

GX7930 SERIES

EMBEDDED PXI CONTROLLERS

- 3U embedded PXI controllers for use with GX7300 Series PXI chassis
- Intel Pentium® M Processor, 1.4 and 1.8 GHz versions
- 512 MB RAM standard, 1.GB RAM Max.
- On-board high performance 855GME graphics accelerator
- On-board Gigabit Ethernet
- USB and COM ports
- Extended operating temperature range option



FEATURES

The GX7930 is a single-slot embedded PXI 3U controller for use with Geotest's GX7300 PXI chassis. The GX7930 is available with various CPU and memory configurations and supports a broad range of peripherals. When combined with the embedded storage peripherals of the GX7300 Series chassis, it is the ideal solution for an integrated PXI chassis / controller configuration.

CONFIGURATION

The GX7930 controllers support multiple peripherals and I/O interfaces through either the PXI controller front panel or the rear I/O panel of the GX7300 Series. 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 is provided with a factory default configuration and is fully functional in any PXI or cPCI chassis.

The GX7930 embedded system controller adheres to the PXI and cPCI specifications and is PICMG 2.0 Rev. 3.0 compliant.

APPLICATIONS

- Automatic Test Equipment (ATE)
- Data Acquisition
- Process Control
- Production Test
- Scientific Applications
- Industrial Systems
- Portable Systems

GX7930 SERIES

SPECIFICATIONS

| PROCESSOR AND MEMORY | |
|---------------------------------|---|
| CPU | Intel Pentium® M Processor <ul style="list-style-type: none"> • 1.4 and 1.8 GHz versions • 1MB/2MB L2 cache • 400 MHz PSB • 479-pin micro FCPGA package |
| MEMORY | |
| MAIN MEMORY | • Up to 1 GB soldered DDR SDRAM memory |
| OTHER MEMORY | • 1 MB FWH for BIOS • 8 Kbyte EEROM for CMOS data storage (no battery operation) |
| EXTERNAL INTERFACES | |
| CompactPCI BUS INTERFACE | Compliant with CompactPCI specification PICMG 2.0 R3.0 <ul style="list-style-type: none"> • System master operation • 64-bit /33 MHz master interface • 3.3 V/5.0 V compatible (default is 5.0 V) |
| PERIPHERAL I/O PORTS | |
| COM1 AND COM2 | • Dual UART, 16C550 compatible, RS-232 • Rear I/O only |
| USB INTERFACE | Four USB 2.0 ports supporting UHCI and EHCI: <ul style="list-style-type: none"> • Two USB type connectors on the front panel • Two rear I/O interfaces |
| ETHERNET INTERFACE | • 10/100/1000 MB/s Gigabit Ethernet interface based on the Intel 82540EM (Kernal-32) Ethernet PCI bus controller: • One 10/100 BASE-T Ethernet interface based on the Intel 82801DB controller (front and rear I/O connection) |
| INTERNAL INTERFACES | |
| VGA INTERFACE | Built-in Intel 3D graphics accelerator for enhanced graphics performance: <ul style="list-style-type: none"> • Supports resolutions of up to 2048x1536 by 8-bit at 60 Hz refresh rate • Flexible allocation of video memory up to 64 MB • 15-pin D-sub VGA CRT-display connector with analog video signals |
| COMPACT FLASH | • CompactFlash type II socket (true IDE mode) • Supports type II CompactFlash cards and IBM Microdrive™ |
| MONITOR AND CONTROL | |
| WATCHDOG | Software configurable Watchdog generates IRQ, NMI, or hardware reset. |
| SYSTEM MONITOR | LM87 hardware monitor supervision of: <ul style="list-style-type: none"> • System power voltages: +12 V, -12 V, +5 V, +3.3 V, and VCORE, thermal control, fan sense (external input) |

| ENVIRONMENTAL | | | |
|--------------------------------|---|-------|------------------------------------|
| MECHANICAL | 3U, 4HP, CompactPCI/PXI compliant form factor | | |
| OPERATING TEMPERATURE | 0° C to 60° C -40° C to 85° C (optional –extended operating range) | | |
| STORAGE TEMPERATURE | -55° C to 85° C | | |
| HUMIDITY | 93% RH at 40° C, non-condensing | | |
| PHYSICAL | | | |
| MECHANICAL | 3U PXI | | |
| DIMENSIONS | 100mm x 160 mm | | |
| WEIGHT | 300 g | | |
| GX7930 SERIES | | | |
| INTERFACE | FRONT | REAR* | COMMENTS |
| Serial (RS-232) | | 2 | |
| USB | 2 | 2 | — |
| Ethernet (10/100 Base T) | 1 | 1 | |
| Gigabit Ethernet (1000 Base T) | 1 | — | — |
| VGA | 1 | — | — |
| IDE | — | — | 2 (Used internally by the chassis) |

*Rear panel connections located on the GX7300 chassis
Note: Specifications are subject to change without notice.

ORDERING INFORMATION

| PXI EMBEDDED CONTROLLERS* | |
|---------------------------|--|
| GX7930-14512 | PXI controller for GX7300 Series 1.4 GHz, Pentium M, 512 MB RAM |
| GX7930-181024 | PXI controller for GX7300 Series 1.8 GHz, Pentium M, 1 GB RAM |
| GX7930-14512E | PXI controller for GX7300 Series 1.4 GHz, Pentium M, 512 MB RAM extended temperature range |

*Call Geotest for additional configurations for applications requiring different speed