

Silicon Valley Computer

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Operation Instructions

part number 113-0047

8 bit IDE Interface card

model ADP50L (assy # 750-0354)
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Introduction

The 8 bit IDE Interface card, here after refer as model ADP50L is a low cost peripheral card for the PC and AT systems. It provides the interface necessary to integrate IDE fixed disk drives into any PC or AT systems. Up to two IDE fixed disks can be daisy chained. An IBM compatible BIOS is included to insure fully compatible fixed disk operations. The card can be operated as the secondary fixed disk interface card in the system.

Features

- Low cost 8 bit IDE interface
- Supports IBM XT, AT, PS/2 model 25/30, and 386, 486 compatibles
- Operates as primary or secondary hard disk interface
- On board BIOS insures compatibility
- Supports two IDE fixed disk drives by daisy chaining them on one cable.

Specifications

Interface

Drive . . . 16 bit IDE drive interface
Host . . . 8 bit task file interface

Physical Dimension

Height . . 4.2 inches
Length . . 4.7 inches

Environmental

Operating . 0°C to 45°C

Configuration

The ADP50L can be operated as the primary or the secondary interface card. The ADP50L will operate in either mode as long as there is no BIOS address conflict.

Jumper

There are seven jumpers on the card. There are located near the center of the card. The jumpers are labeled from E1 to E7 and the following table shows the function of each jumpers. Default settings are identify by *.

E1, E2 - selects starting address of the BIOS

address	E1	E2
C800H*	out	out
CA00H	in	out
CC00H	out	in
CE00H	in	in

*hard drive
controller*

E3 - enables the BIOS

in	enable*
out	disable

E4, E5 and E6 - factory test only (default is out)

E7 - ROM type select

2764 or 27C64	out*
27256 or 27C256	in

BIOS ROM

The on board BIOS ROM contains an utility. This utility is intended for use with the Peripheral IDE fixed disk drives only. It displays the serial number of the fixed disk.

To execute the utility, the DOS program 'DEBUG' must be run. When the Debug prompt '-' appears, type the following:

g=[BIOS segment address]:6
where BIOS segment address is the starting address set by E1 and E2 jumpers.

Installation

To install the ADP50L card into any system, follow the instruction:

- 1) Turn power off to system and remove the case cover.
- 2) Connect the 40 pin IDE cable between the drive and the ADP50L card. Make sure the colored edge of the cable is align with pin 1 on both drive and on the card.
- 3) Insert the card into any empty bus slot and secure it to the back of the system case.
- 4) Mount the fixed disk drive in any empty drive bay and insert the power cable.
- 5) Turn power on to the system to check for the POST sign on message. If the sign on message is displayed, turn power on and replace the cover.
- 6) Run FDISK to partition the drive and FORMAT to logical format the drive.

Drive Compatibility

Following is a list of drives tested with the ADP50L card. Any IDE drive not listed may work with the card if the IDE drive supports the 'IDENTIFY DRIVE' command. If the IDE drive does not support the IDENTIFY DRIVE command, it can be added to the BIOS. Please contact Customer Service for details.

Aerial	MD2060
Brand Technology	BT9170
	BT9220
Conner Peripheral	CP342
	CP344
	CP2024
	CP3022
	CP3024
	CP3044
	CP3102
	CP3104
	CP3184
	CP30104
	CP3204
	CP3000
CDC	94204-71
Fujitsu	M2611T
	M2612T
	M2613T
	M2614T
Klock	KL 343
Kyocera	KC-40GA
	KC-80GA
Maxtor	LXT 200A
	LXT 213A
Microscience	7070-20
	7100-00
	7100-20
Mini-Micro	MM-HD2040A
Miniscrite	7040AT
	7080AT
	8051A
Quantum	40AT
	52AT
	80AT
	105AT
	120AT
	170AT

Rigidyne

210AT
94354-90
94354-111
94354-126
94354-155
94354-160
94354-200
94354-230

Rodime

RO3059A
RO3089A
RO3129A
RO3139A
RO3199A
RO3259A

Seagate

ST 125A
ST 138A
ST 157A
ST 1090A
ST 1102A
ST 1126A
ST 1133A
ST 1144A
ST 1157A
ST 1162A
ST 1186A
ST 1201A
ST 1239A

Western Digital

WD93044-A
WDAC280-00
WDAP4200-00

415-967-1100

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JUMPER SETTINGS AND INSTALLATION PROCEDURE

- 0 = JUMPER NOT INSTALLED (OPEN)
- 1 = JUMPER INSTALLED (CLOSED)
- 2 = FACTORY SET CONFIGURATION

JUMPER E1 AND E2 ARE USED FOR SELECTING THE BIOS ROM ADDRESS:

ADDRESS	E1	E2
C800 HEX	0	0
CC00 HEX	0	1
CA00 HEX	1	0
CE00 HEX	1	1

controller ROM uses 1800h bytes

JUMPER E3 IS USED FOR BIOS ROM ENABLE. THIS JUMPER IS HARD WIRED ON THE BACK OF THE CARD. THERE IS NO NEED TO EVER DISABLE THIS JUMPER.

TO RUN THIS CARD AS THE SECONDARY CONTROLLER, YOU MUST CHANGE THE BIOS ROM ADDRESS, BY ENABLING JUMPERS AS STATED ABOVE. DEPENDING ON WHAT YOUR PRIMARY CONTROLLER BIOS ROM ADDRESS IS SET AT. THIS WILL DETERMINE WHAT SECONDARY ADDRESS YOU WILL WANT TO USE, AS LONG THEY DO NOT CONFLICT WITH EACH OTHER.

IF ERRORS OCCUR, TRY A DIFFERENT ADDRESS UNTIL THERE ARE NO ERRORS.

JUMPERS E4, E5, AND E6 ARE FOR FACTORY TEST ONLY. THE DEFAULT IS OUT. THESE SHOULD NOT BE CHANGED.

JUMPER E7 IS TO SELECT THE ROM SIZE. OUT IS THE DEFAULT. OUT IS FOR 2764 OR 27C64 EPROMS. IN IS FOR 27256 OR 27C256 EPROMS.

ANY QUESTIONS, PLEASE CALL TECHNICAL SUPPORT.