



December 2021









#### Forward-Looking Statements/Non-GAAP Metrics

These slides accompany an oral presentation by Power Integrations, Inc., which contains forward-looking statements. Each statement relating to events that will or may occur in the future is a forward-looking statement. The Company's actual results may differ materially from those suggested in the presentation. Information concerning factors that could cause such a difference is contained in the Company's most recent report on Form 10-K.

This presentation may also contain certain non-GAAP financial information. Reconciliations of non-GAAP financial metrics to GAAP results are available on the investor page of the Power Integrations website, <a href="http://investors.power.com">http://investors.power.com</a>.



#### ICs for Energy Production, Transmission & Consumption



POWER MANAGEMENT



Technology leader in ICs for energyefficient AC-DC power supplies



LED DRIVERS



High-efficiency driver ICs energizing the LED lighting revolution



GATE DRIVERS



Gate drivers for renewable energy, DC transmission, electric locomotives and more



MOTOR



Highly-efficient, reliable and integrated motor drivers



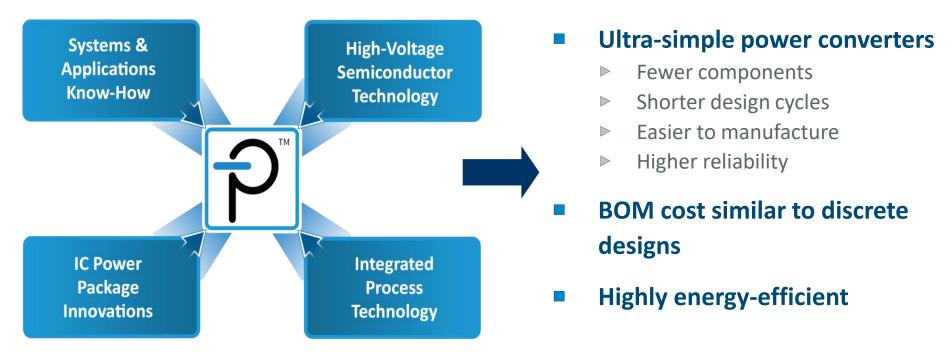
AUTOMOTIVE SOLUTIONS



Automotive solutions for efficient, compact high-voltage power conversion and control



## **Comprehensive Expertise in High Voltage**





#### **Long-Term Secular Growth Drivers**

#### Ongoing transition to highly integrated power supplies

▶ Integration saves labor and materials, improves reliability

#### Enabler of reduced carbon emissions

- EcoSmart<sup>™</sup> technology saves equivalent of 1.6M homes' electricity usage each year by reducing standby consumption in electronics and appliances
- Strong presence in renewable energy, electric transportation, efficient high-voltage DC transmission

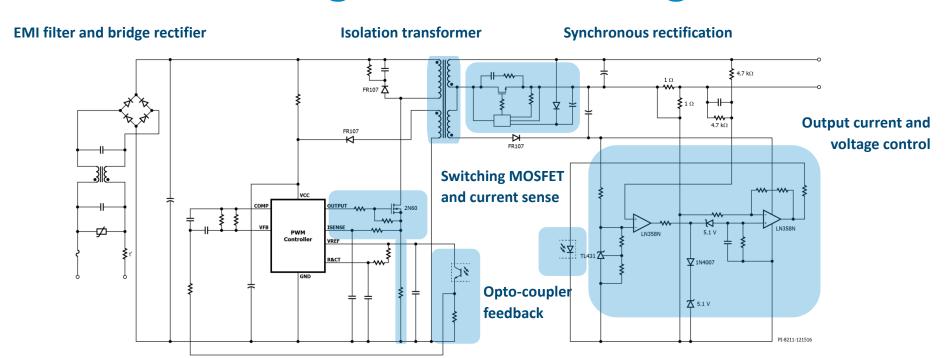
#### Gallium-nitride (GaN) technology expands dollar content, increases efficiency

#### **■** Expanding high-voltage market opportunity – SAM up ~3x since 2010

- Advanced chargers for smartphones, tablets, notebooks
- ▶ Home & building automation / smart lighting and appliances / IoT / smart utility meters
- ▶ Electrification of tools and transportation
- ▶ BridgeSwitch™ motor-drive ICs expand appliance SAM
- ▶ LED lighting
- Sizeable opportunity in electric vehicles



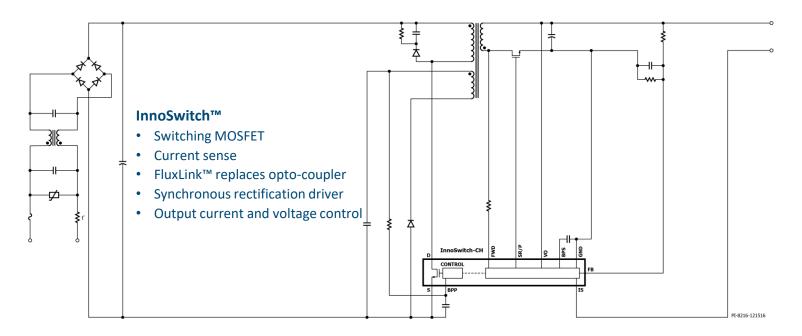
#### The Power Integrations Advantage



**Conventional Phone Charger - More than 60 Components** 



#### The Power Integrations Advantage

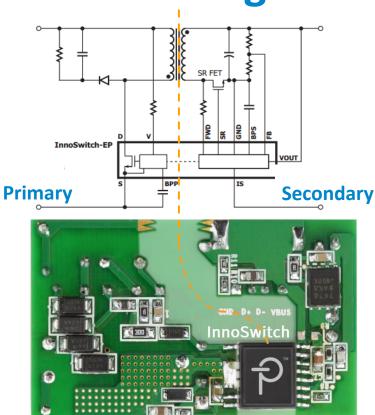


Phone-charger using InnoSwitch-CH – only 24 components



## InnoSwitch™: A Higher Level of Integration

- First IC to integrate primary and secondary sides of power supply across safety barrier
  - Enabled by FluxLink™ technology
- Drastic reduction in component count, complexity
- Highly energy-efficient
  - Very high efficiency
  - Very low standby consumption





#### **GaN Is the Future of Power Conversion**

#### GaN transistors are better than silicon

- More efficient, cooler, smaller power supplies
- Eliminates heatsinks even at high power levels

#### Proprietary GaN switches integrated into our ICs

Far easier to use than discrete GaN transistors

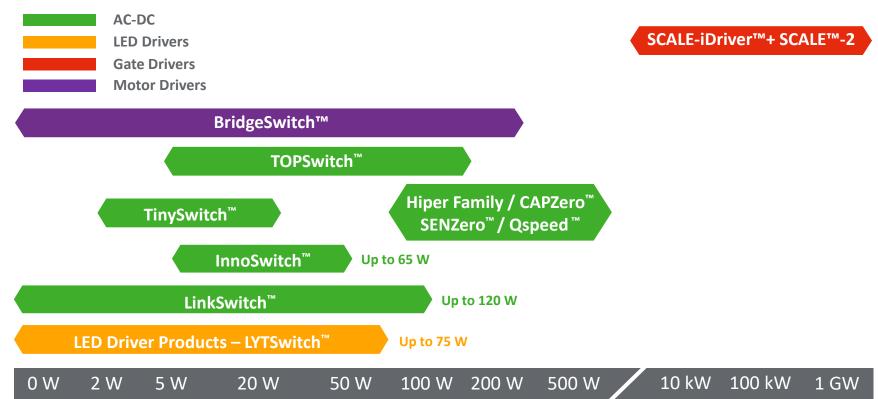


#### GaN now utilized in a broad range of POWI products and applications

- Advanced chargers (smartphone, tablet, notebook, multi-port)
- TVs, appliances, USB wall outlets, more



## **Spanning a Wide Power Range**





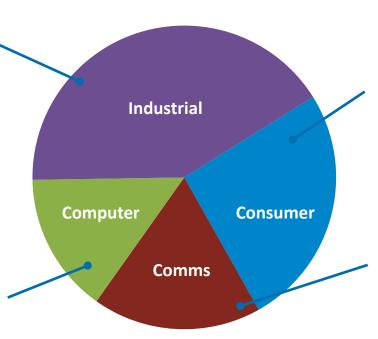
#### **Power Everywhere**





#### Addressable Market Now \$4+ Billion

- LED lighting
- Home/building automation
- Smart meters
- Industrial controls
- Battery-powered tools
- EV auxiliary power supplies
- Industrial motor drives
- Wind/solar inverters
- Electric trains/buses
- DC transmission
- Medical
- Desktop/server standby
- Desktop main
- Notebook/tablet adapters
- LCD monitors
- Printers



- White goods
- Air conditioners
- TV standby / TV main
- Small appliances
- Set-top boxes
- DVD players
- Game consoles
- Mobile phone chargers
- Cordless phone adapters
- Broadband modems
- VoIP phones
- Wireless routers

High-power applications in red



## **Technology Trends Bring SAM Expansion**

- Rapid charging for mobile-device market
  - Faster chargers = greater dollar content, higher efficiency
- Home & building automation / smart lighting and appliances / IoT
  - Smarter homes and appliances = more power needed = greater POWI dollar content
- Electrification creating new opportunities in tools, transportation
  - Lithium-ion batteries replacing gas and plug-in electric for lawn equipment, vacuums
  - ▶ Electric cars, locomotives, buses, delivery vehicles, etc.
- Conversion to brushless DC motors in appliances
  - ▶ BridgeSwitch™ ICs target BLDC motors up to 400W
- LED lighting requires efficient, reliable AC-DC drivers
- GaN-based ICs increase dollar content and performance



#### **Advanced Chargers for Mobile Devices**

#### Single, high-power adapter for travel is becoming common

- Standardization around rapid-charge protocols and connectors
- ► High power needed to charge larger batteries and multiple devices

#### Rapid growth in aftermarket brands

- Smaller is better
- Consumers engaged

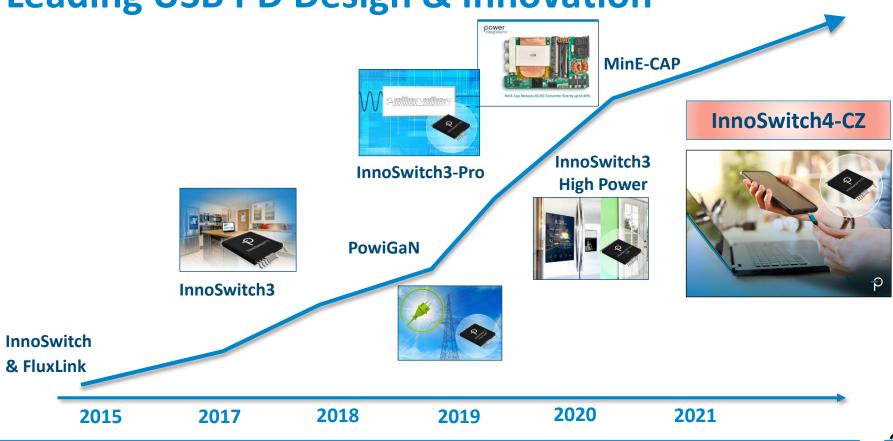
#### Expanding USB charging ecosystem

- Wall outlets, appliances, tool chargers adding USB ports
- Small space requires compact design, no heatsinks



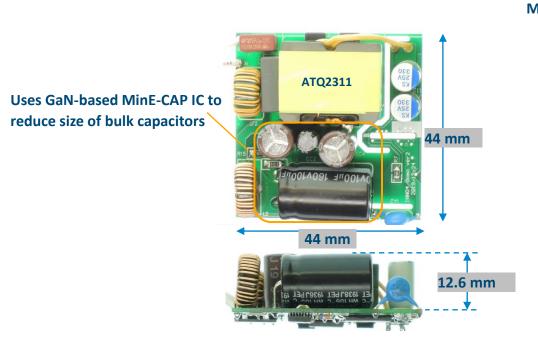


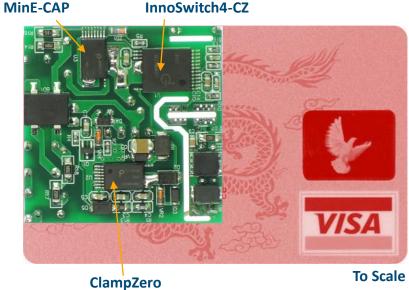
**Leading USB PD Design & Innovation** 





#### Compact 60W Charger with InnoSwitch4-CZ & ClampZero





Volume = 24.4 cm<sup>3</sup>
Power Density = 2.5 W/cm<sup>3</sup>
No heatsinks



## **PowiGaN Winning Big in Advanced Chargers**



100W Multi-Port



33W USB PD



33 W USB PD



47W Dual Port



45W USB PD



65 W USB PD

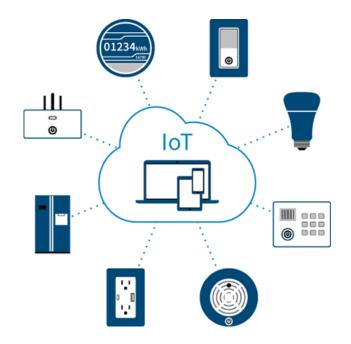


20W Slim Charger





## **IoT / Home Automation / Fixed Charging**





USB-C power receptacle with InnoSwitch3

Reliability, low standby power critical for IoT devices and USB receptacles



#### **BridgeSwitch™ Motor-Driver ICs for BLDC Motors**

- 98.5% efficiency
- Integrated half-bridge architecture eliminates heatsinks



- Simplifies and shortens regulatory approval
- Hardware fault management simplifies software
- Ideal for appliances white goods and industrial
  - Ceiling fans, water pumps, air-conditioning, motors









## **LYTSwitch™ Drivers for LED Lighting**

- Traditional light sources phasing out
- LEDs need efficient, reliable AC-DC drivers
- Integration brings reliability, efficiency, size advantage







## **Gate Drivers for High-Power Market**

Acquired CT-Concept in 2012

Addressing applications 10 kW to 1 GW

 DC industrial motors, renewable energy, electric transportation, DC transmission

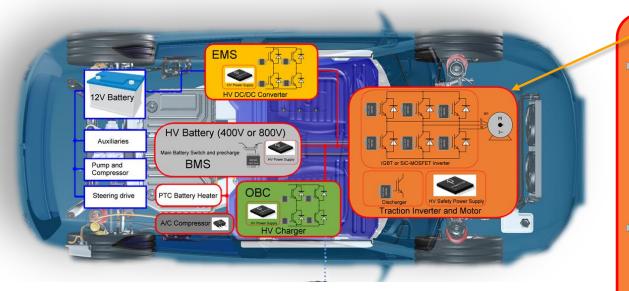
Drivers for IGBTs and SiC switches



SCALE™ drivers reduce component count, enhance efficiency, reliability



#### **EVs Bring High Voltage to the Auto Industry**



- Tens of dollars of potential content per car
  - Drive train, charging, DC-DC conversion
- Several POWI products now auto-qualified

#### **Traction Inverter**

SiC MOSFET or IGBT gate drivers



- Emergency power supply
  - InnoSwitch3-AQ





#### **Global Presence**

- Headquarters in San José, California
- Design centers: U.S., Canada, Switzerland, UK, Germany, Malaysia, Philippines
- 19 field labs worldwide



- PI Locations
- ☐ Wafer Foundry (Lapis, EPSON, X-FAB, Toshiba)
- ☐ Assembly Subcontractor





#### **Financials**



Best Financially Managed Semiconductor Company Achieving up to \$1 Billion in Annual Sales

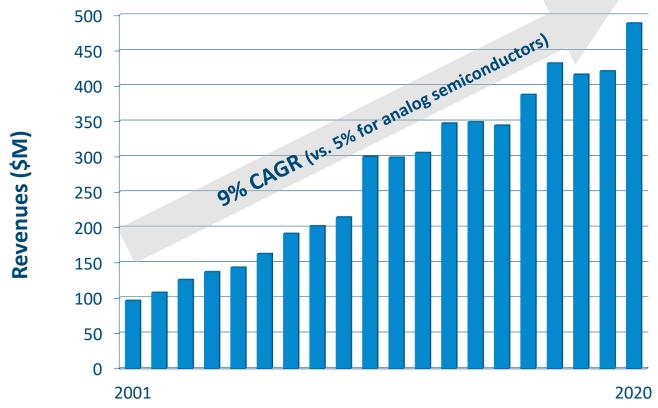


### **Target Financial Model**

- Low-double-digit revenue growth
  - Up 57% for first nine months of 2021
  - 9% CAGR since 2001
- Non-GAAP gross margin 50-55%
  - ▶ 51.1% for first nine months of 2021
- Non-GAAP operating margin 25%+
  - 30.3% for first nine months of 2021



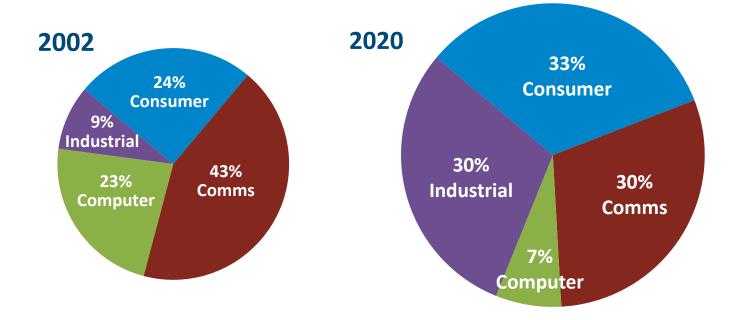
#### **Track Record of Growth**



Note: Revenues prior to 2017 do not reflect ASC 606 recast; see company website for recast financial data for 2015-2016

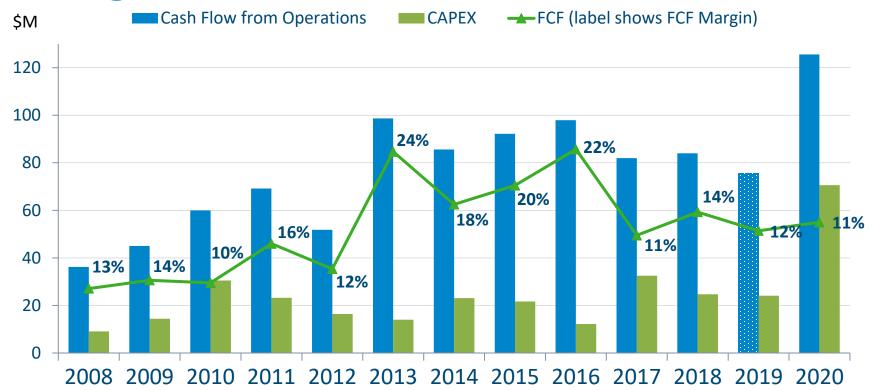


#### **Well-Diversified Revenue Mix**





### **Strong Cash Flow**

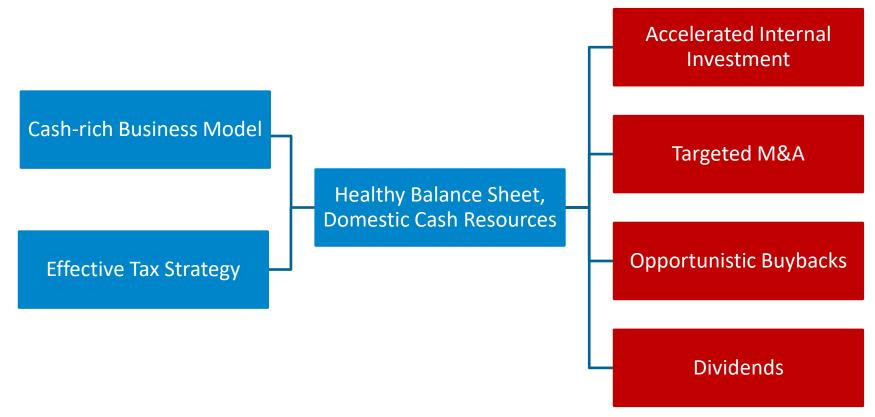


FCF = Cash flow from operations less capital expenditures

2019 GAAP Cash from Operations = \$224.5M; above excludes impact of litigation settlement



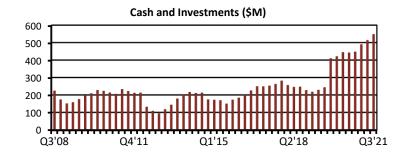
#### Four-Prong Approach to Capital Management

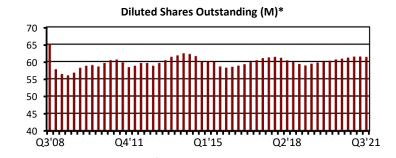


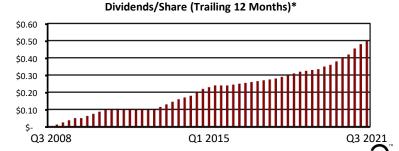
### **Strong Balance Sheet**

At September 30, 2021

- \$549M cash and investments
  - \$175M litigation settlement received in Oct. 2019
- No debt
- Quarterly dividend of \$0.15/share
  - Raised dividend by \$0.02 in Q4 2021
- Share count down 6% since 2008
  - ▶ 120K shares repurchased in Q3 2021 for \$9.8M







## Sustainability: Saving energy and reducing e-waste

Visit our sustainability site for additional ESG-related information: <a href="https://www.power.com/company/sustainability-and-citizenship">https://www.power.com/company/sustainability-and-citizenship</a>



## Recognized Leader in Energy Efficiency

- Member of clean-tech stock indices
  - The Cleantech Index (CTIUS)
  - Nasdaq Clean Edge Green Energy (CELS)
  - Ardour Global Index (AGIGL)
  - ECPI Global Clean Energy Index (GALPHCLN)
- Twice named a top 20 sustainable stock by SustainableBusiness.com
- ENERGY STAR® award recipient
- Star of Energy Efficiency award recipient







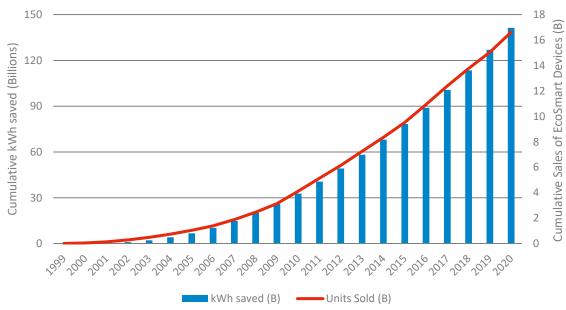




#### **EcoSmart™ Technology Saves Energy**

- >16 billion EcoSmart chips sold since 1998
- >140B kWh of standby energy saved since 1999
  - >\$14B saved by end users
- Saving equivalent of 1.6M homes' entire electricity usage each year\*
  - Saving >6M tons of CO<sub>2</sub> emissions annually\*\*







<sup>\*</sup> Source: U.S. EPA Greenhouse Gas Equivalencies Calculator

<sup>\*\*</sup>Based on 2019 U.S. average of 0.92 lbs./kWh, per U.S. Energy Information Administration

## **Energy Vampire vs. LinkZero™**





### **Energy-Efficiency Specs Drive Innovation**

External power supply requirements in Europe tightened in 2020



ENERGY STAR® "Most Efficient" label rewards top performers



- SEAD awards for connected efficiency
- Light bulbs in U.S. now required to be 60-70% more efficient than standard incandescent bulbs

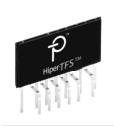




#### **POWI Products Reduce E-waste**

**Two Hiper™ ICs replace up to 100 components** 





**HiperPFS**, **HiperLCS** / **HiperTFS** 





# POWEr integrations

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