

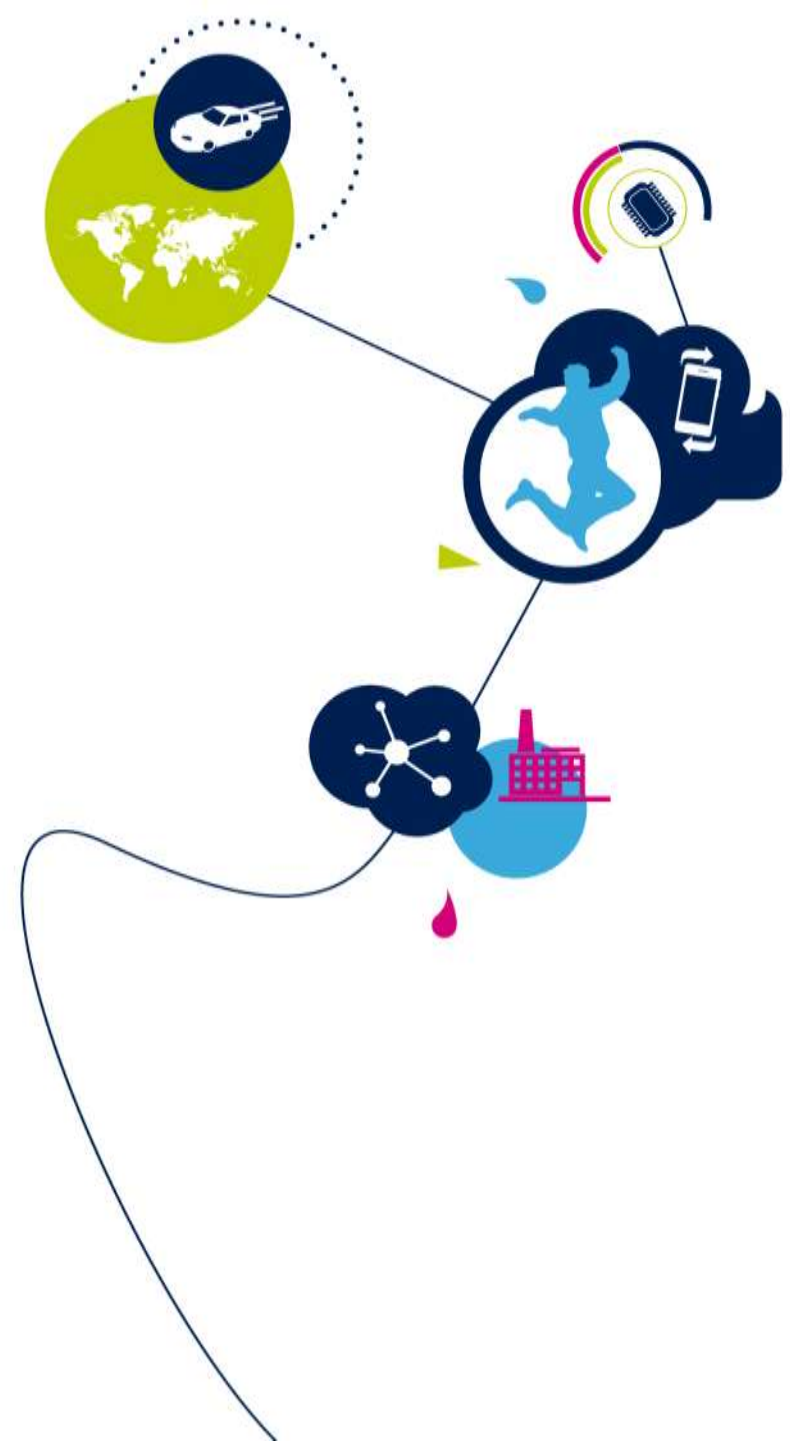


Teseo-Suite and STM32

Easy Teseo III Module management on STM32 board

ADG/Positioning

v. 1.0





Teseo-Suite and STM32

2

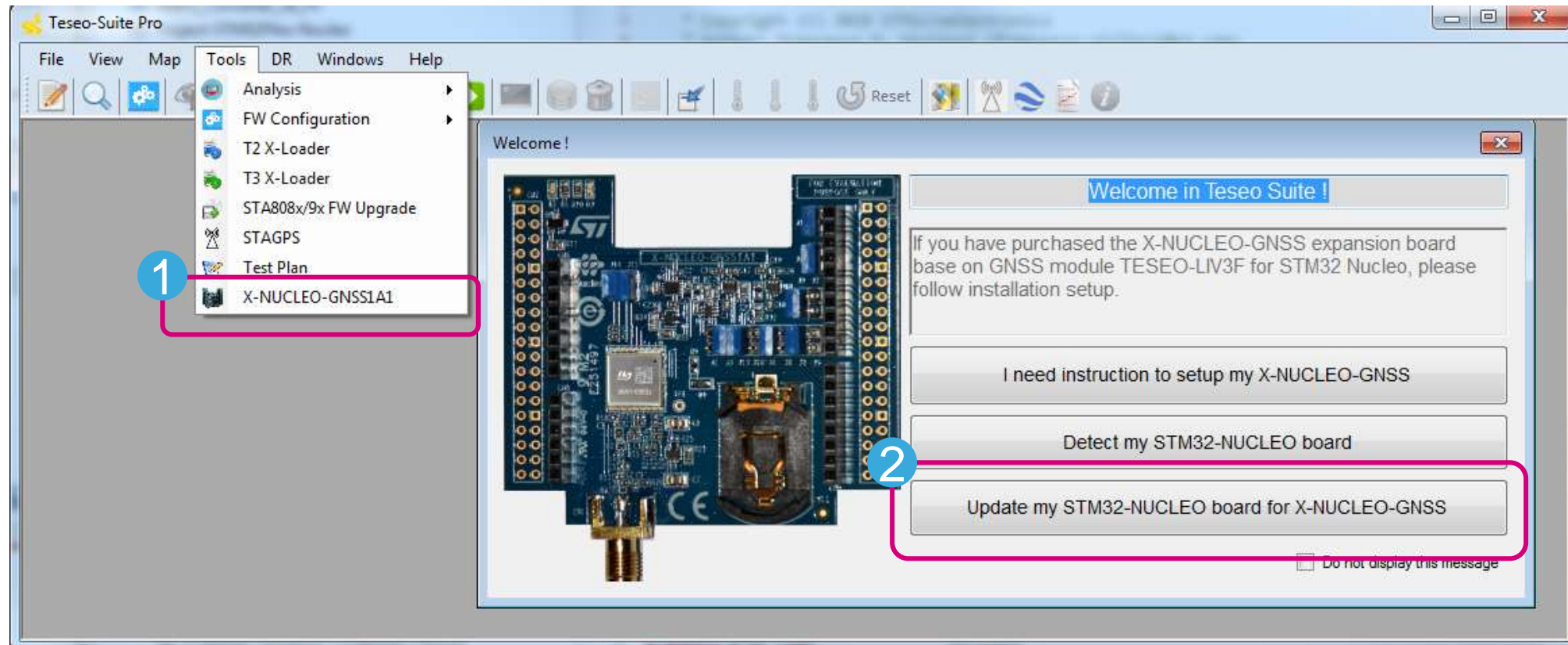
- Since version 5.2.3.3, Teseo-Suite fully manages the Teseo III module family through STM32F4 MCU (NUCLEO-F401RE)
- Teseo-Suite contains STM32F4's firmware to program STM32 device to:
 - Stream NMEA coming from Teseo III module
 - Upgrade the firmware on Teseo III module



X-NUCLEO on Teseo-Suite

3

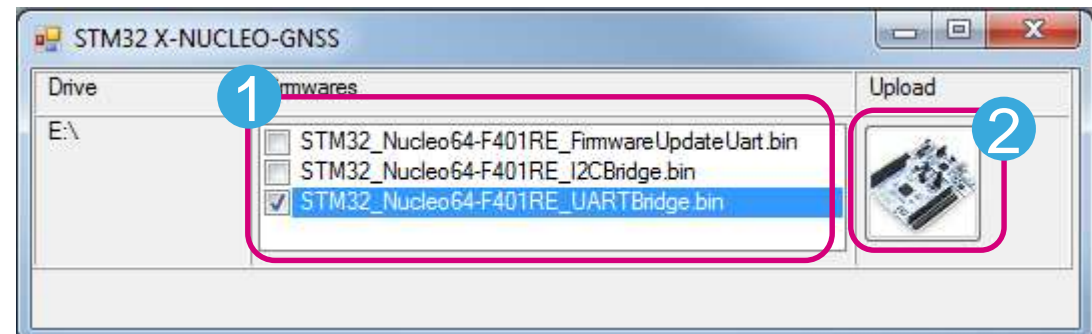
- 1 Select “X-NUCLEO-GNSS1A1”
- 2 Click “Update my STM32-Nucleo board...”





Select STM32 firmware

- 1 Select the required STM32 firmware:
 - **xxx_FirmwareUpdateUART.bin**: to perform a firmware update on Teseo III Module via the STM32.UART port
 - **xxx_I2CBridge.bin**: to perform NMEA streaming coming from Teseo III Module via the STM32.I2C port
 - **xxx_UARTBridge.bin**: to perform NMEA streaming coming from Teseo III Module via the STM32.UART port
- 2 Install the STM32 firmware

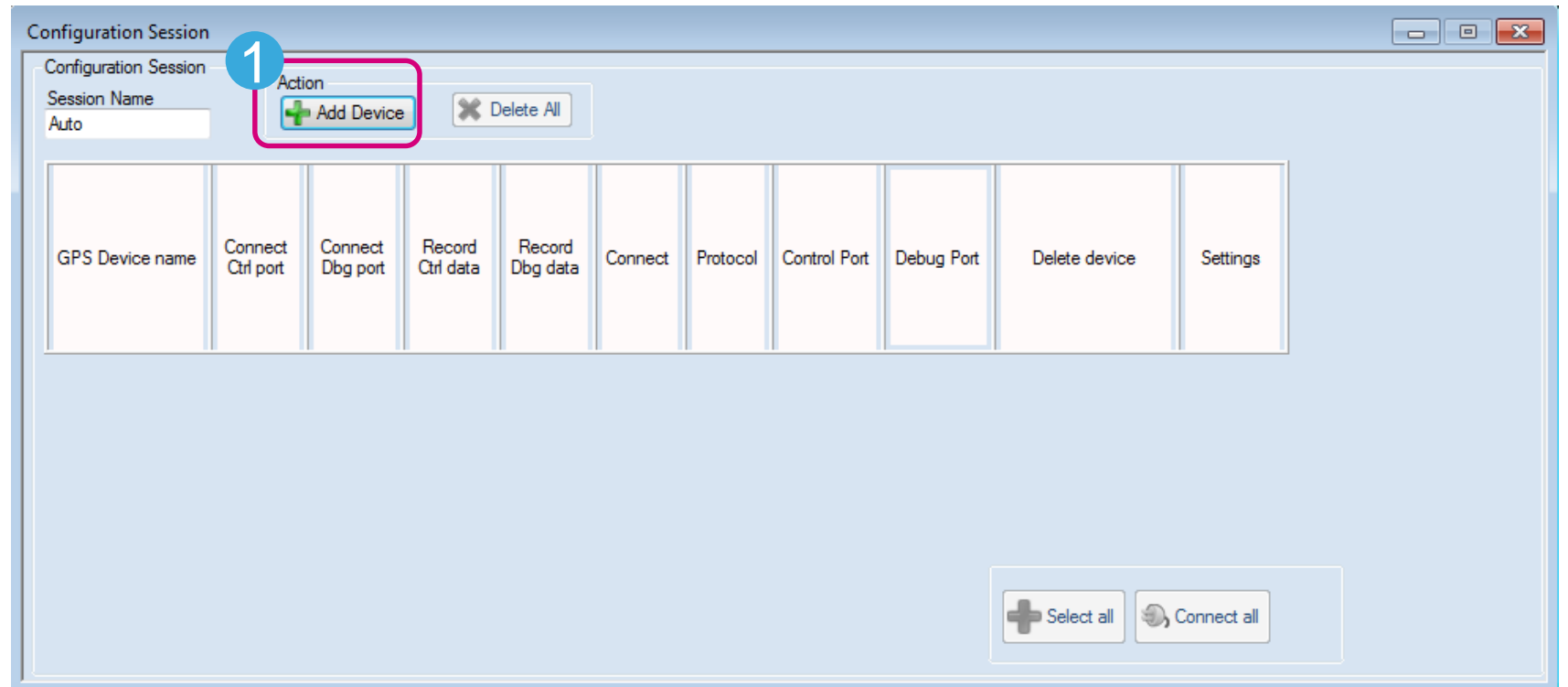




Add a new device

5

- 1 Add a new Device via the STM32-COM port



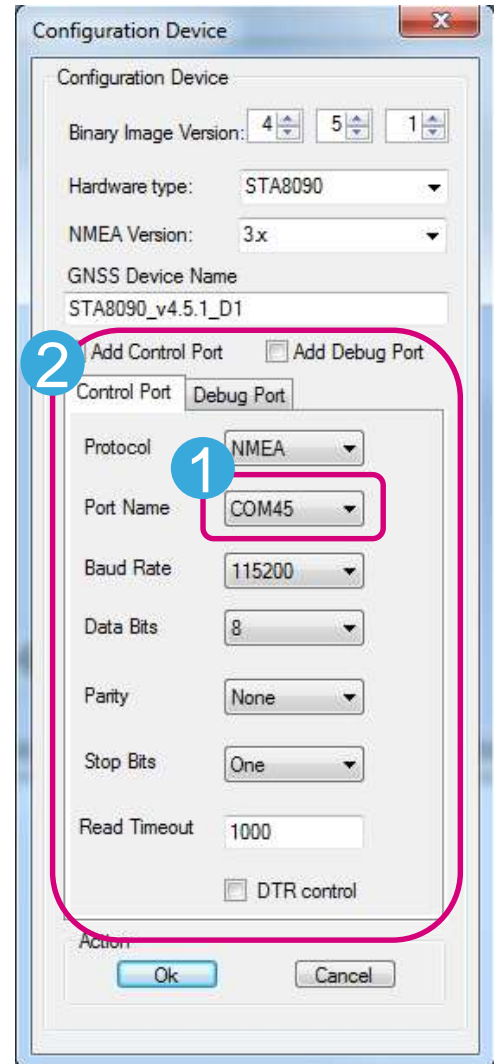


Configure the STM32-COM port

- 1 Open the COM port with the STM32 device
- 2 Configure the COM port
- 3 Use the settings required for the STM32-COM port

3

Baud rate	Data bits	Stop Bits	Parity	Handshake
115200bps	8 Bits	1 Bit	None	None



Now you can use the Nucleo-STM32 + X-NUCLEO-GNSS1A1 like any standard Teseo III Evaluation board



All documents are available on: www.st.com

- **Teseo-LIV3F:** [Webpage](#)
 - Datasheet
 - User Manuals
- **X-Nucleo-GNSS1A1:** [Webpage](#)
 - Datasheet
- **Teseo-Suite:** [Webpage](#)
 - Datasheet
 - Install program

GNSS ICs

ST's Teseo family of Global Navigation Satellite System (GNSS) ICs combines high positioning accuracy and indoor sensitivity with powerful processing capabilities, to simultaneously support multiple global navigation systems (BeiDou, Galileo, GLONASS, GPS, and QZSS).

Teseo II is the latest generation of GNSS ICs, and compared to Teseo III offers reduced power consumption, carrier-phase tracking for higher accuracy, and support for Ready-only library (ROM).

Our product offering includes standalone positioning chips (SAL) and configurable system-on-chips (SoCs). The standalone devices are offered with GNSS firmware embedded, to perform all positioning operations including tracking, acquisition, navigation and data output. The SoCs offer power processing and spare memory to enable customers and partners to easily and efficiently merge their code or specific IP with ST's GNSS library to create a highly optimized platform.

Both solutions come with different package options and memory size, and are compatible with the Teseo-ORAN sensor fusion firmware for dead-reckoning and assisted navigation.

Teseo devices address e-call and telematics systems, personal navigation in PDA's and handheld devices, as well as marine and in-car navigation systems.

Product Specification	Description	Version
000124	PC software to manage, configure and evaluate the performance of Teseo GNSS family	1.0

Product Specification	Description	Version	Size
000131	Teseo III GNSS evaluation board	1.0	101 KB

