ICOP
intelligent control on processor

EB-3362-I

with

**DM&P Vortex86DX3
1GHz processor**

Version 1.0

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Revision History

Revision	Date	Remark
1.0	June 1, 2018	First version release

Contents

1 General Information

1.1 Overview

EB-3362-I series, based on Vprtex86DX3 SoC with 2GB DDR3 RAM onboard memory, is designed to provide stable computing performance with low-power consumption benefit.

EB-3362-I series equipped with VGA, LAN, GLAN, 4USBs, 4COMs, SATA, SD card slot, GPIO, and wireless antenna (optional), is configured to meet a large variety of applications.

EB -3362-I can operate in temperature from -20°C to 70°C and support +8 to +24VDC and can be configured as industrial automation, process control, automotive controller, AVL, medical device, and machine control, etc.

1.2 Block Diagram
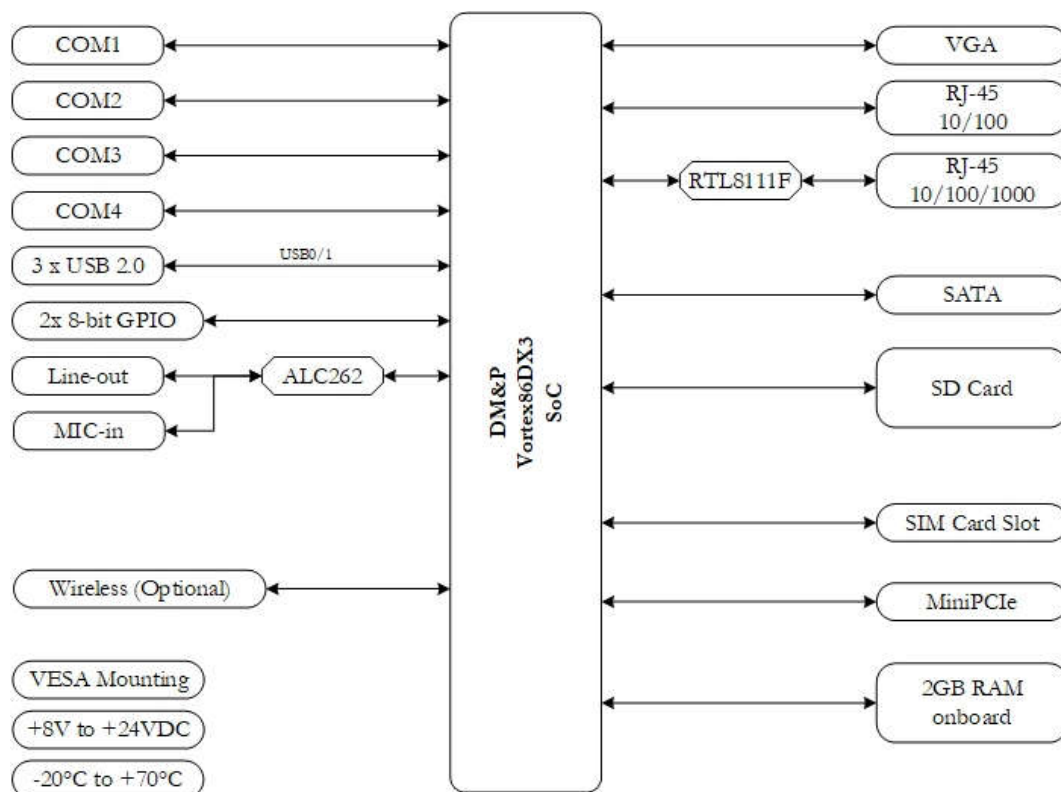
1.3 Specifications

Part Number	EB-3362-L2851C3P-I	EB-3362-C2G2SIM-I	EB-3362-L2C2851G1E-I
Processor	DM&P SoC CPU Vortex86DX3 - 1GHz		
RAM	2GB DDR3 Onboard		
BIOS	AMI BIOS		
Display	VGA: Maximum resolution up to 1920x1080 @ 60Hz		
LAN	10/100Mbps LAN x1 10/100/1000Mbps LAN x1	10/100Mbps LAN x1	10/100Mbps LAN x1 10/100/1000Mbps LAN x1
USB	External x3 Internal x1 (for wireless dongle)	External x3	External x3 Internal x1 (for wireless dongle)
SD Slot	1	1	---
Mini PCIe	1	1	---
SIM Card Slot	---	1	---
SATA	---	1	1
RS232	3	2	2
RS485	1	---	1
GPIO	--	8-bit GPIO x2	8-bit GPIO x1
Dimension	115 x 115 x 35mm		
Power Requirement	+8 to +24VDC		
Weight	510g		
Operating Temperature	-20°C to +70°C		
Auto Power On	Support		
VESA Mounting	75 x75mm 100 x100mm		
O/S Support	Windows7 Linux Windows Embedded Standard 7 DOS Windows Embedded Compact 7 POS Ready (WePOS) Windows Embedded CE6.0 QNX Windows XP Professional VxWorks Windows Embedded 2009 Free BSD		

1.4 Ordering Information

Box System

Part Number	Description
EB-3362-L2851C3P-I	Vorxtex86DX3 with 2GB RAM/LAN/GLAN/4USB/SD/MINIPCIE/4COM
EB-3362-C2G2SIM-I	Vorxtex86DX3 with 2GB RAM/LAN/3USB/SD/MINIPCIE/SIM/SATA/2COM/16GPIO
EB-3362-L2C2851G1E-I	Vorxtex86DX3 with 2GB RAM/LAN/GLAN/4USB/SATA/3COM/8GPIO

Mini PCIeDOM

Part Number	MLC	SLC	0°C to 70°C	-40°C to +85°C
IMPeDOM-8G-M	V		V	
IMPeDOM-16G-M	V		V	
IMPeDOM-32G-M	V		V	
IMPeDOM-64G-M	V		V	
IMPeDOM-8G-M-X	V			V
IMPeDOM-16G-M-X	V			V
IMPeDOM-32G-M-X	V			V
IMPeDOM-64G-M-X	V			V
IMPeDOM-8G-IS		V	V	
IMPeDOM-16G-IS		V	V	
IMPeDOM-32G-IS		V	V	
IMPeDOM-64G-IS		V	V	
IMPeDOM-8G-IS-X		V		V
IMPeDOM-16G-IS-X		V		V
IMPeDOM-32G-IS-X		V		V
IMPeDOM-64G-IS-X		V		V

*Mini PCIe DoM is strongly recommended if Windows 7 operating system is required.
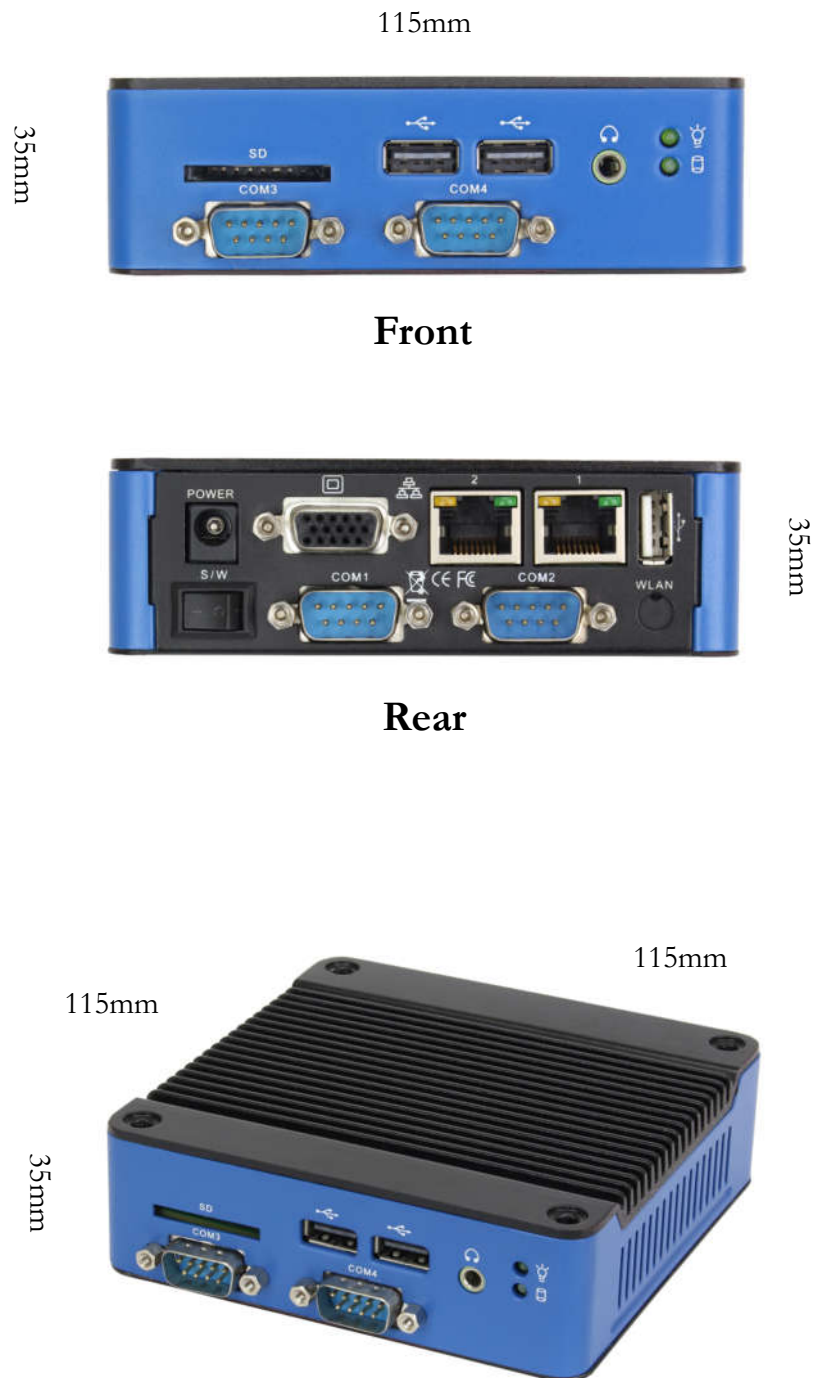
Wireless Dongle

Part Number	Description
USB-WLAN-IPEX-KIT	Internal Wireless USB Adapter
WIRELESS-ANTENNA-157MM	2dBi Dipole Antenna for Wireless USB Adapter, 157mm
WIRELESS-CABLE-150MM	150mm Cable for Antenna

USB-WLAN-IPEX-KIT   WIRELESS-CABLE-90MM   WIRELESS-ANTENNA-157MM

(WIRELESS-CABLE-150MM)

2 Hardware Information

2.1 Dimension

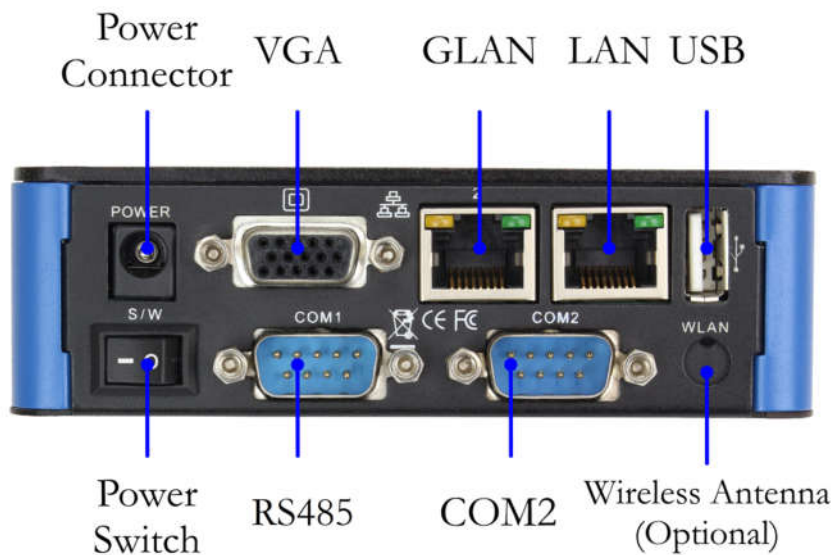115mm

Front

Rear

115mm

115mm

35mm

2.2 Product Outline

EB-3362-L2851C3P-I
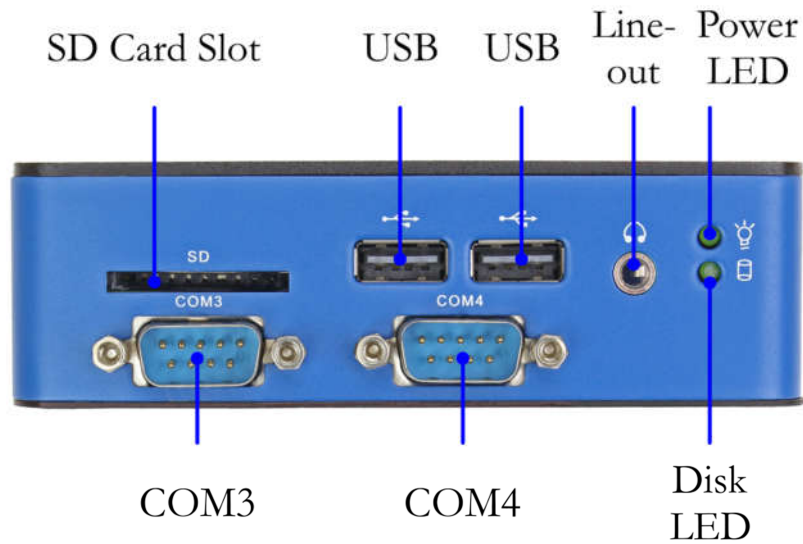
Front

Rear

EB-3362-C2G2SIM-I

SD Card Slot　　USB　USB　Line-out　Power LED

COM3　　　COM4　　　Disk LED

Front

Power Connector　VGA　　　LAN　USB

Power Switch　GPIO　　　GPIO　　Wireless Antenna (Optional)
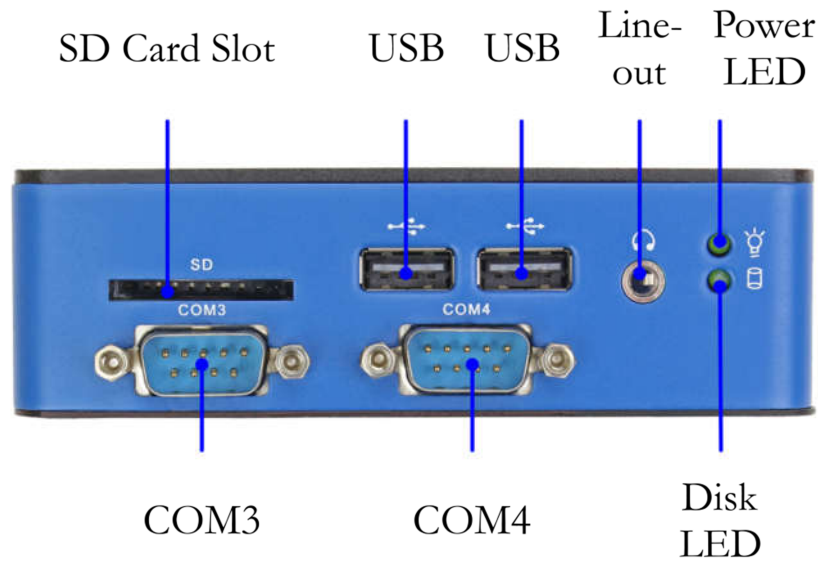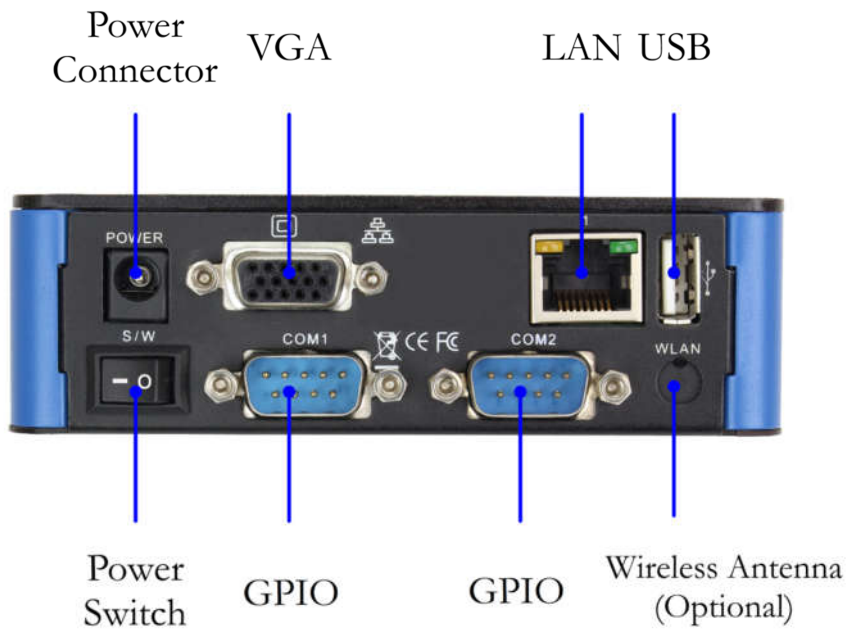
Rear

EB-3362-L2C2851G1E-I
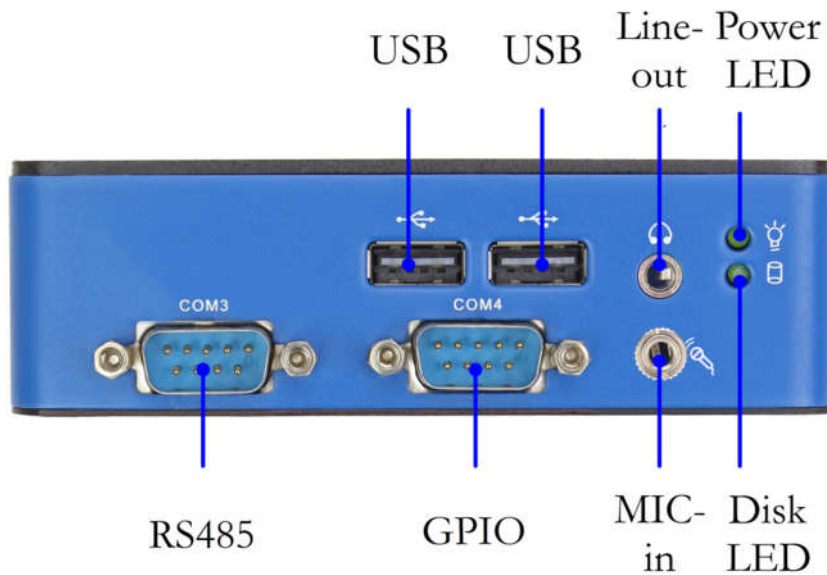
Front
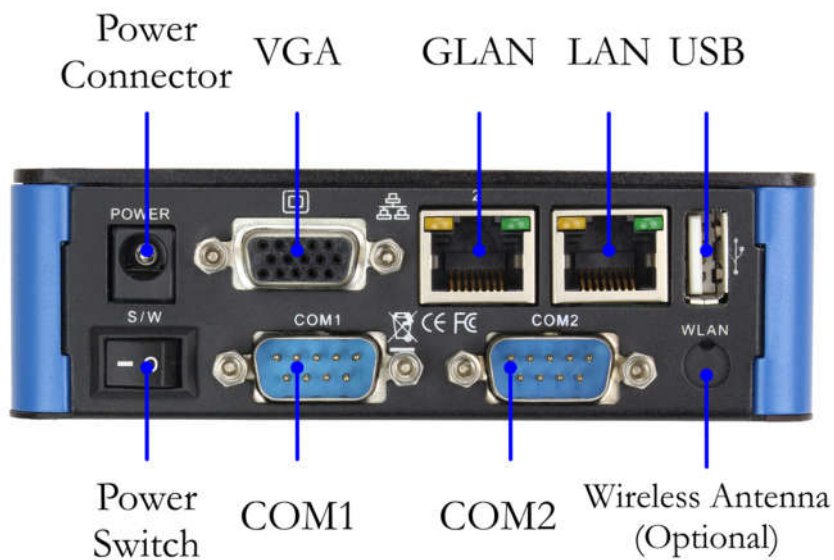
Rear

2.3 Pin Assignment for COM Ports

EB-3362-L2851C3P-I
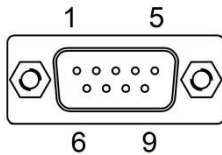
COM1

Pin#	Signal Name	Pin#	Signal Name
1	RS485-	2	RS485+
3		4	
5		6	
7		8	
9			

COM2/COM3/COM4

Pin#	Signal Name	Pin#	Signal Name
1	DCD	2	RXD
3	TXD	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	RI		

EB-3362-C2G2SIM -I
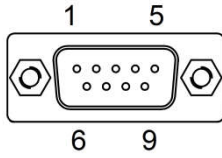
COM1

Pin#	Signal Name	Pin#	Signal Name
1	GP40	2	GP44
3	GP41	4	GP45
5	GND	6	GP46
7	GP42	8	GP47
9	GP43		

COM2

Pin#	Signal Name	Pin#	Signal Name
1	GP50	2	GP54
3	GP51	4	GP55
5	GND	6	GP56
7	GP52	8	GP57
9	GP53		

COM3/COM4

Pin#	Signal Name	Pin#	Signal Name
1	DCD	2	RXD
3	TXD	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	RI		

EB-3362-L2C2851G1E-I

```
1    5
6    9
```
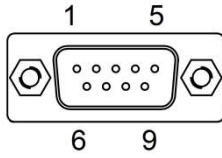
COM1/COM2

Pin#	Signal Name	Pin#	Signal Name
1	DCD	2	RXD
3	TXD	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	RI		

COM3

Pin#	Signal Name	Pin#	Signal Name
1	RS485-	2	RS485+
3		4	
5		6	
7		8	
9			

COM4

Pin#	Signal Name	Pin#	Signal Name
1	GP70	2	GP74
3	GP71	4	GP75
5	GND	6	GP76
7	GP72	8	GP77
9	GP73		

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/

4 Technical support

4.1 BIOS Introduction

Featuring AMI BIOS, EB-3362-I is a one stable module board for your applications. In this section, we will introduce you some basic AMI BIOS setting such as selecting storage and selecting COM port function.

4.1.1 Storage Selection

Main storage is set to SATA DoM as default on EB-3362-I. If SD card is required as main storage, please follow the following to change BIOS setting:

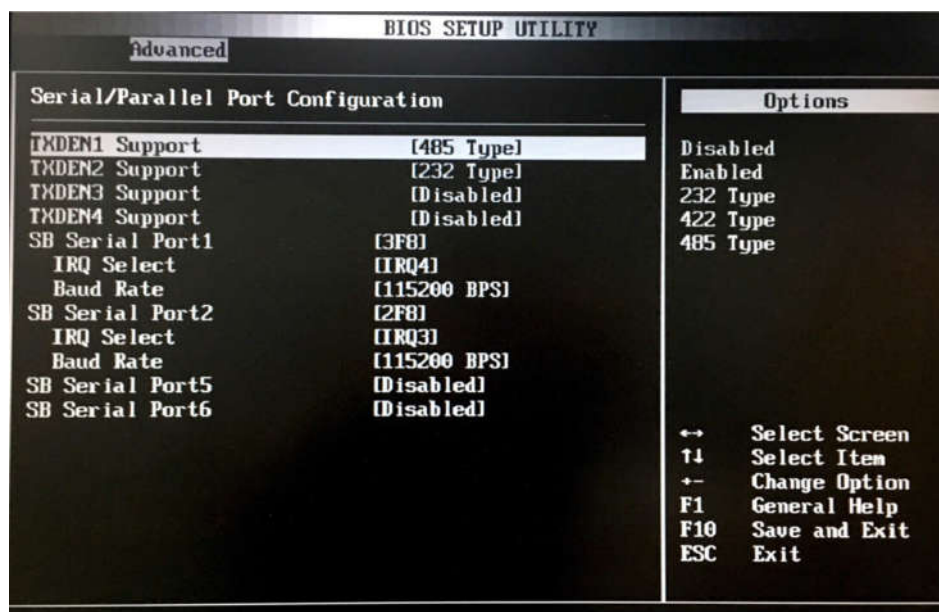**Path: Advanced > IDE Configuration > Primary IDE Pin Select > SD Card**

4.1.2 Serial Ports Switching

Serial ports are set RS232 or RS485 as default on EB-3362-I. If you would like to change serial port setting, please follow the following to change BIOS setting:

Path: Advanced > Serial/Parallel Port Configuration > TXDEN

Support > [232 Type] or [485 Type]

```
                        BIOS SETUP UTILITY
      Advanced

  Serial/Parallel Port Configuration              Options

  TXDEN1 Support              [485 Type]      Disabled
  TXDEN2 Support              [232 Type]      Enabled
  TXDEN3 Support              [Disabled]      232 Type
  TXDEN4 Support              [Disabled]      422 Type
  SB Serial Port1             [3F8]           485 Type
     IRQ Select               [IRQ4]
     Baud Rate                [115200 BPS]
  SB Serial Port2             [2F8]
     IRQ Select               [IRQ3]
     Baud Rate                [115200 BPS]
  SB Serial Port5             [Disabled]
  SB Serial Port6             [Disabled]

                                             ↔     Select Screen
                                             ↑↓    Select Item
                                             +-    Change Option
                                             F1    General Help
                                             F10   Save and Exit
                                             ESC   Exit
```

Technical Support Directly from ICOP

To offer you more accurate and specific solutions for the technical situations you have, please prepare the information below before contacting ICOP:

—Product name and serial number

—Description of the H/W environment (i.e.: working temperature, I/O board information, information of connection between main board and IO boards, and/or other devices, etc)

—Description of the S/W environment (i.e: operating system, version,

application software, and/or other related information, etc.)

   —A detailed description and photos of the technical situation

   —Any complement or technical situations you want ICOP more focusing on

User Manual Feedback

   To make this user manual more complete, if you have any comments or feedbacks to this manual, please feel free to write to info@icop.com.tw or contact your ICOP sales representative.

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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