

GT7700



INSTRUMENTATION CHASSIS

- The ultimate platform for PC based instrumentation
- Accommodates 12 PCI/ISA based instruments
- Expandable to accommodate 38 PC cards
- Accommodates PC cards from any vendor
- Front-loading mechanism similar to VXI
- DISCONTINUED - SEE DETAILS BELOW

Wrong image name:
\\MTSWeb\Images\ProductImages\lg\GT7700.jpg

*****PRODUCT AVAILABILITY*****

This product has been discontinued.

The initial release of this product was approximately 1990.

Please contact the factory for availability and alternate product offerings.

Please review the GX7xxx Series for the latest product alternatives.

DESCRIPTION

The GT7700B is a PCI/cPCI/ISA instrumentation chassis, designed specifically for automatic test systems (ATE), data acquisition, process control applications or any other industrial application requiring the use of PC-based instrumentation. It offers the unique capability of combining the 3U cPCI/PXI form factor with standard PC cards such as PCI and ISA.

CONFIGURATION

The GT7700B instrumentation chassis is a stand-alone unit using an embedded Pentium CPU controller that can be expanded using the GTXI-700B expansion chassis (ISA only). The CPU unit includes a Pentium single-board-computer, floppy, hard disk and CD-ROM or CD-RW drives, SVGA interface, two RS-232 ports, parallel port and a USB port. The GT7700B also provides three open slots for special I/O interfaces such as Ethernet, GPIB, MXI-VXI/PXI, or any other PCI/ISA card (one PCI, one ISA, and one shared PCI/ISA). The GT7700B can be expanded with two GTXI-700B chassis to accommodate a total of 38 3U cPCI, PCI, and ISA instruments.

DUAL POWER SUPPLY SYSTEM

The GT7700B employs two power supplies. One supply provides power to the CPU module and PCI slots while the other provides power to the ISA instrumentation section. Each section has its own power switch, allowing the ISA bus instrumentation to be powered-down while the computer is running. Instruments may then be removed from the chassis without removing any additional mechanical parts (i.e. top cover) or rebooting to reload

software, resulting in a lower MTTR (Mean Time To Repair).

FRONT LOADING

The unique design of the GT7700B allows the instrumentation chassis to accept PC plug-in card from any vendor. The carrier card converts the top loading method of ordinary PCs into a front-loading one similar to PXI/VXI systems. Carrier cards are available for ISA (GT7022) and PCI (GT7720).

ISOLATION

The GT7700B platform provides isolation between the CPU and the instruments as well as between the individual instruments. The computer busses (address, data and control) are buffered using a proprietary buffer card. The GT7022 and the GT7720 carrier cards contain complementary isolation circuitry to protect the PC plug-in cards. This isolation not only safeguards the CPU from any hazardous conditions, but also prevents a single instrument from "hanging-up" the bus and disabling the entire system.

REMAPPABLE I/O ADDRESSING

One of many special features offered by the GT7700B is extended I/O addressing. ISA-based instruments occupy several I/O addresses, typically from 2 to 64. Using a unique address remapping technique, the GT7700B provides users with ten times more address space than that offered by conventional personal computers. The remappable mechanism can be disabled for Plug&Play devices.

INTERFACING

The front panel of the GT7700B is hinged for easy access to the instrument connectors. The plug-in instruments are recessed behind the front panel, which allows room for wiring and connections to the interface panel. The bottom section of the GT7700B is a cable tray that allows users to route cables from the rear to the front to make the interface available for external instruments. The bottom section can also mount non-PC standard auxiliary cards, power supplies, and others.



GT7700



EXTERNAL INSTRUMENTATION

The GT7700B's CPU module provides two RS-232 interfaces and one parallel USB interface. The CPU module can also accommodate other interfaces such as Ethernet, GPIB and MXI-VXI. Such interfaces can be within the CPU module or on a carrier card.

COOLING

The GT7700B offers a unique cooling system that uses four fans and a special mechanical design to provide enhanced ventilation for all cards. The GT7700B cooling system prevents power failures and degraded system performance. Two fans are used for cooling the power supplies and four for the instrumentation. The custom mechanical design of the GT7700B also provides space for additional fans to be directed towards specific instruments that require additional cooling

PROGRAMMING AND SOFTWARE

The board is supplied GTXI configuration utility. On-Line help file and PDF User's Guide provides documentation that includes instructions for installing and using the chassis.

APPLICATIONS

- Automatic Test Equipment
- Data Acquisition
- Process Control
- Scientific Applications

SPECIFICATIONS

CPU MODULE	
Intel 600 MHz or 750 MHz CPU	128 MB RAM 20 GB Hard Drive 3.5" Floppy Drive IDE Controller One Parallel Port Two USB Ports Two COM Ports SVGA Video Interface CD-ROM (optional)
GT7700 PLATFORM	
AC Power Requirements	115 V _{AC} / 60 Hz @ 6 A or 230 V _{AC} / 50 Hz @ 3 A
Internal Power Supplies	+5 V @ 50 A (max) +12 V @ 19 A (max) -12 V @ 1 A (max) -5 V @ 1 A (max)
Cooling	4 fans @ 56 CFM each 2 fans @ 40 CFM each
Dimensions	17.5" W x 11.5" H x 23.25" D
Weight	48 lbs

Note: Specifications are subject to change without notice

ORDERING INFORMATION

GT7700B-850	Instrumentation Chassis (4-PCI & 8-ISA), 850MHz CPU, 20GB HD, 128MB RAM, Win 2000
ACCESSORY	
GT7720	PCI PC Card Carrier
GT7022	ISA PC Card Carrier
GTXI-701	Bus Expansion Kit GT7700 to GTXI-700
GTXI-704	Extended Carrier Card for Debugging (ISA only)
GTPC-32M	32MB Memory Upgrade
GTPC-CD	CD-ROM
GTXI-701-PC-C	ISA Bus Expansion Cable for GTXI-700

