8 Where to find the lot number ?

There are multiple locations where the Lot number is printed to ensure redundancy of important information in place and to support the traceability and activation process.









Label 1



Label 2

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OPTIGA™ Connect IoT Quick Start Guide

www.infineon.com/optiga-connect-IoT

Rev 1.3 – March 2024

1 Scope

This guide is intended for customers familiar to cellular technologies and classic SIM pointing out the deltas to be considered to onboard eSIM on their device.

Specific information are provided to facilitate the implantation of OPTIGA™ Connect IoT on the board and the activation on Tata Communications management platform.

2 Download

First of all please download the essential OPTIGA™ Connect IoT OC2321 & OC2322 Datasheet from www.infineon.com/optiga-connect-iot

3 Check modem compliancy

The big difference of an eSIM compared to a classic SIM are its unique remote profile management functionalities. Consequently, those demand also new functionalities and prerequisites from the **cellular modem** to be able to handle an eSIM:

- Support of Network Access Technology: 2G, 3G, LTE/4G, 5G, LTE-M*, NB-IOT*
- Support of Protocols: TCP and/or UDP, BIP (with minimum command set)
- Network connection control functions:
    - RPLMN; Quality of service; New network selection after SIM/USIM update
- SMS support: Point-to-point MO and MT SMS; SMS cell broadcast; Text and PDU mode
- Additional required modem features:
    - Basic SAT commands
    - AT command AT+ CRSM (restricted SIM access)

For more background info check out chapter 'System integration' in the eSIM Datasheet.

In case of doubt contact your cellular modem manufacturer to ensure eSIM compatibility.

Check the possibility to add missing features by updating the FW to the latest version.

*Note: Some limitations may apply with LTE-M and NB-IOT due to network maturity and implementation options. Contact us for more details.

4 Integrate

Beside the form factor and the extended temperature range there is no difference to a SIM concerning the hardware.

OPTIGA™ Connect IoT OC2321 & OC2322 are delivered in industry standard VQFN8 (MFF2) form-factor.

The implantation requires adding a VQFN8 (MFF2) footprint to your device PCB as documented in chapter 'SMD package' of the Datasheet.

Remark: The electrical connection to a terminal/cellular modem is identical to a SIM.

5 Configure modem

When you are sure that the cellular modem fully supports eSIMs be aware that certain functionalities have to be activated including a Reset to take effect.

Here an example for the SIMCOM SIM7600 modem:

- Setup the APN (Access Point Name) for the PDP context

```
AT+CGDCONT=1,"IP","Terminal"
```

- Enable BIP (Bearer Independent Protocol)

```
AT+QCFG="bip/auth",1
```

- Activate PDP context

```
AT+CGIACT=1
```

The PIN code of the eSIM is disabled by default.
The APN URL is **move.dataxs.mobi**

6 Setup connection

The most generic approach to establish an internet connection with your cellular system is to control the data transmission on the host (MCU). The general connection procedure is

- Configure the modem via AT commands
- Dial into the network with ATD*99#
- Hand over to PPP (Point to Point Protocol) once a connection response is received
    - Link Establishment: Establish a link between the modem and the RAC, where the Link Control Protocol (LCP) is used for negotiation
    - Authentication: If enabled, this phase is used to authenticate both sides to each other via CHAP (Challenge-Handshake Authentication Protocol) or similar
    - A basic connection exists, and it is now handed over to higher levels, usually to establish the IP service via the IPCP (Internet Protocol Control Protocol)

7 Get your eSIMs registered and activated

OPTIGA™ Connect IoT OC2321 & OC2322 eSIMs are delivered in a pre-activated modus. Batch activation process is used to activate multiple eSIMs simultaneously:

- Each batch is identified by its unique 'Lot number' (i.e., ZA012104013) printed on the packing unit as well as on the reel labels (see section 8 for details).
- Registration/Activation request has to be sent by e-mail at move.provisioning@tatacommunications.com with the subject [OC2321/OC2322 Registration /Activation] and containing Company Name and Lot number(s).
- After registration is confirmed, you can activate all your OC2321/OC2322 eSIMs via the platform https://portal.move.tatacommunications.com
- Restart your device(s) to finalize the activation.