



APS-X84 FPGA BOARD

The APS-X84 board is an IBM PC ISA bus FPGA test and development card. The X84 works with the XILINX 4000/5000 series of FPGA chips in the 84 pin PLCC package. The board is shipped with a 5202 chip and all example files are set up for the 5202, but can easily be used to work with any of the XILINX FPGAs described above. The board comes with download software which work directly with XACT bit files. An on board 8255 provides 24 bits of off-FPGA PC IO, which allows the XILINX chip to be easily programmed and controlled from the PC. An on board PAL also handles the PC address decode of the card. This leaves the FPGA open to handle the real fuctions which the user wishes to implement. The board also conrtains a prom socket which allows the FPGA to load from prom. Four 20 pin connectors can be used for IO and routing to exeternal connectors. An oscillator socket is on board which allows the user to interchange the oscillator which the particular design requires. The primary clock

buffer input of the XILINX chip is the line which the ossillator runs to. Further a simple 555 chip timer circuit is on board which can be used for demonstration and as a slow clock. A DONE status LED is on board along with a spare LED which can be strapped to one of the XILINX output pins as a multipurpose status LED. All the XILINX IO pins are available via the four 20 pin connectors. Power, ground, and some 8255 latched pins are also available on the connectors. Mounting holes are available on the board to allow for daughter board mounting or stand-off legs. The board has provisions to be used stand alone. A Disk Drive type power connector is on the board to allow the use of inexpensive PC power supplies to power the card in stand alone mode. Further both the 8255 chip and the DECODE PAL are socketed and can be removed in standalone mode.

APS-X84 FEATURES

- Download XACT bit files from PC
- Accepts XILINX 4000/5000 FPGAs
- FPGA is socketed
- Download C templates included
- On board Oscillator socket
- On board status LEDs
- Easy to use and program
- All FPGA pins available via IO connectors
- Comes with 5202 FPGA installed
- Switch selectable PC address
- PROM socket
- On board timer
- VHDL examples included
- Detailed manual included

APS-X84 APPLICATIONS

- Low cost FPGA development platform
- Low cost ATE system
- Utility IO board
- Algorithm test board
- Data Generator bert tester
- Low cost field programmable IO board
- Reconfigurable logic matrix
- FPGA Demo board
- Low cost digital filter
- FPGA training tool