M33
Quad Band GSM/GPRS Module

QUECTEL

Wireless makes smarter

Quad Band

GPRS Multi-slot Class 12

Extended Temperature Range -45 °C to +85 °C

Revolutionary Camera Interface

Embedded TCP/IP and HTTP Protocols

Embedded MMS, FTP and SMTP Client

PCM

Optional with SIM holder or SIM IC

Micro SD Card

Serial Port Multiplexer (GSM0710)

Quectel Enhanced AT Commands

The M33 is a complete Quad-band GSM/GPRS module with 8-bit CCIR656, CMOS camera sensor interface which supports YUV422/ YUV411/ YUV420 data format and up to 300K pixels CMOS camera input. It can be embedded in security device to implement photo taking, JPEG compression and MMS transfer. Customer can easily develop the whole security equipment through Quectel solution.

Featuring an industry-standard interface, the M33 delivers GSM/GPRS 850/900/1800/1900MHz performance for voice, SMS, data, and fax in a form factor with extremely low power consumption. With a size configuration of **40mm x 32.2mm x 6mm** and four soldering pins**,** M33 can be fixed in host PCB easily. A 300k pixels CMOS camera or CCIR656 interface digital video can be connected to M33 directly. Customer application implements the photo handling and transfer function through AT commands.

- Quad-band GSM/GPRS module with a size of 40mmx32.2mmx6mm
- Support 300k pixels CMOS camera and CCIR656 digital video interface
- JPEG compression
- MMS protocol
- 100-pin B2B connector to supply rich interface resource
- 4 soldering pins for easy fixing in host PCB
- Embedded powerful Internet service protocols
- Based on mature and field-proven platform

M33
Quad Band GSM/GPRS Module

40mm

32.2.mm

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@850/900 MHz)
	Class 1
	（1W@1800/1900MHz)
Supply Voltage Range	3.4~4.5 V 4.0V nominal
Low Power Consumption	1.1mA @ DRX=5
	0.7mA @ DRX=9
Operation Temperature	-45 °C to +85 °C
Dimensions	40mm × 32.2mm × 6mm
	（excluding shielding pins)
Weight	Approx 8g

Control via AT commands (GSM 07.07, 07.05 and other enhanced AT Commands)

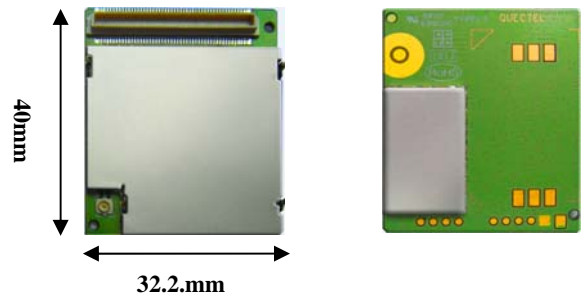**SIM Application Toolkit**

Mux Driver

Specifications for Fax

Group 3, Class 1 & Class 2

Specifications for Data

GPRS Class 12	max. 85.6 kbps (uplink & downlink)
PBCCH Support	
Coding Schemes	CS 1, 2, 3, 4
CSD	up to 14.4 kbps
USSD	
Non Transparent Mode	
Protocols	PPP, TCP/UDP, HTTP
	FTP, MMS, SMTP

Specifications for SMS via GSM / GPRS

Point-to-point MO and MT

SMS Cell Broadcast

Text and PDU Mode

Specifications for Voice

Speech Codec Modes	HR, FR, EFR
	AMR FR, AMR FR
Echo Arithmetic	Echo Cancellation
	Echo Suppression
	Noise Reduction
Hands-free Operation	

Camera Compatibility

Control via AT Commands

Sensor Model	OmniVision OV7725 in default, other models can be customized
Sensor Interface	CCIR656, CMOS
Max Picture Size	VGA 640x480 pixels
Output Format	JPEG

Interfaces

100-pin B2B Connector	
Power Supply	
External SIM	3V/1.8V
Embedded SIM IC	（Optional)
Embedded SIM Holder	（Optional)
Micro SD Card Interface	
RTC Backup	
Analog Audio Interfaces	Two channels
CMOS Camera /CCIR656 Interface	
PCM Interface	
SPI	（Optional)
I²C	（Optional)
Serial Ports	Two
Antenna Connector and Solder Pad	
Charge Interface	（Optional)

Contact Us

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