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 or 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).

MC SERIES MODULES

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

MINI CARD ACCESSORY BOARD

MODEL	AIR INTERFACE	PEAK D/L RATE	PEAK U/L RATE
HL7588	LTE, HSPA+	150 Mbps	50 Mbps

Sierra Wireless
MC SERIES
EMBEDDED MODULES

	MC7455	MC7430	HL7588 Mini Card Accessory Board
Target Region	Americas/EMEA	APAC	Americas
4G LTE			
Category	Cat-6	Cat-6	Cat-4
Frequency Bands	B1, B2, B3, B4, B5, B7, B12, B13, B20, B25, B26, B29, B30, B41	B1, B3, B5, B7, B8, B18, B19, B21, B28, B38, B39, B40, B41	B2, B4, B5, B13, B17
3G			
1 Technology supported	WCDMA	WCDMA	HSPA+
Frequency Bands	B1, B2, B3, B4, B5, B8	B1, B5, B6, B8, B9, B19	B2, B5
2 Technology supported		TD-SCDMA	
Frequency Bands		B39	
DATA SPEED			
Peak Download Rate	300 Mbps	300 Mbps	150 Mbps
Peak Upload Rate	50 Mbps	50 Mbps	50 Mbps
LOCATION SERVICES			
Satellite Systems	GPS, Galileo, Glonass, Beidou	GPS, Galileo, Glonass, Beidou	
EMBEDDED SOFTWARE			
Secure Boot			✓
Pre-certified Firmware			✓
SYSTEM DRIVERS			
Windows® 7	✓	✓	✓
Windows® 8.1	✓	✓	✓
Windows® 10	✓	✓	✓
Linux Driver: Stanard ECM	✓	✓	✓
Android RIL	✓	✓	✓
INTERFACES			
UART			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
GPIO	4	4	5
SIM Interface 1.8V/3V	2	2	1
CONTROL OPTIONS			
APIs, AT Commands	✓	✓	
HARDWARE			
Dimensions	51x30x2.7mm	51x30x2.7mm	51x30x3.5 mm
Antenna			
Connectors	Main, Aux/GNSS, GNSS	Main, Aux/GNSS, GNSS	Main, Aux
Diversity	✓	✓	✓
MIMO	✓	✓	✓
GNSS Bias	✓	✓	
TEMPERATURE RANGE			
Industrial Grade	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
APPROVALS			
Regulatory	CE, FCC, GCF, IC, NCC, PTCRB	CE, GCF, JRF/JPA, NCC	FCC, PTCRB, IC,GCF
Carrier	AT&T, Bell, Rogers, Sprint, Telus, US Cellular, Verizon, Vodafone	docomo, Telstra, KDDI, Softbank	AT&T, Verizon
CLOUD SERVICES			
Free Unlimited FOTA upgrades	✓	✓	✓
Device Management option	✓	✓	✓
Application Enablement option	✓	✓	✓
Connectivity Management option	✓	✓	✓

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MC SERIES
EMBEDDED MODULES

	MC7354	MC7350	MC7304
Target Region	Americas	USA	EMEA/Australia
4G LTE			
Category	Cat-3	Cat-3	Cat-3
Frequency Bands	B2, B4, B5, B13, B17, B25	B4, B13, B25	B1, B3, B7, B8, B20
3G			
1 Technology supported	WCDMA	WCDMA	WCDMA
Frequency Bands	B1, B2, B4, B5, B8	B1, B2, B4, B5, B8	B1, B2, B5, B8
2 Technology supported	EVDO	EVDO	
Frequency Bands	BC0, BC1, BC10	BC0, BC1, BC10	
2G			
1 Technology supported	EDGE, GSM, GPRS	CDMA	EDGE, GSM, GPRS
Frequency Bands	850, 900, 1800, 1900	BC0, BC1, BC10	850, 900, 1800, 1900
2 Technology supported	CDMA		
Frequency Bands	BC0, BC1, BC10		
DATA SPEED			
Peak Download Rate	100 Mbps	100 Mbps	100 Mbps
Peak Upload Rate	50 Mbps	50 Mbps	50 Mbps
LOCATION SERVICES			
Satellite Systems	GPS, Glonass	GPS, Glonass	GPS, Glonass
SYSTEM DRIVERS			
Windows® 7	✓	✓	✓
Windows® 8.1	✓	✓	✓
Windows® 10	✓	✓	✓
Windows® Mobile 6.5 and CE 6.0	✓	✓	✓
Linux Driver: Stanard ECM	✓	✓	✓
Android RIL	✓	✓	✓
INTERFACES			
USB	USB 2.0 High Speed	USB 2.0 High Speed	USB 2.0 High Speed
GPIO	4	4	4
SIM Interface 1.8V/3V	1	1	1
CONTROL OPTIONS			
APIs, AT Commands	✓	✓	✓
HARDWARE			
Dimensions	50x30x2.7mm	50x30x2.7mm	50x30x2.7mm
Antenna			
Connectors	Main, Aux/GNSS, GNSS	Main, Aux, GNSS	Main, Aux, GNSS
Diversity	✓	✓	✓
MIMO	✓	✓	✓
GNSS Bias	✓	✓	✓
TEMPERATURE RANGE			
Industrial Grade	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
APPROVALS			
Regulatory	FCC, PTCRB, NCC	FCC, NCC	CE, GCF, NCC, FCC
Carrier	AT&T, Bell, Rogers, Sprint, Telus, T-Mobile, Verizon Southern Linc (MC7354B only)	Sprint, Verizon	Telstra, Vodafone
CLOUD SERVICES			
Free Unlimited FOTA upgrades	✓	✓	✓

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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