



Z9025900ZEM

ICEBOX™ FAMILY
IN-CIRCUIT EMULATOR

FEATURES

- Supported Devices:

Packages	Emulation	Programming
42-Pin SDIP	Z90251	Z90251
	Z90255	
	Z90261	
	Z90265	

- In-Circuit Program Debug Emulation
- Real-Time Emulation
- Source-Level Debugging with ZiLOG Macro Cross Assembler (ZMASM) and ZiLOG Developer Studio (ZDS)
- Windows-Based User Interface
- On-Line Help
- One-Time Programmable (OTP) Support
- Selectable Baud Rates—9600 to 57.6 K Baud
- HP Logic Analysis System Interface Connector

GENERAL DESCRIPTION

ZiLOG's ICEBOX™ in-circuit emulators are interactive, Windows-oriented development tools providing a real-time environment for developing and debugging software. The ICEBOX™ provides a hardware platform that is a significant improvement compared to software simulators, which are slower in operation and less practical than emulators for code development.

The Z90259 Emulator, which supports the Z9025X/26X family of Digital Television Controllers (DTC), provides

essential timing and I/O circuitry to simplify user emulation of the prototype hardware and software product.

The Z90259 Emulator can be connected to a serial port (COM1, COM2, COM3, or COM4) of the host computer. Interaction between the host computer and the emulator is initiated using the provided Graphical User Interface (GUI) software.

SPECIFICATIONS

Operating Conditions

Operating Temperature:	20°C ± 10°C
Supply Voltage:	+5 VDC ± 5%
Operating Humidity:	10%–90% RH (non-condensing)
Emulation Speed:	6 MHz
Maximum Emulation Memory:	64kb
Maximum Breakpoints	256
Emulation Processor:	Z9025906GSE
Programming Socket:	42-pin SDIP Zero Insertion Force (ZIF) socket
Power Requirements	+5 VDC @ 1.5 A (maximum)
Dimensions	
Width:	6.25 in. (15.8 cm)
Length:	9.5 in. (24.1 cm)
Height:	2.5 in. (6.35 cm)
Serial Interface	RS-232C @ 9600, 19200 (default), 28000, or 57600 Baud

HOST COMPUTER

Minimum Requirements

- IBM PC (or 100-percent compatible) Pentium-based machine
 - 75 MHz
 - 16 MB RAM
 - VGA Video Adapter
 - CD-ROM Drive
- RS-232C COM Port
- Microsoft Windows 95/98/NT
- Mouse or Pointing Device
- The following enhancements to the Minimum Requirements are recommended:
 - 166 MHz (or faster)
 - SVGA Video Adapter
 - Printer

KIT CONTENTS

Z90259 Emulator	
Cables/Pods	Power Cable with Banana Plugs 25-pin to 9-pin RS-232C Cable (M-F) 42-pin SDIP Emulation Cable/Pod
Host Software	ZiLOG Developer's Studio (ZDS) CD-ROM
Documentation	Emulator User's Manual ZiLOG 1999 Technical Library CDROM, containing Z8 device product specifications, user manuals, and application notes ZDS online help

Note: Cross-Assembler and C Compiler are sold separately from Production Languages Corp. (PLC) and other third-party development tool companies:
Production Languages Corp.
(817) 599-8363
E-mail: info@plcorp.com
Internet: www.plcorp.com

Refer to the ZiLOG website at www.zilog.com for more information on third-party support.

ADDITIONAL ITEMS REQUIRED (NOT SUPPLIED)

- A source of power (+4.75 VDC to 5.25 VDC Max [+5.0 VDC typical]) for the emulator. This can be a laboratory power supply with supply current of 1.5 A. To purchase a power supply from ZiLOG, use the following order number: ZPS05V00ZAC.
- A Target Design. Typically, this design is a wire-wrapped or printed-circuit prototype that includes a socket for the target device. To program the device, simply plug the emulation cable from the emulator into the target device, run the GUI software, and initiate a programming session.

ADDITIONAL OPTIONAL ITEMS (NOT SUPPLIED)

- Software Tools (C Compiler)
- Z9024300ZAC OTP Programming Adapter for Z90241

Pre-Characterization Product

The product represented by this document is newly introduced and ZiLOG has not completed the full characterization of the product. The document states what ZiLOG knows about this product at this time, but additional features or non-conformance

with some aspects of the document may be found, either by ZiLOG or its customers in the course of further application and characterization work. In addition, ZiLOG cautions that delivery may be uncertain at times, due to start-up yield issues.

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