



New Product Introduction

September 2023

[1200 V TRENCHSTOP™ IGBT7 H7](#)

[EconoPACK™ 3 with IGBT7 - FS300R12N3E7](#)

[Enhanced PrimePACK™.XT - FF1700XTR17IE5D and FF2000XTR17IE5](#)

[1400 V Reverse Conducting R5L IGBT](#)

[MOTIX™ BTN9960LV single half - bridge IC](#)

[OptiMOS™ 5 power MOSFET 60 V in TOLL](#)

[OPTIREG™ linear TLF4477-3LA antenna supply](#)

[OPTIREG™ linear TLS820F3ELV50 WATCHDOG & RESET](#)

[XENSIV™ - SP49: high level of integration tire pressure monitoring sensor ensures industry leading performance TPMS](#)

[XENSIV™ - TLE4973 automotive and industrial current sensor for up to 2 kA](#)

[EZ-PD™ CCG7SC](#)

[DEMO FX3 U3V CAM01](#)

[EVAL-6ED2742S01QM1](#)

[EVAL-IMI111T-046](#)

[REF-MHA0K2IMC101T](#)

1200 V TRENCHSTOP™ IGBT7 H7



Two new products are added to the hard-switching 1200 V TRENCHSTOP™ IGBT7 H7 discrete product family. Using the TO-247 3pin package technology that has been developed to fulfill the demand in „Save The World Applications“ such as solar photovoltaic, uninterruptible power supplies and battery chargers.

Features

- > Excellent $V_{ce(sat)}$ behavior thanks to our famous Infineon TRENCHSTOP™ technology
- > Fast switching behavior with low EMI emissions
- > Optimized diode for target applications, resulting in low Q_{tr}
- > Low gate resistor selection possible (down to 5 Ω) whilst maintaining excellent switching behaviour
- > Offering $T_{j(max)}$ of 175°C

Benefits

- > Technology with the highest power density with up to 140 A rating
- > Optimized performance in application conditions
- > Lowest conduction losses
- > Lowest switching losses
- > Humidity robustness under harsh environment
- > Improved EMI performance

Target applications

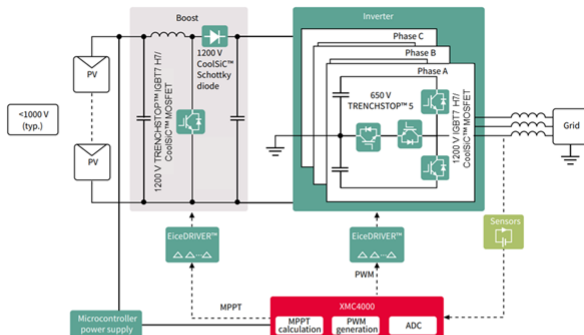
- > Solutions for solar energy systems
- > Uninterruptible power supply (UPS)
- > EV charging
- > Industrial heating and welding

Competitive advantage

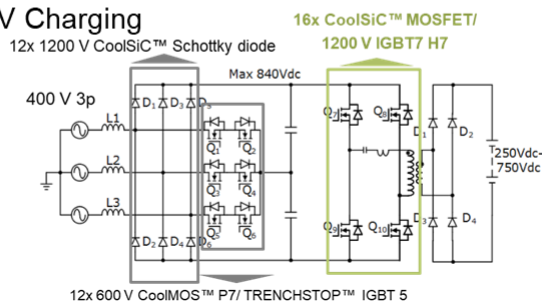
- > Highest power density, first on the market with 140 A rating in 1200 V discretes
- > Optimized performance in application conditions
- > Lowest conduction losses - lowest $V_{ce(sat)}$ = 2 V
- > Lowest switching losses (specially using IKZA and IQY – 4pin packages)
- > Humidity robustness under harsh environment pass by JEDEC Standard
- > Improved EMI performance

Block Diagram

> Solar and UPS



> EV Charging



Product collaterals / Online support

[Product page IKQ120N120CH7](#)

[Product page IKY120N120CH7](#)

Product overview incl. data sheet link

OPN	SP Number	Package
IKY120N120CH7XKSA1	SP005578301	TO247-4-PLUS
IKQ120N120CH7XKSA1	SP005578286	TO247-3-PLUS

EconoPACK™3 with IGBT7 - FS300R12N3E7

The FS300R12N3E7 EconoPACK™3 module with TRENCHSTOP™ IGBT7 technology offers best-in-class electrical performance and high mechanical robustness while reducing system size with potential for system cost benefits by power extension or frame size up due to its technology.



Features

- > TRENCHSTOP™ IGBT7
- > High mechanical robustness
- > Available with solder or PressFit pin. Ready for pre-applied Thermal Interface Material (TIM)

Benefits

- > Easy to integrate with plug and play usability – no change on other properties of the product
- > Unique technology and most-effective methodology
- > Unmatched ruggedness
- > Maximum flexibility by coverage of whole current range with full product portfolio
- > Compact modules
- > Easy and most reliable assembly

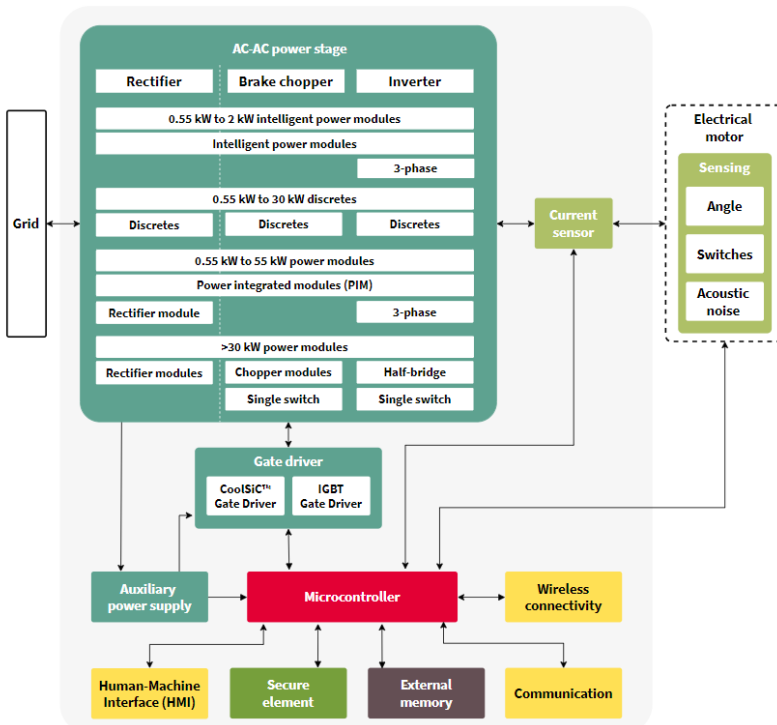
Target applications

- > Industrial motor drives and controls
- > Servo motor drive and control

Competitive advantage

- > Best in class current rating
- > Ease of use, plug and play
- > Low cost of implementation

Block Diagram



Product collaterals / Online support

[Product page](#)

Product overview incl. data sheet link

OPN	SP Number	Package
FS300R12N3E7BPSA1	SP005558999	AG-ECONO3B-711

Enhanced PrimePACK™.XT - FF1700XTR17IE5D and FF2000XTR17IE5

Wind turbines power stacks are divided in two functional blocks, Machine Side Converter (MSC) and Line Side Converter (LSC). FF1800R17IP5 (PrimePACK™ IGBT5.XT) is the most power dense and reliable IGBT module currently available and used in MSC and the LSC. Enhanced PrimePACK™ IGBT5.XT are further optimized to ideally match operational requirements of MSC and LSC, offering increased output power of a wind turbine converter by up to 20%.



Features

- > Optimized for MSC/LSC operation of wind turbine converters
- > Extended operation temperature ($T_{vjop} = 175^{\circ}\text{C}$)
- > Output current increased by more than 20% in the same footprint as FF1800R17IP5
- > Copper bonds for high current carrying capabilities
- > Sintering of chips for highest power cycling capabilities
- > Total losses reduced by up to 20%
- > Package with CTI > 400

Benefits

- > Extremely robust and reliable
- > Higher power per module
- > Less number of power stacks
- > Less cooling efforts
- > Reduced system cost
- > Reduced IGBT E_{off} losses
- > Reduced maintenance

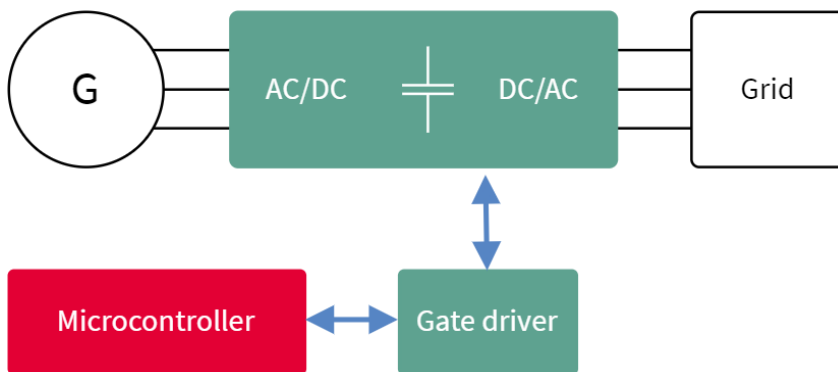
Target applications

- > Wind turbine power converter
- > Solar central inverter
- > Industrial drives
- > Electrolysis

Competitive advantage

- > Optimized for MSC/LSC of wind turbine converters
- > Extremely robust and reliable IGBT5 .XT technology
- > PrimePACK™ package

Block Diagram



Product collaterals / Online support

[Product page FF1700XTR17IE5D](#)

[Product page FF2000XTR17IE5](#)

Product overview incl. data sheet link

OPN	SP Number	Package
FF1700XTR17IE5DBPSA1	SP005826478	AG-PRIME3+-511
FF2000XTR17IE5BPSA1	SP005826485	AG-PRIME3+-511

1400 V Reverse Conducting R5L IGBT

1400 V Reverse Conducting R5L IGBT has been designed with optimized Diode and IGBT performance as well as higher blocking voltage and peak collector current capability, in order to meet the specific requirement for induction heating appliance with a higher efficiency, greater reliability, precise system control and shows a better trade-off between price and performance in the market.



Features

- > Reduced conduction and switching losses
- > Tighter electrical parameters distribution
- > Lower V_f
- > Higher peak collector current capability
- > Less cooling efforts

Benefits

- > Higher efficiency due to smallest power losses in the application conditions
- > Ease of design with easy parallel operation
- > Less stress with low resistive loads provides better reliability and robustness
- > Broad product portfolio brings in more flexibility
- > Product cost effectiveness with guaranteed Infineon's quality

Competitive advantage

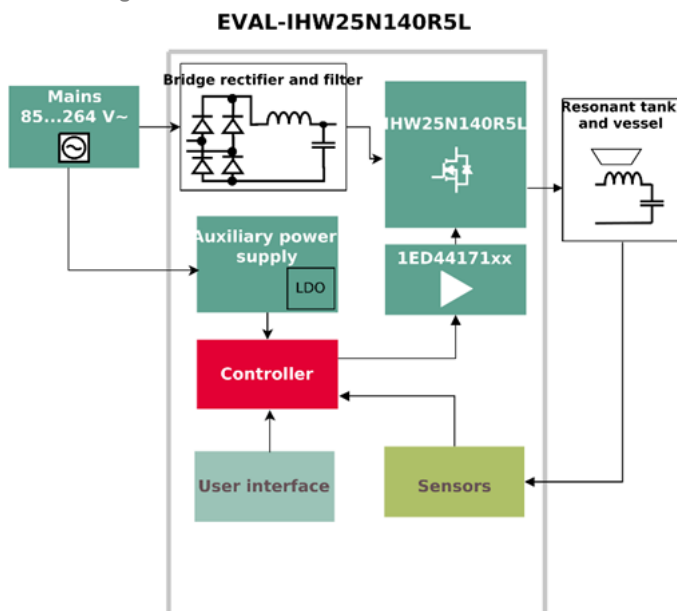
Compared with competitions, 1400 V Reverse Conducting R5L IGBT provides:

- > - 11% saturation voltage reduces conduction losses
- > - 34% diode forward voltage lowers stress with less resistive cookware
- > - 3% device temperature results in less cooling effort
- > Tighter parameters distribution for easy parallel operation

Target applications

- > Induction
- > Microwave
- > Rice cooker

Block diagram



Product collaterals / Online support

[Product family page](#)

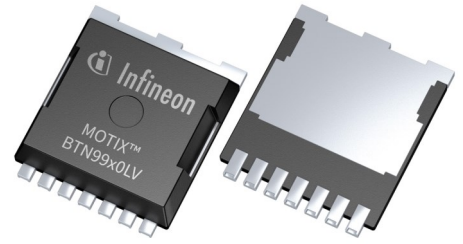
Product overview incl. data sheet link

OPN	SP Number	Package
IHW20N140R5LXKSA1	SP005742018	PG-TO247-3
IHW25N140R5LXKSA1	SP005742020	PG-TO247-3
IHW30N140R5LXKSA1	SP005742022	PG-TO247-3
IHW40N140R5LXKSA1	SP005742024	PG-TO247-3

MOTIX™ BTN9960LV single half - bridge IC

The MOTIX™ BTN9960LV contains one p-channel high-side MOSFET and one n-channel low-side MOSFET with an integrated driver IC in one package. Due to the p-channel high-side switch the need for a charge pump is eliminated thus minimizing EMI. Interfacing to a microcontroller is made easy by the integrated driver IC which features logic level inputs, diagnosis with current sense, slew rate adjustment, dead time generation and protection features.

The MOTIX™ BTN9960LV is ISO 26262-ready and provides a cost optimized solution for protected high-current PWM motor drives with very low board space consumption (HSOF-7-1 package). MOTIX™ software and tools facilitate the evaluation and design-in process.



Features

- > AEC-Q100/Q006 qualified (Grade 1) and ISO 26262-ready
- > Supply voltage range 8 V - 18 V (max up to 40 V)
- > Path resistance of typ. 9.7 mΩ @ 25°C (max. 18.1 mΩ @ 150°C)
- > Low quiescent current of max. 3.3 μA @ 85°C
- > Protection features: overcurrent, undervoltage, overtemperature
- > Overcurrent detection level of 35 A min
- > 8 selectable switching slew rates for optimized EME
- > Status flag diagnosis with feedback of current sense, temperature and slew rate

Competitive advantage

- > Integration of high power PMOS, NMOS and Driver IC in one small package
- > Protection and diagnosis features
- > Low path resistance
- > High current limit
- > Thermal performance

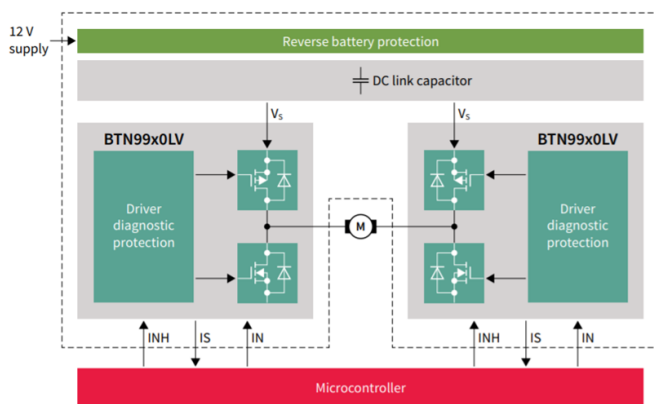
Benefits

- > Integration of high-power PMOS, NMOS and driver IC minimizes design and manufacturing effort
- > Less PCB area and BOM compared to discrete solution
- > Higher system reliability due to integrated diagnosis, current sense and protection functions
- > Supports half and full bridge (2x) configuration

Target applications

- > Automotive 12 V brushed DC Motor
- > Seatbelt pretension
- > Seat control
- > Fuel pumps
- > Power liftgate
- > Sliding door
- > HVAC control module

Block diagram



Product overview incl. data sheet link

OPN	SP Number	Package
BTN9960LV AUMA1	SP005591055	PG-HSOF-7
DCSHIELDBTN9960LV TOBO1	SP005903475	

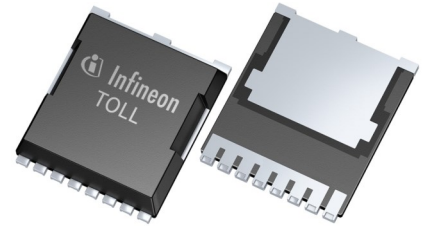
Product collaterals / Online support

[Product page](#)

[Board page](#)

OptiMOS™ 5 power MOSFET 60 V in TOLL

Infineon's new OptiMOS™ 5 power MOSFET 60 V in TOLL at an $R_{DS(on)}$, max of 0.9 mΩ (IPT009N06NM5) is the latest addition to the 60 V TOLL family. The TOLL package offers a 60% space reduction compared to D²PAK 7-pin package. TOLL is the perfect solution where highest efficiency, outstanding EMI behavior, best thermal performance and space reduction are required. Other products within this family include IPT007N06N ($R_{DS(on)}$, max of 0.7 mΩ) and IPT012N06N ($R_{DS(on)}$, max of 1.2 mΩ).



Features

- > High current rating > 400 A
- > Space and footprint reduction compared to D²PAK
- > Very low package parasitic and inductances
- > Significantly reduced electromigration due to improved solder contact area

Benefits

- > Highest efficiency and system cost reduction
- > Less paralleling and cooling required
- > Enabling compact design

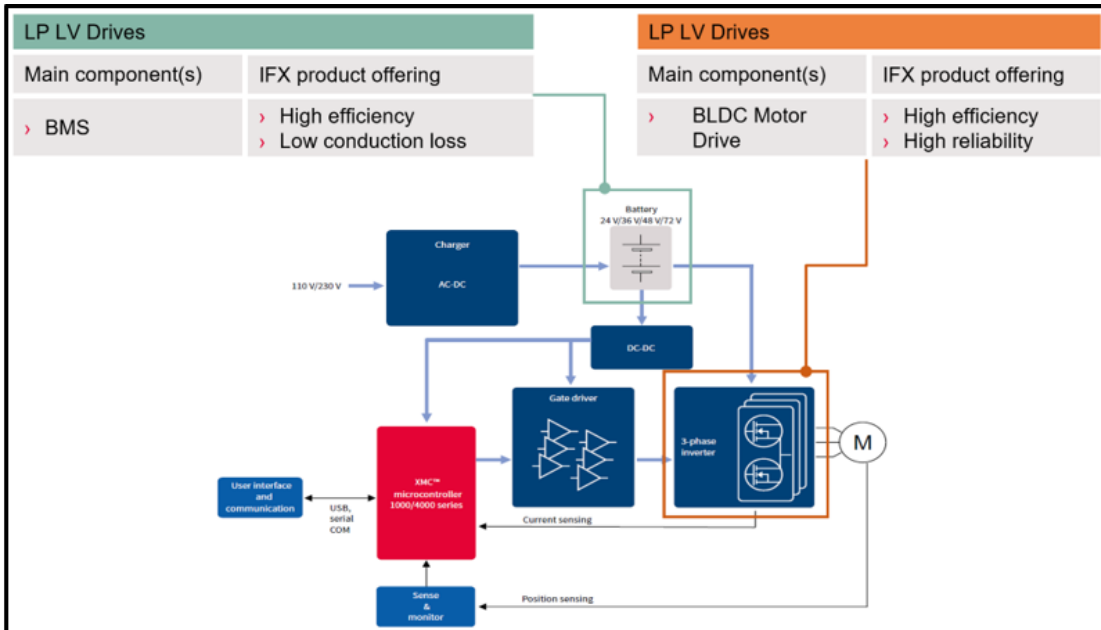
Target applications

- > LEV (Battery Management/Protection)
 - > e-scooter
 - > e-bike
- > Power tools
- > 18 - 36 V gardening tools

Product collaterals / Online support

[Product page](#)

Block diagram

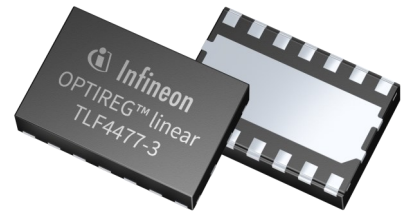


Product overview incl. data sheet link

OPN	SP Number	Package
IPT009N06NM5ATMA1	SP005727743	PG-HSOF-8

OPTIREG™ linear TLF4477-3LA antenna supply

The OPTIREG™ linear TLF4477-3LA is a monolithic integrated dual channel low drop out voltage regulator capable of supplying loads up to 300 mA. With an input voltage of up to 40 V, the TLF4477-3LA provides an adjustable output voltage ranging from 3 V to 20 V in a thermally optimized PG-TSON-14 package. The channel specific current monitors of the TLF4477-3LA provide access to unique diagnostic and protection features



Features

- > Adjustable output voltage ranging from 3 V up to 20 V for an input range up to 40 V
- > Supply of loads up to 300 mA
- > Integrated current sensing and monitoring
- > Adjustable output current limitation for each channel via an external resistor
- > Reverse polarity, over-voltage and short circuits protection
- > Overtemperature, overcurrent and output overvoltage fault conditions detection
- > ENABLE function to disable the outputs of the device independently

Benefits

- > Efficient power utilization and enables proper system diagnosis
- > CSOxSel pin to select and monitor a specific channel
- > Enhances safety, protects components and maintains stability
- > Reduction of power consumption

Competitive advantage

- > Robust protection features
- > Wide input operation and temperature range
- > Integrated current monitor

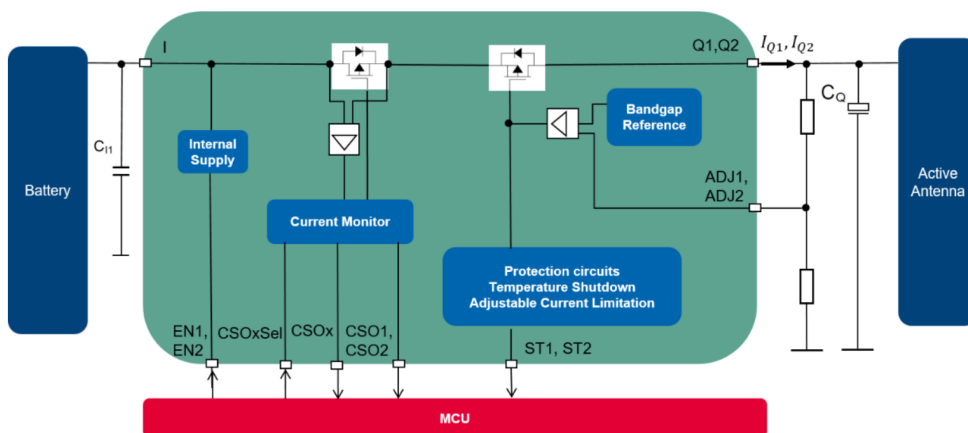
Target applications

- > Infotainment power supply of active antenna such as FM/AM, DAB, XM and SIRIUS
- > Surround view camera power supply
- > Automotive applications that are permanently connected to the battery

Product collaterals / Online support

[Product page](#)

Block diagram

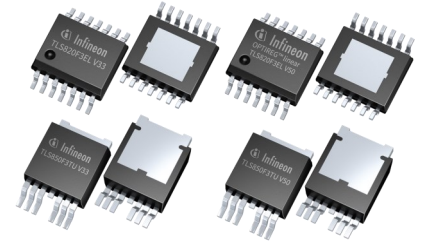


Product overview incl. data sheet link

OPN	SP Number	Package
TLF44773LAXUMA1	SP002262558	PG-TSON-14

OPTIREG™ linear TLS820F3ELV50 WATCHDOG & RESET

The OPTIREG™ linear TLS820F3ELV50 is a high performance, low drop out, fixed output voltage regulator in a PG-SSOP-14 package. It features a WATCHDOG and RESET options. With an input voltage range of 3 V to 42 V and very low quiescent current of only 26 μ A, this regulator is perfect for automotive systems or other supply systems that are permanently connected to the battery.



Features

- > Output voltage 5 V \pm 2% and current capability 200 mA
- > Typical quiescent current of only 26 μ A
- > Integrated Watchdog circuit with adjustable, accurate timing to monitor the microcontroller's operation
- > Reset circuit to supervise the output voltage, including undervoltage reset, delay reset at power-on and adj. lower reset threshold
- > Output current limitation in a short circuit or overload condition to limit the output voltage
- > Very low drop-out voltage typically 100 mV at 100 mA

Benefits

- > Improvement of overall efficiency and extends battery life
- > System monitoring, recovery, fault detection, and protection
- > Fault recovery, fail-safe operation, real-time responsiveness, prevents latch-up, and improves overall system reliability
- > Enhances safety, protects components and maintains stability
- > Stable and regulated power for sensitive components and enhances overall system efficiency

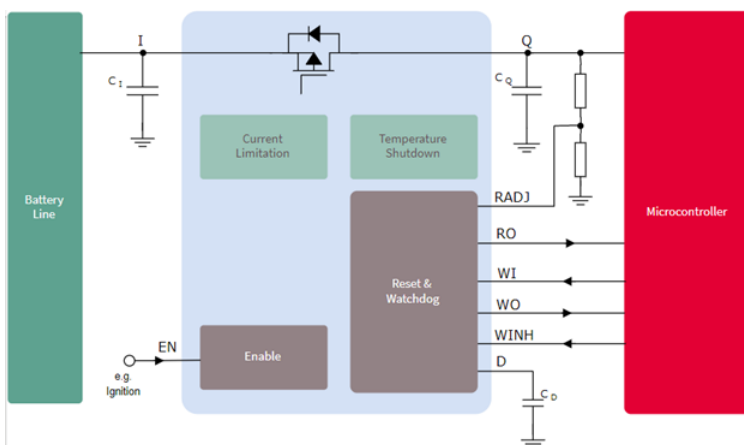
Competitive advantage

- > Very low current consumption
- > Smaller input capacitors, thus, lower input filtering costs
- > PCB space and cost savings
- > Suitable for cranking conditions
- > Higher current capability possible within the family
- > Black-box and firmware upgrade features
- > Protection on-chip

Target applications

- > Automotive general ECUs
- > Telematics systems
- > ADAS cameras and radar systems
- > Navigation systems
- > Body control modules

Block diagram



Product collaterals / Online support

[Product page TLS820F3EL](#)

[Product page TLS850F3TUV](#)

Product overview incl. data sheet link

OPN	SP Number	Package
TLS820F3ELV50XUMA1	SP005184568	PG-SSOP-14
TLS820F3ELV33XUMA1	SP005184574	PG-SSOP-14
TLS850F3TUV50ATMA1	SP005561082	PG-TO252-7
TLS850F3TUV33ATMA1	SP005561080	PG-TO252-7

XENSIV™- SP49 tire pressure monitoring sensor ensures industry leading performance TPMS

The Infineon SP49 product family provides highly integrated devices which perform all functions for a wheel module of a Tire Pressure Monitoring System (TPMS) suited for high-volume applications. The devices measure pressure in the range from 100 kPa up to 920 kPa and acceleration between -600 g and 600 g as well as temperature and supply voltage.

Furthermore, they feature an efficient power management and an integrated microcontroller. An integrated LF receiver and RF transmitter allows wireless communication.

For wired data transfer, the hardware master/slave I²C interface can be used. Further wired interfaces such as UART, SPI or PWM can be realized in software.

Infineon technical leadership in MEMS technology and Patented Glass-Silicon-Glass MEMS pressure sensor with best-in-class media compatibility ensures industry leading performance TPMS.



Features

- > Patented Glass-Silicon-Glass MEMS pressure sensor
- > Industry-standard power efficient 32-bit ARM M0+ core
- > Tailored ASIC with low power monitoring
- > Ultra-low power consumption
- > Hardware master/slave I²C interface
- > Same package outline dimensions & pin out of last generation

Benefits

- > Robust system & high-quality solution with best-in-class media compatibility
- > Fast calculations, more powerful cores and Industry Standard μ C with very good support tools
- > Best for intelligent tire features
- > Best-in-class lifetime charge consumption
- > Best fit in Sub1 GHz and scalable for BLE TPMS
- > Easy switch over from SP40 to SP49 for increased performance with low design-in effort

Competitive advantage

- > High quality
- > Best-in-class lifetime charge consumption
- > Best-in-class LF sensitivity
- > Tailored ASIC with new feature
- > More powerful core
- > Superior logistics

Target applications

- > Tire Pressure Monitoring System (TPMS)
- > Further possible high-pressure applications
 - > Air suspension
 - > Air brake, and more

Product collaterals / Online support

[Product page](#)

Product overview incl. data sheet link

OPN	SP Number	Package
SP4900111XTMA2	SP005878909	PG-DSOSP-14

XENSIV™ - TLE4973 automotive and industrial current sensor for up to 2 kA

High precision miniature coreless magnetic sensor for AC and DC measurement. The sensor works at 5V and provides an analog output proportional to the magnetic field measured as well as over current detection output. One digital control and diagnostic interface provides temperature readout, safety status readout, read/write programming access to internal EEPROM, control of diagnosis mode. Infineon's well established and robust monolithic hall technology enables accurate and highly linear measurement of the magnetic field caused by the current. The measurement range of up to ± 34 mT allows to sense currents up to 2 kA without the negative effects, e.g. hysteresis and saturation, known from core based sensors.



Features

- > Highly accurate coreless magnetic current sensor
- > 5 V supply voltage
- > Digital control and diagnostic interface
- > Very fast overcurrent detection (typ. response time 0.7 μ s)
- > Programmable sensitivity and overcurrent threshold
- > ISO 26262-compliant development for safety requirements up to ASIL B

Benefits

- > No hysteresis, no saturation like in core based sensors
- > Protection against over currents also for fast switching technologies
- > Very low power dissipation
- > Support for safety critical applications
- > Single wire interface for programming sensitivity and over-current thresholds and executing diagnosis from μ C
- > Reliable current measurement over lifetime without recalibration

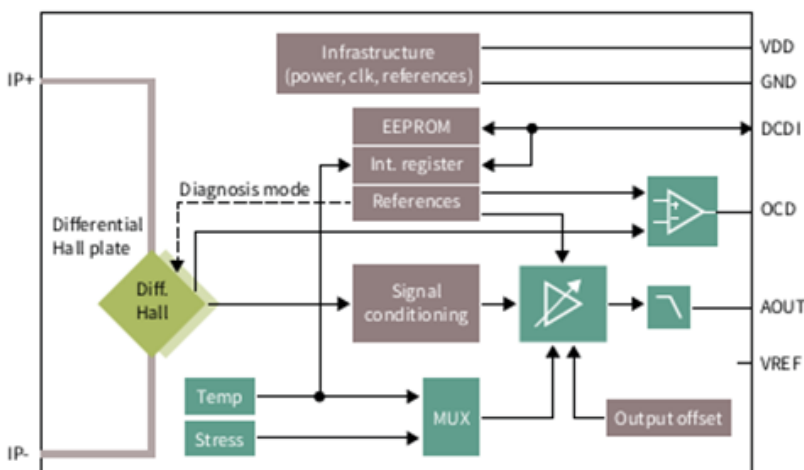
Competitive advantage

- > Very low sensitivity error over temperature and lifetime
- > Separate path for very fast overcurrent detection (typ. response time < 0.7 μ s)
- > Programmable sensitivity to optimize sensing performance

Target applications

- > Traction inverter (high voltage and 48 V)
- > Auxiliary drives
- > Battery main switch
- > PV inverters
- > Overload and over current monitoring

Block diagram



Product collaterals / Online support

[Product page](#)

Product overview incl. data sheet link

OPN	SP Number	Package
TLE4973AE35S5S0001XUMA1	SP005353131	PG-VSON-6-4

EZ-PD™ CCG7SC

EZ-PD™ CCG7SC is a highly integrated single-port USB-C PD with DC-DC controller



Features

- > USB PD 3.1 SPR with PPS
- > ARM® Cortex®-M0 processor
- > 128 KB flash, 16 KB RAM, 32 KB ROM
- > Supports Apple 2.4A, BC1.2, AFC, and QC5.0
- > High-side and buck-boost NFET drivers
- > Support buck and buck-boost config
- > Configurable DC-DC converters
- > VCONN FETs and HSCSA
- > Input voltage range: 5 V to 24 V with 40 V tolerance
- > CC and I2C firmware upgrade
- > Fault protection: OVP, UVP, SCP, OTP, VCONN OCP, and VBUS-CC short

Benefits

- > Highly integrated and programmable single-port USB Type-C PD and DC-DC controller
- > DC-DC support forced-buck and buck-boost configuration
- > DC-DC supports 150 kHz to 600kHz switching frequency, FCCM and PSM mode, peak current cycle-by-cycle duty-limit control
- > Support features such as dynamic load-sharing, cable compensation, black box and firmware upgrade

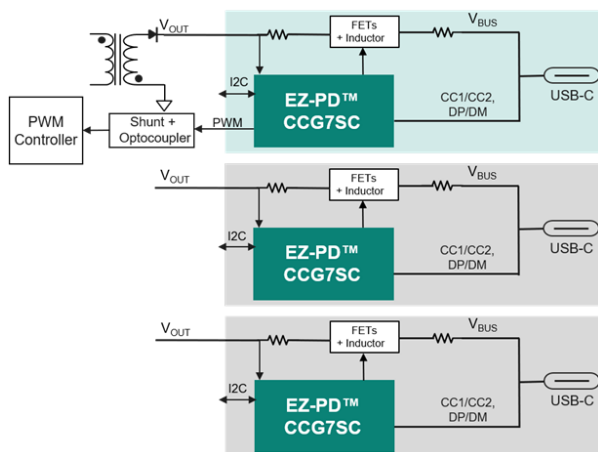
Competitive advantage

- > Scalable and unified design for 2-4 ports USB-C PD charger
- > Dynamic load-sharing amount ports without external MCU
- > Programmability and flexibility
- > Efficiency-optimized control scheme
- > Black-box and firmware upgrade features
- > Protection on-chip

Target applications

- > USB-C multiport charger and adapter
- > USB-C docking downstream facing port
- > Wireless and PD Charger
- > Cigarette lighter adapter (CLA)

Block diagram



Product collaterals / Online support

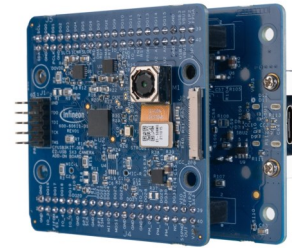
[Product family page](#)

Product overview incl. data sheet link

OPN	SP Number	Package
CYPD717140LQXQXQLA1	SP005910165	PG-VQFN-40
CYPD717140LQXQTXUMA1	SP005910170	PG-VQFN-40

DEMO_FX3_U3V_CAM01

The EZ-USB™ FX3 DEMO_FX3_U3V_CAM01 Camera Kit is based on the EZ-USB™ FX3 product family of Infineon's configurable USB 5 Gbps peripheral controllers. The second-generation general programmable interface (GPIF II) of EZ-USB™ FX3 can connect to a processor, an image sensor, an FPGA, or an ASIC. The kit includes a MIPI CSI-2 camera module connected to an FPGA on one PCB mounting on an updated EZ-USB™ FX3 explorer kit.



Features

- > Video streaming up to 1080 p @30 fps in YUV format from onboard image sensor module
- > Audio stream from onboard L/R digital MEMS microphones
- > USB bus-powered operation
- > External off-the-shelf MIPI camera interface from Raspberry Pi
- > Onboard regulators
- > Firmware-controlled LED and user switch

Benefits

- > USB3 vision firmware ready
- > USB video class firmware ready
- > USB type-C connection

Target applications

- > Machine vision cameras
- > Industrial cameras

Competitive advantage

- > USB3 vision firmware ready
- > USB video class firmware ready
- > USB type-C connection

Product collaterals / Online support

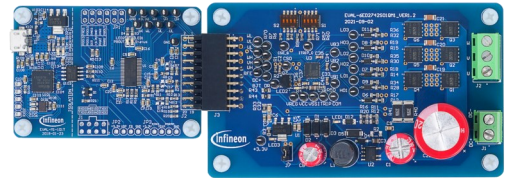
[Board page](#)

Product overview incl. user manual link

OPN	SP Number
DEMOFX3U3VCAM01TOBO1	SP005911874

EVAL-6ED2742S01QM1

The EVAL-6ED2742S01QM1 evaluation kit consists of a three-phase inverter power board with the 160 V rated 6ED2742S01Q (5 x 5 VQFN-32) three phase gate driver driving six 150 V rated OptiMOS™ MOSFETs BSC074N15NS5 (5 x 6 Super SO8). It comes with a M1 connector that is used to interface with iMOTION™ Modular Application Design Kit (MADK) control card – EVAL-M1-101T.



Features

- > Nominal DC input voltage of 24 V
- > Maximum 250 W motor power
- > 500 W motor power with heatsink
- > Single shunt for current sensing
- > Sensing of DC-link voltage
- > +12 V and +3.3 V auxiliary power
- > M1 interface with iMOTION™
- > 1x 160 V Gate driver: 6ED2742S01Q
- > 6x 150 V OptiMOS: BSC074N15NS5
- > 1x iMOTION™: IMC101T

Benefits

- > Widest input voltage range ~ 140 V
- > Lower system level BOM cost
- > Superior latchup immunity 160 V SOI
- > 150 V OptiMOS™ MOSFET (7.4 mΩ, 23 nC)
- > High efficiency control with iMOTION™

Target applications

- > Cordless power tools
- > Battery-powered tools
- > Multicopters and drones
- > Micro-inverter-solutions

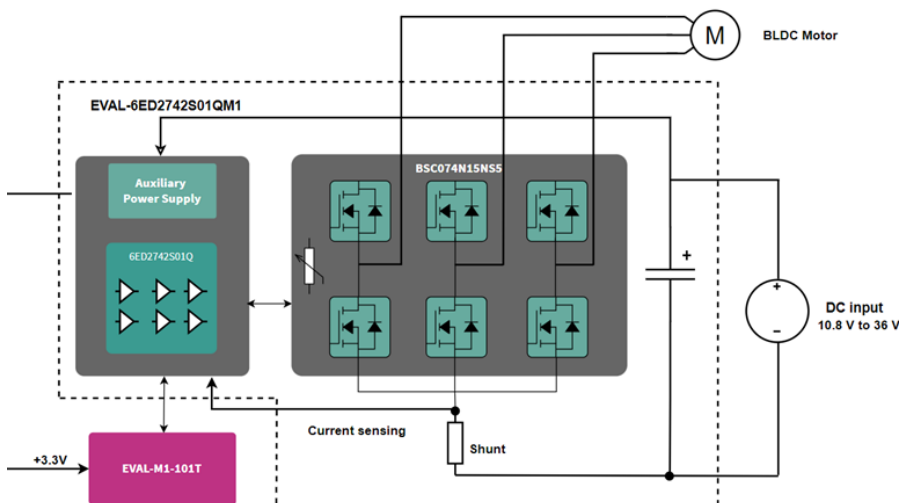
Competitive advantage

- > Quick and easy evaluation board without coding
- > Optimized total solution (Gate Driver, MOSFETs, controller) in single board
- > Outstanding ruggedness with 160 V SOI gate driver, 150 V OptiMOS™ FET

Product collaterals / Online support

[Board page](#)

Block diagram



Product overview incl. user manual link

OPN	SP Number
EVAL6ED2742S01QM1TOBO1	SP005967139

EVAL-IMI111T-046

EVAL-IMI111T-046 is a starter kit for iMOTION™ IMI111T-046H IPMs. The featured IMI111T-026H device is part of the iMOTION™ IMI111T series, offering full 3-phase inverter functionality including motor controller, 3-phase gate driver and IGBT-based power stage in a compact DSO package.



Features

- > Field-proven advanced Motion Control Engine (MCE)
- > Single shunt sensor less FOC Control
- > Scripting engine for additional flexibility
- > 600 V / 4 A IGBT power stage
- > Galvanically isolated on-board PC interface
- > Integrated protection features

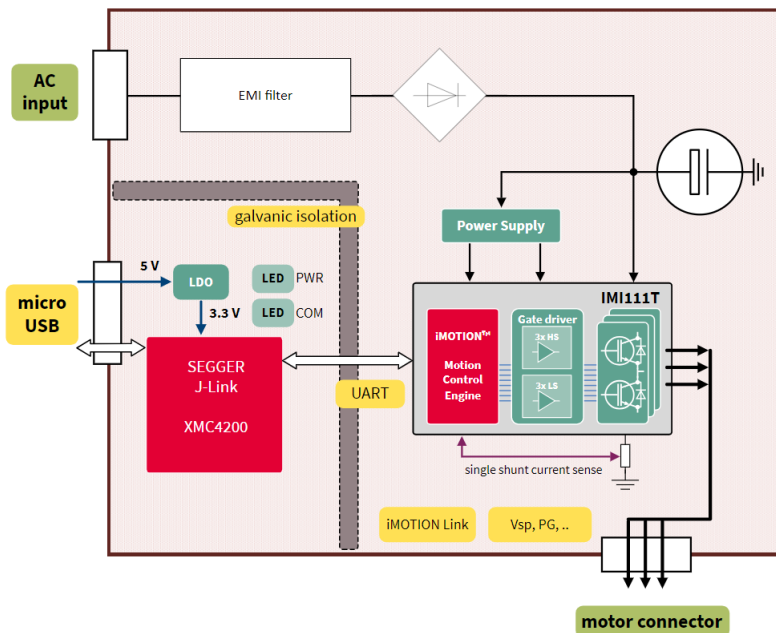
Benefits

- > Highly integrated low power drive solution
- > Easy motor parametrization and tuning using iMOTION™ Solution Designer
- > Fast time to market – no coding required for motor control functions
- > Online simulation tools available

Target applications

- > Ceiling fan - motor control and drive solutions
- > Fan and pump drives
- > Residential aircon indoor fan
- > Low power drives

Block diagram



Product collaterals / Online support

- [Board page](#)
- [Product page](#)

Product overview incl. data sheet / user manual link

OPN	SP Number	Package
IMI111T046HXUMA1	SP005416647	PG-DSO-22
EVALIMI111T046TOBO1	SP005729095	

REF-MHA0K2IMC101T

The REF-MHA0K2IMC101T offers a user-friendly approach for effective management of fridge compressors. Featuring the iMOTION™ IMC100 motor controller IMC101T-T038, it delivers a ready-to-use motor control solution, while the CIPOS™ Micro 600 V, 6 A three-phase IPM (IM241-L6S1B) contributes to a highly integrated system.



This configuration can be readily replicated onto mass production boards, accelerating the time-to-market process.

Features

- > Up to 200 W of maximum power without the need for a heat-sink
- > CIPOS™ Micro IPM based on Reverse Conducting IGBT Gen 2 (RCD2)
- > Accurate overcurrent protection ($\pm 5\%$), complemented by an integrated temperature sensor
- > MCE 2.0 firmware Class B pre-certified (IEC60335)

Benefits

- > Turnkey motor control based on iMOTION™ controller with Motion Control Engine (MCE 2.0)
- > High speed accuracy of $\pm 0.6\%$ and vibration suppression with torque compensation
- > High integration based on IM241-L6S1B with built in overcurrent protection and UL certified temperature sensor

Competitive advantage

- > Ready-to-use: The REF-MHA0K2IMC101T board is plug-and-play for quick market entry
- > Advanced features: Infineon's IPM tech offers robust, efficient motor drives with Gen 2 IGBT
- > Safety: Built-in precautions and discharge protection minimize risks
- > Energy efficiency: low standby power makes it ideal for energy-sensitive appliances

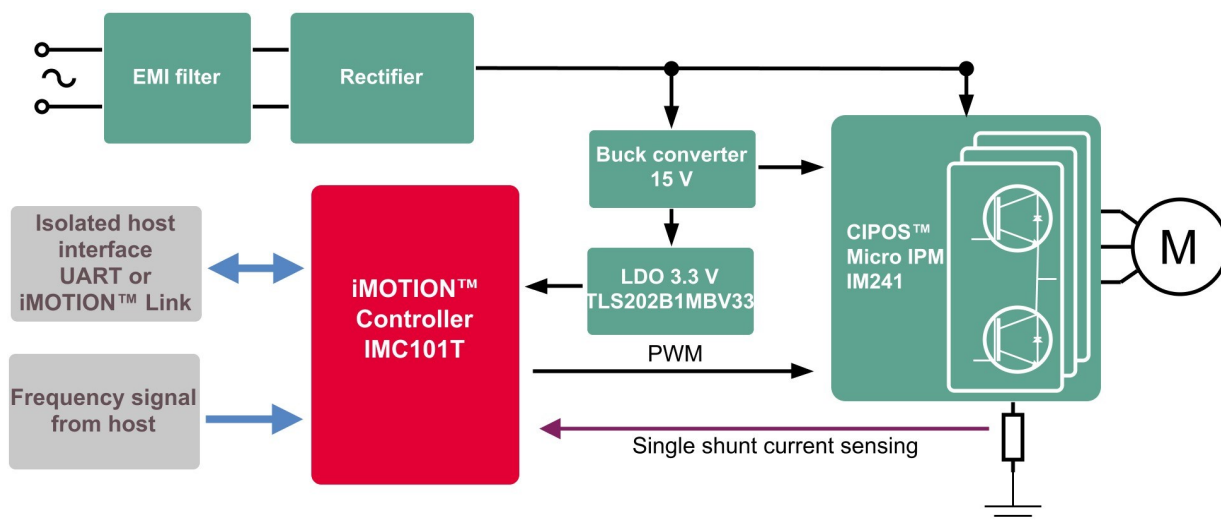
Target applications

- > Home appliances
- > Refrigeration and freezing

Product collaterals / Online support

[Product page](#)

Block diagram



Product overview incl. user manual link

OPN	SP Number
REFMHA0K2IMC101TTOB01	SP005874182