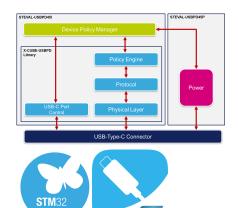


Data brief

# SW package for STEVAL-USBPD45C 45 W USB Type-C™ Power Delivery adapter



### **Features**

- Software package with the binary of the application example for the STEVAL-USBPD45C 45 W USB Type-C™ Power Delivery adapter.
- The application firmware is based on the certified X-CUBE-USB-PD software designed for the ARM<sup>®</sup> 32-bit Cortex<sup>®</sup>-M0 STM32F051 MCU and the PD3.0 certified STUSB1602A Type-C controller.

## **Description**

The STSW-USBPD45CFW software package is designed to support the STEVAL-USBPD45C 45 W USB Type-C Power Delivery adapter reference design.

It contains the binary file of the demo application example for the reference design to function as a 45 W AC-DC adapter (in the USB Power Delivery provider role), and implement adaptive synchronous rectification algorithm.

The application firmware enables the reference design to deliver 5 V, 9 V and 15 V output voltage profiles with a maximum current up to  $3.0 \, A$ , according to the USB Power Delivery specification.

The firmware also monitors the adapter reference design output current for overcurrent and short-circuit conditions.

The software implements the certified X-CUBE-USB-PD software running on the STM32F051K8 high performance 32-bit ARM $^{\rm @}$  Cortex $^{\rm @}$ -M0 MCU.

The STUSB1602A USB controller and X-CUBE-USB-PD software library running on STM32 microcontroller are USB Power Delivery specification rev 3.0 certified.

Product summary	
SW package for STEVAL- USBPD45C reference design	STSW- USBPD45CFW
45 W USB Type-C Power Delivery adapter reference design	STEVAL- USBPD45C
USB Type-C controller (with Tx/Rx line driver and BMC)	STUSB1602A
high performance 32-bit ARM Cortex- M0 MCU	STM32F051
X-CUBE-USB-PD software expansion for STM32Cube	X-CUBE-USB-PD



# **Revision history**

**Table 1. Document revision history** 

Date	Version	Changes
19-Apr-2018	1	Initial release.
04-Jul-2018	2	Minor text edits

DB3579 - Rev 2 page 2/3



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DB3579 - Rev 2 page 3/3