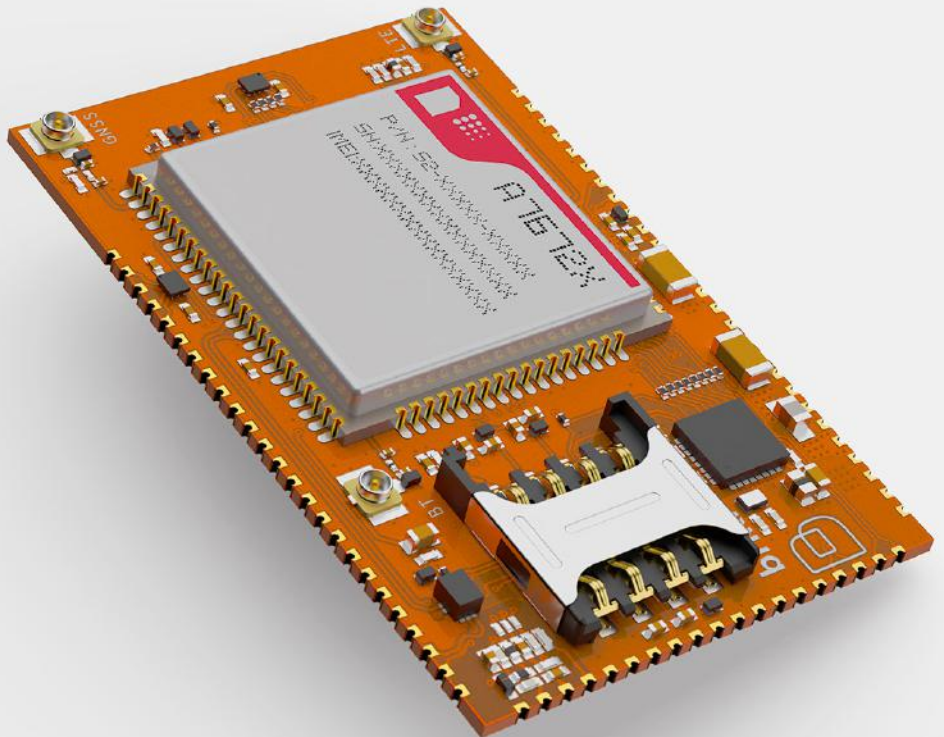# Briki MBC-CEL

4G LTE + GNSS device

OVERVIEW

The MBC-CEL addresses all those applications that require a single independent, powerful and compact LTE module with integrated GPS functionality.

From prototype to product in a simple and fast way

(4G) LTE CAT1 module + GNSS positioning functionality

2-Brick form factor with integrated SIM socket

Several interfaces available (Camera, LCD, UART, SPI, Audio, USB, analog/ digital GPIOs)

LTE and GNSS antennas available on U.FL connectors

Embedded MCU useful to control the LTE/GNSS chip

Debug interfaces exposed for the Cortex MCU

FEATURES

Technical information

LTE Cat1 module supporting wireless communication modes of LTE-FDD/GSM/GPRS/EDGE	Product size: 51 x 32 mm
TCP/IP/IPV4/IPV6/Multi-PDP/FTP/HTTP/DNS/MQTT/MQTTS	Format: 2 brick
LTE Cat1 Uplink up to 5Mbps, Downlink up to 10Mbps	
Companion MCU: ATSAMD21E15B ARM® Cortex®-M0+ running at 48 MHz	
GNSS positioning system	
Mini SIM socket on-board	

This product is sold by request as products for industrial use. The module is available in different versions by hardware configuration and functionalities. Depending on your design, you may prefer one version over the other. Contact us to find the best suited for you!

DEVELOPMENT TOOLS

Firmware and software tools

Meteca offers a complete firmware solution for SAMD21 present on the board, written in C/C++ and fully compatible with Arduino for a fast and simple prototyping process.

The MBC-CEL is programmable using the Arduino IDE or a more professional IDE like Visual Studio Code. The latter, in particular, allows customers to program and debug the SAMD21 using different programming languages and/or SDK like Microchip's ASF or python, using several debugging devices like ATMEL ICE (link) and/or Segger J-Link (link).

The software suite offered includes a set of tools specifically designed to allow firmware update procedure (via USB for both the MCUs).