



Sierra Wireless® WP Series Embedded Modules

ULTRA-LOW POWER DOMAIN

Ideal for remote solar or batterypowered applications, the WP Series integrated power management feature can reduce power consumption by 200x compared to previous modules, enabling new usecases 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



23mm

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

Sierra Wireless WP SERIES EMBEDDED MODULES

	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*	LIE / HOPA+ / EDGE / GPR3 / GOW	HOPA+ / EDGE / GPRO / GOINI
Regulatory	WP7500 / WP7501: FCC/IC, R&TTE*	WP8548: FCC/IC, R&TTE*
Regulatory	WP7502: GCF-CC, PTCRB*	WP8548: GCF-CC, PTCRB*
Carrier	WP7501: Verizon*	WP7500 / WP7501: AT&T*
	WP8548: Rogers* WP8548: Telstra*	WP8548: AT&T*
FREQUENCY BAND	Wi OS-R. Telstia	
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	WP8548: B1 / B2 / B5 / B8 / B19
HSI AT	WP7502: B1 / B8	W. 63 16.12 17 52 7 56 7 5 13
GSM/GPRS/EDGE	WP7502: 900 / 1800	WP8548: 850 / 900 / 1800 / 1900
FOOTPRINT		
	CF3TM / 157 signal pins	CF3TM / 157 signal pins
DIMENSION	22 22 4254	22 22 (25)
INTERFACES AND VOLTAGE	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	13xGPI0 / I2C / SPI / 2xSIM / 2xClock / Tx_ON / LED	13xGPIO / I2C / SPI / 2xSIM / 2xClock / Tx_ON / LED
Audio	PCM, 12S	PCM, I2S
Analog	2xADC	2xADC
Input voltage	3.4V - 4.3V (TBC)	3.4V - 4.3V
GPS/GLONASS		
	P Optional	P Optional
EMBEDDED SOFTWARE ENVIRONMENT		·
	Legato (Linux)	Legato (Linux)
USB DRIVER		
	USB driver for Linux, WIN7, WIN8	USB driver for Linux, WIN7, WIN8
CLOUD SERVICES	over the air update	over the air update
Telecom and Legato Firmware Application	over the air update / remote management	over the air update over the air update / remote management
Wireless Data Monitoring	module ID, network and radio status, GNSS, data counter, modem	module ID, network and radio status, GNSS, data counter, modem
Wireless Data Monitoring	diagnostic	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

Sierra Wireless is building the Internet of Things with intelligent wireless solutions that empower 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.

For more information, visit www.sierrawireless.com.



^{*}Available Q4 2015 **Variants available in Q1 2016