

Talon Grove IoT Expansion for Sierra mangOH

IoT Sensor Interface for mangOH



Grove IoT Expansion

The mangOH Grove Expansion Board brings Seeed Studio Grove connectivity to the Sierra Wireless mangOH IoT platform in a small QSFP+ form factor. The Talon Grove extender offers easy integration into the mangOH and FX30 platforms and is targeted as a simple, flexible, and low-cost expansion solution. By making use of standard Grove connectors and pinout, the rich variety of Grove peripheral modules can easily be connected to mangOH platform devices. The Grove Expansion Board includes on-board voltage conversion to connect 3.3V or 5V devices to the mangOH internal 1.8V logic, and supports the full selection of I2C, UART, digital I/O and analog interfaces.

Development Environment

The Sierra mangOH™ IoT platform is based on Legato open source Linux which is designed to simplify embedded IoT development.

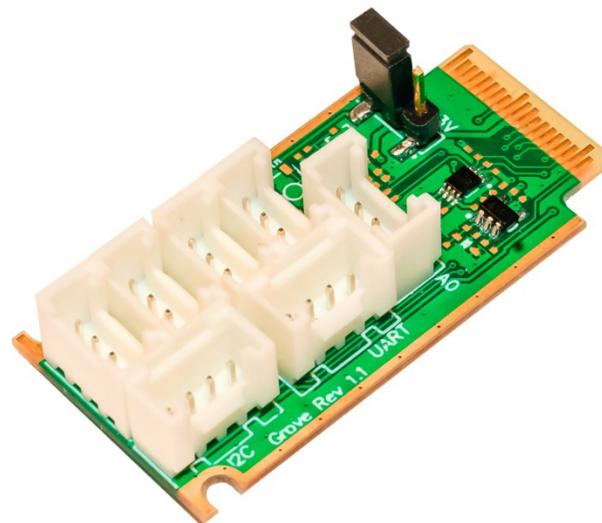
Legato has everything you need to connect the IoT quickly:

- Programming language APIs – dev tools and APIs to easily write software components and specify how apps will use them.
- Target runtime environment – set of daemon processes cooperatively implement execution sandboxes, secure IPC, fault monitoring.
- Development and build tools – target, host, and build tools to create apps ready for deployment to your devices.
- Documentation and automated tests – documentation and automated tests ready to use.

Applications

The use of standardized Grove connectors and pinouts offers a proven, low risk option to connect a wide variety of Grove devices to the Sierra mangOH IoT platform, including:

- I/O devices such as LEDs, buttons, encoders, touch sensors
- LCD and OLED displays
- Motion detection: 3 or 6-axis gyro, compass, accelerometer
- Communication expansion: WiFi, NFC, BLE
- Sensors: temperature / humidity, moisture, dust, gas
- Servo control and motor drivers



Grove IoT Module Features

Features

- On-board voltage level translation to connect 3.3V or 5.0V Grove modules to mangOH internal 1.8V logic
- 3.3V or 5.0V power delivery to Grove modules
- Selectable voltage: can choose 3.3V or 5.0V interface and power delivery with single jumper
- 7 Standard Grove interface connections:
 - 4 Digital
 - 1 Analog
 - 1 UART
 - 1 I2C
- Buffered analog and I2C interfaces
- Optional (not populated by default) on-board EEPROM memory and push button

Physical

- 45.0mm x 22.3mm x 1.0mm QSFP+ form factor
- -40°C to +85°C Operation
- +3.3v or +5.0v Operation
- RoHS Compliant

For more information please contact:
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