

---

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

---

**FORM 8-K**

**CURRENT REPORT**

**Pursuant to Section 13 or 15(d) of  
the Securities Exchange Act of 1934**

Date of Report (date of earliest event reported):  
**June 7, 2018**

---

**MONOLITHIC POWER SYSTEMS, INC.**  
(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**000-51026**  
(Commission  
File Number)

**77-0466789**  
(I.R.S. Employer  
Identification Number)

**79 Great Oaks Boulevard,  
San Jose, CA 95119**  
(Address of principal executive offices) (Zip Code)

**(408) 826-0600**  
(Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- ☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- ☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- ☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 or Rule 12b-2 of the Securities Exchange Act of 1934.

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. ☐

---

---

**Item 7.01 Regulation FD Disclosure.**

As previously announced, on June 7, 2018, Monolithic Power Systems, Inc. (the “Company”) will hold an Analyst Day at 2:00 pm pacific time. During the course of the event, management team will discuss the Company’s corporate strategy, business updates, and financial guidance. The event will be webcast live at <https://mpsic.zoom.us/j/280651316> (meeting ID: 280-651-316). The presentations to be used by the Company in the event are furnished as Exhibit 99.1.

The information in this Item 7.01, including Exhibit 99.1, is being furnished and shall not be deemed to be “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that Section and shall not be deemed incorporated by reference into any registration statement or other document filed pursuant to the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such filing.

**Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits.

<b>Exhibit</b>	<b>Description</b>
99.1	<a href="#"><u>Monolithic Power Systems, Inc. Analyst Day Presentations, dated June 7, 2018.</u></a>

## 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.

Date: June 7, 2018

By: /s/ Bernie Blegen  
**Bernie Blegen**  
**Chief Financial Officer**

---

## Index to Exhibits

<b>Exhibit</b>	<b>Description</b>
99.1	Monolithic Power Systems, Inc. Analyst Day Presentations, dated June 7, 2018.

# Investor/Analyst Day 2018

**MPS**

---

## Forward Looking Statements

This presentation includes forward-looking statements that involve risks and uncertainties, including our belief in continued expansion of our product lines, advances in our technology, anticipated market opportunities, gross margin targets, net & operating margin targets, inventory targets, continuing business diversification, growth and opportunities in China and Taiwan, and increasing sales penetration in Japan, Korea, the U.S., Singapore and Europe. Other forward-looking statements can be identified by terms such as "would," "could," "may," "will," "should," "expect," "Wall Street estimates," "intend," "plan," "anticipate," "believe," "estimate," "predict," "potential," "targets," "target ranges", "seek," or "continue," the negative of these terms or other variations of such terms. These statements are only predictions based on our current expectations and projections about future events. Because these forward-looking statements involve risks and uncertainties, there are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied by the forward-looking statements. In this regard, you should specifically consider the risks identified in our most recent 10-K in the section entitled "Risk Factors," including the risks, uncertainties and cost of litigation and risks related to fluctuations in our operating results.

---

## Agenda

- Computing Power Evolution
  - Battery Management
  - Automotive Break
  - e.Motion: A Market in Motion
  - \$1B to \$2B
  - E to E through eCommerce
  - Financial Summary
  - Q&A
  - Event Summary
-

# Computing Power Evolution

Jinghai Zhou

**MPS**

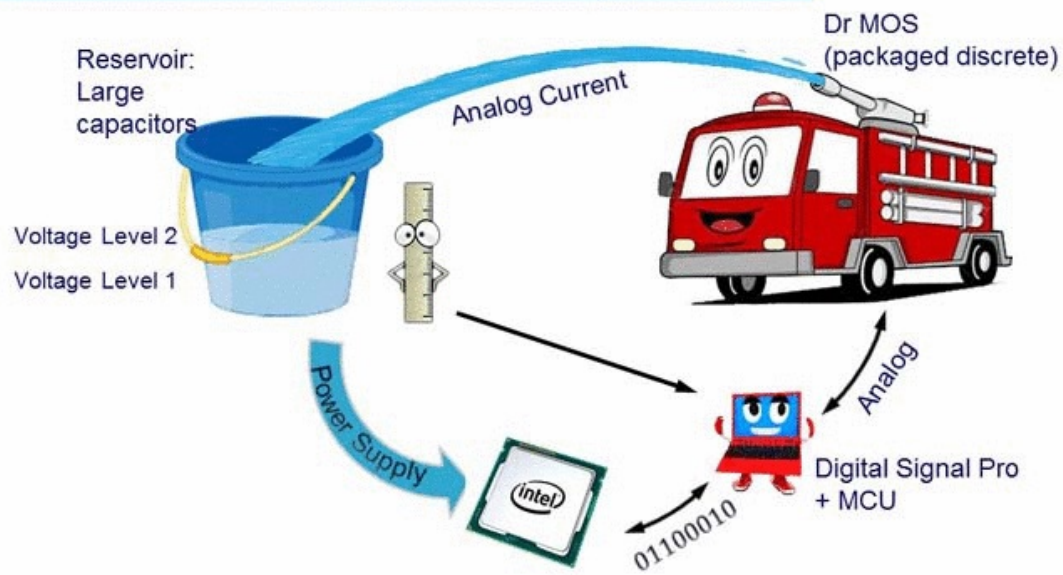
---



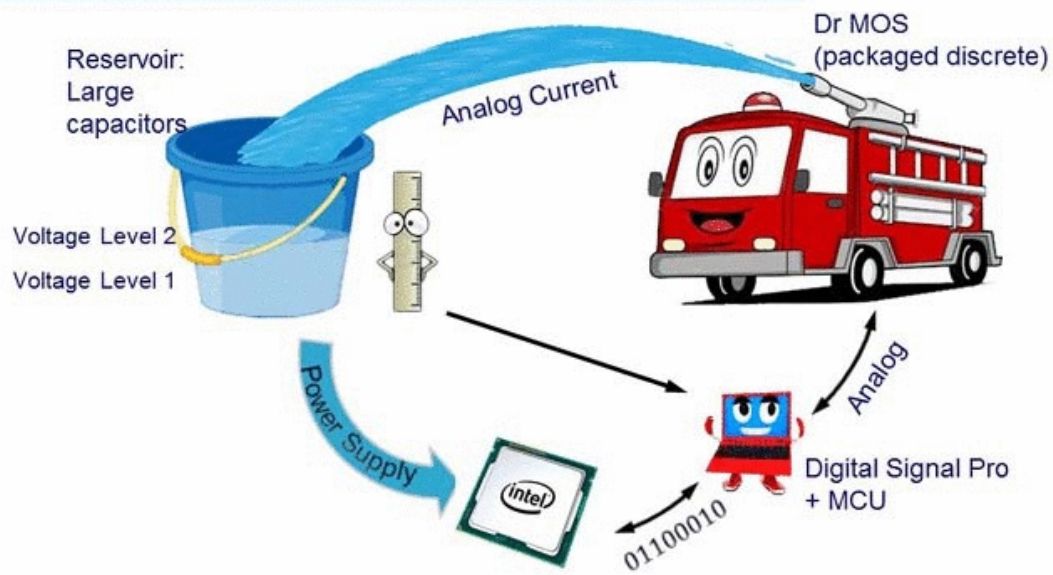
## **It All Started with Two Innovations**

- **MPS Invented Intelli-phase in 2010**  
World first monolithic power stage with integrated Accu-sense.
  - **MPS Invented QSMOD in 2012**  
**Quantum State Modulation**- Modulation based on finest digital steps to determine the real-time output voltage.
  - **MPS First Server Core Power Solution Successfully Powered Intel Grantley Platform in June 2014.**
-

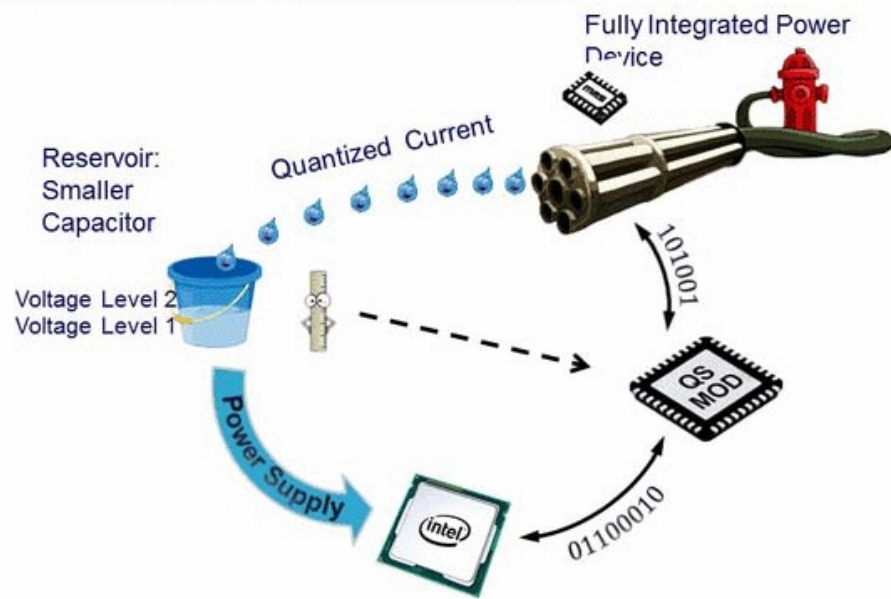
## Existing Solutions – Discrete + Analog + Digital



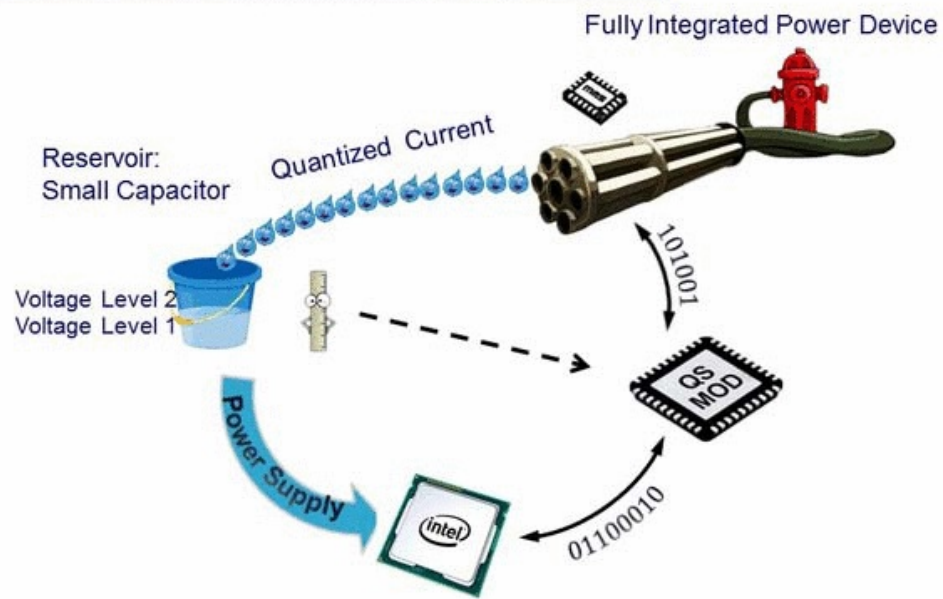
## Existing Solutions – Discrete + Analog + Digital



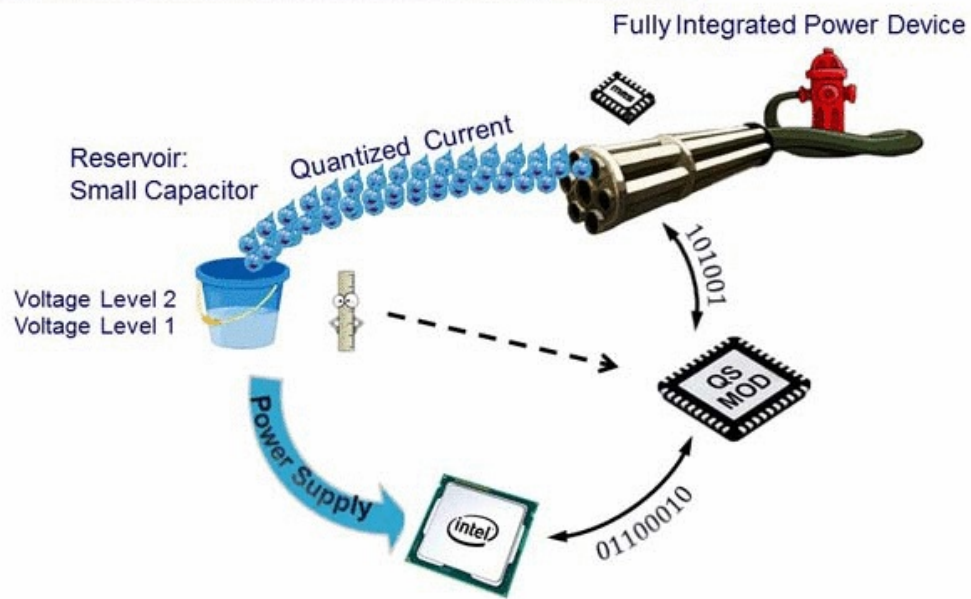
## QS MOD Solution: Fully Integrated + GUI



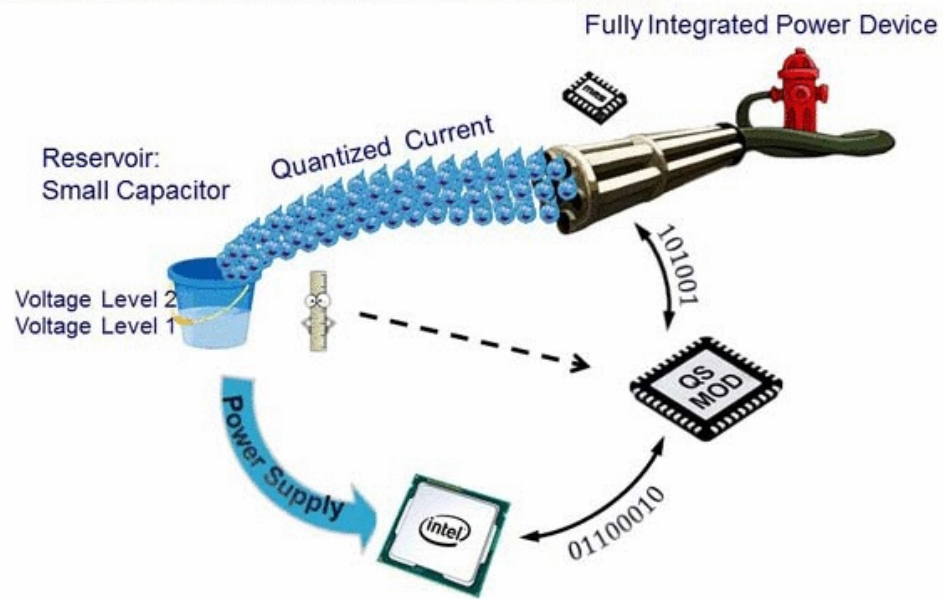
## MPS' Quantum State Modulation\_\_ QS Mod



## MPS' Quantum State Modulation\_\_ QS Mod



## MPS' Quantum State Modulation\_\_ QS Mod



# The Concept is Simple

Competitors

DrMOS  
Discrete Solution



MPS

MPS  
Intelli-Phase



Fast

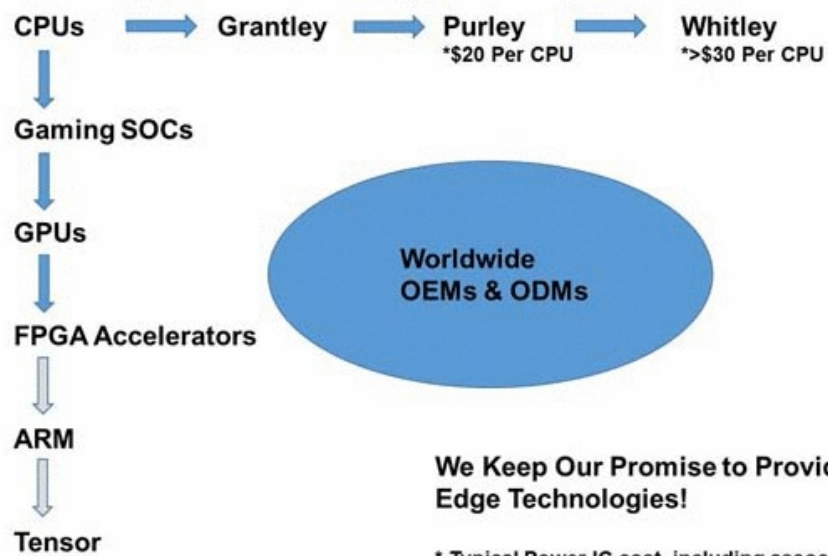


Accurate





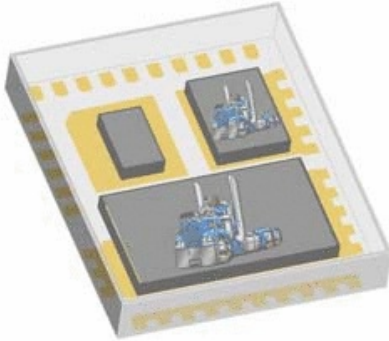
## Great Technology Wins Its Own Way



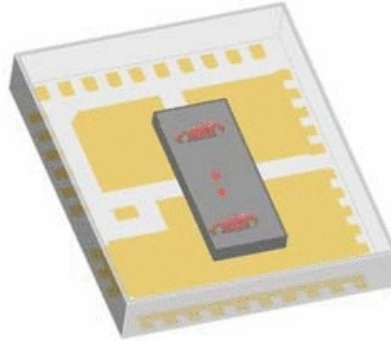
\* Typical Power IC cost, including associated DDR Power

## Common Footprint, Uncommon Performance

- Discrete Die DrMOS

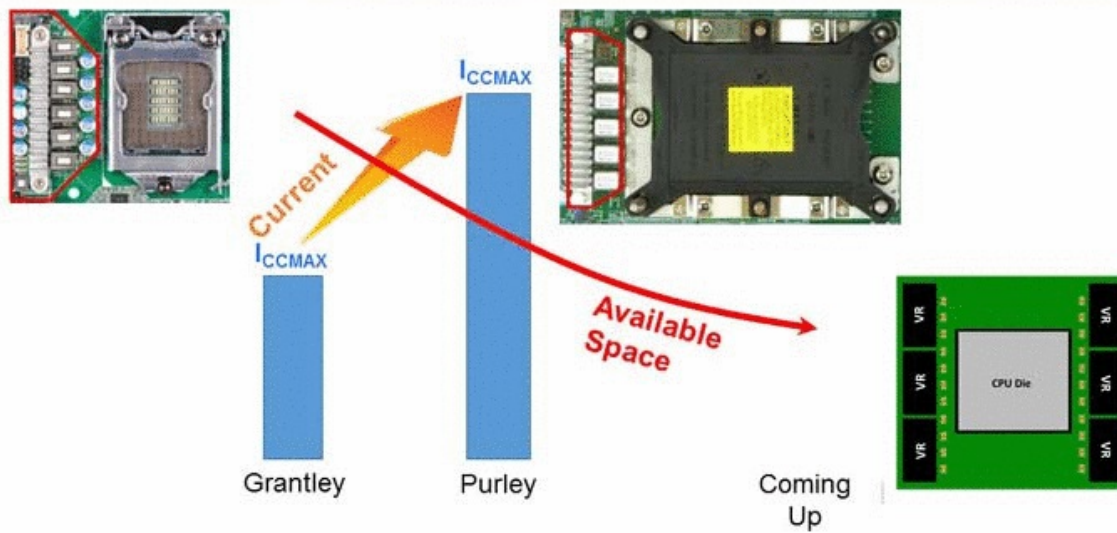


- Monolithic Intelli-Phase



- **Common Footprint Allows Access to Today's Markets**
  - **Monolithic Die Provides Superb Switching Performance and Intelligence**
-

## CPU Demands Huge Current, with Much Less Available Space



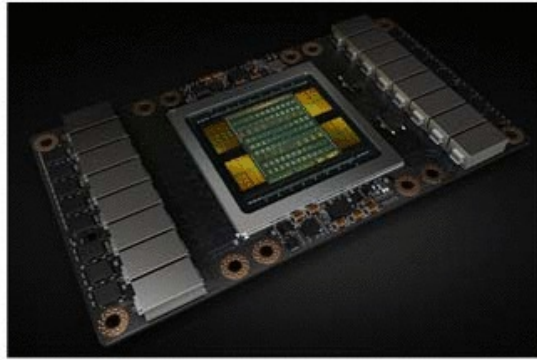
Bigger CPU Socket, More Memory DIMMs, The needs to Pull VR Closer to CPU- All Require Much Dense VRs

## Why MPS is Winning?



While Others Hitting Size and Frequency Boundaries, MPS Monolithic Solution Takes Off

## GPU as an AI Engine Gets Power Hungry

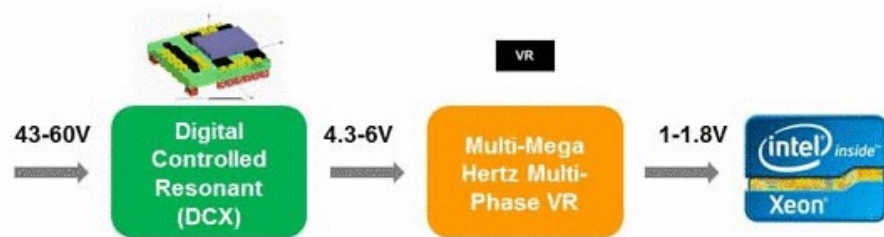


\* Source: Nvidia GPU Conference, 2017

AI Engine Powered by MPS QSMOD-  
Integration Brings Unprecedented Feature Sets to the System

---

## Ready for the 48V Power Architecture for Data Centers



### 2-Stage Structure

- **Simplicity** – well-understood architecture
- **Scalability** – can address different power levels
- **Transient performance** – independent second-stage offers superior performance
- **Interchangeability** – each stage can be upgraded independently
- **Efficiency. Size. Cost** – Optimized.

Intel image source: [https://en.wikipedia.org/wiki/Xeon#/media/File:Intel\\_xeon\\_inside.jpg](https://en.wikipedia.org/wiki/Xeon#/media/File:Intel_xeon_inside.jpg)

---

## Autonomous Driving

MPS Powered AI  
Datacenters Allow  
Autonomous Vehicles  
to Learn...



↑ Learning

Perception

Prediction

Policy

↓ Inferencing

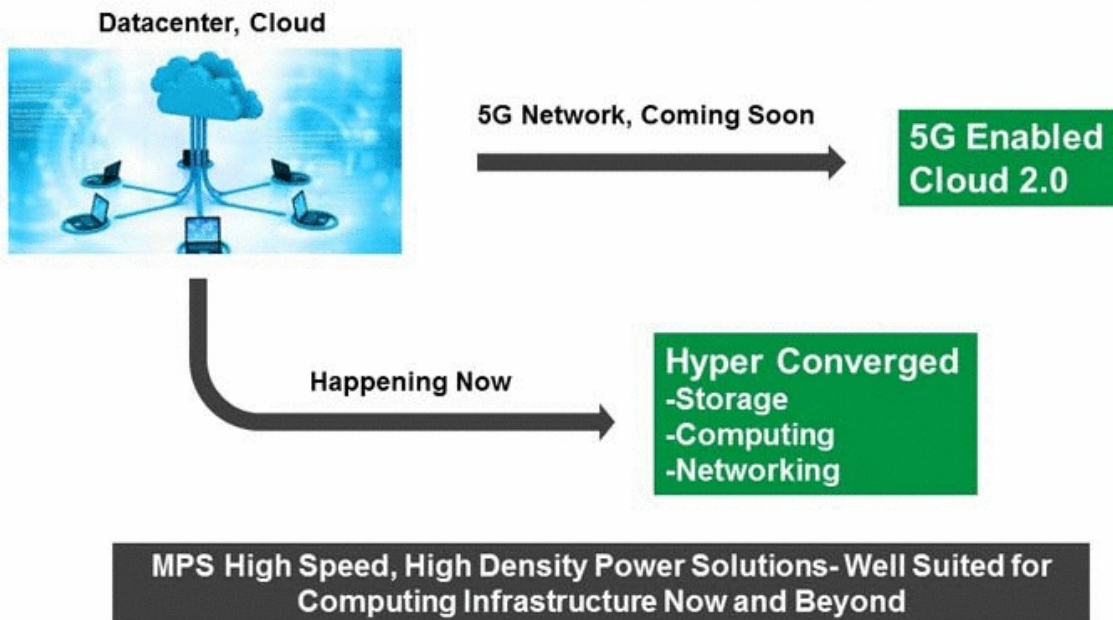


Next step- the  
inference engine that  
resides on the AV  
itself is what MPS will  
power!





## The Evolving of the Computing Eco-System





**We Are the Champion**



**Proudly Powering Olympics**



Questions?





**MPS**

---

# Battery Management

Chris Sporck

**MPS**

---

## MPS Battery Management Applications

**Portable  
Power**



**2-6 Cell non-  
USB  
Applications**



**Wearable  
Devices**



**Connected  
Devices**



**Mobile  
Computing**

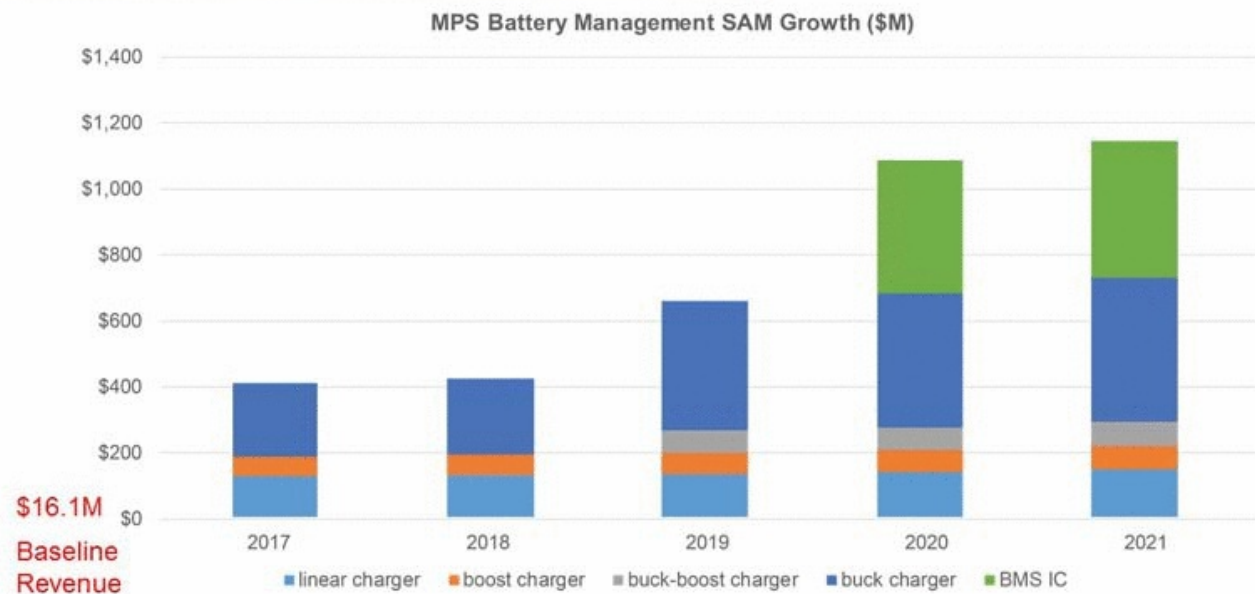


**Battery  
Management  
Systems  
(BMS)**

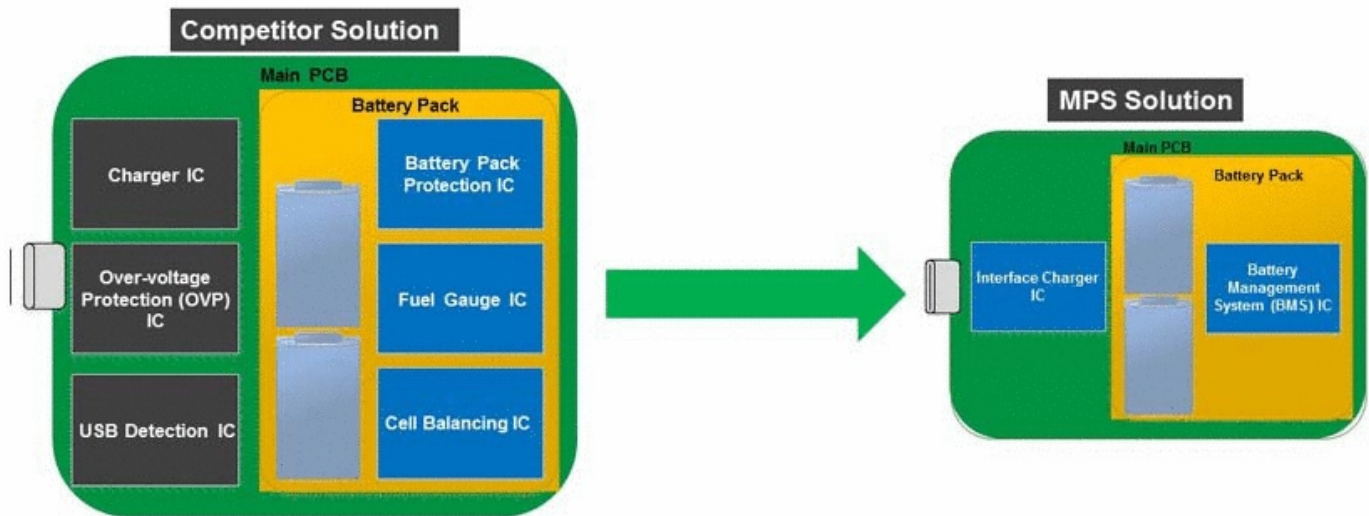


Increasing Value

## MPS Battery Management SAM Growth



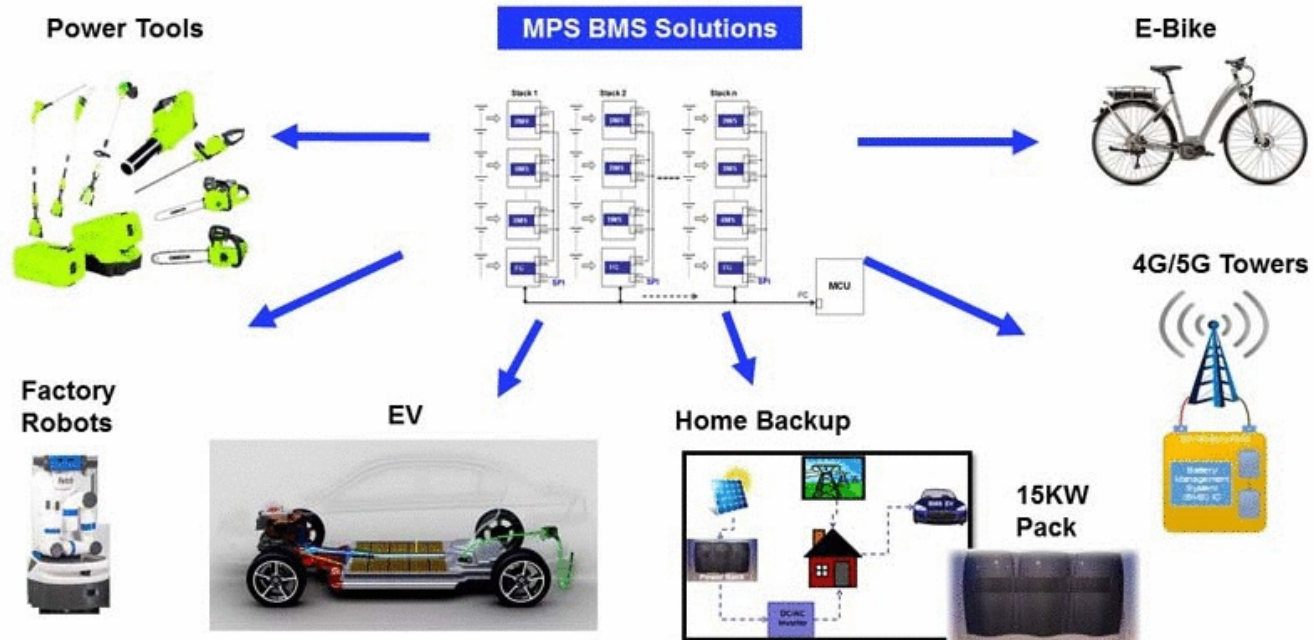
## MPS Battery Management Advantages



- MPS solutions use our leading power FET technology to offer a high level of integration which means smaller total solution size, easier system design, and better cost structure
-

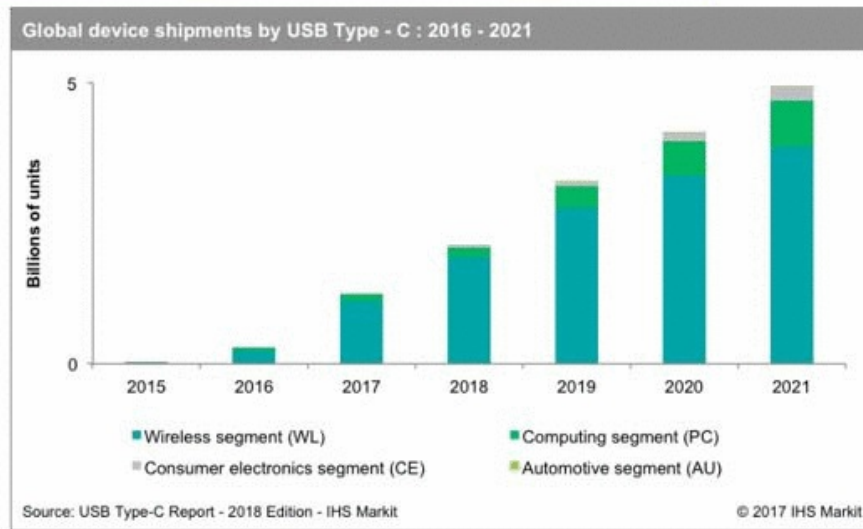


# Battery Management System (BMS) Growth Markets



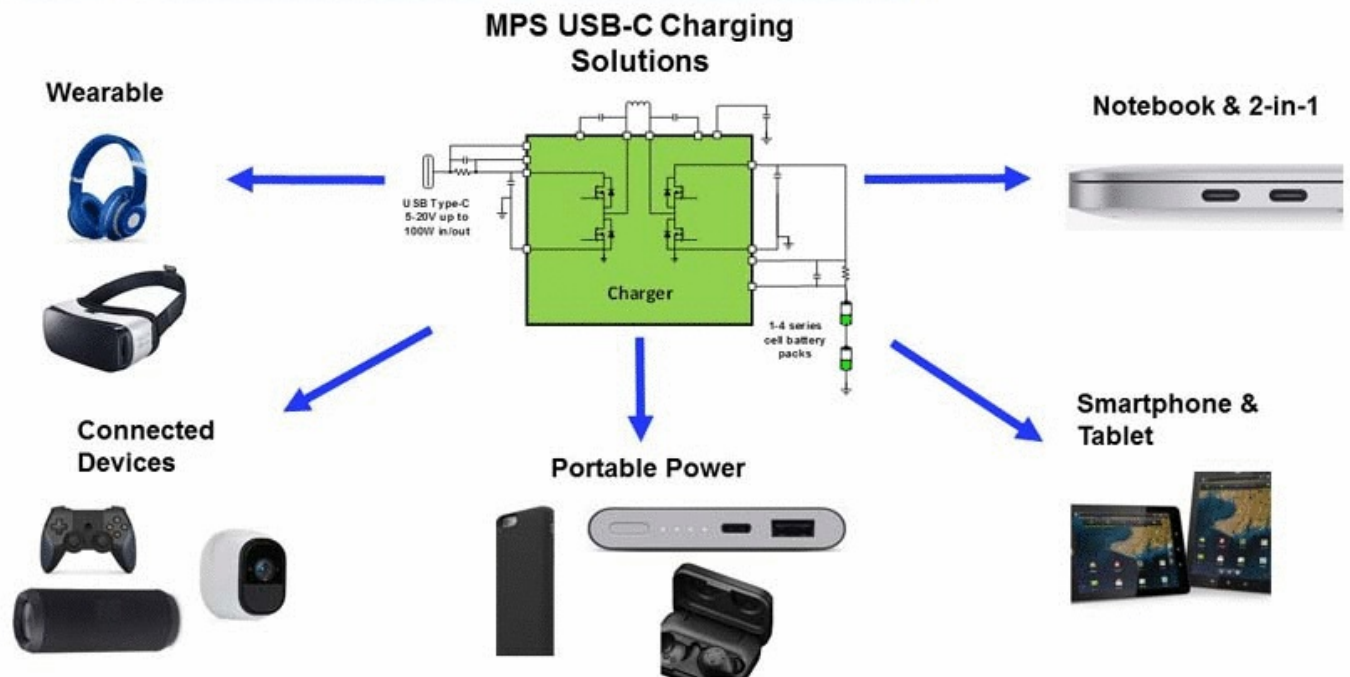


## Capitalizing on USB Type-C and PD Expansion



- CAGR of 105% over the next 5 years and \$3B TAM in semiconductor IC revenue in 2021
  - MPS currently has key design wins in the Wireless and Consumer electronics segments
-

## USB Type-C and PD Charging Growth Markets



## Why MPS Battery Management Will Win

- Increasing product offering diversity driving SAM expansion
  - Growth strategy focused on high level of integration of charger, BMS, USB, and protection functions
  - Fully monolithic chargers for high-power USB Power Delivery applications
  - R & D investment on precision accuracy monitoring and protection circuits for BMS
-

Questions?





**MPS**

---

# Automotive

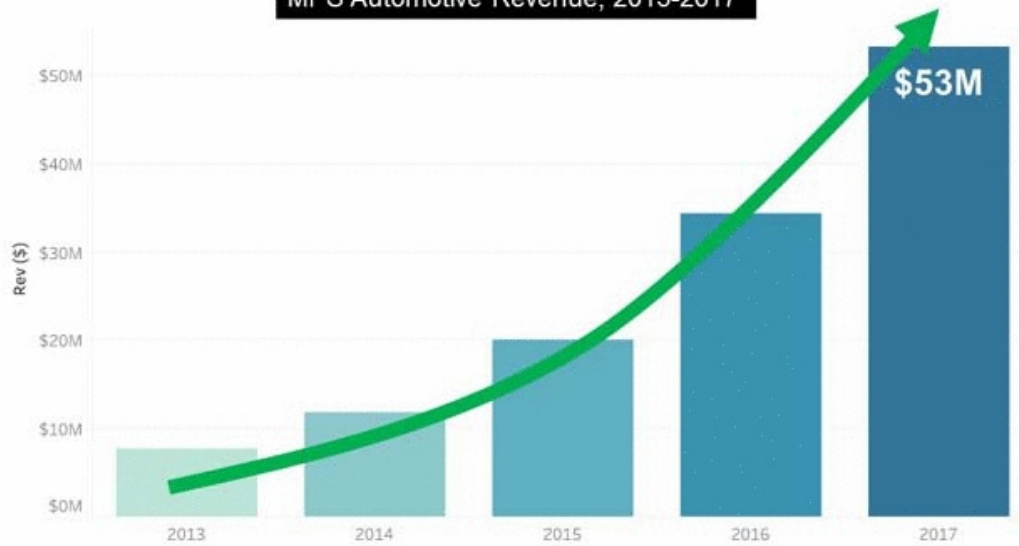
Allen Chen

**MPS**

---

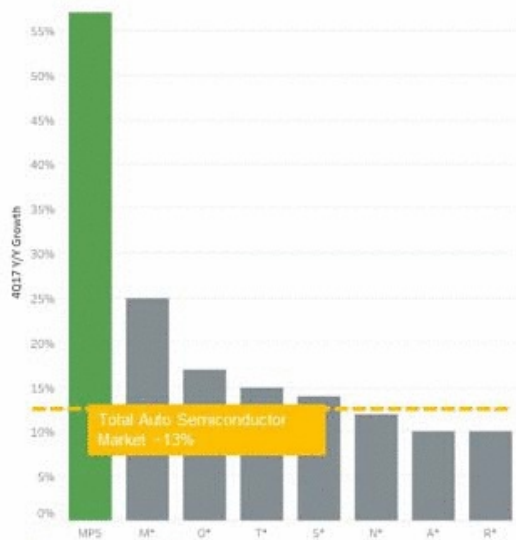
## MPS Automotive Growth is Accelerating

MPS Automotive Revenue, 2013-2017



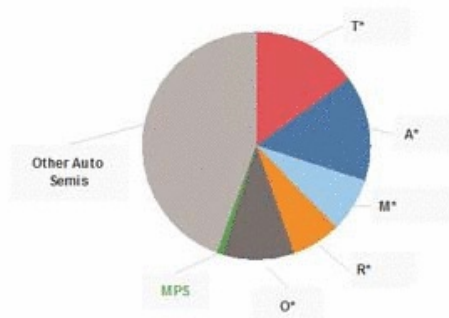
## MPS Automotive Growing Over 4x Market

4Q17 Auto Revenue Growth, YoY



Source: Deutsche Bank automotive semiconductor market tracker

Auto Power Management Market Share

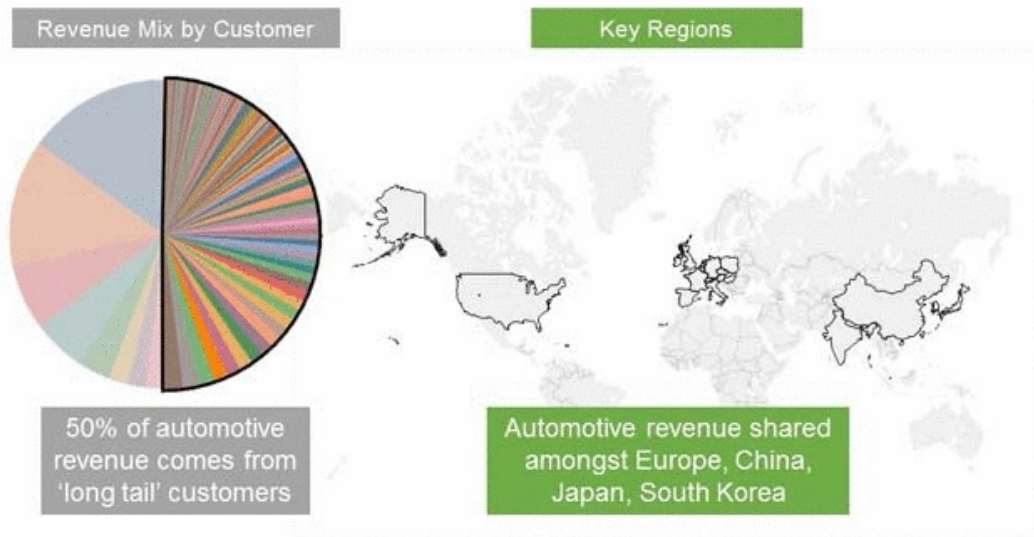


**Power TAM:  
\$7B**

Source: MPS internal analysis, competitor annual reports



## Great Revenue Diversification



## MPS Ramping At Half of Top 50 Tier 1s

...and engaged with most of the rest

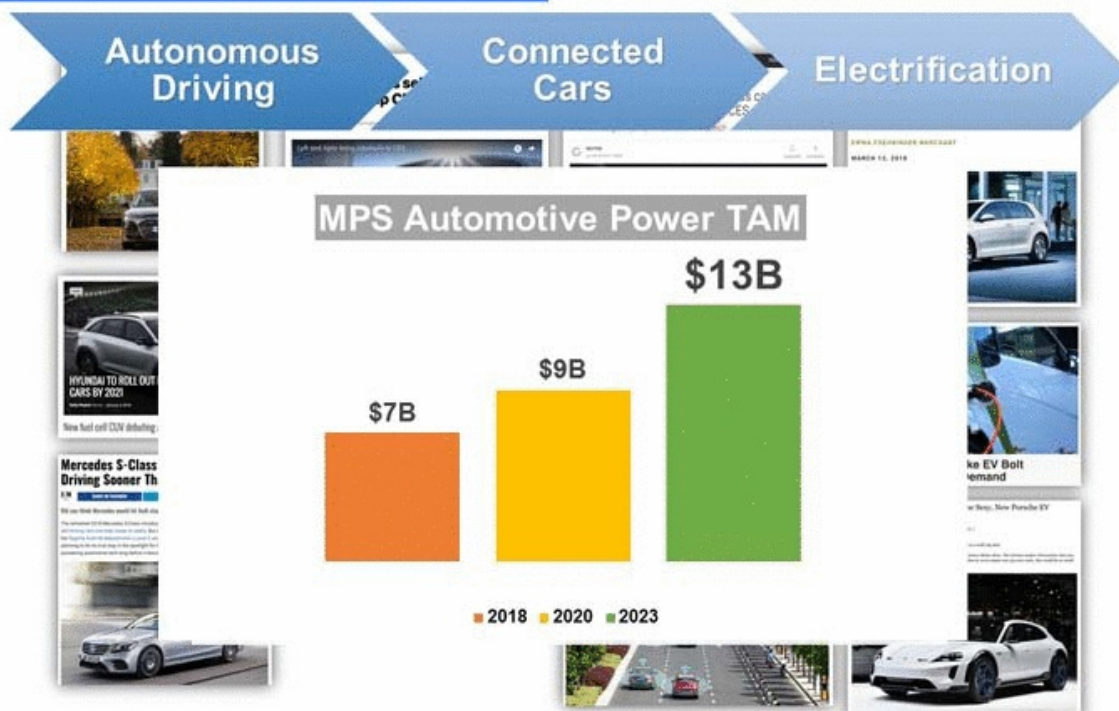
### Tier 1 Automotive Suppliers



### OEMs



# Three Major Automotive Trends



## Our Target Automotive Applications



**Digital Cockpit**  
Infotainment,  
Cluster, HUD, USB  
Charging



**Lighting**  
Matrix Headlamp,  
Dynamic Lighting,  
Interior



**Body Electronics**  
HVAC, Seat, Lift  
Gate, Auto Door  
Handle, Moonroof



**Battery  
Management**  
48V, HEV, EV



**ADAS**  
Radar, Camera,  
Lidar, Self-Driving  
Compute

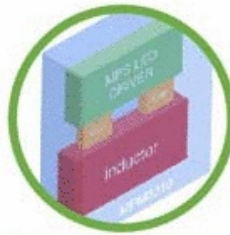


## Technology is Our Core Advantage



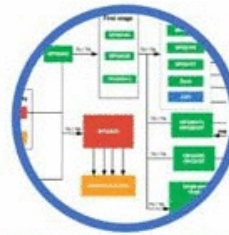
### Packaging

- **1ST AUTO QUALIFIED FLIP-CHIP POWER PART** approved by a major Tier 1 (top 5)
- **2X POWER DENSITY** vs competition
- **BILLIONS** of units shipped – solid track record



### Integration

- **WORLD'S MOST COMPACT** integrated LED driver module (with inductor)
- **4X SMALLER** than similar automotive solution from competition

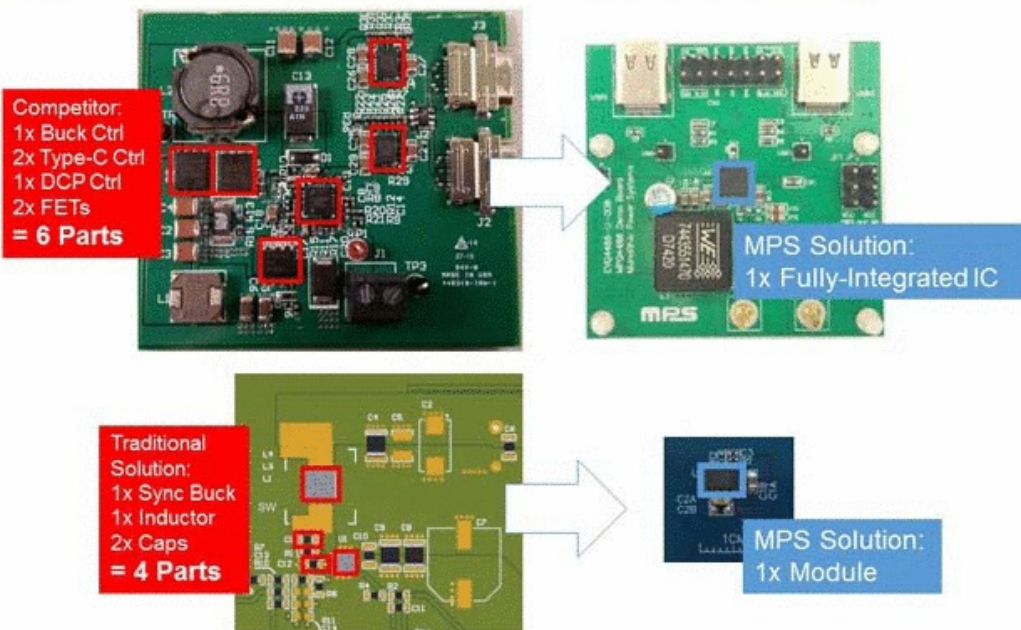


### Full Power Tree

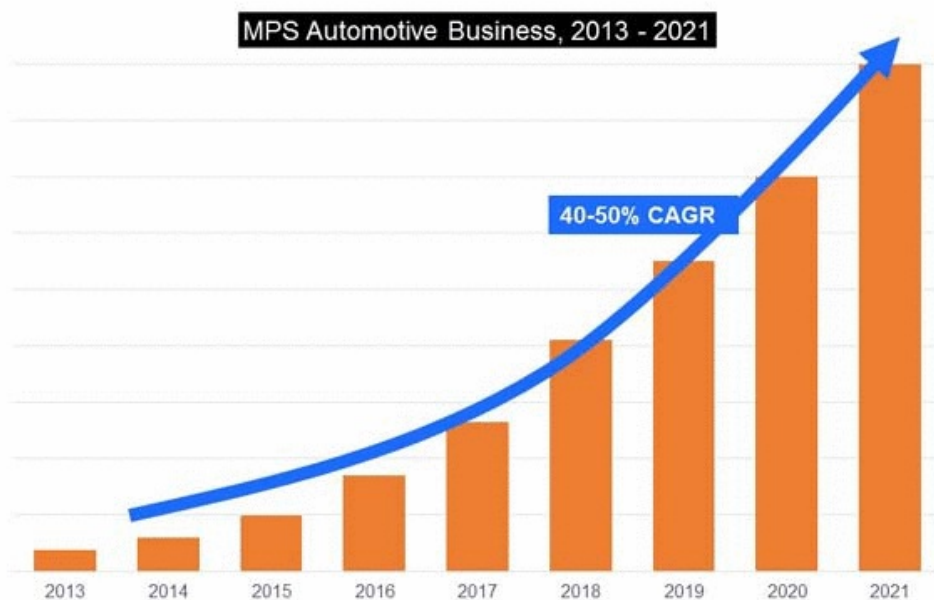
- **ONE-STOP SHOPPING** for every power rail
  - **ADVANCED FEATURES** like digital programmability
  - **RESIDENT EXPERTS** on hot topics like EMI and Thermal Management
-



## Higher Integration: USB Charging, Power Modules



## Automotive Long Term Goal



Questions?







**MPS**

---

**Break**

15 Min

**mPS**

---



# Michael Hsing

CEO

**mPS**

---

**e.Motion™**

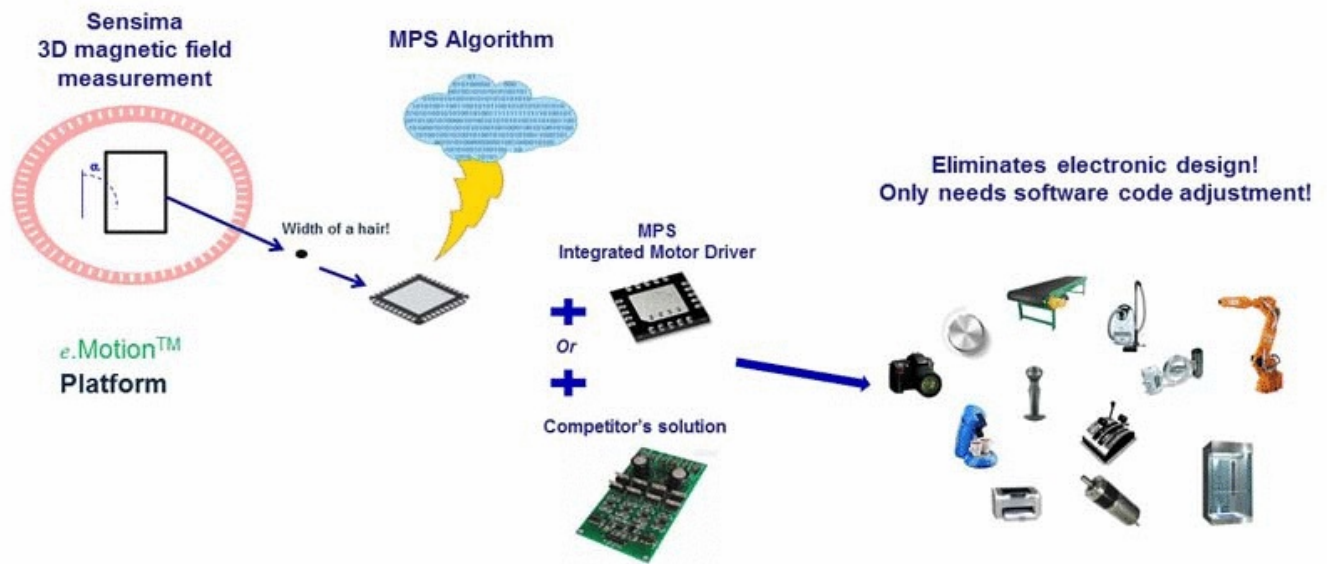
A Market in Motion

Jens Muttersbach

**MPS**

---

## How does *e.Motion*<sup>TM</sup> work?



**MPS**  
Simple, Easy Solutions



*e.*Motion™

Our Solution for Integrated Motion Control

One-stop Solution for Advanced Drive Tasks

## **POSITION SENSING**

Angle Feedback

Magnetic

Small & Robust

## **MOTOR DRIVERS**

Energizing the Windings

Efficiency

Size

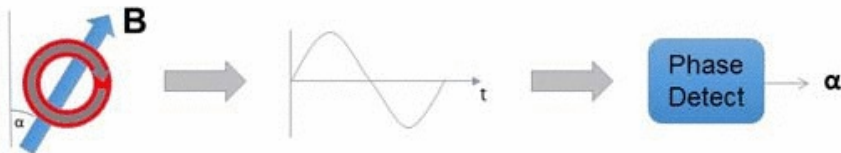
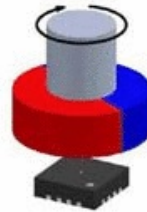
---

## Huge and Diverse Market

	Consumer	Industrial	Automotive
Pure Sensing			
Controlled Motion			

## MPS Spinaxis Technology– Our Unique Advantage

- MPS proprietary
- Integrated angle sensor
- Based on a simple time measurement



### Customer Benefits

Replace bulky optical encoders

Fast sensing

Robust setup

Lower power consumption

Small components

Attractive price

---



## MagAlpha Angle Sensor Family has Promising Growth

20+ products already have design wins:

Consumer

Industrial

Automotive

Medical



## Controlled Motion

### Leveraging MPS' strength in power semiconductors

Technology

Packaging

Testing

Support

#### Customer benefits

Size

Efficiency

Thermal

Cost

Stepper

Brushed DC

Brushless DC



## A lot of Drive in Motor Drivers

Portfolio addressing stepper, brushed and brushless DC motors

Providing high integration and efficiency in small footprints

### Design wins:

Consumer



Industrial



Automotive



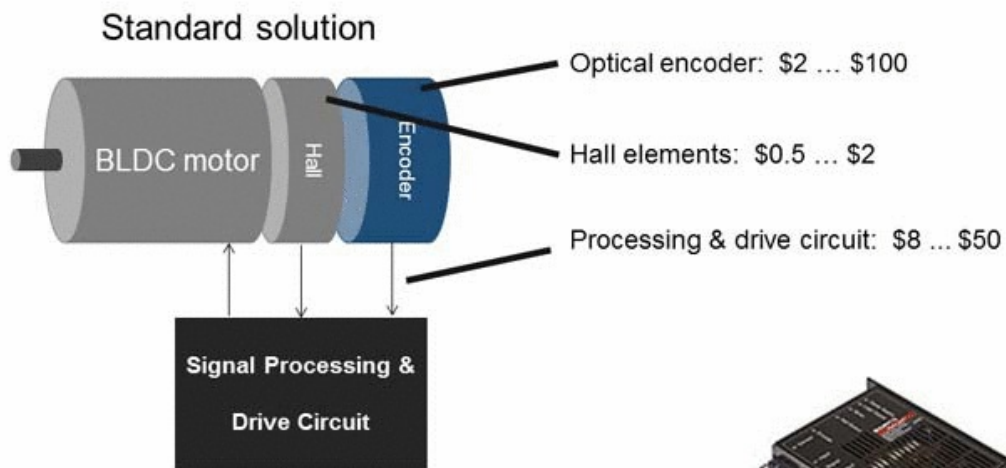
*e.*Motion™

Addresses the challenges & benefits of a growing market

### **Motion control market trends**

- Overall number of electric motors growing
  - Strong trend towards brushless DC motors
    - **Efficiency**
    - **Space**
    - **Noise**
    - **Torque ripple**
  - Challenge: cost for controlling BLDC motors
-

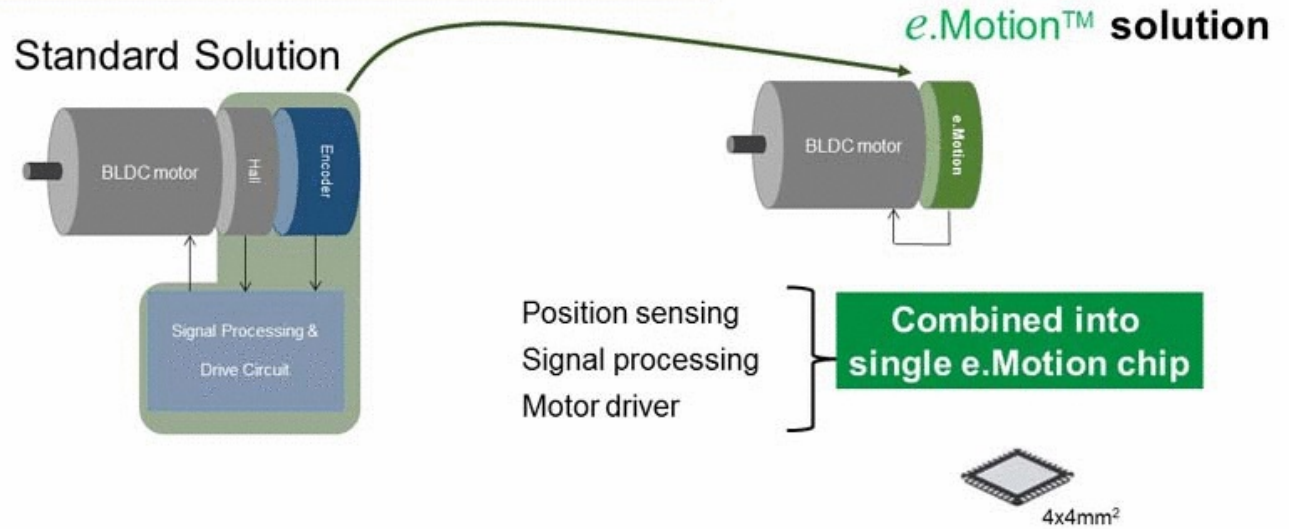
## Typical Motion Control



Overall System Size:  
2x ... 5x Volume of the Motor



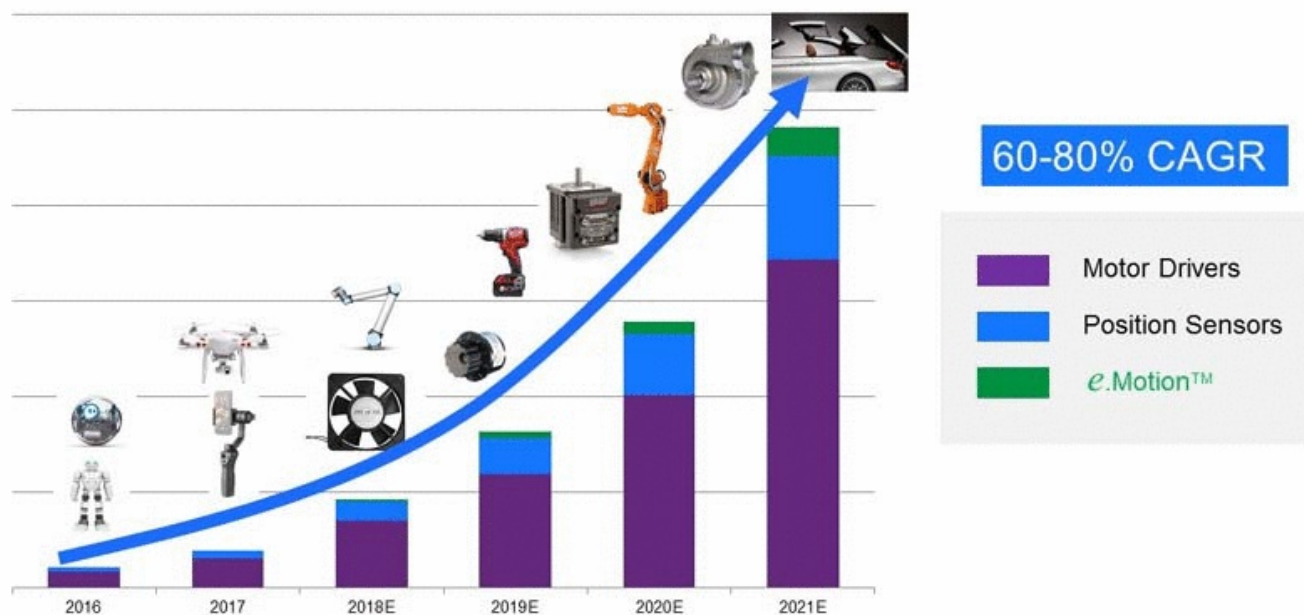
## Integrated Motion Control – e.Motion



Providing field-oriented control (FOC) algorithm to achieve best performance and efficiency

---

## Motion Control Long Term Goal



## Key Take-aways

- **Well positioned by unique technologies in both**
    - Magnetic position sensing
    - Motor drivers and pre-drivers
  - **High growth rates in these markets**
  - **Convergence into e.Motion**
    - Unique bundle for integrated motion control
    - High value for customers
  - **Technical & cost advantage for customer**
  - **Higher \$ amount per application**
-



Questions?





# Michael Hsing

CEO

**MPS**

---

# Product Families

## AC/DC Power Conversion

- High-Voltage Buck Regulator
- High-Voltage LDO
- Flyback Controller
- Flyback Synchronous Rectifier
- Active PFC Controller
- LLC Resonant Converter Controller
- LLC Synchronous Rectifier
- PFC&LLC Combo Controller
- X Cap Bleeder

## DC/DC Power Conversion

- Step-Up (Boost)
- Step-Down (Buck)
- Buck/Boost
- CPU Core Power
  - 50A DrMOS in a 5x5mm QFN

## Battery Management

- Li-Ion Single and Multi-Cell
- USB Complaint Chargers
- Switching Chargers
- Linear Chargers
- Integrated Power Bank Solutions

## Class-D Audio

- Analog Input Class-D Amplifiers
- PWM Input Power Stages

## Display Backlighting Power

- Backlight Drivers
- Electro-Luminescent Drivers
- Photo Flash Drivers
- LCD Power Supplies

## E-Fuse, USB & Load Switches

- Programmable Current Limit up to 50A per Device
- Adjustable Slew Rate
- Reverse Current Blocking
- Output Discharge (Load Switch)
- Integrated Auto Detection
- Pin Compatible
- Parallel able up to 10 Devices
- PMBus Command and Control

## Automotive & Industrial

- AEC-Q100
  - DC/DC
  - LED Lighting
  - Power Modules
  - Motor Drivers
  - USB Charging
  - Display Backlighting
  - Precision Analog

## LED Lighting & Illumination

- TRIAC Dimmable AC/DC LED Controller
- PWM and Analog Dimmable AC/DC LED Controller
- DC/DC LED Controller: Buck, Boost, & Buck-Boost
- LED Protection IC

## Computing Power

- CPU Core Power
- High current DrMOS
  - 60A DrMOS in a 4x5mm QFN
- POL

## Motor Drivers & Position Sensors

- Brushless DC Motor Driver
- Stepper Motor Driver
- Brushed DC Motor/Solenoid Driver
- Half-bridge/Full-bridge/Three-phase Power Stages
- Magnetic Angular Position Sensors

## Power Modules

- 6V, 600mA- 4A
- 16V, 600mA- 60A
- 21V, 600mA- 2A
- 36V, 600mA- 5A
- 55V, 1A- 3A
- 75V, 300mA

## Precision Analog

- Analog Switches
- Current Sense Amplifiers
- Operational Amplifiers
- Voltage Reference

**\$1B to \$2B**

**mPS**

---







## Parcel Sorters



Motor

Motor Control  
& DCDC



Optical  
Encoder



## Warehouse



Motor



Motor Control  
DCDC  
BMS



Battery



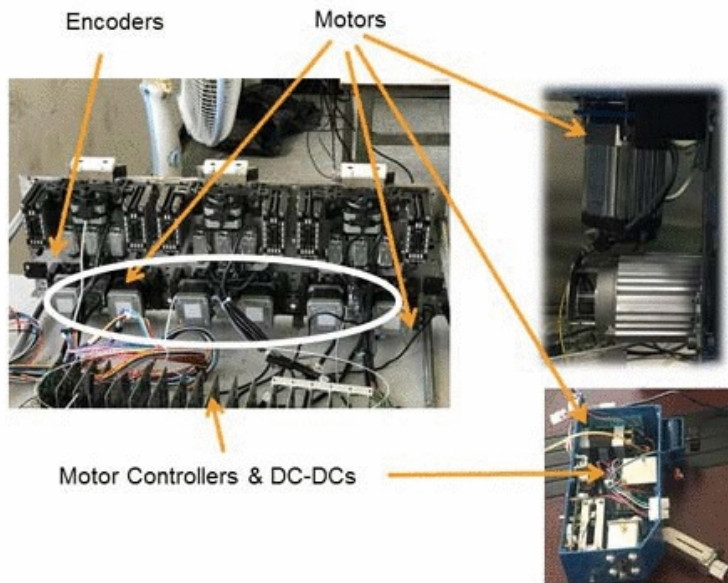


## Textile Machinery Modernization

Motor control / DC-DC



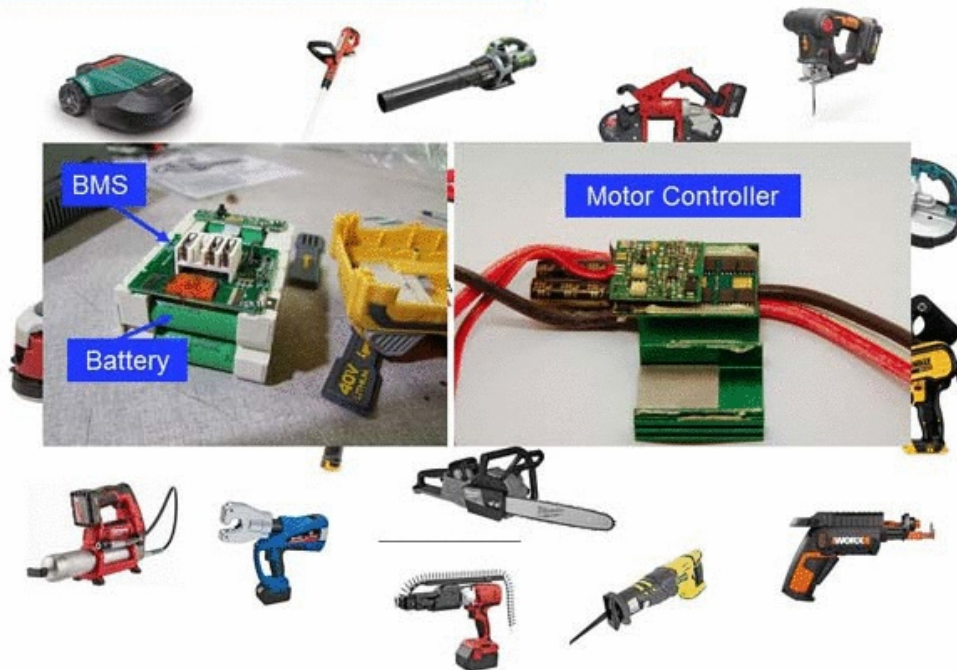
## Textile Machine Teardown



# Building Automation

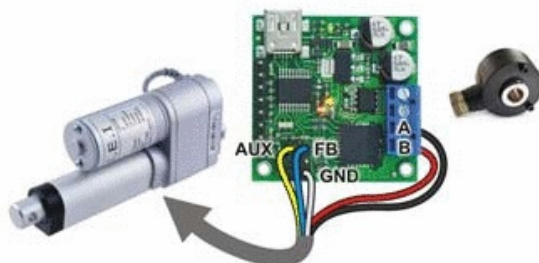


# Industrial Hand Tool Electrification





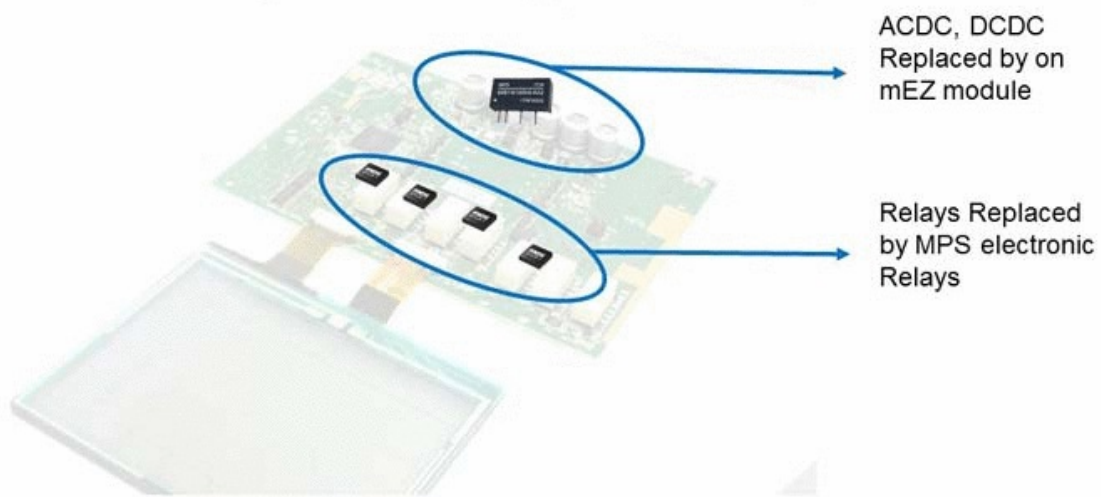
## Others



Motor Control, DC-DC  
AC-DC

---

## Other Large Market Segment



## Leveraging 2000+ Products

### AC/DC Power Conversion

- High-Voltage Buck Regulator
- High-Voltage LDO
- Flyback Controller
- Flyback Synchronous Rectifier
- Active PFC Controller
- LLC Resonant Converter Controller
- LLC Synchronous Rectifier
- PFC&LLC Combo Controller
- X Cap Bleeder

### DC/DC Power Conversion

- Step-Up (Boost)
- Step-Down (Buck)
- Buck/Boost
- CPU Core Power
  - 50A DrMOS in a 5x5mm QFN

### Battery Management

- Li-Ion Single and Multi-Cell
- USB Complaint Chargers
- Switching Chargers
- Linear Chargers
- Integrated Power Bank Solutions

### Class-D Audio

- Analog Input Class-D Amplifiers
- PWM Input Power Stages

### Display Backlighting Power

- Backlight Drivers
- Electro-Luminescent Drivers
- Photo Flash Drivers
- LCD Power Supplies

### E-Fuse, USB & Load Switches

- Programmable Current Limit up to 50A per Device
- Adjustable Slew Rate
- Reverse Current Blocking
- Output Discharge (Load Switch)
- Integrated Auto Detection
- Pin Compatible
- Parallel able up to 10 Devices
- PMBus Command and Control

### Automotive & Industrial

- AEC-Q100
  - DC/DC
  - LED Lighting
  - Power Modules
  - Motor Drivers
  - USB Charging
  - Display Backlighting
  - Precision Analog

### LED Lighting & Illumination

- TRIAC Dimmable AC/DC LED Controller
- PWM and Analog Dimmable AC/DC LED Controller
- DC/DC LED Controller: Buck, Boost, & Buck-Boost
- LED Protection IC

### Computing Power

- CPU Core Power
- High current DrMOS
  - 60A DrMOS in a 4x5mm QFN
- PQL

### Motor Drivers & Position Sensors

- Brushless DC Motor Driver
- Stepper Motor Driver
- Brushed DC Motor/Solenoid Driver
- Half-bridge/Full-bridge/Three-phase Power Stages
- Magnetic Angular Position Sensors

### Power Modules

- 6V, 600mA- 4A
- 16V, 600mA- 60A
- 21V, 600mA- 2A
- 36V, 600mA- 5A
- 55V, 1A- 3A
- 75V, 300mA

### Precision Analog

- Analog Switches
  - Current Sense Amplifiers
  - Operational Amplifiers
  - Voltage Reference
-



## MPS Reconfigurable Standard Products

DC-DC



AC-DC



Motion Control



LED Lighting



Audio Amp



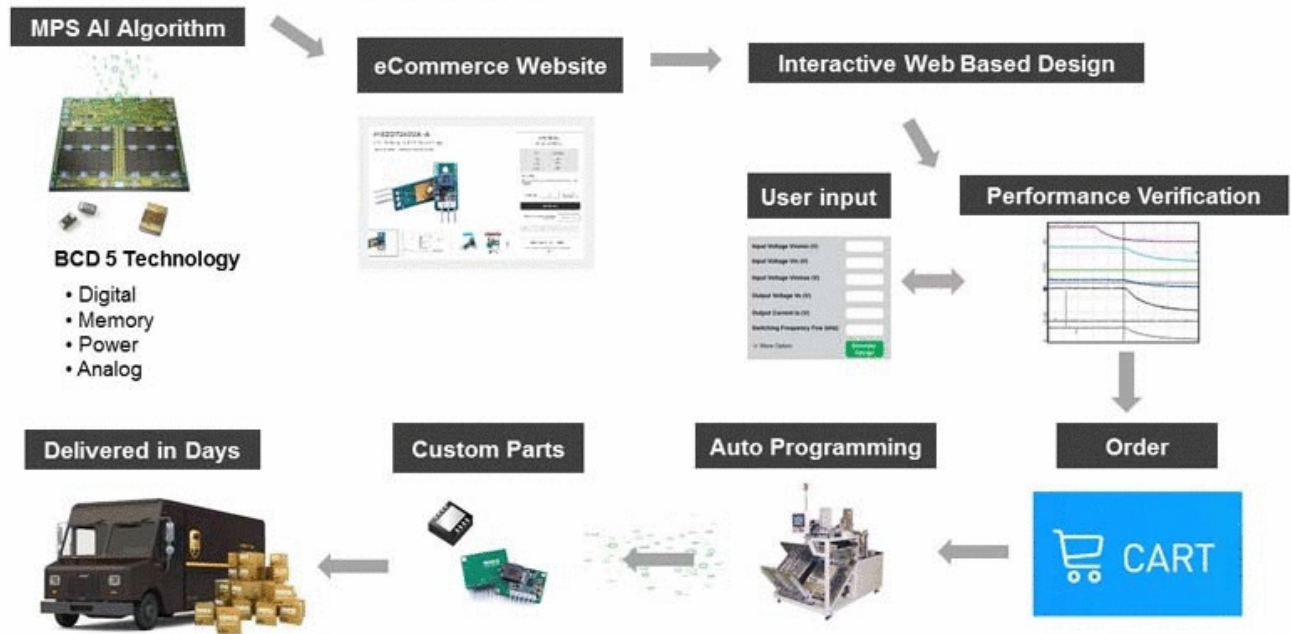
Sensors



# **E to E through eCommerce**

---

## E to E through eCommerce



Questions?





**MPS**

---

# How MPS Wins with Field Programmable Modules and e-Commerce

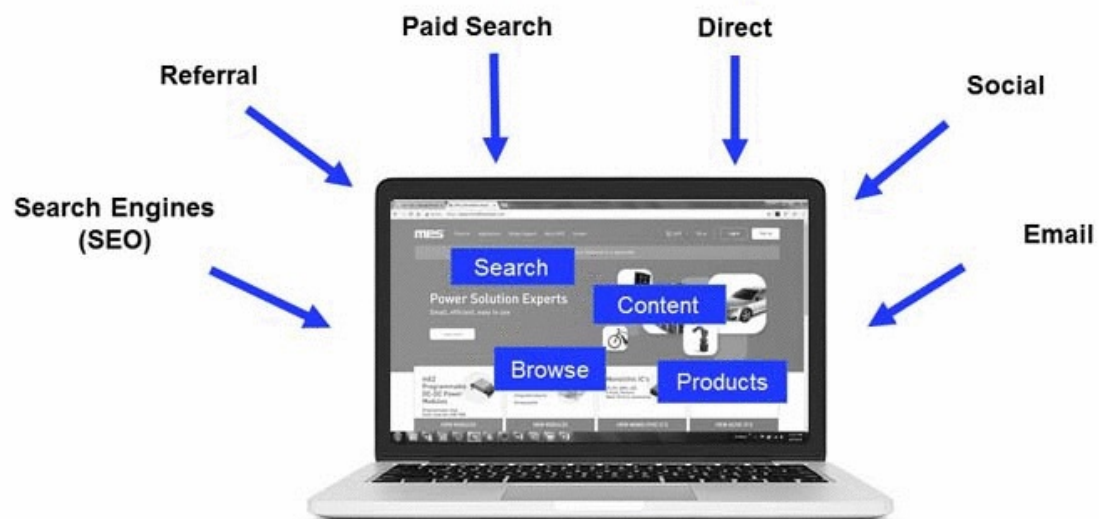
Dean Gannon

**mPS**

---

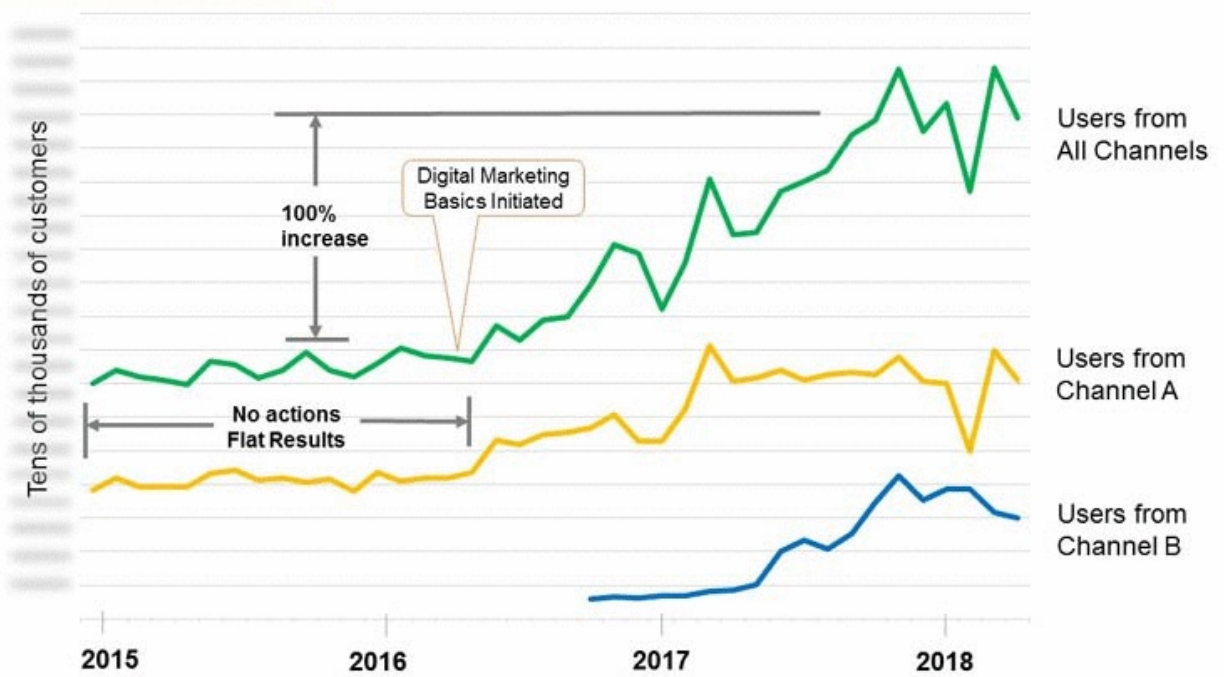
## Reaching Customers at Scale

### Website Customer Acquisition





## Website User Growth



STEP 1  
**Create Your Design**

STEP 2  
Evaluate Your Design

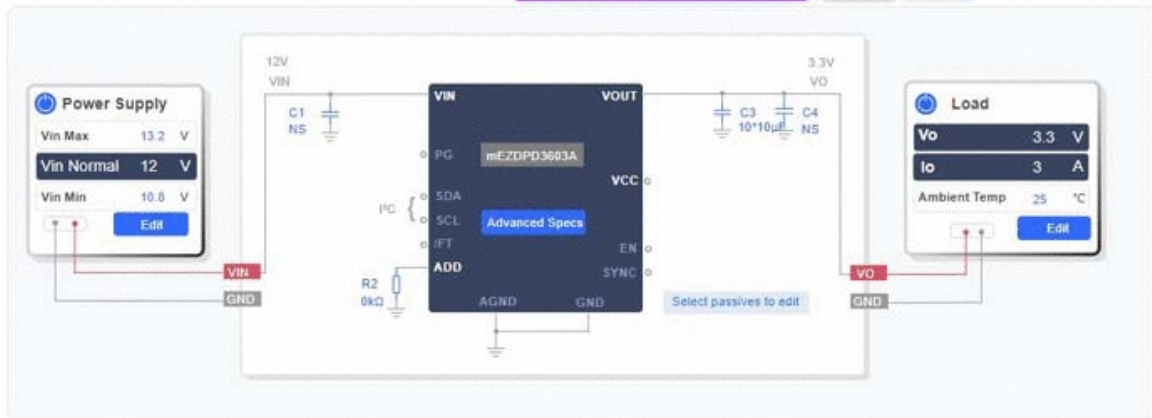
STEP 3  
Get Production Ready

Name of Customer's Design v1.0

My Design: 2 Orderable 0 Modified


+NEW

Save



## E to E Service/Solution through eCommerce

Every Design Customized



Input Voltage Vinmin (V)	<input type="text"/>
Input Voltage Vin (V)	<input type="text"/>
Input Voltage Vinmax (V)	<input type="text"/>
Output Voltage Vo (V)	<input type="text"/>
Output Current Io (V)	<input type="text"/>
Switching Frequency Fsw (kHz)	<input type="text"/>
✓ More Option	<input type="button" value="Simulate Design"/>

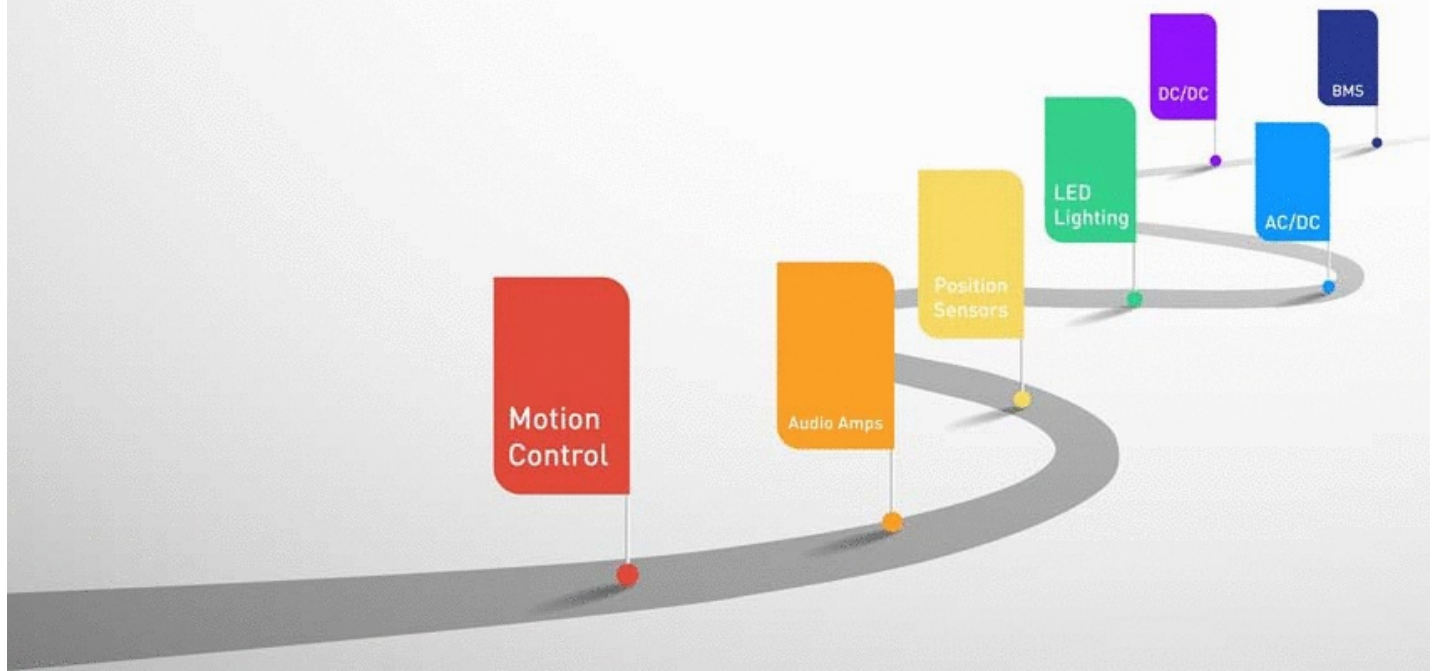
MPS Algorithm



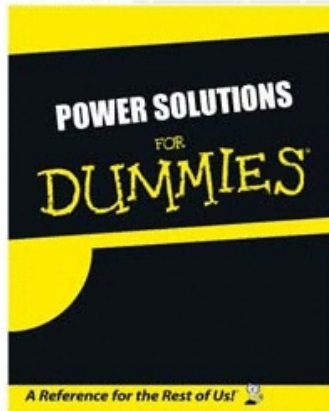
Custom Parts Delivered in Days



# Product Roadmap



## Turnkey Power Solutions



**\$9B Addressable Market**

---

Questions?





**MPS**

---



# Financial Summary

Bernie Blegen

**MPS**

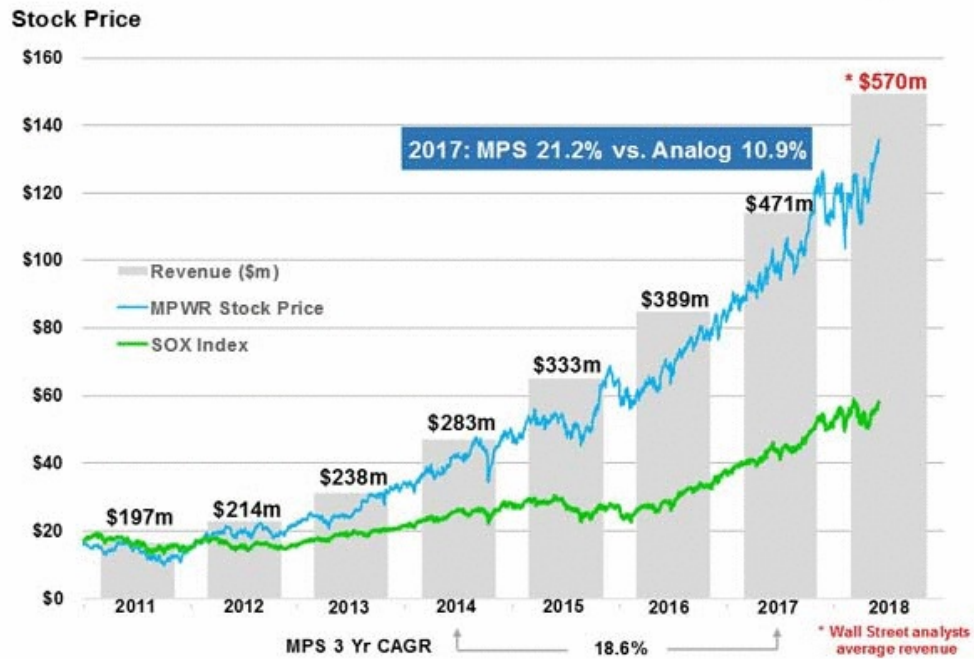
---

## Q2 '18 Guidance

	Initial Guide April 26, '18	Updated June 7, '18
Revenue	\$135 – \$141M	<b>\$138 – 141\$M</b>
Non-GAAP Gross Margin%	55.4% - 56.4%	<b>55.6% – 56.4%</b>
Non-GAAP R&D + SG&A	\$33.7 – \$36.7M	<b>\$34.7 – \$36.7M</b>
Stock Comp	\$15.2 – \$17.2M	<b>\$15.2 – \$17.2M</b>
Fully diluted shares	43.9 – 44.9M	<b>43.9 – 44.9M</b>

---

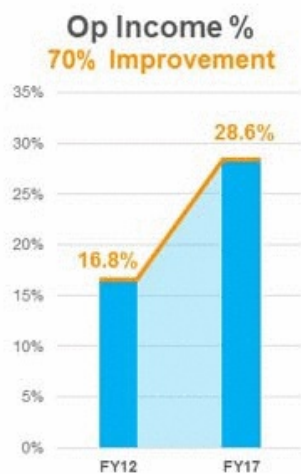
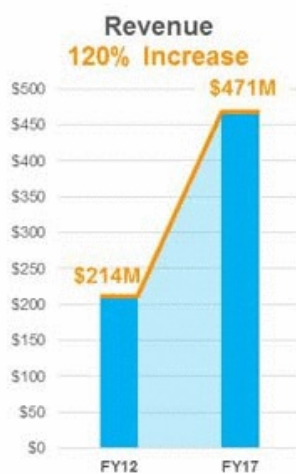
## Consistent Revenue Growth & Shareholders' Return



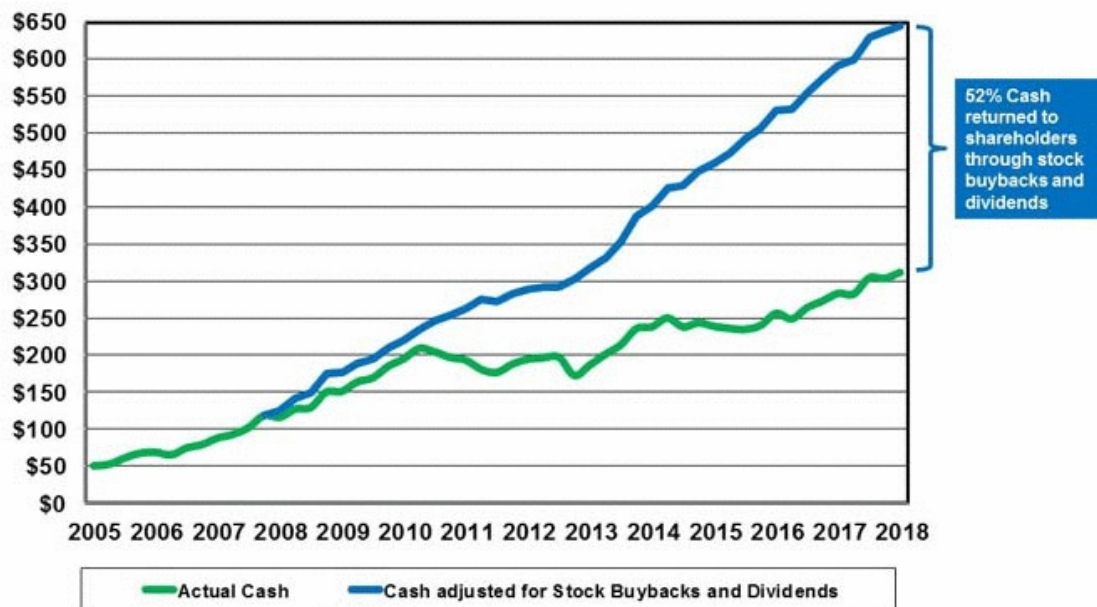
## Diverse End Markets

% of Revenue	2010	2014	2017	18Q1	2014-2017 CAGR
Automotive	1.9%	4.2%	11.4%	15.5%	65.4%
Storage / Computing	10.4%	16.3%	21.4%	23.5%	29.7%
Industrial / Other	4.8%	13.2%	13.4%	12.6%	19.2%
Consumer	65.1%	43.4%	40.3%	36.7%	15.6%
Communications	17.8%	22.9%	13.5%	11.7%	-0.5%
Total	100%	100%	100%	100%	18.6%

## Operating Leverage and Margin Expansion



## Capital Allocation



## Growth Drivers by End Market

### Computing

Cloud Based  
Data Center

GPU's

Portable

Storage

Artificial  
Intelligence

### Automotive

Body Controls

LED Lighting

ADAS

Battery  
Management

Infotainment

### Industrial

Instrumentation

Factory & Bldg  
Automation

Robotics

Healthcare

Commercial  
Lighting

### Infrastructure

5G and Wireless

Base Stations

Networking

Optical

### Consumer

IOT

Wireless  
Charging

Power  
Management

Augmented  
Reality





## SAM Expansion

Market	2015 SAM	2018 SAM
Automotive	\$6B	\$7B
Motion Control	\$2B	\$3B
ACDC	\$1B	\$2B
Modules	\$1B	\$2B
Cloud Computing (Server / Storage)	\$800M	\$1B
Networking / Telecom	\$600M	\$1B
Battery Management	\$600M	\$1B
<b>Total Market SAM</b>	<b>\$12B</b>	<b>\$17B</b>

---

## Strategic Goals

- ☒ Full digital solutions – Synthetic Analog
  - ☒ Integrated, software based, control with 3D sensor motor drive
  - ☒ Advanced power analog processes
  - ☒ Continued Compute and Automotive gains
  - ☒ Future Network Infrastructure and Industrial wins
-

## Financial Model (Non-GAAP) June 2018

Financial Model			2017	2021	
	2015	2018	Actual	Target	Chg v '17
Revenue, YoY	20+% growth	20+% growth	\$470.9m	\$1BN	114%
Gross Margin	Mid to High 50's	Mid to High 50's	55.6%	57.5%	1.9 pts
R&D & SG&A	50% – 60% of annual revenue growth%	50% – 60% of annual revenue growth%	27.0%	21.5%	(5.5) pts
Operating Margin			28.6%	36.0%	7.4 pts
Capital Allocation		30% – 40% of free cash flow	34.0%		

## Q&A

<b>Michael Hsing</b>	CEO
<b>Bernie Blegen</b>	CFO
<b>Maurice Sciammas</b>	VP of Sales and Marketing
<b>Jinghai Zhou</b>	Cloud Computing
<b>Chris Sporck</b>	Battery Management
<b>Allen Chen</b>	Automotive
<b>Dean Gannon</b>	e-Commerce
<b>Jens Muttersbach</b>	e.Motion

---

## Closing Summary

- Disruptive new products allowing unprecedented levels of integration, efficiency and ease of use.
- Pressing ahead with process technology lead
- Expanding in high growth, end markets of Automotive, Industrial, Cloud Computing and Networking
- Significant operating leverage while continuing to invest in next generation products and markets