

# SBOX-2603-R2312

**AMD Ryzen™ Embedded R2312 w/ 1x DVI-D / 2x HDMI® / 2x GbE / 2x COM / DC 12V Embedded Computer**



- AMD Ryzen™ Embedded R2312 2C/4T Processor
- Dual HDMI® Supports Resolution Specified in HDMI 2.0b
- 1 x M.2 2280 Key M Supports NVMe or SATA SSD
- 1 x M.2 3042/52 Key B Supports USB 3.2 WWAN with Dual SIM
- 1 x M.2 2230 Key E Supports PCIe and USB2.0 Wi-Fi/Bluetooth

## Specifications

### System

**Processor**

- AMD Ryzen™ Embedded R2312 2C/4T Processor

**Graphics**

- CPU Built-in Graphics AMD Radeon™ Graphics

**Memory**

- 1 x SO-DIMM DDR4-2400 up to 32GB (ECC Support with ECC DRAM)

**Security**

- TPM 2.0

**Watchdog**

- System power on/off 1 ~ 255 min setting by BIOS

### Interface

**Video**

- 1 x DVI-D (Single link with custom pin define)
- 2 x HDMI® supports 4K@60Hz as specified in HDMI 2.0b

**Audio**

- 1 x Line-out and 1 x Mic-in

**Ethernet**

- 2 x I210-AT GbE RJ45 port

**USB**

- 2 x USB 3.2 Gen 2 (10Gbps)
- 2 x USB 2.0

**GPIO**

- 1 x GPIO port supporting 4 x GPI and 4 x GPO (5VDC TTL)

**Serial Port**

- 2 x RS-232/422/485

### Internal Expansion

**M.2**

- 1 x M.2 3042/52 Key B supports USB 3.2 WWAN w/ Dual SIM
- 1 x M.2 2230 Key E supports PCIe and USB2.0 Wi-Fi/BT

### Storage

**Type**

- 1 x M.2 2280 Key M supports NVMe or SATA SSD
- 1 x 2.5" SATA SSD

### Power

**Power Input**

- DC 12V only via DC Jack

### Software

**Operating System Support**

- Windows 10 IoT Enterprise 64bit LTSC
- Windows 11 IoT Enterprise LTSC
- Ubuntu 20.04 LTS 64bit

### Environmental

**Operating Temp.**

- -30 ~ 60°C, with SSD, ambient w/ air flow 0.6m/s (for barebone system)

**Storage Temp.**

- -40 ~ 85°C

**Relative Humidity**

- 10% RH ~ 90% RH (non-condensing)

**Certification / Standard**

- CE, FCC Class A, UKCA

### Mechanical

**Construction**

- Aluminum Alloy

**Mounting Method**

- Wall-mounting

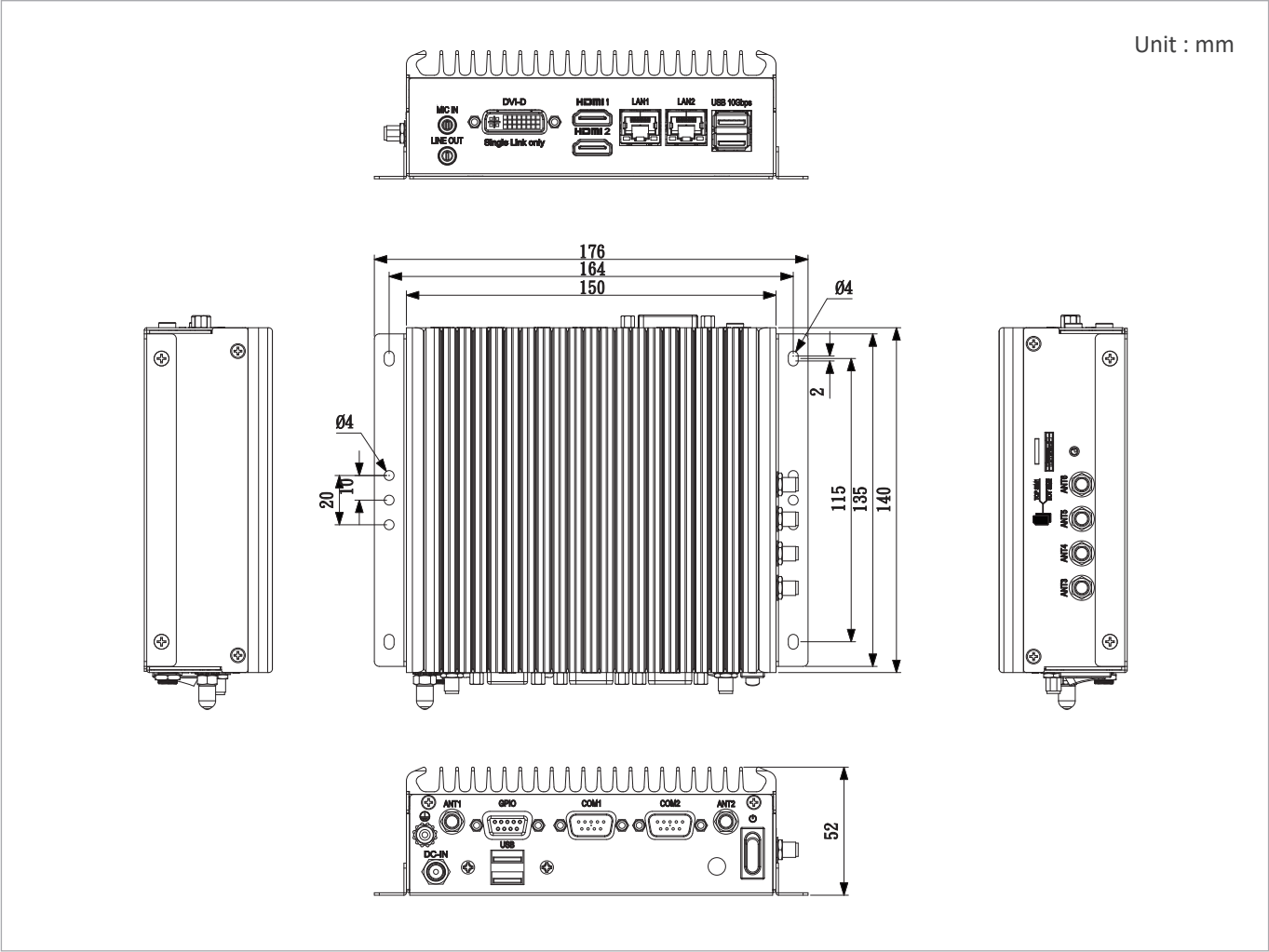
**Weight**

- 1.3kg

**Dimensions**

- 176 (L) x 140 (W) x 52 (H) mm

Dimensions



Ordering Information

|                 |                                                                                               |
|-----------------|-----------------------------------------------------------------------------------------------|
| Model Number    | SBOX-2603-R2312                                                                               |
| Description     | AMD Ryzen™ Embedded R2312 w/ 1x DVI-D / 2x HDMI® / 2x GbE / 2x COM / DC 12V Embedded Computer |
| State of Origin | Made in Taiwan                                                                                |

Optional Accessories

|               |                                                                        |
|---------------|------------------------------------------------------------------------|
| Memory        | DDR4-2400/2666/3200 SO-DIMM, 8GB~32GB, -40~85°C (ECC Option Available) |
| SSD           | M.2 2280 Key B-M NVMe TLC -40~85°C 512GB~2TB                           |
| SSD           | M.2 2280 Key B-M SATA TLC -40~85°C 128GB~2TB                           |
| SSD           | 2.5 inch SATA TLC -40~85°C 128GB~2TB                                   |
| Wi-Fi         | M.2 2230 Key E 802.11 a/b/g/n/ac, Wi-Fi 6E                             |
| WWAN          | M.2 3042 Key B LTE (USB) / 3052 Key B 5G (USB) with Thermal Kit        |
| Power Adapter | 60W 100-240VAC to 12VDC Power Adapter                                  |

All specifications are subject to change without notice.