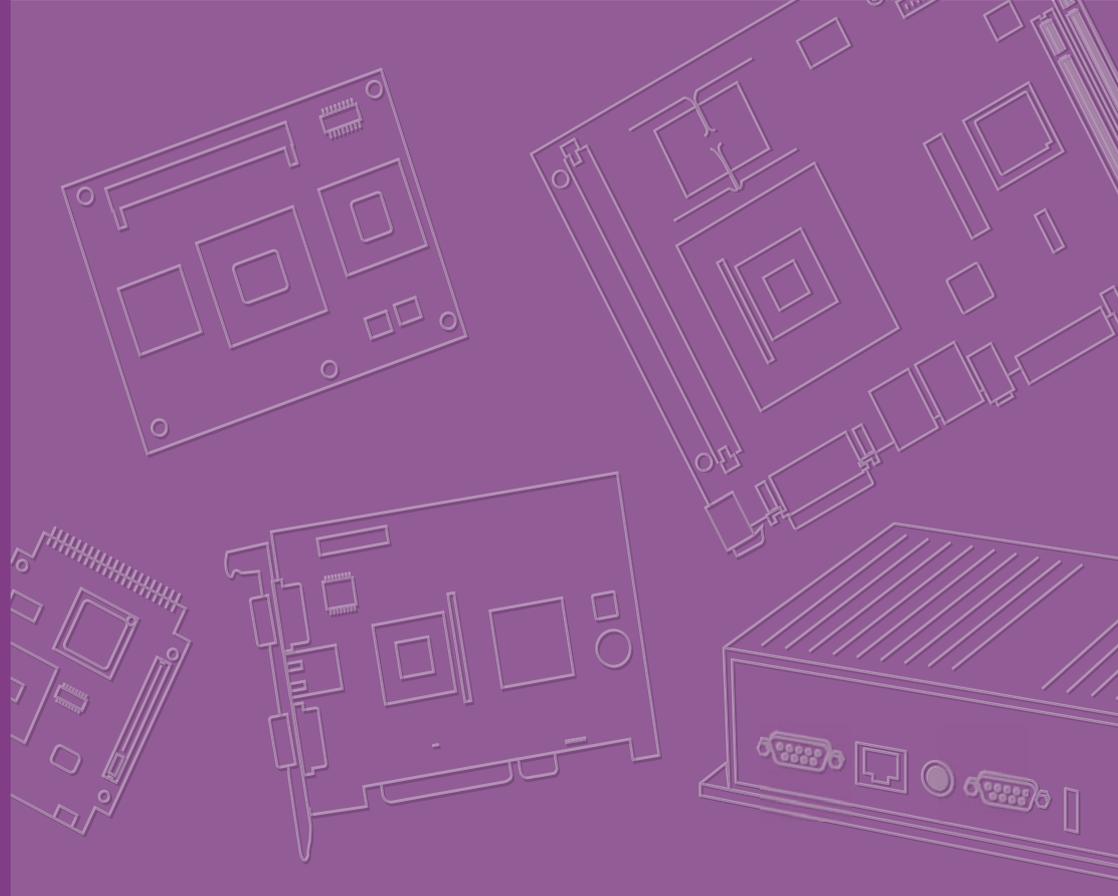


用戶手冊



EPC-U2000 Series

電腦

ADVANTECH

Enabling an Intelligent Planet

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Product Warranty (2 years)/ 產品品質保證 (兩年)

Advantech warrants to you, the original purchaser, that each of its products will be free from defects in materials and workmanship for two years from the date of purchase. This warranty does not apply to any products which have been repaired or altered by persons other than repair personnel authorized by Advantech, or which have been subject to misuse, abuse, accident or improper installation. Advantech assumes no liability under the terms of this warranty as a consequence of such events. Because of Advantech's high quality-control standards and rigorous testing, most of our customers never need to use our repair service. If an Advantech product is defective, it will be repaired or replaced at no charge during the warranty period. For out of warranty repairs, you will be billed according to the cost of replacement materials, service time and freight. Please consult your dealer for more details.

If you think you have a defective product, follow these steps:

1. Collect all the information about the problem encountered. (For example, CPU speed, Advantech products used, other hardware and software used, etc.) Note anything abnormal and list any onscreen messages you get when the problem occurs.
2. Call your dealer and describe the problem. Please have your manual, product, and any helpful information readily available.

3. If your product is diagnosed as defective, obtain an RMA (return merchandise authorization) number from your dealer. This allows us to process your return more quickly.
4. Carefully pack the defective product, a fully-completed Repair and Replacement Order Card and a photocopy proof of purchase date (such as your sales receipt) in a shippable container. A product returned without proof of the purchase date is not eligible for warranty service.
5. Write the RMA number visibly on the outside of the package and ship it prepaid to your dealer.

從購買之日起，研華為原購買商提供兩年的產品保固。但對那些未經授權的維修、人員維修過的產品不予提供保固服務。研華對於不正確地使用、災難、錯誤安裝而產生的問題有免責權利。

如果研華產品出現故障，在保固期間內我們提供免費維修或更換服務。對於已過保固期限之產品，我們將回酌情收取材料費、人工服務費用。請聯繫相關業務人員瞭解詳細情況。

如果您認為您購買的產品出現了故障，請遵循以下步驟：

1. 收集您所遇到的問題資訊（如：CPU 頻率、使用的研華產品及其他軟體、硬體等）。請注意螢幕上出現的任何不正常訊息顯示。
2. 打電話給您的供應商，描述故障問題。請提供手冊、產品和任何有說明的資訊
3. 如果您的產品被診斷發生故障，請從您的供應商獲得 RMA (Return Material Authorization) 序號。這可以讓我們儘快地進行故障產品的回收。
4. 請仔細地包裝故障產品，並在包裝中附上完整的售後服務卡片和購買日期證明（如銷售發票）。我們對無法提供購買日期證明的產品不提供保固服務。
5. 把相關 RMA 序號寫在外包裝上，並將其運送給銷售人員。

Declaration of the Presence Condition of the Restricted Substances Marking/ 限用物質含有情況標示 聲明書

設備名稱：電腦 Equipment name	型號（型式）：EPC-U2000(系列型號請參照次頁) Type designation (Type)					
單元 Unit	限用物質及其化學符號 Restricted substances and its chemical symbols					
	鉛 Lead (Pb)	汞 Mercury (Hg)	鎘 Cadmium (Cd)	六價鉻 Hexavalent chromium (Cr ⁺⁶)	多溴聯苯 Polybromina ted biphenyls (PBB)	多溴二苯醚 Polybrominat ed diphenyl ethers (PBDE)
電路板	—	○	○	○	○	○
電源供應器	—	○	○	○	○	○
記憶卡	—	○	○	○	○	○
內外殼（外殼、 內部框架…等）	○	○	○	○	○	○
配件（排線、傳 輸線…等）	—	○	○	○	○	○
其它固定組件 （螺絲）	—	○	○	○	○	○
分離式電源線組	○	○	○	○	○	○
<p>備考 1. “超出 0.1 wt %” 及 “超出 0.01 wt %” 係指限用物質之百分比含量超出百分比含量基準值。 Note 1: “Exceeding 0.1 wt %” and “exceeding 0.01 wt %” indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.</p> <p>備考 2. “○” 係指該項限用物質之百分比含量未超出百分比含量基準值。 Note 2: “○” indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.</p> <p>備考 3. “—” 係指該項限用物質為排除項目。 Note 3: The “—” indicates that the restricted substance corresponds to the exemption.</p>						

EPC-U2117 系列型號

CPU 型號	XCPU-BGA-X7E3950	XCPU-BGA-X5E3940	XCPU-BGA-X5E3930
	EPC-U2117E5W-03Y11	EPC-U2117E4W-03Y11	EPC-U2117E3W-03Y11
	EPC-U2117E5W-03Y2W	EPC-U2117E4W-03Y2W	EPC-U2117E3W-03Y2W
	EPC-U2217E5W-03Y20	EPC-U2217E4W-03Y20	EPC-U2217E3W-03Y20
	EPCU2117E5BM000-T	EPCU2117E4BM000-T	EPCU2117E3BM000-T
	EPCU2117E5BM001-T	EPCU2117E4BM001-T	EPCU2117E3BM001-T
	EPCU2117E5BM002-T	EPCU2117E4BM002-T	EPCU2117E3BM002-T
	EPCU2117E5BM003-T	EPCU2117E4BM003-T	EPCU2117E3BM003-T
	EPCU2117E5BM004-T	EPCU2117E4BM004-T	EPCU2117E3BM004-T
	EPCU2117E5BM005-T	EPCU2117E4BM005-T	EPCU2117E3BM005-T
	EPCU2117E5BM006-T	EPCU2117E4BM006-T	EPCU2117E3BM006-T
	EPCU2117E5BM007-T	EPCU2117E4BM007-T	EPCU2117E3BM007-T
	EPCU2117E5BM008-T	EPCU2117E4BM008-T	EPCU2117E3BM008-T
	EPCU2117E5BM009-T	EPCU2117E4BM009-T	EPCU2117E3BM009-T
	EPCU2117E5BM010-T	EPCU2117E4BM010-T	EPCU2117E3BM010-T
系列型號	EPCU2117E5BM011-T	EPCU2117E4BM011-T	EPCU2117E3BM011-T
	EPCU2117E5BM012-T	EPCU2117E4BM012-T	EPCU2117E3BM012-T
	EPCU2117E5BM013-T	EPCU2117E4BM013-T	EPCU2117E3BM013-T
	EPCU2117E5BM014-T	EPCU2117E4BM014-T	EPCU2117E3BM014-T
	EPCU2117E5BM015-T	EPCU2117E4BM015-T	EPCU2117E3BM015-T
	EPCU2117E5BM016-T	EPCU2117E4BM016-T	EPCU2117E3BM016-T
	EPCU2117E5BM017-T	EPCU2117E4BM017-T	EPCU2117E3BM017-T
	EPCU2117E5BM018-T	EPCU2117E4BM018-T	EPCU2117E3BM018-T
	EPCU2117E5BM019-T	EPCU2117E4BM019-T	EPCU2117E3BM019-T
	EPCU2117E5BM020-T	EPCU2117E4BM020-T	EPCU2117E3BM020-T
	EPCU2117E5BM021-T	EPCU2117E4BM021-T	EPCU2117E3BM021-T
	EPCU2117E5BM022-T	EPCU2117E4BM022-T	EPCU2117E3BM022-T
	EPCU2117E5BM023-T	EPCU2117E4BM023-T	EPCU2117E3BM023-T
	EPCU2117E5BM024-T	EPCU2117E4BM024-T	EPCU2117E3BM024-T
	EPCU2117E5BM025-T	EPCU2117E4BM025-T	EPCU2117E3BM025-T

EPC-U2217 系列料號

CPU 型號	XCPU-BGA-X7E3950	XCPU-BGA-X5E3940	XCPU-BGA-X5E3930
	EPC-U2217E5W-03Y00	EPC-U2217E4W-03Y00	EPC-U2217E3W-03Y00
	EPC-U2217E5W-03Y2W	EPC-U2217E4W-03Y2W	EPC-U2217E3W-03Y2W
	EPC-U2217E5W-03Y1R	EPC-U2217E4W-03Y1R	EPC-U2217E3W-03Y1R
	EPCU2217E5BM000-T	EPCU2217E4BM000-T	EPCU2217E3BM000-T
	EPCU2217E5BM001-T	EPCU2217E4BM001-T	EPCU2217E3BM001-T
	EPCU2217E5BM002-T	EPCU2217E4BM002-T	EPCU2217E3BM002-T
	EPCU2217E5BM003-T	EPCU2217E4BM003-T	EPCU2217E3BM003-T
	EPCU2217E5BM004-T	EPCU2217E4BM004-T	EPCU2217E3BM004-T
	EPCU2217E5BM005-T	EPCU2217E4BM005-T	EPCU2217E3BM005-T
	EPCU2217E5BM006-T	EPCU2217E4BM006-T	EPCU2217E3BM006-T
	EPCU2217E5BM007-T	EPCU2217E4BM007-T	EPCU2217E3BM007-T
	EPCU2217E5BM008-T	EPCU2217E4BM008-T	EPCU2217E3BM008-T
	EPCU2217E5BM009-T	EPCU2217E4BM009-T	EPCU2217E3BM009-T
	EPCU2217E5BM010-T	EPCU2217E4BM010-T	EPCU2217E3BM010-T
系列型號	EPCU2217E5BM011-T	EPCU2217E4BM011-T	EPCU2217E3BM011-T
	EPCU2217E5BM012-T	EPCU2217E4BM012-T	EPCU2217E3BM012-T
	EPCU2217E5BM013-T	EPCU2217E4BM013-T	EPCU2217E3BM013-T
	EPCU2217E5BM014-T	EPCU2217E4BM014-T	EPCU2217E3BM014-T
	EPCU2217E5BM015-T	EPCU2217E4BM015-T	EPCU2217E3BM015-T
	EPCU2217E5BM016-T	EPCU2217E4BM016-T	EPCU2217E3BM016-T
	EPCU2217E5BM017-T	EPCU2217E4BM017-T	EPCU2217E3BM017-T
	EPCU2217E5BM018-T	EPCU2217E4BM018-T	EPCU2217E3BM018-T
	EPCU2217E5BM019-T	EPCU2217E4BM019-T	EPCU2217E3BM019-T
	EPCU2217E5BM020-T	EPCU2217E4BM020-T	EPCU2217E3BM020-T
	EPCU2217E5BM021-T	EPCU2217E4BM021-T	EPCU2217E3BM021-T
	EPCU2217E5BM022-T	EPCU2217E4BM022-T	EPCU2217E3BM022-T
	EPCU2217E5BM023-T	EPCU2217E4BM023-T	EPCU2217E3BM023-T
	EPCU2217E5BM024-T	EPCU2217E4BM024-T	EPCU2217E3BM024-T
	EPCU2217E5BM025-T	EPCU2217E4BM025-T	EPCU2217E3BM025-T

Declaration of Conformity 符合性聲明

FCC Class B (FCC B 級)

Note: 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 in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, 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 receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

根據 FCC 規則第 15 條，本設備已經過檢測並被判定符合 B 級數位設備標準。這些限制旨在為居住環境下的系統操作提供合理保護，使其免受有害干擾。本設備會產生、使用和發射無線電頻率能量。如果沒有按照手冊說明正確安裝和使用，可能對無線電通訊造成有害干擾。但即使按照手冊說明進行安裝和使用，也並不能保證不會產生干擾。若本設備會對無線電或電視信號接收產生有害干擾，用戶可通過開、關設備進行確認。當本設備產生有害干擾時，用戶可採取下面的措施來解決干擾問題：

- 調整接收天線的方向或位置
- 增大本設備與接收器之間的距離
- 將本設備的電源接頭插在與接收器使用不同電路的電源插座
- 若需技術支援，請諮詢經銷商或經驗豐富的無線電 / 電視技術人員

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.*



警告! 若未經相關權威機構明確批准而擅自更改或修理設備，則使用者操作本設備的權利可能會被取消。



Caution! *This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:*



1. *This device may not cause harmful interference*
2. *This device must accept any interference received, including interference that may cause undesired operation*

注意!



如果電池放置不正確，將有爆炸的危險。因此，只可以使用製造商推薦的同一種或者同等型號的電池進行替換。請按照製造商的指示處理舊電池。

Technical Support and Assistance/ 技術支援與服務

1. Visit the Advantech web site at www.advantech.com/support where you can find the latest information about the product.
 2. 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
-
1. 有關該產品的最新訊息，請訪問研華公司網站：
<http://support.advantech.com.tw>
 2. 用戶若需技術支持，請與當地經銷商、業務代表、或研華客服中心聯繫。進行技術諮詢前，使用者需完整提供下列各項產品訊息：
 - 產品名稱及序號
 - 附加設備描述
 - 使用者軟體描述（作業系統、版本、應用軟體等）
 - 產品所出現問題的完整描述
 - 每條錯誤資訊的完整內容

Safety Instructions/ 安全指示

1. Please read these safety instructions carefully.
2. Please keep this User Manual for later reference.
3. Please disconnect this equipment from AC outlet before cleaning. Use a damp cloth. Don't use liquid or sprayed detergent for cleaning. Use a moist sheet or clothe for cleaning.
4. For pluggable equipment, the socket-outlet should be near the equipment and should be easily accessible.
5. Protect this equipment from humidity.
6. Lay this equipment on a reliable surface when installing. A drop or fall could cause injury.
7. The openings on the enclosure are for air convection and protecting the equipment from overheating. DO NOT COVER THE OPENINGS.
8. Make sure the voltage of the power source when connecting the equipment to the power outlet.
9. Ensure to connect the power cord to a socket-outlet with earthling connection.
10. Place the power cord such a way that people cannot step on it. Do not place anything over the power cord.
11. All cautions and warnings on the equipment should be noted.
12. If the equipment is not used for long time, disconnect the equipment from mains to avoid being damaged by transient over-voltage.
13. Never pour any liquid into ventilation openings; this could cause fire or electrical shock.
14. Never open the equipment. For safety reasons, only qualified service personnel should open the equipment.
15. Before any internal installation procedures are carried out on the system, make sure the system is turned off and cooled down for 15 minutes. Failing to run off the system before opening it can cause permanent damage to the system and serious or fatal injury to the user.
16. If one of the following situations arises, get 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.
17. Do not leave this equipment in an environment where the storage temperature may go below -40°C (-40°F) or above 85°C (185°F). This could damage the equipment. the equipment should be in a controlled environment.

CPU Type	Operating Temperature
14MPA-1.6-2ME3950	$-20\sim 50^{\circ}\text{C}$
14MPA-1.6-2ME3940	$-20\sim 60^{\circ}\text{C}$
14MPA-1.3-2ME3930	$-20\sim 60^{\circ}\text{C}$

18. Caution: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer, discard used batteries according to the manufacturer's instructions.
 - Risk of explosion if the battery is replaced by an incorrect type
 - Replacement of a BATTERY with an incorrect type that can defeat a SAFEGUARD (For example, in the case of some lithium BATTERY types);
 - Disposal of a BATTERY into fire or a hot oven, or mechanically crushing or cutting of a BATTERY, that can result in an EXPLOSION;
 - Leaving a BATTERY in an extremely high temperature surrounding environment that can result in an EXPLOSION or the leakage of flammable liquid or gas; A BATTERY subjected to extremely low air pressure that may result in an EXPLOSION or the leakage of flammable liquid or gas.
19. The sound pressure level at the operator's position according to IEC 704-1:1982 is no more than 70 dB (A).
20. RESTRICTED ACCESS AREA: The equipment should only be installed in a Restricted Access Area.
21. This equipment is not suitable for use in locations where children are likely to be present.
22. Suitable for installation in Information Technology Rooms in accordance with Article 645 of the National Electrical Code and NFPA 75.
23. DISCLAIMER: This set of instructions is given according to IEC 704-1. Advantech disclaims all responsibility for the accuracy of any statements contained herein.

1. 請仔細閱讀此安全操作說明。
2. 請妥善保存此用戶手冊供日後參考。
3. 用濕抹布清洗設備前，請從插座拔下電源線。請不要使用液體或去汙噴霧劑清洗設備。
4. 對於使用電源線的設備，設備周圍必須有容易接觸到的電源插座。
5. 請不要在潮濕環境中使用設備。
6. 請在安裝前確保設備放置在可靠的平面上，意外跌落可能會導致設備損壞。
7. 設備外殼的開口是用於空氣對流，從而防止設備過熱。請不要覆蓋這些開口。
8. 當您連接設備到電源插座上，請確認電源插座的電壓是否符合要求。
9. 請將電源線佈置在人們不易絆到的位置，並不要在電源線上覆蓋任何雜物。
10. 請注意設備上的所有警告標識。
11. 如果長時間不使用設備，請將其同電源插座斷開，避免設備被超標的電壓波動損壞。
12. 請不要讓任何液體流入通風口，以免引起火災或者短路。
13. 請不要自行打開設備。為了確保您的安全，請由經過認證的工程師來打開設備。
14. 如遇下列情況，請由專業人員來維修：
 - 電源線或者插頭損壞；
 - 設備內部有液體流入；
 - 設備曾暴露在過於潮濕的環境中使用；
 - 設備無法正常工作，或您無法通過用戶手冊來使其正常工作；
 - 設備跌落或者損壞；
 - 設備有明顯的外觀破損。

15. 設備工作溫度

CPU	工作溫度
14MPA-1.6-2ME3950	-20~50°C
14MPA-1.6-2ME3940	-20~60°C
14MPA-1.3-2ME3930	-20~60°C

16. 如果系統時間丟失或 BIOS 配置恢復預設值，則表示電池電量已盡。

注意！



1. 請勿自行更換電源適配器，請聯繫資深技術人員或您的銷售代表。
2. 電腦配置了由電池供電的即時時鐘電路，如果電池更換不正確，將有爆炸的危險。因此，只可以使用製造商推薦的同一種或者同等型號的電池進行替換。請按照製造商的指示處理舊電池。

17. 分類

- 提供 I 類適配器
- 無可應用介面
- 連續運行
- 非 AP 或 APG 類別

18. 請按照當地法規處理廢舊設備。

19. 維護：為了正確地維護和清潔設備表面，請使用通過認證的產品或使用幹抹布進行清潔。

20. 聯繫資訊：

申請商：研華股份有限公司
台北市內湖區瑞光路 26 巷 20 弄 1 號
電話：(02) 2792-7818

Packing List/ 包裝清單

安裝前，用戶需確認包裝中含有下面所列各項：

- 1 X EPC-U2000
- 1 x DC 12 V 60W 電源適配器
- 1 x China RoHS
- 1 X (User Manual) 用戶手冊

Order Information/ 訂購資訊

EPC-U2117

P/N	Description	Memory	eMMC	COM	TPM
EPC-U2117E3W-03Y10	EPC-U2117 E3930 w/4G RAM/32G	4GB	32GB	1 x RS232, 1 x ccTalk	NA
EPC-U2117E3W-03Y2W	EPC-U2117 E3930 w/4G RAM/64G	4GB	64GB	1 x RS232, 1 x RS422	NA

EPC-U2217

P/N	Description	Memory	eMMC	COM	TPM
EPC-U2217E4W-03Y00	EPC-U2217 E3940 w/4G RAM	4GB	NA	3 X RS-232 1 X RS-485	NA
EPC-U2217E4W-03Y20	EPC-U2217 E3940 w/4G RAM/64G	4GB	64GB	3 X RS-232 1 X RS-485	TPM 2.0

Accessory List/ 配件列表

電源線

產品料號	說明
1702002600-01	電源線 3 針 180cm, 美國標準 (適用電源適配器 1757004096-01)

安裝支架

產品料號	說明
EPC-BRKU-DR010	EPC-U2000 Din Rail mounting it

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第 1 章

Introduction/ 簡介

1.1 Overview/ 產品簡介

The Advantech EPC-U2000 is palm-sized system uses the latest Intel Atom E3900 processor technology to give a 30% CPU performance enhancement and a 45% graphic performance boost. EPC-U2000 is designed with dual display output, multiple I/O, and wide range 12-24V DC power inputs, which target smart vending machines, digital signage, smart kiosks, and more. EPC-U2000 is compatible with Microsoft Windows 10 IoT Enterprise, and Linux OS. Furthermore, EPC-U2000 has Advantech's WISE-PaaS DeviceOn intelligent software integrated for remote system monitoring and management.

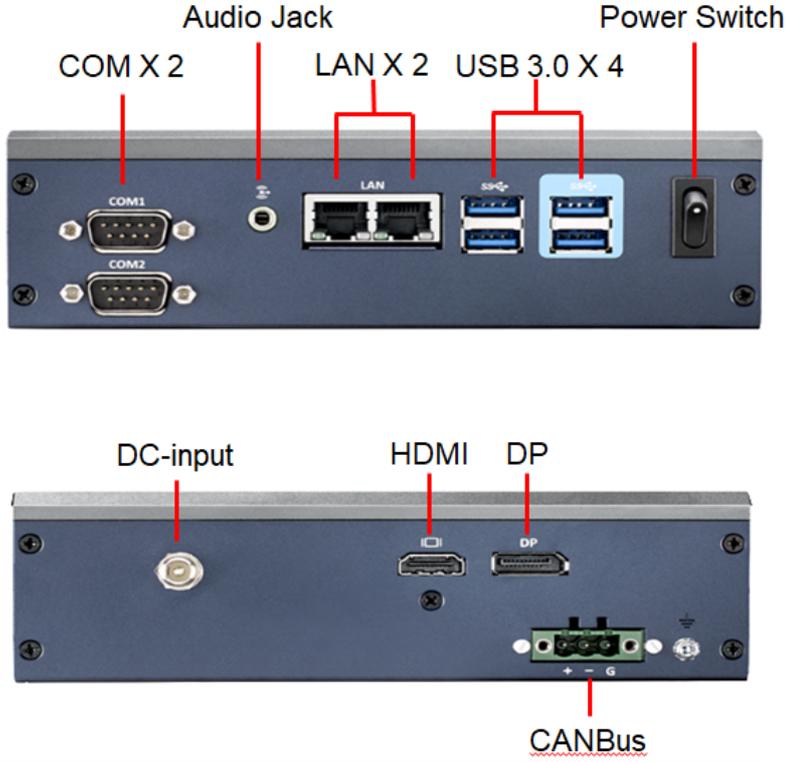
EPC-U2000 系列小型化嵌入式無風扇工業系統，採用 Intel® Atom™ 平台，提供更高效能運算及影像處理能力。產品設計支援 -20~60 °C 寬溫、12~24V DC 寬壓輸入，產品尺寸僅 170 X 117 X 52.6mm 約手掌大小，適合各種嚴苛及空間狹小的使用環境。產品設計有 4 個 USB 3.0、RS-232、RS-485、ccTalk、CANBus 專業應用接口，另外也支援 HDMI & DP 雙重影像輸出。EPC-U2000 支援 eMMC、SATA、mSATA 多種儲存方式，客戶可依據使用環境、需求效能、及儲存資料量選擇適合的儲存裝置。產品另外設計有 M.2 及 MPCle 接口可同時支援兩種無線模組；可同時支援 WiFi & LTE 無線聯網方式，搭配研華 WISE-PaaS DeviceOn 遠端管理平台，可遠端監控、管理、及更新設備資料。適合目前市場上最熱門的智慧自助販賣機、點餐機等相關應用。

1.1.1 Product Benefits/ 產品優勢

- Palm-size embedded system with CE/FCC/CCC/BSMI certification
超薄 ITX 嵌入式系統，已通過 CE/FCC 認證
- Fanless, wide-temperature operation with high performance and flexibility
無風扇、寬溫運行，具有出色的性能和靈活性
- Supports 12V ~ 24V wide voltage DC input
支援 12V 寬範圍 DC 輸入範圍
- One-stop Integrated Solution: Integrated Ultra compact motherboard, chassis peripherals and software
一站式集成解決方案：集成超緊湊型主機板、主機殼、外設和軟體
- Dimensions: 170 x 117 x 52.6 mm
尺寸：170 x 117 x 52.6 mm

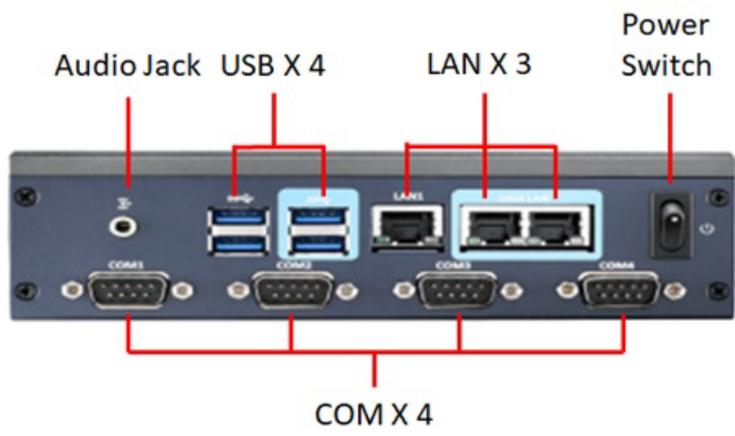
1.2 I/O Placement 系統組態

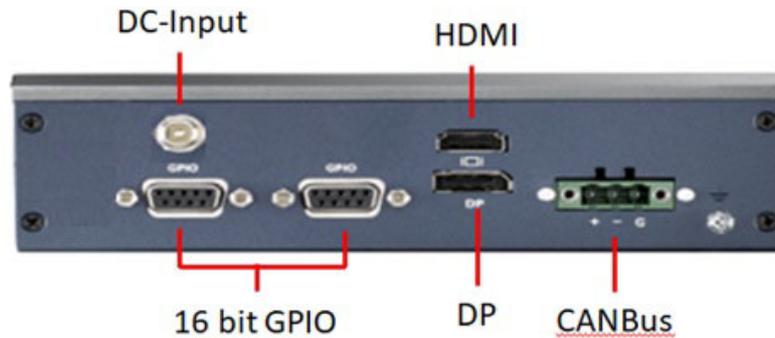
EPC-U2117 I/O 佈局:



(CANBus & COM 技術人員使用)

EPC-U2217 I/O 佈局:





(CANBus & COM 技術人員使用)

1.3 General Specifications/ 一般規格

1.3.1 Standard PC Function/ 標準 PC 功能

- CPU: Intel® Atom™ E3900 系列
- BIOS: AMI EFI 16bit
- Memory 記憶體: DDR3L SODIMM 1333/1866 MHz, 高達 8GB
- Audio 音訊: HD 音訊解碼器 ALC892
- LAN: PCI-E gIGABIT 乙太網控制器 x2
- USB 介面: 4 x USB3.0
- Mini PCI-E 匯流排擴充槽: 1 x 全長 miniPCIE 插槽, 支持 3G/LTE 卡, 以及 1 x M.2 E-key WiFi 卡
- Storage 存儲裝備: 2.5" 薄型 SSD, onboard eMMC
- Audio output: 音訊輸出: Combo 音訊插孔
- Video output: 視頻輸出: 1 HDMI、1 Display port

1.3.2 Power Source Spec/ 電源規格

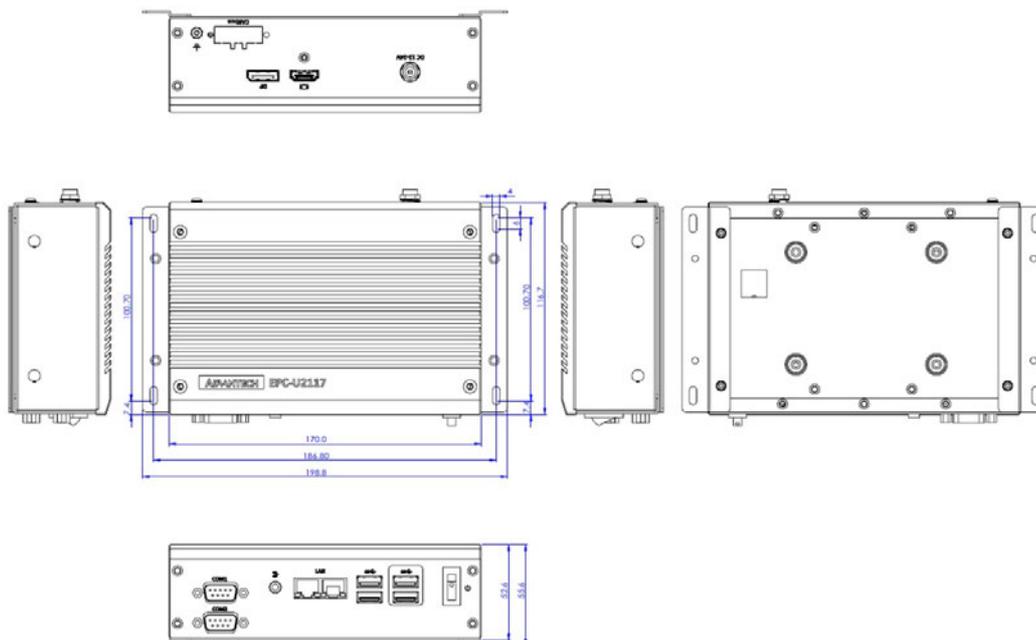
Power adaptor: AC/DC 電源適配器:

強制性產品認證新受理要求如下: 對於不帶適配器銷售或適配器可選 (可帶可不帶的情況), 企業要上傳說明書並在說明書中體現類似說明: "消費者若使用電源適配器充電, 則應購買配套使用獲得 BSMI 認證並滿足標準要求的電源適配器。"

- In-put Voltage (輸入電壓): 100 Vac ~ 240 Vac @ 50 - 60 Hz, 1.5 A
- Out Put Voltage: 輸出電壓: 12 V @ 3 A ~ 24V @2.5A

1.4 Mechanical Specifications/ 機械規格

- System dimension (系統尺寸): 170 X 117 X 52.6 mm (6.69" X 4.6" X 2.07")



- 外箱尺寸: 290 (L) X 210 (W) X 175 (H) mm
- 毛重: 2.0 kg
- 淨重: 1.8 kg

1.5 Environment Specification/ 環境規格

- 工作溫度: $-20 \sim 60^{\circ} \text{C}$ (帶 RF 模組)
- 儲存溫度: $-40 \sim 60^{\circ} \text{C}$
- 相對濕度: 40 - 95% RH (非凝結)

1.5.1 Compliance/ 安規

CE/CCC/BSMI

1.5.2 EMI

FCC B 級、可用於美國、加拿大和歐盟

1.5.3 Vibration/ 振動

帶 SSD: 3Grms, 60068-2-64, 隨機, 5 ~ 500 Hz, 1 hr/axis

第 2 章

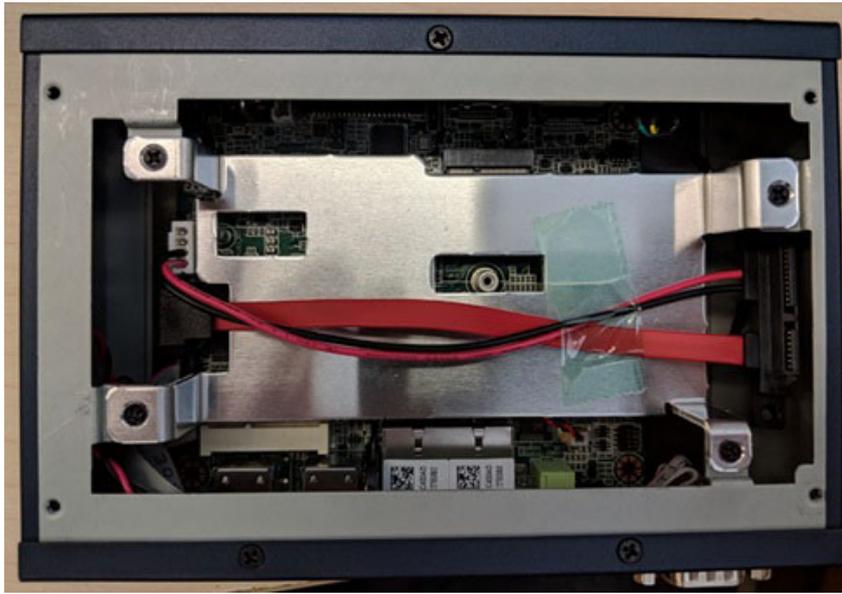
Hardware Function/ 硬
體功能

2.1 HDD Installation/ 安裝 HDD

1. Release the bottom cover screws.
擰開螺絲後卸下底蓋。
2. Secure the 2.5" SATA HDD onto the bottom cover. The screws are in the accessory box.
將 2.5" SATA HDD 固定至底蓋，並使用附件盒中的螺絲進行固定。



3. Connect SATA cable and power cable to 2.5" SATA HDD.
將 SATA 信號線和電源線連接至 2.5" SATA HDD。



4. Install bottom cover and secure the screw.
將底蓋安裝至原處並用螺絲進行固定。



2.2 Mini PCIe moduel Installation/ 安裝 Mini PCIe 模組

1. Release screw and remove bottom cover
擰開螺絲後卸下底蓋



2. Install MiniPCIe module and secure by screw.
將 Mini PCIe 模組插入插槽然後使用螺絲進行固定，貼上適合的散熱片。



3. Install thermal pad and antenna
裝上散熱板並將天線電纜連線至模組



4. Install bottom cover and secure by screw
將底蓋安裝至原處並用螺絲進行固定

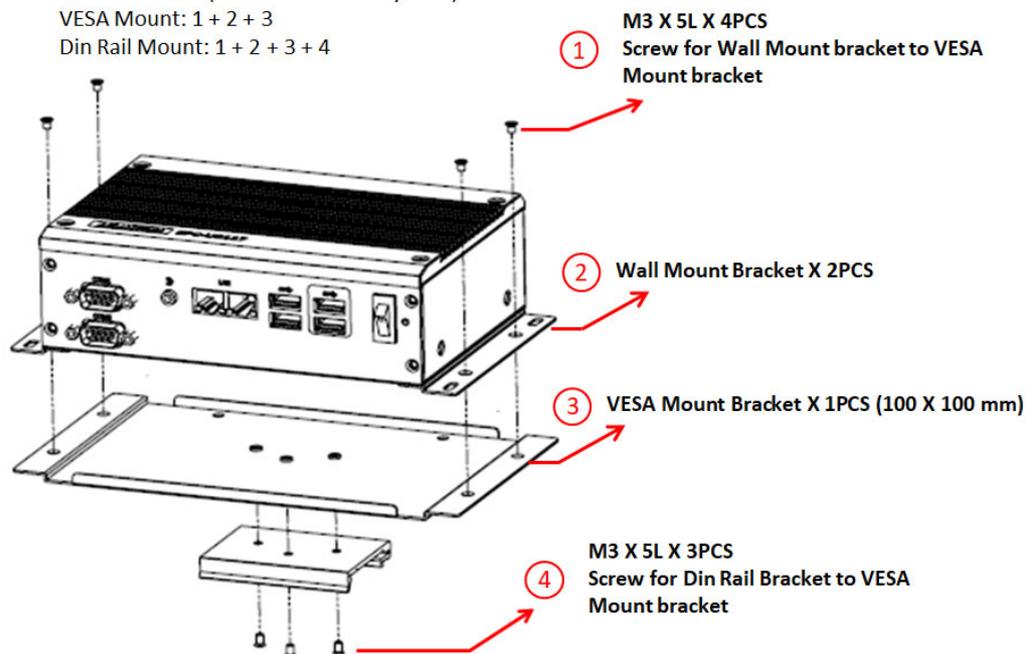


2.3 Mounting Kit Assembly/ 套件安裝

Wall Mount: 2 (Default install on system)

VESA Mount: 1 + 2 + 3

Din Rail Mount: 1 + 2 + 3 + 4



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