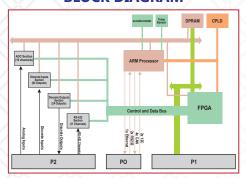
# **MULTIFUNCTION I/O BOARD**



#### **BLOCK DIAGRAM**





### Multifunction I/O Module in 6U form factor with VME interface

#### **Integrated Host Processor**

- ARM ® Cortex®- R5F 32-Bit RISC CPU with 32K inst and 32K data caches with ECC.
- 4MB of Program Flash with ECC.
- System core microprocessor supporting frequencies of 330 MHZ

#### **SDRAM**

 Up to 512 MB SDRAM with ECC Single Bank

#### Flash Memory

- 512KB NOR Boot Flash memory
- · 64MB NOR Boot Flash
- · 256MB NOR Application Flash

#### **Backplane**

 Fully VME64 Host/slave capable with 2eSST support

# **Specifications**

· 10 channels with 12-bit ADC.

**Analog Inputs** 

 Software programmable sample rates, gains, filters, and high voltage and current ranges.

#### Multiple Communication Interfaces

- · 1x 10/100 BASE-T Ethernet
- · 4x CAN Controller.
- 2x Inter-Integrated (I2C) Modules.
- · 11x RS-422 Channels.
- · 2x RS-232/RS422 UART ports

#### **Discrete Inputs**

- 64 channels with multiple voltage and current ranges.
- Programmable input thresholds and debounce times.

#### **Discrete Outputs**

- 24 channels with high voltage and current drives.
- Outputs are protected for short circuit, over current, and over temperature conditions.

#### **Temperature Sensors**

 On-board ambient temperature and processor core temperature sensors

#### **Power Requirements**

· Operates from +5V

## **Features**

- · 6U VME ARM based computer
- High Performance Processor having FPU with Single and Double Precision.
- Onboard Xilinx 6 Series high-end FPGA for ASICs design
- · Xilinx CPLD for power sequencing and reset management
- · High-speed 3.3V 16K x 16 dual-port SRAM
- · Self Calibration and Built-in-Test (BIT) with Visual Indication.
- · 1,000V peak field to VME Bus Isolation.
- · ROHS, CE, UL, 60950 complaint.

# **Optional Accessories**

- · 6U Standard backplane
- Temperature management
- · Wedge Locks

# **Standards**

- MIL-STD-454G
- · ANSI/VITA/1994 VME64
- · MIL-STD-801D
- · MIL-STD-461B

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