Q2 2016 Conference Call

Veeco Instruments Inc.

August 1, 2016

Safe Harbor

To the extent that this presentation discusses expectations or otherwise makes statements about the future, such statements are forward-looking and are subject to a number of risks and uncertainties that could cause actual results to differ materially from the statements made.

These items include the risk factors discussed in the Business Description and Management's Discussion and Analysis sections of Veeco's Annual Report on Form 10-K for the year ended December 31, 2015 and subsequent Quarterly Reports on Form 10-Q and current reports on Form 8-K. Veeco does not undertake any obligation to update any forward-looking statements to reflect future events or circumstances after the date of such statements.

CEO Introduction
John Peeler

Q2 2016 Performance Summary

Revenue of $75M

» Consistent with expectations for a soft LED industry environment in 1H 2016

Gross margins exceeded expectations

» Expanded GAAP and non-GAAP gross margins by ~70 basis points

Bookings increased slightly to $68M

» Supported by orders for Advanced Packaging

Driving a return to profitability

» Executing restructuring plans, as committed

CFO Financial Review
Sam Maheshwari

Focused on Return to Profitability

Aligning operational structure to current business environment

- Lowering quarterly breakeven to $75M-$80M by Q4 2016
- Foundation to deliver consistent adjusted EBITDA profitability
- Will continue to assess / align structure as needed

Target lowering fixed costs by ~$20M on an annualized basis by Q1 2017

- Reducing headcount
- Consolidating 3 manufacturing operations into 1 facility
- ~60% of savings from operating expenses (OPEX), ~40% of savings from cost of goods sold (COGS)

Creates flexible, capable organization aligned with business needs

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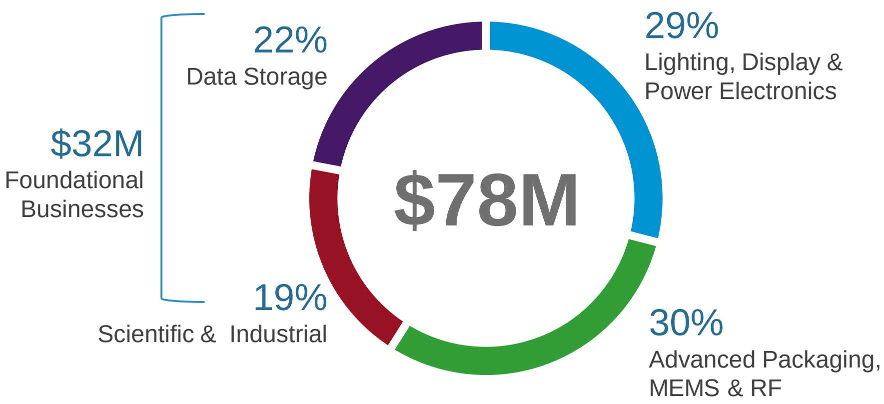
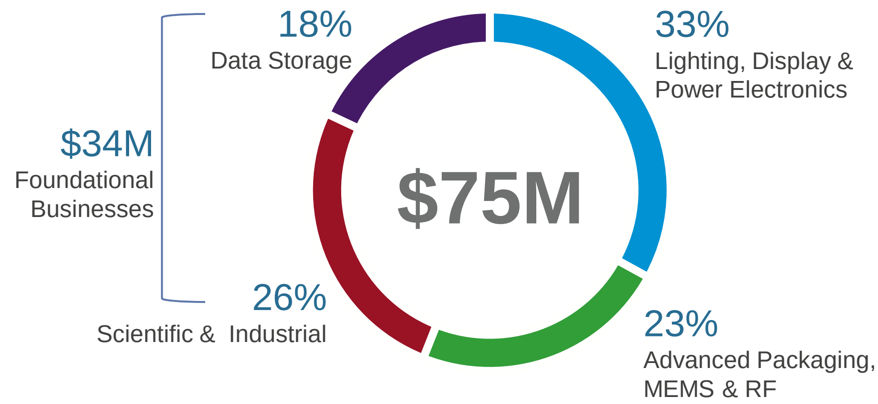
Revenue Breakdown by Market and Geography

Q1 2016 Revenue by End Market



Q2 2016 Revenue by End Market



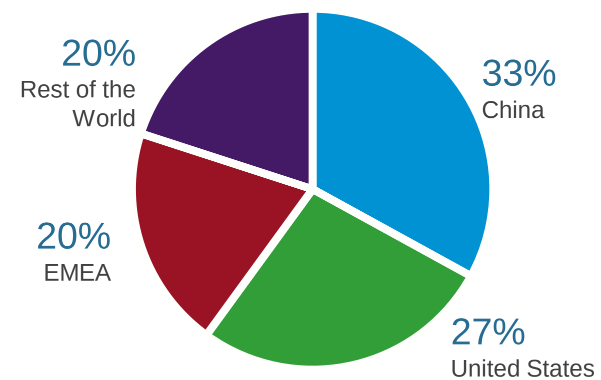
Q2 2016 Revenue of $75M:

- » Foundational businesses providing a stable revenue base

Q2 2016 Bookings of $68M:

- » Bookings increased by ~10% Q/Q
- » Advanced Packaging, MEMS & RF doubled Q/Q, supported by multiple orders in Advanced Packaging

Q2 2016 Revenue by Geography



Note: Amounts may not calculate precisely due to rounding

P&L Highlights

($M)	GAAP Q1 16	GAAP Q2 16	Non-GAAP Q1 16	Non-GAAP Q2 16
Revenue	$78.0	$75.3	$78.0	$75.3
Gross Profit	32.0	31.4	32.5	31.9
%	*41.0%*	*41.7%*	*41.7%*	*42.4%*
R&D	22.1	21.5	21.0	20.6
SG&A & Other	19.8	20.2	17.0	17.5
Net Income	(15.5)	(32.1)	(5.7)	(7.6)
%	*-19.9%*	*-42.6%*	*-7.3%*	*-10.1%*
EPS	($0.40)	($0.82)	($0.15)	($0.19)
Adjusted EBITDA			(2.1)	(2.8)
%			*-2.7%*	*-3.7%*

» Gross margins expanded by 70 basis points Q2/Q1, exceeding expectations for second consecutive quarter

» GAAP Net Income reflects impacts of cost reduction plans and includes ~$2M in restructuring and ~$14M in asset impairment charges

Notes: Amounts may not calculate precisely due to rounding
A reconciliation of GAAP to Non-GAAP financial measures is contained in the Back Up & Reconciliation Tables

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Financial Highlights

($M)	Q1 16	Q2 16
Cash & Short-term Investments	349	**331**
Accounts Receivable	56	**42**
Inventories	77	**91**
Accounts Payable	31	**35**
Cash Flow from Operations	(19)	**(12)**
DSO	65	**50**
DOI	157	**189**
DPO	61	**72**

Note: Amounts may not calculate precisely due to rounding

Q3 2016 Guidance

	GAAP	Non-GAAP
Net Sales	$70M–$85M	$70M–$85M
Gross Margins	38%–40%	39%–41%
Net income (Loss)	($24M)–($18M)	($10M)–($4M)
EPS	($0.62)–($0.46)	($0.26)–($0.10)
Adjusted EBITDA		($6M)–$0M

Notes: A reconciliation of GAAP to Non-GAAP financial measures is contained in the Back Up & Reconciliation Tables

Business Update & Outlook

LED Industry Conditions are Improving

LED demand drivers supporting unit growth

- TV unit shipments forecast to improve in 2017, following declines in 2015/2016
- LED lighting adoption continues to progress at a measured pace

Environment for LED manufacturers is stabilizing

- Bulb ASP’s declining at a slower pace; supports financial stability
- Modest improvement in MOCVD utilization rates
- Suggests supply / demand moving directionally toward equilibrium

Near-term improvement in MOCVD demand

- Multiple LED manufacturers planning to invest in MOCVD capacity over the next 12-months

Note: based on IHS and Veeco estimates

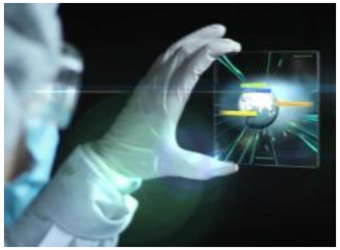
Veeco MOCVD – The Right Technology Platform for Growth

Solid State Lighting, LED Display & Automotive

- Continue to win in GaN LED with market leading EPIK platform
- Maintaining competitive advantage through multi-generation roadmap, already developed

EPIK 700

ROY LED & Photonics



- Gaining traction in As/P applications with K475i
- Leveraging high performance platform to expand wins in LED and capture opportunities in growing photonics market (optical/fiber laser, sensors)

K475i

Advanced Power Electronics

- Single-wafer platform enabling the development of commercially viable GaN power devices
- Focused on helping customers transition from R&D to volume production (late 2017 timeframe)

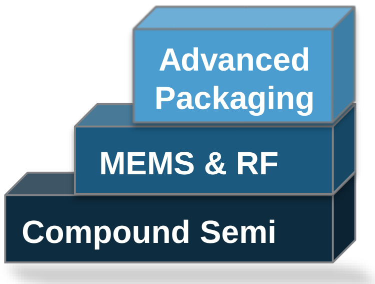
Propel Power GaN

NOTES: GaN – Gallium Nitride
ROY – Red / Orange / Yellow
AsP – Arsenic Phosphide

Veeco PSP – Versatility Generating Multiple Growth Levers

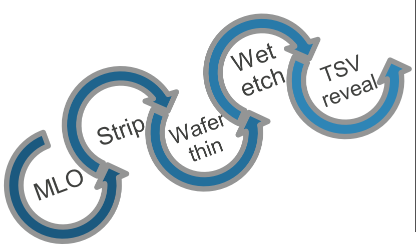
Extend Global Reach

- Market leader for single-wafer solvent clean with unique ImmJET™ technology
- Leveraging process advantages and existing infrastructure to expand into under-represented regions in Asia



Expand Served Markets

- Established positions in core markets: MEMS, RF and Compound Semi (i.e. LED, power electronics, IR sensors)
- Demonstrating our unique technology + process advantage to expand in Advanced Packaging (2.5D and 3D)



Capture New Applications

- Single-wafer technology and process flexibility make PSP ideal for the most complex applications (result in precise process control)
- Device trends towards higher densities and tighter dimensions require precise process control (new opportunities)

Focusing on our Strategic Objectives

Expanding
our footprint

Investing in adjacent market opportunities to diversify revenues

» Advanced Power Electronics
» Advanced Packaging

Strengthening
our core

Building on our foundational business to capture opportunities in core markets

» Data Storage, Scientific & Industrial
» Lighting & Display
» MEMS & RF

Maintaining
operational focus

Right sizing the business to improve profitability through the cycles

» Lowering fixed costs by ~$20M on an annualized basis by Q1 2017

Q&A

Back Up & Reconciliation Tables

Note On Reconciliation Tables

These tables include financial measures adjusted for the impact of certain items; these financial measures are therefore not calculated in accordance with U.S. generally accepted accounting principles (“GAAP”). These Non-GAAP financial measures exclude items such as: share-based compensation expense; charges relating to restructuring initiatives; non-cash asset impairments; certain other non-operating gains and losses; and acquisition-related items such as transaction costs, non-cash amortization of acquired intangible assets, and incremental transaction-related compensation.

These Non-GAAP financial measures may be different from Non-GAAP financial measures used by other companies. Non-GAAP financial measures should not be considered a substitute for, or superior to, measures of financial performance prepared in accordance with GAAP. By excluding these items, Non-GAAP financial measures are intended to facilitate meaningful comparisons to historical operating results, competitors' operating results, and estimates made by securities analysts. Management is evaluated on key performance metrics including adjusted EBITDA, which is used to determine management incentive compensation as well as to forecast future periods.

These Non-GAAP financial measures may be useful to investors in allowing for greater transparency of supplemental information used by management in its financial and operational decision-making. In addition, similar Non-GAAP financial measures have historically been reported to investors; the inclusion of comparable numbers provides consistency in financial reporting. Investors are encouraged to review the reconciliation of the Non-GAAP financial measures used in this news release to their most directly comparable GAAP financial measures.

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Supplemental Information—GAAP to Non-GAAP Reconciliation

US$ millions	Q1 16	Q2 16
Net Sales	$78.0	$75.3
GAAP Gross Profit	32.0	31.4
GAAP Gross Margin	41.0%	41.7%
Add: Share Based Comp	0.5	0.5
Add: Acquisition Related	—	—
Non-GAAP Gross Profit	$32.5	$31.9
Non-GAAP Gross Margin	41.7%	42.4%

US$ millions	Q1 16	Q2 16
GAAP Net Income (Loss)	($15.5)	($32.1)
Add: Share Based Comp	4.3	4.0
Add: Acquisition Related	0.1	0.1
Add: Restructuring	0.1	2.1
Add: Amortization	5.3	5.3
Add: Asset Impairment	—	13.6
Add: Interest (Income) Expense	0.3	(0.2)
Add: Depreciation	3.3	3.4
Add: Taxes	0.0	1.0
Adjusted EBITDA	($2.1)	($2.8)

US$ millions, except per share data	Q1 16	Q2 16
GAAP Basic EPS	($0.40)	(0.82)
GAAP Diluted EPS	($0.40)	(0.82)
GAAP Net Income (Loss)	($15.5)	(32.1)
Add: Share Based Comp	4.3	4.0
Add: Acquisition Related	0.1	0.1
Add: Restructuring	0.1	2.1
Add: Amortization	5.3	5.3
Add: Asset Impairment	—	13.6
Add: Tax Adjustment from GAAP to Non-GAAP	0.0	(0.6)
Non-GAAP Net Income (Loss)	($5.7)	(7.6)
Non-GAAP Basic EPS	($0.15)	(0.19)
Non-GAAP Diluted EPS	($0.15)	(0.19)

Note: Amounts may not calculate precisely due to rounding

Q2 2016 GAAP to Non-GAAP Reconciliation

In millions, except per share data	GAAP	Non-GAAP Adjustments Share-Based Compensation	Amortization	Other	Non-GAAP
Net Sales	$75.3				$75.3
Gross Profit	31.4	0.5			31.9
Gross Margin	41.7%				42.4%
Research and development	21.5	(0.9)			20.6
Selling, general, and administrative and Other	20.2	(2.6)		(0.1)	17.5
Net Income (Loss)	($32.1)	4.0	5.3	15.2	($7.6)
Income (loss) per common share:					
Basic	($0.82)				($0.19)
Diluted	(0.82)				(0.19)
Weighted average number of shares:					
Basic	39				39
Diluted	39				39
Other Non-GAAP Adjustments					
Asset Impairment					13.6
Restructuring					2.1
Acquisition related					0.1
Non-GAAP tax adjustment					(0.6)
Total Other					15.2

Note: Amounts may not calculate precisely due to rounding

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Q3 2016 Guidance GAAP to Non-GAAP Reconciliation

In millions, except per share data	GAAP	Non-GAAP Adjustments: Share-Based Compensation	Non-GAAP Adjustments: Amortization	Non-GAAP Adjustments: Other	Non-GAAP
Net Sales	\$70–\$85				\$70–\$85
Gross Profit	27–34	1	—	—	28–35
Gross Margin	38%–40%				39%–41%
Net Income (Loss)	(\$24)–(\$18)	5	6	3	(\$10)–(\$4)
Income (Loss) per Diluted Share	(\$0.62)–(\$0.46)				(\$0.26)–(\$0.10)

GAAP Net Income (loss)	(\$24)–(\$18)
Share Based Compensation	5
Amortization	6
Other	3
Income tax expense (benefit)	1
Interest income, net	(0)
Depreciation	3
Adjusted EBITDA	(\$6)–(\$0)

Note: Amounts may not calculate precisely due to rounding