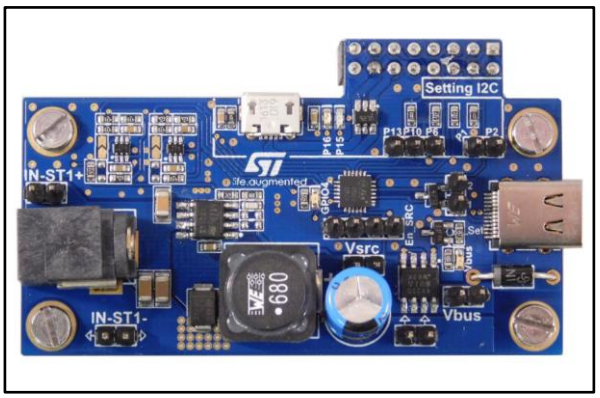
STEVAL-ISC003V1

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.

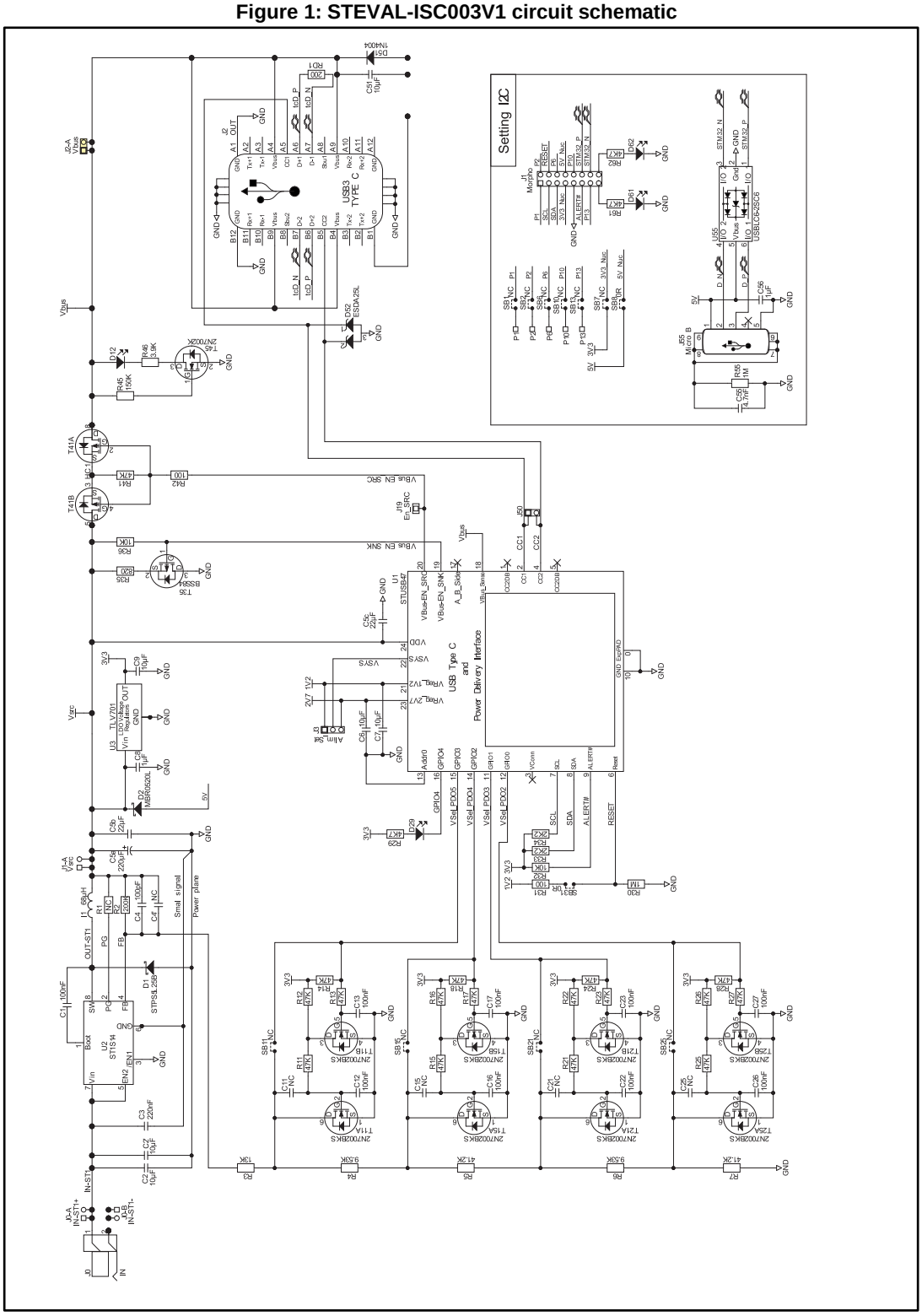
The USB PD port is pre-configured with five different PDO voltages, covering all main applications (5 V, 9 V, 12 V, 15 V and 20 V).

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1 Schematic diagrams

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.

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