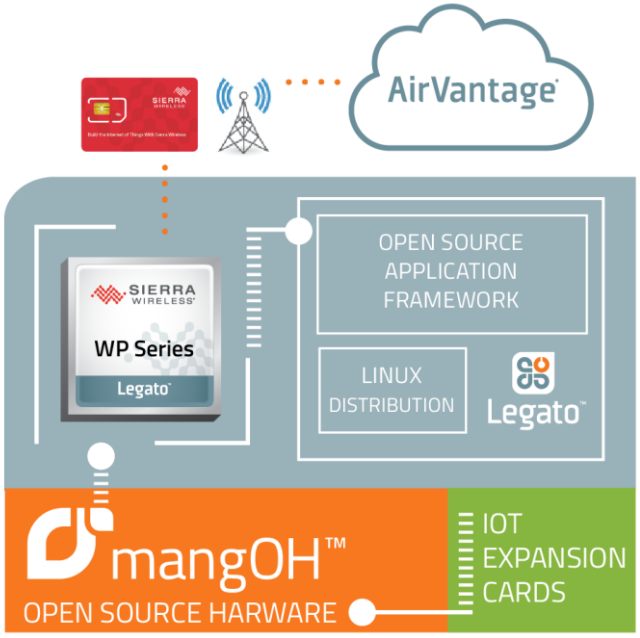
mangOH™

a new category of open hardware sensor-to-cloud platforms for IoT

IDEA
to
PROTOTYPE
to
PRODUCT



Designed specifically for cellular-enabled IoT applications, **mangOH™** reference designs provide a sensor-to-cloud platform for rapidly prototyping ideas and getting them to production quickly. This new category of open hardware makes it easy to develop industrial-grade products with vetted components, open source software, and a business-friendly open license enabling users to modify and reproduce the design.

Partnering with the open source Legato™ platform on the WP Series of embedded modules from Sierra Wireless, mangOH delivers 90% of an IoT prototype out-of-the-box so users can begin creating their software and web applications immediately.

In addition to reference designs, the mangOH project released IoT Expansion Cards to provide plug-and-play wireless, wired, and sensor technologies that can be used in final product designs. Integrated seamlessly with Legato, mangOH reference designs:

- Automatically detect the IoT Expansion Cards to load drivers and applications (no integration required, just plug in and start building your apps)
- Provide data management service that builds local intelligence on the "edge" as well as pushes data to the big data servers.

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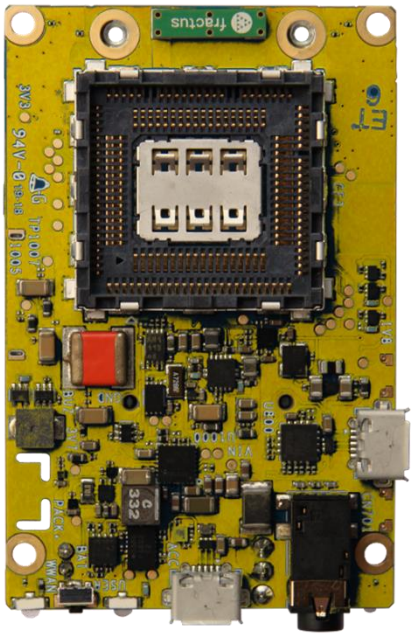

[42mm x 65mm]

mangOH Yellow

Build low-power IoT applications that can run for 10 years on a battery with the newest and smallest mangOH platform for sending edge data to the cloud.

- Compact form-factor you could build on, test, or even take any IoT application to market including small tracking devices
- A snap-in socket to add any CF3©-compatible modules, including wireless modules (2G to 4G & LTE-M/NB-IoT, GPS) to achieve up to 10 years of battery life;
- An IoT Expansion Card slot to plug in any technology based on the IoT Expansion Card open standard;
- Built-in Wi-Fi b/g/n and Bluetooth 4.2 BLE , Bluetooth Mesh, NFC tag;
- Built-in antennas for cellular, GPS, WiFi, Bluetooth and NFC
- Built-in Accelerometer, Gyroscope, Magnetometer, Pressure, Humidity, Acoustic mic, Air Index quality, temperature, and Light sensors
- Battery charger and battery gauge
- Multiple LEDs , buzzer and touch button
- 15 pin IO expansion connector, SD card, 2-way audio connector
- Battery charger and battery gauge
- Cloud and connectivity provided for Octave (3 months free usage)
- 3D-printable case designs available

HARDWARE HIGHLIGHTS

- Includes a cellular modem for wirelessly connecting your IoT applications over a mobile network
- Powerful ARM-based application processor with GNSS receiver
- Built-in sensors including Accelerometer, and Gyroscope
- Can be powered by a battery for low-power wireless applications

SOFTWARE HIGHLIGHTS

- Pre-integrated with the open source Legato Linux platform for application-level development
- Robust connectivity APIs lets you access cloud and network services such as voice calls, SMS, data, radio controls
- Maintained Linux distribution based on the long-term supported Linux kernel (LTSI) hosted by the Linux Foundation

CLOUD SERVICES HIGHLIGHTS

- Pre-integrated with the Octave platform from Sierra Wireless
- Extract data from sensors, automation protocols, and microprocessors
- Dynamically buffer, filter, correlate, store, and forward readings from your edge resources
- Process, analyze, and act on data at the edge and in the cloud with a common JavaScript framework

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