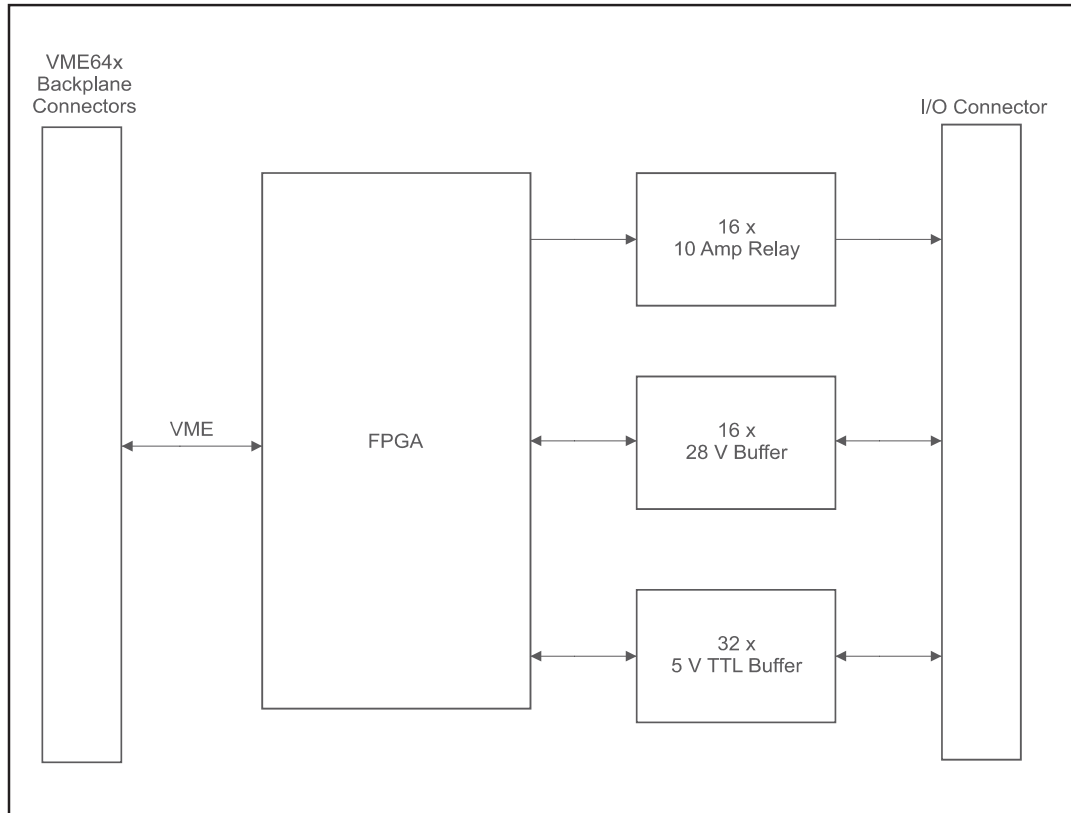


► 6U VME64x Digital I/O and Relay Board

The 6U VME64x Digital Input / Output (I/O) and Relay Board provides thirty-two 5 V TTL I/O channels, sixteen 28 V discrete I/O channels and sixteen 10 Amp relay output channels on a single 6U VME64x board. A Field-Programmable Gate Array (FPGA) is used to provide access to the digital data over the VME64x 2eSST bus.



Block Diagram of the 6U VME64x Digital I/O and Relay Board

Architecture

An FPGA is used to control and/or read from the 46 I/O channel buffers and control the 16 relays. The FPGA also provides the VME64x 2eSST interface to the backplane bus.

Features

- wide I/O range (up to 28 V)
- Air-Cooled and Conduction-Cooled versions
- Commercial, Industrial and Ruggedised grades
- Front Panel and backplane I/O versions
- high relay sink current (up to 10 A)
- programmable inputs and outputs



► **6U VME64x Digital I/O and Relay Board**

Bus Interface	VME64x 64-bit 2eSST		
Digital Inputs and Outputs	32 x 5 V TTL channels, routed to backplane connector or Front Panel 16 x 28 V discrete channels, routed to backplane connector or Front Panel		
Relays	16 x 10 Amp Relay channels, routed to backplane connector or Front Panel		
Power	3,3 V DC at 0,3 A (1 Watt); 5 V DC at 0,5 A (2,5 Watt)		
MTBF	Figures according to MIL-HDBK-217F, Parts Stress Method		
	Commercial and Industrial Grades	Ground Benign, Controlled, 25 C	370 000 hours
	Industrial Grade	Ground, Mobile, 45 C	45 000 hours
		Naval, Sheltered, 40 C	106 600 hours
Airborne, Inhabited Cargo, 55 C		48 400 hours	
Airborne Uninhabited Cargo, 70 C		15 700 hours	
Airborne Rotary Wing, 55 C		15 900 hours	
Airborne, Inhabited Fighter, 55 C		38 500 hours	
Ruggedised Grade	Airborne, Uninhabited Fighter, 70 C	12 700 hours	
	Ground, Mobile, 45 C	48 800 hours	
	Naval, Sheltered, 40 C	115 500 hours	
	Airborne, Inhabited Cargo, 55 C	52 500 hours	
	Airborne Uninhabited Cargo, 70 C	17 000 hours	
	Airborne Rotary Wing, 55 C	17 200 hours	
Airborne, Inhabited Fighter, 55 C	41 700 hours		
Airborne, Uninhabited Fighter, 70 C	13 800 hours		
Software Drivers	Support for Linux VxWorks, Windows and others are costed options		
Physical Characteristics			
	Cooling Type	Air-Cooled	Conduction-Cooled
Dimensions		233 mm x 160 mm	233 mm x 160 mm
Mass		450 g +/- 50 g	500 g +/- 50 g
Environmental Specifications			
Grade	Commercial	Industrial	Ruggedised
Temperature			
- Operating	0 C to +55 C	-15 C to +75 C	-40 C to + 85 C
- Storage	-40 C to +85 C	-40 C to +85 C	-55 C to +125 C
Humidity	0% - 90%	0% - 95%	0% - 95%
Shock	10 g peak for 11 ms	20 g peak for 11 ms	40 g peak for 11 ms
Vibration			
- Sine	2 g (peak) at 10 Hz to 100 Hz	5 g (peak) at 5 Hz to 2 kHz	10 g (peak) at 5 Hz to 2 kHz
- Random	0,04 g²/Hz at 15 Hz to 2 kHz	0,06 g²/Hz at 15 Hz to 2 kHz	0,1 g²/Hz at 15 Hz to 2 kHz
	Part Designation	Cooling	Grade
	CCII/DIO/6UVME/64C/FP/COM	Air	Commercial
	CCII/DIO/6UVME/64C/FP/IND	Air	Industrial
	CCII/DIO/6UVME/64C/FP/RGD	Air	Ruggedised
	CCII/DIO/6UVME/64C/BP/CC	Conduction	Ruggedised

Board-Level Digital I/O and Relay Board