

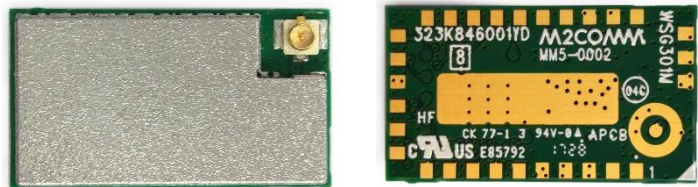
WSG301M Sigfox Verified Module (RC2/4)

Lowest current consumption for 22dBm RF Power

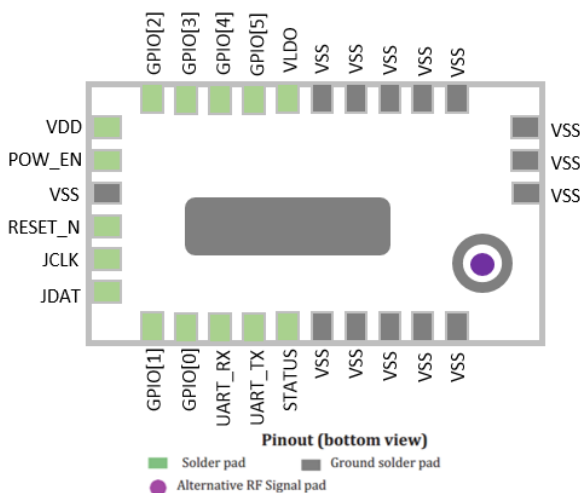
WSG301M RC24 is a Sigfox Verified modem module for the low power wide area network (LPWAN) market. It is designed with M2COMM's system on chip M2C8001 for the US or other FCC-like market (FCC Part 15.247). The module was designed for high performance, high quality, low cost, small form factor and most importantly, high RF power of up to 22dBm. The design is fully compliant to FCC regulations. The Sigfox application is running on M2C8001 at high efficiency. 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 RC2 (902MHz) and RC4 (920MHz)
- Sigfox compliant AT command set via UART
- Transmission power: 22dBm
- Current consumption:
 - 130mA Tx at 22dBm (average current with Sigfox packet transmission)
 - 50nA at OFF (via POW_EN control pin)
- Small-form-factor
 - 13.5mm x 24mm LGA
 - Compact board design with low external component counts
- Voltage supply : 2.5V[20dBm+] ~ 5.5V
- Operation Temperature: -40C ~ 85C
- FCC Part 15.247
- Preloaded Sigfox application with ID/KEY/PAC and bootloader for firmware update
- Evaluation kit available
- I/F: I2C*1/GPIO*6/UART*1



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



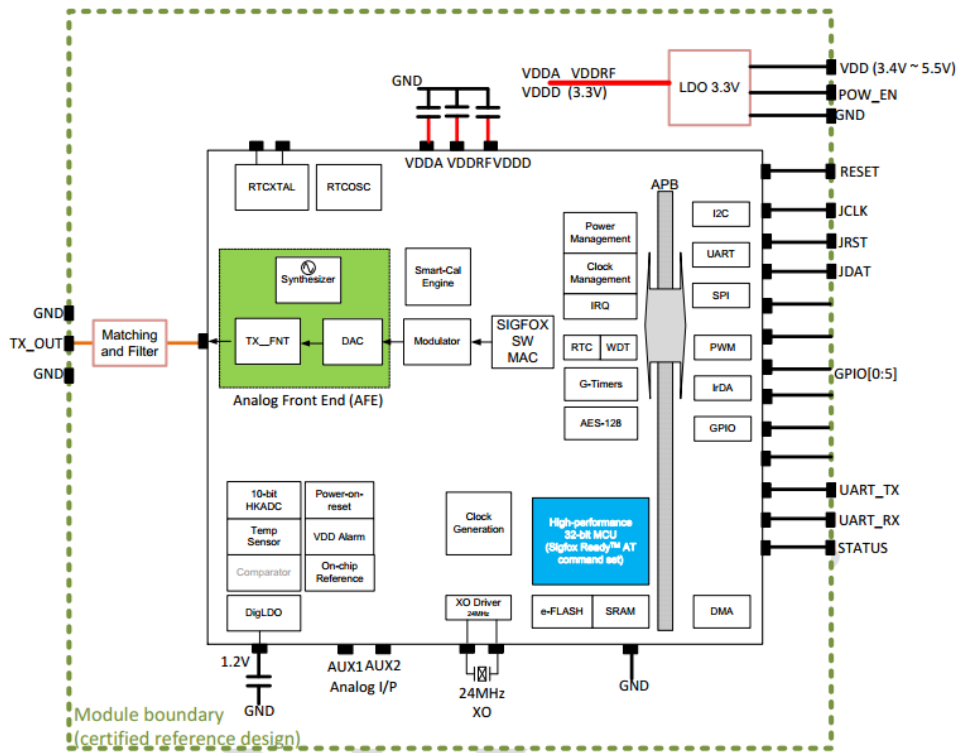
Ordering information

Part Number	Description
WSG301M RC24	WSG301M Sigfox RC24 modem module 3.0V
WSG301M RC24-EVB	WSG301M Sigfox RC24 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)