



Quectel Wireless Solutions

Wireless Module Expert



M10 GSM Module Presentation

April, 2013

- Tracking and Tracing
- Smart Metering
- Wireless POS
- Security
- Connected PND
- Health Care
- Remote Maintenance & Control

Extremely Low Standby Current Consumption

1.3mA@DRX=5

Compact Size

29mmx29mmx3.6mm

Wide Working Temperature Range

-40 °C to +85°C



Quad-band High Data Speed

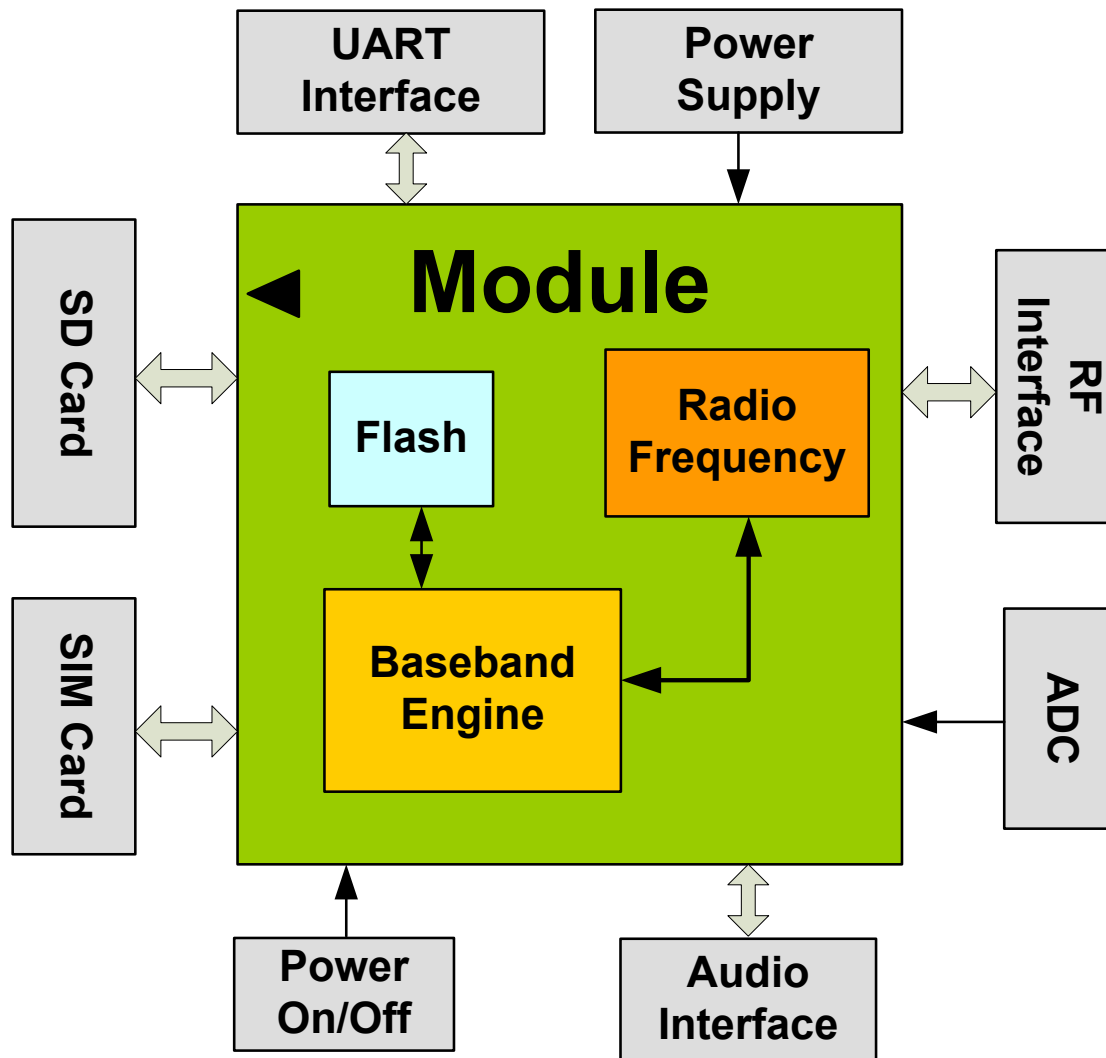
GPRS Multi-slot Class 12

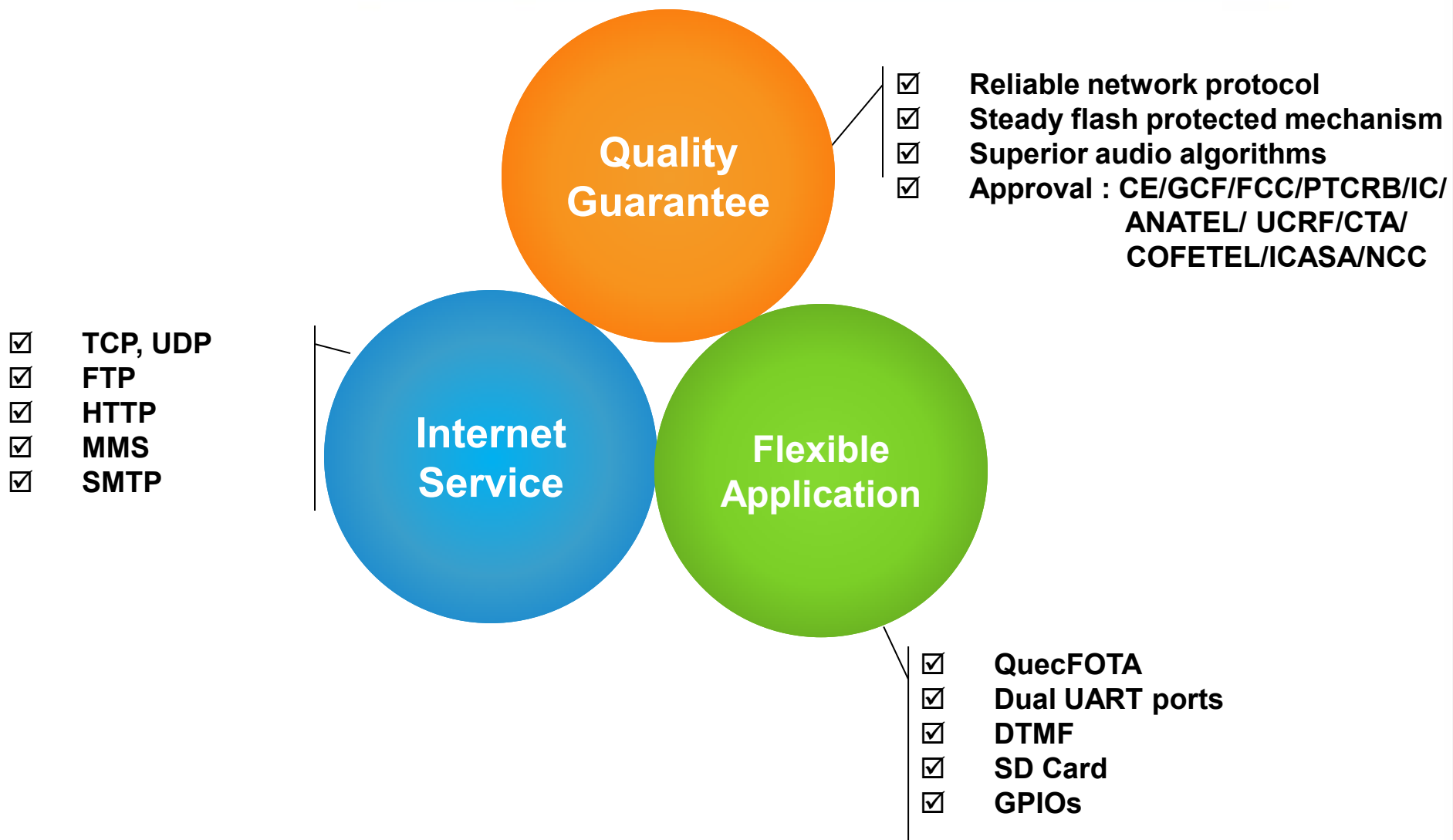
Industry-standard Interface

+8KV/-6KV ESD

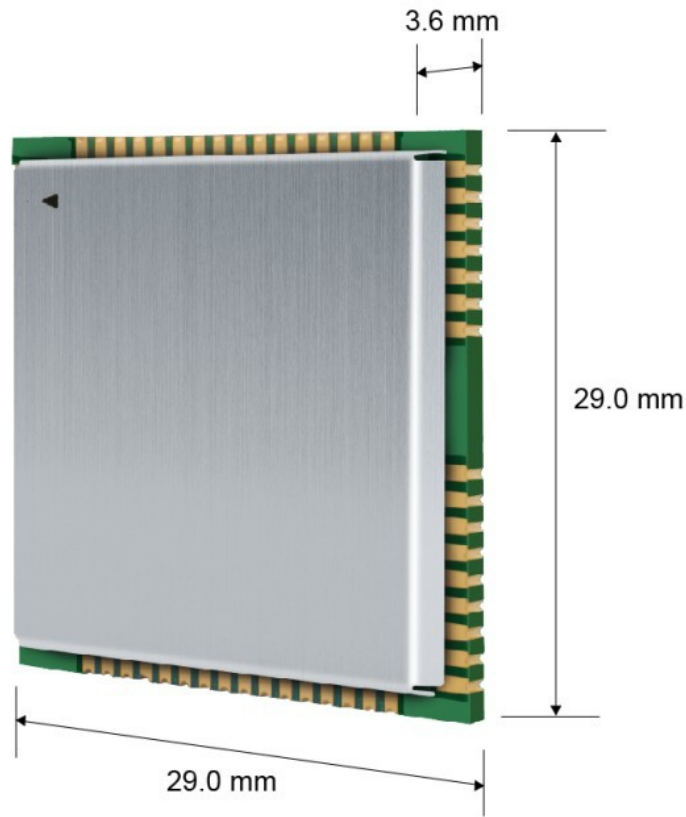
Extremely Strong PCB

PCB Thickness:1.6mm





- Standard V.25ter AT commands
- GSM 07.07
- GSM 07.05 (SMS)
- GPRS AT commands in accordance with GSM 07.07
- TCP/IP stack AT commands
- STK (SIM Application Toolkit)
- Quectel defined AT commands (enhanced functions)



Length:	29 mm ($\pm 0.15\text{mm}$)
Width:	29 mm ($\pm 0.15\text{mm}$)
Height:	3.6 mm ($\pm 0.3\text{mm}$)
Weight:	6g

Product Features		M10	Telxx XX865
Power consumption: Idle registered & slow clocking mode		1.3mA@DRX=5 1.2mA@DRX=9	1.5 mA@DRX=9
GPRS		Class 12: max. 85.6 kbps(uplink & downlink)	Class 10: max. 42.8 kbps(uplink), 85.6kbps(downlink)
Package		LCC type for easier production	BGA (fragile on soldering)
PCB thickness		1.6mm (stronger PCB, no bending problem)	1.0mm
Temperature range	Normal operation	-35°C ~ +80°C	-20°C ~ +55°C
	Restricted operation	-40°C ~ -35°C and +80°C ~ +85°C	-40°C ~ -20°C and +55°C ~ +85°C
	Storage	-45°C ~ +90°C	-40°C ~ +85°C
ESD	VBAT, RF, GND	Air discharge $\pm 10KV$, contact discharge $\pm 5KV$	Unknown
	Other pins	Air discharge $\pm 4KV$	Unknown
Audio interfaces		Two	One

Product Features		M10	Mx55i
Power consumption: idle registered & slow clocking		1.3mA@DRX=5 1.2mA@DRX=9	3mA@DRX=5 2.5mA@DRX=9
GPRS		Class 12: max. 85.6 kbps (uplink & downlink)	Class 10: max. 42.8kbps(uplink), 85.6kbps(downlink)
Package		LCC type for easier production	B2B connector
Dimension		29mm x 29mm x 3.6mm	35mm x 32.5mm x 2.95mm
MMS		Support	None
Switch-off method		By PWRKEY pin or AT command	Only by AT command
Temperature Range	Normal operation	-35°C ~ +80°C	-20°C ~ +55°C
	Restricted operation	-40°C ~ -35°C and +80°C ~ +85°C (industrial standard)	-40°C ~ -20°C and +55°C ~ +70°C
	Storage	-45°C ~ +90°C	-40°C ~ +85°C
ESD		VBAT, RF,GND : air discharge $\pm 10KV$, contact discharge $\pm 5KV$ Other pins : contact discharge $\pm 2KV$	Antenna and SIM card interface: air discharge $\pm 8KV$ contact discharge $\pm 4KV$ Other pins: contact discharge $\pm 1KV$

➤ **Technical materials package**

- Hardware, software, specification
- Application notes package
- Debug tool, download tool, test tool, EVB package
- Approvals & test report package

➤ **Development Tool**

• **Interfaces**

- ✓ RS-232 interface
- ✓ Power supply
- ✓ Antenna interface
- ✓ Debug UART interface
- ✓ Earphone interface

• **Features**

- ✓ Network status LED
- ✓ Power key
- ✓ Emergency off key



M10 EVB KIT



Thank You!

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