

GX7928 SERIES



6U PXI CONTROLLER, INTEL® XEON® E-2176M PROCESSOR

- 6U cPCI/PXI controller for use with GX70xx & GX71xx Series chassis
- 2.7 GHz 6-Core Intel® Xeon® E-2176M Processor
- 16 GB DRAM
- (2) SATA Interfaces
- (2) Gigabit Ethernet Interfaces
- (3) USB, (1) RS232 COM Ports
- (2) PMC/XMC Interfaces
- HD Stereo Analog Audio



DESCRIPTION

The GX7928 is a Single Board Computer (SBC) that features the high performance, highly integrated 6-core Xeon® processor platform from Intel®. The Xeon® processor offers an integrated graphics and memory controller plus six core processing and operating at speeds up to 2.7 GHz. Coupled with the Intel® CM246 Chipset, the GX7928 provides an unmatched level of I/O bandwidth for both onboard and off-board functions. The module is supplied with 16 GB of DDR4 ECC DRAM memory.

Both standard and extended temperature operation range versions are available.

FEATURES

The GX7928 is a single-slot 6U controller for use with Marvin Test Solutions' GX70xx and GX71xx series chassis. The GX7928 offers multiple peripheral connections including USB, Ethernet, COM and VGA. When combined with the embedded storage peripherals of the GX70xx and GX71xx Series chassis, it is the ideal solution for a compact, high performance, and integrated PXI chassis / controller configuration. Additional flexibility is provided by the two front panel accessible PMC / XMC slots, which can accommodate a variety of interfaces and functions for specific applications or needs.

CONFIGURATION

The GX7928 controller supports multiple peripherals and I/O interfaces through either the controller's front panel or the rear I/O panel of the GX70xx or GX71xx Series chassis. Connection to the DVD-RW drive and hard drive is via the controller's internal I/O interface. The controller's front panel I/O supports DisplayPort, one USB 2.0 port, two Gigabit Ethernet ports and one COM 3 port. Additional USB, DisplayPort, COM and Ethernet connections (chassis model dependent) are available on the rear panel of the GX70xx and GX71xx chassis via the controller's rear I/O interface. The GX7928 features two PMC / XMC slots which support 64-bit PCI, 100 MHz in PCI-X mode or PCI Express x8 (Gen2, 2.5 Gb/s) for XMC applications.

A high-density splitter cable (GX7928-PSC) provides easy access to the following front panel interfaces: (2) DisplayPort, (2) USB and (1) Serial RS-232.

OPERATING SYSTEM

The GX7928 series controller is available with Windows 11 Pro or Windows 10 Pro operating system, and should be specified at time of order.

APPLICATIONS

- GX70xx chassis controllers
- GX71xx chassis controllers

GX7928 SERIES



SPECIFICATIONS

PROCESSOR AND MEMORY	
CPU	Intel® Xeon® E-2176M Processor, 2.7 GHz • 12 MB Smart Cache
Main Memory	16 GB ECC DRAM (DDR4)
EXTERNAL INTERFACES	
Compact PCI Bus Interface	Compliant with CompactPCI specification PICMG 2.0 R3.0
PERIPHERAL I/O PORTS	
USB Interface	(4) USB 2.0 ports: • (1) USB, front panel • (3) rear I/O interface connections, dependent on chassis rear panel configuration
Ethernet Interface	• (2) 10/100/1000 MB/s Ethernet ports (front panel) • (2) 10/100/1000 MB/s Ethernet ports (rear), dependent on chassis rear panel configuration
COM Interface	• (1) COM interface (front panel) • (2) COM interfaces (rear panel), dependent on chassis rear panel configuration
DisplayPort	Intel® graphics and memory controller: • 1920 x 1200 max.
PHYSICAL AND ENVIRONMENTAL	
Mechanical	6U, 1 slot wide, CompactPCI/PXI compliant form factor
Operating Temperature	GX7928: 0 °C to +55 °C GX7928-M: 0 °C to +83 °C
Storage Temperature	-40 °C to +85 °C
Humidity	5% to 95%, @ +40 °C

Note: Specifications are subject to change without notice

ORDERING INFORMATION

GX7928	PXI Controller, 6U E-2176M Processor, 16 GB DRAM
GX7928-SSD	PXI Controller, 6U-E2176M Processor, 16 GB DRAM w/Solid State Drive (SSD)
GX7928-M	PXI Controller, 6U E-2176M Processor, 16 GB DRAM - Ruggedized / Extended Temperature