



ICOP-6082 Series

**Tiny Vortex86 Module with
128MB/2S/IDE/LAN/CRT/Parallel**

User's Manual

(Revision1.0)

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● 1st issue date: April 11, 2003

● Revision date: None

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Chapter 0

Startup

0.1 Packing List

Product	Function	Package
Tiny Vortex86 Module	Tiny Vortex86™ Module with 128MB/2S/IDE/LAN CRT/Parallel	<ul style="list-style-type: none">● ICOP-6082 Module x1● HDD cable x 1● VGA cable x1● RS232 cable x 2● Printer cable x 1● Keyboard cable x1

0.2 Option Accessory

Product	Function	Package
ICOP-6083-XXX	Two LAN & Mini-PCI Module for Tiny Vortex86™ Module	● Tiny Vortex86 LAN I/O Add-on Module x1
ICOP-6084XX	BT-878A & Mini-PCI Module for Tiny Vortex86™ Module	● Tiny Vortex86 Video Capture Add-on Module x1

Note: XXX represents different types of I/O Expansion boards.

0.3 Ordering Information

- **CPU Module & Power Adapter**

ICOP-6082	Tiny Vortex86 CPU Module with 2S/IDE/LAN/Parallel/128MB DRAM Onboard
PS-15W	AC to DC Power Supply Unit 15Watts *

- **X-PCI I/O Expansion Modules**

Type Number	Function Description
ICOP-6083L1	X-PCI Single LAN I/O Module
ICOP-6083L2	X-PCI Dual LAN I/O Module
ICOP-6083-Mini-PCI	X-PCI Mini-PCI Module
ICOP-6084AV	X-PCI Video Captured Audio I/O Module
ICOP-6084A	X-PCI Audio I/O Module
ICOP-6084V	X-PCI Video Captured I/O Module, 3-channels

0.4 Specification

■ **ICOP-6082**

Tiny Vortex86™ Module 128MB/2S/IDE/LAN/CRT/Parallel

SoC	DM&P(SiS) <i>Vortex86™</i> System-On-Chip CPU-166MHz Data Bus: 64-bit Watchdog Timer: 128us up to 512us Real Time Clock (Need external Battery)
BIOS	AMI BIOS
System Memory	Onboard 128MB DRAM
Bus Interface	Specific X-PCI Bus Interface
Extended I/O Interface	<ul style="list-style-type: none"> ● Predefined Specific X-PCI bus I/O interface x1 ● Enhanced IDE interface x1 ● COM1/COM2 interface x1 each ● Printer interface x1 ● Keyboard & Mouse interface x1 each ● USB port x1 ● Speaker output interface x1
Connectors	<ul style="list-style-type: none"> ● 2.0mm Ø, 32x2 pin Pin Header for X-PCI 32-bit Interface x1 ● 2.0mm Ø 44-pin Box Header for IDE x1 ● 2.0mm Ø 10-pin Box Header for RS-232/485 x1 ● 2.0mm Ø 10-pin Box Header for & RS-485 x1 ● 2.54mm Ø 3-pin header for RS-485 select ● 2.0mm Ø 26-pin Box Header for Printer ● 2.0mm Ø 10-pin Box Header for USB x1 ● 2.0mm Ø 8-pin Pin Header for 10/100BaseT x1 ● 2.0mm Ø 10-pin Pin Header for VGA ● 2.54mm Ø 5-pin Molex header for Keyboard ● 2.54mm Ø 5-pin Pin Header for Mouse ● 2.0mm Ø 10-pin Pin Header for USB ● 2.0mm Ø 2-pin Pin Header for Speaker
LAN	<ul style="list-style-type: none"> ● Realtek 8100B single chip x1 ● Full-duplex transfer mode, doubles effective bandwidth ● NE2000 compatible with built-in 16KB RAM buffer ● Throughput 10/100Mbps
Power Requirement	Single Voltage +5V @1.5A~1.8A
Board Weight	800g
Board Size	100mm X 66mm (3.93 x 2.59 inches)
Operating Temperature	-20°C ~ +70°C

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Chapter 1

Introduction

1.1 Features

- PC/104 Embedded *Vortex86™* CPU Module (90 x 96 mm)
- DM&P *Vortex86™* System-On-Chip
- CRT VGA Display interface
- Onboard 128MB SDRAM
- Enhanced IDE devices
- One Bi-directional Parallel Port
- RS-232/485 interface
- Watchdog timer
- Onboard Keyboard & Mouse connector
- Onboard Ethernet, compatible with NE2000
- Single voltage +5 V power connector
- Operating temperature from $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$
- Board Support Package for Windows CE.NET and Windows XP Embedded
- Accept custom modification

1.2 Specifications

- **Embedded CPU:** DM&P *Vortex86™* System-on-Chip CPU – 166MHz, Realtime clock, and watchdog timer.
- **BIOS:** Y2K compliant AMI system BIOS
- **System Memory:** Onboard 128MB SDRAM
- **Bus Interface:** 32-bit X-PCI Bus Interface
- **Data Bus:** 64-bit
- **Bus Speeds:** PCI Bus – 33MHz
- **DMA Channels:** 7
- **Interrupt Levels:** 15
- **Enhanced IDE:** supports one port and up to two hard drives or Enhanced IDE devices of PIO mode 4. BIOS enabled/disabled
- **Watchdog Timer:** generates either a RESET, NMI or an IRQ when your application loses control over the system. Optionally the watchdog can trigger a user specified interrupt. The watchdog is configurable from 16 μ s ~ 256 μ s x4 hours
- **Real-time Clock:** included in *Vortex86™* SOC with onboard lithium battery backup for 10 years of data retention. CMOS data backup of BIOS setup and BIOS default.
- **Keyboard and Mouse Connectors:** Supports PS/2 Keyboard and mouse
- **Serial ports:** Supports high speed RS-232 port, high speed RS-232/485 port (jumper selectable).
- **Bi-directional Parallel Port:** supports SPP, EPP and ECP mode. BIOS enabled/disabled
- **Environmental and Power**
 - **Power Requirements:** single voltage +5 V @ 1.5A~1.8A
 - **Board Dimensions:** 100 (L) x 66 (W) mm.
 - **Board Weight :** 800 g
 - **Extended Operating Temperature:** -20°C ~+70 °C

1.3 VGA Interface

- **Chipset:** DM&P *Vortex86™* SOC
- **Memory:** Shared system memory up to 8MB
- **System Bus:** 33-bit PCI bus
- **Panel Data Bus:** 24-bit
- **Display:** CRT and LCD Flat Panel

- **Compliance:**
 - AGP 2.0 / 4X Compliant / Fully DirectX 8 Compliant
 - Built-In DVI / DSTN / VIP interface
 - Cooperates with "Video Bridge" to support NTSC/PAL TV / Digital LCD Monitor / Secondary CRT Monitor output

- **Digital Output:**
 - Supports VESA Standard Super High Resolution Graphic Modes
 - 640x480 16/256/32K/64K/16M Colors 160 Hz NI
 - 800x600 16/256/32K/64K/16M Colors 120 Hz NI
 - 1024x768 256/32K/64K/16M Colors 120 Hz NI
 - 1280x1024 256/32K/64K/16M Colors 85 Hz NI
 - 1600x1200 256/32K/64K/16M Colors 85 Hz NI
 - 1920x1440 256/32K/64K Colors 60 Hz NI
 - 1920x1440 256 Colors 75 Hz NI

1.4 Network Interface

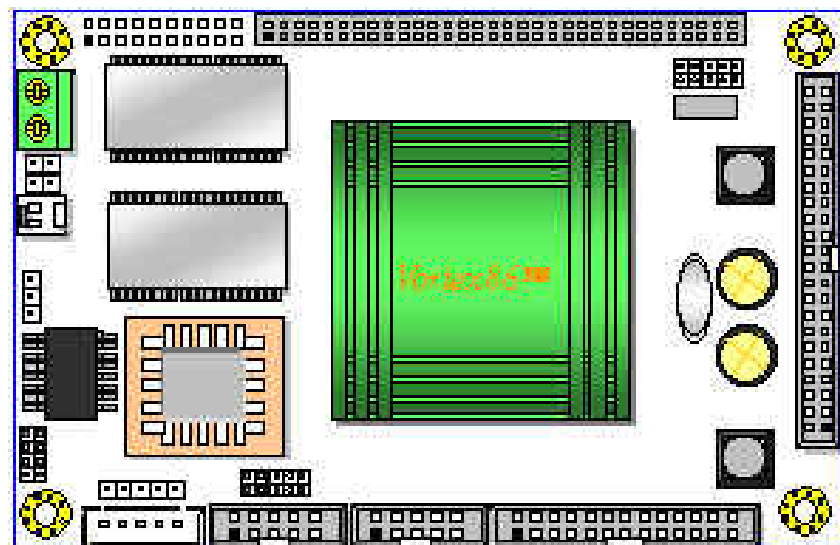
- **Chipset:** Realtek 8100B single chip
- **Type:** 10/100BASE-T
- **Transfer Mode:** Full duplex, doubles effective bandwidth
- **Buffer:** Built-in 16KB RAM Buffer.
- **Connectors:** 8-pin male header , pitch 2.0mm
- **Monitoring LEDs:** network ready indicator, network activity indicator
- **Compatibility:** NE2000

Chapter 2

Installation

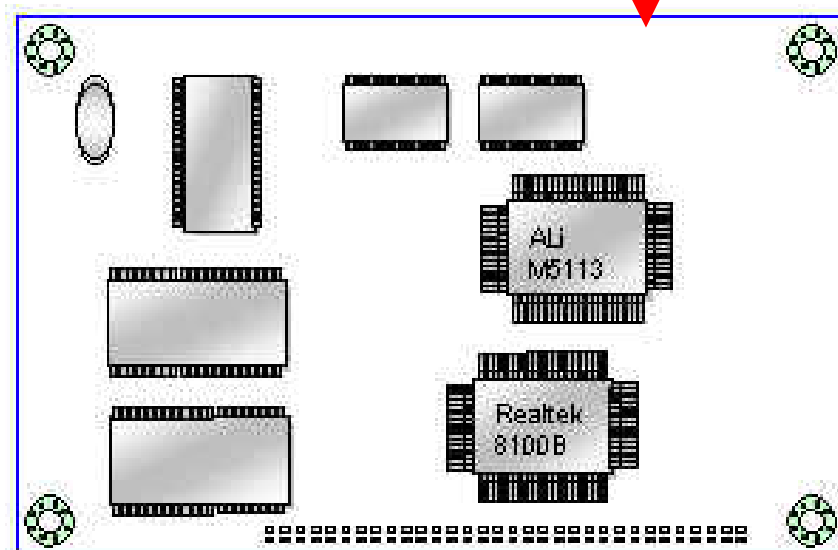
2.1 Board Outline

■ ICOP-6082 (Tiny Vortex86 Module)



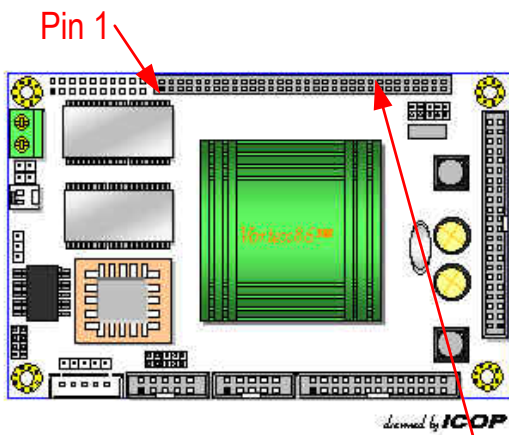
↑
Component Side

↓
Reverse Solder Side

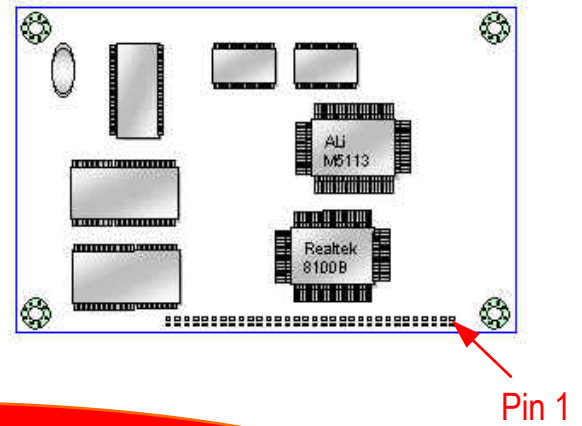


■ ICOP-6082 – X-PCI Bus Interface connector

Component Side



Reverse Solder Side

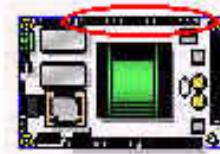


Warning : Be sure that you have the right orientation when adding Tiny I/O modules into the X-PCI bus of the ICOP-6082 (Tiny Vortex86™ CPU module). The available Tiny I/O modules include BT-878 Video Capture and 2-LAN I/O modules. The Manufacturer is not liable for any damage caused by wrong orientation.

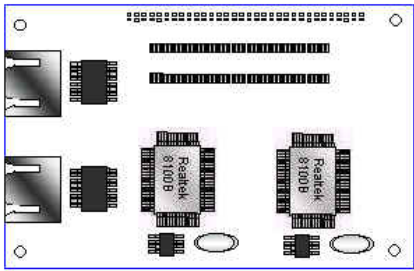
■ X-PCI Bus Pin Assignment

J1: X-PCI- 2.0 Ø 32x2-Box Header

Pin #	Signal Name	Pin #	Signal Name
1	GND	2	GND
3	AD0	4	AD1
5	AD2	6	AD3
7	AD4	8	AD5
9	AD6	10	AD7
11	AD8	12	AD9
13	AD10	14	AD11
15	AD12	16	AD13
17	AD14	18	AD15
19	VCC	20	VCC
21	AD16	22	AD17
23	AD18	24	AD19
25	AD20	26	AD21
27	AD22	28	AD23
29	AD24	30	AD25
31	AD26	32	AD27
33	AD28	34	AD29
35	AD30	36	AD31
37	VCC3	38	VCC3
39	CBE-0	40	CBE-1
41	CBE-2	42	CBE-3
43	PGNT-0	44	PREQ-0
45	PGNT-1	46	PREQ-1
47	PGNT-2	48	PREQ-2
49	INT-A	50	INT-B
51	INT-C	52	INT-D
53	GND	54	GND
55	FRAME-	56	IRDY-
57	TRDY-	58	STOP-
59	SERR-	60	PAR
61	DEVSEL-	62	PLOCK-
63	PCIRST-	64	PCICLK1

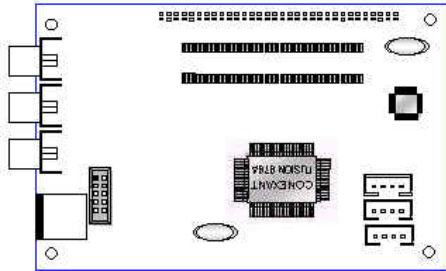


2.2 X-PCI Expansion Modules



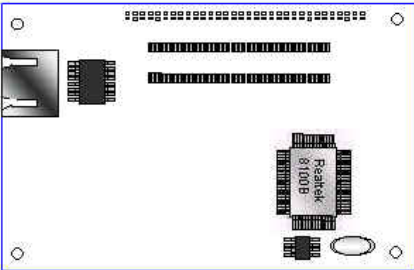
designed by ICOP

ICOP-6083L2



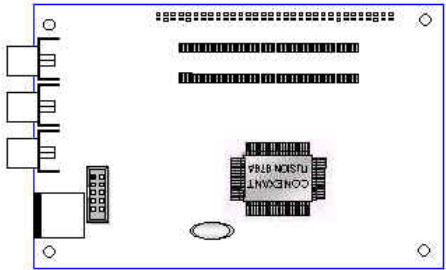
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ICOP-6084AV



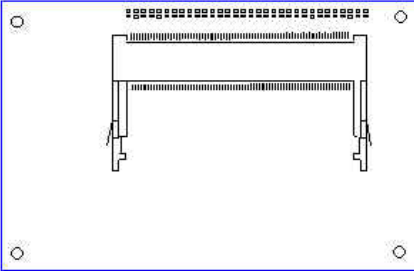
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ICOP-6083L1



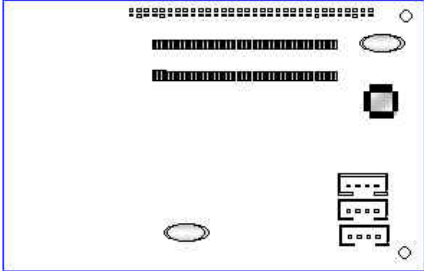
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ICOP-6084V



designed by ICOP

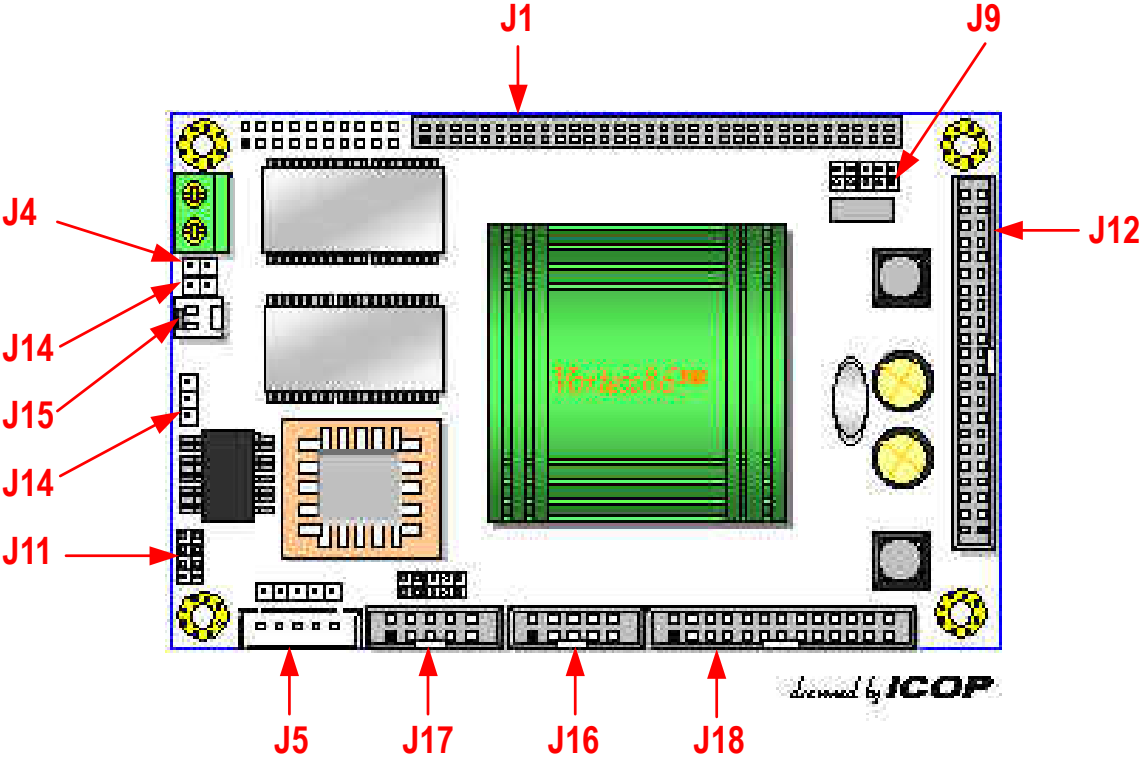
ICOP-6083-Mini-PCI



designed by ICOP

ICOP-6084A

2.3 Connectors & Jumpers Location

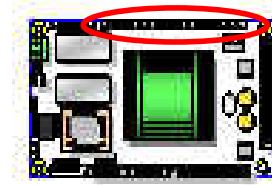
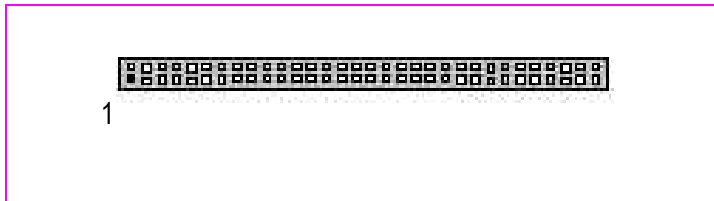


2.4 Connectors & Jumpers Summary

SUMMARY		
J1	X-PCI	2.0 Ø 64-pin Pin Header 32x2
J2	VGA	2.0 Ø 10-pin PinHeader 5x2
J3	LPC/AC97 CONN.	2.0 Ø 20-pin Pin Header 10x2
J4	RESET	2.54 Ø 2-pin Pin Header 2x1
J5	KBD	2.54 Ø 5-pin Molex Header 5x1
J7	SPEAKER	2.54 Ø 2-pin Pin Header 2x1
J9	USB	2.0 Ø 10-pin PinHeader 5x2
J10	MOUSE	2.54 Ø 5-pin Pin Header 5x1
J11	LAN	2.0 Ø 10-pin PinHeader 5x2
J12	IDE	2.0 Ø 44-pin Box Header 22x2
J13	POWER CONNECTOR	5.0 Ø 2-pin Terminal Block
J14	RS232/RS485 SELECT	2.54 Ø 3-pin Pin Header 3x1
J15	RS485	2.54 Ø 2-pin Pin Header 2x1
J16	COM1	2.0 Ø 10-pin Box Header 5x2
J17	COM2	2.0 Ø 10-pin Box Header 5x2
	COM1 TTL Signal Converter	
	COM2 TTL Signal Converter	
J18	PRINT	2.0 Ø 26-pin Box Header 13x2
ROM1	Flash ROM_PLCC	32-pin PLCC Socket

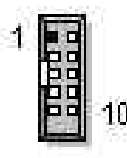
2.5 Pin Assignments & Jumper Settings

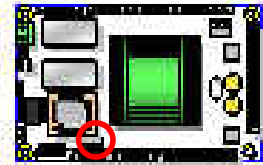
J1: X-PCI- 2.0 Ø 32x2-Box Header



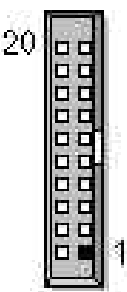
Pin #	Signal Name	Pin #	Signal Name
1	GND	2	GND
3	AD0	4	AD1
5	AD2	6	AD3
7	AD4	8	AD5
9	AD6	10	AD7
11	AD8	12	AD9
13	AD10	14	AD11
15	AD12	16	AD13
17	AD14	18	AD15
19	VCC	20	VCC
21	AD16	22	AD17
23	AD18	24	AD19
25	AD20	26	AD21
27	AD22	28	AD23
29	AD24	30	AD25
31	AD26	32	AD27
33	AD28	34	AD29
35	AD30	36	AD31
37	VCC3	38	VCC3
39	CBE-0	40	CBE-1
41	CBE-2	42	CBE-3
43	PGNT-0	44	PREQ-0
45	PGNT-1	46	PREQ-1
47	PGNT-2	48	PREQ-2
49	INT-A	50	INT-B
51	INT-C	52	INT-D
53	GND	54	GND
55	FRAME-	56	IRDY-
57	TRDY-	58	STOP-
59	SERR-	60	PAR
61	DEVSEL-	62	PLOCK-
63	PCIRST-	64	PCICLK1

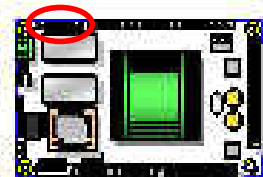
J2 : VGA - 2.0 Ø 10-pin Box Header 5x2

	Pin #	Signal Name	Pin #	Signal Name
	1	ROUT	2	GND
	3	GOUT	4	GND
	5	BOUT	6	GND
	7	HSYNC	8	GND
	9	VSYNC	10	GND




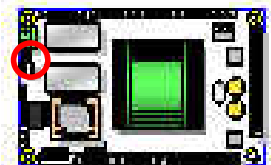
J3: LPC/AC97 CONN. - 2.0 Ø 20-pin Box Header 10x2 (Option)

	Pin #	Signal Name	Pin #	Signal Name
	1	GND	2	VCC
	3	LAD0	4	LAD1
	5	LAD2	6	LDA3
	7	SIRQ	8	LDRQ-
	9	VOSCX	10	LFRAME-
	11	PCIRST-	12	PCICLK
	13	AC RESET-	14	BT CLK
	15	SDAT10	16	SDATO
	17	SYNC	18	VCC3
	19	VCC	20	GND

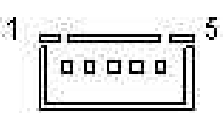


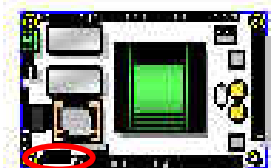
J4: RESET - 2.54 Ø 2-pin Header 2x1

	Pin #	Signal Name
	1	PWROK
	2	GND




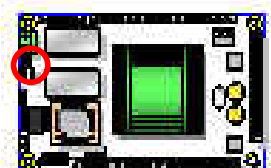
J5 :KBD - 2.54 Ø 5-pin Molex Header 5x1

	Pin #	Signal Name
	1	KBCLK
	2	KBDAT
	3	NC
	4	GND
5	SB5V	




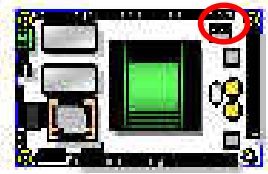
J7: SPEAKER - 2.54 Ø 2-pin Header 2x1

	Pin #	Signal Name
	1	SPKR
	2	VCC




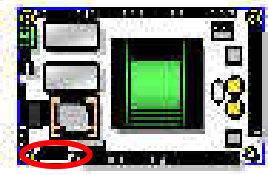
J9 : USB - 2.0 Ø pitch / 10-pin Box Header 5x2

	Pin #	Signal Name	Pin #	Signal Name
	1	VCC	2	VCC
	3	-DATA1	4	-DATA0
	5	+DATA1	6	+DATA0
	7	GND	8	GND
	9	GND	10	GND




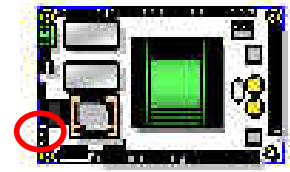
J10 :MOUSE - 2.54 Ø 5-pin Pin Header 5x1

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

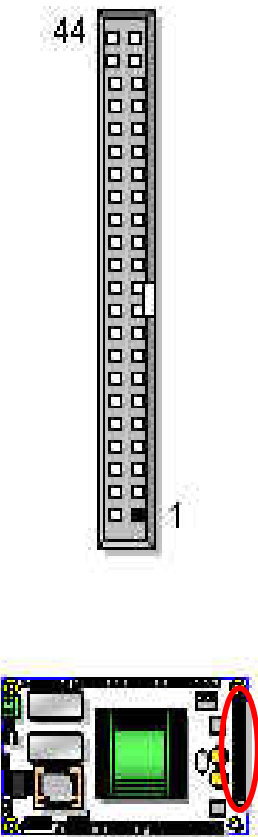


J11: LAN - 2.0 Ø pitch / 10-pin Box Header 5x2

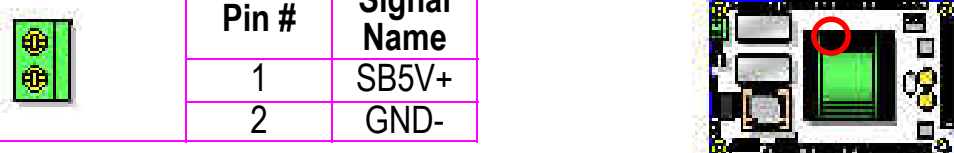
	Pin #	Signal Name	Pin #	Signal Name
	1	TX+	2	TX-
	3	RX+	4	NC
	5	NC	6	RX-
	7	NC	8	NC



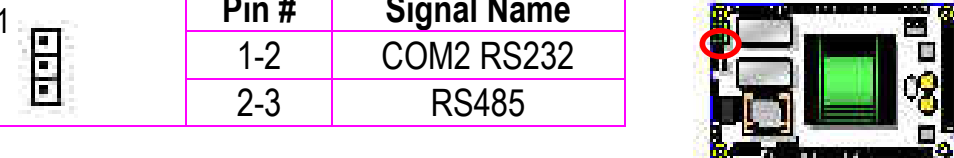
J12: IDE - 2.0 Ø 44-pin Box Header 22x2

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

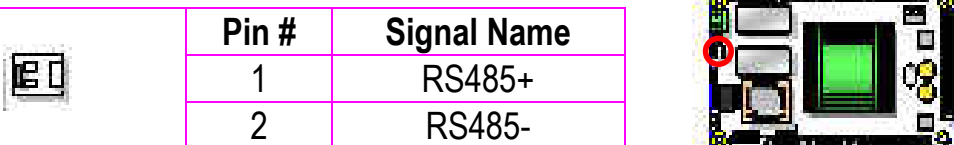
J13: POWER CONNECTOR - 5.0 Ø 2-pin Terminal Block

	Pin #	Signal Name
	1	SB5V+
	2	GND-


J14 : RS232/RS485 SELECT - 2.54 Ø 3-pin Pin Header 3x1

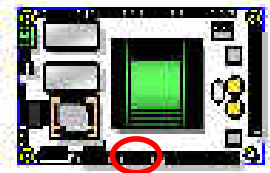
	Pin #	Signal Name
	1-2	COM2 RS232
	2-3	RS485

J15 : RS485 - 2.54 Ø 2-pin Pin Header 2x1


	Pin #	Signal Name
	1	RS485+
	2	RS485-

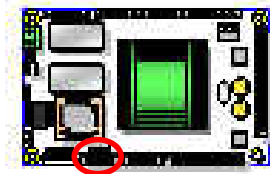
J16 : COM1 - 2.0 Ø10-pin Box Header 5x2

	Pin #	Signal Name	Pin #	Signal Name
	1	DCD1	2	RXD1
	3	TXD1	4	DTR1
	5	GND	6	DSR1
	7	RTS1	8	CTS1
	9	RI1	10	VCC



J17 : COM2 - 2.0 Ø10-pin Box Header 5x2

	Pin #	Signal Name	Pin #	Signal Name
	1	DCD2	2	RXD2
	3	TXD2	4	DTR2
	5	GND	6	DSR2
	7	RTS2	8	CTS2
	9	RI2	10	VCC

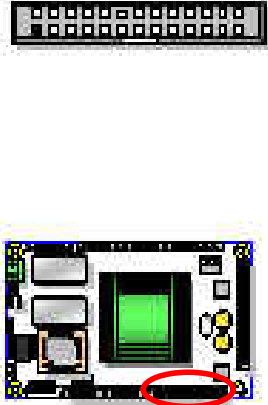


COM1 TTL & COM2 TTL Signal Converter

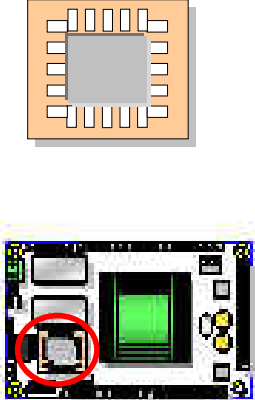
COM3 TTL			
Signal Name	Pin #	Pin #	Signal Name
RXD1	1	2	RXD1\
TXD1	3	4	TXD1\
CTS1	5	6	CTS1\
DTR1\	7	8	DTR1
DCD1	1	2	DCD1\
RTS1	3	4	RTS1\
DSR1	5	6	DSR1\
RI1\	7	8	RI1

COM4 TTL			
Signal Name	Pin #	Pin #	Signal Name
DSR2	1	2	DSR2\
RTS2	3	4	RTS2\
DCD2\	5	6	DCD2
RI2\	7	8	RI2
RXD2	1	2	RXD2_A
DTR2	3	4	DTR2\
TXD2	5	6	TXD2\
CTS2	7	8	CTS2\

J18: PRINTER –D-Sub 25F Connector

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

ROM1: FLASH ROM_PLCC – 32-pin PLCC Socket

	Pin #	Signal Name	Pin #	Signal Name
	1	XA18	2	XA16
	3	XA15	4	XA12
	5	XA7	6	XA6
	7	XA5	8	XA4
	9	XA3	10	XA2
	11	XA1	12	XA0
	13	XD0	14	XD1
	15	XD2	16	GND
	17	XD3	18	XD4
	19	XD5	20	XD6
	21	XD7	22	ROMCS0
	23	XA10	24	MDRCL
	25	XA11	26	XA9
	27	XA8	28	XA13
	29	XA14	30	XA17
	31	MWTCL	32	VCC

2.6 Watchdog Timer

The watchdog timer work flow of Vortex86 is: If the watchdog timer expires the first time, the expired event will set SFTMR0_STS and timer will reload its initial value and count again. If the timer expire the second time, the expired event will set SFTMR1_STS.

Software Watchdog Timer Initial Value: Default Value: FFh

I/O Address	Bit	Access	Description
84Ah	7:0	R/W	Software Watchdog Timer Initial Value Writing to this register will reload the software watchdog timer with the value specified in this register. If the software watchdog timer expires the first time, the expired event will set the SFTMR0_STS and the timer will reload its initial value and count again. If the timer expire the second time, the expired event will set the SFTMR1_STS. The timer value can't be read from this field.

Software Watchdog Timer Control Register: Default Value: 00h

I/O Address	Bit	Access	Description
84Bh	7	R/W	Software Watchdog Timer Counting Enable The software watchdog timer will start to count when this bit is set to one.
	6	RO	Reserved
	5:4	R/W	Software Watchdog Timer Clock Select 00 : 4 ms 01 : 1 second 10 : 1 minute 11 : 1 hour
	3:2	R/W	Software Watchdog Timer Expiration Event 1 Routing Select When SFTMR1_STS is set to one, an SMI#/SFTIRQ/PCIRST# will be generated according to the following combination. 00 : No effect 01 : SMI# 10 : SFTIRQ 11 : PCIRST#

1:0	R/W	Software Watchdog Timer Expiration Event 0 Routing Select When SFTMR0_STS is set to one, an SMI#/SFTIRQ/PCIRST# will be generated according to the following combination. 00 : No effect 01 : SMI# 10 : SFTIRQ 11 : PCIRST#
-----	-----	--

Legacy Event Status Register: Default Value: 00h

I/O Address	Bit	Access	Description
841h	7	R/WC	Software Watch Dog Timer Event 1 Status (SFTMR1_STS) This bit is set when the software watchdog timer expires the second time. This status bit does not have its corresponding enable bit and can survive under PCIRST#.
	6	R/WC	Software Watch Dog Timer Event 0 Status (SFTMR0_STS) This bit is set when the software watchdog timer expires the second time. This status bit does not have its corresponding enable bit and can survive under PCIRST#.

C Example

Those C code for DOS will show you more: ([Download C source code for DOS and execute file](#))

```
#include <conio.h>
#include <stdio.h>
#include <time.h>

void main()
{
    clock_t clk;
    int      nTime = 5;

    /* set time out */
    outp(0x84a, nTime);

    /* set timer clock to 1 second and "Timer Expiration Event 0/1" to reset system.
    */
    outp(0x84b, 0x9c);
```

```

printf("Press any key to stop clearing watchdog timer status...\n");
while(!kbhit())
{
    /* clear "Timer Expiration Event 0/1" bit */
    outp(0x841, 0xc0);
}

getch();

printf("System will be reset after %d seconds.\n", nTime * 4);

clk = clock();
while(!kbhit())
    printf("%2.2fr", (clock() - clk) / CLK_TCK);
}

```

Assembler Example code

```

mov dx,84ah ; set timeout = 20 second
mov al,5
out dx,al
mov dx,84bh ; set timer clock to 1 second and "Timer Expiration Event 0/1" to
reset system.
mov al,9ch
out dx,al

; clearing watchdog timer status
mov dx,841h
mov al,0c0h
out dx,al

```

Chapter 3

SVGA Setup

3.1 Introduction

The TINY VORTEX86 offers high performance/low cost *Vortex™* SoC (System on Chip) solution that integrates a x86 compatible processor, high performance North Bridge, advanced hardware GUI engine and Super-South bridge into a single chipset – this SoC design supports the now PC technology, USB, Legacy Removal, CIR, Memory Stick, Smart Card and Slotless Design for a variety of Industrial Applications covering automation, data acquisition, internet communication, and other information exchange devices. It also has a built-in VGA controller.

3.1.1 SoC Chipset

The embedded video uses the integrated Ultra-AGP™ VGA controller for Hardware 2D/video/Graphics Accelerators, this board supports conventional analog CRT monitor or flat panel. It is both AGP 4X / Fully DirectX 8 Compliant. It also provides Monitor / Secondary CRT Monitor output. This video SVGA controller supports conventional analog CRT monitor or flat panel. In addition, it also supports interlaced and non-interlaced analog monitors (color and monochrome VGA) in high-resolution modes while maintaining complete IBM VGA compatibility. Multiple frequency (multi-sync) monitors are handled as if they were analog monitors.

3.1.2 Display memory

The VGA controller can drive CRT displays or color panel displays with resolutions up to 1920 x 1440 at 256 colors (True colors). It supports Shared System Memory up to 128 MB.

Chapter 4

Network Interface

4.1 Introduction

The Realtek RTL-8100B 10/100Mbps Ethernet controller board supports both 10/100BASE-T and Coax 10Base-2 'BNC' connectors, and allows direct connection to your 10/100Mbps Ethernet based Local Area Network for full interaction with local servers, wide area networks such as the Internet.

I/O and IRQ settings can be done by software with the supplied utility software, or it can be set for Plug and Play compatibility. The controller supports : Full-Duplex Ethernet function to double channel bandwidth, auto media detection.

4.2 Software Support

- On-board EEPROM (93C46) programming
- Setup/Diagnostic program for DOS
- Help utility for easy installation
- RPL boot ROM for Novell Netware, Microsoft NT
- NDIS2 (DOS,OS/2,Lantastic,WFW3.1jKjK)
- NDIS3,NDIS4,NDIS5 for WIN95,98,NT3.51,4.0,5.0,WFW3.11
- Netware 16-bit ODI driver for DOS,OS/2 and 32-bit ODI driver for Netware 3.x,4.x,5.0 Server
- Packet driver for UNIX Client
- SCO Unix driver
- Linux driver

All operating systems that support standard NE2000

Warranty

This product is warranted to be in good working order for a period of one year 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 at no 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 will be 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.