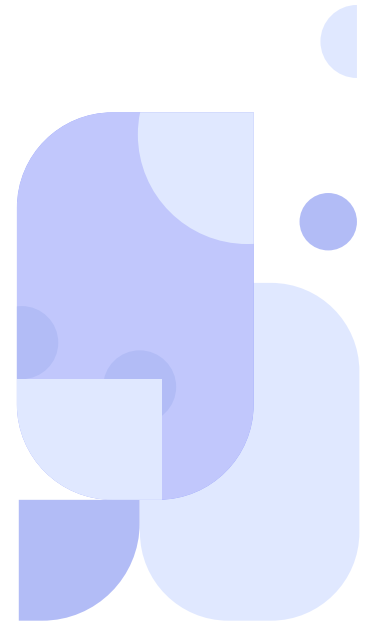
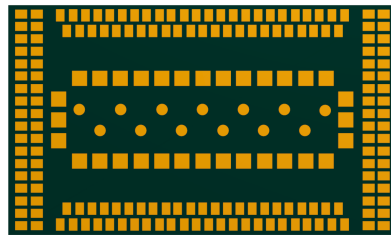


C10GS



Cavli
C Series

Technical Document



Overview

C10GS is an LTE Cat 1/ Cat 4 module designed for IoT and M2M applications, adhering to 3GPP release 9 standards. It offers compatibility with Cavli Hubble Device and connectivity management platform, enabling global connectivity through an optional integrated eSIM.

Additionally, C10GS supports an optional integrated GNSS, making it suitable for location tracking purposes. With its Linux-based OpenSDK, the module allows for application-level coding specific to various use cases, eliminating the need for an external host MCU.

C10GS is an excellent choice for applications requiring medium to high data throughput, location information, and global deployment, such as Asset Tracking, Vehicular Telemetry System and more.

Key Highlights



Integrated
Hubble eSIM



Modem
Intelligence Cloud



Global

GNSS

GNSS Support



Deep Sleep Mode

Basic Module Information

Basic Specification

Processor: ARM-11 processor @ 400 MHz

Flash: 256MB

RAM: 128MB

OS: Linux 3.x / 5.x

Radio Technology

RAT Used: LTE Cat 1 / Cat 4

3GPP Release: 9

LTE Bands

Global: B1/ B2/ B3/ B4/ B5/B6/ B8/

B10/B18/ B19/ B20/ B25/ B26/ B40/ B66

Internet Protocols

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

Interfaces

1x uSIM (1.8 V / 3.0 V)

1xUSB2.0, 4xUART¹ (1-AT, 1-DM, 1-User, 1-GNSS),

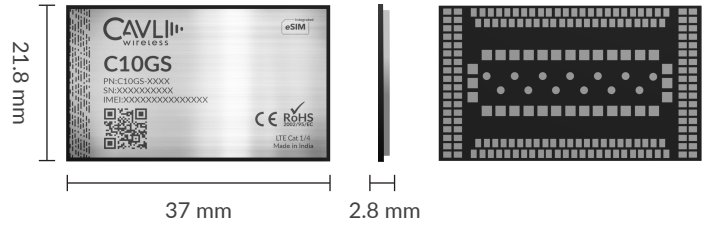
1xSPI, 1xI2C, 1xUSIM, 13xGPIO, 1xSDH, 1xPCM,

2xANT^t, 1xGMII/RGMII, 1xJTAG

Temperature Range

Operating Temperature: -20 °C to 75 °C

Extended Operating temp: -30 °C to 85 °C



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 /Galileo & SBAS + QZSS

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

Applicable Region(s)

Global

Product Variants

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

¹ Optional

² Needs SDK

³ In Progress

⁴ Planned