



Board-Mounted Power Converter Article Archive

This document is a list of articles about board-mounted power converters published in the How2Power Today newsletter. Products listed here include

- Linear regulators
- Switching regulators and
- Non-isolated point-of-load dc-dc converters (POLs)
- Isolated dc-dc converters (regulated and unregulated)
- Some specialty ac-dc converter products.

Products here include IC-style devices, hybrids, and other encapsulated board-mountable power converters.

Products are listed here using the following format:

Issue date:

Article title, *Part number/product name*

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

For power converters offering higher current and higher power levels as well as ac-dc and dc-ac power conversion, see the Power Supply Article Archive.

January 2016:

Monolithic Sync Buck Regulator Operates Efficiently Up to 18 V, *Alpha and Omega Semiconductor's AOZ3101 synchronous buck regulator.*

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June 2016:

POL Modules Offer High Density For Battery-Powered Industrial Applications, *Intersil's ISL8205M and ISL8202M stepdown power modules*

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Board-Mounted Power Converter Article Archive

March 2015:

High-Rel DC-DC Converter Features Epoxy Encapsulation, Greater Power Density, VPT's VPT250-2800S series dc-dc converters

[For more details...](#)

200-mA Linear Regulator Pushes Operating Temperature To 175°C, CISSOID's CMT-ANTARES 5-V linear regulator.

[For more details...](#)

April 2015:

Top Five Products And Demos Seen at APEC 2015 includes

- Altera's Enpirion EM1130A 30-A Point-Of-Load Converter
- Intersil's ISL8272M 50-A Point-Of-Load Converter

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May 2015:

COTS DC-DC Converters And EMI Filters Feature Wide Input Range And Advanced Packaging, VPT's VXR series of dc-dc converters and EMI filters

[For more details...](#)

June 2015:

High-Density Power Modules Reshape AC-DC Power Supplies, Vicor's VIA PFM ac-dc front-end power modules

[For more details...](#)

Bus Converter Steps Down 380 V to 48 V With High Power Density And Low Profile, Vicor's VIA BCM bus converter module

[For more details...](#)

July 2015:

New Type Of Power Module Offers Greater Integration, Path To Cost Reduction, Maxim Integrated's Himalaya power modules

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Board-Mounted Power Converter Article Archive

Hermetically Sealed Linear Regulators Offer Dramatically Lower Cost And A Range Of Grades, Datal's LVR-7815 linear voltage regulators

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August 2015:

185°C Rated DC-DC Converters Deliver Small Size For Downhole Tools, IR HiRel's HTB28 hermetic dc-dc converters

[For more details...](#)

October 2015:

Digital Power Module Delivers 80 A For FPGAs, Processors And Memory

[For more details...](#)

November 2015:

High-Density DC-DC Converters Come In Rugged Chassis-Mount Package, Vicor's VIA DCMs

[For more details...](#)

Bus Converter Modules Are Non-Isolated And Bidirectional, Vicor's non-isolated, bidirectional bus converter modules (NBMs)

[For more details...](#)

January 2014:

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

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February 2014:

750-mA POL Requires Just 30-mm² Of Board Space, Texas Instruments' LMR22007 750-mA switching regulator

[For more details...](#)

Board-Mounted Power Converter Article Archive

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...](#)

March 2014:

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

[For more details...](#)

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

[For more details...](#)

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

[For more details...](#)

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

[For more details...](#)

July 2014:

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

[For more details...](#)

Board-Mounted Power Converter Article Archive

August 2014:

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
[For more details...](#)

DC-DC Converters Push Limits On Power Density For A Range Of Applications, Vicor's ChiP DCM and HD Brick dc-dc converters
[For more details...](#)

September 2014:

Digitally Controlled Eighth Bricks Boast Better Dynamic Performance, Fewer Parts, TDK's 300-W TDK-Lambda iEH series of isolated dc-dc converters
[For more details...](#)

Switching Regulators Offer High Operating Voltage, Wide Temp Range, Small Size, ROHM Semiconductor's BD9G101G and BU9000xGWZ switching regulators
[For more details...](#)

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
[For more details...](#)

Epoxy Encapsulated Package Streamlines Assembly Of High-Rel DC-DC Converters In Customer's Applications, VPT's encapsulated epoxy package option
[For more details...](#)

November 2014:

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
[For more details...](#)

Board-Mounted Power Converter Article Archive

January 2013:

Low-Power Buck Converter Aims To Accelerate Energy Harvesting Designs,
Texas Instruments' TPS62736 Nano-power Buck Converter

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April 2013:

User-Defined Power Modules Take Configurability To A New Level, *Vicor's User-Defined, VI Chip PRM Modules*

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Buck Converter Delivers 25 A From A 5-mm x 6-mm PQFN, *International Rectifier's IR3847 Gen3 SupIRBuck voltage regulator*

[For more details...](#)

July 2013:

Wide-Input Linear Regulator Works At Very High Temperatures, *CISSOID's CHT-RIGEL adjustable linear regulator*

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DC-DC Converters Meet MIL-HDBK-1547 And Aerospace TOR Requirements,
VPT's SVR series rad-hard dc-dc converters and EMI filters for space

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October 2013:

Current-Sharing LDOs Double Current Capability For Harsh Environments,
Texas Instruments' TPS7H1101-SP and the TPS7H1201-HT LDOs

[For more details...](#)

December 2013:

DC-DC Converters For Railway Applications includes

- *30-W Converter Complies With Railway Transient And EMC standards, XP Power's RDC30 series dc-dc converters*
- *High-Efficiency 40-W Converter Operates Over >5:1 Input Range, Beta Dyne's BHE30006 dc-dc converter*

Board-Mounted Power Converter Article Archive

- *Baseplate-Cooled 50-W Quarter Bricks Suit Rolling Stock And Trackside Equipment, TDK-Lambda's CN50A24 series dc-dc converters*
- *75-W Converter Targets Mission Critical Railway Applications, Schaefer's MTQZ75 series by Minmax dc-dc converter*
- *80-W Converters Accommodate A Wide Range of Battery Voltages, MTM Power's PCMDS80 dc-dc converters*

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January 2012:

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

[For more details...](#)

February 2012:

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...](#)

March 2012:

Adjustable 500-mA LDO Operates To 225°C, Cissoid's CHT-Vega 225°C Adjustable 500-mA LDO

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July 2012:

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

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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*

Board-Mounted Power Converter Article Archive

- *Intersil's ISL70001 and ISL70002 6-A and 12-A SEE immune synchronous buck regulators*
- *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*

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December 2012:

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

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

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

[For more details...](#)

January 2011:

4-A Regulator Shrinks To 2-mm x 2-mm Footprint, Maxim Integrated Products' MAX15040 4-A, synchronous switching regulator

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February 2011:

Digital POL Expands Control and Energy-Saving Features, Ericsson Power Modules' BMR463 digital point-of-load regulator

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Board-Mounted Power Converter Article Archive

May 2011:

Digital POL Regulator Delivers Higher Output Current, Ericsson Power Modules' 3E series BMR464 digital point-of-load regulators

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October 2011:

Digital Power Products includes

- *POL Regulators Offer Vertical Mount For Space-Critical Applications*, Ericsson's BMR4622002 and BMR4632002 3E digital point-of-load voltage regulators
- *Buck Regulators Deliver Highly Integrated Designs*, Summit Microelectronics' SMB220 and SMB221 10-A and 20-A digitally programmable buck regulators

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November 2011:

DOSA-Based Digital POLs Expand Output Current Range, GE Energy's DLynx 3-A, 6-A, 20-A and 40-A point-of-load digital dc power converters

[For more details...](#)

February 2010:

Modules Make Simple Switchers Even Simpler, National Semiconductor's LMZ series of Simple Switcher power modules

[For more details...](#)

April 2010:

LDOs Deliver CMOS Advantages and Robustness, ON Semiconductor's NCP69x families of 1-A CMOS LDOs

[For more details...](#)

May 2010:

DC-DC Converter Raises The Bar On Power Density, Picor's PI3101 Cool-Power isolated dc-dc converter

[For more details...](#)

Board-Mounted Power Converter Article Archive

Buck-Boost Converter Slashes Board Space Requirements, TPS63020 buck-boost converter IC

[For more details...](#)

June 2010:

DC-DC Converters Deliver Fast Response and High Efficiency, Semtech's SC173, SC174, and SC493 EcoSpeed dc-dc converter ICs

[For more details...](#)

DC-DC Converters Increase Efficiency for DDR Memory Applications, Enpirion's 8-A EV1380 and the 4-A EV1340 dc-dc converters

[For more details...](#)

July 2010:

Boost Converters Feature Tiny Packaging and Low Input Voltage, Semtech's SC120, SC121 and SC122 boost converter ICs

[For more details...](#)

August 2010:

Rad-Hard LDOs Improve Performance And Availability, International Rectifier's 3-A rad-hard ultra-low dropout regulators

[For more details...](#)

Shunt Regulator Minimizes Standby Power For Always-On Applications, Supertex's SR10 capacitor-coupled switched-shunt regulator

[For more details...](#)

September 2010:

Negative 36-V LDO Delivers Low-Noise Performance, Texas Instruments' TPS7A30 negative 36-V low dropout regulator

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October 2010:

Point-Of-Load Regulators Extend Functionality and Performance,

Board-Mounted Power Converter Article Archive

International Rectifier's IR3837M, IR3838M and IR3839M SupIRBuck point-of-load voltage regulator

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November 2010:

Novel Input Technology Pushes AC-DC Converter To High Performance,
Vicor's PFM VI BRICK power-factor-corrected ac-dc converter module,
PF175B480C033FP-00

[For more details...](#)

Modules Shrink Point-of-Load Converters For Portable and Industrial Applications,
Texas Instruments' 600-mA TPS82671 and 6-A TPS84620 point-of-load power converters

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September 2009:

Voltage Transformer Delivers 130 A Efficiently for Servers,
A subsidiary of Vicor, V•I Chip's VIV0005TFJ voltage transformer module

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October 2009:

A Smaller Dc-Dc Converter For Military or Commercial Vehicles,
Vicor's 28-V Micro DC-DC Converters, 8 models from 3.3-V to 48-V output

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