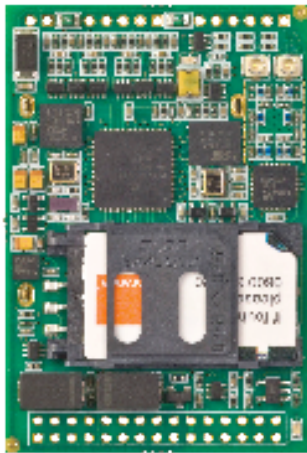


Specification of New GSM/GPRS/GPS/RFID M2M & Telematics Platform



ACTUAL SIZE

MODEM

Q2687H: EGSM/GPRS/EGPRS 900/1800/850/1900 MHz version with 32 Mb of Bursted Flash memory and 8 Mb of SRAM (32/8)

GSM/GPRS/EGPRS FEATURES

2-Watt EGSM – GPRS 900/850 radio section running under 3.6 volts

1-Watt GSM-GPRS1800/1900 radio section running under 3.6 volts

0.5-Watt EGPRS 900/850 radio section running under 3.6 volts

0.4-Watt EGPRS 1800/1900 radio section running under 3.6 volts

Hardware GSM/GPRS class 10 and EGPRS class 10 capable

OPERATING SYSTEM

Micro SIM Socket

Open AT on ARM 9 CPU

Echo cancellation + noise reduction (quadri codec)

Full GSM or GSM/GPRS/EGPRS Operating System stack

POWER OPTIONS

- Hi capacity long life 3.6V primary lithium-thionyl chloride (Li-SOCl₂) battery for long term use (3/4 years)
- Or medium capacity lithium Li-ion battery for short term (90 Days)
- Ultra low current consumption < 40uA in sensing sleep mode
- Built in power & battery management
- 6V to 30V DC @ 1.5A max input. (rechargeable version)
- * Internal and External Power Monitoring

ON-BOARD MEMORY

- 32 Mbit Flash (Data / Black Box Logging)
- 1 Mbit EEPROM (Event Logging)
- 64 Kbit EEPROM (Configuration)
- 256 KBytes Flash (Program)
- 16 KBytes SRAM (Battery backed up)

SENSORS/INPUT OUTPUT

- Low power PIC CPU
- Real Time Clock (RTC) with calendar
- 1 ultra-low power 3 axis accelerometer with 6D detection for movement, tilt, acceleration and tamper protection, active in all modes
- Vibration/movement detector active in all modes
- 4 external inputs, individually configurable for analog or volt/ground detection
- 1 Microphone Input
- 1 Loudspeaker Output
- Temperature sensor $\pm 0.5^{\circ}\text{C}$ Accuracy with 0.0625°C resolution
- 1 diagnostic and 2 user serial ports
- Optional multi-port expansion board
- Internal GSM antenna or optional external antenna
- Internal SiRF Star IV GPS receiver with internal or optional external antenna
- 2 Tamper Alarm loops

RF TRANSCIEVER

- High power 433/868/915 MHz License free frequency bands
- Can run up to 254 Slave units in network configuration
- Diverse internal antenna's for device communications and location beacon
- Variable frequency
- Variable RF power output (diversity transmission using 2 antennas)
- Programmable modulation methods and encoder/decoder
- Temperature Compensated Local Oscillator (TCXO)

SIZE

- Board size 53mm x 36mm x 15mm

POSSIBLE APPLICATIONS

- > Fleet Management Tracking -
 - Trailer Tracking – Logistics Companies
 - Telematics Platform – Auto Manufactures as OEM Product
 - Telematics Platform – Plant Manufactures as OEM Product
- > Asset Tracking with RF – Stolen/lost Equipment Recovery
- > Asset Tracking with RFID – Manufacture supply chain
- > Cable Theft detection
- > Data logging – Driving habits etc
- > Vending Machines – Remote monitoring
- > Remote Signage – Update contents
- > Remote Meter Reading – Gas, Electricity, Water
- > Remote Alarms – Burglary, Power, Water, Fuel etc.
- > Remote Temperature /Humidity Monitoring – Blood, Fridges,Freezers
- > People Tracking – Lone Worker, Dementia etc.
 - Animal Tracking – Dogs, Birds of Prey etc.



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