SIERRA
WIRELESS®

Sierra Wireless® MC Series Embedded Modules

High-speed connectivity in a mini-card form factor

SWITCH NETWORKS ANYTIME

The MC74xx module variants allow device manufacturers to store up to three different firmware variants on-board, while the MC73xx has the same functionality via host download, simplifying logistics and supply chain management.

51mm

30mm

Sierra Wireless® AirPrime® MC Series supports the latest 4G and 3G networks in North America, Europe, and Asia. Optimized for low power consumption, the MC Series is ideal for today's mobile computing, networking, and industrial IoT applications.

DEPLOY ON THE WORLD'S FASTEST LTE NETWORKS

The MC 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 with AirVantage® cloud connectivity (some module variants require a Linux SDK).

MODEL	AIR INTERFACE	PEAK D/L RATE	PEAK U/L RATE
MC 7455*	LTE-FDD, LTE-TDD HSPA+	300 Mbps	50 Mbps
MC7430*	LTE-FDD, LTE-TDD HSPA+, TD-SCDMA	300 Mbps	50 Mbps
MC73xx	LTE,HSPA+,GSM/GPRS/ EDGE, EV-DO Rev A, 1xRTT (MC7354/50)	100 Mbps	50 Mbps
MC8705	HSPA+,GSM/GPRS/EDGE	21.1 Mbps	5.76 Mbps
MC9090 /MC809x	HSPA+,GSM/GPRS/EDGE, EVDO (MC9090)	HSPA+ 14.4Mbps EVDO 3.1Mbps (MC9090)	HSPA+ 5.76Mbps EVDO 1.8Mbps (MC9090)

	MC7455*	MC7430*	MC73xx	MC8705	MC9090/MC809x
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	MC7304: B1, B3, B7, B8, B20 MC7330: B1, B19, B21 MC7354: B2, B4, B5, B13, B25 MC7350: B4,B13,B25		
WCDMA	B1, B2, B3, B4, B5, B8	B1, B5, B6, B8, B9, B19	MC7304: B1, B2, B5, B8 MC7330: B1, B5, B6, B19 MC735: B1, B2, B4, B5, B8	850/900/1900/2100 MHz	MC9090: 800/ 850/ 1900/ 2100 MHz MC8090: 850/ 1900/ 2100 MHz MC8092: 900/ 2100 MHz
TD-SCDMA		B39			
CDMA 1xRTT/EV-DO Rev A			MC7354/50: BC0,BC1,BC10		800/ 1900 MHz (MC9090)
GSM/GPRS/EDGE			Quad-Band MC7350: None	Quad-band	Quad-Band
APPROVALS					
Regulatory	FCC, IC, CE, NCC, GCF, PTCRB	JRF/JPA, NCC, CE, GCF	MC7304: CE, GCF, NCC, FCC MC7330: JRF/JPA, NCC MC7354: FCC, PTCRB, NCC MC7350: FCC, NCC	CE, FCC, IC, NCC, PTCRB, GCF-CC	MC9090: FCC, IC, PTCRB, NCC MC8090: FCC, IC, PTCRB, JRF/JPA MC8092: CE, GCF-CC
Carrier	AT&T, Verizon, Sprint, Vodafone	docomo, Telstra Planned: KDDI, Softbank	MC7304: Telstra, Vodafone MC7330: docomo MC7354: AT&T, Verizon, Sprint MC7350: Verizon Sprint	MC8704: Bell, Telstra, Telus, NZ Telecom MC8705: AT&T	MC9090: AT&T, Sprint, Verizon MC8090: AT&T, docomo
CPU PERFORMANCES (IO VOLTAGE)	1.8V	1.8V	1.8V	1.8V (MC8704)	1.8 V
INTERFACES					
UART					MC9090: 1X 8 wire MC809x: 1x 4-Wire
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
Main Radio Disable	P	P	P	P	P
Vref	1.8V	1.8V	1.8V	1.8V	1.8V
GPIO	4	4	4	6	4
Flash LED output	1	1	1	1	1
Audio	PCM/I2S**	PCM/I2S**	PCM/I2S	MC8704: I2S	PCM
SIM interface	2x 1.8 or 3V	2x 1.8 or 3V	1.8 or 3V	1.8 or 3V	1.8 or 3V
ANTENNA					
Connectors	Main, Aux/GNSS, GNSS	Main, Aux/GNSS, GNSS	MC7354: Main, Aux/GNSS, GNSS MC7350/04/30: Main, Aux, GNSS	Main, Aux/GNSS	Main, Aux, GNSS
Diversity	✓	✓	✓	✓	✓
MIMO	✓	✓	✓		
GNSS Bias	✓	✓	✓		
LOCATION SOLUTION					
Satellite Systems	GPS, Glonass, Beidou, Galileo	GPS, Glonass, Beidou, Galileo	GPS, Glonass	GPS	GPS
Modes***	Standalone, SUPL 2.0, XTRA 3.0	Standalone, SUPL 2.0, XTRA 3.0	Standalone, SUPL 2.0, XTRA 2.0	Standalone, SUPL 1.0, XTRA 1.0	Standalone, SUPL 1.0, XTRA 1.0
CONTROL OPTIONS	APIs, AT Commands	APIs, AT Commands	APIs, AT Commands	APIs, AT Commands	APIs, AT Commands
DRIVERS					
Windows® 7, 8.1 and 10	✓	✓	✓		
Windows® Mobile 6.5			✓	✓	✓
Windows® CE 6.0			✓	✓	✓
Android	✓	✓	✓	✓	✓
Linux	✓	✓	✓	✓	✓
DEVICE DIMENSIONS	51 x 30 x 2.7mm	51 x 30 x 2.7mm	50 x 30 x 2.7mm	51 x 30 x 4.5mm	51 x 30 x 4.5mm
OPERATIONAL TEMPERATURE	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-25°C to +75°C	-40°C to +85°C

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.

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