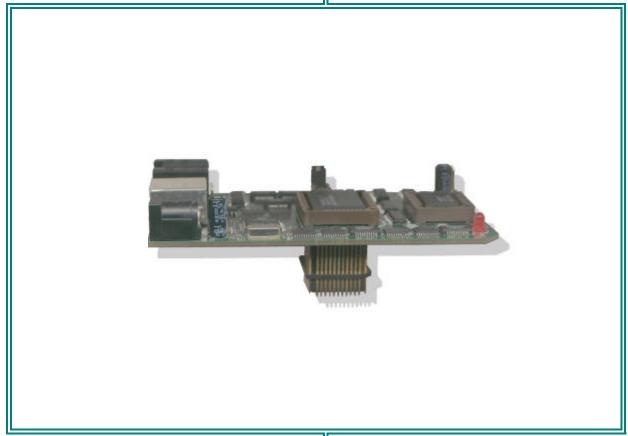
CEIBO FE - 51Mx Development System



Development System for Philips P8xC51MA/B/C and P89C669 Microcontrollers



FEATURES

- Emulates Philips P8xC51MA/B/C, P89C669
 Microcontrollers
- 1MByte Code Memory
- Based on Enhanced Hooks Technology
- Frequency up to 24MHz 3V / 5V Operation
- Huge Real Time Trace Memory
- Windows Debugger for C/C++ and Assembler
- Target Board Included
- RS-232 or USB Interface
- 64K C/ASM and 8K C++ Included

Ceibo FE-51MX is a development tool that supports Philips P8xC51MA/B/C and P89C669 microcontrollers at any frequency allowed by the devices. It is serially or USB linked to a PC or compatible systems and can emulate the microcontrollers using any clock. Emulation is carried out by loading the system with the user software. The system is based on Enhanced hooks Technology which uses standard devices, carrying out real-time and transparent emulation. The emulator is not frequency or voltage restricted, so it can be used to emulate the microcontroller in the complete range of parameters defined by the device. Two working modes are available: real-time and simulator. In the real-time mode the user software is executed transparently and without interfering with the microcontroller speed. Breakpoints can be added to stop program execution at a specific address. The simulation is intended only for software debugging of the basic functions without any hardware. FE-51MX may be disconnected while using the simulation mode. The software includes 64K C Compiler and Assembler, Source Level Debugger, Online Assembler/Disassembler and 8K C++ Compiler. The system is supplied with Windows debugger software, RS-232 cable power supply, mechanical adapters and other accessories.

SPECIFICATIONS

SYSTEM MEMORY

FE-51MX provides 1Mbyte memory with mapping capabilities.

BREAKPOINTS

Breakpoints allow real-time program execution until an opcode is executed at a specified address. 4M hardware breakpoints may be defined.

WINDOWS DEBUGGER

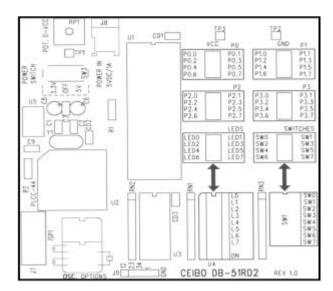
The FE-51MX software includes a source level debugger for Assembler and high-level languages C/C++ and others with the capability of executing lines of the program while displaying the state of any variable. The debugger uses symbols contained in the absolute file generated by the most commonly used Assemblers and High Level Language Compilers. The CEIBO Windows Debugger runs only under Windows 98 or later. Includes 64K C/ASM and 8K C++.

SUPPORTED MICROCONTROLLERS

The supported microcontrollers are Philips P8xC51MA/B/C and P89C669 microcontrollers and other derivatives that will be announced in the future. The standard supported package for emulation is PLCC.

REAL TIME TRACE

The Trace concept has changed and improved. Now the trace depth is variable to optimize it and in many cases is like



endless. The emulator allows real time trace to record up to 8K frames with the recreated program counter *changes* due to non-sequential instructions. The software completes the executed instructions between non-sequential instructions, so the trace depth is variable. Alternately, the software can set the trace to record every instruction.

FREQUENCY

FE-51MX runs from the clock source supplied by the user hardware. The minimum and maximum frequencies are determined by the emulated chip characteristics, while the emulator maximum frequency is 24MHz.

HOST CHARACTERSTICS

PC or compatible systems with 8 MByte of RAM, one RS-232C interface card for the PC or USB, Windows 98 or later.

INPUT POWER

5V, 1.5A power supply supplied.

ITEMS SUPPLIED AS STANDARD

Development system including emulator and development board, PLCC emulation header, Windows software with source level debugger, on-line assembler and disassembler, user manual, RS-232 cable and power supply.

WARRANTY

Two years limited warranty, parts and labor.

PARTS OF THE SYSTEM

The system includes 2 main hardware boards:

- 1. FE-51MX In-circuit Emulator
- 2. DB-51RD2 Development Board



www.ceibo.com 1-800-833 4084 info@ceibo.com