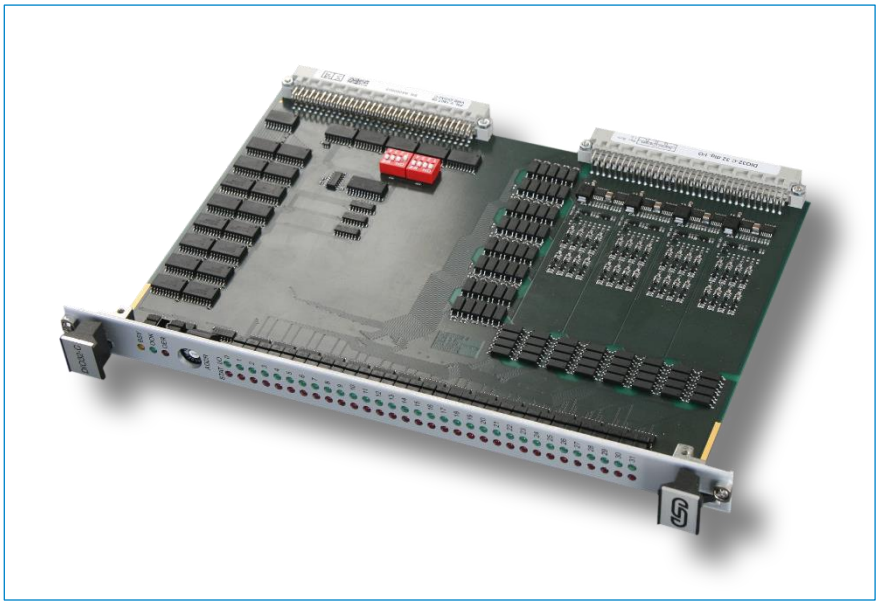
VME-DIO32-C

VMEbus Board with 32 Digital I/Os as Successor of VDOT-32

Process IOs with wide Voltage Range
- *32 digital inputs,-3 ... 32 V DC*
- *32 digital outputs 18... 32 V DC/0.5 A*

Optical Isolation and Protection
- *Optical isolation of all inputs and outputs*
- *Short circuit protection also resists permanent short circuits for all outputs*
- *Error detection of outputs is integrated*
- *Overvoltage protection of inputs*

VDOT-32 Successor by esd electronics
- *Developed to take over simple I/O operations of the VDOT-32.*
- *P2 pinning and VMEbus interface correspond to those of the VDOT-32*



Opto-isolated Process I/Os
The VME-DIO32-C provides 32 opto-isolated digital IO channels. The IO channels can be set and read out via a digital process interface. The IOs and the power supply are connected via the P2 connector of the board.

The 32 digital IO channels are arranged in 4 groups of 8 IO channels each, whereby each group must be supplied with power independently. These 4 groups are galvanically isolated from the VME system and from each other.

The VMEbus interface is designed for addressing as A16 Slave and D08(O) transfer mode.

Successor for JanzTec VDOT-32
The VME-DIO32-C can be used as a replacement for the JanzTec VDOT-32 due to the compatible P2 pinning and the matching VMEbus interface. The newly developed board offers a reduced range of functions to transparent reading and writing of I/Os. Advanced functions like PWM, counter or interrupt generation are not supported.

Display of Status with LEDs
The VME-DIO32-C has three status LEDs to indicate the VME activity (yellow) and green and red to indicate the power good of the output channels combined for all groups.

Each of the 32 IO channels is represented by one green and one red LED. All LEDs are located on the front panel.
The green LEDs indicate the input status of the respective channel, while the red LEDs signal an output short circuit or an overtemperature protection shutdown of the individual channels.

Wide Voltage Ranges
The digital output channels use a quad channel smart high-side power switch and accept an operating voltage range of 18 V DC to 32 V DC (24 VDC nominal voltage) with a nominal current of 0.5 A per channel. The current of each channel is limited.

Customization on Request
Customized options are available for customized series production in reasonable quantities. Please contact our sales team for detailed information.

esd electronics gmbh
Vahrenwalder Str. 207
30165 Hannover / Germany

Phone: +49 (0) 511 3 72 98-0
Fax: +49 (0) 511 3 72 98-68
E-mail: info@esd.eu

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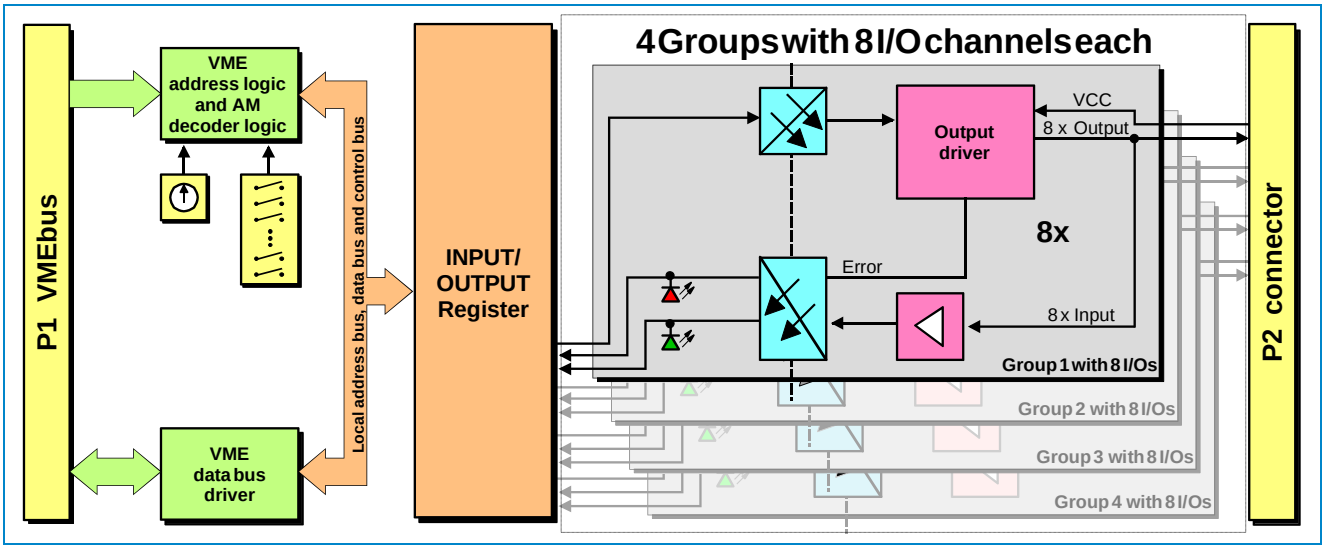

Technical Specifications

Digital Inputs/Outputs:		
Number	*32 (IO0 – IO31),* *Arranged in 4 groups with 8 channels*	
I/O-configuration	*Input/Output ports,* *Status of dig. outputs can be read*	
Type of the outputs	*Plus switching (High Side Driver)*	
External power supply voltage	*18 … 32 V* *Arranged in 4 groups,* *Maximum current per group: 6A*	
Digital Inputs		
Digital Inputs	*-3 V ... 32 V (maximum external power supply)* *Input threshold:*	*UON ⩾ 12 V* *UOFF ⩽ 5 V*
	Input current (24V):	*Minimum 4 mA,* *Maximum 6 mA*
Digital Outputs	*Output current:*	*Typical: 0.50 A* *Maximum: 0.75 A* *Max. overcurrent-limit: 1.5 A*
	Electrical Isolation voltage: 5000 V_{rms} (1 minute)	
VMEbus.:		
VME interface	*IEEE 1014 / D*	
Addressing	*A16 Slave*	
Transfer mode	*D08(O)*	
VME base address	*Adjustable by 2 DIP-switches, and a rotary switch (ADDR) in the front panel*	
Interrupter	*None*	

General:	
Power supply voltage	*4.85 V … 5.25 V DC / $I_{TYPICAL}$: 0.65 A*
Ambient temperature	*0 °C ... +70 °C*
Relative humidity	*Max. 90 % (non-condensing)*
Dimensions	*Eurocard Double-height (6U), 1 Slot width* *160 mm x 233,35 mm x 20,1 mm*
Connectors	*VME: P1 (DIN41612-C96)* *I/Os: P2 (DIN41612-C64)*
Weight	*Ca. 470 g*

Order Information:		
Hardware		*Order No.*
VME-DIO32-C	*32 digital I/Os,* *A16 Slave,* *D8O transfer mode*	*V.1607.06*

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