

User Manual

## POC-W212

Point-of-Care Terminal with  
Intel<sup>®</sup> Core<sup>™</sup> i7 or i5 Processor  
and a 21.5" TFT LCD

**ADVANTECH**

*Enabling an Intelligent Planet*

## Instructions for the User

This document combines text and illustrations, providing a comprehensive overview of the system. The information is presented as a sequential series of actions, 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 an easy-to-follow sequence.

## Definitions/Définitions

**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.



**Avertissement !** Un message d'**AVERTISSEMENT** fournit des informations importantes sur une situation potentiellement dangereuse qui, si elle n'est pas évitée, risque d'entraîner la mort ou des dommages corporels graves.



**Attention!** Un message **ATTENTION** fournit des informations importantes sur une situation potentiellement dangereuse qui, si elle n'est pas évitée, peut entraîner des blessures mineures ou modérées pour l'utilisateur ou le patient ou des dommages à l'équipement ou d'autres biens.



**Remarque!** Une **REMARQUE** fournit des informations supplémentaires destinées à éviter les désagréments pendant le fonctionnement.



## Safety Instructions/Consignes de Sécurité

1. Strictly follow these Instructions for Use; please read these safety instructions carefully.
2. Please keep this User Manual for later reference; 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.
3. Repair of the device may 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.*



4. If one of the following situations arises, have the equipment checked by service personnel:
  - The power cord or plug is damaged.
  - Liquid has penetrated into the equipment.
  - The equipment has been exposed to moisture.
  - The equipment does not work well, or you cannot get it to work according to the user manual.
  - The equipment has been dropped and damaged.
  - The equipment has obvious signs of breakage.
5. 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 service personnel to verify that patient safety is not compromised.*



6. 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.

**Caution!** *To prevent overheating, do not cover the openings or place the device in direct sunlight or near radiant heaters.*



7. 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.*



8. If your computer does not keep the correct time or the BIOS configuration has been reset to default, the battery may have no charge.

**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.*

**Caution!** *The battery charging indicator is not included with this device. It will be added to the finished system assembly and be shown with the completed system.*



9. Improper installation of VESA mount 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 detailed operating procedure is specified in Appendix A.
10. Classification:
  - 1). 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 systems.*



11. Environmental protection: follow national requirements to dispose of unit.
12. 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 Digital Healthcare cannot warrant or endorse the safe performance of third-party replacement parts for use with our medical device.*



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

14. 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

15. Accessory equipment connected to 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.

**Caution!** Use suitable mounting apparatus to avoid risk of injury.



16. Grounding reliability can only be achieved when the equipment is connected to an equivalent receptacle marked "Hospital Only" or "Hospital Grade".
17. Use a power cord that matches the voltage of the power outlet, which has been approved and complies with the safety standard of your particular country.

**Note!** Environmental protection



Follow national requirements to dispose of unit.

1. Suivez strictement ces Instructions d'utilisation; lisez attentivement ces consignes de sécurité.
2. Conservez ce Manuel de l'utilisateur comme référence ultérieure; toute utilisation du produit exige la pleine compréhension et l'observation stricte de toutes les parties de ces instructions. Respectez tous les messages AVERTISSEMENTS et ATTENTION tels que stipulés dans ce manuel et sur les étiquettes sur l'équipement.
3. La réparation de l'appareil ne peut être effectuée que par un personnel qualifié. Advantech recommande qu'un contrat de service soit obtenu auprès du Service Advantech et que toutes les réparations soient réalisées par eux. Sinon, le fonctionnement correct de l'appareil peut être compromis.

**Avertissement!** *En raison du risque de choc électrique, ne retirez jamais le couvercle d'un appareil lorsqu'il est en marche ou connecté à une prise de courant.*



4. Si l'une des situations suivantes se présentait, faites vérifier l'équipement par un personnel qualifié :
  - Le cordon d'alimentation ou la fiche est endommagé.
  - Un liquide a pénétré dans l'équipement.
  - L'équipement a été exposé à l'humidité.
  - L'équipement ne fonctionne pas correctement ou vous n'arrivez pas à le faire fonctionner conformément au manuel de l'utilisateur.
  - L'équipement est tombé et il est endommagé.
  - L'équipement présente des signes évidents de dommages.
5. Déconnectez cet équipement de la prise secteur avant de le nettoyer. Utilisez un chiffon humide. Ne pas utiliser de liquide ou ne vaporisez pas de détergents pour le nettoyage et maintenez cet équipement à l'abri de l'humidité.

**Attention!** *Pour éviter un court-circuit et de risquer d'endommager l'appareil, ne laissez pas de liquides entrer en contact avec l'appareil. Si des liquides sont renversés accidentellement sur l'équipement, retirez l'unité affectée du service dès que possible et contactez le personnel de réparation pour vérifier que la sécurité des patients n'est pas compromise.*



6. Placez cet équipement sur une surface stable pendant l'installation. S'il est lâché brutalement ou en cas de chute il risque d'être endommagé. Les prises de courant destinées à brancher les équipements doivent être situées près de l'équipement et doivent être facilement accessibles.

**Attention!** *Pour éviter la surchauffe, ne couvrez pas les ouvertures ou ne placez pas l'appareil en plein soleil ou près d'un radiateur radiant.*



7. Vérifiez que la tension de la source d'alimentation est correcte avant de brancher l'équipement à la prise de courant. Placez le cordon d'alimentation de telle sorte qu'il ne soit pas piétiné. Ne placez rien sur le cordon d'alimentation. Si l'équipement ne doit pas être utilisé pendant une longue période, débranchez-le de la source d'alimentation pour éviter les dommages causés par les surtensions transitoires.

**Attention!** Ne laissez pas cet appareil dans un environnement non contrôlé où la température de stockage est inférieure à -20° C (-4° F) ou supérieure à 60° C (140° F). Cela pourrait endommager l'équipement.



8. Si votre ordinateur ne conserve pas l'heure exacte ou que la configuration du BIOS a été réinitialisée aux valeurs par défaut, cela signifie que la batterie est peut-être déchargée.

**Attention!** Ne remplacez pas la batterie vous-même. Faites appel à un technicien qualifié ou à votre vendeur.



L'ordinateur est muni d'un circuit d'horloge en temps réel alimenté par batterie. Il y a danger d'explosion si la batterie n'est pas remplacée correctement. Remplacez-la uniquement par un type de batterie équivalent recommandé par le fabricant. Éliminez les batteries usagées conformément aux instructions du fabricant.

L'indicateur de charge de la batterie n'est pas fourni avec cet appareil. Il sera ajouté à l'ensemble du système fini et montré avec le système complet.

**Attention!** L'indicateur de charge de la batterie n'est pas fourni avec cet appareil. Il sera ajouté à l'ensemble du système fini et montré avec le système complet.



9. Une mauvaise installation du montage VESA peut entraîner des blessures graves! L'installation du montage VESA doit être effectuée par un technicien professionnel, veuillez contacter le technicien de service ou votre vendeur si vous avez besoin de ce service. La procédure détaillée est spécifiée à l'Annexe A.
10. Classification :
- 1). Adaptateur de Classe I d'alimentation
  - 2). Aucune partie appliquée
  - 3). IPX1
  - 4). Fonctionnement continu
  - 5). Catégorie non AP ou APG

**Avertissement!** Cet appareil n'est pas adapté à une utilisation en présence d'un mélange anesthésique inflammable avec l'air, d'oxygène, de protoxyde d'azote, ou de systèmes d'assistance médicale.



11. Protection de l'environnement : Respectez les exigences nationales pour éliminer l'appareil.
12. Entretien : Pour entretenir et nettoyer correctement les surfaces, utilisez uniquement les produits approuvés ou nettoyez avec un applicateur sec.

**Attention!** Lors de l'entretien de l'appareil, utilisez toujours des pièces de rechange qualifiées aux normes Advantech. Advantech Digital Healthcare ne peut garantir ou endosser les performances sécurisées des pièces de rechange de tiers pour une utilisation avec notre appareil médical.



13. Assurez-vous que l'utilisateur ne permet pas de contact entre SIP/SOP et le patient en même temps.
14. Lors de la mise en réseau avec des appareils électriques, l'opérateur est responsable de s'assurer que le système résultant répond aux exigences prévues par les normes suivantes :
  - EN 60601-1 (IEC 60601-1)  
Équipements électriques médicaux  
Partie 1 : Exigences générales pour la sécurité
  - EN 60601-1-1 (IEC 60601-1-1)  
Équipements électriques médicaux  
Partie 1-1 : Exigences générales pour la sécurité  
Norme collatérale : Exigences de sécurité pour Les systèmes médicaux électriques
  - EN 60601-1-2 (IEC 60601-1-2)  
Équipements électriques médicaux  
Partie 1-2 : Exigences générales pour la sécurité  
Norme collatérale : Compatibilité électromagnétique; Exigences et essais



**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

15. Les accessoires connectés aux interfaces analogiques et numériques doivent être conformes aux normes IEC harmonisées à l'échelle nationale respectives (c.-à-d. IEC 60950 pour les équipements de traitement de données, IEC 60065 pour les équipements vidéo, IEC 61010-1 pour les équipements de laboratoire, et IEC 60601-1 pour le matériel médical.)  
Par ailleurs, toutes les configurations doivent être conformes à la norme IEC 60601-1-1 du système. Toute personne reliant un équipement supplémentaire à la partie d'entrée du signal ou à la partie de sortie du signal configure un système médical, et est donc responsable de ce que le système soit conforme aux exigences de la norme IEC 60601-1-1 du système. L'appareil est conçu pour être connecté exclusivement avec un équipement certifié IEC 60601-1 dans l'environnement du patient et un équipement certifié IEC 60XXX en-dehors de l'environnement du patient. En cas de doute, consultez le département des services techniques ou votre représentant local.

**Attention!** Utilisez un appareil de montage approprié pour éviter tout risque de blessure.



16. La fiabilité de mise à la terre ne peut être atteinte que lorsque l'appareil est connecté à un réceptacle équivalent marqué « Hôpital uniquement » ou « Qualité Hôpital ».

17. Utilisez un cordon d'alimentation qui corresponde à la tension de la prise de courant et qui a été approuvée et conforme à la norme de sécurité de votre pays en particulier.

**Remarque!**

*Protection de l'environnement*



*Respectez les exigences nationales pour l'élimination de l'appareil.*

## Explanation of Graphical Symbols



IEC 60878 and ISO 3864-B.3.6 : Warning: dangerous voltage



ISO 7000-0434 : Caution, consult ACCOMPANYING DOCUMENTS.



ISO 7000-1641 : Follow operating instructions or consult instructions for use.



IEC 60417 -5009 : STAND-BY.



IEC 60417-5031 : Direct current.



IEC 60417-5021 : Equipotentiality.

# Disposing of Old Products

## Within the European Union



EU-wide legislation, as implemented in each member state, requires that waste electrical and electronic products carrying the mark shown at left must be disposed of separately from normal household waste. This includes monitors and electrical accessories, such as signal cables or power cords. When you need to dispose of your display products, please follow the guidance of your local authority, or ask the shop where you purchased the product, or if applicable, follow any agreements made between you and the provider.

The mark on electrical and electronic products only applies to the current European Union Member States.

## 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 manual, it may cause harmful interference to radio communications.

Note that even when this equipment is installed and used in accordance with this user 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:

- Reorient or relocate the receiving antenna
- 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 standard's authority could void your authority to operate the equipment.*



Cet équipement a été testé et s'est révélé conforme aux limites définies pour un appareil numérique de classe B, conformément à la section 15 des règles de la FCC. Ces normes sont conçues pour fournir une bonne protection contre les interférences nuisibles quand l'équipement est utilisé en environnement résidentiel. Cet équipement génère, utilise et peut radier des énergies de fréquence radio. S'il n'est pas installé et utilisé conformément à ce manuel de l'utilisateur, il peut générer des interférences nuisibles aux communications radio.

Notez que même lorsque cet équipement est installé et utilisé conformément au présent manuel de l'utilisateur, il n'est toujours pas garanti que des interférences ne se produiront pas. Si cet équipement est censé être à l'origine d'interférences nuisibles à la réception de radio ou télévision, ce qui peut être déterminé en mettant l'appareil sous et hors tension. Si l'interférence se produit, l'utilisateur est encouragé à essayer de corriger l'interférence par une ou plusieurs des mesures suivantes :

- Réorientez ou déplacez l'antenne de réception.
- Éloignez le matériel du récepteur
- Connectez l'équipement à une prise secteur se trouvant sur un circuit différent de celui auquel le récepteur est connecté.
- Consultez votre revendeur ou un technicien spécialisé en radio/TV.

**Avertissement!** *Toute modification apportée à l'équipement non expressément approuvée par l'autorité de la norme pertinente peut annuler votre droit à faire fonctionner l'équipement.*



## List of Accessories/Liste des Accessoires

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

- POC-W212 series Point-of-Care Terminal
- Accessories for POC-W212
- CD-ROM disc-"Drivers, User's manual and Utilities"
- Mounting kits and packet of screws.
- VESA mounting note x1
- China RoHs note x1

**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.*



Avant d'installer votre Terminal de point de soins, assurez-vous que les matériels suivants ont été reçus:

- Terminal de point de soins de la série POC-W212
- Accessoires pour POC-W212
- Disque CD-ROM- « Drivers, User's manual and Utilities » (Pilotes, manuel de l'utilisateur et utilitaires)
- Kits de montage et paquet de vis.
- Note de montage VESA x1
- Note Chine RoHs x1

**Avertissement!**



*Aucune pièce réparable par l'utilisateur; confiez l'entretien à un personnel qualifié. Seuls les accessoires indiqués dans la liste des accessoires ci-dessus ont été testés et approuvés pour être utilisés avec l'appareil. En conséquence, il est fortement recommandé de n'utiliser que ces accessoires en conjonction avec l'appareil spécifique. Sinon, le fonctionnement correct de l'appareil peut être compromis.*

## Additional Information and Assistance/Informations Supplémentaires et 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 malfunction therefore.

### Environmental protection

- Follow national requirements to dispose of unit.

**Manufacturer:**

Advantech Co., Ltd.

No.1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei,  
Taiwan 114, R.O.C.

TEL: (02) 2792-7818

**Distributed in Europe by:**

Advantech Europe GmbH Kolberger Straße 7

D-40599 Düsseldorf, Germany

Tel: 49-211-97477350

Fax: 49-211-97477300

Visit the Advantech websites at [www.advantech.com](http://www.advantech.com) or [www.advantech.com.tw](http://www.advantech.com.tw) if you need more information.

Contactez votre distributeur, représentant des ventes, ou le centre de service à la clientèle d'Advantech pour le support technique si vous avez besoin d'aide supplémentaire. Veuillez préparer les informations suivantes avant d'appeler :

- Nom du produit et numéro de série
- Description de vos équipements périphériques

- Description de vos logiciels (système d'exploitation, version, logiciels d'application, etc.)
- Une description complète du problème
- Le libellé exact des messages d'erreur
- Cet équipement est une source d'ondes électromagnétiques. Avant l'utilisation assurez-vous qu'il n'y a pas de dispositifs sensibles à EMI dans ses environs qui peuvent de ce fait mal fonctionner.

#### Protection de l'environnement

- Respectez les exigences nationales pour l'élimination de l'appareil.

#### Fabricant:

Advantech Co., Ltd.  
No.1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei,  
Taiwan 114, R.O.C.  
TÉL: (02) 2792-7818

#### Distribué en Europe par :

Advantech Europe GmbH Kolberger Straße 7  
D-40599 Düsseldorf, Allemagne  
Tél: 49-211-97477350  
Fax: 49-211-97477300  
Visitez les sites Web Advantech à [www.advantech.com](http://www.advantech.com) ou [www.advantech.com.tw](http://www.advantech.com.tw) si vous avez besoin de plus amples informations.



# Contents

<b>Chapter 1</b>	<b>General Information .....</b>	<b>1</b>
1.1	Introduction .....	2
1.2	Specifications .....	2
1.3	Dimensions .....	4
	Figure 1.1 Dimensions of the POC-W212 .....	4
	Figure 1.2 VESA Mounting of the POC-W212 .....	4
	Figure 1.3 POC-W212 Front Panel .....	5
	Figure 1.4 POC-W212 Back I/O .....	5
1.3.1	Optional Modules .....	5
1.4	Point-of-Care Terminal Cleaning and Disinfecting .....	6
<b>Chapter 2</b>	<b>System Setup .....</b>	<b>7</b>
2.1	A Quick Tour of the POC-W212 .....	8
2.1.1	Front View .....	8
	Figure 2.1 Front View of the Point-of-Care Terminal .....	8
2.1.2	Bottom View .....	9
	Figure 2.2 Bottom View .....	9
2.1.3	Rear View .....	9
	Figure 2.3 Rear view of the Point-of-Care Terminal .....	9
	Figure 2.4 Rear view of Multi I/O ports .....	10
2.1.4	Left-side View .....	11
	Figure 2.5 Left side View .....	11
2.1.5	Right-side View .....	11
	Figure 2.6 Right-side View .....	11
2.2	Installation Procedures .....	12
2.2.1	Connecting the Power Cord .....	12
	Figure 2.7 Connecting the Power Cord .....	12
2.2.2	Connecting the Ground Pin .....	13
	Figure 2.8 POC-W212 Equipotential Terminal Pin .....	13
	Figure 2.9 Grounding cable with connector .....	14
2.3	Running the BIOS Setup Program .....	14
2.4	Installing System Software .....	14
2.5	Troubleshooting .....	15
<b>Chapter 3</b>	<b>Driver Installation .....</b>	<b>21</b>
3.1	Introduction .....	22
3.2	Automatic Driver Installation .....	22
<b>Chapter 4</b>	<b>Operation and Safety Information .....</b>	<b>23</b>
4.1	General Safety Guide .....	24
4.2	Thermal .....	24
4.3	Disconnect the Power .....	25
4.4	Proper Handling .....	25
4.5	Built-in Battery .....	25

<b>Chapter</b>	<b>5</b>	<b>PCM-8715 Connector Map &amp; Table..</b>	<b>27</b>
	5.1	Motherboard Top Side .....	28
	5.2	Motherboard Bottom Side .....	29
		Table 5.1: MB Connector Table .....	29
	5.3	I/O Board.....	30
		Table 5.2: Jumper Settings: .....	30
<b>Chapter</b>	<b>6</b>	<b>PCM-8715 Jumper Settings.....</b>	<b>31</b>
	6.1	Motherboard.....	32
		Figure 6.1 PCM-8709 Motherboard Top Side .....	32
	6.2	I/O Board.....	32
		Figure 6.2 PCM-8715 MB Top Side .....	32
		Table 6.1: Jumper Settings: .....	33
		Table 6.2: CN2: Clear CMOS .....	33
		Table 6.3: CN4: Clear ME .....	33
		Table 6.4: CN14: LVDS Voltage Setup .....	34
		Table 6.5: CN32: Touch always on Mode .....	34
		Table 6.6: CN44: Panel Setup.....	34
		Table 6.7: CN44: Board Setup .....	34
		Table 6.8: CN47: On board resistive touch controller power.....	35
		Table 6.9: CN11 (IO): COM1 RS232/422/485 output type setting	35
		35	
<b>Chapter</b>	<b>7</b>	<b>Front Bezel Buttons .....</b>	<b>37</b>
	7.1	Introduction .....	38
		7.1.1 Front Button Map.....	38
<b>Chapter</b>	<b>8</b>	<b>POC-W212 Advanced BIOS .....</b>	<b>39</b>
	8.1	Introduction .....	40
<b>Appendix A</b>		<b>POC-W212 VESA Mounting.....</b>	<b>43</b>
	A.1	Install VESA Mounting .....	44
		Figure A.1 VESA Mounting 75x75mm, 100x100 mm .....	44

# Chapter 1

General Information

## 1.1 Introduction

The POC-W212 is a multimedia Intel® Core™ i7 or i5 processor series designed for mobile computing as a Point-of-Care terminal (POC.) It is a PC-based system with 21.5" wide screen TFT LCD display, single VGA port, HDMI out, dual on-board 10/100/1000 PCI-E Ethernet controllers, and one LAN port. It supports the Intel AMT9.5 function, has dual COM ports, quad USB 2.0 ports and a 24-bit stereo audio controller. With an optional 2.5" SATA drive, the POC-W212 is a user-friendly computer. For system integrators, this highly integrated multimedia system lets you easily build a Point-of-Care Terminal into your applications. The POC-W212 makes it an ideal and safe point-of-care solution for patients and hospital practitioners.

The POC-W212 is specially designed to resist spills and water damage, and ensures dust resistance with its protected LCD and sealed ports. The POC-W212 is a reliable solution to your application's processing requirements.

**Intended use** - The POC-W212 is intended to serve as a Point-of-Care terminal (POC) for integration with hospital systems. POC-W212 is designed for general purpose medical computing in the hospital environment, for data collection and for displaying information.

It should not be used as a life-support system.

The latest version of this user manual is available for download from <http://support.advantech.com.tw/support/>

## 1.2 Specifications

Computing System	Chipset	QM67
	CPU	Intel® Core™ i7 4650U, 1.7 GHz (up to 3.30 GHz) Processor, Haswell Intel® Core™ i5 4300U, 1.8 GHz (up to 2.90 GHz) Processor, Haswell
	Memory	Up to 16 GB DDR3 1333 MHz SDRAM
	Graphics Controller	Integrated Intel® HD Graphics
	Operating System	WIN7, WIN8 Embedded Standard, Windows 8 industry Pro
	Input Ratings	18Vdc, 5.5A
Display	Display Size	21.5" wide TFT color LCD (16:9)
	Max. Resolution	1920(H) x 1080(V)
	Max. Colors	16.7M colors (RGB 8bits)
	Pixel Pitch (mm)	248.25x248.25
	Viewing Angle	178°/178 °
	Luminance	250 cd/m <sup>2</sup>
	Backlight	LED
	LCD MTBF	30,000 Hours
	Contrast Ratio	5000:1
Expansion Slot	Mini PCIe	2 x Mini PCI-E slot
	PCIe /PCI	1 x PCIe (x4) slot
Storage	HDD	1 x 2.5" SATA

I/O Ports	Serial Ports	1 x RS-232 (isolated) and 1 x RS-232/422/485 (isolated) serial port;
	USB 2.0 Ports	2
	USB3.0	2
	VGA/DVI Ports	1 x VGA port
	Speakers (1W)	2
	LAN	2 x Gigabit Ethernet (isolated) interface (RJ-45)
	HDMI	1 x HDMI out
Power Supply	DC Model	AC/DC adapter (Sinpro Model no.HPU101-107)
	Input Voltage	100-240V AC, 47-63Hz, 1.2-0.5A
	Output Voltage	+18 VDC,5.55 A.
Optional Functions	Battery	3S2P 4200mAH, supports 0.5 hr. backup operation
	Smart Card Reader	Complies with ISO7816-1,2,3,T=1 and T=0 protocols
	WLAN	802.11a/b/g/n wire LAN mini-PCIe module & Internal antenna
	RFID	13.56 MHz with ISO-15693 & ISO-14443°/B and active tag function
	Bluetooth	Integrated Bluetooth v4.0
Optional Touchscreen	Type	Analog Resistive
	Resolution	Continuous
	Light Transmission	80%
	Controller	RS-232 interface (uses COM6)
	Durability	35 million touches
Certifications	UL/TUV/CB, ANSI/AAMI ES60601-1/EN60601-1/IEC60601-1, CE & FCC Class B certified	
Environment	Temperature	0 ~ 40°C (32 ~ 104°F) (Operating) -20 ~ 60°C (Storage) -20 ~ 60°C (Transportation)
	Humidity	10 ~ 95% @ 40°C (non-condensing) 5 ~ 95% (non condensing) (Storage) 5 ~ 95% (Transportation)
	Pressure	700-1013 hPa (Operation) 375 mmHg to 760 mmHg (Storage) 375 mmHg to 760 mmHg (Transportation)
	Water/dust Resistance	IP54/IPX1 compliant IP65 front panel
	Shock Resistance	20G peak acceleration (11ms duration)
Physical Characteristics	Dimensions (W x H x D)	550 x 360 x 65 mm (21.65" x 14.17" x 2.56")
	Weight	6.9 kg (15.2 lb)
Platform & Utility	WIN8 Embedded Standard, Windows 8 industry Pro, Windows 7, SUSI	

## 1.3 Dimensions

Dimensions: 550 x 370 x 65 mm (Unit: mm)

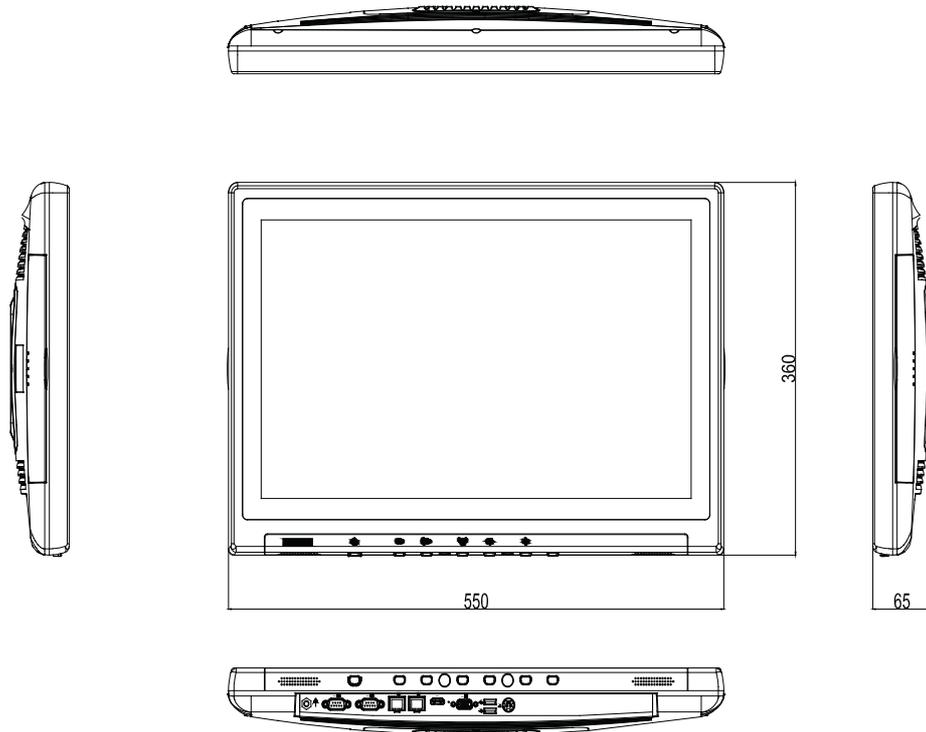


Figure 1.1 Dimensions of the POC-W212

VESA Mounting: 75 x 75 mm; 100 x 100 mm

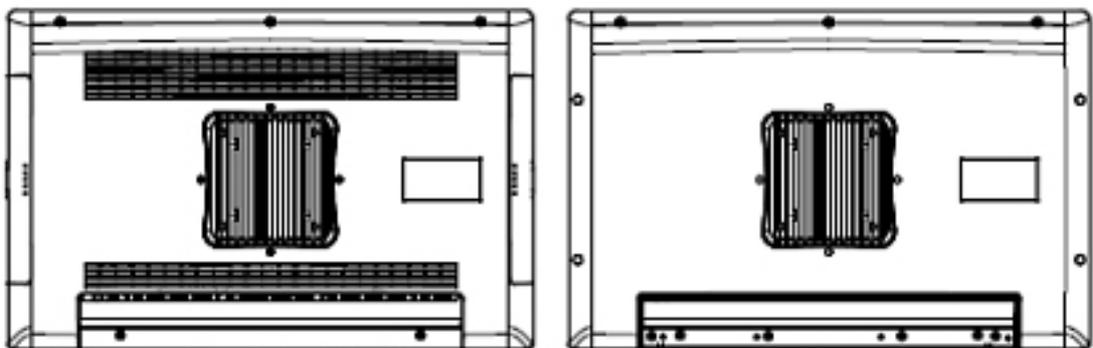


Figure 1.2 VESA Mounting of the POC-W212

**Warning!** Use suitable mounting apparatus to avoid risk of injury.



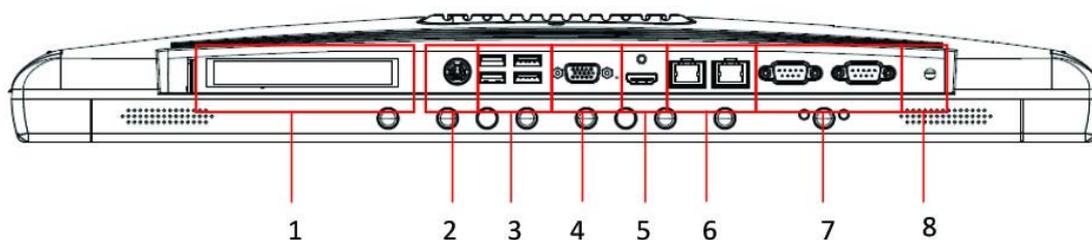
**Avertissement!** Utilisez un appareil de montage approprié pour éviter tout risque de blessure.





**Figure 1.3 POC-W212 Front Panel**

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



**Figure 1.4 POC-W212 Back I/O**

- (1) PCIe (x4) card slot
- (2) Power DC-IN
- (3) 2 x USB 3.0 ports and 2 x USB 2.0 ports
- (4) VGA port
- (5) HDMI out port
- (6) 2 x (RJ-45) Gigabit Ethernet interfaces
- (7) 2 x (DE-9) RS-232 (isolated)
- (8) Equipotential Terminal Pin

### 1.3.1 Optional Modules

- Memory: 2GB, 4GB DDR3 1333 MHz SDRAM
- HDD: 2.5" SATA HDD
- Touchscreen: Analog resistive / Projected Capacitive

## 1.4 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 ester solvents, sharp tools or abrasives. Never immerse electrical connectors in water or other liquids.*

**Attention!** ■ *Ne pas immerger ou rincer le POC ou ses périphériques. Si vous renversez par accident un liquide sur l'appareil, débranchez l'appareil de la source d'alimentation. Contactez votre département Biomed concernant la sécurité continue de l'unité avant de la remettre en service.*



- *Ne pas pulvériser de produits de nettoyage sur le châssis.*
- *Ne pas utiliser de désinfectants contenant du phénol. Ne pas stériliser ou nettoyer le POC ou ses périphériques avec des solvant aromatiques forts, chlorés, cétone, éther, ou des solvants Esther, des outils tranchants ou abrasifs. Ne jamais plonger les connecteurs électriques dans l'eau ou d'autres liquides.*

# Chapter 2

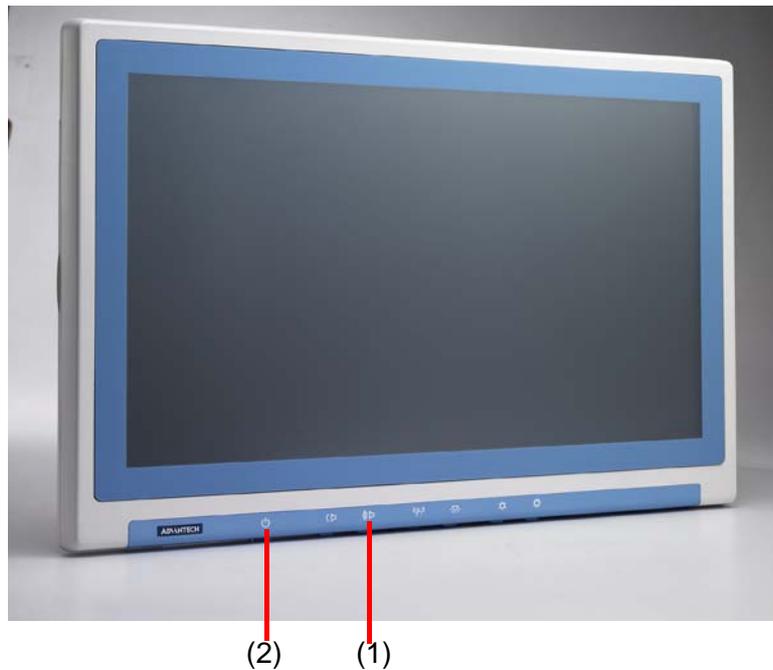
## System Setup

## 2.1 A Quick Tour of the POC-W212

Before you start to set up the POC-W212, 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-W212 upright on the desktop, its front panel appears as shown in Figure 2.1.

### 2.1.1 Front View



**Figure 2.1 Front View of the Point-of-Care Terminal**

#### **Front Bezel View**

- (1) LCD panel with Touchscreen option (Touchscreen Enabled: Green light)
- (2) Power symbol w/ indicator light (Power on: Green light)

## 2.1.2 Bottom View

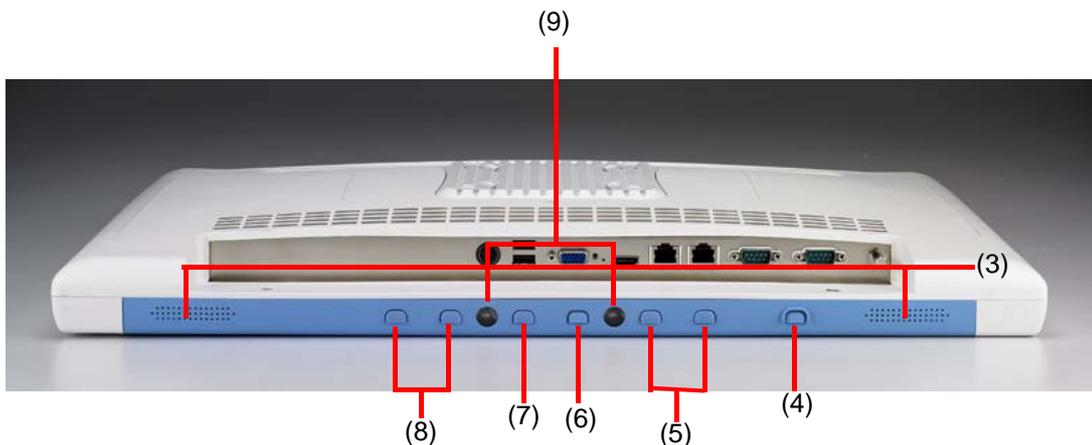


Figure 2.2 Bottom View

### Bottom View:

- (3) Speaker
- (4) Power Button
- (5) Volume Up/Down Button
- (6) Touchscreen Status Control Button
- (7) Read Light Control Button
- (8) Brightness Increase/Decrease Bottom
- (9) LED for Book Light

## 2.1.3 Rear View

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 and Figure 2.4 (zoom view). (The I/O section includes various I/O ports, including serial ports, VGA, HDMI, Ethernet port, USB ports and so on.)

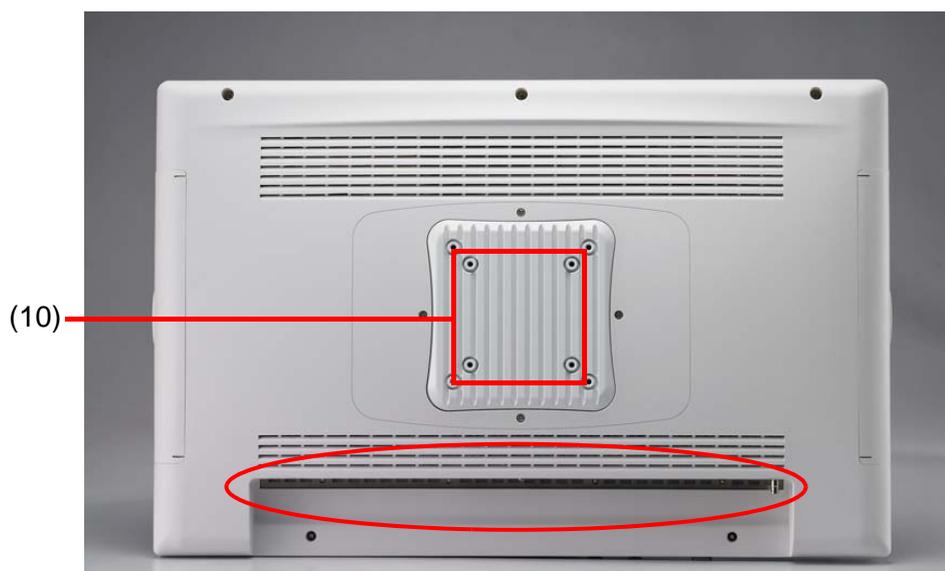
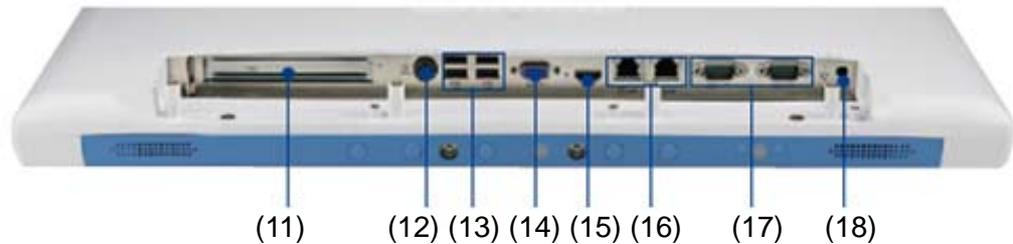


Figure 2.3 Rear view of the Point-of-Care Terminal



**Figure 2.4 Rear view of Multi I/O ports**

**Rear View:**

- (10) VESA mounting 100mm x 100mm or 75mm x 75mm
- (11) PCIe (x4) card slot
- (12) Power DC-IN
- (13) 2 x USB 3.0 ports and 2 x USB 2.0 ports
- (14) VGA port
- (15) HDMI out port
- (16) 2 x Gigabit Ethernet interfaces (RJ-45)
- (17) 1 x RS-232 (isolated) serial port and 1 x RS-232/422/485 (isolated) serial port
- (18) Equipotential Terminal Pin

**Note!** Equipotential terminals need a link to hospital ground/earth system before the system boots to protect operator and system.



**Remarque!** Les terminaux équipotentiels ont besoin d'un lien vers le système sol/terre de l'hôpital avant le démarrage du système pour protéger l'opérateur et le système.



## 2.1.4 Left-side View

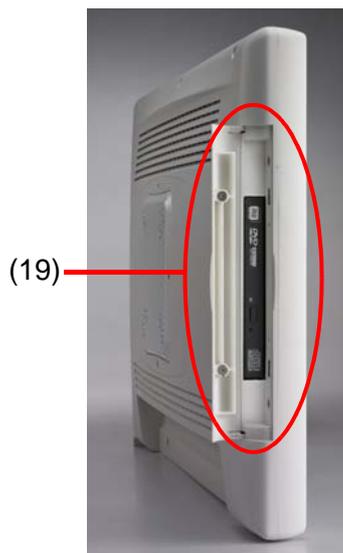


Figure 2.5 Left side View

**Left-side View:**  
(19) RW-DVD-ROM (Optional)

## 2.1.5 Right-side View

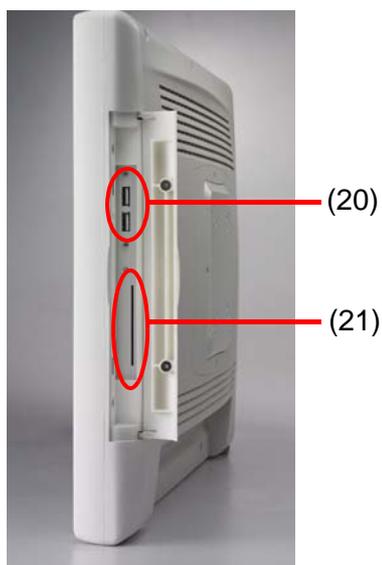


Figure 2.6 Right-side View

**Left-side View:**  
(20) USB5-USB6 ports  
(21) Smart Card Reader (Optional)

## 2.2 Installation Procedures

### 2.2.1 Connecting the Power Cord

The POC-W212 can only be powered by a DC power adapter (SINPRO Model no.HPU101-107). Be sure to always handle the power cords by holding the plug ends only.

Follow these procedures in order:

1. Connect the female end of the power adapter to the DC jack of the panel PC. (See Figure 2.7.)
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.

#### Switching on the power:

Push down the power button on the front panel for POC-W212. (The color indicator turns green)

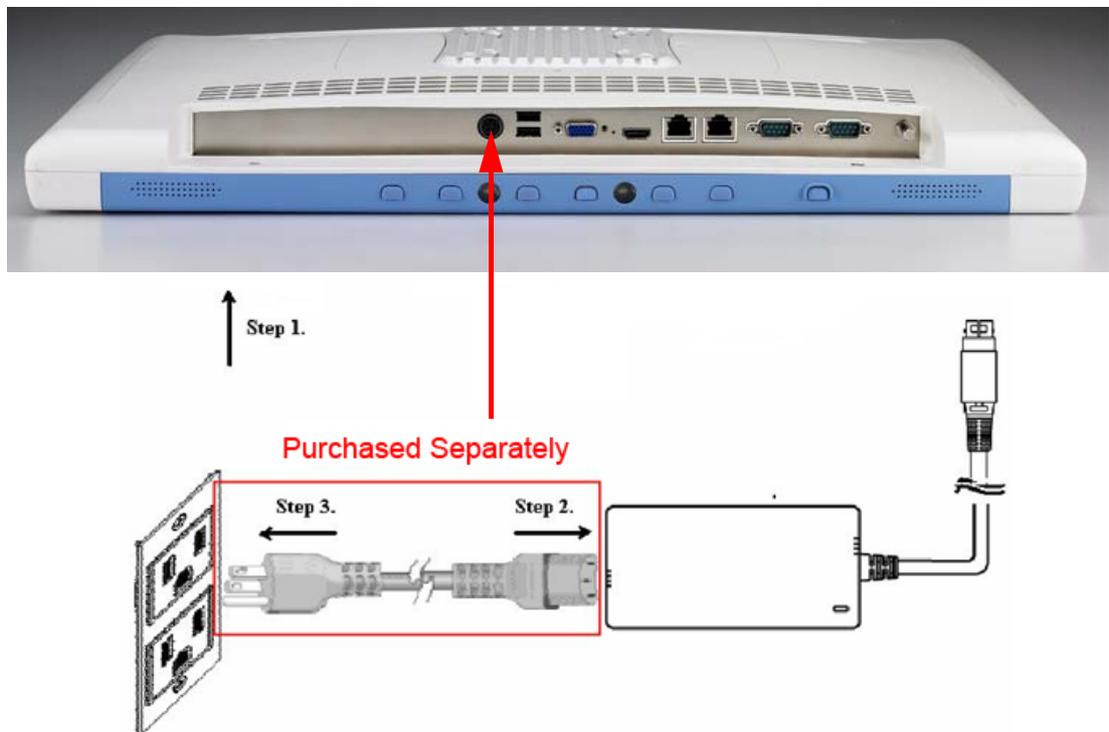


Figure 2.7 Connecting the Power Cord

**Warning!** The POC-W212 is supplied by a 100 watt power supply and a special adaptor as depicted as above model.



If medical adaptor is connected to the POC-W212, the customer must ensure legal and regulatory compliance and that the device meets the law and standards compliance requirements of this hardware.

**Avertissement!** Le POC-W212 est alimenté par une alimentation de 100 watts et un adaptateur spécial comme illustré par le modèle ci-dessus.



Si l'adaptateur médical est relié au POC-W212, le client doit s'assurer de la conformité juridique et réglementaire et que le dispositif répond à la loi et aux exigences de conformité aux normes de ce matériel.

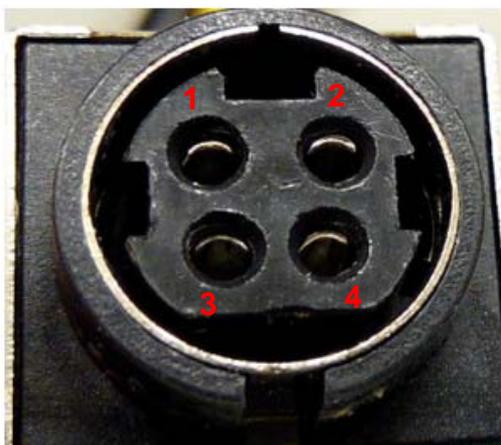
**Warning!** The POC-W212 adapter is direction power plug.  
Power Plug view is below.



### Power Plug Pin Define

Pin	Function
1, 2	+18V Power
3, 4	Power Return
Shell	Protect Ground

Below photo is POC-W212 system DCIN Connector.



Adapter Power plug MUST plug in POC-W212 DCIN connector in RIGHT direction, otherwise, it might damage system components.

### 2.2.2 Connecting the Ground Pin

1. With system ready, find the equipotential terminal on the rear side of the POC. An equipotential terminal is provided to optionally connect to a hospital ground/earth system



Figure 2.8 POC-W212 Equipotential Terminal Pin

2. Prepare the grounding cable and the other terminal link to hospital ground/earth system.



**Figure 2.9 Grounding cable with connector**

3. Grounding cable plug with Equipotential Terminal

## 2.3 Running the BIOS Setup Program

Your POC-W212 was probably 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 “F2 or 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 pre-installed 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 boots 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 “ECS or Del” key to boot into BIOS menu and adjust the boot device sequence.

You can also press F12 key when booting; a bootable device popup menu will appear, you can select bootable device that you want. 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 Troubleshooting

When system behaves abnormally, such as:

1. Failure to power on
2. Failure to power off
3. Power LED ON but no DC power output
4. AC power in and all switches ON, but system doesn't power on

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
- Symptoms, photo or video if available.

<b>Guidance and Manufacturer's Declaration – Electromagnetic Emissions</b>		
The model POC-W212 is intended for use in an electromagnetic environment as specified below. The customer or the user of the POC-W212 should assure that it is used in such an environment.		
<b>Emissions Test</b>	<b>Compliance</b>	<b>Electromagnetic Environmental Guidance</b>
RF emissions CISPR 11	Group 1	The model POC-W212 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The model POC-W212 is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Not applicable	

**Recommended Separation Distances Between Portable and Mobile RF Communications Equipment and the POC-W212**

POC-W212 is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the model POC-W212 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the model POC-W212 as recommended below, according to the maximum output power of the communications equipment.

Rated Maximum Output Power of Transmitter W	Separation Distance According to Frequency of Transmitter m		
	150 kHz to 80 MHz $d = 1,2 \sqrt{P}$	80 MHz to 800 MHz $d = 1,2 \sqrt{P}$	800 MHz to 2,5 GHz $d = 2,3 \sqrt{P}$
0,01	0,12	0,12	0,23
0,1	0,38	0,38	0,73
1	1,2	1,2	2,3
10	3,8	3,8	7,3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance  $d$  in meters (m) can be estimated using the equation in the table above applicable to the frequency of the transmitter, where  $P$  is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

<b>Guidance and Manufacturer's Declaration – Electromagnetic Immunity</b>			
POC-W212 is intended for use in the electromagnetic environment specified below. The customer or the user of the model POC-W212 should assure that it is used in such an environment.			
<b>Immunity Test</b>	<b>IEC 60601 Test Level</b>	<b>Compliance Level</b>	<b>Electromagnetic Environmental Guidance</b>
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst  IEC 61000-4-4	±2 kV for power supply lines  ±1 kV for input/output lines	±2 kV for power supply lines  ±1 kV for input/output lines	Main power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV line(s) to line(s) ±2 kV line(s) to earth	±1 kV line(s) to line(s) ±2 kV line(s) to earth	Main power quality should be that of a typical commercial or hospital environment.
Interruptions and voltage variations on power supply input lines  IEC 61000-4-11	<5% <i>UT</i> (>95% dip in <i>UT</i> ) for 0,5 cycle  40% <i>UT</i> (60% dip in <i>UT</i> ) for 5 cycles  70% <i>UT</i> (30% dip in <i>UT</i> ) for 25 cycles  <5% <i>UT</i> (>95% dip in <i>UT</i> ) for 5 sec	<5% <i>UT</i> (>95% dip in <i>UT</i> ) for 0,5 cycle  40% <i>UT</i> (60% dip in <i>UT</i> ) for 5 cycles  70% <i>UT</i> (30% dip in <i>UT</i> ) for 25 cycles  <5% <i>UT</i> (>95% dip in <i>UT</i> ) for 5 sec	Main power quality should be that of a typical commercial or hospital environment. If the user of the model POC-W212 requires continued operation during main power interruption, it is recommended that the model POC-W212 be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE <i>UT</i> is the A.C. main voltage prior to application of the test level.			

**Guidance and Manufacturer’s Declaration – Electromagnetic Immunity**

The model POC-W212 is intended for use in the electromagnetic environment specified below. The customer or the user of the model POC-W212 should assure that it is used in such an environment.

Immunity test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environmental Guidance
<p>Conducted RF IEC 61000-4-6</p> <p>Radiated RF IEC 61000-4-3</p>	<p>3 Vrms 150 kHz to 80 MHz</p> <p>3 V/m 80 MHz to 2,5 GHz</p>	<p>Vrms</p> <p>V/m</p>	<p>Portable and mobile RF communications equipment should be used no closer to any part of the model POC-W212, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.</p> <p><b>Recommended Separation Distance</b></p> $d = 1,2 \sqrt{P}$ $d = 1,2 \sqrt{P} \text{ 80 MHz to 800 MHz}$ $d = 2,3 \sqrt{P} \text{ 800 MHz to 2,5 GHz}$ <p>where <math>P</math> is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and <math>d</math> is the recommended separation distance in meters (m).</p> <p>Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, <sup>a</sup> should be less than the compliance level in each frequency range. <sup>b</sup></p> <p>Interference may occur in the vicinity of equipment marked with the following symbol:</p> 

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.  
 NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

- a** Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the POC-W212 is used exceeds the applicable RF compliance level above, the POC-W212 should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the unit.
- b** Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.



# Chapter 3

## Driver Installation

## 3.1 Introduction

The POC-W212 supports "one key" driver installation. User can just click one button to install all drivers.

**Warning!** Please use clean OS to install this auto installation, otherwise, it might cause un-expected error(s).



**Avertissement!** Utilisez un système d'exploitation propre pour installer cette installation automatique, sinon, cela pourrait causer des erreurs imprévues.



Windows Driver List:

Please follow your OS version (WIN7 32-bit, WIN7 64-bit, WIN8 32-bit, WIN8 64-bit) to install proper drivers.

These drivers located on driver CD\Driver\ folder

Please follow this sequence to install drivers.

Install sequence	Folder Name	Note
1	Chipset	Please install chipset driver first.
2	Graphics	
3	Audio	
4	LAN	
5	Touch	Option Resistive Touch only. Please install this driver when you use resistive touch. Install at USB interface option. PCAP touch use Windows internal driver. No need extra driver.
6	Wireless	Option
7	Smart Card	Option
8	RFID	Option
9	Bluetooth 4.0	Option
10	AMT	
11	USB3.0	

## 3.2 Automatic Driver Installation

1. Double Click "InstallAll.exe" in D:\Driver\ folder. The Install dialog will appear.
2. Please follow the instruction to install the driver

# Chapter 4

Operation and Safety  
Information

---

## 4.1 General Safety Guide

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

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

- 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 computer or screen
- You want to remove/install any parts

## 4.2 Thermal

The vent hole of the POC-W212 rear cover functions as a cooling air flow inlet and outlet. These air inlets and outlets transfer heat from inside the computer to the cooler air outside. Do not block these holes/vents.

When using your POC-W212 system, it is normal for the rear metal heatsink to get warm. The rear metal heatsink of the POC-W212 functions as a cooling surface that transfers heat from inside the computer to the cooler air outside. Do not block this heatsink with any soft material.

**Warning!** *Do not place your POC-W212 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.*



## 4.3 Disconnect the Power

The only way to disconnect power completely is to unplug the adapter 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.

**Warning!**  Never push objects of any kind into this product through the openings in the case. Doing so may be dangerous and result in fire or a dangerous electric shock.

Never place anything on system case before turning off the 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.

## 4.4 Proper Handling

Handle your POC-W212 with care. It is made of metal, glass, and plastic and has sensitive electronic components inside.

Don't use a damaged POC-W212, such as one with a cracked screen, as it may cause injury.

Set POC-W212 on a stable work surface.

Do not push objects into the ventilation openings.

To lift or move your system, hold its sides.

When you move your system, do not hit the surface of the glass.

## 4.5 Built-in Battery

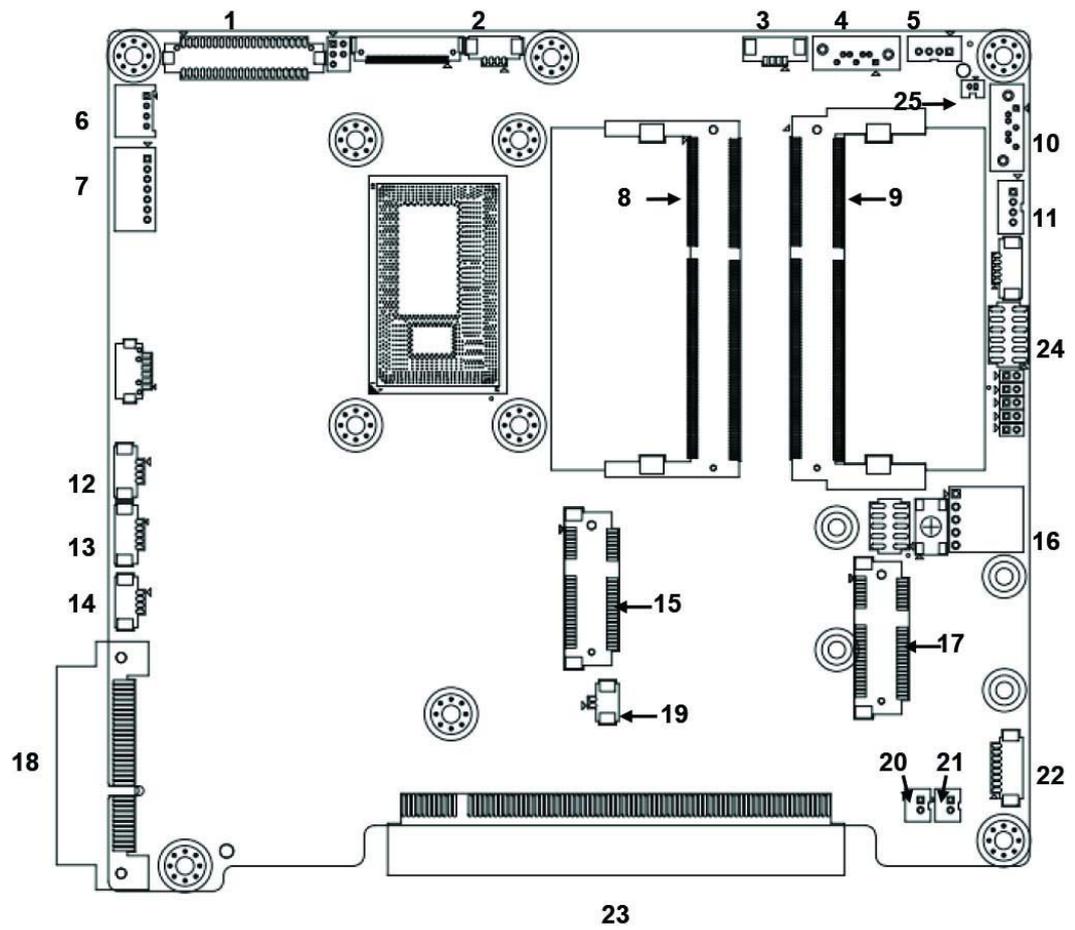
Do not remove the battery from your system. The battery should be replaced only by Advantech Service. Discontinue use of your system if it has been dropped or appears crushed, bent, deformed, or damaged. Do not expose your system to extreme heat sources, such as radiators or fireplaces.



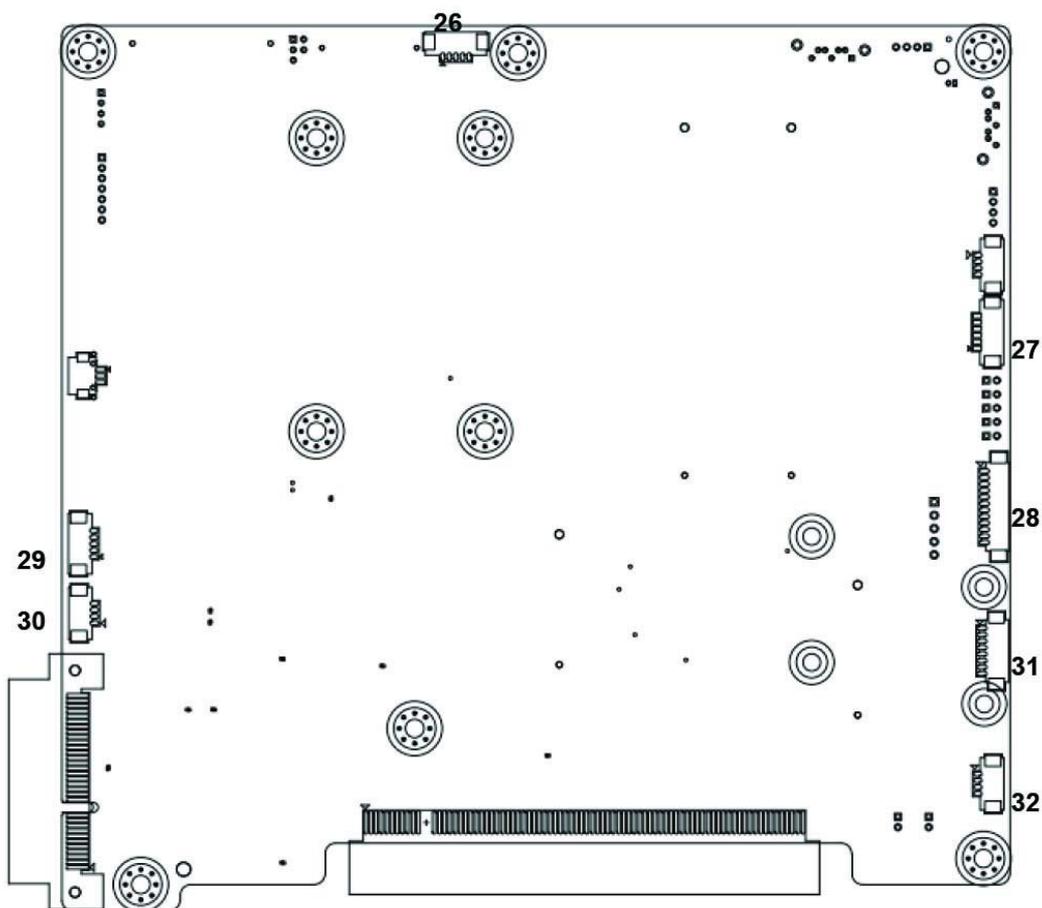
# Chapter 5

PCM-8715 Connector  
Map and Table

## 5.1 Motherboard Top Side



## 5.2 Motherboard Bottom Side



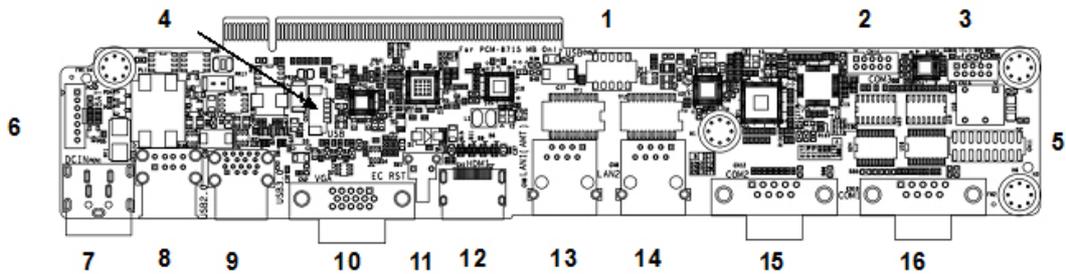
**Table 5.1: MB Connector Table**

No.	Description
1	LVDS Connector
2	Camera/USB (5V) Connector
4	SATA 0 Connector
5	SATA 0 Power Connector
7	LED Driver/Inverter Connector
8	DDR3L SODIMM 2 Socket
9	DDR3L SODIMM 1 Socket
10	SATA 1 Connector
11	SATA 1 Power Connector or
12	PCAP Touch USB Connector
13	Camera/USB (12V and 3.3V) Connector
14	USB (5V) Connector
15	Mini PCIe (Half Size) Socket
16	5 wires resistive Touch Connect
17	Mini PCIe (Full Size) Socket
18	PCIex4 Slot
19	RTC Battery Connector
20	Left Speaker Connector
21	Right Speaker Connector

**Table 5.1: MB Connector Table**

22	Audio Connector
23	IO Board Slot
24	Port 80 (LPC) Debug port (Reserved)
25	EC Debug port (Reserved)
26	EC SMBUS Connector
27	Power Button Connector (Reserved)
28	Front Button Connector
29	PCH SMBUS Connector
30	RFID/USB (5V) Connector
31	Bluetooth/USB (3.3V) Connector
32	Audio (Reserved) Connector

### 5.3 I/O Board



\* All Jumpers located at top side

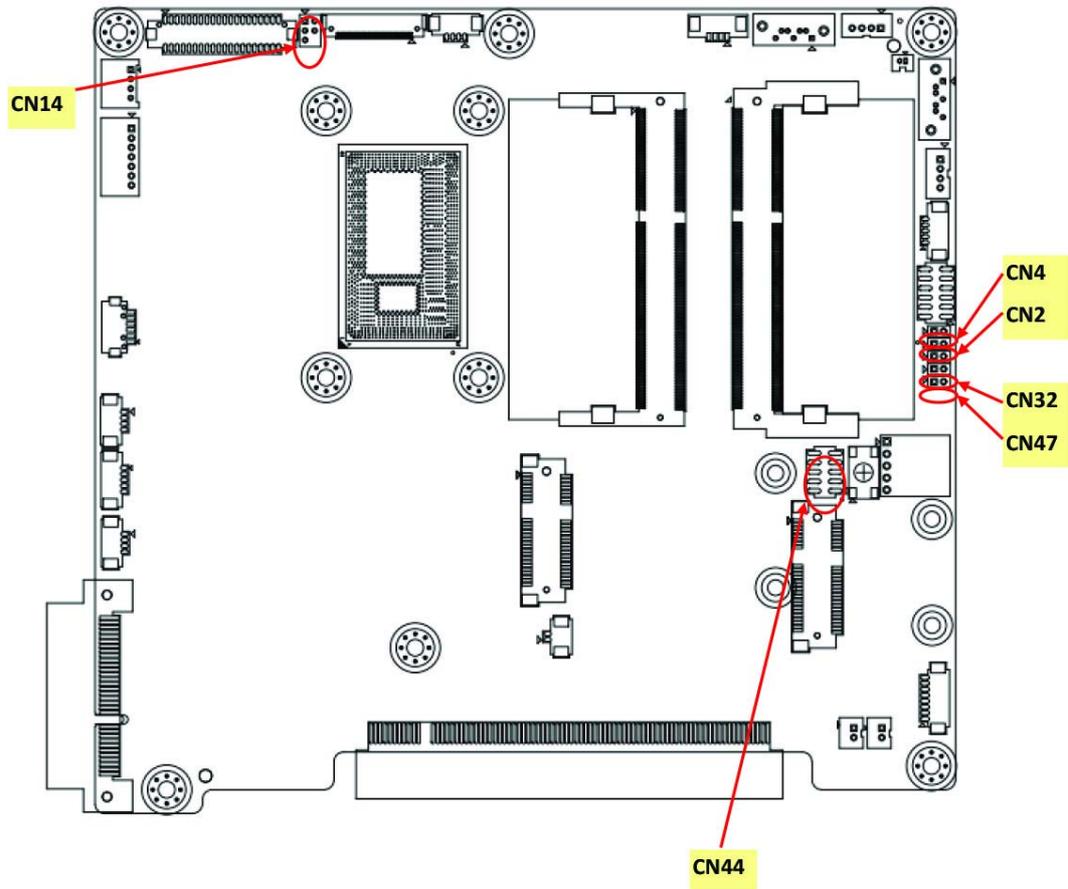
**Table 5.2: Jumper Settings:**

Setting	Function
CN2	Clear CMOS
CN4	ME Manufacturing Mode
CN14	LVDS Voltage
CN32	Touch Always On
CN44	Panel Setup/Board Setup
CN47	Resistive Touch Controller power
<b>IO:</b>	
CN11	COM1 RS-232/422/485 output type setting

# Chapter 6

## PCM-8715 Jumper Settings

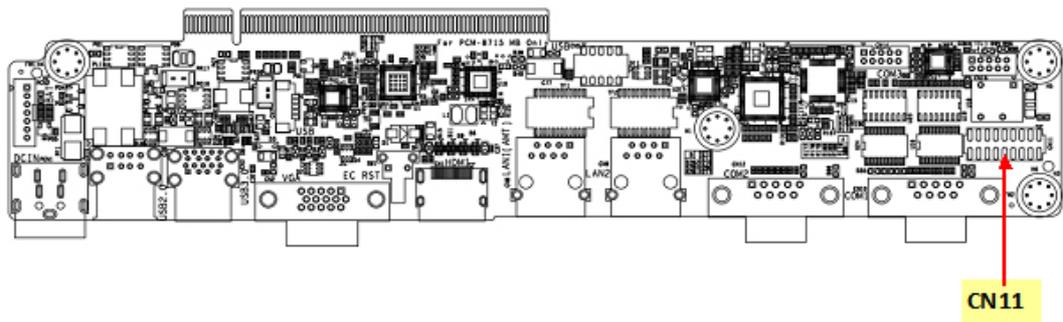
## 6.1 Motherboard



\* All Jumpers located on top side

**Figure 6.1 PCM-8709 Motherboard Top Side**

## 6.2 I/O Board



\* All Jumpers located on top side

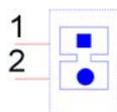
**Figure 6.2 PCM-8715 MB Top Side**

**Table 6.1: Jumper Settings:**

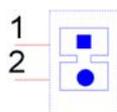
Setting	Function
CN2	Clear CMOS
CN4	ME Manufacturing Mode
CN14	LVDS Voltage
CN32	Touch Always On
CN44	Panel Setup/Board Setup
CN47	Resistive Touch Controller power
<b>IO:</b>	
CN11	COM1 RS-232/422/485 output type setting

**Table 6.2: CN2: Clear CMOS**

Setting	Function
(1-2)	Clear CMOS Setup
(No Connect)	Normal Operation (Default)

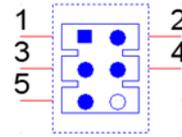
**Table 6.3: CN4: Clear ME**

Setting	Function
(1-2)	Clear ME Setup
(No Connect)	Normal Operation (Default)



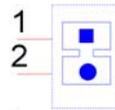
**Table 6.4: CN14: LVDS Voltage Setup**

Setting	Function
(1-3)	Panel LVDS voltage 5V (Default)
(2-4)	Panel LVDS voltage 12V
(3-5)	Panel LVDS voltage 3.3V



**Table 6.5: CN32: Touch always on Mode**

Setting	Function
(1-2)	Touch always enable
(No Connect)	Normal Operation (Default)

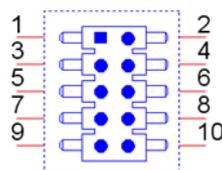


**Table 6.6: CN44: Panel Setup**

Setting	Function
(3-4)(5-6)	Panel Resolution: 24 bits single channel 1024x768
(1-2)(5-6)	Panel Resolution: 24 bits dual channel 1280x1024
(1-2)(3-4)(5-6)	Panel Resolution: 24 bits dual channel 1680x1050
(5-6)	Panel Resolution: Manual setting
(3-4)	Panel Resolution: 24 bits dual channel 1920x1080 (Default)
(1-2)	Panel Resolution: 24 bits single channel 1366x768
(1-2)(3-4)	Panel Resolution: 24 bits single channel 1920x1200
(No Connect)	Reserved

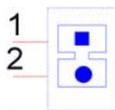
**Table 6.7: CN44: Board Setup**

Setting	Function
(7-8) (9-10)	Reserved
(7-8)	Reserved
(9-10)	Reserved
(No Connect)	Default



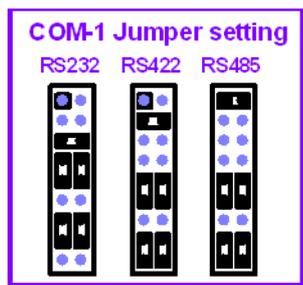
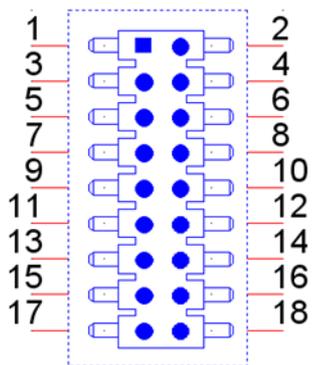
**Table 6.8: CN47: On board resistive touch controller power**

Setting	Function
(1-2)	Resistive Touch Controller power enable
(No Connect)	Resistive Touch Controller power disable, Windows Device Manager will not show this device. (Default)



**Table 6.9: CN11 (IO): COM1 RS232/422/485 output type setting**

Setting	Function
(5-6), (7-9), (8-10), (13-15), (14-16)	RS-232 (Default)
(3-4), (9-11)(10-12), (15-17)(16-18)	RS-422
(1-2), (9-11)(10-12), (15-17)(16-18)	RS-485



RS485: 2 Wires type  
RS422: 4 Wires type



# Chapter 7

## Front Bezel Buttons

## 7.1 Introduction

This section outlines the POC-W212 front button function descriptions.

### 7.1.1 Front Button Map



#### Button Description:

Power button 	Press this button to power system on/off. When system ON, this icon will glow green. The LED turns off when system is off.
Reduce volume 	Press this button to reduce speaker and headphone volume.
Increase volume 	Press this button to increase speaker and headphone volume.
Touch disable 	Press this button to disable/enable the touch function. When touch is enabled, this icon glows green. When touch function is disabled, this LED will be off.
Read light 	Press this button to enable/disable read light.
Reduce brightness 	Press this button to reduce LCD backlight brightness.
Increase brightness 	Press this button to increase LCD backlight brightness.

#### Combination Buttons (Backlight Off):

The backlight off function is a special function. When you press both the reduce brightness and increase brightness buttons at the same time for half a second, the LCD backlight will turn off. Pressing both buttons again for a half second will turn on the LCD backlight.

When the backlight is off, the POC-W212 system will still run. There will not be any impact to any operating programs.

This backlight off function can be used in a hospital environment. For example, if an operator needs to check X-rays in a dark environment, the operator can quickly turn off the backlight to prevent interference.

An operator can turn off the backlight at night to prevent disturbing sleeping patients.

# Chapter 8

POC-W212 Advanced  
BIOS Function

## 8.1 Introduction

This section introduces the advanced functions of the POC-W212 BIOS menu.

### 1. Power Button Function Enable/Disable

You can enable/disable power button functions from the BIOS menu.

If you disable the power button in S0 (System ON) status, the power button will not work. This prevents a user from turning a system off by the power button, preventing accidental shutdown of the system. In this mode, software is required to turn off the system.

BIOS Menu location:

BIOS Menu - Advanced - Embedded Controller Configuration - Power Button Function

Enable: Power button function works when system is in S0 (System ON) status. (Default)

Disable: Power button function does not work when system is in S0 (System ON) status.

Press power button 5 seconds or more to trigger power button.

### 2. Brightness Button Control

You can enable/disable LCD Backlight button function in the BIOS menu.

If you disable the LCD Backlight button, this button will not work, preventing a user from adjusting LCD backlight luminance. This function can prevent accidentally touching the LCD backlight button and inadvertently adjusting LCD backlight luminance.

BIOS Menu location:

BIOS Menu - Advanced - Embedded Controller Configuration - Brightness Button Control

Enable: Front bezel LCD Backlight adjust button control functions work. (Default)

Disable: Front bezel LCD Backlight adjust button control functions do not work.

### 3. Volume Button Control

You can enable/disable Front Volume button functions in BIOS menu.

If you disable the Front Volume button, this button will not work, preventing a user from adjusting speaker volume. This function can prevent accidental volume adjustments.

BIOS Menu location:

BIOS Menu - Advanced - Embedded Controller Configuration - Volume Button Control

Enable: Front bezel volume adjust button control functions work. (Default)

Disable: Front bezel volume adjust button control functions do not work.

#### 4. EC Beep Function

You can enable/disable EC beep function in BIOS menu.

If you disable the EC beep function, EC will not generate a beeping sound when you press front bezel button.

BIOS Menu location:

BIOS Menu - Advanced - Embedded Controller Configuration - EC Beep Function

Enable: Beeping sound when any front bezel button pressed. (Default)

Disable: No beeping sound when a front bezel button pressed.

#### 5. Setup Popup Menu F12

You can enable/disable F12 key Setup popup menu in BIOS menu.

When you press F12 key during bootup, BIOS will display a bootable device menu and you can select the device that you want to boot from.

BIOS Menu location:

BIOS Menu - Boot - Setup Popup Menu F12

Enable: Press F12 key during bootup displays popup menu (Default)

Disable: Press F12 key during bootup does not display popup menu



# Appendix **A**

POC-W212 VESA  
Mounting

## A.1 Install VESA Mounting

The POC-W212 also provides standard VESA mounting to help system integrators conveniently integrate the panel PC into their systems.

Never use mounting brackets except as provided by Advantech to prevent unreliable mounting of the POC-W212. VESA mount installation should be carried out by a professional technician; please contact a service technician or your retailer if you need this service.

Ne jamais utiliser de supports de montage, sauf dans les cas prévus par Advantech pour empêcher un montage non fiable du POC-W212. L'installation du montage VESA doit être effectuée par un technicien professionnel, veuillez contacter un technicien de service ou votre vendeur si vous avez besoin de ce service.

Installation instructions follow:

1. First attach wall-mounting to the heat-sink of the POC-W212, securing it in place with the four Phillips-head screws provided.
2. Mount the unit on the wall, stand or other flat surface.

**Warning!** *Be sure to secure the screws of the mounting bracket tightly. A loose joint between the POC-W212 and mounting bracket may create danger of injury.*



**Avertissement!** *Prenez soin de bien serrer les vis du support de montage. Un assemblage lâche entre le POC-W212 et le support de montage peut entraîner des risques de blessures.*

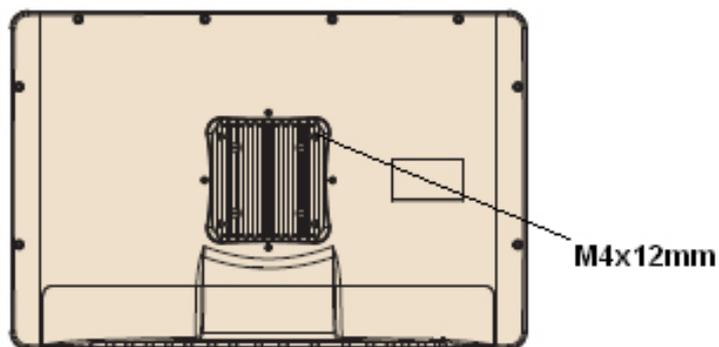


Figure A.1 VESA Mounting 75x75mm, 100x100 mm



**ADVANTECH**

*Enabling an Intelligent Planet*

**[www.advantech.com](http://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.

No part of this publication may be reproduced in any form or by any means, electronic, photocopying, recording or otherwise, without prior written permission of the publisher.

All brand and product names are trademarks or registered trademarks of their respective companies.

© Advantech Co., Ltd. 2015