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**Monolithic Sync Buck Regulator Operates Efficiently Up to 18 V**, Alpha and Omega Semiconductor’s AOZ3101synchronous buck regulator.

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**Tiny Low-Side Drivers Ease Power System Design**, Infineon Technologies’ IR44252L, IR44272L, and IR44273L low-side drivers

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**Wearable Wireless Charging Products Open New Area—Vertical Charging**, NuCurrent’s new wearable products including customizable receivers

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**1600-W Converters And Battery Chargers Endure Severe Environments**, Schaefer’s C/B 4500 series 6U dc-dc and ac-dc converter modules and battery chargers

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**Rectiverter Performs Bidirectional AC-DC power Conversion In A Single Module**, Eltek’s Rectiverter HE power conversion module

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**Power Management ICs Are Optimized For Intel’s Skylake Core Processor**, Rohm’s BD99991GW and BD99992GW power management ICs

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**Three-Phase, High-Input Voltage AC-DC Power Supplies Deliver Up To 500 W**, ABSOPULSE Electronics’ HTP 300-F3 and HTP 500F-FXW series power supplies

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Mounting Kit May Redefine Performance Of DIN-Rail Power Supplies,
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Probe Adapter For VNA Eases Power Integrity Testing,
Picotest J2160A probe adapter for Keysight E5061B vector network analyzer

Reference Design For Medium-Power Wireless Power Receiver Is Qi-Certified,
Reference design using the BD57015GW wireless power receiver IC

Compact Regenerative Load To Be Demo’d At APEC,
ELR9000 series of electronic dc loads

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Isolated Gate Drivers Offer High Noise Immunity,
Enabling Fast Switching,
Silicon Labs’Si827x ISOdriver family of isolated gate drivers

Highly Integrated Multi-Phase Boost Controllers Simplify Automotive Designs,
Intersil’s ISL78227 and ISL78229 two-phase synchronous boost controllers

250-W Power Supplies Suit Extreme Environments,
ABSOPULSE Electronics’ PPF 250-P59X ac-dc power supplies

Precision P-Channel MOSFETs Revamp Current Mirrors, Sources And Oscillators,
Advanced Linear Devices’ ALD310708A and ALD310708 quad p-channel EPAD MOSFET arrays

Controllers Feature Ultra-Stable On-Resistance For Power Rail Switching,
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APEC 2016 Exhibition Offers Vast Showcase of Magnetic Components
• Planar Transformers From Watts To 100+ kW,
  Payton Planar’s planar transformers
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- Metal Hybrid SMD Power Inductors, Sumida America Components’ CDMT40D20 series power inductors
- Metal Alloy Power Inductors, Chip Bead Ferrites And Design Tools, Wurth Electronics Midcom’s WE-MAPI metal allow power inductors, SMD chip bead ferrites and Smart Transformer Selector design tools
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- Laser Direct Structuring Bobbins And 3D Printing, Norwe’s LDS bobbins and 3D printing technology (rapid prototyping)
- Broadband Conical Inductors For Bias Tees, Gowanda Electronics’ C550FL series of wirewound, flying-lead broadband conicals

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GaN Power ICs Integrate Power FET With Gate Drive And Logic, Navitas Semiconductor’s 650-V GaN Power ICs

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650-V GaN FET Delivers Low On-Resistance In TO-247, Transphorm’s TPH3207WS GaN FET

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Free Engineering Design Calculators Overcome Limitations Of Existing Math Tools, OneSolver.com’s engineering design calculators

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Tool Configures Modular Power Systems From Source To Points Of Load, Vicor’s Power System Designer
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DC Electronic Loads Span 1.25-kW to 120-kW+ Range, Magna-Power Electronics’ MagnaLOAD product line of dc electronic loads
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AC To POL Development Kit Enables Fast Evaluation Of Complete Power Systems, Vicor’s AC to Point-of-Load Development Kit
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Feature-Rich LED Power Supplies Save Space In Industrial Lighting, LinkCom Manufacturing’s INCORE high-performance constant-current LED power supplies
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Embedded Component Packaging Leads To Tiny GaN Transistors, AT&S’s Embedded Component Technology
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1200-V Full SiC Module Boasts More-Efficient High-Frequency Operation, ROHM Semiconductor’s BSM180D12P3C007 SiC power module
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POL Modules Offer High Density For Battery-Powered Industrial Applications, Intersil’s ISL8205M and ISL8202M stepdown power modules
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High-Temperature DC-DC converters Specify 30-Year Operational Life, ABSOPULSE Electronics’ BHT-319R-F4 series of dc-dc converters
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Discrete And Bare Die IGBTs Target Hybrid And All-Electric Vehicles, Fairchild Semiconductor’s FGY160T65SPD_F085 and FGY120T65SPD_F085 discrete
IGBTs, PCGA200T65NF8, PCRKA20065F8, PCGA300T65DF8, and PCRKA30065F8 bare die IGBTs and diodes, and an automotive-grade module

All-SiC Half-Bridge Power Module Features Highly Optimized Package Design, Wolfspeed’s CAS325M12HM2 62-mm power module

Text Teaches Techniques To Ease Derivation Of Transfer Functions, “Linear Circuit Transfer Function: An Introduction to Fast Analytical Techniques,” by Christophe Basso

July 2016:

GaAs Switches + 3D Package Will Enable Small, Fast Voltage Regulators, Sarda Technologies’ HIPS heterogeneously integrated power stage.

Synchronous Rectification ICs Enhance Simplicity And Efficiency In SMPS Designs, Infineon Technologies’ IR1161L and IR11688S secondary synchronous rectification controller ICs.

Hi-Rel DC-DC Converters Are Tailored To Non-Flight-Critical Programs, VPT’s VHR series industrial-grade dc-dc converters and EMI filters.

Motor Drivers Improve Performance And Design Flexibility For Automotive Powertrains, Texas Instruments’ DRV8305-Q1 three-phase brushless dc gate driver and UCC27211A-Q1 half-bridge gate driver.

12-Cell Li-ion Battery Pack Monitor Safeguards Hybrid And EV Battery Systems, Intersil’s ISL78610 Li-ion battery pack monitor.

Wireless Charging Demo System Supports Both WPC And AirFuel Standards, Efficient Power Conversion’s EPC9121 10-W multi-mode wireless power charging eGaN FET/IC eval kit.
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- **High-Current Inductors For High-Frequency Applications**, Coilcraft’s SLR family of shielded power inductors
- **Automotive-Grade Wound Inductors Come In 1212 Case Size**, Murata Manufacturing’s LQH3NPN_ME and LQH3NPZ_ME series of wound-type power inductors
- **Surface-Mount Inductor Suits PV Inverters And UPSs**, Sumida’s CDPQ2419 series of high-current power inductors
- **High-Current Inductors For LED Headlights**, Sumida’s CDEP15D90/T150 low-profile power inductors
- **Metal Hybrid Inductor Offers Low Loss, Reduced Electrical Noise**, Sumida’s CDMT40D20 series of high-current inductors
- **Thin-Film Metal Inductor Suits Demanding Automotive Designs**, TDK’s TFM201610ALMA thin-film metal power inductor
- **Inductors In 1212 Case Size Feature Profiles Down to 0.8 mm**, Vishay Intertechnology’s IHHP series of high-current power inductors
- **Power Inductors Fill Gap Between 1812 And 3013 Case Sizes**, Gowanda Electronics’ SMP2512 series of wirewound, molded power inductors
- **Surface-Mount Gate-Drive Transformers Deliver 5000-Vrms Isolation**, Pulse Electronics’ PH9400 series of gate-drive transformers
- **Stepdown Power Transformers Are Now Certified to UL 506/UL5085-2**, Signal Transformer’s SLT series of stepdown power transformers
- **Web Tool Aids Selection Of Common-Mode Chokes**, Coilcraft’s Common-Mode Choke Finder
- **AC Common-Mode Choke Also Prevents Normal-Mode Noise**, Sumida’s LF2420B ac common-mode choke coil
- **Output And Storage Chokes Are Compact**, TDK’s ERU19 series of chokes
- **Tx Coil Saves Space in Qi-Compatible Wireless Charging Pads**, Vishay Intertechnology’s Vishay Dale IWTX-47R0BE-11 6.3 μH wireless charging transmitter coil

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**LDO Achieves Ultra-Tiny Size With Bumpless Chip-Scale Package,**
STMicroware’s LDBL20 low-dropout regulator

**Modular Power Supplies Offer Fanless Operation, User Configurability And Extensive Feature Set,** Excelsys Technologies’ CoolX600 NFF series power supplies

**Solder-Bond, 50-mm Thyristor/Diode Modules Offer Lower Cost,** Infineon Technologies’ 50-mm thyristor/diode modules

**1700-V SiC MOSFET Reduces Losses In Industrial Applications,** ROHM’s SCT2H12NZ SiC MOSFET

**Speedy FET Driver Unleashes GaN Performance,** Peregrine’s UltraCMOS PE29100 GaN’s FET driver

**Active-Bridge Solution Lowers Conduction Losses For PoE-Based IoT Devices,** Fairchild’s FDMQ8205 GreenBridge 2 full-bridge IC

**Lab Kits Teach Practical Power Supply Design,** Texas Instruments’ TI-PMLK series Power Management Lab Kit

September 2016:

**Power Supply Safety And Compliance Database Helps Designers Identify And Meet The Required Standards,** The Power Sources Manufacturers Association’s Safety & Compliance Database

**1350-V IGBT Is Optimized For Soft-Switching,** Alpha and Omega Semiconductor’s AOK30B135W1 IGBT

**800-V Superjunction MOSFETs Improve Efficiency Of Flyback Converters,** Infineon Technologies’ CoolMOS P7 series of superjunction MOSFETs
Power Electronics Simulation Platform Adds SPICE Engine, Powersim’s PSIM simulation platform

Flyback Converter ICs for Industrial Inverters Feature Improved Load Response, ROHM’s BD7F series of isolated flyback dc-dc converter ICs

Monolithic GaN ICs Integrate 650-V Half Bridge With Gate Drivers And Logic, Dialog Semiconductor’s DA8801 GaN half-bridge IC

Railway DC-DC Converters Offer 3.5-Vn Surge-Withstand Capacity, ABSOPULSE Electronics’ RWR 252-P400 series of dc-dc converters

10-bit High Definition Oscilloscopes Extend Bandwidth To 4 GHz, Teledyne LeCroy’s HDO9000 High Definition Oscilloscopes

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Smart Power Amp Generates Multi-Pulse Waveforms For Industrial Ink Jets, Apex Microtechnology’s MP113 printhead driver module

800-V SCRs Deliver High Temp Operation In Surface-Mount Package, STMicroelectronics’ TM8050H-8 SCR

1000-V SiC MOSFET Raises Power Density Of EV Battery Chargers, Wolfspeed’s C3M0065100K SiC MOSFET

1200-V GaN Power Modules Deliver Efficient, High-Speed Switching, VisIC Technologies’ family of 1200-V GaN power modules

Railway DC-DC Converters Float Charge Batteries For On-Train Equipment, ABSOPULSE Electronics’ LTH-65R-F3TH series heavy-duty dc-dc converters
IGBT Modules Feature Sixpack Topology, Ratings Up To 200 A, Vincotech’s MiniSKiiP PACK 2 and MiniSKiiP PACK 3 1200-V IGBT modules

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PCBs Balance Leakage Current In Supercap Stacks, Consume Little To No Power, Advanced Linear Devices’ Supercapacitor Auto Balancing PCBs

Digital Multiphase PWM Controllers Feature AVSBus And Synthetic Current Control, Intersil’s ISL681xx and ISL691xx digital multiphase controllers and ISL99227 smart power stage

90-W Medical AC-DC Adapters Are Less Than 1-in Thick, Enargy Power’s BM90 series ultra-thin BladeAdapters

Power Management IC Is Optimized For Intel’s Apollo Lake Chip Architecture, ROHM’s BD2670MWV power management IC

Comprehensive Platform Eases Evaluation Of GaN Transistors, GaN Systems’ daughterboard-style evaluation kit

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High-Voltage Scope Probe Measures Fastest GaN Power Switches, Picotest.com’s P2000A GaN voltage probe

1.5-PetaFLOPS/m3 Super Computer Is Powered by High-Performance Power Modules, Vicor’s modules power the ZettaScaler-1.8 Super Computer

Power Semiconductor Test System Measures SiC And GaN Devices Up To 3 kV, Tektronix’s Keithley S540 Power Semiconductor Test System
Stackable PMBus Converter Delivers High Current Density, Texas Instruments’ TPS546C23 synchronous buck converter

Low-Profile Railway Inverters Deliver Three-Phase Pure-Sinewave Output, Absopulse Electronics’ CTP-300R-F7 series three-phase sinewave inverters

Simulation Platform Features Extensive Functionality, New SPICE Engine, Powersim’s PSIM v11.0 simulation platform

Power Supplies Boost Efficiency In Marine And Industrial Applications, Powerbox’s PT570, PT571, PT576 and PT577 Marine Line power supplies

DC-DC Converters Operate Over 12-V To 160-V Input Range, Gaia Converter’s MGDD1-06 series of ultra-wide input range dc-dc converters

Probe And Decoder Support PMIC, Power Sequencing, And Power-Integrity Testing, Teledyne LeCroy’s RP4030 active voltage rail probe and MIPI System Power Management Interface (SPMI) serial decoder

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- Power Inductors Minimize Losses At 2 To 5 MHz And Beyond, Coilcraft’s XEL60xx family of high-current inductors
- High-Current Inductors Come In Low-Profile Surface-Mount Package, MPS Industries’ HWIA2918S series surface-mount inductors
- Flat Helical Winding Yields Low-Profile for High-Current Inductors, TDK’s EPCOS ERU16 choke series
- Company Adds Metal Alloy And Other Power Inductors, Murata Group’s Toko metal alloy inductors
- Broad Line Of High-Power Toroidal Inductors Offer In-Stock Availability, Abracon Holdings’ ATCA-XX line of toroidal inductors
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- **Miniature Inductors & CM Chokes Are Cost Optimized**, Beta Transformer Technology’s BPI series high-reliability power inductors and BCM series common-mode chokes

- **Nanocrystalline Chokes Deliver Higher Impedance For EMI Filters**, Pulse Electronics’ PA441xNL series of common-mode chokes

- **Flybuck Transformer Powers PLC Module**, Wurth Electronics Midcom’s 750315856 flyback transformer for TI’s TIDA-00550 PLC Analog Input Module

- **Hybrid Planar Transformers Offer Lower Cost, Smaller Packages**, Vishay Intertechnology’s TPL-2516 series hybrid planar transformers

- **AEC-Q200 Certified Flyback Transformer Targets High-Temperature Applications**, TT Electronics’ HA00-10043ALFTR flyback transformer

- **Transformers For Iso-Buck Converter**, Wurth Electronics Midcom’s series of isolated buck transformers for Maxim Integrated’s MAX17681 Iso-Buck dc-dc converter

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