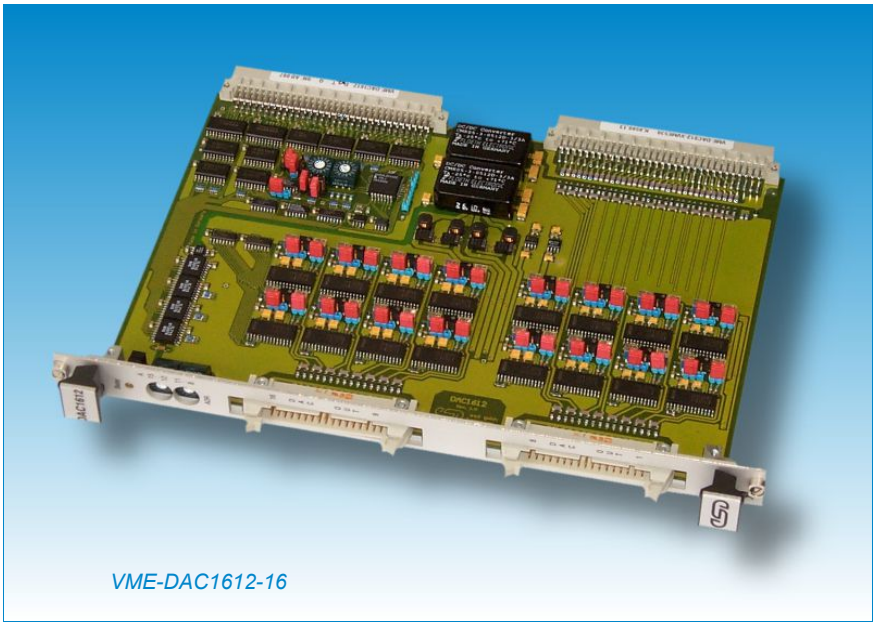
VME-DAC1612
16 Analog Outputs

Up To 16 D/A Converters
- General purpose analog output board
- 8 or 16 analog output channels
- 12 bits resolution, 5 µs settling time
- Multiple output voltage ranges possible, optionally current outputs for 8 channels
- Buffered outputs, short-circuit-proof

Industrial Standard
- Safety of operation by electrical isolation between VMEbus and process environment
- Proper wiring of analog outputs and analog parts power supply to the backplane via P2 and at the front panel

Options
- Optional IEEE front panel for VME-DAC1612-16 with easy-to-use ejector handle
- A customized version, compatible with XYCOM XVME530 is available



VME-DAC1612-16

Output Circuit
The VME-DAC1612 is an interface board designed for the generation of 8 analog signals (VME-DAC1612-8) or 16 analog signals(VME-DAC1612-16) for process control purposes.

Output voltages can be selected to 0...+5 V, 0...+10 V, ±5 V or ±10 V.
The selection is done by setting the corresponding jumpers on the board. Gain and offset can be adjusted by potentiometers.
The VME-DAC1612 is delivered with adjustment for bipolar voltages.

Adapter Board
Conversion of the output voltage (0...+10 V) into an output current (0...20 mA or 4...20 mA) is possible with option VME-DAC812-20mA for 8 channels.

Electrical Isolation
Fast magnetic coupling barriers IL715 and DC/DC-converters perform the electrical isolation between VMEbus and analog process section.

Wiring
The P2 connector links both the external power supply inputs of the analog section and the process signals to the system.
For the connection of the signals from P2 with ribbon cable to an industrial mounted module (according to DIN EN 50022) with terminal blocks, the option DAC1612-ADAPT1 or DAC1612-ADAPT2 are recommended.
The analog outputs are also accessible via two 34-pin post connectors in the front panel.

Customizing Option
In the customized version VME-DAC1612-XVME530 the board comes with 5 outputs,12 bits, adjusted for 0...+10 V. Front-I/O, I/O data access and power supply are compatible with XYCOM XVME530

Software Support
Control of the VME-DAC1612 via VMEbus is easily done with simple commands, so that no driver is necessary. Nevertheless, drivers for all popular operating systems are available.

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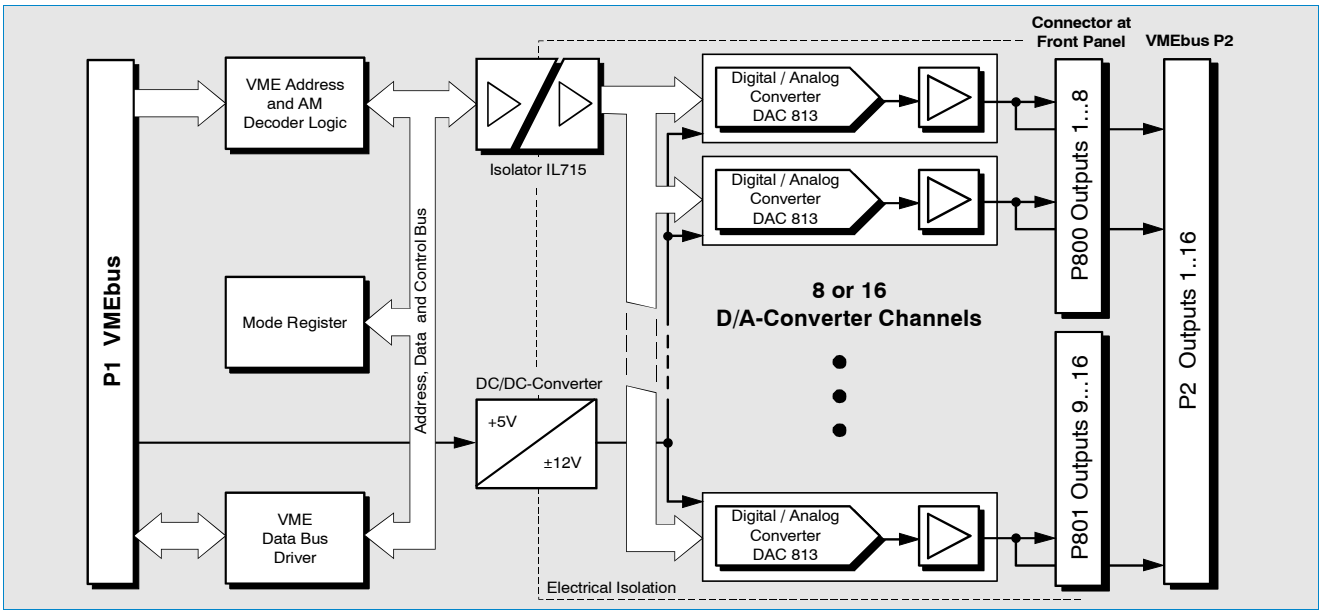
VME-DAC1612

16 Analog Outputs



Technical Specifications:

Process section:	
Outputs	*Unipolar: 0...+5 V or 0...+10 V Bipolar: -5...+5 V or -10...+10 V Output current: 0...20 mA or 4...20 mA (with option DAC812-20mA, 8 channels)*
Number of channels	*VME-DAC1612-8: 8 channels VME-DAC1612-16: 16 channels*
Resolution	*12 bits*
Settling time	*5 µs (VME data in to output, typ. 20 °C)*
LED array	*BUSY (board select)*
Electrical isolation	*By digital isolator IL715 and DC/D converters*

VMEbus section:	
Base address	*Selectable by jumpers over the whole address range of 16 Mbyte. The board covers 256 bytes.*
Address modifier (AM)	*Full AM decoding additionally with don't care mode for 'supervisory'/'non-privileged' mode*
VMEbus compatibility	*Revision IEEE 1014 rev. C.1*
Data transfer options	*SADO24, SD16*

General:	
Ambient temperature	*0 °C ... +70 °C*
Relative humidity	*Max. 90 % (non-condensing)*
Connector types	*P1, P2: DIN 41612-C96 P800, P801: 34-pin post connector*
Board size	*160 mm x 233 mm*
VME dimensions	*6U height, 1 slot width*
Weight	*400 g*
Power consumption	*Typical 1.6 A at 5 VDC*

Order Information:		
Hardware		*Order No.*
VME-DAC1612-8	*8 channels unipolar/bipoar 0...+10 V, -10...+10 V*	*V.1706.08*
VME-DAC1612-16	*16 channels unipolar/bipoar 0...+10 V, -10...+10 V*	*V.1706.16*
VME-DAC1612-XVME530	*5 outputs, 12 bits, adjusted for 0...+10 V, opto-isolated, front-I/O, I/O data access and power supply compatible with XYCOM XVME530*	*K.0508.13*
VME-DAC1612-IEEE/FRONT	*IEEE front panel for VME-DAC1612-16*	*V.1706.31*
Accessories		
VME-DAC1612-ADAPT1	*Adapter module with screw terminal blocks, connection to P2*	*V.1923.01*
VME-DAC1612-ADAPT2	*Adapter module with clamp terminal blocks, connection to P2*	*V.1923.02*
VME-DAC812-20mA-8	*Adapter for conversion to 0(4)...20 mA*	*V.1702.28*

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