

UNO-2484V3 Intel® Core™ Ultra (Arrow Lake U) Processor Modular Box PC Startup Manual

Packing List

Before you begin installing your card, please make sure that the following items have been shipped:

1. UNO-2484V3
2. 1 x plug-in block for power wiring.
3. Startup Manual
4. Thermal pad for M.2 M key module (1pcs* 1990042505N000) & RAM (1pcs *1990042331N000)

If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

Declaration of Conformity

CE

This product has passed the CE test for environmental specifications when shielded cables are used for external wiring. We recommend the use of shielded cables. This type of cable is available from Advantech. Please contact your local supplier for ordering information.

Test conditions for passing also include the equipment being operated within an industrial enclosure. In order to protect the product from damage caused by electrostatic discharge (ESD) and EMI leakage, we strongly recommend the use of CEcompliant industrial enclosure products.

FCC Class A

This equipment has been tested and found to comply with the limits for a Class A 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 commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference. In this event, users are required to correct the interference at their own expense.

Specifications

Processor System

- Intel® Core™ Ultra 5 Processor 225U
- Intel® Core™ Ultra 7 Processor 255U

Memory

- 2 x Optional DDR5 5600 MHz, per channel support up to 32GB

Graphics

- Intel® Iris® Xe Graphics

Ethernet

- **LAN A:** Intel® i219-LM 1Gb/s, IEEE 802.3, 802.1as/1588
- **LAN B-D:** Intel® i226-LM 2.5Gb/s, IEEE 802.3, 802.1as/1588

Expansion/Storage

- 1 x M.2 B key (3042/3052) (PCIEx1/USB 3.2/USB2.0)
- 1 x M.2 E key (2230) (PCIEx2/USB2.0)
- 2 x M.2 M key (2280) (PCIEx4)
- *2nd stack: 2 x 2.5" SSD (via UNO-2484V3-ES2A)

I/O

- **Display:**
 - 1 x HDMI 1.4 (1920x1080@60Hz),
 - 1 x DP1.4 (3840x2160 @60Hz)

For more information on this and other Advantech products, please visit our website at:

<http://www.advantech.com>



For technical support and service, please visit our support website for UNO-2484V3 at:



Part No. 204184V300

1st Edition
December 2025

Specifications (Cont.)

- **USB:** 3 x USB 3.2 Gen2, 1 x USB2.0
- **USB Type-C:** 2 x USB Type C (1.5A), supports DP 1.4a & DP ALT mode
- **Serial:** 4 x RS 232/422/485, 50kbps – 115.2 kbps speed
- **Power Connector:** 1 x 2 pins, terminal block

Power Requirement

- **Power Requirement:** 10 - 36 V_{DC}
- **Power Consumption:** 31W (Typical), 97W (Max), 109W (with 2nd stack)

Certification

- CE, FCC, UL, CCC, BSMI

Environment

- **Operating Temperature:** -20 ~ 60°C (-4 ~ 140°F) with 0.7 m/s airflow
- **Storage Temperature:** -40 ~ 85°C (-40 ~ 185°F)
- **Relative Humidity:**
 - Operating 95% RH @40°C, non-condensing
 - Non-Operating, 95% RH @ 60°C, condensing
- **Shock Protection:** Operating, IEC 60068-2-27, 50G, half sine, 11 ms
- **Vibration Protection:** Operating, IEC 60068-2-64, 3 Grms, random, 5 ~ 500 Hz, 1hr/axis
- **Ingress Protection:** IP20

Physical Characteristics

- **Dimensions:**
 - 200 X 140 X 55 (7.8" x 5.6" x 2.1") for single stack
 - 200 x 140 x 90 (7.8" x 5.6" x 3.5") for base unit with second stack
- **Weight:** 1.97kg (4.34 lbs)

Introduction

The UNO-2484V3 is an embedded hardware-ready platform capable of shortening development time. The system offers a wide range of networking interfaces to satisfy the various needs of different applications. Equipped with Intel Core Ultra (Arrow Lake U) 5 & 7 Processor, and optional DDR5 RAM slot. It supports wide temperature range operation (-20 ~ 60° C/-4 ~ 140° F) and sufficient I/O - including 1 x GbE, 3 x 2.5 GbE, 1x M.2 B key, 1x M.2 E key, 2x M.2 M key, 1x HDMI, 1x DP, 1x USB2.0, 3x USB 3.2, 2x USB TypeC and 4x COM. It also supports 3 different kinds of 2nd stack extension kit, supporting 2 x idoor modules, 1 x idoor + 1 x HDD and 2 x HDD.

Safety Precautions - Static Electricity

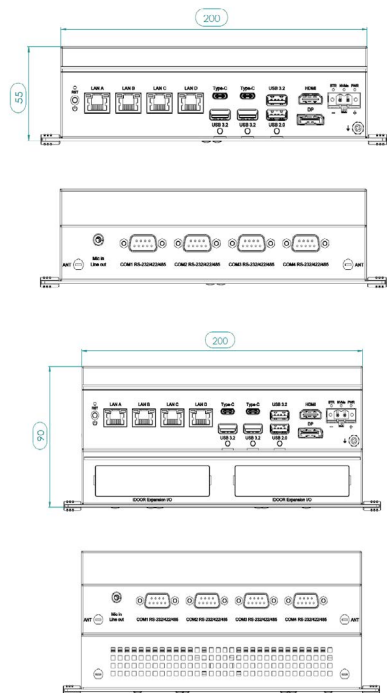
Follow these simple precautions to protect yourself from harm and the products from damage.

- To avoid electrical shock, always disconnect the power from the PC chassis before manual handling. Do not touch any components on the CPU card or other cards while the PC is powered on.
- Disconnect the power before making any configuration changes. A sudden rush of power after connecting a jumper or installing a card may damage sensitive electronic components.

Technical Support and Assistance

1. Visit the Advantech website at www.advantech.com/ support to obtain the latest product information.
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 calling:
 - 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

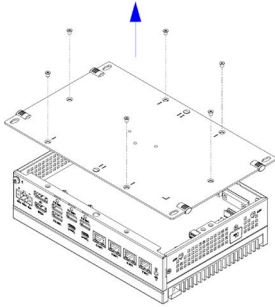
System I/O Interface



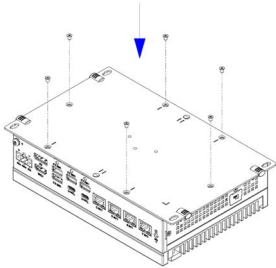
Simple Maintenance Process

Remove & Recover BTM Cover

1. Unscrew (1930008390*6).
2. Remove BTM cover(1960105540T011*1).

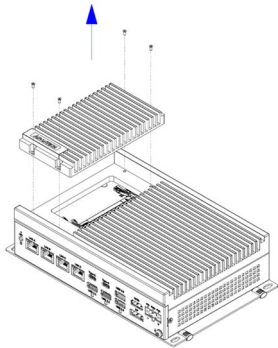


3. Install BTM cover(1960105540T011*1).
4. Lock screw (1930008390*6).



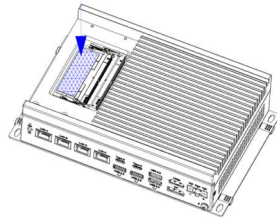
Install DDR + Thermal Pad

1. Unscrew (1930009298*4).
2. Remove DDR Door(1960119358T001).

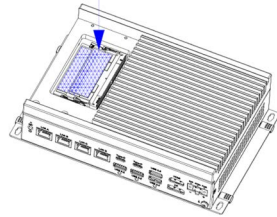


Simple Maintenance Process (Cont.)

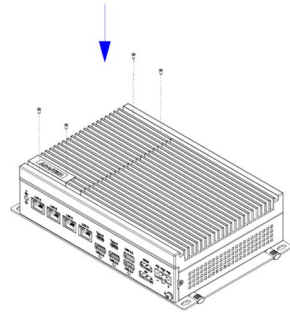
3. Install DDR 1 & Paste Thermal pad (1990042331N000).



4. Install DDR 2 & Paste Thermal pad (1990042331N000).

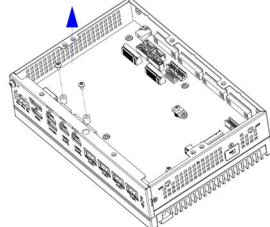


5. Recover DDR DOOR(1960119358T001).
6. Lock screw (1930009298*4).



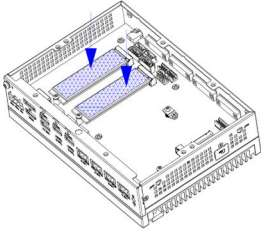
Install M Key for 2280

1. Unscrew (19350304A0)

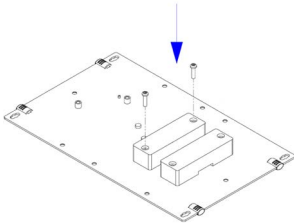


Simple Maintenance Process (Cont.)

2. Insert 2280 Card & Paste Thermal pad (1990042505N000).
3. Lock screw (19350304A0).

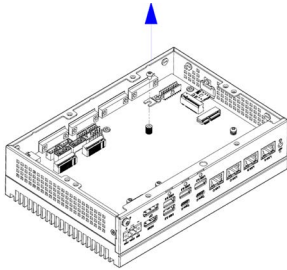


4. Install AL Block for 2280 (1960119414N000) on the BTM cover.
5. Lock screw (1930007680-01).

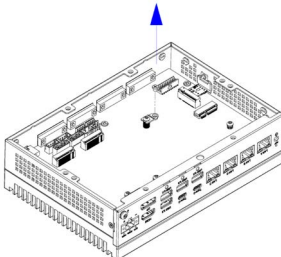


Install B key for 2242/3052

- 1-1. If your module is 3052, unscrew (19350304A0) ;

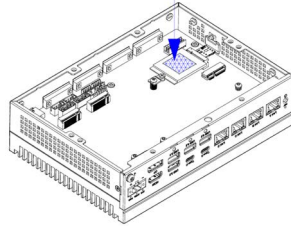


- 1-2. If your module is 2242, unscrew (1930008738).

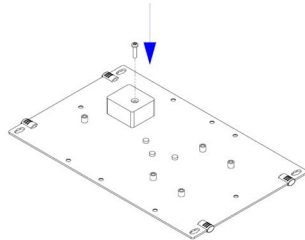


Simple Maintenance Process (Cont.)

2. Insert 2242/3052 Card & Paste Thermal pad (1990042507N000).
3. Lock screw (1930008738).

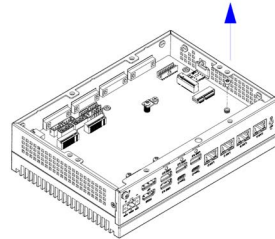


4. Install AL Block for 2242/3052 (1960119412N000) on the BTM cover.
5. Lock screw (1930007680-01).

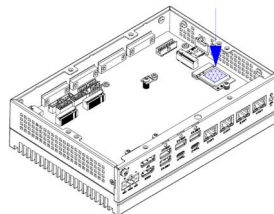


Install E Key for 2230

1. Unscrew (19350304A0).

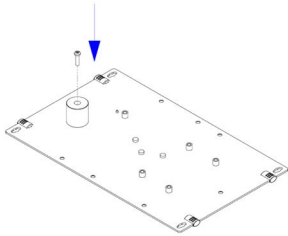


2. Insert 2230 Card & Paste Thermal pad (1990042506N000).
3. Lock screw (19350304A0).



Simple Maintenance Process (Cont.)

4. Install AL Block for 2230 (1960119413N000) on the BTM cover.
5. Lock screw (1930007680-01).



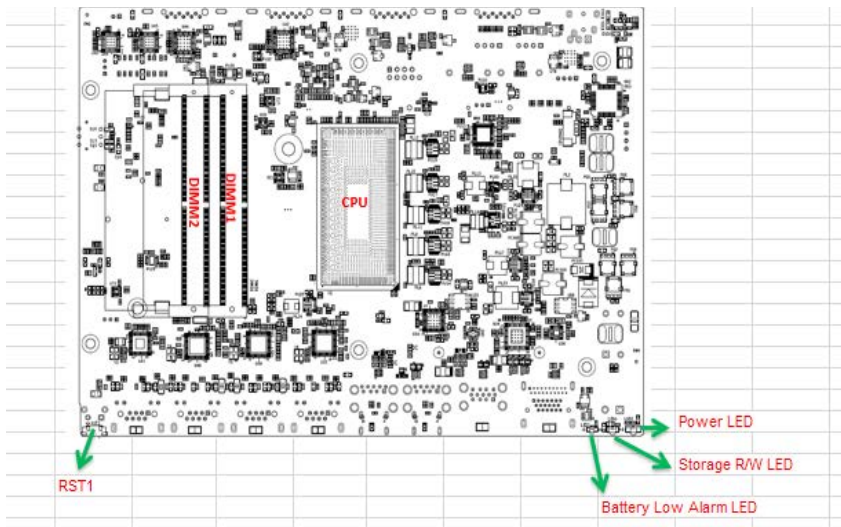
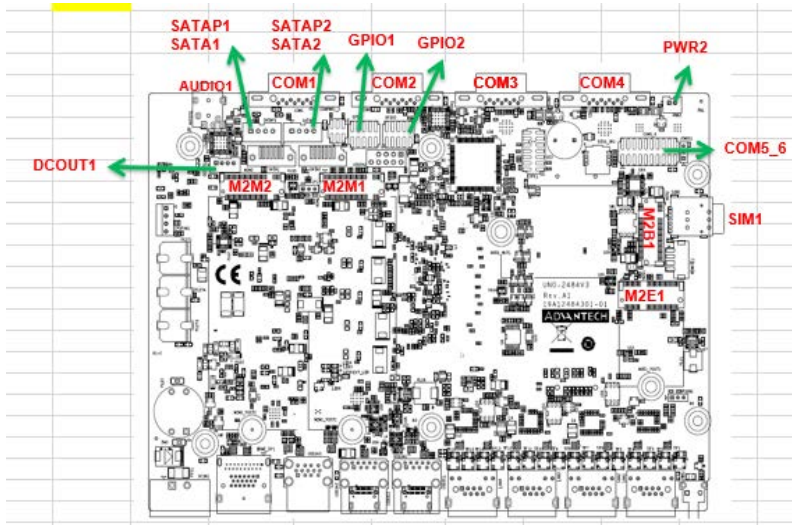
Safety Instructions

1. Read these safety instructions carefully.
2. Retain this user manual for future reference.
3. Disconnect the equipment from all power outlets before cleaning. Use only a damp cloth for cleaning. Do not use liquid or spray detergents.
4. For pluggable equipment, the power outlet socket must be located near the equipment and easily accessible.
5. Protect the equipment from humidity.
6. Place the equipment on a reliable surface during installation. Dropping or letting the equipment fall may cause damage.
7. The openings on the enclosure are for air convection. Protect the equipment from overheating. Do not cover the openings.
8. Ensure that the voltage of the power source is correct before connecting the equipment to a power outlet.
9. Position the power cord away from high-traffic areas. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage from transient overvoltage.
12. Never pour liquid into an opening. This may cause fire or electrical shock.
13. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
14. If any of the following occurs, have the equipment checked by service personnel:
 - The power cord or plug is damaged.
 - Liquid has penetrated the equipment.
 - The equipment has been exposed to moisture.
 - The equipment is malfunctioning, or does not operate according to the user manual.
 - The equipment has been dropped and damaged.
 - The equipment shows obvious signs of breakage.
15. Do not leave the equipment in an environment with a storage temperature of below -40°C (-40°F) or above 85°C (185°F) as this may damage the components. The equipment should be kept in a controlled environ-

Safety Instructions (Cont.)

- ment.
16. CAUTION: Batteries are at risk of exploding if incorrectly replaced. Replace only with the same or equivalent type as recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.
 17. In accordance with IEC 704-1:1982 specifications, the sound pressure level at the operator's position does not exceed 70 dB (A).
 18. Ensure that the voltage of the power source is correct before connecting the equipment to a power outlet. The power outlet socket should have a grounded connection.
 19. For use in pollution free environments and indoor use.
 20. This equipment is not suitable for use in locations where children are likely to be present.
 21. If the equipment is used in a manner not specified by the Advantech, the protection provided by the equipment may be impaired.
 22. The equipment contains no user-serviceable parts. Do not open. Return to manufacturer for servicing.
 23. Do not block air ventilation holes.
 24. This is open type equipment and should be installed in a suitable enclosure.
 25. Restricted Access Area: The equipment should only be installed in a Restricted Access Area.
 26. This product is intended to be supplied by an UL certified power supply or dc source with SELV output, rated 10 Vdc, 7.7A minimum and Tma 40 degree. If you need further assistance, please contact Advantech for further information.
 27. This product is intended to be supplied by an UL Listed power supply suitable for use at Tma 60°C min. whose output meets ES1 (or SELV) is rated: (1) 10-36Vdc, 7.65A-2.12A min. (DC IN), if need further assistance, please contact Advantech for further information.
 28. DISCLAIMER: These instructions are provided according to IEC 704-1 standards.
 29. Advantech disclaims all responsibility for the accuracy of any statements contained.

Motherboard I/O Connectors

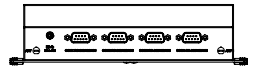
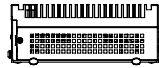
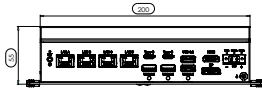
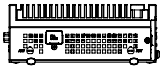
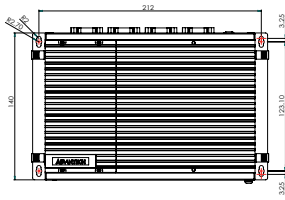


Attention Surface chaude, ne pas toucher pour le dissipateur thermique supérieur.



System Dimensions

UNO-2484V3 Dimensions



UNO-2484V3 Dimensions (with Optional Extension Kit)

