POC-C197/C177/C157

Trusted ePlatform Services



Instructions for the User

This document combines text and illustrations, providing a comprehensive overview of the system. The information is presented as sequential steps of action, allowing the user to learn directly how to use the device.

The text provides explanations and instructs the user step-by-step in the practical use of the product, with short, clear instructions in easy-to-follow sequence.

Definitions



Warning! A WARNING statement provides important information about a potentially hazardous situation which, if not avoided, could result in death or serious injury.



Caution! A CAUTION statement provides important information about a potentially hazardous situation which, if not avoided, may result in minor or moderate injury to the user or patient or in damage to the equipment or other property.

Note!



A NOTE provides additional information intended to avoid inconveniences during operation.

Environmental protection

Follow national requirements to dispose of unit

Safety Instructions

Strictly follow these Instructions for Use, please read these safety instructions carefully.

You are reminded to keep this user's manual for later reference, and any use of the product requires full understanding and strict observation of all portions of these instructions. Observe all WARNINGS and CAUTIONS as rendered throughout this manual and on labels on the equipment.

Repair of the device may also only be carried out by trained service personnel. Advantech recommends that a service contract be obtained with Advantech Service and that all repairs also be carried out by them. Otherwise the correct functioning of the device may be compromised.

Warning! Because of the danger of electric shock, never remove the cover of a device while it is in operation or connected to a power outlet.



If one of the following situations arises, have the equipment checked by service personnel:

- a. The power cord or plug is damaged.
- b. Liquid has penetrated the equipment.

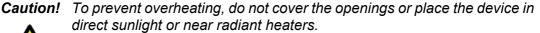
- c. The equipment has been exposed to moisture.
- d. The equipment does not work well, or you cannot get it to work according to the user's manual.
- e. The equipment has been dropped and damaged.
- f. The equipment has obvious signs of breakage.

Disconnect this equipment from any AC outlet before cleaning. Use a damp cloth. Do not use liquid or spray detergents for cleaning and keep this equipment away from humidity.



Caution! To avoid short-circuiting and otherwise damaging the device, do not allow fluids to come in contact with the device. If fluids are accidentally spilled on the equipment, remove the affected unit from service as soon as possible and contact the appropriate service personnel to verify that patient safety is not compromised.

Put this equipment on a reliable surface during installation. Dropping it or letting it fall may cause damage. For plug-in equipment, the power outlet socket must be located near the equipment and must be easily accessible.



Make sure the voltage of the power source is correct before connecting the equipment to the power outlet. Position the power cord so that people cannot step on it. Do not place anything over the power cord. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over voltage.



Caution! Do not leave this equipment in an uncontrolled environment where the storage temperature is below -20° C (-4° F) or above 60° C (140° F). this may damage the equipment.

If your computer is not keeping correct time or the BIOS configuration resets to default, the battery may not have power.

Caution! Do not replace battery yourself. Please contact a qualified technician or your retailer.



The computer is provided with a battery-powered real-time clock circuit. There is a danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions

Improper installation of VESA mounting can result in serious personal injury! VESA mount installation should be operated by professional technician, please contact the service technician or your retailer if you need this service. The detail operating procedure specified on Appendix A.

CLASSIFICATION:

- Supply Class I adapter
- 2. No applied part
- 3. IPX1
- 4. **Continuous Operation**
- 5. Not AP or APG category

Warning! This device is not suitable for use in the presence of flammable anesthetic mixture with air, oxygen, nitrous oxide, or for life support system.



Maintenance: to properly maintain and clean the surfaces, use only the approved products or clean with a dry applicator.



Caution! When servicing the device, always use replacement parts that are qualified to Advantech standards. Advantech Medical cannot warrant or endorse the safe performance of third-party replacement parts for use with our medical devices.

Make sure the user does not contact SIP/SOPs and the patient at the same time.

When networking with electrical devices, the operator is responsible for ensuring that the resulting system meets the requirements set forth by the following standards:

EN 60601-1 (IEC 60601-1) Medical electrical equipment Part 1: General requirements for safety

EN 60601-1-1 (IEC 60601-1-1) Medical electrical equipment Part 1-1: General requirements for safety Collateral standard: Safety requirements for Medical electrical systems

EN 60601-1-2 (IEC 60601-1-2) Medical electrical equipment Part 1-2: General requirements for safety

Collateral standard: Electromagnetic compatibility; Requirements and tests



Medical Equipment With Respect to Electric Shock, Fire, and Mechanical Hazards Only, In Accordance with UL 60601-1, CAN/CSA C22.2 No. 601.1, and IEC 60601-1

Accessory equipment connected to the analog and digital interfaces must be in compliance with the respective nationally harmonized IEC standards (i.e. IEC 60950 for data processing equipment, IEC 60065 for video equipment, IEC 61010-1 for laboratory equipment, and IEC 60601-1 for medical equipment.) Furthermore all configurations shall comply with the system standard IEC 60601-1-1. Anyone who connects additional equipment to the signal input part or signal output part is configuring a medical system, and is therefore, responsible that the system complies with the

requirements of the system standard IEC 60601-1-1. The unit is for exclusive interconnection with IEC 60601-1 certified equipment in the patient environment and IEC 60XXX certified equipment outside of the patient environment. If in doubt, consult the technical services department or your local representative.

FCC Class B

This equipment has been tested and found to comply with the limits for a Class B 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 residential environment. This equipment generates uses and can radiate radio frequency energy. If not installed and used in accordance with this user's manual, it may cause harmful interference to radio com-

Note that even when this equipment is installed and used in accordance with this user's manual, there is still no guarantee that interference will not occur. If this equipment is believed to be causing harmful interference to radio or television reception. this can be determined by turning the equipment on and off. If interference is occurring, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1. Reorient or relocate the receiving antenna
- 2. Increase the separation between the equipment and the receiver
- Connect the equipment to a power outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help



Warning! Any changes or modifications made to the equipment which are not expressly approved by the relevant standards authority could void your authority to operate the equipment.

List of Accessories

Before installing your Point of Care Terminal, ensure that the following materials have been received:

- POC-C197/C177/C157 series Point of Care Terminal
- Accessories for POC-C197/C177/C157
 - CD-ROM disc-"Drivers, User's manual and Utilities"
 - Mounting kits and packet of screws
 - External DC adapter (Manufacturer: SINPRO Model no.: HPU100-107)



Warning! No user serviceable parts inside, refer servicing to qualified personnel. Only the accessories indicated on the list of accessories above have been tested and approved to be used with the device. Accordingly it is strongly recommended that only these accessories be used in conjunction with the specific device. Otherwise the correct functioning of the device may be compromised.

Additional Information and Assistance

Contact your distributor, sales representative, or Advantech's customer service center for technical support if you need additional assistance. Please have the following information ready before you call:

- Product name and serial number
- Description of your peripheral attachments
- Description of your software (operating system, version, application software, etc.)
- A complete description of the problem
- The exact wording of any error messages
- This equipment is a source of electromagnetic waves. Before use please make sure that there are not EMI sensitive devices in its surrounding which may be subject to malfunction.

Manufacturer

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Visit the Advantech websites at www.advantech.com or www.advantech.com.tw if you need more information.

Contents

| Chapter | 1 | General Information | 1 |
|---------|-----|--|--------|
| | 1.1 | Introduction | |
| | 1.2 | Specifications | |
| | | 1.2.1 General | |
| | | 1.2.3 Display interface | |
| | | 1.2.4 Audio function | |
| | | 1.2.5 Ethernet interface | |
| | | 1.2.6 Optional modules | |
| | | 1.2.7 Environment | |
| | | 1.2.8 Touchscreen (optional) | |
| | | Table 1.1: Touchscreen specification | |
| | 1.3 | LCD Specifications | |
| | 1.4 | DimensionsFigure 1.1 Dimensions of the POC-C197 | |
| | | Figure 1.1 Dimensions of the POC-C197 | |
| | | Figure 1.2 Dimensions of the POC-C177 | 5 6 |
| | | Figure 1.4 POC-C197 Front Panel | |
| | | Figure 1.5 POC-C177/C157 Front Panel | |
| | | Figure 1.6 POC-C197 Back I/O | |
| | | Figure 1.7 C177/C157 Back I/O | |
| Chapter | 2 | System Setup | 9 |
| | 2.1 | A Quick Tour of the POC-C197/C177/C157 | 10 |
| | | Figure 2.1 Front View of POC-C197 | |
| | | Figure 2.2 Front View of POC-C177/C157 | |
| | | Figure 2.3 Rear View of the Point of Care Terminal | |
| | 2.2 | Installation Procedures | |
| | | 2.2.1 Connecting the power cord | 11 |
| | | Figure 2.4 Connecting the power cord | |
| | 2.3 | Running the BIOS Setup Program | |
| | 2.4 | Installing System Software | |
| | 2.5 | Installing the DriversFigure 2.5 The file directory on "Drivers and Utilities" CD-RC | |
| Chantan | 2 | Chinaat and Cranbias Catur | 4 5 |
| Chapter | 3 | Chipset and Graphics Setup | .15 |
| | 3.1 | Introduction | 16 |
| | | 3.1.1 Chipset | |
| | 3.2 | Installation of Chipset Driver | |
| | | 3.2.1 Installation for Windows XP | 17 |
| Chapter | 4 | Audio Interface | .23 |
| | 4.1 | Introduction | 24 |
| | 4.2 | Installation of Audio Driver | |
| | | 4.2.1 Installation for Windows 2000/XP | |
| | 4.3 | Further Information | 26 |
| Chapter | 5 | PCI Express Ethernet Interface | .27 |

| | 5.1 5.2 | IntroductionInstallation of Ethernet Driver | |
|------------|------------|--|---------|
| | | 5.2.1 Installation for Windows XP | |
| | 5.3 | Further Information | 30 |
| Chapter | 6 | Touch Panel Interface | 31 |
| | 6.1 | Introduction | 32 |
| | 6.2 | 6.1.2 Installation for Windows XPFurther Information | |
| Chapter | 7 | Utilities and Hot fixes | 37 |
| | 7.1 | Introduction | 38 |
| | 7.2 | Wakeup by External USB Device at S3 Resume (Wakeup) | |
| | 7.3 | Window Audio Volume Application | |
| | | 7.3.1 Installation for Windows XP | 38 |
| Chapter | 8 | Operation Information | 39 |
| | 8.1 | Plug in the Power Adapter | |
| | 8.2 8.3 | Thermal Disconnect the Power | |
| | 8.4 | Point-of-Care Terminal Cleaning and Disinfecting | 41 |
| | 8.5 | General Safety Guide | 42 |
| Appendix A | | Windows Display Hot Key Function | ո 43 |
| | A.1 | Windows Display Hot Key Function | 44 |
| Appendix B | | Description of Connectors | 45 |
| | B.1 | Description of Connectors | |
| | | Figure B.1 Top Side View of POC-C1x7 Motherboard indication Local Connectors | |
| | | Figure B.2 Bottom Side View of POC-C1X7 Motherboard Inc | dicates |
| | | all Local Connectors | |
| | | Figure B.3 Top Side View of POC-C1X7 I/O Board Indicate Local Connectors | |
| | | | |

Chapter

General Information

1.1 Introduction

The POC-C197/C177/C157 is a multimedia Intel® Atom processor-based computer that is designed to serve as a Point of Care terminal (POC.) It is a PC-based system with color TFT LCD display, VGA port, dual on-board 10/100/1000 PCI-E Ethernet controller, Single COM port, Quad USB 2.0 port and a 24-bit stereo audio controller. With a built-in 2.5" HDD drive, the system is as slim and user-friendly as a notebook computer and makes low audible noise. For system integrators, this silent, compact, mobile and highly integrated multimedia system lets you easily build a Point of Care Terminal into your applications. The low audible noise of the point of care terminal makes it an ideal and safe point of care solution for patients and hospital practitioners.

The POC-C series is specially designed to resist spills and water damage, and it is dust resistant with its protected LCD, sealed ports. The high contrast ratio makes it a perfect image terminal for PACS and DICOM applications. The POC-C series is a reliable solution to your application's processing requirements.

1.2 Specifications

1.2.1 General

- Dimensions (W x H x D):
 - POC-C197: 472 x 416 x 111 mm (18.58" x 16.38" x 4.37")
 - POC-C177: 436.5 x 376.5 x 91.4 mm (17.18" x 14.82" x 3.59")
 - POC-C157: 418 x 342 x 89.3 mm (16.46" x 13.46" x 3.51")

■ Weight:

- POC-C197: (w/o battery) 8.1 kg
- POC-C177: (w/o battery) 7.1 kg
- POC-C157: (w/o battery) 5.4 kg

■ Power Supply:

- DC model: 100 watt max external DC Adapter- (Manufacturer: SINPRO Inc. Model no.: HPU100-107) used
- Input voltage: 100-240 V_{AC}, 47-63 Hz, 1.25-0.5 A
- Output voltage: +18 V_{DC}, 5.55 A max.
- Disk drive housing: Space for one 2.5" SATA HDD
- Entire System:
 - IPX1 compliant
 - IP54 enclosure for POC-C197

1.2.2 Hardware

- CPU: Intell® 45nm Atom ultra low voltage processor N270 1.6 GHz
- **BIOS**: Award 512 KB Flash BIOS, supports Plug & Play, APM
- Chipset: INTEL 945GSE + ICH7M
- Front side bus: FSB 533 MHz
- RAM: 1 x 200-pin, single channel DDR2 SODIMM slot (max. 2 GB)
- IDE interface: ATA/100 x1. Supports one IDE device.
- **SATA interface:** SATA x2. Support one SATA device.
- **Serial ports:** RS-232 port x 2, they are all compatible with 16C550 UARTs. COM1, 2 has optical isolation; COM1 supported +5 V by jumper selection
- Universal serial bus (USB) port: USB 2.0 port x 6 (4 external, 2 internal)

- **Expansion slot:** Mini PCI/33 MHz slot x 1, Mini PCI-E (2.5Gb/s) slot x 1
- Watchdog timer: Supports super I/O embedded watchdog function. Automatically generates system reset when the system stops due to a program error
- CMOS Battery (BIOS): 3.0 V @ 195 mA lithium battery
- Backup Battery (Optional): 11.1V @ 6300mAh lithium battery

1.2.3 Display interface

- SDVO Interface: Single channel 18/36-bit/dual channel 24/48-bit LVDS, via Chrontel 7308B SDVO transmitter
- Graphic Chipset: Intel® internal graphics support
- **Display Port**: VGA out

1.2.4 Audio function

- Chipset: Realtek ALC888, compliant with Intel HDA.
- **Audio controller:** 24-bit codec, full-duplex stereo codec
- Audio interface: Microphone-in, Line-out

1.2.5 Ethernet interface

- Chipset: RTL8111C PCI express high performance Gigabit Ethernet controller
- Ethernet interface: Gigabit Ethernet port x 2, full integrated Gigabit Ethernet Media Access Control (MAC) and Physical Layer (PHY) functions, and each provides a standard IEEE 803.3 Ethernet interface for 10/100/1000 Mbps.

1.2.6 Optional modules

- Memory: 1 GB / 2 GB, DDR2- 400/533 MHz SODIMM
- **HDD**: 2.5", SATA HDD
- Mini PCI WLAN module: 802.11a/b/g WLAN
- Mini PCI-E WLAN module: 802.11b/g/n WLAN

1.2.7 Environment

- **Temperature:** 0 ~ 40° C (32 ~ 104 ° F)
- Relative humidity:
 - 10° C to 40° C / 20% RH to 90% RH operating
 - -20° C to 50° C/ 10% RH to 95% RH Storage (Non-condensing)
- Shock: 20 G, half sine, 11 msec duration
- **Vibration:** 0.047 double amplitude displacement (5~32 Hz) 2G Peak (32 -500 Hz)
 - Power MTBF: 100,000 hrs
- Altitudes: Operational: 6,000 feet; Shipping: 40,000 feet
- Certifications:
 - EMC: CE, FCC approved
 - Safety: UL60601-1 and EN60601-1 compliance.

This device bears the CE label in accordance with the provisions of the EMC Directive 89/336/EMC and the Low Voltage Directive 73/23/EEC.

1.2.8 Touchscreen (optional)

| Table 1.1: Touchscreen specification | | | | |
|--------------------------------------|-----------------------------------|--|--|--|
| Туре | Analog Resistive | | | |
| Resolution | Continuous | | | |
| Light Transmission | 75% | | | |
| Controller | RS-232 interface (uses COM3) | | | |
| Power Consumption | +5 V @ 200 Max. | | | |
| Software Driver | Supports Windows 2000, Windows XP | | | |
| Durability (touches in a lifetime) | 30 million | | | |

Note!



The Point of Care Terminal with the optionally installed touchscreen will share COM3. Once the touchscreen is installed, COM3 cannot be used for other purposes.

1.3 LCD Specifications

POC-C197

Display type: 19" TFT LCD.
Resolution: 1280 x 1024
Colors: 16.7 M (8 bits/color)
Dot size (mm): 0.294 x 0.294
Viewing angle: 178° x 178°
Luminance: 300 cd/m2
Contrast ratio: 1300 : 1
LCD MTBF: 50,000 hours
Backlight lifetime: 50,000 hours

POC-C177

Display type: 17" TFT LCD.
Resolution: 1280 x 1024
Colors: 16.7M (8 bits/color)
Dot size (mm): 0.264 x 0.264
Viewing angle: 140° x130°
Luminance: 300 cd/m2
Contrast ratio: 500 : 1
LCD MTBF: 50,000 hours
Backlight lifetime: 50,000 hours

POC-C157

Display type: 15" TFT LCD.Resolution: 1024 x 768

Colors: 262K

Dot size (mm): 0.297 x 0.297
Viewing angle: 140° x125°
Luminance: 350 cd/m2
Contrast ratio: 700 : 1
LCD MTBF: 50,000 hours
Backlight lifetime: 50,000 hours

1.4 Dimensions

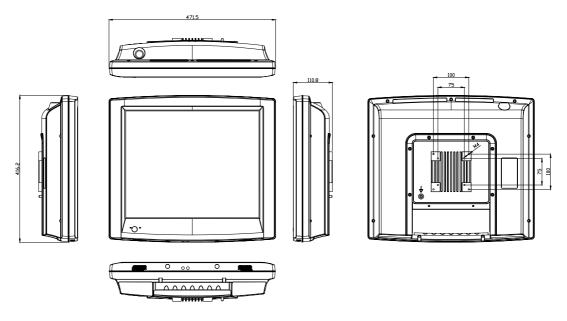


Figure 1.1 Dimensions of the POC-C197

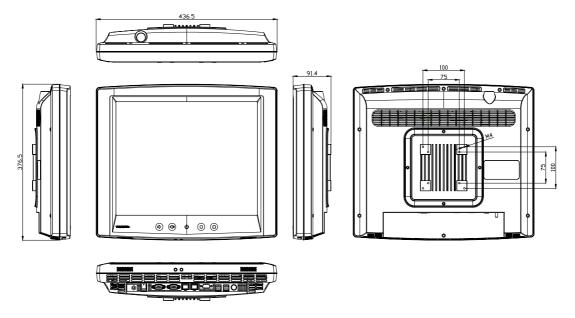


Figure 1.2 Dimensions of the POC-C177

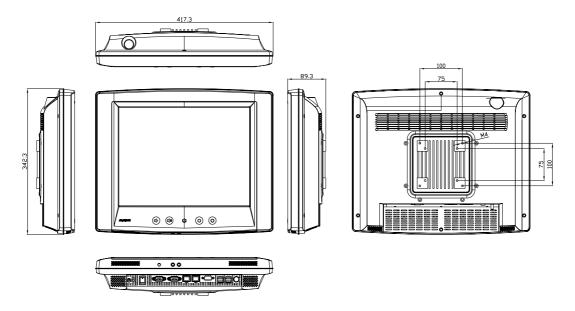


Figure 1.3 Dimensions of the POC-C157

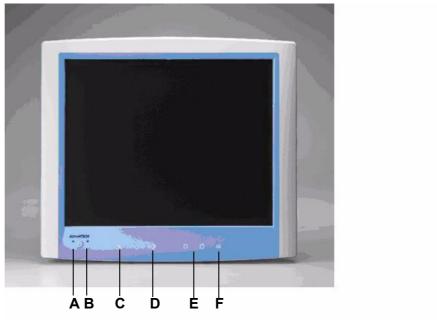


Figure 1.4 POC-C197 Front Panel

- A. Power Switch
- B. Touchscreen Light Indicator
- C. Touchscreen Status Control
- D. Volume Up/Down
- E. Brightness Increase/Decrease
- F. Read Light Control

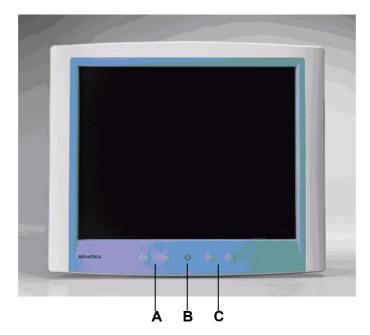


Figure 1.5 POC-C177/C157 Front Panel

- A. Audio Control Button
- B. Power Light
- C. Brightness Control Button

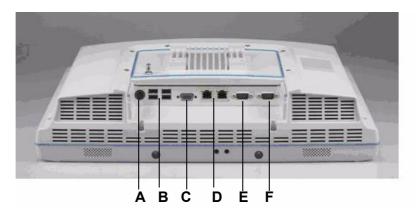


Figure 1.6 POC-C197 Back I/O

- A. 4-pin mini-DIN DC connector
- B. USB 2.0 ports x 4
- C. VGA port
- D. 10/100/1000 Mbps Ethernet interface (RJ-45)
- E. Isolated RS-232/422/485 COM port (Set by jumper)
- F. RS-232 COM port (COM2)

7

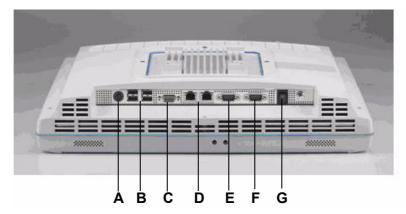


Figure 1.7 C177/C157 Back I/O

- A. 4-pin mini-DIN DC connector
- B. USB 2.0 ports x 4
- C. VGA port
- D. 10/100/1000 Mbps Ethernet interface (RJ-45)
- E. Isolated RS-232/422/485 COM port (By jumper setting)
- F. RS-232 COM port (COM2)
- G. Power switch

Chapter

System Setup

2.1 A Quick Tour of the POC-C197/C177/C157

Before you start to set up the POC-C197/C177/C157, take a moment to become familiar with the locations and purposes of the controls, drives, connections and ports, which are illustrated in the figures below.

When you place the POC-C197/C177/C157 upright on the desktop, its front panel appears as shown in Figure 2.1 and Figure 2.2.

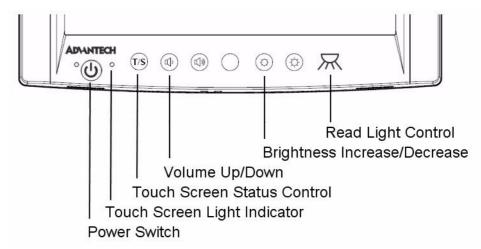


Figure 2.1 Front View of POC-C197

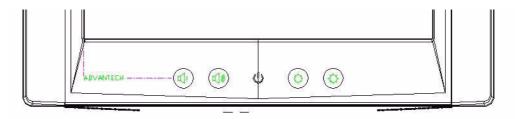


Figure 2.2 Front View of POC-C177/C157

When you turn the Point of Care Terminal around and look at its rear cover, the sunken I/O section is at the bottom of the panel PC, as shown in Figure 2.3. (The I/O section includes various I/O ports, including serial ports, VGA port, the Ethernet port, USB ports, the DC power adapter jack, and so on.)

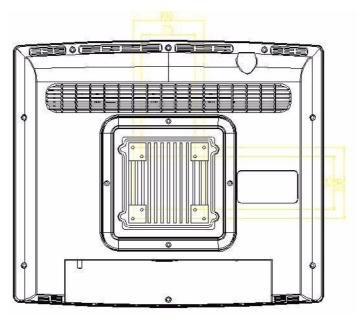


Figure 2.3 Rear View of the Point of Care Terminal

Note! This Equipotential Terminal uses a connection to hospital GND.



Installation Procedures 2.2

2.2.1 Connecting the power cord

The POC-C197/C177/C157 can only be powered by a DC power adapter (SINPRO Model no.HPU100-107). Be sure to always handle the power cords by holding the plug ends only.

Follow these procedures in order:

- Connect the female end of the power adapter to the DC jack of the panel PC. (See Figure 2.4.)
- 2. Connect the female end of the power cord to the DC power adapter.
- 3. Connect the 3-pin male plug of the power cord to an electrical outlet.

Warning! The POC-C197/C177/C157 is supplied by a 100 watt power supply and a special adapter as depicted in the model above.



If medical adaptor is connected to the POC-C197/C177/C157, the customer must ensure legal and regulatory compliance and that the device meets the legal and standards compliance requirements of this hardware.

Switching on the power

Switch on the power switch on the back I/O.

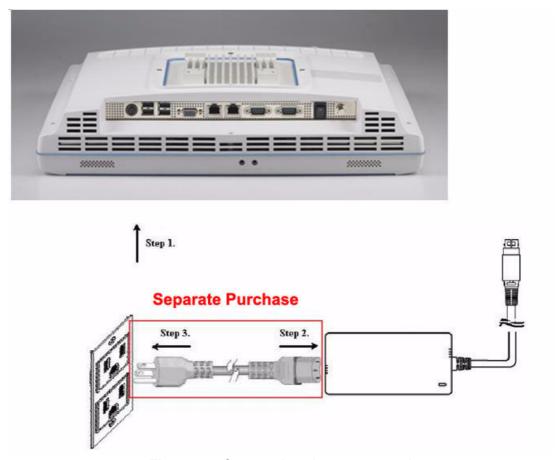


Figure 2.4 Connecting the power cord

2.3 Running the BIOS Setup Program

Your POC-C197/C177/C157 is likely to have been properly set up and configured by your dealer prior to delivery. You may still find it necessary to use the BIOS (Basic Input-Output System) setup program to change system configuration information, such as the current date and time or your type of hard drive. The setup program is stored in read-only memory. It can be accessed either when you turn on or reset the panel PC, by pressing the "Crtl+Alt+Del" key on your keyboard immediately after powering on the computer.

The settings you specify with the setup program are recorded in a special area of memory called CMOS RAM. This memory is backed up by a battery so that it will not be erased when you turn off or reset the system. Whenever you turn on the power, the system reads the settings stored in CMOS RAM and compares them to the equipment check conducted during the power on self-test (POST). If an error occurs, an error message will be displayed on screen, and you will be prompted to run the setup program.

2.4 Installing System Software

Recent releases of operating systems from major vendors include setup programs which load automatically and guide you through hard disk preparation and operating system installation. The guidelines below will help you determine the steps necessary to install your operating system on the panel PC hard drive.

Note!

Some distributors and system integrators may have already preinstalled system software prior to shipment of your panel PC.



If required, insert your operating system's installation or setup diskette into the external diskette drive until the release button pops out.

The BIOS supports system boot-up directly from the CD-ROM drive. You may also insert your system installation CD-ROM disk into your external CD-ROM drive.

Power on or reset the system by pressing the "Ctrl"+"Alt"+"Del" keys simultaneously. The Point of Care Terminal will automatically load the operating system from the diskette or CD-ROM.

If you are presented with the opening screen of a setup or installation program, follow the instructions on screen. The setup program will guide you through preparation of your hard drive, and installation of the operating system.

2.5 Installing the Drivers

After installing your system software, you will be able to set up the chipset, graphics, Ethernet, audio and touchscreen functions from your own external CD-ROM drive. All the drivers except the CD-ROM drive driver are stored in a CD-ROM disc entitled "Drivers and Utilities."

The standard procedures for installing the chipset, graphics, audio and Ethernet drivers are described in Chapters 3, 4, 5, and 6 respectively.

The various drivers and utilities in the CD-ROM disc have their own text files which help users install the drivers and understand their functions. These files are a very useful supplement to the information in this manual.

For your reference, the directory of drivers on the "Drivers and Utilities" CD-ROM is:

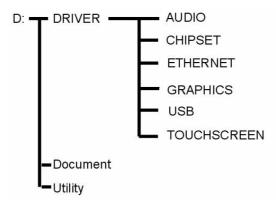


Figure 2.5 The file directory on "Drivers and Utilities" CD-ROM

Note!



The drivers and utilities used for the POC-C1x7 panel PCs are subject to change without notice. If in doubt, check Advantech's website or contact our application engineers for the latest information regarding drivers and utilities.

Chapter

Chipset and Graphics Setup

3.1 Introduction

The POC-C197/C177/C157 has an onboard display interface. The specifications and features are described as follows:

3.1.1 Chipset

The POC-C197/C177/C157 uses the Mobile Intel 945GSE Express chipset for its graphic controller. It supports an SDVO device and CRT monitors. The Mobile Intel 945 Express Chipset Family comes with a Generation 3.5 Intel Integrated Graphics Engine, providing enhanced graphics support over the previous generation Graphics and Memory Controller Hubs (GMCHs).

Installation of Chipset Driver 3.2

Complete the following steps to install the Chipset driver. Follow the procedures in the flow chart that apply to the operating system that you are using for your POC-C1x7.



Important! The following Windows illustrations are examples only. You must follow the flow chart instructions and pay attention to the instructions which appear on your screen.

Note! The CD-ROM drive is designated as "D" throughout this chapter.



Note! <Enter> means pressing the "Enter" key on the keyboard.



Note!



Before you install the graphic driver for POC-C1x7, please ensure you have installed the "Intel Chipset Software Installation Utility". You can find this driver on the Utility CD-ROM.

Note!



The resolution of the window display will be set to 640 x 480 before you install a Graphics driver. Depending on your monitor's native resolution, the black area might be different.

3.2.1 Installation for Windows XP

- 1-1. Double Click "infinst_autol.exe" in the F:\PCM-8704 Driver\Chipset folder. The Install dialog will appear.
- 1-2. Click "Next" to continue.



1-3. Read License Agreement and click "Yes" to proceed.



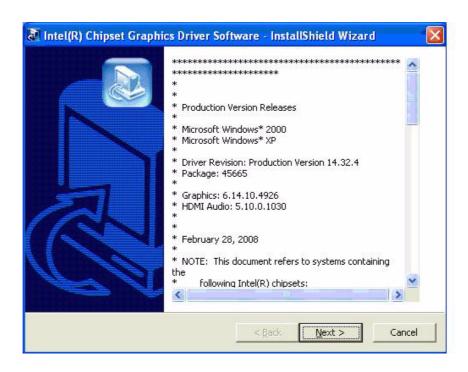
1-4. Read file information and click "Next" to proceed.



1-5. When the "Setup COMPLETE" message appears click "Finish" to restart your computer.



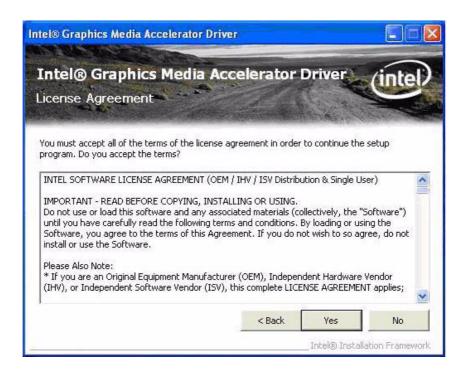
- 2-1. Double Click "winxp_14324.exe" in the D:\Driver\XP\Graphic folder. The Install dialog will appear.
- 2-2. Click "Next" to continue.



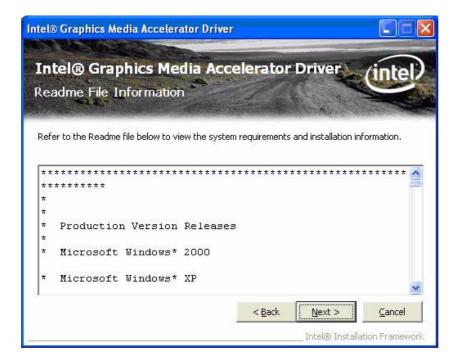
2-3. Click "Next" to continue.



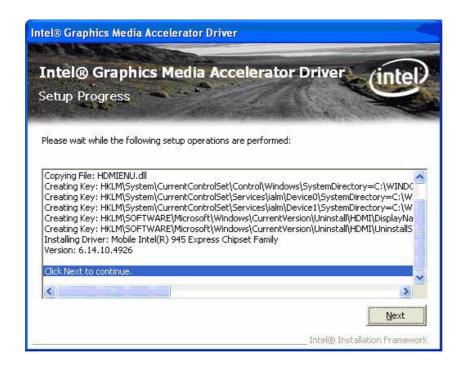
2-4. Read Agreement and click "Yes" to proceed.



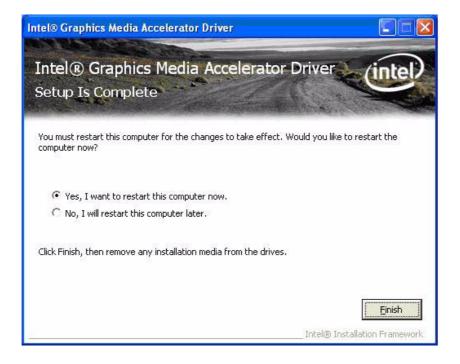
2-5. Read the Readme file information and click "Next" to proceed.



2-6. When the "Click Next to continue" message appears click "Next" to proceed.



2-7. When the "Setup Is Complete" message appears click "Finish" to restart your computer.



Chapter

4

Audio Interface

4.1 Introduction

The POC-C197C177/C157's onboard audio interface provides high-quality stereo sound using the ALC888 audio controller from Realtek. The ALC888 series controllers are high performance 7.1+2 channel High Definition Audio Codecs providing ten DAC channels that simultaneously support 7.1 sound playback, plus 2 channels of independent stereo sound output (multiple streaming) through the front panel stereo outputs.

All analog jacks are input and output capable, and headphone amplifiers are also integrated at each analog output. All analog I/Os can be re-tasked according to user definitions, or automatically switched depending on the connected device type.

4.2 Installation of Audio Driver

Before installing the audio driver, please take note of the procedures detailed below. You must know which operating system you are using on your POC-C1x7; then refer to the corresponding installation flow chart. Just follow the steps in the flow chart. You can guickly and successfully complete the installation, even if you are not familiar with instructions for Windows.

This setup program will install the audio driver and Realtek utility on your system.



Important! The following Windows illustrations are examples only. You must follow the flow chart instructions and pay attention to the instructions which appear on your screen.

Note!

The CD-ROM drive is designated as "D" throughout this chapter.



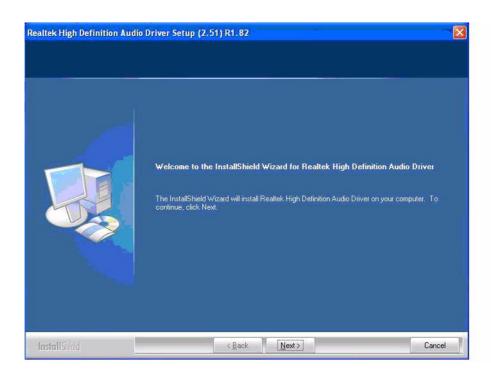
Note!

<Enter> means pressing the "Enter" key on the keyboard.

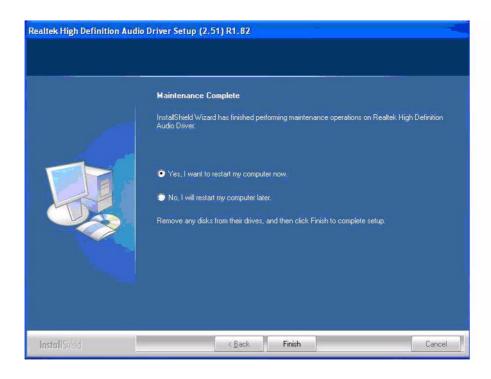


4.2.1 Installation for Windows 2000/XP

- Double Click "setep.exe" in F:\PCM-8704 Driver\HD Audio Codecs\Win2K_XP folder. The Install dialog will appear.
- 2. Click "Next" to continue. The install program will install driver and utility. It will spend a period of time processing.



When the "InstallShield Wizard Complete" message appears click "Finish" to restart your computer...



4.3 Further Information

For further information about the Audio interface installation for your POC-C197/C177/C157, included driver updates, troubleshooting guides and FAQ lists please visit the following web resources.

Realtek website: www.realtek.com.tw

Advantech websites: www.advantech.com, www.advantech.com.tw

Chapter

PCI Express Ethernet Interface

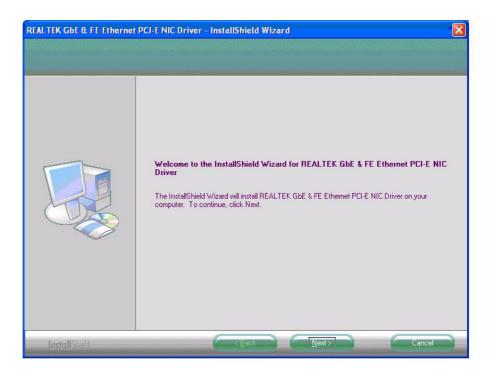
5.1 Introduction

The POC-C197C177/C157 is equipped with a high performance PCle Ethernet chipset, Realtek RTL8111B, which is fully compliant with IEEE 802.3 10/100/1000 Mbps standards. The Ethernet port provides a standard RJ-45 jack.

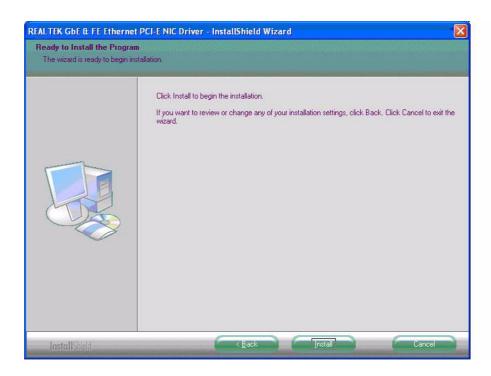
5.2 Installation of Ethernet Driver

5.2.1 Installation for Windows XP

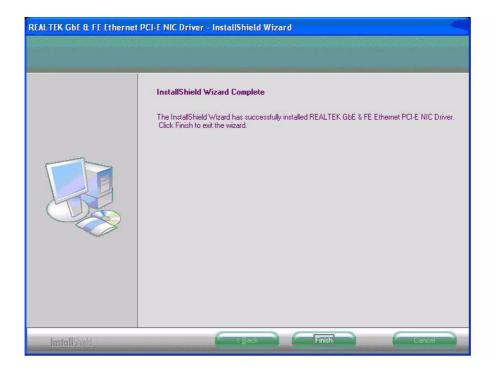
- Double Click "setup.exe" in the D:\Driver\ETHERNET folder. The Install dialog will appear.
- 2. Click "Next" to continue.



3. Click "Install" to continue. The install program will install driver. It will spend a period of time processing.



4. When the "InstallShield Wizard Complete" message appears click "Finish" to finish the install program.



5.3 Further Information

For further information about the installation of your POC-C197C177/C157, included Driver updates, troubleshooting guides and FAQ lists please visit the following web resources.

Realtek website: www.realtek.com.tw

Advantech websites: www.advantech.com, www.advantech.com.tw

Chapter

Touch Panel Interface

6.1 Introduction

The POC-C197C177/C157 is supported with a system integrated touch panel. The touch panel controller is control by the system COM3 interface.

6.1.1 Installation of Touch Panel Driver

6.1.2 Installation for Windows XP

- 1. Double Click "setup.exe" in the D:\Driver\TOUCH folder. The Install dialog will appear.
- 2. Click "Next" to continue.



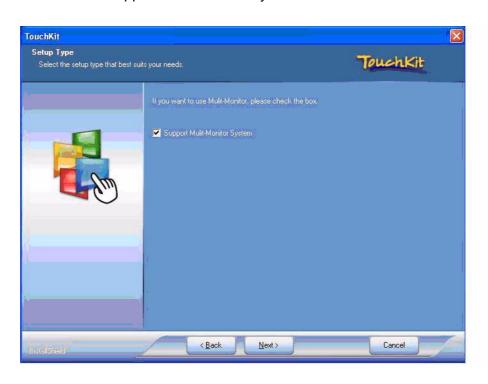
3. Click "Next" to continue. Since POC-C197's touch controller is controlled by COM3, please do not select the "Install PS/2 interface driver".



 Click "Next" to continue.
 Please select "None" for Do 4 point calibration; the driver install program will do this 4 point calibration when install completes.



5. Click "Next" to continue. Please select "Support Multi-Monitor System".



6. Click "Next" to continue.

If you want to change the driver destination folder, you can click the "Browse" button to change the folder.

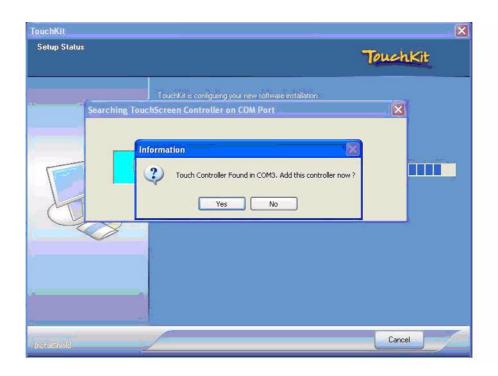


7. Click "Next" to continue.

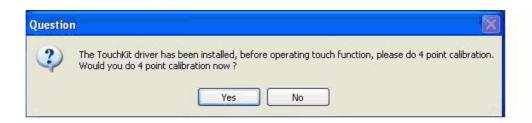


8. Click "Yes" to continue.

The install program will search the touch screen controller, and find it on COM3.



9. Click "Yes" to continue.
Please do 4 point calibration to calibrate the touchscreen.



10. Touch the "X" once at each of the 4 corners on the panel.

Please touch each "X" icon in the corners until the icon stops blinking.



6.2 Further Information

For further information about the installation of your POC-C197C177/C157, included Driver updates, troubleshooting guides and FAQ lists please visit the following web resources.

Advantech websites: www.advantech.com, www.advantech.com.tw

Chapter

Utilities and Hot fixes

7.1 Introduction

The POC-C197C177/C157 system needs specific utilities or hot fixes to support special functions.

7.2 Wakeup by External USB Device at S3 Resume (Wakeup)

POC-C197C177/C157 supports three different sleep (suspend) modes. They are:

- S1: Power On Suspend; system will stop the clock, turn off LCD backlight, but keep all power on. The user can press any key (mouse or keyboard) to wakeup system.
- S3: Suspend to RAM; system will stop the clock, turn off most power rails but not memory power. All necessary information from memory will be saved.
- In this sleep mode, the system needs a hot fix to wakeup by USB mouse or keyboard.
- S4: Suspend to Disk (Hibernation); system will stop the clock, turn off most power, including memory power. All necessary information will be saved to harddisk. In this sleep mode, the user needs to press the power button to wake up the system.

7.2.1 Installation for Windows XP

- 1. Double click the "USBRG.REG" in the D:\Driver\USB folder.
- 2. Click "Yes" to install this registry information.
- 3. Click "OK" to close the installation information window.

7.3 Window Audio Volume Application

On the front panel of the POC-C1x7 system, there are two buttons to control the speaker volume.

This speaker volume is adjustable pressing a button and it does not need any soft-ware utility.

However, this speaker volume button cannot modify the Windows volume control if the user has not installed the Advantech Audio Volume application.

7.3.1 Installation for Windows XP

- 1. Double click "SETUP.EXE" in the D:\Utility\Volume Control folder.
- 2. Click the "Next" button.
- 3. Click on "I accept the terms of the license agreement" and click the "Next" button.
- 4. Click "Finish" to close the completed installation window.

Chapter

Operation Information

Plug in the Power Adapter 8.1

Always leave space around your power adapter. Do not use this equipment in a location where airflow around the power adapter or computer is confined. Always disconnect the power adapter before opening the computer to perform procedures such as installing memory or removing the hard disk.

Warning! Use only the power adapter that came with your POC-C197/C177/C157 system. Adapters for other electronic devices may look similar, but they may damage your computer.

8.2 **Thermal**

When using your POC-C197/C177/C157 system, it is normal for the rear metal heatsink to get warm. The rear metal heatsink of the POC-C197/C177/C157 case functions as a cooling surface that transfers heat from inside the computer to the cooler air outside. Do not block this heatsink by any soft material.



Warning! Do not place your POC-C197/C177/C157 system on a pillow or other soft material when it is on, as the material may block the airflow and cause the computer to overheat. Never place anything on system case before turning off computer.

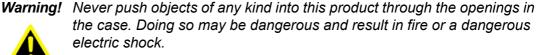
> Never turn on your computer unless all of its internal and external parts are in place. Operating the computer when it is open or missing parts can be dangerous and can damage your computer.

8.3 **Disconnect the Power**

The only way to disconnect power completely is to unplug the power cord. Make sure at least one end of the power cord is within easy reach so that you can unplug the computer when you need to.



Warning! Your AC cord came equipped with a three-wire grounding plug (a plug that has a third grounding pin). This plug will fit only a grounded AC outlet. If you are unable to insert the plug into an outlet because the outlet is not grounded, contact a licensed electrician to replace the outlet with a properly grounded outlet. Do not defeat the purpose of the grounding plug.



8.4 Point-of-Care Terminal Cleaning and Disinfecting

During normal use of the POC (Point-of-Care Terminal) the device may become dirty and should be regularly cleaned.

Steps:

- 1. Prepare cleaning agent per manufacturer's instructions or hospital protocol.
- 2. Wipe the POC with a clean cloth that has been moistened in the cleaning solution.
- 3. Wipe thoroughly with a clean cloth.

Cleaning agent list: chemical disinfectants which have been tested on the POC

| No | Cleaning Agents | |
|----|----------------------|--|
| 1 | Cidex | |
| 2 | Isopropyl alcohol | |
| 3 | Green tinctured soap | |
| 4 | Windex | |
| 5 | Alcohol | |
| 6 | Alcohol 70% | |
| 7 | Chloride 1000PPM | |
| 8 | Incidin plus | |
| 9 | Incidin liquid | |
| 10 | Mikrozid liquid | |

Caution!



- Do not immerse or rinse the POC or its peripherals. If you accidentally spill liquid on the device, disconnect the unit from the power source. Contact your Biomed Department regarding the continued safety of the unit before placing it back in operation.
- Do not spray cleaning agents on the chassis.
- Do not use disinfectants that contain phenol. Do not autoclave or clean the POC or its peripherals with strong aromatic, chlorinated, ketone, ether, or Esther solvents, sharp tools or abrasives. Never immerse electrical connectors in water or other liquids.

8.5 General Safety Guide

For your own safety and that of your equipment, always take the following precautions.

Disconnect the power plug (by pulling the plug, not the cord) if any of the following conditions exists:

- You want to remove any parts
- The power cord or plug becomes frayed or otherwise damaged
- You spill something into the case
- Your computer has been dropped or the case has been otherwise damaged
- You suspect that your computer needs service or repair
- You want to clean the case

Appendix A

Windows Display Hot Key Function

A.1 Windows Display Hot Key Function

If the user wants to switch the display content to different display device, such as an:

- Internal LCD Panel (Notebook)
- External CRT Monitor (Monitor)
- External DVI Monitor (Digital Display)

the user can press the hot key below to switch the device.

| Hot Key | Display Device | |
|-------------|--------------------------------|--|
| Ctrl+Alt+F1 | External CRT Monitor | |
| Ctrl+Alt+F3 | Ctrl+Alt+F3 Internal LCD Panel | |
| Ctrl+Alt+F4 | External DVI Monitor | |

Windows will switch the display content to the dedicated display device.

Appendix B

Description of Connectors

B.1 Description of Connectors

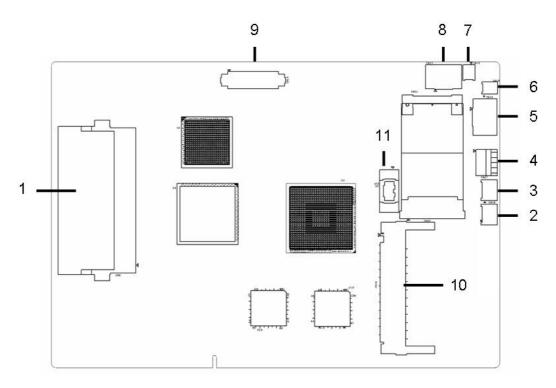


Figure B.1 Top Side View of POC-C1x7 Motherboard indicates all Local Connectors

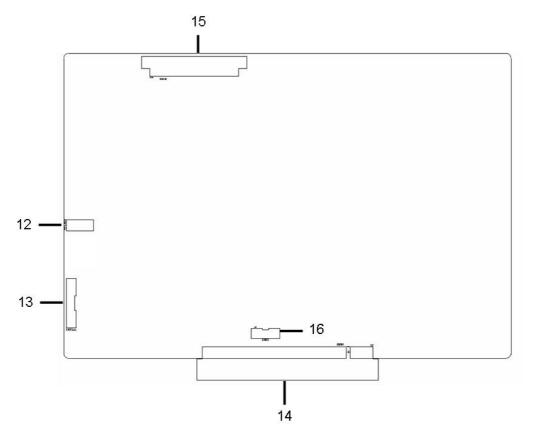


Figure B.2 Bottom Side View of POC-C1X7 Motherboard Indicates all Local Connectors

| No. | Description | No. | Description |
|-----|--|-----|---|
| 1 | DDR 2 SODIMM Socket Connector | 9 | LVDS connectors |
| 2 | USB Multi Touch Connector | 10 | Mini PCI Socket |
| 3 | Touch Enable Volume Up/Down Switch Connector | 11 | BIOS |
| 4 | Touch Screen I/F Connector | 12 | COM4 Jack |
| 5 | SATA Connector Channel 0 | 13 | Internal Audio Connector (Line, HP Out& Line, MIC In & Speaker Out) |
| 6 | SATA Power Connector 0 | 14 | I/O Bus Connector |
| 7 | SATA Power Connector 2 | 15 | IDE Connector |
| 8 | SATA Connector Channel 2 | 16 | PS/2 Connector |

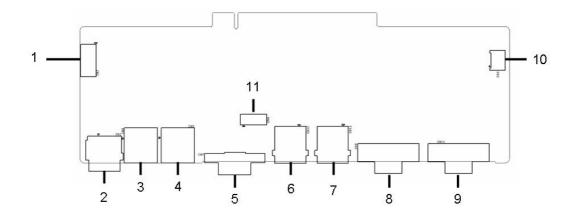


Figure B.3 Top Side View of POC-C1X7 I/O Board Indicates All Local Connectors

| No. | Description | No. | Description |
|-----|-----------------------|-----|---|
| 1 | Battery Connector | 7 | RJ-45 Jack (LAN 2) |
| 2 | DC-in Power Connector | 8 | Isolation COM 1 Jack (RS232, RS422 RS485) |
| 3 | USB connector | 9 | Isolation COM2 Jack |
| 4 | USB connector | 10 | Power Button LED Connector |
| 5 | VGA Connector | 11 | USB Header |
| 6 | RJ-45 Jack (LAN 1) | 12 | |



www.advantech.com

Please verify specifications before quoting. This guide is intended for reference purposes only.

All product specifications are subject to change without notice.

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