

sigfox

GDM7243i

Hybrid (Cellular + Sigfox LPWA mode) Solution for IoT

Superior Connectivity Options for IoT: Supporting LTE Cat. M1/NB1/EC-GSM and Sigfox LPWA mode IoT Connectivity

Features

- Highly integrated with RF transceiver, baseband and RAM memory.
- High performance Cortex-R4.
- Complies with 3GPP Release 13 LTE Advanced Pro standard.
- Hybrid connectivity modes, FULLY INTEGRATED, supporting:
 - Cat. M1
 GPS
 - NB1
- Sigfox
- GSM
- CAN bus interface
- BLE
- Supports RF bands 600-960MHz, 1.7-2.7GHz.
- Optimized for half-duplex FDD, FD-FDD, TDD.
- eSIM/Soft SIM support.
- On-chip sensor hub with dedicated micro-controller.
- Integrated security features support:
 - Secure boot, key and configuration
 - Symmetric/asymmetric cryptography HW and TRNG
- Optimized for low data, low power M2M devices.
- Supports IoT applications such as:
 - Wearables
 Smart home
 - Smart meters Healthcare
 - Trackers

Interfaces

- 1/2/4/8-bit high speed serial flash.
- Serial interfaces: USB2.0, UART (x4), I2C (x4), SPI, USIM, I2S, CAN-Bus (for OBD).
- PWM, REFF.
- Integrated BLE4.2 modem/link controller.



Key Benefits

- Includes all features for turnkey trackers
- Flexible Architecture for IoT Devices
- Ultra-Low Power with up to 10 Year Battery Life
- No Cost Added to Support Sigfox Application
- Long Range and Reliable Data Transfer
- Faster Time-to-Market
- Integrated Security Engine

Carrier Approved Reference Design Available

GDM7243i Block Diagram

Low Band RF 600~900 MHz	1Rx – 1Tx RF	Cortex-R4		On-Chip 2MB SRAM
High Band RF		H-FDD, FDD, TDD (3GPP E-UTRA Rel13) PHY & MAC CAT-M1 (1.4MHz) CAT-NB1 (200 KHz)		Interface • S-Flash • USB2.0 • USIM • SPI • UART • I2C • I2S
GSM RF I/F	-	BLE4.2 (Control	Sigfox Security Engine	CAN Bus RTC Sensor Hub

