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FUSB15201 Dual Port USB Type-C/PD Controller Start-Up Guide

FUSB15201EVBSUG

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. This document aimed to provide user a faster bring–up to quickly exercise FUSB15201 EVB with the device characteristic listed in Table 1.

Table 1. FUSB15201 SUPPORTED DEVICE CHARACTERISTIC

Feature		Firmware (ARM Cortex-M0+)
Type-C	Source	Yes
PD	Provider	Yes

Quick Start-Up Guide

Steps to load and execute binary for faster evaluation:

- 1. Download the binary with filename FUSB15201_v1.0.0.0.bin and the JLINK support files FUSB15200_NVR_Loader.elf, FUSB15200_FLASH_LOADER.elf and the FUSB15201 Flash Programming Guide from **onsemi** website.
- 2. Install SEGGER J–LINK (Follow the steps in **FUSB15201 Flash Programming Guide** for how to download and run firmware in FUSB15201 EVB).

Advertised PDOs	Туре	Description
PDO 1	Fixed	5 V / 3 A
PDO 2	Fixed	9 V / 3 A
PDO 3	Fixed	15 V / 3 A
PDO 4	Fixed	20 V / 3 A

Table 2. SUPPORTED PDOs



Figure 1. FUSB15201 Evaluation Board

FUSB15201EVBSUG

Table 3. FUSB15201 SUPPORTED/ENABLED CONFIGURATION IN EACH PORT

Feature	Supported	Description
PD Specification Revision	3.1	Supported Revision
PD Specification Revision Version	1.1	Supported Revision Version
SOP* Communication	Yes	Supports SOP, SOP', SOP"
Manufacturer Info Message	No	Unsupported Get MFI
Data Role Swap to DFP	Yes	Supports swap to DFP
Data Role Swap to UFP	Yes	Supports swap to UFP
VCONN Swap to ON	Yes	Support for VCONN swap to ON
VCONN Swap to OFF	Yes	Support for VCONN swap to OFF
Cable Discovery	Yes	Supports for Cable Query
Chunk Message	Yes	Support for chunk messages
UnChunked Extended Message Length	No	No support for unchunked message with extended length
Rp Value	3 A	
VCONN Source	Yes	VCONN sourcing support
PD Power Source	60 W	PD capability per port
USB Suspend May Clear	Yes	
Modal Support	No	Disabled modal operation
VDM Messages	Yes	Support for Vendor Define Messaging
Unconstrained Power	Yes	
Product Type	3	Power Brick DFP VDO

Power Supply Requirement

See EVB User manual guide for the power supply requirement.

Modifying Configuration

Refer to Software Programming Guide if default configuration needs to be modified and it can be supported by the device characteristic.

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