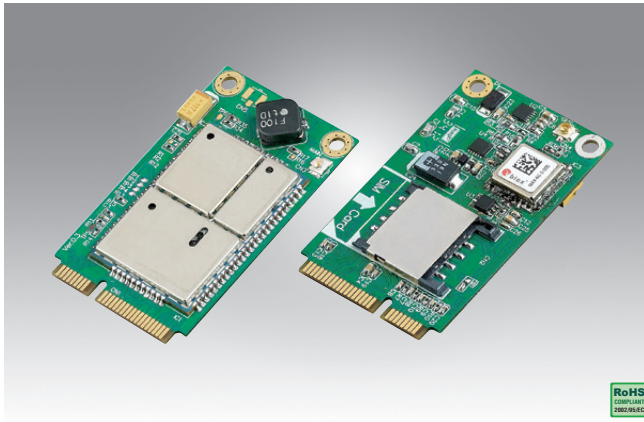


EWM-C109F6G1E

Wide-Temp 3.75G HSPA and GPS, 2-in-1,
Full-size Mini PCIe Card with SIM Card holder



Features

- 6-bands, 800/850/900/1700/1900/2100 MHz for UMTS/HSPA network
- 850/900/1800/1900 MHz for EDGE/GPRS/GSM network
- With SIM card holder
- With hardware standalone GPS, u-blox MAX-6
- HSDPA 7.2Mbps, HSUPA 5.76Mbps
- Operating temperature: -40 to +85° C

Specifications

Main Chipset	U-blox LISA-U200 and MAX-6
Antenna	2 RF Antenna Coaxial Connectors
Band	UMTS/HSPA: 800/850/900/1700/1900/2100 MHz EDGE/ GPRS/ GSM: 850/ 900/ 1800/ 1900 MHz
Data throughput	Downlink: 7.2 Mbps Uplink: 5.76 Mbps
Interface	PCI Express mini-card rev. 1.2
Operation Voltage	3.3V ~ 3.6V
Power Consumption	< 700 mA (HSPA connected Mode)
Peak Current (Max.)	1.5 A
OS Supported	Win XP/Vista/7, ARM WinCE 5.0/6.0, Linux 2.4.x/2.6.x, Mac
Temperature Ranges	Operation: -40 to +85° C
Dimensions (L x W x H)	50.85 x 29.9 x 6.2 mm

Ordering Information

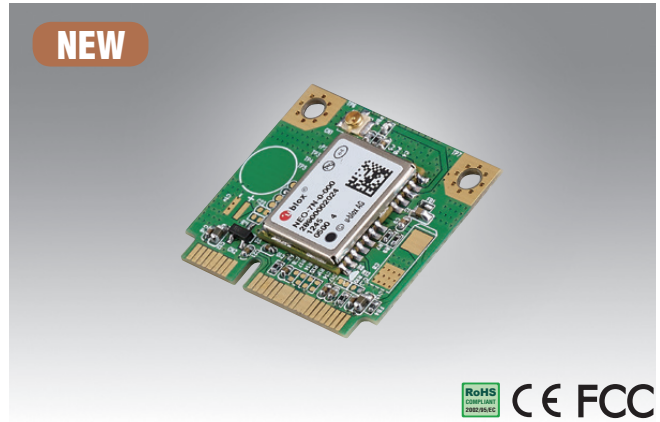
Part No.	Product Description
EWM-C109F6G1E	Wide-Temp 3.75G HSPA and GPS, 2-in-1, Full-size Mini PCIe Card with SIM Card holder

Suggested Antenna and Cable

Part No.	Specifications
1750005865	824-960 MHz, 1710~2170 MHz dipole antenna, 109 mm
1750006426	824-960 MHz, 1710~2170 MHz dipole antenna, 169.5 mm
1750005866	Coaxial GSM/ GPS Cable, 100 mm
1750006009	Coaxial GSM/ GPS Cable, 250 mm
1750006432	GPS antenna 1575MHz, cubic antenna 45x35x14 mm, wire length 5000mm

EWM-G108H

Embedded GPS/ GNSS Module
Half-size Mini PCIe Card



Features

- 56-Ch u-blox NEO-7 engine (GPS, GLONASS, Galileo, QZSS and SBAS), SBAS (WAAS, EGNOS, MSAS)
- < 1 second TTFF for Hot and Aided Starts, Open sky code start 29 second.
- Accuracy 2.5 m CEP
- Operating temperature: -40 to +85° C

Specifications

Main Chipset	u-blox NEO-7
Receiver Type	56 Channels GPS L1 C/A, GALILEO L1 FDMA, QZSS L1 C/A and Galileo E1 B/C
Time-To-First-Fix (GPS)	Cold Start: 29 s Warm Start: 28 s Hot Start: < 1 s
Sensitivity (GPS)	Tracking & Navigation: -162 dBm Reacquisition: -160 dBm Cold Start: -148 dBm
Horizontal Position Accuracy	Autonomous: < 2.5 m SBAS: < 2.0 m
Accuracy of Time Pulse Signal	RMS: 30 ns 99%: < 60 ns Time Pulse Configurable: f=0.25...10M Hz
Velocity Accuracy	0.1 m/s
Heading Accuracy	0.5 degrees
Dynamics	< 4 g
Operational Limits	Altitude: 50000 m, Velocity: 500 m/s
Temperature Ranges	Operation: -40 to +85° C

Ordering Information

Part No.	Product Description
EWM-G108H01E	Embedded u-blox NEO-7, GPS/GNSS Half-size Mini PCIe Card

Suggested Antenna and Cable

Part No.	Specifications
1750006120	GPS antenna 1575 MHz, Antenna 4.5 dBi, LNA 28 dBi, Cubic antenna 4.3 x 3.5 x 1.6, RHCP and SMA male (MM)
1750005866	Coaxial GSM/ GPS Cable, 100 mm
1750006009	Coaxial GSM/ GPS Cable, 250 mm