



## 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	EM7355	EM7330	EM7305	
Target Region	Americas/EMEA	APAC	Americas	Japan	EMEA/Australia	
DATA SPEED						
Peak Download Rate	300 Mbps	300 Mbps	100 Mbps	100 Mbps	100 Mbps	
Peak Upload Rate	50 Mbps	50 Mbps	50 Mbps	50 Mbps	50 Mbps	
4G LTE						
Frequency Bands	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, B25	B1, B19, B21	B1, B3, B7, B8, B20	
3G UMTS/HSPA+						
Frequency Bands	B1, B2, B3, B4, B5, B8	B1, B5, B6, B8, B9, B19	B1, B2, B4, B5, B8	B1, B5, B6, B19	B1, B2, B5, B8	
TD-SCDMA						
Frequency Bands		B39				
2G CDMA 1XRTT/EV-DO REV A						
Frequency Bands			BC0, BC1, BC10			
2G EDGE/GSM/GPRS						
Frequency Bands			Quad-band	Quad-band	Quad-band	
APPROVALS						
Regulatory	CE, FCC, GCF, IC, NCC, PTCRB	CE, GCF, JRF/JPA, NCC	FCC, IC, NCC, PTCRB	JRF/JPA	CE, FCC, GCF, NCC	
Carrier	AT&T, Bell, Rogers, Sprint, Telus, Verizon, Vodafone	docomo, Telstra, KDDI, Softbank	AT&T, Rogers, Sprint, Telus, Verizon	docomo	Orange, Telefonica, Telstra, Vodafone	
CPU PERFORMANCES: IO VOLTAGE	1.8V	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	USB 2.0 High Speed	
Active Antenna Control	4 pin	4 pin	4 pin	4 pin	4 pin	
Dynamic Power Control	1 pin	1 pin	1 pin	1 pin	1 pin	
Main Radio Disable	1	1	1	1	1	
GNSS Disable	1	1	1	1	1	
Flash LED Output	1	1	1	1	1	
Wake on Wan	1	1	1	1	1	
On/Off	1	1	1	1	1	
Reset	1	1	1	1	1	
Audio	PCM/I2S*	PCM/I2S*	I	I	1	
SIM Interface 1.8V/3V	2	2	1	1	1	
			1	1	I	
ANTENNA Connectors: Main, Aux/ GNSS, GNSS	<b> </b>	✓	✓	✓	✓	
Diversity		<b>√</b>	<b>√</b>	<b>√</b>	✓	
MIMO	·	<u>·</u>	<u>·</u>	<u>·</u>	· · · · · · · · · · · · · · · · · · ·	
GNSS Bias	· ·	·				
LOCATION SOLUTION						
	CDS Cloppes Boidon Calilan	CDS Clonace Boider Calila-	CDS Clonacs	CDS Clanace	CDS Clopacs	
Satellite Systems Modes**	GPS, Glonass, Beidou, Galileo	•	•	GPS, Glonass	GPS, Glonass	
	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	Standalone, SUPL 2.0, XTRA 2.0	
CONTROL OPTIONS  APIs, AT Commands  DRIVERS	 	✓	✓	✓	<b>✓</b>	
Windows® 7, 8.1 and 10, Android, Linux	<b>1</b> ✓	✓	✓	✓	✓	
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	42 x 30 x 2.3 mm	
TEMPERATURE RANGE	-					
Industrial Grade	-40°C to +85°C	-40°C to +85°C	-25°C to +60°C	-25°C to +60°C	-25°C to +60°C	

<sup>\*</sup> FW support for voice is a future FW update

#### 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 www.sierrawireless.com.



<sup>\*\*</sup> Exact GPS modes supported may be SKU and Operator dependent