



Power ICs Article Archive (By Issue)

Power IC News Sponsored by Renesas

This document is a list of the power IC articles published in the How2Power Today newsletter. Products listed here include

- Power supply controllers
- Gate drivers
- Linear regulators
- Switching regulators and
- Point-of-load dc-dc converters
- Battery charger and battery management ICs
- ORing controllers
- LED drivers
- Wireless charging ICs

While most are monolithic semiconductor devices, some may be multi-chip modules or modules that copackage chips and magnetics or passives—the commonality is that all these products are housed in IC style packages. Integrated circuits using hybrid construction or open-frame PCB construction are generally not included here. However, reference designs featuring ICs are listed here.

Products are listed here using the following format:

Issue date:

Article title, Part number/product name

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

January 2023:

900-V GaN Power ICs Feature Low On-Resistance And Low Leakage,
GaNPower International's GPI4TIC15DFV and GPI6TIC15DFV GaN ICs

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ZVS Power-Supply ICs Combine Programmability, High Efficiency and Small Size,
Power Integrations' InnoSwitch4-Pro family of flyback ICs

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February 2023:

Compact eFuses Offer 2.8-V to 23-V Operating Range, Vishay Intertechnology's SiP32433A/B and SiP32434A/B eFuses

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Wide-Voltage-Range Hot-Swap Controller Offers Programmable Digital SOA Control, Infineon Technologies' XDP710 digital controller

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IC Enables Safe And Flexible Power Distribution In Automotive E/E Architectures, Renesas Electronics' RAJ2810024H12HPD Intelligent Power Device

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Buck-Boost Reference Design Yields Small 140-W Fast Charger, From EPC and Richtek, a bidirectional buck-boost controller reference design board

[For more details...](#)

High-Voltage Driver Offers A Highly Integrated Solution For MEMS Switches, Menlo Micro's MM101 eight-channel driver with integrated charge pump

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Rad-Tolerant LDO Targets LEO Applications, Microchip Technology's MIC69303RT 3-A COTS low-dropout voltage regulator

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Laser Driver IC Enables Higher-Density Lidar Systems, EPC's EPC21701 laser driver IC with 80-V, 40-A FET for time-of-flight lidar systems

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A Highly Integrated Gate Driver IC For Battery-Powered BLDC Motor Drives, Infineon's 6ED2742S01Q MOTIX three-phase gate driver IC

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March 2023:

Designs Accelerate Development Of EV Charging, Vehicle Cluster Control And Other Applications, Renesas Electronics' 10 Winning Combinations engineering-vetted designs

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Cost-Optimized, Energy-Saving Designs For Power Supplies And Battery Chargers, Pulsiv's PSV-RDAD-75FB and PSV-RDAD-100FB reference

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designs

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Automotive High-Side Drivers Are Scalable And Feature Rich,
STMicroelectronics' VIPower M0-9 series gate drivers

[For more details...](#)

April 2023:

Active EMI Filter ICs Enable Smaller Power Supply Designs, Texas
Instruments' TPSF12Cx family of active EMI filter ICs

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900-V Switcher ICs Benefit EV And Industrial Applications, Power
Integrations' 900-V InnoSwitch3 flyback switcher ICs

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BMS Controller Improves Li-Ion Battery Performance, STMicroelectronics'
L9961 battery-management-system (BMS) device

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Single-Chip Intelligent Battery Management Solutions For 20-Cell Systems,
Qorvo's PAC22140 and PAC25140 Power Application Controller (PAC) devices

[For more details...](#)

ASIL C Safety-Rated Field Current Sensor For EV Powertrain Systems,
Allegro MicroSystems' ACS37601 high-precision, field current sensor

[For more details...](#)

Integrated 100-V GaN Half-Bridge With Driver Saves Board Space,
Innoscence Technology's ISG3201 SolidGaN half-bridge

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May 2023:

**GaN FETs Plus Controller Build High-Density Buck Converter Reference
Design,** EPC's EPC9158 synchronous buck reference design board

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**Smart High-Side Switches Protect Sensitive ADAS Loads And The Power
Distribution System,** Infineon Technologies' PROFET Load Guard 12-V power
switches

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Buck Converters Ease Tradeoffs In Size Versus Efficiency, *Diodes' AP62500 and AP62800 synchronous buck converters*

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June 2023:

SiC Gate Driver Improves Efficiency, Simplifies Design For EV Traction Inverters, *Texas Instruments' UCC5880-Q1 isolated gate driver*

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A Highly Integrated Wireless Power Transmitter IC For Applications Up To 50 W, *Infineon Technologies' WLC1150 wireless charging transmitter IC*

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MCUs Offer An Array Of Features For Motor Control Applications, *Renesas Electronics' RX and RA families of MCUs*

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SiC E-Fuse Demonstrator Eases Design Of Solid-State Power Protection, *Microchip Technology's SiC-based E-fuse demonstrator board*

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Design Option For Buck Converter IC With Intelligent Power Sharing, *Silanna Semiconductor's Power Density Hero online configuration tool can now be used with the SZPL3002A IC*

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July 2023:

GaN Driver Integrates Galvanic Isolation For Power Rails Up To 1700 V, *STMicroelectronics' STGAP2GS gate driver*

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PMIC Integrates Essential Functions For Bluetooth Low Energy Designs, *Nordic Semiconductor's nPM1300 power management IC*

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August 2023:

MCU Embedded Power ICs With CAN FD Interface Provide Faster Communication, *Infineon Technologies' TLE988x and TLE989x MOTIX MCU embedded power ICs*

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High-Voltage Driver Shrinks Design For Ultrasound Scanners,
STMicroelectronics' STHV200ultrasound IC

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January 2022:

Boost Converter Demo Board Shows Off Benefits Of Controller & GaN FETs Combo,
Efficient Power Conversion's EPC9166 demo board

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Automotive Boost Controller Shrinks Class-D Audio Amplifier,
Analog Devices' MAX25203 boost controller

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Silicon-Based ACF Reference Design Challenges GaN-Based Chargers,
Silanna Semiconductor's active clamp flyback-based reference design for 33-W 1C fast chargers

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February 2022:

A 2-kW Bidirectional Converter Reference Design Board With High Efficiency,
Efficient Power Conversion's EPC9170 demo board

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Smart Gate Driver With SPI Protects 48-V Battery Systems In Mild Hybrids,
Infineon Technologies' 2ED4820-EM EiceDRIVER gate driver

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Switcher ICs With 1700-V SiC MOSFET Simplify EV Power Supply Design,
Power Integrations' INN3947CQ-TL and INN3949CQ-TL power supply ICs

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High PSRR LDO With Soft Start Powers Automotive Sensor Systems,
Nisshinbo Micro Devices' NR1640 series LDO regulator

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Dual Gate Drivers For SiC And IGBT Switching,
STMicroelectronics' STGAP2HD and STGAP2SICD galvanically-isolated gate drivers for IGBTs ('2HD) and SiC MOSFETs ('2SICD)

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Buck Converter Reduces Space In Multi-Cell Battery Applications,
Analog Devices' MAX77540 buck converter

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100-V Gate Driver Raises Efficiency, Saves Space, Diodes' DGD0579U high-side and low-side gate driver with built-in bootstrap diode

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March 2022:

All-Silicon, 65-W ACF Reference Design Challenges GaN-Based Adapter Designs, Silanna Semiconductor's RD-31 active clamp flyback (ACF)-based reference design

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April 2022:

APEC 2022: GaN Power Devices And Advanced Topologies Are Put To Work In Latest Adapter Designs

- Eggtronic's SmartEgg ac-dc architecture for power applications in the 75- to 1-kW range, and the associated 230-W demo
- Silanna Semiconductor's AnyPort RD-5 multi-port fast charger reference design, RD-16 100-W 2C1A multi-port USB-PD reference design and RD-25 118-W 1C1A multi-port USB-PD reference design and Smarter Living's 3510PDFE 65-W charger
- Power Integrations' HiperPFS-5 family of quasi-resonant PFC ICs with a 750-V GaN switch, HiperLCS-2 chipset for LLC resonant converters, and DER-916 reference design for a Multi-Port USB-C Wall Outlet Without Buck Converters

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Charge-Pump Converter Expands Options For Distributing Board-Level Power, Murata's MYC0409 charge-pump capacitor-divider module

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Quasi-Resonant PFC Chips With GaN Switch Shrink PFC Stage For Adapters, Power Integrations' HiperPFS-5 family of power-factor-correction ICs

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Chipset Boosts LLC Converter Efficiency, Slashes Component Count, Power Integrations' HiperLCS-2 resonant switch and synchronous rectification chipset

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May 2022:

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Tiny, Quad-Output Regulators Need No External Inductors Or Capacitors,
Empower Semiconductor's EP71xx integrated voltage regulators

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SSRs Shrink Design Size, Improve Reliability And Safety In 800-V EVs,
Texas Instruments' TPSI3050-Q1 isolated switch driver and TPSI2140-Q1 isolated switch

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GaN IC Enables Fast Switching, Narrow Pulses For Automotive Lidar,
Efficient Power Conversion's EPC2221 common-source dual GaN FET

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Amplifier Combines High-Definition Sound With Class-G Efficiency,
STMicroelectronics' TDA7901 automotive amplifier with buck controller for class-G power switching

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June 2022:

PMIC Complements Bluetooth Low Energy Chips, *Nordic Semiconductor's nPM1100 power management IC*

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65-W ACF Reference Design Achieves 30-W/in³ Power Density, *Innoscence Technology and Silanna Semiconductor's 65-W active clamp flyback (ACF) reference design*

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Switcher ICs Extend Adapter Designs To 220 W With Small Size, *Power Integrations' InnoSwitch4-CZ and the ClampZero ICs*

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Architecture Simplifies Development Of Multi Port Chargers, *Silanna Semiconductor's AnyPort architecture*

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LDO Features Low Noise, Dropout And Quiescent Current, *STMicroelectronics' LD56020 200-mA low-dropout voltage regulator*

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July 2022:

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Highly-Integrated Motor Controllers For Battery-Powered Products, Infineon Technologies' MOTIX IMD700A and IMD701A motor controllers

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Automotive LDO Regulators Are Stable With 100-nF Output Capacitance, ROHM Semiconductor's BD9xxN1 series LDOs

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August 2022:

Buck Regulators With Integrated Inductor Save Space, Infineon Technologies' TDM3883 and TDM3885 synchronous buck regulators

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September 2022:

NSREC Notes: Exhibitors Showcase Latest Reference Designs Along With Progress In Rad-Tolerant And Rad-Hard Power Components

Powering Space-Grade FPGAs

- Renesas' rad-hard power management reference designs for the Xilinx Kintex XQRKU060 FPGA and the Microsemi RTG4 FPGA
- IR HiRel's rad-hard RIC74424 gate-driver eval board
- Vicor's three-chip solution for stepping down a 100-V bus to 3 V at 50 A
- EPC Space's EPC7C006 reference design demo board for a rad-hard three-phase motor control plus driver with GaN FETs
- Texas Instruments showed Alpha Data's development board for the Versal space-grade (rad-tolerant) FPGA from Xilinx, which contains TI's power management solution for all the power rails; TI also showed the TPS7H5001-SP rad-hard PWM controller and TI's demo board for the TPS7H4010 SEP 6-A 30-V input POL
- Apogee Semiconductor's AFP1422 rad-hard PWM controller IC

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Other Updates

- *Analog Devices' RH3845MW dc-dc controller and the ADLT3045S and RH3080 linear regulators*
- *STMicroelectronics' eval board for the RHRPMICL1A integrated current limiter*

[For more details...](#)

25-A And 40-A Buck Regulators Feature SVID And I²C/PMBus Interfaces, Infineon Technologies' TDA38640, TDA38740 and TDA38725 OptiMOS 5 IPOL devices

[For more details...](#)

October 2022:

Novel Approach To PFC Enables High Efficiency With Optimized System Cost, Pulsiv's OSMIUM microcontrollers

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GaN Half-Bridge Power ICs Enable Megahertz Switching, Navitas Semiconductor's NV6247 and NV6245C GaNSense half-bridge ICs

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Buck Regulators Provide Dynamic Voltage Scaling With Programmable Slew Rate, Halo Microelectronics' HL7593 and HL7594 synchronous buck converters

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November 2022:

1-kV Voltage Sensor Measures V_{DS} Of SiC And GaN Transistors, Tell-i Technologies' VON1k5Vm sensor

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Another Source For Automotive LDOs With Options For Higher Integration, Taiwan Semiconductor's TQL8xx low-dropout regulators

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Flyback PWM Controllers Enable Small Footprints For Fast Charging Solutions, Elevation Semiconductor's HL9510 and HL9512 controller ICs

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Chip Balances Supercapacitors Rated At 3.0 V And Higher, Advanced Linear Devices' ALD810030 precision MOSFET array

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Buck Converter IC For ADAS Achieves Highly Stable Operation, ROHM Semiconductor's BD9S402MUF-C buck converter IC with built-in MOSFET

[For more details...](#)

December 2022:

PFC And Hybrid-Flyback IC Drives Performance In GaN-Based USB-C Adapters, Infineon Technologies' XDPS2221 controller IC for USB-PD

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Highly Configurable, Compact PMIC For The IoT, Qorvo's ACT88420 power management IC

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January 2021:

PMBus-Compliant Buck Regulators Deliver Up To 40 A In 5-mm x 7-mm Package, Vishay Siliconix SiC45x family of microBUCK regulators

[For more details...](#)

Automotive DC-DC Converters Offer Stable Output, Fast Response And High Efficiency, ROHM's BD9P series dc-dc converters

[For more details...](#)

February 2021:

Receiver IC Puts Wireless Charging Speeds On Par With 60-W Adapters, Renesas Electronics' P9418 60-W wireless power receiver IC

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24-V Dual-Channel Gate Driver For Large Power Switches, Infineon Technologies' 2ED24427N01F low-side gate driver with an integrated thermal pad

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March 2021:

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Laser Driver IC Could Spur Burst Of Activity In Lidar Applications, Efficient Power Conversion's EPC21601 laser driver IC

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Smart Controller Combines Motion Control Engine With Three-Phase Gate Driver, Infineon Technologies' IMD110 iMOTION Smart Driver series

[For more details...](#)

Class-D Amp For High-Definition Audio Adds Safety-Related Diagnostics, STMicroelectronics' HFDA801A high-resolution audio amplifier

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NSREC Notes:

Space Power Components Answer Calls For Higher Performance, Lower Cost

- **Bringing Higher Reliability To Plastic Parts, Renesas's Intersil space plastic products including the ISL73033SEH low-side driver and 100-V GaN FET, the ISL71001SLH/SEHM 6-A synchronous buck regulator, the ISL71610SLHM digital isolator with passive input, and the ISL71710SLHM digital isolator with active input**
- **A PWM Controller Fast Enough For GaN, Apogee Semiconductor's AFP1422 radiation-hardened PWM controller**
- **Smart Power Switch Controller Brings Greater Integration, CAES's UT36/UT05PFD103 smart power switch controller**
- **Higher Current And Wider Input Range For Point-Of-Load Converters, Texas Instruments' TPS7H4001-SP space-grade 18-A buck converter and TPS7H4010-SEP space-enhanced plastic 3.5-V to 32-V, 6-A buck converter**
[For more details...](#)

April 2021:

DC-DC Controllers Integrate Active EMI filter For Smaller Solution Size, Texas Instruments' LM25149-Q1 and LM25149 dc-dc controllers

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AC-DC Converter ICs Ease Design For Appliances, Sensors And Meters, Power Integrations' LNK3207 ac-dc converter ICs

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Half-Bridge And High-Side/Low-Side Gate Drivers Are Tailored For Fast Switching, Infineon Technologies' 2ED2103S06F/2ED2104S06F half-bridge and 2ED2110S06M/2ED2101S06F high- and low-side gate drivers

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Power ICs Extend Battery Life In Consumer, Industrial, Healthcare And IoT Designs, Maxim Integrated Products' MAX17227A and MAX17291 boost converters and MAX38911 LDO

[For more details...](#)

Tiny, Programmable Mixed-Signal ASIC Features I²C Interface, Dialog Semiconductor's SLG46811 GreenPAK device

[For more details...](#)

Highly Integrated Switching Regulator Delivers Fast Transient Response, Empower Semiconductor's IVR EP7010 10-A Integrated Voltage Regulator

[For more details...](#)

May 2021:

Inverter Eval System Shows >99% Efficiency At 100 kHz Using SiC MOSFETs, Pre-Switch's CleanWave200 inverter evaluation system, offers the option of a chip-level implementation of its controller

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PMICs Offer Customized And Compact Power Supply Solutions For FPGAs, AnDAPT AmP PMICs

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Plug-And-Play Gate Drivers Target Railway Applications, Power Integrations' SCALE-2 gate drivers

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Easy-To-Design-In Gate Drivers Offer Reinforced Isolation, Infineon Technologies' EiceDRIVER X3 gate driver families

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Isolated Gate Driver Safely Controls SiC MOSFETs, STMicroelectronics' STGAP2SiCS STGAP family of isolated gate drivers

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Reference Design Compact USB Type-C 27-W Power Adapters,

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STMicroelectronics' STEVAL-USBPD27S USB Type-C Power Delivery 3.0 reference design, which includes the STM32G071 microcontroller, the STCH03 PWM controller and the TCPP01-M12 USB Type-C protection IC

[For more details...](#)

600-V IGBT IPMs Reduce Radiated Noise And Power Loss, ROHM
Semiconductor's four new members of the BM6437x series of 600-V IGBT intelligent power modules (IPMs)

[For more details...](#)

June 2021:

900-V Switcher ICs Benefit EV Designs With 400-V, 800-V And Even Higher Voltage Buses, Power Integrations' INN3996CQ flyback switcher IC

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Programmable Three-Phase Driver IC Enables More-Integrated Designs For Power Tools, Infineon Technologies' 6EDL7141 three-phase gate driver IC

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Photocouplers Save Space In Industrial Drives And Solar Inverters, Renesas' RV1S9231A, RV1S9207A and RV1S9209A photocouplers

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Isolated Gate Drivers Are Optimized For EVs And Industrial Applications, Silicon Labs' Si828x version 2 isolated gate driver product family

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July 2021:

Totem-Pole PFC Controller Provides High Performance, Cost Effective Design, ON Semiconductor's NCP1680 CrM PFC controller IC

[For more details...](#)

Supply Supervisor Delivers Glitch-Free Power-Up Down To 0.6 V And Lower, Maxim Integrated Products' MAX16162 nanoPower supervisor

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700-V, 2-W To 8-W Buck Regulators Suit A Range Of Home And Industrial Uses, Renesas Electronics' RAA2230XX buck regulators

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Offline Switcher ICs Incorporate Lossless Zero-Cross Detection And X-Capacitor Discharge, Power Integrations' LinkSwitch-TNZ family of switching power supply ICs [For more details...](#)

High Efficiency DC-DC Converter Family Extends Output Power To 100 W, Silanna Semiconductor's SZDL3105B fully-integrated dc-dc converter [For more details...](#)

Flyback Switcher ICs Enable Compact Mobile Chargers, Power Integrations' InnoSwitch4-CZ high-frequency, zero voltage switching (ZVS) flyback switcher ICs [For more details...](#)

August 2021:

650-V GaN FET Features Integrated Driver And Enhanced Protection, Tagore Technology's TP44200NM 180-mΩ 650-V GaN E-HEMT device [For more details...](#)

Active Clamp Flyback Controller Extends Power Density, Lowers No-Load Power For Adapters, Silanna Semiconductor's SZ1131 ACF controller [For more details...](#)

Single-Stage Flyback Controllers Enable Cost-Effective Smart LED Drivers, Infineon Technologies' ICL88xx flyback controllers [For more details...](#)

PMIC Delivers Complete Power Solution For New MPUs, Renesas Electronics' RAA215300 PMIC [For more details...](#)

ZVS Chipset Enables Smaller Adapters At 100-W+ Power Levels, Dialog Semiconductor's digital zero voltage switching chipset includes the iW9801 primary-side controller and the iW709 secondary-side USB PD protocol IC [For more details...](#)

Smart Power Stages Provide Controller-Agnostic Solution For Multiphase VR Regulators, Alpha and Omega Semiconductor's AOZ527xQI series smart power stages [For more details...](#)

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Isolated Current Sensors Feature High Speed And High Accuracy, Crocus Technology's CT430 and CT431 XtremeSense TMR devices

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Three-Phase MOSFET Gate Driver Maximizes Battery Life And Cuts Component Count, TRINAMIC Motion Control's TMC6140-LA MOSFET gate driver

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PMICs Power Next-Gen Automotive AI SoCs, Dialog Semiconductor's DA914X-A automotive-grade, stepdown dc-dc converters

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Wireless Charger Reference Design For Automotive And Consumer Applications, Microchip Technology's Qi 1.3 wireless charging reference design

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October 2021:

NSREC Notes: Vendor Talks Highlight Advances In Power Devices, Packaging And Reference Designs For Space Applications

- **Superjunction Technology And System Solutions**, half-bridge eval boards, RIC7S113 rad-hard high- and low-side gate driver, and RIC74424 rad-hard dual noninverting low-side gate driver
- **Many Voltage Regulator Options**, Texas Instruments' TPS7H5001-SP rad-hard current-mode PWM controller; 3-A QMLV rad-hard TPS7H4002-SP, 18-A QMLV rad-hard TPS7H4001-SP and rad-tolerant TPS7H4010-SEP point-of-load converter ICs; TPS7H2201-SP smart load switch; TPS73801-SEP 1-A fast transient regulator; and TI's eval board with rad-hard power solution for Xilinx's Kintex UltraScale XQRKU060 FPGA
- **More Progress In Plastic**, ISL73033SEH low-side driver and 100-V GaN FET, ISL71001SLH/SEHM 6-A synchronous buck regulator and the ISL71610SLHM digital isolator with passive input, and Renesas' full QML-V qualified power solution for Microchip's RTG4 rad hard FPGA

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GaN Gate Driver Boosts Speed, Flexibility In Industrial And Home Automation, STMicroelectronics' STDRIVEG600 half-bridge gate driver

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Tiny PMIC Charges Wearables And Hearables Faster, Analog Devices' MAX77659 single-inductor multiple output (SIMO) power management IC

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November 2021:

Buck-Boost Converter Boasts Low I_Q And Supercapacitor Charging, Texas Instruments' TPS61094 buck-boost converter

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Flyback Switcher Chips With Built-In USB PD Controller Simplify Adapter Designs, Power Integrations' InnoSwitch3-PD offline switcher ICs

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GaN Power ICs Integrate Fast Overcurrent And Overtemperature Protection, Navitas Semiconductor's third-gen GaNFast power ICs

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USB-C Controller Eases Transition Away From Barrel Connectors, Infineon Technologies' EZ-PD BCR (Barrel Connector Replacement)

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Automotive LED Driver Provides 4.5-V to 75-V Input, Taiwan Semiconductor's TS19503 hysteretic-mode converter

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December 2021:

Multi-Cell Battery Front End ICs For High-Cell-Count, High-Voltage Systems, Renesas Electronics' RAA48920x battery front end ICs

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January 2020:

Photocouplers Shrink Designs For Industrial Automation And Solar Inverters, Renesas' RV1S92xxA and RV1S22xxA photocouplers

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PMIC Powers Application-Processor-Based Systems, STMicroelectronics' STPMIC1 power-management IC

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Highly Robust Gate Drivers Achieve AEC-Q100 Automotive Qualification,
Power Integrations' SID1181KQ SCALE-iDriver gate driver

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PMIC For Automotive Surround View Camera Systems, *Renesas Electronics' ISL78083 automotive camera PMIC*

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Rad Hard Regulator Integrates Synchronous Buck And LDO For Satellites,
Renesas Electronics' ISL70005SEH synchronous buck and low dropout regulator

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March 2020:

40-A Buck Converter IC Is Stackable Up to 160 A, *Texas Instruments' TPS546D24A 40-A buck converter*

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April 2020:

What We Missed At APEC: Silicon Carbide Marches On And Other Power Product News, *Power Integrations' PowiGaN, SiC SCALE iDriver gate driver, BRD 1167/1267 bridge switch motor driver ICs; Rohm Semiconductor's BM6112 isolated gate driver; Infineon Technologies' IR3887M, IR3888M and IR3889M OptiMOS iPOL regulators with Fast COT; the FOD8334, NCD57000 and NCP51530 gate drivers; Texas Instruments' TPS546D24A 40-A stackable buck converter, the TPSM53604 36-V input, 4-A output buck power module, the UCC12050/40 500-mW isolated dc-dc power supply; Efficient Power Conversion's EPC2152 80-V, 12.5-A power stage IC (driver plus eGaN FET half-bridge).*

[For more details...](#)

Low-Cost ICs Provide Advanced Velocity Control Of Servo Motors,
Performance Motion Devices' Juno Velocity Control ICs

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Synchronous-Rectification Controller Cuts BOM Costs For Power Adapters,
STMicroelectronics' SRK1001 secondary-side synchronous-rectification controller

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GaN Power Switch Increases Output Of Display PSUs To 75 W, Power Integrations' InnoSwitch3-MX isolated switcher IC family

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PMIC Cuts Solution Size, Extends Battery Life For Wearables And Hearables, Maxim Integrated Products' MAX77654 power management IC

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ACF Controllers Push Power Adapters To Higher Efficiency Using Silicon Only, Silanna Semiconductor's SZ1110 and SZ1130 active-clamp flyback controllers

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Flexible And Rugged Controller Simplifies Power For Smart Devices, STMicroelectronics' VIPer222 controller for high-voltage converters

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June 2020:

Automotive LED Driver Ensures Stable Lighting During Battery Voltage Drops, ROHM Semiconductor's BD18336NUF-M LED driver IC

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Thermally Efficient PFC Controller IC Enables 100-W Adapters With No Heatsinks, Power Integrations' HiperPFS-4 ICs

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Configurable Mixed-Signal IC Adds High-Voltage Capability For Driving Motors, Dialog Semiconductor's SLG47105 HV PAK IC

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100-V Half-Bridge MOSFET Drivers Offer Ruggedness And High Performance, Renesas Electronics' HIP2211 and HIP2210 half-bridge MOSFET drivers

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Switcher IC Powers EV Subsystems Directly From 400-Vdc Bus, Power Integrations' AEC-Q100-qualified version of its LinkSwitch-TN2 switcher IC

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Switcher IC Eases Operation From High-Voltage EV Batteries, Power Integrations' InnoSwitch3-AQ flyback switcher IC

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Versatile LED Driver Powers A Host of Automotive Applications, Taiwan Semiconductor's TS19501 dimmable LED driver

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Buck-Boost Chargers Deliver Greater Power Density For USB And Wireless Dual-Input Charging, Texas Instruments' BQ25790 and BQ25792 buck-boost battery charger ICs

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Interleaved PFC Digital Power Controller Features Mechanical Inrush Control, STMicroelectronics' STNRGPF02 two-channel interleaved PFC controller

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Highly Integrated Automotive-Grade Buck Converters Power In-Cabin Electronics,
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CMOS LED ICs Replace Legacy Bipolar Drivers,
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Efficient GaN-Powered LED Drivers Target Smart-Lighting Designs,
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Buck-Boost Converter With Ultra-Low Quiescent Current Powers Sensors And Other Devices,
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Power IC Shrinks Input Bulk Capacitor, Reduces Inrush Current,
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Isolated IGBT/SiC MOSFET Gate Driver Benefits HEV/EV Applications,
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80-V DC-DC Controllers Provide Extra Voltage Margin For Data Center, Telecom Applications,
Renesas Electronics' ISL81801 and ISL81802 dc-dc controllers

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Automotive GaN FET Includes Driver, Protection And Active Power

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Management, Texas Instruments' LMG3522R030-Q1, LMG3525R030-Q1, LMG3422R050, LMG3425R050, LMG3422R030 and LMG3425R030 600-V and 650-V GaN FETs with integrated driver, protection and temperature reporting

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Modules Protect 5-V And Lower Designs From Overvoltage, Advanced Linear Devices' SABMBOVP family of overvoltage protection PCBs

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Automotive Gate Drivers Target 48-V Battery Systems, Allegro MicroSystems' AMT49100, AMT49101, AMT49502, A89503 and the A89500 three-phase and half-bridge gate drivers

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December 2020:

Automotive-Qualified High-Side Switch ICs With User-Definable Protection, ROHM's V2HD045EFU-C, BV2HC045EFU-C and BV2HD070EFU-C two-channel high-side switch ICs

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Buck Regulators Deliver High Efficiency, Small Size For USB-PD Applications, Silanna Semiconductor's SZPL3102A/3103A dc-dc converters

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Low-Noise Buck Converters With Ferrite-Bead Compensation Eliminate LDOs, Texas Instruments' TPS62912 and TPS62913 switching regulators

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LED Drivers Come In DFN With Side-Wettable Flanks, Nexperia's NCR32xPAS/NCR42xPAS LED driver ICs

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January 2019:

Receiver Chip Enables Wireless Charging In Smaller Devices, Energous' DA2223 four-port RF-to-dc wireless power chip

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Energy-Harvesting Embedded Controller May Eliminate Batteries In IoT Devices, Renesas' R7F0E embedded controller

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Buck Regulators Deliver Compact Solutions For Powering Next-Gen Chipsets, Alpha and Omega Semiconductor's AOZ2367QI and AOZ2368QI EZBuck regulators

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March 2019:

SiC-MOSFET Gate Driver Improves Efficiency And Safety, Power Integrations' SIC1182K SCALE-iDriver SiC-MOSFET gate driver

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PMIC Supports Thermal Energy Harvesting With Low-Voltage Startup, e-peas' AEM20940 power management IC

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April 2019:

6-A Buck Converter Achieves Tiny Size, High Efficiency Using Novel Architecture, Murata Manufacturing's MYMGA1R86RELC2RA dc-dc converter

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Gate Driver Uses AI To Bring Soft Switching Benefits To Inverters, Pre-Switch's 3-phase gate-drive solution

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Chipset Makes Flybacks More Efficient In Powering Displays, Power Integrations' InnoMux chipset

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Regulator Uses Less Power, Fewer Parts Than Conventional Cap-Drop Designs, Texas Instruments' TPS7A78 ac-dc linear regulator

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PMBus Power Modules Deliver High Power Density For FPGAs, DSPs, ASICs And Memory, Renesas Electronics' ISL8280M and ISL8282M hybrid digital dc-dc PMBus power modules

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1000-A Voltage Regulator Solution For Next-Gen AI And 5G Networking,

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Regulated LED Driver For Automotive Applications, Taiwan Semiconductor's TSCR421 low-side constant-current regulator

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Isolated ICs Ensure Precise Current And Voltage Measurements, Silicon Labs' Si89xx family of isolated analog amplifiers, voltage sensors and delta-sigma modulator devices

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AC-DC Converter ICs Add Built-In 1700-V SiC MOSFET For More Compact Designs, ROHM Semiconductor's BM2SCQ12xT-LBZ series ac-dc converter ICs

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Rad-Tolerant PWM Controller And GaN FET Driver Come In Plastic Packages For SmallSats, Renesas Electronics' ISL71043M PWM controller and ISL71040M GaN FET driver

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Isolated Gate Drivers Integrate Sensing For IGBTs And SiC MOSFETs, Texas Instruments' UCC21710-Q1, UCC21732-Q1 and UCC21750 isolated gate drivers

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Programmable Multi-Channel LDO Packs High PSRR And Low Noise For Powering Smart Phone Cameras, Dialog Semiconductor's SLG51000 configurable mixed-signal integrated circuit

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Smart Class D Amplifier Delivers Louder, Richer Sound From Micro Speakers, Maxim Integrated Products' MAX98390 smart amplifier

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Six-Channel Controller Improves Precision And Performance For Stepper

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80-V Buck LED Drivers Perform Highly Accurate Dimming, Infineon Technologies' ILD8150/E LED driver ICs

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Switching Regulator Operates With Input Up To 61 V, STMicroelectronics' A7987 automotive switching regulator

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Offline Switcher ICs Adopt GaN For Higher Power Output And Efficiency, Power Integrations' INN3X79C and INN3X70C offline switcher ICs

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15-Mbps Photocouplers Withstand Harsh Industrial Applications, Renesas' RV1S9x60A photocouplers

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Regulator's Low Quiescent Current Extends Battery Life For IoT Devices, Texas Instruments' TPS62840 synchronous stepdown converter

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Configurable Mixed-Signal ICs Are Now Available For Automotive Applications, Dialog Semiconductor's SLG46620-A Configurable Mixed-Signal IC

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September 2019:

Battery Management IC Maximizes Cell Life And Driving Range For Hybrids And EVs, Renesas Electronics' ISL78714 Li-ion battery management IC

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Buck-Boost Converter Extends Battery Life For IoT, Wearable, And Portable Devices, ROHM's BD83070GWL synchronous buck-boost converter IC

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X-Capacitor Discharge ICs Enable Faster Discharge, Power Integrations'
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Charger's Low Termination Current Increases Battery Capacity, Texas Instruments'
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ICs Simplify USB Type-C Power Delivery, Enable HostFlexing And PDBalancing, Microchip Technology's
USB705x SmartHub devices with support for power delivery and UPD301A USB type-C PD controller

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Power Amplifier IC Delivers High Voltage And High Current, Apex Microtechnology's
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October 2019:

Backlight LED Driver Is Compatible With 3- To 12-in. Vehicle LCD Panels, ROHM Semiconductor's
BD81A76EFV-M LED driver IC

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Silent Motor Controller Enables Battery-Powered Stepper Motors To Run in Stealth Mode, TRINAMIC's
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POLs Increase Efficiency For Server, Networking And Telecom Applications, Infineon Technologies'
OptiMOS IR3826(A)M integrated point-of-load regulators

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Tiny LDO Cuts Quiescent Current To <25 nA, Texas Instruments'
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November 2019:

PoE Products Ease Powering Of Pre-standard And 802.3bt-2018-Compliant PDs, Microchip Technology's
IEEE 802.3bt-2018-compliant PoE injectors and midspans and power sourcing equipment (PSE) chipsets including the PD69208M, PD69204T4 and PD69208T4 PSE managers and PD69210 PoE controller

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LED Drivers Support Dynamic Automotive Lighting From Front To Rear, Texas Instruments' TPS92520-Q1, TPS92682-Q1 and TPS929120-Q1 LED drivers
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January 2018:

Dual-Mode Battery Charge ICs Enable Simultaneous USB PD And Wireless Charging, ROHM's BD99954GW/MWV dual-input boost-buck charging ICs
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February 2018:

Rad-Hard GaN Devices Propel Space Power Supplies To Higher Performance, Renesas Electronics' ISL7002xSEH GaN FETs and ISL70040SEH GaN FET driver
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Fully Integrated Regulators Have PMBUS, SVID And PVID Functionality, Infineon Technologies' IR38x63/5 integrated point-of-load regulators
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Buck Regulator Delivers High Current With High Power Density For 24-V Inputs, Vicor's PI3325-00-LGIZ Cool-Power ZVS buck regulator
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March 2018:

Dynamically Configurable Offline Switcher IC Supports USB PD 3.0 + PPS, Power Integrations' InnoSwitch3-Pro configurable flyback switcher ICs
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DC-DC Converter Runs Up To 10 Years On Coin-Cell Battery, ROHM Semiconductor's BD70522GUL dc-dc converter IC
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GaN Power ICs Make Adapters Smaller, Support Fast Charging, Navitas Semiconductor's 27-W and 65-W USB-PD reference designs
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Feature Rich PoE Chips Power IP Cameras And Other IoT Applications, Silicon Labs' Si3406x and Si3404 PoE powered device ICs

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April 2018:

4-V to 42-V Input Buck Regulators Occupy 2.6-mm x 3.0-mm Footprint,
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PWM Controller-MOSFETs Combo Enables Robust SMPS Designs Up To 43 W,
Infineon Technologies' CoolSET

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Stepup Power Module Supports 48-V GPUs In Legacy 12-V Data Centers,
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LDO Packs High Performance In Tiny Footprint,
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Power Supply ICs Are Honed For High-Fidelity Audio, ROHM Semiconductor's
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PMICs Boast Better Efficiency And Solution Size For Powering Processors,
Renesas Electronics' ISL91302B, ISL91301A and ISL91301B power management ICs

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USB Type-C Data Line Protection IC Responds To Overvoltages In 15 ns,
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400-V Linear Regulators Deliver Constant LED Current In Compact Packages,
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"Deep Sleep" Load Switch Prevents Battery Discharge During Product Shipment,
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LDOs Boast 98-dB PSRR, Benefitting Imaging And Wireless Applications, ON Semiconductor's NCP16x and NCV816x series LDOs

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Bidirectional Bus Converters Deliver 750 W For Data Center, Automotive Apps, Vicor's 2317 NBM, a bidirectional nonisolated fixed-ratio converter

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Dual-Core Digital Signal Controller Eases Code Development By Separate Design Teams, Microchip Technology's dsPIC33CH digital signal controller

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Gate Driver Core Is Optimized For SiC MOSFET Modules, AgileSwitch's ASC1 SiC MOSFET gate driver core

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EMI-Compliant Buck Converters Speed Time To Market, Maxim Integrated Products' CISPR 22- and EN 55022-compliant Himalaya stepdown converters and power modules

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Resonant Controller With PFC Targets Power Supplies And LED Drivers, Infineon Technologies' ICL5102 resonant controller IC

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September 2018:

Half-Bridge Gate Driver IC Enhances Reliable Start-Up Operation, Infineon Technologies' IRS2007S 200-V half-bridge gate-driver IC

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PMICs Power Next-Generation Mobile Consumer Applications, Maxim Integrated Products' MAX77714 and MAX77752 power-management ICs

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Power Monitoring IC Measures AC And DC Power With High Accuracy,
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48-V Input Buck Regulators Offer BGA Option, *Vicor's PI354x-00-BGIZ Cool-Power ZVS buck regulator*

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Half H-Bridge Module Combines SiC MOSFETs with Integrated Gate Drive,
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Buck Converters Support Sensors And Cameras For Assisted Driving, *ROHM Semiconductor's BD9S series automotive synchronous buck converters*

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Buck-Boost Controllers Deliver True Bidirectional Power Conversion For Industrial Battery-Powered Applications, *Renesas Electronics' ISL81601 and ISL81401 bidirectional four-switch synchronous buck-boost controllers*

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Smart Switch Supports Fuel Savings In Automotive Power Trains, *Infineon Technology's TLE9104SH smart quad-channel powertrain switch*

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USB Type-C And USB Power Delivery Controllers Have Fully Integrated Power Paths, *Texas Instruments' TPS65987D and TPS65988 USB Type-C and USB PD controllers*

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Digital Signal Controller Accelerates DSP Performance for Time-Critical Control Applications, *Microchip Technology's dsPIC33CK digital signal controllers*

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600-V GaN FET Power Stages Boost Performance For Applications Up To 10 kW, *Texas Instruments' LMG34x family of 600-V GaN power stages*

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Automotive Buck-Boost Chipset Meets Demands Of Start-Stop Vehicle Systems, Rohm's BD8P250MUF-C + BD90302NUF-C buck-boost chipset

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Rad Hard Current Sources For Sensing Subsystems In Satellites, Renesas Electronics' ISL70591SEH and ISL70592SEH rad hard current sources

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Flyback Switcher ICs Bring High Efficiency To Three-Phase 480-V Industrial Applications, Power Integrations' LinkSwitch-XT2 offline switcher ICs

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LDO's Miserly Iq Prolongs Battery Life While 1-mm² Footprint Saves Space, Microchip Technology's MCP1811 linear low dropout regulator (LDO)

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December 2018:

BLDC Motor Driver Eliminates Heatsinks, Slashes Certification Time For Appliance Designs, Power Integrations' BridgeSwitch half-bridge motor driver IC family

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Buck/Boost Regulator Simplifies Power Backup Using Supercaps, Maxim Integrated's MAX38888 reversible buck/boost regulator

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Half-Bridge Drivers Enhance Design Of 12-V to 48-V Automotive Hybrid Powertrains, Renesas Electronics' ISL784x4 100-V half-bridge drivers

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Isolated High-Side Power Switch Offers SPI And Many Other Features, STMicroelectronics' ISO8200AQ isolated octal high-side smart power switch

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ORing FET Controller Protects Automotive Electrical Systems, Maxim Integrated's MAX16141 36-V ORing FET controller

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January 2017:

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Power IC Model Library For PSpice Adds Automotive Test, From EMA Design Automation, ver.4.2 of AEi Systems' Power IC Model Library

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February 2017:

GaN Power ICs Enter The Market, Navitas Semiconductor's NV6131, NV6105 and NV6115 iDrive Gallium Nitride power ICs

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Battery Charger Extends Backup Battery Life In Automotive eCall Systems, Intersil's ISL78693 3.6-V battery charger IC

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Motor Driver IC Requires Only Four External Components, Allegro MicroSystems Europe's A3916 motor driver IC

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Intelligent Power Modules Offer More Packages, More Features For Appliances, STMicroelectronics' SLLIMM nano series of Intelligent Power Modules for motor drives

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Inductorless Converter Delivers 10 A With Over 98% Efficiency, Dialog Semiconductor's DA9313 switched-capacitor dc-dc converter

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48-V Buck Regulator Delivers 20 A In Less Than 740-mm² Footprint, Vicor's PI3525-00-LGIZ 48-V Cool-Power ZVS buck regulator

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Buck-Boost Controller Is Tailored To Dual Automotive Battery Systems, Texas Instruments' LM5170-Q1 multiphase bidirectional dc-dc current controller.

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Power IC Combines Fifth-Gen Flyback Controller With Latest MOSFETs, Infineon Technologies' Gen5 CoolSET power ICs

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Buck Converter Optimizes DC Fan Motor Control For Refrigerators, Rohm's BD9227F buck converter for dc fan motors

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100-V Power Stage Module Satisfies Cloud Infrastructure Requirements, ON Semiconductor's FDMF8811 100-V bridge power stage module

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10-A Power Modules Provide Complete Stepdown Solutions In Tiny Footprints, Texas Instruments' TPSM84A21 and TPSM84A22 stepdown power modules

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PMIC Increases Power Efficiency For Digital SLR Cameras, Dialog Semiconductor's DA6102 integrated power management IC

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LED Driver ICs Combine High Efficiency, Small Size, Peregrine Semiconductor's ARC3C family of LED driver ICs

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June 2017:

A New Power Management Tool For Portable Product Designers, Silego Technology's SLG46580 GreenPAK programmable mixed-signal IC

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Power Management IC Is 91% Efficient, Reduces Space Needs 40%, Intersil's ISL91211 PMIC

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Stepdown Converters Cut Power Dissipation And Size For Industrial Applications, Maxim Integrated's MAX17572 and MAX17574 Himalaya synchronous stepdown dc-dc converters

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Synchronous Rectifier Controller Eases Power System Design, ON Semiconductor's FAN6248 synchronous rectifier controller for LLC resonant converters

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GaN Power ICs Enable Smallest Power Adapters For Ultra-Thin TVs And Laptops, Navitas Semiconductor's 150-W ac-dc reference design using GaN power ICs

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August 2017:

PMICs Increase Battery Life In "Hearables", Maxim Integrated's MAX77650/MAX77651 power management ICs (PMICs)

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Smart Gate Driver Photocoupler Features Improved Desaturation Sensing, Toshiba America Electronic Components' TLP5214A smart gate driver photocoupler

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September 2017:

Offline Flyback Switcher ICs Deliver 94% Efficiency Over Line And Load, Power Integrations' InnoSwitch3 family of offline flyback switcher ICs

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October 2017:

Power Amplifier ICs Deliver High Voltage, High Output Current In Compact Package, Apex Microtechnology's PA164 and PA165 power amplifiers

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Buck Converter IC Delivers Extreme Voltage Stepdown For Mild Hybrid Vehicles, ROHM Semiconductor's BD9V100MUF-C dc-dc converter IC

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IC Boosts Power Measurement Accuracy In Windows 10 Devices, Microchip Technology's PAC1934 power and energy monitoring chip

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40-A Buck Converter Chip Features Novel Control Topology, Texas Instruments' TPS543C20 synchronous buck converter IC

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November 2017:

Power ICs Offer Many Options For Expanded Power Delivery Via USB Type C

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- *Buck-Boost Battery Charge Controllers Maximize Input Power For 1S To 4S Applications, Texas Instruments' bq25703A and bq25700A synchronous charge controllers*
- *Eval Boards Ease Development Of USB PD Applications From Mobile To 100 W, Rohm's USB power delivery (USBPD) compatible transmitter/receiver evaluation boards*
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- *Power Converter ICs Complete Smartphone Direct Charging Solution, Dialog Semiconductor's DA9318 series of power converter ICs (can be combined with the iW656 listed above)*
- *18-W USB PD Reference Design Delivers High Efficiency And Compact Footprint, Power Integrations' DER-567 USB PD compliant, ac-dc power converter reference design*
- *Complete USB Type-C Solutions For Rapid Charging And High-Speed Data Transfer, ON Semiconductor's portfolio of solutions for the implementation of USB type-C applications includes intelligent charge controllers, port control ICs, data multiplexers, integrated re-drivers, high voltage protection switches, and ESD protection components*
- *USB-C Buck-Boost Battery Chargers Add 5-V To 20-V Reverse Boost For USB On-The-Go Charging, Intersil's ISL9238 and ISL9238A single-chip battery chargers*

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- *USB-C Buck-Boost Battery Charger Reduces BOM Costs, Intersil's single-chip ISL9237 Narrow VDC battery charger*

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Power Supply Sequencers Are Rad Hard, Intersil's ISL70321SEH and ISL73321SEH quad power supply sequencers

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Digital POL Generates Five Outputs In Compact, Infineon Technologies' IRPS5401 digital point-of-load regulator

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Chip Enables Faster Wireless Charging Of Smartphones And Tablets, STMicroelectronics' STWBC-EP wireless-charging controllers

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December 2017:

5-A Peak-Current Gate Drivers Reduce System Complexity And Cost, Power Integrations' SID1102K gate driver IC

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Nanopower PMICs Extend Battery Life For IoT Products, Dialog Semiconductor's DA9230 and DA9231 nanopower PMICs

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January 2016:

16-Cell Li-ion Monitor Eases Battery Management For Hybrids, EVs And Grid Storage, Texas Instruments' bq76PL455A-Q1 battery monitor and protector

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Monolithic Sync Buck Regulator Operates Efficiently Up to 18 V, Alpha and Omega Semiconductor's AOZ3101 synchronous 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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February 2016:

Power ICs Article Archive (By Issue)

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

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March 2016:

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

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

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Controllers Feature Ultra-Stable On-Resistance For Power Rail Switching, Silago Technology's SLG59H100xV integrated power controllers

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April 2016:

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

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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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January 2015:

15-W Qi-compliant Wireless Charging Solution Charges Larger Devices Faster, Freescale Semiconductor's WPR1516 and MWCT1012 wireless charging chips

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Power ICs Article Archive (By Issue)

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February 2015:

Digital Controllers Support VR12/12.5 And PMBus, Powervation's PV3103, PV3104, and PV3202 digital dc-dc controllers

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March 2015:

GaN FETs + Driver Module Lowers Barriers To GaN-Based Power Design, Texas Instruments' LMG5200 integrated half-bridge GaN FET power-stage

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

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April 2015:

Top Five Products And Demos Seen at APEC 2015

- 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:

Power Op Amp Improves Circuit Protection, Lowers Quiescent Current For Piezo Transducers, Apex Microtechnology's MP118FD power operational amplifier

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DSCs Offer Lower Latency, Live Update And More For Digital Power Supply Designs, Microchip Technology's dsPIC33EP "GS" family of digital signal controllers

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June 2015:

Controllers Simplify Digital Power Conversion And Enhance Performance, STMicroelectronics' STNRG digital-controller family

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Power ICs Article Archive (By Issue)

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IC Speeds Charging Of Li-ion Batteries, Texas Instruments' bq2589x single-cell Li-on charger

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July 2015:

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

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

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700-V Gate Driver ICs Increase System Reliability And Shrink Board Space, Infineon Technologies' IR7xxxS series of 700-V HVICs

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August 2015:

Integrated Power Switch Features Reverse-Current Blocking, Silego Technology's SLG59M1603V integrated power switch

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Controller IC Eases Application Of SiC MOSFETs In AC-DC Power Supplies, Rohm's BD7682FJ-LB ac-dc converter control IC

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September 2015:

IC Extends Life Of Multi-Cell Li-ion Batteries, Intersil's ISL94203 Li-ion battery monitor

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October 2015:

Gate Driver Shrinks Delay And Board Space For Server Power Supplies, Texas Instruments' UCC27714 high-speed, low-side gate driver

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Power ICs Article Archive (By Issue)

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Charger Interface IC Eases Implementation Of Quick Charge 3.0 Protocol,
Power Integrations' CHY103D charger-interface IC

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November 2015:

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

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PWM Controllers Feature 40-V Operation And PMBus Interface, *Microchip Technology's MCP19118 and MCP19119 digitally enhanced power analog controllers*

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Wireless Charging Solution Is Adopted By Tier I Computer Makers,
Semtech's TS80K wireless charging platform

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December 2015:

Smart Diode Controller Delivers Reverse Polarity Protection With No I_Q ,
Texas Instruments' LM74610-Q1 smart diode controller

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Medium-Power Wireless Transmitter Reference Design Is Certified To Qi V 1.2, *Rohm's wireless power reference design*

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15-W Wireless Power Receiver IC Complies With Qi V1.2, *Toshiba America Electronic Components' TC7766WBG wireless power receiver*

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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:

Power ICs Article Archive (By Issue)

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Controller Cuts Cost For Qi-compliant Wireless Chargers, Texas Instruments' bq500412 Qi-compliant wireless power transmitter manager

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

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High-Temperature, High-Voltage DC-DC Converters Reduce Design Time For Down-Hole Applications, International Rectifier's HTH27022S and HTM27092S dc-dc converters

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March 2014:

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

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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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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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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 [For more details...](#)

May 2014:

Gate Drivers For Automotive Applications Feature Fast Propagation Delays, Texas Instruments' UCC275xx-Q1 family of single- and dual-channel gate drivers [For more details...](#)

July 2014:

MCUs With High-Res Timer Ease Transition To Digital Power Control, STMicroelectronics' STM32F334 Digital Power microcontrollers [For more details...](#)

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...](#)

August 2014:

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

Tiny Li-ion Charger Targets Wearable Applications, Texas Instruments' bq25100 single-cell Li-ion charger [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...](#)

Power ICs Article Archive (By Issue)

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November 2014:

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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December 2014:

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

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January 2013:

High-Efficiency Stepper Motor Driver IC Targets Office Automation Equipment, ON Semiconductor's LV8702V stepper-motor-driver IC

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

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February 2013:

Single-Stage LED Driver Cuts BOM Cost in Price-Sensitive Retrofit Bulbs, iWatt's iW3626 single-stage LED driver

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Robust Angular Position Sensor Finds Use In Transmission Control Unit, Austriamicrosystems' AS5134 angular position sensor

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Hybrid Power Controller Chip Delivers Benefits of Analog + Digital Control, Microchip Technology's MCP19111 digitally enhanced power analog controller with integrated synchronous driver

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March 2013:

Gate Drivers Are Optimized For IGBTs And SiC FETs, Texas Instruments' UCC27531 and UCC27532 single-channel output stage gate drivers

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Universal Lighting Controller Promises To Enhance Many Applications, STMicroelectronics' STLUX385 digital controller for lighting and power supply applications

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Upgraded Design Tool, New Firmware Enhance Capabilities Of Digital Controller, Powervation's PowerSMART design tool and firmware for the PV3012

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Synchronous Rectifier Controller With Sync Function Simplifies SMPS Designs, International Rectifier's IR1169 high-speed synchronous rectifier controller

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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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Smart Bypass Diode Lowers Power Dissipation, Texas Instruments' SM74611 smart bypass diode

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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

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May 2013:

Single-Stage LED Drivers Deliver High Dimmer Compatibility At Competitive BOM Cost, Cirrus Logic's CS1615/16 single-stage LED driver ICs

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Fast-Switching Solid-State Relays Consume Ultra-Low Power, Electronic Design & Research's μ R2M and μ D2M series solid-state relays

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June 2013:

PMIC Reduces Thermal Stress On Application Processors In Mobil Devices, ams' AS3721 PMIC and AS3729 point-of-load power stage

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Single-Stage LED Drivers Enable Wide Bulb Dimming Range With Lower BOM Cost, iWatt's iW3606 and iW3608 dimmable single-stage, LED drivers

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July 2013:

Low-Cost Gate Drivers Handle Wide Operating Voltage Range, IXYS Integrated Circuits Division's IX4426, IX4427, and IX4428 dual low-side gate driver ICs

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

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Class D Amplifier Improves Efficiency For Driving Brush-Type Motors, Apex Microtechnology's SA160DP H-Bridge motor driver/amplifier

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August 2013:

Controller In SOT-23 Shrinks Boost PFC Circuits, International Rectifier's IRS2505L PFC boost IC

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Versatile LED Driver Features Adjustable Frequency And Low-Side Current Sense, Texas Instruments' TPS92690 n-channel controller for dimmable LED drives

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October 2013:

Power ICs Article Archive (By Issue)

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

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Digital PWM Controller Cuts BOM Cost, Standby Power In Smartphones,
Dialog Semiconductor's iW1679 PWM controller

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November 2013:

Envelope Tracking Power Chips Boost Efficiency In Smartphones, Texas
Instruments' LM3290 buck-boost converter and LM3291 linear amplifier

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Buck Controller Features Inductor DCR-Based Overcurrent Protection,
Texas Instruments' LM27403 synchronous buck controller

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December 2013:

**HV Amplifier IC Slashes Noise For Improved Accuracy In Positioning
Systems,** Apex Microtechnology's PA44X 350-V amplifier ICs

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**PFC Controller Extends Range On Switching Frequency, Lowers Losses In
Shunt Resistor,** Texas Instruments' UCC28180 CCM PFC controller

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January 2012:

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

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**Gate-Driver IC Simplifies Power Train Design In Hybrid And Electric
Vehicles,** International Rectifier's AUIR0815S automotive-qualified gate-driver IC

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February 2012:

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

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Digital PWM Controllers Deliver Small, Efficient Multiphase Solutions, International Rectifier's third-generation family of CHiL digital PWM controllers

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Digital Controller Provides Flexibility And Performance For Isolated Supplies, Texas Instruments' UCD3138 digital controller for isolated power supplies

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Hot Swap Controller Emulates MOSFET Thermal Performance, The Picor Cool-Swap PI2211 hot swap controller and circuit breaker from Vicor

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DC-DC Converters Deliver 334 W/in³ For Industrial And Military Applications, The Picor Cool-Power PI3106 isolated dc-dc converter from Vicor

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

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March 2012:

Digital LED Controller Is Compatible With Nearly All TRIAC Dimmers, Cirrus Logics' CS161X digital LED controller

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Wireless Power Chipset Shrinks Footprint And Lowers Cost, Integrated Device Technology's wireless power transmitter and receiver ICs

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

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April 2012:

Power ICs Article Archive (By Issue)

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

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May 2012:

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

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June 2012:

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

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

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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*
- *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*

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September 2012:

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

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

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October 2012:

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

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

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December 2012:

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

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January 2011:

Digital LED Drivers Deliver Flicker-Free Dimming And Hot-Plug Support, iWatt's iW3612/iW3602 digitally controlled, offline power supply controllers for dimmable LED luminaires

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

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March 2011:

Power ICs Article Archive (By Issue)

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DSCs Expand Feature Set To Support More Complex Digital Power Apps,
Microchip Technology's 16-bit dsPIC GS series of digital signal controllers

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April 2011:

Driver IC Simplifies Design, Increases Efficiency For High-Power LED lighting,
International Rectifier's IRS2548D switched-mode power supply control IC with integrated PFC control

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Receiver Chip Shrinks Qi-Compliant Wireless Power Designs,
Texas Instruments' bq51013 wireless power receiver IC

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May 2011:

Highly Integrated Controller Works With BJTs To Cut Cost of Lamp Ballasts,
STMicroelectronics L6520 lamp ballast controller IC

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Chip Integrates PFC And Lamp Ballast Control In SO-8 Package,
International Rectifier's Combo8 IRS2580DS PFC + Half-Bridge Ballast IC

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August 2011:

High-Temperature Components For Power Design

- *Automotive-Grade Boost Controller Boasts Wide Input Range, ON Semiconductor's NCV8871 nonsynchronous boost controller*
- *Forward Converter Chipset Is Specified Over -55°C to 125°C Range, Linear Technology's LT1952/-1 single-switch forward controller, LTC3900 synchronous rectifier driver, and LT4430 secondary-side optodriver*

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October 2011:

Digital Power Products

- *Digital Controller Provides Real-Time Adaptive Loop Compensation, Powervation's PV3012 dual-phase digital dc-dc controller*

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- *Analog Buck Controllers Feature PMBus Interface, Texas Instruments' TPS40400 2-MHz single-channel controller and TPS40422 dual-channel controller*
- *Digital Power Controllers Deliver High Efficiency, International Rectifier's IR3541, IR3536, and IR3538 multiphase digital PWM controllers*
- *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*
- *Multi-Rail Digital PMUs Pack Numerous Features, Akros Silicon's EnergySense family of multi-output, digital dc-dc power management unit ICs*

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February 2010:

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

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Driver IC Lights Up to 12 White LEDs in Series, Alpha & Omega Semiconductor's AOZ1950 white LED backlight driver

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April 2010:

Control IC Simplifies HID Ballast Design, International Rectifier's IRS2573D HID ballast controller IC

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

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ICs Control Discharge Of X Capacitors, Reduce Losses in EMI Filters, Power Integrations' CAPZero family of zero-loss automatic X-capacitor discharge ICs

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May 2010:

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

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June 2010:

Digital PFC Controllers Battle Analog Chips On Performance And Price, Cirrus Logic's CS1500 and CS1600 digital power factor correction controller ICs

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

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

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Low-Side Driver IC Targets Automotive Applications, International Rectifier's AUIRS4426S is a dual-channel low-side driver IC

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July 2010:

Embedded CPU Makes Power Management IC More Functional and Flexible In Portable Designs, Integrated Device Technology's P95020 portable power management IC

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Controller Exploits BJT To Cut Standby Power And Cost, CamSemi's C2163 primary-side sensing controller

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

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August 2010:

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

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Power ICs Article Archive (By Issue)

Power IC News Sponsored by Renesas

Battery-Monitoring IC Cuts Cost In Hybrid And Electric Vehicles, Maxim Integrated Products' MAX11068 12-cell battery-monitoring IC

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September 2010:

High-Side Active ORing Devices Deliver Fast Response for Intermediate Bus Applications, A subsidiary of Vicor, Picor's PI2007 and PI2127 high-side active ORing devices

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

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Power Chip Builds Efficient, Low-Cost Supplies for Industrial Applications, iWatt's iW1810 digitally controlled PWM IC with built-in BJT

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October 2010:

Point-Of-Load Regulators Extend Functionality and Performance, International Rectifier's IR3837M, IR3838M and IR3839M SupIRBuck point-of-load voltage regulator

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November 2010:

High-Temperature Controller And Driver Improve Performance Of SiC Switches, Cissoid's high-temperature Themis controller and Atlas push-pull driver stage

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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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October 2009:

Power ICs Article Archive (By Issue)

Power IC News Sponsored by Renesas

A Slew of Improved Specs for Piezoelectric Drivers, Cirrus Logic's PA107DP and MP103FCFC hybrid power amps

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November 2009:

20-A LED Driver Addresses Color-Mixing Challenges, Linear Technology's LT3743 synchronous stepdown converter

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December 2009:

Power Devices Perform At Extreme Temperatures, Cissoid's high-temperature MAGMA PWM controller

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Controller Eases Compliance With Power Supply Efficiency Standards, International Rectifier's IR11672A synchronous rectification controller

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Higher Isolation Extends Use of AC Current Sensors, Silicon Laboratories' Si85xx family of ac current sensors

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