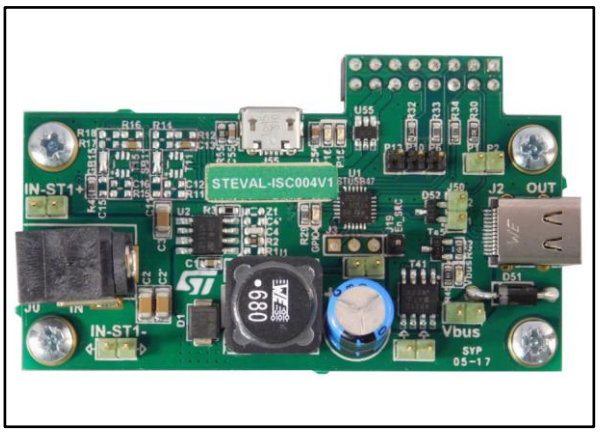
STEVAL-ISC004V1

STUSB4710A evaluation board (with on-board DC-DC)

Data brief



Features

- 1 x USB PD port (source)
- STUSB4710A USB power delivery controller
- Compliant with:
  - USB Type-C r1.2
  - USB PD r2.0
- On-board DC-DC
- V_{BUS} power switches and discharge path
- Support for up to 5 power data objects (PDO)
- Short-to-V_{BUS} protections on CC pins (22 V) and V_{BUS} pins (28 V)
- Customizable start-up profiles
- Compatible with NUCLEO-F072RB board for configuration and debug interface
- RoHS compliant

Description

The STEVAL-ISC004V1 evaluation board is a ready-to-use USB PD source based on STUSB4710A and ST1S14 ICs. It demonstrates how to convert a fixed voltage DC power input into a USB PD variable voltage output.

The STUSB4710A acts as a Type-C port interface that ensures power delivery advertising and negotiation, drives the DC-to-DC converter and power paths, and monitors V_{BUS} voltage.

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

The various LEDs indicate the operating status of the STUSB4710A and USB PD port.

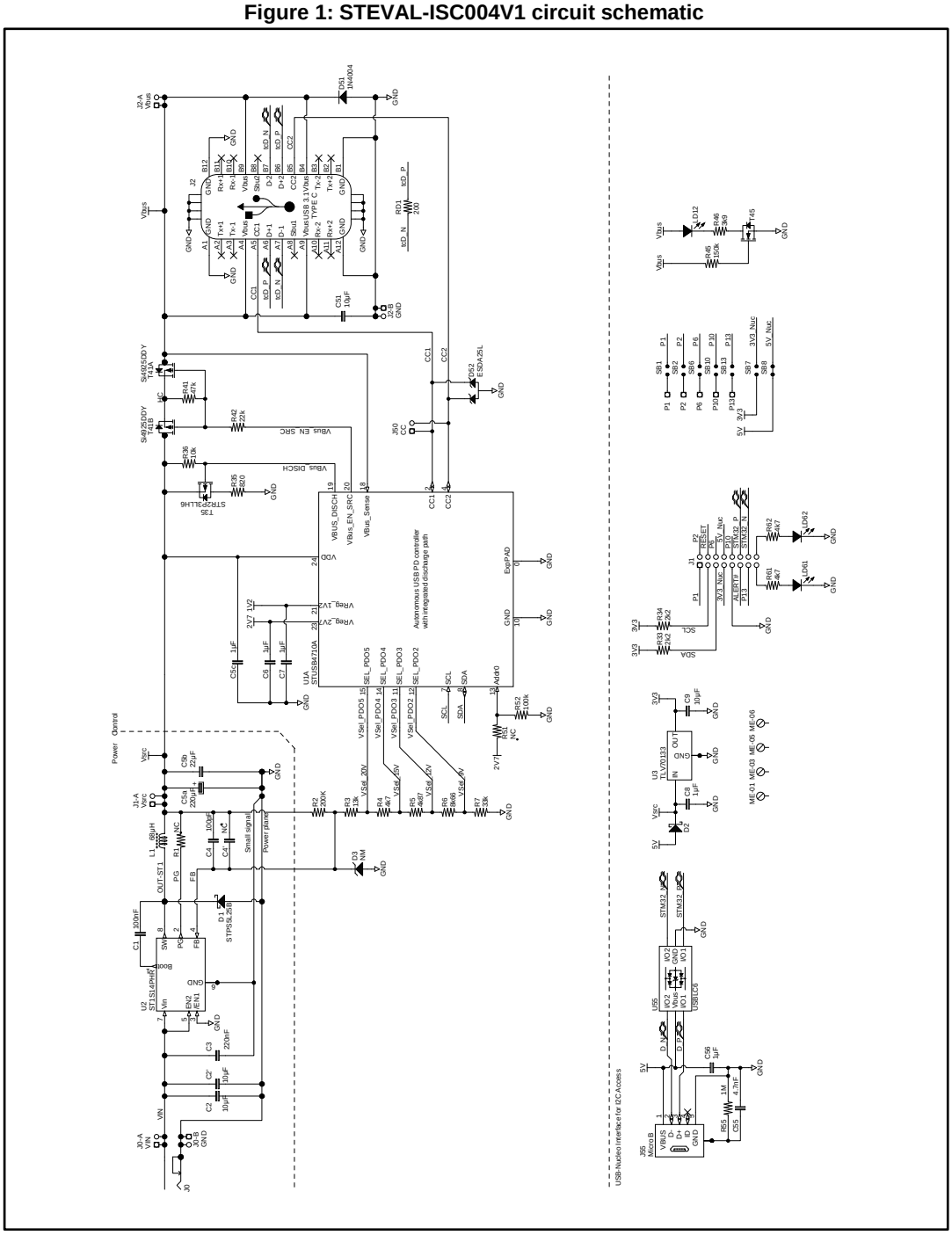
The USB PD port is pre-configured with five different PDOs to address a broad range of applications (5 V, 9 V, 12 V, 15 V and 20 V).

For further information contact your local STMicroelectronics sales office

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1 Schematic diagram

Figure 1: STEVAL-ISC004V1 circuit schematic



2 Revision history

Table 1: Document revision history

Date	Version	Changes
15-Sep-2017	1	Initial release.

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