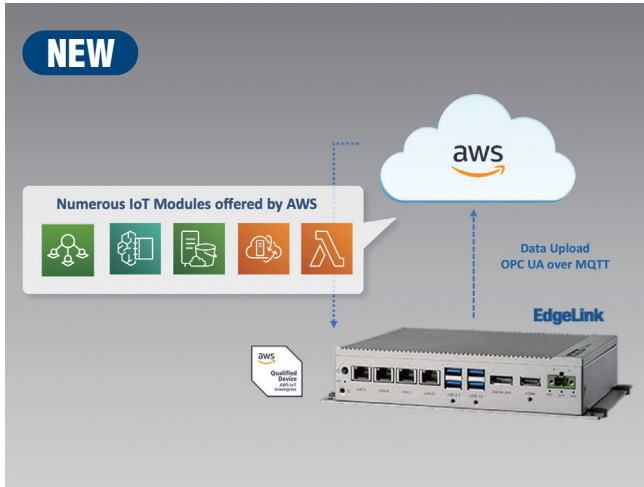


ESRP-AWS-U2484V2

Amazon IoT Greengrass Starter Kit with UNO-2484G V2



Features

- Intel® Core™ 11th i5 with 8GB DDR4, 256GB NVME
- AWS IoT Greengrass certified
- Extends cloud intelligence and analytics to edge devices
- Boosts productivity and response times with data insights
- Support multiple southbound and northbound interface

Introduction

ESRP-AWS-U2484V2 edge intelligence computer is a great solution for extending cloud intelligence and analytics to edge devices. IoT solutions, such as stream analytics, machine learning, image recognition, and other high-value AI modules can be deployed from AWS to the edge to support diverse applications. All data are collected and delivered to the cloud by EdgeLink. It supports more than 200 PLC devices for collecting data and features plug-and-play functionality which reduces software development time. This eliminates the gap between OT and IT. User guide is also provided for users to initialize AWS Greengrass V2 Core on UNO-2484G V2.

Feature Details

Extends cloud intelligence and analytics to edge devices

Stream analytics, OPC UA publisher, Modbus, and other high-value AI modules can be deployed from the cloud to the edge to support diverse applications.

Boosts productivity and response times with data insights

Local data processing enables immediate decision-making and reduces bandwidth costs by minimizing the data transmitted from local devices to the cloud.

Support multiple southbound and northbound interface

EdgeLink is designed to connect to 200+ PLCs for data acquisition with zero coding. It also supports multiple protocols for unifying data sources, enhances data processing, and publishes data to cloud.

Specifications

General

- **Certification** CE, FCC, UL, CCC, BSMI
- **Dimensions (W x D x H)** 200 x 140 x 40 (7.8" x 5.6" x 1.6") for single stack
- **Enclosure** Aluminum housing
- **Mounting** Stand, wall, VESA (Optional), DIN-rail (Optional)
- **Weight (Net)** 1.4kg (3.09lbs)
- **Power Requirement** 10 - 36 V_{DC}
- **Power Consumption** 30.2W (Typical), 85W (Max)
- **Operating system** Ubuntu 20.04 Desktop
- **Software services** Edgelinek Container version 2.8.3
Docker version 20.10.17, build 100c701
docker-compose version 1.29.2, build 5becea4c
Java 1.8.0_342
Python 3.8.10
AWS IoT SiteWise Component v1.0.0 (optional)
aws-cli/2.7.29 (optional)
Edgemanager v1.0.1 (optional)

System Hardware

- **BIOS** AMI 256 Mbit SPI
- **Watchdog Timer** Programmable 255 levels timer interval, from 1 to 255 sec
- **Hardware Security** TPM2.0 2
- **Processor** 11th Gen Intel Core
Core™ i5-1145G7E quad-core 1.5GHz
- **Memory** Built-in 8GB DDR4 3200 MHz, supports up to 64GB (2 slots)
- **Graphics Engine** 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
- **LED Indicators** LEDs for Power, HDD, LAN (Active status), RTC Battery low
- **Storage** 256GB NVME
- **Expansion Option** 1 x M.2 B key slot (USB Signal for 3042/3052
LTE/5G/LTE module, SATA signal for storage)
1 x 2.5" SSD SATA drive bay (support SSD/HDD height up to 9.5mm)
*Support RAID0/RAID1 with 2.5" SSD and M.2 B key 2242 SSD.
1 x M.2 M key (PCIe4x) supports 2280 NVME SSD
2 x mPCIe slot (PCIe, USB2.0 signal)

I/O Interfaces

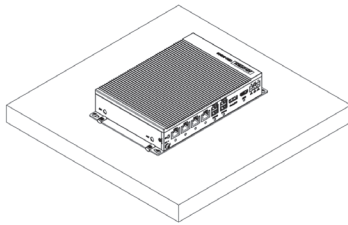
- **Serial Ports** 4 x RS 232/422/485, 50-115.2 kbps speed
- **LAN Ports** 1 x RJ45 , 10/100/1000 Mbps
3 x RJ45 , 10/100/1000/2500 Mbps
- **USB Ports** 3 x USB 3.2 Gen2, 1 x USB2.0
- **Displays** 1 x HDMI 1.4 (3840x2160@30Hz)
1 x DP 1.4a (4096x2304@60Hz)
- **USB Type-C** 1 x USB3.2 Gen2, support DP1.4a Alt. mode
- **Power Connector** 1 x 2 pins, terminal block

Environment

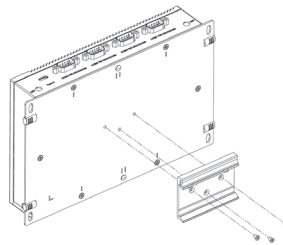
- **Operating Temperature** -20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7 m/s airflow
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- **Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11 ms
- **Vibration Protection** Operating, IEC 60068-2-64, 3 Grms, random, 5 ~ 500 Hz, 1hr/axis (mSATA)
- **Ingress Protection** IP40

Installation Scenario

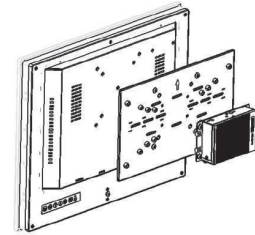
Stand/Wall Mount



DIN-rail Mount (Optional)

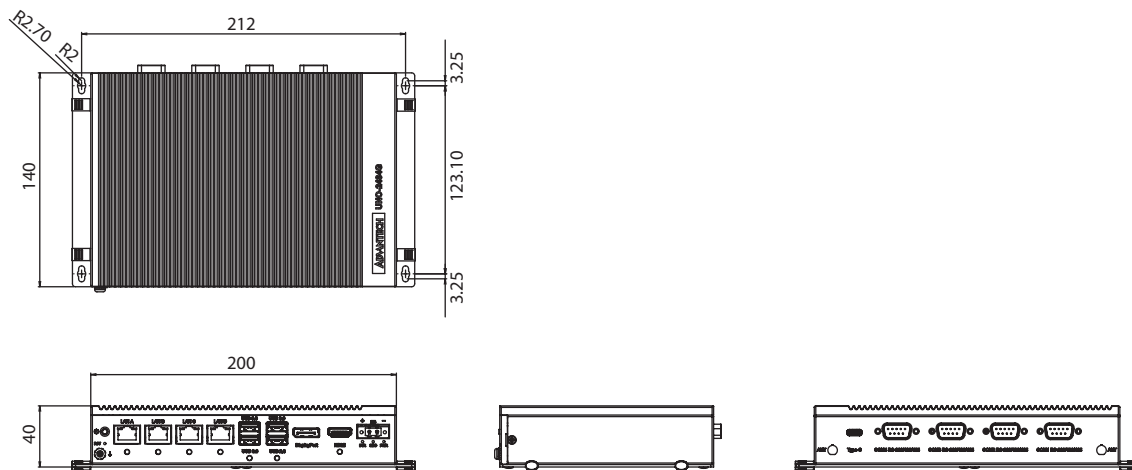


VESA Mount (Optional)

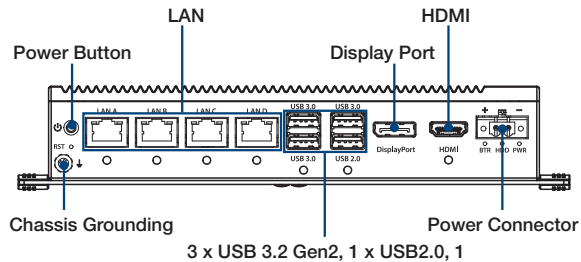


Dimensions

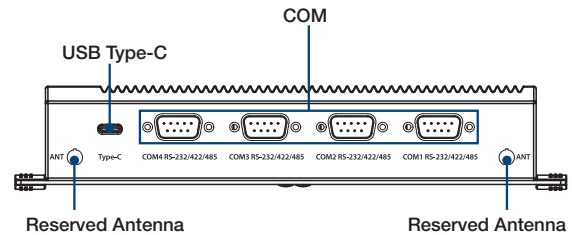
Unit: mm



Front I/O View



Rear I/O View



Ordering Information

- **ESRP-AWS-U2484V2** Amazon IoT Greengrass Starter Kit with UNO-2484G V2

Optional Accessories

- **96PSA-A150W24T2-4** Power Adapter 150W
- **96PSA-A120W24T2-4** Power Adapter 120W
- **1702002600** Power Cable US Plug 1.8 M (Industrial Grade)
- **1702002605** Power Cable EU Plug 1.8 M (Industrial Grade)
- **1702031801** Power Cable UK Plug 1.8 M (Industrial Grade)
- **1700000596** Power Cable China/Australia Plug 1.8 M (Industrial Grade)
- **1700033574-01** F cable 2x10P-2.0x2/IDE#2 16P-2.54 17CM
- **UNO-2000G-VMKAE** UNO-2000 VESA Mount Kit
- **UNO-2000G-DMKAE** UNO-2484G DIN RAIL Kit
- **UNO-2000-LKAE** Cable lockable kit 10 units/per pack
- **UNO-REPWR-AE** Remote power & reset kit

Please note: If some optional modules are offered with the system, additional system certificates may be required in certain regions/countries. Please contact Advantech for certificate compliance.