

### for Feather shaped microcontoller boards







#### Features:

- RS485 mode (half duplex)
- RS422 mode (full duplex)
- Isolated serial interface
- Enhanced ESD protection
- adjustable automatic transceiver switching for RS485 mode
- adjustable control of transceiver/receiver via GPIO pin
- adjustable Pull-Up, Pull-Down und terminating resistors
- Indicator LEDs for RX and TX signals
- many options adjustable via DIP switches
- Optional Stacked headers
- For Feather microcontroller boards and compatible boards



for Feather shaped microcontroller boards

#### **Compatibility:**







Adafruit™ Feather boards

Sparkfun™ Thing Plus boards

Particle™ Boron/Argon

#### **Electrical Characteristics:**

Max. Datarate: 500-Kbps

Number of nodes: 256

• ESD: +/-15kV

Isolation Rating: 2500 Vrms

Max Working Voltage: 560 Vpeak (V<sub>IORM</sub> / VDE)

Operating Temp.: 0°C to 70°C

#### **Applications:**

- Smart Home
- Building Control
- Industrial Control
- Lighting Control
- Video Surveillance
- Access Control

#### **Protocols:**

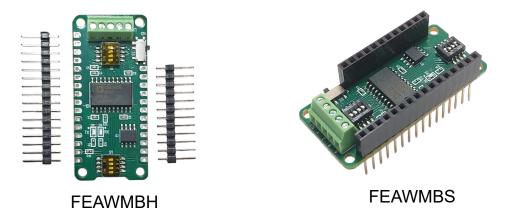
- Modbus RTU
- DMX
- NMEA0183
- Profibus
- etc



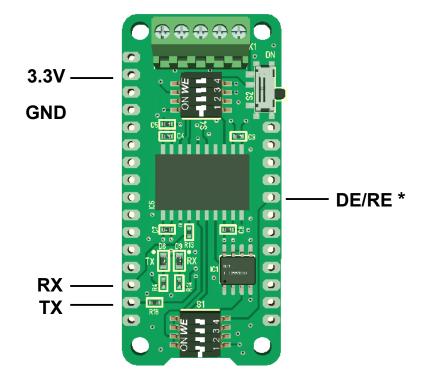
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#### Part number table:

Part-No.	Version
FEAWMBH	With <b>unsoldered male</b> headers
FEAWMBS	With soldered stacked headers



#### **Used Feather Pins:**

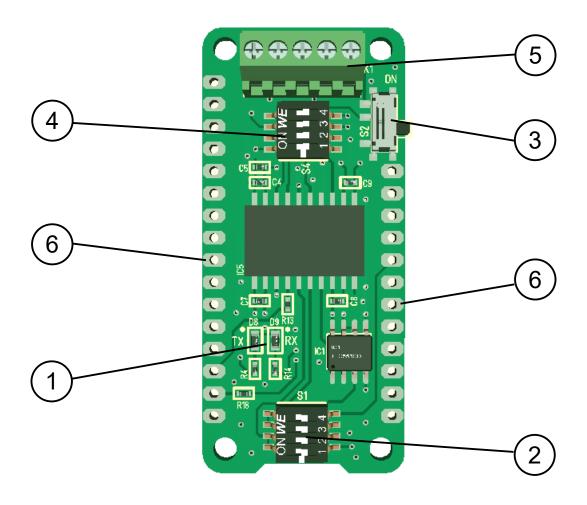


<sup>\*</sup> Only used if SW1.4 is in ON position



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#### **Control Elements:**



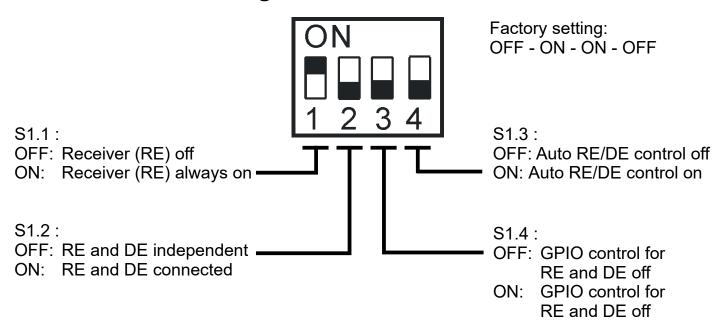
- ① Indicator LEDs
- ② DIP Switch S1
- 3 DIP Switch S2
- DIP Switch S4
- (5) terminal block for RS485/RS422
- 6 Headers for Feather boards

### RS422/RS485 Shield

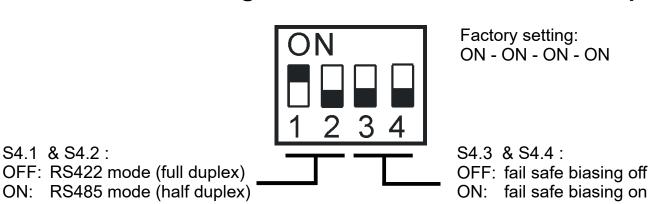


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### S1 - DIP Switch Configuration - send/receive control



### S4 - DIP Switch Configuration - RS422 / RS485 & Pull Ups



### **S2 – Terminating Resistor**

OFF: 120 Ohm terminating resistor off ON: 120 Ohm terminating resistor on