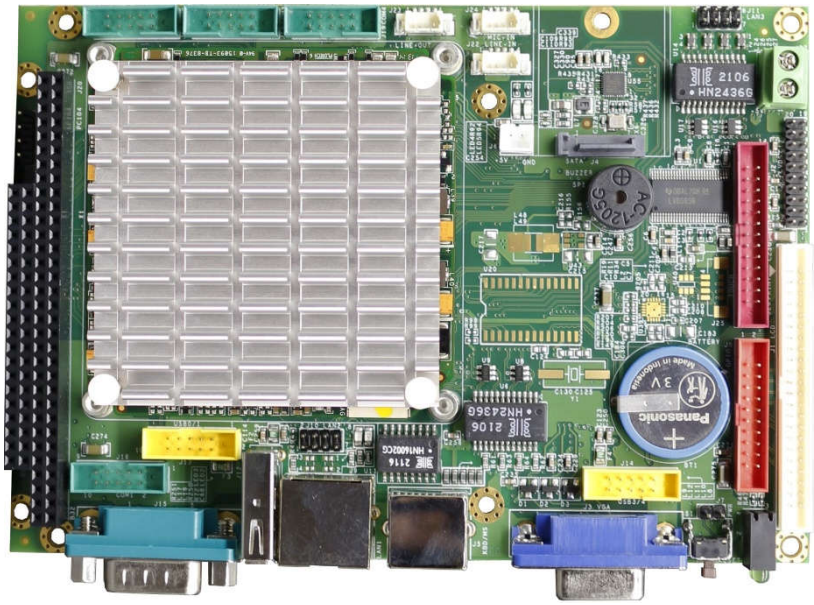
User Manual



VDX3-6726-V2

with

DM&P Vortex86DX3
1GHz processor

Version 3.0

Copyright

Trademarks Acknowledgement

Revision History

Revision	Date	Remark
1.0	June 13, 2016	First version release
2.0	June 8, 2017	New Add: Working temperature for Dual Core version
3.0	August 30, 2022	Change P/N to VDX3-6726-V2 due to Audio codec changes to ALC888S and GbE controller changes RTL8111H

Table of Contents

1 General Information

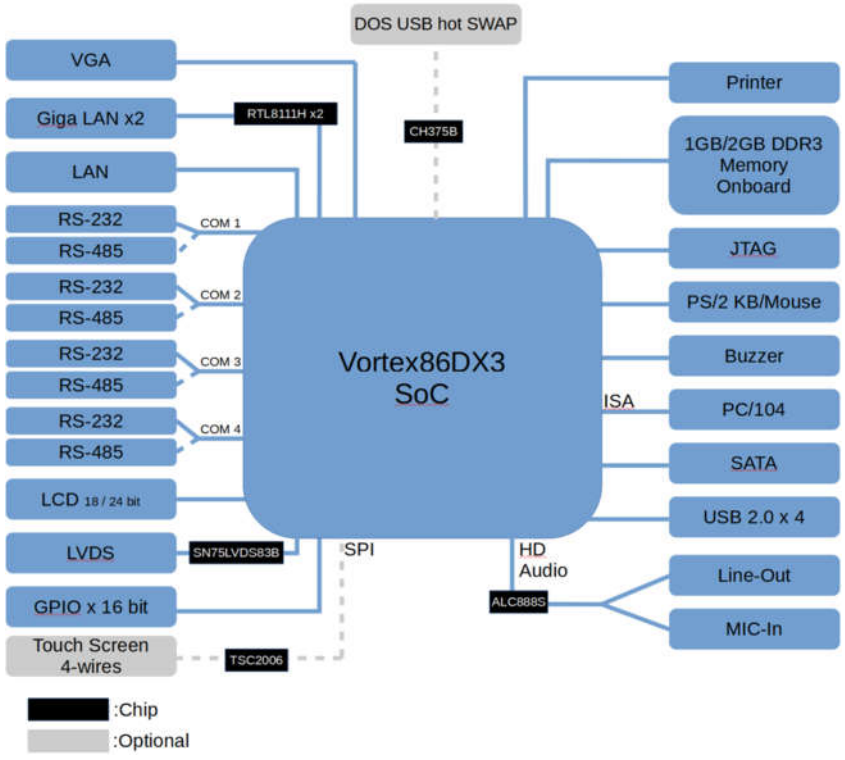
1.1 Overview

The VDX3-6726 family of low-power x86 embedded controller is designed to meet 3.5" specification with backward compatibility to provide migration path for projects facing end-of-life challenges with their existing x86 based 3.5" controller.

In addition, the VDX3-6726 family of controller is designed as a plug in replacement, with backward compatibility to support legacy software to help extend existing product life cycle without heavy re-engineering.

The VDX3-6726 is suitable for broad range of data-acquisition, industrial automation, process control, automotive controller, AVL, intelligent vehicle management device, medical device, human machine interface, robotics, machinery control and more

1.2 Block diagram



1.3 Specifications

Processor	DM&P SoC CPU Vortex86DX3 - 1GHz L1:32K I-Cache, 32K D-Cache, L2 Cache:512KB
RAM	1GB/2GB DDR3 Onboard
BIOS	AMI BIOS
Bus	PC/104 Standard Compliant
Display	Integrated 2D VGA chip with dual display support (VGA +TTL / VGA + LVDS) VGA: Maximum resolution up to 1920x1080 @ 60Hz LVDS: Maximum resolution up to 1024x768 @ 60Hz Single channel 24-bit LVDS
LAN	Integrated 10/100Mbps Ethernet x1 Realtek 8111H GbE x2
I/O Interface	RS232/485 x4 USB (ver. 2.0) x4 Parallel x1 16-bit GPIO x1 DOS hot SWAP x1 (Optional) PS/2 touch controller x1 (Optional) HD Audio
Connectors	2.54mm 4-pin pin header for DC output x1 2.54mm 2-pin pin header for Reset x1 2.54mm 104-pin PC/104 connector x1 2.0mm 44-pin box header for LCD x1 2.0mm 26-pin box header for Parallel x1 2.0mm 20-pin pin header for 16-bit GPIO x1 2.0mm 20-pin pin header for LVDS x1 2.0mm 10-pin box header for USB x2 2.0mm 10-pin box header for RS232 x4 2.0mm 8-pin pin header for Ethernet x1 2.0mm 8-pin pin header for GbE x1 1.25mm 4-pin wafer connector for Line-out/MIC-in x2 2-pin box header for DC 5V output x1 7-pin SATA connector for SATA DOM x1 RJ45 connector for GbE x1 15-pin D-Sub female connector for VGA x1 9-pin D-Sub male connector for RS232 x1 PS/2 connector for Keyboard/Mouse x1

Power Requirement	DC +5V @1300mA (Typical)	
Operating Temp.	-20C ~ +70˚C (Single Core) -10˚C ~ +60˚C (Dual Core) -40˚C ~ +85˚C (Optional for Single Core) -20˚C ~ +70˚C (Optional for Dual Core)	
Dimensions	102mm x 146mm	
Weight	150g	
O/S Support	Windows 7 Windows Embedded Standard 7 Windows Embedded Compact 7* Windows XP Professional Windows Embedded 2009 Free BSD	Linux DOS POS Ready (WePOS) QNX VxWorks

***** If you are using Win CE compact 7, you will need to rebuild your image with new driver in order to make RTL8111H to work.

****** Microsoft has stopped supporting Win CE 6.0 since 2013 so there is no driver support for RTL8111H.

1.4 Ordering Information

1.4.1 VDX3-6726

Product Name	1GB DDR3 onboard	2GB DDR3 Onboard	Touch Function	Dual Core
VDX3-6726-V2-1G	V			
VDX3-6726-V2-2G		V		
VDX3-6726-V2-2C-1G	V			V
VDX3-6726-V2-2C-2G		V		V
VDX3-6726-V2-1G-T	V		V	
VDX3-6726-V2-2G-T		V	V	
VDX3-6726-V2-2C-1G-T	V		V	V
VDX3-6726-V2-2C-2G-T		V	V	V
CABLE-SET-6726				

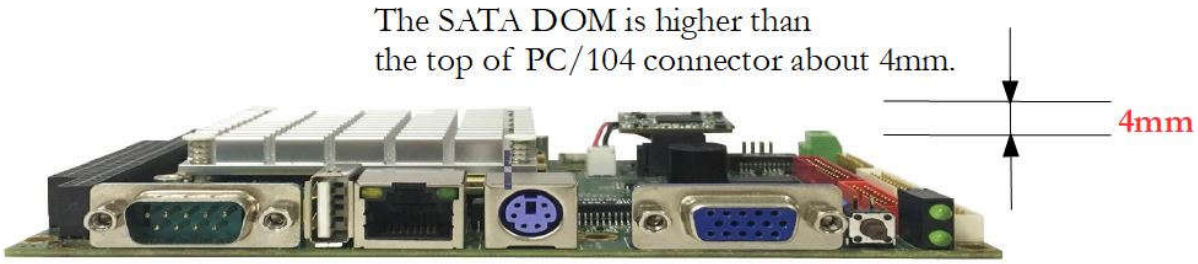
1.4.2 Cable Set

Product Name	Contents	
CABLE-SET-6726	NET4X2 (2.0) x2	PRINT(2.0) x1
	RS232(2.0) x4	Audio Line x2
	GPIO(2.0) x1	USB(2.0) x2

1.4.3 SATA DOM

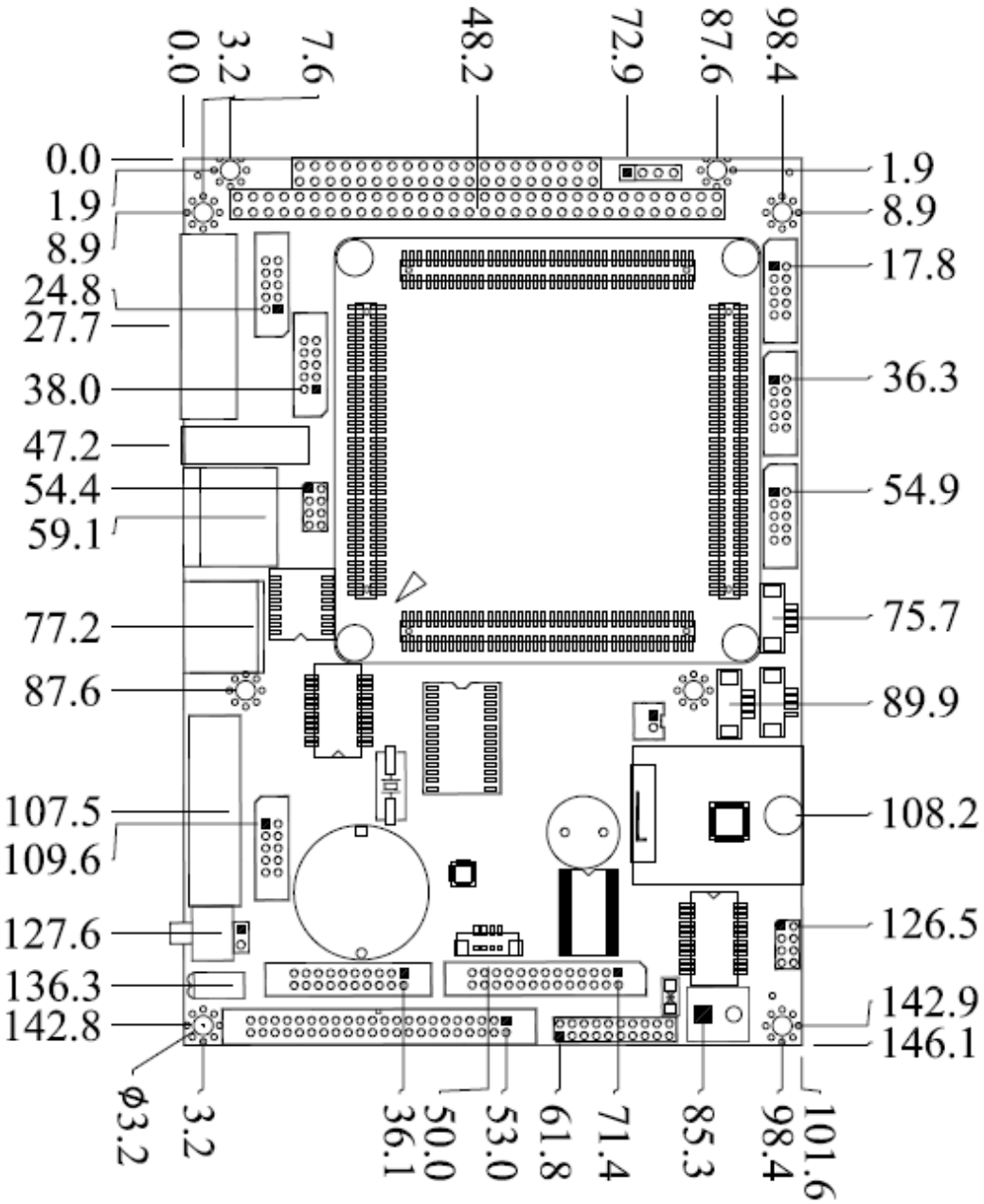
Product Name	MLC	SLC	0℃ ~ +70℃	-40℃ ~ +85℃
SDM-SST-2G-H-M	V		V	
SDM-SST-4G-H-M	V		V	
ISATA-8G-H-M	V		V	
ISATA-16G-H-M	V		V	
ISATA-32G-H-M	V		V	
ISATA-4G-H-M-X	V			V
ISATA-8G-H-M-X	V			V
ISATA-16G-H-M-X	V			V
ISATA-32G-H-M-X	V			V
ISATA-1G-H-S		V	V	
ISATA-2G-H-S		V	V	
ISATA-4G-H-S		V	V	
ISATA-8G-H-S		V	V	
ISATA-16G-H-S		V	V	
SDM-SST-4G-H-S-X		V		V
SDM-SST-8G-H-S-X		V		V
ISATA-16G-H-S-X		V		V

Demonstration of "SDM-SST" SATA DoM on VDX3-6726-V2

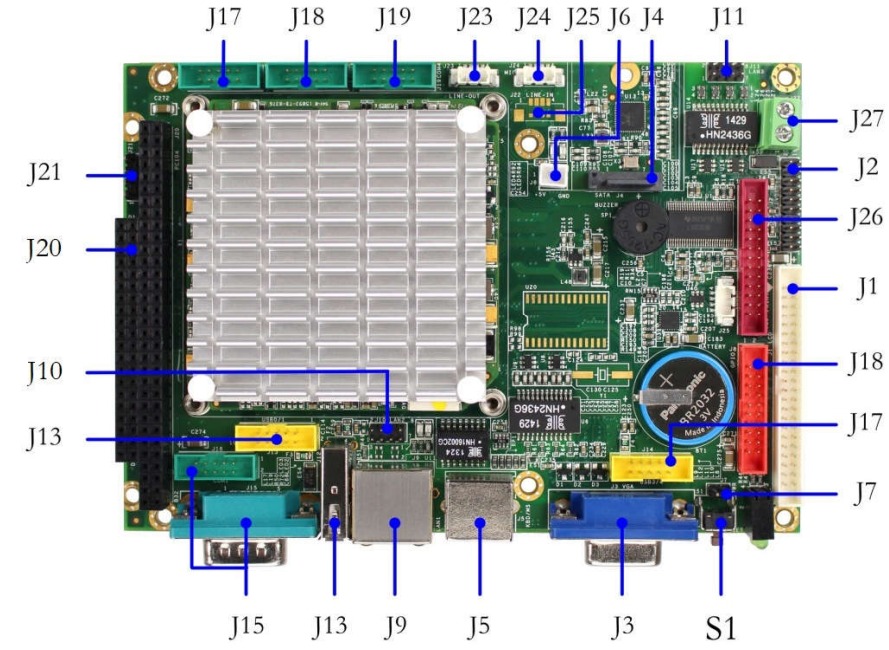


2 Hardware Information

2.1 Dimension



2.2 Board Outline



Note:

1. RS232/485 is selected by BIOS.
2. USB4 has no function by default. It only works under DOS when CH375 (DOS hot SWAP support IC) is equipped. Any other OS are not supported.
3. PS/2 Mouse will be disabled when Touch function (optional) is selected.

2.3 Connector and Jumper Summary

Nbr.	Name	Type of Connections	Nbr of Pin
J1	LCD	Box Header, 2.0mm, 22x2	44
J2	LVDS (24 bits)	Pin Header, 2.0mm, 10x2	20
J3	VGA	15-pin D-Sub Female	15
J4	SATA DOM	SATA 7P Connector, 7x1	7
J5	PS/2 Keyboard/Mouse	Mini-DIN Female	6
J6	DC 5V output	Box Header, 2.0mm, 1x2	2
J7	Reset Switch	Pin Header, 2.54mm, 1x2	2
J8	GPIO (Port0/1)	Box Header, 2.0mm, 10x2	20
J9	LAN1 (10/100/1000 Ethernet)	RJ45 Connector	8
J10	LAN2 (10/100 Ethernet)	Pin Header, 2.0mm, 4x2	8
J11	LAN3 (10/100/1000 Ethernet)	Pin Header, 2.0mm, 4x2	8
J12	USB2	Type A USB Connector	4
J13	USB0&1	Box Header, 2.0mm, 5x2	10
J14	USB3&4 (USB4 is optional)	Box Header, 2.0mm, 5x2	10
J15	COM1 (RS232/485 or optional TTL/P4)	D-Sub Male	9
J17	COM2 (RS232/485 or optional TTL/P4)	Box Header, 2.0mm, 5x2	10
J18	COM3 (RS232/485 or optional TTL/P4)	Box Header, 2.0mm, 5x2	10
J19	COM4 (RS232/485 or optional TTL/P4)	Box Header, 2.0mm, 5x2	10
J20A	PC104 Connector – 64 pin	Box Header, 2.54mm, 32x2	64
J28B	PC104 Connector – 40 pin	Box Header, 2.54mm, 20x2	40
J21	DC Power output (Interconnect to PC/104 –J20)	Pin Header, 2.54mm, 4x1	4
J23	Line-out	Wafer, 1.25mm, 4x1	4
J24	MIC-in	Wafer, 1.25mm, 4x1	4
J25	Touch screen connector (Optional)	Wafer, 1.25mm, 4x1	4
J26	Parallel	Box Header, 2.0mm, 13x2	26
J27	Power Connector	Terminal Block, 5.0mm, 2x1	2
PWER LED	Power Active LED(Red)	LED-SMD	
LED3	LAN Link/Active LED(Green)	LED-SMD	
LED4	LAN Duplex LED(Yellow)	LED-SMD	
SP1	Buzzer		

2.4 Pin Assignments & Jumper Settings

J1: LCD

Pin#	Signal Name	Pin #	Signal Name
1.	+3.3V	2	+3.3V
3	LG2	4	LG3
5	LG4	6	LG5
7	NC	8	NC
9	LR0	10	LR1
11	LR2	12	LR3
13	LR4	14	LR5
15	GND	16	NC
17	NC	18	NC
19	NC	20	GND
21	NC	22	NC
23	LB0	24	LB1
25	LB2	26	LB3
27	LB4	28	LB5
29	NC	30	NC
31	LG0	32	LG1
33	GND	34	GND
35	NC	36	LCLK
37	NC	38	LDE
39	NC	40	LHSYNC
41	NC	42	LVSYNC
43	LBACKL	44	LVDDEN

J2: LVDS (24 bits)

Pin#	Signal Name	Pin #	Signal Name
1.	VCC3(3.3V)	2	VCC3(3.3V)
3	GND	4	GND
5	Y0+	6	Y0-
7	Y1-	8	GND
9	GND	10	Y1+
11	Y2+	12	Y2-
13	CLK-	14	GND
15	GND	16	CLK+
17	Y3-	18	GND
19	GND	20	Y3+

J3: VGA

Pin#	Signal Name	Pin #	Signal Name
1.	R OUT	2	G OUT
3	B OUT	4	NC
5	GND	6	GND
7	GND	8	GND
9	NC	10	GND
11	NC	12	DDCDAT
13	HSYNC	14	VSYNC
15	DDCLK		

J4: SATA DOM

Pin#	Signal Name	Pin #	Signal Name
1.	GND	2	TX+
3	TX-	4	GND
5	RX-	6	RX+
7	GND		

J6: DC 5V output

Pin#	Signal Name
1.	VCC
2	GND

J7: REST

Pin#	Signal Name	Pin #	Signal Name
1.	RST_SW	2	GND

J8: GPIO (Port 0/1)

Pin#	Signal Name	Pin #	Signal Name
1.	GND	2	VCC
3	GP00	4	GP10
5	GP01	6	GP11
7	GP02	8	GP12
9	GP03	10	GP13
11	GP04	12	GP14
13	GP05	14	GP15
15	GP06	16	GP16
17	GP07	18	GP17
19	VCC	20	GND

J9: LAN 1 (RJ45)

Pin#	Signal Name	Pin #	Signal Name
1.	GTX+	2	GTX-
3	GRX+	4	GTXC+
5	GTXC-	6	GRX-
7	GRXD+	8	GRXD-

J10: LAN 2

Pin#	Signal Name	Pin #	Signal Name
1.	ATX+	2	ATX-
3	ARX+	4	LED00
5	LED0+	6	ARX-
7	LED1+	8	LED1

J11: LAN 3

Pin#	Signal Name	Pin #	Signal Name
1.	GTX+1	2	GTX-1
3	GRX+1	4	GTXC+1
5	GTXC-1	6	GRX-1
7	GRXD+1	8	GRXD-1

J12: USB2

Pin#	Signal Name
1	VCC
2	USB_DATA+
3	USB_DATA-
4	GND

J13: USB0&1

Pin#	Signal Name	Pin #	Signal Name
1	VCC	2	VCC
3	LUSBD0-	4	LUSBD1-
5	LUSBD0+	6	LUSBD1+
7	GND	8	GND
9	GGND	10	GGND

J14: USB3&4

(USB 4 is optional)

Pin#	Signal Name	Pin #	Signal Name
1	VCC	2	VCC
3	LUSBD3-	4	LUSBD4-
5	LUSBD3+	6	LUSBD4+
7	GND	8	GND
9	GGND	10	GGND

*USB4 only works under DOS when CH375 (DOS hot SWAP support IC) is equipped. Any other OS are not supported. For more detail, please contact ICOP sales.

J15: COM1

(RS232/485 or optional TTL/P4)

Pin#	Signal Name	Pin #	Signal Name
1	DCD1/1RS485-	2	RXD1/1RS485+
3	TXD1	4	DTR1
5	GND	6	DSR1
7	RTS1	8	CTS1
9	RI1	10	NC

J17: COM2

(RS232/485 or optional TTL/P5)

Pin#	Signal Name	Pin #	Signal Name
1	DCD2/2RS485-	2	RXD2/2RS485+
3	TXD2	4	DTR2
5	GND	6	DSR2
7	RTS2	8	CTS2
9	RI2	10	NC

J18: COM3

(RS232/485 or optional TTL/P6)

Pin#	Signal Name	Pin #	Signal Name
1	DCD3/3RS485-	2	RXD3/3RS485+
3	TXD3	4	DTR3
5	GND	6	DSR3
7	RTS3	8	CTS3
9	RI3	10	NC

J18: COM4

(RS232/485 or optional TTL/P7)

Pin#	Signal Name	Pin #	Signal Name
1	DCD4/4RS485-	2	RXD4/4RS485+
3	TXD4	4	DTR4
5	GND	6	DSR4
7	RTS4	8	CTS4

J20A: PC/104 Connector – 64 pin

Pin#	Signal Name	Pin #	Signal Name
1.	IOCHCHK*	2	GND
3	SD7	4	RESETDRV
5	SD6	6	VCC
7	SD5	8	IRQ9
9	SD4	10	-5V
11	SD3	12	RDQ2
13	SD2	14	-12V
15	SD1	16	OWS
17	SD0	18	+12V
19	IOCHRDY	20	GND
21	AEN	22	SMEMW*
23	SA19	24	SMEMR*
25	SA18	26	IOW*
27	SA17	28	IOR*
29	SA16	30	DACK3*
31	SA15	32	DRQ3
33	SA14	34	DACK1*
35	SA13	36	DRQ1*
37	SA12	38	REFRESH*
39	SA11	40	SYSCLK
41	SA10	42	IRQ7
43	SA9	44	IRQ6
45	SA8	46	IRQ5
47	SA7	48	IRQ4
49	SA6	50	IRQ3
51	SA5	52	DACK2*
53	SA4	54	TC
55	SA3	56	BALE
57	SA2	58	VCC
59	SA1	60	OSC
61	SA0	62	GND
63	GND	64	GND

J20B: PC/104 Connector – 40 pin

Pin#	Signal Name	Pin #	Signal Name
1.	GND	2	GND
3	MEMCS16*	4	SBHE*
5	IOCS16*	6	SA23
7	IRQ10	8	SA22
9	IRQ11	10	SA21
11	IRQ12	12	SA20
13	IRQ15	14	SA19
15	IRQ14	16	SA18
17	DACK0*	18	SA17
19	DRQ0	20	MEMR*
21	DACK5*	22	MEMW*
23	DRQ5	24	SD8
25	DACK6*	26	SD9
27	DRQ6	28	SD10
29	DACK7	30	SD11
31	DRQ7	32	SD12
33	VCC	34	SD13
35	MASTER*	36	SD14
37	GND	38	SD15
39	GND	40	NC

J21: DC power output

(Interconnect to PC/104 J20)

Pin#	Signal Name
1.	-5V
2	-12V
3	+12V
4	GND

J23: Line-out

Pin#	Signal Name
1.	LOUTR
2	GND
3	GND
4	LOUTL

J24: MIC-in

Pin#	Signal Name
1.	MICVREF
2	GND
3	GND
4	MIC-IN

J25: Touch screen connector

Pin#	Signal Name
1.	Y-
2	X-
3	Y+
4	X+

**Onboard SPI ROM (optional) won't be available when Touch function is selected.

J26: Parallel

Pin#	Signal Name	Pin #	Signal Name
1	STB-	14	AFD-
2	PD0	15	ERR-
3	PD1	16	INIT-
4	PD2	17	SLIN-
5	PD3	18	GND
6	PD4	19	GND
7	PD5	20	GND
8	PD6	21	GND
9	PD7	22	GND
10	ACK-	23	GND
11	BUSY	24	GND
12	PE	25	GND
13	SLCT	26	NC

J27: Power Connector

Pin#	Signal Name
1.	+5V
2	GND

System Mapping

Memory Mapping		
Address	**Description**	**Usage**
00000000 – 0009FFFF	System RAM	*
000A0000 – 000AFFFF	EGA/VGA Video Memory	*
000B0000 – 000B7FFF	MDA RAM, Hercules graphics display RAM	*
000B8000 – 000BFFFF	CGA display RAM	*
000C0000 – 000C7FFF	EGA/VGA BIOS ROM	*
000C8000 – 000CFFFF	Boot ROM enable	
000CC000 – 000CFFFF	Console Redirection enable	
000D0000 – 000D7FFF	Expansion ROM space	
000D8000 – 000D8FFF	SPI Flash Emulation Floppy A Enable	
000DC000 – 000DFFFF	Expansion ROM Space	
000E0000 – 000EFFFF	USB Legacy SCSI ROM space	
000F0000 – 000FFFFF	Motherboard BBIOS	*
FEFDBC00 – FEFDBCFF	Standard OpenHCD USB Host Controller	*
FEFBB400 – FEFBB4FF	Onboard Ethernet Adapter	*
FEFDB800 – FEFDBFFF	Standard Enhanced PCI to USB Host Controller	*

I/O Mapping		
Address	**Description**	**Usage**
0000h – 000Fh	DMA 8237-1	*
0020h – 0021h	PIC 8259-1	*
0022h – 0023h	Indirect Access Registers (6117D configuration port)	*
0040h –0043h	Timer Counter 8254	*
0060h	Keyboard / Mouse data port	
0061h	Port B + NMI control port	*
0062h – 0063h	8051 download 4k address counter	
0064h	Keyboard/ Mouse status/ command port	
0065h	WatchDog0 reload counter	
0070h – 0071h	CMOS RAM port	*
0072h – 0075h	MTBF control register	*
0078h – 007Ch	GPIO port 0,1,2,3,4 default setup	*
0080h – 008Fh	DMA page register	
0092h	System control register	*
0093h – 0097h	GPIO port 6,7,8,9,A direction control	*
0098h – 009Dh	GPIO port 0,1,2,3,4,5 direction control	*
00A0h – 00A1h	PIC 8259-2	*
00A8h – 00ADh	WatchDog1 control counter	*
00AEh	WatchDog1 reload counter	*
00C0h – 00DFh	DMA 8237-2	*
00E0h – 00EFh	DOS 4G Page access	*
0100h – 0105h	GPIO port 5,6,7,8,9,A default setup	*
0170h – 0177h	IDE 1(IRQ 15)	*
0278h – 027Fh	Printer port (IRQ7, DMA 0)	*
02E8h – 02EFh	COM4 (IRQ 11)	*
02F8h – 02FFh	COM2 (IRQ 3)	*
03E8h – 03EFh	COM3 (IRQ 10)	*
03F6h	IDE1 ATAPI device control write only register	*
03F8h – 03FFh	COM1 (IRQ 4)	*
0480h – 048Fh	DMA High page register	*
0490h – 0499h	Instruction counter register	*
04D0h – 04D1h	8259 Edge / level control register	*
0CF8h – 0CFFh	PCI configuration port	*
DE00h – DEFFh	On board LAN	*
FC00h – FC05h	SPI Flash BIOS control register	*

FC08h – FC0Dh	External SPI BUS control register	*

IRQ Mapping		
Address	**Description**	**Usage**
IRQ0	System Timer	*
IRQ1	Keyboard Controller	*
IRQ2	Cascade for IRQ8~15	
IRQ3	Serial port 2	*
IRQ4	Serial port 1	*
IRQ5	USB	*
IRQ6	USB	
IRQ7	Printer Port	*
IRQ8	Real Timer Clock	*
IRQ9	ACPI	*
IRQ10	Serial Port 3	*
IRQ11	Serial Port 4	*
IRQ12	Mouse	*
IRQ13	Math Coprocessor	*
IRQ14	Multimedia Device	*
IRQ15	Hard Disk Controller #2	*

DMA Mapping		
Address	**Description**	**Usage**
DMA0		
DMA1		
DMA2		
DMA3		
DMA4		
DMA5		
DMA6		
DMA7		

3 Software Resources

3.1 ICOP Technical Resource Website

In the following website, you will find our latest user manuals, including OS support resources systems such as evaluation images for Windows Embedded Compact 7, Windows Embedded CE 6.0, Windows Embedded CE 5.0, and Windows XP Embedded (Win XPe). For details, please kindly visit the following link: http://tech.icop.com.tw/

3.2 Vortex86 Processor Programming Guide

Vortex86 processor programming guide is for software programmers to build their programs more quickly and easily on Vortex86 processor. This programming guide also includes the installation guide for X-Linux, Debian & Ubuntu Linux guide and board support package (BSP) for Windows Embedded OS on Vortex86SX/DX/DX2/DX3. For details, please kindly visit the following link: http://www.dmp.com.tw/tech/

4 Technical support

4.1 LCD

4.1.1 Introduction

The VDX3-6726 offers two different interfaces which support maximum resolution up to 1920 x 1080 (at 60MHz) connecting to LCD Flat Panel: 18-bit/24-bit TFT-LCD and 24-bit LVDS.

4.1.2 Pin Assignment of LVDS and TFT-LCD

LVDS Pin Assignment

LVDS Pin#	Pin Name	LVDS Pin#	Pin Name
1.	VCC3(3.3V)	2	VCC3(3.3V)
3	GND	4	GND
5	Y0+	6	Y0-
7	Y1-	8	GND
9	GND	10	Y1+
11	Y2+	12	Y2-
13	CLK-	14	GND
15	GND	16	CLK+
17	Y3-	18	GND
19	GND	20	Y3+

TFT Flat Panel Data Output

LCD Pin#	Vortex86DX3 Pin Name	DIGITAL 18 bits	RGB 24 bits
1	LCDVCC (+3.3V)	VDD	VDD
2	LCDVCC (+3.3V)	VDD	VDD
3	FPD12	G2	G4
4	FPD13	G3	G5
5	FPD14	G4	G6
6	FPD15	G5	G7
7	FPD16	/	R0
8	FPD17	/	R1
9	FPD18	R0	R2
10	FPD19	R1	R3
11	FPD20	R2	R4
12	FPD21	R3	R5
13	FPD22	R4	R6
14	FPD23	R5	R7
15	GND	VSS	VSS
16	NC	/	/
17	NC	/	/
18	NC	/	/
19	NC	/	/
20	GND	VSS	VSS
21	PPD0	/	B0
22	PPD1	/	B1
23	PPD2	B0	B2
24	PPD3	B1	B3
25	PPD4	B2	B4
26	PPD5	B3	B5
27	PPD6	B4	B6
28	PPD7	B5	B7
29	PPD8	/	G0
30	PPD9	/	G1
31	PPD10	G0	G2
32	PPD11	G1	G3
33	GND	VSS	VSS
34	GND	VSS	VSS
35	NC	/	/

36	FP1CLK	XCLK	XCLK
37	NC	/	/
38	FP1DE	DEN	DEN
39	NC	/	/
40	FP1HS	HSYNC	HSYNC
41	NC	/	/
42	FP1VS	VSYNC	VSYNC
43	FPENBLT	ADJ	ADJ
44	FPENVDD	VDDEN	VDDEN

4.2 BIOS Introduction

4.2.1 Introduction

Featuring AMI BIOS, the VDX3-6726 module is a one stable module board for your applications. In this section, we will introduce you some basic AMI BIOS setting such as CPU speed adjusting, console redirection, and IDE configuration, etc.

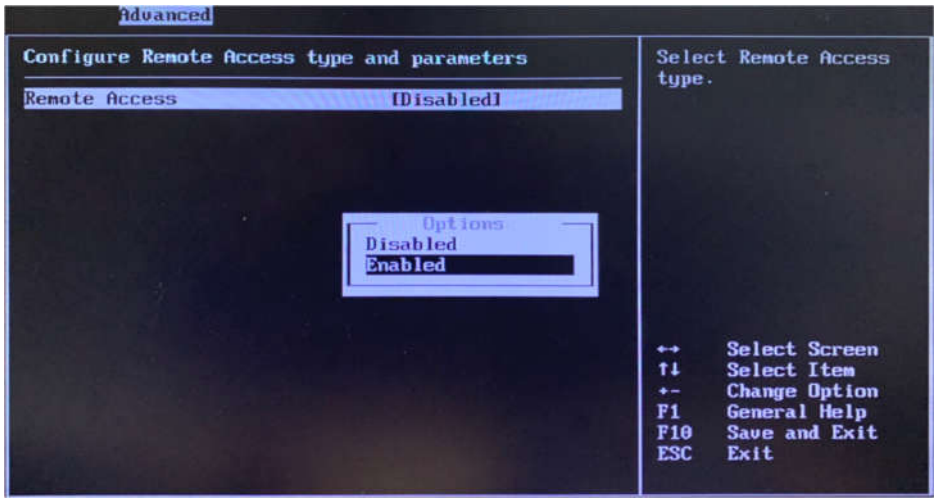
4.2.2 CPU Clock Adjusting

For CPU clock adjusting, please contact your contact window directly or mail info@icop.com.tw.

4.2.3 Console Direction

Access to computer board through serial port, you can work on VDX3-6726 without VGA display or monitor. The default access port is COM1 and disabled. If you would like to use this function, please go to the path below to enable Console Redirection.

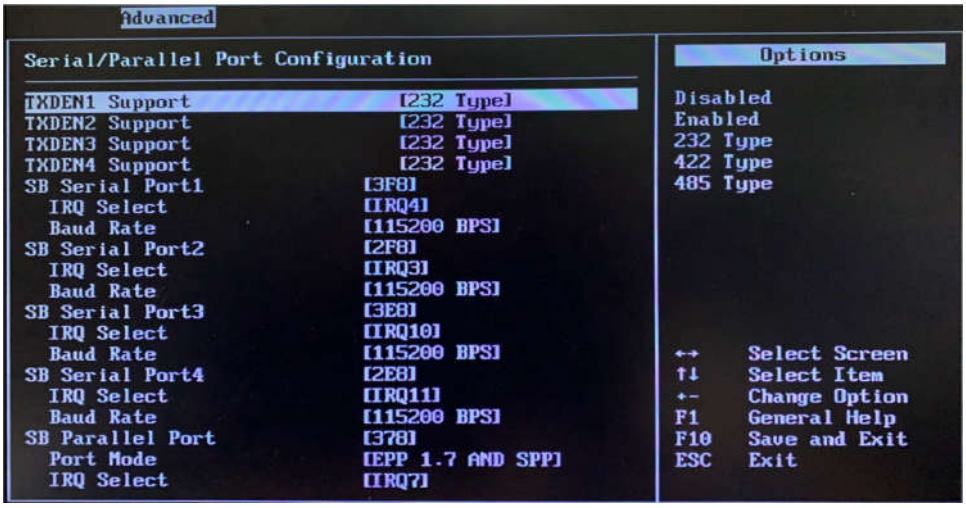
Path: Advanced >Remote Access Configuration >Remote Access [Enabled]



4.2.4 Serial Ports Switching

Serial ports on VDX3-6726 are set RS232 as default. If you need RS485 to be your default serial ports, you can refer to the below instruction to change it according to your demands.

Path: Advanced > Serial/Parallel Port Configuration



4.2.5 IDE Configuration

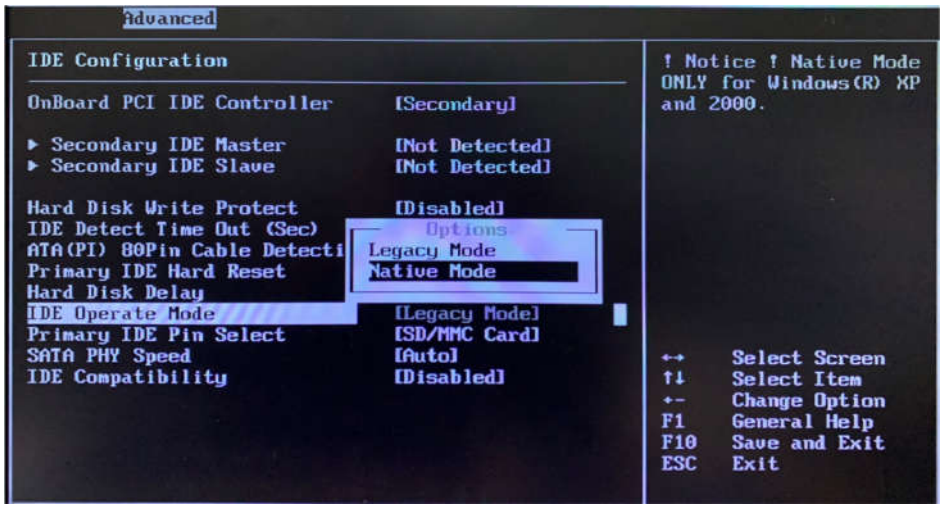
The default IDE configuration is for Windows Operating System, and the setting as below:

Onboard IDE Operate Mode: [Legacy Mode]
IDE Compatibility: [Disabled].

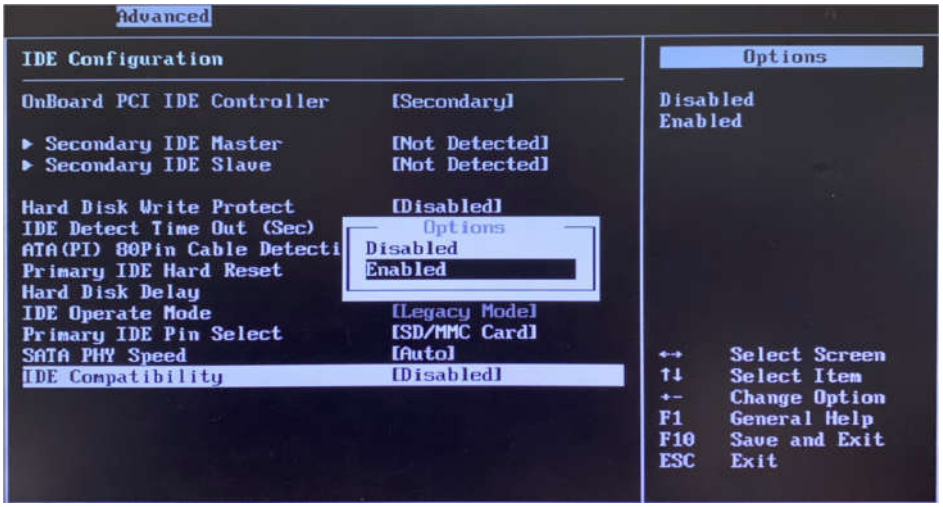
If you would like to use Linux on VDX3-6726, please follow below instructions:

Onboard IDE Operate Mode: [Native Mode]
IDE Compatibility: [Enabled].

Path of Onboard IDE Operate Mode:
Advanced > IDE Configuration > IDE Operate Mode [Native Mode]



Path of IDE Compatibility:
Advanced > IDE Configuration > IDE Compatibility [Enabled]

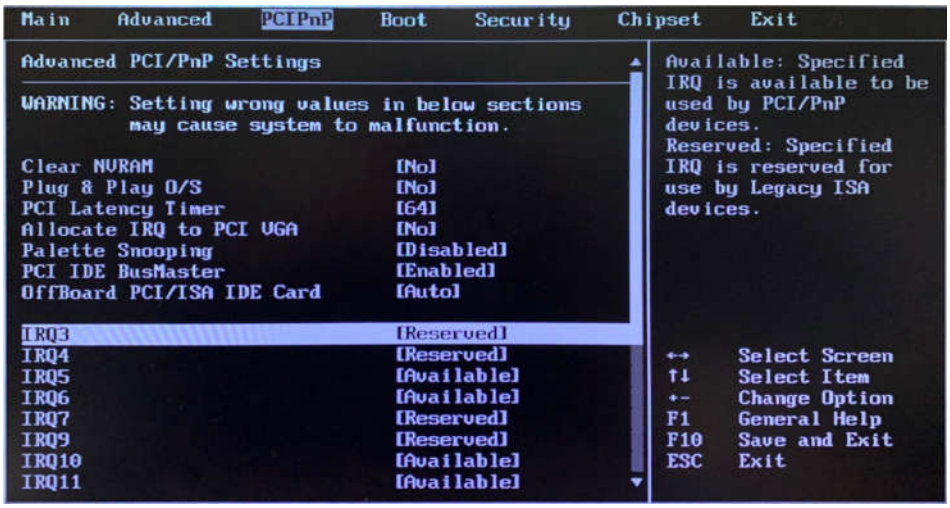


4.2.6 Advanced PCI/PnP Setting

Two statuses for IRQ setting:

[Reserved]: IRQ will be free to be allocated by ISA device, not PCI device.
[Available]: IRQ will be allocated by both ISA device and PCI device.

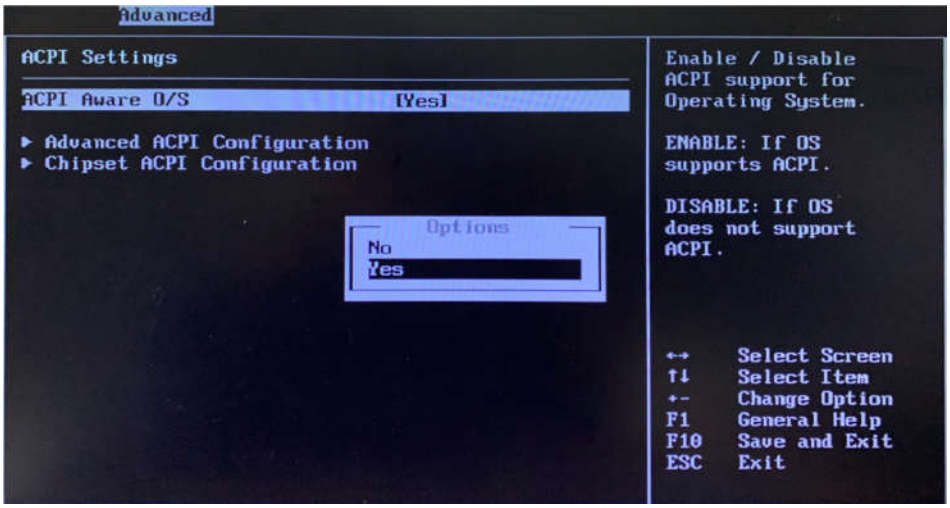
Path: PCIPnP >IRQ



4.2.7 ACPI Enable

To install Windows 7 on ICOP computer boards, please enable ACPI as the following instruction.

Path: Advanced > ACPI Configuration >ACPI Aware O/S



4.2.8 LCD Panel Setting

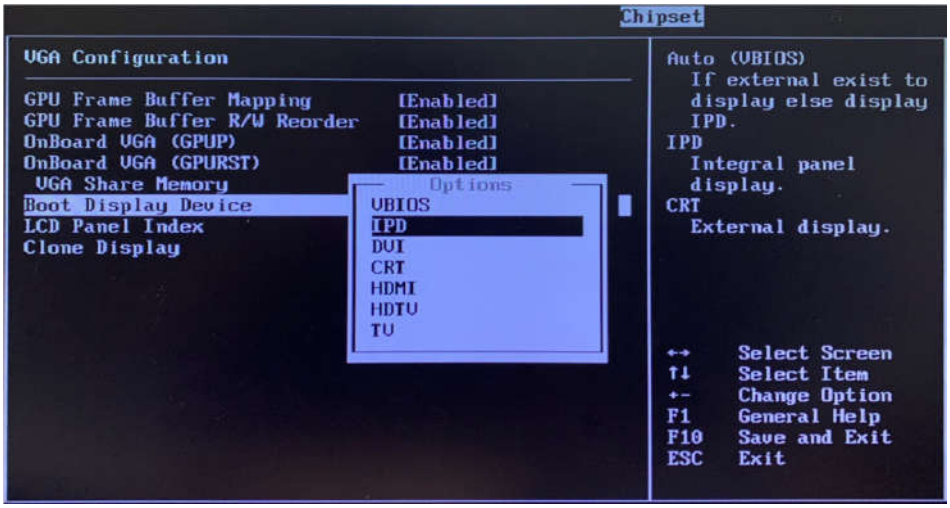
The default setting of **Boot Display Device [CRT]** and the **LCD Panel Index [VBIOS]** are for VGA signal.

If you need to use LCD panel with VDX3-6726, please follow below instructions:

Boot Display Device [IPD]
LCD Panel Index according to your LCD resolution from 1 to 5.

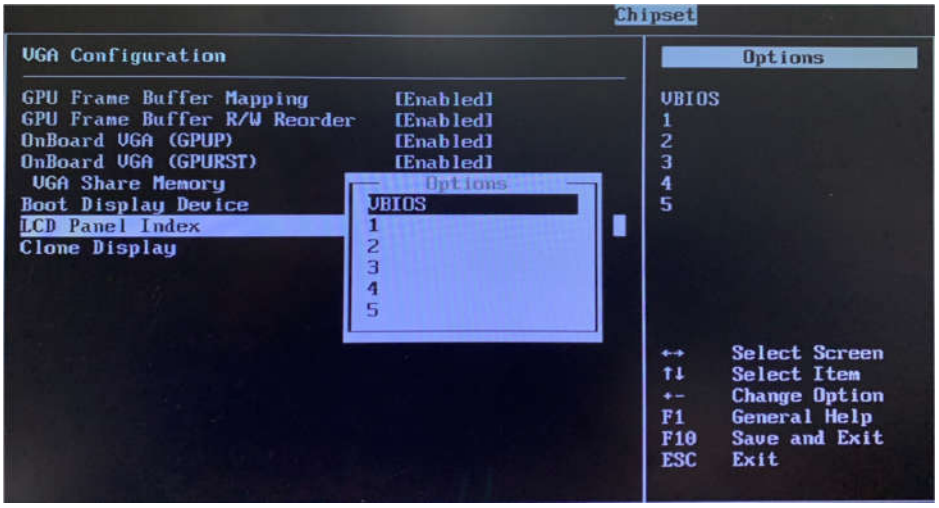
Options	Resolution of the LCD Panel
1	640 x 480
2	800 x 480
3	800 x 600
4	1024 x 600
5	1024 x 768

Path of Boot Display Device setting:
Chipset > NorthBridge Configuration > VGA Configuration > Boot Display Device [IPD]



Path of LCD Panel Index setting:

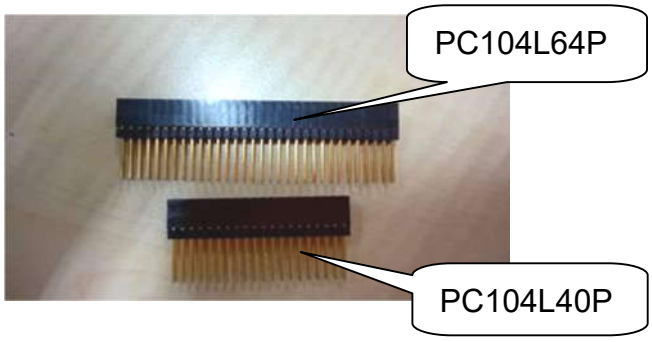
Chipset > NorthBridge Configuration > VGA Configuration > LCD Panel Index [ ]



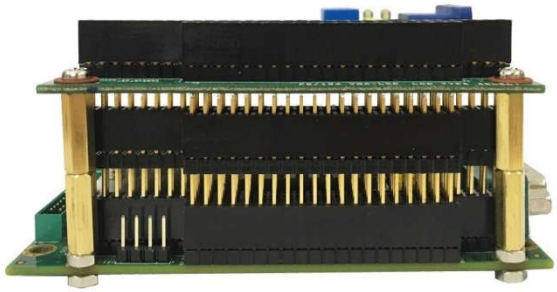
Appendix

Stacking Solution for Daughter Board

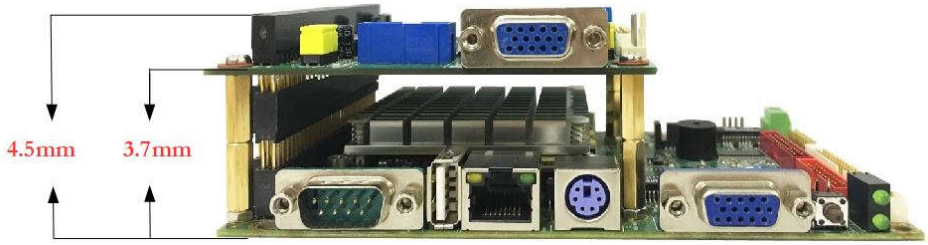
1. Please prepare PC104L40P x 1 and PC104L64P x 1 (as the image below shown).



2. Put on the nuts, pillars, screws and PC104 connector (as the image below shown)



3. As the image below shown after stacking.
   Note: Please contact ICOP if the nuts, pillars and screws are required.



Warranty

This product is warranted to be in good working order for a period of one year (12 months) from the date of purchase. Should this product fail to be in good working order at any time during this period, we will, at our option, replace or repair it without additional charge except as set forth in the following terms. This warranty does not apply to products damaged by misuse, modifications, accident or disaster. Vendor assumes no liability for any damages, lost profits, lost savings or any other incidental or consequential damage resulting from the use, misuse of, originality to use this product. Vendor will not be liable for any claim made by any other related party. Return authorization must be obtained from the vendor before returned merchandise is accepted. Authorization can be obtained by calling or faxing the vendor and requesting a Return Merchandise Authorization (RMA) number. Returned goods should always be accompanied by a clear problem description. Should you have questions about warranty and RMA service, please contact us directly.

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