

Quick Installation Guide

EPM-1560T

Panel Link Transmitter Module

2nd Ed. - 14 February 2003

FCC STATEMENT

THIS DEVICE COMPLIES WITH PART 15 FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE.

(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE

RECEIVED INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE
OPERATION.

THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS "A" DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES.

THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT. THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND, IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS.

OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.

Notice:

This guide is designed for experienced users to setup the system within the shortest time. For detailed information, please always refer to the electronic user's manual.

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A Message to the Customer

Avalue Customer Services

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Your satisfaction is our primary concern. Here is a guide to Avalue's customer services. To ensure you get the full benefit of our services, please follow the instructions below carefully.

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We want you to get the maximum performance from your products. So if you run into technical difficulties, we are here to help. For the most frequently asked questions, you can easily find answers in your product documentation. These answers are normally a lot more detailed than the ones we can give over the phone. So please consult the user's manual first.

To receive the latest version of the user's manual, please visit our Web site at:

<http://www.avalue.com.tw>

If you still cannot find the answer, gather all the information or questions that apply to your problem, and with the product close at hand, call your dealer. Our dealers are well trained and ready to give you the support you need to get the most from your Avalue's products. In fact, most problems reported are minor and are able to be easily solved over the phone.

In addition, free technical support is available from Avalue's engineers every business day. We are always ready to give advice on application requirements or specific information on the installation and operation of any of our products. Please do not hesitate to call or e-mail us.

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Product Warranty

Avalue warrants to you, the original purchaser, that each of its products will be free from defects in materials and workmanship for two years from the date of purchase.

This warranty does not apply to any products which have been repaired or altered by persons other than repair personnel authorized by Avalue, or which have been subject to misuse, abuse, accident or improper installation. Avalue assumes no liability under the terms of this warranty as a consequence of such events. Because of Avalue's high quality-control standards and rigorous testing, most of our customers never need to use our repair service. If any of Avalue's products is defective, it will be repaired or replaced at no charge during the warranty period. For out-of-warranty repairs, you will be billed according to the cost of replacement materials, service time, and freight. Please consult your dealer for more details. If you think you have a defective product, follow these steps:

1. Collect all the information about the problem encountered. (For example, CPU type and speed, Avalue's products model name, hardware & BIOS revision number, other hardware and software used, etc.) Note anything abnormal and list any on-screen messages you get when the problem occurs.
2. Call your dealer and describe the problem. Please have your manual, product, and any helpful information available.
3. If your product is diagnosed as defective, obtain an RMA (return material authorization) number from your dealer. This allows us to process your good return more quickly.
4. Carefully pack the defective product, a complete Repair and Replacement Order Card and a photocopy proof of purchase date (such as your sales receipt) in a shippable container. A product returned without proof of the purchase date is not eligible for warranty service.
5. Write the RMA number visibly on the outside of the package and ship it prepaid to your dealer.

Packing List

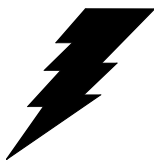
Before you begin installing your single board, please make sure that the following materials have been shipped:

- 1 EPM-1560T Panel Link Transmitter Module
- 1 LCD Cable (40-pin, pitch 1.25mm)

If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

1. Safety Precautions

1.1 Warning!



Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

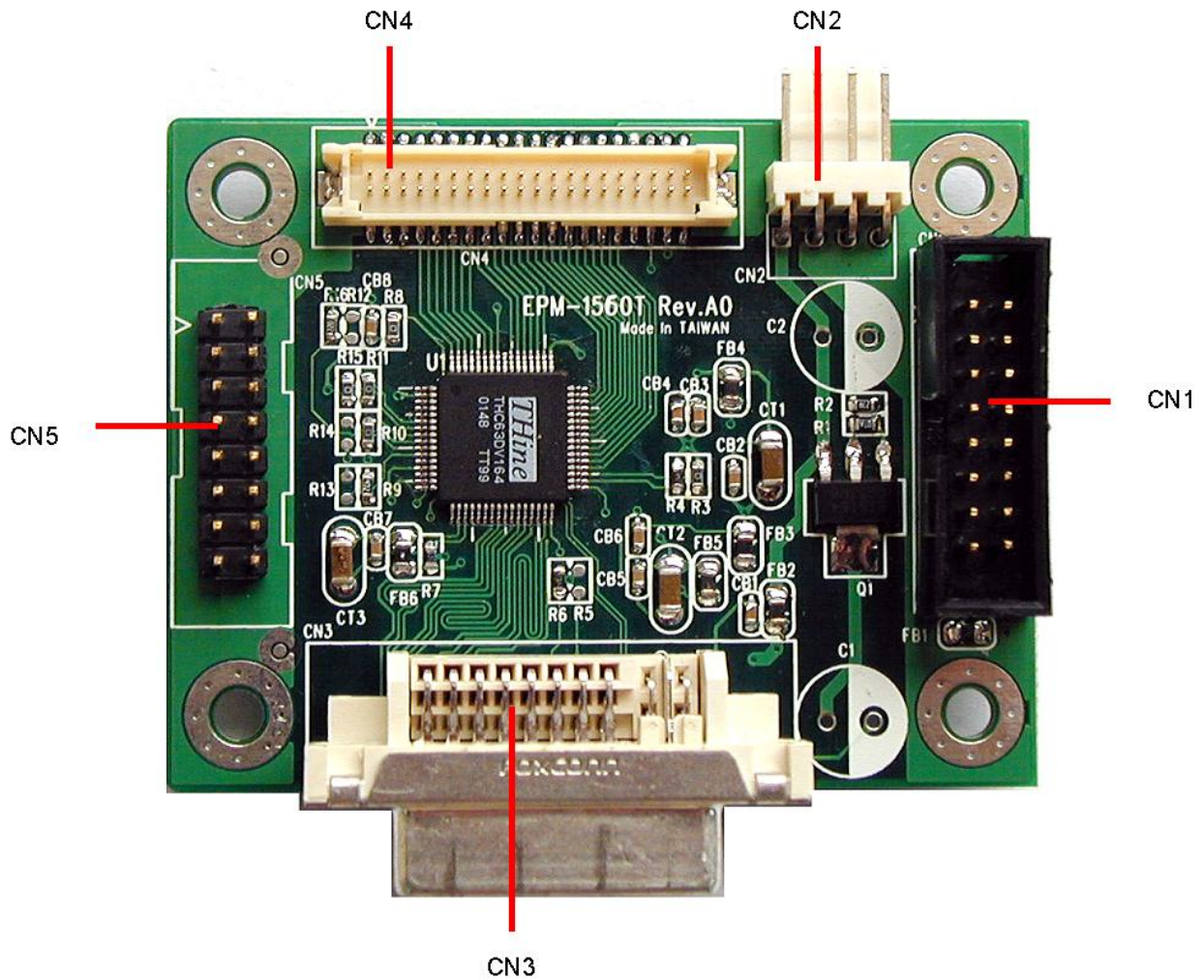
1.2 Caution!



Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

2. Jumper & Connector

2.1 Jumper & Connector Layout



2.2 Jumper and Connector List

Connectors on the board are linked to external devices such as hard disk drives, a keyboard, or floppy drives. In addition, the board has a number of jumpers that allow you to configure your system to suit your application.

The following tables list the function of each of the board's jumpers and connectors.

Connectors		
Label	Function	Note
CN1	CRT input connector	8 x 2 header, pitch 2.54mm
CN2	Power connector	4 x 1 wafer, pitch 2.54mm
CN3	DVI connector	
CN4	Digital graphics data bits input connector	HIROSE DF13-40DP-1.25V
CN5	Panel Link connector	8 x 2 header, pitch 2.54mm

3. Hardware Configuration

3.1 Connector Definitions

3.1.1 CRT Input Connector (CN1)

Signal	PIN		Signal
R	1	9	NC
G	2	10	GND
B	3	11	NC
NC	4	12	NC
GND	5	13	Hsync
GND	6	14	Vsync
GND	7	15	NC
GND	8	16	NC

3.1.2 Power Connector (CN2)

Signal	PIN
VCC	1
GND	2
GND	3
+12V	4

3.1.3 DVI Connector (CN3)

PIN	Signal Assignment	PIN	Signal Assignment	PIN	Signal Assignment
1	T.M.D.S. Data2-	9	T.M.D.S. Data1-	17	T.M.D.S. Data0-
2	T.M.D.S. Data2+	10	T.M.D.S. Data1+	18	T.M.D.S. Data0+
3	T.M.D.S. Data2/4 Shield	11	T.M.D.S. Data1/3 Shield	19	T.M.D.S. Data0/5 Shield
4	T.M.D.S. Data4-	12	T.M.D.S. Data3-	20	T.M.D.S. Data5-
5	T.M.D.S. Data4+	13	T.M.D.S. Data3+	21	T.M.D.S. Data5+
6	DDC Clock	14	+5V Power	22	T.M.D.S. Clock Shield
7	DDC Data	15	Ground (return for +5V, HSync, and VSync)	23	T.M.D.S. Clock+
8	Analog Vertical Sync	16	Hot Plug Detect	24	T.M.D.S. Clock-
C1	Analog Red	C2	Analog Green	C3	Analog Blue
C4	Analog Horizontal Sync	C5	Analog Ground (Analog R, G, & B return)		

3.1.4 Digital Graphics Data Bit Input Connector (CN4)

Signal	PIN		Signal
NC	2	1	NC
GND	4	3	GND
NC	6	5	NC
GND	8	7	NC
P1	10	9	P0
P3	12	11	P2
P5	14	13	P4
P7	16	15	P6
P9	18	17	P8
P11	20	19	P10
P13	22	21	P12
P15	24	23	P14
P17	26	25	P16
P19	28	27	P18
P21	30	29	P20
P23	32	31	P22
GND	34	33	GND
FLM	36	35	SHFCLK
LP	38	37	M
NC	40	39	ENBKL

Note:

Connector P/N: HIROSE DF13-40DP-1.25V

Mating connector P/N: DF 13-40DS-1.25C

3.1.5 Panel Link Connector (CN5)

Signal	PIN		Signal
GND	1	2	PDDCCLK
PDDCDAT	3	4	GND
GND	5	6	PEDGE
Tx2-	7	8	Tx2+
Tx1-	9	10	Tx1+
Tx0-	11	12	Tx0+
Txc+	13	14	Txc-
DDC5V	15	16	VCC3

