ZLGICSP0100ZPR

ZiLOG In-Circuit Serial Programmer (ZPRO)

PB003404-0503 **Product Brief**

Introduction

The ZiLOG In-Circuit Serial Programmer (ZPRO) provides the user with a low-cost, simple solution for the OTP programming of ICSP processors. ZPRO provides the physical link between ZiLOG Developer Studio (ZDS) and the user's target system or a ZPRO programming module. Use ZPRO to download code directly to the target system.

From ZDS, the target application code is downloaded to ZPRO via the serial port of the host PC. The ZPRO stores the code into SRAM and then downloads the code, along with the appropriate programming commands, to the target application. ZPRO features 64KB total RAM space for user code.

Features

Key features of ZPRO include:

- ICSP program control
- Future expandability with Altera
- Power supply control
- Serial interface
- USB interface (future support)
- 128KB Flash
- 512KB SRAM
- 5x2 header for the ICSP interface
- 4 variable power supplies:
  - 2 0–15VDC @10mA
  - 1 0–7VDC @10mA
  - 1 0–7VDC @50mA
- DB9 socket RS232 connector

Kit Contents

The ZPRO kit contains one each of the following items:

- ZPRO Base Programming Module (PCB and enclosure)
- 10-pin flat ribbon cable/connector
- ZiLOG Developer's Studio CD-ROM
- ZPRO User's Manual

Note: The ZDS CD-ROM contains the ZiLOG Developer's Studio manual. This manual can also be downloaded from the ZiLOG web site.

Hardware Specifications

Power Requirements

ZPRO requires an external 1.2A, 9VDC power supply.

Interface

ZiLOG Developer Studio communicates with ZPRO using a DB9 RS-232 cable.

Connection to the target board is performed using a 10-pin female-to-female ribbon cable assembly.

Table 1 lists the operating conditions specific to the ZLGICSP0100ZPR device.

Table 1. Operating Conditions

Operating Humidity	10–90% relative humidity (noncondensing)
Operating Temperature	20ºC ±10ºC
Serial Baud Rate	57,600 bps

GUI-Supported Compiler, Assembler Formats

The ZPRO programmer supports binary or Intel hex code files produced by the ZiLOG Developer's Studio (ZDS) and ZiLOG Macro Cross Assembler (ZMASM) applications.

Supported ZiLOG Devices

ZPRO supports the MUZE family of processors.

Additional Items Not Supplied

The following items are required but are not currently supplied in the ZPRO kit:

- 9VDC, 1.2A power supply—part number ZPS09V12000ZAC
- The user's target design that ZPRO supports, or
- One of the OTP devices in Table 2 if not programming directly to a target board

Table 2. Supported MUZE One-Time Programmable ICSP Devices

Device	Package	Ordering Number
Z86E122, E123, E124, E125, E126	20-pin SOIC	ZICSP000D00ZDS
Z86E122, E123, E124, E125, E126	20-pin PDIP	ZICSP000C00ZDP
Z86E132, E133, E134, E135, E136	28-pin PDIP	ZICSP000100ZDP
Z86E132, E133, E134, E135, E136	28-pin SOIC	ZICSP000300ZDS
Z86E142, E143, E144, E145, E146	40-pin PDIP	ZICSP000400ZDP
Z86E143, E143, E144, E145, E146	44-pin QFP	ZICSP000600ZDF

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