



LTE Cat M1/NB1 Modem (Type 1SC)

Ultra-small cellular modem

Smallest, highly integrated cellular modem

Modem features global coverage in low and mid bands, low current consumption (eDRX and PSM), and long battery life (10+ years), which is ideally suited for small, battery operated IoT devices and applications

Features

- LTE Cat M1 23 dBm
- NB-IoT (NB1) Rel. 13 (Rel. 14 SW Upgrade)
- GNSS
- VoLTE
- Dimension: 11.1 x 11.4 x 1.4 mm (typ), 1.5 mm (max)
- Package: LGA
- Antenna configurations: external
- 3GPP eDRX and PSM modes
- Power Consumption: enables up to 10 year battery life
 Hibernation current: 3 uA ESR
- eDRX current: <25 uA @ 8 hyperframes
- PSM current: dormant window configurable
- Intergrated GNSS
- Modem features global covergae in low and midbands, low current consumption (eDRX and PSM), and long battery life (10 + years), which is ideally suited for small, battery operated IoT devices and applications
- Operating temperature range: -40 °C to 85 °C
- OTA firmware upgrade
- Global Carrier Certifications: GCF and ptcrb



Applications & Benefits

- Smallest/Highly integrated LTE Cat M1/NB1 modem available in the market (~21% less square area than nearest competitor)
 - Ideally suited for miniaturized battery operated devices, such as wearables and tracking applications
 - Low current consumption that can provide up to a 10 year battery
 - Embbeded eSIM included in certification
- Multi-band (low and mid-band) support that covers approximately the globe
- Dual mode (LTE Cat M1/NB-IoT)
- Provides options within a single modem that allows end customers flexibility of switching between modes globally, especially for those carriers planning to support both modes
- Secure boot architecture and a robust hardware -based security framework

Specifications

Part Number	LBAD0XX1SC
Connectivity	3GPP Release 13/Optimized for LTE Class 3 output power (+23 dBm)
Universal LTE (LB & MB)	Low-band: B5/B8/B12/B13/B14/B17/B18/B19/B20/B26/B28 Mid-band: B1/B2/B3/B4/B25/B39/B66 (AWS)
GNSS	GPS and Glonass
Voltage Input	3.3V
Antenna	Off board multi-band antenna
Dimension	11.1 mm x 11.4 mm x 1.4mm
Operating Temp	-40° to 85° C

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