

New Product Introduction



June 2023

ISOFACE™ dual-channel digital isolators

TRAVEO™ T2G for body application

Infineon's 60 V and 120 V MOSFETs in TOLL, TOLG and TOLT package

650 V CoolMOS™ CFD7 superjunction MOSFETs in QDPAK and TO-leadless

950 V CoolMOS™ PFD7 superjunction MOSFET in TO-247 package

Next generation 1200V CoolSiC™ Trench MOSFETs in TO263-7 package

CoolMOS™ S7 / A industrial and automotive SJ MOSFETs in QDPK bottom-side (BSC) and top-side cooled (TSC) package

EasyPACKTM 3B 200 kW for ESS - F3L225R12W3H3 B11

EasyDUAL™ CoolSiC™ MOSFETs for 1200 V fast switching applications

OptiMOS™ 5 power MOSFET logic level 60 V & 80 V in PQFN 3.3 x 3.3 Source-Down Center-Gate dual-side cooling packages

KIT DPS310 2GO & KIT DPS368 2GO

<u>Eval-1ED3142MU12F-SiC. Evaluation board for 1ED3142MU12F - 2300 V, 6.5 A, 3 kV (rms) single-channel isolated gate driver</u>

S2GO RADAR BGT60LTR11

ISOFACE™ dual-channel digital isolators

The ISOFACETM dual-channel digital isolator family supports data rates up to 40 Mbps and ensures signal integrity over a wide ambient operating temperature range (-40 °C to +125 °C) and across production spread. Infineon's robust coreless transformer (CT) technology guarantees high immunity against system noise (CMTI >100 kV / μ s) and withstands up to 3000 V_{RMS} isolation voltage (VISO).

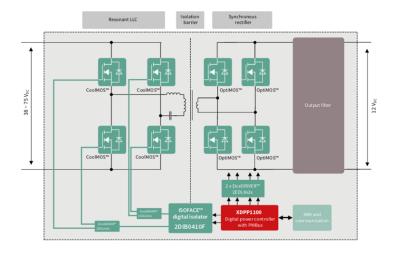
Two data channels in a narrow-body DSO-8 package allow for simplified and high power density designs and improve system efficiency with low current consumption. Product variants with different channel configurations, fail-safe default output states and variable or fixed input thresholds are available.



Features

- > Highest common-mode transient immunity (CMTI) (min. 100 kV / μs)
- > Low current consumption (@ ~1 Mbps)
- > High propagation delay accuracy
- > Pin-to-pin compatibility
- > Safety certification

Block diagram



Benefits

- > Reliable system operation in noisy environments
- > Highest system efficiency
- > Stable system operation with predictable data communication
- > Easy device replacement
- > Simplified system safety approval

Target applications

- > Industrial automation
- > Motor control
- > Server
- > Telecom SMPS
- > Solar

Product collaterals / Online support

Product family page

Board page

OPN	SP Number	Package
2DIB0400FXUMA1	SP005424270	PG-DSO-8
2DIB0401FXUMA1	SP005547215	PG-DSO-8
2DIB0410FXUMA1	SP005547289	PG-DSO-8
2DIB0411FXUMA1	SP005547292	PG-DSO-8
2DIB1400FXUMA1	SP005547230	PG-DSO-8
2DIB1401FXUMA1	SP005547233	PG-DSO-8
2DIB1410FXUMA1	SP005547295	PG-DSO-8
2DIB1411FXUMA1	SP005547298	PG-DSO-8
EVALISO2DIB0410FTOBO1	SP005742906	

TRAVEO™ T2G for body application

The multicore TRAVEO™ T2G family is based on ARM® Cortex®-M7 and -M4 cores with up to 8 MB of embedded flash that helps the devices deliver the robust performance required for demanding body electronics applications. Compliance to ISO26262 ASIL-B Level ensures a safe operation of the device, even for ambient temperatures up to 125°C. The TRAVEO™ T2G Body Family comprises four different series of entry devices (CYT2BL series, CYT2B9 series, CYT2B7 series, CYT2B6 series) and two series of high-end devices (CYT4BF series, CYT3BB / CYT4BB series), each with a different memory size and pin count.



Features

- > Arm® Cortex®-M7 single / dual CPU
- > Up to 350 MHz operation
- > Up 8 MB code flash, 256 KB work flash and 1024 KB SRAM and Arm® Cortex® -M0+
- > Dual-bank flash to support true FOTA
- > Audio interface: I2S, TDM
- > Connectivity: Up to 2 ch Ethernet

Target applications

- > Body control modules
- > Door, window, sunroof and seat control units
- > In-cabin smartphone terminals
- > Wireless charging units
- > Climate control
- > Communication gateway

Benefits

- Single chip solution offering automotive function thanks to Arm® Cortex®-M7
- > Optimized memory footprint for reduced BOM
- State-of-the-art security with secure boot support from a dedicated M0+ core and security hardware to accelerate cryptographic functions
- > Real FOTA support based on security and dual-bank flash
- > Safety (ASIL-B) features and analysis report

Competitive advantage

Advantage on low power mode which fits perfectly to body applications for power consumption, security and safety solutions

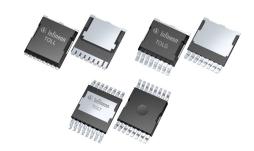
Product collaterals / Online support

Product family page

OPN	SP Number	Package
CYT2BL3CAAQ0AZEGS	SP005734396	PG-LQFP-64
CYT2B63BADQ0AZEGS	SP005674823	PG-LQFP-64
CYT2B65BADQ0AZSGS	SP005665113	PG-LQFP-100
CYT2B73CADQ0AZSGS	SP005665715	PG-LQFP-64
CYT2B74CADQ0AZEGS	SP005665753	PG-LQFP-80
CYT2B75CADQ0AZEGS	SP005668155	PG-LQFP-100
CYT2B78CADQ0AZEGS	SP005668801	PG-LQFP-176
CYT2B93CACQ0AZEGS	SP005668849	PG-LQFP-64
CYT2B94CACQ0AZEGS	SP005671283	PG-LQFP-80
CYT2B97CACQ0AZEGS	SP005671929	PG-LQFP-144
CYT3BB5CEBQ1AEEGS	SP005855441	PG-TQFP-100
CYT3BB8CEBQ1AEEGS	SP005754840	PG-TQFP-176
CYT4BB5CEBQ1AEEGS	SP005855499	PG-TQFP-100
CYT4BF8CEDQ0AESGS	SP005665333	PG-TQFP-176
CYT4BFBCJDQ0BZEGS	SP005665887	PG-LFBGA-272

Infineon's 60 V and 120 V MOSFETs in TOLL, TOLG and TOLT package

Infineon is offering a comprehensive MOSFET portfolio in TOLL, TOLG and TOLT package supporting different thermal power dissipation concepts on ECM level. On top of this, these different package options are offered at different voltage classes, starting from 60 V, 80 V, 100 V up to 120V, providing freedom to our customers to develop most efficient DCDC converter according to automotive requirements.



Features

- > Industry's lowest R_{DS(on)}
- > Three different package options
- > Enables designs with parallel MOSFETs
- > High current capability

Target applications

- > 60 V TOLx MOSFET targets CAV related applications and HV-LV DCDC converter
- > 120 V TOLx MOSFETs are for HVLV DC-DC converter, but also directed at 48 V - 70 V battery supplied electronic control modules (ECM) like battery disconnect switches and traction inverter for electrified 2 - and 3 wheeler

Benefits

- > MOSFET paralleling for lowest R_{DS(on)} and minimum component count
- > 3 different SMD package types, one leadless, one with gullwing leads and one for top side cooling
- > Broad portfolio with different voltage classes for scalable ECU designs
- > Minimized conduction losses
- > Low switching losses

Product collaterals / Online support

Product family page

OPN	SP Number	Package
IAUTN06S5N008ATMA1	SP005879442	PG-HSOF-8
IAUTN06S5N008GATMA1	SP005629909	PG-HSOG-8
IAUTN06S5N008TATMA1	SP005629899	PG-HDSOP-16
IAUTN12S5N017ATMA1	SP005629891	PG-HSOF-8
IAUTN12S5N018GATMA1	SP005629905	PG-HSOG-8
IAUTN12S5N018TATMA1	SP005629901	PG-HDSOP-16

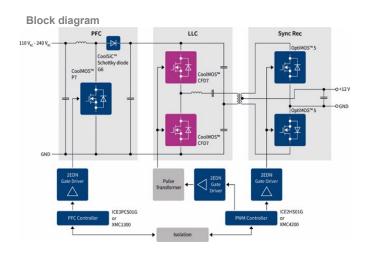
650 V CoolMOS™ CFD7 superjunction MOSFETs in QDPAK and TO-leadless

The 650 V CoolMOS™ CFD7 superjunction MOSFET technology is now also available in the QDPAK as well as the TO-leadless package. It comes with an integrated fast body diode and is ideally suited for resonant topologies in industrial applications, such as server, telecom, solar, and EV-charging stations, in which it enables significant efficiency improvements compared to competition.



Features

- > Ultrafast body diode and very low Q_{rr}
- > 650 V breakdown voltage
- > Significantly reduced switching losses compared to competition
- > Lowest R_{DS(on)} dependency over temperature



Benefits

- > Excellent hard commutation ruggedness
- > Extra safety margin for designs with increased bus voltage
- > Enabling increased power density
- Outstanding light load efficiency in industrial SMPS applications
- > Improved full load efficiency in industrial SMPS applications
- > Price competitiveness compared to alternative offerings in the market

Target applications

- > Fast EV charging
- > Server power supply
- > Solutions for solar energy systems
- > Telecom infrastructure

Product collaterals / Online support

Product family page

OPN	SP Number	Package
IPDQ65R017CFD7XTMA1	SP005537598	PG-HDSOP-22
IPDQ65R029CFD7XTMA1	SP005537517	PG-HDSOP-22
IPDQ65R040CFD7XTMA1	SP005537599	PG-HDSOP-22
IPDQ65R060CFD7XTMA1	SP005537601	PG-HDSOP-22
IPDQ65R099CFD7XTMA1	SP005537605	PG-HDSOP-22
IPDQ65R125CFD7XTMA1	SP005537608	PG-HDSOP-22
IPT65R040CFD7XTMA1	SP005537600	PG-HSOF-8
IPT65R060CFD7XTMA1	SP005537602	PG-HSOF-8
IPT65R080CFD7XTMA1	SP005537604	PG-HSOF-8
IPT65R099CFD7XTMA1	SP005537607	PG-HSOF-8
IPT65R125CFD7XTMA1	SP005537610	PG-HSOF-8
IPT65R155CFD7XTMA1	SP005537615	PG-HSOF-8
IPT65R190CFD7XTMA1	SP005537513	PG-HSOF-8

950 V CoolMOS™ PFD7 superjunction MOSFET in TO-247 package

The 950 V CoolMOS™ PFD7 family is a revolutionary superjunction technology for high-voltage power MOSFETs, with integrated fast body diode to address lighting and industrial SMPS. The new series is tailored for usage across several topologies.

Continue of the second

Features

- > Integrated ultra-fast body diode with BiC Q_{rr} (reverse recovery charge)
- > Best-in-class FOM $R_{DS(on)}$ x E_{oss} ; reduced Q_g , C_{iss} and C_{oss}
- > Best-in-class V_{(GS)th} of 3 V and smallest V_{(GS)th} variation of ±0.5 V
- > ESD protection up to class 2 (HBM)
- > Best-in-class quality and reliability

Target applications

- > Lighting
- > Consumer and Industrial SMPS

Product collaterals / Online support

Product page

Benefits

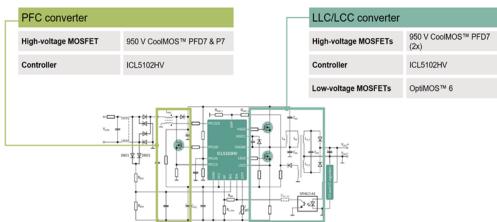
- > Best-in-class hard commutation ruggedness enabling usage across topologies
- > Up to 0.5 % efficiency gain and up to 4° C lower MOSFET temperature compared to CoolMOS™ C3
- Enabling higher power density designs, BOM savings and lower assembly cost
- > Easy to drive and to design-in
- > Improved production yield by reducing ESD related failures
- > Less production issues and reduced field returns

Competitive advantage

- > BiC reverse recovery charge (Q_{rr}) and reverse recovery time (t_{rr}), out-performs its main competitor
- > BiC and the lowest V_{(GS)th} tolerance
- > Improved by 60% Q_q compared to CoolMOS™ C3 family
- > ~4° C lower MOSFET temperature compare to closest competitor
- > Better cost performance compared to CoolMOS™ C3 family and closest competitor

Block diagram





OPN	SP Number	Package
IPW95R130PFD7XKSA1	SP005547004	PG-TO247-3

Next generation 1200V CoolSiC[™] Trench MOSFETs in TO263-7 package

The 1200V SiC Mosfet for Automotive family has been developed for current and future On-Board Charger and DC-DC applications in hybrid and electric vehicles.

Built on a state-of-the-art Infineon SiC trench technology combined with .XT interconnection technology the silicon carbide mosfet is specifically designed to meet the high requirements demanded by the automotive industry with regards to reliability, quality and performance.



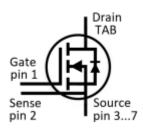
Features

- > Revolutionary semiconductor material Silicon Carbide
- > Very low switching losses
- > Threshold-free on state characteristic
- > 0 V turn-off gate voltage
- > Benchmark gate threshold voltage, V_{GS(th)} = 4.5 V
- > Fully controllable dv/dt
- Commutation robust body diode, ready for synchronous rectification
- > Temperature independent turn-off switching losses
- > Sense pin for optimized switching performance
- > Suitable for HV creepage requirements
- > .XT interconnection technology for best-in-class thermal performance

Competitive advantage

- > Best in class switching performance with 50% less switching losses than competition
- > Various $R_{ds(on)}$ options incl. the only 9 m Ω type in TO263-7 package in the market

Block diagram



Product overview incl. data sheet link

OPN	SP Number	Package
AIMBG120R080M1XTMA1	SP005411515	PG-TO263-7
AIMBG120R040M1XTMA1	SP005411513	PG-TO263-7
AIMBG120R010M1XTMA1	SP005411519	PG-TO263-7

Benefits

- > Optimized switching behavior
- > Very high power density
- > Highest efficiency
- > Improved thermal performance and reduced cooling efforts
- > Reduction of system complexity and cost

Target applications

- > On-board charger
- > PFC
- > DC-DC

Product collaterals / Online support

Product family page

CoolMOS™ S7/A industrial and automotive SJ MOSFETs in QDPK bottom-side (BSC) and top-side cooled (TSC) package

The 600 V CoolMOS™ S7/A SJ MOSFET family is optimized for low conduction losses and features the lowest $R_{DS(on)}$ in the market regarding high-voltage SJ MOSFETs in a compact SMD package. The S7A comes with an outstanding $R_{DS(on)}$ x price figure-of-merit and is now available in both Industrial and Automotive grade versions in QDPAK top-side and bottom side-cooling packages.

The CoolMOS™ S7 is a perfect fit for industrial application such as solidstate circuit breakers and relays, PLCs, battery protection, and active bridge rectification in high-power power supplies; while the CoolMOS™ S7A addresses HV solid state power distribution applications (HV eFuse, HV eDisconnect) and the on-board charger PFC stage in an active line rectification.



Features

- > Compact bottom-side-cooled QDPAK package
- > Optimized for conduction performance
- > Improved thermal resistance
- > High pulse current capability
- > Kelvin-source pin improves switching performance at high current

Target applications

- > SMPS
- > Solar energy systems
- > Battery and equipment protection
- Solid state relays (SSR) and solid state circuit breakers (SSCB)
- > Indoor commercial lighting control
- > UPS
- > Low speed electric vehicles (LSEV)
- > Programmable logic controllers (PLC)
- > Room air conditioning

Product overview incl. data sheet link

OPN	SP Number	Package
IPQC60R010S7XTMA1	SP005567915	PG-HDSOP-22
IPQC60R017S7XTMA1	SP005567916	PG-HDSOP-22
IPQC60R040S7XTMA1	SP005568023	PG-HDSOP-22
IPDQ60R017S7XTMA1	SP005580095	PG-HDSOP-22
IPQC60R040S7AXTMA1	SP005567908	PG-HDSOP-22
IPQC60R017S7AXTMA1	SP005567906	PG-HDSOP-22
IPQC60R010S7AXTMA1	SP005567905	PG-HDSOP-22
IPDQ60R040S7AXTMA1	SP005580158	PG-HDSOP-22
IPDQ60R022S7AXTMA1	SP002373870	PG-HDSOP-22
IPDQ60R017S7AXTMA1	SP005580155	PG-HDSOP-22

Benefits

- > Minimizes conduction losses
- > Increases energy efficiency
- > More compact and easier designs
- > Eliminates or reduces heat sinks in solid-state design
- > Lower TCO cost or BOM cost

Product collaterals / Online support

Product family page

EasyPACK[™] 3B 200 kW for ESS - F3L225R12W3H3_B11

The new EasyPACK[™] 3B comes with NPC1 topology, together with EmCon 7 and 1200 V H3 chip. It is optimized for ESS bi-directional operation and is designed with two paralleling modules to achieve 200 kW 1500 V_{DC} Power Conversion System design.



Features

- > Easy family with PressFIT technology
- > Power density and compact design
- > Low stray inductance module design
- > Optimized for energy storage applications
- > 1200 V, 225 A IGBT
- > Fast switching
- > H3 chip
- > EmCon 7 diode

Competitive advantage

- > Reduced system costs
- > Easy to design products
- > High degree of freedom for inverter and booster design
- > Highest efficiency and power density

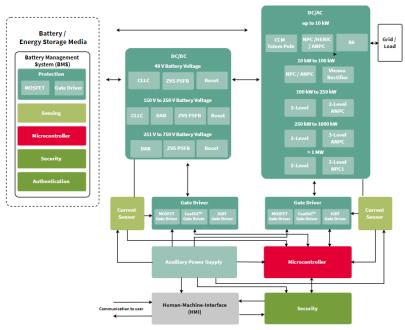
Benefits

- > ESS application portfolio extension to fulfill broader power range up to 200 kW
- > Best cost-performance ratio
- > Simplification of the design, ease of use

Target applications

> Energy storage systems

Block diagram



Product collaterals / Online support

Product page

OPN	SP Number	Package
F3L225R12W3H3B11BPSA1	SP005675779	AG-EASY3B-411

EasyDUAL™ CoolSiC™ MOSFETs for 1200 V fast switching applications

The EasyDUAL™ 1B half - bridge modules with CoolSiC™ MOSFET enhanced generation 1 are suitable for 1200 V applications and come with PressFIT mounting technology and NTC. They are also available with pre-applied Thermal Interface Material (TIM).



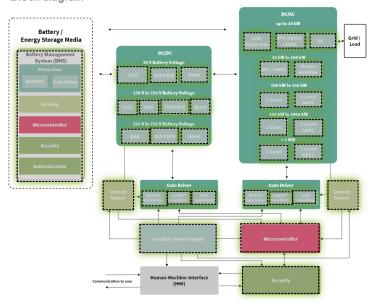
Features

- > 1200 V CoolSiCTM MOSFET
- > Easy 1B housing
- > Best-in-class package with 12 mm height
- > Very low module stray inductance
- > Wide RBSOA
- > Enlarged gate drive voltage window
- > PressFIT pins
- > Two modules with Thermal Interface Material

Competitive advantage

- > Introduction of new M1H series with 1200 V in our bestin-class package – Easy 1B
- > Reaching new levels of power and efficiency with Infineon WBG material
- > Support of multiple application purposes and following the new trends in the markets

Block diagram



Product overview incl. data sheet link

OPN	SP Number	Package
FF17MR12W1M1HB11BPSA1	SP005634554	AG-EASY1B-3111
FF17MR12W1M1HB70BPSA1	SP005634488	AG-EASY1B-3111
FF17MR12W1M1HPB11BPSA1	SP005634518	AG-EASY1B-3111
FF33MR12W1M1HB11BPSA1	SP005634429	AG-EASY1B-3111
FF33MR12W1M1HPB11BPSA1	SP005634523	AG-EASY1B-3111

Benefits

- > Extended maximum gate source voltage of +23 V and -10 V
- > T_{vjop} under overload condition with up to 175°C
- > Best cost-performance ratio which leads to reduced system costs
- > Enabling high frequency operation and improvement for reduced cooling requirements

Target applications

- > Motor control and drives
- > Uninterruptible Power Supplies (UPS)
- > EV charging
- > Solutions for photovoltaic energy systems
- > Energy storage systems

Product collaterals / Online support

Product family page

OptiMOS™ 5 power MOSFET logic level 60 V & 80 V in PQFN 3.3 x 3.3 Source-Down Center-Gate dual-side cooling packages

Infineon has extended its innovative Source-Down family with new OptiMOS $^{\text{TM}}$ 5 logic level 60 V and 80 V in a PQFN 3.3 x 3.3 package. The new best-in-class power MOSFET optimizes the end user experience by challenging the status quo in power density and form factor. The logic level threshold voltage provides lower Q_{rr} and Q_{OSS} , and allows easier gate driver selection. Moreover, the available dual-side cooling package can dissipate up to three times more power than the traditional over-molded package.



The new logic level portfolio is addressing high power density and performance applications such as telecom, SMPS or server. The new portfolio can be found in two different footprints: Source-Down Standard-Gate and Source-Down Center-Gate (optimized for parallelization).

Features

- > Logic level allows lower Q_{rr} and Q_{OSS} , and easier gate driver selection
- > Reduced R_{DS(on)} by up to 30% compared to current technology
- > Improved R_{th,IC} over current PQFN package technology
- > Available standard-gate and Center-Gate footprints
- > New, optimized layout possibilities

Competitive advantage

Market leader with best-in-class R_{DS(on)} and superior thermal performance

Target applications

- > Telecom DC / DC converter
- > Server DC / DC converter

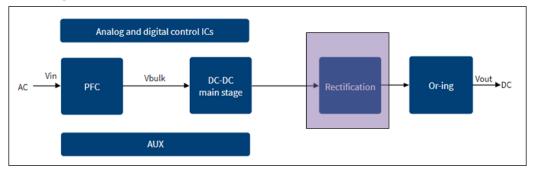
Block diagram

Benefits

- > Enabling highest power density and performance
- > Superior thermal performance
- > Optimized layout possibilities for efficient use of real-estate
- Simplified parallel configuration of MOSFETs with center-gate footprint
- > Improved PCB losses
- > Reduced parasitic

Product collaterals / Online support

Product family page



OPN	SP Number	Package
IQE022N06LM5ATMA1	SP005633128	PG-TSON-8
IQE022N06LM5CGATMA1	SP005633132	PG-TTFN-9
IQE022N06LM5SCATMA1	SP005633154	PG-WHSON-8
IQE022N06LM5CGSCATMA1	SP005632163	PG-WHTFN-9
IQE046N08LM5ATMA1	SP005633158	PG-TSON-8
IQE046N08LM5CGATMA1	SP005633163	PG-TTFN-9
IQE046N08LM5SCATMA1	SP005632167	PG-WHSON-8
IQE046N08LM5CGSCATMA1	SP005632171	PG-WHTFN-9

KIT_DPS310_2GO & KIT_DPS368_2GO

The DPS310 / DPS368 Kit2Go from Infineon is the latest addition to our line of barometric pressure sensors, designed for use in IoT and embedded systems. This all-in-one solution is based on the popular DPS310 / DPS368 Shield2Go, but comes with a built-in XMC1100 microcontroller unit, and a XMC4200 Debugger, which makes it even more versatile and convenient to use.



The DPS310 / DPS368 Kit2Go is not only powerful, but also incredibly easy to use. It is fully compatible with the Arduino IDE which means that you can easily incorporate it into your existing projects or create new ones. Additionally, example codes are available on Infineon's Github repository, which can be easily modified and customized to suit your needs.

Overall, the DPS310 / DPS368 Kit2Go is an innovative and reliable solution that makes it easier than ever to measure air pressure in your projects. It's ideal for applications in automotive, weather monitoring, industrial, and other fields where precision and convenience are key.

Features

- > Integrated MCU and Debugger Unit
- > Operation range:

> Pressure: 300 – 1200 hPa

> Temperature: - 40 - 85°C

- > Precision: ± 0.002 hPa (or ±0.02 m)
- > Pressure temperature sensitivity of 0.5 Pa / K
- > Temperature accuracy ± 0.5C°
- > Interface: I2C and SPI (both with optional interrupt)

Competitive advantage

- > Arduino IDE compatible
- > Integrated XMC1100 MCU + XMC4200 Debugger
- > Compatible with Infineon's Maker Portfolio (Shield2Go)
- > Read-out air pressure and temp in a few minutes due to examples
- Super compact and extendable with other sensors (e.g. Shield2Go)

Benefits

- > Arduino IDE compatible
- > High precision measurements with low power consumption
- > Easy integration into IoT and embedded systems projects
- > Super small and light design

Target applications

- > Automotive
- > Weather monitoring
- > Industrial
- > Altimeter
- > HVAC
- > Robotics
- > Altitude measurement
- > Environmental monitoring
- > Smart home

Product collaterals / Online support

Board page KIT_DPS310_2GO

Board page KIT_DPS368_2GO

Product overview incl. user manual link

OPN	SP Number
KITDPS3102GOTOBO1	SP005729570
KITDPS3682GOTOBO1	SP005729572

Eval-1ED3142MU12F-SiC. Evaluation board for 1ED3142MU12F - 2300 V, 6.5 A, 3 kV (rms) single-channel isolated gate driver

The EVAL-1ED3142MX12F-SIC is in half-bridge configuration with two gate driver ICs (1ED3142MU12F) to drive power switches such as IGBTs, MOSFETs and SiC MOSFETs.

This board comes pre-populated with two CoolSiC™ SiC MOSFET IMZA120R020M1H, an additional gate driver IC is used for isolated over-current feedback signal from high voltage side to logic control side, fast operational amplifier is used as comparator for over-current detection. It is best suited for double-pulse testing.



Features

- > EiceDRIVER™ Compact single channel isolated gate driver 1ED31xx family (X3 compact family)
- $>\;$ For use with 650 V /1200 V /1700 V / 2300 V / IGBTs, Si and SiC MOSFETs
- > 2300 V functional offset voltage capable for selected applications
- > Galvanically isolated coreless transformer gate driver
- > 6.5 A typical sinking and sourcing peak output current
- > 35 V absolute maximum output supply voltage
- > 45 ns propagation delay with 20 ns input filter

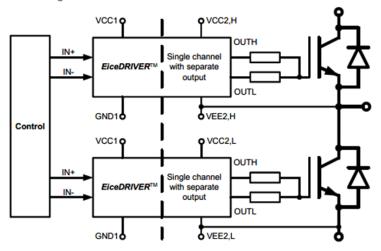
Benefits

- > Integrated filters reduce the need of external filters
- > Tight IC-to-IC propagation delay matching (7 ns max.), tolerance improves application robustness without variations due to aging, current, and temperature
- Suitable for operation at high ambient temperature and in fast switching applications
- UL 1577 (planned) VISO = 3.6 kV (rms) for 1 s, 3.0 kV (rms) for 1 min

Target applications

- > EV charging
- > Motor control and drives
- > Server power supply
- > Solutions for photovoltaic energy systems
- > Uninterruptible power supllies (UPS)

Block diagram



Product collaterals / Online support

Board page

Product overview incl. user manual link

OPN	SP Number
EVAL1ED3142MU12FSICTOBO1	SP005914664

S2GO RADAR BGT60LTR11

Infineon's first Arduino compatible 60GHz radar sensor for makers, developers and prototyping.



Features

- > Easy motion and direction of motion detection of an object with only two GPIOs
- > Programmable in Arduino IDE and Platform.IO (VS code extension)
- > Configurable detection range from 0.5 m to 7 m
- > LEDs that blink when presence or direction movement is detected
- > Potentiometers and switches to adjust the settings of the radar (QS)
- > Super small (48.80 mm x 24.1 mm) board design with Infineon's Shield2Go format
- > 60 GHz transceiver BGT60LTR11AIP MMIC with one transmitter and one receiver unit
- > Antenna in package (AIP)

Competitive advantage

- > Low cost
- > Easy to read out by only using 2 GPIOs
- Easy to start with, made for enthusiasts, tinkerer and prototyping
- > Fast prototyping with Arduino (later Raspberry Pi)

Product collaterals / Online support

Board page

Benefits

- > Arduino compatible (find libraries on Infineon's Github)
- > Up to 7 m detection range for humans
- > Low cost radar IC
- Less than 2 mW power consumption with radar sensor possible
- > Requires minimal external circuitry

Target applications

- Fast prototyping and makers activities such as do-it-yourself applications
- Smart building and smart home devices such as thermostats, smoke detectors, smart speakers and other entertainment systems
- Smart appliances (small home appliances and major home appliances) such as service robots, vacuum cleaners, lawnmower, washing machine and kitchen appliances
- > Smart home security and alarm systems including IP cameras
- > Screen based systems such as TVs, laptops or tablets
- > Lighting systems and lighting control (mainly indoor lighting)
- > Room air conditioners
- > Automated door openers
- > Smart entrance counter solution
- > Contactless switches
- > Multicopters and drones

Product overview incl. application note link

OPN	SP Number
S2GORADARBGT60LTR11TOBO1	SP005594890