

# New Product Introduction

May 2022

EasyBRIDGE module with chopper configuration

LITIX<sup>™</sup> Power TLD6098-2ES

Infineon® Prime Switch P2000DL45X168 and P3000ZL45X168

XENSIV<sup>™</sup> 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.

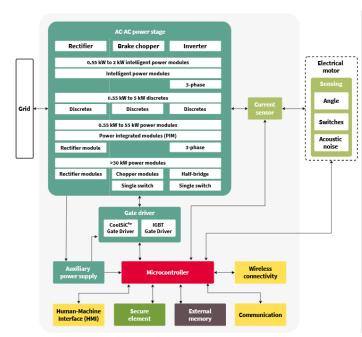
#### Features

- > 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

# Block diagram:



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

# C) Infineon EasyBRIDGE Easy 18

#### Benefits

- > Low on-state voltage V<sub>CE(sat</sub>) and V<sub>f</sub>
- > 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

Product collaterals / Online support

Product family page

Application page

# LITIX<sup>™</sup> Power TLD6098-2ES

LITIX<sup>™</sup> 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

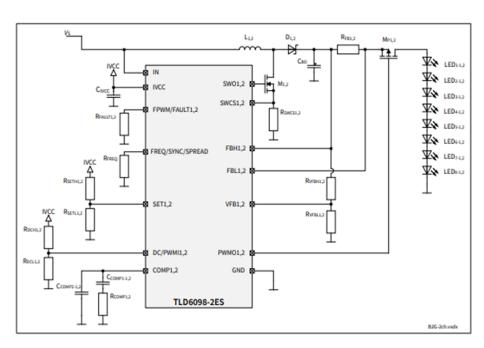
### **Target applications**

- > 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

# Competitive advantage

- > Full long term short on fail
- > Explosion proofed housing
- > Highest power cycling capability
- > Double side cooling
- > Wide range of clamping force

# Benefits

- > Robust against outside atmosphere
- > 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

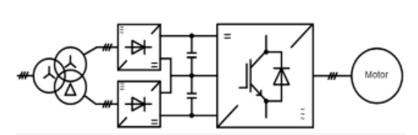
Product page P3000ZL45X168

Product overview incl. data sheet link

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



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





# XENSIV<sup>™</sup> 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 lowfrequency 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.

# C Infineon IMT2D128

#### Features

- > Ultra-low self-noise / ultra-high SNR (72 dB)
- $> \,$  Selectable power modes for battery critical applications (980/280  $\,\mu\text{A})$
- > 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 rolloff) of 20 Hz
- > Very low group delay (7 µs @ 1 kHz)

# Evaluation Board KITIM72D128V01FLEXTOBO1



> Five XENSIV<sup>™</sup> MEMS microphones mounted on flex board and one adapter board.

The flex evaluation kits allow simple and easy evaluation of XENSIV<sup>™</sup> 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.

#### **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

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	