**UNITED STATES**
**SECURITIES AND EXCHANGE COMMISSION**
**Washington, D.C. 20549**

# FORM 10-Q

(Mark One)
☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the quarterly period ended September 30, 2023 .**

**or**

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the transition period from to**

**Commission File Number: 001-36102**

# Knowles Corporation

*(Exact name of registrant as specified in its charter)*

| **Delaware** | **90-1002689** |
|---|---|
| *(State or other jurisdiction of incorporation or organization)* | *(I.R.S. Employer Identification No.)* |

**1151 Maplewood Drive, Itasca, IL**
*(Address of Principal Executive Offices)*

**60143**
*(Zip Code)*

**(630) 250-5100**
*(Registrant's telephone number, including area code)*

**Securities registered pursuant to Section 12(b) of the Act:**

| Title of each class | Trading symbol | Name of each exchange on which registered |
|---|---|---|
| Common stock, $0.01 par value per share | KN | New York Stock Exchange |

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).
Yes ☑ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

| | | | |
|---|---|---|---|
| Large accelerated filer | ☑ | Accelerated filer | ☐ |
| Non-accelerated filer | ☐ | Smaller reporting company | ☐ |
| | | Emerging growth company | ☐ |

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).
Yes ☐ No ☑

The number of shares outstanding of the registrant's common stock as of October 31, 2023 was 90,257,146 .

**Knowles Corporation**
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## PART I — FINANCIAL INFORMATION

### Item 1. Financial Statements

**KNOWLES CORPORATION**
**CONSOLIDATED STATEMENTS OF EARNINGS**
**(in millions, except per share amounts)**
**(unaudited)**

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | **2023** | **2022** | **2023** | **2022** |
| **Revenues** | $ 175.1 | $ 178.2 | $ 492.4 | $ 567.6 |
| Cost of goods sold | 102.7 | 110.1 | 298.9 | 338.5 |
| Gain on sale of fixed assets | ( 5.2 ) | — | ( 10.0 ) | — |
| Restructuring charges - cost of goods sold | 0.1 | 28.1 | ( 1.5 ) | 28.1 |
| **Gross profit** | 77.5 | 40.0 | 205.0 | 201.0 |
| Research and development expenses | 19.8 | 19.3 | 59.5 | 63.7 |
| Selling and administrative expenses | 34.6 | 32.6 | 104.9 | 95.6 |
| Impairment charges | — | — | — | 239.8 |
| Restructuring charges | 1.5 | 2.7 | 3.1 | 9.8 |
| **Operating expenses** | 55.9 | 54.6 | 167.5 | 408.9 |
| **Operating earnings (loss)** | 21.6 | ( 14.6 ) | 37.5 | ( 207.9 ) |
| Interest expense, net | 0.6 | 1.1 | 2.2 | 2.7 |
| Other (income) expense, net | ( 0.5 ) | ( 2.1 ) | 0.5 | ( 0.9 ) |
| **Earnings (loss) before income taxes** | 21.5 | ( 13.6 ) | 34.8 | ( 209.7 ) |
| Provision for (benefit from) income taxes | 4.9 | ( 16.3 ) | 9.8 | 12.4 |
| **Net earnings (loss)** | $ 16.6 | $ 2.7 | $ 25.0 | $ ( 222.1 ) |
| | | | | |
| **Net earnings (loss) per share:** | | | | |
| Basic | $ 0.18 | $ 0.03 | $ 0.27 | $ ( 2.42 ) |
| Diluted | $ 0.18 | $ 0.03 | $ 0.27 | $ ( 2.42 ) |
| | | | | |
| **Weighted-average common shares outstanding:** | | | | |
| Basic | 90.8 | 91.4 | 91.2 | 91.9 |
| Diluted | 91.4 | 92.0 | 91.9 | 91.9 |

See accompanying Notes to Consolidated Financial Statements

**KNOWLES CORPORATION**
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE EARNINGS**
**(in millions)**
**(unaudited)**

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | **2023** | **2022** | **2023** | **2022** |
| **Net earnings (loss)** | $ 16.6 | $ 2.7 | $ 25.0 | $ (222.1) |
| **Other comprehensive loss, net of tax** | | | | |
| Foreign currency translation | (1.2) | (13.1) | (10.9) | (30.9) |
| Employee benefit plans: | | | | |
| Amortization or settlement of actuarial losses and prior service costs | — | (0.2) | 0.4 | (0.2) |
| Net change in employee benefit plans | — | (0.2) | 0.4 | (0.2) |
| Changes in fair value of cash flow hedges: | | | | |
| Unrealized net losses arising during period | (1.2) | (3.0) | (5.1) | (6.1) |
| Net losses reclassified into earnings | 0.8 | 1.7 | 1.3 | 2.3 |
| Total cash flow hedges | (0.4) | (1.3) | (3.8) | (3.8) |
| Other comprehensive loss, net of tax | (1.6) | (14.6) | (14.3) | (34.9) |
| **Comprehensive earnings (loss)** | $ 15.0 | $ (11.9) | $ 10.7 | $ (257.0) |

See accompanying Notes to Consolidated Financial Statements

**KNOWLES CORPORATION**
**CONSOLIDATED BALANCE SHEETS**
**(in millions, except share and per share amounts)**
**(unaudited)**

| | September 30, 2023 | December 31, 2022 |
|---|---|---|
| **Current assets:** | | |
| Cash and cash equivalents | $ 75.1 | $ 48.2 |
| Receivables, net of allowances of $ 0.4 and $ 1.1 | 119.0 | 134.7 |
| Inventories, net | 184.1 | 169.5 |
| Prepaid and other current assets | 9.6 | 10.0 |
| Total current assets | 387.8 | 362.4 |
| **Property, plant, and equipment, net** | 144.6 | 161.8 |
| **Goodwill** | 471.0 | 471.0 |
| **Intangible assets, net** | 78.3 | 85.1 |
| **Operating lease right-of-use assets** | 10.7 | 12.6 |
| **Other assets and deferred charges** | 89.8 | 91.0 |
| **Total assets** | $ 1,182.2 | $ 1,183.9 |
| | | |
| **Current liabilities:** | | |
| Accounts payable | $ 52.3 | $ 41.4 |
| Accrued compensation and employee benefits | 26.9 | 26.9 |
| Operating lease liabilities | 4.7 | 8.4 |
| Other accrued expenses | 22.8 | 19.9 |
| Federal and other taxes on income | 0.3 | 2.5 |
| Total current liabilities | 107.0 | 99.1 |
| **Long-term debt** | 45.0 | 45.0 |
| **Deferred income taxes** | 0.9 | 0.9 |
| **Long-term operating lease liabilities** | 6.2 | 7.2 |
| **Other liabilities** | 29.8 | 38.8 |
| **Commitments and contingencies (Note 14)** | | |
| **Stockholders' equity:** | | |
| Preferred stock - $ 0.01 par value; 10,000,000 shares authorized; none issued | — | — |
| Common stock - $ 0.01 par value; 400,000,000 shares authorized; 97,240,535 and 90,257,146 shares issued and outstanding at September 30, 2023, respectively, and 96,431,604 and 91,078,376 shares issued and outstanding at December 31, 2022, respectively | 1.0 | 1.0 |
| Treasury stock - at cost; 6,983,389 and 5,353,228 shares at September 30, 2023 and December 31, 2022, respectively | ( 130.8 ) | ( 103.3 ) |
| Additional paid-in capital | 1,682.7 | 1,665.5 |
| Accumulated deficit | ( 423.2 ) | ( 448.2 ) |
| Accumulated other comprehensive loss | ( 136.4 ) | ( 122.1 ) |
| Total stockholders' equity | 993.3 | 992.9 |
| **Total liabilities and stockholders' equity** | $ 1,182.2 | $ 1,183.9 |

See accompanying Notes to Consolidated Financial Statements

**KNOWLES CORPORATION**
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**
**(in millions, except share amounts)**
**(unaudited)**

| | Common Stock | | Treasury Stock | | Additional Paid-In Capital | Accumulated Deficit | Accumulated Other Comprehensive Loss | Total Stockholders' Equity |
|---|---|---|---|---|---|---|---|---|
| | Shares Issued | Amount | Shares | Amount | | | | |
| **Balance at June 30, 2023** | 97,228,853 | $ 1.0 | ( 6,086,666 ) | $ ( 115.8 ) | $ 1,675.9 | $ ( 439.8 ) | $ ( 134.8 ) | $ 986.5 |
| Net earnings | — | — | — | — | — | 16.6 | — | 16.6 |
| Other comprehensive loss, net of tax | — | — | — | — | — | — | ( 1.6 ) | ( 1.6 ) |
| Repurchase of common stock | — | — | ( 896,723 ) | ( 15.0 ) | — | — | — | ( 15.0 ) |
| Stock-based compensation expense | — | — | — | — | 6.9 | — | — | 6.9 |
| Exercise of stock options | 1,929 | — | — | — | — | — | — | — |
| Restricted stock unit settlement, net of tax | 9,753 | — | — | — | ( 0.1 ) | — | — | ( 0.1 ) |
| **Balance at September 30, 2023** | 97,240,535 | $ 1.0 | ( 6,983,389 ) | $ ( 130.8 ) | $ 1,682.7 | $ ( 423.2 ) | $ ( 136.4 ) | $ 993.3 |

| | Common Stock | | Treasury Stock | | Additional Paid-In Capital | Accumulated Deficit | Accumulated Other Comprehensive Loss | Total Stockholders' Equity |
|---|---|---|---|---|---|---|---|---|
| | Shares Issued | Amount | Shares | Amount | | | | |
| **Balance at June 30, 2022** | 96,254,641 | $ 1.0 | ( 4,263,678 ) | $ ( 84.7 ) | $ 1,650.9 | $ ( 242.9 ) | $ ( 120.7 ) | $ 1,203.6 |
| Net earnings | — | — | — | — | — | 2.7 | — | 2.7 |
| Other comprehensive loss, net of tax | — | — | — | — | — | — | ( 14.6 ) | ( 14.6 ) |
| Repurchase of common stock | — | — | ( 1,089,550 ) | ( 18.6 ) | — | — | — | ( 18.6 ) |
| Stock-based compensation expense | — | — | — | — | 6.8 | — | — | 6.8 |
| Exercise of stock options | 29,672 | — | — | — | 0.4 | — | — | 0.4 |
| Restricted stock unit settlement, net of tax | 15,362 | — | — | — | ( 0.1 ) | — | — | ( 0.1 ) |
| **Balance at September 30, 2022** | 96,299,675 | $ 1.0 | ( 5,353,228 ) | $ ( 103.3 ) | $ 1,658.0 | $ ( 240.2 ) | $ ( 135.3 ) | $ 1,180.2 |

See accompanying Notes to Consolidated Financial Statements

**KNOWLES CORPORATION**
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**
**(in millions, except share amounts)**
**(unaudited)**

| | Common Stock | | Treasury Stock | | Additional Paid-In Capital | Accumulated Deficit | Accumulated Other Comprehensive Loss | Total Stockholders' Equity |
|---|---|---|---|---|---|---|---|---|
| | Shares Issued | Amount | Shares | Amount | | | | |
| **Balance at December 31, 2022** | 96,431,604 | $ 1.0 | (5,353,228) | $ (103.3) | $ 1,665.5 | $ (448.2) | $ (122.1) | $ 992.9 |
| Net earnings | — | — | — | — | — | 25.0 | — | 25.0 |
| Other comprehensive loss, net of tax | — | — | — | — | — | — | (14.3) | (14.3) |
| Repurchase of common stock | — | — | (1,630,161) | (27.5) | — | — | — | (27.5) |
| Stock-based compensation expense | — | — | — | — | 21.8 | — | — | 21.8 |
| Exercise of stock options | 195,170 | — | — | — | 1.6 | — | — | 1.6 |
| Restricted and performance stock unit settlement, net of tax | 613,761 | — | — | — | (6.2) | — | — | (6.2) |
| **Balance at September 30, 2023** | 97,240,535 | $ 1.0 | (6,983,389) | $ (130.8) | $ 1,682.7 | $ (423.2) | $ (136.4) | $ 993.3 |

| | Common Stock | | Treasury Stock | | Additional Paid-In Capital | Accumulated Deficit | Accumulated Other Comprehensive Loss | Total Stockholders' Equity |
|---|---|---|---|---|---|---|---|---|
| | Shares Issued | Amount | Shares | Amount | | | | |
| **Balance at December 31, 2021** | 95,112,778 | $ 1.0 | (3,217,798) | $ (62.4) | $ 1,639.4 | $ (18.1) | $ (100.4) | $ 1,459.5 |
| Net loss | — | — | — | — | — | (222.1) | — | (222.1) |
| Other comprehensive loss, net of tax | — | — | — | — | — | — | (34.9) | (34.9) |
| Repurchase of common stock | — | — | (2,339,045) | (44.0) | — | — | — | (44.0) |
| Stock-based compensation expense | — | — | — | — | 21.6 | — | — | 21.6 |
| Exercise of stock options | 529,199 | — | — | — | 6.4 | — | — | 6.4 |
| Exercise of warrants | — | — | 203,615 | 3.1 | (3.1) | — | — | — |
| Restricted and performance stock unit settlement, net of tax | 657,698 | — | — | — | (6.3) | — | — | (6.3) |
| **Balance at September 30, 2022** | 96,299,675 | $ 1.0 | (5,353,228) | $ (103.3) | $ 1,658.0 | $ (240.2) | $ (135.3) | $ 1,180.2 |

See accompanying Notes to Consolidated Financial Statements

**KNOWLES CORPORATION**
**CONSOLIDATED STATEMENTS OF CASH FLOWS**
**(in millions)**
**(unaudited)**

| | Nine Months Ended September 30, | |
|---|---|---|
| | 2023 | 2022 |
| **Operating Activities** | | |
| Net earnings (loss) | $ 25.0 | $ ( 222.1 ) |
| Adjustments to reconcile net earnings (loss) to cash from operating activities: | | |
| Depreciation and amortization | 33.8 | 41.7 |
| Stock-based compensation | 21.8 | 21.6 |
| Deferred income taxes | 1.6 | ( 2.0 ) |
| Non-cash interest expense and amortization of debt issuance costs | 0.6 | 0.5 |
| (Gain) loss on sale or disposal of fixed assets | ( 10.0 ) | 0.2 |
| Non-cash restructuring charges | ( 1.8 ) | 8.9 |
| Impairment charges | — | 239.8 |
| Other, net | ( 2.4 ) | ( 7.4 ) |
| Changes in assets and liabilities (excluding effects of foreign exchange): | | |
| Receivables, net | 15.5 | 16.8 |
| Inventories, net | ( 19.0 ) | ( 50.3 ) |
| Prepaid and other current assets | ( 0.8 ) | ( 1.5 ) |
| Accounts payable | 11.3 | ( 24.6 ) |
| Accrued compensation and employee benefits | 0.3 | ( 16.7 ) |
| Other accrued expenses | ( 2.7 ) | 5.8 |
| Accrued taxes | ( 2.3 ) | 9.0 |
| Other non-current assets and non-current liabilities | ( 8.6 ) | 19.8 |
| **Net cash provided by operating activities** | 62.3 | 39.5 |
| **Investing Activities** | | |
| Proceeds from the sale of property, plant, and equipment | 12.4 | — |
| Capital expenditures | ( 11.8 ) | ( 24.7 ) |
| Acquisition of asset | ( 0.3 ) | — |
| Acquisition of business (net of cash acquired) | — | ( 0.7 ) |
| Purchase of investments | ( 0.4 ) | — |
| Proceeds from the sale of investments | 0.4 | — |
| **Net cash provided by (used in) investing activities** | 0.3 | ( 25.4 ) |
| **Financing Activities** | | |
| Payments under revolving credit facility | — | ( 15.0 ) |
| Borrowings under revolving credit facility | — | 23.0 |
| Repurchase of common stock | ( 27.5 ) | ( 44.0 ) |
| Tax on stock option exercises and restricted and performance stock unit vesting | ( 6.2 ) | ( 6.3 ) |
| Payments of debt issuance costs | ( 1.9 ) | — |
| Payments of finance lease obligations | ( 1.3 ) | ( 4.2 ) |
| Proceeds from exercise of stock options | 1.6 | 6.4 |
| **Net cash used in financing activities** | ( 35.3 ) | ( 40.1 ) |
| Effect of exchange rate changes on cash and cash equivalents | ( 0.4 ) | ( 1.4 ) |
| **Net increase (decrease) in cash and cash equivalents** | 26.9 | ( 27.4 ) |
| Cash and cash equivalents at beginning of period | 48.2 | 68.9 |
| **Cash and cash equivalents at end of period** | $ 75.1 | $ 41.5 |
| **Supplemental information - cash paid for:** | | |
| Income taxes | $ 9.0 | $ 3.9 |
| Interest | $ 2.8 | $ 2.4 |

See accompanying Notes to Consolidated Financial Statements

## 1. Basis of Presentation

***Background*** - Knowles Corporation (NYSE:KN) is a market leader and global provider of advanced micro-acoustic microphones and balanced armature speakers, audio solutions, and high performance capacitors and radio frequency ("RF") products, serving the consumer electronics, medtech, defense, electric vehicle, industrial, and communications markets. The Company uses its leading position in SiSonic™ micro-electro-mechanical systems ("MEMS") microphones and strong capabilities in audio processing technologies to optimize audio systems and improve the user experience across consumer applications. Knowles is also a leader in hearing health acoustics, high performance capacitors, and RF solutions for a diverse set of markets. The Company's focus on the customer, combined with its unique technology, proprietary manufacturing techniques, and global operational expertise, enable the Company to deliver innovative solutions across multiple applications. References to "Knowles," "the Company," "we," "our," and "us" refer to Knowles Corporation and its consolidated subsidiaries.

***Financial Statement Presentation -*** The accompanying unaudited interim Consolidated Financial Statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC") for quarterly reports on Form 10-Q and do not include all of the information and note disclosures required by U.S. generally accepted accounting principles (“GAAP” or “U.S. GAAP”) for complete financial statements. These unaudited interim Consolidated Financial Statements should therefore be read in conjunction with the Consolidated Financial Statements and Notes thereto for the year ended December 31, 2022 included in the Company’s Annual Report on Form 10-K.

The accompanying unaudited interim Consolidated Financial Statements have been prepared in accordance with U.S. GAAP, which requires management to make estimates and assumptions that affect amounts reported in the Consolidated Financial Statements and accompanying disclosures. Although these estimates are based on management’s best knowledge of current events and actions that the Company may undertake in the future, actual results may differ from those estimates. Management uses historical experience and all available information to make these estimates. The unaudited interim Consolidated Financial Statements reflect all adjustments of a normal, recurring nature that are, in the opinion of management, necessary for a fair statement of results for these interim periods.

***Share Repurchase Program -*** On February 24, 2020, the Company announced that its Board of Directors had authorized a share repurchase program of up to $ 100.0 million of the Company's common stock. On April 28, 2022, the Company announced that its Board of Directors had increased the authorization by up to $ 150.0 million in additional aggregate value. The timing and amount of any shares repurchased will be determined by the Company based on its evaluation of market conditions and other factors, and will be made in accordance with applicable securities laws in either the open market or in privately negotiated transactions. The Company is not obligated to purchase any shares under the program, and the program may be suspended or discontinued at any time. The actual timing, number, and share price of shares repurchased will depend on a number of factors, including the market price of the Company’s common stock, general market and economic conditions, and applicable legal requirements. Any shares repurchased will be held as treasury stock. During the nine months ended September 30, 2023 and 2022, the Company repurchased 1,630,161 shares and 2,339,045 shares of common stock, respectively, for a total of $ 27.5 million and $ 44.0 million, respectively.

***Non-cash Investing Activities*** - Purchases of property, plant, and equipment included in accounts payable at both September 30, 2023 and September 30, 2022 were $ 1.6 million. These non-cash amounts are not reflected as "Capital expenditures" within Investing Activities on the Consolidated Statements of Cash Flows for the respective periods.

Operating lease liabilities arising from obtaining right-of-use assets for the nine months ended September 30, 2023 and 2022 were $ 2.5 million and $ 1.9 million, respectively.

The purchase price for the asset acquisition that occurred during the third quarter of 2023 includes $ 1.7 million of contingent consideration. This non-cash amount is not reflected in “Acquisition of asset” within Investing Activities on the Consolidated Statements of Cash Flows for the nine months ended September 30, 2023. See also Note 7. Goodwill and Other Intangible Assets.

## 2. Recent Accounting Standards

There are no recently issued or adopted accounting standards that impact the Consolidated Financial Statements of the Company as of September 30, 2023.

**3. Acquisitions**

On November 1, 2023, the Company completed the acquisition of Cornell Dubilier. See Note 16. Subsequent Events.

On May 3, 2021, the Company acquired all of the outstanding shares of common stock of Integrated Microwave Corporation ("IMC") for $ 81.4 million. During the first quarter of 2022, the Company recorded a purchase price adjustment of $ 0.7 million that was paid during the second quarter of 2022. The adjustment, which did not impact the Consolidated Statements of Earnings, resulted in an increase to goodwill of $ 0.7 million. The acquired business provides RF filters to the defense, industrial, and communications markets. The transaction was accounted for under the acquisition method of accounting and the results of operations are included in the Consolidated Financial Statements from the date of acquisition in the Precision Devices ("PD") segment.

**4. Impairment Charges**

The Company tests goodwill for impairment at least annually as of October 1, or more frequently if there are events or circumstances indicating the carrying value of individual reporting units may exceed their respective fair values on a more likely than not basis. Recoverability of goodwill is measured at the reporting unit level. The Company’s three reporting units are Precision Devices ("PD"), MedTech & Specialty Audio ("MSA"), and Consumer MEMS Microphones ("CMM"). The impairment assessment compares the fair value of each reporting unit to its carrying value. Impairment is measured as the amount by which the carrying value of a reporting unit exceeds its fair value.

During the second quarter of 2022, the Company identified a triggering event requiring an interim impairment assessment for the CMM reporting unit (previously referred to as Mobile Consumer Electronics or "MCE"), which resulted in a goodwill impairment charge of $ 239.8 million. The triggering event occurred due to the identification of a rapid decline in current demand and a reduction in the expected future growth rate for global consumer electronics, which resulted in reductions to forecasted revenue and terminal growth rates and profit margins. The goodwill impairment charge is presented within "Impairment charges" in "Operating expenses" on the Consolidated Statements of Earnings. The Company had not incurred any previous goodwill impairment charges.

Additionally, during the fourth quarter of 2022, the Company identified another triggering event requiring an impairment assessment of the CMM reporting unit, which resulted in a goodwill impairment charge of $ 231.1 million. This triggering event occurred due to the identification of further declines in forecasted demand for global consumer electronics, resulting in reductions to forecasted revenue and profit margins. In addition, the Company’s assumptions for weighted average cost of capital and income tax rates increased as a result of rising interest rates and not satisfying certain tax holiday conditions.

Fair value was estimated using a discounted cash flow model that included the Company’s market participant assumptions, forecasted future cash flows based on historical performance and future estimated results, determinations of appropriate discount rates, and other assumptions which were considered reasonable and inherent in the discounted cash flow analysis. The fair value estimate was based on known or knowable information at the assessment date. Significant assumptions used in the model included forecasted revenue and terminal growth rates, profit margins, income taxes, and the Company's weighted average cost of capital. The fair value measurements for reporting units are based on significant unobservable inputs, and thus represent Level 3 inputs.

Fair value measurements require considerable judgment and are sensitive to changes in underlying assumptions. As a result, there can be no assurance that estimates and assumptions made for purposes of the impairment assessment will prove to be an accurate prediction of the future. Potential circumstances that could have a negative effect on the fair value of our reporting units include, but are not limited to, lower than forecasted growth rates or profit margins and changes in the weighted average cost of capital. A reduction in the estimated fair value of the reporting units could trigger an impairment in the future. The Company cannot predict the occurrence of certain events or changes in circumstances that might adversely affect the carrying value of goodwill.

**5. Inventories, net**

The following table details the major components of inventories, net:

| *(in millions)* | September 30, 2023 | December 31, 2022 |
|---|---|---|
| Raw materials | $ 129.2 | $ 116.1 |
| Work in progress | 34.3 | 28.3 |
| Finished goods | 63.6 | 62.8 |
| **Subtotal** | 227.1 | 207.2 |
| Less reserves | ( 43.0 ) | ( 37.7 ) |
| **Total** | $ 184.1 | $ 169.5 |

**6. Property, Plant, and Equipment, net**

The following table details the major components of property, plant, and equipment, net:

| *(in millions)* | September 30, 2023 | December 31, 2022 |
|---|---|---|
| Land | $ 12.4 | $ 12.5 |
| Buildings and improvements | 112.5 | 114.6 |
| Machinery, equipment, and other | 488.5 | 531.2 |
| **Subtotal** | 613.4 | 658.3 |
| Less accumulated depreciation | ( 468.8 ) | ( 496.5 ) |
| **Total** | $ 144.6 | $ 161.8 |

Depreciation expense totaled $ 7.6 million and $ 9.8 million for the three months ended September 30, 2023 and 2022, respectively. For the nine months ended September 30, 2023 and 2022, depreciation expense totaled $ 25.0 million and $ 32.5 million, respectively.

During the nine months ended September 30, 2023, the Company entered into an agreement to sell certain of its machinery and equipment related to the CMM segment to a third party for total proceeds of $ 11.4 million, which were received in their entirety in the second quarter of 2023. The Company transferred control of assets with a fair value of approximately $ 5.5 million and $ 11.2 million to the buyer during the three and nine months ended September 30, 2023, resulting in a gain on sale of approximately $ 5.3 million and $ 11.0 million, respectively. These gains on sale are reflected in the Consolidated Statements of Earnings as follows:

| *(in millions)* | Three Months Ended September 30, 2023 | Nine Months Ended September 30, 2023 |
|---|---|---|
| Gain on sale of fixed assets | $ ( 5.2 ) | $ ( 10.0 ) |
| Restructuring charges - cost of goods sold | ( 0.1 ) | ( 1.0 ) |
| **Total** | $ ( 5.3 ) | $ ( 11.0 ) |

See also Note 8. Restructuring and Related Activities.

The Company has deferred the remaining sale proceeds related to this agreement of approximately $ 0.2 million until it completes the transfer of control of the remaining assets to the buyer. This liability is included in "Other accrued expenses" on the Consolidated Balance Sheet as of September 30, 2023.

**7. Goodwill and Other Intangible Assets**

There were no changes in the carrying value of goodwill by reportable segment for the nine months ended September 30, 2023.

***Other Intangible Assets***

The gross carrying value and accumulated amortization for each major class of intangible assets are as follows:

| | September 30, 2023 | | December 31, 2022 | |
|---|---|---|---|---|
| *(in millions)* | Gross Carrying Amount | Accumulated Amortization | Gross Carrying Amount | Accumulated Amortization |
| **Amortized intangible assets:** | | | | |
| Trademarks | $ 2.0 | $ 1.0 | $ 2.0 | $ 0.8 |
| Customer relationships | 38.4 | 13.6 | 36.4 | 10.3 |
| Developed technology | 45.4 | 25.3 | 45.4 | 20.1 |
| Other | 2.4 | 2.0 | 2.4 | 1.9 |
| **Total** | 88.2 | 41.9 | 86.2 | 33.1 |
| **Unamortized intangible assets:** | | | | |
| Trademarks | 32.0 | | 32.0 | |
| **Total intangible assets, net** | $ 78.3 | | $ 85.1 | |

The Company completed an asset acquisition in the third quarter of 2023. In connection with this acquisition, the Company recognized customer relationships with a fair value of approximately $ 2.0 million, reflecting cash paid of $ 0.3 million and contingent consideration with an estimated fair value of $ 1.7 million. These customer relationships have an estimated useful life of 7 years.

Amortization expense totaled $ 3.0 million and $ 3.1 million for the three months ended September 30, 2023 and 2022, respectively. For the nine months ended September 30, 2023 and 2022, amortization expense was $ 8.8 million and $ 9.2 million, respectively. Amortization expense for the next five years, based on current definite-lived intangible balances, is estimated to be as follows:

| *(in millions)* | |
|---|---|
| Q4 2023 | $ 3.0 |
| 2024 | 11.9 |
| 2025 | 11.5 |
| 2026 | 5.6 |
| 2027 | 5.6 |
| 2028 and thereafter | 8.7 |
| **Total** | $ 46.3 |

**8. Restructuring and Related Activities**

Restructuring and related activities are designed to better align the Company's operations with current market conditions through headcount reductions, targeted facility consolidations, and other measures to further optimize operations and align resources with growth opportunities.

The Company recorded restructuring charges of $ 1.3 million during the three and nine months ended September 30, 2023 for severance pay and benefits related to headcount reductions within the PD segment and $ 1.4 million during the nine months ended September 30, 2023 for severance pay and benefits related to headcount reductions within the MEMS Microphones product line, which is included within the Consumer MEMS Microphones segment. The Company also recorded $ 0.4 million and $ 0.7 million for Corporate charges for the three and nine months ended September 30, 2023, respectively. The Company recognized the majority of these costs within Operating expenses, resulting in total restructuring charges within Operating expenses of $ 1.5 million and $ 3.1 million for the three and nine months ended September 30, 2023, respectively.

During the three and nine months ended September 30, 2023, the Company recorded gains of $ 0.1 million and $ 1.0 million, respectively, for the sale of certain machinery and equipment that was previously written off through restructuring charges within the Consumer MEMS Microphones segment. In addition, during the nine months ended September 30, 2023, the Company recorded a $ 0.8 million reversal of restructuring charges within the Consumer MEMS Microphones segment related to a change in estimate. The Company recognized these transactions within Gross profit, resulting in total restructuring expense within Gross Profit of $ 0.1 million for the three months ended September 30, 2023, and credits of $ 1.5 million for the nine months ended September 30, 2023.

During the nine months ended September 30, 2022, the Company restructured its MEMS Microphones product line through two restructuring programs, which are included within the Consumer MEMS Microphones segment. These actions resulted in the settlement of supplier obligations, non-cash fixed asset write-offs, and severance pay. During the nine months ended September 30, 2022, the Company recorded restructuring charges of $ 35.1 million related to this action, including $ 21.9 million for the settlement of supplier obligations, $ 8.9 million in fixed asset write-offs, and $ 4.3 million in severance pay and benefits.

In addition, during the nine months ended September 30, 2022, the Company recorded restructuring charges of $ 2.2 million for severance pay and benefits related to headcount reductions within the Intelligent Audio product line workforce, which is included within the Consumer MEMS Microphones segment, and $ 0.6 million for other costs.

During the three and nine months ended September 30, 2022 the Company recorded total restructuring charges within Gross profit of $ 28.1 million primarily for the settlement of supplier obligations, non-cash fixed asset write-offs, and severance pay associated with the MEMS microphones product line. During the three and nine months ended September 30, 2022, the Company recorded total restructuring charges within Operating expenses of $ 2.7 million and $ 9.8 million, respectively, primarily for the settlement of supplier obligations and severance pay and benefits associated with the MEMS microphones product line and other actions for headcount reductions within the Intelligent Audio product line workforce.

The following table details restructuring charges incurred by reportable segment for the periods presented:

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| *(in millions)* | **2023** | **2022** | **2023** | **2022** |
| Precision Devices | $ 1.3 | $ — | $ 1.3 | $ — |
| Consumer MEMS Microphones | ( 0.1 ) | 30.7 | ( 0.4 ) | 37.3 |
| Corporate | 0.4 | 0.1 | 0.7 | 0.6 |
| **Total** | $ 1.6 | $ 30.8 | $ 1.6 | $ 37.9 |

The following table details the Company's severance and other restructuring accrual activity:

| *(in millions)* | **Severance Pay and Benefits** | **Contract Termination and Other Costs** | **Total** |
|---|---|---|---|
| **Balance at December 31, 2022** | $ 0.9 | $ 21.8 | $ 22.7 |
| Restructuring charges | 3.4 | ( 1.8 ) | 1.6 |
| Payments | ( 3.6 ) | ( 3.1 ) | ( 6.7 ) |
| Other, including foreign currency | — | ( 0.1 ) | ( 0.1 ) |
| **Balance at September 30, 2023** | $ 0.7 | $ 16.8 | $ 17.5 |

The severance and restructuring accruals are recorded in the following line item on the Consolidated Balance Sheets:

| *(in millions)* | **September 30, 2023** | **December 31, 2022** |
|---|---|---|
| Other accrued expenses | $ 7.3 | $ 4.0 |
| Other liabilities | 10.2 | 18.7 |
| **Total** | $ 17.5 | $ 22.7 |

## 9. Borrowings

***Revolving Credit Facility***

Revolving credit facility borrowings consist of the following:

| *(in millions)* | September 30, 2023 | December 31, 2022 |
|---|---|---|
| Revolving credit facility | $ 45.0 | $ 45.0 |
| Less current maturities [1] | — | — |
| Total long-term debt | $ 45.0 | $ 45.0 |

[1] There are no required principal payments due until maturity in February 2028.

On February 8, 2023, the Company entered into an Amended and Restated Credit Agreement (the "A&R Credit Agreement") that amends and restates the prior Credit Agreement, dated September 4, 2020 (the "2020 Credit Facility"), and provides for a senior secured revolving credit facility with borrowings in an aggregate principal amount at any time outstanding not to exceed $ 400.0 million (the "Credit Facility"). The A&R Credit Agreement, among other things, extends the maturity date of the Credit Facility from January 2, 2024 to February 8, 2028, replaces the London Inter-Bank Offered Rate ("LIBOR") with the Term Secured Overnight Financing Rate ("Term SOFR") as a reference rate available for borrowings, amends the minimum Interest Coverage Ratio, and amends certain other financial covenants with which the Company must comply, as described below.

On September 25, 2023, the Company amended its A&R Credit Agreement to, among other things, (a) permit the Company in connection with the acquisition of Cornell Dubilier, to incur senior priority seller financing indebtedness (the "Seller Note") in an aggregate principal amount of approximately $ 123.0 million secured by certain assets (including equity interests) acquired in connection with such acquisition and the capital stock of Knowles Intermediate PD Holdings, LLC ("Knowles PD Holdings") (the "Acquisition Assets"), which shall mature two years after the effective date of such Seller Note (the "Seller Note Maturity Date"), (b) extends the requirement to pledge the Acquisition Assets that would otherwise constitute collateral under the Credit Agreement to the date that is 90 days after the Seller Note Maturity Date, and (c) restricts, until the Seller Note Maturity Date, the amount of dispositions and investments from the Company and certain of its subsidiaries into Knowles PD Holdings and the acquired subsidiaries that constitute Acquisition Assets from exceeding $ 80.0 million in the aggregate. All other terms remain the same as the A&R Credit Agreement dated February 8, 2023.

Up to $ 100.0 million of the Credit Facility will be available in Euro, Pounds Sterling, and other currencies requested by the Company and up to $ 50.0 million of the Credit Facility will be made available in the form of letters of credit. Undrawn amounts under the Credit Facility accrue a commitment fee at a per annum rate of 0.225 % to 0.350 %, based on a leverage ratio grid.

At any time during the term of the Credit Facility, the Company will be permitted to increase the commitments under the Credit Facility or to establish one or more incremental term loan facilities under the Credit Facility in an aggregate principal amount not to exceed the sum of $ 200.0 million, plus additional amounts, so long as the senior secured leverage ratio does not exceed 2.00 to 1.00.

The A&R Credit Agreement includes requirements, to be tested quarterly, that the Company maintains (i) a minimum ratio of Consolidated EBITDA to consolidated cash interest expense of 3.00 to 1.00, (the "Interest Coverage Ratio"), (ii) a ratio of total indebtedness, minus netted cash in an aggregate amount not to exceed $50.0 million, to Consolidated EBITDA of 3.75 to 1.00 (the "Total Net Leverage Ratio"), and (iii) a maximum ratio of senior net secured indebtedness to Consolidated EBITDA of 3.25 to 1.00 (the "Senior Secured Net Leverage Ratio"). For these ratios, Consolidated EBITDA and consolidated interest expense are calculated using the most recent four consecutive fiscal quarters in a manner defined in the A&R Credit Agreement. At September 30, 2023, the Company was in compliance with these covenants and it expects to remain in compliance with all of its debt covenants over the next twelve months.

The interest rates under the Credit Facility will be, at the Borrowers' option (1) (A) in the case of borrowings denominated in U.S. dollars Term SOFR, (B) in the case of borrowings denominated in Sterling, Daily Simple Sonia, or (C) for borrowings denominated in Euro, EURIBOR, in each case, plus the rates per annum determined from time to time based on the total net leverage ratio of the Company as of the end of and for the most recent period of four fiscal quarters for which financial statements have been delivered (the "Applicable Margin"); or (2) in the case of borrowings denominated in U.S. dollars, alternate base rate ("ABR") (as defined in the A&R Credit Agreement) plus the Applicable Margin. The Applicable Margin for Term SOFR, Daily Simple Sonia, or EURIBOR could range from 1.50 % to 2.50 % while the Applicable Margin for ABR could range from 0.50 % to 1.50 %.

The weighted-average interest rate on the Company's borrowings under the Credit Facility and the 2020 credit facility was 6.43 % and 2.62 % for the nine months ended September 30, 2023 and 2022, respectively. The weighted-average commitment fee on the revolving line of credit was 0.23 % for the nine months ended September 30, 2023 and 2022.

***Warrants***

In the second quarter of 2016, the Company entered into warrant transactions, whereby the Company sold warrants to acquire shares of the Company's common stock at a strike price of $ 21.1050 per share (the "Warrants"). The Company received aggregate proceeds of $ 39.1 million from the sale of the Warrants. The Warrants were separate transactions entered into by the Company, and were not part of the Notes, and were accounted for as part of additional paid-in capital.

The Warrants expired during the first quarter of 2022, which resulted in the Company delivering 0.2 million shares of its common stock held in treasury. Settlement of the Warrants resulted in a $ 3.1 million decrease in treasury stock, which was measured based on the acquisition cost of the delivered shares determined on a first-in, first-out ("FIFO") basis, offset by an equivalent decrease in additional paid-in capital with no net impact to equity.

## 10. Other Comprehensive Earnings

The amounts recognized in other comprehensive loss were as follows:

| | Three Months Ended September 30, 2023 | | | Three Months Ended September 30, 2022 | | |
|---|---|---|---|---|---|---|
| *(in millions)* | Pre-tax | Tax | Net of tax | Pre-tax | Tax | Net of tax |
| Foreign currency translation | $ ( 1.2 ) | $ — | $ ( 1.2 ) | $ ( 13.1 ) | $ — | $ ( 13.1 ) |
| Employee benefit plans | 0.1 | ( 0.1 ) | — | 0.2 | ( 0.4 ) | ( 0.2 ) |
| Changes in fair value of cash flow hedges | ( 0.6 ) | 0.2 | ( 0.4 ) | ( 1.3 ) | — | ( 1.3 ) |
| Total other comprehensive loss | $ ( 1.7 ) | $ 0.1 | $ ( 1.6 ) | $ ( 14.2 ) | $ ( 0.4 ) | $ ( 14.6 ) |

| | Nine Months Ended September 30, 2023 | | | Nine Months Ended September 30, 2022 | | |
|---|---|---|---|---|---|---|
| *(in millions)* | Pre-tax | Tax | Net of tax | Pre-tax | Tax | Net of tax |
| Foreign currency translation | $ ( 10.9 ) | $ — | $ ( 10.9 ) | $ ( 30.9 ) | $ — | $ ( 30.9 ) |
| Employee benefit plans | 0.4 | — | 0.4 | 0.5 | ( 0.7 ) | ( 0.2 ) |
| Changes in fair value of cash flow hedges | ( 4.7 ) | 0.9 | ( 3.8 ) | ( 4.1 ) | 0.3 | ( 3.8 ) |
| Total other comprehensive loss | $ ( 15.2 ) | $ 0.9 | $ ( 14.3 ) | $ ( 34.5 ) | $ ( 0.4 ) | $ ( 34.9 ) |

The following tables summarize the changes in balances of each component of accumulated other comprehensive loss, net of tax during the nine months ended September 30, 2023 and 2022:

| *(in millions)* | Cash flow hedges | Employee benefit plans | Cumulative foreign currency translation adjustments | Total |
|---|---|---|---|---|
| **Balance at December 31, 2022** | $ 1.0 | $ ( 16.3 ) | $ ( 106.8 ) | $ ( 122.1 ) |
| Other comprehensive (loss) earnings, net of tax | ( 3.8 ) | 0.4 | ( 10.9 ) | ( 14.3 ) |
| **Balance at September 30, 2023** | $ ( 2.8 ) | $ ( 15.9 ) | $ ( 117.7 ) | $ ( 136.4 ) |

| *(in millions)* | Cash flow hedges | Employee benefit plans | Cumulative foreign currency translation adjustments | Total |
|---|---|---|---|---|
| **Balance at December 31, 2021** | $ 0.3 | $ (17.1) | $ (83.6) | $ (100.4) |
| Other comprehensive loss, net of tax | (3.8) | (0.2) | (30.9) | (34.9) |
| **Balance at September 30, 2022** | $ (3.5) | $ (17.3) | $ (114.5) | $ (135.3) |

The following tables summarize the amounts reclassified from accumulated other comprehensive loss to earnings:

| | | Three Months Ended September 30, | |
|---|---|---|---|
| *(in millions)* | **Statement of Earnings Line** | **2023** | **2022** |
| **Pension and post-retirement benefit plans:** | | | |
| Amortization or settlement of actuarial losses and prior service costs | Other (income) expense, net | $ 0.1 | $ 0.2 |
| Tax | Provision for (benefit from) income taxes | (0.1) | (0.4) |
| Net of tax | | $ — | $ (0.2) |
| | | | |
| **Cash flow hedges:** | | | |
| Net losses reclassified into earnings | Cost of goods sold | $ 1.0 | $ 2.0 |
| Tax | Provision for (benefit from) income taxes | (0.2) | (0.3) |
| Net of tax | | $ 0.8 | $ 1.7 |

| | | Nine Months Ended September 30, | |
|---|---|---|---|
| *(in millions)* | **Statement of Earnings Line** | **2023** | **2022** |
| **Pension and post-retirement benefit plans:** | | | |
| Amortization or settlement of actuarial losses and prior service costs | Other (income) expense, net | $ 0.4 | $ 0.5 |
| Tax | Provision for (benefit from) income taxes | — | (0.7) |
| Net of tax | | $ 0.4 | $ (0.2) |
| | | | |
| **Cash flow hedges:** | | | |
| Net losses reclassified into earnings | Cost of goods sold | $ 1.6 | $ 2.7 |
| Tax | Provision for (benefit from) income taxes | (0.3) | (0.4) |
| Net of tax | | $ 1.3 | $ 2.3 |

## 11. Income Taxes

Income taxes for the interim periods presented have been included in the accompanying Consolidated Financial Statements on the basis of an estimated annual effective tax rate ("ETR"). The determination of the consolidated provision for income taxes requires management to make certain judgments and estimates. Changes in the estimated level of annual pre-tax earnings or loss, tax laws, and changes resulting from tax audits can affect the overall ETR, which impacts the level of income tax expense or benefit and net income or loss. Judgments and estimates related to the Company's projections and assumptions are inherently uncertain and therefore, actual results could differ materially from projections.

The Company's ETR for the three and nine months ended September 30, 2023 was 22.8 % (inclusive of discrete items totaling $ 0.8 million of benefit) and 28.2 % (inclusive of discrete items totaling $ 0.1 million of benefit), respectively. The discrete items impacting the tax provision for the three and nine months ended September 30, 2023 were primarily attributable to stock-based compensation and the recognition of foreign tax credits resulting from the release of IRS Notice 2023-55. Absent the discrete items, the ETR for the three and nine months ended September 30, 2023 was 26.5 % and 28.4 %, respectively. The Company's ETR for the three and nine months ended September 30, 2022 was 119.9 % and ( 5.9 )% (inclusive of discrete items totaling $ 1.6 million of benefit), respectively. The discrete items impacting the tax provision for the three and nine months ended September 30, 2022 were primarily attributable to stock-based compensation. Absent the discrete items, the ETR for the three and nine months ended September 30, 2022 was 119.9 % and ( 6.7 )%, respectively.

The Company's ETR is favorably impacted by tax holidays granted to the Company. The benefit for these incentives for the three and nine months ended September 30, 2023 was approximately $ 0.7 million and $ 1.3 million, respectively, or $ 0.01 on a basic per share basis for both periods. The impact for these incentives for the three and nine months ended September 30, 2022 was approximately $ 4.0 million expense and $ 0.9 million benefit, respectively, or $( 0.04 ) and $ 0.01 on a basic (loss) earnings per share basis. The decrease in the tax holiday benefits is attributable to the Company not satisfying all of the conditions of our tax holiday in Malaysia during the year ended December 31, 2022 due to the rapid decline in demand for global consumer electronics. As a result, our tax holiday benefit in Malaysia ended on December 31, 2022.

The Company believes it is reasonably possible that a U.S. valuation allowance of approximately $ 11.6 million related to foreign tax credits will be released within the next twelve months.

## 12. Equity Incentive Program

The following table summarizes the stock-based compensation expense recognized by the Company for the periods presented:

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| *(in millions)* | 2023 | 2022 | 2023 | 2022 |
| **Total pre-tax stock-based compensation expense** | $ 6.9 | $ 6.8 | $ 21.8 | $ 21.6 |
| Tax benefit | — | 0.1 | 3.2 | 4.1 |
| **Total stock-based compensation expense, net of tax** | $ 6.9 | $ 6.7 | $ 18.6 | $ 17.5 |

***Stock Options and SSARs***

The expense related to stock options granted in the nine months ended September 30, 2022 was estimated on the date of grant using a Black-Scholes option-pricing model based on the assumptions shown in the table below. No stock options were granted during the nine months ended September 30, 2023.

| | Nine Months Ended September 30, |
|---|---|
| | 2022 |
| Risk-free interest rate | 0.85 % |
| Dividend yield | — % |
| Expected life (years) | 4.5 |
| Volatility | 34.3 % |
| Fair value at date of grant | $ 6.29 |

The following table summarizes the Company's stock-settled stock appreciation right ("SSAR") and stock option activity for the nine months ended September 30, 2023:

| | SSARs | | | | Stock Options | | | |
|---|---|---|---|---|---|---|---|---|
| | Number of Shares | Weighted-Average Exercise Price | Aggregate Intrinsic Value | Weighted-Average Remaining Contractual Term (Years) | Number of Shares | Weighted-Average Exercise Price | Aggregate Intrinsic Value | Weighted-Average Remaining Contractual Term (Years) |
| *(in millions, except share and per share amounts)* | | | | | | | | |
| Outstanding at December 31, 2022 | 223,564 | $ 23.92 | | | 2,703,424 | $ 16.28 | | |
| Exercised | — | — | | | ( 536,771 ) | 12.47 | | |
| Forfeited | — | — | | | ( 12,684 ) | 20.97 | | |
| Expired | ( 223,564 ) | 23.92 | | | ( 49,613 ) | 19.49 | | |
| Outstanding at September 30, 2023 | — | $ — | $ — | 0.0 | 2,104,356 | $ 17.15 | $ 0.2 | 2.5 |
| Exercisable at September 30, 2023 | — | $ — | $ — | 0.0 | 1,946,512 | $ 16.84 | $ 0.2 | 2.3 |

There was no unrecognized compensation expense related to SSARs at September 30, 2023. At September 30, 2023, unrecognized compensation expense related to stock options not yet exercisable of $ 0.6 million is expected to be recognized over a weighted-average period of 1.1 years.

***RSUs***

The following table summarizes the Company's restricted stock unit ("RSU") activity for the nine months ended September 30, 2023:

| | Share units | Weighted-average grant date fair value |
|---|---|---|
| Unvested at December 31, 2022 | 1,880,521 | $ 19.96 |
| Granted | 1,265,748 | 18.78 |
| Vested [1] | ( 834,521 ) | 19.54 |
| Forfeited | ( 147,153 ) | 19.90 |
| Unvested at September 30, 2023 | 2,164,595 | $ 19.44 |

[1] The number of RSUs vested includes shares that the Company withheld on behalf of employees to satisfy statutory tax withholding requirements.

At September 30, 2023, $ 26.1 million of unrecognized compensation expense related to RSUs is expected to be recognized over a weighted-average period of 1.7 years.

***PSUs***

The Company grants performance share units (“PSUs”) to senior management. In each case, the awards will cliff vest three years following the grant date. PSUs will be settled in shares of the Company's common stock. Depending on the Company's overall performance relative to the applicable measures, the size of the PSU awards are subject to adjustment, up or down, resulting in awards at the end of the performance period that can range from 0 % to 225 % of target. The Company will ratably recognize the expense over the applicable service period for each grant of PSUs and adjust the expense for the expected achievement of performance conditions as appropriate. The fair value of PSUs is determined by using a Monte Carlo simulation. For the awards granted in February 2023, 2022, and 2021, the number of PSUs that may be earned and vest is based on total shareholder return (“TSR”) relative to the component companies of the Russell 2000 Index over a three-year performance period.

The following table summarizes the Company's PSU activity for the nine months ended September 30, 2023:

| | Share units | Weighted-average grant date fair value |
|---|---|---|
| Unvested at December 31, 2022 | 833,589 | $ 25.12 |
| Granted | 320,585 | 29.75 |
| Vested [1] | ( 261,770 ) | 16.14 |
| Forfeited | ( 37,125 ) | 29.20 |
| Unvested at September 30, 2023 | 855,279 | $ 29.42 |

[1] The number of PSUs vested includes shares that the Company withheld on behalf of employees to satisfy statutory tax withholding requirements.

At September 30, 2023, $ 12.0 million of unrecognized compensation expense related to PSUs is expected to be recognized over a weighted-average period of 1.4 years.

**13. Earnings per Share**

Basic and diluted earnings per share were computed as follows:

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| *(in millions, except per share amounts)* | 2023 | 2022 | 2023 | 2022 |
| Net earnings (loss) | $ 16.6 | $ 2.7 | $ 25.0 | $ ( 222.1 ) |
| **Basic:** | | | | |
| Net earnings (loss) per share | $ 0.18 | $ 0.03 | $ 0.27 | $ ( 2.42 ) |
| Weighted-average shares outstanding | 90.8 | 91.4 | 91.2 | 91.9 |
| **Diluted:** | | | | |
| Net earnings (loss) per share | $ 0.18 | $ 0.03 | $ 0.27 | $ ( 2.42 ) |
| Weighted-average shares outstanding | 91.4 | 92.0 | 91.9 | 91.9 |

For the three and nine months ended September 30, 2023, the weighted-average number of anti-dilutive potential common shares for stock-based awards excluded from the diluted earnings per share calculation above was 1.7 million and 2.4 million, respectively. For the three and nine months ended September 30, 2022, the weighted-average number of anti-dilutive potential common shares for stock-based awards excluded from the diluted earnings per share calculation above was 3.2 million and 3.0 million, respectively.

**14. Commitments and Contingent Liabilities**

From time to time, the Company is involved in various legal proceedings and claims arising in the ordinary course of its business. The majority of these claims and proceedings relate to commercial, warranty, employment, and intellectual property matters. Although the ultimate outcome of any legal proceeding or claim cannot be predicted with certainty, based on present information, including management’s assessment of the merits of the particular claim, the Company believes that the disposition of these legal proceedings or claims, individually or in the aggregate, after taking into account recorded accruals and the availability and limits of insurance coverage, will not have a material adverse effect on its cash flow, results of operations, or financial condition.

The Company owns many patents and other intellectual property pertaining to its products, technology, and manufacturing processes. Some of the Company's patents have been and may continue to be infringed upon or challenged by others. In appropriate cases, the Company has taken and will take steps to protect and defend its patents and other intellectual property, including through the use of legal proceedings in various jurisdictions around the world. Such steps have resulted in and may continue to result in retaliatory legal proceedings, including litigation or other legal proceedings in various jurisdictions and forums around the world alleging infringement by the Company of patents owned by others. The costs of investigations and legal proceedings relating to the enforcement and defense of the Company's intellectual property may be substantial. Additionally, in multi-forum disputes, the Company may incur adverse judgments with regard to certain claims in certain jurisdictions and forums while still contesting other related claims against the same opposing party in other jurisdictions and forums.

***Intellectual Property Infringement Claims***

The Company may, on a limited customer specific basis, provide contractual indemnities for certain losses that arise out of claims that its products infringe on the intellectual property of others. It is not possible to determine the maximum potential amount under these indemnification agreements due to the unique facts and circumstances involved in each particular agreement. Historically, the Company has not made significant payments under such indemnity arrangements. The Company's legal accruals associated with these indemnity arrangements were not significant at September 30, 2023 and December 31, 2022.

**15. Segment Information**

The Company's three reportable segments are Precision Devices, MedTech & Specialty Audio, and Consumer MEMS Microphones. Information regarding the Company's reportable segments is as follows (certain prior year information has been reclassified to conform to the current year presentation):

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| *(in millions)* | **2023** | **2022** | **2023** | **2022** |
| **Revenues:** | | | | |
| Precision Devices | $ 50.2 | $ 64.4 | $ 151.7 | $ 179.6 |
| MedTech & Specialty Audio | 56.5 | 47.0 | 162.6 | 168.1 |
| Consumer MEMS Microphones | 68.4 | 66.8 | 178.1 | 219.9 |
| **Total revenues** | $ 175.1 | $ 178.2 | $ 492.4 | $ 567.6 |
| **Earnings (loss) before interest and income taxes:** | | | | |
| Precision Devices | $ 6.1 | $ 16.2 | $ 21.6 | $ 39.5 |
| MedTech & Specialty Audio | 22.2 | 15.4 | 57.2 | 60.2 |
| Consumer MEMS Microphones | 11.1 | (32.3) | 9.2 | (271.1) |
| Total segments | 39.4 | (0.7) | 88.0 | (171.4) |
| Corporate expense / other | 17.3 | 11.8 | 51.0 | 35.6 |
| Interest expense, net | 0.6 | 1.1 | 2.2 | 2.7 |
| Earnings (loss) before income taxes | 21.5 | (13.6) | 34.8 | (209.7) |
| Provision for (benefit from) income taxes | 4.9 | (16.3) | 9.8 | 12.4 |
| **Net earnings (loss)** | $ 16.6 | $ 2.7 | $ 25.0 | $ (222.1) |

Information regarding assets of the Company's reportable segments:

| | Total Assets | |
|---|---|---|
| *(in millions)* | September 30, 2023 | December 31, 2022 |
| Precision Devices | $ 292.1 | $ 275.7 |
| MedTech & Specialty Audio | 350.2 | 358.1 |
| Consumer MEMS Microphones | 536.3 | 547.3 |
| Corporate / eliminations | 3.6 | 2.8 |
| **Total** | $ 1,182.2 | $ 1,183.9 |

The following table details revenues by geographic location. Revenues are attributed to regions based on the location of the Company's direct customer, which in some instances is an intermediary and not necessarily the end user. The Company's businesses are based primarily in Asia, North America, and Europe.

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| *(in millions)* | 2023 | 2022 | 2023 | 2022 |
| Asia | $ 109.6 | $ 105.3 | $ 298.5 | $ 347.2 |
| United States | 36.1 | 43.7 | 105.4 | 129.3 |
| Europe | 25.1 | 24.5 | 74.9 | 80.2 |
| Other Americas | 1.1 | 2.9 | 4.5 | 5.5 |
| Other | 3.2 | 1.8 | 9.1 | 5.4 |
| **Total** | $ 175.1 | $ 178.2 | $ 492.4 | $ 567.6 |

Receivables, net from contracts with customers were $ 112.4 million and $ 125.7 million as of September 30, 2023 and December 31, 2022, respectively. As of September 30, 2023 and December 31, 2022, our total remaining performance obligations were immaterial.

**16. Subsequent Events**

On November 1, 2023, the Company acquired (i) all the issued and outstanding shares of Kaplan Electronics, Inc. and (ii) certain assets of Cornell Dubilier Electronics, Inc. and CD Aero, LLC (collectively, "Cornell Dubilier") for aggregate consideration of approximately $ 263.0 million, consisting of a $ 140.0 million cash payment at closing and an interest-free seller note of approximately $ 123.0 million, with $ 50.0 million maturing one year from closing of the acquisition and the remaining $ 73.0 million maturing two years from closing of the acquisition, secured by certain assets (including equity interest) acquired in connection with the acquisition (the "Seller Note"). The Seller Note includes Knowles Capital Holdings, Inc. and Knowles Intermediate PD Holdings, LLC as borrowers, which jointly and severally agree to pay James P. Kaplan, as representative of the sellers of Cornell Dubilier. The acquisition purchase price is subject to working capital and other contractual adjustments. The Company funded the cash portion of the consideration through a combination of borrowings on its existing revolving credit facility and cash on hand.

Cornell Dubilier is a manufacturer of film, electrolytic, and mica capacitors used in medtech, military, aerospace, and industrial electrification applications. The transaction will be accounted for as a business combination under Accounting Standards Codification 805 and the results of operations from the date of acquisition will be reflected within the Precision Devices segment. The Company is in the process of completing its appraisals of tangible and intangible assets relating to this acquisition, and the allocation of the purchase price to the assets acquired and liabilities assumed will be completed once the appraisal process has been finalized. During the nine months ended September 30, 2023, the Company recognized acquisition-related costs of $ 3.0 million, which are reflected within "Selling and administrative expenses" in the Consolidated Statement of Earnings.

**Forward-Looking Statements**

This Quarterly Report on Form 10-Q contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 relating to our operations, results of operations, our continued business operations, and other matters that are based on our current expectations, estimates, assumptions, and projections. Words such as “believe,” “expect,” “anticipate,” “project,” “estimate,” “budget,” “continue,” “could,” “intend,” “may,” “plan,” “potential,” “predict,” “seek,” “should,” “will,” “would,” “objective,” “forecast,” “goal,” “guidance,” “outlook,” “effort,” “target,” and similar expressions, among others, generally identify forward-looking statements, which speak only as of the date the statements were made. The statements in this Quarterly Report on Form 10-Q, including those statements related to our expectations regarding the acquisition of Cornell Dubilier and the evaluation of strategic alternatives for the CMM business, are based on currently available information and the current expectations, forecasts, and assumptions of our management concerning risks and uncertainties that could cause actual outcomes or results to differ materially from those outcomes or results that are projected, anticipated, or implied in these statements. Other risks and uncertainties include, but are not limited to:

- unforeseen changes in MEMS microphone demand from our largest customers, particularly our top five customers, who represent a significant portion of revenues for our Consumer MEMS Microphones segment;
- our ongoing ability to execute our strategy to diversify our end markets and customers;
- our ability to stem or overcome price erosion in our segments;
- fluctuations in our stock's market price;
- fluctuations in operating results and cash flows;
- our ability to prevent or identify quality issues in our products or to promptly remedy any such issues that are identified;
- the timing of OEM product launches;
- risks associated with increasing our inventories in advance of anticipated orders by customers;
- global economic instability, including due to inflation, rising interest rates, negative impacts caused by pandemics and public health crises, or the impacts of geopolitical uncertainties;
- the impact of changes to laws and regulations that affect the Company’s ability to offer products or services to customers in different regions;
- our ability to achieve reductions in our operating expenses;
- the ability to qualify our products and facilities with customers;
- our ability to obtain, enforce, defend, or monetize our intellectual property rights;
- disruption caused by a cybersecurity incident, including a cyber attack, cyber breach, theft, or other unauthorized access;
- difficulties or delays in and/or the Company's inability to realize expected synergies from its acquisitions;
- increases in the costs of critical raw materials and components;
- availability of raw materials and components;
- managing new product ramps and introductions for our customers;
- our dependence on a limited number of large customers;
- our ability to maintain and expand our existing relationships with leading OEMs in order to maintain and increase our revenue;
- increasing competition and new entrants in the market for our products;
- our ability to develop new or enhanced products or technologies in a timely manner that achieve market acceptance;
- our reliance on third parties to manufacture, assemble, and test our products and sub-components;
- escalating international trade tensions, new or increased tariffs, and trade wars among countries;
- financial risks, including risks relating to currency fluctuations, credit risks, and fluctuations in the market value of the Company;
- a sustained decline in our stock price and market capitalization may result in the impairment of certain intangible or long-lived assets;
- market risk associated with fluctuations in commodity prices, particularly for various precious metals used in our manufacturing operation; and
- changes in tax laws, changes in tax rates, and exposure to additional tax liabilities.

A more complete description of these risks, uncertainties, and other factors can be found under the heading “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2022. We do not undertake to update or revise our forward-looking statements as a result of new information, future events, or otherwise, except as required by law.

**Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations**

The following discussion and analysis should be read in conjunction with our Consolidated Financial Statements and related Notes included elsewhere in this Quarterly Report on Form 10-Q.

**Overview**

We are a market leader and global provider of advanced micro-acoustic microphones and balanced armature speakers, audio solutions, and high performance capacitors and radio frequency ("RF") filtering products, serving the medtech, defense, consumer electronics, electric vehicle, industrial, and communications markets. Our focus on the customer, combined with unique technology, proprietary manufacturing techniques, and global operational expertise, enables us to deliver innovative solutions across multiple applications. References to "Knowles," the "Company," "we," "our," or "us" refer to Knowles Corporation and its consolidated subsidiaries, unless the context otherwise requires.

During the fourth quarter of 2022, we determined each operating segment represents a single reportable segment; thus, we now report three segments. These segments were determined in accordance with Financial Accounting Standards Board Accounting Standards Codification 280 - Segment Reporting and are comprised of (i) Precision Devices ("PD"), (ii) MedTech & Specialty Audio ("MSA"), and (iii) Consumer MEMS Microphones ("CMM"). The segments are aligned around similar product applications serving our key end markets to enhance focus on end market growth strategies.

- PD Segment
  Our PD segment specializes in the design and delivery of high performance capacitor products and RF solutions primarily serving the defense, medtech, industrial, communication, electric vehicle, and distribution markets. PD has sales, support, and engineering facilities in North America, Europe, and Asia as well as manufacturing facilities in North America and Asia.

- MSA Segment
  Our MSA segment designs and manufactures microphones and balanced armature speakers used in applications that serve the hearing health and premium audio markets. MSA has sales, support, and engineering facilities in North America, Europe, and Asia, as well as manufacturing facilities in Asia.

- CMM Segment
  Our CMM segment designs and manufactures micro-electro-mechanical systems ("MEMS") microphones and audio solutions used in applications that primarily serve the ear, Internet of Things ("IoT"), computing, and smartphone markets. CMM has sales, support, and engineering facilities in North America, Europe, and Asia, as well as manufacturing facilities in Asia.

We sell our products directly to original equipment manufacturers ("OEMs") and to their contract manufacturers and suppliers and through distributors worldwide.

On September 18, 2023, we announced that we are reviewing strategic alternatives for CMM. No assurance can be given that any transaction or other strategic outcomes will result from the review. We have not set a timetable for the conclusion of the strategic review and do not intend to comment on or provide updates regarding these matters unless and until we determine that further disclosure is appropriate or required.

**Non-GAAP Financial Measures**

In addition to the GAAP financial measures included in this item, we have presented certain non-GAAP financial measures. We use non-GAAP measures as supplements to our GAAP results of operations in evaluating certain aspects of our business, and our executive management team and Board of Directors focus on non-GAAP items as key measures of our performance for business planning purposes. These measures assist us in comparing our performance between various reporting periods on a consistent basis, as these measures remove from operating results the impact of items that, in our opinion, do not reflect our core operating performance. We believe that our presentation of non-GAAP financial measures is useful because it provides investors and securities analysts with the same information that we use internally for purposes of assessing our core operating performance. The Company does not consider these non-GAAP financial measures to be a substitute for the information provided by GAAP financial results. For a reconciliation of these non-GAAP financial measures to the most directly comparable GAAP financial measures, see the reconciliation included herein.

**Results of Operations for the Three Months Ended September 30, 2023 compared with the Three Months Ended September 30, 2022**

| | Three Months Ended September 30, | |
|---|---|---|
| *(in millions, except per share amounts)* | 2023 | 2022 |
| Revenues | $ 175.1 | $ 178.2 |
| | | |
| Gross profit | $ 77.5 | $ 40.0 |
| Non-GAAP gross profit | $ 78.1 | $ 68.6 |
| | | |
| Earnings (loss) before interest and income taxes | $ 22.1 | $ (12.5) |
| Adjusted earnings before interest and income taxes | $ 36.8 | $ 28.2 |
| | | |
| Provision for (benefit from) income taxes | $ 4.9 | $ (16.3) |
| Non-GAAP provision for income taxes | $ 6.9 | $ 3.8 |
| | | |
| Net earnings | $ 16.6 | $ 2.7 |
| Non-GAAP net earnings | $ 29.3 | $ 23.3 |
| | | |
| Diluted earnings per share | $ 0.18 | $ 0.03 |
| Non-GAAP diluted earnings per share | $ 0.31 | $ 0.25 |

***Revenues***

Revenues for the third quarter of 2023 were $175.1 million, compared with $178.2 million for the third quarter of 2022, a decrease of $3.1 million or 1.7%. PD revenues decreased $14.2 million, primarily due to lower demand from the industrial, communication, defense, medtech, and distribution markets as a result of continued demand weakness associated with excess channel inventory and timing of shipments into the defense market. MSA revenues increased $9.5 million, primarily due to higher shipping volumes into the hearing health and premium audio markets as demand has returned to normalized levels. CMM revenues increased $1.6 million, primarily due to higher demand in the computing and IoT markets, partially offset by lower average pricing on mature products.

***Cost of Goods Sold***

Cost of goods sold ("COGS") for the third quarter of 2023 was $102.7 million, compared with $110.1 million for the third quarter of 2022, a decrease of $7.4 million or 6.7%. This decrease was primarily due to product cost reductions, benefits of prior year restructuring actions, favorable product mix, favorable foreign currency changes, partially offset by lower factory capacity utilization and higher shipping volumes.

***Gain on Sale of Fixed Assets***

As a result of transitioning to our next generation of MEMS wafer manufacturing technology, we sold certain machinery and equipment related to the CMM segment in the third quarter of 2023 and recorded a gain of $5.2 million. For additional information, refer to Note 6. Property, Plant, and Equipment, net to our Consolidated Financial Statements.

***Restructuring Charges***

During the third quarter of 2023, we recorded restructuring charges of $1.3 million for severance pay and benefits related to headcount reductions within our PD segment and $0.4 million in other charges, all primarily in Operating expenses. We also recorded a $0.1 million gain on the sale of certain machinery and equipment that was previously written off through restructuring charges in Gross profit and the CMM Segment. For additional information, refer to Note 8. Restructuring and Related Activities to our Consolidated Financial Statements.

During the third quarter of 2022, we committed to a restructuring program within our CMM segment designed to rightsize manufacturing capacity and operating expenses in the MEMS microphones product line. This action was taken in light of the decline in demand and the reduction in the expected future growth for global consumer electronics. In addition, this restructuring program furthers the Company's previously announced strategy to reduce exposure to commodity microphones and increase emphasis on high-value solutions. This action resulted in the settlement of supplier obligations, non-cash fixed asset write-offs, and severance pay. We recorded restructuring charges of $29.8 million related to this action. In addition, we recorded restructuring charges of $1.0 million related to headcount reductions within the Intelligent Audio product line workforce, which is also included within the Audio segment. As a result, we recorded total restructuring charges of $28.1 million within Gross Profit and $2.7 million within Operating expenses. For additional information, refer to Note 8. Restructuring and Related Activities to our Consolidated Financial Statements.

***Gross Profit and Non-GAAP Gross Profit***

Gross profit for the third quarter of 2023 was $77.5 million, compared with $40.0 million for the third quarter of 2022, an increase of $37.5 million or 93.8%. Gross profit margin (gross profit as a percentage of revenues) for the third quarter of 2023 was 44.3%, compared with 22.4% for the third quarter of 2022. The increases were primarily due to lower restructuring charges, product cost reductions, the gain on sale of fixed assets, benefits of prior year restructuring, favorable product mix, and favorable foreign currency exchange rate changes, partially offset by lower average pricing on mature products shipped into the mobile market and lower factory capacity utilization.

Non-GAAP gross profit for the third quarter of 2023 was $78.1 million, compared with $68.6 million for the third quarter of 2022, an increase of $9.5 million or 13.8%. Non-GAAP gross profit margin (non-GAAP gross profit as a percentage of revenues) for the third quarter of 2023 was 44.6%, compared with 38.5% for the third quarter of 2022. The increases in non-GAAP gross profit were primarily due to product cost reductions, the gain on sale of fixed assets, benefits of prior year restructuring, favorable product mix, and favorable foreign currency exchange rate changes, partially offset by lower average pricing on mature products shipped into the mobile market and lower factory capacity utilization.

***Research and Development Expenses***

Research and development expenses for the third quarter of 2023 were $19.8 million, compared with $19.3 million for the third quarter of 2022, an increase of $0.5 million or 2.6%. Research and development expenses as a percentage of revenues for the third quarter of 2023 and 2022 were 11.3% and 10.8%, respectively. The increase in expenses was primarily driven by increased development activities in our MSA segment, partially offset by reduced spending in our CMM segment driven by the benefits of prior year restructuring actions as we continue to shift our focus and spending to our higher margin businesses. The increase in expenses as a percentage of revenues was driven by our lower revenues.

***Selling and Administrative Expenses***

Selling and administrative expenses for the third quarter of 2023 were $34.6 million, compared with $32.6 million for the third quarter of 2022, an increase of $2.0 million or 6.1%. Selling and administrative expenses as a percentage of revenues for the third quarter of 2023 and 2022 were 19.8% and 18.3%, respectively. The increase in expenses was primarily driven by higher professional service fees. The increase in expenses as a percentage of revenues was driven by our increase in expenses and lower revenues.

***Interest Expense, net***

Interest expense for the third quarter of 2023 and 2022 was $0.6 million, compared with $1.1 million for the third quarter of 2022, a decrease of $0.5 million. We had a lower outstanding revolving credit facility balance during the third quarter of 2023 compared to the third quarter of 2022, offset by higher interest rates. For additional information on borrowings and interest expense, refer to Note 9. Borrowings to our Consolidated Financial Statements.

***Other Income, net***

Other income for the third quarter of 2023 was $0.5 million, compared with income of $2.1 million for the third quarter of 2022, a change of $1.6 million. The change is primarily due to less favorable foreign currency exchange rate changes.

***Provision for Income Taxes and Non-GAAP Provision for Income Taxes***

The effective tax rate ("ETR") for the third quarter of 2023 and 2022 was 22.8% and 119.9%, respectively. The ETR for the third quarter of 2023 includes discrete items totaling $0.8 million of tax benefit primarily attributable to stock-based compensation and the recognition of foreign tax credits resulting from the release of IRS Notice 2023-55. Absent the discrete items, the ETR for the third quarter of 2023 and 2022 was 26.5% and 119.9%, respectively. The Company accrues taxes in various countries where it generates income and applies a valuation allowance in other jurisdictions, which resulted in the provision (benefit) for the third quarter of 2023 and 2022, respectively. The change in the ETR was mainly due to the book goodwill impairment recorded in the second quarter of 2022, as well as the mix of earnings and losses by taxing jurisdictions and net discrete items.

The non-GAAP ETR for the third quarter of 2023 and 2022 was 19.1% and 14.0%, respectively. The non-GAAP ETR for the third quarter of 2023 was impacted by a net discrete expense totaling $0.1 million. Absent the discrete items, the non-GAAP ETR for the third quarter of 2023 and 2022 was 18.8% and 14.0%, respectively. The change in the non-GAAP ETR was primarily due to lower pre-tax earnings and the loss of our Malaysian tax holiday.

The ETR and non-GAAP ETR deviate from the statutory U.S. federal income tax rate, mainly due to the taxing jurisdictions where we generate taxable income or loss. As a result of the rapid decline in demand for global consumer electronics during 2022, we did not satisfy all of the conditions of our tax holiday in Malaysia. As such, we are not including this tax holiday benefit in our 2023 GAAP ETR and non-GAAP ETR. For additional information on tax holidays refer to Note 11. Income Taxes to our Consolidated Financial Statements.

***Net Earnings***

Net earnings for the third quarter of 2023 were $16.6 million, compared with $2.7 million for the third quarter of 2022, an increase of $13.9 million. As described above, the increase is primarily due to higher gross profit, partially offset by higher income tax expense.

***Earnings (Loss) and Adjusted Earnings Before Interest and Income Taxes***

Earnings before interest and income taxes ("EBIT") for the third quarter of 2023 was $22.1 million, compared with a $12.5 million loss for the third quarter of 2022, an increase of $34.6 million. EBIT margin (EBIT as a percentage of revenues) for the third quarter of 2023 was 12.6%, compared with (7.0)% for the third quarter of 2022. The change is primarily due to higher gross profit.

Adjusted earnings before interest and income taxes ("Adjusted EBIT") for the third quarter of 2023 was $36.8 million, compared with $28.2 million for the third quarter of 2022, an increase of $8.6 million. Adjusted EBIT margin (Adjusted EBIT as a percentage of revenues) for the third quarter of 2023 was 21.0%, compared with 15.8% for the third quarter of 2022. The increases were primarily due to higher non-GAAP gross profit.

***Diluted Earnings per Share and Non-GAAP Diluted Earnings per Share***

Diluted earnings per share was $0.18 for the third quarter of 2023, compared with earnings per share of $0.03 for the third quarter of 2022, an increase of $0.15. As described above, the increase is primarily due to higher gross profit, partially offset by higher income tax expense.

Non-GAAP diluted earnings per share was $0.31 for the third quarter of 2023, compared with $0.25 for the third quarter of 2022, an increase of $0.06. As described above, the increase was primarily due to higher non-GAAP gross profit partially offset by higher non-GAAP income tax expenses.

**Results of Operations for the Nine Months Ended September 30, 2023 compared with the Nine Months Ended September 30, 2022**

| | Nine Months Ended September 30, | |
|---|---|---|
| *(in millions, except per share amounts)* | **2023** | **2022** |
| Revenues | $ 492.4 | $ 567.6 |
| | | |
| Gross profit | $ 205.0 | $ 201.0 |
| Non-GAAP gross profit | $ 205.2 | $ 230.5 |
| | | |
| Earnings (loss) before interest and income taxes | $ 37.0 | $ (207.0) |
| Adjusted earnings before interest and income taxes | $ 72.6 | $ 105.2 |
| | | |
| Provision for income taxes | $ 9.8 | $ 12.4 |
| Non-GAAP provision for income taxes | $ 14.1 | $ 13.9 |
| | | |
| Net earnings (loss) | $ 25.0 | $ (222.1) |
| Non-GAAP net earnings | $ 56.3 | $ 88.6 |
| | | |
| Diluted earnings (loss) per share | $ 0.27 | $ (2.42) |
| Non-GAAP diluted earnings per share | $ 0.60 | $ 0.93 |

***Revenues***

Revenues for the nine months ended September 30, 2023 were $492.4 million, compared with $567.6 million for the nine months ended September 30, 2022, a decrease of $75.2 million or 13.2%. PD revenues decreased $27.9 million, primarily due to lower demand from the industrial, communication, distribution, defense, and medtech markets as a result of continued demand weakness associated with excess channel inventory and timing of shipments into the defense market. CMM revenues decreased $41.8 million, primarily due to lower demand for MEMS microphones in the mobile and IoT markets. The decreases in these markets were primarily driven by weak global demand for consumer electronics and excess inventory in the supply chain. In addition to lower end market demand, shipping volumes were unfavorably impacted earlier this year by financial incentives offered to customers resulting in higher shipping volumes in the fourth quarter of 2022. CMM revenues were also impacted by lower average pricing on mature products shipped into the mobile market. MSA revenues decreased $5.5 million, primarily due to lower shipping volumes into the hearing health market as customers reduced their inventory levels, partially offset by higher shipping volumes into the premium audio market. In addition to lower end market demand, shipping volumes were unfavorably impacted earlier this year by financial incentives offered to customers resulting in higher shipping volumes in the fourth quarter of 2022.

***Cost of Goods Sold***

COGS for the nine months ended September 30, 2023 was $298.9 million, compared with $338.5 million for the nine months ended September 30, 2022, a decrease of $39.6 million or 11.7%. This decrease was primarily due to lower shipping volumes, product cost reductions, benefits of prior year restructuring actions, and favorable foreign currency exchange rate changes, partially offset by lower factory capacity utilization.

***Gain on Sale of Fixed Assets***

As a result of transitioning to our next generation of MEMS wafer manufacturing technology, we sold certain machinery and equipment related to the CMM segment in the nine months ended September 30, 2023 and recorded a gain of $10.0 million. For additional information, refer to Note 6. Property, Plant, and Equipment, net to our Consolidated Financial Statements.

***Restructuring Charges***

During the nine months ended September 30, 2023, we recorded a $1.0 million gain on the sale of certain machinery and equipment that was previously written off through restructuring charges and a $0.8 million reversal of restructuring charges related to a change in estimate, all within Gross profit and the CMM Segment. We also recorded restructuring charges in Operating expenses of $1.4 million for severance pay and benefits related to headcount reductions within our CMM segment, $1.3 million for severance pay and benefits related to headcount reductions within our PD segment, and $0.7 million for other costs. For additional information, refer to Note 8. Restructuring and Related Activities to our Consolidated Financial Statements.

During the nine months ended September 30, 2022, we committed to a restructuring program within our CMM segment designed to rightsize manufacturing capacity and operating expenses in the MEMS microphones product line, designed to rightsize manufacturing capacity and operating expenses in the MEMS microphones product line. These actions were taken in light of the current decline in demand and the reduction in the expected future growth for global consumer electronics. In addition, these restructuring programs further the Company's previously announced strategy to reduce exposure to commodity microphones and increase emphasis on high-value solutions. These actions resulted in the settlement of supplier obligations, non-cash fixed asset write-offs, and severance pay. We recorded restructuring charges of $35.1 million related to these actions and $0.6 million for other costs. In addition, we recorded restructuring charges of $2.2 million related to headcount reductions within the Intelligent Audio product line workforce, which is also included within the CMM segment. As a result, we recorded total restructuring charges of $28.1 million within Gross Profit and $9.8 million within Operating expenses. For additional information, refer to Note 8. Restructuring and Related Activities to our Consolidated Financial Statements.

***Gross Profit and Non-GAAP Gross Profit***

Gross profit for the nine months ended September 30, 2023 was $205.0 million, compared with $201.0 million for the nine months ended September 30, 2022, an increase of $4.0 million or 2.0%. Gross profit margin for the nine months ended September 30, 2023 was 41.6%, compared with 35.4% for the nine months ended September 30, 2022. The increase in gross profit was primarily due to lower restructuring charges, product cost reductions, benefits of prior year restructuring actions, the gain on sale of fixed assets, and favorable foreign currency exchange rate changes, partially offset by lower shipping volumes, factory capacity utilization, and lower average pricing on mature products shipped into the mobile market. The increase in gross profit margin was primarily due to lower restructuring charges, product cost reductions, benefits of prior year restructuring actions, the gain on sale of fixed assets, and favorable foreign currency exchange rate changes, partially offset by lower factory capacity utilization and average pricing on mature products shipped into the mobile market.

Non-GAAP gross profit for the nine months ended September 30, 2023 was $205.2 million, compared with $230.5 million for the nine months ended September 30, 2022, a decrease of $25.3 million or 11.0%. Non-GAAP gross profit margin for the nine months ended September 30, 2023 was 41.7%, compared with 40.6% for the nine months ended September 30, 2022. The decrease in non-GAAP gross profit was primarily due to lower shipping volumes, factory capacity utilization, and lower average pricing on mature products shipped into the mobile market, partially offset by product cost reductions, benefits of prior year restructuring actions, the gain on sale of fixed assets, and favorable foreign currency exchange rate changes. The increase in non-GAAP gross profit margin was primarily due to product cost reductions, benefits of prior year restructuring actions, the gain on sale of fixed assets, and favorable foreign currency exchange rate changes, partially offset by lower factory capacity utilization and lower average pricing on mature products shipped into the mobile market.

***Research and Development Expenses***

Research and development expenses for the nine months ended September 30, 2023 were $59.5 million, compared with $63.7 million for the nine months ended September 30, 2022, a decrease of $4.2 million or 6.6%. Research and development expenses as a percentage of revenues for the nine months ended September 30, 2023 and 2022 were 12.1% and 11.2%, respectively. The decrease in expenses was primarily driven by reduced spending in our CMM segment driven by the benefits of prior year restructuring actions, partially offset by increased development activities in our MSA and PD segments as we continue to shift our focus and spending to our higher margin businesses. The increase in expenses as a percentage of revenues was driven by our lower revenues.

***Selling and Administrative Expenses***

Selling and administrative expenses for the nine months ended September 30, 2023 were $104.9 million, compared with $95.6 million for the nine months ended September 30, 2022, an increase of $9.3 million or 9.7%. Selling and administrative expenses as a percentage of revenues for the nine months ended September 30, 2023 and 2022 were 21.3% and 16.8%, respectively. The increase in expenses was primarily driven by higher professional service fees. The increase in expenses as a percentage of revenues was driven by our lower revenues and an increase in expenses.

***Impairment Charges***

No impairment charges were recorded during the nine months ended September 30, 2023. Impairment charges for the nine months ended September 30, 2022 were $239.8 million related to a goodwill impairment charge for the MCE reporting unit. For additional information related to these impairment charges, refer to Note 4. Impairment Charges to our Consolidated Financial Statements.

***Interest Expense, net***

Interest expense for the nine months ended September 30, 2023 and 2022 was $2.2 million, compared with $2.7 million for the nine months ended September 30, 2022, a decrease of $0.5 million. We had a lower outstanding revolving credit facility balance during the nine months ended September 30, 2023 compared to the nine months ended September 30, 2022, offset by higher interest rates. For additional information on borrowings and interest expense, refer to Note 9. Borrowings to our Consolidated Financial Statements.

***Other Expense (Income), net***

Other expense for the nine months ended September 30, 2023 was $0.5 million, compared with income of $0.9 million for the nine months ended September 30, 2022, a change of $1.4 million. Expense in 2023 represents unfavorable foreign currency exchange rate impacts, partially offset by the unrealized gains in our investment balances. Income in 2022 represents favorable impacts from foreign currency exchange rate changes, partially offset by an adjustment to pre-spin-off pension obligations and the depreciation in our investment balances.

***Provision for Income Taxes and Non-GAAP Provision for Income Taxes***

The ETR for the nine months ended September 30, 2023 and 2022 was 28.2% and (5.9)%, respectively. The ETR for the nine months ended September 30, 2023 and 2022 includes discrete items totaling $0.1 million and $1.6 million of tax benefit, respectively. The discrete items impacting the tax provision for the nine months ended September 30, 2023 are primarily attributable to stock-based compensation and the recognition of foreign tax credits resulting from the release of IRS Notice 2023-55. The discrete items impacting the tax provision for the nine months ended September 30, 2022 are primarily attributable to stock-based compensation. Absent the discrete items, the ETR for the nine months ended September 30, 2023 and 2022 was 28.4% and (6.7)%, respectively. The Company accrues taxes in various countries where it generates income and applies a valuation allowance in other jurisdictions, which resulted in the provision for both the nine months ended September 30, 2023 and 2022. The change in the ETR was mainly due to the book goodwill impairment recorded in the second quarter of 2022, as well as the mix of earnings and losses by taxing jurisdictions and net discrete items.

The non-GAAP ETR for the nine months ended September 30, 2023 and 2022 was 20.0% and 13.6%, respectively. The non-GAAP ETR includes discrete items totaling $1.0 million of tax expense for the nine months ended September 30, 2023 and a net discrete benefit totaling $0.4 million for the nine months ended September 30, 2022. Absent the discrete items, the non-GAAP ETR for the nine months ended September 30, 2023 and 2022 was 18.6% and 14.0%, respectively. The change in the non-GAAP ETR was primarily due to lower pre-tax earnings and the loss of our Malaysian tax holiday.

The ETR and non-GAAP ETR deviate from the statutory U.S. federal income tax rate, mainly due to the taxing jurisdictions where we generate taxable income or loss. As a result of the rapid decline in demand for global consumer electronics during 2022, we did not satisfy all of the conditions of our tax holiday in Malaysia. As such, we are not including this tax holiday benefit in our 2023 GAAP ETR and non-GAAP ETR. For additional information on tax holidays refer to Note 11. Income Taxes to our Consolidated Financial Statements.

***Net Earnings (Loss)***

Net earnings for the nine months ended September 30, 2023 was $25.0 million, compared with a loss of $222.1 million for the nine months ended September 30, 2022, an increase of $247.1 million. As described above, the increase is primarily due to impairment charges in 2022 that did not recur in 2023, higher gross profit, and lower income tax expense.

***Earnings (Loss) and Adjusted Earnings Before Interest and Income Taxes***

EBIT for the nine months ended September 30, 2023 was $37.0 million, compared with a loss of $207.0 million for the nine months ended September 30, 2022, an increase of $244.0 million. EBIT margin for the nine months ended September 30, 2023 was 7.5%, compared with (36.5)% for the nine months ended September 30, 2022. The change is primarily due to impairment charges recorded in 2022 that did not recur in 2023 and higher gross profit.

Adjusted earnings before interest and income taxes for the nine months ended September 30, 2023 was $72.6 million, compared with $105.2 million for the nine months ended September 30, 2022, a decrease of $32.6 million. Adjusted EBIT margin for the nine months ended September 30, 2023 was 14.7%, compared with 18.5% for the nine months ended September 30, 2022. The decreases were primarily due to lower non-GAAP gross profit.

***Diluted Earnings (Loss) per Share and Non-GAAP Diluted Earnings per Share***

Diluted earnings per share was $0.27 for the nine months ended September 30, 2023, compared with a loss per share of $2.42 for the nine months ended September 30, 2022, an increase of $2.69. As described above, the change is primarily due to impairment charges recorded in 2022 that did not recur in 2023 and higher gross profit.

Non-GAAP diluted earnings per share was $0.60 for the nine months ended September 30, 2023, compared with $0.93 for the nine months ended September 30, 2022, a decrease of $0.33. As described above, the decrease was primarily due to lower non-GAAP gross profit.

**Reconciliation of GAAP Financial Measures to Non-GAAP Financial Measures [1]**

| (in millions, except per share amounts) | Three Months Ended September 30, 2023 | Three Months Ended September 30, 2022 | Nine Months Ended September 30, 2023 | Nine Months Ended September 30, 2022 |
|---|---|---|---|---|
| Gross profit | $ 77.5 | $ 40.0 | $ 205.0 | $ 201.0 |
| Stock-based compensation expense | 0.5 | 0.5 | 1.7 | 1.4 |
| Restructuring charges | 0.1 | 28.1 | (1.5) | 28.1 |
| Non-GAAP gross profit | $ 78.1 | $ 68.6 | $ 205.2 | $ 230.5 |
| | | | | |
| Net earnings (loss) | $ 16.6 | $ 2.7 | $ 25.0 | $ (222.1) |
| Interest expense, net | 0.6 | 1.1 | 2.2 | 2.7 |
| Provision for (benefit from) income taxes | 4.9 | (16.3) | 9.8 | 12.4 |
| Earnings (loss) before interest and income taxes | 22.1 | (12.5) | 37.0 | (207.0) |
| Stock-based compensation expense | 6.9 | 6.8 | 21.8 | 21.6 |
| Intangibles amortization expense | 3.0 | 3.1 | 8.8 | 9.2 |
| Impairment charges | — | — | — | 239.8 |
| Restructuring charges | 1.6 | 30.8 | 1.6 | 37.9 |
| Acquisition-related costs [2] | 3.0 | — | 3.0 | — |
| Other [3] | 0.2 | — | 0.4 | 3.7 |
| Adjusted earnings before interest and income taxes | $ 36.8 | $ 28.2 | $ 72.6 | $ 105.2 |
| | | | | |
| Provision for (benefit from) income taxes | $ 4.9 | $ (16.3) | $ 9.8 | $ 12.4 |
| Income tax effects of non-GAAP reconciling adjustments [4] | 2.0 | 20.1 | 4.3 | 1.5 |
| Non-GAAP provision for income taxes | $ 6.9 | $ 3.8 | $ 14.1 | $ 13.9 |
| | | | | |
| Net earnings (loss) | $ 16.6 | $ 2.7 | $ 25.0 | $ (222.1) |
| Non-GAAP reconciling adjustments [5] | 14.7 | 40.7 | 35.6 | 312.2 |
| Income tax effects of non-GAAP reconciling adjustments [4] | 2.0 | 20.1 | 4.3 | 1.5 |
| Non-GAAP net earnings | $ 29.3 | $ 23.3 | $ 56.3 | $ 88.6 |
| | | | | |
| Diluted earnings (loss) per share | $ 0.18 | $ 0.03 | $ 0.27 | $ (2.42) |
| Earnings per share non-GAAP reconciling adjustment | 0.13 | 0.22 | 0.33 | 3.35 |
| Non-GAAP diluted earnings per share | $ 0.31 | $ 0.25 | $ 0.60 | $ 0.93 |
| | | | | |
| Diluted average shares outstanding | 91.4 | 92.0 | 91.9 | 91.9 |
| Non-GAAP adjustment [6] | 2.6 | 2.2 | 2.5 | 3.2 |
| Non-GAAP diluted average shares outstanding [6] | 94.0 | 94.2 | 94.4 | 95.1 |

(1) In addition to the GAAP financial measures included herein, Knowles has presented certain non-GAAP financial measures that exclude certain amounts that are included in the most directly comparable GAAP measures. Knowles believes that non-GAAP measures are useful as supplements to its GAAP results of operations to evaluate certain aspects of its operations and financial performance, and its management team primarily focuses on non-GAAP items in evaluating Knowles' performance for business planning purposes. Knowles also believes that these measures assist it with comparing its performance between various reporting periods on a consistent basis, as these measures remove from operating results the impact of items that, in Knowles' opinion, do not reflect its core operating performance. Knowles believes that its presentation of non-GAAP financial measures is useful because it provides investors and securities analysts with the same information that Knowles uses internally for purposes of assessing its core operating performance.

(2) These expenses are related to the acquisition of Cornell Dubilier by the Precision Devices segment.

(3) In 2023, Other expenses include non-recurring professional service fees related to an evaluation of a reorganization. In addition, Other expenses include the ongoing net lease cost (income) related to facilities not used in operations. In 2022, Other expenses represent an adjustment to pre-spin-off pension obligations of $3.4 million, which was recorded during the second quarter of 2022 in Other expense (income), net line on the Consolidated Statements of Earnings, and the ongoing net lease cost related to facilities not used in operations.

(4) Income tax effects of non-GAAP reconciling adjustments are calculated using the applicable tax rates in the jurisdictions of the underlying adjustments.

(5) The non-GAAP reconciling adjustments are those adjustments made to reconcile Earnings (loss) before interest and income taxes to Adjusted earnings before interest and income taxes.

(6) The number of shares used in the diluted per share calculations on a non-GAAP basis excludes the impact of stock-based compensation expense expected to be incurred in future periods and not yet recognized in the financial statements, which would otherwise be assumed to be used to repurchase shares under the GAAP treasury stock method.

**Segment Results of Operations for the Three Months Ended September 30, 2023 compared with the Three Months Ended September 30, 2022**

The following is a summary of the results of operations of our three reportable segments: Precision Devices, Medtech & Specialty Audio, and Consumer MEMS Microphones.

See Note 15. Segment Information to the Consolidated Financial Statements for (i) a reconciliation of segment revenues to our consolidated revenues and (ii) a reconciliation of segment earnings before interest and income taxes to our consolidated earnings.

**Precision Devices**

| | Three Months Ended September 30, | | | |
|---|---|---|---|---|
| *(in millions)* | 2023 | Percent of Revenues | 2022 | Percent of Revenues |
| Revenues | $ 50.2 | | $ 64.4 | |
| Earnings before interest and income taxes | $ 6.1 | 12.2% | $ 16.2 | 25.2% |
| Stock-based compensation expense | 0.8 | | 0.6 | |
| Intangibles amortization expense | 1.5 | | 1.5 | |
| Restructuring charges | 1.3 | | — | |
| Adjusted earnings before interest and income taxes | $ 9.7 | 19.3% | $ 18.3 | 28.4% |

***Revenues***

PD revenues were $50.2 million for the third quarter of 2023, compared with $64.4 million for the third quarter of 2022, a decrease of $14.2 million or 22.0%. Revenues decreased primarily due to lower demand from the industrial, communication, defense, medtech, and distribution markets as a result of continued demand weakness associated with excess channel inventory and timing of shipments into the defense market.

***Earnings and Adjusted Earnings Before Interest and Income Taxes***

PD EBIT was $6.1 million for the third quarter of 2023, compared with $16.2 million for the third quarter of 2022, a decrease of $10.1 million. EBIT margin for the third quarter of 2023 was 12.2%, compared to 25.2% for the third quarter of 2022. The decreases were primarily due to lower revenues and lower gross profit margin, partially offset by lower operating expenses. The gross profit margin decrease was primarily driven lower factory capacity utilization.

PD Adjusted EBIT was $9.7 million for the third quarter of 2023, compared with $18.3 million for the third quarter of 2022, a decrease of $8.6 million. Adjusted EBIT margin for the third quarter of 2023 was 19.3%, compared with 28.4% for the third quarter of 2022. The decreases were primarily due to lower revenues and lower non-GAAP gross profit margin. The non-GAAP gross profit margin decrease was primarily driven by lower factory capacity utilization.

**MedTech & Specialty Audio**

| (in millions) | Three Months Ended September 30, 2023 | Percent of Revenues | 2022 | Percent of Revenues |
|---|---|---|---|---|
| Revenues | $ 56.5 | | $ 47.0 | |
| Earnings before interest and income taxes | $ 22.2 | 39.3% | $ 15.4 | 32.8% |
| Stock-based compensation expense | 0.9 | | 0.7 | |
| Adjusted earnings before interest and income taxes | $ 23.1 | 40.9% | $ 16.1 | 34.3% |

***Revenues***

MSA revenues were $56.5 million for the third quarter of 2023, compared with $47.0 million for the third quarter of 2022, an increase of $9.5 million or 20.2%. Revenues increased primarily due to higher shipping volumes into the hearing health and premium audio markets as demand has returned to normalized levels compared to the third quarter of 2022.

***Earnings and Adjusted Earnings Before Interest and Income Taxes***

MSA EBIT was $22.2 million for the third quarter of 2023, compared with $15.4 million for the third quarter of 2022, an increase of $6.8 million or 44.2%. EBIT margin for the third quarter of 2023 was 39.3%, compared with 32.8% for the third quarter of 2022. The increases were primarily due to higher revenues and gross profit margins, partially offset by higher operating expenses. The higher gross profit margin was driven by product cost reductions, favorable foreign currency exchange rates, and product mix.

MSA Adjusted EBIT was $23.1 million for the third quarter of 2023, compared with $16.1 million for the third quarter of 2022, an increase of $7.0 million. Adjusted EBIT margin for the third quarter of 2023 was 40.9%, compared to 34.3% for the third quarter of 2022. The increases were primarily due to higher revenues and non-GAAP gross profit margins, partially offset by higher non-GAAP operating expenses. The higher non-GAAP gross profit margin was driven by product cost reductions, favorable foreign currency exchange rates, and product mix.

**Consumer MEMS Microphones**

| (in millions) | Three Months Ended September 30, 2023 | Percent of Revenues | 2022 | Percent of Revenues |
|---|---|---|---|---|
| Revenues | $ 68.4 | | $ 66.8 | |
| | | | | |
| Earnings (loss) before interest and income taxes | $ 11.1 | 16.2% | $ (32.3) | (48.4)% |
| Stock-based compensation expense | 1.2 | | 1.3 | |
| Intangibles amortization expense | 1.5 | | 1.6 | |
| Restructuring charges | (0.1) | | 30.7 | |
| Other [1] | (0.6) | | — | |
| Adjusted earnings before interest and income taxes | $ 13.1 | 19.2% | $ 1.3 | 1.9% |

[1] Other represents the ongoing net lease cost related to facilities not used in operations.

***Revenues***

CMM revenues were $68.4 million for the third quarter of 2023, compared with $66.8 million for the third quarter of 2022, an increase of $1.6 million or 2.4%. Revenues increased primarily due to higher demand in the computing and IoT markets, partially offset by lower average pricing on mature products.

***Earnings (Loss) and Adjusted Earnings Before Interest and Income Taxes***

CMM EBIT was $11.1 million for the third quarter of 2023, compared with a loss of $32.3 million for the third quarter of 2022, an increase of $43.4 million. The increase was primarily due to higher revenues, higher gross profit margins, and lower operating expenses. The higher gross profit margin was driven by lower restructuring charges, the gain on sale of fixed assets, product cost reductions, benefits of prior year restructuring actions, product mix, and increased factory capacity utilization, partially offset by lower average pricing on mature products shipped into the mobile market.

CMM Adjusted EBIT was $13.1 million for the third quarter of 2023, compared with $1.3 million for the third quarter of 2022, an increase of $11.8 million. Adjusted EBIT margin for the third quarter of 2023 was 19.2%, compared to 1.9% for the third quarter of 2022. The increases were primarily due to higher revenues, higher non-GAAP gross profit margins, and lower non-GAAP operating expenses. The higher non-GAAP gross profit margin was driven by the gain on sale of fixed assets, product cost reductions, benefits of prior year restructuring actions, product mix, and increased factory capacity utilization, partially offset by lower average pricing on mature products shipped into the mobile market.

**Segment Results of Operations for the Nine Months Ended September 30, 2023 compared with the Nine Months Ended September 30, 2022**

**Precision Devices**

| | Nine Months Ended September 30, | | | |
|---|---|---|---|---|
| *(in millions)* | 2023 | Percent of Revenues | 2022 | Percent of Revenues |
| Revenues | $ 151.7 | | $ 179.6 | |
| | | | | |
| Earnings before interest and income taxes | $ 21.6 | 14.2% | $ 39.5 | 22.0% |
| Stock-based compensation expense | 2.8 | | 2.0 | |
| Intangibles amortization expense | 4.3 | | 4.4 | |
| Restructuring charges | 1.3 | | — | |
| Other [1] | — | | 3.4 | |
| Adjusted earnings before interest and income taxes | $ 30.0 | 19.8% | $ 49.3 | 27.4% |

[1] 2022 expenses represent an adjustment to pre-spin-off pension obligations.

***Revenues***

PD revenues were $151.7 million for the nine months ended September 30, 2023, compared with $179.6 million for the nine months ended September 30, 2022, a decrease of $27.9 million or 15.5%. Revenues decreased primarily due to lower demand from the industrial, communication, distribution, defense, and medtech markets, as a result of continued demand weakness associated with excess channel inventory and timing of shipments into the defense market.

***Earnings and Adjusted Earnings Before Interest and Income Taxes***

PD EBIT was $21.6 million for the nine months ended September 30, 2023, compared with $39.5 million for the nine months ended September 30, 2022, a decrease of $17.9 million. EBIT margin for the nine months ended September 30, 2023 was 14.2%, compared to 22.0% for the nine months ended September 30, 2022. The decreases were primarily due to lower revenues, lower gross profit margin, and increased operating expenses, partially offset by the absence of adjustments to pre-spin-off pension obligations in 2023. The gross profit margin decrease was primarily driven by lower factory capacity utilization, partially offset by product cost reductions and a decrease in precious metal costs.

PD Adjusted EBIT was $30.0 million for the nine months ended September 30, 2023, compared with $49.3 million for the nine months ended September 30, 2022, a decrease of $19.3 million. Adjusted EBIT margin for the nine months ended September 30, 2023 was 19.8%, compared with 27.4% for the nine months ended September 30, 2022. The decreases were primarily due to lower revenues and non-GAAP gross profit margin. The non-GAAP gross profit margin decrease was primarily driven by lower factory capacity utilization, partially offset by product cost reductions and a decrease in precious metal costs.

**MedTech & Specialty Audio**

| | Nine Months Ended September 30, | | | |
|---|---|---|---|---|
| *(in millions)* | **2023** | **Percent of Revenues** | **2022** | **Percent of Revenues** |
| Revenues | $ 162.6 | | $ 168.1 | |
| Earnings before interest and income taxes | $ 57.2 | 35.2% | $ 60.2 | 35.8% |
| Stock-based compensation expense | 2.6 | | 2.1 | |
| Adjusted earnings before interest and income taxes | $ 59.8 | 36.8% | $ 62.3 | 37.1% |

***Revenues***

MSA revenues were $162.6 million for the nine months ended September 30, 2023, compared with $168.1 million for the nine months ended September 30, 2022, a decrease of $5.5 million or 3.3%. Revenues decreased primarily due to lower shipping volumes into the hearing health market as customers reduced their inventory levels, partially offset by higher shipping volumes into the premium audio market. In addition to lower end market demand, shipping volumes were unfavorably impacted earlier this year by financial incentives offered to customers resulting in higher shipping volumes in the fourth quarter of 2022.

***Earnings and Adjusted Earnings Before Interest and Income Taxes***

MSA EBIT was $57.2 million for the nine months ended September 30, 2023, compared with $60.2 million for the nine months ended September 30, 2022, a decrease of $3.0 million or 5.0%. EBIT margin for the nine months ended September 30, 2023 was 35.2%, compared with 35.8% for the nine months ended September 30, 2022. The decreases were primarily due to lower revenues and higher operating expenses, partially offset by higher gross profit margin. The higher gross profit margin was driven by product cost reductions and favorable foreign currency exchange rates, partially offset by lower factory capacity utilization and product mix.

MSA Adjusted EBIT was $59.8 million for the nine months ended September 30, 2023, compared with $62.3 million for the nine months ended September 30, 2022, a decrease of $2.5 million. Adjusted EBIT margin for the nine months ended September 30, 2023 was 36.8%, compared to 37.1% for the nine months ended September 30, 2022. The decreases were primarily due to lower revenues and higher non-GAAP operating expenses, partially offset by higher non-GAAP gross profit margin. The higher non-GAAP gross profit margin was driven by product cost reductions and favorable foreign currency exchange rates, partially offset by lower factory capacity utilization and product mix.

**Consumer MEMS Microphones**

| | Nine Months Ended September 30, | | | | | |
|---|---|---|---|---|---|---|
| *(in millions)* | | 2023 | Percent of Revenues | | 2022 | Percent of Revenues |
| Revenues | $ | 178.1 | | $ | 219.9 | |
| | | | | | | |
| Earnings (loss) before interest and income taxes | $ | 9.2 | 5.2% | $ | (271.1) | (123.3)% |
| Stock-based compensation expense | | 4.8 | | | 4.8 | |
| Intangibles amortization expense | | 4.5 | | | 4.8 | |
| Impairment charges | | — | | | 239.8 | |
| Restructuring charges | | (0.4) | | | 37.3 | |
| Other [(1)] | | (1.2) | | | 0.3 | |
| Adjusted earnings before interest and income taxes | $ | 16.9 | 9.5% | $ | 15.9 | 7.2% |

[(1)] Other represents the ongoing net lease cost related to facilities not used in operations.

***Revenues***

CMM revenues were $178.1 million for the nine months ended September 30, 2023, compared with $219.9 million for the nine months ended September 30, 2022, a decrease of $41.8 million or 19.0%. Revenues decreased primarily due to lower demand for MEMS microphones in the mobile and IoT markets. The decreases in these markets were primarily driven by weak global demand for consumer electronics and excess inventory in the supply chain. In addition to lower end market demand, shipping volumes were unfavorably impacted earlier this year by financial incentives offered to customers resulting in higher shipping volumes in the fourth quarter of 2022. CMM revenues were also impacted by lower average pricing on mature products shipped into the mobile market.

***Earnings (Loss) and Adjusted Earnings Before Interest and Income Taxes***

CMM EBIT was $9.2 million for the nine months ended September 30, 2023, compared with a loss of $271.1 million for the nine months ended September 30, 2022, an improvement of $280.3 million. The increase was primarily due to impairment charges in 2022 that did not recur in 2023, higher gross margins, and lower operating expenses, partially offset by lower revenues. The higher gross profit margin was driven by lower restructuring charges, benefits of prior year restructuring actions, the gain on sale of fixed assets, product cost reductions, and favorable foreign currency exchange rates, partially offset by average pricing on mature products shipped into the mobile market and decreased factory capacity utilization.

CMM Adjusted EBIT was $16.9 million for the nine months ended September 30, 2023, compared with $15.9 million for the nine months ended September 30, 2022, an increase of $1.0 million. Adjusted EBIT margin for the nine months ended September 30, 2023 was 9.5%, compared to 7.2% for the nine months ended September 30, 2022. The increases were primarily due to higher non-GAAP gross profit margins and lower non-GAAP operating expenses, partially offset by lower revenues. The higher gross profit margin was driven by benefits of prior year restructuring actions, the gain on sale of fixed assets, product cost reductions, and favorable foreign currency exchange rates, partially offset by average pricing on mature products shipped into the mobile market and decreased factory capacity utilization.

**Liquidity and Capital Resources**

Historically, we have generated and expect to continue to generate positive cash flow from operations. Our ability to fund our operations and capital needs will depend on our ongoing ability to generate cash from operations and access to capital markets. We believe that our future cash flow from operations and access to capital markets will provide adequate resources to fund our working capital needs, capital expenditures, strategic investments, and share repurchases. We have secured a revolving line of credit in the United States from a syndicate of commercial banks to provide additional liquidity. Furthermore, if we were to require additional cash above and beyond our cash on the balance sheet, the free cash flow generated by the business, and availability under our revolving credit facility, we would most likely seek to raise long-term financing through the U.S. debt or bank markets.

Due to the global nature of our operations, a significant portion of our cash is generated and typically held outside the United States. Our cash and cash equivalents totaled $75.1 million and $48.2 million at September 30, 2023 and December 31, 2022, respectively. Of these amounts, cash held by our non-U.S. operations totaled $67.0 million and $40.0 million as of September 30, 2023 and December 31, 2022, respectively. To the extent we repatriate these funds to the U.S., we may be required to pay U.S. state income taxes and applicable foreign withholding taxes on those amounts during the period when such repatriation occurs. Management will continue to reassess our need to repatriate the earnings of our foreign subsidiaries.

On February 8, 2023, we entered into an Amended and Restated Credit Agreement (the "A&R Credit Agreement") that amends and restates the prior Credit Agreement (the "2020 Credit Agreement"), which provides for a senior secured revolving credit facility with borrowings in an aggregate principal amount at any time outstanding not to exceed $400.0 million. As of September 30, 2023, outstanding borrowings under the Credit Facility were $45.0 million. At any time during the term of the Credit Facility, we will be permitted to increase the commitments under the Credit Facility or to establish one or more incremental term loan facilities under the New Credit Facility in an aggregate principal amount not to exceed $200.0 million for all such incremental facilities. Commitments under the Credit Facility will terminate, and loans outstanding thereunder will mature, on February 8, 2028. For additional information, refer to Note 9. Borrowings to our Consolidated Financial Statements.

On September 25, 2023, the Company amended its A&R Credit Agreement to, among other things, (a) permit the Company in connection with the acquisition of Cornell Dubilier, to incur senior priority seller financing indebtedness (the “Seller Note”) in an aggregate principal amount of approximately $123.0 million secured by certain assets (including equity interests) acquired in connection with such acquisition and the capital stock of Knowles Intermediate PD Holdings, LLC (“Knowles PD Holdings”) (the “Acquisition Assets”), which shall mature two years after the effective date of such Seller Note (the “Seller Note Maturity Date”), (b) extends the requirement to pledge the Acquisition Assets that would otherwise constitute collateral under the Credit Agreement to the date that is 90 days after the Seller Note Maturity Date, and (c) restricts, until the Seller Note Maturity Date, the amount of dispositions and investments from the Company and certain of its subsidiaries into Knowles PD Holdings and the acquired subsidiaries that constitute Acquisition Assets from exceeding $80.0 million the aggregate. All other terms remain the same as the A&R Credit Agreement dated February 8, 2023.

On February 24, 2020, we announced that our Board of Directors had authorized a share repurchase program of up to $100 million of our common stock. On April 28, 2022, we announced that our Board of Directors had increased the authorization by up to $150 million in additional aggregate value. The timing and amount of any shares repurchased will be determined by us based on our evaluation of market conditions and other factors, and will be made in accordance with applicable securities laws in either the open market or in privately negotiated transactions. We are not obligated to purchase any shares under the program, and the program may be suspended or discontinued at any time. The actual timing, number, and share price of shares repurchased will depend on a number of factors, including the market price of our common stock, general market and economic conditions, and applicable legal requirements. Any shares repurchased will be held as treasury stock. During the nine months ended September 30, 2023 and 2022, we repurchased 1,630,161 shares and 2,339,045 shares of common stock, respectively, for a total of $27.5 million and $44.0 million, respectively.

Cash flows from operating, investing, and financing activities as reflected in our Consolidated Statements of Cash Flows are summarized in the following table:

| | Nine Months Ended September 30, | |
|---|---|---|
| *(in millions)* | **2023** | **2022** |
| Net cash flows provided by (used in): | | |
| Operating activities | $ 62.3 | $ 39.5 |
| Investing activities | 0.3 | (25.4) |
| Financing activities | (35.3) | (40.1) |
| Effect of exchange rate changes on cash and cash equivalents | (0.4) | (1.4) |
| Net increase (decrease) in cash and cash equivalents | $ 26.9 | $ (27.4) |

***Operating Activities***

Cash provided by operating activities adjusts net earnings for certain non-cash items, including impairment charges, depreciation expense, amortization of intangible assets, stock-based compensation, changes in deferred income taxes, and the effects of changes in operating assets and liabilities. The increase in cash provided by operating activities in 2023 as compared to 2022 is primarily due to an improvement in working capital and lower incentive compensation payments in 2023, partially offset by payments for previously accrued expenses, including lease and restructuring liabilities. In addition, after adjusting for non-cash expense items, net earnings were lower due primarily to an increase in professional fees. The favorable changes in working capital in 2023 were primarily driven by an increase in accounts payable and a reduction in inventories.

***Investing Activities***

The cash provided by investing activities during 2023 was primarily driven by proceeds from the sale of certain machinery and equipment. In addition, capital expenditures were lower in 2023 as compared to 2022. The cash used in investing activities during 2023 and 2022 was primarily driven by cash used for capital expenditures to support product innovation and cost savings.

In 2023, we expect capital expenditures to be in the range o f 2% to 3% of revenue s.

***Financing Activities***

Cash used in financing activities during 2023 was primarily related to the $27.5 million of repurchases of common stock, the $6.2 million payment of taxes related to net share settlement of equity awards, and the $1.9 million payment of debt issuance costs, partially offset by proceeds of $1.6 million from the exercise of options. Cash used in financing activities during 2022 was primarily related to the $44.0 million of repurchases of common stock and the $6.3 million payment of taxes related to net share settlement of equity awards, partially offset by net borrowings of $8.0 million under our revolving credit facility and proceeds of $6.4 million from the exercise of options.

**Contingent Obligations**

We are involved in various legal proceedings, claims, and investigations arising in the ordinary course of business. Legal contingencies are discussed in Note 14. Commitments and Contingent Liabilities to our Consolidated Financial Statements.

**Critical Accounting Estimates**

This discussion and analysis of results of operations and financial condition is based on our Consolidated Financial Statements, which have been prepared in conformity with U.S. GAAP. The preparation of these financial statements requires the use of estimates and assumptions related to the reporting of assets, liabilities, revenues, expenses, and related disclosures. In preparing these financial statements, we have made our best estimates and judgments of certain amounts included in the financial statements. Estimates are revised periodically. Actual results could differ from these estimates.

The information concerning our critical accounting estimates can be found under Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for the year ended December 31, 2022 filed with the Securities and Exchange Commission on February 9, 2023. There are no material changes in our previously reported critical accounting estimates.

**Recent Accounting Standards**

As included in Note 2. Recent Accounting Standards to our Consolidated Financial Statements, there are no recently issued or adopted accounting standards that have had or are expected to have a significant impact on our revenue, earnings, or liquidity.

**Item 3. Quantitative and Qualitative Disclosures About Market Risk**

During the nine months ended September 30, 2023, there were no material changes to the information on market risk exposure disclosed in our Annual Report on Form 10-K for the year ended December 31, 2022. For a discussion of our exposure to market risk as of December 31, 2022, refer to Item 7A, Quantitative and Qualitative Disclosures about Market Risk, contained in our Annual Report on Form 10-K for the year ended December 31, 2022.

**Item 4. Controls and Procedures**

**Evaluation of Disclosure Controls and Procedures**

Our management has evaluated, under the supervision and with the participation of our chief executive officer ("CEO") and chief financial officer ("CFO"), the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of the end of the period covered by this report. Based on that evaluation, our CEO and CFO have concluded that, as of the end of the period covered by this report, our disclosure controls and procedures are effective in ensuring that information required to be disclosed in our Exchange Act reports is (1) recorded, processed, summarized, and reported within the time periods specified in the Securities and Exchange Commission’s rules and forms, and (2) accumulated and communicated to our management, including our CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

**Changes in Internal Control Over Financial Reporting**

There has been no change in our internal control over financial reporting that occurred during the third quarter of 2023 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**Inherent Limitations on Effectiveness of Controls**

Our management, including the CEO and CFO, do not expect that our disclosure controls or our internal control over financial reporting will prevent or detect all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system’s objectives will be met. The design of a control system must reflect the fact that the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, will be detected. These inherent limitations include the realities that judgments in decision making can be faulty and that breakdowns can occur because of simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by intentionally falsified documentation, by collusion of two or more individuals within Knowles or third parties, or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of controls effectiveness to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

**PART II — OTHER INFORMATION**

**Item 1. Legal Proceedings**

For a discussion of contingencies related to legal proceedings, see Note 14. Commitments and Contingent Liabilities to our Consolidated Financial Statements, which is incorporated herein by reference.

Except as otherwise noted above, there have been no material developments in legal proceedings.

**Item 1A. Risk Factors**

There have been no material changes from the risk factors previously disclosed under the heading “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2022.

**Item 2. Unregistered Sales of Equity Securities and Use of Proceeds**

**Issuer Purchases of Equity Securities**

On February 24, 2020, the Company announced that its Board of Directors had authorized a share repurchase program of up to $100.0 million of the Company's common stock. On April 28, 2022, the Company announced that its Board of Directors had increased the authorization by up to $150.0 million in additional aggregate value. The timing and amount of any shares repurchased will be determined by the Company based on its evaluation of market conditions and other factors, and will be made in accordance with applicable securities laws in either the open market or in privately negotiated transactions. The Company is not obligated to purchase any shares under the program, and the program may be suspended or discontinued at any time. The actual timing, number, and share price of shares repurchased will depend on a number of factors, including the market price of the Company's common stock, general market and economic conditions, and applicable legal requirements. Any shares repurchased will be held as treasury stock.

Below is a summary of share repurchases for the three months ended September 30, 2023:

*(in millions, except share and per share amounts)*

| Period | Total Number of Shares Purchased | Average Price Paid per Share | Total Number of Shares Purchased as Part of Publicly Announced Program | Approximate Dollar Value of Shares That May Yet Be Purchased Under The Program |
|---|---|---|---|---|
| August 2023 | 896,723 | $ 16.73 | 896,723 | $ 117.7 |

**Item 5. Other Information**

**Director and Officer Trading Plans and Arrangements**

During the quarter ended September 30, 2023, no director or officer adopted or terminated any Rule 10b5-1 trading arrangement or non-Rule 10b5-1 trading arrangement.

**Closing of Acquisition of Cornell Dubilier; Entry into Seller Note to Fund Portion of Purchase Price**

On November 1, 2023, pursuant to a Purchase and Sale Agreement dated September 15, 2023 (the "Purchase Agreement"), by and between the Company, Knowles Capital Holdings, Inc., a wholly-owned subsidiary of the Company, Knowles Intermediate PD Holdings, LLC, a wholly-owned subsidiary of the Company, Cornell Dubilier Electronics, Inc. ("CDE"), CD Aero, LLC ("CDA"), Kaplan Electronics, Inc. ("Kaplan"), the parties listed as "Shareholders," James P. Kaplan, in his capacity as sellers' representative, and the parties listed as "Guarantors," the Company closed on its acquisition of (i) all the issued and outstanding shares of Kaplan and (ii) certain assets of CDE and CDA (with (i) and (ii) being referred to collectively as "Cornell Dubilier") for aggregate consideration of approximately $263.0 million, consisting of a $140.0 million cash payment at closing and an interest-free seller note of approximately $123.0 million, with $50.0 million maturing one year from closing of the acquisition and the remaining $73.0 million maturing two years from closing of the acquisition, secured by certain assets (including equity interest) acquired in connection with the acquisition (the “Seller Note”). The purchase price is subject to working capital and other contractual adjustments.

The Seller Note includes Knowles Capital Holdings, Inc. and Knowles Intermediate PD Holdings, LLC as borrowers, which jointly and severally agree to pay James P. Kaplan, as representative of the sellers of Cornell Dubilier, the principal amount of approximately $123.0 million as described above. The Seller Note is not interest bearing except at such time as an event of default has occurred, upon which and during the continuance of an event of default, all overdue principal will accrue interest at 2% per annum plus the SOFR-based rate otherwise applicable under the Company’s existing credit facility. The Seller Note is subject to customary conditions and events of default and the secured nature of the Seller Note is supported by a Security Agreement.

In connection with the closing of the acquisition on November 1, 2023, the parties entered into an Amendment to the Purchase Agreement related to the resolution of certain export control items related to the business of Cornell Dubilier.

The foregoing description of the Amendment to the Purchase Agreement, the Seller Note, and the related Security Agreement do not purport to be complete and are qualified in their entirety by reference to the full text of the Amendment to the Purchase Agreement, the Seller Note, and the Security Agreement, which are filed herewith as Exhibits 10.2, 10.4, and 10.5, respectively.

**Item 6. Exhibits**

| | |
|---|---|
| 10.1 | Purchase and Sale Agreement, dated September 15, 2023, among Knowles Corporation, Knowles Capital Holdings, Inc., Knowles Intermediate PD Holdings, LLC, Cornell Dubilier Electronics, Inc., CD Aero, LLC, Kaplan Electronics, Inc., and the Sellers' Representative, Shareholders, and Guarantors party thereto (incorporated by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K filed on September 20, 2023 (SEC file No. 001-36102)) |
| 10.2 | Amendment to Purchase Agreement, dated November 1, 2023, by and among Knowles Capital Holdings, Inc. and Knowles Intermediate PD Holdings, LLC, and James P. Kaplan, in his capacity as Sellers' Representative. |
| 10.3 | Amendment No. 1 to Amended and Restated Credit Agreement dated as of September 25, 2023, among Knowles Corporation, JPMorgan Chase Bank, N.A., and the other lenders party thereto (incorporated by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K filed on September 27, 2023 (SEC file No. 001-36102)) |
| 10.4 | Secured Promissory Note issued by Knowles Capital Holdings, Inc. and Knowles Intermediate PD Holdings, LLC to James P. Kaplan on November 1, 2023 |
| 10.5 | Guarantee and Collateral Agreement, dated as of November 1, 2023, among Knowles Corporation, as Guarantor, Knowles Capital Holdings, Inc., and Knowles Intermediate Holdings, Inc., as Grantors, and James P. Kaplan, as Sellers' Representative |
| 31.1 | Certification of the Chief Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 |
| 31.2 | Certification of the Chief Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 |
| 32.1 | Joint Certification of the Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 |
| 101 | The following financial information from Knowles Corporation's Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2023 formatted in Inline XBRL: (i) Consolidated Statements of Earnings (Unaudited) for the three and nine months ended September 30, 2023 and 2022, (ii) Consolidated Statements of Comprehensive Earnings (Unaudited) for the three and nine months ended September 30, 2023 and 2022, (iii) Consolidated Balance Sheets (Unaudited) as of September 30, 2023 and December 31, 2022, (iv) Consolidated Statements of Stockholders' Equity (Unaudited) for the three and nine months ended September 30, 2023 and 2022, (v) Consolidated Statements of Cash Flows (Unaudited) for the nine months ended September 30, 2023 and 2022, and (vi) the Notes to the Consolidated Financial Statements (Unaudited) tagged as blocks of text and including detailed tags. |
| 104 | The cover page from the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2023, formatted in Inline XBRL and contained in Exhibit 101. |

**Signatures**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

KNOWLES CORPORATION

| | | |
|---|---|---|
| Date: | November 2, 2023 | /s/ John S. Anderson |
| | | John S. Anderson |
| | | Senior Vice President & Chief Financial Officer |
| | | (Principal Financial Officer) |

**AMENDMENT TO**
**PURCHASE AND SALE AGREEMENT**

THIS AMENDMENT TO PURCHASE AND SALE AGREMEENT (this "Amendment"), dated as of November 1, 2023 (the "Amendment Effective Date"), is entered into by and among Knowles Capital Holdings, Inc., a Delaware corporation ("Stock Buyer"), and Knowles Intermediate PD Holdings, LLC, a Delaware limited liability company (together with Stock Buyer, the "Buyers"), on the one hand, and James P. Kaplan, in his capacity as Sellers' Representative in the Agreement, on the other hand. Capitalized terms used and not otherwise defined herein shall have the meanings ascribed thereto in the Agreement (as defined below).

**RECITALS**

A. Buyer, Sellers' Representative, and certain other Persons are parties to that certain Purchase and Sale Agreement (as amended from time to time, the "Agreement"), dated as of September 15, 2023.

B. In accordance with Section 11.01 of the Agreement, Buyers and Sellers' Representative desire to amend the Agreement as set forth herein.

**AGREEMENTS**

In consideration of the mutual covenants of the parties hereto as hereinafter set forth and other good and valuable consideration, the receipt and sufficiency of which hereby are acknowledged, the parties hereto hereby agree as follows:

1. Amendments.

(a) Section 7.23 of the Agreement is hereby amended and restated as follows:

"7.23 Certain Export Controls Matters. With respect to the Specific Indemnity Items listed in items 2, 3, 4 and 5 of Schedule 8.02(a) (the "Export Controls Matters"), following the Closing, as owners of the Business, Buyers shall control the attempted resolution of such issues, including through discussions and filings with applicable Governmental Entities, as appropriate. Buyers and Sellers shall reasonably cooperate with each other with respect to such attempted resolution of the Export Controls Matters, so long as such cooperation does not interfere with or impede the operation of the Business, and Buyers in good faith shall consider Sellers' Representative's input regarding such attempted resolution. Sellers shall indemnify Buyers for the Export Controls Matters in accordance with Section 8.02(a)(ii)(J), including indemnifying Buyers for (a) Buyers' reasonable expenses incurred pursuant to this Section 7.23 and (b) any corresponding settlement costs (including, if applicable, any fines) related to the Export Controls Matters required to be paid to any Governmental Entities; provided, however, that Buyers shall not agree to any settlement of any Export Control Matter without the prior written consent of Sellers' Representative (which consent shall not be unreasonably withheld, conditioned or delayed)."

(b) Schedule 8.02(a) of the Agreement is hereby amended and restated as set forth on Exhibit A hereto.

2. Complete Agreement. This Amendment embodies the complete agreement and understanding among the parties to the Agreement with respect to the subject matter hereof and supersedes and preempts any prior understandings, agreements or representations by or among such parties, written or oral, which may have related to the subject matter hereof in any way. From and after the Amendment Effective Date, any reference to the Agreement shall mean the Agreement, as amended and modified by this Amendment. In the event of an inconsistency between the terms of the Agreement and this Amendment, this Amendment will control.

3. Limited Amendment. This Amendment is limited by its terms and does not and shall not serve to amend or waive any provision of the Agreement except as expressly provided for in this Amendment, and all other terms, conditions and obligations set forth in the Agreement shall continue in full force and effect and are hereby reaffirmed by the parties hereto.

4. Miscellaneous. Sections 11.01, 11.02, 11.03, 11.04, 11.05, 11.06, 11.09, 11.10, 11.11, 11.12 and 11.13 of the Agreement shall apply to this Amendment *mutatis mutandis*.

[Remainder of page intentionally left blank; signature page follows]

The parties hereto have executed this Amendment to Agreement and Plan of Merger as of the Amendment Effective Date.

**BUYERS:**

KNOWLES CAPITAL HOLDINGS, INC.

By: /s/ John S. Anderson
Name: John S. Anderson
Its: President

KNOWLES INTERMEDIATE PD HOLDINGS, LLC

By: /s/ John S. Anderson
Name: John S. Anderson
Its: President

**SELLERS' REPRESENTATIVE:**

/s/ James P. Kaplan

James P. Kaplan

*Execution Version*

**KNOWLES CAPITAL HOLDINGS, INC.**
**KNOWLES INTERMEDIATE PD HOLDINGS LLC**

**SECURED PROMISSORY NOTE**

$122,900,000 November 1, 2023

FOR VALUE RECEIVED, the undersigned Knowles Capital Holdings, Inc., a Delaware corporation ("Knowles Capital"), and Knowles Intermediate PD Holdings, LLC, a Delaware limited liability company ("Knowles PD" and, together with Knowles Capital, the "Borrowers"), jointly and severally promise to pay to James P. Kaplan, as representative (together with his permitted successors and assignees, the "Sellers' Representative") for the benefit of himself and the other Sellers, the principal amount of $122,900,000 on or before the Maturity Date (as defined below) in United States Dollars, as such amount may be adjusted in accordance with Section 3 below. This Secured Promissory Note (this "Note") is issued by the Borrowers in accordance with Section 2.02(b) of the Purchase and Sale Agreement dated as of September 15, 2023 (the "Purchase Agreement") among the Borrowers, the Guarantor, the Sellers' Representative and certain other parties. The principal balance of this Note outstanding from time to time is referred to as the "Principal Amount". Capitalized terms are used herein with the definitions provided in Annex A hereto.

1. Interest Rate. No interest shall accrue on the Principal Amount, except to the extent provided in Section 7(b) below.

2. Payment of Principal.

(a) The Principal Amount shall be due and payable in cash on November 1, 2025 (the "Maturity Date"), unless due earlier as provided in this Note.

(b) The Borrowers shall pay to the Sellers' Representative as a scheduled mandatory prepayment $50,000,000 of the Principal Amount on November 1, 2024.

(c) The Borrowers may elect to prepay the Principal Amount in minimum amounts of $10,000,000 upon at least three Business Days advance notice to the Sellers' Representative. Any such prepayment shall be applied to amounts due under this Note in the manner directed by the Borrowers.

(d) All payments received by the Sellers' Representative under this Note or the Guarantee and Collateral Agreement shall be applied to the Obligations as follows:

(i) first, to the payment of any fees, costs and expenses, including counsel costs, of the Sellers' Representative reimbursable by the Borrowers under any Loan Document (if any); and

(ii) second, to payment of the Principal Amount.

3. Adjustments to Principal Balance of Note. Pursuant to Section 1.04(e), Section 1.04(g) and Article 8 of the Purchase Agreement, the Principal Amount shall be automatically decreased by the CDM Excess Amount (as defined in the Purchase Agreement), the CDE Excess Amount (as defined in the Purchase Agreement) and for Losses (as defined in the Purchase Agreement) to the extent the Principal Amount is reduced by such Losses pursuant to the terms and conditions of Article 8 of the Purchase Agreement (the "Principal Adjustment"), respectively. The amount of the Principal Adjustment, and the resulting reduced Principal Amount (the "Adjusted Principal Amount") shall be recorded by the Sellers' Representative on Schedule A attached hereto. Notwithstanding the foregoing, the failure of the Sellers' Representative to record the Principal Adjustment or the Adjusted Principal Amount on Schedule A shall not affect or limit the reduction of the Principal Amount owing by the Borrowers hereunder, which reduction shall be automatic pursuant to this Section 3.

4. Security; Guarantee. The obligations of the Borrowers hereunder shall be (a) secured by a pledge by (i) Knowles Intermediate of all of the Equity Interests of Knowles PD owned by it, the recourse for which shall be limited to the Equity Interests of Knowles PD and (ii) Knowles Capital of all of the Equity Interests of Kaplan Electronics owned by it and (b) guaranteed by the Guarantor, pursuant to the Guarantee and Collateral Agreement dated as of the Effective Date (as from time to time in effect, the "Guarantee and Collateral Agreement") among the Guarantor, Knowles Intermediate, Knowles Capital and the Sellers' Representative.

5. Representations and Warranties. As of the date of this Note, each Borrower represents and warrants as follows; provided, however, that the Borrowers make no representation or warranty as to the CDM Business or the CDE Business:

(a) Organization; Powers. Such Borrower is (i)(A) duly organized and validly existing and (B) in good standing under the laws of the jurisdiction of its organization, (ii)(A) has all power and authority and (B) all material governmental approvals required for the ownership and operation of its properties and the conduct of its business as now conducted and as proposed to be conducted and (iii) qualified to do business, and in good standing, in every jurisdiction where such qualification is required, except, in each case (other than clause (i)(A)) where the failure to do so, individually or in the aggregate, could not reasonably be expected to have a Material Adverse Effect.

(b) Authorization; Enforceability. The execution, delivery and performance by such Borrower of the Loan Documents are within such Borrower's corporate or other organizational powers and have been duly authorized by all necessary corporate or other organizational and, if required, stockholder or other equityholder action of such Borrower. This Note and each other Loan Document have been duly executed and delivered by such Borrower and constitute a legal, valid and binding obligation of such Borrower, enforceable against it in accordance with its terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium or other laws affecting creditors' rights generally and to general principles of equity, regardless of whether considered in a proceeding in equity or at law.

(c) No Conflicts. The execution, delivery and performance by such Borrower of the Loan Documents do not violate the charter, by-laws or other organizational documents of such Borrower.

(d) Investment Company Status. Such Borrower is not required to be registered as an "investment company" as defined in the Investment Company Act of 1940.

(e) Collateral Matters. The Guarantee and Collateral Agreement, upon execution and delivery thereof by the parties thereto, will create in favor of the Sellers' Representative a valid and enforceable security interest in the Pledged Collateral, and when the Pledged Collateral constituting certificated securities (as defined in the Uniform Commercial Code) are delivered to the Sellers' Representative, together with instruments of transfer duly endorsed in blank, the security interest created under the Guarantee and Collateral Agreement will constitute under the Uniform Commercial Code (to the extent a Lien may be perfected thereunder) a fully perfected security interest in all right, title and interest of the Grantors in such Pledged Collateral, prior and superior in right to any other Person, other than Liens arising by operation of law and having priority by law over the Liens of the Sellers' Representative on the Pledged Collateral.

(f) Federal Reserve Regulations. Such Borrower is not engaged or will engage principally or as one of its important activities in the business of purchasing or carrying margin stock (within the meaning of Regulation U of the Board of Governors), or extending credit for the purpose of purchasing or carrying margin stock. No part of the proceeds of the Principal Amount will be used, directly or indirectly, for any purpose that entails a violation of any of the regulations of the Board of Governors, including Regulations U and X. Not more than 25% of the value of the assets subject to any restrictions on the sale, pledge or other disposition of assets under any Loan Document will at any time be represented by margin stock.

(g) Solvency. The Borrowers hereby make the representation and warranty set forth in Section 5.06 of the Purchase Agreement, which is incorporated herein, solely in the manner and to the extent required by Section 6.03(a) of the Purchase Agreement.

6. Covenants. Each Borrower covenants that, until the Termination Date, such Borrower will comply with the covenants set forth in Annex B hereto.

7. Defaults; Remedies.

(a) Events of Default. The following events are herein referred to as "Events of Default"; provided, however, that any such events related to the CDM Business or CDE Business that have occurred prior to, or are in existence on, the Effective Date or that occur after the Effective Date as a continuation or result of any such event that occurred prior to, or which was in existence on, the Effective Date shall, in each case, not constitute an Event of Default (it being understood that this proviso shall not waive, amend or otherwise modify any obligations of the Sellers and Sellers' Representative under the Purchase Agreement):

(i) any Borrower shall fail to pay any Principal Amount when and as the same shall become due and payable, whether at the due date thereof or at a date fixed for prepayment thereof or otherwise;

(ii) any representation or warranty made by or on behalf of any Loan Party in any Loan Document shall prove to have been incorrect in any material respect when made;

(iii) (A) any Borrower shall fail to observe or perform any covenant, condition or agreement contained in the Note (other than as specified in Section 7(a)(i)) or (B) any Loan Party shall fail to observe or perform any covenant contained in the Guarantee and Collateral Agreement, and in each case such failure shall continue unremedied for a period of 30 days after notice thereof from the Sellers' Representative to the Borrowers;

(iv) (A) any Loan Party shall fail to make any payment (whether of principal, interest, termination payment or other payment obligation and regardless of amount) in respect of any Material Indebtedness, when and as the same shall become due and payable and beyond the grace period therefor; provided that any failure under this Section 7(a)(vi) is unremedied and is not waived by the holders of such Indebtedness prior to any acceleration of this Note pursuant to this Section 7, or (B) the Knowles Administrative Agent terminates the Knowles Commitments or declares the Knowles Loans then outstanding to be due and payable in whole or in part, in each case following an "Event of Default" under and as defined in the Knowles Credit Agreement;

(v) any event or condition occurs that results in any Material Indebtedness becoming due or required to be prepaid, repurchased, redeemed or defeased prior to its scheduled maturity (or, in the case of a Hedging Agreement (other than a Permitted Convertible Notes Hedging Agreement or Permitted Equity Derivative Transactions), the involuntary termination thereof as the result of a default by any Loan Party), or that enables or permits the holder or holders of any Material Indebtedness or any trustee or agent on its or their behalf (or, in the case of any Hedging Agreement (other than any Permitted Convertible Notes Hedging Agreement or Permitted Equity Derivative Transactions), the applicable counterparty), to cause such Material Indebtedness to become due, or require the prepayment, repurchase, redemption or defeasance thereof (or, in the case of a Hedging Agreement (other than a Permitted Convertible Notes Hedging Agreement or Permitted Equity Derivative Transactions), the involuntary termination thereof as the result of a default by any Loan Party) prior to its scheduled maturity, in each of the foregoing cases, beyond the grace period therefor; provided that this Section 7(a)(v) shall not apply to (A) any secured Indebtedness that becomes due as a result of the voluntary sale or transfer of the assets securing such Indebtedness, (B) any Indebtedness that becomes due as a result of a voluntary refinancing thereof (in the case of any Loan Party that is part of the Kaplan Restricted Group, that is permitted under Section 1.05 of Annex B hereto) or as a result of any voluntary prepayment, repurchase, redemption or defeasance thereof by any Loan Party in the absence of any default (or a similar event, however denominated) thereunder or (C) any requirement to deliver cash upon conversion of the Permitted Convertible Notes; provided, further, that any such failure under this Section 7(a)(v) is unremedied and is not waived by the holders of such Indebtedness prior to any acceleration of this Note pursuant to Section 7(b);

(vi) (A) any material provision of this Note, at any time after its execution and delivery and for any reason, ceases to be in full force and effect other than (x) as expressly permitted hereunder or (y) the occurrence of the Termination Date or (B) any Loan Party contests in writing the validity or enforceability of any provision of this Note;

(vii) an involuntary proceeding shall be commenced or an involuntary petition shall be filed seeking (A) liquidation, reorganization or other relief in respect of any Loan Party or its debts, or of a substantial part of its assets, under any Federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect or (B) the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for any Loan Party or for a substantial part of its assets, and, in any such case, such proceeding or petition shall continue undismissed for 60 days or an order or decree approving or ordering any of the foregoing shall be entered;

(viii) any Loan Party shall (A) voluntarily commence any proceeding or file any petition seeking liquidation, reorganization or other relief under any Federal, state or foreign bankruptcy, insolvency, receivership or similar law now or hereafter in effect, (B) consent to the institution of any proceeding or petition described in Section 7(a)(vii), (C) apply for or consent to the appointment of a receiver, trustee, custodian, sequestrator, conservator or similar official for any Loan Party or for a substantial part of its assets, (D) file an answer admitting the material allegations of a petition filed against it in any such proceeding or (E) make a general assignment for the benefit of creditors;

(ix) any Loan Party shall admit in writing its inability or fail generally to pay its debts as they become due;

(x) one or more final judgments for the payment of money in an aggregate amount in excess of $35,000,000 (other than any such judgment covered by insurance to the extent the insurer has been notified and liability therefor has not been denied by the insurer) shall be rendered against any Loan Party or any combination thereof and the same shall remain undischarged, unpaid, unvacated, unbonded or unstayed pending appeal for a period of 60 consecutive days during which execution shall not be effectively stayed, or, during such 60 day period, a judgment creditor shall legally take any action to sell material assets of the Guarantor to collect any such judgment during such 60 day period;

(xi) one or more ERISA Events shall have occurred that could, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect;

(xii) any Lien purported to be created under the Guarantee and Collateral Agreement shall cease to be, or shall be asserted in writing by any Loan Party not to be, a valid and perfected Lien on any Pledged Collateral, with the priority required by the Guarantee and Collateral Agreement, except as a result of (A) a sale or transfer of the applicable Pledged Collateral in a transaction permitted under the Loan Documents, (B) the release thereof as provided in the Loan Documents or (C) the Sellers' Representative's failure to maintain possession of any stock certificate, or other similar instrument, delivered to it under the Guarantee and Collateral Agreement or the Sellers' Representative's failure to file Uniform Commercial Code financing statements; or

(xiii) the Guarantee of the Guarantor purported to be created under the Guarantee and Collateral Agreement shall cease to be, or shall be asserted in writing by any Loan Party not to be, in full force and effect; or

(xiv) a Change in Control shall occur.

(b) Remedies. If any one or more Events of Default shall occur and be continuing, then in each and every such case:

(i) Acceleration of Maturity. Upon notice by the Sellers' Representative to the Borrowers, the Obligations shall become immediately due and payable.

(ii) Exercise of Rights. The Sellers' Representative may proceed to protect and enforce its rights by suit in equity, action at law and/or other appropriate proceeding under the Loan Documents.

(iii) Bankruptcy Default. Upon the occurrence of an Event of Default under Section 7(a)(vii) or Section 7(a)(viii), the unpaid balance of the Obligations shall automatically become immediately due and payable.

(iv) Default Interest; Enforcement Costs. Upon the occurrence and during the continuance of an Event of Default under Section 7.1(a)(i), (a) all overdue principal of the Note shall accrue interest, payable on demand, at 2% per annum plus the SOFR-based rate otherwise applicable on such date under the Knowles Credit Agreement and (b) the Borrowers shall pay on demand all reasonable out-of-pocket costs and expenses, including all court costs and reasonable attorneys' fees and expenses (limited to (A) one firm of counsel for the Sellers' Representative, the Sellers and their Affiliates, taken as a whole, and (B) if reasonably necessary, one firm of local counsel in any relevant jurisdiction (which may include a single firm of special counsel acting in multiple jurisdictions) to all such Persons, taken as a whole), incurred solely in connection in enforcing its rights under the Loan Documents (and, for the avoidance of doubt, excluding the Purchase Agreement and the other transactions and documents contemplated thereunder).

(v) Right to Realize Upon Collateral. The Sellers' Representative shall have all the rights and remedies of a secured creditor under the Uniform Commercial Code and other applicable law.

(vi) Setoff. The Sellers' Representative may offset and apply toward the payment of the Obligations or part thereof (and/or toward the curing of any Event of Default) any obligation owing from the Sellers' Representative to any Loan Party, regardless of the adequacy of any security for the Obligations, and the Sellers' Representative shall have no duty to determine the adequacy of any such security in connection with any such offset. Other than with respect to the adjustments to the Principal Amount pursuant to Section 3 hereof, the Borrowers hereby waive to the extent not prohibited by applicable law any rights to offset or reduce the Principal Amount against any of the obligations of Sellers' Representative to any Loan Party now or hereafter existing under the Purchase Agreement or any other agreement among any Loan Parties and the Sellers' Representative.

(vii) Cumulative Remedies. To the extent not prohibited by applicable law which cannot be waived, all of the Sellers' Representative's rights hereunder shall be cumulative.

8. Joint and Several Obligations. Each Borrower shall be jointly and severally liable for all the Obligations, and confirms that it will obtain a substantial benefit by the incurrence of

Obligations by the other Borrower. Each Borrower shall keep itself apprised of the financial condition of the other Borrower. Each Borrower waives (a) any suretyship defenses available to it under the Bankruptcy Code or any other applicable law, and (b) any right to require the Sellers' Representative to: (i) proceed against any other Borrower or any other Person; (ii) proceed against or exhaust any security; or (iii) pursue any other remedy. The Sellers' Representative may exercise or not exercise any right or remedy it has against any Borrower or any security it holds (including the right of the Sellers' Representative or an engaged third party to foreclose by judicial or non-judicial sale in compliance with relevant laws and regulations) without affecting any Borrower's liability. Notwithstanding any other provision of this Note or other Loan Document, until the Termination Date, each Borrower irrevocably waives all rights that it may have at law or in equity (including any law subrogating any Borrower to the rights of the Sellers' Representative under this Note) to seek contribution, indemnification or any other form of reimbursement from any other Borrower or Seller Note Party, for any payment made by such Borrower with respect to the Obligations and all rights that it might have to benefit from, or to participate in, any security for the Obligations as a result of any payment made by such Borrower with respect to the Obligations. Until the Termination Date, if any payment is made to a Borrower in contravention of this Section 8, such Borrower shall hold such payment in trust for the Sellers' Representative and such payment shall be promptly delivered to the Sellers' Representative for application to the Obligations, whether matured or unmatured.

9. General.

(a) No course of dealing by the Sellers' Representative nor any delay on the part of the Sellers' Representative in the exercise of any right or remedy shall operate as a waiver hereunder. No single or partial exercise by the Sellers' Representative of any right or remedy shall preclude the exercise of any other right or remedy. No covenant, obligation or other provision of any Loan Document may be waived by the Sellers' Representative, and no consent contemplated hereby may be given by the Sellers' Representative, other than in a writing signed by the Sellers' Representative explicitly waiving such covenant, obligation or provision or giving such consent. Each Borrower hereby waives to the extent not prohibited by applicable law, (i) presentment, demand, protest and notice of every kind in connection with the enforcement and collection of this Note, (ii) any requirement of diligence or promptness on the part of the Sellers' Representative in the enforcement of its rights under the Loan Documents and (iii) any and all notices of every kind and description which may be required to be given by any statute or rule of law.

(b) Upon receipt of evidence reasonably satisfactory to the Borrowers of the loss, theft, destruction or mutilation of this Note and receipt of an indemnity from Sellers' Representative in form and substance reasonably acceptable to the Borrowers, the Borrowers will issue a new Note, with the same maturity and amount, in lieu of such lost, stolen, destroyed or mutilated Note.

(c) This Note shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns permitted hereby, except that the Borrowers may not assign or otherwise transfer any of their rights or obligations hereunder. This Note is not assignable by the Sellers' Representative without the prior written consent of the Borrowers (such consent not to be unreasonably withheld), which consent shall not be required (i) upon the occurrence and during the continuance of an Event of Default or (ii) with respect to a successor (which successor shall be a Seller) to James P. Kaplan as Seller's Representative; provided, that in connection with any permitted assignment, (x) this Note shall remain subject to the set-off rights contained in Section 3 and (y) the assignee shall specifically acknowledge, in writing in a form acceptable to the Borrower, the set-off rights pursuant to Section 3 above.

(d) All notices, demands and other communications to be given or delivered under or by reason of the provisions of any Loan Document shall be in writing (including by electronic mail) and shall be deemed to have been given (i) if personally delivered, on the date of delivery, (ii) if delivered by express courier service of national standing for next Business Day delivery (with charges prepaid), on the Business Day following the date of delivery to such courier service, (iii) if deposited in the United States mail, first-class postage prepaid, on the date of delivery, or (iv) if delivered by electronic mail, on (x) the date of such transmission, if such transmission is completed on a Business Day at or prior to 5:00 p.m., local time of the recipient party, on the date of such transmission and (y) the next Business Day following the date of transmission, if such transmission is completed after 5:00 p.m., local time of the recipient party, on the date of such transmission or otherwise on a day other than a Business Day. Notices, demands and communications to Sellers or Buyers shall, unless another address is specified in writing pursuant to the provisions hereof, be sent to the address indicated below:

If to the Borrowers or any Loan Party:

c/o Knowles Corporation
1151 Maplewood Drive
Itasca, IL 60143
Attn: Nilson Rodrigues
Email: notices@knowles.com with a copy to generalcounsel@knowles.com

With a copy to (which shall not constitute notice):

Sidley Austin LLP
2021 McKinney Avenue
Suite 2000
Attn: Angela Fontana
Email: angela.fontana@sidley.com

If to the Sellers' Representative:

James P. Kaplan
133 Farmgate Road
Pickens, SC 29671
Attn: James P. Kaplan
Email: jkaplan@cde.com

with a copy to (which shall not constitute notice):

Foley Hoag LLP
155 Seaport Boulevard

Boston, MA 02210
Attn: William R. Kolb; Jonathan Ettinger
Email: wkolb@foleyhoag.com; jettinger@foleyhoag.com

(e) Any signature upon this Note or any other Loan Document which is transmitted as a facsimile or as a scan or .pdf shall be deemed a valid and binding signature of such signatory with the same effect as if a manually signed original signature. The words "executed," "signature" and similar words in this Note or any other Loan Document shall be deemed to include electronic signatures, which shall be of the same legal effect, validity or enforceability as a manually executed signature to the extent and as provided in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the Delaware Uniform Electronic Transactions Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

(f) If for any reason one or more of the provisions of this Note or their application to any Person or circumstance shall be held to be invalid, illegal or unenforceable in any respect, such provisions shall nevertheless remain valid, legal and enforceable to such extent as may be permissible, and any such invalidity, illegality or unenforceability shall not affect any other provisions of this Note.

(g) This Note is made and shall be governed by and construed in accordance with, the laws of the State of Delaware, without giving effect to any choice or conflict of law provision that would result in the application of the laws of any jurisdiction other than the State of Delaware. Any action in connection with this Note or the other Loan Documents shall be brought exclusively in the state and federal courts in Delaware; the Sellers' Representative and each Borrower hereby submit to the jurisdiction thereof and waive any objection to such venue. Each of the Sellers' Representative and each Borrower agree to waive trial by jury in any action in connection with this Note or the other Loan Documents.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, this Secured Promissory Note has been duly executed and delivered under seal as of the date first written above.

**BORROWERS**

KNOWLES CAPITAL HOLDINGS, INC.

By: _/s/ John S. Anderson_______________
Name: John S. Anderson
Title: President

KNOWLES INTERMEDIATE PD HOLDINGS, LLC

By: _/s/ John S. Anderson_______________
Name: John S. Anderson
Title: President

**SELLERS' REPRESENTATIVE**

JAMES P. KAPLAN

_/s/ James P. Kaplan___ ________

Schedule A

**Adjusted Principal Amount**

| Initial Principal Amount | Principal Adjustment | | Any Prior Prepayment of Principal | Adjusted Principal Amount |
|---|---|---|---|---|
| $122,900,000 | CDM Excess Amount<br>CDE Excess Amount<br>Indemnifiable Losses<br><br>Total Adjustment Amount | $[●]<br>$[●]<br>$[●]<br><br>$[●] | $[●] | $[●] |

*Execution Version*

GUARANTEE AND COLLATERAL AGREEMENT

dated as of

November 1, 2023,

among

KNOWLES CORPORATION,
as Guarantor,

KNOWLES CAPITAL HOLDINGS, INC.,

and

KNOWLES INTERMEDIATE HOLDING, INC.,
as Grantors,

and

JAMES P. KAPLAN,
as Sellers' Representative

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SCHEDULES

GUARANTEE AND COLLATERAL AGREEMENT dated as of November 1, 2023 (this "Agreement"), among Knowles Corporation, a Delaware corporation (the "Guarantor"), Knowles Capital Holdings, Inc., a Delaware corporation ("Capital Holdings"), Knowles Intermediate Holding, Inc., a Delaware corporation ("Intermediate Holding" and together with Capital Holdings, collectively, the "Grantors" and each a "Grantor"), and James P. Kaplan, as representative (together with his successors and assignees, the "Sellers' Representative") for the benefit of himself and the other Sellers.

WHEREAS, each of Capital Holdings and Knowles Intermediate PD Holdings, LLC, a Delaware limited liability company and newly-formed, direct Subsidiary of Intermediate Holdings ("PD Holdings" and together with Capital Holdings, "Buyers"), are parties to that certain Purchase and Sale Agreement, dated as of September 15, 2023 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Purchase Agreement"), among Capital Holdings, PD Holdings, the Guarantor, the Sellers' Representative and certain other parties; and

WHEREAS, pursuant to the Purchase Agreement, Capital Holdings will purchase all of the issued and outstanding stock of Kaplan Electronics, Inc., a Delaware corporation, and PD Holdings will purchase a combination of stock and assets sold thereunder (collectively, the "Acquired Assets"); and

WHEREAS, as part of the consideration under the Purchase Agreement, Buyers have agreed to deliver to Sellers' Representative the Secured Promissory Note, dated as of the date hereof in an aggregate principal amount of $122,900,000 (the "Note"), from the Buyers (in such capacity, the "Borrowers"), payable to Sellers' Representative for the benefit of himself and the other Sellers; and

WHEREAS, it is a condition to the Note that the Grantors and Guarantor shall have executed and delivered this Agreement to the Sellers' Representative to provide, in part, a pledge by the Grantors of certain of the Acquired Assets as security for, and a guaranty by the Guarantor of, the obligations under the Note as more fully set forth herein;

NOW, THEREFORE, in consideration of the premises and of the mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree with the Sellers' Representative as follows:

## ARTICLE I

## Definitions

SECTION 1.01. Defined Terms.

(a) Each capitalized term used but not defined herein and defined in the Note shall have the meaning specified in the Note. Each other term used but not defined herein that is defined in the New York UCC (as defined herein) shall have the meaning specified in the New York UCC. The term "instrument" and "Proceeds" shall have the meaning specified in Article 9 of the New York UCC.

(b) The rules of construction specified in Sections 1.02, 1.03, and 1.04 of Annex A to the Note also apply to this Agreement, mutatis mutandis.

SECTION 1.02. Other Defined Terms. As used in this Agreement, the following terms have the meanings specified below:

"Acquired Assets" has the meaning assigned to such term in the recitals hereto.

"Agreement" has the meaning assigned to such term in the preamble hereto.

"Bankruptcy Code" has the meaning assigned to such term in the Note.

"Borrowers" has the meaning assigned to such term in the recitals hereto.

"Buyers" has the meaning assigned to such term in the recitals hereto.

"Capital Holdings" has the meaning assigned to such term in the preamble hereto.

"Claiming Party" has the meaning assigned to such term in Section 5.02.

"Contributing Party" has the meaning assigned to such term in Section 5.02.

"Electronic Signature" means an electronic sound, symbol or process attached to, or associated with, a contract or other record and adopted by a Person with the intent to sign, authenticate or accept such contract or record.

"Federal Securities Laws" has the meaning assigned to such term in Section 4.03.

"Grantors" has the meaning assigned to such term in the preamble hereto.

"Guarantor" has the meaning assigned to such term in the preamble hereto.

"Indemnified Amount" has the meaning assigned to such term in Section 5.02.

"Intermediate Holding" has the meaning assigned to such term in the preamble hereto.

"Loan Parties" means the Guarantor, the Borrowers and the Grantors.

"New York UCC" means the Uniform Commercial Code as from time to time in effect in the State of New York.

"Note" has the meaning assigned to such term in the recitals hereto.

"Obligations" has the meaning assigned to such term in the Note.

"PD Holdings" has the meaning assigned to such term in the recitals hereto.

"Pledged Collateral" has the meaning assigned to such term in Section 3.01.

"Pledged Equity Interests" has the meaning assigned to such term in Section 3.01.

"Pledged Securities" means any stock certificates, unit certificates, limited liability membership interest certificates and other certificated securities now or hereafter included in the Pledged Collateral, including all certificates, instruments or other documents representing or evidencing any Pledged Collateral.

"Purchase Agreement" has the meaning assigned to such term in the recitals hereto.

"Reduction Provisions" has the meaning assigned to such term in Section 2.03.

"Secured Parties" means, collectively, the Sellers' Representative and the Sellers.

"Sellers" has the meaning assigned to such term in the Note.

ARTICLE II

Guarantee

SECTION 2.01. Guarantee. The Guarantor irrevocably and unconditionally Guarantees, as a primary obligor and not merely as a surety, the full and punctual payment and performance, when due, of the Obligations. The Guarantor further agrees that the Obligations may be extended or renewed, in whole or in part, or amended or modified, without notice to or further assent from it, and that it will remain bound upon its Guarantee hereunder notwithstanding any extension, renewal, amendment or modification of the Obligations. The Guarantor waives presentment to, demand of payment from and protest to the Borrowers or any other Person of the Obligations, and also waives notice of acceptance of its guarantee hereunder and notice of protest for nonpayment.

SECTION 2.02. Guarantee of Payment; Continuing Guarantee. The Guarantor further agrees that its Guarantee hereunder constitutes a guarantee of payment when due (whether or not any bankruptcy, insolvency, receivership or other similar proceeding shall have stayed the accrual or collection of the Obligations or operated as a discharge thereof) and not merely of collection, and waives any right to require that any resort be had by the Sellers' Representative or any other Secured Party to any security held for the payment of the Obligations. The Guarantor agrees that its Guarantee hereunder is continuing in nature and applies to all Obligations, whether currently existing or hereafter incurred.

SECTION 2.03. No Limitations.

(a) Except for the termination or release of the Guarantor's obligations hereunder as expressly provided in Section 6.12 and the adjustment provisions set forth in Section 3 of the Note (the "Reduction Provisions"), and subject to Section 2.09, the obligations of the Guarantor hereunder shall not be subject to any reduction, limitation, impairment or termination for any reason, including any claim of waiver, release, surrender, alteration or compromise, and shall not be subject to any defense or set-off, counterclaim, recoupment or termination whatsoever by reason of the invalidity, illegality or unenforceability of the Obligations, any impossibility in the performance of the Obligations or otherwise. Without limiting the generality of the foregoing but subject to the Reduction Provisions, the obligations of the Guarantor hereunder shall not be discharged or impaired or otherwise affected by (i) the failure of the Sellers' Representative or any other Secured Party to assert any claim or demand or to enforce any right or remedy under the provisions of any Loan Document or otherwise; (ii) [reserved]; (iii) the release of, or any impairment of or failure to perfect any Lien on or security interest in, any security held by the Sellers' Representative or any other Secured Party for the Obligations; (iv) any default, failure or delay, willful or otherwise, in the performance of the Note; or (v) any other act or omission that may or might in any manner or to any extent vary the risk of the Guarantor or otherwise operate as a discharge of the Guarantor as a matter of law or equity (other than the Reduction Provisions and, subject to Section 2.04, the payment in full of the Obligations to the extent necessary to cause the Termination Date to occur). The Guarantor expressly authorizes the Secured Parties to take and hold security for the payment and performance of the Obligations, to exchange, waive or release any or all such security (with or without consideration), to enforce or apply such security and direct the order and manner of any sale thereof in their sole discretion or to release or substitute any one or more other guarantors or obligors upon or in respect of the Obligations, all without affecting the obligations of the Guarantor hereunder.

(b) To the fullest extent permitted by applicable law, the Guarantor waives any defense based on or arising out of any defense of any Loan Party or the unenforceability of the Note or any part thereof from any cause, or the cessation from any cause of the liability of any Loan Party, other than the Reduction Provisions and, subject to Section 2.04, the payment in full of the Obligations to the extent necessary to cause the Termination Date to occur. The Sellers' Representative and the other Secured Parties may, at their election, foreclose on any security held by one or more of them by one or more judicial or nonjudicial sales, accept an assignment of any such security in lieu of foreclosure, compromise or adjust any part of the Obligations, make any other accommodation with any Loan Party, or exercise any other right or remedy available to them against any Loan Party, without affecting or impairing in any way the liability of the Guarantor hereunder except to the extent of the Reduction Provisions and, subject to Section 2.04, the Obligations have been paid in full to the extent necessary to cause the Termination Date to occur. To the fullest extent permitted by applicable law, the Guarantor waives any defense arising out of any such election even though such election operates, pursuant to applicable law, to impair or to extinguish any right of reimbursement or subrogation or other right or remedy of the Guarantor against any Loan Party, as the case may be, or any security.

SECTION 2.04. Reinstatement. The Guarantor agrees that its Guarantee hereunder shall continue to be effective or be reinstated, as the case may be, if at any time payment, or any part thereof, of any Obligation is rescinded or must otherwise be restored by the Sellers' Representative or any other Secured Party upon the bankruptcy, insolvency, receivership, dissolution, liquidation or reorganization of any other Loan Party or otherwise.

SECTION 2.05. Agreement to Pay; Subrogation. In furtherance of the foregoing and not in limitation of any other right that the Sellers' Representative or any other Secured Party has at law or in equity against the Guarantor by virtue hereof, upon the failure of any Borrower to pay the Note when and as the same shall become due, whether at maturity, by acceleration, after notice of prepayment or otherwise, the Guarantor hereby promises to and will forthwith pay, or cause to be paid, to the Sellers' Representative for distribution to the applicable Secured Parties in cash the amount of such unpaid Obligations. Upon payment by the Guarantor of any sums to the Sellers' Representative as provided above, all rights of the Guarantor against any Loan Party arising as a result thereof by way of right of subrogation, contribution, reimbursement, indemnity or otherwise shall in all respects be subject to Article V.

SECTION 2.06. Information. The Guarantor (a) assumes all responsibility for being and keeping itself informed of each other Loan Party's (as applicable) financial condition and assets, and of all other circumstances bearing upon the risk of nonpayment of the Obligations and the nature, scope and extent of the risks that the Guarantor assumes and incurs hereunder and (b) agrees that none of the Sellers' Representative or the other Secured Parties will have any duty to advise the Guarantor of information known to it or any of them regarding such circumstances or risks.

SECTION 2.07. [Reserved].

SECTION 2.08. Acknowledgment. Each of the Guarantor and Knowles Intermediate hereby acknowledges the provisions of Annex B of the Note applicable to it and agrees to be bound by such provisions (but only with respect to provisions applicable to it) with the same force and effect, and to the same extent, as if the Guarantor and Knowles Intermediate were parties to the Note.

SECTION 2.09. [Reserved].

ARTICLE III

Pledge of Securities

SECTION 3.01. Pledge. As security for the payment and performance in full of the Obligations, each Grantor hereby assigns, pledges and grants to the Sellers' Representative, for the benefit of the Secured Parties, a security interest in all such Grantor's right, title and interest in, to and under: (a)(i) the Equity Interests set forth opposite the name of such Grantor on Schedule I and any additional Equity Interests issued by such issuers set forth on Schedule I after the date hereof and (ii) all certificates and other instruments representing all such Equity Interests (the "Pledged Equity Interests"); (b) subject to Section 3.05, all payments of dividends or other distributions, whether paid or payable in cash, instruments or other property from time to time received, receivable or otherwise distributed in respect of, in exchange for or upon the conversion of, and all other Proceeds received in respect of, the Pledged Equity Interests; (c) subject to Section 3.05, all rights and privileges of such Grantor with respect to the securities, instruments and other property referred to in clauses (a) and (b) above; and (d) all Proceeds of any of the foregoing (the items referred to in clauses (a) through (d) above being collectively referred to as the "Pledged Collateral").

SECTION 3.02. Delivery of the Pledged Securities; UCC Filings Authorization.

(a) Each Grantor agrees to deliver or cause to be delivered to the Sellers' Representative any and all Pledged Securities within ten (10) Business Days of the date hereof. Each Grantor acknowledges and agrees that (A) if any interest in any limited liability company pledged hereunder is a "security" within the meaning of Article 8 of the New York UCC and is governed by Article 8 of the New York UCC, such interest shall be certificated and the certificate representing such interest shall be delivered to the Sellers' Representative in accordance with this Section 3.02(a) and (B) if any interest in any limited liability company pledged hereunder is not a "security" within the meaning of Article 8 of the New York UCC, such Grantor shall not cause or permit such interest to be a security governed by Article 8 of the New York UCC or to be represented by a certificate unless such Grantor shall first notify the Sellers' Representative and deliver such certificate to the Sellers' Representative in accordance with clause (A) of this Section 3.02(a).

(b) Upon delivery to the Sellers' Representative, any Pledged Securities shall be accompanied by undated stock powers duly executed by the applicable Grantor in blank or other undated instruments of transfer reasonably satisfactory to the Sellers' Representative.

(c) Each Grantor hereby irrevocably authorizes the Sellers' Representative (or its designee) at any time and from time to time after the date hereof to file in any relevant jurisdiction any financing statements with respect to the Pledged Collateral or any part thereof and amendments thereto that (i) describe the collateral covered thereby in any manner that the Sellers' Representative reasonably determines is necessary or advisable to ensure the perfection of the security interest in the Pledged Collateral granted under this Agreement (but which filing shall be specific as to the collateral and shall not be an "all assets" filing or similar filing purporting to cover all assets of the Grantors), and (ii) contain the information required by Article 9 of the Uniform Commercial Code or the analogous legislation of each applicable jurisdiction for the filing of any financing statement or amendment, including whether such Grantor is an organization, the type of organization and any organizational identification or company number issued to such Grantor. Each Grantor agrees to provide the information required for any such filing to the Sellers' Representative promptly upon request.

SECTION 3.03. Representations, Warranties and Covenants. The Grantors jointly and severally represent and warrant to the Sellers' Representative, for the benefit of the Secured Parties, that:

(a) Schedule I sets forth, as of the date hereof, a true and complete list, with respect to each Grantor, of the Pledged Equity Interests owned by such Grantor and the percentage of the issued and outstanding units of each class of the Equity Interests of the issuer thereof represented by the Pledged Equity Interests owned by such Grantor;

(b) [Reserved];

(c) each of the Grantors (i) will continue to be the direct owner, beneficially and of record, of the Pledged Equity Interests indicated on Schedule I as owned by such Grantor, (ii) holds the Pledged Collateral owned by it free and clear of all Liens, other than non-consensual Liens permitted to exist under Section 1.06 of Annex B of the Note, (iii) will make no assignment, pledge, hypothecation or transfer of, or create or permit to exist any security interest in or other Lien on, the Pledged Collateral, other than non-consensual Liens permitted to exist under Section 1.06 of Annex B of the Note and transfers made in compliance with the Note and (iv) will defend its title or interest thereto or therein against any and all Liens (other than non-consensual Liens permitted to exist under Section 1.06 of Annex B of the Note), however arising, of all Persons whomsoever; and

(d) each of the Grantors has the power and authority to pledge the Pledged Collateral pledged by it hereunder in the manner hereby done or contemplated.

SECTION 3.04. Registration in Nominee Name; Denominations. Upon and during the continuance of an Event of Default, the Sellers' Representative shall have the right to exchange the certificates representing Pledged Securities for certificates of smaller or larger denominations for any purpose consistent with this Agreement.

SECTION 3.05. Voting Rights; Dividends and Interest.

(a) Unless and until an Event of Default shall have occurred and be continuing and, other than in the case of an Event of Default under Section 7(a)(vii) or Section 7(a)(viii) of the Note, the Sellers' Representative shall have notified the Grantors that the Grantors' rights, in whole or in part, under this Section 3.05 are being suspended:

(i) each Grantor shall be entitled to exercise any and all voting and/or other consensual rights and powers inuring to an owner of Pledged Collateral or any part thereof for any purpose not inconsistent with the terms of this Agreement and the other Loan Documents; provided that such rights and powers shall not be exercised in any manner that could reasonably be expected to materially and adversely affect the rights and remedies of any of the Sellers' Representative or any other Secured Party under this Agreement or any other Loan Document (taken as a whole) or the ability of the Secured Parties to exercise the same;

(ii) the Sellers' Representative shall execute and deliver to each Grantor, or cause to be executed and delivered to such Grantor, all such proxies, powers of attorney and other instruments as such Grantor may reasonably request for the purpose of enabling such Grantor to exercise the voting and/or consensual rights and powers it is entitled to exercise pursuant to Section 3.05(a)(i); and

(iii) each Grantor shall be entitled to receive and retain any dividends paid on or distributions in respect of the Pledged Collateral that are permitted by Section 1.07(i) in Annex B to the Note; provided that any noncash dividends or other distributions that would constitute Pledged Equity Interests, whether resulting from a subdivision, combination or reclassification of the outstanding Equity Interests of the issuer of any Pledged Securities or received in exchange for Pledged Securities or any part thereof, or in redemption thereof, or as a result of any merger, consolidation, acquisition or other exchange of assets to which such issuer may be a party or otherwise, shall be and become part of the Pledged Collateral and, if received by any Grantor and required to be delivered to the Sellers' Representative hereunder, shall be held in trust for the benefit of the Sellers' Representative and the other Secured Parties and shall be forthwith delivered to the Sellers' Representative in the form in which they shall have been received (with any endorsements, stock or note powers and other instruments of transfer requested by the Sellers' Representative).

(b) Upon the occurrence and during the continuance of an Event of Default and, other than in the case of an Event of Default under Section 7(a)(vii) or Section 7(a)(viii) of the Note, in respect of the relevant Grantor, after the Sellers' Representative shall have notified the Grantors of the suspension of the Grantor's rights under Section 3.05(a)(iii), all rights of any Grantor to dividends or other distributions that such Grantor is authorized to receive pursuant to Section 3.05(a)(iii), shall cease, and all such rights shall thereupon become vested in the Sellers' Representative, which shall have the sole and exclusive right and authority to receive and retain such dividends or other distributions. All dividends and other distributions received by any Grantor contrary to the provisions of this Section 3.05 shall be held in trust for the benefit of the Sellers' Representative and the other Secured Parties and shall be forthwith delivered to the Sellers' Representative upon demand in the form in which they shall have been received (with any necessary endorsements, stock powers or other instruments of transfer). Any and all money and other property paid over to or received by the Sellers' Representative pursuant to the provisions of this Section 3.05(b) shall be retained by the Sellers' Representative in an account to be established by the Sellers' Representative upon receipt of such money or other property, shall be held as security for the payment and performance of the Note and shall be applied in accordance with the provisions of Section 4.02. After all Events of Default have been cured or waived and the Sellers' Representative has received from the Guarantor satisfactory evidence relating to any such cure or waiver, the Sellers' Representative shall promptly repay to each Grantor (without interest) all dividends or other distributions that such Grantor would otherwise have been permitted to retain pursuant to the terms of Section 3.05(a)(iii) and that remain in such account.

(c) Upon the occurrence and during the continuance of an Event of Default and, other than in the case of an Event of Default under Section 7(a)(vii) or Section 7(a)(viii) of the Note, in respect of the relevant Grantor, upon notice from the Sellers' Representative to the Grantors of the suspension of the Grantors' rights under Section 3.05(a)(i), all rights of any Grantor to exercise the voting and consensual rights and powers it is entitled to exercise pursuant to Section 3.05(a)(i), and the obligations of the Sellers' Representative under Section 3.05(a)(ii), shall cease, and all such rights shall thereupon become vested in the Sellers' Representative, which shall have the sole and exclusive right and authority to exercise such voting and consensual rights and powers; provided that the Sellers' Representative shall have the right from time to time following and during the continuance of an Event of Default to permit the Grantors to exercise such rights. After all Events of Default have been cured or waived and the Sellers' Representative has received from the Guarantor satisfactory evidence relating to any such cure or waiver, all rights vested in the Sellers' Representative pursuant to this Section 3.05(c) shall cease, and the Grantors shall have the exclusive right to exercise the voting and consensual rights and powers they would otherwise be entitled to exercise pursuant to Section 3.05(a)(i), and the obligations of the Sellers' Representative under Section 3.05(a)(ii) shall be in effect.

(d) Any notice given by the Sellers' Representative to the Grantors suspending the Grantors' rights under Section 3.05(a): (i) may be given by telephone if promptly confirmed in writing, (ii) may be given to one or more of the Grantors at the same or different times and (iii) may suspend the rights and powers of the Grantors under Section 3.05(a)(i) or Section 3.05(a)(iii) in part without suspending all such rights or powers (as specified by the Sellers' Representative in its sole and absolute discretion) and without waiving or otherwise affecting the Sellers' Representative's right to give additional notices from time to time suspending other rights and powers so long as an Event of Default has occurred and is continuing.

SECTION 3.06. Negative Pledge. The Guarantor shall not and shall not permit its Subsidiaries to grant a Lien on its assets (other than assets of the type pledged as "Collateral" under and as defined in the Knowles

Credit Agreement as in effect on the date hereof) to secure the obligations under the Knowles Credit Agreement or any other Material Indebtedness for borrowed money (other than Indebtedness permitted under Section 1.05 of Annex B of the Note) unless within thirty (30) days of such grant the Kaplan Restricted Group shall enter into collateral documentation in substantially the same form and secured by substantially the same assets, with customary carveouts, exceptions and materiality qualifiers that are no less favorable to the Kaplan Restricted Group than the Knowles Unrestricted Group (e.g., limitation on 65% pledge of any first-tier CFC).

ARTICLE IV

Remedies

SECTION 4.01. Remedies Upon Default. Upon the occurrence and during the continuance of an Event of Default, each Grantor agrees to deliver, on demand, each item of Pledged Collateral to the Sellers' Representative or any Person designated by the Sellers' Representative, and it is agreed that the Sellers' Representative shall have the right with or without legal process and with or without prior notice or demand for performance, to exercise any and all rights afforded to a secured party under the New York UCC or other applicable law. Each Grantor agrees that the Sellers' Representative shall have the right, subject to the mandatory requirements of applicable law, to sell or otherwise dispose of all or any part of the Pledged Collateral at a public or private sale or at any broker's board or on any securities exchange, for cash, upon credit or for future delivery as the Sellers' Representative shall deem appropriate. Each such purchaser at any sale of Pledged Collateral shall hold the property sold absolutely free from any claim or right on the part of any Grantor, and each Grantor hereby waives (to the extent permitted by law) all rights of redemption, stay and appraisal that such Grantor now has or may at any time in the future have under any rule of law or statute now existing or hereafter enacted.

The Sellers' Representative shall give the applicable Grantors 10 days' prior written notice (which each Grantor agrees is reasonable notice within the meaning of Section 9-611 of the New York UCC or its equivalent in other jurisdictions) of the Sellers' Representative's intention to make any sale of Pledged Collateral. Such notice, in the case of a public sale, shall state the time and place for such sale and, in the case of a sale at a broker's board or on a securities exchange, shall state the board or exchange at which such sale is to be made and the day on which the Pledged Collateral, or portion thereof, will first be offered for sale at such board or exchange. Any such public sale shall be held at such time or times within ordinary business hours and at such place or places as the Sellers' Representative may fix and state in the notice (if any) of such sale. At any such sale, the Pledged Collateral, or portion thereof, to be sold may be sold in one lot as an entirety or in separate parcels, as the Sellers' Representative may (in its sole and absolute discretion) determine. The Sellers' Representative shall not be obligated to make any sale of any Pledged Collateral if it shall determine not to do so, regardless of the fact that notice of sale of such Pledged Collateral shall have been given. The Sellers' Representative may, without notice or publication, adjourn any public or private sale or cause the same to be adjourned from time to time by announcement at the time and place fixed for sale, and such sale may, without further notice, be made at the time and place to which the same was so adjourned. In case any sale of all or any part of the Pledged Collateral is made on credit or for future delivery, the Pledged Collateral so sold may be retained by the Sellers' Representative until the sale price is paid by the purchaser or purchasers thereof, but the Sellers' Representative and the other Secured Parties shall not incur any liability in case any such purchaser or purchasers shall fail to take up and pay for the Pledged Collateral so sold and, in case of any such failure, such Pledged Collateral may be sold again upon like notice. In the event of a foreclosure by the Sellers' Representative on any of the Pledged Collateral pursuant to a public or private sale or other disposition, the Sellers' Representative or any Secured Party may be the purchaser or licensor of any or all of such Pledged Collateral at any such sale or other disposition, and the Sellers' Representative as agent for and representative of the Secured Parties shall be entitled, for the purpose of bidding and making settlement or payment of the purchase price for all or any portion of the Pledged Collateral sold at any such sale or other disposition, to use and apply any of the Obligations as a credit on account of the purchase price for any Pledged Collateral payable by the Sellers' Representative on behalf of the Secured Parties at such sale or other disposition. For purposes hereof, a written agreement to purchase the Pledged Collateral or any portion thereof shall be treated as a sale thereof; in accordance with Section 9-610(b) of the New York UCC or its equivalent in other jurisdictions, the Sellers' Representative shall be free to carry out such sale pursuant to such agreement and no Grantor shall be entitled to the return of the Pledged Collateral or any portion thereof subject thereto, notwithstanding the fact that after the Sellers' Representative shall have entered into such an agreement all Events of Default shall have been remedied and the Obligations paid in full. As an alternative to exercising the power of sale herein conferred upon it, the Sellers' Representative may proceed by a suit or suits at law or in equity to foreclose this Agreement and to sell the Pledged Collateral or any portion thereof pursuant to a judgment or decree of a court or courts having competent jurisdiction or pursuant to a proceeding by a court-appointed receiver. Any sale pursuant to the provisions of this Section 4.01 shall be deemed to conform to commercially reasonable standards as provided in Section 9-610(b) of the New York UCC or its equivalent in other jurisdictions.

SECTION 4.02. Application of Proceeds. The Sellers' Representative shall apply the proceeds of any collection, sale, foreclosure or other realization upon any Pledged Collateral, including any Pledged Collateral consisting of cash, as follows:

FIRST, to the payment of any fees, costs and expenses, including counsel costs, of the Sellers' Representative reimbursable by the Borrowers under any Loan Document (if any);

SECOND, to payment of the Principal Amount; and

THIRD, to the Grantors, their successors or assigns, or as a court of competent jurisdiction may otherwise direct.

Upon any sale of Pledged Collateral by the Sellers' Representative (including pursuant to a power of sale granted by statute or under a judicial proceeding), the receipt of the Sellers' Representative or of the officer making the sale shall be a sufficient discharge to the purchaser or purchasers of the Pledged Collateral so sold and such purchaser or purchasers shall not be obligated to see to the application of any part of the purchase money paid over to the Sellers' Representative or such officer or be answerable in any way for the misapplication thereof. Subject to Section 6.15, Capital Holdings shall remain liable for any deficiency if the proceeds of any sale or disposition of the Pledged Collateral are insufficient to pay the Obligations. Notwithstanding the foregoing, the proceeds of any collection, sale, foreclosure or realization upon any Pledged Collateral of any Grantor, including any Pledged Collateral consisting of cash, shall be applied to the Obligations.

SECTION 4.03. Securities Act. In view of the position of the Grantors in relation to the Pledged Collateral, or because of other current or future circumstances, a question may arise under the Securities Act of 1933 as now or hereafter in effect or any similar statute hereafter enacted analogous in purpose or effect (such Act and any such similar statute as from time to time in effect being called the "Federal Securities Laws") with respect to any disposition of the Pledged Collateral permitted hereunder. Each Grantor understands that compliance with the Federal Securities Laws might very strictly limit the course of conduct of the Sellers' Representative if the Sellers' Representative were to attempt to dispose of all or any part of the Pledged Collateral, and might also limit the extent to which or the manner in which any subsequent transferee of any Pledged Collateral could dispose of the same. Similarly, there may be other legal restrictions or limitations affecting the Sellers' Representative in any attempt to dispose of all or part of the Pledged Collateral under applicable Blue Sky or other state securities laws or similar laws analogous in purpose or effect. Each Grantor recognizes that in light of such restrictions and limitations the Sellers'

Representative may, with respect to any sale of the Pledged Collateral, and shall be authorized to, limit the purchasers to those who will agree, among other things, to acquire such Pledged Collateral for their own account for investment, and not with a view to the distribution or resale thereof, and upon consummation of any such sale may assign, transfer and deliver to the purchaser or purchasers thereof the Pledged Collateral so sold. Each Grantor acknowledges and agrees that in light of such restrictions and limitations, the Sellers' Representative, in its sole and absolute discretion, (a) may proceed to make such a sale whether or not a registration statement for the purpose of registering such Pledged Collateral or part thereof shall have been filed under the Federal Securities Laws or, to the extent applicable, Blue Sky or other state securities laws and (b) may approach and negotiate with a limited number of potential purchasers (including a single potential purchaser) to effect such sale. Each Grantor acknowledges and agrees that any such sale might result in prices and other terms less favorable to the seller than if such sale were a public sale without such restrictions. In the event of any such sale, the Sellers' Representative shall incur no responsibility or liability for selling all or any part of the Pledged Collateral at a price that the Sellers' Representative, in its sole and absolute discretion, may in good faith deem reasonable under the circumstances, notwithstanding the possibility that a substantially higher price might have been realized if the sale were deferred until after registration as aforesaid or if more than a limited number of potential purchasers (or a single purchaser) were approached. The provisions of this Section 4.03 will apply notwithstanding the existence of a public or private market upon which the quotations or sales prices may exceed substantially the price at which the Sellers' Representative sells.

## ARTICLE V

### Indemnity, Subrogation, Contribution and Subordination

SECTION 5.01. Indemnity and Subrogation. In addition to all such rights of indemnity and subrogation as the Guarantor may have under applicable law (but subject to Section 5.03), the Guarantor and each Borrower agrees that (a) in the event a payment in respect of the Obligations shall be made by the Guarantor under this Agreement, such Borrower or Borrowers, shall indemnify the Guarantor for the full amount of such payment and the Guarantor shall be subrogated to the rights of the Person to whom such payment shall have been made to the extent of such payment and (b) in the event any assets of any Grantor shall be sold pursuant to this Agreement to satisfy in whole or in part the Obligations of any Borrower under the Note, such Borrower or Borrowers, shall indemnify such Grantor (other than if such Obligation is an obligation of such Grantor) in an amount equal to the greater of the book value or the fair market value of the assets so sold.

SECTION 5.02. Contribution and Subrogation. Each Guarantor and Grantor (each such Guarantor or Grantor, other than, in the case of any payment referred to in this sentence by Capital Holdings under the Note, as applicable, being referred to as a "Contributing Party") agrees (subject to Section 5.03) that, in the event a payment shall be made by the Guarantor in respect of the Note or assets of any other Grantor shall be sold pursuant hereto to satisfy the Note (other than any assets of Capital Holdings sold to satisfy its obligations under the Note) and the Guarantor or Grantor (the "Claiming Party") shall not have been fully indemnified by the Borrower or Borrowers, as applicable, as provided in Section 5.01, such Contributing Party shall indemnify the Claiming Party in an amount equal to the amount of such payment or the greater of the book value or the fair market value of such assets (the "Indemnified Amount"), as the case may be, in each case multiplied by a fraction of which the numerator shall be the net worth of such Contributing Party on the date hereof and the denominator shall be the aggregate net worth of all the Contributing Parties on the date hereof. Any Contributing Party making any payment to a Claiming Party pursuant to this Section 5.02 shall (subject to Section 5.03) be subrogated to the rights of such Claiming Party under Section 5.01 to the extent of such payment.

SECTION 5.03. Subordination.

(a) Notwithstanding any provision of this Agreement to the contrary, all rights of the Guarantor and Grantors under Sections 5.01 and 5.02 and all other rights of the Guarantor and Grantors of indemnity, contribution or subrogation under applicable law or otherwise shall be fully subordinated to the payment in full of the Obligations to the extent necessary to cause, subject to Section 2.04, the Termination Date to occur. No failure on the part of the Guarantor or any Grantor to make the payments required by Sections 5.01 and 5.02 (or any other payments required under applicable law or otherwise) shall in any respect limit the obligations and liabilities of the Guarantor or any Grantor with respect to its obligations hereunder, and each Guarantor and Grantor shall remain liable for the full amount of the obligations of such Guarantor or Grantor hereunder.

(b) [Reserved].

## ARTICLE VI

## Miscellaneous

SECTION 6.01. Notices. All communications and notices hereunder shall (except as otherwise expressly permitted herein) be in writing and given in the manner provided in Section 9(d) of the Note.

SECTION 6.02. Waivers; Amendment.

(a) No failure or delay by the Sellers' Representative or any Secured Party in exercising any right or power hereunder or under the Note shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such a right or power, preclude any other or further exercise thereof or the exercise of any other right or power. The rights and remedies of the Sellers' Representative and the Secured Parties hereunder and under the Note are cumulative and are not exclusive of any rights or remedies that they would otherwise have. No waiver of any provision of this Agreement or consent to any departure by the Guarantor or any Grantor therefrom shall in any event be effective unless the same shall be permitted by Section 6.02(b), and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. No notice or demand on any Loan Party in any case shall entitle any Loan Party to any other or further notice or demand in similar or other circumstances.

(b) Except as provided in Sections 6.12 and 6.13, neither this Agreement nor any provision hereof may be waived, amended or modified except pursuant to an agreement or agreements in writing entered into by the Sellers' Representative, the Guarantor and the Grantors with respect to which such waiver, amendment or modification is to apply; provided that the Sellers' Representative may, without the consent of any Secured Party, consent to a departure by any Loan Party from any covenant of such Loan Party set forth herein to the extent such departure is not inconsistent with any limitation on the authority of the Sellers' Representative set forth in the Note.

(c) This Agreement shall be construed as a separate agreement with respect to the Guarantor and each Grantor and may be amended, modified, supplemented, waived or released with respect to any Loan Party without the approval of any other Loan Party and without affecting the obligations of any other Loan Party hereunder.

SECTION 6.03. [Reserved].

SECTION 6.04. Survival. All covenants, agreements, representations and warranties made by the Loan Parties herein and in the Note shall be considered to have been relied upon by the Sellers' Representative and shall survive the execution and delivery of the Loan Documents and shall continue in full force and effect until the Termination Date has occurred. The provisions of Section 2.04 shall survive the repayment of the Obligations or termination of this Agreement or any provision hereof.

SECTION 6.05. Counterparts; Effectiveness; Successors and Assigns; Electronic Execution.

(a) This Agreement may be executed in counterparts (and by different parties hereto on different counterparts), each of which shall constitute an original but all of which when taken together shall constitute a single contract. This Agreement shall become effective as to any Loan Party when a counterpart hereof executed on behalf of such Loan Party shall have been delivered to the Sellers' Representative and a counterpart hereof shall have been executed on behalf of the Sellers' Representative, and thereafter shall be binding upon such Loan Party and the Sellers' Representative and their respective successors and assigns, and shall inure to the benefit of such Loan Party, the Sellers' Representative and the other Secured Parties and their respective successors and assigns, except that no Loan Party may assign or otherwise transfer any of its rights or obligations hereunder or any interest herein or in the Pledged Collateral (and any attempted assignment or transfer by any Loan Party shall be null and void), except as expressly contemplated by this Agreement or the Note.

(b) Delivery of an executed counterpart of a signature page of this Agreement (including any Electronic Signature) by facsimile or other electronic imaging shall be effective as delivery of a manually executed counterpart of this Agreement. The words "execution", "signed", "signature", "delivery" and words of like import in or relating to this Agreement shall be deemed to include Electronic Signatures, deliveries or the keeping of records in any electronic form (including deliveries by fax, emailed pdf or any other electronic means that reproduces an image of an actual executed signature page), each of which shall be of the same legal effect, validity or enforceability as a manually executed signature, physical delivery thereof or the use of a paper-based recordkeeping system, as the case may be; provided that nothing herein shall require the Sellers' Representative to accept Electronic Signatures in any form or format without its prior written consent and pursuant to procedures approved by it; provided further, without limiting the foregoing, (i)(A) the Sellers' Representative shall be entitled to rely on such Electronic Signature purportedly given by or on behalf of any Loan Party without further verification thereof and without any obligation to review the appearance or form of any such Electronic Signature and (B) the Loan Parties shall be entitled to rely on such Electronic Signatures purportedly given by or on behalf of the Sellers' Representative without further verification thereof and without any obligation to review the appearance or form of any such Electronic Signature and (ii) upon the request of any Loan Party, the Sellers' Representative or any Secured Party, any Electronic Signature shall be promptly followed by a manually executed counterpart. Without limiting the generality of the foregoing, each of the parties hereto hereby (A) agrees that, for all purposes, including in connection with any workout, restructuring, enforcement of remedies, bankruptcy proceedings or litigation among the Sellers' Representative and the Loan Parties, Electronic Signatures transmitted by fax, emailed pdf or any other electronic means that reproduces an image of an actual executed signature page and/or any electronic images of this Agreement and/or the Note shall have the same legal effect, validity and enforceability as any paper original and (B) each other party hereto may, at its option, create one or more copies of this Agreement and/or the Note in the form of an imaged electronic record in any format, which shall be deemed created in the ordinary course of such Person's business, and destroy the original paper document (and all such electronic records shall be considered an original for all purposes and shall have the same legal effect, validity and enforceability as a paper record).

SECTION 6.06. Severability. Any provision of this Agreement held to be invalid, illegal or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity, illegality or unenforceability without affecting the validity, legality and enforceability of the remaining provisions hereof; and the invalidity of a particular provision in a particular jurisdiction shall not invalidate such provision in any other jurisdiction.

SECTION 6.07. [Reserved].

SECTION 6.08. Governing Law; Jurisdiction; Consent to Service of Process.

(a) This Agreement shall be governed by, and construed in accordance with, the law of the State of New York.

(b) Each party hereto hereby irrevocably and unconditionally submits, for itself and its property, to the jurisdiction of the Supreme Court of the State of New York sitting in New York County and of the United States District Court of the Southern District of New York, and any appellate court from any thereof, in any suit, action or proceeding arising out of or relating to this Agreement, or for recognition or enforcement of any judgment, and each of the Loan Parties hereby irrevocably and unconditionally agrees that all claims arising out of or relating to this Agreement brought by it shall be brought, and shall be heard and determined, exclusively in such United States District Court or, if that court does not have subject matter jurisdiction, such Supreme Court. Each party hereto agrees that a final judgment in any such suit, action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Nothing in this Agreement or the Note shall affect any right that the Sellers' Representative or any Secured Party may otherwise have to bring any action or proceeding relating to this Agreement against any Loan Party or any of its properties in the courts of any jurisdiction.

(c) Each of the parties hereto hereby irrevocably and unconditionally waives, to the fullest extent permitted by law, any objection that it may now or hereafter have to the laying of venue of any suit, action or proceeding arising out of or relating to this Agreement in any court referred to in Section 6.08(b). Each of the parties hereto hereby irrevocably waives, to the fullest extent permitted by law, the defense of an inconvenient forum to the maintenance of such action or proceeding in any such court.

(d) Each party hereto irrevocably consents to service of process in the manner provided for notices in Section 6.01. Nothing in this Agreement will affect the right of any party to this Agreement to serve process in any other manner permitted by law.

SECTION 6.09. WAIVER OF JURY TRIAL. EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT, THE NOTE OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 6.09.

SECTION 6.10. Headings. Article and Section headings and the Table of Contents used herein are for convenience of reference only, are not part of this Agreement and shall not affect the construction of, or be taken into consideration in interpreting, this Agreement.

SECTION 6.11. Security Interest Absolute. All rights of the Sellers' Representative hereunder, the grant of the security interest in the Pledged Collateral and all obligations of each Loan Party hereunder shall be absolute and unconditional irrespective of (a) any lack of validity or enforceability of the Note or any other agreement or instrument relating to any of the foregoing, (b) any change in the time, manner or place of payment of, or in any other term of, the Note, or any other amendment to or waiver of, or any consent to any departure from, the Note or any other agreement or instrument relating to any of the foregoing, (c) any exchange, release or non-perfection of any Lien on other collateral securing, or any release or amendment to or waiver of, or any consent to any departure from, any Guarantee of, the Note and (d) any other circumstance that might otherwise constitute a defense available to, or a discharge of, any Loan Party in respect of the Note or this Agreement.

SECTION 6.12. Termination or Release.

(a) This Agreement, the Guarantees made herein and the security interests granted hereby shall automatically terminate upon the occurrence of the Termination Date.

(b) In connection with any termination or release pursuant to this Section 6.12, the Sellers' Representative shall execute and deliver to any Loan Party all documents that such Loan Party shall reasonably request to evidence such termination or release and shall perform such other actions reasonably requested by such Loan Party to effect such release, including delivery of any Pledged Securities. Any execution and delivery of documents by the Sellers' Representative pursuant to this Section 6.12 shall be without recourse to or warranty by the Sellers' Representative.

SECTION 6.13. [Reserved].

SECTION 6.14. Sellers' Representative Appointed Attorney-in-Fact. Each Grantor hereby appoints the Sellers' Representative the attorney-in-fact of such Grantor for the purpose of carrying out the provisions of this Agreement and taking any action and executing any instrument that the Sellers' Representative may deem necessary to accomplish the purposes hereof, which appointment is irrevocable and coupled with an interest. Without limiting the generality of the foregoing, the Sellers' Representative shall have the right, upon the occurrence and during the continuance of an Event of Default, with full power of substitution either in the Sellers' Representative's name or in the name of such Grantor (a) to receive, endorse, assign and/or deliver any and all notes, acceptances, checks, drafts, money orders or other evidences of payment relating to the Pledged Collateral or any part thereof, (b) to demand, collect, receive payment of, give receipt for and give discharges and releases of all or any of the Pledged Collateral, (c) to commence and prosecute any and all suits, actions or proceedings at law or in equity in any court of competent jurisdiction to collect or otherwise realize on all or any of the Pledged Collateral or to enforce any rights in respect of any Pledged Collateral, (d) to settle, compromise, compound, adjust or defend any actions, suits or proceedings relating to all or any of the Pledged Collateral and (e) to use, sell, assign, transfer, pledge, make any agreement with respect to or otherwise deal with all or any of the Pledged Collateral, and to do all other acts and things necessary to carry out the purposes of this Agreement, as fully and completely as though the Sellers' Representative were the absolute owner of the Pledged Collateral for all purposes; provided that nothing herein contained shall be construed as requiring or obligating the Sellers' Representative to make any commitment or to make any inquiry as to the nature or sufficiency of any payment received by the Sellers' Representative, or to present or file any claim or notice, or to take any action with respect to the Pledged Collateral or any part thereof or the moneys due or to become due in respect thereof or any property covered thereby. The Sellers' Representative and the other Secured Parties shall be accountable only for amounts actually received as a result of the exercise of the powers granted to them herein, and they shall not be responsible to any Grantor for any act or failure to act hereunder, except for their own gross negligence or willful misconduct (as determined by a court of competent jurisdiction in a final and non-appealable judgment).

SECTION 6.15. Non-Recourse Basis. Notwithstanding any provision in this Agreement, in the Note, or in any other agreement, document or instrument, whether written or oral, expressed or implied, to the contrary, it is understood and agreed between Grantors and the Sellers' Representative (on behalf of the Secured

Parties) that (i) the liability of Intermediate Holding shall be limited solely to the Pledged Collateral of Intermediate Holding pledged to the Sellers' Representative pursuant to this Agreement and (ii) no money judgment, order or execution shall be sought, taken or entered in any suit, action or proceeding, whether legal or equitable, but that the Sellers' Representative's and Secured Parties' sole and exclusive recourse against such Grantor shall be to have the Sellers' Representative realize upon such Pledged Collateral in accordance with the provisions of this Agreement and that all rights to such suit, action, proceeding or deficiency are hereby waived by the Payee and each Secured Party. It is further understood and agreed that notwithstanding that the obligations are full recourse to Capital Holdings, such recourse is only secured to the extent of the Pledged Collateral of Capital Holdings hereunder and thereafter is unsecured.

*[Signature Pages Follow]*

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year first above written.

**GUARANTOR**:

KNOWLES CORPORATION

By: /s/ John S. Anderson
Name: John S. Anderson
Its: Senior Vice President and Chief Financial Officer

**GRANTORS**:

KNOWLES CAPITAL HOLDINGS, INC.

By: /s/ John S. Anderson
Name: John S. Anderson
Its: President

KNOWLES INTERMEDIATE HOLDING, INC.

By: /s/ John S. Anderson
Name: John S. Anderson
Its: Vice President

**SELLERS' REPRESENTATIVE:**

/s/ James P. Kaplan

James P. Kaplan

Acknowledged and agreed solely for purposes of Section 5.01:

KNOWLES INTERMEDIATE PD HOLDINGS, LLC

By: /s/ John S. Anderson
Name: John S. Anderson
Title: Vice President

Schedule I to
the Guarantee and
Collateral Agreement

PLEDGED EQUITY INTERESTS

| Issuer | Jurisdiction of Organization | Registered Owner | Percentage of Equity Interests Owned by Registered Owner | Number of Certificate | Number and Class of Equity Interest Owned by Registered Owner |
|---|---|---|---|---|---|
| Kaplan Electronics, Inc. | Delaware | Knowles Capital Holdings, Inc. | 100% | N/A | 950 Class A Voting Common Stock<br><br>94,050 Class B Non-Voting Common Stock |
| Knowles Intermediate PD Holdings, LLC | Delaware | Knowles Intermediate Holding, Inc. | 100% | N/A | N/A |

**Exhibit 31.1**

**CERTIFICATION PURSUANT TO RULE 13a-14(a) AND RULE 15d-14(a)**
**OF THE SECURITIES EXCHANGE ACT OF 1934**

I, Jeffrey S. Niew, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Knowles Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an Annual Report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 2, 2023

/s/ JEFFREY S. NIEW

Name: Jeffrey S. Niew
Title: President and Chief Executive Officer
(Principal Executive Officer)

**Exhibit 31.2**

**CERTIFICATION PURSUANT TO RULE 13a-14(a) AND RULE 15d-14(a)**
**OF THE SECURITIES EXCHANGE ACT OF 1934**

I, John S. Anderson, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Knowles Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an Annual Report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 2, 2023

/s/ JOHN S. ANDERSON

Name: John S. Anderson
Title: Senior Vice President & Chief Financial Officer
(Principal Financial Officer)

**Exhibit 32.1**

**JOINT CERTIFICATION PURSUANT TO**
**18 U.S.C. SECTION 1350,**
**AS ADOPTED PURSUANT TO**
**SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Knowles Corporation (the “Company”) on Form 10-Q for the quarter ended September 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), we, Jeffrey S. Niew and John S. Anderson, the Principal Executive and Financial Officers of the Company, certify, pursuant to and for purposes of 18 U.S.C. ss. 1350, as adopted pursuant to ss. 906 of the Sarbanes-Oxley Act of 2002, that:

(1) the Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ JEFFREY S. NIEW
Name: Jeffrey S. Niew
Title: President and Chief Executive Officer
(Principal Executive Officer)
Date: November 2, 2023

/s/ JOHN S. ANDERSON
Name: John S. Anderson
Title: Senior Vice President & Chief Financial Officer
(Principal Financial Officer)
Date: November 2, 2023