SEEED-102991539

Squama CAN FD to Ethernet board with PoE

PRODUCT DETAILS

Features

- Powerful CPU: ATSAME51G19A 32bit Cortex M4 core
- Various Hardwired TCP/IP Protocols support: TCP, UDP, ICMP, IPv4, ARP, IGMP, PPPoE
- Flexible compatibility: Compatible with Arduino IDE
- High-Speed Serial Peripheral Interface：SPI MODE 0, 3

Description

Squama is a series of products. This series of products have a standard appearance, with a general size of 62x30mm. The series integrates an MCU and peripherals with a communication function, which is suitable for IoT-related applications.

Squama Ethernet with CAN FD is the second product in the Squama series. The board integrates a high-performance microcontroller based on **Cortex M4** and an
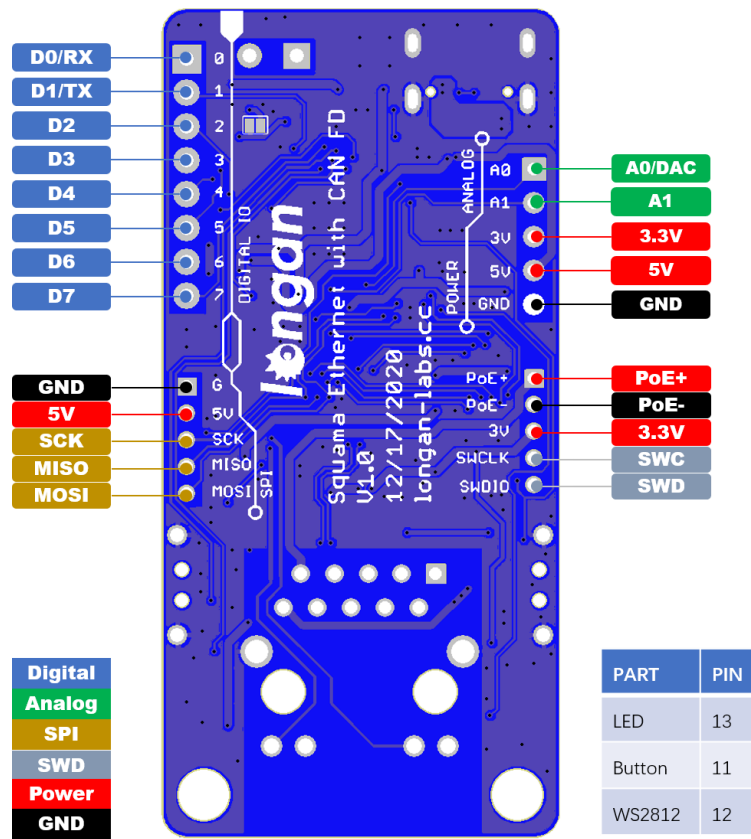
Ethernet control chip **W5500**, which can be used by users to develop Ethernet as well as CAN FD applications.

WS2812 LED and user buttons are also integrated on the board, which can facilitate some interaction. More importantly, Squama Ethernet with CAN FD supports **PoE** (Power Over Ethernet), which makes the wiring more concise. Only one network cable is needed to complete signal transmission and power supply.

You can use Arduino IDE to develop your application easily.

Specifications

- MCU: ATSAME51 32bit Cortex M4 core
- Clock speed: 120MHz
- Flash memory: 512KB
- RAM: 192KB
- EEPROM: No EEPROM
- Input voltage: 5V via USB and 48~57V via PoE
- Output Current @ 5V: 2A
- Size: 62x30 mm
- Weight: 15g (without PoE), 20g (with PoE)
- both CAN-FD and CAN2.0
- Supports 8 independent sockets simultaneously
- Supports Power-down mode
- Supports Wake on LAN over UDP
- Internal 32Kbytes Memory for TX/RX Buffers
- 10BaseT/100BaseTX Ethernet PHY embedded
- Supports Auto Negotiation (Full and half duplex, 10 and 100* based)
- Not supports IP Fragmentation
- WS2812B Led
- Reset Button and User Button
- Grove connector for I2C and UART

Digital	
Analog	
SPI	
SWD	
Power	
GND	

PART	PIN
LED	13
Button	11
WS2812	12

Part List

- Squama Ethernet Dev Board x 1
- PoE Cape x 1
- 5pin header (male and female)
- 8pin header (male and female)