

Sierra Wireless AirPrime[®] Embedded Wireless Modules WP Series

Expect more, do more with the next-gen WP

Sierra Wireless AirPrime[®] WP Series provides an integrated device-to-cloud architecture enabling IoT developers to build a Linux-based product on a single module and seamlessly send valuable user and product data to the cloud. Offering an application processor running the open source Legato[™] platform, GNSS receiver, and cellular modem with an ultra-low power domain, WP modules reduce system complexity and get you to market faster.

SIMPLIFY SYSTEM DEVELOPMENT WITH A DEVICE-TO-CLOUD ARCHITECTURE

- All the key hardware components of your connected product in a compact form factor to save board space and reduce total BOM (bill of materials)
- Integrated Legato[™] platform that maintains your Linux distribution and includes an application framework, development tools, and community support
- Integrated AirVantage[®] cloud services make it easy to access product and user data into your backend enterprise applications

FUTURE-PROOF YOUR PRODUCT DESIGNS

- CF3[™] (common flexible form factor) module design provides worldwide coverage on 2G, 3G, 4G networks, is compatible with HL Series of modules, and capable of supporting new wireless technologies
- The professionally maintained open source Legato platform for IoT enables you to reuse software components and applications in future designs with no vendor lock-in
- AirVantage cloud services with big data storage grows with your deployments and can power future revenue-generating services as your business evolves

KEEP YOUR PRODUCTS DEPLOYED FOR YEARS IN THE FIELD

- New ultra-low power domain can reduce power consumption by 200x opening new use-cases for cellular where 100% connectivity to the network is not required
- Application sandbox within the Legato platform hosts your proprietary software and provides a secure place for 3rd party applications to enable future services for your customers
- Unlimited FOTA (firmware over-the-air) powered by AirVantage maintains optimized connectivity as networks evolve and keeps your data transmission protected as new security threats arise



ULTRA-LOW POWER DOMAIN

Ideal for remote solar or battery-powered applications, the WP Series integrated power management feature can reduce power consumption by 200x compared to previous modules, enabling new use-cases for cellular. For example:

- Devices that only need to transmit data once a day can now run on a single battery for up to 3 years*
- Devices that only need to transmit data once a week can now run on a single battery for 10 years*

*based on sending 100kb of data, powered by a standard consumer-grade battery, operating on a 2G network

Smart



Image shown in actual size: 22 x 23 x 4.35 mm

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	WP75xx Series**	WP8548*
CHIPSET	Qualcomm MDM9215™	Qualcomm MDM8215™
CORES		
Application core	ARM® Cortex™-A5 (550MHz)	ARM® Cortex™-A5 (550MHz)
Telecom core	Dual QDSP6 (600MHz)	Dual QDSP6 (600MHz)
AIR INTERFACES	LTE / HSPA+ / EDGE / GPRS / GSM	HSPA+ / EDGE / GPRS / GSM
APPROVALS*		
Regulatory	WP7500 / WP7501: FCC/IC, R&TTE* WP7502: GCF-CC, PTCRB*	WP8548: FCC/IC, R&TTE* WP8548: GCF-CC, PTCRB*
Carrier	WP7500 / WP7501: AT&T* WP7501: Verizon*	WP8548: AT&T* WP8548: Rogers* WP8548: Telstra*
FREQUENCY BAND		
LTE [cat 3, 100/50 Mbps]	WP7500: B2 / B4 / B5 / B12 / B13 WP7501: B2 / B4 / B13 WP7502: B3 / B7 / B8 / B20	
HSPA+	WP7500: B2 / B4 / B5 WP7502: B1 / B8	WP8548: B1 / B2 / B5 / B8 / B19
GSM/GPRS/EDGE	WP7502: 900 / 1800	WP8548: 850 / 900 / 1800 / 1900
FOOTPRINT	CF3TM / 157 signal pins	CF3TM / 157 signal pins
DIMENSION	22 x 23 x 4.35 (mm)	22 x 23 x 4.35 (mm)
INTERFACES AND VOLTAGE		
Link	USB OTG / 2xUART / SDIO / HSIC	USB OTG / 2xUART / SDIO / HSIC
Digital	13xGPIO / I2C / SPI / 2xSIM / 2xClock / Tx_ON / LED	13xGPIO / I2C / SPI / 2xSIM / 2xClock / Tx_ON / LED
Audio	PCM, I2S	PCM, I2S
Analog	2xADC	2xADC
Input voltage	3.4V – 4.3V (TBC)	3.4V – 4.3V
GPS/GLONASS	✓ Optional	✓ Optional
EMBEDDED SOFTWARE ENVIRONMENT	Legato (Linux)	Legato (Linux)
USB DRIVER	USB driver for Linux, WIN7, WIN8	USB driver for Linux, WIN7, WIN8
CLOUD SERVICES		
Telecom and Legato Firmware	over the air update	over the air update
Application	over the air update / remote management	over the air update / remote management
Wireless Data Monitoring	module ID, network and radio status, GNSS, data counter, modem diagnostic	module ID, network and radio status, GNSS, data counter, modem diagnostic
Application Business Data	dedicated channel and report for each application	dedicated channel and report for each application
TEMP RANGE [CLASS B]	-40°C to + 85°C	-40°C to + 85°C

* Available Q4 2015

** Variants available in Q1 2016

About Sierra Wireless

Sierra Wireless is building the Internet of Things with intelligent wireless solutions that enable organizations to innovate in the connected world. We offer the industry's most comprehensive portfolio of 2G, 3G and 4G embedded modules and gateways, seamlessly integrated with our secure cloud and connectivity services. OEMs and enterprises worldwide trust our innovative solutions to get their connected products and services to market faster. Sierra Wireless has more than 900 employees globally and operates R&D centers in North America, Europe and Asia.

For further company and product information, please visit www.sierrawireless.com.