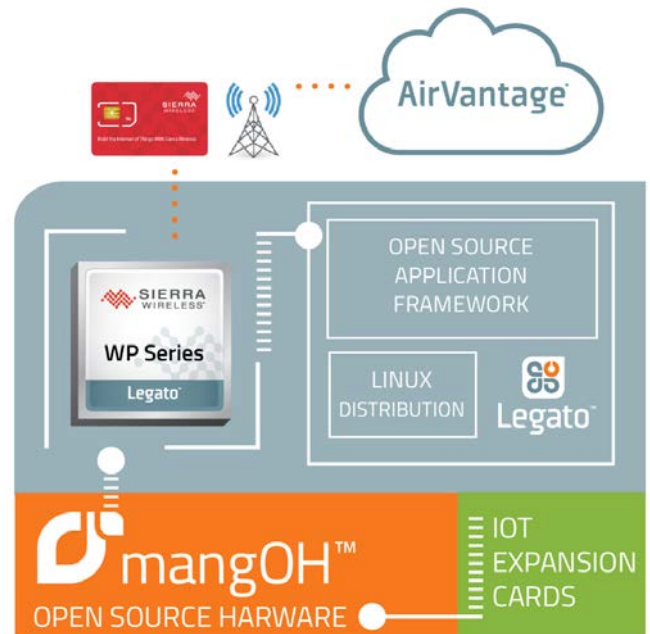




a new category of open hardware
sensor-to-cloud platforms for IoT

IDEA
to
PROTOTYPE
to
PRODUCT



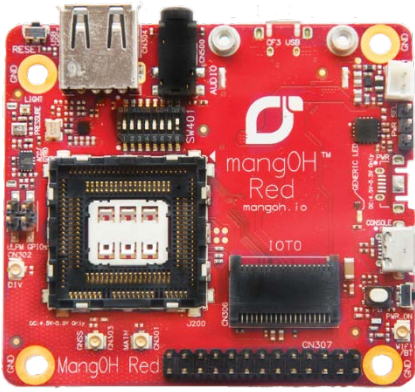
Designed specifically for cellular-enabled IoT applications, **mangOH™** reference designs provide a sensor-to-cloud platform for rapidly prototyping ideas and getting them to production quickly. This new category of open hardware makes it easy to develop industrial-grade products with vetted components,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





mangOH Red is designed for low-power IoT use-cases in a smaller, lower-cost form factor.

- 61mm*69mm Form Factor
- 1 IoT Expansion Card connector
- CF3™ socket for WP & HL modules
- Raspberry Pi shield connector : 26 pin
- Built in Wi-Fi and Bluetooth
 - WiFi : Dual band 1x1 a/b/g/n with STA and AP
 - Bluetooth: Bluetooth 2.1+ EDR, BLE 4.2
- Built-in sensors:
 - Accelerometer
 - Gyroscope
 - Light
 - Altimeter
- ARM Cortex-M4 with floating point MCU (192MHz)
- USB 2.0 OTG and USB 2.0 Host
- Audio Jack with Receive and Transmit
- Micro SD Card slot
- Micro SIM slot
- Power:
 - Single Li-ion Battery powered with battery charger
 - DC powered at 5V
- 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 (LTS) hosted by the Linux Foundation

CLOUD SERVICES HIGHLIGHTS

- Pre-integrated with the AirVantage® cloud platform from Sierra Wireless
- HTTP-based RESTful APIs for integrating IoT data
- Big Data storage and analytics with aggregated data APIs for driving trend visualization
- Operations console provides a SIM and device management with monitoring dashboards and remote update capabilities for your edge applications