ECU-4674

Intel® Atom™ N2600 Power and Energy Computers with 8 x LAN, 18 x COM, 8 x D/I, 8 x D/O, 1 x IRIG-B, and 1 x PCI-104

NEW

Features

- Intel® Core™ i7, i3/Celeron® processors
- Isolated 8 x LAN, 10 x serial port communication interfaces
- 220 VAC/DC redundant power supply
- 48Vdc power for selection
- 2 x I/O expansion slots
- 2 x 2.5" SATA HDD, 1 x CFast socket for storage
- VGA and DVI display interface
- Programmable LEDs
- Intelligent connectivity diagnosis management
- Remote management
- Trusted platform module
- Virtualization technology for directed I/O

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

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)

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