

A Best-in-Class Industrial Growth Enterprise

February 2022

SAFE HARBOR

The company's guidance with respect to anticipated financial results for future periods, potential future growth and profitability, future business mix, expectations regarding future market trends, future performance within specific markets and other statements herein that are not historical information are forward-looking statements and are subject to the Safe Harbor provision of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements are subject to known and unknown risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. These risks are described in Advanced Energy's Form 10-K, Form 10-Q and other reports and statements filed with the Securities and Exchange Commission (SEC). These reports and statements are available on the SEC's website at www.sec.gov. Copies may also be obtained from our Investors page at ir.advancedenergy.com. Forward-looking statements are based on information available to the company on the date of this presentation. Aspirational goals and targets discussed in the presentation materials should not be interpreted as guidance. The company assumes no obligation to update the information in this presentation.



PRECISION POWER LEADER FOR THE DIGITAL ECONOMY



Strategic focus on power ensures sustainable advantage and scale



OUTPERFORMING MARKETS

Track record of growing share, adding content and broadening market reach

PROPIETARY SOLUTIONS

Lead with differentiated, highly-engineered, high value products and technologies

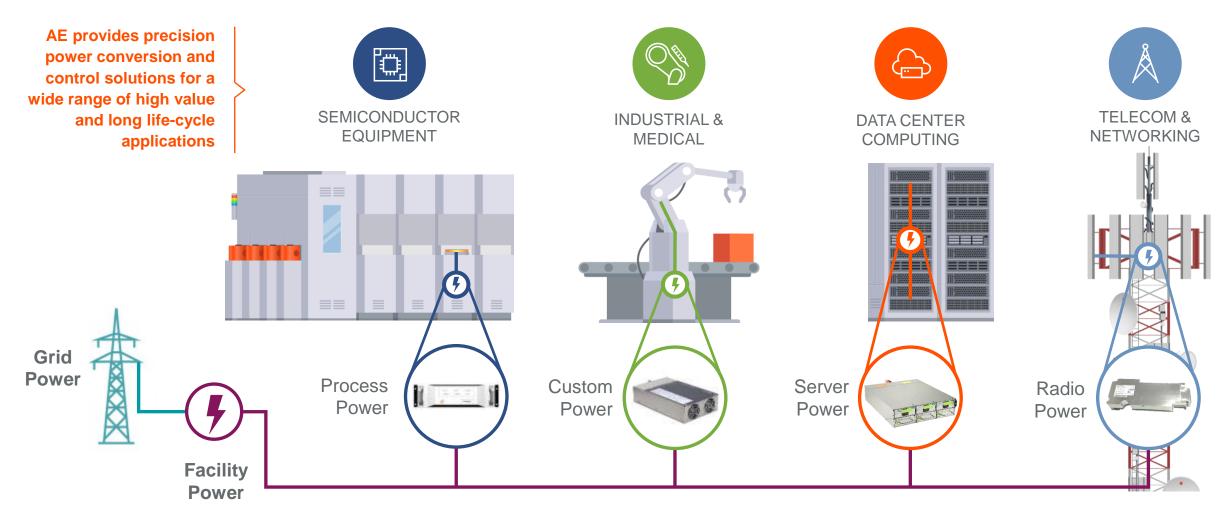


ACCELERATING EARNINGS

Capture long life-cycle revenues and optimize margins to grow EPS >2X faster than revenue



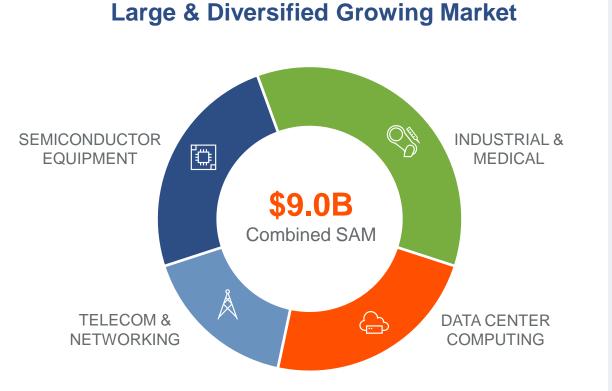
WE ARE THE PURE PLAY POWER LEADER



>70% of Revenue Comes from Proprietary Products



OUR LEADERSHIP ENABLES SOLID FINANCIAL PERFORMANCE



#1 or #2 in All Four Markets

\$1.46 billion RECORD REVENUE \$4.78 NON-GAAP EPS⁽¹⁾



2021 Reported Results

\$211 million NON-GAAP OP PROFIT⁽¹⁾ Operating margin 15%



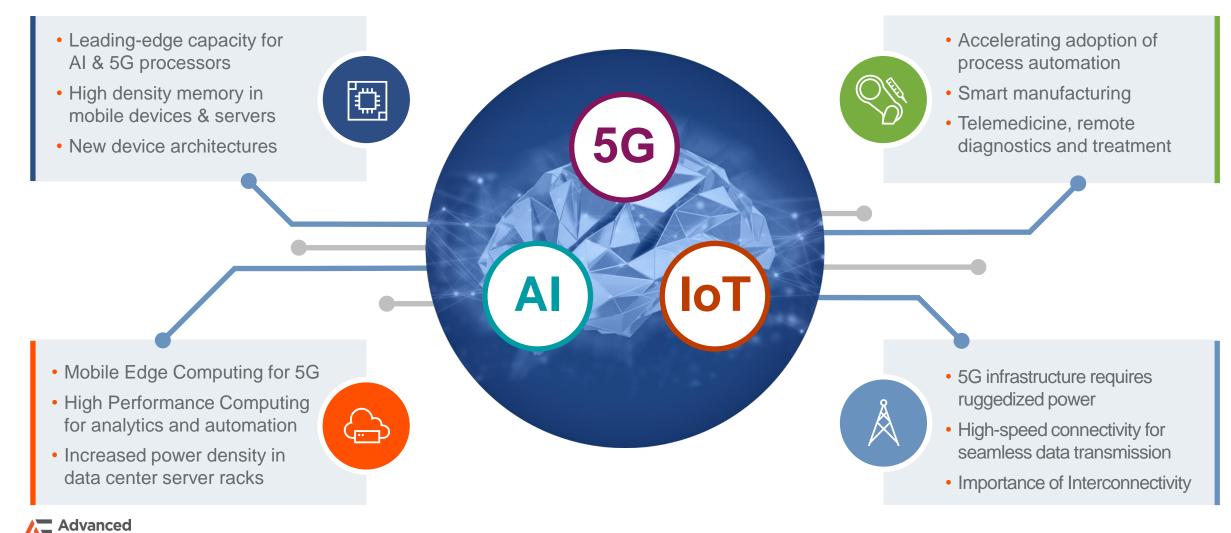
\$141 million OPERATING CASH FLOW⁽²⁾ 10% of Sales

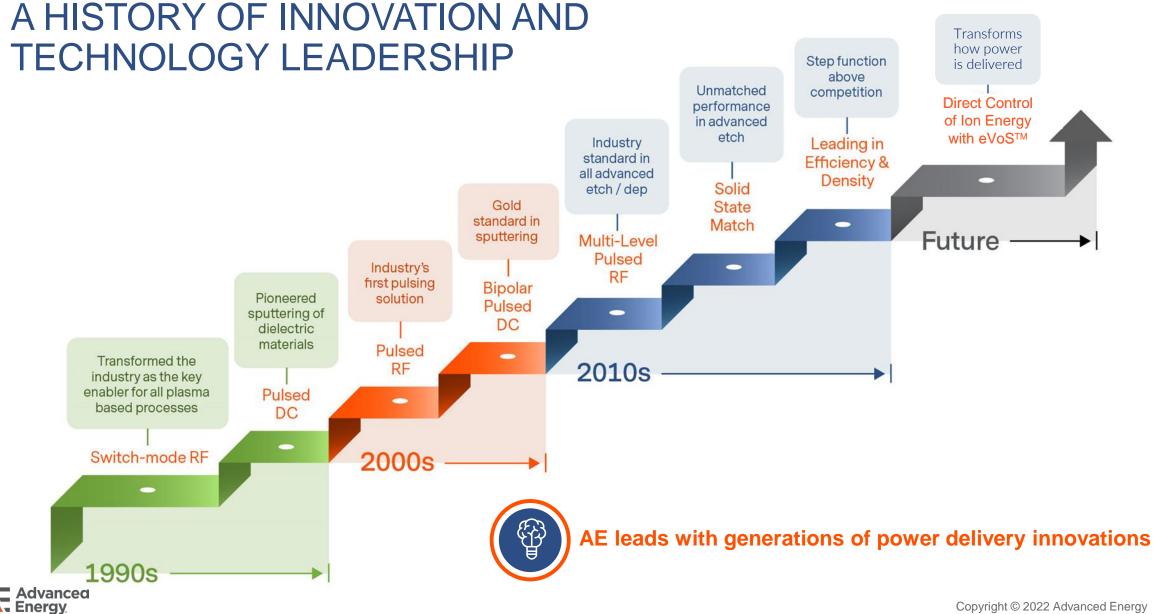


(2) Cash flow from operating activities from continuing operations

Energy

DIGITAL ECONOMY DRIVES GROWTH ACROSS OUR 4 VERTICALS





FOCUS ON PROPRIETARY DESIGNS TO ACCELERATE GROWTH

AE TARGETED GROWTH STRATEGIES



GROW SHARE

Across Mission-Critical Precision Power Verticals



Invest in **INNOVATION** and Technology Leadership



Leverage Strong Financials and Increased Scale to Capitalize on NEW OPPORTUNITIES



Semiconductor: Extending Our Leadership



Data Center Computing: From Fast Follower to Technology Leader



Industrial & Medical: Expanding Our Portfolio of Proprietary Solutions



Telecom & Networking: Targeting 5G Infrastructure



SEMICONDUCTOR: EXTENDING OUR LEADERSHIP

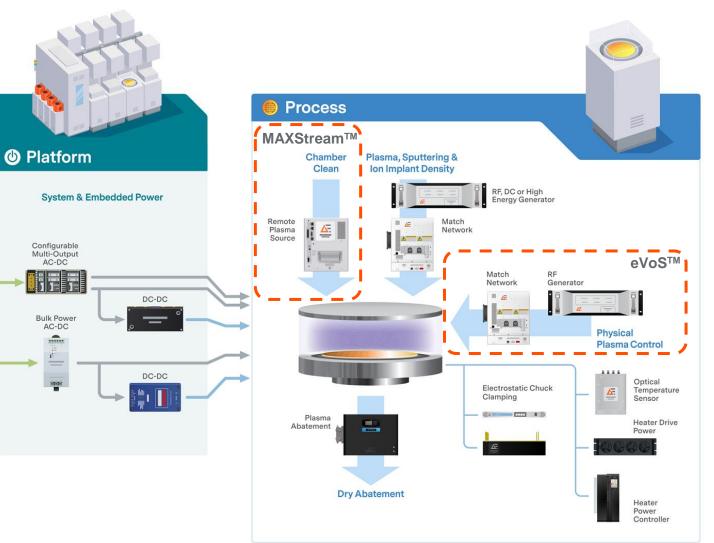
MARKET LEADER WITH PROVEN TRACK RECORD



16% 10-year Semi Product Revenue CAGR⁽²⁾

TARGET TO CONTINUE TO OUTGROW OUR MARKET

>1.2X AE Targeted Revenue CAGR over WFE CAGR



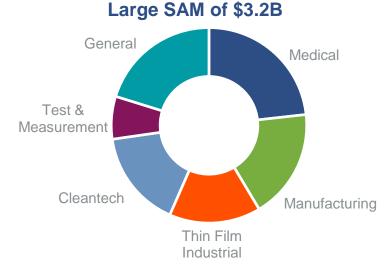
Advanced Energy

(1) RF+DC market share estimates by VLSI Research, based on 5-year average data from 2016 to 2020

(2) CAGR is calculated using 2021 forecast based on mid-point of Q4 2021 guidance

INDUSTRIAL & MEDICAL: EXPANDING OUR PORTFOLIO OF PROPRIETARY SOLUTIONS

LARGE MARKET WITH WIDE RANGE OF NICHE OPPORTUNITES



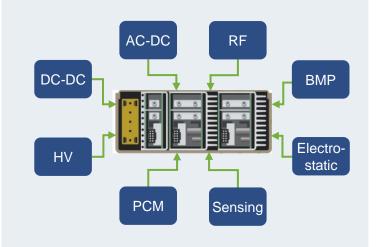
• Large SAM consists of many small and medium high-value opportunities

Advanced

Enerav

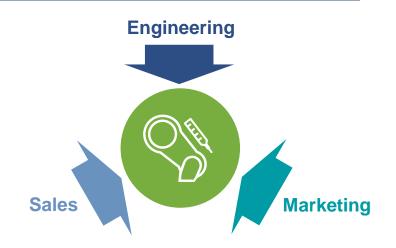
 Target long-life cycle and proprietary applications to capture sole-source positions

LEVERAGE BROAD PORTFOLIO OF STANDARD PRODUCTS TO DELIVER CUSTOM SOLUTIONS



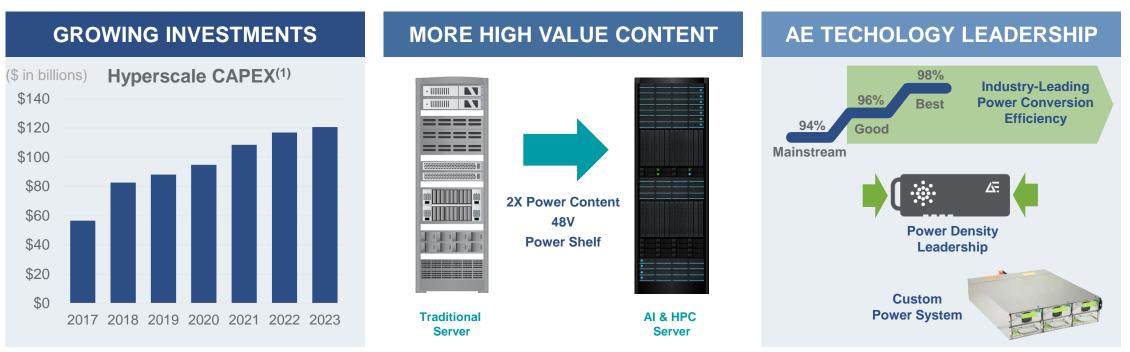
- Most comprehensive portfolio of standard power products
- Develop modified standard or full custom solutions to solve customers' challenging power delivery problems

ACCELERATING INVESTMENTS TO DRIVE GROWTH



- Allocate more engineering, sales and marketing resources to I&M applications
- Grow design win funnel, accelerate cross selling and drive profitable revenue growth

DATA CENTER COMPUTING: FROM FAST FOLLOWER TO TECHNOLOGY LEADER



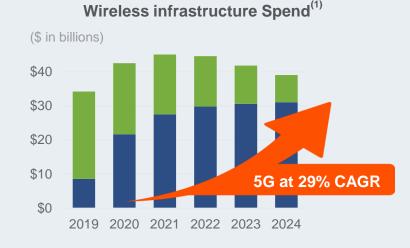
OUR WINNING STRATEGIES

- Technologies to address the most difficult power delivery problems
- Win high value applications at Tier-I and Tier-II hyperscale customers
- Capture additional opportunities with 48V transition
- Deliver best-in-class quality and performance



TELECOM & NETWORKING: TARGETING 5G INFRASTRUCTURE

5G INFRASTRUCTURE MARKET GROWTH TREND



- Growth returning to wireless infrastructure with 5G launch
- Increased capacity demand driven by expanding use cases

GROWTH STRATEGY

- Win proprietary designs in 5G radio power for both macro and small cells
- Target high value opportunities in Data Center Networking

Powering many of the largest wireless networks across the world



High reliability ruggedized power supply for the harshest environments

WHY WE WIN

- Industry-leading high density, rugged power supplies for outdoor radio
- Deep application knowledge
 necessary in 5G radio design
- 20+ years of customer intimacy with leading OEMs





INORGANIC GROWTH: GROWING SCOPE AND LEVERAGING SCALE



Well-Defined Acquisition Criteria

- Precision Power and Controls
- Expand SAM, portfolio & technology
- Synergistic with current organization

Building a Solid Funnel

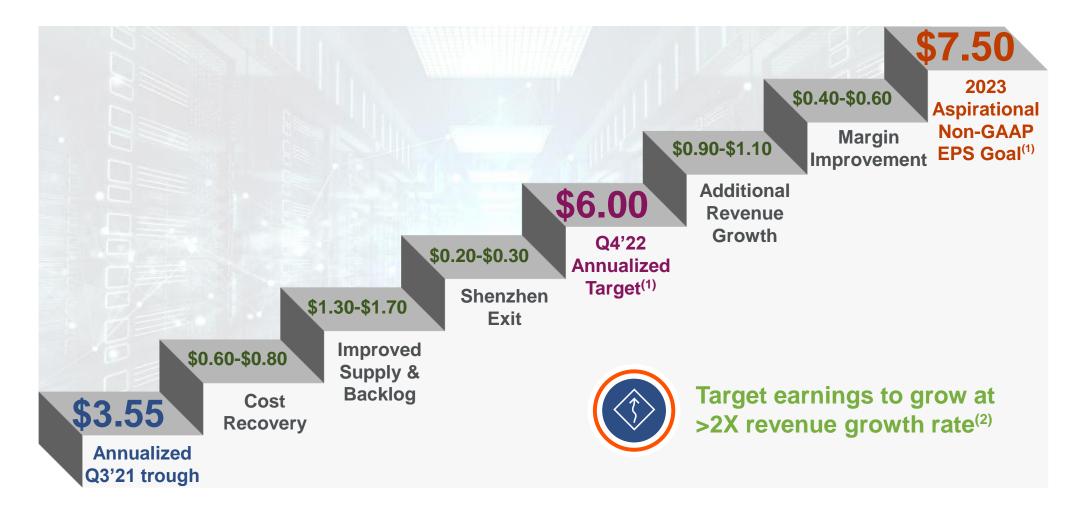
- Large and fragmented power market
- Plenty of differentiated high-value targets
- Extend our leadership

Discipline and Value Creation

- · Analytical and deliberate
- · Accretive within first year
- Target ROIC > 10%



REACCELERATING EARNINGS GROWTH AS SUPPLY IMPROVES





A FRAMEWORK TO ACHIEVE OUR LONG-TERM VISION

	3-YEAR ASPIRATIONAL GOALS	LONG-TERM ORGANIC FINANCIAL FRAMEWORK	INORGANIC GROWTH ASSUMPTIONS	LONG-TERM VISION (6-8 YEARS)
Revenue (\$M)	\$1,650	5-6% Net CAGR	Add ~\$500M	\$2,500
Non-GAAP Operating Margins	21%	OPEX at ½ rev. CAGR 35-45% incr. margins	>10% acquired margins	21%
Non-GAAP EPS (\$/sh)	\$7.50	>2X revenue CAGR	Accretive in Year 1	\$12.00
ROIC	23%	Maintain >20%	Targeted ROIC at >10%	>20%

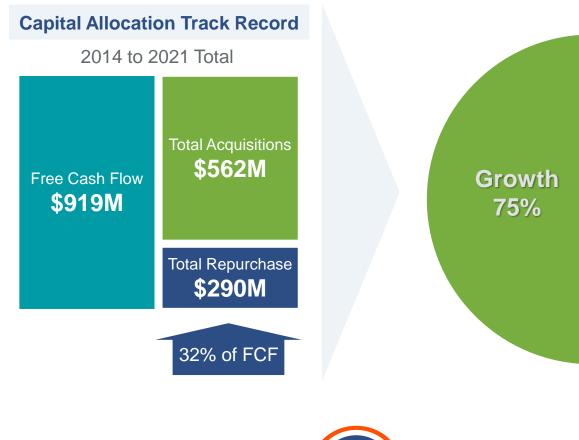
CLEAR ROADMAP TO CREATE LONG-TERM SHAREHOLDER VALUE



Advanced

Energy

CAPITAL ALLOCATION PLAN



Allocation of Free Cash Flow

Growth
75%Capital
Return
25%

Strong Balance Sheet

supports continued inorganic growth

GROWTH: ~75%

- M&A Engine with a disciplined process
- Building a solid funnel
- Maintain gross debt leverage at 1.0-1.5x, and comfortable raising to 2.5X
- Ample liquidity with an unused LOC of \$150M and accordion of \$250M

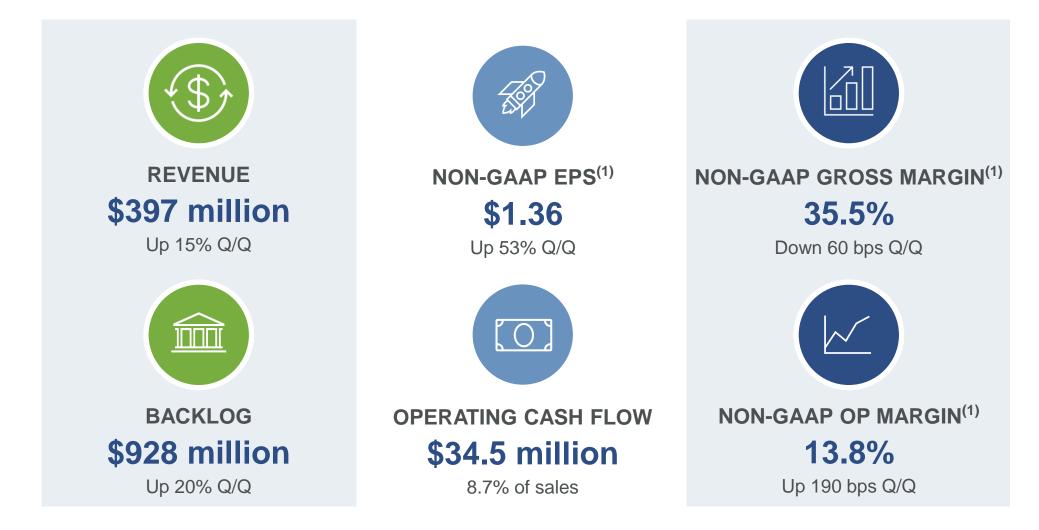
SHARE REPURCHASE: ~15%

- Opportunistic program to take advantage of market volatility
- Target to offset dilution over time

DIVIDEND PROGRAM: ~10%

- Initiating quarterly dividend program, starting in Q1 2021
- Supported by financial strength, scale and cash flow
- Initial yield at ~0.4% with room to increase in the future

Q4 2021 RESULTS SURPASSED HIGH END OF GUIDANCE





(1) Non-GAAP measures exclude the impact of non-cash related charges such as stock-based compensation, amortization of intangible assets and unrealized foreign exchange gain or losses on long term facility lease and pension obligations, as well as discontinued operations, and non-recurring items such as acquisition-related costs and restructuring expenses.

PRECISION POWER LEADER FOR THE DIGITAL ECONOMY



Strategic focus on power ensures sustainable advantage and scale



OUTPERFORMING MARKETS

Track record of growing share, adding content and broadening market reach

PROPIETARY SOLUTIONS

Lead with differentiated, highly-engineered, high value products and technologies



ACCELERATING EARNINGS

Capture long life-cycle revenues and optimize margins to grow EPS >2X faster than revenue





THANK YOU

Copyright © 2022 Advanced Energy

NON-GAAP MEASURES

Advanced Energy's non-GAAP measures exclude the impact of non-cash related charges such as stock-based compensation, amortization of intangible assets, and unrealized foreign exchange gain or loss on long-term facility lease and pension obligations, as well as discontinued operations and non-recurring items such as acquisition-related costs and restructuring expenses. The non-GAAP measures included in this release are not in accordance with, or an alternative for, similar measures calculated under generally accepted accounting principles and may be different from non-GAAP measures used by other companies. In addition, these non-GAAP measures are not based on any comprehensive set of accounting rules or principles. Advanced Energy believes that these non-GAAP measures provide useful information to management and investors to evaluate business performance without the impacts of certain non-cash charges and other cash charges which are not part of the company's usual operations. The company uses these non-GAAP measures to assess performance against business objectives, make business decisions, develop budgets, forecast future periods, assess trends and evaluate financial impacts of various scenarios. In addition, management's incentive plans include these non-GAAP measures as criteria for achievements. Additionally, the company believes that these non-GAAP measures, in combination with its financial results calculated in accordance with GAAP, provide investors with additional perspective. While some of the excluded items may be incurred and reflected in the company's GAAP financial results in the foreseeable future, the company believes that the items excluded from certain non-GAAP measures do not accurately reflect the underlying performance of its continuing operations for the period in which they are incurred. The use of non-GAAP measures has limitations in that such measures do not reflect all of the amounts associated with the company's results of operations as determined in accordance with GAAP, and these measures should only be used to evaluate the company's results of operations in conjunction with the corresponding GAAP measures. Please refer to the Form 8 K regarding this release furnished today to the Securities and Exchange Commission.



Q1 2022 GUIDANCE

	Q1 2022
Revenue	\$360M +/- \$20M
GAAP EPS from continuing operations	\$0.61 +/- \$0.25
Non-GAAP* EPS	\$0.94 +/- \$0.25



* Non-GAAP measures exclude the impact of non-cash related charges such as stock-based compensation, amortization of intangible assets and unrealized foreign exchange gain or losses on long term facility lease and pension obligations, as well as discontinued operations, and non-recurring items such as acquisition-related costs and restructuring expenses.

NON-GAAP* RECONCILIATION

Reconciliation of Non-GAAP measure

- operating expenses and operating

income, excluding certain iter	income.	excluding	certain	items
--------------------------------	---------	-----------	---------	-------

income, excluding certain items	Т	hree Months	Year Ended			
-	Decem	ber 31,	Sep	tember 30,	Decem	ber 31,
	2021	2020		2021	2021	2020
Gross profit from continuing operations,						
as reported	\$ 139,747	\$ 145,549	\$	120,039	\$ 532,322	\$ 541,869
Adjustments to gross profit:						
Stock-based compensation	(19)	122		218	764	567
Facility expansion, relocation costs						
and other	997	741		1,357	6,189	4,349
Acquisition-related costs	234	25		3,259	3,585	5,381
Non-GAAP gross profit	140,959	146,437		124,873	542,860	552,166
Non-GAAP gross margin	35.5%	39.5%		36.1%	37.3%	39.0%
Operating expenses from continuing						
operations, as reported	97,537	89,764		95,830	380,641	365,846
Adjustments:						
Amortization of intangible assets	(5,556)	(5,065)		(5,607)	(22,060)	(20,129)
Stock-based compensation	(2,939)	(2,483)		(3,456)	(14,975)	(11,705)
Acquisition-related costs	(679)	387		(1,768)	(6,803)	(10,209)
Facility expansion, relocation costs						
and other	(17)	(443)		(98)	(229)	(2,213)
Restructuring charges	(2,231)	(5,226)		(1,272)	(4,752)	(13,166)
Non-GAAP operating expenses	86,115	76,934		83,629	331,822	308,424
Non-GAAP operating income	\$ 54,844	\$ 69,503	\$	41,244	\$ 211,038	\$ 243,742
Non-GAAP operating margin	13.8%	18.7%		11.9%	14.5%	17.2%

income excluding certain items	Т	hree Month	Year Ended			
	Decem	ber 31,	Sep	otember 30,	Decem	ber 31,
	2021	2020		2021	2021	2020
Income from continuing operations, less non-controlling interest, net of income						
taxes	\$ 39,753	\$ 41,841	\$	21,041	\$ 134,663	\$ 135,096
Adjustments:						
Amortization of intangible assets	5,556	5,065		5,607	22,060	20,129
Acquisition-related costs	913	(362)		5,027	10,388	15,590
Facility expansion, relocation costs, and						
other	1,014	1,184		1,455	6,418	6,562
Restructuring charges	2,231	5,226		1,272	4,752	13,166
Unrealized foreign currency (gain) loss	(134)	3,786		(2,092)	(3,543)	8,384
Acquisition-related costs and other						
included in other income (expense), net	(3,093)	90		(79)	(2,186)	716
Tax effect of non-GAAP adjustments	3,017	(1,532)		(1,036)	(1,346)	(7,611)
Non-GAAP income, net of income taxes,						
excluding stock-based compensation	49,257	55,298		31,195	171,206	192,032
Stock-based compensation, net of taxes	2,233	1,993		2,811	12,042	9,418
Non-GAAP income, net of income taxes	\$ 51,490	\$ 57,291	\$	34,006	\$ 183,248	\$ 201,450

Reconciliation of non-GAAP measure per share earnings excluding certain items

Three Month's Ended										
December 31,			September 30,		December 31,					
2	2021	2	2020		2021		2021	2	2020	
\$	1.05	\$	1.09	\$	0.55	\$	3.51	\$	3.51	
	0.31		0.40		0.34		1.27		1.72	
\$	1.36	\$	1.49	\$	0.89	\$	4.78	\$	5.23	
	\$	Decem 2021 \$ 1.05 0.31	December 3 2021 2 \$ 1.05 \$ 0.31	December 31, 2021 2020 \$ 1.05 \$ 1.09 0.31 0.40	December 31, Sep 2021 2020 \$ 1.05 \$ 1.09 0.31 0.40	2021 2020 2021 \$ 1.05 \$ 1.09 \$ 0.55 0.31 0.40 0.34	December 31, September 30, 2021 2020 2021 \$ 1.05 1.09 0.55 \$ 0.31 0.40 0.34	December 31, 2021 September 30, 2021 December 30, 2021 \$ 1.05 \$ 1.09 \$ 0.55 \$ 3.51 0.31 0.40 0.34 1.27	December 31, September 30, December 3 2021 2020 2021 2021 2021 2 \$ 1.05 \$ 1.09 \$ 0.55 \$ 3.51 \$ 0.31 0.40 0.34 1.27	

Three Months Ended

Quarterly results may not sum to year to date due to rounding



* Non-GAAP measures exclude the impact of non-cash related charges such as stock-based compensation, amortization of intangible assets and unrealized foreign exchange gain or losses on long term facility lease and pension obligations, as well as discontinued operations, and non-recurring items such as acquisition-related costs and restructuring expenses.

Year Ended

RECONCILIATION OF GUIDANCE

Reconciliation of Q1 2022 Guidance

	Lo	w End	High End		
Revenue	\$34) million	\$38	0 million	
Reconciliation of non-GAAP earnings per share					
GAAP earnings per share	\$	0.36	\$	0.86	
Stock-based compensation		0.11		0.11	
Amortization of intangible assets		0.15		0.15	
Restructuring and other		0.13		0.13	
Tax effects of excluded items	_	(0.06)		(0.06)	
Non-GAAP earnings per share [*]	\$	0.69	\$	1.19	



* Non-GAAP measures exclude the impact of non-cash related charges such as stock-based compensation, amortization of intangible assets and unrealized foreign exchange gain or losses on long term facility lease and pension obligations, as well as discontinued operations, and non-recurring items such as acquisition-related costs and restructuring expenses.