



Sierra Wireless® EM Series Embedded Modules

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

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

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.



30mm

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 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.



Sierra Wireless EM SERIES EMBEDDED MODULES

	EM7455*	EM7430*	EM73xx
AIR INTERFACE	LTE-FDD, LTE-TDD HSPA+	LTE-FDD, LTE-TDD HSPA+, TD-SCDMA	LTE-FDD, HSPA+, GSM/GPRS/EDGE, CDMA (EM7355)
DATA SPEED			
Peak Download Rate	300 Mbps	300 Mbps	100 Mbps
Peak Upload Rate	50 Mbps	50 Mbps	50 Mbps
FREQUENCY BANDS			
LTE	B1-B5, B7, B12, B13, B20, B25, B26, B29, B30, B41	B1, B3, B5, B7, B8, B18, B19, B21, B28, B38-B41	EM7355: 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
TD-SCDMA		B39	
CDMA 1xRTT/EV-DO Rev A			EM7355: BC0, BC1, BC10
GSM/GPRS/EDGE			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
Carrier	Planned: AT&T, Verizon, Sprint, Telefonica, Orange	Planned: docomo, Telstra	EM7355: AT&T, Verizon, Sprint, Telus, Rogers EM7305: Telstra, Vodafone, Telefonica, Orange EM7330: docomo
CPU PERFORMANCES: IO VOLTAGE	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
Active Antenna Control	4 pin	4 pin	4 pin
Dynamic Power Control	1 pin	1 pin	1 pin
Main Radio Disable	✓ ·	✓	✓
GNSS Disable	<i>✓</i>	√	✓
Flash LED Output	<i>✓</i>	√	✓
Wake on Wan	✓	√	✓
On/Off	<i>✓</i>	√	✓
Reset	√	√	√
Audio	PCM/I2S**	PCM/I2S**	
SIM Interface	2x 1.8V or 3V	2x 1.8V or 3V	1.8V or 3V
ANTENNA			
Connectors	Main, Aux/GNSS, GNSS	Main, Aux/GNSS, GNSS	Main, Aux/GNSS, GNSS
Diversity	✓	→	✓
MIMO	<i>✓</i>	√	✓
GNSS Bias	<i>✓</i>	√	
LOCATION SOLUTION			
Satellite Systems	GPS, Glonass, Beidou, Galileo	GPS, Glonass, Beidou, Galileo	GPS, Glonass
Modes***	Standalone, SUPL 2.0, XTRA 3.0	Standalone, SUPL 2.0, XTRA 3.0	Standalone, SUPL 2.0, XTRA 2.0
CONTROL OPTIONS	APIs, AT Commands	APIs, AT Commands	APIs, AT Commands
DDIV/FDC	_		
DRIVERS	──		
Windows® 7 and 8	······································	✓	
Android	· · · · · · · · · · · · · · · · · · ·	∨	V
Linux DEVICE DIMENSIONS			
DEVICE DIMENSIONS	42 x 30 x 2.3 mm	42 x 30 x 2.3 mm	43 x 30 x 2.3 mm
OPERATIONAL TEMPERATURE	TBD	TBD	-25°C to +60°C

^{*} Available in 2H 2015

About Sierra Wireless

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 ${\color{blue} www.sierrawireless.com}.$



^{**}FW support for voice is a future FW update

^{***}Exact GPS modes supported may be SKU and Operator dependent