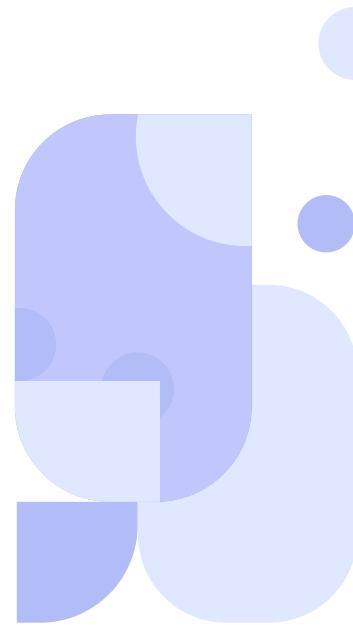


CQS315



Overview

The Cavli CQS315 is a versatile LTE Cat 4 module with 2G fallback, designed to meet a broad range of IoT application needs. Equipped with an Octa-core Kryo 260 CPU and an Adreno 610 GPU, this module offers enhanced graphics performance, efficient power usage, and supports high-quality imaging.

With multiple SKUs available, each variant includes multi-constellation GNSS support, including GPS, BDS, GLONASS, Galileo, QZSS, and SBAS. The CQS315 module also provides robust connectivity options, including USB 3.1/2.0, Bluetooth 5.0, and dual-band Wi-Fi. It also supports the MIPI DSI interface, which is capable of full HD resolution, making it an ideal choice for applications such as two-wheelers, e-mobility, telematics, fleet management, and POS terminals.

An optional integrated eSIM is available, providing global connectivity managed through the Cavli Hubble platform. Regional variants are offered to support specific market needs, including CQS315-EAJ for Eurasia and Japan, CQS315-AN for Australia and New Zealand, CQS315-NA for North America, CQS315-IN for India, and a Worldwide model for global deployments.

Key Highlights

Qualcomm Octa-core Kryo 260 64-bit CPU	Qualcomm Adreno™ 610 GPU	LTE Cat 4	2G Fallback	LCC+LGA Package	GPS/BDS/GLONASS/Galileo/QZSS/SBAS	Superior Multimedia Functions
WiFi IEEE 802.11 a/b/g/n/ac	Bluetooth 5.0 (BR/EDR + BLE)	Integrated eSIM	Hubble Connectivity Platform	Integrated MIPI-DSI Interface	Android OS	Linux OS



Basic Module Information

Basic Specification

Processor:	Qualcomm Octa-core Kyro 260 64-bit CPU
Inbuilt GPU:	Qualcomm Adreno 610 64-bit GPU @ 1050MHz
Flash:	4 ¹ /8 ¹ /16/32/64 GB eMMC
RAM:	1 ¹ /2/3/4 LPDDR4X
OS:	Android / Linux

Radio Technology

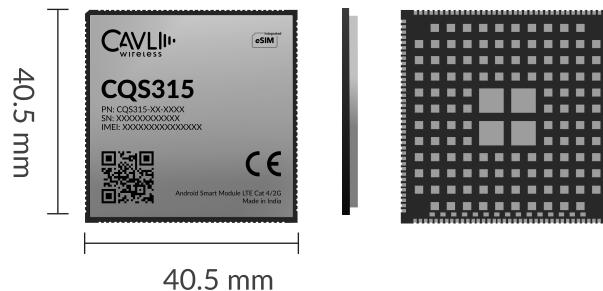
RAT Used:	LTE Cat 4 with 2G
3GPP Release:	10
Secondary Wireless Protocols:	WLAN and BLE

LTE Bands

WW:	1/2/3/4/5/7/8/12/13/18/19/ 20/25/26/28/40/41/66/71
EAJ:	1/3/5/7/8/18/19/20/26/28/ 38/40/41
AN:	1/3/5/8/18/19/26/28
IN:	1/3/5/8/40/41
NA:	2/4/5/7/8/12/13/17/25/66/71

Interfaces

MIPI_CSI (4-bit)	x3
MIPI_DSI (4-bit)	x1
Analog Audio Out	x3
USB (2.0/3.1)	x1
USIM	x1
UART	x7
Main ANT	x1
DIV ANT	x1
GNSS ANT	x1
Wi-Fi & BLE ANT	x1
GPIO	x71*
SDC (4 bit)	x1
ADC	x1*
I2C	x4*
CCI I2C	x2
Capacitive Touch Panel (I2C)	x1
I3C (Sensor for Accel + Gyro)	x2*
SPI	x5*
MIC (Analog)	x3
DMIC	x2



Packaging

Form Factor:	LCC+LGA
Dimensions:	40.5 x 40.5 x TBD (mm scale)

GSM Bands

900 / 1800 MHz

WLAN and BLE Specifications

WLAN Frequencies:	2.4GHz & 5GHz
WLAN Standard:	802.11a/b/g/n/ac
BLE Specifications:	2.1 EDR/3.0 HS/4.2 LE/5.0 LE
BLE Standard:	BLE 5.0

Network Speed (Peak Values)

Cat 4:	DL 150Mbps & UL 50 Mbps
GSM:	DL 236.8Kbps & UL 236.8 Kbps

Constellation Coverage

In-built Qualcomm Location Suite with support for
GPS/BDS/GLONASS/Galileo/QZSS/SBAS

Temperature Range

Operating Temperature:	TBD
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Power Characteristics

Voltage Range:	3.5 V to 4.4 V
Typical Voltage:	3.8 V

Applicable Region

WW / EAJ / AN / IN / NA

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

*Linux Only *Maximum Number Possible