

Power Products Article Archive

List of articles published in the January through December 2012 issues

Products are listed here using the following format:

Issue date:

Article title, *Part number/product name*

[For more details...](#)(link to article)

January 2012:

Simulation Tool Speeds Evaluation And Selection Of Intermediate Bus Converters, *Vicor's IBC Power Simulation tool*

[For more details...](#)

Energy Measurement ICs Optimize Cost And Performance For Smart Meters, *Cirrus Logics' CS5484/80/90 analog front end ICs for energy measurement*

[For more details...](#)

Demo Suggests Cascode MOSFET Stacks up Well Against SiC And Si Switches, *Alpha and Omega Semiconductor's and SemiSouth Laboratories' UniSiC 1200-V, 90-mΩ MOSFET*

[For more details...](#)

Compound Power Devices Co-Package SiC Schottkys With MOSFETs Or IGBTs, *Renesas Electronics' RJQ6020DPM, RJQ6021DPM, and RJQ6022DPM SiC compound power devices*

[For more details...](#)

Gate-Driver IC Simplifies Power Train Design In Hybrid And Electric Vehicles, *International Rectifier's AU1R0815S automotive-qualified gate-driver IC*

[For more details...](#)

600-V SiC Schottky Targets Air Conditioners, Base Stations, And Solar Arrays, *Renesas Electronics' RJS6005TDPP SiC Schottky barrier diode*

[For more details...](#)

February 2012:

Gate Drivers Work With Silicon Or GaN FETs, *Texas Instruments' LM5114 low-side gate driver*

[For more details...](#)

Power Products Article Archive

List of articles published in the January through December 2012 issues

Digital PWM Controllers Deliver Small, Efficient Multiphase Solutions, International Rectifier's third-generation family of CHiL digital PWM controllers
[For more details...](#)

Digital Controller Provides Flexibility And Performance For Isolated Supplies, Texas Instruments' UCD3138 digital controller for isolated power supplies
[For more details...](#)

Hot Swap Controller Emulates MOSFET Thermal Performance, The Picor Cool-Swap PI2211 hot swap controller and circuit breaker from Vicor
[For more details...](#)

DC-DC Converters Deliver 334 W/in³ For Industrial And Military Applications , The Picor Cool-Power PI3106 isolated dc-dc converter from Vicor
[For more details...](#)

Power Device Enhances Scalability In Computing And Consumer Applications, International Rectifier's IR3551 50-A PowIRstage module
[For more details...](#)

Full-Bridge Drivers Feature Braking Control And Extreme Speed, Electronic Design & Research's high-speed full-bridge isolated (HS-FBI) H7GvvDaa/e drivers
[For more details...](#)

March 2012:

Digital LED Controller Is Compatible With Nearly All TRIAC Dimmers, Cirrus Logics' CS161X digital LED controller
[For more details...](#)

Wireless Power Chipset Shrinks Footprint And Lowers Cost, Integrated Device Technology's wireless power transmitter and receiver ICs
[For more details...](#)

Adjustable 500-mA LDO Operates To 225°C, Cissoid's CHT-Vega 225°C Adjustable 500-mA LDO
[For more details...](#)

Power Products Article Archive

List of articles published in the January through December 2012 issues

April 2012:

Power Booster Increases Slew Rate And Bandwidth, Adds Second Channel, Cirrus Logics' PB63 dual power booster amplifier

[For more details...](#)

Shielded, Wirewound Inductors Offer Greater Handling In Small Footprint, Coilcraft's PFL4514 shielded, wirewound power inductors

[For more details...](#)

Soft-Switching IGBT Replaces Relays In PTC Heaters For Hybrid And Electric Vehicles, International Rectifier's AUIRGDC0250 1200-V automotive-qualified IGBT for soft-switching applications

[For more details...](#)

May 2012:

50-A Power Devices Extend SiC Benefits To More Applications, Cree's family of 50-A SiC MOSFETs and Schottkys

[For more details...](#)

Planar Transformer Boasts 90-kW Rating, Payton America's 90-kW planar transformer

[For more details...](#)

Power Modules Shrink Footprint For Appliances And Industrial Applications, International Rectifier's family of μ IPM power modules

[For more details...](#)

650-V 55-m Ω SiC JFETs Boast Extremely Low On-Resistance, SemiSouth Laboratories' SJDA065R055 SiC JFET power transistors

[For more details...](#)

Digital LED Controller Features Two-Color Mixing, Cirrus Logic's CS163X family of digital LED controllers

[For more details...](#)

June 2012:

Isolated ADCs Simplify Line Voltage Monitoring For Solar Inverters And Power Supplies, Silicon Laboratories' Si890x isolated ADCs for mains line monitoring

[For more details...](#)

Power Products Article Archive

List of articles published in the January through December 2012 issues

Embedded Inductor Enables Tiny Size, Low EMI For Buck Converters,
Murata Americas' LXDC2UR and LXDC3EP micro dc-dc converters

[For more details...](#)

Novel Package Makes Resettable PPTCs Suitable For Harsh Environments,
TE Circuit Protection's LVB125 PolySwitch Resettable PPTC

[For more details...](#)

Power Capacitors Target Power Inverters, TDK-EPC's MKP DC B2562 series of
EPCOS power capacitors

[For more details...](#)

**Motion-To-Grid Energy Converters Deliver Turnkey Solutions For Small
Wind Turbines,** Siemens Industry's SINAMICS Motion-to-Grid Energy Converters

[For more details...](#)

July 2012:

Zero-Voltage Switching Boosts POL Efficiency To 98%, Vicor's Picor PI33XX
Cool-Power ZVS buck regulator series

[For more details...](#)

**Offline Switcher ICs Extend Benefits Of Primary-Side Regulation Up To 90
W,** Power Integrations' LinkSwitch-HP family of off-line switcher ICs

[For more details...](#)

MOSFET Delivers Low On-Resistance At 650 V, STMicroelectronics'
STY139N65M5 650-V n-channel superjunction MOSFET

[For more details...](#)

Megavolt UHVDC Transformer Breaks Power Transmission Barriers, ABB's
1,100-kV UHVDC converter transformer

[For more details...](#)

August 2012:

Rad-Hard Power Converters Ride Intermediate Bus Into Space

Monolithic Point-of-Load Regulators (POLs)

- Texas Instruments' TPS50601-SP 6-A POL for harsh environments
- Intersil's ISL70001 and ISL70002 6-A and 12-A SEE immune synchronous buck regulators

Power Products Article Archive

List of articles published in the January through December 2012 issues

- *Intersil's ISL75051SRH radiation-tolerant ultra-low dropout regulator*
- *Peregrine Semiconductor's PE9915x family of rad-hard buck regulators with integrated switches*

Hybrid POLs and DC-DC Converters

- *International Rectifier's GHP2815S 120-W rad hard dc-dc converter*
- *International Rectifier's 120-V input, 40-W M3G-series converters*
- *VPT's 15-A 50-W SVGA0515S POL*
- *M.S. Kennedy's MSK 5060RH dual 10-A rad-hard synchronous rectified switching regulator*
- *3D plus' 3DPM0024-3 5.5-A rad-hard POL*

Power Management Devices

- *Aeroflex's 3.3-V and 5-V voltage UT0xVSxxx supervisor family*
- *Modular Devices' Model 3649 radiation hardened Bus Master Hybrid*
[For more details...](#)

September 2012:

High-Voltage GaN HEMT Achieves JEDEC Qualification, Transphorm's TPH2006PS 600-V GaN HEMT

[For more details...](#)

Super Junction MOSFETs Break New Ground At 900 V And 950 V, STMicroelectronics' SuperMESH 5 super junction MOSFETs

[For more details...](#)

Smart DC Motor Controller Targets Cost-Sensitive Applications, Roboteq's LDC1450 intelligent dc motor controller

[For more details...](#)

CMOS-Based Isolators Are Pin, Footprint Compatible With Standard Optocouplers, Silicon Laboratories' Si87xx CMOS-based digital isolators

[For more details...](#)

DC-DC Converters Mount To Curved, Uneven Or Thermally Insulating Surfaces, Absopulse Electronics' BAP 236TH convection-cooled 250-W dc-dc converters

[For more details...](#)

SSL LED Drivers Feature Flickerless Performance And Digital Dimming Control, iWatt's iW3616 and iW3617 digital LED drivers

[For more details...](#)

Power Products Article Archive

List of articles published in the January through December 2012 issues

October 2012:

PSS Flyback Controller Eyes Low-Cost Networking Adapters, CamSemi's C2283 primary-side sensing flyback controller

[For more details...](#)

Current Injector Outperforms Electronic Loads In Measuring POLs, Picotest's J2112A fast current injector

[For more details...](#)

Development Boards Simplify Evaluation Of eGAN FETs, Efficient Power Conversion's EPC9003 and EPC9006 development boards

[For more details...](#)

PFC Controller Integrates Numerous Protection Features, MagnaChip Semiconductor's MAP8800 PFC controller

[For more details...](#)

High-Speed 600-V IGBTs Feature Very Low Saturation Voltage, Advanced Power Electronics Corp.'s AP20GT60 n-channel IGBT family

[For more details...](#)

November 2012:

Novel Construction Cuts Power Loss, Size Of High-Current Inductors, Precision's high-current inductors

[For more details...](#)

Circuit Breaker To Help Shape DC Grid Of The Future, ABB's circuit breaker for high-voltage direct current

[For more details...](#)

Wraparound Chip Resistors Withstand Up To 200°C, Vishay Precision Group's FRST bulk metal Z1-Foil wraparound, surface-mount chip resistors

[For more details...](#)

DC-DC Converter Boasts 10:1 Input Range, Power-One's MELCHER brand HR-Series 300-W dc-dc converter

[For more details...](#)

Robust High-Voltage MOSFETs Challenge Superjunction MOSFETs, Alpha and Omega Semiconductor's AlphaMOS II MOSFETs

[For more details...](#)



Power Products Article Archive

List of articles published in the January through December 2012 issues

December 2012:

AC-DC Front End Sparks New Trends In Density, Efficiency And Flexibility, Vicor's VI BRICK AC Front End module

[For more details...](#)

High-Voltage IGBT Modules Handle 4160-V AC Lines, Powerex's QID3320002 and QID4515002 dual HVIGBT modules

[For more details...](#)

Module Is Fully Encapsulated 30-A POL Converter, Intersil's ISL8225M 30-A fully-encapsulated POL power module

[For more details...](#)

Auto-Compensated POL Offers High Performance, Second-Source Footprint, CUI's NDM2Z digital POL modules with auto compensation

[For more details...](#)