

Sierra Wireless AirPrime[®] Embedded Wireless Modules AR Series

Easy Wireless Integration for Automotive Solutions

The Sierra Wireless AirPrime[®] AR Series modules offer powerful, robust and reliable in-vehicle connectivity that reduces time-to-market, product, and development costs. These automotive grade modules stand up to demanding environments and have been designed specifically to meet the needs of automotive OEMs.

SIMPLE, SCALABLE, SECURE

AirPrime AR Series modules are equipped with a powerful multicore architecture with a dedicated application processor, an open-source embedded platform, and built-in connectivity to secure cloud services. AR Series modules reduce system complexity to help embedded software developers get products to market faster.

SIMPLIFY APPLICATION DEVELOPMENT WITH AN OPEN, FLEXIBLE PLATFORM

AirPrime AR Series modules come with Legato[™], an open source embedded platform built on Linux. Made up of a tightly integrated application framework, Linux distribution, and feature-rich development environment, the Legato platform comes ready to run, build, and connect out-of-the-box.

SEAMLESSLY CONNECT TO THE CLOUD

Reduce effort and cost to develop, deploy, and operate innovative new M2M solutions with built-in connectivity to the AirVantage[®] M2M cloud. The AirVantage M2M Cloud simplifies device management and delivers machine information wherever you need it.

GLOBAL COVERAGE

Available with frequency band groupings, AirPrime AR Series minimizes design effort for automotive manufacturers operating in North America, EMEA, and APAC.

DESIGNED FOR AUTOMOTIVE

The Sierra Wireless AirPrime AR Series modules are designed and tested to real world automotive scenarios, offering:

- Automotive-grade manufacturing (TS-16949 certified)
- Automotive quality processes (PPAP, 8D, FA) & low target ppm rates
- Tolerance to extreme operating environments including thermal shock cycles
- Extended operating temperature range from -40°C to +85°C

AIRPRIME AR755X

Built on a Qualcomm Gobi[™] 9x15 chipset, these 3G/4G LTE modules can host the most robust customer applications. A powerful dedicated application core, high speed interfaces, and GNSS deliver time-to-market advantage to design next generation in-vehicle telematics solutions.



KEY BENEFITS

- Automotive-grade manufacturing and quality processes
- GNSS for precise location information
- 4G for high bandwidth telematics solutions
- Reduced design effort for global projects
- High quality, reliable performance over the life of the vehicle

Automotive



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AR755x	
CHIPSET	Qualcomm MDM9x15™
CORES	
Application core	ARM® Cortex™-A5 (550MHz)
Telecom core	Dual QDSP6 (600MHz)
AIR INTERFACES	LTE/HSPA+/EV-DO/EDGE/GPRS/GSM
APPROVALS	
Regulatory	GCF, PTRCB, FCC, IC, R&TTE*
Carrier	AR7550: Verizon AR7552: AT&T*, Rogers* AR7556: CCC* AR7558: Sprint
FREQUENCY BAND	
LTE (cat 3, 100/50 Mbps)	AR7550: 700/1700/2600 (NA:Verizon) AR7552: 700/850/1700/1900/2600 (NA:AT&T) AR7554: 800/900/1800/2100/2600**/850**/1500** (EMEA/APAC/Japan) AR7556: 1800/2100 ; TDD: B8-900/B38-2600/B39-1900/B40-2300/B41-2500 (China/ Japan) AR7558: 850/1700/1900/2600 (NA: Sprint/Rogers)
EV-DO Rev A/ CDMA 1x	AR7550: BC0 800/BC1 1900 AR7558: BC0/BC10 800/BC1 1900
TD-SCDMA	AR7556: B34-2010/B39-1900
HSPA+	AR7550, AR7552: 850/1900 AR7554: 850**/900/2100 AR7556: 850/900/1800/2100 AR7558: 850/1900
GSM/GPRS/EDGE	AR7552, AR7554: 850/900/1800/1900 AR7556: 800/1800 AR7558: 850/1900
FOOTPRINT	STAR LGA
DIMENSIONS	32 x 37 x 3.6mm
INTERFACES AND VOLTAGE	
Link	USB OTG, HSIC
Digital	SPI, I2C, 11xGPIOs, Int, SDIO
Audio	PCM, Analog
Analog	3xADC, 2xSIM, 1.8V out
Input voltage	3.4V - 4.2V
GPS/GLONASS	✓
EMBEDDED SOFTWARE ENVIRONMENT	Legato (Linux)
CLOUD SERVICES	
AirVantage Management Service	✓
AirVantage Enterprise Platform	✓
TEMP RANGE	- 40°C to + 85°C

* Target
**Optional

About Sierra Wireless

Sierra Wireless is the global leader in machine-to-machine (M2M) devices and cloud services, delivering intelligent wireless solutions that simplify the connected world. Our solutions are **simple**, **scalable**, and **secure**, and enable customers to get their connected products and services to market faster.

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