

EPC-R4760

Qualcomm APQ-8016 Cortex-A53 ARM Based Box Computer

NEW



Features

- Qualcomm ARM® Cortex®-A53 APQ8016 Quad core up to 1.2 GHz
- Onboard 1GB/2GB LPDDR3 memory and 8GB eMMC
- 1 HDMI, 1 RS-232/422/485, 1 GbE, 4 USB 2.0, 8 GPIO
- Highly integrated on-board wireless connectivity - Wi-Fi, BT, and GNSS
- Connectivity expansion capability - M.2, mini-PCIe
- Wide voltage range DC power input
- Support Android, Linux and Debian



Introduction

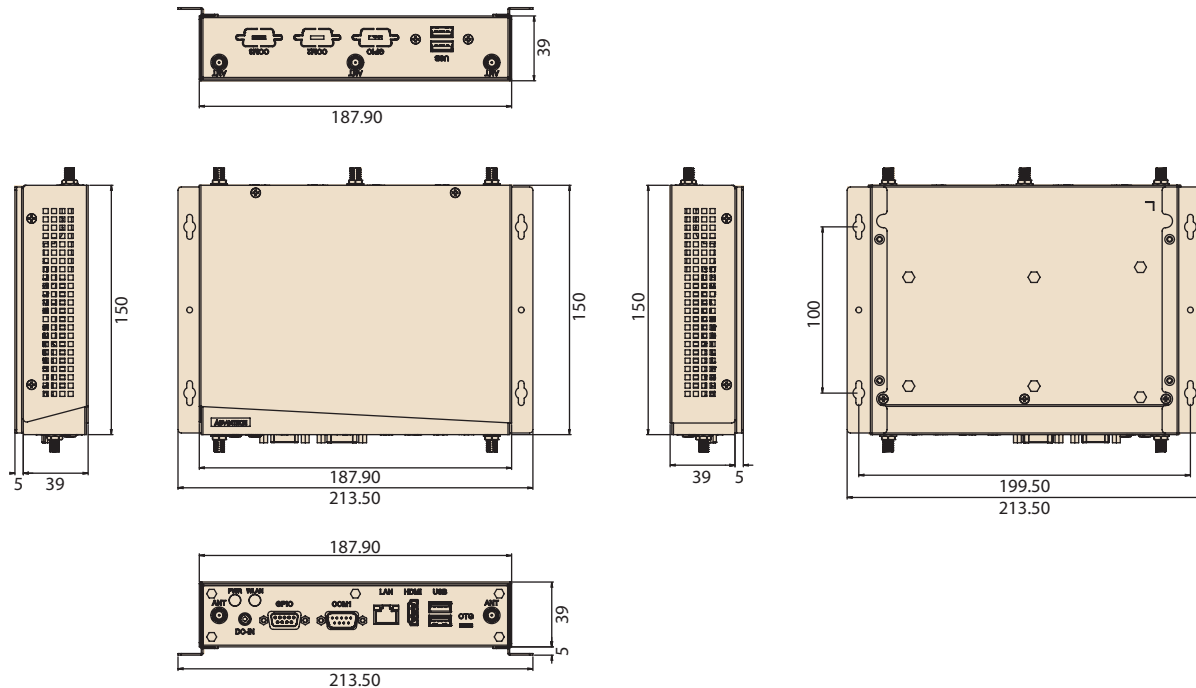
EPC-R4760 is an ARM based Box Computer powered by Qualcomm ARM® Cortex®-A53 APQ8016 processor that supports full HD display and intergrades on board wireless solution – Wi-Fi, BT and GPS. EPC-R4760 also features in mini PCIe, M.2, and SIM card slots for expanding connectivity capability, like 3G, 4G/LTE modules. Equipped with complete Android, Linux and Win10 IoT core BSPs, this box computer enables customers to easily develop unique application on specific OS.

Specifications

| | | |
|------------------|-------------------------|--|
| Form Factor | | ARM-based Box Computer |
| Processor System | CPU | Quad-core ARM® Cortex® A53 APQ8016 |
| | Technology | LPDDR3 1066MHz |
| | Capacity | On-board 1GB / 2GB LPDDR3 |
| Graphics | Flash | 8GB |
| | HDMI | 1 HDMI, 1920 x 1080 at 60Hz |
| | H/W Video Codec | Encode: 30 fps 720p (H.264 Baseline/MPEG-4) 30 fps 1080p (MPEG-4/H.264/VP8/H.263) Decode: 30 fps 1080p (MPEG-4/H.264/H.263/DivX/MPEG2/VC1/Soreson/VP8) |
| Ethernet | Chipset | Microchip LAN7500 |
| | Speed | 1.10/100/1000 Mbps |
| Connectivity | Wi-Fi | WCN3620 802.11 b/g/n 2.4GHz |
| | Bluetooth | WCN3620 Bluetooth 4.1 |
| | GNSS | WGR7640 |
| RTC | | Yes |
| WatchDog Timer | | Yes |
| Expansion | SD socket | 1 x SD socket |
| | M.2 | 1 x M.2 2230 Key.E |
| | mini PCIe | 1 x Full size mini PCIe slot (USB signal only) |
| | SIM | 1 x mini-SIM slot |
| | SATA | - |
| I/O | SATA Power | - |
| | USB | 4 x USB 2.0 Type A / 1 micro USB client |
| | Audio | - |
| | SPDIF | - |
| | Serial Port | 1 x 4 wires RS-232/422/485 via D-SUB 9 |
| | SPI | - |
| | CAN | - |
| | GPIO | 8 x GPIO via D-SUB 9 (3.3V TTL level) |
| | I²C | - |
| | System Bus | - |
| | Touch | - |
| | I/R | - |
| | LED | 1 x Power LED, 1 x Wi-Fi&BT LED |
| | Button | - |
| Power | Power Supply Voltage | 9-36V |
| | Power Type | DC-in |
| | Power Consumption | 6.2W |
| Environment | Operational Temperature | 0 - 40° C |
| | Operating Humidity | 5% - 95% |
| Mechanical | Dimensions (W x D) | 188 x 150 x 39 mm |
| Operating System | | Android / Yocto Linux / Debian |
| Certifications | | CE/RED/FCC/IC/SRRC/TELECOM |

Dimensions

Unit: mm



Ordering Information

| Part Number | CPU | Memory | Flash | HDMI | LAN | Serial Port | USB Host | SD | Operating Temperature |
|-------------------|--------------------------------------|--------|-------|------|-----|----------------------------|----------|----|-----------------------|
| EPC-R4760CQ-QNA1E | Qualcomm APQ8016 Quad Core 1.2GHz | 1GB | 8GB | 1 | 1 | 1 x 4 wires RS-232/422/485 | 4 | 1 | 0 ~ 40 °C |
| EPC-R4760CQ-WNA1E | Qualcomm APQ8016 Quad Core 1.2GHz | 2GB | 8GB | 1 | 1 | 1 x 4 wires RS-232/422/485 | 4 | 1 | 0 ~ 40 °C |

Packing List

| Part Number | Description |
|-------------|------------------------|
| EPC-R4760 | EPC-R4760 Box computer |

Optional Accessories

| Port Number | Description |
|----------------|---|
| 96PSA-A36W12R1 | Adapter 100-240 36W 12V 3A 9NA0362308 |
| 170203183C | Power cord 3P Europe (WS-010+WS-083) 183 cm |
| 170203180A | Power cord 3P UK 2.5A/3A 250 V 1.83 M |
| 1700001524 | Power cord 3P UL 10A 125 V 180 cm |
| 1700026931-01 | Debug cable |
| ROM-ED20-00A1E | Debug adapter board |
| 1700008921 | Power Cord 3P PSE 183cm |

Embedded Linux Support and Design-in Services

Hardware Certified Ubuntu and Yocto with Eco Partner Services

Linux is the most popular embedded OS for transportation, outdoor services, factory automation, and mission critical applications. Its open source and kernel reliability features ease security updates, and make it particularly adaptable to new AI and Edge computing technology. Advantech has cooperated with Canonical and other software partners to provide hardware certified Ubuntu image and Yocto BSP as Linux offerings. The Advantech, Embedded Linux, and Android Alliance (ELAA) delivers local software services and consultation.



Features

| | | | |
|--|--|--|---|
| <p>Certified OS and BSP</p> <ul style="list-style-type: none"> Platform compatibility tests Preloaded functional driver and software stacks | <p>Licensed Services</p> <ul style="list-style-type: none"> License authorized Canonical delivers 10-years of bug fixes and security updates In-house bundled service | <p>Numerous AI and Edge Resources</p> <ul style="list-style-type: none"> Containerized technology for service provision and deployment AI resources from Caffe, TensorFlow, and mxnet | <p>Local Partner Alliance</p> <ul style="list-style-type: none"> Embedded Linux and Android Alliance (ELAA) |
|--|--|--|---|

WISE-DeviceOn

Massive IoT Device Management Utility

IoT deployment and management typically involves numerous disparate devices installed on multiple sites. These devices require effective monitoring, managing, and tracking. Advantech's easy-to-use WISE-DeviceOn interface enables users to remotely monitor device health, troubleshoot problems, and send software/firmware updates over-the-air (OTA). In sum, DeviceOn empowers quick real-time responsiveness to emerging problems.



Features

| Comprehensive Management | Remote Access | Efficient Operations |
|--|--|--|
| <ul style="list-style-type: none">• Devices status• Peripherals/firmware• Open for extension | <ul style="list-style-type: none">• Real-time monitoring• Remote controls• Troubleshooting | <ul style="list-style-type: none">• Zero-touch on-boarding• OTA updates• Batch control |

Product Highlights



SOM-6883

High-performance 11th Gen Intel[®] COMe Type 6 Module



MIO-5375

Compact 11th Gen Intel[®] Outdoor Focused 3.5" SBC



EPC-B5587

10th Gen Intel[®] Xeon[®] based Edge server



EPC-R3220

Arm based IoT Edge Gateway