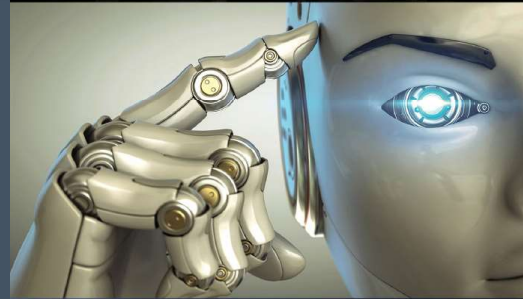


**VICOR**

# Annual Stockholders Meeting

June 2020

Innovation drives  
sustainable growth with  
world class customers



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# Safe Harbor Statement & Disclaimer

This presentation includes forward-looking statements. When used in this presentation, the words “anticipate,” “believe,” “estimate,” “forecast,” “expect,” “intend,” “plan” and “project,” and similar expressions, as they relate to us, Vicor Corporation management, or third parties, identify forward-looking statements. Forward-looking statements include statements regarding our business strategy, financial condition, results of operations, and market data, as well as any other statements that are not historical facts. These statements reflect beliefs of our management, as well as assumptions made by our management based on information currently available to us.

Although we consider these beliefs and assumptions are reasonable, such forward-looking statements are subject to numerous factors, risks, and uncertainties that could cause actual outcomes and results to be materially different from those anticipated or projected. These factors, risks, and uncertainties expressly qualify all subsequent oral and written forward-looking statements attributable to us or persons acting on our behalf and include the following: market demand and industry conditions, our ability to successfully introduce new technologies and products, the demand for the goods into which our products are incorporated, our ability to generate sufficient cash or raise sufficient capital to meet both our research and development and capital investment requirements, our ability to accurately estimate demand and match our production capacity accordingly or obtain supplies from third-party producers, our access to production from third-party outsourcing partners, and any events that might affect their business or our relationship with them, our ability to secure adequate and timely supply of equipment and materials from suppliers, our ability to avoid operational problems and product defects and, if such issues were to arise, to rectify them quickly, our ability to form strategic partnerships and joint ventures and successfully cooperate with our alliance partners, our ability to win competitive bid selection processes to develop products for use in our customers’ equipment and products, our ability to successfully establish a brand identity, our ability to successfully hire and retain key personnel; and our ability to maintain good relationships with our suppliers.

We do not have any intention or obligation to update forward-looking statements after we distribute this presentation. In addition, this presentation contains information concerning our industry and our market segments that is forward-looking in nature and is based on a variety of assumptions regarding the ways in which our industry and our market segments will develop. We have based these assumptions on information currently available to us. Although we believe this information is reliable, we have not independently verified and cannot guarantee its accuracy or completeness. If any one or more of these assumptions turn out to be incorrect, actual results may differ from those predicted. While we do not know what impact any such differences may have on our business, if there are such differences, our future results of operations and financial condition, and the market price of our common stock, could be materially adversely affected.

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Vicor is in its “quiet period” and will not comment on current or anticipated financial or operational performance for Q2 2020.

# Today's agenda

- Introductions
- Official business meeting
- Management presentations
- Stockholder Q&A

# Introductions: Independent Directors

- Samuel J. Anderson\*

- *Chief Executive Officer, IceMOS Technology Ltd.*

- Jason L. Carlson\*

- *Chief Executive Officer, congatec AG*

- Estia J. Eichten\*

- *Senior Scientist, Fermi National Accelerator Laboratory*

\* Member, Audit Committee & Compensation

# Introductions: Inside Directors

- Philip D. Davies, Corporate Vice President
- Michael S. McNamara, Corporate Vice President
- James A. Simms, Chief Financial Officer
- Claudio Tuozzolo, Corporate Vice President
- Patrizio Vinciarelli, Chief Executive Officer

# Introductions: Third Parties

- Gabor Garai
  - *Outside Counsel, Foley & Lardner LLP*
- Harold Murphy
  - *Computershare Trust Co.*
- Edward A. Sullivan, Jr.
  - *Audit Partner, KPMG LLP*

# Official business meeting agenda

- Business meeting call to order
- Declaration of quorum
- Proposals before stockholders
- Stockholder questions
- Adjourn

# Shares outstanding and voting power

	<u>Year-End</u> <u>December 31, 2019</u>	<u>%</u>	<u>Record Date</u> <u>April 30, 2020</u>	<u>%</u>	<u>Post-Offering</u> <u>June 17, 2020</u>	<u>%</u>
<b>Common Stock</b>						
Issued:	40,403,058		40,570,758		42,902,999	
Less Treasury:	11,634,806		11,634,806		11,634,806	
Outstanding:	28,768,252		28,935,952		31,268,193	
<b>Common Stock Votes</b>	28,768,252	19.7%	28,935,952	19.7%	31,268,193	21.0%
<b>Class B Shares</b>						
Issued:	11,758,218		11,758,218		11,758,218	
Less Treasury:	0		0		0	
Outstanding:	11,758,218		11,758,218		11,758,218	
<b>Class B Votes</b>	117,582,180	80.3%	117,582,180	80.3%	117,582,180	79.0%
<b>Total Outstanding</b>	<b>40,526,470</b>		<b>40,694,170</b>		<b>43,026,411</b>	
<b>Total Votes</b>	<b>146,350,432</b>	100.0%	<b>146,518,132</b>	100.0%	<b>148,850,373</b>	100.0%

[1] Totals shown represent basic shares (i.e., no dilutive considerations).

[2] Class B Shares are entitled to 10 votes per share.

[3] Class B Shares are not registered nor listed.

[4] Upon transfer, Class B Shares are convertible into shares of Common Stock on a 1:1 basis.



# Declaration of quorum



- Record Date shares:
  - Common Stock: 28,935,952
  - Class B Stock: 11,758,218
  - Total eligible votes: 146,518,132
- Votes for which proxies received prior to meeting:
  - 135,804,796
  - 92.7% of total eligible votes
- Quorum confirmed

# Proposals and stockholder questions

1. To fix Directors at eight and to elect the eight nominees
2. To approve “Say on Pay” (NEO Compensation)

The Board will now respond to questions from registered stockholders submitted prior to the meeting or during the meeting via the Computershare website.

# Voting results

Proposal	Board Recommendation	Shareholder Action	Votes in Favor * (Millions)	Votes in Favor * (%)
1.	FOR	APPROVAL	132.6	97.6%
* Each nominee received an affirmative vote of at least 132.6 million votes and 97.6% in favor.				
2.	FOR	APPROVAL	135.1	99.5%

# Adjournment

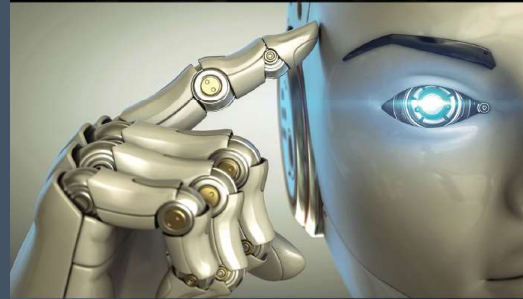
- End of official business
- Call for adjournment

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# Strategy Update

June 2020

Innovation drives  
sustainable growth with  
world class customers



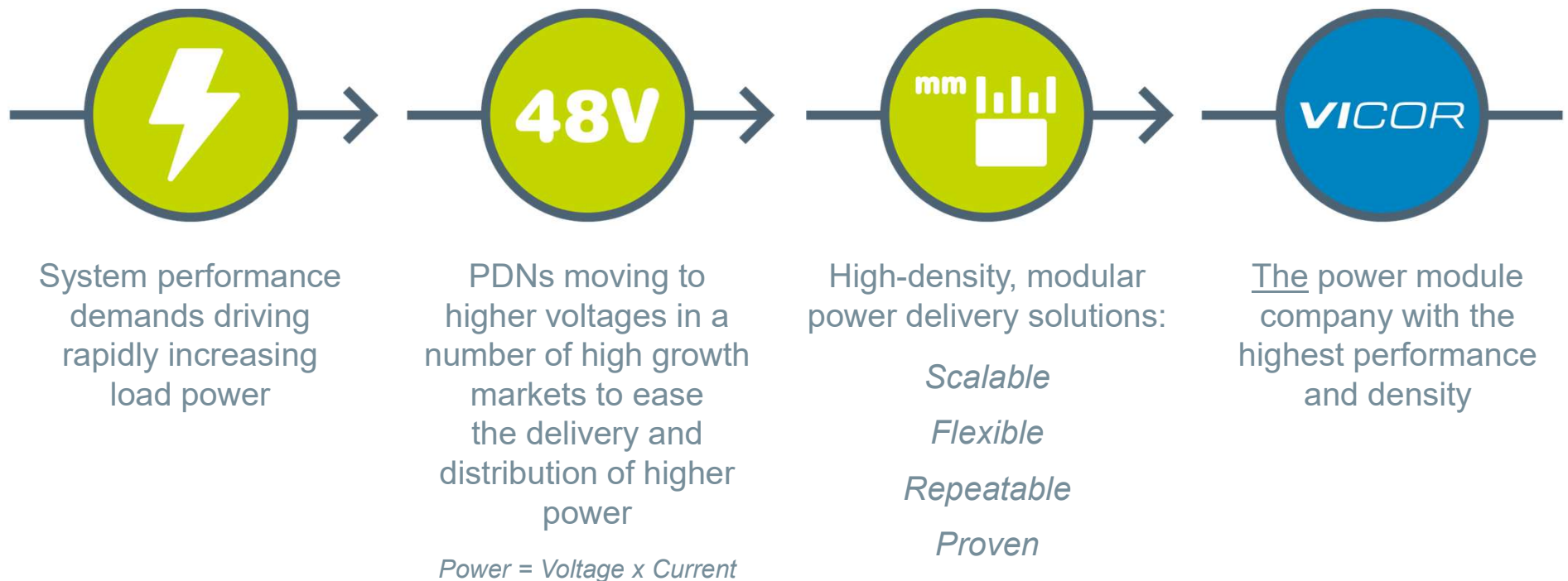
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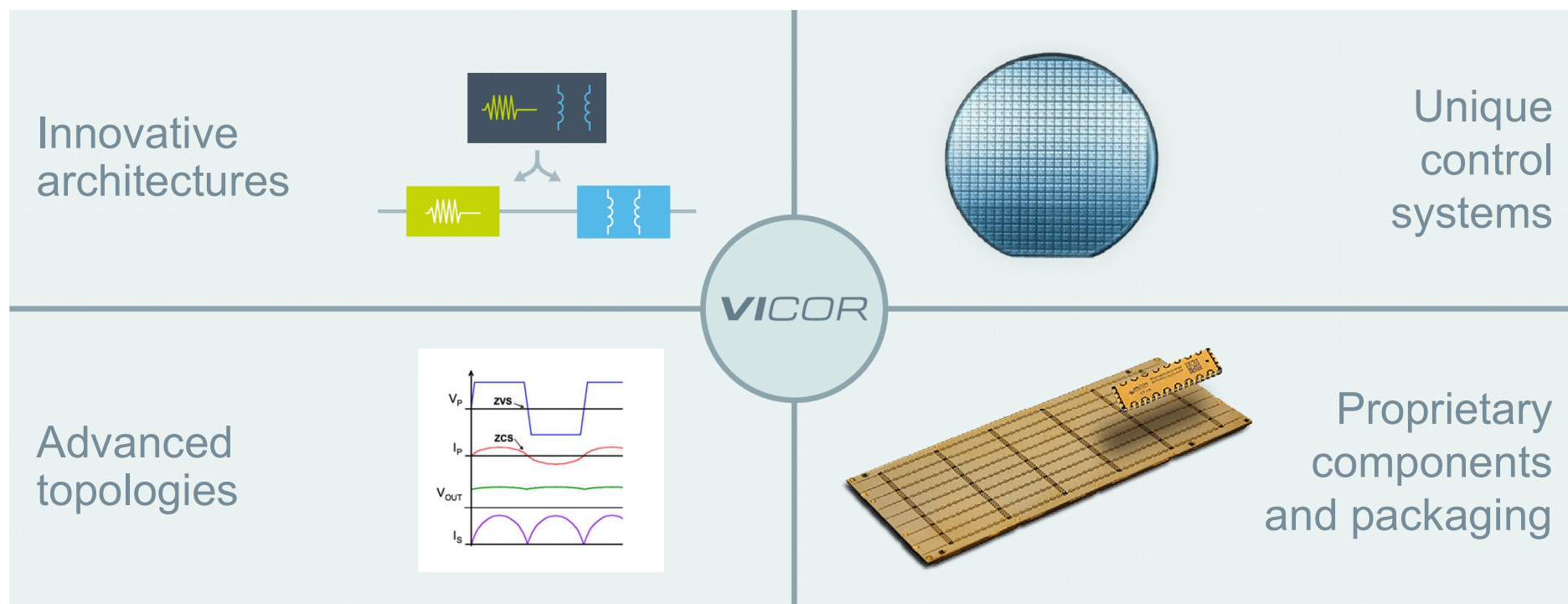
# Agenda

- Why change and why Vicor
- Significant technology leadership
- Data Center, HPC, and AI
- Automotive electrification
- Vertically integrated manufacturing
- Q&A

# Vicor: modular Power Delivery Networks (PDN)

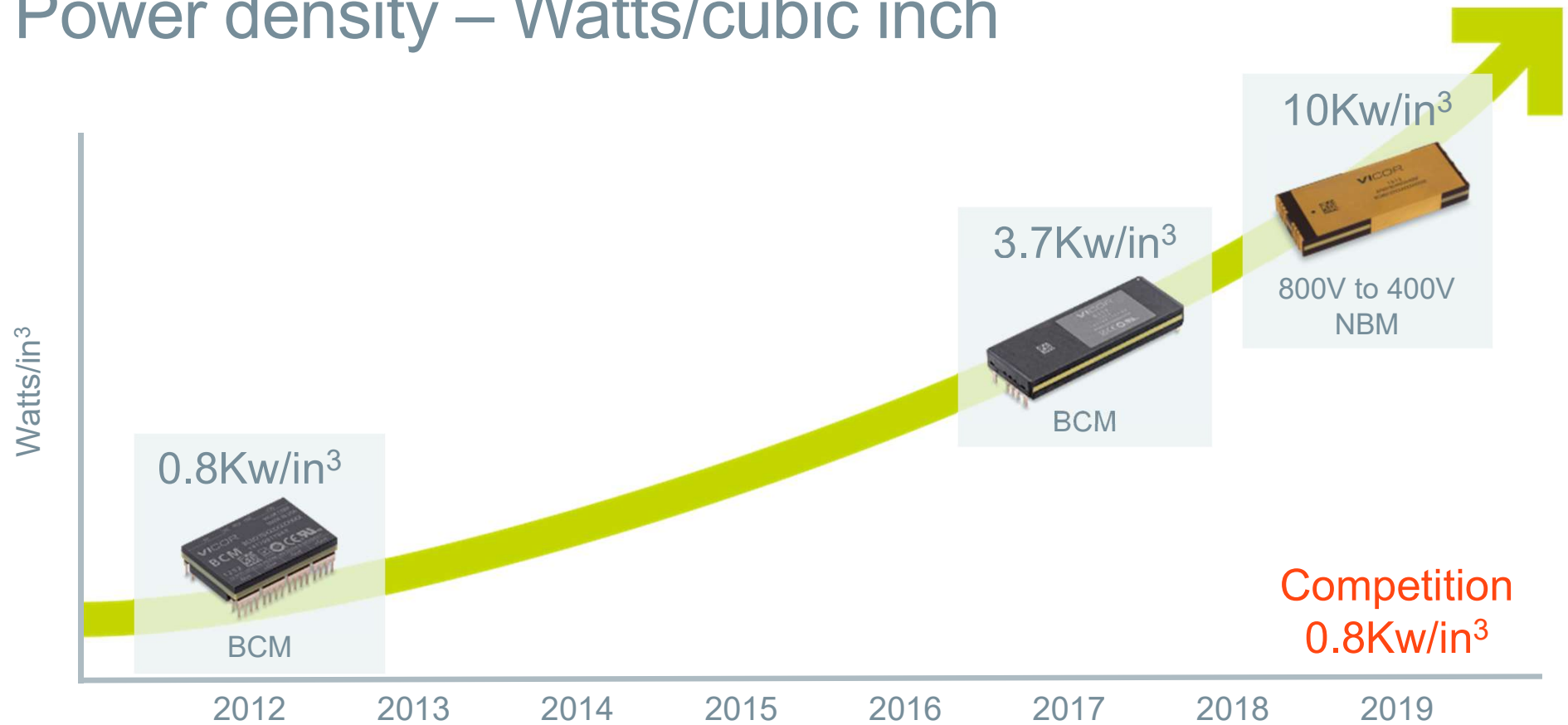


# The four pillars of power system innovation

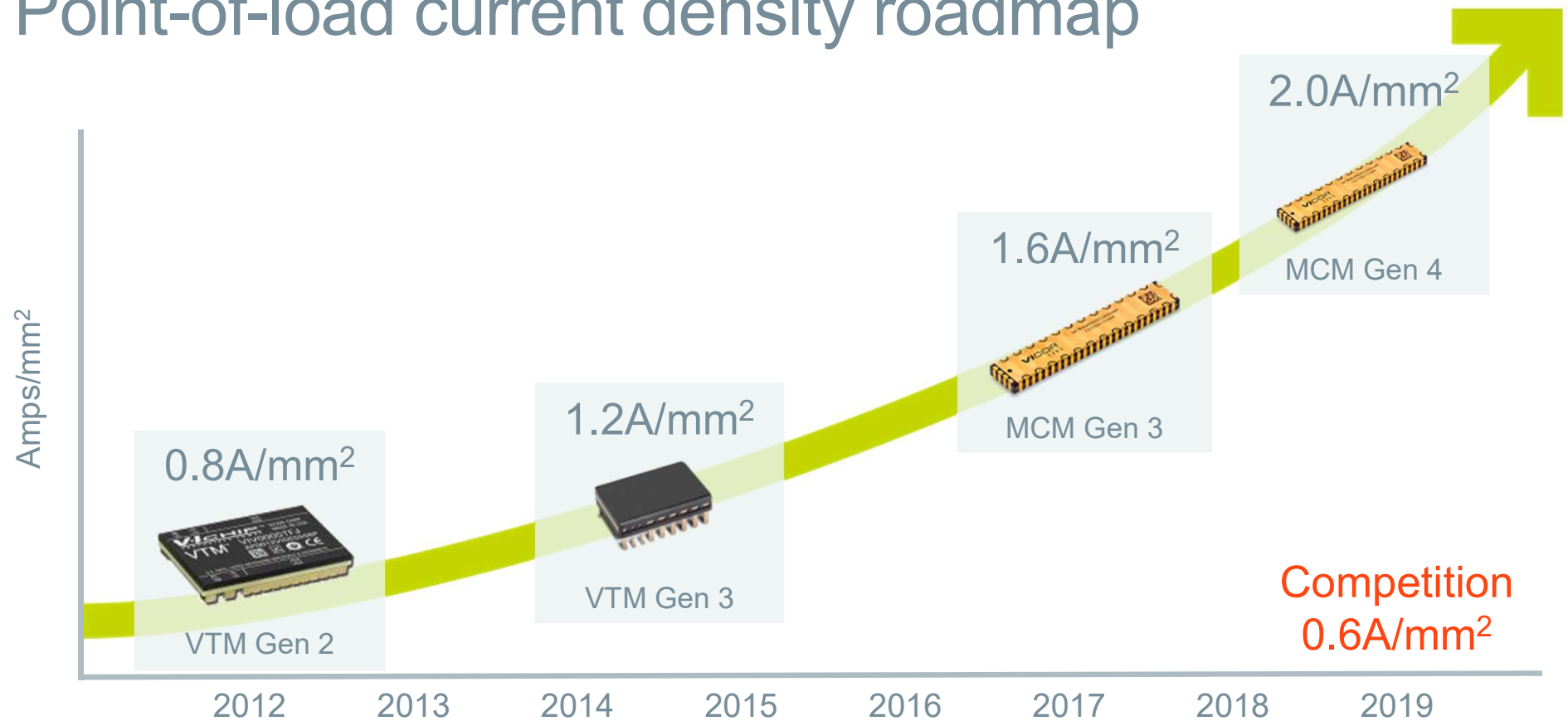




# Power density – Watts/cubic inch

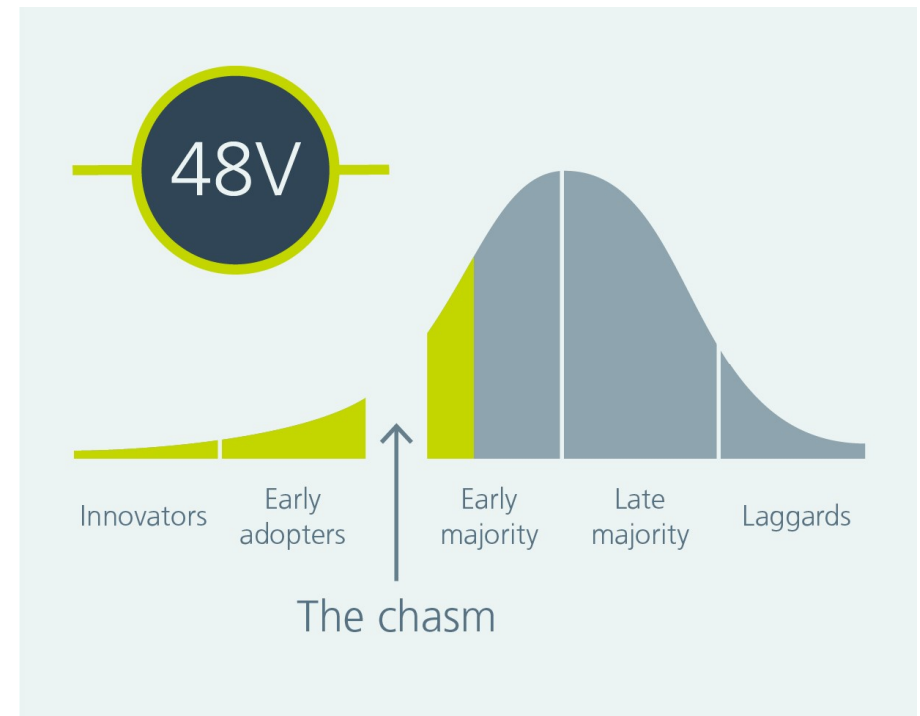


# Point-of-load current density roadmap



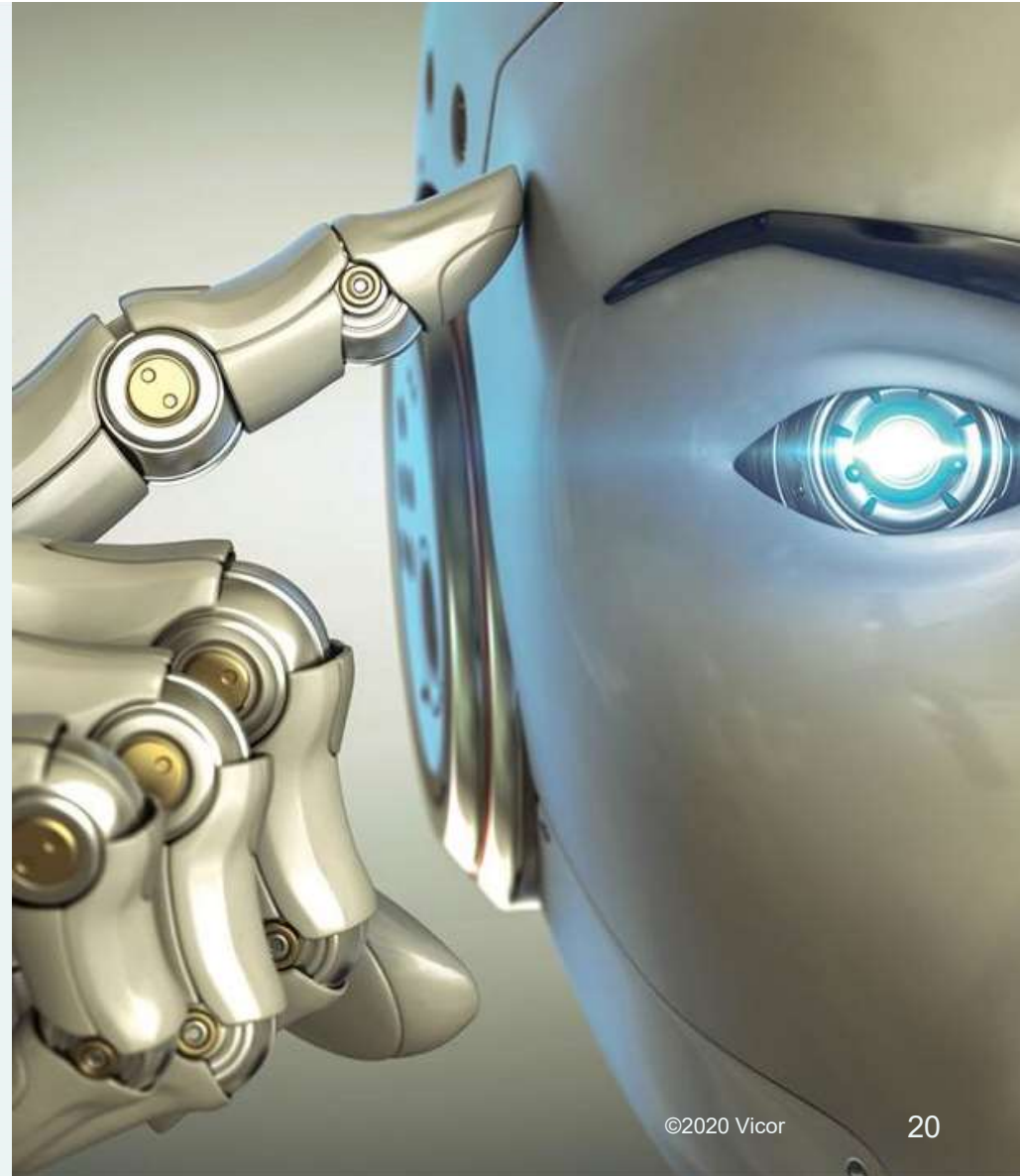
# 48V has crossed the chasm

- Open Compute Project (OCP)
  - Open rack standard
  - 48V backplane
- OCP AI Module (OAM)
- Scorpio (China based)
  - 48V rack standard
- 48V Automotive Standard
  - EV, PHEV, and Hybrid vehicles





# Data Center, HPC, and AI solutions



# Data Center: HPC/AI driving the move to 48V

3-phase 480V AC



380V HVDC

48V

20kW to 80kW rack power



Heavy workload:  
HPC/AI, CPU,  
GPU, ASIC,  
FPGA

< 1V @ 350A to  
1,500A



Medium workloads:  
Cloud

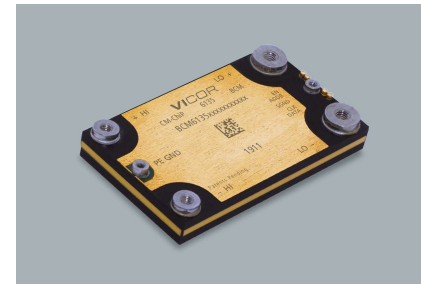
12V @ 150A to  
300A

12kW to 20kW rack power

## Use one or more of these power delivery architectures

The diagram illustrates the three main stages of power delivery in a data center:

- Conversion:** This stage shows the initial power source (represented by a power line and transformer) feeding into a 370V source. This is then converted through a series of components (labeled RCM, BCM, and RCM) to a 48V source.
- Current Delivery:** This stage shows the 48V source feeding into a series of components (labeled RCM, BCM, RCM, BCM, RCM, BCM, RCM, BCM, RCM, BCM) that deliver current to the server racks.
- Bridging:** This stage shows the 48V source feeding into a series of components (labeled BCM, RCM, Buck, RCM) that bridge the power to the server racks, which are shown with 12V and 48V sources.

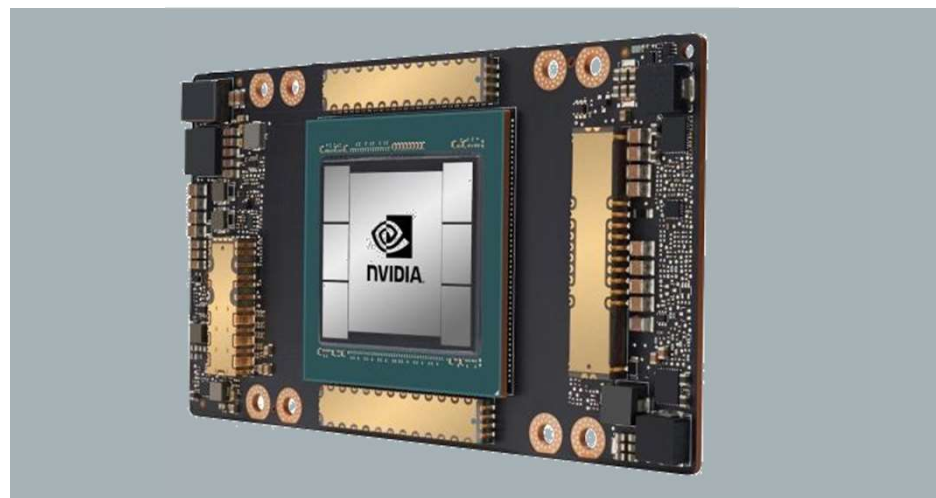


# V100 and new A100 accelerator from Nvidia

Lateral power delivery Hydra I and new Hydra II solution



V100



A100

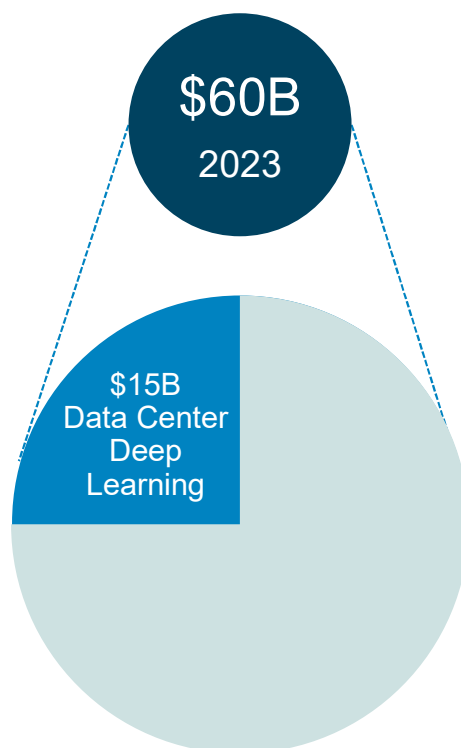


# The AI opportunity

## All AI Processors, 2023 – 2025

\$3.0B estimated  
power module  
TAM

\$750M estimated  
power module  
SAM

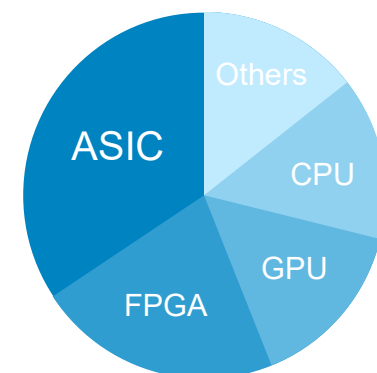


Source: Allied Market Research

ASICs projected as  
the largest segment  
in 2025:

- Google
- Amazon
- Facebook
- Tesla
- Alibaba
- others

SAM expected to  
expand beyond  
Deep Learning  
(Training)





# Continuing customer wins

New hyperscalers

New GPU customers

GPU customer

HPC customer

First hyperscaler

IBM

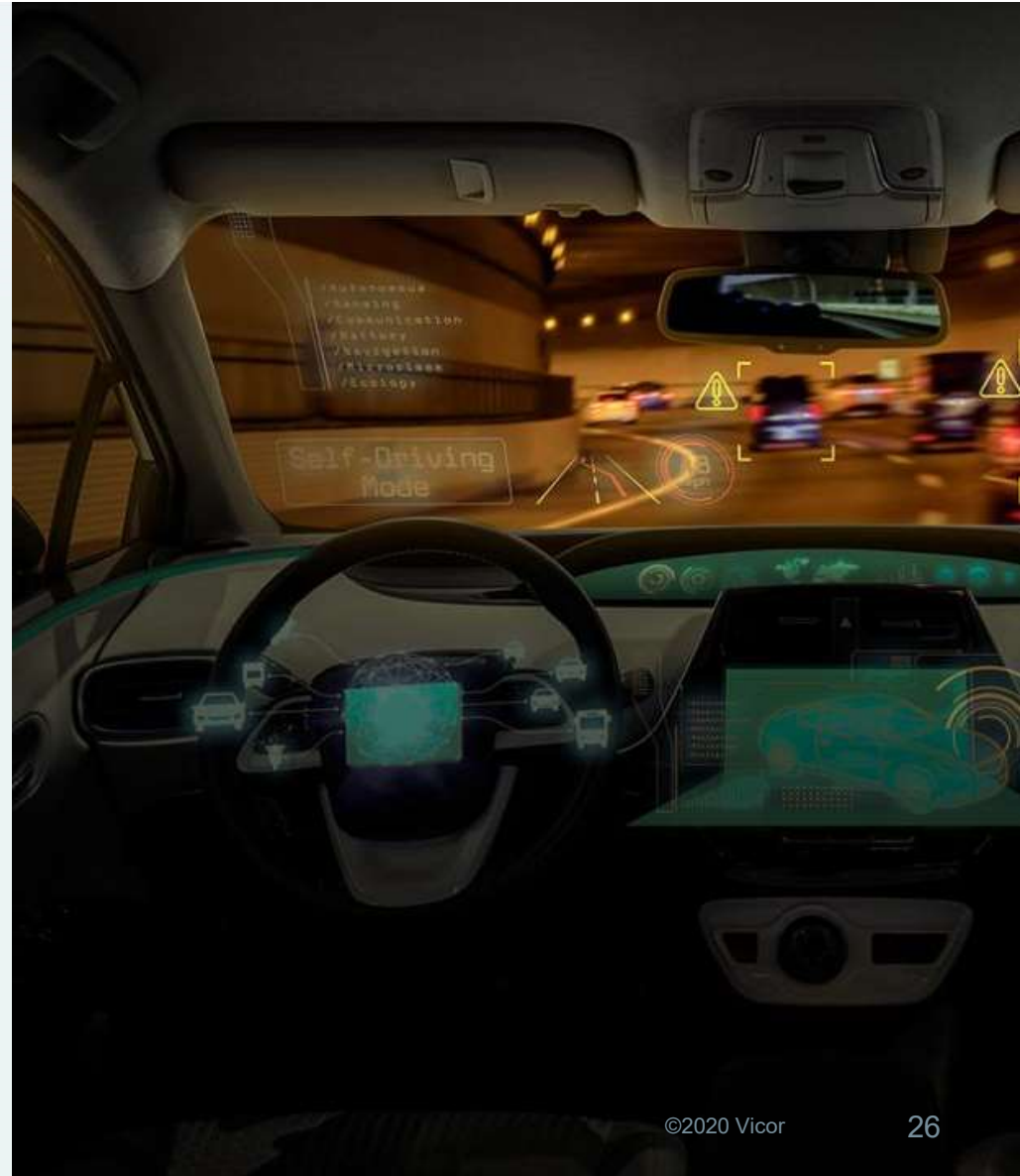
ASIC and FPGA  
revenue expected to  
begin with  
anticipated design  
wins



2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020  
Forecast

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# Automotive



# Electrification: new power delivery networks

Electric vehicles



Mild hybrids



Light duty trucks, trucks and busses



High-end sports cars

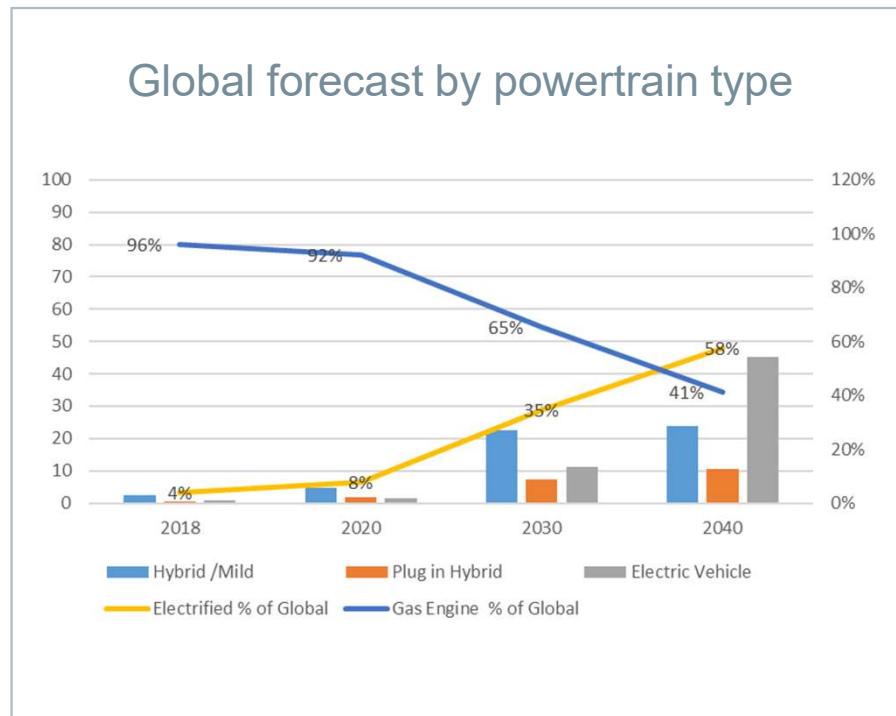


Plug-in hybrid vehicles



EV motorcycles

# Electrification is accelerating



## Hybrid / mild hybrid



\$80 – \$200 in Vicor content  
4.6Mu to 22.5Mu (2020 – 2030)

## Plug-in hybrid



\$280 – \$480 in Vicor content  
1.9Mu to 7.3Mu (2020 – 2030)

## Electric vehicle



\$350 – \$760 in Vicor content  
1.5Mu to 11.3Mu (2020 – 2030)

# Electrified vehicle market and opportunity

2020 vs 2030 Vicor SAM projected to grow from \$2.9B to \$16.5B

Hybrid / mild hybrid



2020 SAM \$920M  
2030 SAM \$4.5B

Plug-in hybrid



2020 SAM \$912M  
2030 SAM \$3.5B

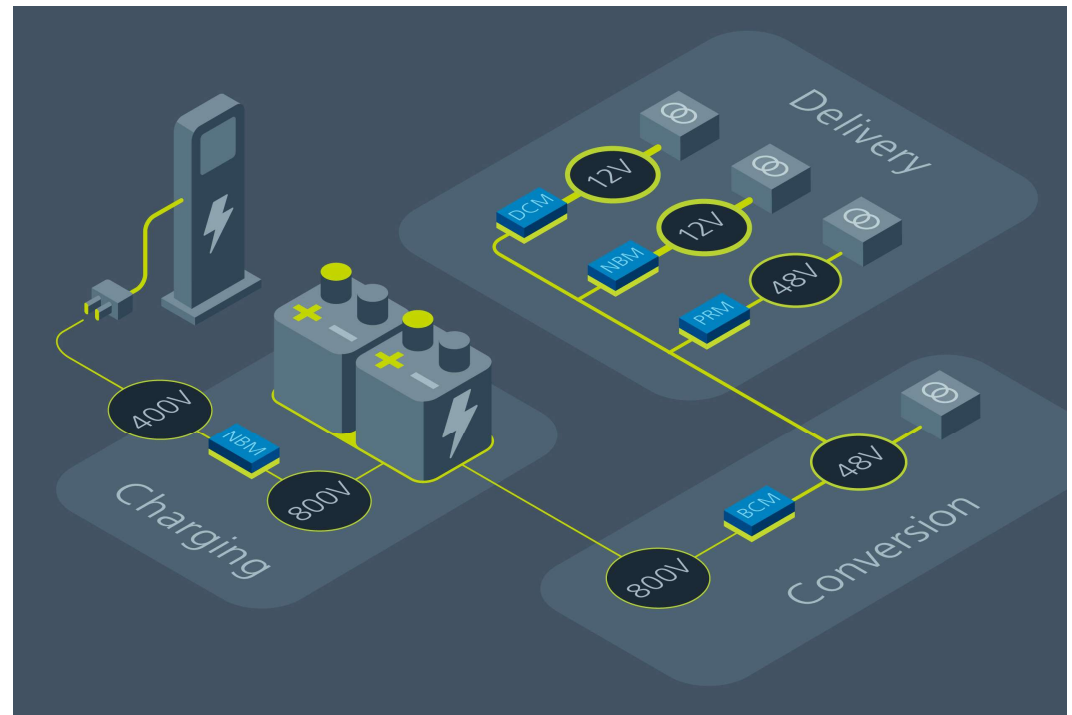
Electric vehicle



2020 SAM \$1.1B  
2030 SAM \$8.5B

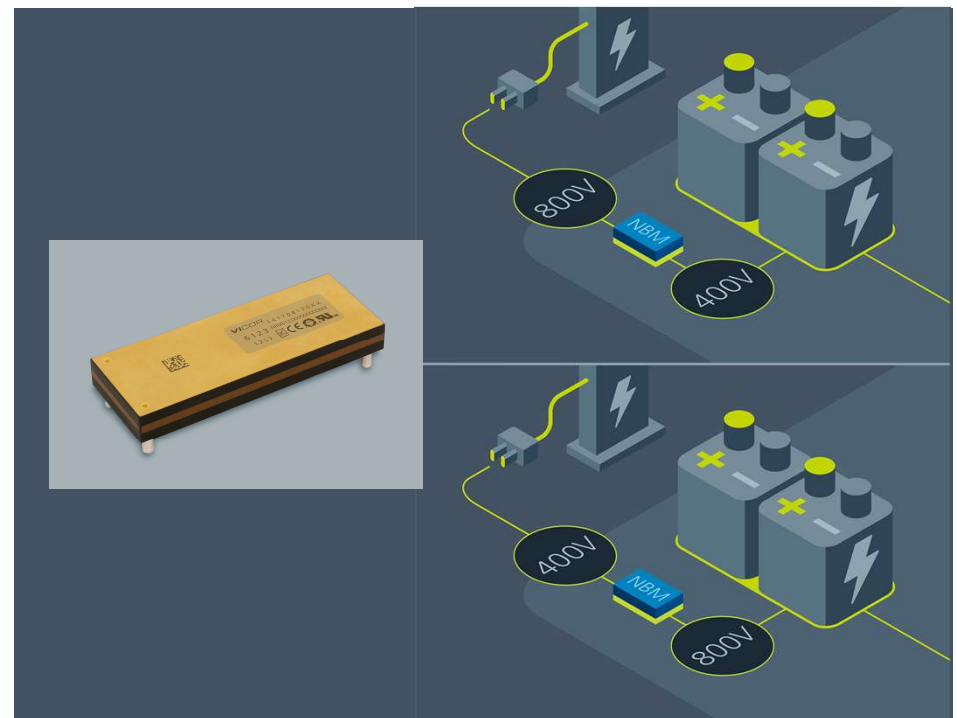
# Modular solutions for powertrain electrification

High density power conversion  
from the source to point of load



# Battery charging

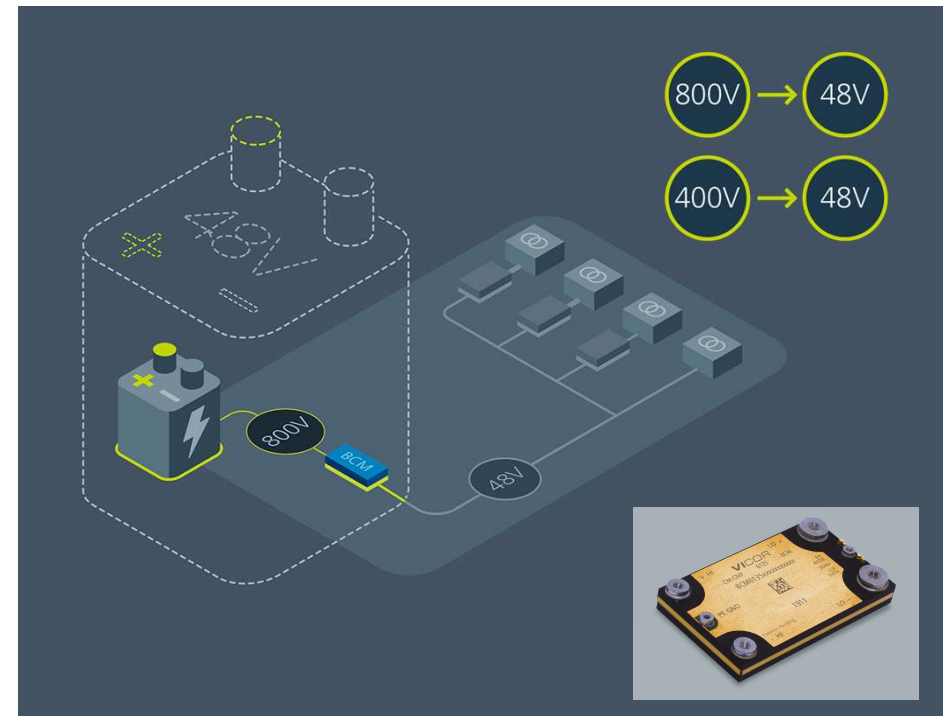
- Flexibility
  - NBM adapts voltages to fit vehicle and charging station requirements
- Fast charging at higher voltage
- Alleviates range anxiety
  - Charge from either 400V or 800V





# Conversion: enabling virtual 48V batteries

- Vicor HV bus converters enable consolidation of energy storage into a single HV battery
- Higher power density reduces weight and size, extending vehicle range
- Scalable power delivery solutions to address entry level to luxury vehicles



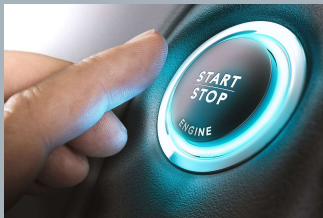


# Delivery: 48V is the new 12V

Providing high density power delivery to numerous, non-powertrain loads



Heated windshield



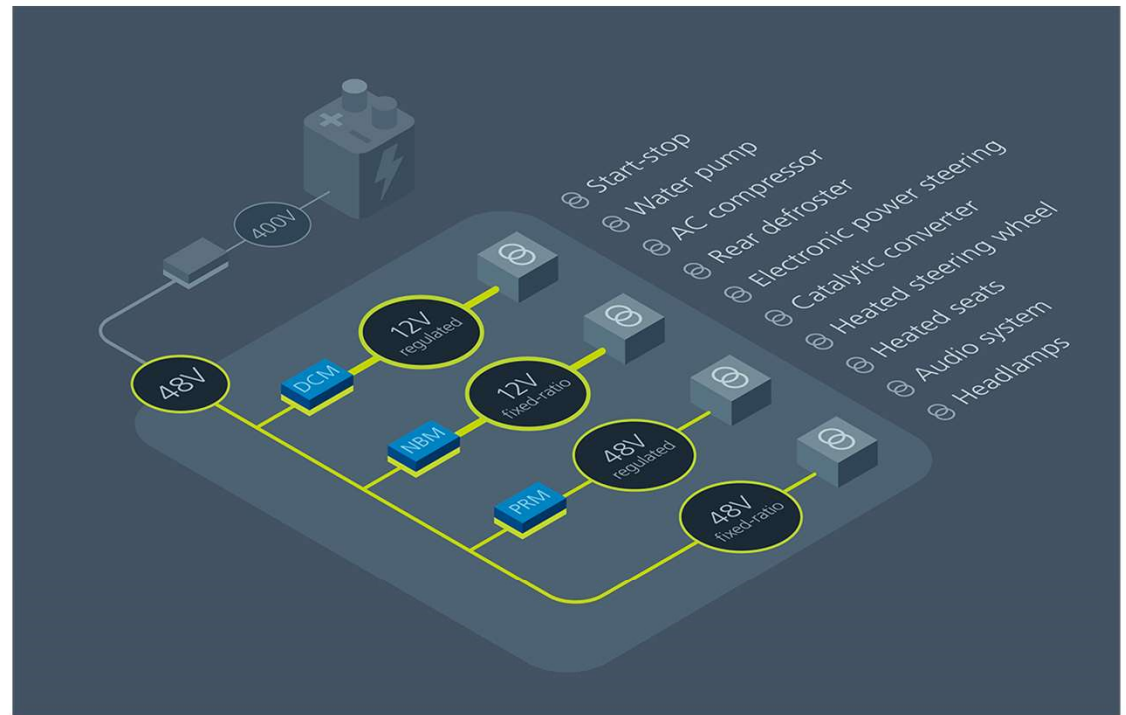
Start-stop



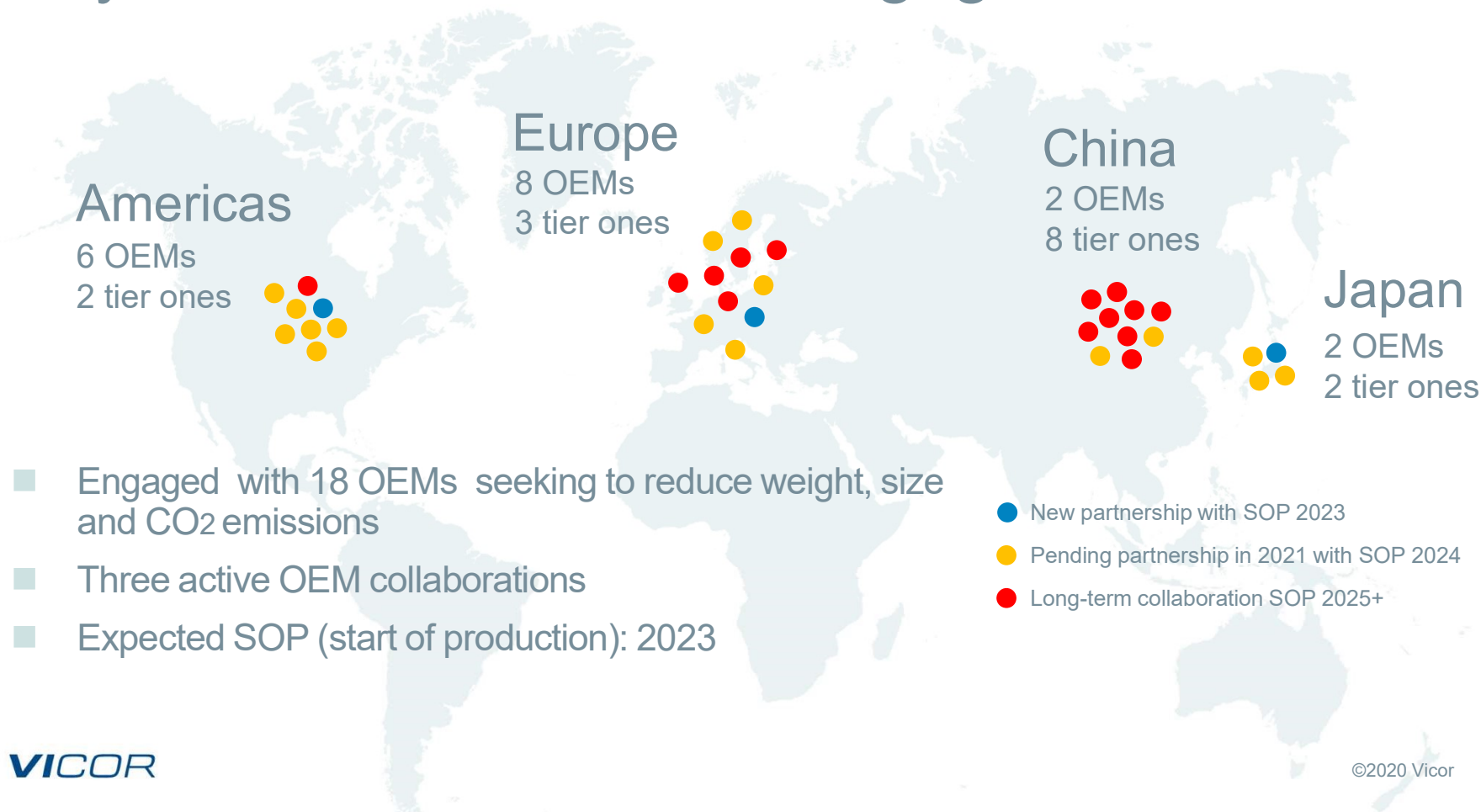
Electric, heated seats



About the same size as a sugar cube



# Key automotive customer engagements





# Facilities expansion



# Factory expansion schedule

- North Addition – 90,000 sq. ft.
  - Site prep started; interior work underway
  - Building closed to weather target: Q4 2020
  - Equipment installation: Q4 2020 – Q2 2021



# Vertical integration

- Expansion enables vertical integration of critical processes
  - Reduced manufacturing cycle time
  - Scaled up capacity to meet ramping demand
  - Leverages existing operational overhead and infrastructure



# Capacity expansion roadmap

Expanding production capacity / Integrating vertically	Estimated timing	Expected total annualized revenue capacity
Machine capacity expansion (250,000 sq. ft. facility)	Online Q2 2019 ✓	\$450M – \$500M
90,000 sq. ft. addition	Mid-year 2021	\$750M
New facility	TBD	>\$1B

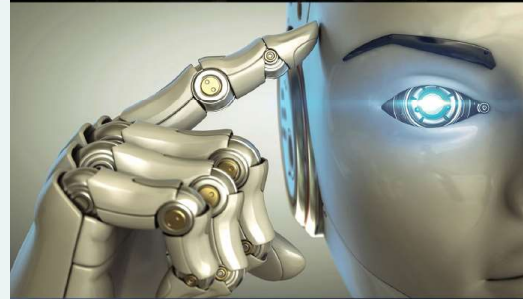


Automated panel production



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Q&A



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