ECU-4553

TI Cortex4 A8 Power Automation Computer with 4 x LAN, 16 x COM Ports

NEW

RoHS COMPLIANT 2002/95/EC C E FCC

Features

- TI Cortex A8 800MHz CPU
- DDR3L 1GB RAM
- 1GB Micro-SD card for system storage; 1 x Micro-SD Slot
- 1 x IRIG-B
- 16 x RS-232/485 isolated serial ports
- 4 x 10/100 Base-T Ethernet ports
- 2 x CAN2.0B
- Support Data logger on SD card
- Operation System: RT-Linux
- Operation Temperature -40 ~ 70°C

Introduction

For solar power, electricity and factory related applications which require Ethernet and Serial Port communication solutions, Advantech has released the ECU-4553 RISC-based industrial communication gateway. ECU-4553 has an open platform design with Cortex A8 processor, 16 x RS-232/485 isolated serial ports, 4x10/100 Ethernet ports and operating temperature range from -40 to 70°C.WithLinux operating system and open TagLink SDK, which enable to system integrators to develop applications which precisely ft their need.

Specifications

General

- **Certification** CE, FCC
- **Mounting** 1U Rackmount
- **Power Consumption (typical)** 10 W
- **Power Requirements** 100 ~ 240 V_{AC}, 100 ~ 240 V_{DC}

System

- **CPU** TI Cortex A8, 800MHz
- **Memory** DDR3L 1GB
- **Indicators** LEDs for Power, LAN (LINK, ACT), CAN (Tx, Rx) Serial (Tx, Rx), Programmable
- **Storage** 1GB Micro-SD card for system storage
- **SD Slot** 1 x Micro-SD slot
- **Watchdog** Yes
- **Real-time clock** Yes
- **Node ID** 8-bit

Communication

- **Serial Port** 16 x RS-232/48 5 (Terminal Block)
- **Isolation** 3000 V_{DC}
- **Serial Port Speed** RS-232/RS-485: 50 ~ 115.2 kbps
- **Ethernet Port** 4 x 10/100 Base-T RJ-45 ports
- **USB Port** 1 x USB2.0B
- **CAN** 2 x CAN2.0 B
- **Isolation** 3000 V_{DC}

Time Synchronization Interface

- **Type** IRIG-B (RS-422)
- **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

Power Fail

- **Relay** Relay Output Form C
  Contact 5A @ 125V_{AC}/ 5A @ 30V_{DC}
  Channel 1

Software

- **OS Support** RT-Linux 3.12
- **Programming** Linux C

Environment

- **Operating Temperature** -40 ~ 70°C
- **Storage Temperature** -40 ~ 85°C
- **Humidity** 5 ~ 95% (non-condensing)

Ordering Information

- **ECU-4553-R12SAE** TI Cortex A8 Power Automation Computer with 4 x LAN, 16 x COM, 2 x CAN, 1 x IRIG-B

Storage Solution

- **96FMMSDI-4G-ET-AT1** ATP 4G MICRO SD CARD I-GRD SLC(G)
- **96FMMSDI-8G-ET-AT1** ATP 8G MICRO SD CARD I-GRD SLC(G)