FUSB15201 Dual Port USB Type-C/PD Controller Flash Programming Guide
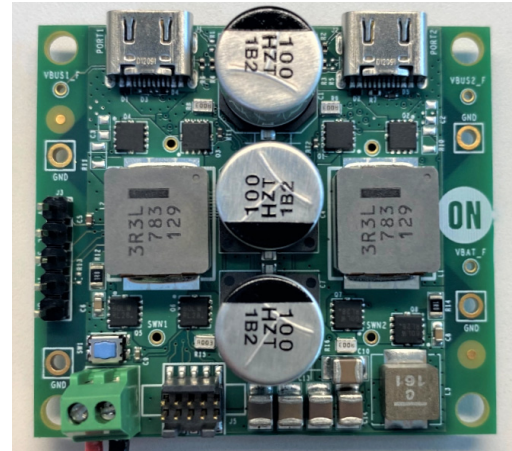
FUSB15201EVBFPG

Introduction

The FUSB15201 EVB along with the firmware binary provided in the release package will allow customer a complete evaluation of the Type−C/PD solution as stand−alone controller.

Description

This document should be used in conjunction with the Start−Up Guide for firmware binary download to the FUSB15201 EVB.

Tool Installation Guide

1. Install SEGGER J−LINK if not yet installed.
   – Download J−Link Software and Documentation Pack from https://www.segger.com/downloads/jlink/JLink_Windows.exe
   – Install the binary to default location
2. Download the JLINK support files from **onsemi** website and copy files under **C:\Program Files (x86)\SEGGER\JLink\Devices\ONSemiconductor\FUSB15200**. If directory **FUSB15200** does not exist create it.

FUSB15200_Flash_Loader.elf   FUSB15200_NVR_Loader.elf

3. Open the file **C:\Program Files (x86)\SEGGER\JLink\JLinkDevices.xml** in text editor and add the following lines as shown below.
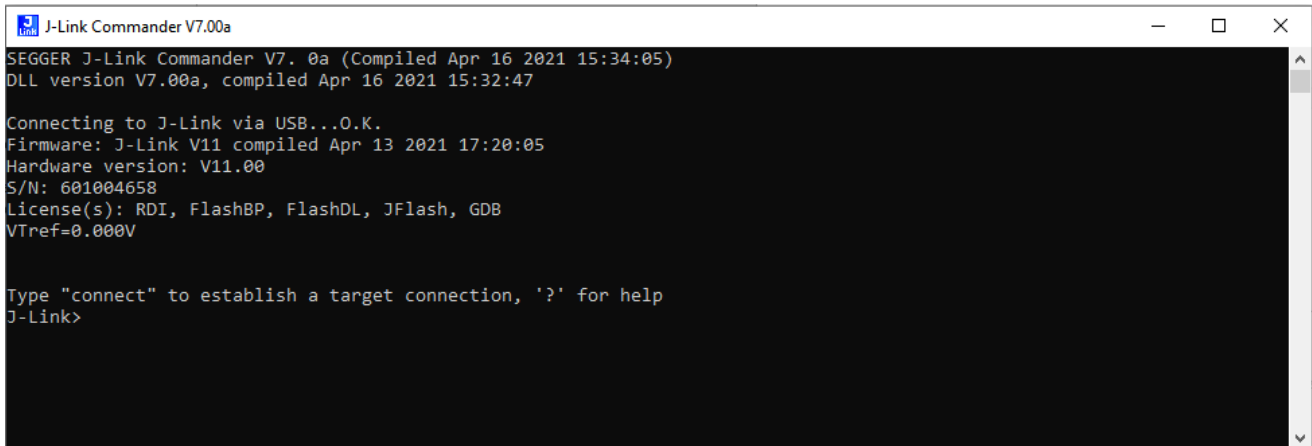

Add below text as a new entry in the XML device XML file.

```
<Device>
  <ChipInfo Vendor="ON Semiconductor" Name="FUSB15200" Core="JLINK_CORE_CORTEX_M0" WorkRAMAddr="0x20000000" WorkRAMSize="0x1800" />
  <FlashBankInfo Name="Main Flash" BaseAddr="0x00000000" MaxSize="0x21000" Loader="Devices/ONSemiconductor/FUSB15200/FUSB15200_Flash_Loader.elf" LoaderType="FLASH_ALGO_TYPE_OPEN" AlwaysPresent="1"/>
  <!-- <FlashBankInfo Name="NVR Flash" BaseAddr="0x08000000" MaxSize="0x800" Loader="Devices/ONSemiconductor/FUSB15200/FUSB15200_NVR_Loader.elf" LoaderType="FLASH_ALGO_TYPE_OPEN"/> -->
</Device>
```

Running JLink Commander
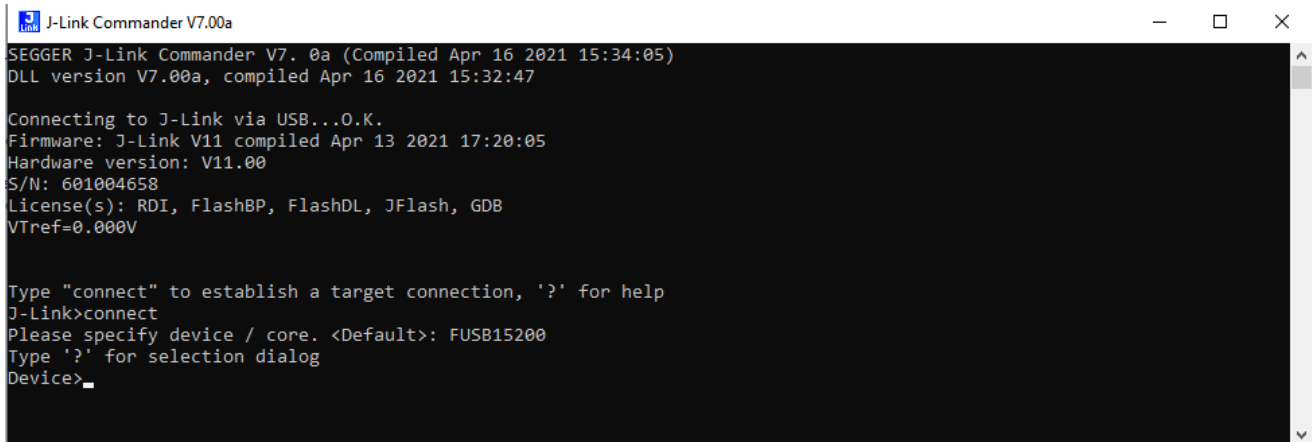
1. Open JLink Commander and from search bar and launch

2. Type connect and hit enter
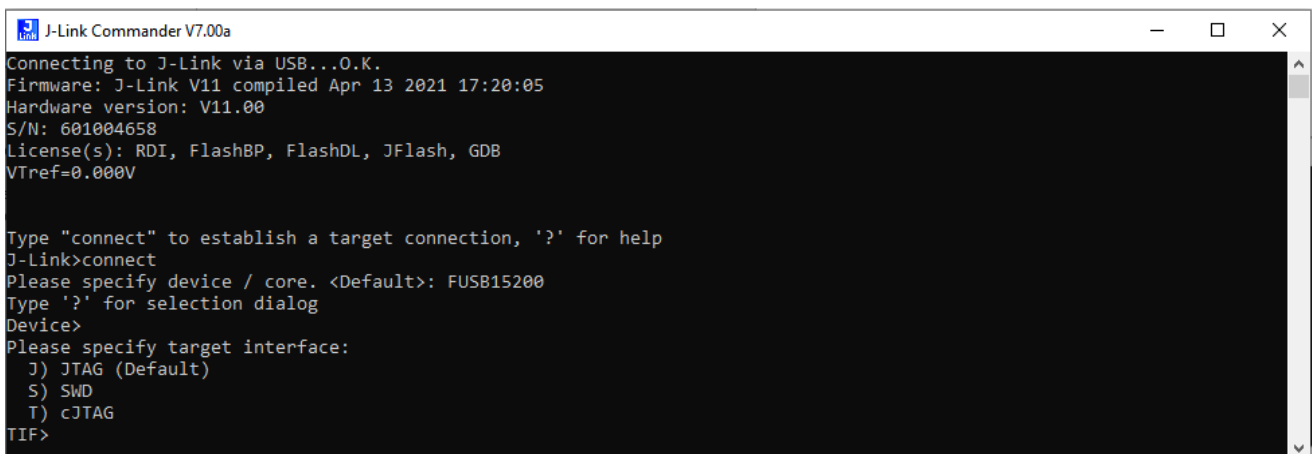
If text entry in Step #3 in Tools installation guide is added correctly, you should see FUSB15200 as device default.

3. Press the Enter key to accept the default of FUSB15200

4. From selection above, type S and press enter for default connection speed @ 4000 KHz.

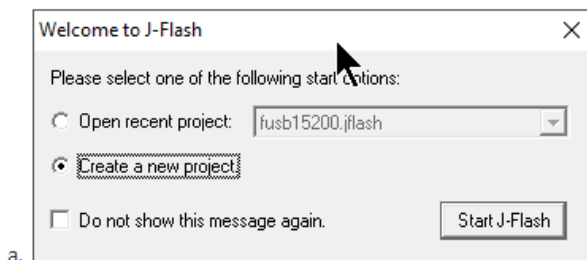Your JLink connection should display like what is shown below.

Running JFlash Utility

1. Run the J–Flash Utility
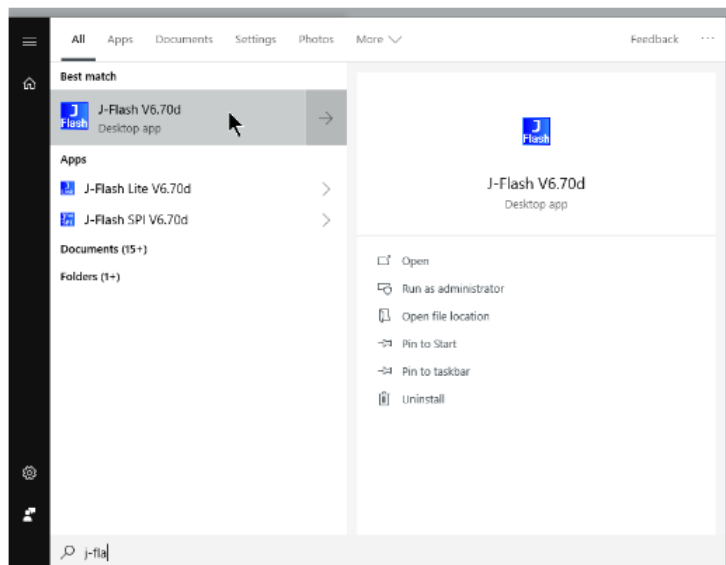
2. Select **Create a new project** if you are running the J–Flash first time.

3. Select the Target Device to use.
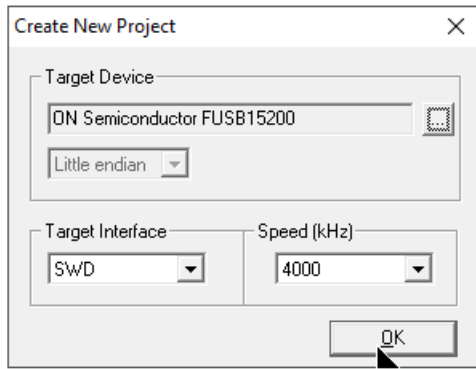
a.

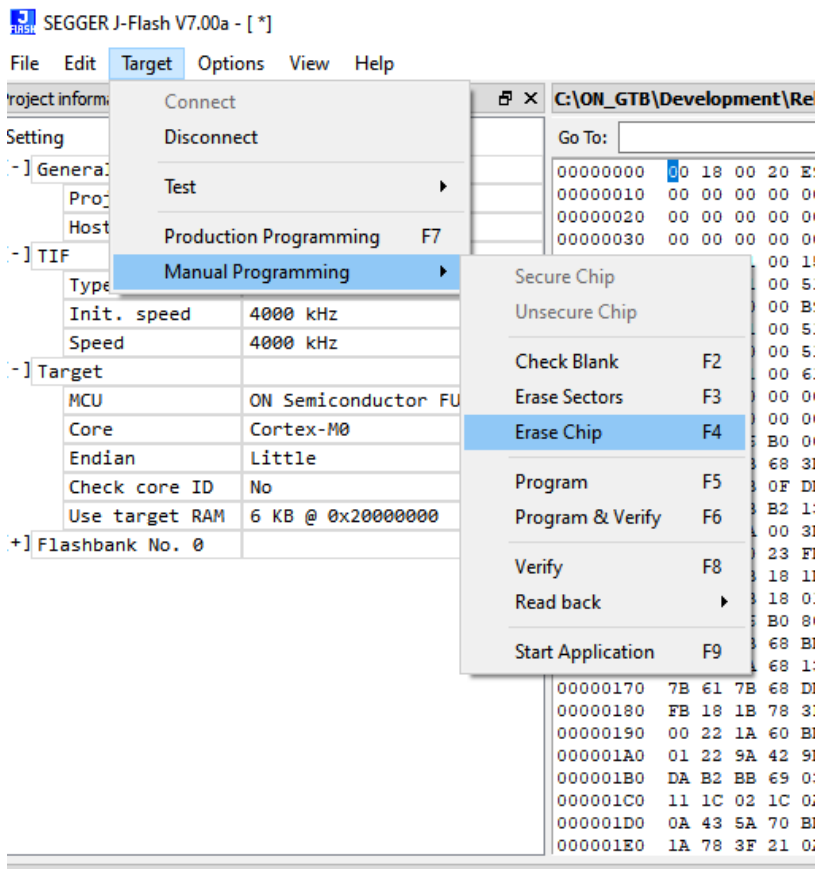4. Open .hex or .bin file to program by selecting **File → Open Data File**
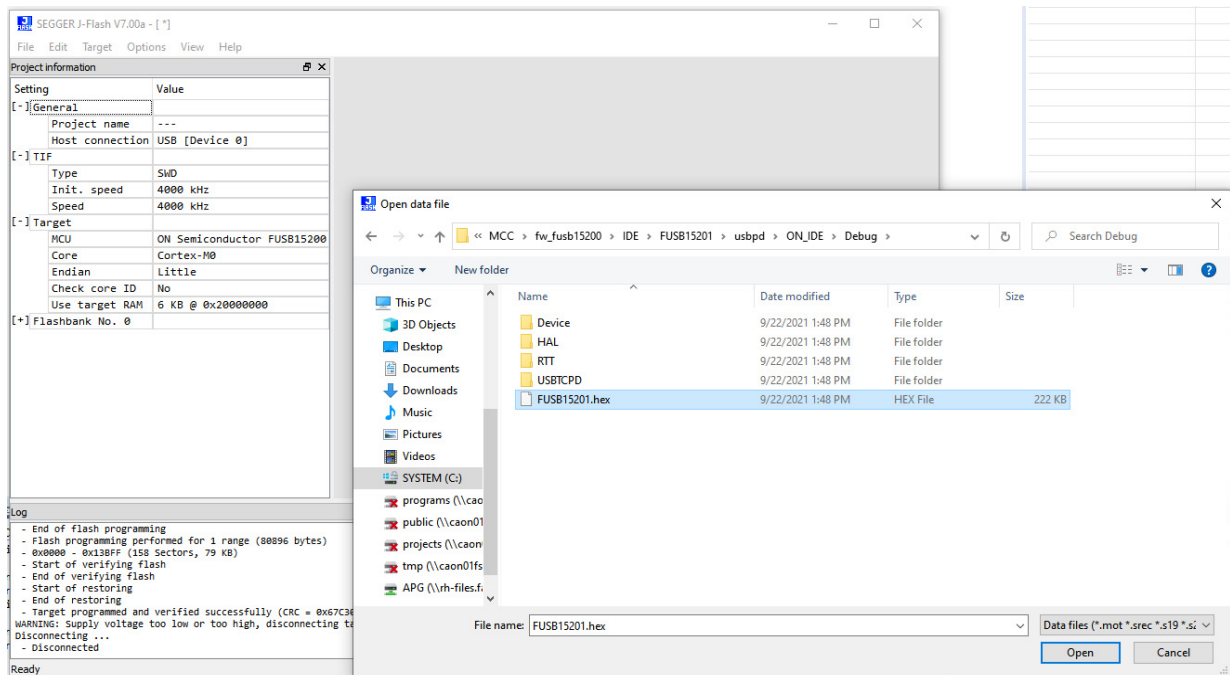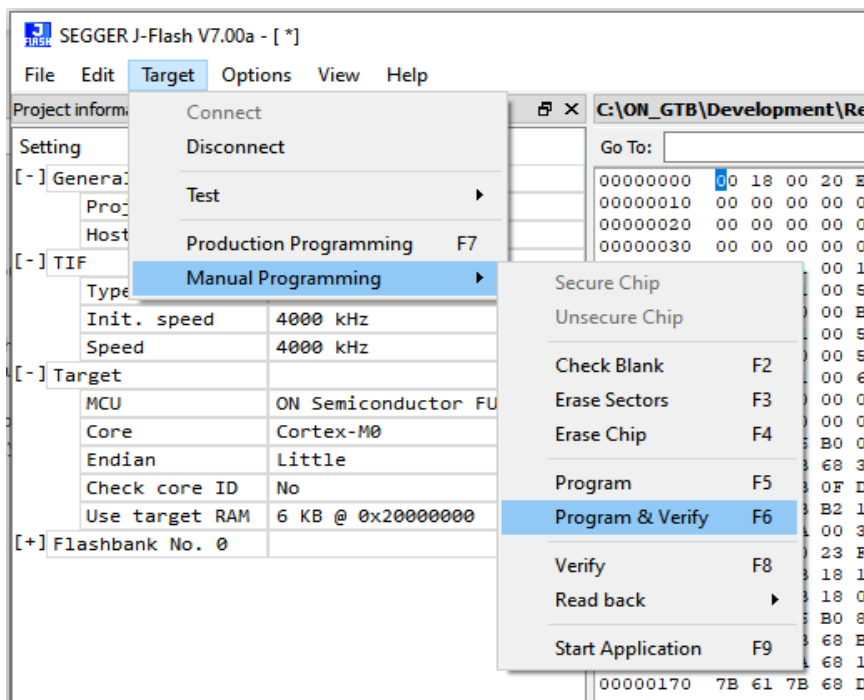
5. Select **Target → Connect**
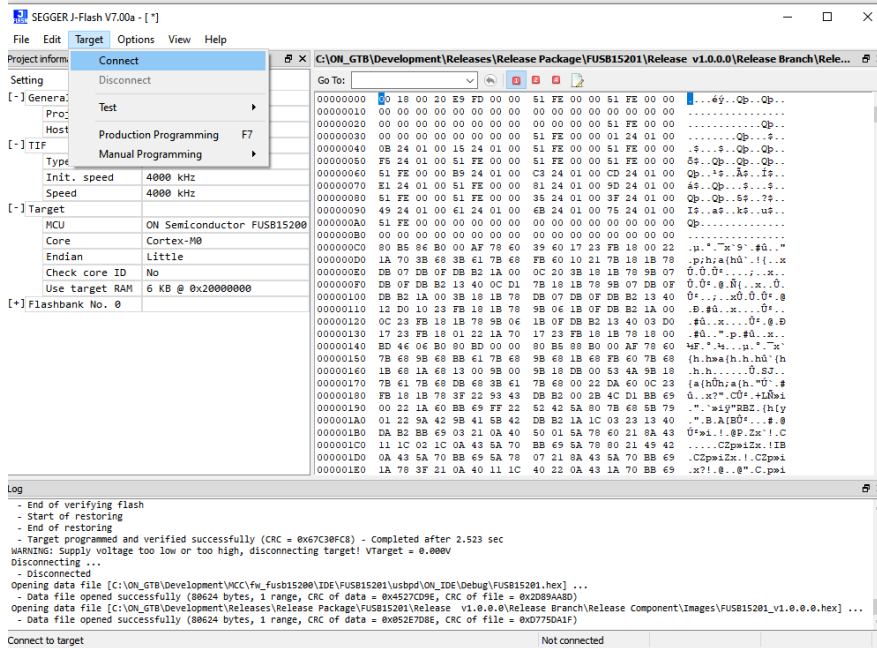
6. To erase flash content, **Target → Manual Programming → Erase Chips**

7. To program Flash, **Target → Manual Programming → Program & Verify**

8. To start application, run **Target → Manual Programming → Start Application** or F9

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