eZ80019000100ZCO

eZ80190 Evaluation Board

Introduction

The eZ80190 Evaluation Board is a general-purpose platform that allows a user to evaluate the capabilities and operation of the eZ80190 Webserver.

The eZ80190 Evaluation Board can operate in either a stand-alone mode or with the user's target board. The board interfaces with the host PC using a DB9, RS-232 cable. A Debug Monitor program is loaded on the supplied EPROM, which allows a user to download hex code and modify register settings.

The board can also be used with ZPAK, allowing the user to debug code using ZDS and the eZ80 C-Compiler.The eZ80 is intended primarily for use in a wide variety of high performance communication intensive applications.

Board Features

Key features of the eZ80190 Evaluation Board include:

- Standalone Environment
- 10/MBPS Ethernet interface (10BaseT PHY)
- Debug Monitor including PC download of executable files in Intel Hex format.
- Code portable from Z80 and Z180 MPUs
- Support for Address & Data Long (ADL) mode of the Minnow Architecture.
- Reset and NMI push buttons
- 28-pin ROM socket that supports up to 32KB, 64KB, and 128KB EPROMs
- 1MB Flash EPROM
- 1MB SRAM
- Up to 48 MHz operation

- Two DB-9 RS-232 serial port (One port with full complement of modem control signals)
- Connector for Zilog Debug Interface emulation
- One crystal oscillator mounted on socket-pins
- All the address, data, control signal, communication ports, and GPIO accessible at expansion headers
- Real Time Clock (RTC) circuit
- Debug monitor including PC download, breakpoints and disassembly
- Compatible with ZDS and the eZ80 C-compiler

Supported ZiLOG Devices

The eZ80190 Evaluation Board supports the eZ80190 Webserver micro-controller

Hardware Specifications

Operating Conditions

Operating Humidity	10%-90% RH (Non condensing)
Operating Temperature	10°C to 40°C
Serial Baud Rate:	57,600 bps
Clocks	The control processor operates at 48 Mhz

Power Requirements

This board requires an external 9VDC power supply.

Operating Voltage (Input)	+9 VDC to +12 VDC Max (+5.0 VDC typical)
:Operating Current	250mA (minimum 500 mA (maximum)

Serial Interface

ZiLOG Developer Studio communicates with the eZ80190 Evaluation Board using ZPAK and a DB25, RS-232 and DCE cable (TxD, RxD only).

GUI-Supported Compiler, Assembler Formats

The Emulator supports object (binary, COFF or Intel hex) code files produced by ZiLOG Developer Studio (ZDS and ZiLOG Macro Cross Assembler (ZMASM).

Kit Contents

The emulator kit contains one each of the following items:

- eZ80190 Evaluation Board
- Debug Monitor loaded on the included EPROM
- Evaluation Software Diskette
- Evaluation Kit User's Manual
- Zilog Developer's Studio
- Registration card

Required Items Not supplied with the Kit

- 9V power supply with a current rating of 250 mA minimum
- RS-232C cable (to connect to the host PC)
- Host Computer
- Terminal emulator program (for example: Windows ® Terminal, Hyper Terminal TM, or Pro-Comm TM) running on the PC