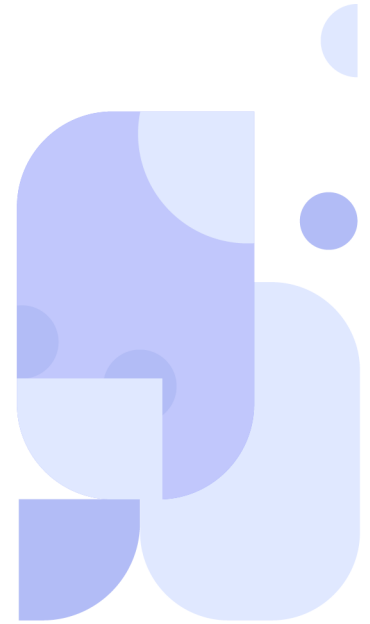
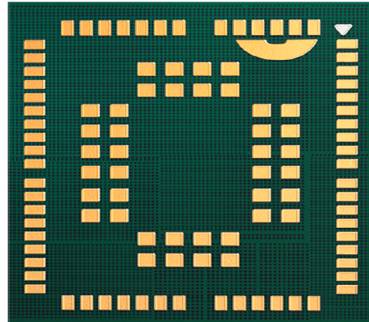


C41QS



Cavli
C Series



Overview

C41QS is an Cat NB2 Module compatible with 3GPP E-UTRA Release 14 standards supporting globally available bands while consuming very low power. The module comes in a compact form-factor of 17.7mm x 15.8mm x 2.0mm ideal for size constrained applications. The module supports an optional integrated GNSS along with eSIM for seamless location tracking and enabling Global Connectivity and Modem Management features powered by Cavli Hubble platform.

C41QS is ideal for applications that demand low space, low power consumption and aggressive pricing. It is suited for applications such as smart metering, smart parking, sensor and monitoring applications etc.

Key Highlights



Cat NB2



Ultra-Low
Power Consumption



LGA Package



Compact Form
Factor Design



Integrated GNSS



Cavli Hubble
Platform

Basic Module Information

Basic Specification

Processor:	ARM Cortex M3 @ 204MHz clock
Flash:	4 MB
RAM:	272 KB
OS:	Free RTOS

Radio Technology

RAT Used:	Cat NB2
3GPP Release:	14

LTE Bands

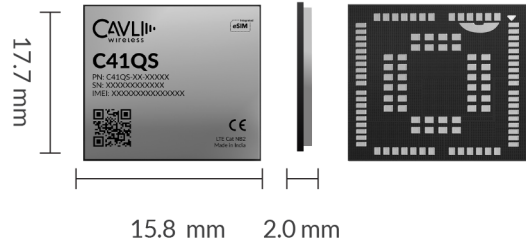
LTE:	B1/B2/B3/B4/B5/B8/B12/B13/ B14/B17/B18/B19/B20/B25/B26/ B28/B66/B70/B85
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Internet Protocols

HTTP(S), TCP(S), UDP, MQTT(S)

Interfaces

UART	x3
GNSS UART ¹	x1
USIM (DSSS) (1.8V / 3.0V)	x1
SWD	x1
Network Status Indicator	x1
Power ON Status Indicator	x1
SPI ²	x1
GPIO ²	x1
ADC	x1
I2C	x1
Main ANT	x1
GNSS ANT ¹	x1



Packaging

Form Factor:	LGA
Dimensions:	17.7 x 15.8 x 2.0 mm
Pin Count:	58 Pins
Weight:	1.83g

Network Speed (Peak Values)

Cat NB2:	DL 127Kbps & UL 158.5Kbps
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Constellation Coverage

GPS / BeiDou

Hot Start / Warm Start / Cold Start

Power Characteristics

Voltage Range:	3.0V to 4.5V
Typical Voltage:	3.3 V
TxD Peak	155 mA
TxD Idle	8 mA
GNSS (Fix)	56 mA

Applicable Region

Global

Temperature Range

Operating Temperature: -30°C to +85°C

¹ Optional

² Needs SDK. Not available currently

³ In Progress

This document is a pre-release version. Some of the technical specifications are subjected to change.