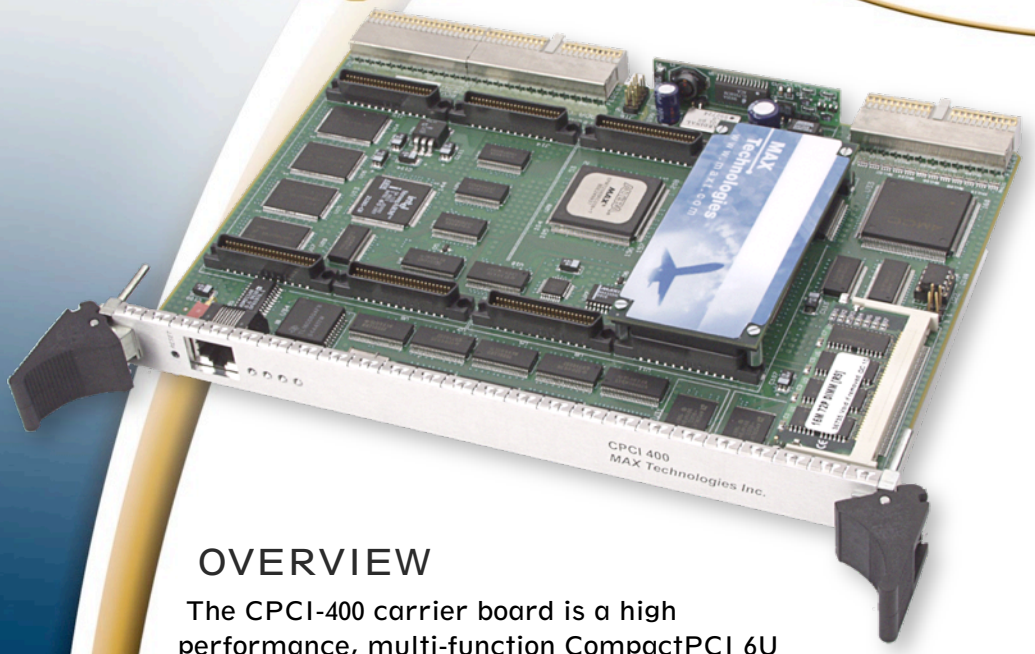
CPCI-400

CompactPCI 6U Multi-Function
Intelligent Carrier Board



OVERVIEW

The CPCI-400 carrier board is a high performance, multi-function CompactPCI 6U solution to your communication requirements, supporting up to four 8/32MHz Industry Pack (IPack) modules. This new generation of intelligent carrier boards is powered by a StrongArm 200MHz RISC processor and comes with 2MB of SRAM and 16 or 32 MB of shared memory, permitting it to buffer and process high-bandwidth communication between the CPCI host and the IPack interface modules.

The on-board firmware allows scheduling of transmit messages, bridging between protocols, complex label filtering, and triggering of recordings. Received messages are time-tagged with 32-bit microsecond precision, without requiring real-time intervention from the host system. Furthermore, multiple carrier boards can be time-synchronized resulting in unmatched precision in critical real-time applications.

MULTIPROTOCOL SUPPORT

The CPCI-400 is complemented by MAX Technologies' IPack modules available for ARINC 429/561/568/629/708/717, ASYNC RS-232/422/485, CSDB, ASCB, HDLC/SDLC, MIL-STD-1553, Pulse/Frequency generator, Analog and Discrete I/O and more. By using MAX Technologies IPack modules, all the data transferred is time-synchronized between all messages, analog and discrete signals. The CPCI-400 also can be used with hundreds of third-party IPack modules.

FEATURES

- Multiprotocol support: ARINC 429/561/568/629/708/717 CSDB, ASCB, MIL-STD-1553, ASYNC RS-232/422/485, HDLC/SDLC and more
- Multi-I/O support: Analog I/O, Discrete I/O, Pulse and Frequency generator and more
- Runs multiple protocols and I/O simultaneously
- Powered by a 200MHz RISC CPU
- Holds up to four IPack modules
- 16 or 32 MB of shared memory
- 32-bit one-microsecond precision time-tags
- Provides accurate time synchronization between protocols and I/O

SOFTWARE

- MX-Foundation multi-protocol software API available for Windows and Linux and IRIX
- Portable Low-Level ANSI-C library
- MAXIM Windows GUI

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Specifications

Bus type
- PCI Local Bus 2.1 Standard
- CPCI PICMG 2.0 R3.0

Number of IPACK modules supported
- 4 single or 2 double

Synchronization
- SYNC IN/OUT: Synchronization between multiple boards

IPACK Module bus clock
- 8/32 MHz

Physical dimensions
- CPCI 6U card
- 160 mm x 233.35 mm

On-board memory
- Flash memory: 4 MB
- SRAM: 2 MB
- DRAM: 16 or 32 MB

External connector type and location
- 200 I/O lines on rear connector

Environmental
- Standard Operating Temperature: 0°C to 70°C
- Storage Temperature: -55°C to 100°C
- Relative Humidity: 5 to 95% (non condensing)

Maximum power consumption
- 5V @ 1020 mA
- 12V @ < 1 mA
- -12V @ < 1 mA

  Note: Power consumption provided is for the carrier board only, it does not include installed IPACK module power consumption.

Reliability MTBF (MIL-HDBK-217 FN2, 30 °C)
- 601 324 hours

Additional features
- 1 RS-232 console port
- Card reset

IndustryPACK (IPACK) Modules

The CPCI-400 is complemented by a wide range of IPACK modules available from MAX Technologies supporting Analog, Discrete, Serial ASYNC RS-232/422/485, HDLC/SDLC, MIL-STD-1553, ARINC-429, ARINC-561/568, ARINC-629, ARINC-708, ARINC-717, CSDB, ASCB, Pulse and Frequency generator and more.

Ordering Information

Part Number	Description
MAX-SBC-400102-M	CPCI-400 CompactPCI 6U, 5V, INTELLIGENT CARRIER, 4 MODULE SITES, REAR I/O
MAX-AC-40100	1.5 m (60") interface cable for PCI/CPCI/VME/VXI-400 card with 4 DB-25 female connectors

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