

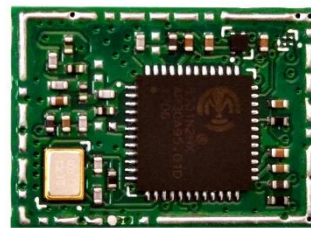
WSG300M Sigfox Verified Module(RC1)

Tiny Form factor, Easy integration

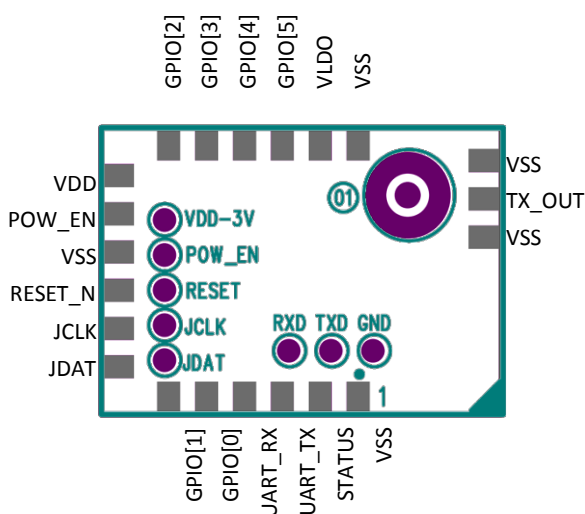
WSG300M RC1 is a Sigfox Verified modem module for the low power wide area network (LPWAN) market. It is designed with M2COMM's system on chip M2C8001 for the European market (EN 300 220). The module was designed for high performance, high quality and small form factor. The design is fully compliant to ETSI regulations. The Sigfox application is ported over M2C8001 and execute at high efficiency using its internal 32bit core processor. Every module is preloaded with Sigfox application software, module specific ID/KEY/PAC as referring to Sigfox network system. The preloaded software also includes a bootloader which allows software update or future user application development.

Features

- Operating Frequency: ISM 868MHz
- Sigfox Verified AT command set via UART
- Sigfox Verified reference design
- Out power: 14dBm
- Current consumption:
 - 60mA Tx at 14dBm (average current with Sigfox packet transmission)
 - 50nA at OFF (via POW_EN control pin)
- Small-form-factor
 - 13.5mm x 19mm LGA
 - Compact board design with low external component counts
- Voltage supply : 2.5V ~ 5.5V
- Operation Temperature : -40C ~ 85C
- ETSI EN 300 220 compliant
- Preloaded Sigfox Ready™ firmware with ID/KEY/PAC and bootloader for firmware update
- Evaluation kit available
- I/F: I2C*1/UART*1/GPIO*6



PAD name	IO	Description
VDD	VDD	module main power supply
VSS	GND	module ground
VLDO	O	Monitoring point for module operating voltage
RESET_N	I	Module reset pin. When asserted LOW, it resets the module to initial state
POW_EN	I	Module enabling pin Logic low for Disable; Logic high for Enable
UART_TX	O	UART transmit data (9600bps)
UART_RX	I	UART receive data (9600bps)
TX_OUT	O	50ohm antenna output
GPIO[0:5]	IO	GPIO (reserve for future use)
STATUS	O	Module status pin Logic High – Sigfox Ready ; Logic Low – Module busy
JDAT	I	JTAG interface
JCLK	I	JTAG interface



Pinout (bottom view)

- Solder pad
- Test pad

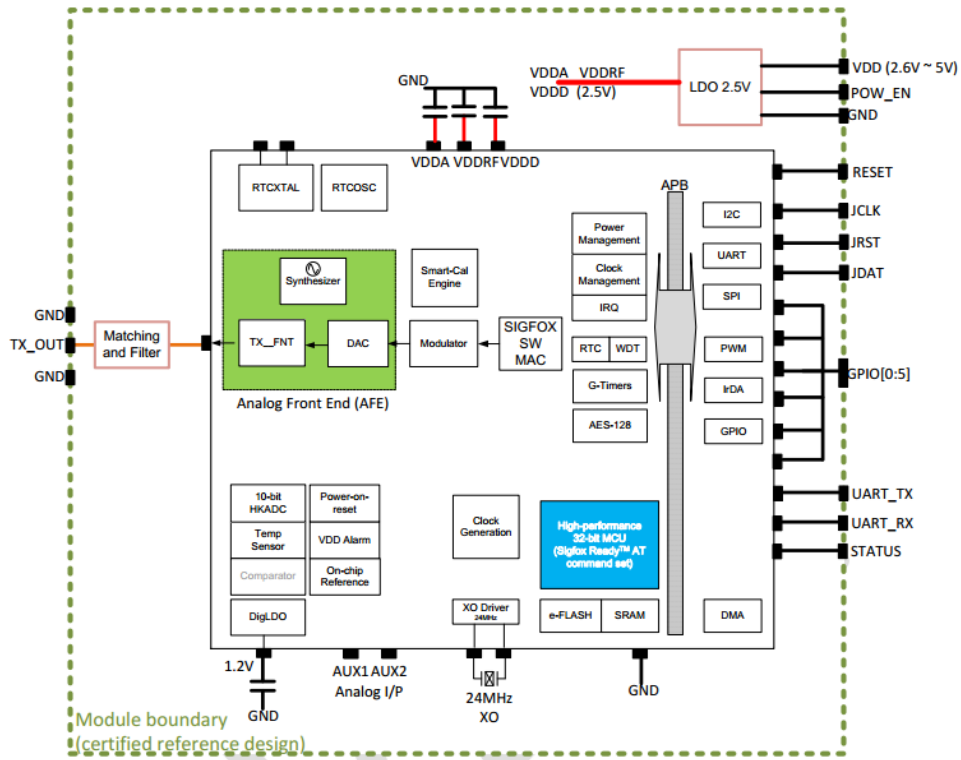
Ordering information

Part Number	Description
WSG300M RC1	WSG300M Sigfox RC1 modem module 2.6V
WSG300M RC1-EVB	WSG300M Sigfox RC1 modem Evaluation Kit

*please contact us for request

[http:// www.liteon.com](http://www.liteon.com)

Functional Block Diagram



[http:// www.liteon.com](http://www.liteon.com)