



Investor Presentation

May 2, 2022

Safe Harbor

Forward Looking Statements

This presentation contains forward-looking statements within the meaning of the safe harbor provisions of the United States Private Securities Litigation Reform Act of 1995, such as statements about our future plans, objectives, expectations, financial performance, and continued business operations. The words “believe,” “expect,” “anticipate,” “project,” “estimate,” “budget,” “continue,” “could,” “intend,” “may,” “plan,” “potential,” “predict,” “seek,” “should,” “will,” “would,” “objective,” “path,” “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 presentation are based on currently available information and the current expectations, forecasts, and assumptions of Knowles’ 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, including risks relating to the COVID-19 pandemic and governmental responses to it, including but not limited to, the impact on our supply chain, customer demand, and costs associated with our operations. Other risks and uncertainties include, but are not limited to: unforeseen changes in MEMS microphone demand from our largest customers, in particular, two North American, a Korean, and Chinese OEM customers; 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; 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 cost 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; 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; and other risks, relevant factors, and uncertainties identified in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, subsequent Reports on Forms 10-Q and 8-K and our other filings we make with the U.S. Securities and Exchange Commission. **Except as where expressly indicated otherwise, these forward-looking statements speak only as of November 30, 2021, and Knowles disclaims any intention or obligation to update or revise these forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.**

Non-GAAP Disclaimer

The financial results disclosed in this presentation include certain measures calculated and presented in accordance with GAAP. In addition to the GAAP results included in this presentation, Knowles has presented supplemental, non-GAAP gross profit, earnings before interest and income taxes, adjusted earnings before interest and income taxes, adjusted earnings before interest and income taxes margin, non-GAAP gross profit margin, non-GAAP diluted earnings per share, free cash flow, free cash flow margin, and non-GAAP operating expense margin to facilitate evaluation of Knowles’ operating performance. These non-GAAP financial measures exclude certain amounts that are included in the most directly comparable GAAP measure. In addition, these non-GAAP financial measures do not have standard meanings and may vary from similarly titled non-GAAP financial measures used by other companies. Knowles uses non-GAAP measures as supplements to its GAAP results of operations in evaluating certain aspects of its business, and its executive management team focuses on non-GAAP items as key measures of Knowles’ performance for business planning purposes. These measures assist Knowles in 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 these 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. For a reconciliation of these non-GAAP financial measures to the most directly comparable GAAP financial measures, see the reconciliation tables in the Appendix.

A top-down view of an F-35 fighter jet flying over a sea of white clouds under a blue sky with scattered clouds. The jet is centered in the left half of the image, with its wings and canards clearly visible.

Our Company

A global technology leader and manufacturer.

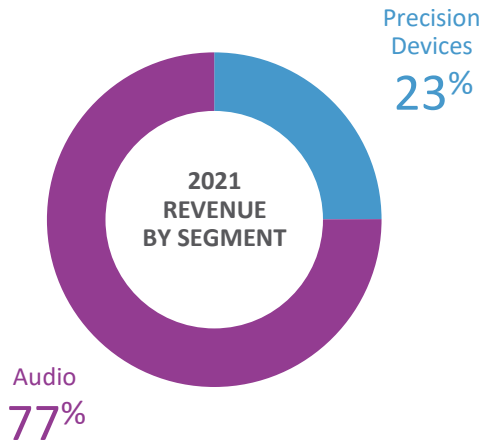
Knowles develops advanced micro-acoustic microphones and speakers, audio solutions, high performance capacitors and RF filters for the world's leading technology providers.

Founded: 1946
HQ: Itasca, IL
NYSE: KN

2021 Revenue
\$868M

2021 Adjusted EBIT *
\$174M

2021 Free Cash Flow *
\$134M



1000+
Engineering & Technology
Employees



~7000
Total Employees

13
Countries

900+
Granted and
Pending Patents

* For this Non-GAAP financial measure see the Appendix for GAAP to Non-GAAP reconciliation.

Repositioned to drive improved financial performance.

Over the past five years, we have optimized our product and market portfolio to deliver higher growth, earnings and cash flow. We have built a highly sustainable business with unique capabilities in solving customers' most complex technical challenges. Our product innovation and manufacturing expertise are unparalleled in the industry.

Investment in High-Growth Markets

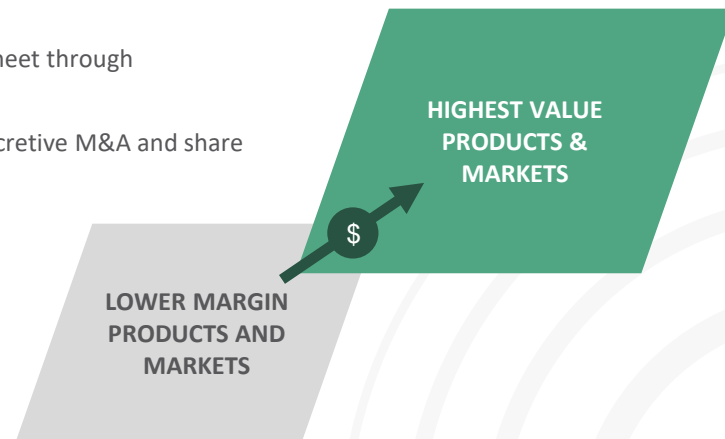
- Leader in technology and market share across diversified set of end markets
- Focusing on market segments with most favorable tailwinds

Innovation in Design

- Shifting R&D towards higher value areas
- Innovating across complex customer needs to maximize differentiation

Discipline in Capital Deployment

- Returns-focused approach to R&D and CapEx investment
- Strengthening balance sheet through debt paydown
- Driving value through accretive M&A and share buybacks



Experienced Management Team.



Jeffrey S. Niew

President &
Chief Executive Officer



John Anderson

Senior Vice President
& Chief Financial Officer

Chris Dugan
President,
Precision Devices



Ray Cabrera
Senior Vice President,
Human Resources &
Chief Administrative
Officer



Greg Doll
Vice President,
Audio MEMS



Brian Crannell
Senior Vice President,
Corporate Development



Peter Vancorenland
Senior Vice President,
R&D, Audio MEMS



Daniel Giesecke
Senior Vice President &
Chief Operating
Officer



Jon Kiachian
Vice President,
Audio



Robert J. Perna
Senior Vice President,
General Counsel
& Secretary



Shehab Albahri
Sr. Director,
R&D, Audio



Christian Scherp
Senior Vice President,
Global Sales

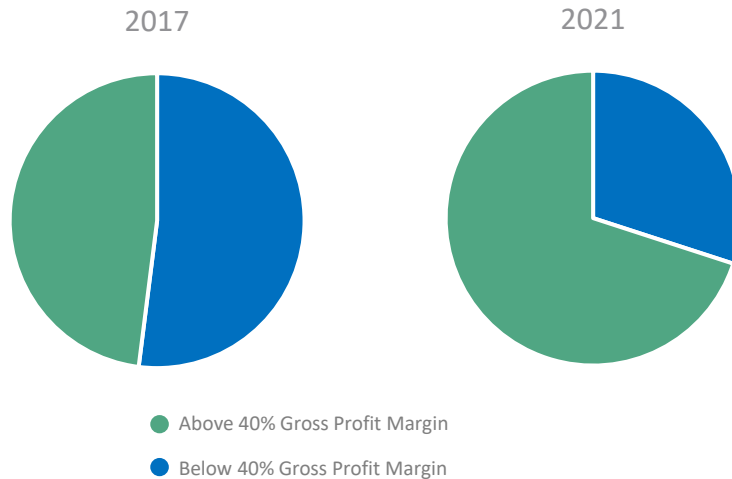


Electronics Experience

In-House Counsel Experience

Shift in strategy to expand margins.

Revenue above
40% Gross Profit Margin



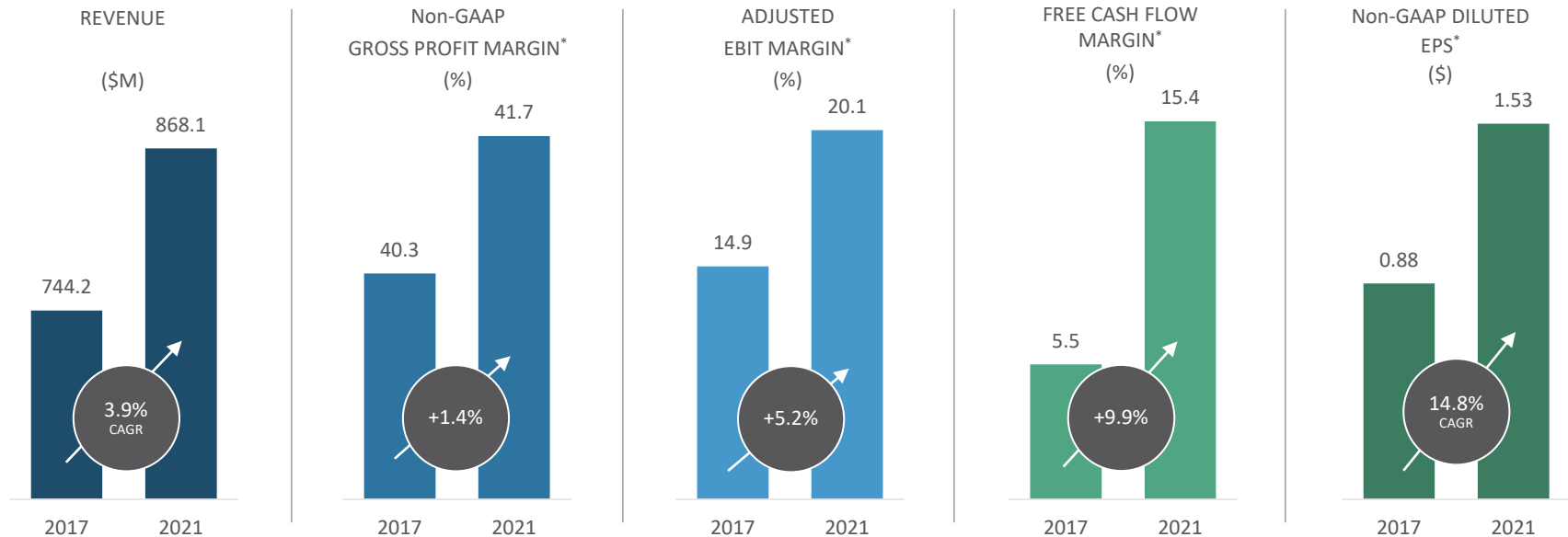
Achievements

Since 2016, we have executed multiple initiatives to improve performance and shareholder value:

- Divested smartphone focused, lower margin speaker and receiver business
- Divested highly cyclical, lower margin timing device business
- Closed four accretive transactions expanding our capabilities for the defense and medical markets
- Acquired MEMS Microphone ASIC capabilities
- Realigned R&D and CapEx spend to higher value markets
- Drove SG&A and overhead expense efficiencies

We have significantly improved our financial performance from 2017 to 2021.

Since implementing our strategy to more deeply invest in market segments that yield the most attractive margins and free cash flow, our financial performance has continued to improve year-over-year.



* For this Non-GAAP financial measure see the Appendix for GAAP to Non-GAAP reconciliation.

2017 results include \$13.6 million in revenue and \$5.6 million related to recovered legal expenses associated with the settlement of a royalty dispute. Management estimates that \$13.0 million of the settlement proceeds relate to years prior to 2017.

Strategy provides a path to greater returns.



Provides path
to

\$2.50+

Non-GAAP diluted
earnings
per share*

* As of November 30, 2021, and Knowles disclaims any duty to update. Reconciliation of this forward-looking Non-GAAP financial measure to the most directly comparable GAAP financial measure is not provided because the information needed to complete a reconciliation is unavailable without unreasonable effort.

The background is a composite image. On the left, a man with a friendly smile sits on a dark sofa. In the foreground, a cylindrical smart speaker with a dark fabric mesh sits on a white table. The scene is overlaid with abstract geometric shapes: a large purple triangle on the right and blue circular patterns on the left.

Our Markets

Focusing on markets with the most attractive growth potential.

While every one of our markets is experiencing favorable tailwinds, we are investing in those with the strongest growth and macro trends.

● Growth



Ear



IoT



Defense



Electric
Vehicle



Telecom

● Core



MedTech



Smartphone



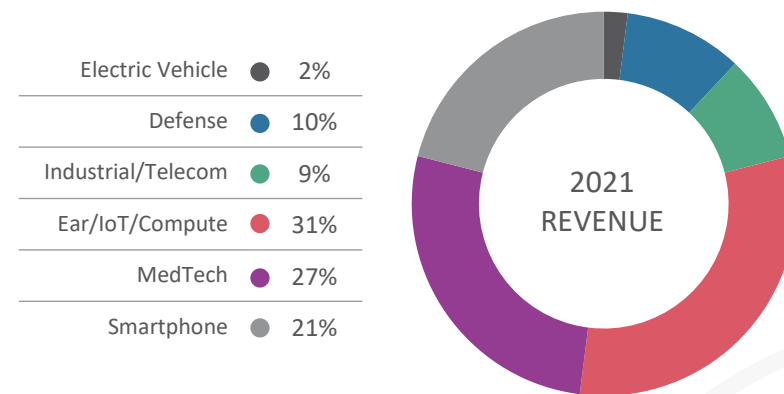
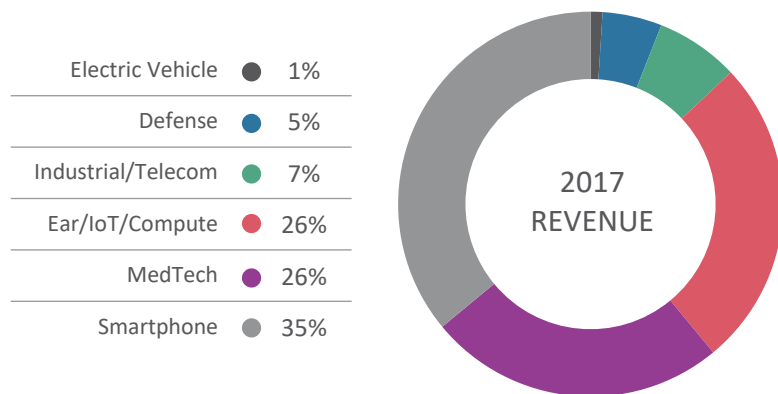
Industrial



Compute

Shift in mix of markets drives higher gross margins.

We have expanded the markets we serve beyond the smartphone industry. Today, our business is more diversified across the markets that yield higher gross margins.



A close-up photograph of a white electric vehicle's charging port. A white charging cable with a yellow handle is plugged into the port. The background is blurred, showing other vehicles and a parking area. The image is partially overlaid by a large purple graphic on the right side of the slide.

Our Products

Long-held reputation in delivering high performance products.

With decade upon decade of manufacturing expertise, our technology has consistently outperformed competitive products.

We are uniquely capable of creating innovative solutions to complex technical needs, enabling performance for our customers.



Innovate

Innovate a concept for differentiated, customer-driven features & functionality

Design

Design a high quality, high performance, cost-effective product

Manufacture

Differentiate ourselves through unique manufacturing techniques & processes

Deliver

Enable our customers to consistently offer new products & applications

Focus on value and specialization.

We have redirected our innovation and manufacturing capabilities to focus on higher growth and financial return opportunities. We seek to amplify the success of our fastest growing segment, Precision Devices.

Reduced Investments:

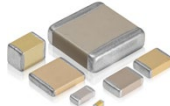



- Commoditized products with low gross margins and ROIC
- Audio DSP opportunities where the rate of market adoption did not justify our level of investment

Increased Investments:

- Specialized products for unique and emerging applications which value our differentiated technology
- Focused organic investments which provide reliable earnings and cash flow
- Solutions that cater to attractive Defense, EV, and MedTech markets



Two platforms with industry-leading performance in every market.

PRECISION DEVICES	CAPACITORS			SAM \$1.0B ¹	
	RF & MICROWAVE	<p>High Performance Capacitors</p> <p>High voltage, temp, reliability and capacitance/size.</p>	<p>RF Filtering Solutions</p> <p>High frequency filtering for next generation communication.</p>		
AUDIO	EAR			SAM \$1.7B ²	
	IoT				
	COMPUTE	MEMS Microphones	Balanced Armature Speakers		Audio Solutions
	MEDTECH	Optimized signal to noise and power performance in compact, environmentally robust, cost-effective form factors.	High output in a compact power efficient package.		Advanced assemblies and signal processing solutions.
	SMARTPHONE				

1. Source for SAM: GlobalData Plc, Paumanok Group, Mobile Experts LLC, and KN customer intelligence. Information is as of November 30, 2021.

2. Source for SAM: Futuresource Consulting Ltd, SAR Insight & Consulting, Omdia, European Hearing Instrument Manufacturers Association, ABI Research and KN customer intelligence. Information is as of November 30, 2021.

Specializing in high voltage, high temp, high reliability capacitors for mission critical applications.

ADVANTAGES

Broad offering and highest performance for the most challenging applications

The ability to solve customer-specific design challenges

Our unique high voltage, high temperature, high reliability ceramic capabilities

Multiple proprietary manufacturing processes provide advantages in speed, flexibility and customization

CAGR

5–7%

2021–2024

SAM

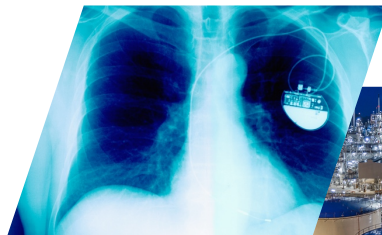
\$550M

PRODUCT LIST

Multi-Layer
Ceramic Capacitors

Single Layer
Ceramic Capacitors

Trimmer Capacitors



IMPLANTABLE



INDUSTRIAL



ELECTRIC VEHICLE



DEFENSE



IMAGING SYSTEM

Delivering high performance ceramic filtering across a broad range of applications and frequencies.

ADVANTAGES

Materials and RF expertise in ceramic filtering for 30 MHz to 60GHz

Capabilities to serve expanded use of radio spectrum in defense and 5G telecom

Higher stability (K) in smallest footprint enables customers to expand capabilities in size constrained applications

Custom design, rapid prototyping and RF testing to ensure optimal performance

CAGR

6–10%

2021–2024

SAM

\$475M

PRODUCT LIST

Microwave and mmWave Filters

Couplers

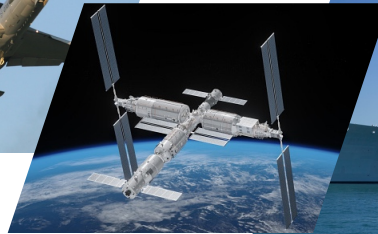
Power Dividers

Gain Equalizers

Bias Networks and Resonators



DEFENSE
COMMUNICATION



AEROSPACE



DEFENSE RADAR



5G TELECOM

Enabling an unrivaled listening experience through groundbreaking innovation in ear-worn devices.

ADVANTAGES

Recognized as the leader in providing microphones and balanced armature speakers for high-performance all-day wear

Size, power, robustness and audio performance enabling new use cases and form factors

Unmatched Ear audio application expertise

Investments in automation enable the adoption of balanced armature for volume consumer applications

CAGR

10–20%

2021–2024

SAM

\$475M

PRODUCT LIST

Microphones

Speakers

Audio Solutions



IN EAR MONITOR



TRUE WIRELESS STEREO (TWS)

Pushing the boundaries of AI/machine learning in IoT devices offering voice control and communication.

ADVANTAGES

Enabler of the Voice as a User Interface revolution

Broad portfolio of solutions to enable lowest power operation and high performance in ambient noise

Proven field robust microphone architecture ideal for the wide range of IoT applications

Solutions for audio applications to drive multi-microphone as the ecosystem standard

CAGR

10–15%

2021–2024

SAM

\$275M

PRODUCT LIST

Microphones

Audio Solutions



SMART SPEAKER



TV and REMOTE



SECURITY CAMERA

Enabling high quality communication from anywhere.

<p>ADVANTAGES</p>	<p>Pioneering leader with a proven track record of quality</p>	<p>Differentiated with compute application expertise, system simulation and test capabilities</p>	<p>Performance to enable next generation compute form factors and audio ecosystem trends</p>	<p>Enabling high performance communication for the work from anywhere world</p>
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PRODUCT LIST

Microphones



TABLET



DESKTOP



LAPTOP

Delivering the highest performing solutions to address hearing loss.

<p>ADVANTAGES</p>	<p>An undisputed legacy in microphone and balanced armature speaker innovation for the hearing health market</p>	<p>Leveraging audio and application expertise to address new use cases and enhanced environmental performance</p>	<p>Leading the market in manufacturing scale, quality, process design and supply reliability</p>	<p>Unique expertise for addressing needs in both hearing augmentation and audio quality</p>
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<p>CAGR 3–6% 2021–2024</p>	<p>SAM \$300M</p>
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PRODUCT LIST

Microphones

Balanced Armature Speakers

Advanced Assemblies



HEARING AID

Driving innovation to enable audio features for leading, high volume smartphone providers.

ADVANTAGES

Industry leader with field proven technology for demanding smartphone applications

Broad, unique portfolio to support price and performance levels across the entire market

Fully integrated from design to final shipment with dual site manufacturing flexibility and scale

Expertise in addressing application RF immunity, environmental robustness, and product quality

CAGR

1–4%
2021–2024

SAM

\$475M

PRODUCT LIST

Microphones



SMARTPHONE

A steadfast commitment.

Striving to be an ethically, socially and environmentally responsible steward to the communities in which we live and work.

Environmental Sustainability

- Issued inaugural 2021 Corporate Sustainability Report
- Continually investigating and evaluating new ways to reduce the materials we use, waste we produce and energy we consume
- Working towards a sustainable supply chain
- Engineering our products to enable lower power consumption
- As of 2021, Knowles received an MSCI ESG Rating of A



CCC	B	BB	BBB	A	AA	AAA
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Social Responsibility

- Diversity and inclusion strategy centered on three pillars



Educate, Train & Build Awareness



Recruit, Grow & Promote



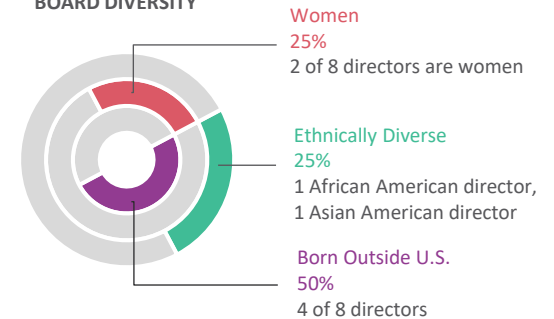
Give Back & Get Involved

- Closing the gender gap through multiple programs, e.g. University of Illinois at Chicago Women in Engineering Program
- Training programs in place to educate employees about workplace safety and their health and well-being outside of the workplace

Governance Highlights

- Declassified Board as of 2021
- Separate non-executive Chairman and CEO roles
- Board member average tenure is 5 years
- Committees comprised of independent directors
- Regular Board, Committee and Director evaluations

BOARD DIVERSITY

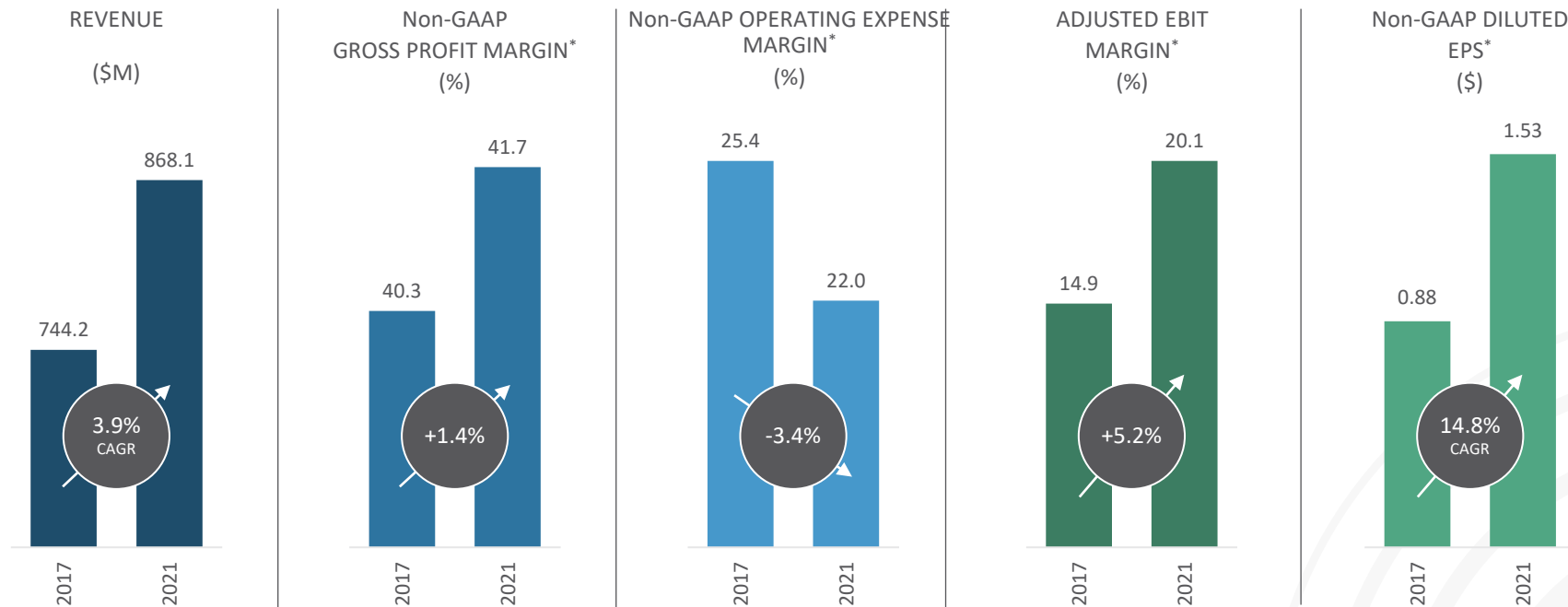


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A photograph of a young woman with blonde hair in a ponytail, wearing a red long-sleeved shirt and a black earbud, smiling as she rows a boat. The image is partially obscured by a large blue graphic element consisting of concentric circles and a diagonal split.

Our Financials

Track record of improved financial performance.



* For this Non-GAAP financial measure see the Appendix for GAAP to Non-GAAP reconciliation

2017 results include \$13.6 million in revenue and \$5.6 million related to recovered legal expenses associated with the settlement of a royalty dispute. Management estimates that \$13.0 million of the settlement proceeds relate to years prior to 2017

Proven ability to deliver strong free cash flow.

Gross Margin Expansion

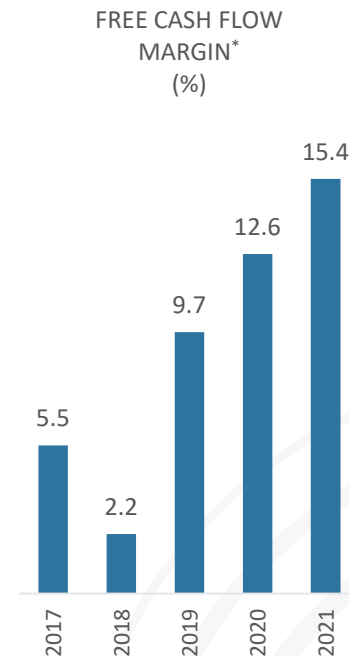
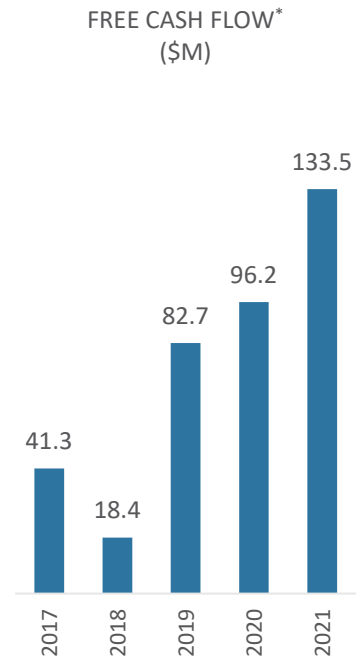
- Focused on markets that value our technology and manufacturing differentiation
- Implemented a more disciplined approach to pricing
- Divested lower gross margin businesses
- Completed acquisitions that were accretive to gross margin

Expense Control

- Reduced R&D spend where pace of market adoption was below our expectations
- Committed to continuous improvement in processes to drive efficiencies
- Leveraged ERP system and low-cost shared service center

CapEx Discipline

- Optimized investments across areas with attractive returns



* For this Non-GAAP financial measure see the Appendix for GAAP to Non-GAAP reconciliation

2017 results include \$13.6 million in revenue and \$5.6 million related to recovered legal expenses associated with the settlement of a royalty dispute. Management estimates that \$13.0 million of the settlement proceeds relate to years prior to 2017

Strong cash flow generation and debt reduction enables shift in future capital allocation priorities.

Organic Growth

- Continued investment of R&D spend to markets with optimal growth trends and products with better profit potential
- Deploying Capital Expenditures to markets and products with attractive returns

Accretive M&A

- Continued focus on accretive¹ acquisitions

Increase Share Repurchases to 50% of Annual Free Cash Flow

- April 2022 increase of \$150M to share repurchase program²

Maintain Strong Balance Sheet

- Leverage Ratio of 2.5x or less³



¹ Accretive to Non-GAAP Diluted EPS within 12 months of acquisition

² 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 and share price of shares repurchased will depend on a number of factors, including the market price of the Company's stock, general market and economic conditions, and applicable legal requirements.

³ Leverage Ratio represents the ratio of Consolidated Total Indebtedness to Consolidated EBITDA, as those terms are defined in our Revolving Credit Facility

Mid-term financial targets.

DRIVERS

Revenue Growth

- Growth in the mid to high single digit CAGR%

Non-GAAP Gross Profit Margin*

- Improve to 43% or more on mix and new product introductions

Non-GAAP Operating Expense*

- Efficiently leverage resources to support growth and reduce expenses to approximately 20% of revenues

TARGETS

Adjusted EBIT
Margin*

22–24%

Free Cash Flow
Margin*

15–17%

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We have built a highly sustainable business with unique capabilities in solving customers' most complex technical challenges.

Unparalleled product performance



Innovating across complex customer needs to maximize differentiation

Diversification in high-growth markets



Focusing on market segments with the most favorable tailwinds including Ear, IoT, MedTech, EV and Defense

Accretive new product introductions



Deploying R&D to markets and products with better profit potential

Discipline in capital deployment



Focusing CapEx on our attractive products and markets M&A delivering accretive returns

Cash generation



Successful debt reduction enables return of Free Cash Flow through increased share repurchases

Strong earnings potential



Path to \$2.50+ Non-GAAP Diluted EPS* with top quartile financial metrics among diversified electronic component peers

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Appendix

Reconciliation of GAAP Financial Measures to Non-GAAP Financial Measures

	Year Ended December 31,	
	2021	2017
<i>(in millions, except per share amounts)</i>		
Gross profit	\$ 359.5	\$ 286.3
<i>Gross profit margin</i>	<i>41.4%</i>	<i>38.5%</i>
Stock-based compensation expense	1.6	1.8
Impairment charges	-	1.4
Restructuring charges	-	4.0
Production transfer costs ⁽¹⁾	-	6.7
Other ⁽²⁾	1.0	-
Non-GAAP gross profit	\$ 362.1	\$ 300.2
<i>Non-GAAP gross profit margin</i>	<i>41.7%</i>	<i>40.3%</i>
Operating expenses	\$ 243.7	\$ 245.8
Stock-based compensation expense	(30.5)	(22.9)
Intangibles amortization expense	(15.9)	(7.3)
Impairment charges	(4.0)	(19.9)
Restructuring charges	(0.5)	(6.2)
Production transfer costs ⁽¹⁾	-	(0.1)
Other ⁽²⁾	(2.0)	(0.3)
Non-GAAP operating expenses	\$ 190.8	\$ 189.1
<i>Non-GAAP operating expenses margin</i>	<i>22.0%</i>	<i>25.4%</i>
Earnings from continuing operations	\$ 150.2	\$ 6.5
Interest expense, net	14.2	20.6
(Benefit from) provision for income taxes	(45.6)	12.9
Earnings from continuing operations before interest and income taxes	118.8	40.0
<i>Earnings from continuing operations before interest and income taxes margin</i>	<i>13.7%</i>	<i>5.4%</i>
Stock-based compensation expense	32.1	24.7
Intangibles amortization expense	15.9	7.3
Impairment charges	4.0	21.3
Restructuring charges	0.5	10.2
Production transfer costs ⁽¹⁾	-	6.8
Other ⁽²⁾	3.0	0.3
Adjusted earnings from continuing operations before interest and income taxes	\$ 174.3	\$ 110.6
<i>Adjusted earnings from continuing operations before interest and income taxes margin</i>	<i>20.1%</i>	<i>14.9%</i>
Earnings from continuing operations	\$ 150.2	\$ 6.5
Non-GAAP reconciling adjustments ⁽³⁾	55.5	70.6
Interest expense, net non-GAAP reconciling adjustments ⁽⁴⁾	6.6	6.1
Income tax effects of non-GAAP reconciling adjustments ⁽⁵⁾	65.4	2.0
Non-GAAP net earnings	\$ 146.9	\$ 81.2
Diluted earnings per share from continuing operations	\$ 1.59	\$ 0.07
Earnings per share non-GAAP reconciling adjustment	(0.06)	0.81
Non-GAAP diluted earnings per share	\$ 1.53	\$ 0.88
Diluted average shares outstanding	94.7	90.5
Non-GAAP adjustment ⁽⁶⁾	1.1	1.9
Non-GAAP diluted average shares outstanding ⁽⁶⁾	95.8	92.4

Notes:

⁽¹⁾ Production transfer costs represent duplicate costs incurred to migrate manufacturing to facilities primarily in Asia. These amounts are included in the corresponding Gross profit and Earnings from continuing operations before interest and income taxes for each period presented.

⁽²⁾ In 2021, Other expenses represent the ongoing net lease cost (income) related to facilities not used in operations and expenses related to the acquisition of Integrated Microwave Corporation by the Precision Devices segment. In 2017, Other primarily represents expenses related to the acquisition of certain assets of a capacitors manufacturer.

⁽³⁾ The non-GAAP reconciling adjustments are those adjustments made to reconcile Earnings from continuing operations before interest and income taxes to Adjusted earnings from continuing operations before interest and income taxes.

⁽⁴⁾ Under GAAP, certain convertible debt instruments that may be settled in cash (or other assets) upon conversion are required to be separately accounted for as liability (debt) and equity (conversion option) components of the instrument in a manner that reflects the issuer's nonconvertible debt borrowing rate. Accordingly, for GAAP purposes we were required to recognize imputed interest expense on the Company's \$172.5 million of convertible senior notes due November 1, 2021 that were issued in a private placement in May 2016. The imputed interest rate for the convertible notes was 8.12%, while the actual coupon interest rate of the notes was 3.25%. The difference between the imputed interest expense and the coupon interest expense is excluded from management's assessment of the Company's operating performance because management believes that this non-cash expense is not indicative of its core, ongoing operating performance.

⁽⁵⁾ Income tax effects of non-GAAP reconciling adjustments are calculated using the applicable tax rates in the jurisdictions of the underlying adjustments. In 2021, these adjustments include a valuation allowance release of \$59.1 million for our U.S. subsidiaries.

⁽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. In addition, the Company entered into convertible note hedge transactions that expired upon maturity of the convertible notes to offset any potential dilution from the convertible notes. Although the anti-dilutive impact of the convertible note hedges is not reflected under GAAP, the Company includes the anti-dilutive impact of the convertible note hedges in non-GAAP diluted average shares outstanding, if applicable.

<i>(in millions)</i>	Years Ended December 31,				
	2021	2020	2019	2018	2017
Cash provided by operating activities	\$ 182.1	\$ 128.1	\$ 123.9	\$ 98.5	\$ 92.9
Less: Capital expenditures	(48.6)	(31.9)	(41.2)	(80.1)	(51.6)
Free cash flow ⁽¹⁾	\$ 133.5	\$ 96.2	\$ 82.7	\$ 18.4	\$ 41.3
<i>Free cash flow margin ⁽¹⁾</i>	<i>15.4%</i>	<i>12.6%</i>	<i>9.7%</i>	<i>2.2%</i>	<i>5.5%</i>

⁽¹⁾ In addition to measuring cash flow generation and usage based on liquidity measures determined in accordance with GAAP, Knowles also measures free cash flow and free cash flow margin. Free cash flow is defined as cash provided by operating activities less capital expenditures. Knowles believes these measures are useful in measuring its cash generated from operations that is available to repay debt, fund acquisitions, and repurchase Knowles' common stock. Free cash flow and free cash flow margin are not presented in accordance with GAAP and may not be comparable to similarly titled measures used by other companies in our industry. As such, free cash flow and free cash flow margin should not be considered in isolation from, or as an alternative to, any other liquidity measures determined in accordance with GAAP.