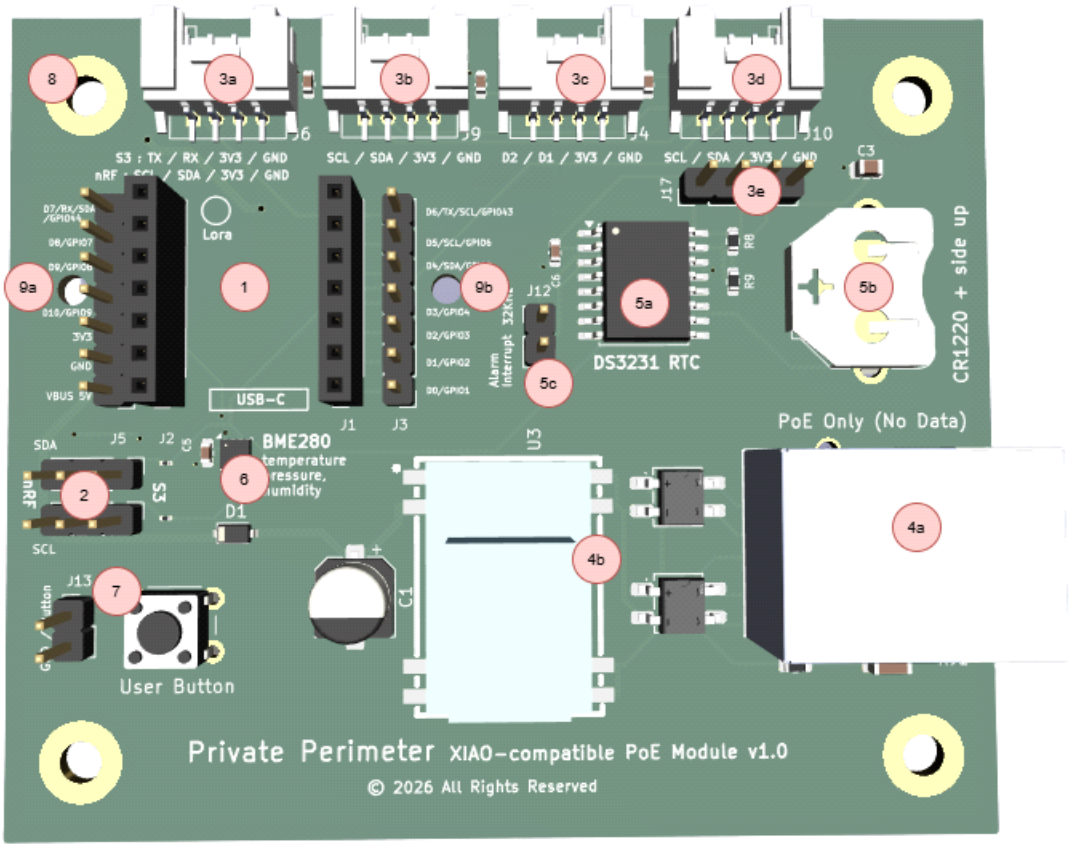
XIAO PoE MOSFET Module



1. Socket for the XIAO module (not included) with USB port facing down. Dupont pins next to each signal for monitoring or jumpering to individual signals.
2. Two rows of jumpers to select processor type:
    LEFT = nRF52840
    RIGHT = ESP32S3
3. Expansion connectors
    3a: Grove connector, depends on jumper setting
        ESP32S3 = additional serial port
        nRF52840 = additional I2C port
    3b: I2C Port (Grove connector)
    3c: Extra ports: D0, D1 and power (Grove connector)
    3d: I2C Port (Grove connector)
    3e: I2C port (Dupont pins)

Common uses:

- Plug in a Seeed Studio grove OLED display (requires enabling in the code)
- Use the serial port for an addition debug console port when USB is not available such as
- when making power saving measurements.
- Adding extra I2C sensors or use D0,D1 for powering or monitoring devices

4. Power over Ethernet 5 volt power supply
    4a: RJ45 PoE jack
    4b: Support Circuitry with backflow protection diode
5. Real Time Clock
    6a: DS3231 genuine Analog Devices with TCXO
    6b: Battery holder for a CR1220 (not included) for up to 10 years of backup
    6c: breakout pins for an alarm interrupt and 32KHz signal (optionally jumper the interrupt to an input signal)

6. BME280 environment sensor (temperature, pressure, humidity)
7. General purpose user button. jumper it to an available input signal to have an extra user input
8. M3 mounting holes
9. Holes for securing the mounting bracket to secure the XIAO processor in harsh environments

All pins are clearly marked on the board for ease of use.
Circuit includes a solid ground plane, capacitors, pull-up resistors, and signal rounding resistors which are handy for potential FCC compliance.