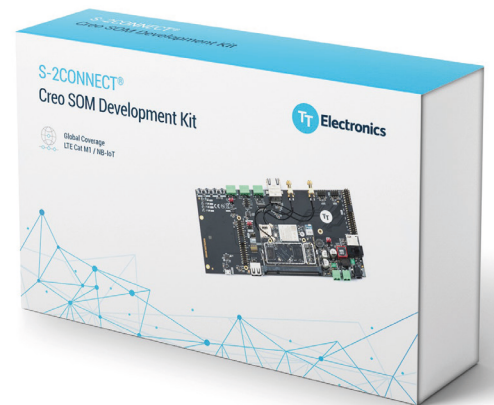




S-2CONNECT®

CREO SOM DEVELOPMENT KIT



REDUCE R&D RISK ACCELERATE TIME TO MARKET



S-2CONNECT® Creo SOM Development Kit

LTE Cat M1 / NB-IoT

The S-2CONNECT Creo SOM concept is designed for engineers, programmers, and developers who are looking to:

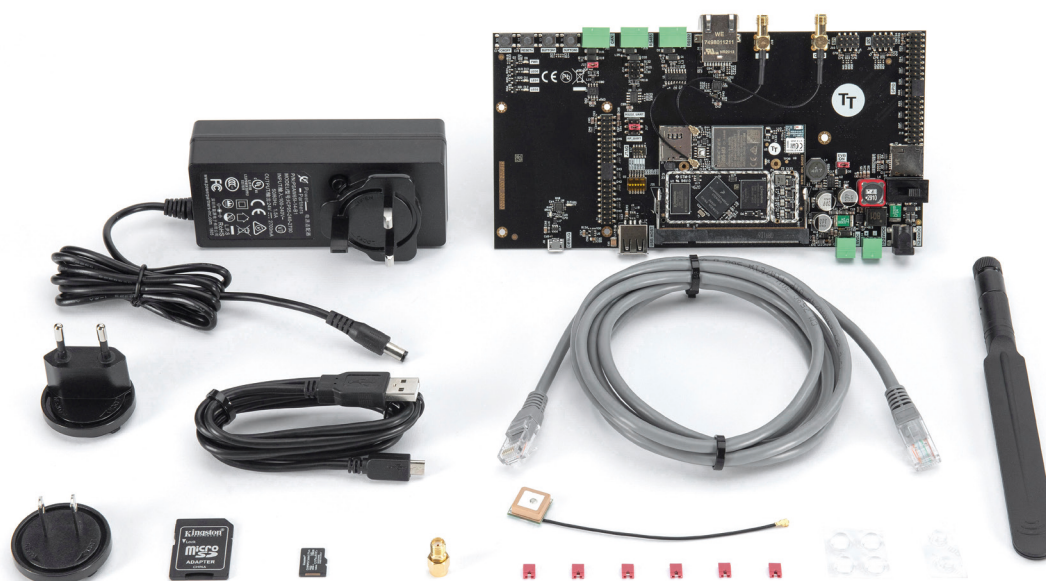
- ✔ **Develop and test applications for cellular solutions including LTE Cat M1 / NB-IoT**
- ✔ **Implement IoT applications using a pre-certified SOM board.**
- ✔ **Develop a Proof of Concept, quickly.**

S-2CONNECT Creo Development Kit includes an Evaluation Board (EVB) and accessories, providing a comprehensive tool for developers of application code for S-2CONNECT Creo SOM.

KIT CONTENTS

- S-2CONNECT Creo SOM
- S-2CONNECT Creo Evaluation Board (EVB)
- Power Supply with interchangeable plugs
- USB cable
- Ethernet cable
- LTE antenna
- GNSS antenna
- SD card
- 6 Jumpers for 2.54 mm headers
- Quick start manual
- 4 month SIM subscription

The Software Development Kit (SDK) can be accessed at www.s-2connect.com/creo/sdk and the full user and integration manuals for both S-2CONNECT Creo SOM and EVB can be found at www.s-2connect.com



S-2CONNECT® Creo SOM Development Kit

LTE Cat M1 / NB-IoT

FEATURES

- ✓ Cat M1/NB2 + GSM/EGPRS enables a global cellular coverage, allowing the device to relay data through diverse interfaces available on the SOM. The radio module is also equipped with a GNSS receiver for positioning.
- ✓ 2G fall-back
- ✓ Pre-certified for EU, UK, US and Canada
- ✓ Highly flexible SOM with advanced features to drive powerful applications.
- ✓ ARM Cortex-A7 processor running embedded Linux
- ✓ OS supports a wide range of interfaces for connecting peripheral such as Bluetooth, GNSS and serial interfaces.
- ✓ 256MB RAM
- ✓ Flash memory 4GB Flash memory.
- ✓ Proven edge connector - 200-pin SODIMM.
- ✓ Scalable platform.
- ✓ TPM (Trusted Platform Module) integrated security crypto processor for enhanced security.
- ✓ Soldered eSIM + 3FF (micro SIM-card holder). Optional cellular connectivity subscription plans available.
- ✓ Integrated Sensors - Accelerometer, Gyroscope, Magnetometer.
- ✓ S-2CONNECT Creo SOM software development kit available for developers.



CONNECTIVITY

LTE Cat M1 / NB-IoT
Our connectivity services include 2G/4G cellular connectivity for global coverage. Provided in association with Telenor Connexion.



CLOUD SERVICES

Create your own application code and chose which Cloud Service you prefer to connect to.



DEVICE MANAGEMENT

Optional Portal and user interface to manage device configuration, provisioning and monitoring.



APPLICATION READY



Asset tracking



Building automation



Energy



Environmental monitoring



Healthcare



Industrial automation



Instrumentation

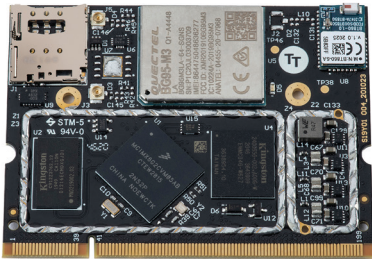


Agriculture



TECHNICAL SPECIFICATIONS

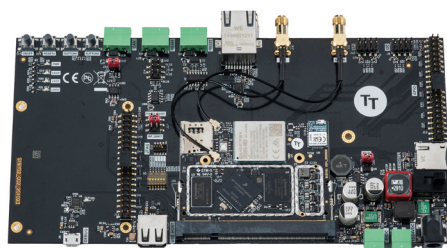
S-2CONNECT® Creo SOM System-on-Module



Communication	Cellular Modem Bluetooth GNSS	Quectel BG95-M3 BLE 5.0 Positioning
Frequency Bands	LTE 2G GNSS Bluetooth	1, 2, 3, 4, 5, 8, 12, 13, 18, 19, 20, 25, 26, 27, 28, 66, 71, 85 2, 3, 5, 8 GPS/GLONASS/Galileo/QZSS 2.4 GHz
Electrical Properties	Processor Memory RAM eSIM Sensors Input voltage	NXP i.MX6UL Cortex-A7 eMMC 4GB Flash DDR3L 256MB MFF2 Accelerometer, Gyroscope, Magnetometer 5V and 3.3V DC
Interface/Connectors	Connector Antenna SIM-card	USB Micro SO-DIMM edge-connector U.FL connectors Soldered eSIM + 3FF (micro SIM-card holder)
Sensors Accuracy	Temperature Humidity Accelerometer	-30°C to +85°C (+/-0.3°C) 0 -100% Rh (+/-2% Rh) +/-2g (+/-2mg/LSB)
Mechanical Properties	Outer Dimensions Weight Operating Temperature	67.6 mm x 50.0 mm x 5.0 mm 18g -30°C to +60°C
Software Properties	Firmware protocols SDK	Linux Available to download via the website

TECHNICAL SPECIFICATIONS

S-2CONNECT® Creo Evaluation Board (EVB)



Communication Interfaces	USB	USB-A, USB Micro B
	RS485	3 Pin terminal block
	RS232	3 Pin terminal block
	CAN	3 Pin terminal block
	Ethernet	RJ45
	JTAG	Pin header
	Power	Barrel connector, 2 pin terminal block, pin header
	GPIO	Pin header
	SPI	Pin header
	I2C	Pin header
	PWM	Pin header
	ADC	Pin header
	Raspberry Pi hat interface	Pin header
	SD-card	Micro SD card holder
	SOM board interface	200 pin SO-DIMM
	Antenna interface	SMA right angel connectors
MMI	LED	On indication, 3 configurable
	Pushbutton	ONOFF, Reset, 2 configurable
	BOOT	Configurable boot area selector
Mechanical Properties	Outer Dimensions	3200 mm x 100 mm x 21.1 mm
	Weight	135 g
	Operating Temperature	0°C to +45°C
Electrical Properties	Input voltage	5V DC, 12-24V DC

*The Software Development Kit can be accessed at www.s-2connect.com/creo/sdk and the full user and integration manuals for both S-2CONNECT Creo SOM and EVB can be found at www.s-2connect.com

Speed to Connect by TT Electronics brings your IoT programmes to life with connected, scalable solutions that reduce R&D risk and get you to market, fast.

The S-2CONNECT series of IoT solutions by TT Electronics is an end-to-end framework that seamlessly delivers hardware, connectivity, infrastructure and user experience solutions. By streamlining the secure connection of products and systems, users achieve tangible results such as improving efficiencies, eliminating unnecessary maintenance, reducing carbon footprint and enabling data-led business decisions.

OUR PARTNERS

