

New Product Introduction September 2026



MICROCONTROLLER

[MOTIX™ TLE9954QSW40-33 motor control SiP \(System-in-Package\)](#)

[PSOC™ Control C3 Performance Line best-in-class system performance](#)

[AURIX™ TC49x high-performance microcontroller for xEV-integration platforms and high-end engine management](#)

POWER

[EasyDUAL™ with IGBT7 and EC7 for advanced drive application](#)

[OptiMOS™ 6 power MOSFET in 80 V for AI Server, telecom, BMS and solar applications](#)

EVALUATION BOARDS

[EVAL GD BDS GAN gate driver evaluation board for CoolGaN™ BDS](#)

[EVAL IGK048B041S GAN CoolGaN™ BDS evaluation board with 40 V 4.2 mΩ part in UFWLB-22 \(WLCSP 2.1x2.1\) package](#)

[EVAL IGK080B041S GAN CoolGaN™ BDS evaluation board with 40 V 6 mΩ part in UFWLB-16 \(WLCSP 1.7 x 1.7\) package](#)

[EVAL IGK120B041S GAN CoolGaN™ BDS evaluation board with 40 V 9 mΩ part in UFWLB-12 \(WLCSP 1.2x2.7\) package](#)

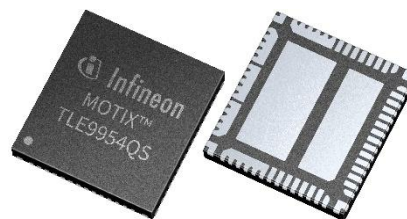
[150 W Water Pump Reference Design with MOTIX™ TLE9954QSW40-33 motor control SiP](#)

[KIT DRIVER 2EDN7534x EiceDRIVER™ 2EDN7534x, 2-channel low-side gate driver IC demonstration kits](#)

[Mini Comfort Motor Control Reference Design with MOTIX™ TLE9954QSW40-33 motor control SiP](#)

MOTIX™ TLE9954QSW40-33 motor control SiP (System-in-Package)

The MOTIX™ TLE9954QSW40-33 simplifies automotive BLDC motor control by combining an Arm® Cortex®-M23 MCU, 3-phase gate driver, OptiMOS™ 7 MOSFETs, LIN transceiver and voltage regulator in a single 9.5 × 9 mm package. Its highly integrated architecture enables up to 40% PCB area reduction and 2-layer PCB designs while delivering high efficiency, optimized EMC, ASIL-B functional safety, and a comprehensive ecosystem of software, tools and partners, with proven performance in automotive BLDC motor control applications up to 150 W at 12 V.



Features

- > Integrated MCU, gate driver and MOSFETs in a single SiP
- > Compact 9.5 × 9 mm package
- > Fast-switching architecture with low parasitic
- > ASIL-B functional safety support
- > Dual-cycle FOC motor control capability
- > Proven hardware, software and development ecosystem

Benefits

- > Simplified design with reduced external component count
- > 40% smaller PCB footprint compared to SoC solution
- > Optimized EMC and higher energy efficiency
- > Safe motor operation
- > Smooth, precise and efficient motor control
- > Faster time-to-market and reduced engineering effort

Competitive advantage

- > Up to 40% smaller PCB footprint
- > Enables 2-layer PCB designs
- > Reduced external component count
- > Fast switching with optimized EMC and lower switching losses
- > ASIL-B safety + Grade 0 robustness
- > Proven in a 150 W water pump reference design

Target applications

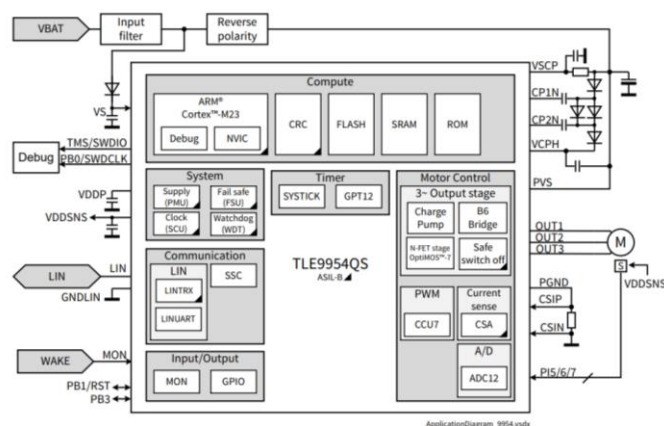
- > Pumps and fans in thermal management
- > Comfort applications in a car, e.g. seat adjustment
- > Any BLDC motor control application that requires a smart and safe but compact motor driver solution

Product collaterals/online support

[Product page](#)

[Board page](#)

Block diagram



Product overview incl. datasheet link

OPN	SP Number	Package
TLE9954QSW4033AUMA1	SP006170185	PG-LIQFN-58
TLE9954QSWEVALKITTOBO1	SP006245848	LG-MADK-1

Classification: Restricted document! The information presented is valid from September 1st 2026. Please check the latest Distribution Price Book for current prices and minimum quantities.

PSOC™ Control C3 Performance Line best-in-class system performance

PSOC™ Control C3 Performance Line is based on Arm® Cortex®-M33 multi-core architecture to meet the needs of industries that require real-time control in demanding power conversion applications. The family enhances Infineon system offering for best performance in power conversion applications in AI server PSUs, solar, SMPS, EV charging and robotics. With advanced security, the Performance Line is PSA L3 ready and enabled for Post-Quantum Cryptography.



Features

- > 180 MHz Arm® Cortex®-M33 with TrustZone, DSP and FPU, 128 kB SRAM with ECC
- > Up to 512 kB read while write Flash with ECC
- > 5 power modes including deep sleep and hibernate
- > Programmable Power Control Accelerator (PPCA) with:
 - o Dual Arm® Cortex®-M33, 200 MHz
 - o 112 kB SRAM
 - o 4x 24-ch 12-bit, 25 MSPS SAR ADC
- > Up to PSA L3/EPC3 security PQC and "DICE ready"
- > Class B and SIL 2 safety compliant
- > Operating temperature: Ta: -40°C to 115°C

Competitive advantage

- > Fast control loop execution with high-performance CPU and coprocessors
- > PSA Level 3 security
- > 25 MSPS ADC with up to 26 synchronous samples and integrated gain up to 66x
- > Supports various power conversion topologies including multi-level Vienna PFC and LLC topologies
- > PSOC Control C3 Performance with WBG switches
- > Robust ecosystem: ModusToolbox™ Power Suite, extensive software libraries, reference designs and evaluation kits

Product collaterals/online support

[Product page: PSOC™ Control C3 Performance Line](#)

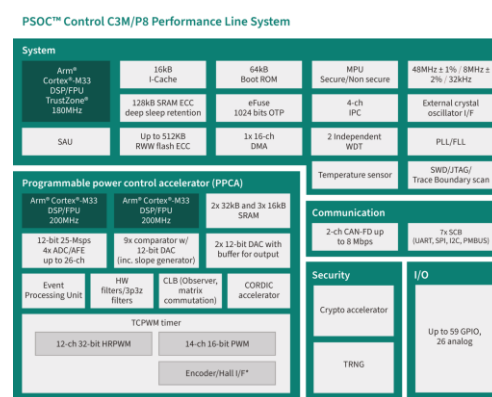
Benefits

- > Fast analog and digital peripherals ready for up to 2 MHz switching frequency
- > Multiple ADCs enabling accurate 3-phase current sensing while reducing external BOM
- > High power density applications are accelerated by use of wide-bandgap switches
- > HW accelerators (dual core accelerator, filters, DSP, FPU) for real-time execution

Target applications

- > Power Conversion: AI Server, Power Supply Units, EV Charging, PV Inverter, SMPS
- > Battery Management System (BMS)
- > Motor Control: Robotics, Service Robots, Industrial Robotics

Block diagram



Product overview incl. datasheet link

OPN	SP Number	Package
PSC3P8GFS3PAHQ1XQSA1	SP006157346	PG-LQFP-100
PSC3P8GFS3PLHQ1XQSA1	SP006193135	PG-VQFN-64
PSC3P8GFS3PAFQ1XQSA1	SP006158126	PG-LQFP-80
PSC3P8GFS3PACQ1XQSA1	SP006193177	PG-LQFP-64
PSC3P8GFS3PLGQ1XQSA1	SP006193163	PG-VQFN-48
KITPSC3M8EVKTOBO1	SP006164489	LG-MADK-1
KITPSC3M8CC1TOBO1	SP006164487	LG-MADK-1
KITPSC3PFC1TOBO1	SP006241996	LG-MADK-1
KITPSC3LLC1TOBO1	SP006241998	LG-MADK-1

AURIX™ TC49x high-performance microcontroller for xEV-integration platforms and high-end engine management

Infineon releases its third generation AURIX™ TC4x microcontroller. It comes with an increase in performance, memory sizes, connectivity and scalability to address the latest automotive trends and challenges. In terms of performance, the TC49x offers 5 cores at 400 MHz, up to 20 MB of Flash memory and a rich ADC and timer setup.



Features

- > 5/5 lockstep TriCore™
- > 1 additional TriCore™ dedicated for security
- > 400 MHz clock frequency
- > 20 MB eflash + 1 MB for security
- > Up to 6.1 MB SRAM
- > High speed communication interfaces (1 x 1Gb Ethernet, 3 x 10/100 Mb Ethernet or 10BaseT1S and 2xCAN-XL)
- > Above EVITA Full CSRM
- > Parallel Processing Unit (PPU)

Benefits

- > Strong ASIL-D performance with 4 lockstep CPUs
- > PPU 256 bit enables innovation
- > Future-proven cybersecurity cluster, ISO 21434 compliant, post-quantum ready and solves performance bottlenecks
- > Strong SW partner ecosystem

Competitive advantage

- > TC4x will be the most comprehensive AURIX™ portfolio, featuring more ASIL-D performance, more security and connectivity features and new SW development methods
- > Infineon provides high-quality automotive microcontrollers along with operational excellence, premium sales and application support worldwide

Target applications

- > [Electric vehicle drivetrain system](#)
- > ECUs integration for xEV (X-in-1)
- > Inverter
- > Battery Management System
- > High-end engine management

Product collaterals/online support

[Product page](#)

Product overview incl. datasheet link

OPN	SP Number	Package
TC499PP20MF400MSABKXUMA1	SP006146839	PG-F2BGA-436
TC497PP20MF400MSABKXUMA1	SP006146841	PG-F2BGA-292

Classification: Restricted document! The information presented is valid from September 1st 2026. Please check the latest Distribution Price Book for current prices and minimum quantities.

EasyDUAL™ with IGBT7 and EC7 for advanced drive application

The EasyDUAL™ 1B 1200 V TRENCHSTOP™ IGBT7 module delivers best-in-class performance for general purpose motor and servo drives and control. Featuring emitter controlled 7 diode and integrated NTC temperature sensor, it is a perfect fit for advanced drive application of matrix converter.



Features

- > Easy family with 12 mm height
- > Very low stray inductance
- > Overload capabilities up to 175°C with IGBT T7 technology
- > PressFIT contact technology
- > Integrated NTC temperature sensor

Benefits

- > High integration single module solution
- > Very low stray inductance
- > Low switching losses/lower junction temperature
- > Increased power density
- > Reducing cooling effort

Competitive advantage

- > Easy-to-design products
- > Best cost-performance ratio, which leads to reduced system costs
- > Enabling a strongly enhanced power density for a new generation of power modules

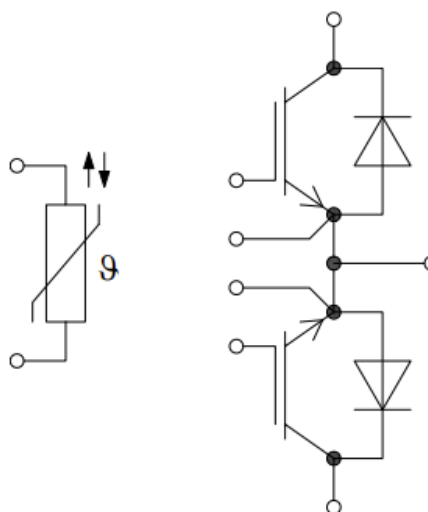
Target applications

- > [General purpose motor drive](#)
- > [Servo motor drive and control](#)

Product collaterals/online support

[Product page](#)

Block diagram



Product overview incl. datasheet link

OPN	SP Number	Package
FF150R12W1T7EB11BPSA1	SP006112063	AG-EASY1B-711

OptiMOS™ 6 power MOSFET in 80 V for AI Server, telecom, BMS and solar applications

OptiMOS™ 6 80 V sets new performance benchmarks with > 30% reduced $R_{DS(on)}$ and > 42% improved FOM compared to OptiMOS™ 5 for lower conduction and switching losses. Optimized for high switching frequencies, it offers flexibility with the industry-standard SuperSO8 package and multiple other package options. Ideal for compact, high-efficiency designs in AI Server, telecom, BMS and solar applications. Two new products are now available with 2.5 mOhm $R_{DS(on)}$ in SuperSO8 and DSC packages.



Features

- > > 30% lower $R_{DS(on)}$ vs. OptiMOS™ 5
- > > 42% improved FOM
- > Multiple industry-standard packages (e.g., SuperSO8, PQFN 3.3x3.3, D2PAK, TO-220, TO leadless)

Benefits

- > Lowest conduction losses
- > Enhanced thermal management
- > Compact and efficient designs
- > Increased power density

Competitive advantage

- > Low switching losses, supporting high switching frequency
- > Industry's best $R_{DS(on)}$ leading to lowest conduction losses
- > Highest power density and ease of paralleling
- > High efficiency through improved FOM and thermal behavior

Target applications

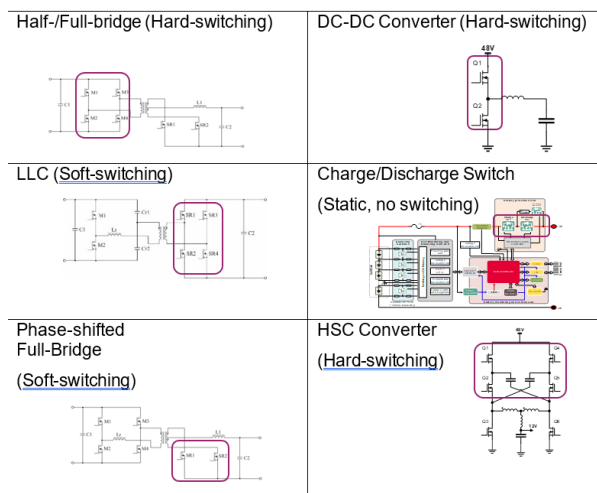
- > Server
- > Telecom
- > BMS
- > Solar

Product collaterals/online support

[Product family page](#)

Block diagram

DC-DC Converter and Half/Full-bridge



Product overview incl. datasheet link

OPN	SP Number	Package
ISC025N08NM6ATMA1	SP006197419	PG-TDSON-8
ISC025N08NM6SCATMA1	SP006197456	PG-WSON-8

EVAL_GD_BDS_GaN gate driver evaluation board
for CoolGaN™ BDS

EVAL_GD_BDS_GaN is an evaluation board designed to drive a GaN bidirectional switch (BDS) with drain voltages up to 120 V. It features a single-channel isolated 1EDB7275F gate driver and a connector for attaching different GaN BDS daughter cards. The board lets users choose the gate-drive return path depending on the direction of current flow, making it fit for applications such as eFuse, USB-C PD, smartphones, notebooks, and docking stations.



Features

- > Gate driver for GaN BDS
- > Input voltage range of 5 V to 120 V
- > Max. load current of 20 A
- > Isolated gate driver power supply of 5 V
- > Suited to use with EVAL_IGK120B041S_GaN
- > Suited to use with EVAL_IGK080B041S_GaN
- > Suited to use with EVAL_IGK048B041S_GaN

Benefits

- > Compatible with GaN BDS up to 120 V
- > User-selectable gate drive return path
- > Soft start delay for lower inrush current

Product collaterals/online support

[Board page](#)

Target applications

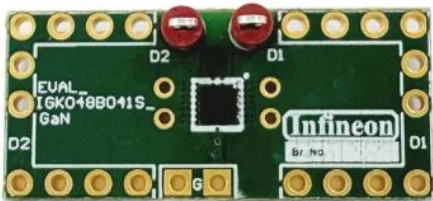
- > [USB-C adapters and chargers](#)
- > [eFuses](#)
- > [Battery management systems](#)

Product overview incl. user guide link

OPN	SP Number	Package
EVALGDBDSGANTOBO1	SP006154083	L-MADK-1

EVAL_IGK048B041S_GaN CoolGaN™ BDS evaluation board
with 40 V 4.2 mΩ part in UFWLB-22 (WLCSP 2.1x2.1) package

EVAL_IGK048B041S_GaN is a compact daughterboard for assembling and evaluating a CoolGaN™ 40 V, 4.2 mΩ bidirectional switch (BDS) in a 2.1 × 2.1 mm WLCSP package. It provides Berg stick terminals for drain 1, drain 2, and gate connections, making it compatible with the EVAL_GD_BDS_GaN gate driver evaluation board.



Features

- > UFWLB-22 (WLCSP 2.1x2.1) package
- > Drain to drain configuration
- > Compatible with EVAL_GD_BDS_GaN
- > Qualified according to JEDEC

Benefits

- > Bidirectional voltage blocking
- > Bidirectional current blocking
- > Low on-resistance (4.2 mΩ)
- > Low gate charge
- > Low output charge
- > Lower cost

Product collaterals/online support

[Board page](#)

Target applications

- > [USB-C adapters and chargers](#)
- > [eFuses](#)
- > [Battery management systems](#)

Product overview incl. user guide link

OPN	SP Number	Package
EVALIGK048B041SGANTOBO1	SP006179965	LG-MADK-1

EVAL_IGK080B041S_GAN CoolGaN™ BDS evaluation board
with 40 V 6 mΩ part in UFWLB-16 (WLCSP 1.7 x 1.7) package

EVAL_IGK080B041S_GaN is a compact daughterboard for assembling and evaluating a CoolGaN™ 40 V, 6 mΩ bidirectional switch (BDS) in a 1.7 × 1.7 mm WLCSP package. It provides Berg stick terminals for drain 1, drain 2, and gate connections, making it compatible with the EVAL_GD_BDS_GaN gate driver evaluation board.



Features

- > UFWLB-16 (WLCSP 1.7 x 1.7) package
- > Drain to drain configuration
- > Compatible with EVAL_GD_BDS_GaN
- > Qualified according to JEDEC

Benefits

- > Bidirectional voltage blocking
- > Bidirectional current blocking
- > Low on-resistance (6 mΩ)
- > Low gate charge
- > Low output charge
- > Lower cost

Product collaterals/online support

[Board page](#)

Target applications

- > [USB-C adapters and chargers](#)
- > [eFuses](#)
- > [Battery management systems](#)

Product overview incl. user guide link

OPN	SP Number	Package
EVALIGK080B041SGANTOBO1	SP006170039	LG-MADK-1

EVAL_IGK120B041S_GAN CoolGaN™ BDS evaluation board
with 40 V 9 mΩ part in UFWLB-12 (WLCSP 1.2x2.7) package

EVAL_IGK120B041S_GaN is a compact daughterboard for assembling and evaluating a CoolGaN™ 40 V, 9 mΩ bidirectional switch (BDS) in a 1.2 × 2.7 mm WLCSP package. It provides Berg stick terminals for drain 1, drain 2, and gate connections, making it compatible with the EVAL_GD_BDS_GaN gate driver evaluation board.



Features

- > UFWLB-12 (WLCSP 1.2x2.7) package
- > Drain to drain configuration
- > Compatible with EVAL_GD_BDS_GaN
- > Qualified according to JEDEC

Benefits

- > Bidirectional voltage blocking
- > Bidirectional current blocking
- > Low on-resistance (9 mΩ)
- > Low gate charge
- > Low output charge
- > Lower cost

Product collaterals/online support

[Board page](#)

Target applications

- > [USB-C adapters and chargers](#)
- > [eFuses](#)
- > [Battery management systems](#)

Product overview incl. user guide link

OPN	SP Number	Package
EVALIGK120B041SGANTOBO1	SP006179962	LG-MADK-1

150 W Water Pump Reference Design with MOTIX™
TLE9954QSW40-33 motor control SiP

The REF_WATERPUMP_SIP is a compact 150 W water pump reference design built around Infineon's MOTIX™ TLE9954QSW40-33 motor control SiP.

The reference design is designed for 150 W utilizing the fully integrated System-in-Package (SiP), equivalent to the REF_WATERPUMP150W design which uses integrated half-bridge MOSFETs, while saving ~40% board space on a 2-layer PCB, with passed EMC and thermal tests.



Features

- > MOTIX™ TLE9954QSW40-33 fully integrated
- > BLDC motor control SiP (system-in-package)
- > Reference design for up to 150 W motor control
- > Reference for thermal performance
- > Reference for EMC

Benefits

- > Ultra-compact PCB design up to 150 W at 12 V
- > Fast time to market
- > Easy evaluation and rapid prototyping
- > Reduced development risk

Competitive advantage

- > Ultra-compact 2-layer PCB design up to 150 W at 12 V
- > 40% smaller PCB footprint compared to SoC + external MOSFET solution

Target applications

- > Water pump up to 150 W

Product collaterals/online support

[Board page](#)

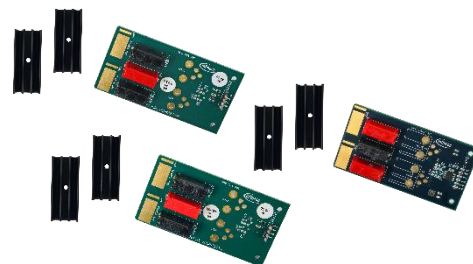
Product overview incl. user guide link

OPN	SP Number	Package
REFWATERPUMPSIPTOBO1	SP006246264	LG-MADK-1

KIT_DRIVER_2EDN7534x EiceDRIVER™ 2EDN7534x, 2-channel low-side gate driver IC demonstration kits

This evaluation kit provides a test platform for Infineon's dual-channel non-isolated gate driver IC EiceDRIVER™ 2EDN7534B in SOT23 6-pin package, EiceDRIVER™ 2EDN7534F in DSO 8-pin package, or EiceDRIVER™ 2EDN7534U in TSNP 6-pin package.

The complete driving circuitry is integrated into the board to allow a practical step-by-step discovery of the 2EDN7534x features and to evaluate the influence of the driving circuitry on the signal delivered to the load.



Features

- > ± 5 A source/sink currents
- > 19 ns typ. propagation delay
- > +6/-4 ns propagation delay accuracy
- > Fast active output voltage clamping (1.2 V/20 ns)
- > -12 V input robustness
- > 5 A reverse current robustness
- > 4 V and 8 V UVLO options
- > Available in DSO-8, TSSOP-8, WSON-8, SOT23-6, and TSNP-6pin packages

Target applications

- > Switch-mode power-supplies
- > DC-DC power converters
- > Synchronous rectification stages
- > Power factor correction system

Product collaterals/online support

[Board page: KITDRIVER2EDN7534BTOBO1](#)

[Board page: KITDRIVER2EDN7534FTOBO1](#)

[Board page: KITDRIVER2EDN7534UTOBO1](#)

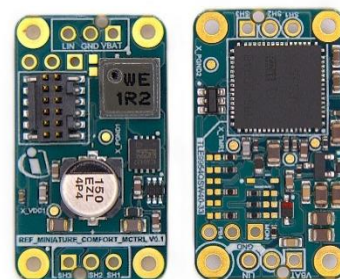
Product overview incl. user guide link

OPN	SP Number	Package
KITDRIVER2EDN7534BTOBO1	SP006263088	L-MADK-1
KITDRIVER2EDN7534FTOBO1	SP006096323	LG-MADK-1
KITDRIVER2EDN7534UTOBO1	SP006263091	L-MADK-1

Mini Comfort Motor Control Reference Design with MOTIX™ TLE9954QSW40-33 motor control SiP

The Mini Comfort Motor Control Reference Design (REF_MINI_CMFRT_SIP) accelerates development of compact automotive BLDC motor applications. Tested up to 120 W, it demonstrates the potential of highly integrated motor control in space-constrained designs.

Based on the MOTIX™ TLE9954QSW40-33 SiP with Arm® Cortex®-M23, it integrates a voltage regulator, LIN interface, 3-phase bridge driver, and OptiMOS™ 7 MOSFETs on an ultra-compact 2-layer PCB with improved thermal and EMC performance.



Features

- > MOTIX™ TLE9954QSW40-33 fully integrated
- > BLDC motor control SiP (system-in-package)
- > XENSIV™ current sensor
- > Made for top-side cooling
- > Reference design for up to 120 W motor control
- > FOC motor control example with MOTIX™ MCU Solution Designer

Benefits

- > Ultra-compact PCB design up to 120 W at 12 V
- > Fast time to market
- > Easy evaluation and rapid prototyping
- > Reduced development risk

Competitive advantage

- > Ultra-compact PCB design up to 120 W at 12 V

Target applications

- > BLDC motor control
- > Tailored for automotive body comfort motor control applications where space is limited, such as decentralized BLDC seat motor control, mechatronic power lift gate and sunroof motor control
- > Also suitable for small pump motor control applications

Product collaterals/online support

[Board page](#)

Product overview incl. user guide link

OPN	SP Number	Package
REFMINICMFRTSIPTOBO1	SP006266191	LG-MADK-1