



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 EM75xx and 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.

GLOBAL 4G LTE COVERAGE ON A SINGLE MODULE

Deploy anywhere in the world on a single EM75xx LTE-Advanced Pro module that supports a wide selection of 4G bands in North America, Europe, and Asia — simplifying manufacturing and inventory management.

ADDITIONAL SPEED BOOST ON UNLICENSED BANDS

Enhance network performance by aggregating licensed and unlicensed spectrum using LTE-LAA, and enable secure and stable private networks using CBRS band.

ENABLE PUBLIC SAFETY NETWORKS

Provide a reliable and highly secure network for public safety agencies and first responders by supporting public safety networks in North America and Europe.

DEPLOY ON THE WORLD'S FASTEST LTE NETWORKS

The EM Series supports 4G global networks, including LTE Advanced Pro, 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 the EM75xx and EM74xx module variants with AirVantage® cloud connectivity.

Sierra Wireless EM SERIES EMBEDDED MODULES

	EM7565	EM7455	EM7430	EM7355	EM7305
Target Region	Global	Americas/EMEA	APAC	Americas	EMEA/Australia
4G LTE					
Category	Cat-12	Cat-6	Cat-6	Cat-3	Cat-3
Frequency Bands	B1, B2, B3, B4, B5, B7, B8, B9, B12, B13, B18, B19, B20, B26, B28, B29, B30, B32, B41, B42, B43, B46, B48, B66	B1-B5, B7, B12, B13, B20, B25, B26, B29, B30, B41	B1, B3, B5, B7, B8, B18, B19, B21, B28, B38-B41	B2, B4, B5, B13, B17, B25	B1, B3, B7, B8, B20
3G					
1 Technology supported	HSPA+	HSPA+, UMTS	HSPA+, UMTS	HSPA+, UMTS	HSPA+
Frequency Bands	B1, B2, B3, B4, B5, B6, B8,	B1, B2, B3, B4, B5, B8	B1, B5, B6, B8, B9, B19	B1, B2, B4, B5, B8	B1, B2, B5, B8
2 Technology supported	B9, B19		TD-SCDMA		
Frequency Bands			B39		
2G			535		
1 Technology supported				EDGE, GSM, GPRS	EDGE, GSM, GPRS
Frequency Bands		•		850, 900, 1800, 1900	850, 900, 1800, 1900
2 Technology supported				CDMA	030, 300, 1000, 1300
Frequency Bands				BC0, BC1, BC10	
PEAK DL/UL RATE	600 Mbps/ 150 Mbps	300 Mbps/ 50 Mbps	300 Mbps/ 50 Mbps	100 Mbps/ 50 Mbps	100 Mbps/ 50 Mbps
LOCATION SOLUTION					
Satellite Systems*	GPS, Galileo, Glonass, Beidou	GPS, Glonass, Beidou, Galileo	GPS, Glonass, Beidou, Galileo	GPS, Glonass	GPS, Glonass
FIRMWARE					
Secure Boot	✓				
Pre-certified Firmware	✓	•			***************************************
USB DRIVERS					
Windows® 7		✓	✓	✓	✓
Windows® 8	✓	•			
Windows® 8.1, 10	✓	✓	✓	✓	✓
Linux, Android RIL	✓	✓	✓	✓	✓
INTERFACES					
USB	USB 3.0, USB 2.0 High Speed	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
PCle	✓	•	•		
SIM Interface 1.8V/3V	1	2	2	1	1
APIs, AT COMMANDS	✓	✓	✓	✓	✓
HARDWARE					
Dimensions	42 x 30 x 2.3 mm	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
Antenna					
Connectors: Main, Aux/GNSS, GNSS	✓	✓	✓	✓	✓
Diversity	√	-	✓	√	√
MIMO	·	· ·	·	· ·	· ·
GNSS Bias	✓		√		✓
APPROVALS					
Regulatory	FCC, IC, CE, PTCRB, GCF, NCC	CE, FCC, GCF, IC, NCC, PTCRB	CE, GCF, JRF/JPA, NCC	FCC, IC, NCC, PTCRB	CE, FCC, GCF, NCC
Carrier	Planned: AT&T, Verizon, docomo, Telstra, Vodafone	AT&T, Bell, Rogers, Sprint, Telus, US Cellular, Verizon, Vodafone	docomo, Telstra, KDDI, Softbank	AT&T, Bell, Rogers, Sprint, Telus, T-Mobile, Verizon	Orange, Telefonica, Telstra Vodafone
CONNECTIVITY					
Optional embedded SIM	✓				
OPTIONAL CLOUD SERVICES					
Free Unlimited FOTA upgrades		✓	✓	✓	✓
Device Management		✓	✓		✓
Application Enablement		✓	✓		✓
Connectivity					
Management		✓	✓		\checkmark

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

