# Programmable Device Server

# **APORT-214PG**



## **Features**

- · 4 x Opto-isolated digital inputs
- · 2 x Relay outputs
- 1 x 10/100Mbps Ethernet interface
- · 2 x RS-485 interface
- 1 x microSD card interface
- Support lwIP and BSD socket library
- Support web server
- · Windows configuration utility included
- FreeRTOS operating system
- · ToolChain: Atmel Studio
- · 9~48VDC Power input

# ■ H/W Specifications

#### CPU / Memory

- · CPU: Atmel SAM4E16E Cortex M4 SoC 120MHz
- · Memory: 128KB SRAM, 1MB Flash inside SoC
  - 128KB SRAM, 2MB Flash on board via SPI expansion

#### **Mass Storage**

- SD 2.0 compliant, support SDHC
- 1 x Micro-SD socket inside

#### Network Interface

- Type: 1 x 10/100 Mbps Ethernet
- Connector: RI45 connector
- · Protection: 1.5KV magnetic isolation

#### **Serial Ports**

- 2 x RS-485
- · Connector: Terminal block

## **Isolated Digital Input**

- · No. of Channel: 4
- Isolation protection: 2500Vrms
- Logical High: 5~24VDC
- Logical Low: 0~1.5VDC

## **Relay Output**

- · No. of Channels: 2
- Contact Rating: 30VDC@1A or 125VAC@0.5A
- · LED Indicator: Yes
- Pin define: NC / COM / NO

# Console / Debug Port

· Serial console port (on board, inside) x1

#### Indicator

- PWR: POWER LED x1
- RDY: READY LED x1
- LAN: Ethernet Activity LED x1
- RS-485 (D1/D2): RS-485 activity LED x2
- STATUS: User Defined (Control by SW/GPIO) x1
- DO0/DO1: Digital Out LED x2

#### General

- Power Input: +9 ~ +48VDC
- Operating Temperature: 0~70°C (32~158°F)
- Dimensions (W x L x H): 78 x 108 x 24mm (3.0 x 4.25 x 0.94in)
- · Weight: 290g (0.64lb)
- · Regulation: CE Class A, FCC Class A
- Installation: Wall-mounting, Optional DIN-RAIL mounting

# ■ S/W Specifications

## **Operation System**

· FreeRTOS

#### Software Development

· Atmel Studio

## **Library Support**

- · IwIP
- BSD Socket

## ■ Windows Utility Software



■ Example Program



• Users only need to write application main program user\_main (), web interface, interactive AJAX.C and home page HTML

# Ordering Information

#### APORT-214PG

 $\cdot$  Programmable Device Server with 2xRS485, 1xEthernet, 4xDI, 2xRelay out

#### DK-35A (36-DK35A-000)

· DIN RAIL Mounting Kit

## PWR-12V-1A (31-62100-000)

• 110~240VAC to 12VDC 1A Power Adapter