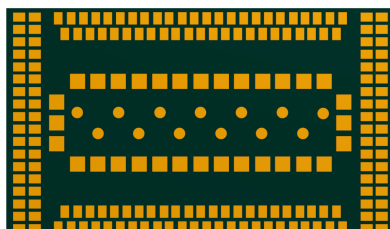


C10GS



Cavli
C Series

Technical Document



Overview

C10GS is a LTE CAT 1/4 compatible Smart Module with integrated eSIM (MMF2), supporting global bands. It also features an optional high precision integrated GNSS which provides multi constellation support that ensures quick location fix with 1m accuracy.

C10GS is perfect for applications such as Asset Tracking, Vehicular Telemetry System, Portable PoS Machines, etc. that require medium to high data throughput with locational information and global deployments. The Smart Module is powered by an ARM-11 processor running at 400MHz with Linux-based OpenSDK support for application level coding for specific use cases without requiring an external host MCU.

ARM-11 processor: 400MHz clock:32KB I-Cache:32 KB D-Cache:16KB Data TCM for each CPU (Dual-Core CPU)

LTE Fast Search Mode

256 MB Flash + 128 MB RAM

Linux 5.4 Based OpenSDK Support

Multi Constellation Support for GNSS with 132 tracking channels & AGPS

High Module Reliability due to presence of Watchdog IC and Auto Recovery features

Key Highlights



Integrated
Hubble eSIM



Powered by
Cavli Hubble



Global



OpenSDK
Support

GNSS

GNSS Support

Basic Module Information

Application Processor Specification

ARM-11 processor:	GDM7243S 400MHz Dual-Core
Flash:	256MB
RAM:	128MB

Supported Bands

FDD: B1/ B2/ B3/ B4/ B5/B6/ B8/ B10/B18/ B19/
B20/B25/ B26/ B66

TDD: B40

Communication Protocols

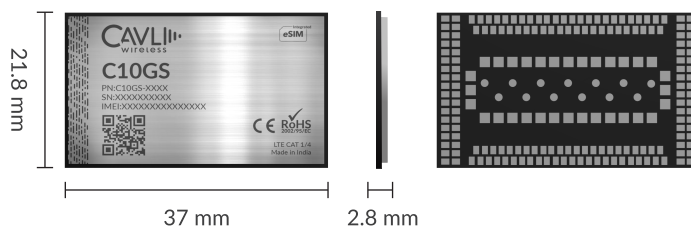
HTTP(S), TCP(S), UDP, MQTT(S),
FTP(S), SNMP, PPP, WS(S)

Temperature Range

Normal working temperature: -30°C to +85°C

Interfaces

1.8V/3V SIM Interface
1xUSB2.0, 4xUART* (1-AT, 1-DM, 1-User, 1-GNSS),
1xSPI, 1xI2C, 1xUSIM, 13xGPIO, 1xSDH, 1xPCM,
2xANT*, 1xGMII/RGMII, 1xJTAG



Packaging

LGA Package - Dimension: 37 x 21.8 x 2.8 mm,

mPCIe - Dimension: 50.9 x 30 x 3.78 mm,

Network Speed (Peak values)

LTE CAT 1: 5Mbps (UL), 10Mbps (DL)

LTE CAT 4: 50Mbps (UL), 150Mbps (DL)

Constellation Coverage

GPS /GLONASS /BeiDou /QZSS /Galileo

Power Characteristics

Voltage Range: 3.6V to 4.5V

Typical Voltage: 3.8V

TxD Idle: 210 mA

DRx Mode: 17 mA

Deep Sleep Mode: 1.078 mA

Product Variants

Variants	CAT 1	CAT 4	GNSS	OpenSDK	Internal eSIM
C10GS-S001N	✓	✗	✗	✓	✗
C10GS-S001H	✓	✗	✗	✓	✓
C10GS-GNA1N	✓	✗	✓	✓	✗
C10GS-GNA1H	✓	✗	✓	✓	✓
C10GS-S004N	✗	✓	✗	✓	✗
C10GS-S004H	✗	✓	✗	✓	✓
C10GS-GNA4N	✗	✓	✓	✓	✗
C10GS-GNA4H	✗	✓	✓	✓	✓

* Optional