

New Product Introduction



November 2025



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ESD118-B1-W01005 bi-directional ESD protection device

Heatmap indicator				
AMERICAS	JAPAN	GC	AP	EMEA

This Infineon ESD (electrostatic discharge) protection device, with 3.3 V, 0.9 pF, 01005, has a bi-directional and symmetric I/V characteristic and excellent clamping performance.



Features

- > Low insertion loss
- > Low clamping
- > Bi-directional protection device
- > Ultra-small package

Benefits

- > Improved system reliability
- > Absolute minimum board space
- > Best protection allows engineers to focus on higher value portions of their designs

Competitive advantage

- > Low insertion loss for high-speed data lines

Target applications

- > Keypads
- > Touchpads
- > Buttons
- > Convenience keys
- > LCD displays
- > Cameras
- > Audio lines
- > Mobile communication
- > Notebooks
- > Tablets
- > Desktop computers
- > Modules (WIFI, fingerprint, flash)

Product collaterals / Online support

[Product page](#)

Block diagram



Product overview incl. datasheet link

OPN	SP Number	Package
ESD118B1W01005E6327XTSA1	SP005634483	SG-WLL-2

ESD122-U1-W0201 uni-directional ESD protection device

Heatmap indicator				
AMERICAS	JAPAN	GC	AP	EMEA

This Infineon ESD (electrostatic discharge) protection device, with 2.1 V, 0.75 pF, 0201, has an uni-directional I/V characteristic and excellent clamping performance.



Features

- > Low insertion loss
- > Low clamping
- > Uni-directional protection device
- > Small package

Benefits

- > Improved system reliability
- > Absolute minimum board space
- > Best protection allows engineers to focus on higher value portions of their designs

Competitive advantage

- > Low insertion loss for high-speed data lines

Target applications

- > SPI
- > UART
- > I2C data lines
- > Sensitive low speed data lines

Product collaterals / Online support

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Block diagram



Product overview incl. datasheet link

OPN	SP Number	Package
ESD122U1W0201E6327XTSA1	SP005910446	SG-WLL-2

ESD159-B1-W0201 bi-directional ESD protection device

Heatmap indicator				
AMERICAS	JAPAN	GC	AP	EMEA

This Infineon ESD (electrostatic discharge) protection device, with 16 V, 0.10 pF, 0201, has a bi-directional and symmetric I/V characteristic and excellent clamping performance combined with an extremely low capacitance.



Features

- > Low insertion loss
- > Low clamping
- > Bi-directional protection device
- > Small package

Benefits

- > Improved system reliability
- > Absolute minimum board space
- > Best protection allows engineers to focus on higher value portions of their designs

Competitive advantage

- > Low insertion loss for high-speed data lines

Target applications

- > Short-to-Vbus tolerant data and control lines in USB
- > ESD protection of highly susceptible IC/ASICs in audio, headset, and human-machine interfaces (HMI)

Product collaterals / Online support

[Product page](#)

Block diagram



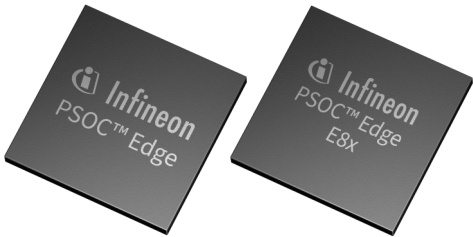
Product overview incl. datasheet link

OPN	SP Number	Package
ESD159B1W0201E6327XTSA1	SP005962192	SG-WLL-2

PSOC™ Edge E84 Microcontrollers

Heatmap indicator				
AMERICAS	JAPAN	GC	AP	EMEA

The PSOC™ Edge E8 series microcontroller brings high performance, low-power, and robust security to on-device AI, purpose-built for efficient, responsive ML at the edge. Ideal for HMI, smart home, wearables, robotics, and security cameras, PSOC™ Edge is backed by ModusToolbox™ software, DEEPCRAFT™ Studio integration, and off-the-shelf ML models to accelerate development.



At the heart of the E84 devices is a heterogeneous compute architecture: an Arm® Cortex®-M55 with Helium DSP and an Arm® Ethos™-U55 NPU for advanced ML workloads, plus a low-power Arm® Cortex®-M33 paired with Infineon’s ultra-low-power NNLite NPU for always-on intelligence.

Features

- > 32-Bit MCU subsystems: up to 400MHz Arm® Cortex®-M55 with Helium DSP and up to 200MHz Arm® Cortex®-M33
- > Machine Learning: Ethos-U55 for advanced ML, Infineon’s NNLite NPU for low-power always-on AI/ML, end-to-end ML with DEEPCRAFT™ AI suite
- > Memory and SoC integration: high-capacity memory, ultra-low power RRAM, rich peripherals to reduce system cost and integrated low-power analog subsystem
- > Security: up to Edge Protect Category Level 4 (EPC4) / PSA L4
- > HMI: Keyword spotting and wake word detection, low-power graphics up to 1024x768, 2.5D GPU, MIPI-DSI/DBI

Benefits

- > Responsive on-device AI at low-power
- > High-quality voice: low power, low latency, low false alarms
- > Realistic user interfaces at lower power leveraging 2.5D GPU
- > Faster path to production (DEEPCRAFT™ AI Hub, tools)
- > Flexible workflows: train, convert, or use ready models
- > Lower system cost via integrated advanced AI, graphics, audio, analog subsystem, and state-of-the-art security
- > End-to-end security across the product lifecycle
- > Developer-friendly: ModusToolbox™, Zephyr® RTOS, eval kits

Competitive advantage

- > High-performance, low-power architecture: Arm® Cortex® M55 up to 400 MHz with Helium™ DSP and Arm® Cortex® M33 up to 200 MHz
- > Energy efficient ML acceleration: Arm® Ethos™ U55 NPU and Infineon NNLite NPU for low power, always on AI
- > Complete Edge AI stack: MCUs, software and security
- > Low-power leadership; up to +15h battery life for biometric activity tracking
- > Security leadership: secured enclave (Edge Protect Cat 4); PSA Level 3 and Level 4 iSE alignment; full TCG DICE; first AVA.VAN.4 MCU with Payment Card Industry (PCI) pre-certification by a third-party lab

Target applications

- > Smart home and building: alarm, security camera, video doorbell, smart door lock and smart thermostat
- > Home appliances: countertop appliances, vacuum cleaner and mops
- > Health and lifestyle: consumer wearables and medical wearables
- > Consumer electronics: AR devices, smart glasses, VR devices, audio and speaker
- > Robotics: domestic robots, humanoid robots, industrial robots and mobile robots
- > Industrial devices HMI and automation

Product collaterals / Online support

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Product overview incl. datasheet/user guide link

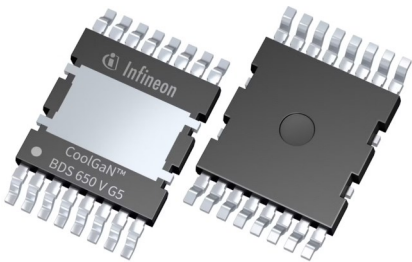
OPN	SP Number	Package
KITPSE84AITOBO1	SP006137452	-
KITPSE84EVALTOBO1	SP006137450	-
PSE846GPS2DBZC4XQSA1	SP005961384	PG-VFBGA-220

CoolGaN™ bidirectional switch 650 V G5

Heatmap indicator				
AMERICAS	JAPAN	GC	AP	EMEA

The CoolGaN™ bidirectional switch (BDS) 650 V G5 is a monolithic device that actively blocks voltage and current in both directions. It represents a remarkable innovation in power electronics, particularly for enabling single-stage power conversion.

Available in the TOLT package, it allows high power density designs, is a versatile option for a wide range of applications and enables new cost-attractive topologies.



Features

- > 650 V bidirectional e-mode transistor
- > Common-drain configuration
- > Bidirectional blocking capability
- > Low gate charge
- > Low output charge
- > Integrated substrate voltage control
- > JEDEC qualified
- > Stable $R_{SS(on)}$ across temperature and frequency
- > Replacement of back-to-back switches

Benefits

- > Compact design
- > Cost effective
- > Low conduction loss
- > Simplified design
- > Short time-to-market

Competitive advantage

- > 1 CoolGaN™ BDS can be used to replace four switches in a traditional back-to-back configuration
- > Facilitates the development of converters with fewer components, reduces costs and simplifies designs, offering substantial benefits over traditional two-stage approaches

Target applications

- > 1-phase string inverter solutions
- > 3-phase string inverter solutions
- > Microinverter solutions
- > Motor control and drives
- > Server power supply units (PSU)

Product collaterals / Online support

[Product page](#)

Product overview incl. datasheet link

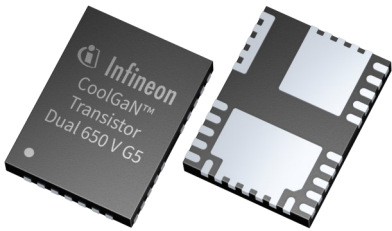
OPN	SP Number	Package
IGLT65R055B2AUMA1	SP005926461	PG-HDSOP-16

CoolGaN™ Transistor Dual 650 V G5

Heatmap indicator				
AMERICAS	JAPAN	GC	AP	EMEA

CoolGaN™ Transistor Dual 650 V G5 combines a half-bridge power stage consisting of two 140 mΩ(R_{DS(on)} typ.) / 650 V enhancement mode CoolGaN™ Transistors in a small 6x8 mm QFN-32 package.

This product is ideally suited to enable high-power density designs of AC-DC chargers and adapters, low-power motor drives and lighting applications, utilizing the superior switching behavior of CoolGaN™ Transistors.



Features

- > Ultra-fast switching
- > No reverse-recovery charge
- > Capable of reverse conduction
- > Low gate charge
- > Low output charge
- > Kelvin source connection

Benefits

- > 2x reduced component count vs. discrete
- > Reduced cost
- > Reduced weight
- > Reduced system complexity

Competitive advantage

- > Performance over discrete solutions
- > Integration eliminates parasitic inductance between switches for seamless switching and improved slew rates
- > Lower gate charge and output charge, reducing overall switching energy
- > Superior reverse conduction capabilities, enhancing operational flexibility

Target applications

- > USB-C adapters and chargers
- > Low-power motor drive
- > LED lighting

Product collaterals / Online support

[Product page](#)

Product overview incl. user guide link

OPN	SP Number	Package
IGI65D1414A3MSXUMA1	SP005970004	PG-TIQFN-32

XHP™ 2 CoolSiC™ MOSFET 2300 V

Heatmap indicator				
AMERICAS	JAPAN	GC	AP	EMEA

Extending XHP™ 2 portfolio addressing raising trend of 1500 V DC-link applications in renewables with new 2300 V CoolSiC™ MOSFET offering outstanding performance for high-power applications with variety of current ratings up to 2000 A and isolation voltages of 4 kV or 6 kV in combination with robust .XT interconnection technology for enhanced lifetime with best in class reliability.



Each module is also available with pre-applied Thermal Interface Material (TIM) for simplified assembly and optimal thermal performance.

Features

- > CoolSiC™ MOSFET 2.3 kV
- > Integrated body diode
- > Down to 0.95 mΩ R_{DS(on)}
- > Low-inductive housing XHP™ 2
- > .XT interconnection technology
- > Symmetrical module design
- > High surge-current capability
- > Short-circuit capability
- > Lowest switching and conduction losses
- > T_{vj} = 175°C continuous
- > 4 kV and 6 kV isolation voltage
- > Cu and AlSiC baseplate variant

Benefits

- > Energy efficiency
- > High power density
- > Extended lifetime
- > Best-in-class reliability

Competitive advantage

- > Blocking voltage of 2300 V addressing higher DC-link voltage (1500 V nominal, up to 1800 V)
- > Short-circuit robustness
- > Surge-current robust
- > Material composition allowing permanent chip temperatures of T_{vj,op} = 175 °C

Target applications

- > Renewables (wind, photovoltaic)
- > BESS
- > Hydrogen

Product collaterals / Online support

[Product family page](#)

Product overview incl. user guide link

OPN	SP Number	Package
FF1000UXTR23T2M1B5BPSA1	SP006041778	AG-XHP2K33-3031
FF1000UXTR23T2M1BPSA1	SP005729048	AG-XHP2K23-3031
FF1000UXTR23T2M1PBPSA1	SP006026312	AG-XHP2K23-3031
FF1300UXTR23T2M1BPSA1	SP006052319	AG-XHP2K23-3031
FF1300UXTR23T2M1PBPSA1	SP006134319	AG-XHP2K23-3031
FF2000UXTR23T2M1BPSA1	SP006146979	AG-XHP2K23-3031
FF2000UXTR23T2M1PBPSA1	SP006182330	AG-XHP2K23-3031

CoolSiC™ MOSFET M1H EasyDUAL™ 1200 V

Heatmap indicator				
AMERICAS	JAPAN	GC	AP	EMEA

AQG324 qualified EasyDUAL™ 2B CoolSiC™ MOSFET half-bridge module 1200 V, 4 mΩ with NTC temperature sensor, pre-applied Thermal Interface Material and PressFIT contact technology for EV power conversion and eAviation ecosystem.



Features

- > Best-in-class package with 12 mm height
- > Leading edge WBG material
- > CoolSiC™ for high switching frequencies
- > Lowest $R_{DS(on)}$ and FIT rate
- > Pre-applied Thermal Interface Material
- > Available with PressFIT pin and solder pin

Benefits

- > Compact and lightweight design without baseplate
- > Reduced system size and weight
- > Highly reliable package concept used in different applications under harsh conditions
- > Increased power density and high efficiency
- > Reduced development time and costs
- > AQG324 qualified to support automotive standards

Competitive advantage

- > Full control of FE and BE to support fast design-in and reduced development time
- > Easy module with CoolSiC™ M1H and AQG324 qualification for a lightweight and compact system design

Target applications

- > EV power conversion and OBC
- > EV Charging
- > Uninterruptable power supplies
- > Server power supply

Product collaterals / Online support

[Product page](#)

Product overview incl. datasheet link

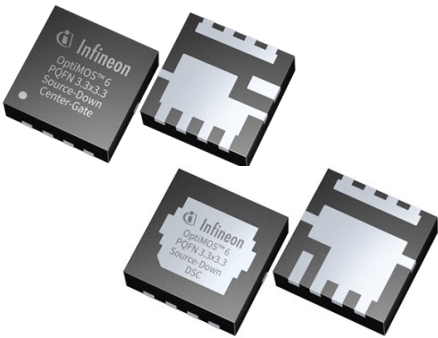
OPN	SP Number	Package
FF4MR12W2M1HPB11ABPSA1	SP006049697	AG-EASY2B-3121

OptiMOS™ 6 power MOSFET 80 V in PQFN 3.3x3.3 package

Heatmap indicator				
AMERICAS	JAPAN	GC	AP	EMEA

The new OptiMOS™ 6 80 V power MOSFETs in PQFN 3.3x3.3 combines Infineon's latest generation of MOSFET technology into a compact package.

This enables industry-best $R_{DS(on)}$ and power-density, delivering significant improvement in conduction losses and current capability. These new products address high switching frequency Telecom server and AI applications.



Features

- > N-channel, logic level
- > Industry benchmark $R_{DS(on)}$, which is upto 35% lower than OptiMOS™ 5

Benefits

- > Very low conduction losses
- > Increased power density and performance
- > Simplifying parallel configuration of multiple MOSFETs with Center-Gate footprint
- > Enables high switching frequency

Competitive advantage

- > The logic level enables high switching frequency
- > Industry's best $R_{DS(on)}$ leading to lowest conduction losses
- > Highest power density and ease of paralleling
- > High efficiency

Target applications

- > Telecom DC/DC Brick
- > Server PSU/SMPS
- > 48 V - 12 V IBC
- > 400 V - 48 V HVDC IBC

Product collaterals / Online support

[Product page](#)

Product overview incl. datasheet link

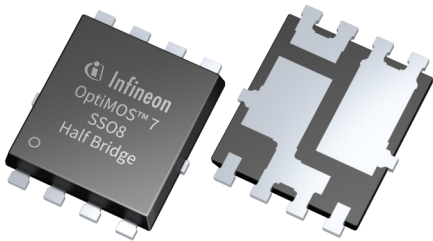
OPN	SP Number	Package
IQE031N08LM6CGATMA1	SP006067321	PG-TTFN-9
IQE031N08LM6CGSCATMA1	SP006067324	PG-WHTFN-9

OptiMOS™ 7 40 V in SSO8 HB 5x6 package

Heatmap indicator				
AMERICAS	JAPAN	GC	AP	EMEA

The new integrated SSO8 half-bridge (5x6 mm²) is the innovative and cost-efficient package solution for motor drive and body applications.

The integrated half-bridge provides the ideal solution for optimized routing in bridge applications and helps reduce the PCB area significantly. The new OptiMOS™ 40 V portfolio provides a wide $R_{DS(on)}$ range from 2.3 mΩ to 5.4 mΩ combined with an increased current rating of up to 100 A.



Features

- > Enhanced routing and optimized layout for H-bridge and 3-phase applications
- > Up to 100 A current capability vs. 60 A with dual SSO8
- > Latest OptiMOS™ 7 40 V technology for optimized switching and power losses

Benefits

- > Optimized layout for H-bridge and 3-phase applications
- > Optimized $R_{DS(on)}$ for low conduction losses enabling high efficiency
- > Small footprint: 5x6 mm² SSO8 leadless package
- > Extended ATV qualification (beyond AEC-Q101)

Competitive advantage

- > Up to 100 A current capability in half-bridge configuration
- > 5x6 mm² reduced footprint and optimized layout for BLDC motors
- > Latest OptiMOS™ 7 40 V technology for optimized switching and power losses, perfect EMC performance
- > Cost efficiency for low and mid power drive applications

Target applications

- > Body: power lift, power seat, window lift, wiper, HVAC
- > Chassis: electric parking brake
- > Power Train: water pump, fuel pump, oil pump
- > USB-charging

Product collaterals / Online support

[Product page](#)

Product overview incl. datasheet link

OPN	SP Number	Package
IAUCN04S7L023HATMA1	SP006009558	PG-TDSON-8
IAUCN04S7N024HATMA1	SP006009572	PG-TDSON-8
IAUCN04S7L037HATMA1	SP006008362	PG-TDSON-8
IAUCN04S7N040HATMA1	SP006008355	PG-TDSON-8
IAUCN04S7L050HATMA1	SP006005259	PG-TDSON-8
IAUCN04S7N054HATMA1	SP006005280	PG-TDSON-8
IAUCN04S7L025AHATMA1	SP006009988	PG-TDSON-8

TRENCHSTOP™ IGBT7 H7 750 V

Heatmap indicator				
AMERICAS	JAPAN	GC	AP	EMEA

The hard-switching TRENCHSTOP™ IGBT7 H7 750 V discrete is an evolution of the 650 V version, designed to cater to the demands of green and efficient energy applications that require a higher voltage handling capability.

With its enhanced voltage rating, this device is capable of withstanding higher voltage spikes and overvoltage conditions, making it an ideal choice for applications where reliability and efficiency are paramount.



Features

- > VCE = 750 V
- > IC = 50 A
- > Very low collector-emitter saturation voltage VCEsat
- > Very soft, fast recovery antiparallel diode

Benefits

- > Low switching losses
- > Smooth switching behavior
- > Humidity robustness
- > Optimized for hard switching, two and three-level topologies

Competitive advantage

- > Enhanced voltage rating of 750 V
- > Improved reliability
- > Reduced system costs

Target applications

- > Industrial UPS
- > EV Charging
- > String inverter

Product collaterals / Online support

[Product family page](#)

Product overview incl. datasheet link

OPN	SP Number	Package
IKZA50N75EH7XKSA1	SP006050486	PG-TO247-4
IKZA75N75EH7XKSA1	SP006051627	PG-TO247-4
IKZA100N75EH7XKSA1	SP006051629	PG-TO247-4
IKQ120N75EH7XKSA1	SP006051625	PG-TO247-3
IKQ150N75EH7XKSA1	SP006050490	PG-TO247-3
IKWH50N75EH7XKSA1	SP006051619	PG-TO247-3
IKWH75N75EH7XKSA1	SP006051621	PG-TO247-3
IKWH100N75EH7XKSA1	SP006051623	PG-TO247-3
IKY120N75EH7XKSA1	SP006152821	PG-TO247-4
IKY150N75EH7XKSA1	SP006092056	PG-TO247-4

IHV-A module with IGBT4 trench stop technology
6500 V

Heatmap indicator				
AMERICAS	JAPAN	GC	AP	EMEA

IHV 6500 V, 675 A, 130 mm single switch IGBT module with IGBT4 Trench field stop technology, the best solution for your HVDC-VSC, traction and industry applications.



Features

- > Low VCEsat
- > AlSiC Base Plate
- > Storage Temperature down to = -55°C
- > Package with CTI > 600

Benefits

- > Enabling compact inverter designs
- > Low power losses
- > Standardized housing

Competitive advantage

- > Highest current rating in the package size
- > Enables higher power rating in same inverter size

Target applications

- > High voltage direct current (HVDC)
- > Medium voltage (MV) drive
- > Traction

Product collaterals / Online support

[Product page](#)

Product overview incl. user guide link

OPN	SP Number	Package
FZ675R65KE4NPSA1	SP006033237	A-IHV130-461

XENSIV™ MEMS microphone IM66D130M

Heatmap indicator				
AMERICAS	JAPAN	GC	AP	EMEA

IM66D130M is an ultra-low power digital XENSIV™ MEMS microphone, designed for applications which require long battery life, very high AOP and environmental robustness in a small package.

With a Signal-to-noise ratio (SNR) of 66 dB(A) and an acoustic overload point (AOP) of 130 dBSPL the microphone enables a clear audio experience.

Enabled by a revolutionary digital microphone ASIC, the IM66D130M balances performance in a small package at a low current consumption of 540 µA.

IM66D130M comes in a very small package with dimensions of 3 x 2 x 0.98 mm³, making it a perfect fit for space-constrained applications.



Features

- > Low 510 µA current consumption in always-on mode
- > Component level IP57 water and dust resistant
- > 66 dB(A) signal-to-noise ratio
- > Acoustic overload point (AOP) of 130 dBSPL
- > Tight sensitivity (-37/-37 ± 1 dB) tolerances
- > 35 Hz low frequency roll-off
- > Small package size (3 x 2 x 0.98 mm³)

Benefits

- > Strong acoustic performance with small footprint and low current consumption
- > Clear audio signals even for high sound pressure levels
- > Performance across wide frequency range for audio beams and algorithms

Competitive advantage

- > New Single Backplate (SBP) technology
- > Ultra-low current consumption in low power mode (170 µA)
- > Component level IP57 water and dust resistant

Target applications

- > Active Noise Cancellation (ANC): headphones and earphones
- > Smartphones and mobile devices
- > Hearing enhancement devices
- > Voice User Interface (VUI): e.g., smart speaker, home automation, and IOT devices
- > Power constrained applications

Product collaterals / Online support

[Product page](#)

Product overview incl. datasheet link

OPN	SP Number	Package
IM66D130MV01XTMA1	SP006037654	PG-TLGA-5

EVAL_5K5W_3PH_LLC_SIC2

5.5 kW 3-phase interleaved LLC converter

Heatmap indicator				
AMERICAS	JAPAN	GC	AP	EMEA

The EVAL_5K5W_3PH_LLC_SIC2 is a 5.5 kW three-phase interleaved LLC converter which converts 400 V DC input voltage to a regulated 50 V output. It achieves a peak efficiency of almost 99% and a power density of 170 W/in³, enabled by the superior characteristics of CoolSiC™ and top-side cooled package solution.



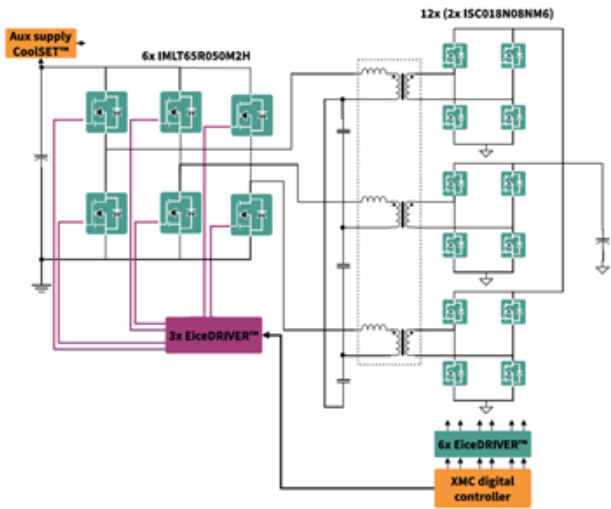
Features

- > 98.95% efficiency at 50% load
- > 98.48% efficiency at 100% load
- > 200 kHz resonant frequency
- > Three-phase interleaved LLC

Benefits

- > High-performance CoolSiC™ 650 V in TOLT
- > Top-side cooling
- > Ultra high efficiency and power density
- > Digital control

Block diagram



Target applications

- > AC-DC power conversion for telecommunications infrastructure
- > Power conversion
- > Server power supply units (PSU)

Product collaterals / Online support

[Board page](#)

Product overview incl. application notes link

OPN	SP Number	Package
EVAL5K5W3PHLLCSIC2TOBO1	SP006206001	LG-MADK-1-1

EVAL_QDPAK_FB_V2_1 evaluation platform for high-speed switching of SiC MOSFETs

Heatmap indicator				
AMERICAS	JAPAN	GC	AP	EMEA

The EVAL_QDPAK_FB_V2_1 evaluation board evaluates the switching capabilities of CoolSiC™ 750 V MOSFETs in Q-DPAK package. It features four SiC MOSFETs and EiceDRIVER™ gate driver ICs for isolated voltage supplies.

Optimized for high-speed switching through power loop design, the board showcases the optimum usage of high-speed switching devices in Q-DPAK packages, ideal for developers and engineers pushing the boundaries of power electronics.



Features

- > CoolSiC™ Automotive MOSFET 750 V G2
- > Versatile evaluation platform
- > Optimal power loop design
- > Dedicated voltage probes on board

Benefits

- > Easy evaluation of switching behavior
- > Showcase how to utilize Q-DPAK packages
- > Quick acquisition of voltage waveforms

Competitive advantage

- > Demonstrates the optimal usage of CoolSiC™ 750 V G2 SiC power MOSFETs top-side-cooled Q-DPAK packages in a full-bridge topology
- > Electrical experiments (such as single- or double-pulse measurements) can be performed and the voltages of the SiC MOSFETs can be observed
- > The eval board serves as a demonstrator of an optimal PCB design showing the correct usage of latest-generation wide-bandgap semiconductors in top-side-cooled packages
- > The complete design resources (such as the schematic, BOM, and layout) are available as complete Altium project online

Target applications

- > DC-DC converter high-voltage
- > On-board charging (OBC)
- > FCEV powertrain system
- > EV charging

Product collaterals / Online support

[Board page](#)

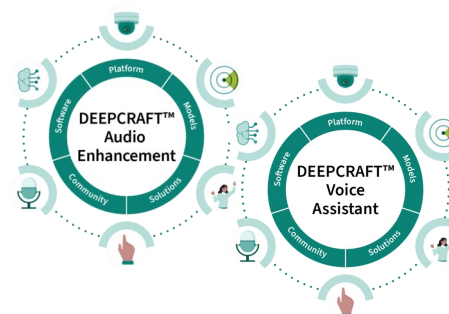
Product overview incl. user guide link

OPN	SP Number
EVAL_QDPAK_FB_V2_1	SP006129072

DEEPCRAFT™ Audio Enhancement and Voice Assistant

Heatmap indicator				
AMERICAS	JAPAN	GC	AP	EMEA

Introducing DEEPCRAFT™ Audio Enhancement and DEEPCRAFT™ Voice Assistant, transforming noisy audio into crystal-clear voice. These solutions enable power-efficient and responsive on-device voice interfaces, eliminating the need for network connectivity. DEEPCRAFT™ Audio Enhancement and DEEPCRAFT™ Voice Assistant use AI models to optimize voice and audio features, provide exceptional voice clarity, and enable developers to build intuitive voice interfaces with up to 100 commands. These solutions seamlessly integrate with PSOC™ Edge MCUs' power-efficient audio and AI acceleration capabilities, providing an enhanced user experience and enabling a new level of voice interaction for your products.



Features

DEEPCRAFT™ Audio Enhancement:

- > Noise suppression to remove environmental noise
- > Acoustic Echo Cancellation to remove device-generated noise
- > Beamforming to isolate the intended voice audio

DEEPCRAFT™ Voice Assistant:

- > Power-efficient AI acceleration and audio pipeline
- > Easy-to-use, no-code cloud configuration tool for quick prototyping and deployment
- > High accuracy under real-world noisy environments
- > Low-power, always-on listening enables extended battery life
- > Supports English. Mandarin support coming soon

Competitive advantage

- > Always-on listening at < 1mW with ultra-low latency in typical quiet room conditions helps longer battery life
- > Greater than 98% detection in quiet, close-talking conditions, with extremely low false alarm rate
- > Faster development time: build voice AI models and deploy them on PSOC™ Edge in less than 30 minutes
- > Takes full advantage of Ethos™-U55 and NNLite NPU hardware acceleration capabilities of PSOC™ Edge
- > 75% faster audio processing with up to 50% of the energy vs competitors

Product collaterals / Online support

[Product page: DEEPCRAFT™ Audio Enhancement](#)

[Product page: DEEPCRAFT™ Voice Assistant](#)

Benefits

DEEPCRAFT™ Audio Enhancement:

- > Enables high-quality voice user experience (UX) with accurate, real-time responsiveness
- > Delivers industry-leading power efficiency through AI
- > Intuitive tools and resources enable rapid product design, test and implementation
- > Integrates with DEEPCRAFT™ Voice Assistant

DEEPCRAFT™ Voice Assistant:

- > Allows for flexible command phrasing, enabling a human-centric interface
- > AI processing happens locally, eliminates cloud dependencies
- > Entire solution runs on PSOC™ Edge MCUs, enabling optimal system-level power and performance

Target applications

- > Smart home and building: alarm, security, security camera, video doorbell, smart door lock and smart thermostat
- > Home appliances: countertop appliances, vacuum cleaner and mops
- > Health and lifestyle: consumer wearable and medical wearable
- > Consumer electronics: AR devices, smart glasses, VR devices, audio and speaker
- > Robotics: domestic robots, humanoid robots, industrial robots and mobile robots
- > Industrial devices HMI and automation

Product overview incl. user guide/product brief link

OPN	SP Number
KITPSE84AITOBO1	SP006137452
KITPSE84EVALTOBO1	SP006137450
DEEPCRAFTAUDIOPACKSOFT1	SP006182834

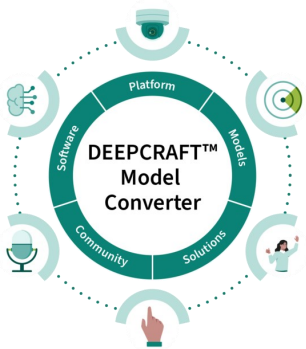
DEEPCRAFT™ Model Converter

Heatmap indicator				
AMERICAS	JAPAN	GC	AP	EMEA

DEEPCRAFT™ Model Converter lets ML and embedded engineers take existing AI models - proprietary or open-source - and run them efficiently on Infineon MCUs.

Convert for edge targets, apply compact, high performance optimizations, and validate against your dataset to confirm the generated edge code matches original model performance. Developers can easily utilize the GUI tool on Windows, Linux, and Mac, or integrate the CLI tool into CI/CD to automate model conversions at scale.

Save time, boost efficiency, and streamline Bring Your Own Model (BYOM) for edge deployment on Infineon’s PSOC™ Edge and PSOC™ 6 MCUs with ease.



Features

- > Bring Your Own Model (BYOM) support
- > Support for TFLite, H5 and Pytorch AI models
- > Optimized for PSOC™ Edge and PSOC™ 6 MCUs
- > Offers both GUI and CLI options
- > Runs on Windows, Linux and Mac
- > Quantization to int8x8 with int16x8 coming soon
- > Sparsity for quantized models

Benefits

- > Saves time and improves efficiency for importing your models onto PSOC™ Edge and PSOC™ 6 MCUs
- > For ML experts and non-experts alike
- > Enables developers to run proprietary and open-source AI models on edge devices

Product collaterals / Online support

[Product page](#)

Target applications

- > Smart home and building: alarm, security, security camera, video doorbell, smart door lock and smart thermostat
- > Home appliances: countertop appliances, vacuum cleaner and mops
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Product overview incl. user guide link

OPN	SP Number	Package
KITPSE84AITOBO1	SP006137452	-
KITPSE84EVALTOBO1	SP006137450	-
CY8CKIT-062S2-AI	SP006024345	LG-MADK-1

DEEPCRAFT™ Studio Computer Vision

Heatmap indicator				
AMERICAS	JAPAN	GC	AP	EMEA

DEEPCRAFT™ Vision brings computer vision to the edge without the usual complexity. Built into DEEPCRAFT™ Studio, it streamlines the full workflow from data annotation and pre-processing to model training, evaluation, and deployment. A built-in Ultralytics YOLO (You Only Look Once) pipeline reduces labeling effort and automatically applies robust augmentations, so you get production-ready results faster.

The Vision code is optimized for Infineon’s PSOC™ Edge MCUs and designed for seamless integration, drastically cutting porting time. With free cloud-based training through the software, any developer can quickly evaluate and build vision models for NPU-enabled microcontrollers, then deploy on-device with ease. Bring vision to consumer products, reduce development workload, and ship smarter edge AI fast.

Features

- > Supports making models for object detection
- > Enables users to make custom models, detecting whatever objects they select/identify by simply uploading data
- > Supports labeling images easily through the tool
- > Leverages Ultralytics YOLO models directly in DEEPCRAFT™ Studio

Benefits

- > Easy to integrate and deploy onto end products
- > Reduces the workload and time needed to develop production ready Edge AI models for vision
- > Streamlines the processes of data annotation, pre-processing, model creation and evaluation
- > Free cloud-based model training through the software
- > Easy to deploy on edge device

Competitive advantage

- > Equipped with YOLO training features. Supports image labeling, augmentation, cloud retraining model evaluation, code generation, quantizing
- > Model training on AWS. Vision features integrated in DEEPCRAFT™ Studio. Uses the Graph UX interface instead of coding
- > Easy code-free development and training support on DEEPCRAFT™ Studio
- > Optimized for PSOC™ Edge MCUs

Target applications

- > Smart home and building: alarm, security, security camera, video doorbell and smart door lock
- > Robotics: domestic robots, humanoid robots and mobile robots
- > Home appliances: refrigerator, freezer, vacuum cleaner and mops
- > Mobility industrial: drone, eVTOL, AR devices, smart glasses, car access control and electric forklift

Product collaterals / Online support

[Product page](#)

Product overview incl. user guide/product brief link

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