# SYS940X-01

## User Guide

# Revision History

| Version | Change | Date |
|---------|--------|------|
| 1.0 | First Release | 10/03/2011 |
| 1.1 | 1. Rearranged Variants in Page-1<br>2. Added Variant Reference note in Page-3 | 10/21/2011 |

# Preface

This User Guide gives information about system layout, component installation, and regulatory compliance for the SYS940X-01.

## Intended Audience

This User Guide is intended for technically qualified personnel. It is not intended for general audiences.

## Intended Use

All Inforce boards are evaluated as Information Technology Equipment (I.T.E.) for use in personal computers (PC) for installation in homes, offices, schools, computer rooms, and similar locations. The suitability of this product for other PC or embedded non-PC applications or other environments, such as medical, industrial, alarm systems, test equipment, etc. may not be supported without further evaluation by Inforce Computing.

## Document Organization

The chapters in this User Guide are arranged as follows:

1   System Features: a summary of product features
2   Installing System Components: instructions on how to install the System and other hardware components
3   Appendix: Installing SATA driver for Windows XP installation.
4   Company contact information

## Conventions

The following conventions are used in this Guide:

⚠️**CAUTION**

   *Cautions warn the user about how to prevent damage to hardware or loss of data.*

📝 **NOTE**

   *Notes call attention to important information.*

## Support Information

Every effort has been made to ensure the accuracy of the user Guide. If you have comments, questions, or ideas regarding the application or user Guide contact technical support:

**techsupport@inforcecomputing.com**

# Terminology

The table below gives descriptions to some common terms used in the User Guide.

| Term | Description |
|------|-------------|
| ASIC | Application Specific Integrated Circuit |
| BIOS | Basic Input/ Output System |
| BLDK | Boot Loader Development Kit |
| C | Celsius |
| CSA | Canadian Standards Association |
| DC | Direct Current |
| DDR | Double Data Rate |
| GB | Gigabyte (1,073,741,824 bytes) |
| GHz | Gigahertz (one billion hertz) |
| GPIO | General Purpose Input / Output |
| LAN | Local Area Network |
| LPC | Low Pin Count |
| LVDS | Low Voltage Differential Signaling |
| MB | Megabyte (1,048,576 bytes) |
| MHz | Megahertz (one million hertz) |
| PCI | Peripheral Component Interconnect |
| REACH | Registration, Evaluation, Authorization and Restriction of Chemical substances |
| ROHS | Restriction of Hazardous Substances |
| RS | Recommended Standard |
| SATA | Serial Advanced Technology Attachment |
| SD | Secure Digital |
| SDVO | Serial Digital Video Out |
| SPI | Serial Peripheral Interface |
| UL | Underwriters Laboratories |
| USB | Universal Serial Bus |
| V | Voltage |
| VGA | Video Graphics Array |
| WEEE | Waste Electrical and Electronic Equipment |

# Contents

# Introduction

The Inforce® SYS940X-01 Portable Computing Platform is a highly-integrated processor system that provides rich and flexible features to embedded and mobile system designers. Based on Intel® Atom™ technology specifically created for ultra-mobile computing, the SYS940X-01 offers outstanding performance in a small form-factor to optimize solutions for a variety of portable and fixed installation applications.

The SYS940X-01 platform supports Microsoft Windows XP and out-of-the-box Linux operating systems. Developers can leverage thousands of applications and tools that are already available for the PC desktop to accelerate their development cycle and time-to-market.

The SYS940X-01 supports Intel® Virtualization (VT-x) technology.

The system is available in different factory configurations as shown in the following table:

**Table 1: SYS940X-01 Variants**

| System Configuration | | | Board |
|---|---|---|---|
| **SYS940X-01** | **CPU Frequency** | **System Memory** | **IFC940X-00** |
| SYS9400-01 | 1.3GHz | 512MB | IFC9400-00 |
| SYS9401-01 | 1.3GHz | 1GB | IFC9401-00 |
| SYS9402-01 | 1.0GHz | 512MB | IFC9402-00 |
| SYS9403-01 | 1.0GHz | 1GB | IFC9403-00 |
| SYS9404-01 | 600MHz | 512MB | IFC9404-00 |
| SYS9405-01 | 1.6GHz | 512MB | IFC9405-00 |
| SYS9406-01 | 1.6GHz | 1GB | IFC9406-00 |

# 1   System Features

This chapter briefly describes the main features of the SYS940X-01.Table 2 summarizes the features of the system.

**Table 2: System Features**

| | |
|---|---|
| **Form Factor** | ECX (146 millimeters[5.7 inches] x 102 millimeters [4.0 inches]) |
| **Processor** | Passively-cooled, soldered-down Intel® Atom™ Processor E6xx,600MHz to 1.6GHz |
| **Main Memory** | 512MB-1GB of DDR2 800 MHz system memory |
| **Chipset** | Intel® Platform Controller Hub EG20T PCH |
| **Display** | ➢ LVDS<br>➢ SDVO – VGA ASIC – CH7317 A from Chrontel |
| **Audio** | Intel® High Definition Audio<br>➢ Microphone/Headphone header, Buzzer<br>➢ Audio Codec – ALC232 from Realtek |
| **Expansion** | x1 Mini PCI Express slot |
| **Storage** | ➢ Two SATA 2.0 ports (3Gb/s per port)<br>➢ x1 SD Card Slot |
| **Peripheral Interfaces** | ➢ x2 RS-232<br>➢ x5 USB 2.0 Host ports<br>➢ x1 SPI header |
| **Debug Ports** | x1 LPC header |
| **BIOS** | ➢ Phoenix BIOS<br>➢ Intel BLDK1<br>➢ Intel BLDK2 |
| **LAN Support** | Gigabit Ethernet |
| **Power** | +12V / 1.5A Input Socket |
| **Power Management** | Support for Advanced Configuration and Power Interface (ACPI) |
| **Environment** | ➢ Operating Temperature:   $0^o$C to $55^o$C<br>➢ Storage Temperature:    $-20^o$C to $85^o$C<br>➢ Relative Humidity:        5% to 95%, non-condensing<br>➢ RoHS compliant<br>➢ REACH: In progress<br>➢ WEEE |
| **Safety** | ➢ UL 60950-1, 2nd Edition, 2007-03-27 (Information Technology Equipment - Safety - Part 1: General Requirements)<br>➢ CSA C22.2 No. 60950-1-07, 2nd Edition, 2007-03 (Information Technology Equipment - Safety - Part 1: General Requirements) |

![Note icon] **Note**

*CPU frequency and System memory configuration are not same in all the variants of the board. For detailed configuration list, refer to the SYS940X-01 Variants in page1.*

## 1.1  System Component Overview

Figure 1 shows the location of the major components on SYS940X-01.
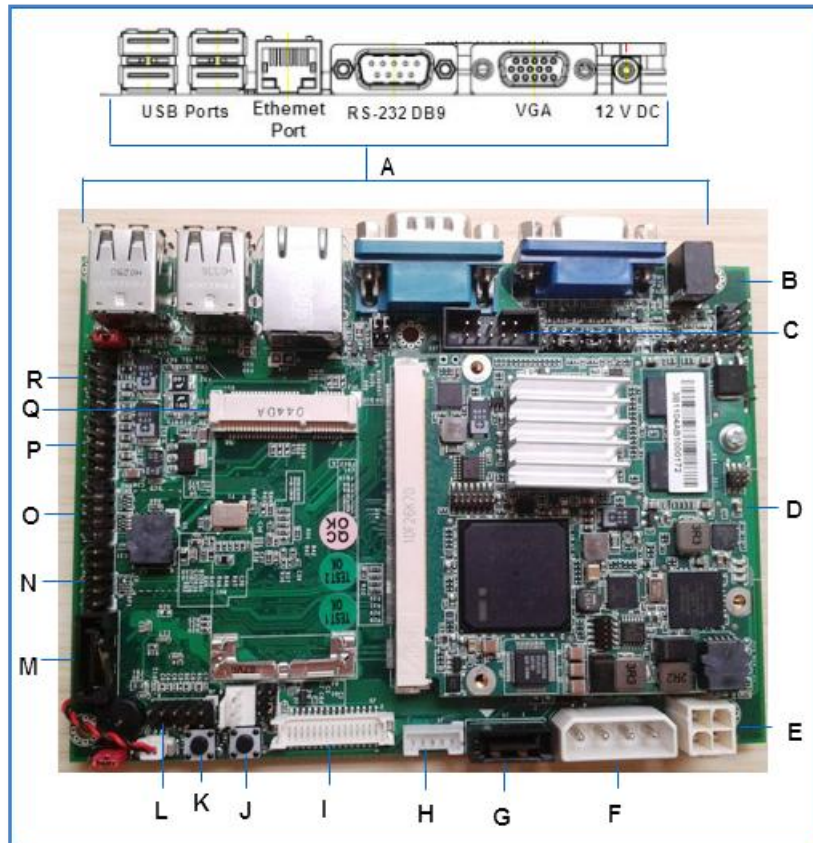
**Figure 1: System SYS940X-01 Components**



**Table 3: System Components**

| Label | Description | Label | Description |
|-------|-------------|-------|-------------|
| A | Back panel connectors | B | ECX Q7 carrier card |
| C | RS232 header | D | IFC940x-01 board |
| E | Auxiliary power connector | F | SATA power connector |
| G | SATA DATA connector 0 | H | LVDS back light connector |
| I | LVDS connector | J | Restart switch |
| K | Power switch | L | Audio header |
| M | SATA DATA connector 1 | N | GPIO header |
| O | LPC debug port | P | USB header 0 |
| Q | Mini PCIex1 connector | R | USB header 1 |

## Form Factor

The SYS940X-01 complies with the ECX form factor standard (146 millimeters [5.7 inches] x 102 millimeters [4.0 inches]).

## Processor

The SYS940X-01 includes the Intel® Atom™ E6xx Processor (Tunnel Creek).The processor is soldered down to the board and is not field upgradeable.

**Note**

*The system is designed to be passively cooled in a properly ventilated chassis. Chassis venting locations are recommended above the processor heatsink area for maximum heat dissipation effectiveness.*

## System Memory

The SYS940X-01 system supports up to 1GB of DDR2 800 MHz memory. The system memory is soldered down to the board and is not field upgradable.

**Note**

*For feature list, refer to the SYS940X-01 Variants in page1*

## Chipset

The SYS940X-01 system includes the Intel® Platform Controller Hub EG20T PCH (Topcliff).

## Display

The SYS940X-01 system supports LVDS and VGA display connectors as follows:

➢ The LVDS port supports 112MHz single channel interface at 24bpp. The maximum supported resolution is 1366 x 768

➢ SDVO to VGA controller CH7317A is present on the system which provides VGA interface

## Audio

The SYS940X-01 system supports Intel® High Definition Audio via an onboard microphone/headphone header and internal Buzzer.

## Expansion Capabilities

The SYS940X-01 system supports one x1 Mini PCI express slot. It can be used for wireless connectivity or other compatible expansion modules.

## Storage

The SYS940X-01 system supports Two SATA 2.0 ports 3 GB/s per slot and one SD card slot.

## Peripheral Interfaces

The SYS940X-01 system supports the following peripheral interfaces.

➢ Two RS-232 ports: one DB9 (selectable connector as RS-422/485) and one RS-232 onboard header

➢ Four USB 2.0 Host ports

➢ One USB 2.0 Host onboard header

➢ One SPI header

## Debug Ports

The SYS940X-01 system supports system debugging using the onboard LPC header.

## BIOS

The SYS940X-01 system supports following BIOS and Boot Loader Development Kits:

- ➢ Phoenix
- ➢ Intel BLDK1
- ➢ Intel BLDK2

## LAN

The SYS940X-01 system includes one Gigabit Ethernet (1000BASE-TX) port through a standard RJ-45 connector.

## Power

The SYS940X-01 system operates using an external +12V, 1.5A power supply.

## Power Management

The SYS940X-01 system supports Advanced Configuration and Power Interface (ACPI).

## Environmental Specifications

| | |
|---|---|
| Operating Temperature | $0^{o}$C to $55^{o}$C |
| Storage Temperature | $-20^{o}$C to $85^{o}$C |
| Relative Humidity | 5% to 95%, non-condensing |
| RoHS compliant | |
| REACH | In progress |
| WEEE | |

## Safety

- ➢ UL 60950-1, 2nd Edition, 2007-03-27 (Information Technology Equipment - Safety - Part 1: General Requirements).
- ➢ CSA C22.2 No. 60950-1-07, 2nd Edition, 2007-03 (Information Technology Equipment - Safety - Part 1: General Requirements).

## 1.2 Operating System Support

**Phoenix BIOS supports following operating system**

- ➢ Microsoft Windows XP SP3
- ➢ Fedora 11 (Linux Kernel Version 2.6.29)
- ➢ Fedora 14 (Linux Kernel Version 2.6.35)
- ➢ Ubuntu 11.04 (Linux Kernel Version 2.6.38)
- ➢ Meego 1.0 (Linux Kernel Version 2.6.33)
- ➢ Meego 1.1 (Linux Kernel Version 2.6.35)
- ➢ Debian 6.0.2 ( kernel version 2.6.32)

**BLDK1 support following operating system**

- ➢ Fedora 11 Timesys version

**BLDK2 support following operating system**

- ➢ Fedora 11 Timesys version
- ➢ Windows Embedded Compact
- ➢ UEFI Shell 2.0

## 1.3 Drivers and Tools

Download Linux and Windows drivers from http://www.inforcecomputing.com/products.html#01

# 2    Installing System Components

This chapter explains about how to:

➢ Assemble CPU module

➢ Install the top and bottom acrylic sheet on the board.

➢ Connect SATA drives

➢ Connect to internal headers and connectors

➢ Configure jumper

## 2.1   Before You Begin

⚠️**CAUTION**

*The procedures in this chapter assumes familiarity with the general terminology associated with embedded systems and with the safety practices and regulatory compliance required for using and modifying electronic equipment.*

*Disconnect the system from its power source and from any telecommunications links, networks, or modems before performing any of the procedures described in this chapter. Failure to disconnect power, telecommunications links, networks, or modems before you open the computer or perform any procedures can result in personal injury or equipment damage. Some circuitry on the system can continue to operate even though the power button is off.*

*Follow these guidelines before you begin using the SYS940X-01 system:*

➢ Always follow the steps in each procedure in the correct order.

➢ Set up a log to record information about your system, such as model, serial numbers, installed options, and configuration information.

➢ Electrostatic discharge (ESD) can damage components. Perform the procedures described in this chapter only at an ESD workstation using an antistatic wrist strap and a conductive foam pad. If such a station is not available, you can provide some ESD protection by wearing an antistatic wrist strap and attaching it to a metal part of the computer chassis.

### Installation Precautions

When you install and test the SYS940X-01 system, observe all warnings and cautions in the installation instructions.

To avoid injury, be careful of:

➢ Sharp pins on connectors or headers

➢ Sharp pins on printed circuit assemblies

➢ Rough edges and sharp corners on the chassis

➢ Hot components (such as voltage regulators and heat sinks)

➢ Damage to wires that could cause a short circuit

Observe all warnings and cautions that instruct you to refer computer servicing to qualified technical personnel.

### Prevent Power Supply Overload

Do not overload the power supply output. To avoid overloading the power supply, make sure that the calculated total current loads of all the modules within the system is less than the output current rating of the power supply.

## Observe Safety and Regulatory Requirements

Read and adhere to the instructions in this section and the instructions supplied with the chassis and associated modules. If you do not follow these instructions and the instructions provided by chassis and module suppliers, you increase safety risk and the possibility of noncompliance with regional laws and regulations.

# 2.2   Assembling CPU Module

Steps to assemble CPU module in SYS940X-01 system:

1.  Observe the precautions in <u>Before You Begin</u> on page 6.
2.   Insert the four M2.5 copper pillar screws in the board as shown in the following figure 2.

**Figure 2: Inserting Pillar screws**
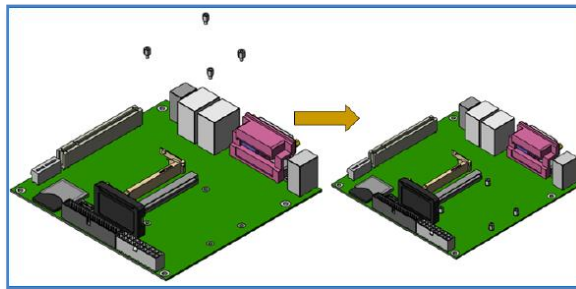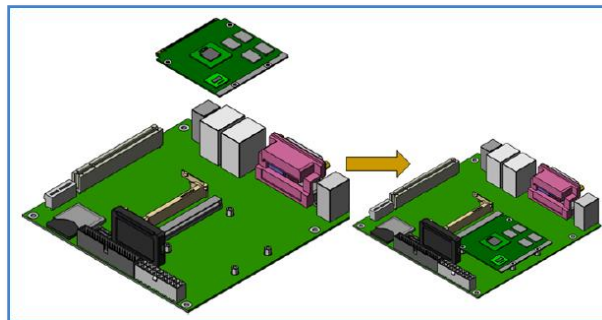


3.  Place the CPU module at top of the four M2.5 copper pillar screws in the base board as shown in the following figure 3.

![NOTE icon] NOTE

   *Ensure the alignment of module screw hole.*

**Figure 3: Placing CPU Module**

## 2.3   Installing top and bottom acrylic sheet on the board

Steps to insert SYS940X-01 system in acrylic sheet:

1.  Observe the precautions in Before You Begin on page 6.

2.  Insert the 4 long pillar screws and 4 short pillar screws in the acrylic sheet as shown in the following figure 4.

**Figure 4: Acrylic bottom sheet**



3.  Place the hard disk at middle of the base acrylic sheet as shown in the following figure 5.

**Figure 5: Place hard disk in middle of acrylic sheet**

4.  Place the board at top of the 4 short pillar screws in the base acrylic sheet and attach the board with screws as shown in the following figure 6.

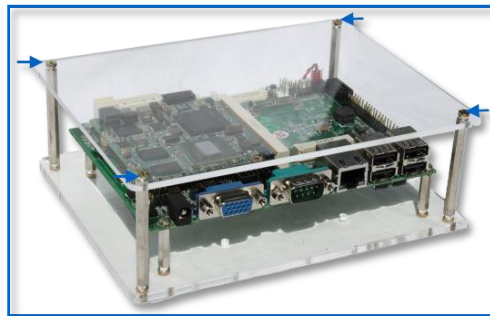**Figure 6: Attach the board with screws**



🖉 NOTE

*Ensure the alignment of module screw hole.*

5.  Place the acrylic sheet at top of the 4 long pillar screws and attach the acrylic sheet with screws as shown in the following figure 7.

**Figure 7: Attach the acrylic sheet with screws**

## 2.4   Connecting SATA Drives

SYS940X-01 supports two SATA drives with one data connector and one power connector.

Steps to connect a SATA drive to the board:

1.   Observe the precautions in Before You Begin on page 6.
   2.   Attach one end of the SATA data cable to a SATA connector on the board as shown in the figure 8 label A.
   3.   Attach the other end of the SATA data cable to the SATA drive.
   4.   Attach one end of the 4-pin power connector on the board as shown in the figure 8 label B.
   5.   Attach the other end of the SATA power connector to the SATA drive.

**Figure 8: Connecting the SATA Data and Power Cables**
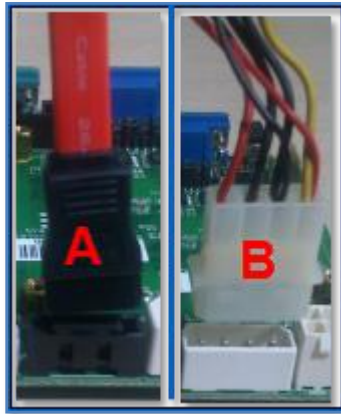
## 2.5   Connecting to the Internal Headers and Connectors

Before connecting cables to the internal headers or connectors, observe the precautions in "Before You Begin" on page 6. Figure 9 shows the location of the board's internal connectors and headers, Table 4 describes the internal connectors and headers identified in Figure 9.

**Figure 9: Internal Headers and Connectors**
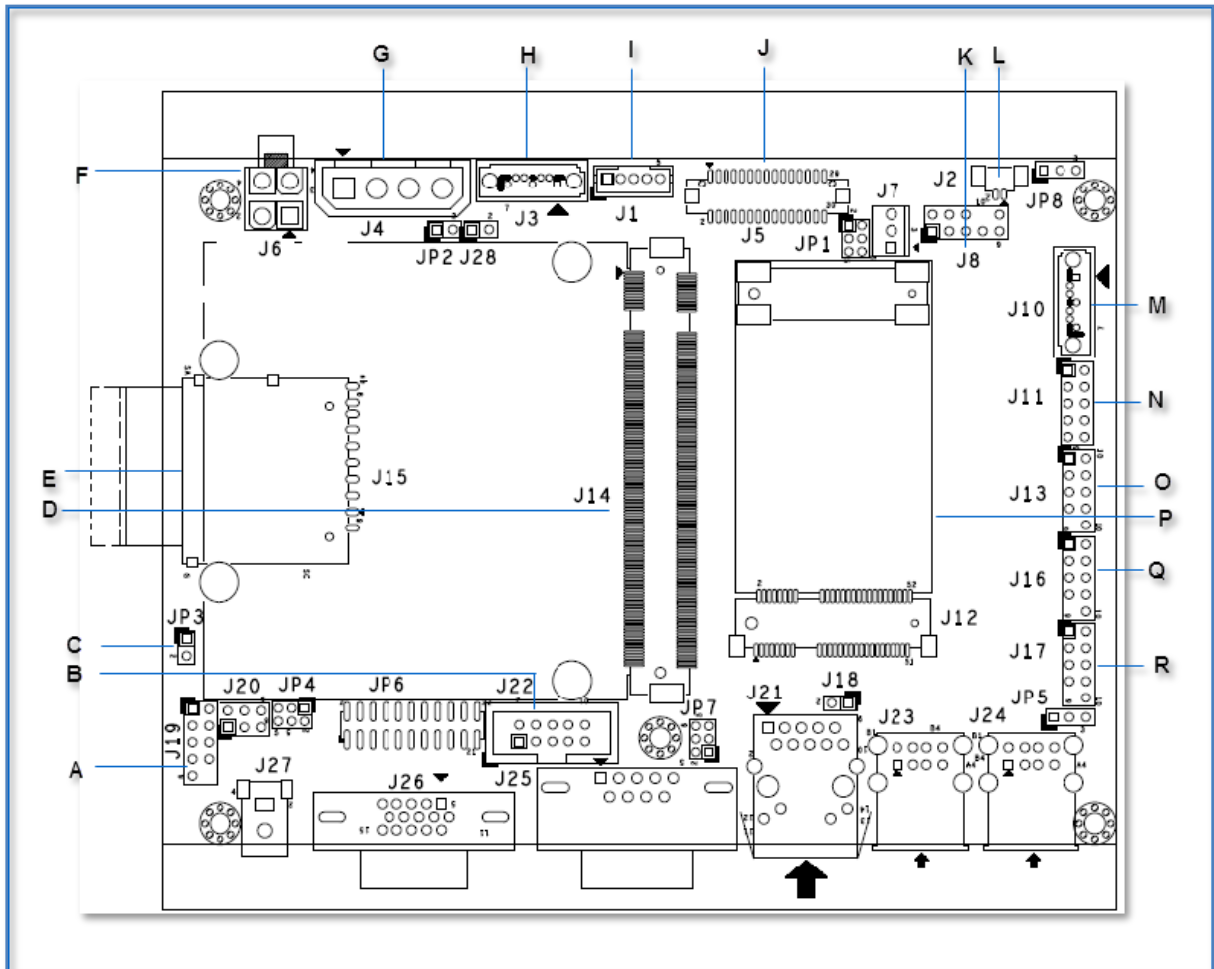


**Table 4: Internal Connectors and Headers**

| Item | Description | Item | Description |
|------|-------------|------|-------------|
| A | Front panel control header | B | RS232 header |
| C | Auto power header | D | Q7 connector |
| E | SD cord slot | F | Auxiliary power connector |
| G | SATA power connector | H | SATA data connector 0 |
| I | LVDS back light connector | J | LVDS connector |
| K | Audio header | L | RTC battery connector |
| M | SATA data connector 1 | N | GPIO header |
| O | LPC debug port | P | Mini PCI connector |
| Q | USB header 0 | R | USB header 1 |

## Internal Connectors and Headers

Table 5 through Table 20 lists the signal names for the connectors and headers.

### Table 5: J22 COM2 Serial Port BOX Header

| Pin | Signal Name | Pin | Signal Name |
|-----|-------------|-----|-------------|
| 1 | DCD#2 | 2 | DSR#2 |
| 3 | RXD#2 | 4 | RTS#2 |
| 5 | TXD#2 | 6 | CTS#2 |
| 7 | DTR#2 | 8 | 2RI# |
| 9 | GND | 10 | NO PIN |

### Table 6: J15 SD Card Slot

| Pin | Signal Name |
|-----|-------------|
| 1 | DAT3 |
| 2 | CMD_RSP |
| 3 | GND |
| 4 | VCC |
| 5 | CLK |
| 6 | GND |
| 7 | DAT0 |
| 8 | DAT1 |
| 9 | DAT2 |
| Sa | WP3 |
| Sb | CD# |
| Sc | C#_COM |

### Table 7: J4 Power Connector

| Pin | Signal Name | Pin | Signal Name |
|-----|-------------|-----|-------------|
| 1 | Ground | 2 | Ground |
| 3 | +12 V | 4 | +12 V |

### Table 8: J3/J10 SATA Interface Connector

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

**Table 9: J1 LVDS and Back Light connector**

| Pin | Signal Name |
|-----|-------------|
| 1 | Back light enable |
| 2 | GND |
| 3 | +12V |
| 4 | Back light control |
| 5 | +5V |

**Table 10: J8 Audio Header**

| Pin | Signal Name |
|-----|-------------|
| 1. | CN_MIC_R |
| 2 | AGND |
| 3 | CN_MIC-L |
| 4 | AGND |
| 5 | CN_LINOUT-R |
| 6 | NC |
| 7 | VCC |
| 8 | NO PIN |
| 9 | CN_LINOUT-L |
| 10 | NC |

**Table 11: J2 RTC Battery Connector**

| Pin | Signal Name |
|-----|-------------|
| 1 | Positive |
| 2 | Negative |

**Table 12: J11 GPIO header**

| Pin | Signal Name | Pin | Signal Name |
|-----|-------------|-----|-------------|
| 1 | LPC GP30 | 2 | LPC GP31 |
| 3 | LPC GP32 | 4 | LPC GP33 |
| 5 | LPC GP34 | 6 | LPC GP35 |
| 7 | LPC GP36 | 8 | LPC GP37 |
| 9 | GND | 10 | VCC |

**Table 13: J16 USB Header (Only USB2.0 Device)**

| Pin | Signal Name | Pin | Signal Name |
|-----|-------------|-----|-------------|
| 1 | +5V | 2 | +5V |
| 3 | USBD6- | 4 | NC |
| 5 | USBD6+ | 6 | NC |
| 7 | GND | 8 | GND |
| 9 | NO PIN | 10 | NC |

**Table 14: J17 Client USB Header (Only USB2.0 Device)**

| Pin | Signal Name | Pin | Signal Name |
|-----|-------------|-----|-------------|
| 1 | +5V | 2 | NC |
| 3 | USBD1- | 4 | NC |
| 5 | USBD1+ | 6 | NC |
| 7 | GND | 8 | NC |
| 9 | NO PIN | 10 | NC |

**Table 15: J21 RJ45 LAN Port**

| Pin | Signal Name |
|-----|-------------|
| 1 | L1_MDI+0 |
| 2 | L1_MDI-0 |
| 3 | L1_MDI+1 |
| 4 | L1_MDI-1 |
| 5 | VCTREF_GBEO_CT |
| 6 | GND |
| 7 | L1_MDI+2 |
| 8 | L1_MDI-2 |
| 9 | L1_MDI+3 |
| 10 | L1_MDI-3 |
| 11 | LAN1_ACT- |
| 12 | LAN1Link# |
| 13 | Lan1_link1000- |
| 14 | Lan1_link100- |

**Table 16: J23 Dual Port USB**

| Pin | Signal Name | Pin | Signal Name |
|-----|-------------|-----|-------------|
| A1 | +5V | B1 | +5V |
| A2 | USBD3- | B2 | USBD2- |
| A3 | USBD3+ | B3 | USBD2+ |
| A4 | GND | B4 | GND |

**Table 17: J24 Dual Port USB**

| Pin | Signal Name | Pin | Signal Name |
|-----|-------------|-----|-------------|
| A1 | +5V | B1 | +5V |
| A2 | USBD5- | B2 | USBD4- |
| A3 | USBD5+ | B3 | USBD4+ |
| A4 | GND | B4 | GND |

**Table 18:J25 RS-232 DB9**

| Pin | Signal Name | Pin | Signal Name |
|-----|-------------|-----|-------------|
| 1 | DCD | 2 | RXD |
| 3 | TXD | 4 | DTR |
| 5 | GND | 6 | DSR |
| 7 | RTS | 8 | CTS |
| 9 | RI | 10 | NO PIN |

**Table 19:J26 D-SUB15 VGA Connector**

| Pin | Signal Name | Pin | Signal Name |
|-----|-------------|-----|-------------|
| 1 | RED | 2 | GREEN |
| 3 | BLUE | 4 | ID0 |
| 5 | GND | 6 | GND |
| 7 | GDN | 8 | GND |
| 9 | NC | 10 | GND |
| 11 | ID1 | 12 | DDCDATA |
| 13 | HSYNC | 14 | VSYNC |
| 15 | DDCCLK | | NO PIN |

**Table 20: J27 Power Jack 12V**

| Pin | Signal Name |
|-----|-------------|
| 2 | V12CON_IN |
| 3 | GND |
| 4 | GND |

# 2.6  Configuring Jumpers

Table 21 through Table 26 lists the position of jumper pin for the connectors and headers in Figure 9 and Table 4.

🖊 **Note**

*A jumper is a metal bridge used to close an electrical circuit. It consists of two or three metal pins and a small metal clip (often protected by a plastic cover) that slides over the pins to connect them.*

**Figure 10: Jumper Pin Settings**
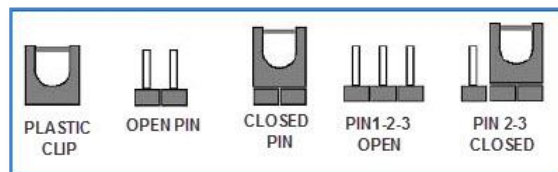


Close the pin by plastic clip to activate or deactivate the function of header and connector.

To change the voltage level of LVDS display uses this jumper setting as shown in the following table 21.

**Table 21: JP1 LVDS**

| Pin Closed | Function |
|------------|----------|
| 1-3 | +3.3V VDD (Default) |
| 5-3 | +5V VDD |
| 4-3 | +12V VDD |

To enable auto power button uses this jumper setting as shown in the following table 22. By default the auto power is on.

**Table 22: JP3 Enable Auto Power**

| Pin Closed | Function |
|------------|----------|
| 1-2 | Enable auto power on (Default) |

To configure USB port as host or client uses this jumper setting as shown in the following table 23

**Table 23: JP5 USB Host or Client**

| Pin Closed | Function |
|------------|----------|
| 1-2 | Host (Default) |
| 2-3 | Client |

To configure serial port COM1 as RS-232 / RS-422 / RS-485 uses this jumper setting as shown in the following table 24.

**Table 24: JP6 COM1 Function Control**

| Pin Closed | Function |
|------------|----------|
| 5-6, 9-11, 10-12, 15-17, 16-18 | RS-232 (Default) |
| 3-4, 7-9, 8-10, 13-15, 14-16, 21-22 | RS-422 |
| 1-2, 7-9, 8-10, 19-20 | RS-485 |

To change LVDS display back light voltage uses this jumper setting as shown in the following table 25.

**Table 25: JP7 Back Light Enable Signal Set**

| Pin Closed | Function |
|------------|----------|
| 1-3, 2-4 | 5V, Active high (Default) |
| 1-3, 4-6 | 12V, Active high |
| 3-5, 2-4 | 5V, Active low |
| 3-5, 4-6 | 12V, Active low |

To reset CMOS contents uses this jumper setting as shown in the following table 26.

**Table 26: JP8 RTC Power Connector**

| Pin Closed | Function |
|------------|----------|
| 1-2 | Normal Operation (Default) |
| 2-3 | Clear CMOS Contents |

# Appendix I

## 1  Windows XP Installation for SYS940X-01

### Pre Requisite

1.  USB Floppy drive with Windows XP SATA driver floppy disk.
2.  USB CD drive with Windows XP Installation CD.

### Downloads

1.  Download the SATA driver from
    http://www.intel.com/p/en_US/embedded/hwsw/hardware/atom-e6xx/software
2.  Unzip the downloaded **EG20T_WinXP_WePOS_Package_241** file.
3.  Open the **EG20T_WinXP_WePOS_Package_241** folder then copy the **FD_Inst_WinXP** folder which contains SATA driver for Windows XP and paste in to floppy disk.

### Installation

NOTE

*SATA driver needs to be installed along with Windows XP installation. SYS940X-01 system will not detect any mass storage device without SATA driver.*

Steps to install SATA driver with Windows XP installation:

1.  Connect the USB floppy drive that contains SATA driver floppy disk, in to the SYS940X-01 system.
2.  Connect the USB CD drive that contains Windows XP installation CD, in to the SYS940X-01 system.
3.  Start the SYS940X-01 system.
4.  Select boot option as CD drive in BIOS setting.
5.  Press **Enter** to continue the installation when system asks to **press any key to continue installation**.
6.  Press **F6** as shown in the following figure 11 to install additional SCSI adapters or other mass-storage devices. This will detect attached USB floppy drive.

**Figure 11: Installing SATA drivers**
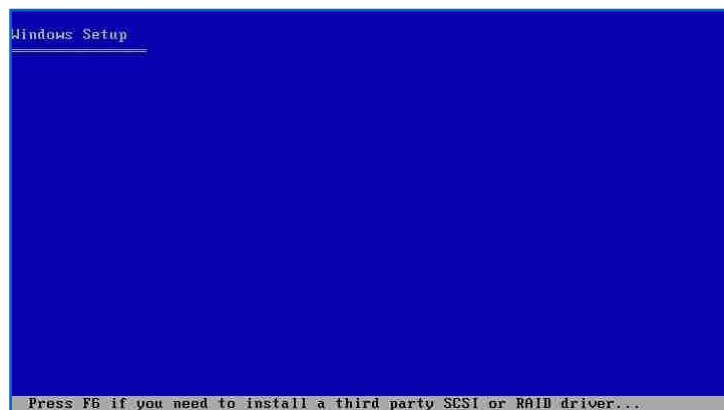
7. Windows XP setup continues the installation as shown in the following figure 12 and 13.
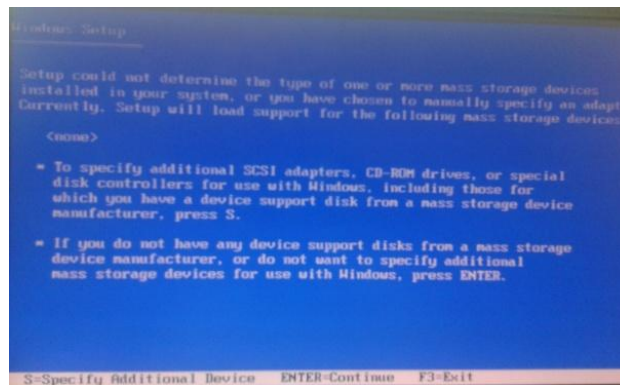
**Figure 12: Windows setup**



**Figure 13: Windows setup continuation**



8. Installation gives option to select additional device. Press **S** to select USB floppy drive as shown in the following figure 14.

**Figure 14: Specify additional device**

9.  Installation gives option to configure SCSI adapter. Press **Enter** to install Intel® PCH EG20T SATA AHCI SCSI adapter as shown in the following figure 15.

**Figure 15: Select SCSI adapter**
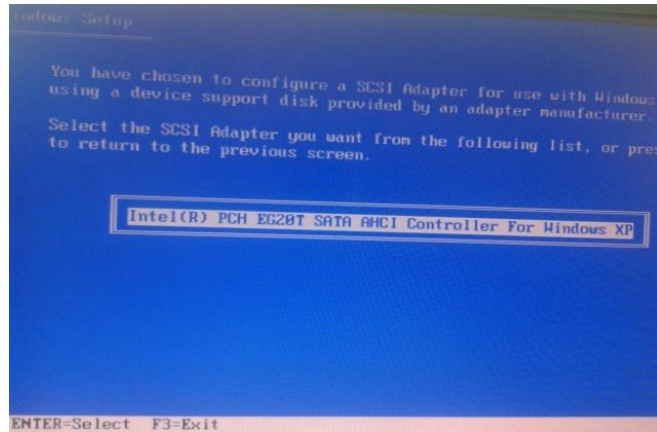


10. Installation gives option to use floppy disk to install the SATA driver for Windows XP installation. Press **S** to use the SATA driver on floppy as shown in the following figure 16.

**Figure 16: Use the driver on floppy**
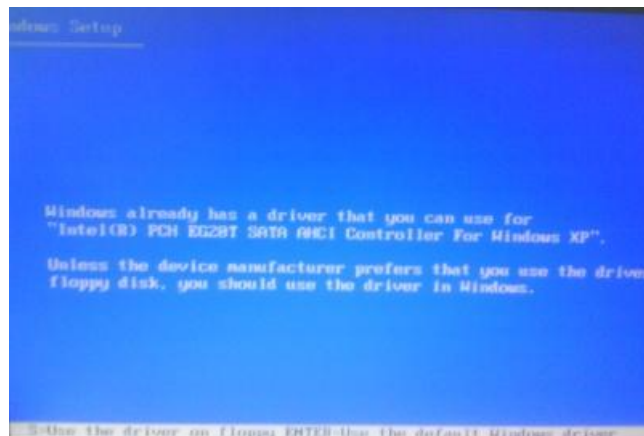


11. Follow the screen instruction and press **Enter** to continue Windows XP installation.

# Contact information

**USA**
**Inforce Computing Inc.**
**48860 Milmont Drive, Suite 101C**
Fremont, California 94538 USA.
Phone: +1 510 683 9999
Fax: +1 510 683 9909

**INDIA - KOCHI**
**Inforce Computing (India) Private Ltd.**
60/2477, 3rd Floor
M.G. Road, Kochi - 682 016,
Kerala, India.
Phone: +91-484-3057100

**INDIA - BENGALURU**
**Inforce Computing (India) Private Ltd.**
# 24, 3rd Floor, 1st cross,
Magrath Road, Bengaluru - 560 025
Karnataka, India.
Phone: +91-80-25566699

For technical assistance refer:     http://www.inforcecomputing.com/products.html#01
For technical support contact:     techsupport@inforcecomputing.com
For sales contact:                         sales@inforcecomputing.com