Sierra Wireless AirPrime™ Embedded Wireless Modules Q Series

Wireless Anywhere with One Single Design

Available in 2G and 3G versions, all AirPrime Q Series modules are footprint compatible. Make a single product design to communicate on any cellular network, anywhere in the world.

To simplify hardware integration into your product, its industrial-grade board-to-board connector offers a wide range of interfaces.

With its application framework and cloud-based device management services, the smart AirPrime Q Series modules accelerate your M2M deployment.

Choose the AirPrime Q Series to connect your solutions for the transportation, industrial, energy, healthcare and security sectors.

AIRPRIME Q2698
The AirPrime Q2698 is a 5-band 3G HSPA+ module with GPS for your worldwide deployments.

AIRPRIME Q2686
The AirPrime Q2686 is a quad-band 2G GPRS module.

AIRPRIME Q2687
The AirPrime Q2687 supports quad-band 2G connectivity up to EDGE.

AIRPRIME Q26 ELITE
The AirPrime Q26 Elite is a 2G CDMA 2000 1xRTT module.

KEY BENEFITS
- Easy hardware integration
- Fast embedded software development
- Extensive global network coverage
- Form–factor compatibility between 2G and 3G markets
- Safe investment with cloud–based device management services

Smart

EXTENSIVE HARDWARE FEATURES
All AirPrime Q Series modules support an extended temperature range of -40°C to +85°C, present best-in-class analog and digital audio capabilities and offer a wide range of hardware interfaces.

ADVANCED SOFTWARE CAPABILITIES   OpenAT

Open AT Application Framework
The AirPrime Q Series* features the Open AT Application Framework to make software application development easier and less expensive. Its software building blocks and tools are field-proven, with a 10-year track record.

A Comprehensive Set of Libraries
Open AT features a best-in-class embedded IP stack, a security library, a location library and a large set of audio APIs.

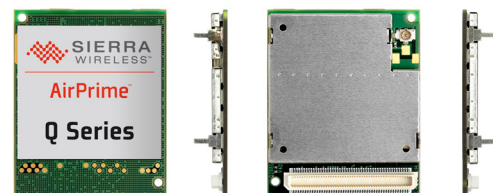### CONNECTION TO A CLOUD–BASED PLATFORM
The AirPrime Q Series enables access to the AirVantage Platform to remotely monitor, control and upgrade your devices in the field through a web portal.

*All AirPrime Q Series modules except for the AirPrime Q26 Elite

SIERRA WIRELESS™ | AirPrime™

Sierra Wireless AirPrime™
Embedded Wireless Modules
Q Series

	Q2686	Q2687	Q2698	Q26 Elite
AIR INTERFACE				
	GSM/GPRS	GSM/GPRS/EDGE	GSM/GPRS/EDGE/HSPA+	CDMA 1xRTT
FREQUENCY BANDS				
GSM/GPRS/EDGE	850/900/1800/1900 MHz	850/900/1800/1900 MHz	850/900/1800/1900 MHz	
WCDMA			800/850/900/1900/2100 MHz	
CDMA 1xRTT				800/1900 MHz
APPROVALS				
Regulatory	GCF-CC, PTCRB R&TTE (CE), FCC	GCF-CC, PTCRB R&TTE (CE), FCC, A-Tick, Anatel	GCF-CC, PTCRB - Planned R&TTE (CE), FCC/IC, A-Tick, JPA - Planned	FCC, IC, CDG 1&2
Carrier		AT&T, Vodafone	Telstra, NTT DoCoMo, AT&T - Planned	Sprint, Verizon
CURRENT CONSUMPTION				
Alarm	17uA	17uA	30uA	
Standby and Idle	2,5mA	2,5mA	2,5mA	5mA
GSM/GPRS max	400mA max GPRS class 10	400mA max GPRS class 10	600mA GPRS class 10	
HSxPA max			600mA max; HSDPA full power	
CPU PERFORMANCES				
Processor	ARM946 / DSP	ARM946 / DSP	ARM1136	ARM9
Core frequency	26-104 MHz	26-104 MHz	480 MHz	192 MHz
User MIPS available	87 MIPS	87 MIPS	500 MIPS	
AUDIO				
Analog audio	2 x speaker out -2 x micro in	2 x speaker out -2 x micro in	1 x speaker out -1 x micro in	2 x speaker out -2 x micro in
Digital audio	PCM	PCM	PCM	PCM
Codec	HR, FR, EFR, AMR	HR, FR, EFR, AMR	GSM: HR, FR, EFR, AMR WCDMA: AMR	EVRC/QCELP/EVRC-B
Quality	VDA2A	VDA2A		
Echo cancellation & noise reduction	✓	✓	✓	✓
DTMF	✓	✓	✓	✓
INTERFACES				
UART	2	2	2	2
USB	USB 2.0 Full Speed (12 Mbps)	USB 2.0 Full Speed (12 Mbps)	USB 2.0 High Speed (480 Mbps)	Device 2.0 (Full Speed)
SPI	2	2	2	
I2C	1	1	1	1
ADC	2	2	3	2
DAC	1	1		1
GPIO	Up to 44	Up to 44	Up to 45	Up to 20*
RTC	✓	✓	✓	✓
Timers (HW, SW, Capture)	✓	✓	✓	
Interrupts pins	2	2	3	
Flash LED output	1	1	1	1
PWM (Buzzer)	1	1	1	1
Keyboard interface	5x5	5x5		5x5
SIM interface	1.8V/3V SIM and U-SIM	1.8V/3V SIM and U-SIM	1,8V/3V SIM and U-SIM	RUIM
ANTENNA DIVERSITY				
			✓	
LOCATION SOLUTION				
	AirPrime XM0110 GPS module and Location Library	AirPrime XM0110 GPS module and Location Library	GPSOne XTRA™ and Location Library	GPSOne
EMBEDDED SIM				
	Optional	Optional	Optional	
CONTROL OPTIONS				
	AT commands, C/C++ language	AT commands, C/C++ language	AT commands, C/C++ language	AT commands
APPLICATION FRAMEWORK				
	Open AT	Open AT	Open AT	
MANAGEMENT SERVICES				
	✓	✓	✓	
INTERNET SERVICES				
	TCP/UDP/FTP/HTTP/SMTP/POP3/ SNMP/SSL/MMS	TCP/UDP/FTP/HTTP/SMTP/POP3/ SNMP/SSL/MMS	TCP/UDP/FTP/HTTP/SMTP/POP3/ SSL/MMS	TCP/UDP
HOST OS COMPATIBILITY				
Windows® Mobile/CE RIL	✓	✓	✓	
Android™ RIL			✓	
Linux® SDK	✓	✓	✓	
DEVICE DIMENSIONS				
	32 x 40 x 4 mm	32 x 40 x 4 mm	32 x 40 x 6.2 mm	32 x 40 x 6.63 mm
TEMPERATURE				
	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C

* Multiplexed

SIERRA WIRELESS™ | AirPrime™