UNO-1252G

Intel® Quark Micro Din-Rail Controller w/ 2 x LAN, 2 x mPCIe, 2 x COM, 8 x DI/O, 2 x USB, 1 x 1GB microSD card, 1 x SIM

NEW

Features

- Intel® Quark X1001 400 MHz Processor with 256MB Memory
- 2 x LAN, 2 x mPCIe, 1 x RS-232, 1 x RS-232/485, 8 x DI/O, 2 x USB, 1 x 1GB microSD card, 1 x SIM
- COM ports and Digital I/O with Isolation Protection design for Sensing and Controlling
- Chassis Grounding Protection
- Compact with Fanless Design
- Din-rail mounting design
- Supports GPRS/3G/GPS/Wi-Fi Communication by iDoor Technology
- Supports Yocto Linux system

Introduction

The UNO-1252G is an Intel Quark DIN-rail controller for IoT gateway solution. This controller features dual LAN ports and mPCIe card slots for economic gateway application bridging cloud and brown area. The general purpose input/output ports also success gateway controller directly reading status of sensors and indicating required results. The UNO-1252G is also equipped with Advantech iDoor technology that employes iDoor modules to extend itself to become a wireless gateway. In addition, the UNO-1252G also features eight LED indicators for the status of Power, Battery, SD card, COM ports and three programmable indicators.

Specifications

General

- **Certification**   CE, FCC, CCC, BSMI, UL
- **Dimensions (W x D x H)**   63 x 105 x 100 mm (2.48" x 4.13" x 3.94")
- **Form Factor**   Micro Size
- **Enclosure**   Aluminum Housing
- **Mounting**   DIN-rail
- **Weight (Net)**   0.6 kg (1.33 lbs)
- **Power Requirements**   10~36 V_{DC}
- **Power Consumption**   10 W (Typical)
- **OS Support**   Yocto Linux

System Hardware

- **BIOS**   8MB SPI Flash
- **Processor**   Intel Quark X1001 400 MHz
- **System Chip**   Integrated Intel SoC Chipset
- **Memory**   On-board 256 MB DDR3 800 MHz
- **LED Indicators**   LEDs for Power (PWR) , battery (BTR), COM1~2 (Tx/Rx) and microSD (SD), Programmable Indicators (PL1~3)
- **Storage**   1 x microSD Slot (1GB microSD card included)
- **Expansion**   1 x Full-size mPCIe with USB signal, 1 x Full-size mPCIe with PCIe signal, 1 x iDoor I/O front plate

I/O Interfaces

- **Isolated Serial Ports**   1 x RS-232, DB9, 50~115.2 kbps, supports console debug (Isolation Protection 1000 V_{DC}) 1 x RS-232/485, DB9, 50~115.2 kbps
- **LAN Ports**   2 x RJ45, 10/100 Mbps
- **USB Ports**   1 x USB 2.0 (type-A), 1 x USB Client (micro-B)
- **Isolated DI/O**   4-ch digital input, 4-ch digital output (Isolation Protection 1000 V_{DC} , Overvoltage protection 30 V_{DC})
- **Power Connector**   1 x 3 Pin, Terminal Block
- **Grounding Protection**   Chassis Grounding
- **SIM**   1 x SIM card slot

Environment

- **Operating Temperature**   - 20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH
- **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, 11ms
- **Vibration Protection**   Operating, IEC 60068-2-64, 2 Grms, random, 5 ~ 500Hz, 1 hr/axis
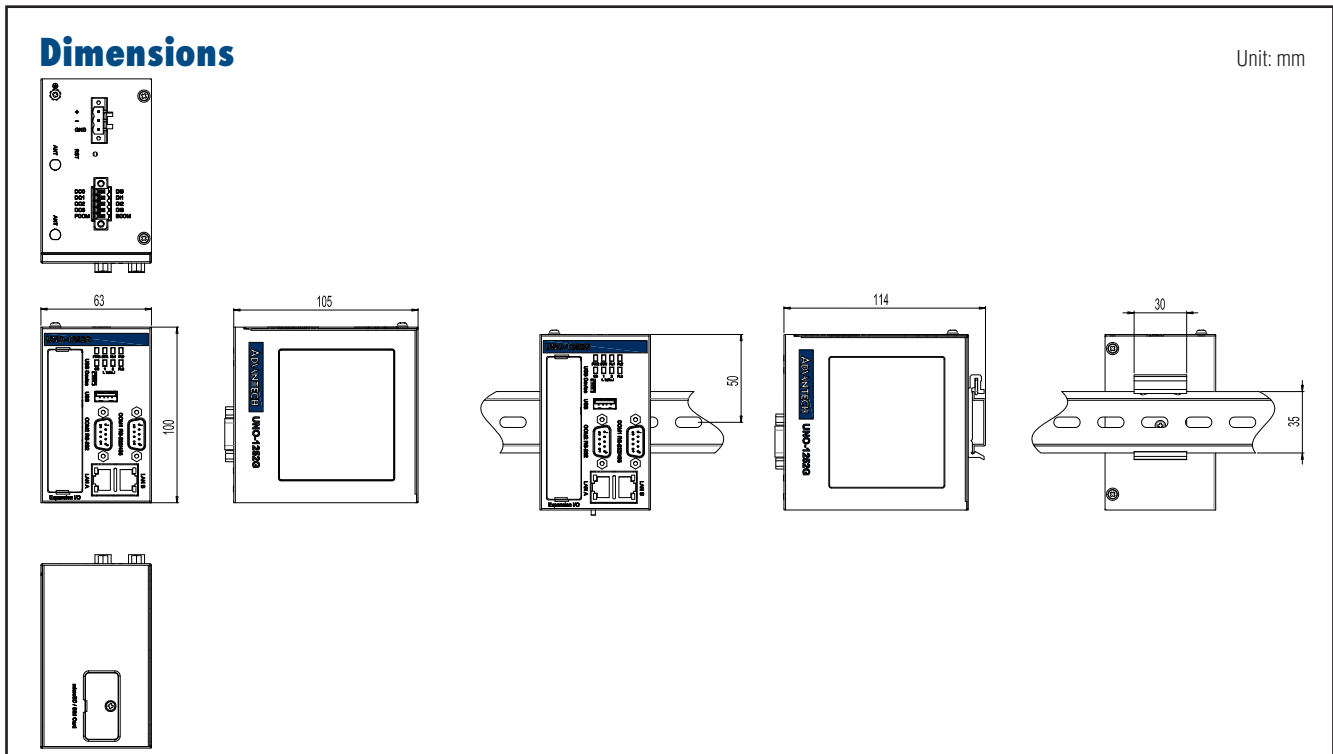
Application Software

SUSIAccess

Version : V3.1 or above
An innovative remote device management software, allowing efficient remote monitoring, quick recovery & backup, and real-time remote configuration, to create a more intelligent and interconnected embedded computing solution.

*SUSI is supported. SUSIAccess will be supported in Q2 2016
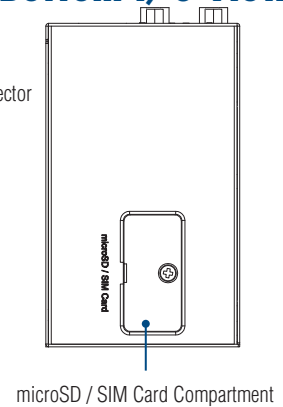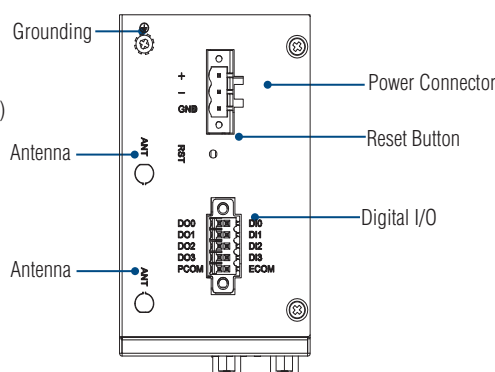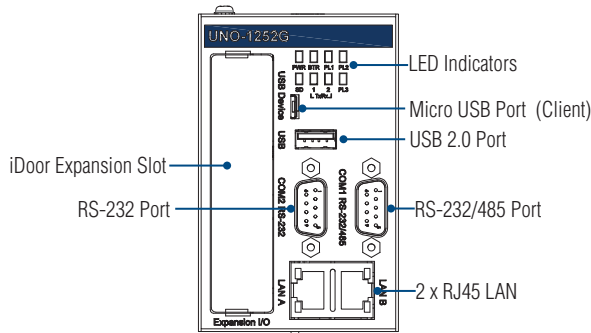
Dimensions

Unit: mm

63 105 114 30

100 50 35

Front I/O View

UNO-1252G

LED Indicators

Micro USB Port (Client)

USB 2.0 Port

iDoor Expansion Slot

RS-232 Port

RS-232/485 Port

2 x RJ45 LAN

Expansion I/O

Top I/O View

Grounding

Power Connector

Antenna

Reset Button

Antenna

Digital I/O

DO0 DI0
DO1 DI1
DO2 DI2
DO3 DI3
PCOM ECOM

Bottom I/O View

microSD / SIM Card

microSD / SIM Card Compartment

Ordering Information

▪ **UNO-1252G-Q0AE**   Intel Quark X1001 400MHz, 2 x LAN, 2 x mPCIe, 2 x COM, 8 x DI/O, 2 x USB, 1GB microSD

iDoor Modules

▪ **PCM-24S33G-AE**   Wide-Temp 3.75G HSPA and GPS, 2-in-1, mPCIe w/ dual SIM Card holder, Antenna, cable

*More iDoor modules will be supported in 2016

Accessories

▪ **96PSA-A60W24T2**   ADP A/D 100-240V 60W 24V (Commercial Grade)
▪ **1700001524**   Power cable 3-pin US type 1.8 M (Commercial Grade)
▪ **170203183C**   Power cable 3-pin EU type 1.8 M (Commercial Grade)
▪ **170203180A**   Power cable 3-pin UK type 1.8 M (Commercial Grade)
▪ **96FMMSDI-2G-ET-AT**   ATP 2G MICRO SD CARD I-GRD SLC(G)
▪ **968EMC0048**   HSPA/EDGE/GPS PCI Express Mini Card
▪ **1750006264**   Coaxial cable for antenna
▪ **1750005865**   Antenna L=10.9 cm 50 Ohm