



Sierra Wireless® MC Series Embedded Modules

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.



High-speed connectivity in a mini-card form factor

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
MC7455	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)

Sierra Wireless
MC SERIES
EMBEDDED MODULES

	MC9090	MC8705	MC8704	MC8092	MC8090
TARGET REGION	Global	Global	Global	EMEA	Global
3G WCDMA					
Frequency Bands	800, 850, 1900, 2100	850, 900, 1900, 2100	850, 900, 1900, 2100	900, 2100	850, 1900, 2100
2G CDMA 1XRTT/EV-DO REV A					
Frequency Bands	BC0, BC1				
2G EDGE/GSM/GPRS					
Frequency Bands	Quad-band	Quad-band	Quad-Band	Quad-band	Quad-Band
APPROVALS					
Regulatory	FCC, IC, PTCRB, NCC	CE, FCC, IC, NCC, PTCRB, GCF-CC	CE, FCC, IC, NCC, PTCRB, GCF-CC	CE, GCF-CC, JRF/JPA	FCC, IC, PTCRB, JRF/JPA
Carrier	AT&T, Verizon, Sprint, Aeris, Rogers	AT&T, Bell, Telus, Rogers	Telstra		AT&T, docomo
CPU PERFORMANCES: IO VOLTAGE	1.8V		1.8V	1.8V	1.8V
INTERFACES					
UART	1 X 8-wire			1 X 4-wire	1 X 4-wire
USB	USB 2.0 High Speed	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		5	4	4
Flash LED output	1	1	1	1	1
Audio	PCM/I2S		I2S	PCM/I2S	PCM/I2S
SIM interface: 1.8 or 3V	1	1	1	1	1
ANTENNA					
Connectors	Main, Aux, GNSS	Main, Aux/GNSS	Main, Aux/GNSS	Main, Aux, GNSS	Main, Aux, GNSS
Diversity	✓	✓	✓	✓	✓
LOCATION SOLUTION					
Satellite Systems	GPS	GPS	GPS	GPS	GPS
Modes	Standalone, SUPL 1.0, XTRA 1.0	Standalone, SUPL 1.0, XTRA 1.0	Standalone, SUPL 1.0, XTRA 1.0	Standalone, SUPL 1.0, XTRA 1.0	Standalone, SUPL 1.0, XTRA 1.0
CONTROL OPTIONS					
APIs, AT Commands	✓	✓	✓	✓	✓
DRIVERS					
Windows® Mobile 6.5 and CE 6.0	✓	✓	✓	✓	✓
Android and Linux	✓	✓	✓	✓	✓
DEVICE DIMENSIONS	51 x 30 x 4.5 mm	51 x 30 x 4.5 mm	51 x 30 x 4.5 mm	51 x 30 x 4.5 mm	51 x 30 x 4.5 mm
TEMPERATURE RANGE					
Industrial Grade	-40°C to +85°C	-25°C to +75°C	-25°C to +75°C	-40°C to +85°C	-40°C to +85°C

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MC SERIES
EMBEDDED MODULES

	MC7455	MC7430	MC7354	MC7350	MC7330	MC7304
TARGET REGION	Americas/EMEA	APAC	Americas	USA	Japan	EMEA/Australia
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, B17, B25	B4, B13, B25	B1, B19, B21	B1, B3, B7, B8, B20
3G WCDMA						
Frequency Bands	B1, B2, B3, B4, B5, B8	B1, B5, B6, B8, B9, B19	B1, B2, B4, B5, B8	B1, B2, B4, B5, B8	B1, B5, B6, B19	B1, B2, B5, B8
3G TD-SCDMA						
Frequency Bands		B39				
2G CDMA 1XRTT/EV-DO REV A						
Frequency Bands			BC0, BC1, BC10	BC0, BC1, BC10		
2G EDGE/GSM/GPRS						
Frequency Bands			Quad-band			
APPROVALS						
Regulatory	FCC, IC, CE, NCC, GCF, PTCRB	JRF/JPA, NCC, CE, GCF	FCC, PTCRB, NCC	FCC, NCC	JRF/JPA, NCC	CE, GCF, NCC, FCC
Carrier	AT&T, Verizon, Sprint, Vodafone	docomo, Telstra, Planned: KDDI, Softbank	AT&T, Verizon, Sprint	Verizon, Sprint	docomo	Telstra, Vodafone
CPU PERFORMANCES: IO VOLTAGE	1.8 V	1.8V	1.8V	1.8V	1.8V	1.8 V
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	USB 2.0 High Speed
Main Radio Disable	P	P	P	P	P	P
Vref	1.8V	1.8V	1.8V	1.8V	1.8V	1.8V
GPIO	4	4	4	4	4	4
Flash LED output	1	1	1	1	1	1
Audio	PCM/12S	PCM/12S	PCM/12S	PCM/12S	PCM/12S	PCM/12S
SIM interface: 1.8 or 3V	1	2	1	1	1	1
ANTENNA						
Connectors	Main, Aux/GNSS, GNSS	Main, Aux/GNSS, GNSS	Main, Aux/GNSS, GNSS	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, Glonass	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	Standalone, SUPL 2.0, XTRA 2.0	Standalone, SUPL 2.0, XTRA 2.0
CONTROL OPTIONS						
APIs, AT Commands	✓	✓	✓	✓	✓	✓
DRIVERS						
Windows® 7, 8.1 and 10	✓	✓	✓	✓	✓	✓
Windows® Mobile 6.5 and CE 6.0			✓	✓	✓	✓
Android and Linux	✓	✓	✓	✓	✓	✓
DEVICE DIMENSIONS	51 x 30 x 2.7 mm	51 x 30 x 2.7 mm	50 x 30 x 2.7 mm	50 x 30 x 2.7 mm	50 x 30 x 2.7 mm	50 x 30 x 2.7 mm
TEMPERATURE RANGE						
Industrial Grade	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°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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