New Product Introduction

May 2022

EasyBRIDGE module with chopper configuration

LITIX™ Power TLD6098-2ES

Infineon® Prime Switch P2000DL45X168 and P3000ZL45X168

OPTIGA™ Connect Consumer

XENSIV™ MEMS microphone IM72D128V01

EasyBRIDGE module with chopper configuration

The EasyBRIDGE modules with 50 A nominal current and 1600 V repetitive peak reverse voltage are the latest addition to the Easy portfolio. The modules are equipped with a TRENCHSTOP™ IGBT 7 chip generation. They come with chopper configuration in an Easy 1B housing and offer a great choice for the customer:

> **DDB6U50N16W1R – a solder pin solution**

> **DDB6U50N16W1RP – a solder pin variant with pre-applied thermal interface material (TIM)**

> **DDB6U50N16W1RP_B11 – a PressFIT option with pre-applied TIM**

The modules find their application in servo drives, more specifically the AC-AC power stage.

Features

> Easy 1B housing

> 1600 V, 50 A

> TRENCHSTOP™ IGBT7 chip generation for brake chopper

> PressFIT or solder pin solution

> With and without pre-applied thermal interface material (TIM)

> Complete portfolio in 12 mm height

Competitive advantage

> 1600 V rectifier diodes, IGBT and diode for the brake chopper is based on the latest micro-pattern trench technology, optimized for drive applications
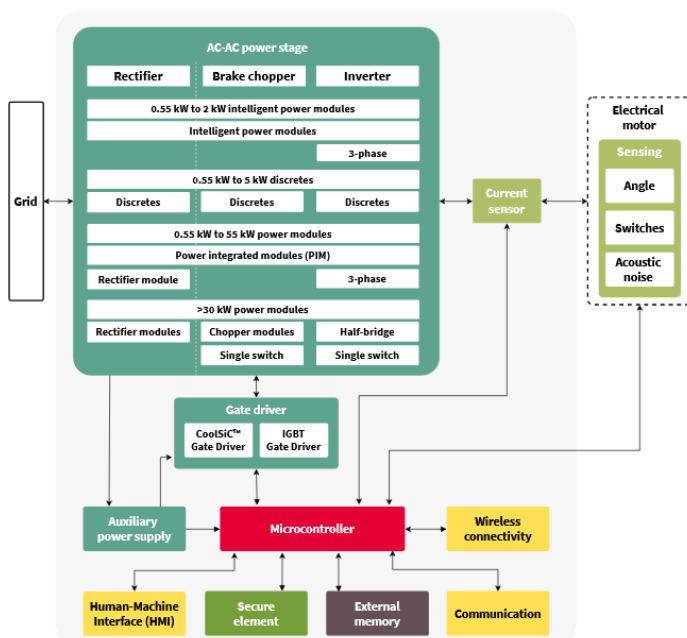
Benefits

> Low on-state voltage $V_{CE(sat)}$ and V_f

> Power extension

> Compact converter design

> Platform-based design

> Flexibility of choice based on customer needs

Target applications

> Auxiliary inverters

> Air conditioning

> Motor drives

> Servo drives

Block diagram:

Product collaterals / Online support

[Product family page](#)

[Application page](#)

Product overview incl. data sheet link

OPN	SP Number	Package
DDB6U50N16W1RPBPSA1	SP005419848	AG-EASY1B-711
DDB6U50N16W1RBPSA1	SP005578338	AG-EASY1B-711
DDB6U50N16W1RPB11BPSA1	SP005613027	AG-EASY1B-711

LITIX™ Power TLD6098-2ES

LITIX™ Power TLD6098-2ES is a dual channel configurable DC-DC boost controller with built-in diagnosis and protection features for automotive exterior and interior lighting.

Features

> Dual-channel peak current mode controller

> Each channel configurable in Boost, Buck, Buck-Boost, SEPIC and Flyback topology with constant output current/voltage

> Drives low-side external n-channel switching MOSFET from internal 5 V voltage regulator

> Flexible switching frequency range from 100 kHz to 500 kHz with spread spectrum modulator

> Synchronization with external clock source from 100 kHz to 500 kHz and 2.2 MHz

> Wide input voltage range from 4.5 V to 60 V

> Analog dimming and PWM dimming feature (embedded or external) to adjust average LED current

> Integrated PMOS gate drivers for PWM dimming and output disconnection

> Channels in phase opposition

Benefits

> Reduced EMI emissions

> Reliable protection with high-side load disconnection using a PMOS
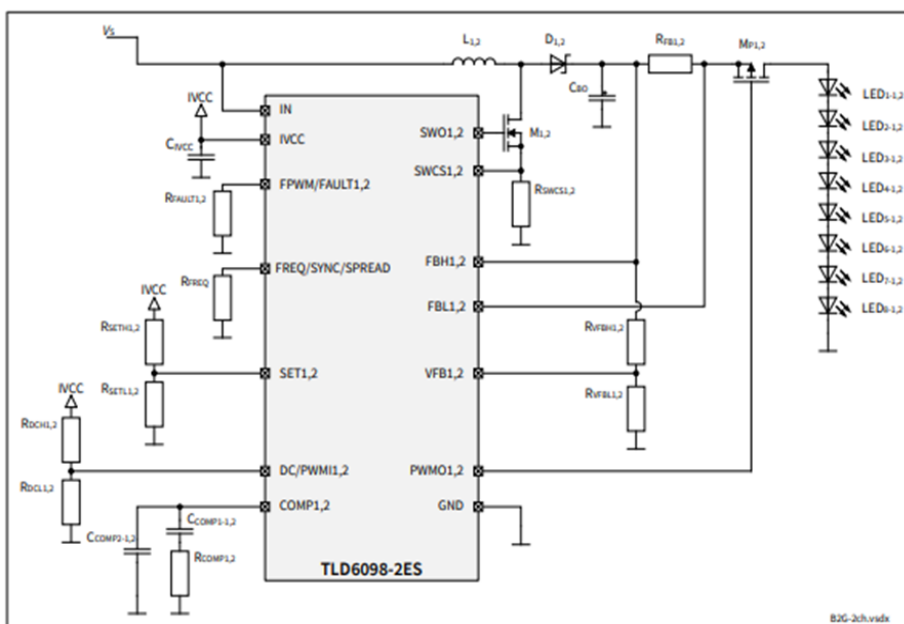
> 2.2 MHz option for small size DC-DC

Target applications

> Automotive exterior and interior lighting

> General illumination

> General - purpose constant output current

> Voltage applications

Competitive advantage

> Low EMI emissions

> Reliable protection with high-side load disconnection using a PMOS

Block diagram:

Product collaterals / Online support

[Product page](#)

Product overview incl. data sheet link

OPN	SP Number	Package
[TLD60982ESXUMA2](#)	SP005568816	PG-TSDSO-24

Infineon® Prime Switch P2000DL45X168 and P3000ZL45X168

Infineon Technologies Bipolar extends its high power product portfolio with a new direct Press Pack IGBT using Infineon Trench 4.5 kV IGBT chips: Infineon® Prime Switch.

This new, application optimized Press Pack IGBTs offer 2000 A with and 3000 A without internal freewheeling diode. They are designed to fulfil all current and future requirements of high power systems using IGBT power semiconductors. Main applications are HVDC & FACTS, DC Breaker, MV Drives, Wind Turbine Converters and Traction.

Features

> 4.5 kV Trench IGBT Chip

> Full long term short - on - fail

> Pressure contact

> Hermetical sealed housing

Benefits

> Robust against outside atmosphere

> Double side cooling

> Wide range of clamping force

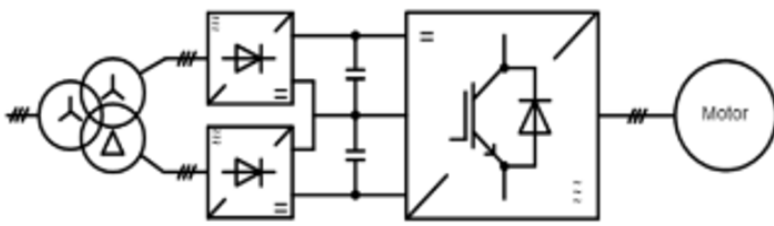### Competitive advantage

> Full long term short - on - fail

> Explosion proofed housing

> Highest power cycling capability

> Double side cooling

> Wide range of clamping force

Target applications

> HVDC & FACTS

> DC breaker

> MV drive

> Wind turbine converters

> Traction

Block diagram:

Product collaterals / Online support

[Product family page](#)

[Product page P2000DL45X168](#)

[Product page P3000ZL45X168](#)

Product overview incl. data sheet link

| OPN	SP Number	Package
P2000DL45X168HPSA1	SP005729091	BG-P16826K-1
P3000ZL45X168HPSA1	SP005717389	BG-P16826K-1

Infineon
Infineon Technologies Bipolar

You can place the order for these bipolar semiconductor devices through the Infineon Technologies Bipolar Online Shop

OPTIGA™ Connect Consumer

OPTIGA™ Connect Consumer is a ready-to-connect embedded SIM (eSIM) solution for consumer devices. It is especially suited to extending cellular connectivity to smaller devices like smart watches, fitness trackers and other wearables.

OPTIGA™ Connect Consumer represents the next generation of eSIMs implementing GSMA's technical specification for mobile consumer devices. This turnkey solution securely authenticates the device to the subscribed carrier networks of choice. Remote SIM provisioning (RSP) allows the user to change or add carriers over the air provided the device is equipped with a local profile assistant (LPA).

Generally speaking, SIM - based cellular connectivity is more resistant to security breaches than typical wireless network connections as it provides end - to - end encryption and secured key exchange.
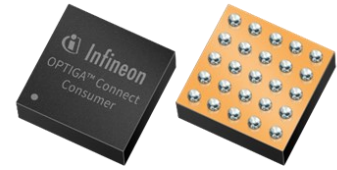
Features

> Compliant with network technologies 2G, 3G, 4G (LTE), 5G

> Network Access Applications SIM, USIM, CSIM, RUIM and ISIM

> Remote SIM Provisioning (RSP) compliant with GSMA SGP.22 v2.2.2

> Compliant with Trusted Connectivity Alliance (TCA) eUICC Profile Package V2.3.

> Interoperable with MNOs offering commercial eSIM services

> Chip-scale (2.9 x 2.5 x 0.4 mm) and ETSI MFF2 (5.0 x 6.0 mm) packages

> Up to 800 kB free memory for MNO profiles, applications, and data (supporting integration of additional applets)

> Certified and tested solution according to GSMA

Competitive advantage

> Easy integration: Stand-alone required low integration efforts (no dependency with other functionality)

> Future proof: Free memory available (up to 800kB) to enable product evolution with integration of new applications

Benefits

> Increased customer convenience

> More design flexibility by providing an ultra-small package size

> Future-ready device

> Based on a solid security platform

> Interoperable

> Turnkey solution with lower design-in and qualification effort

Target applications

> 3G / 4G / 5G cellular devices such as:

>> Smartphones

>> Tablets

>> Wearables

>> Laptops

>> Access Points

>> Consumer IoT Devices

Block diagram:
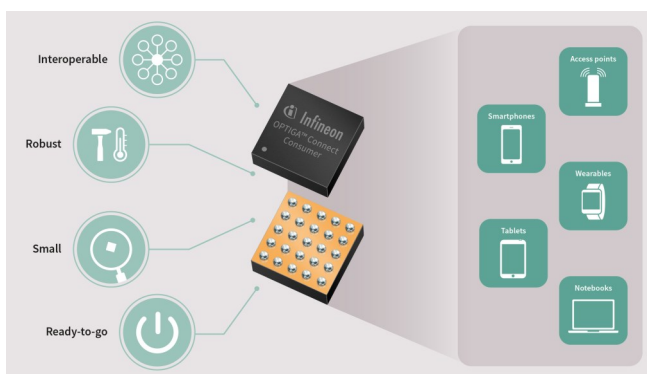

Product collaterals / Online support

Product page

Product brief

Product overview incl. data sheet link

OPN	SP Number	Package
OC11200810VQFN8XTMA2	SP005580064	PG-VQFN-8
OC11200810WLB25XTSA1	SP005556128	SG-XFWLB-25
OPTIGACONNECTKIT2XHSA1	SP005751597	

XENSIV^{TM} MEMS microphone IM72D128V01

The **IM72D128V01 is an ultra-high performance digital microphone designed for applications which require a very high SNR (low self-noise) and low distortions (high AOP). This microphone is based on Infineon's new Sealed Dual Membrane MEMS technology which delivers high ingress protection (IP57) at a microphone level. The flat frequency response (20 Hz low-frequency roll-off) and tight manufacturing tolerance improve performance of multi-microphone (array) applications. Different power modes can be selected in order to suit specific clock frequency and current consumption requirements.**
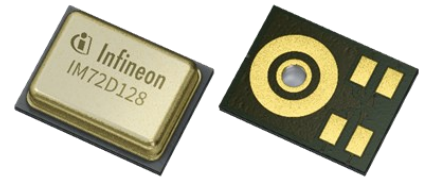
Features

> Ultra-low self-noise / ultra-high SNR (72 dB)

> Selectable power modes for battery critical applications (980/280 µA)

> Sealed Dual Membrane (SDM) technology with IP57 ingress protection at microphone level

> Ultra-high dynamic range and high acoustic overload point (AOP) of 128 dB SPL

> Very tight part-to-part phase and sensitivity matching (± 1 dB)

> Flat frequency response with a very low LFRO (low frequency roll-off) of 20 Hz

> Very low group delay (7 µs @ 1 kHz)

Benefits

> Crystal clear audio pick up of the quietest and the loudest sounds

> High ingress protection (IP57) at a microphone level

> Enablement of advanced audio features (ANC, transparent hearing, audio zoom, beamforming)

Target applications

> ANC headphones

> Conference systems

> Smart speaker

> Laptops & tablets

> Surveillance

> Cameras

Evaluation Board KITIM72D128V01FLEXTOBO1
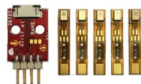
> Five XENSIV™ MEMS microphones mounted on flex board and one adapter board.
The flex evaluation kits allow simple and easy evaluation of XENSIV™ MEMS microphones. One microphone of the respective type is mounted on each flex board. A flex board can be easily connected to an audio testing setup with the included adapter board via a 6-position ZIF connector. Each kit includes five flex boards and one adapter board.

Product collaterals / Online support

[Product page](#)

[Board page](#)

[Product brief](#)

Product overview incl. data sheet link

OPN	SP Number	Package
IM72D128V01XTSA1	SP005738480	PG-LLGA-5
KITIM72D128V01FLEXTOBO1	SP005429924	