



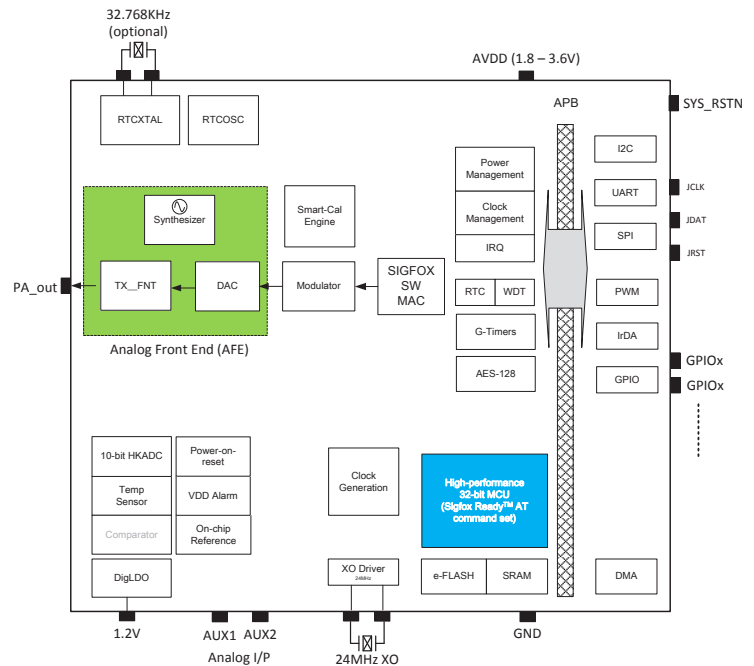
# Uplynx M2C8001

## SIGFOX verified RCZ1,RCZ2, RCZ4 System on Chip

Uplynx M2C8001 is one of M2COMM’s family of wireless SoC designed for ultra-low-power wireless IoT applications. Uplynx is Sigfox Verified and monolithically integrates Sigfox protocol stack with output transmission power from 14dBm to 22+dBm with its integrated Power Amplifier. M2C8001’s GPIOs are accessible via AT command and 10 bit ADC, analogue comparators and other onchip features are open for software development. Uplynx is the most cost effective and easy-to-design SoC solution for IoT applications where wireless data uplink is enabled via Sigfox network. Uplynx RCZ1, RCZ2 and RCZ4 reference circuits are verified by Sigfox. Reference design without Power Amplifier and TCXO makes all three regions sharing one PCB design feasible and reduce BoM cost and system cost.

### Features

- Communication Unit
  - 868(863~870)MHz, 870-875.6MHz, 915(902-928)MHz ISM band support
  - Tightly controlled PA profile to support Sigfox signaling
- Sigfox compliant AT command set via UART
- Sensor / Peripheral Unit access via AT command
  - GPIO, PWM, 10-bit 250ksps ADC
  - AES-128
  - On-die monolithic temperature sensor, analog CMP, battery sense, voltage alarm
- Maximum transmission power: 22+dBm
- Current consumption (Sigfox AT\$SB):
  - 60mA Tx at 14dBm@868MHz
  - 130mA Tx at 22dBm@902MHz
  - <7uA at sleep
- Easy-to-Design
  - Complete set of Data Sheets, TRMs, Application Notes, AT command manual
  - Simple control interface via UART
- Small-form-factor
  - 7x7mm(48-pin) QFN available
  - Compact board design with low external component counts
- Voltage supply : 2.5V ~ 3.6V (-40C ~ 80C)
- Compiler-free EasyAT commander
- Software Development kit available



### Ordering information

Part Number	Description
M2C8001	QFN 48 pin Uplynx
UPLYNX-M-RCZ1	Uplynx Sigfox RCZ1 modem module
UPLYNX-M-RCZ1-EVB	Uplynx Sigfox RCZ1 modem Evaluation Kit
UPLYNX-M-RCZ24	Uplynx Sigfox RCZ2/4 modem module
UPLYNX-M-RCZ24-EVB	Uplynx Sigfox RCZ2/4 modem Evaluation Kit