UNO-4673A
UNO-4683

Intel® Atom™ D510/ Core™ i7 Power & Energy Automation Computers with 6 x LAN, 2 x COM and 3 x Expansion Slots

NEW

Features

- China Electricity Certificate IV level
- IEC 61850-3 and IEEE 1613 certified for substation automation applications
- Onboard Intel Atom 1.66 GHz / Core i7 2.0 GHz processor
- Support Intel Virtualization Technology for Direct IO (VT-D)
- 2 x RS-232/422/485 isolated serial ports with automatic flow control and 128KB FIFO
- 2 x 10/100/1000Base-T (supports teaming function) and 4 x 10/100Base-T
- Supports 1 x internal CF card and 1 x 2.5" SATA HDD
- 6 x USB 2.0 (1 x internal) and 3 x Domain I/O expansions
- Rear wiring, rich system & I/O LED status indicators
- Windows® CE 6.0, Windows XP Embedded SP2, and Linux ready solution
- Fanless design with no internal cabling
- Isolation power design with wide AC / DC input range
- Isolation between chassis and power ground
- One internal USB for dongle and flash drive

IEC 61850-3 / IEEE 1613 Compliant Windows Embedded RoHS COMPLIANT 2002/95/EC CCC CE FCC c UL us LISTED E180881 I.T.E.

Introduction

UNO-4673A and UNO-4683 are compliant with the hardware requirements of IEC 61850-3, which defines the international standards of network and system communications in power substations. Featuring fanless designs with built-in isolated PSU and 3 expansion slots for I/O plug-in cards, the UNO-4673A and UNO-4683 are suitable for harsh environments. The rear I/O connection and LEDs on front panel for all ports and modes highly simplify monitoring for operation and maintenance.

Specifications

General

- **Certification** IEC 61850-3, IEEE 1613, CE, FCC Class A, UL, CCC, Electricity IV level for China
- **Dimensions (W x D x H)** 2U (440 x 220 x 89 mm/ 17.3" x 8.6" x 3.4") fits into standard 19 inch rack
- **Enclosure** SECC + Aluminum
- **Mounting** 2U Rackmount
- **Power Consumption** 45 W (Typical)
- **Power Requirements** AC: 81~275 V_{AC} (47 ~ 63 Hz), DC: 90~300 V_{DC}, With isolation protection, AT
- **Weight** ~6.0 kg
- **OS Support** WES, Windows XP Embedded, Windows /XP, Windows CE 6.0, Linux, QNX, Window server 2008 R2 (64bits)
- **System Design** Fanless Design
- **Remote Management** Built-in Advantech DiagAnywhere agent on Windows CE/XPe

System Hardware

- **CPU** Intel Atom D510 1.66 GHz/Core i7 2.0 GHz
- **Memory** 2 GB DDR2 SDRAM/4G DDR3 SDRAM built-in
- **Indicators** LEDs for Power, IDE, Alarm for battery backup SRAM, Diagnosis (programmable), LAN (Active, Status) and Serial (Tx, Rx)
- **Keyboard/Mouse** 2 x PS/2
- **Storage**
  CF   1 x internal type I/II CompactFlash® slot
  HDD   Built-in one 2.5" SATA HDD bracket
- ***RAID capable with 2nd HDD kit**
- **Display** DB15 VGA connector, 2048 x 1536 @ 85 Hz (UNO-(4673A)
  1 x DVI-I (UNO-4683)
- **Watchdog Timer** Programmable 7-tier event handler, from 1 to 255 seconds for each tier
- **Battery Backup SRAM** 1 MB

Relay

- **Relay output** Form C
- **Contact** 5 A @ 250 V_{AC}\5 A @ 30 V_{DC}

I/O Interface

- **Serial Ports** 2 x DB-9Automatic RS-485 data flow control2000 V_{DC} EFT protection & 2000 V_{DC} isolation
- **Serial Port Speed** RS-232: 50 ~ 115.2 kbps
  RS-422/485: 50 ~ 921.6 kbps (Max.)
- **LAN** 2 x 10/100/1000Base-T RJ-45 ports,teaming function supported
  4 x 10/100Base-T RJ-45 ports
- **Audio** Line-out
- **USB Ports** 6 x USB, UHCI, Rev. 2.0 compliant2 x Front, 3 x Rear and 1 x Internal ports
- **Expansion** 3 x Domain I/O expansions (Only slot 1 supports PCIe resource)

Environment

- **Storage Humidity** 95% @ 40°C (non-condensing)
- **Operating Temperature** IEC 60068-2-2 with 100% CPU/ I/O loading, 48 hrs -20 ~ 70°C (optional for -40°C)
- **Operating Humidity** 20 ~ 95% (non-condensing)
- **Shock Protection** IEC 60068-2-27 CompactFlash®: 50 G half sine, 11 ms HDD: 20 G half sine, 11 ms
- **Vibration Protection** IEC 60068-2-64 (Random 1 Oct./min, 1hr/axis.) CompactFlash®: 2 Grms @ 5 ~ 500 Hz, HDD: 1 Grms @ 5 ~ 500 Hz

Ordering Information

- **UNO-4673A-A33E** Intel Atom 1.66 GHz, 2 GB RAM Power & Energy Automation Computer
- **UNO-4683-D34E** Intel Core i7 2.0 GHz, 4 GB RAM Power & Energy Automation Computer
- **UNO-4673ADP-A33E** Intel Atom 1.66 GHz, 2 GB RAM,dual PSU Power & Energy Automation Computer
- **UNO-4683DP-D34E** Core i7 2.0 GHz, 4 GB RAM,dual PSU Power & Energy Automation Computer

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