



Universal CPLD Interface for PC/104 MPC920



Features

- ✓ Interfaces to all PC/104 signals
- ✓ Buffered data lines
- ✓ Altera EPM7256S CPLD
- ✓ 5V only operation
- ✓ PC/104 format
- ✓ Breadboard area
- ✓ 32-pin JEDEC socket

The MPC920 CPLD board provides an interface that can be configured for almost any purpose. Timers, digital I/O, serial-parallel interfaces, state-machines, and many other custom devices can be designed into the MPC920 by simply programming that circuit into the CPLD through the JTAG connector.

The Altera CPLD connects to all of the signals on the PC/104 bus, four LEDs, four plug-on jump-

ers, a 32-pin JEDEC socket, a 40-pin connector, and a 34-pin connector. This allows for flexibility in I/O configuration. In addition, there is a small breadboard area for custom circuitry.

Altera's MAX+PLUS II software (available from Altera) allows CPLDs to be designed by using schematic capture of high-level description languages.

Software Support

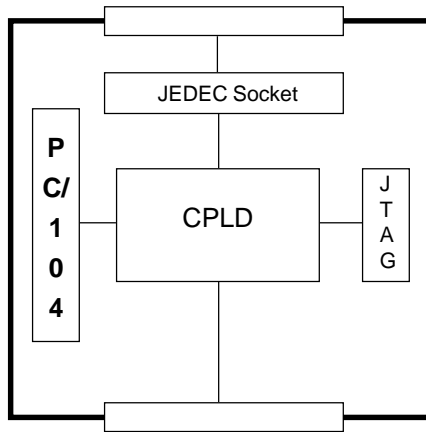
*Altera MAX+PLUS II
Example software included
Third party synthesis tools*

Compatible Hardware

*Altera ByteBlasterMV
programming cable
Custom interfacing*

Mounting/Packaging

*PC/104 standard
Chassis mounting*



Specifications:

Mechanical:

- PC/104 standard
- 3.55" (plus I/O region) x 3.775" x .6"

Power Requirements:

- +5V ± 5% at 570mA max

Environmental:

- 0° - +70°C operating
- 25° - +85°C storage
- 5%-95% relative humidity, non-condensing

CPLD:

- Altera EPM7256S
- 256 macrocells
- 5,000 usable gates
- 15ns propagation delay

PC/104 Interface:

- 8-bit PC/104 module
- 16-bit PC/104 module if MPCOPT16ST installed
- All PC/104 signals connect to CPLD
- 16 data lines are buffered

External Connections:

- 40-pin general-purpose header
- 34-pin general-purpose header (shares signals with JEDEC socket)
- 32-pin JEDEC socket (shares signals with 34-pin header)
- 10-pin JTAG header (interfaces directly with Altera ByteBlasterMV CPLD programming cable)

Ordering Information:

| | |
|-----------|-----------------------|
| MPC920 | Universal CPLD board |
| MPC920-ET | MPC920, extended temp |

Related Products:

| | |
|------------|--|
| CA5050 | Cable, 34-pin/34-pin headers |
| CA4025 | Cable, 40-pin/40-pin headers |
| RAM128 | 128k RAM device |
| FLASH128-5 | 128k 5V flash |
| MPCOPT16ST | Optional 16-bit PC/104 connector added |