UNO-1483G

Intel® Core™ i3 Regular-Size DIN-Rail Controller w/ 4 x GbE, 3 x mPCIe, 1 PCIe, DP/VGA , 8 DI/O

NEW

Features

- 4th Generation Intel® Core™ i3 Processors up to 1.7GHz with 8GB DDR3L Memory
- 4 x GbE, 4 x USB 2.0/3.0, 1 x RS-232, 2 x RS-422/485, 1 x VGA, 1 x DP, Audio
- Compact with Fanless Design
- Supports PCIe card, PoE iDoor module and Digital I/O for Machine Motion/ Vision application
- Dual Power Input and Remote Power Button for reducing power down time and remote power control
- 4G/ 3G/GPS/GPRS/WiFi Communication by iDoor Technology
- Supports MRAM by iDoor Technology
- Chassis Grounding Protection
- Hot-Swap RTC battery with easily access at top side
- Supports Fieldbus Protocol by iDoor Technology

iDoor SUSIAccess RoHS COMPLIANT 2002/95/EC CCC CE FCC c UL us LISTED E180881 I.T.E.

Introduction

The UNO-1483G is an Intel 4th generation Core i3 DIN-Rail controller. This controller featured with dual power input that shorten the down time to enhance operation excellence. The general purpose input/output ports also help machine builder integrate direct control of start/stop inspection and indicate inspection results. UNO-1483G also equipped with PCIe slot and Advantech iDoor technology that extend this product to motion controller, like motion control card, or isolation control unit from iDoor modules. In companion these features, UNO-1483G featured with 4 gigabyte LAN, 2 USB 3.0, 3 COM, DP, VGA can support essential link for upstream and downstream, for example, PoE connected to IP camera from iDoor.

Specifications

General

- **Certification** — CE, FCC, UL, CCC, BSMI
- **Dimensions (W x D x H)** — 106 x 139 x 198 mm (4.2" x 5.8" x 7.8")
- **Form Factor** — Regular Size
- **Enclosure** — Aluminum Housing
- **Mounting** — DIN-rail, Wallmount
- **Weight (Net)** — 2.4kg (5.3lbs)
- **Power Requirement** — 12V/24V$_{DC}$ ± 20%
- **Power Consumption** — 41W (Typical), 60W(Max)
- **OS Support** — Microsoft® Windows 7/8, WES7/WE8S, Linux

System Hardware

- **BIOS** — AMI UEFI 128Mbit Flash BIOS
- **Watchdog Timer** — Programmable 6 levels timer interval, from 15 to 255 sec
- **Processor** — Intel® 4th Gen. Core™ i3-4010U ULT 1.7GHz Haswell Dual Core, 3MB L2
  Core i7-4650U/i5-4300U/Celeron 2980U by project
- **System Chip** — Integrated Intel 8 Series Chipset
- **Memory** — On-board 8GB DDR3L 1333/1600 MHz
- **Graphics Engine** — Intel® HD Graphics 4400
- **Ethernet** — Intel® i210-IT GbE
  Intel® i218-LM GbE
- **LED Indicators** — LEDs for Power, battery, LAN (Active, Status), Tx/Rx and HDD
- **Storage** — One drive bay for SATA 2.5" HDD (Compatible with 9.5mm height HDD)
  CFast drive by iDoor Technology (Optional)
- **Expansion** — 2 x Full-size mPCIe slot, mPCIe 2.0 (1 supports mSATA / SIM card)
  1 x Half-size mPCIe slot w/o USB signal
  1x PCIe slot with x1 signal

I/O Interfaces

- **Serial Ports** — 1x RS-232, DB9, 50~115.2kbps
  2x RS-422/485, DB9, auto flow control, 50~115.2kbps
- **LAN Ports** — 4x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000Base-T Fast Ethernet, support Jumbo Frame
- **USB Ports** — 4x USB Ports (2 x USB2.0, 2 x USB3.0 compliant)
- **Displays** — 1x VGA, supports 1920x1200@60Hz 24bpp
  1x DP 1.2, supports 1920x1080@60Hz 24bpp
- **Audio** — Line-Out
- **Power Connector** — 1x 7 Pins, Terminal Block to support dual power input and remote power control
- **Grounding Protection** — Chassis Grounding

Digital I/O

- **4-ch digital input** — Wet/dry contact with Isolation Protection 2,500 V$_{DC}$
- **4-ch digital output** — Compatible 5 V/TTL, Capable Sink: 24 mA max. per channel

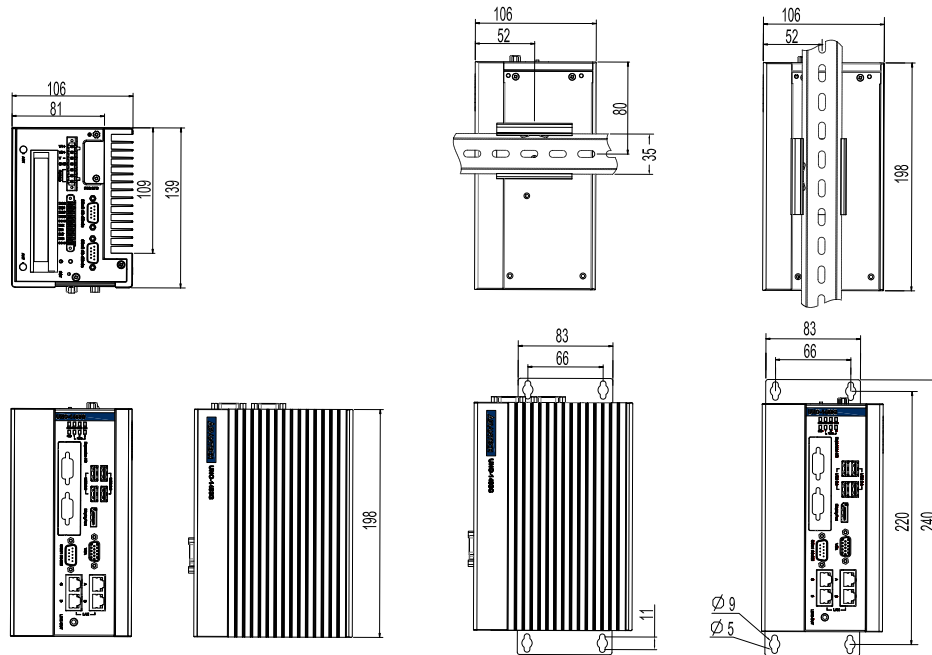### Environment

- **Operating Temperature** — - 20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7m/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, 11ms
- **Vibration Protection** — Operating, IEC 60068-2-64, 1Grms, random, 5 ~ 500Hz, 1 hr/axis

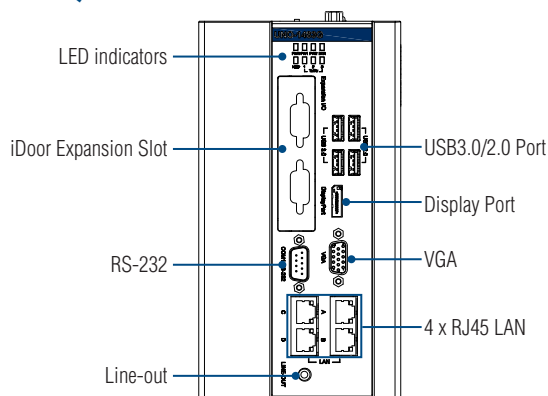## Application Software

SUSIAccess	Version : V2.1 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.
WebAccess	Version : V7.1 or above WebAccess, as the core of Advantech's IoT solution, is full web browser-based software package for HMI and SCADA software. All HMI and SCADA software features including: Animated Graphics Displays, Real-time Data, Control, Trends, Alarms and Logs, are available in a standard web browser. WebAccess is built around the latest internet technologies. With its open architecture, vertical domain applications can easily be integrated.
PANELEXPRESS Designed for Convenience	Version : V2.0.3.8 or above Panel Express, a windows based HMI mini SCADA, realizes the cross platform flexibility offered by WebOP Designer to switch hardware for the consideration of cost and performance become an easy job. Panel Express software provides the best economic and express solution for data intensive high-end HMI applications.
Web OP Designer	Version : V2.0.3.8 or above An easy to use integrated development tool featuring solution-oriented screen objects, high-end graphics, Windows fonts for multi-language applications. WebOP runtime, a part of WebOP Designer, guarantees reliability and performance because of the minimum system overhead, high communication data rates, and sub-second screen switching.

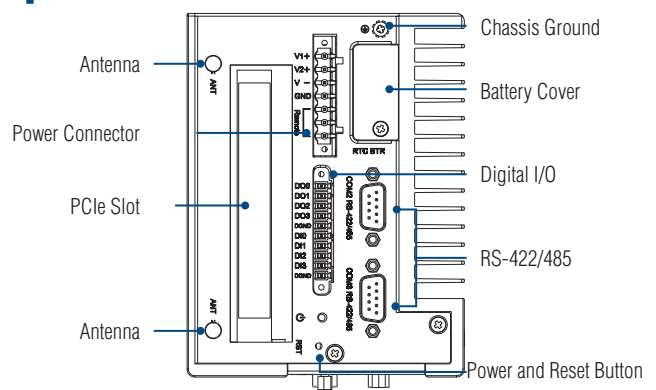**ADVANTECH** | **Embedded Automation Computers**

Date updated: 1-Oct-2014

Dimensions

Unit: mm

Front I/O View

- LED indicators
- iDoor Expansion Slot
- RS-232
- Line-out
- USB3.0/2.0 Port
- Display Port
- VGA
- 4 x RJ45 LAN

Top I/O View

- Antenna
- Power Connector
- PCIe Slot
- Antenna
- Chassis Ground
- Battery Cover
- Digital I/O
- RS-422/485
- Power and Reset Button

Ordering Information

- **UNO-1483G-434AE**   Intel® Core™ i3-4010U ULT 1.7GHz, 8GB, 4 x LANs, 2 x mPCIe, 1 PCIe Slot

    Note: Processor i7-4650U/i5-4300U/Celeron 2980U reserved for project

iDoor Modules

- **PCM-24R2PE-AE**   Intel i350, GbE, PoE IEEE 802.3af, PD, RJ45 x 2
- **PCM-24U2U3-AE**   2 port USB 3.0 mini card
- **PCM-2300MR-AE**   MR4A16B, 2MByte
- **PCM-26D1PB-AE**   Hilscher netX100 FieldBus, ProfiBus, DB9 x 1
- **PCM-26D2CA-AE**   SJA1000 CANBus, CANOpen, DB9 x 1
- **PCM-24D2R4-AE**   OXPCIe-952 UART, Isolated RS-422/485, DB9 x 2
- **PCM-24S2WF-AE**   802.11 a/b/g/n 2T2R w/ BT4.0, Atheros AR9462
- **PCM-24S23G-AE**   6-band HSPA Cellular Module, SIM holder+GPS
- **PCM24S24G-T**   Full-size mPCIe, LTE bands 2, 4, 5, 7, 17, (for USA, AT&T, T-Mobile)
- **PCM-24S24G-AE**   Full-size mPCIe, LTE bands 1, 3, 5, 7, 8, 20, (for Europe, APAC)

Accessories

- **PWR-244-AE**   96W AC to DC power adapter
- **1702002600**   Power Cable US Plug 1.8 M
- **1702002605**   Power Cable EU Plug 1.8 M
- **1702031801**   Power Cable UK Plug 1.8 M
- **1700000596**   Power Cable China/Australia Plug 1.8 M
- **SQF-SMSM4-16G-S8E**   SQF MSATA 820 16G MLC 4-CH (-40~85°C)

Embedded OS & Automation Software

- **968WEXP003X**   PanelExpress V2.0 300 tags S/W license
- **968WEXP015X**   PanelExpress V2.0 1500 tags S/W license
- **968WEXP050X**   PanelExpress V2.0 5000 tags S/W license
- **968EMLSAP2**   SUSIAccess Pro V2.0 Package CD/ download card/ flyer