

DMP-1032

PCI/ISA Engineer Computer

User's Manual

Jan Yin Chan Electronics Corporation

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OWNER'S RECORD

The serial number of this product is located at the bottom of your DMP-1032 PCI/ISA Engineer Computer (upper right near the rear panel connectors). Refer to the model and serial number when you contact your nearest dealer or DM&P offices for services. The Model No. of this product is also indicated on the product label of your gift box, as: DMP-1032.



● SAFETY INFORMATION

WARNING

- ▶ Do not expose your DMP-1032 (PCI/ISA ENGINEER COMPUTER) to rain or moisture, in order to prevent shock and fire hazard.
- ▶ Do not open the chassis cover to avoid electrical shock. Refer to your nearest dealer for qualified technician for servicing.
- ▶ Do not use the modem or a telephone to report a gas leak in the surrounding vicinity of the leak.
- ▶ Never install your ENGINEER COMPUTER in wet locations.
- ▶ Never touch un-insulated terminals or wire unless your power adaptor and display monitor are disconnected.
- ▶ When using ENGINEER COMPUTER, avoid using or installing the modem to the serial port during a storm or a lightning.
- ▶ Locate your ENGINEER COMPUTER as close as possible to the electrical outlet (socket outline), this is (1)for easy access and (2)in avoiding force caused by entangling of your arms with surrounding cables from the ENGINEER COMPUTER.
- ▶ USB connectors are not supplied with Limited Power Sources.

DO NOT ATTEMPT TO OPEN OR TO DISASSEMBLE THE CHASSIS COVER (ENCASING) OF THIS PRODUCT. PLEASE CONTACT YOUR NEAREST DEALER FOR SERVICING FROM QUALIFIED TECHNICIAN.



REGULATORY

FCC CLASS A NOTE

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 in which case the user will be required to correct the interference at his own expense. Testing was done with shielded cables. Therefore, in order to comply with the FCC regulations, you must use shielded cables with your installation.

WARNING

This product Complies with EN55022 Class A. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the interference - causing equipment standard entitled "Digital Apparatus", ICES-003 of the Department of Communications.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe (A) prescrites dans la norme sur le matériel brouilleur: "Appareils Numériques", NMB-003 édictée par le ministère des Communications.

MANUFACTURER'S DECLARATION OF CONFORMITY

This equipment has been tested and found to comply with the requirements of European Community Council Directives 89/336/EEC and 73/23/EEC relating to electromagnetic compatibility and product safety respectively.

ATTENTION

This product has been designed and certified to comply with certain regulatory requirements pertaining to Information Technology Equipment. This product has not been designed for use as a medical device. Without limitation of the foregoing, this product is not intended and has not been certified for use in a hospital or clinical environment to diagnose, treat, or monitor patients under medical supervision, and is not intended and has not been certified to make physical or electrical contact with patients, nor to transfer energy to or from patients and/or to detect such energy transfer to or from patients.



PURCHASE AGREEMENT

Version 1.1 – 2002/11/19

PURPOSE:

In accordance to the general commercial conduct of Trust and Fair Trade, herewith below is the agreement for the protection for both parties, DM&P and Users in pursuant of trading.

PRODUCT DESCRIPTION :

With this product, herewith also known as “ENGINEER COMPUTER”, which is a simplified & an economical design of an embedded computer for Special Purpose Personal Computing in test and diagnosis. The basic specification of this product comprises of the latest x86 technology that is embedded into a CPU design of a SoC (System-On-Chip) design, and runs at a speed of 166MHz, with onboard 128MB System memory, Display, USB, Serial, PS/2 Keyboard, PS/2 Mouse, LAN, and Audio Interfaces.

DISTRIBUTION CONVENTION:

1. This Product includes a Gift box, an inner case, ENGINEER COMPUTER, a Power adaptor, a CD ROM for Utilities & Drivers + User’s Guide. Upon receiving this product, kindly please refer to the CD ROM for User’ Manual, in order to check for the contents and appearance of this product. Please contact your nearest dealer or DM&P office immediately for any defective or missing parts. The supplier will not be responsible for any reported discrepancy thereafter the expiration period of 7-days from the date of purchase.
2. In consideration to the transportation and the cost of storage, the supplier provides to the distributors a warranty of 13-months (12-months is granted to the enduser). This warranty covers the failure caused by hardware breakdown (excluding hard drives), but does not cover the act of misuse and mishandling.
3. The supplier will not accept unknown post item, therefore if you wish to repair or to return your goods – kindly please contact your nearest dealer to make your declaration; and at the same time, apply for a RMA number – please see the RMA form in the appendix and fill-up for authorization. RMA stands for Return Merchandise Authorization.
4. The freight for Return goods for repair will follow the International customary practice and convention: Both parties are to pay for freight of one shipment each. The shipper is required to prepaid the freight from the place of origin (This means that the Returnee (user) covers the freight for return goods, while the Supplier covers the freight for goods after the repair).
5. Obsolete warranty is referred to as: (1)Expiration of warranty, or (2)Damage due to misuse within warranty. The Supplier will be taken into consideration of the circumstances, to provide repair service with charges expense for obsolete warranty. This expense includes the cost of material and the cost of labor.

NOTE:

If there is other particular issue not listed in the above conditions, both parties agreed to follow the General Law of Commerce with fair and reasonable discussion in handling and resolving the argument.



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UNPACKING YOUR ENGINEER COMPUTER

Congratulation! You have just acquire the ENGINEER COMPUTER (DMP-1032), the world's best PCI/ISA Protector (See Figure 1), please check the following items:

PACKING LIST

Item	Description	Q'ty
①	The DMP-1032 –“ENGINEER COMPUTER ”	x1 unit
②	15-watts External Universal Power Adaptor Vinput: 100~240VAC ~60/50Hz / Vout:: +5VDC @ 3A , UL/TUV/CE certified	x1 pce.
③	Utilities & Drivers + User's Guide CD	x1 pce.

* Note: The cables and accessories are subject to change without immediate notice.

CHECK BEFORE USE

▶ DMP1032 PCI/ISA ENGINEER COMPUTER	▶ AC Power Adaptor	▶ Drivers CD
		

* Note: AC Power Adaptor specification: .

Model No.: JOD-SAU050302-3Z Input: AC100-240V ~50/60Hz, 0.45Amax Output: DC5V 3A. UL / TUV / CE	CAUTION Risk of Electric Shock Dry Location Use Only
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INTRODUCTION

INTRODUCING THE DMP-1032 “ENGINEER COMPUTER”

The DMP-1032 “ENGINEER COMPUTER” is a standalone Vortex86 PC PCI/ISA Interface Development Testing Protector. The “ENGINEER COMPUTER” is equipped with a PC system that protects its “own” system from over-voltage, rush current and shorting of interface signals during the development of your I/O card and specific custom-made hardware during your experiment in laboratory. This testing device allows you to do your PC I/O development atop a PC testing platform environment that provides protection from faulty design and soldering short of signals; after which the system may restarts and operates normally without hanging up. This system also allows you to debug the faulty target I/O card without turning on/off the power of your PC. The “ENGINEER COMPUTER” is a “must tool” PC hardware device for developers and test station in the engineering institution/hardware experiment laboratory and PC-based factory respectively.

OUTSTANDING FEATURES

- Two selectable 16-bit ISA bus slot and 32-bit PCI 2.2 bus edge slots
- 100% protect PC hardware signal pin even short-circuit damage or input over voltage
- Each pin of the ISA and PCI slot expansion has signal protection.
- ISA and PCI slot also has DC output power protection.
- Over current can be supervised by and through the debug port, resolve troubleshooting easily.
- Real signal extension slot, all signals can be measured and tested on the extension slot
- Remove interface cards anytime without the need to power off
- ASIC designed with excellent stability and easy maintenance.
- Plug and play operation.

GENERAL APPLICATION

- Engineering institute: for I/O board design and experiment lab
- R&D : I/O board design and experiment
- Manufacturing: Test station for PC-based board mass production
- Maintenance : For PC interface card



APPLICABLE INTERFACE CARD DIAGNOSIS

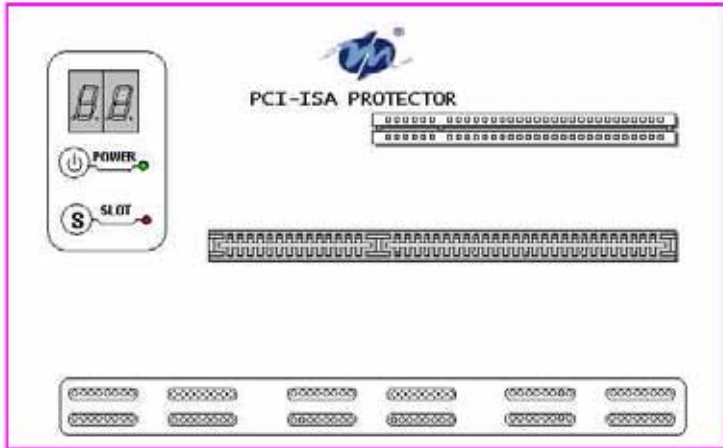
- 1394 card
- USB card
- Modem card
- General I/O card
- Wireless LAN card
- SCSI card
- Game Card
- MPEG card

TECHNICAL SPECIFICATION

<p><u>GENERAL SPECIFICATION</u></p> <ul style="list-style-type: none"> ● VORTEX86-200MHZ ● SDRAM 128MB ● IDE/DOMx1 ● C.F. x1 ● MINI-PCI x1 ● PS/2 KBD/MS x1 ● USB x2 ● VGA x1 ● LAN 100M x1 ● LINE-OUT ● MIC-IN ● DC INPUT 5V/3A ● RS232 x1 ● ISA BUS EDGE SLOT x1 ● PCI BUS EDGE SLOT x1 ● ADDRESS & BUS SOCKET x6. ● 80-PORT Dual 7-Segment Display <p><u>DIMENSION</u> 22.5cm x 14cm x 4cm</p> <p><u>POWER</u> DC INPUT ~ 5V /3A 15W DC OUTPUT</p>	<p><u>FRONT PANEL INTERFACE</u></p> <ul style="list-style-type: none"> ● COMPACT FLASH x1 : 50-pin CF Socket ● USB x1 : 4-pin Type A USB socket <p><u>BACK PANEL INTERFACE</u></p> <ul style="list-style-type: none"> ● PS/2 KEYBOARD x1 : 6-pin MINI-DIN ● PS/2 MOUSE x1 : 6-pin MINI-DIN ● 100MB LAN x1 : RJ45 8-pin receptacle ● DC-IN 5V/3A x1 : 3-pin MINI-DIN ● VGA OUTPUT x1. : 15-pin D-SUB ● RS232 x1 : 9-pin D-SUB ● USB x1 : 4-pin Type A USB socket ● MIC-IN x1 : RCA PHONE JACK ● LINE-IN x1 : RCA PHONE JACK ● RESET x1 : Push button switch ● POWER SWITCH x1 : <p><u>TOP INTERFACE</u></p> <ul style="list-style-type: none"> ● P.O.S.T Test Display x1 : 80-PORT Dual 7-Segment Display ● POWER x1 : Push button switch ● SLOT x1 : Push button switch ● POWER LED x1 : Green ● SLOT ON/OFF LED x1 : Dual color Green=SLOT ON,Red=Power failure,OFF=SLOT is off 															
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; border-right: 1px solid black; padding: 5px;">⊕ 5V</td> <td style="width: 33%; border-right: 1px solid black; padding: 5px;">@ 1.7A (MAX)</td> <td style="width: 33%; padding: 5px;">● PCI Edge Slot x1</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">⊕ 3.3V</td> <td style="border-right: 1px solid black; padding: 5px;">@ 1.7A (MAX)</td> <td style="padding: 5px;">● ISA Edge Slot x1</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">⊕ +12V</td> <td style="border-right: 1px solid black; padding: 5px;">@ 150mA(MAX)</td> <td style="padding: 5px;">● Address & Bus Socket x6</td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">⊕ -12V</td> <td style="border-right: 1px solid black; padding: 5px;">@ 150mA(MAX)</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="border-right: 1px solid black; padding: 5px;">⊕ -5V</td> <td style="border-right: 1px solid black; padding: 5px;">@ 150mA(MAX)</td> <td style="padding: 5px;"></td> </tr> </table>	⊕ 5V	@ 1.7A (MAX)	● PCI Edge Slot x1	⊕ 3.3V	@ 1.7A (MAX)	● ISA Edge Slot x1	⊕ +12V	@ 150mA(MAX)	● Address & Bus Socket x6	⊕ -12V	@ 150mA(MAX)		⊕ -5V	@ 150mA(MAX)		
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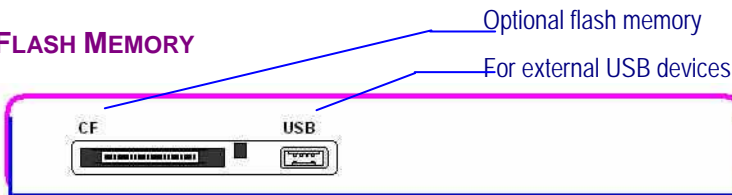


TEST BED BAY



ENGINEER COMPUTER – TOP VIEW

FLASH MEMORY



ENGINEER COMPUTER – FRONT VIEW

REAR I/O CONNECTORS



ENGINEER COMPUTER – REAR VIEW



HOW TO USE

DMP-1032 is an ENGINEER COMPUTER that enable the electronic designer and engineer to do diagnosis on their prototype or engineering sample, hereby, to be known as D.U.T. (Device Under Test). This ENGINEER COMPUTER provide the user with digital indicators to identify each POST error code, LED's for monitoring power supply voltages and the capability of testing and identifying the presence of the bus signals such as the Clock and Reset signals. POST is refer to as Power On Self Test.

ENGINEER COMPUTER fix *DEAD Add-on Card Peripherals* quickly and easily. It provides *Instant Fault Analysis* and spontaneous check on the erroneous signals. It saves a typical technician in wasting precious time trying to diagnose faults on dead I/O cards. It is a valuable gadget for engineer and technician; whether in laboratory doing experiment or in production line troubleshooting defective cards. Just plug the dead peripheral card and switch power on. It instantly shows you why the peripheral won't boot, even if the screen is blank. The power detector catches flaky power input. This comprehensive manual guides in identifying the proper signal pins in troubleshooting failure symptoms. Often, you can fix the problem in minutes.

Works with any PCI or ISA bus system - Old technology Diagnosis or POST cards will not work with modern motherboards. Our ENGINEER COMPUTER offers and uses the latest decoding and PCI device emulation technology, with distinctive BIOS standards, and fully supports the complete PCI and ISA specifications.

Benefits

- Standalone: no need to insert extra add-on interface card into the computer
- No need to present any decode, provide a easy and prompt operation
- Built-in x86 based embedded H/W system, able to preload to test program into ENGINEER COMPUTER
- Built-in CF and Mini-PCI connector
- Built-in 44-pin header for Ultra IDE
- OS support : DOS, MS Windows, MS WinCE.NET and Linux



OPERATING PROCEDURE



Cables Connection


1. Connect the following cables to your ENGINEER COMPUTER
 - 1.1 Connects the connectors of your PS/2 Keyboard & mouse to the corresponding PS/2 sockets of the ENGINEER COMPUTER.
 - 1.2 Connects the VGA cable of your monitor to VGA-input of the ENGINEER COMPUTER. Attach the power cable of your monitor to the AC receptacle on the wall.
 - 1.3 Attach the Mini-Din connector of the Universal power adaptor to the Mini-Din socket on the DC-IN of the ENGINEER COMPUTER. Then attach the other end of your power cord by connecting the AC plug to the AC receptacle on the wall or your working table.
2. Turn-on the power switch of your Monitor.
3. Turn-on the ENGINEER COMPUTER system by depressing the I/O Rocker switch on the rear panel of the ENGINEER COMPUTER
4. Plug-in your D.U.T. to the required I/O bus of the ENGINEER COMPUTER: choose either PCI bus or ISA bus, depending on your design. Note: D.U.T. stands for Device Under Test; which is refer to as your I/O board for testing.
5. Be sure that the D.U.T. is properly aligned and seated on it's gold finger of the required Edge Slot (PCI bus or ISA bus).
6. Press the POWER (switch) on the Testing Bay, and the corresponding green LED will Lit on simultaneously, indicating that the power of the edge slots are working normally.



Testing PCI-bus Peripheral

For PCI-bus slot testing: The ENGINEER COMPUTER will starts to test the D.U.T.; the numbers "00" are shown for D.U.T. that is working normally. This implies that DOS have detected and identified the D.U.T. peripheral. You may also boot from the IDE devices on either DOM or C F (Compact Flash) .

7. or Disk-On-Module respectively). ENGINEER COMPUTER is also bootable from USB Flash Drive or Hard Drive. Please check the condition of POWER's LED status as listed in the table below.

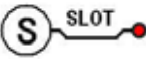
	LED Color	State
	Green	ON
	No color	OFF
	Orange	Storage Access

8. If the D.U.T. fails, an error message will be shown and displayed on the digital indicators of the Testing Bay. Please check the corresponding POST code at this website – <http://www.dmp.com.tw>

Digital indicators



9. The ENGINEER COMPUTER provides the user with digital indicators for identifying every P.O.S.T. error code. At power-on, the system ROM BIOS (Basic Input Output System) software executes its POST (Power-on Self-Test). Just before running each test, POST sends a test number code to an output test port monitored by the POST CARD. If the computer system hangs during POST, the failing test number appears on the two-digit hexadecimal display of the POST CARD. You look up the meaning of the failing code in the supplier's website to determine which part of the circuit of the card is defective for making quick easy repair.
10. If a power failure is detected on D.U.T., the ENGINEER COMPUTER is automatically protected; all signals and power will be locked off for further testing. A red color is indicated on the SLOT's LED simultaneously. For other SLOT's LED status, please check the table below.

	LED Color	State
	Green	ON
	No color	OFF
	Red	Power fails

11. You are now required to check you D.U.T. for over-voltage, over current or circuit shorts..
12. To restart the Edge slots for testing, reset by depressing the membrane button of the SLOT switch.



Testing ISA-bus Peripheral

13. The ISA bus slot is suitable for educational institution, wherein experiment on logic device application are carried out and done with a bread board design & test; the corresponding data bus and address signals can be easily connected with a DIP plug ribbon cable through the signal sockets of the ENGINEER COMPUTER. The ENGINEER COMPUTER offers the electronic fundamentals and digital logic signals. Note: The signal sockets consist of DMA, Address, IRQ, Address bus, Command, Data bus, Operating DC Power (+3.3V, 5V, +/-12V and Ground signals).
14. If you do not wish to continue the test, simply press the I/O Rocker switch at the rear panel of the ENGINEER COMPUTER
15. When the SLOT test is completed , you can detach the D.U.T. without system power shut-down. You may attach or detach the D.U.T. anytime



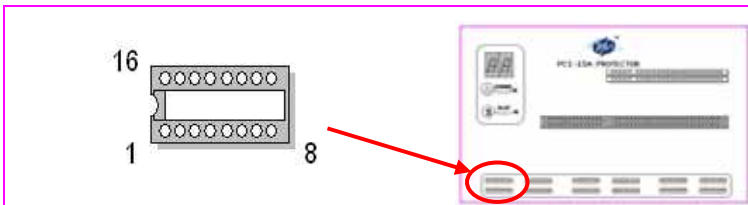
APPENDIX A

CONNECTORS SUMMARY

TESTING BAY CONNECTOR DEFINITION

DATA BUS AND ADDRESS TEST SOCKET
Pin List v1.0 dd 3/31/2004

The pin assignment listed below is for PCI/ISA signal testing purpose, and serves as a signal test socket for probe measurement with an oscilloscope.



SOCKET 6. DMA	SOCKET 4. ADDRESS/	SOCKET 3. ADDRESS	SOCKET 2. COMMAND	SOCKET 1. DATA BUS	SOCKET 5. POWER
1: OSC	1: IRQ5	1: SA7	1: RESET	1: SD7	1: +12V
2: DRQ7	2: IRQ4	2: SA6	2: BALE	2: SD6	2: +12V
3: DRQ6	3: IRQ3	3: SA5	3:	3: SD5	3: NC
4: DRQ5	4: AEN	4: SA4	4:	4: SD4	4: GND
5: DRQ3	5: SA19	5: SA3	5: IOW	5: SD3	5: GND
6: DRQ2	6: SA18	6: SA2	6: IOR	6: SD2	6: NC
7: DRQ1	7: SA17	7: SA1	7:	7: SD1	7: +5V
8: DRQ0	8: SA16	8: SA0	8: SMEMR	8: SD0	8: +5V
9: DACK0	9: IRQ6	9: SA8	9:	9: SD8	9: +3.3V
10: DACK1	10: IRQ7	10: SA9	10:	10: SD9	10: +3.3V
11: DACK2	11: IRQ9	11: SA10	11:	11: SD10	11: NC
12: DACK3	12: IRQ10	12: SA11	12: IOCS16	12: SD11	12: GND
13: DACK5	13: IRQ11	13: SA12	13:	13: SD12	13: GND
14: DACK6	14: IRQ12	14: SA13	14: MEMR	14: SD13	14: NC
15: DACK7	15: IRQ14	15: SA14	15: MEMW	15: SD14	15: -12V
16: TC	16: IRQ15	16: SA15	16: SBHE	16: SD15	16: -12V



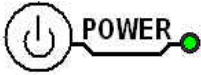
DUAL 7-SEGMENT DISPLAY – 14-pin 7-Segment Display-CA

Pin #	Signal Name	Pin #	Signal Name
1	HSEG-F	8	HSEG-C
2	HSEG-G	9	DOT
3	NC	10	NC
4	VCC	11	NC
5	NC	12	VCC
6	HSEG-E	13	HSEG-B
7	HSEG-D	14	HSEG-A



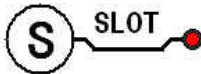
SW2: POWER ON/OFF - 4-pin Double Pole Push button

LED Color	State
Green	ON
No color	OFF
Orange	Storage Access

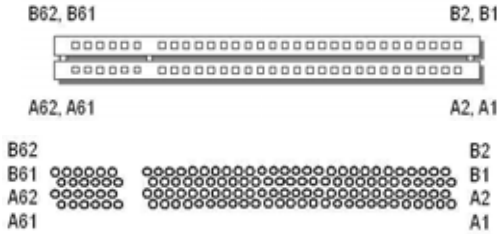


SW1: SLOT ON/OFF - 4-pin Double Pole Push button

LED Color	State
Green	ON
No color	OFF
Red	Power fails



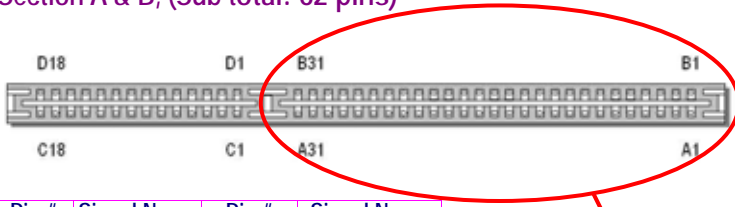
PCI1: PCI Bus – Gold Finger Socket – 2.54 Ø 31x4



Pin #	Signal Name	Pin #	Signal Name	Pin #	Signal Name	Pin #	Signal Name
A1	TRST#	A32	AD[16]	B1	-12V	B32	AD[17]
A2	+12V	A33	+3.3V	B2	TCK(NC)	B33	C/BE#[2]
A3	TMS	A34	FRAME#	B3	GROUND	B34	GROUND
A4	TDI	A35	GROUND	B4	TDO	B35	IRDY#
A5	+5V	A36	TRDY#	B5	+5V	B36	+3.3V
A6	INT#[A]	A37	GROUND	B6	+5V	B37	DEVSEL#
A7	INT#[C]	A38	STOP#	B7	INT#[B]	B38	GROUND
A8	+5V	A39	+3.3V	B8	INT#[D]	B39	LOCK#
A9	RESERVED	A40	RESERVED	B9	PRSENT#[1](NC)	B40	PERR#
A10	+5V(I/O)	A41	RESERVED	B10	RESERVED	B41	+3.3V
A11	RESERVED	A42	GROUND	B11	PRSENT#[2](NC)	B42	SERR#
A12	GROUND	A43	PAR	B12	GROUND	B43	+3.3V
A13	GROUND	A44	AD[15]	B13	GROUND	B44	C/BE#[1]
A14	3.3V_AUX	A45	+3.3V	B14	RESERVED	B45	AD[14]
A15	RST#	A46	AD[13]	B15	GROUND	B46	GROUND
A16	+5V(I/O)	A47	AD[11]	B16	CLK	B47	AD[12]
A17	GNT#	A48	GROUND	B17	GROUND	B48	AD[10]
A18	GROUND	A49	AD[9]	B18	REQ#	B49	GROUND
A19	PME#	A50		B19	+5V	B50	
A20	AD[30]	A51		B20	AD[31]	B51	
A21	+3.3V	A52	C/BE#[0]	B21	AD[29]	B52	AD[8]
A22	AD[28]	A53	+3.3V	B22	GROUND	B53	AD[7]
A23	AD[26]	A54	AD[6]	B23	AD[27]	B54	+3.3V
A24	GROUND	A55	AD[4]	B24	AD[25]	B55	AD[5]
A25	AD[24]	A56	GROUND	B25	+3.3V	B56	AD[3]
A26	IDSEL	A57	AD[2]	B26	C/BE#[3]	B57	GROUND
A27	+3.3V	A58	AD[0]	B27	AD[23]	B58	AD[1]
A28	AD[22]	A59	+5V(I/O)	B28	GROUND	B59	+5V(I/O)
A29	AD[20]	A60	REQ#64	B29	AD[21]	B60	ACK64#
A30	GROUND	A61	+5V	B30	AD[19]	B61	+5V
A31	AD[18]	A62	+5V	B31	+3.3V	B62	+5V



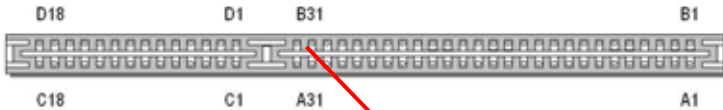
**J4A : ISA Bus SL62 – 62-pin Gold Finger Socket – 2.54Ø 31x2
Section A & B, (Sub total: 62 pins)**



Pin #	Signal Name	Pin #	Signal Name
A1	IOCHCK	B1	GND
A2	SD7	B2	RSTDRV
A3	SD6	B3	VCC
A4	SD5	B4	IRQ9
A5	SD4	B5	-5V
A6	SD3	B6	DRQ2
A7	SD2	B7	-12V
A8	SD1	B8	OWS
A9	SD0	B9	+12V
A10	IOCHRDY	B10	GND
A11	AEN	B11	SMEMW
A12	SA19	B12	SMEMR
A13	SA18	B13	IOW
A14	SA17	B14	IOR
A15	SA16	B15	DACK3
A16	SA15	B16	DRQ3
A17	SA14	B17	DACK1
A18	SA13	B18	DRQ1
A19	SA12	B19	REFRESH
A20	SA11	B20	SYSCLK
A21	SA10	B21	IRQ7
A22	SA9	B22	IRQ6
A23	SA8	B23	IRQ5
A24	SA7	B24	IRQ4
A25	SA6	B25	IRQ3
A26	SA5	B26	DACK2
A27	SA4	B27	TC
A28	SA3	B28	BALE
A29	SA2	B29	VCC
A30	SA1	B30	OSC
A31	SA0	B31	GND



J4B : ISA bus SL36B – 36-pin Gold finger
Section C & D, (Sub total: 36 pins)



Pin#	Signal Name	Pin #	Signal Name
C1	SBHE	D1	MEMCS16
C2	LA23	D2	IOCS16
C3	LA22	D3	IRQ10
C4	LA21	D4	IRQ11
C5	LA20	D5	IRQ12
C6	LA19	D6	IRQ15
C7	LA18	D7	IRQ14
C8	LA17	D8	DACK0
C9	MEMR	D9	DRQ0
C10	MEMW	D10	DACK5
C11	SD8	D11	DRQ5
C12	SD9	D12	DACK6
C13	SD10	D13	DRQ6
C14	SD11	D14	DACK7
C15	SD12	D15	DRQ7
C16	SD13	D16	VCC
C17	SD14	D17	MASTER
C18	SD15	D18	GND



Note: ISA bus consists of four sections – A, B, C and D edge pins. Total number of pins is 98-pins.



FRONT PANEL CONNECTOR DEFINITION



Compact Flash Memory Slot CF1: – 50-pin Type I/II CF Connector

Pin #	Signal Name	Pin #	Signal Name
1	GND	26	NC
2	IDED3	27	IDED11
3	IDED4	28	IDED12
4	IDED5	29	IDED13
5	IDED6	30	IDED14
6	IDED7	31	IDED15
7	IDECS-0	32	IDECS-1
8	NC	33	NC
9	GND	34	IDEIOR-
10	NC	35	IDEIOW-
11	NC	36	NC
12	NC	37	IDEIRQ
13	VCC	38	VCC
14	NC	39	VCC
15	NC	40	NC
16	NC	41	PCIRST-
17	NC	42	ICHRDY
18	IDESA2	43	NC
19	IDESA1	44	NC
20	IDESA0	45	DASP
21	IDED0	46	CBLID
22	IDED1	47	IDED8
23	IDED2	48	IDED9
24	NC	49	IDED10
25	NC	50	GND

USB Port: For connection to external USB device – 4-pin USB Type 1 Connector (H)

Pin #	Signal Name
1	VCC
2	USB2-
3	USB2+
4	GND
5	NC
6	NC



REAR PANEL CONNECTOR DEFINITION

These are connectors of a standard computer; they are labeled as such that it enables the enduser for easy connection.



Taking a glance at the rear connectors from left side to right side, the definitions are listed in the below ,

Power Sw – One pole Rocker Switch

	Pin #	Status
		ON
	0	OFF
	--	--
	--	--

KBD (PS/2 Keyboard & Mouse) – 6-pin Mini-Din Connector

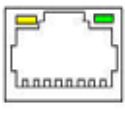
	Pin #	Signal Name
	1	KBCLK
	2	PMCLK
	3	GND
	4	KBDAT
	5	PMDAT
	6	SB5V

PS/2 Mouse – 6-pin Mini-Din Connector


	Pin #	Signal Name
	1	PMCLK
	2	NC
	3	GND
	4	PMDAT
	5	NC
	6	SB5V



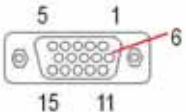
RJ-45 (LAN)- 8-pin RJ45 Connector

	Pin #	Signal Name	Pin #	Signal Name
	1	FTXD+	2	FTXD-
	3	FRXIN+	4	NC
	5	NC	6	FRXIN-
	7	NC	8	NC

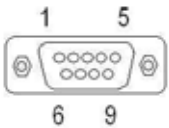
DC-IN (DC-IN 5V) – 3-pin MINI-DIN Lock Pin Socket

	Pin #	Signal Name
	1	VCC
	2	GND
	3	NC

VGA – 15-pin Dsub Connector

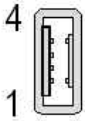
	Pin #	Signal Name	Pin #	Signal Name	Pin #	Signal Name
	1	MR	6	GND	11	NC
	2	MG	7	GND	12	VCC
	3	MB	8	GND	13	HYSYNC
	4	NC	9	NC	14	VSYNC
	5	GND	10	GND	15	VCC

COM1 - 9-pin Dsub Connector


	Pin #	Signal Name	Pin #	Signal Name
	1	DCD1	2	RXD1
	3	TXD1	4	DTR1
	5	GND	6	DSR1
	7	RTS1	8	CTS1
	9	RI1	--	--




USB (USB1)- 4-pin USB Type 1 Connector (Vertical Type)

	Pin #	Signal Name
	1	VCC
	2	USB0-
	3	USB0+
	4	GND
	5	GGND
6	GGND	


MIC - 5-pin RCA Phone Jack

	Pin #	Signal Name
	1	GND
	2	AUD MIC
	3	GND
	4	GND
5	REF	

J15: Line-out - 5-pin Phone Jack

	Pin #	Signal Name
	1	GND
	2	LOUT L
	3	NC
	4	NC
5	LOUT R	

Reset - 2-pole Push button switch

	Action	Status
	Push	RESET
	No push	OFF



TROUBLESHOOTING

This chapter helps you to get your system operating properly. It contains: General Problems, Elementary Troubleshooting, Obtaining technical support and Returning a product.

GENERAL PROBLEMS

Herewith below is a summary of the common problems that you may encounter during your testing of D.U.T. (Device Under Test) on the ENGINEER COMPUTER.

- | | |
|---------------------------------------|---|
| ENGINEER COMPUTER doesn't work | <ul style="list-style-type: none"> ◆ Check the LED indicator of the POWER switch is Red or no color. Remove the D.U.T. from the testing bay, and check if your AC power adaptor is locked steadily to the Mini-Din Lock socket of ENGINEER COMPUTER. ◆ Press the Reset switch at the rear panel of the ENGINEER COMPUTER. |
| No screen display | <ul style="list-style-type: none"> ◆ Check if your VGA cable of your monitor is properly connected to the 15-pin Dsub connector of your ENGINEER COMPUTER. ◆ Check if the AC power plug of your monitor is connected to the power source or AC wall socket. ◆ Replace another monitor. |
| D.U.T. cannot work | <ul style="list-style-type: none"> ◆ Check the LED indicator of the SLOT switch is Red or no color; and restart by depressing the SLOT switch on the Testing bay. ◆ Check if the D.U.T. is properly align; remove and attach the D.U.T. again. ◆ Verify all cables are connected properly. |

Elementary Troubleshooting

If you have reviewed the possible condition listed in the upper table and still cannot isolate the problem with your ENGINEER COMPUTER, please try the following troubleshooting steps.

- | | |
|-----------------------------|---|
| Simplify the system. | ◆ Remove items one at a time and see if one particular item seems to cause the problem. |
| Swap components. | ◆ Try replacing items in the system one-at-a-time with similar items. |



Even if the resulting information does not help you find the problem, it will be very helpful if you contact technical support.

Technical/Sales Assistance

For technical question, please contact DM&P Customer Support Service at the numbers below, or send an email to our technical support team at:

Email : tech@dmp.com.tw

Phone: 886(2)-2298-0770

For sales question, please contact your nearest local distributor or send an email to DM&P. Also for further information such as: User guide & manuals, technical & application notes, drivers & patches, BIOS.

Email: info@dmp.com.tw

Return for Service

1. Before returning your ENGINEER COMPUTER for service, you must contact DM&P or your local dealer to obtain a Returned Merchandise Authorization (RMA) number. **Note: It is mandatory to secure the RMA number in order to return any product at any reason.**
2. The following information is needed to expedite the shipment of a replacement to you:
 - o Your company name and address for invoice
 - o Shipping address and phone number
 - o Product I.D. number
 - o Your contact qualified technician
 - o A detailed description of the problem and of the current configuration including OS and software loaded.
3. If the unit is out of warranty, service is available at a pre-established service charge. Contact DM&P for pricing and please supply a purchase order number for invoicing the repair.
4. Pack the ENGINEER COMPUTER in an anti-static material and ship it in a sturdy cardboard box with enough packing material to adequately cushion it.

Warning! Any product returned to DM&P improperly packed will immediately void the warranty for this particular product.



WARRANTY

Terms and Conditions

1. Warranty

The warranty terms for DMP-1032 are 3 months beginning on the date of invoice. During the warranty period, JAN YIN CHAN Will repair replace the product covered under this limited warranty.

2. Service and Support

JAN YIN CHAN provides the technical support for software and hardware problems with your system throughout the warranty period. The technical support service is limited to the configuration and the operation of ENGINEER COMPUTER sold by JAN YIN CHAN The technical support service does not offer software tutoring or training.

3. Return Merchandise Authorization (RMA) policy

If the JAN YIN CHAN technical support staff determines that a part is defective. Purchaser must call our technical support service to obtain an RMA number before attempting to return any part.

To obtain an RMA number, Purchaser must follow procedures as below :

- 3.1 Complete the JAN YIN CHAN standard RMA Form and fax back to the RMA Department.
- 3.2 The RMA Number must be used within 7 DAYS
- 3.3 The RMA Number must be shown clearly on your shipping label.
- 3.4 JAN YIN CHAN must receive all Returns before a replacement will be sent.
- 3.5 The repair cost is depends on the parts, the damage reasons, and whether under warranty period...etc. The Seller will charge the Purchaser in a reasonable price.
- 3.6 A copy of the invoice for the RMA product(s) will also be shipped to Purchaser.
- 3.7 The freight of return to Media Stream Tech. is charges to Purchaser account and accompanied by an RMA number. Any Returns with freight collect will be refused and returned to you. After Repairing, the cost of freight will be paid by Seller.
- 3.8 JAN YIN CHAN must receive all returned goods within the warranty period.



4. Shipping Policy

The Purchaser must pre-pay shipping for any defective system or parts returned under the warranty. JAN YIN CHAN shall not be liable for risk of loss or damage during shipment of your returned system or parts if you fail to insure the shipment.

All products must be shipped back to JAN YIN CHAN in original or equivalent packaging. JAN YIN CHAN will ship the repaired or replacement product(s) to Purchaser by freight prepaid. Purchaser assumes the risk of loss. JAN YIN CHAN shall not be responsible for failure of the delivery service to make on-time delivery.



MEMO



DMP-1032