

Quectel MC60

The World's Smallest LCC Quad-band GSM/GPRS/GNSS Module

General Features

Quad-band	850/900/1800/1900MHz
GPRS Multi-slot Class	Class 12
GPRS Mobile Station	Class B
Compliant to GSM Phase 2/2+	Class 4 (2W @850/900MHz) Class 1 (1W @1800/1900MHz)
Supply Voltage Range	3.3~4.6V 4.0V Typ.
Low Power Consumption	TBD
Operation Temperature	-40 °C ~ +85 °C
Dimensions	18.7 × 15.8 × 2.3mm
Weight	TBD
Control via AT Commands	GSM 07.07, 07.05 and other enhanced AT Commands

Specifications for Data

GPRS Class 12	85.6kbps (Downlink) 85.6kbps (Uplink)
PBCCH Support	
Coding Schemes	CS 1, 2, 3, 4
USSD	
Non Transparent Mode	
Protocols	TCP/UDP/PPP/FTP/HTTP

Specifications for SMS

Point-to-point MO and MT

SMS Cell Broadcast

Text and PDU Mode

Specifications for Voice

Speech Codec Modes	Half Rate (HR) Full Rate (FR) Enhanced Full Rate (EFR) Adaptive Multi-Rate (AMR)
Echo Arithmetic	Echo Cancellation Echo Suppression Noise Reduction

Specifications for GNSS

L1 Band Receiver (1575.42MHz)	Channel	33 (Tracking) / 99 (Acquisition) Up to 210(PRN)
	C/A Code	
	SBAS	WAAS, EGNOS MSAS, GAGAN
Horizontal Position Accuracy	Autonomous	<2.5 m CEP
Velocity Accuracy	Without Aid	<0.1m/s
Acceleration Accuracy	Without Aid	0.1m/s ²
Timing Accuracy	1PPS Out	10ns
Reacquisition Time		<1s
TTFF@-130dBm with EASY™	Cold Start	<15s
	Warm Start	<5s
	Hot Start	<1s
TTFF@-130dBm without EASY™	Cold Start	<35s
	Warm Start	<30s
	Hot Start	<1s
Sensitivity	Acquisition	-148dBm
	Tracking	-165dBm
	Reacquisition	-160dBm
Dynamic Performance	Maximum Altitude	Max.18000m
	Maximum Velocity	Max.515m/s
	Maximum Acceleration	4G

Interfaces

SIM/USIM	×2 3V/1.8V
SD	×1
UART	×4 (×1 GSM main serial port, ×1 GSM auxiliary serial port, ×1GSM debug port, ×1 for GNSS NEMA)
Analog Audio Channel	2 output channels and 1 input channel
Bluetooth	BT 3.0 Profile: SPP
ADC	×1
GPIO	×1
PCM	×1(LGA pad)
RTC	×1
Antenna PAD	×3 (One for GSM antenna, one for GPS, another for Bluetooth antenna)