

# AN5740

Application note

# ST4SIM with Truphone® connectivity - activation procedure

### Introduction

This application note applies to the ST4SIM-200M, ST4SIM-200S and ST4SIM-200A embedded SIM devices, which are referred to as the ST4SIM in this document.

In order to use one of the ST4SIM products, the device must be activated, and this document describes this process using the Truphone<sup>®</sup> connectivity.

The ST4SIM is activated according to the procedure defined in the following sections.



## **1** General information

The ST4SIM-200A, ST4SIM-200S and ST4SIM-200M devices are based on Arm<sup>®</sup> cores. They provide a secure and interoperable Java<sup>®</sup> Card environment compliant with Java Card specification





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Note: Java is a registered trademark of Oracle and/or its affiliates.

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### 1.1 Glossary

### Table 1. List of terms

Term	Description
eSIM	Embedded SIM
ICCID	Integrated circuit card identifier
IoT	Internet of things
PLMN	Public land mobile network
SIM	Subscriber identity module
URL	Uniform resource locator



#### **Activation procedure** 2

The activation procedure is outlined in a step by step process in the following sections.

#### 2.1 **Retrieve the ICCID**

The first step is to identify and enter the ICCID code. The ICCID is available on the top surface of the package. The ICCID can be also retrieved directly from the device where the ST4SIM is used. To retrieve this information, the user must access the modem through a configured terminal on the relevant COM port. The terminal configuration is shown in the figure below.

Baud rate:	115200	~	ОК
Data:	8 bit	~	Cancel
Parity: 🔓	none	$\sim$	
Stop:	1 bit	$\sim$	Help
Flow control:	none	$\sim$	
Transmit dela	y c/char 0	ms	eclline

#### Figure 1. Terminal configuration example

The ICCID is displayed after entering the AT command at AT&CCID via the terminal console as shown in the figure below.

### Figure 2. Console example screen



In the example above, the ICCID is 894447730000021070



### 2.2 Connect to the Truphone<sup>®</sup> web portal to activate the eSIM profile

The second step is to connect to the Truphone<sup>®</sup> web portal.

The user must connect to the Truphone<sup>®</sup> web portal https://iot.truphone.com (using Chrome<sup>™</sup>) and follow the instructions provided to create a user account if needed. Once logged-in, the user activates the ST4SIMs from the dashboard page as shown in the screen below.



MENU	Dashboard / 🕈 / Home / Dashboard		Report 12 months + Refresh None selected + Now Reset New Widget	
Corganization C	TEURINGERS INT TEURINGERS INT TEURIN	er SIMS Ms or development kits.	Activa	ivate SIMs Ite your IoT SIMs with a Truphone for Things data plan.
C Devices ∴ Rules O Notifications ■ Reports	0 Active SIMs	0 Available SIMs	0.0 KB This Month	0 Outbound SMS This Month
Q Audit Trail	🗎 Latest Events			x - ×
? Support → ♥ Contact	Rules	Configure View All No data found!	Notifications	View All No data found!

Click on "Activate SIMs", and the next page appears inviting the user to enter the ICCID of the eSIM to be activated.

#### Figure 4. SIMs activation screen

ter your activation code to bulk-activate your SIMs. d submit the ICCID from each SIM individually befo	If you haven't got an activation code, enter re continuing.	ICCID 8944 1234 5678 9012 345
ACTIVATION CODE	ICCID	PUK 1234 5678 TRUPHONE 1234 5678 WWW 12245872 WWW 12245872 WWW
ICCID (SERIAL):	0	Service
		1100

The activation of the SIM card may take a few minutes to complete. The SIM card status is shown on the dashboard once it is activated.

For more details, about data plane status and other services that are provided by Truphone<sup>®</sup>, refer to the Truphone<sup>®</sup> IoT web portal referred to above.

Note: The URL quoted in this section belongs to a third party. It is active at document publication, however STMicroelectronics shall not be liable for any change, move or inactivation of the URL or the referenced material.



### 2.3 Perform a network search and registration

The third step is to connect and register to a cellular network.

To force the device to search and register to a cellular network (also known as PLMN selection), the user simply needs to reboot the device.

The first time the board registers on the network may take several minutes to find a network and register. This may take between 15 and 20 minutes. The registration is based on the radio environment, Truphone<sup>®</sup> network availability and the technology of the network being used. To speed up the network search, the user may follow the tips that are provided on Truphone<sup>®</sup> web portal.

## **Revision history**

### Table 2. Document revision history

Date	Version	Changes
22-Oct-2021	1	Initial release.



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