

Sierra Wireless AirPrime[®] Embedded Wireless Modules EM Series

High-speed connectivity in a future-proof form factor

Sierra Wireless AirPrime[®] EM Series supports the latest 4G and 3G networks in North America, Europe, and Asia. The PCI Express M.2 form factor allows easy integration into smaller and thinner devices. Optimized for low power consumption, the EM Series is ideal for today's mobile computing, networking, and industrial IoT applications.

DEPLOY ON THE WORLD'S FASTEST LTE NETWORKS

The EM Series supports 3G and 4G global networks, including LTE Advanced, with automatic fallback to 3G and 2G networks depending on the module variant.

ENABLE LOCATION BASED SERVICES

GNSS tracking lets you locate, monitor, and deploy location-based applications and services with module variants supporting GPS, GLONASS, Beidou, and Galileo satellite systems.

INCORPORATE CLOUD CONNECTED SOLUTIONS

Update firmware, manage applications, and utilize product data over-the-air on EM74xx module variants with AirVantage[®] cloud connectivity.

SWITCH NETWORKS ANYTIME

The EM74xx module variants allow device manufacturers to store up to three different firmware variants on-board, while other variants have the same functionality via host download, simplifying logistics and supply chain management.



Image shown in actual size
(42 x 30 x 2.3mm)

WHY BASE YOUR DESIGN ON THE NEXT-GEN M.2?

- Smaller and thinner
- Enhanced pin functionality
- Future-proof form factor

Essential



AirPrime[®]

Sierra Wireless AirPrime[®] Embedded Wireless Modules EM Series



	EM7455*	EM7430*	EM73XX	EM8805
AIR INTERFACE	LTE-FDD, LTE-TDD HSPA+	LTE-FDD, LTE-TDD HSPA+, TD-SCDMA	LTE-FDD, HSPA+, GSM/GPRS/EDGE, CDMA (EM7355)	HSPA+, GSM/GPRS/EDGE
DATA SPEED				
Peak Download Rate	300 Mbps	300 Mbps	150 Mbps	42 Mbps
Peak Upload Rate	50 Mbps	50 Mbps	50 Mbps	5.76 Mbps
FREQUENCY BANDS				
LTE	B1-B5, B7, B12, B13, B17, B20, B25, B26, B29, B30, B41	B1, B3, B5, B7, B8, B18, B19, B21, B28, B38-B41	7355: B2, B4, B5, B13, B17, B25 EM7305: B1, B3, B7, B8, B20 EM7330: B1, B19, B21	
UMTS/HSPA+	B1, B2, B3, B4, B5, B8	B1, B5, B6, B8, B9, B19	EM7355: B1, B2, B4, B5, B8 EM7305: B1, B2, B5, B8 EM7330: B1, B5, B6, B19	B1, B2, B5, B8
TD-SCDMA		B39		
CDMA 1xRTT/EV-DO Rev A			EM7355: BC0, BC1, BC10	
GSM/GPRS/EDGE			Quad-Band	Quad-Band
APPROVALS				
Regulatory	Planned: FCC, IC, CE, NCC, GCF, PTCRB	Planned: JRF/JPA, NCC	EM7355: FCC, IC, PTCRB, NCC EM7305: CE, GCF, NCC, FCC EM7330: JRF/JPA	CE, GCF, NCC
Carrier	Planned: AT&T, Verizon, Sprint, Vodafone, Telefonica, Orange	Planned: docomo, Telstra	EM7355: AT&T, Verizon, Sprint, Telus, Rogers EM7305: Telstra, Vodafone, Telefonica, Orange EM7330: docomo	Telefonica
CPU PERFORMANCES				
IO voltage	1.8V	1.8V	1.8V	1.8V
INTERFACES				
USB	"USB 3.0 USB 2.0 High Speed"	"USB 3.0 USB 2.0 High Speed"	USB 2.0 High Speed	USB 2.0 High Speed
Active Antenna Control	4 pin	4 pin	4 pin	4 pin
Dynamic Power Control	1 pin	1 pin	1 pin	1 pin
Main Radio Disable	✓	✓	✓	✓
GNSS Disable	✓	✓	✓	✓
Flash LED Output	✓	✓	✓	✓
Wake on Wan	✓	✓	✓	✓
On/Off	✓	✓	✓	✓
Reset	✓	✓	✓	✓
Audio	PCM/I2S**	PCM/I2S**		
SIM Interface	2x 1.8V or 3V	2x 1.8V or 3V	1.8V or 3V	1.8V or 3V
ANTENNA				
Connectors	Main, Aux/GNSS, GNSS	Main, Aux/GNSS, GNSS	Main, Aux/GNSS, GNSS	Main, Aux/GNSS
Diversity	✓	✓	✓	✓
MIMO	✓	✓	✓	✓
GNSS Bias	✓	✓	✓	✓
LOCATION SOLUTION				
Satellite Systems	GPS, Glonass, Beidou, Galileo	GPS, Glonass, Beidou, Galileo	GPS, Glonass	GPS, Glonass
Modes***	Standalone, SUPL 2.0, XTRA 3.0	Standalone, SUPL 2.0, XTRA 3.0	Standalone, SUPL 2.0, XTRA 2.0	Standalone, SUPL 2.0, XTRA 2.0
CONTROL OPTIONS	APIs, AT Commands	APIs, AT Commands	APIs, AT Commands	APIs, AT Commands
DRIVERS				
Windows [®] 8	✓	✓	✓	✓
Windows [®] 7	✓	✓	✓	✓
Android	✓	✓	✓	✓
Linux	✓	✓	✓	✓
DEVICE DIMENSIONS	42 x 30 x 2.3 mm	42 x 30 x 2.3 mm	43 x 30 x 2.3 mm	42 x 30 x 2.3 mm
OPERATIONAL TEMPERATURE	TBD	TBD	-25°C to +60°C	-25°C to +60°C

* Available in 2H 2015

**FW support for voice is a future FW update

***Exact GPS modes supported may be SKU and Operator dependent