

onsemi FUSB15200 Dual Port USB TYPE-C-PD Controller Owner's Manual

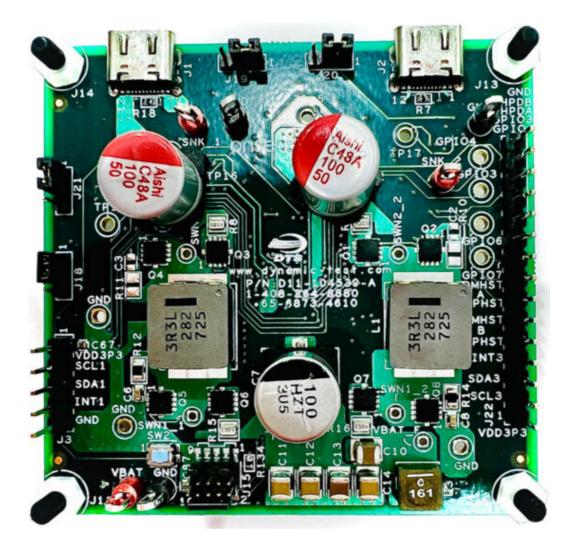
Home » onsemi » onsemi FUSB15200 Dual Port USB TYPE-C-PD Controller Owner's Manual



Contents

- 1 onsemi FUSB15200 Dual Port USB TYPE-C-PD Controller Owner's Manual
- 2 Documents / Resources
 - 2.1 References

onsemi FUSB15200 Dual Port USB TYPE-C-PD Controller Owner's Manual



www.onsemi.com

FUSB15200EVBFPG

Introduction

The FUSB15200 Evaluation Board (EVB) together with the firmware binary provided in the release package permits a customer to program the flash memory and non-volatile memory (NVM) of the FUSB15200.

Required Hardware and Setup Instructions

- A. FUSB15200 Evaluation Board (EVB)
- B. SEGGER J-Link Pro JTAG/SWD programming and debug probe
- C. 9-Pin Cortex-M Adapter to connect (A) the EVB to (B) J-Link Pro
- D. External Power Supply
- Use (C) the 9-Pin Adapter to connect (B) the J-Link Pro to the SWD connector (J15) on the socket EVB
- Connect (D) the Power Supply GND to the GND pin of (A) the EVB
- Setup (D) the Power Supply to 12 V (~200 mA) and connect to VBAT pin of (A) the EVB

Required Software

A. SEGGER J-Link Tools

Please download and install the SEGGER J-Link utility

Note: We recommend using version 7.92d. Please make sure SEGGER J-Flash is installed.

B. FUSB15200 Flash Loader

Please download the FUSB15200 Flash Loader used by J-Link to flash the EVB.

Search for file FUSB15200_FLASH_LOADER.ELF

Further instructions on where to place this file will be indicated in the subsequent paragraph.

C. FUSB15200 Device List AddOn

Please download the FUSB15200 Device AddOn to add the FUSB15200 to the device list xml. Search for file FUSB15200 XML ADDON.TXT

FUSB15200EVBFPG

Adding FUSB15200 Support to J-Link

There is a need to add the FUSB15200 to the list of J-Link supported devices.

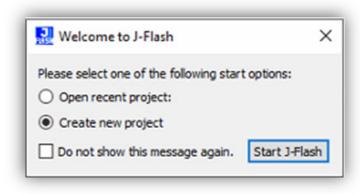
J-Link requires a device support to be added in xml format as follow:

- Create a directory named onsemi\FUSB15200 as follow:
 - C:\Users\<USER_NAME>\AppData\Roaming\SEGGER\JLinkDevices\onsemi\FUSB15200\
- Rename the file (C) FUSB15200_XML_ADDON.TXT to Devices.xml and place it in the following directory:
 C:\Users\<USER_NAME>\AppData\Roaming\SEGGER\JLinkDevices\onsemi\FUSB15200\
- Copy the file (B) from section "Required Software" into
 C:\Users\<USER_NAME>\AppData\Roaming\SEGGER\JLinkDevices\onsemi\FUSB15200\

Programming the FSUB15200 Flash

Complete the following 4 steps:

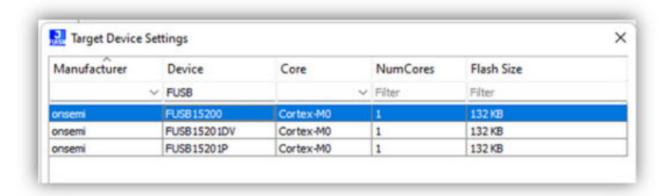
- a. Connect J-Link to the EVB
- b. Erase the Flash Content
- c. Program the Flash Content
- d. Validate Flash Content
- a) Connect J-Link to the EVB
- Open the SEGGER J-Flash and select "Create new project" then "Start J-Flash"



Click on the selection box



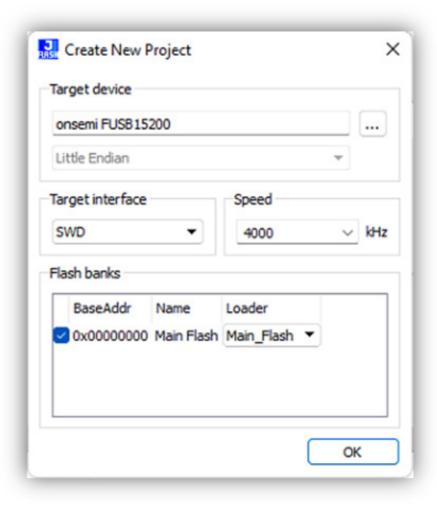
• Select FUSB15200



• Select Target interface: SWD

• Select Speed: 4000 kHz

• Click OK for the new project to be created



- · From the menu go to Target
- Then go to Connect

If the connection is established, you should see a message on the Log indicating a successful connection.

```
Log
 - AP[0]: AHB-AP (IDR: 0x04770031)
 - Iterating through AP map to find AHB-AP to use
 - AP[0]: Core found
 - AP[0]: AHB-AP ROM base: 0xE00FF000
 - CPUID register: 0x410CC601. Implementer code: 0x41 (ARM)
 - Found Cortex-M0 r0p1, Little endian.
 - FPUnit: 4 code (BP) slots and 0 literal slots

    CoreSight components:

 - ROMTb1[0] @ E00FF000
 - ROMTbl[0][0]: E000E000, CID: B105E00D, PID: 000BB008 SCS
 - ROMTbl[0][1]: E0001000, CID: B105E00D, PID: 000BB00A DWT
 - ROMTbl[0][2]: E0002000, CID: B105E000, PID: 000BB00B FPB
  Executing init sequence
  - Initialized successfully

    Target interface speed: 4000 kHz (Fixed)

 - Found 1 JTAG device. Core ID: 0x0BC11477 (None)

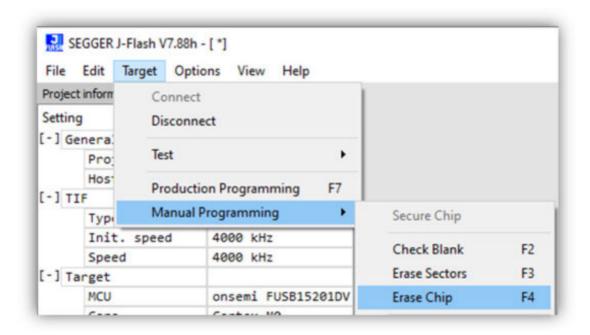
    Connected successfully

Ready
```

b) Erase the Flash Content

· From the menu, choose Target.

- From the resulting window, choose Manual Programming.
- Select Erase Chip. J–Flash erases the chip and reports a successful Erase operation.



c) Program the Flash Content

- Drag the appropriate .bin file into the J-Flash window.
- J–Flash asks for a start address, please accept the default 0x0 as follow:

Documents / Resources



onsemi FUSB15200 Dual Port USB TYPE-C-PD Controller [pdf] Owner's Manual FUSB15200 Dual Port USB TYPE-C-PD Controller, FUSB15200, Dual Port USB TYPE-C-PD Controller, Port USB TYPE-C-PD Controller, USB TYPE-C-PD Controller, TYPE-C-PD Controller, Controller

References

- 9-Pin Cortex-M Adapter (8.06.02) SEGGER | Embedded Systems Development Tools | USA Web Shop
- SEGGER The Embedded Experts Downloads
- SEGGER J-Link PRO
- User Manual

Manuals+, Privacy Policy

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.