



GDM7243SL: Multi-Mode LTE “Single-Chip” Supporting NTN and 450MHz Rel. 14



INTRODUCTION

GDM7243SL is an advanced 4G LTE chip that supports NTN and other modes. This low-cost single-chip solution includes RF transceiver and modem, and offers the unique capability of switching between NTN and NB-IoT, CatM, Cat1bis, Cat1 and/or Cat4.

USE CASES

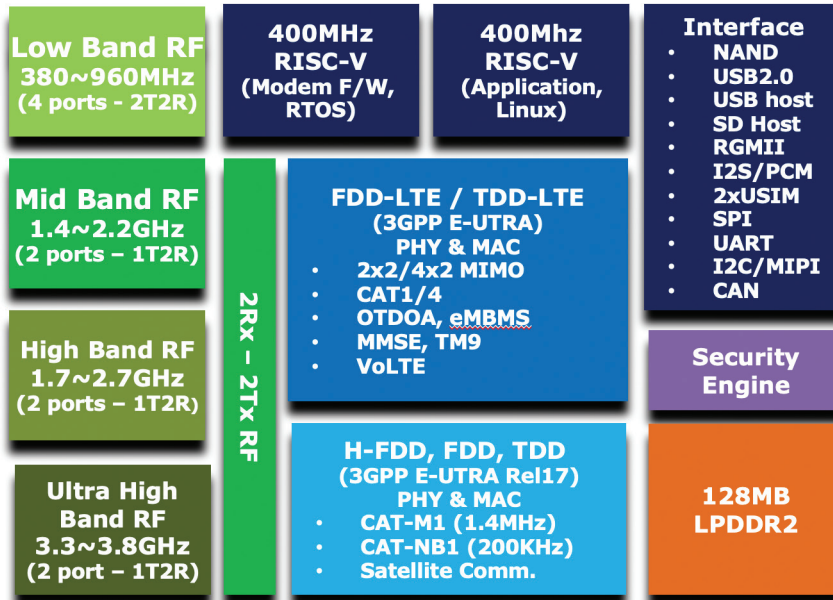
- SOS and two-way messaging for smartphones, wearables and automotive — allows for SOS and two-way messaging in areas with no terrestrial access.
- Agriculture and farming, such as precision farming and livestock monitoring in rural or remote locations.
- Asset tracking such as shipping containers or vehicles.
- Disaster response and recovery such as IoT devices for search and rescue, damage assessment and emergency response.
- Remote monitoring of equipment such as oil rigs or weather stations.
- Maritime and airline applications such as vessel tracking or environmental monitoring in the open ocean or coastal areas.
- Automotive communication for continuity of service for low data rate automotive safety and emergency calls.

FEATURES

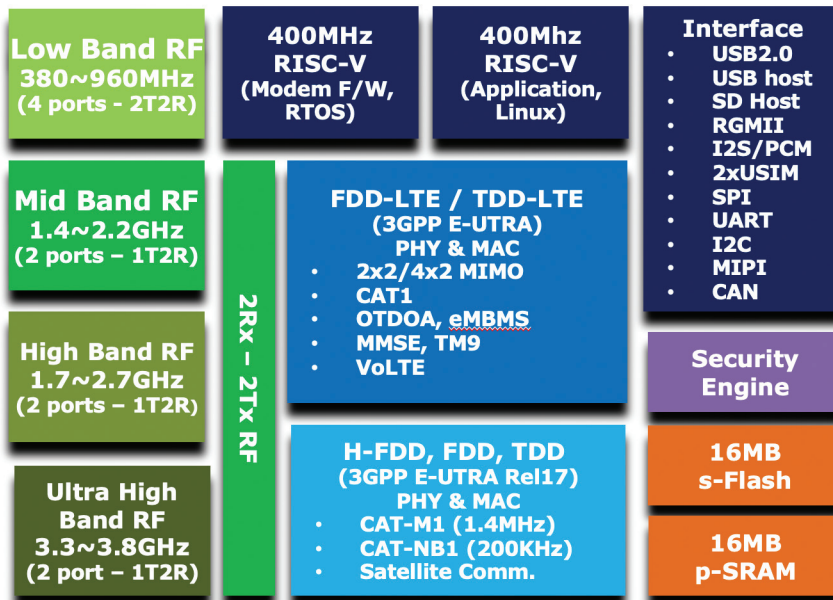
- Supports NTN and other modes.
- The only chip on the market that allows switching between NTN and NB-IoT, CatM, Cat1bis, Cat1 and/or Cat4.
- Supports 450MHz (sub-500MHz) bands, (TVWS) bands from 478 MHz to 698 MHz.
- Compatible with CBRS spectrum.
- Includes an open RISC-V core available for user applications, with operating systems including Linux, OpenWRT, PRPL and Zephyr.
- Features a sensor hub with internal 32-bit controller for interfacing with IoT sensors.
- Supports secure boot with an integrated hardware engine and a 4K OTP ROM
- CAN Bus engine with full stack available.

BLOCK DIAGRAM

GDM7243SL2



GDM7243SL1



KEY FEATURES:

- Dual-Transmit on all Low Band Ports
- Dual-SIM, Dual-Standby (DSDS)
- VoLTE Capability
- eDRX/PSM Support
- 2x2 MIMO DL & UL w/64QAM
- 380MHz to 3.8GHz Integrated RF
- Upgradable to Future 3GPP Releases

CONTACT US

For more information, please visit www.gctsemi.com/4g-lte or scan the QR code below.



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