

CE00LB Dual-Channel IGBT & MOSFET gate driver core up to 3300V

Introduction

The E-Series CE00LB gate driver core offers full Poweronics' gate drive performance and functionality in a package which has the smallest volume in its class.

As with all Poweronics products, the gate driver is suitable for all applications requiring high performance and high reliability. Both 2-level and 3-level topologies are supported for all device blocking voltages up to and including 3300V. Input voltages of both 15V and 24V are available. The communication interface is electrical. The CE00LB includes 2 drive channels supported by all necessary connections and supporting circuits including isolated DC-DC converter, short-circuit protection, active clamping and supply voltage monitoring.

Peak drive output current is 56A per channel, supported by either 6W drive power (24V input) or 4W drive power (15V input).

Product Features

- Smallest volume space-claim in class
- Feature-rich performance
- Peak gate current +/- 56A
- Gate voltages -10V/+15V (standard, configurable on request)
- Device blocking voltages up to 3300V
- Isolation to IEC62497-1 and IEC62477-1
- Active Clamping
- Electrical control interface
- Lead-free manufacture

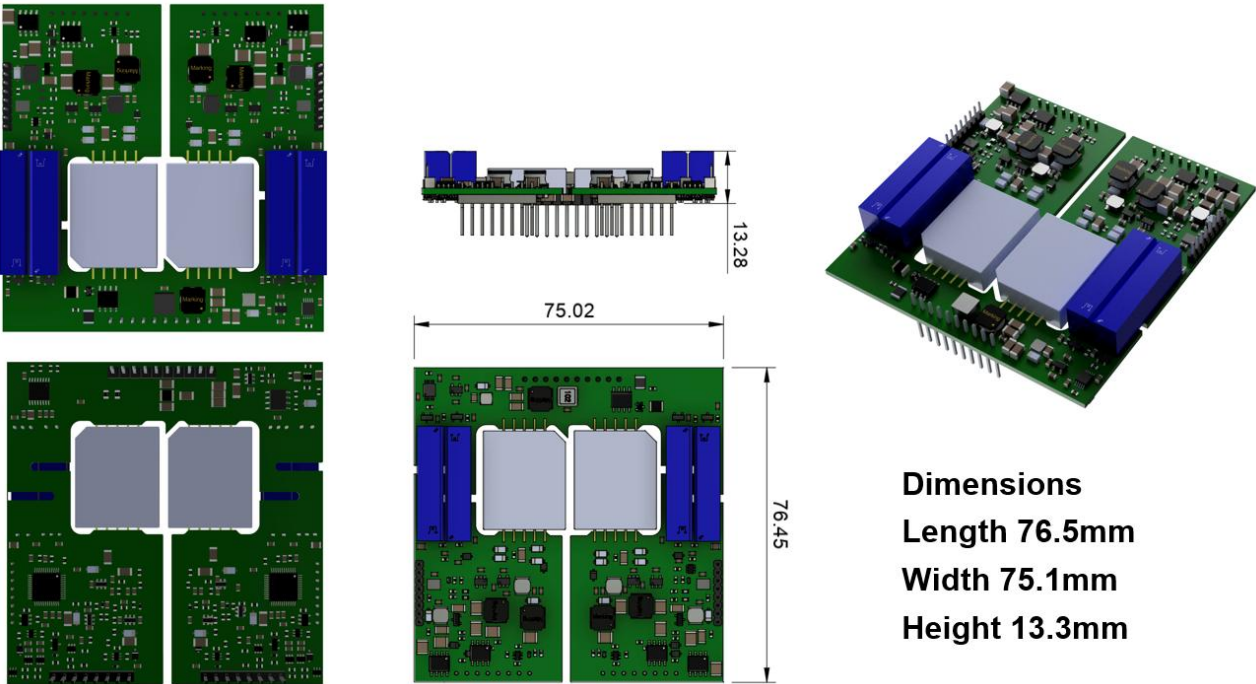
Applications

- High-Speed Rail
- Freight Locomotives
- Metro- and Mass-Transit
- HVDC and FACTS converters
- Hydrogen Generation
- MV Converters and motor drives
- Industrial drives
- Windpower Converters
- High-energy and Pulsed-Power applications
- Medical applications

Specification Examples

Parameter	Min.	Typ.	Max.	Unit
- Supply voltage (15V version)	14.5	15.0	15.5	V
- Supply Voltage (24V version)	21.6	24.0	27.6	V
- Logic Input and Output voltages	-0.5		V _{cc} +0.5	V
- Peak Gate Current	-56		+56	A
- External Gate Resistance	limited by I _{g_peak}			
- Average supply current	TBC			
- Output Power per channel (15V version)			6	W
- Output Power per channel (24V version)			4	W
- Switching Frequency			>100	kHz
- Creepage primary-secondary	31.3	(mat gp 2)		mm
- Creepage secondary-secondary	16.0	(mat gp 2)		mm
- Clearance	19.3			mm

Dimensions



Pinout

