PCMCIA Prototyping Card

February 8, 1998 | Product Specification

Mobile Media Research, Inc.

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Features

- Cuts PC-Card development time by half
- All PCMCIA interface components predesigned onto board
  - Xilinx XC3042 or XC3042A in 100-pin TQFP
  - 32Kx8 CIS EEPROM
  - PCMCIA and I/0 connectors
- Includes 12 sq. in of bread board area for I/O devices such as Ethernet, Fax/Modem, etc.
- Separate analog Ground and Vcc for analog devices
- Support for logic analyzer and scope probes to ease debugging of board
- Optional PCMCIA macros for Xilinx for further reduction in PC Card development cycle
- Complete documentation and design support available from Mobile Media Research

General Description

The PC-Card Prototyping Board is intended for PC Card developers and can be used to verify PC-Card logic without spending a considerable amount of time on proper package availability, PCB layout or assembly.

Functional Description

The PC-Card Prototyping Board contains a pre-connected Xilinx XC3042 or XC3042A FPGA in a 100 TQFP package. The PCMCIA signals are connected to the FPGA.

The FPGA provides the interface from the I/O devices to the PCMCIA bus. It also controls the CIS ROM. The Card Configuration registers are implemented on the XC3042. This requires that address decoding, reset and interrupts all go through the FPGA. The unconnected pins on the FPGA are brought out to test points from where they can easily be wired to other devices.

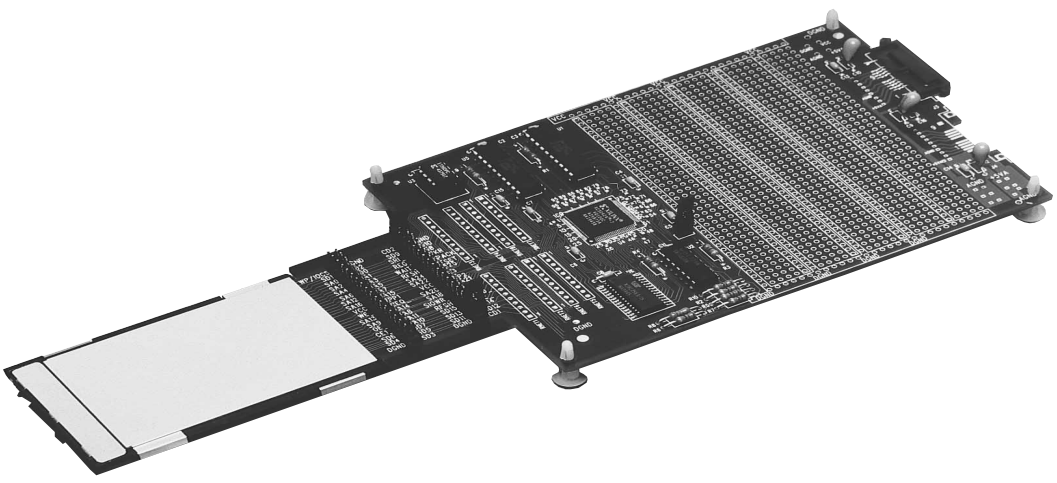

Figure 1: PCMCIA Prototyping Board

The FPGA can be configured either from the XC1736 PROM or from a host via a download cable. The jumper J1 allows the user to select the programming option.

A 12 square-inch breadboard area is provided for I/O devices. Up to four memory or I/O devices can be put onto the bread-board area. Power and ground strips are provided throughout to support additional devices. Separate analog Ground and Vcc are provided for I/O devices requiring analog signals.

Also included on the board is a logic analyzer strip to assist in tracing hardware or software problems. All PCMCIA signals are routed to the logic analyzer strip. Other signals (from the FPGA, CIS or I/O) can easily be accessed either through test points or in the breadboard area.

Documentation

The following documentation is provided with the PC-Card Prototyping Card:

- Board schematic
- Board specifications
- Application brief on developing PC-Cards
- Sample modem card CIS
- A list of soft macros for the Xilinx device available from Mobile Media Research.

Available Support Products

Mobile Media Research supplies a complete line of PCMCIA design products. Contact DO for additional information.

- PCMCIA Fax/Modem Macro
- PCMCIA Library V1.2
- CIS Generator 1.2 software

Ordering Information

This product is available from the AllianceCORE™ partner listed on the first page. Please contact the partner for pricing and more information.

Related Information

For information on Xilinx programmable logic or development system software, contact your local Xilinx sales office, or:

Xilinx, Inc.
2100 Logic Drive
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For general Xilinx literature, contact:

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For AllianceCORE™ specific information, contact:

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