

DS-011 Development Kit

Qualcomm QCS6490 Edge-AI Development Kit

NEW



Features

- Power by Qualcomm Dragonwing™ 8-cores QCS6490 2.1Ghz
- Hexagon™ 770 AI Engine up to 12 TOPS
- Triple-ISP for camera up to 192MP capture
- Qualcomm AI Hub for Application development
- Dual HDMI 4K Display Support
- Windows on Arm supports Edge AI SDK, Visual Studio Code, DeviceOn

WISE-DeviceOn

Introduction

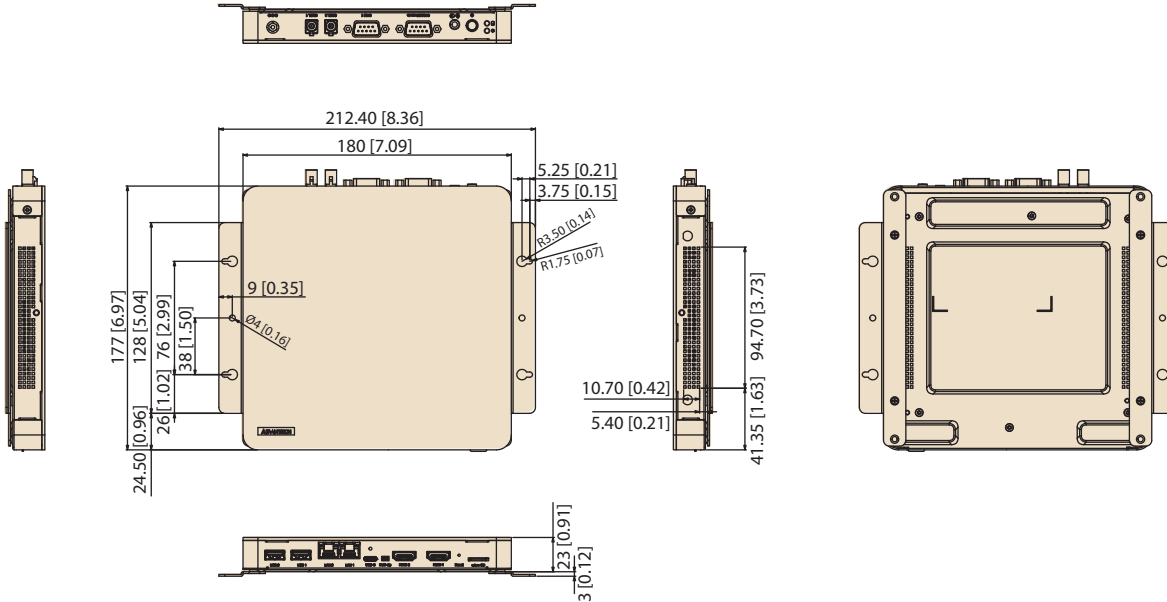
DS-011 Development Kit WoA is a compact Edge-AI box featuring dual UHD HDMI outputs, optimized for application-level visual processing in AI-driven scenarios. It is ideal for interactive-AI and AI signage applications requiring smooth multi-display performance.

Specifications

| | | |
|--------------------------|------------------------|--|
| | | DS-011QF-P0A1U |
| Processor | Chipset | Qualcomm QCS6490 |
| | Clock Speed | 1x A78 @ 2.7 GHz, 3x A78 @ 2.4 GHz, 4x A55 @ 1.9 GHz |
| Memory | Technology | 8GB LPDDR5 8533MT/s on board |
| GPU | | Adreno™ 643, 812Mhz |
| Thermal Solution | | Fanless |
| NPU | AI Engine | Hexagon™ 770, 1.45Ghz, 12 TOPS |
| | Output | 2 x HDMI 2.1 TMDS |
| Display | HDMI Resolution | HDMI 3840 x 2160 @ 30Hz HDMI 3840 x 2160 @ 60Hz |
| | | |
| Ethernet | Controller | RTL8211FS |
| | Interface | Gigabit LAN Controller |
| | Connector | 2 x RJ45 |
| I/O Interfaces | Audio | 1 x (Line-Out or Mic-In) |
| | USB | 2 x USB 3.2 Gen1 |
| | Serial Port (RS-232) | 2 x RS232 |
| | LED Indicators | 1 x Power, 1 x SSD Access |
| | GMSL | |
| Expansion | M.2 | 1 x 2280 M Key (NVME) 1 x 3042 B Key (LTE module) 1 x 2230 E Key (WiFi module) |
| | MicroSD | 1 x Card Slot |
| Power Requirement | Input Voltage | 12-24V DC-in (ATX/AT mode) |
| Physical Characteristics | Mounting | Wall Mount |
| | Dimensions (W x D x H) | 180 x 177 x 23mm |
| | Weight | 0.9 kg |
| Environment | Operating Temperature | 0~40°C (with 0.7 m/s airflow) |
| | Relative Humidity | 95% @ 40 °C (non-condensing), operating |
| Operating System | Operating System | Windows on Arm 11 |
| Certifications | EMC | CE/FCC Class B, BSMI, UKCA |
| | Safety | UL, CB, BSMI |

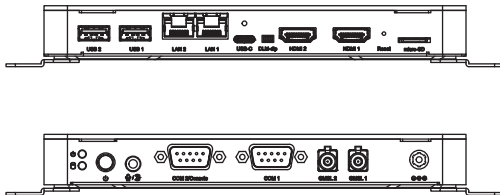
Dimensions

Unit: mm [inch]



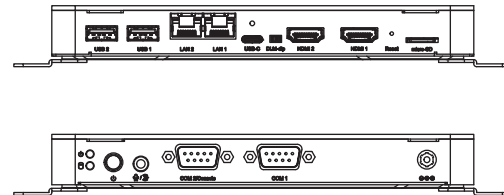
Front View

With GMSL



Rear View

Without GMSL



Ordering information

| Part No. | CPU | Memory | Storage | HDMI | USB 3.2 Gen1 | RJ-45 | RS-232 | GMSL | OS | Power input | Operating Temp. | Origin |
|----------------|------------------|--------------------|-----------|------|--------------|-------|--------|------|-----|-------------|-----------------|--------|
| DS-011QF-POA1U | Qualcomm QCS6490 | 8G LPDDR5 on board | UFS: 128G | 2 | 2 | 2 | 2 | 2 | WOA | 19V DC-in | 0-40 °C | Taiwan |

Packing List

| Part Number | Description |
|------------------|--|
| - | 1 x DS-011 |
| 96PSA-A65W19V1-3 | ADP A/D 100-240V 65W 19V C6 DC PLUG 180° 62368 |
| 1960057740T002 | Wall mount kit x 2 |
| 1700001524 | 3-pin power cord (US) |

Optional Items

| Part Number | Description |
|---------------|---|
| EWM-C401CQE01 | Cellular 4G M.2 3042 Key B, no simslot, no GNSS |
| AIW-170BQ-001 | WiFi6E M.2 2230 E key |
| 1751000717-01 | 2xDipole Ant.WiFi 6E |
| 1751000648-01 | 2xRF cable |

Storage and DRAM

| Part Number | Description |
|--------------------|---|
| SQF-C8MV2-128GDEDM | SQF M.2 2280 720-D 128G 3D TLC BiCS5 (-20-85°C) |

Power Cord

| Part Number | Description |
|---------------|-----------------------------------|
| 1700001524 | 3-pin power cord (US) |
| 170203183C | 3-pin power cord (EU) |
| 170203180A-01 | 3-pin power cord (UK) |
| 1700008921 | 3-pin power cord with PSE (Japan) |
| 1700019146 | 3-pin power cord (CCC) |
| 1700018553 | 3-pin power cord (AU) |
| 1700024849-01 | 3-pin power cord (TW) |