ECU-4674

Intel® Atom™ N2600 Power & Energy Computers with 8xLAN, 18xCOM, 8DI, 8DO, 1x IRIG-B and 1 x PCI-104

NEW

Windows Embedded | RoHS COMPLIANT 2002/95EC | CCC | CE | FCC

Features

- China Electricity Certificate IV level Certification for substation applications
- IEC 61850-3 and IEEE 1613 compliant
- Intel Atom N2600 1.6GHz processor, 2GB DDR3
- 2 x RS-232, 16 x RS-232/485(Max.) isolated serial ports
- 2 x 10/100/1000, 6 x 10/100 Base-T Ethernet ports
- 1 x CF, 2 x 2.5" SATA HDD, RAID (RAID 0 & RAID 1)
- 8-ch isolated DI, 8-ch isolated DO
- 1 x Time Synchronize IRIG-B
- Redundant isolated power with wide AC/DC input range
- Mounting: 2U Rack-mount
- iCDManager: intelligent Connectivity Diagnosis and Management

Introduction

The ECU-4674 product is compliant with Electricity Certificate level IV (especially for China) and IEC 61850-3 and IEEE 1613 certification , which provides higher reliability and stability, suitable for any Global P&E automation market and harsh environment. With versatile communication interface to use for Smart substation Communication server and IED Analyzer to fulfill the Data Gateway & Protocol Conversion requirement easily. Featuring a fanless design with high performance Intel Atom N2600 processor, the ECU-4674 comes with 18 isolated serial ports, 8 x LAN and 1 x PCI-104 extension. With iCDMananger support , users can easy diagnose System & Communication and enhance maintenance efficiency, with Structured and functional module Internal design for easy customization and Fast assembly to fulfill the different kind of application.

Specifications

General

- **Certification** CE, FCC class A, CCC, Electricity IV level for China (Compatible IEC 61850-3, IEEE 1613)
- **Dimensions (W x D x H)** 440 x 220 x 88 mm
- **Enclosure** SECC & Aluminum
- **Mounting** 2U Rack mount
- **Power Requirements** Supports Redundant power input
  Power 1: 100 ~ 240 V_{AC} or 100 ~ 240 V_{DC}
  Power 2: 100 ~ 240 V_{AC} or 100 ~ 240 V_{DC}
  Supports Power loss alarm
- **Weight** < 5.5 kg
- **OS Support** Windows7, WES7(WS7P), Linux (Debain 5.0)
- **System Design** Fanless

System Hardware

- **CPU** Intel Atom N2600, 1.6GHz
- **Memory** 2G DDR3 SDRAM built-in
- **Indicators** LEDs for Power, HDD, Programmable LED,IRIG-B, LAN (Active, Status) and Serial (Tx, Rx)
- **Storage** 1 x internal CF, 2 x 2.5" SATA HDD (RAID 0,1)
- **Display** DB15 VGA connector
- **Expansion slot** 1 x PCI-104
- **Watchdog Timer** Programmable 256 levels time interval, from 1 to 255 seconds for each tier

I/O Interface

- **Serial Ports** 18 Ports, 2 x RS-232, 16 x RS-232/485 (Max.) 2,500 V_{DC} isolation (Automatic RS-485 data flow control)
- **Serial Port Speed** RS-232: 50 ~ 115.2 kbps, RS-485: 50 ~ 921.6 kbps
- **LAN** 2 x 10/100/1000Base-T RJ-45 ports, teaming function supported, 6 x 10/100Base-T RJ-45 ports
- **USB Ports** 5 x USB (1x internal), UHCI, Rev. 2.0 compliant

- **Digital Input** 8-ch isolated digital input
  Wet contact: Logic 0:0~3 V_{DC}; Logic 1: 10~30 V_{DC}
  Isolation protect: 2000 V_{DC}, 30-50 V_{DC} over voltage protection (Only for ECU-4674-A53SAE)
  Opto-Isolator Response:25us-interrupt capable
- **Digital Output** 8-ch isolated digital output
  2000 V_{DC} isolation, 200mA max/channel sink current
  Keeps output status after system hot reset
  Open collector to 40V (200mA maximum sink current load) 3 kHz speed (Only for ECU-4674-A53SAE)
- **Programmable LED** 8-ch programmable LED indicator

Time Synchronization Interface

- **Type** IRIG-B (RS-485)
- **Channel** 1
- **Support Format** IRIG-B00X according to IRIG STANDARD 04, 200-98
- **Message Syntax** QQQHHMMSS (year, day, hour, minute & second)
- **Resolution of Time** 1s

Environment

- **Storage Humidity** 5 ~ 95% RH (non-condensing)
- **Operating Temperature** IEC 60068-2-2 with 100% CPU/ I/O loading, 24 hrs -25~ 70°C (-13 ~ 158°F)
- **Operating Humidity** 5 ~ 95% RH (non-condensing)
- **Shock Protection** IEC 68 2-27 CompactFlash®: 30 G half sine, 11 ms
- **Vibration Protection** IEC 68 2-64 (Random 1 Oct./min, 1hr/axis.) CompactFlash: 2 Grms @ 5 ~ 500 Hz

Ordering Information

- **ECU-4674-A53SAE** Intel Atom N2600 1.6 Ghz ,8 x LAN ,18 x COM, 8 x DI/DO, 1IRIG-B Computer
- **ECU-4674-LBA53SAE** Intel Atom N2600 1.6 Ghz, 8 x LAN, 10 x COM (1 IRIG-B for Selection) Computer
- **XECU-FSP150-1H35(*)** FSP AC/DC 100-240V 150W W/PFC (Note: For ECU-4674 Dual Power, by CTOS configuration center)
- **9893SW0400E (*)** DC 36V~72V module(Note: For ECU-4674 48V Power Request, by CTOS configuration center)
- **ECUP-1514R-AE(*)** PCI-104 4 Port LAN Ethernet Card For ECU-4674 (Note: by CTOS configuration center)

All product specifications are subject to change without notice

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