

High Performance ISA Bus, IEEE 488.2 Controller

ISA-GPIB

Registered
ISO 9001
Company

- IEEE 488.2 standard interface
- Talker/listener/controller
- Uses the new industry standard CB7210.2 chip
- 16 bit ISA bus
- Data transfer rates over 1Mega bytes/sec
- REP-INSW block transfer
- 1024 word FIFO buffer
- High speed state machine bus manager
- RF shielded IEEE-488 connector
- 7 Interrupt lines, shared interrupt capability
- Transparent interrupt enabling/disabling
- Includes GPIB-Library software support, Windows 95/98/NT and 3.1x

The ISA-GPIB IEEE-488 interface converts any ISA bus PC into an instrumentation control and data acquisition system, for up to 14 instruments using standard IEEE-488 cables.

The ISA-GPIB is designed around the new industry standard CB7210.2 GPIB chip.

Greater than 1Mbyte/s transfer rates

The ISA-GPIB transfers data over the GPIB at rates in excess of 1 million bytes per second. A 1024 word FIFO buffer and the advanced REP-INSW ISR transfer method achieve the highest possible rates.

Controlled by the advanced high speed State Machine Bus Manager, the CB7210.2 and FIFO buffer are able to absorb all the information coming from the highest speed instruments. The high speed state machine provides byte-to-word packing and unpacking and since words carry twice the information that bytes do, packed data requires fewer bus cycles to transfer the same GPIB information.

IEEE-488.2 (GPIB) compatibility

The GPIB provides handshaking and interface communications over an 8 bit data bus employing 5 control and 3 handshake signals.

Equipped with a ISA-GPIB, an PC can control GPIB instruments, gather data from GPIB test equipment or become a data



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DESCRIPTION	PRODUCT CODE
ISA-GPIB board	909 761 51

Don't forget your GPIB cables

acquisition station in a GPIB system.

One switch, no jumpers

The ISA-GPIB is so easy to install. Select a base address, plug in the ISA-GPIB and run the installation software then start communicating. The installation software automatically configures the interrupt level of the ISA-GPIB. Note, the ISA-GPIB does not use DMA in favour of the superior REP-INSW high speed transfer.

Windows 95/98.1 and DOS compatibility

The ISA-GPIB hardware supports popular operating systems and languages. Your programs run without modifications required to the GPIB-Library commands. The language interface is standard for a given language in all operating systems – just take out your old board and plug the new one in.

SPECIFICATION

The ISA-GPIB is compatible with IEEE-488.1 and IEEE-488.2 specifications.

Transfer rate	>1Mbyte/sec
Power	5VDC @ 350mA typical
Dimensions	162 X 89 millimetres
I/O connector	IEEE-488 standard 24 pin
Operating temp. & hum.	0-60 °C @ 10-90%
Storage temp. & hum.	-40 to 100 °C @ 5-90%
Compliance	CE EMC

GPIB CHIP



- Drop in Compatibility with the NEC uPD7210, 40 Pin Dip is 100% Pin & register compatible, TQFP is 100% register compatible
- Additional enhanced registers for advanced features.
- Meets IEEE-488.1 and 488.2
- Will not send messages when there are no listeners
- Bus line monitoring
- Preferred implementation of requesting service
- Programmable clock rate up to 15MHz
- Low power CMOS Design
- Automatic EOS and NL message detection.
- Programmable data transfer rate with T1 Delays of 350ns, 500ns, 1.1µs and 2µs
- Compatible at program level with bus transceivers from National Semiconductor TI and Motorola
- Talker/Listener/Controller
- Replaces the NEC uPD7210
- High Speed State Machine Bus/FIFO Manager available
- Chip designed in VHDL State Machines - source available to OEM's
- Generic C library available to manufacturers, OEMs and system developers.

DESCRIPTION	PRODUCT CODE
CB7210.2GPIB chip	909 762 26