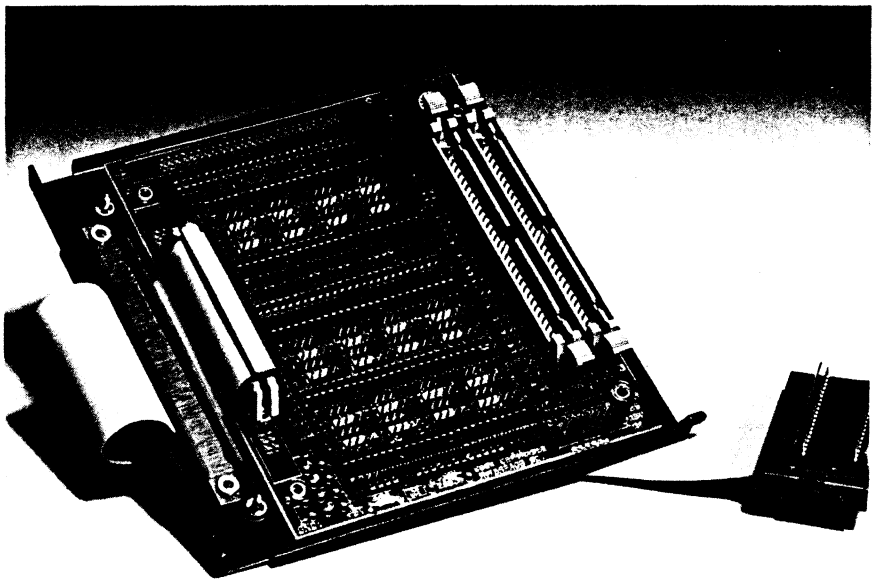
HEWLETT PACKARD

General Purpose Preprocessor Interface Module

MODEL 64651A

TECHNICAL DATA 1 NOV 82



Description

Model 64651A General Purpose Preprocessor Interface Module is a versatile plug-in probe module on which the user may develop specific microprocessor interfaces. The module is installed in a 64650A General Purpose Preprocessor that contains interfacing circuits for a Model 64620S Logic State/Software Analyzer. Chip sockets and wire-wrap hardware supplied with the interface module form a basis to implement preprocessor interfaces for specific microprocessors or buses not supported by standard 64000 System interface modules. The module provides a simple hook-up to the user processor via any of a selection of low mechanical profile, dual-in-line probe/chip carriers. Mnemonic tracing of target processor activity is possible using an inverse assembler written using the Inverse Assembly Language software package, which is ordered separately.

Features

- Variety of convenient, low profile probe/chip carriers
- Chip sockets and wire-wrap hardware for easy design implementation
- User-definable processor instruction set disassembly
- Symbolic mapping with user-defined disassembly
- Programmable stimulus and halt lines for processor control
- User-definable functions for input/output lines

Interface Hardware

Chip sockets and wire-wrap hardware are provided on the interface board. This allows the user to create interface hardware for specific microprocessors or buses. Simple hook-up to the user processor is possible via 40, 48 and 64 pin low mechanical profile dual-in-line probe/chip carriers. (See figure 1.)

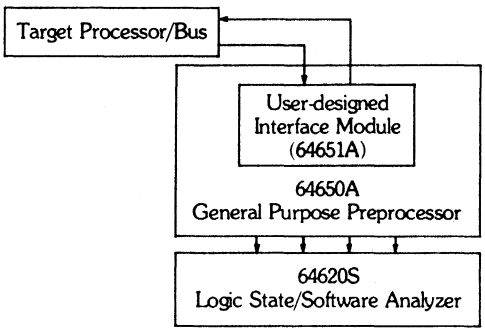
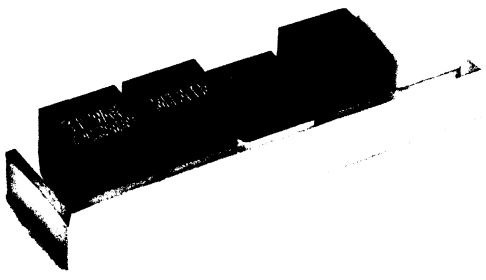


Figure 1. Block diagram of Model 64620S Logic State/Software Analyzer, with the general purpose preprocessor and interface module.



Processor Instruction Set Disassembly

Inverse Assembly Language software package (Model 64856AT on tape cartridge or Model 64856AF on flexible disc) provides a powerful tool for the development of processor-specific inverse assembler modules to display processor instructions in mnemonic format (figure 2). A switch setting defines identification codes which initiate automatic loading of user-defined Inverse Assembly software into Model 64620S Logic State/Software Analyzer whenever the interface module is used. Trace displays may also incorporate user-defined symbols in the address field and instruction operand field for powerful symbolic tracing.

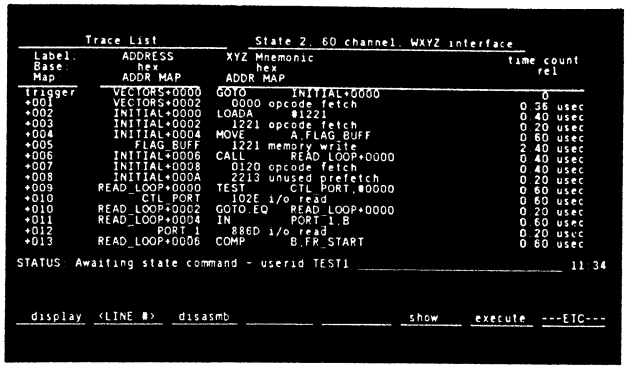


Figure 2. Symbolic display of trace data provided by the Inverse Assembly software package.

Specifications

GENERAL

Maximum clock speed: 10 MHz.
Outputs: STIMULUS and HALT are LS TTL open collector active low outputs; max sinking current, 6 mA.
Input: ACK, acknowledge for STIMULUS
Power Consumption: up to 1.0 A at +5 Vdc max.

ENVIRONMENTAL*

Temperature: operating, 0° to +55° C (+32° to +131° F); nonoperating −40° to +75° C (−40° to −167° F).
Altitude: operating, 4600 m (15 000 ft); nonoperating, 15 300 m (50 000 ft).
Humidity: 90% noncondensing. Avoid sudden, extreme temperature changes which could cause condensation within the instrument
*These specifications apply only to Model 64650A GP Preprocessor and Model 64651A GP Preprocessor Interface Module and do not include any constraints that may be required by the user's hardware.

Ordering Information

Model 64651A General Purpose Preprocessor Interface Module
- **Option 010** Cable with 40-pin connector
- **Option 011** Cable with 48-pin connector
- **Option 012** Cable with 64-pin connector

Model 64856AT Inverse Assembly Language Software on tape cartridge
Model 64856AF Inverse Assembly Language Software on flexible disc
Note: Model 64651A must be installed in Model 64650A General Purpose Preprocessor.
Model 64650A General Purpose Preprocessor

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For more information, call your local HP Sales Office or nearest Regional Office: Eastern (301) 258-2000; Midwestern (312) 255-9800; Southern (404) 955-1500; Western (213) 877-1282; Canadian (416) 678-9430. Ask the operator for Instrument Sales. Or, Write: Hewlett-Packard, 1501 Page Mill Road, Palo Alto, CA 94304. In Europe: Hewlett-Packard S.A., 7, rue du Bois-du-Lan, P.O. Box CH-1217 Meyrin 2, Geneva, Switzerland. In Japan: Yokogawa-Hewlett-Packard Ltd., 29-21, Takaido-Higashi 3-chrome, Suginami-ku, Tokyo, 168.