



Power Products Article Archive

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380-V Input Bus Converter Raises Efficiency And Power Density To Benefit HVDC Power Distribution, Vicor's VI Chip bus converter module built in the ChiP platform [For more details...](#)

Wide-Input Range DC-DC Converter Extends Operating Life To 30 Years, Absopulse Electronics' DHR 150-24 dc-dc converter [For more details...](#)

Single-Phase Power Analyzer Promises High Accuracy, More Standard Features, Tektronix's PA1000 single-phase power analyzer [For more details...](#)

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Controller Cuts Cost For Qi-compliant Wireless Chargers, Texas Instruments' bq500412 Qi-compliant wireless power transmitter manager [For more details...](#)

Package Innovation Shrinks 650-V And 800-V MOSFETs Into 5- x 6-mm Footprint, STmicroelectronics' PowerFLAT 5x6 HV and VHV packages [For more details...](#)

750-mA POL Requires Just 30-mm² Of Board Space, Texas Instruments' LMR22007 750-mA switching regulator [For more details...](#)

High-Temperature, High-Voltage DC-DC Converters Reduce Design Time For Down-Hole Applications, International Rectifier's HTH27022S and HTM27092S dc-dc converters [For more details...](#)

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Dynamic VAR Compensator Provides Precise Grid Voltage Regulation And Support, One-Cycle Control's OCC-Dynamic VAR Compensator

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Planar Transformer Adopts Aluminum Windings For Reduced Weight, Payton America's 2-kW planar transformer with aluminum windings

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PMIC Reduces Board Space, Noise, And Power Consumption In Automotive Instrument Clusters, Maxim Integrated's MAX16993 automotive power management IC

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3-Phase Sine-Wave Inverter Delivers 1 kVA in Rugged, Compact Package, Absopulse Electronics' CTP 1K modular dc-ac inverters

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VTM Current Multiplier In New ChiP Packaging Will Support VR12.5 Applications, Vicor's VRM solution compliant with Intel's VR12.5 voltage regulation specification

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100-V eGaN FET Benefits Power Switching And RF Applications, Efficient Power Conversion's EPC8010 power transistor

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Tiny Stepdown Regulators Deliver Extended Voltage And Temp Ranges, ROHM Semiconductor's BD9G101G dc-dc converter IC and BU90002GWZ 6-MHz synchronous stepdown regulator IC

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April 2014:

PWM Controllers And Modules Offer Optimized Power Solutions For VR12.5, International Rectifier's CHiL digital controllers and PowIRstage devices

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1200-V SiC Power MOSFET Boasts 200°C Rating, STMicroelectronics' SCT30N120 SiC MOSFET

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Flyback ICs Limit Standby Power to <30-mW For Offline Supplies, Texas Instruments' UCC28910 700-V flyback switcher and UCC28630 PWM controller
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Driver Stage Tailors Power Conversion Solution To High-Performance FPGAs, Altera's ET4040 monolithic 40-A driver plus synchronous MOSFET powertrain
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600-V GaN Devices Are Offered In PQFNs Plus TO-220s For Low-Power Designs, Transphorm's TPH3002LD and TPH3002LS 600-V GaN HEMT devices in PQFNs and TPH3002PD and TPH3002PS 600-V GaN HEMT devices in TO-220s
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Power Op Amp Improves Onboard Circuit Protection, Slashes Quiescent Current, Apex Microtechnology's MP118FD power operational amplifier
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Gate Drivers For Automotive Applications Feature Fast Propagation Delays, Texas Instruments' UCC275xx-Q1 family of single- and dual-channel gate drivers
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Power Tester Revamps Reliability Testing Of Power Semiconductor Modules, Mentor Graphics' MicReD Industrial Power Tester 1500A
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June 2014:

More DC-DC Converters For Railway Applications

- 30-W Converters Feature 11:1 Input Voltage Range, MTM Power's primary-switched PMDS/PCMDS30 series of dc-dc converters
- 50-W and 75-W Quarterbricks Deliver High Efficiency For Rolling Stock, Artesyn Embedded Technologies' ERM family of dc-dc converter modules
- 60-W Converters Feature 12:1 Input Voltage Range, Gaia Converter's MGDDI-60 series
- 200-W Converter Is Watertight And Dust Proof, Absopulse Electronics' RWY 200-IP67 series of 200-W dc-dc converters
- Cassette Power Converters Are Certified For Fire Protection, Power-One's Melcher cassette power converters for railway applications
- 500-W And 600-W Power Supplies Operate Over Ultra-Wide Temperature Range, Schaefer's TER family of low-profile, ac-dc power supplies

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1200-V SiC MOSFET Lowers On-Resistance To 25-mΩ In TO-247, Cree's C2M0025120D SiC MOSFET

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Midrange Scopes Offer More Channels, Higher Resolution For Testing Power Electronic And Other Systems, Teledyne LeCroy's HDO8000 8-channel 12-bit oscilloscopes

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Auto-Tuning 60-A POL Improves Dynamic Performance, TDK-Lambda's 60-A iJB series point-of-load converters

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MCUs With High-Res Timer Ease Transition To Digital Power Control, STMicroelectronics' STM32F334 Digital Power microcontrollers

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High-Rel Dual Output DC-DC Converters Target Satellite Power Systems, International Rectifier's D series rad-tolerant two output dc-dc converters

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25-A Phase-Control Stud-Style Thyristors Come In TO-48 Packages, America Semiconductor's 25RIA series phase-control thyristors

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Highly Integrated Digital Power Monitors Work With Supplies Up To 60 V, Intersil's ISL2802x family of digital power monitors

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12:1 Input Range Simplifies Transient Protection For High-Rel DC-DC Converters, Gaia Converter's MGDD-60W series of 60-W dc-dc converters

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DC-DC Converters Push Limits On Power Density For A Range Of Applications, Vicor's ChiP DCM and HD Brick dc-dc converters

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September 2014:

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Tiny Li-ion Charger Targets Wearable Applications, Texas Instruments' bq25100 single-cell Li-ion charger

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Digitally Controlled Eighth Bricks Boast Better Dynamic Performance, Fewer Parts, TDK's 300-W TDK-Lambda iEH series of isolated dc-dc converters

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Switching Regulators Offer High Operating Voltage, Wide Temp Range, Small Size, ROHM Semiconductor's BD9G101G and BU9000xGWZ switching regulators

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LLC Transformers And PFC inductors Are Optimized For GaN-Based Power Converters, Precision's GaN-ready LLC transformers and PFC inductors

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October 2014:

Display Demonstrates Increasing Viability Of 400-V DC For Telecom And Datacenter Applications, Multi-vendor demo of 400-V dc ecosystem at INTELEC 2014 includes products from Anderson Power Products, Emerson Network Power, IBM, Universal Electric, NTT and Vicor

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All-SiC Half-bridge Module Reduces Cost And Size For Inverters, Cree's CAS300M17BM2 all-SiC 1.7-kV half-bridge power module

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Epoxy Encapsulated Package Streamlines Assembly Of High-Rel DC-DC Converters In Customer's Applications, VPT's encapsulated epoxy package option

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Monolithic eGaN Half Bridge Boosts Efficiency For Buck Converters, Efficient Power Conversion's EPC2100 eGaN half bridge

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Autoranging Eases Use, Extends Range Of Benchtop Power Supplies, Picotest's P961xA series of programmable, single-output dc power supplies

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300-VA Railway Inverters Are Watertight, Dust-Proof, Absopulse Electronics' RSI 300-IP66 series of railway grade dc-ac sine wave inverters

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Narrow-Profile Switchers Deliver Up to 75 W In Tight Spaces, Acopian's WN8B series of narrow-profile 75-W switchers

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Transmission Line Probes Enable Higher Bandwidth, Lower Noise Measurements For PDNs, Picotest's 50- Ω transmission line test probes

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Interface Panel Simplifies High-Voltage Capacitance-Vs-Voltage Testing For Power Semiconductors At The Wafer Level, Keithley's Model 8020 High Power Interface Panel

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PMIC Keeps Automotive MCUs Running Reliably Under Start-Stop Operation, Rohm's BD39001EKV-C power management IC

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PowerSoCs Are Automotive Qualified And Ready To Power FPGAs, Altera's nine new Altera Enpirion AEC-Q100 qualified power system-on-chip (PowerSoC) devices from the EP53xx and EN63xx families

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1200-V And 1700-V SiC Junction Transistors Are Positioned To Challenge SiC MOSFETs And Silicon IGBTs, GeneSiC Semiconductor's 1700-V SiC junction transistors (SJT)—the GA50JT17-247 (25 m Ω), GA16JT17-247 (65 m Ω), and GA04JT17-247 (220 m Ω)—and 1200-V SJTs—the GA50JT12-247 (25 m Ω), GA20JT12-247 (60 m Ω), GA10JT12-247 (120 m Ω), and GA05JT12-247 (210 m Ω)

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Wireless Power Chipset Offers 10-W Solution, Texas Instruments' bq51025 wireless charging receiver and bq500215 wireless power transmitter controller

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Reverse-Conducting IGBTs Combine Strengths Of IGBTs And MOSFETs For High-Current Applications, IXYS's line of 3600-V reverse-conducting IGBTs

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Enhanced Simulation Software Helps Designers Find Best Capacitors For SMPS Designs, AVX's SpiCalci simulation software

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