

Sierra Wireless AirPrime™ Embedded Wireless Modules WP Series

An Entire M2M Ecosystem on a Module

The Sierra Wireless AirPrime™ WP Series delivers processing and connectivity in a single device optimized for industrial machine-to-machine (M2M) applications. Designed to reduce the complexity of integrating embedded wireless communications, the WP Series provides an entire M2M ecosystem on a module.

REDUCE DEVELOPMENT COSTS, TOTAL SYSTEM COSTS, AND TIME TO MARKET

AirPrime WP Series modules feature a powerful multicore processor with dedicated application cores, M2M functionality, an advanced open application framework, development tools, and built-in connectivity to secure cloud services. They simplify system design and lower total system costs to help embedded software developers get products to market faster.

SIMPLIFY AND SCALE M2M SOLUTIONS

All AirPrime WP Series modules are footprint and software compatible for easy scalability from 2G to 4G. The 2G variant features a power-efficient processor while the 3G/4G variants provide high-speed interfaces and connectivity. Seamless integration with the AirVantage® M2M Cloud reduces deployment costs and makes operations both scalable and manageable.

DESIGNED FOR INDUSTRIAL M2M

The Sierra Wireless AirPrime WP Series modules are designed to meet the needs of industrial M2M solutions:

- Support for a comprehensive set of industrial interfaces
- Tolerance for difficult operating environments
- Easy design and automated manufacturing with STAR LGA form factor

AIRPRIME WP6x00

Powered by the world's first dedicated M2M system-on-a-chip and built in collaboration with ARM, this advanced tri-core architecture includes a 2G EDGE modem, a dedicated high-speed ARM application processor, and a unique implementation of the ARM Cortex-M0 processor to enable ultra-low power operation. GNSS (GPS/GLONASS) and quad-band frequency make this a good choice for applications with tracking features.

AIRPRIME WP710x

Built on a Qualcomm Gobi™ 9x15 chipset, these 3G/4G LTE modules can host the most robust customer M2M applications. Powerful application cores, high speed and industrial interfaces, and GNSS deliver time-to-market advantage to OEMs designing feature-rich next generation M2M solutions.



KEY BENEFITS

- Faster, easier integration
- Optimize performance and total system costs
- Simplify M2M solution deployment and device management
- Scale easily to millions of devices. From 2G to 4G.

Integrated



AirPrime™

Sierra Wireless AirPrime™ Embedded Wireless Modules WP Series

	WP6x00	WP710x
CHIPSET	Sierra Wireless S6	Qualcomm MDM9x15™
CORES		
Mini core	ARM® Cortex™-M0 (156MHz)	
Application core	WP6300: ARM926 (312MHz)	ARM® Cortex™-A5 (550MHz)
Telecom core	ARM926 (156MHz)	Dual QDSP6 (600MHz)
AIR INTERFACES	EDGE/GPRS/GSM	LTE/HSPA+/EDGE/GPRS/GSM
APPROVALS		
Regulatory	GCF, PTCRB FCC/IC, R&TTE	GCF-CC, PTCRB FCC/IC, R&TTE
Carrier		WP7100 : Verizon WP7102 : AT&T WP7104: Telstra
FREQUENCY BAND		
LTE (cat 3, 100/50 Mbps)		WP7100 : 700/1700 (NA : Verizon) WP7102 : 700/850/1700/1900 (NA : AT&T) WP7104 : 800/900/1800/2100/2600 (EMEA, APAC)
HSPA+		WP7100 : 850/900/1900/2100 WP7102 : 850/900/1700/1900/2100 WP7104 : 800/850/900/1900/2100
GSM/GPRS/EDGE	850/900/1800/1900	850/900/1800/1900
FOOTPRINT	STAR LGA	STAR LGA
DIMENSION	30 x 30 x 2.8 mm	30 x 39 x 2.8 mm
INTERFACES AND VOLTAGE		
Link	3xUART, 2xCAN WP6200 : USB Device FS WP6300 : 2xUSB OTG	USB OTG, 2x UART, HSIC
Digital	WP6x00: 2xSPI, 2xI2C, GPIOs (up to 100), bus (PARIF) , Keyboard, Int (up to 16), 6xtimer WP6300 : SDIO	SPI, I2C, 11xGPIOs, Int, SDIO
Audio	MIC + SPK, PCM, Buzzer, WP6300: 2xI2S	2xI2S, PCM, Buzzer
Analogue	12xADC, 2xSIM	3xADC, SIM, Int SON8, 1.8V out
Input voltage	3.4V - 4.8V	3.4V - 4.6V
GPS/GLONASS	✓	✓
APPLICATION FRAMEWORK	WP6200 : Open AT WP6300 : Linux	Linux
CLOUD SERVICES		
AirVantage Management Service	✓	✓
AirVantage Enterprise Platform	✓	✓
TEMP RANGE	-40°C to + 85°C	-40°C to + 85°C