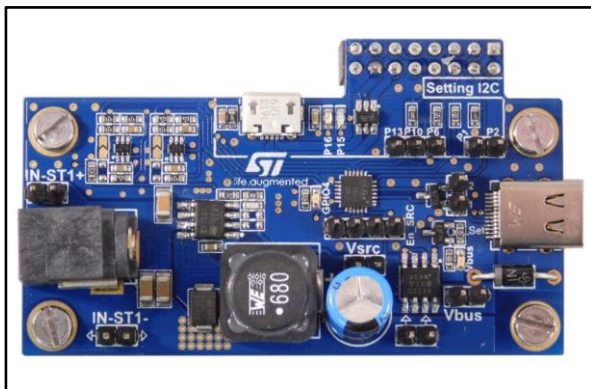

STUSB4710 evaluation board USB PD controller with on-board DC-DC

Data brief

**Features**

- 1 x USB PD port (source)
- STUSB4710 USB power delivery controller
- Compliant with:
 - USB Type-C™ r1.2
 - USB PD r2.0
- On-board 20 V/3 A DC-DC
- V_{BUS} power switches and discharge path
- V_{CONN} support (programmable up to 600 mA)
- Support up to 5 power data objects (PDO)
- Pre-configured PDOs
- High voltage protection on connector pins
- Customizable startup profiles
- Compatible with NUCLEO-F072RB board for configuration and debug interface
- RoHS compliant

Description

The STEVAL-ISC003V1 evaluation board is a ready-to-use USB PD source using the STUSB4710 and ST1S14 ICs. It is used to demonstrate the features of the STUSB4710 controller by converting a single-voltage power supply into a Type-C power delivery source.

The STUSB4710 controls the Type-C port ensuring power delivery advertising and negotiation, controls the DC-to-DC converter and power paths, and monitors V_{BUS} voltage.

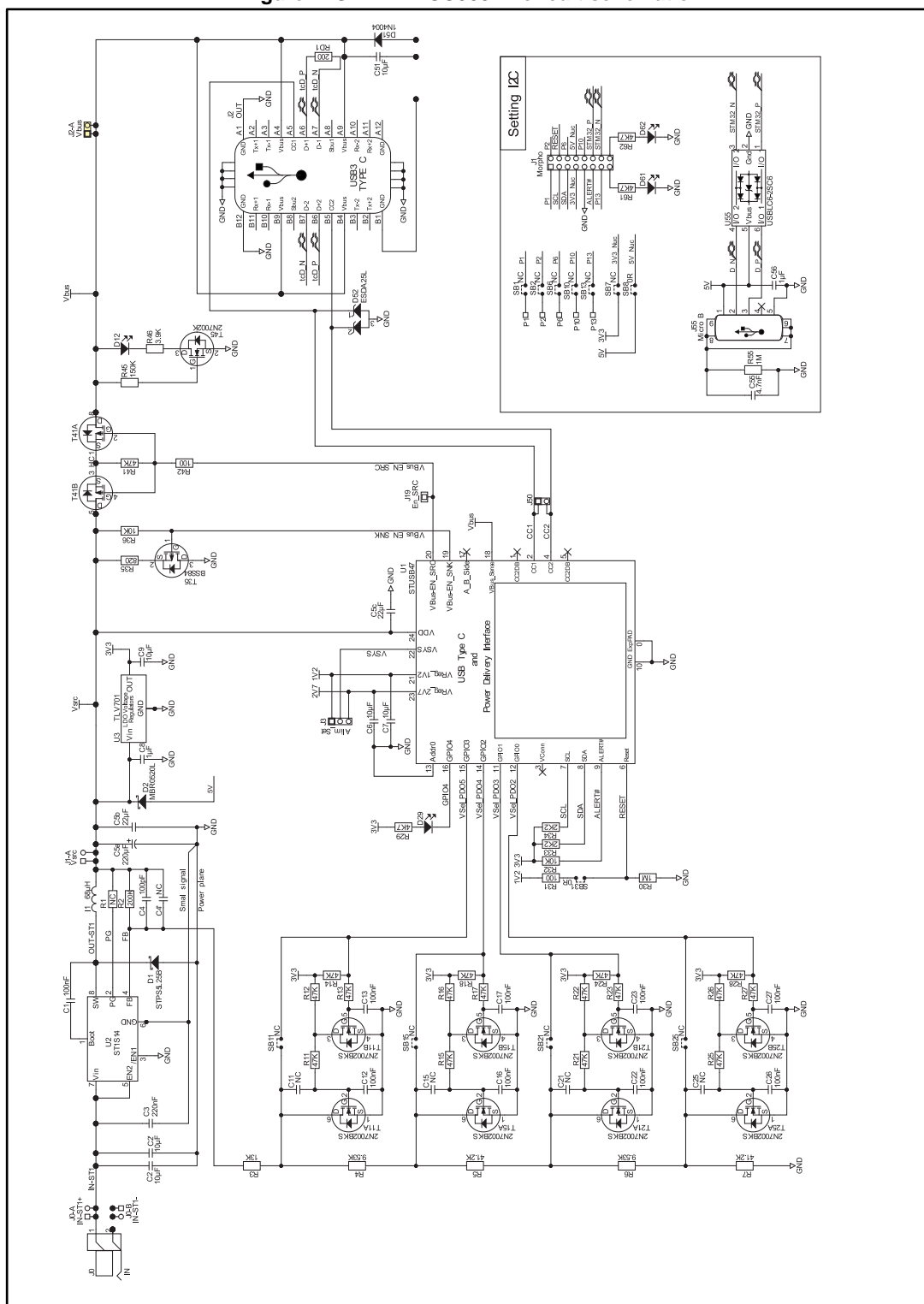
The ST1S14 device ensures the step down conversion from the input DC port to the negotiated V_{BUS} voltage.

The various LEDs indicate the operating status of the STUSB4710 and USB PD port.

The USB PD port is pre-configured with five different PDO voltages, covering all main applications (5 V, 9 V, 12 V, 15 V and 20 V).

1

Figure 1: STEVAL-ISC003V1 circuit schematic



2 Revision history

Table 1: Document revision history

Date	Version	Changes
21-Apr-2017	1	Initial release.
05-May-2017	2	Updated the part number of the USB controller used in the board to STUSB4710.
08-Sep-2017	3	Updated board photo on the cover page.

IMPORTANT NOTICE – PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2017 STMicroelectronics – All rights reserved

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[STMicroelectronics:](#)

[STEVAL-ISC003V1](#)