ECU-1051TL

Cloud enabled Intelligent Communication Gateway for IIoT application

Features
- TI Cortex A8 600MHz CPU with DDR3L 256MB RAM
- Support web service for remotely on-line monitoring
- Firmware update by SD card and online update
- Data logger on SD card
- Support dual SIM slots for communication redundant
- Support MQTT Client for cloud communication
- Wide Operating temperature: -40 ~ 70°C

Introduction
For facility monitoring, distributed solar power, smart factory sector, especially cloud based applications which require a total wireless and Ethernet communication solutions, Advantech has released the ECU-1051TL RISC-based industrial communication gateway. ECU-1051TL has an open platform design with Cortex A8 processor, two 10/100 Ethernet ports and operating temperature range of -40~70°C. With Linux operating system and open Edgelink SDK, which enable to system integrators to develop applications which precisely fit their need.

Specifications

General
- Certification: CE, FCC
- Mounting: Wall-Mount/DIN-Rail
- Power consumption (typical): 2.4W @ 24Vdc
- Power Requirements: 10 ~ 30 Vdc

System
- CPU: TI Cortex A8, 600MHz
- Memory: DDR3L 256MB
- Indicators: LEDs for Power, LAN (LINK, ACT), Programmable
- Storage: 512MB NAND Flash
- SD Slot: 1 x Micro-SD slot
- Watchdog: Yes
- Real-time clock: Yes

Communication
- Serial Port: Serial Port; 2 x RS232/RS485(isolation optional)
- Serial Port Speed: RS-232/RS-485: 50 ~ 115200 bps
- Ethernet Port: 2 x 10/100 Base-T RJ-45 ports
- Wireless (Optional): Type: WiFi/Cellular/4G Signal: USB

Drivers
- Communication Protocol: IEC-60870-5-104
- Modbus TCP/RTU
- MQTT
- FTP/HTTP/DHCP/TCPIP
- 100+ PLC drivers
- Real-time datalogger

Database uplink
- ODBC/ FTP
- Linux C, Restful API, Web service API, Event Manager

Software
- OS Support: RT-Linux 3.12
- Configuration Tool: Advantech Edgelink Studio

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

Ordering Information

- ECU-1051TL-R10AAE: TI Cortex A8 industrial communication gateway with Edgelink
- Cellular Solution (SIM card is not included)
  - 96PD-EC25EFA: LTE Cat 4 Module with GNSS
  - 1750006264: SMA(F) Cable, 15 cm
  - 1750005865: Dipole Antenna, 11 cm
- WIFI Solution (recommended)
  - 96PD-RYUW131: 2.4GHz Wi-Fi Full/Half Size Mini PCIe Card
  - 1750006043: SMA(M) cable, 15 cm
  - 1750000318: 2dBi antenna for testing, 11 cm
- 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)

Dimensions

Unit: mm