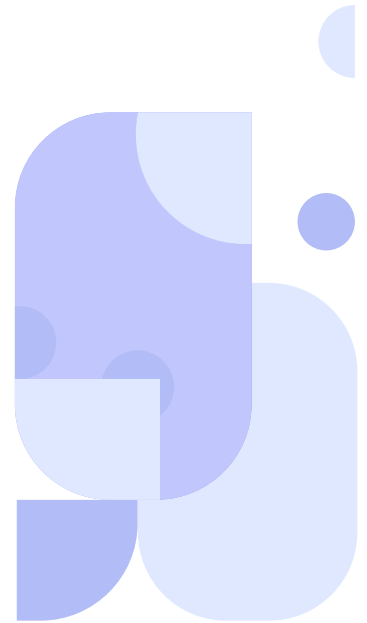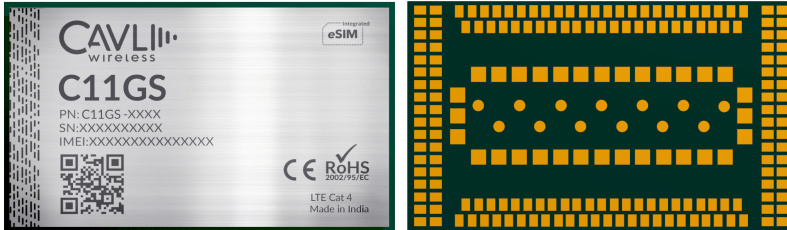# C11GS

Cavli C Series

Technical Document

Overview

C11GS is an LTE Cat 4 module designed for IoT and M2M applications, adhering to 3GPP Release 9 standards along with the 450 MHz Alliance standards. It offers compatibility with Cavli Hubble Device and connectivity management platform, enabling global connectivity through an optional integrated eSIM.

Additionally, C11GS supports an optional integrated GNSS, making it suitable for location tracking purposes. With its Linux-based SDK, the module allows for application-level coding specific to various use cases, eliminating the need for an external host MCU.

C11GS is an excellent choice for applications requiring medium to high data throughput, location information, and global deployment, such as Asset Tracking, Vehicular Telemetry System, Smart Utility, and more.

Key Highlights

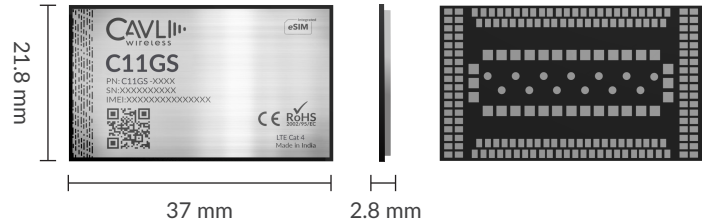| Integrated Hubble eSIM	Modem Intelligence Cloud	Europe	GNSS Support	Deep Sleep Mode	MHz

Basic Module Information

Basic Specification

Processor: ARM-11 processor @ 400 MHz

Flash:	256MB
RAM:	128MB
OS:	Linux 3.x / 5.x

21.8 mm

37 mm   2.8 mm

Radio Technology

RAT Used:	LTE Cat 4
3GPP Release:	9

LTE Bands

B1/ B3/ B5/B7/ B8/ B20/B28/ B31/ B72 /B73

Internet Protocols

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

Interfaces

UART	x4
USB 2.0	x1
SDIO 3.0	x1
USIM (DSSS) (1.8V / 3.0 V)	x1
JTAG	x1
Network Status Indicator	x1
Module Status Indicator	x1
RGMII	x1
PCM [2]	x1
I2C [2]	x1
SPI [2]	x1
GPIO [2]	x13
Main ANT	x1
Diversity ANT	x1
GNSS ANT [1]	x1

Temperature Range

Operating Temperature: -30 °C to 75 °C[4]

Extended Operating temp: -40 °C to 85 °C[4]

Packaging

LGA - 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 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

[1] Optional   [2] Needs SDK   [3] In Progress   [4] Planned

This document is a pre-release version. Some technical specifications may be subject to change.