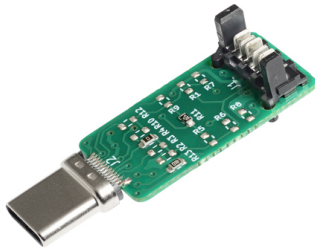# USB Type-C adapter to connect ST-ONE and ST-ONEMP with the STEVAL-PCC020V2

Features

- Full reference design for USB Type-C® to 6-way female Picoflex IDC flat Ribbon cable adapter with USB Type-C connector and 6-way Picoflex connector.
- Dimensions: 37.1 x 13.4 x 9.6 mm (L x W x H).
- Useful to set ST-ONE and ST-ONEMP parameters through UART channel when UART mapping is set on CC1/CC2.
- It is possible to communicate between ST-ONE (or ST-ONEMP) and STEVAL-PCC020V2 directly using the USB Type-C port of the EVLONEx board.

Description

The compact design of the EVLONEPCC allows to communicate between ST-ONE (or ST-ONEMP) and STEVAL-PCC020V2 using the UART communication channel on the USB Type-C port of the EVLONEx board. To configure ST-ONE (or ST-ONE MP) parameters through the CC line, ST-ONE (or ST-ONEMP) must be programmed as follows:

- APPL_SETUP: disabled

- USART_ebable (UART mapping): CC1/CC2

- Programming mode: enabled

The device's parameters are programmed from the PC through a dedicated GUI. Connecting the USB Type-C port of the EVLONEx board to the Plug USB Type-C connector of EVLONEPCC, and connecting the other side of this adapter to a 6-way female Picoflex IDC flat Ribbon cable, it is possible to open the UART communication channel between ST-ONE (or ST-ONEMP) and STEVAL-PCC020V2.

ATTENTION: If there is no communication between the device and STEVAL-PCC020V2, please reverse the connection of the USB Type-C connector of the adapter.

Product status link
EVLONEPCC

DB4830 - Rev 1 - November 2022
For further information contact your local STMicroelectronics sales office.

www.st.com

1 How to connect STEVAL-PCC020V2 with ST-ONE through EVLONEPCC adapter

1. Connect the ST-ONE or ST-ONEMP evaluation board (either EVLONE65W or EVLONEMP) with the EVLONEPCC adapter using USB Type-C connector.

Attention: *Connection between USB Type-C connector of EVLONEPCC and USB Type-C connector of the evaluation board is correct only in one sense.*

2. Connect the 6-way female Picoflex IDC flat Ribbon cable to the 6-way Picoflex connector of EVLONEPCC.
3. Connect the 6-way female Picoflex IDC flat Ribbon cable to the 6-way Picoflex connector of STEVAL-PCC020V2.
4. Connect the STEVAL-PCC020V2 interface board to a PC via a USB cable.

Figure 1. EVLONEPCC adapter connection
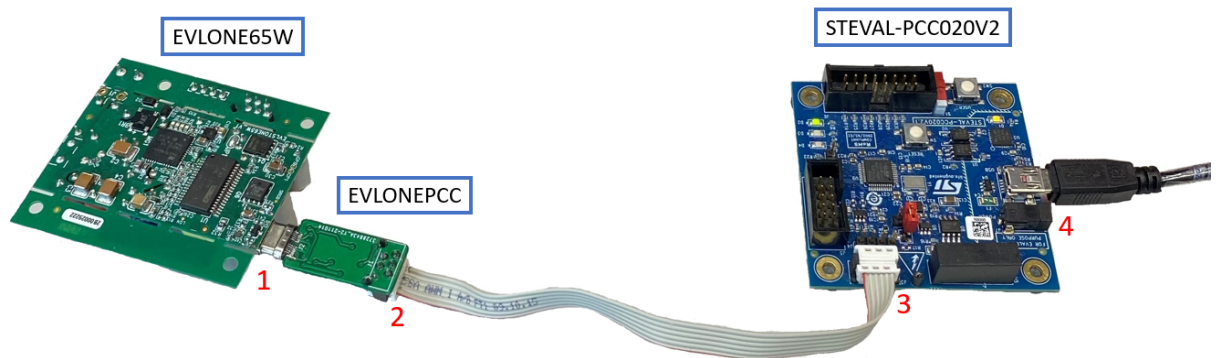
2 Electrical diagrams

Figure 2. EVLONEPCC electrical diagram
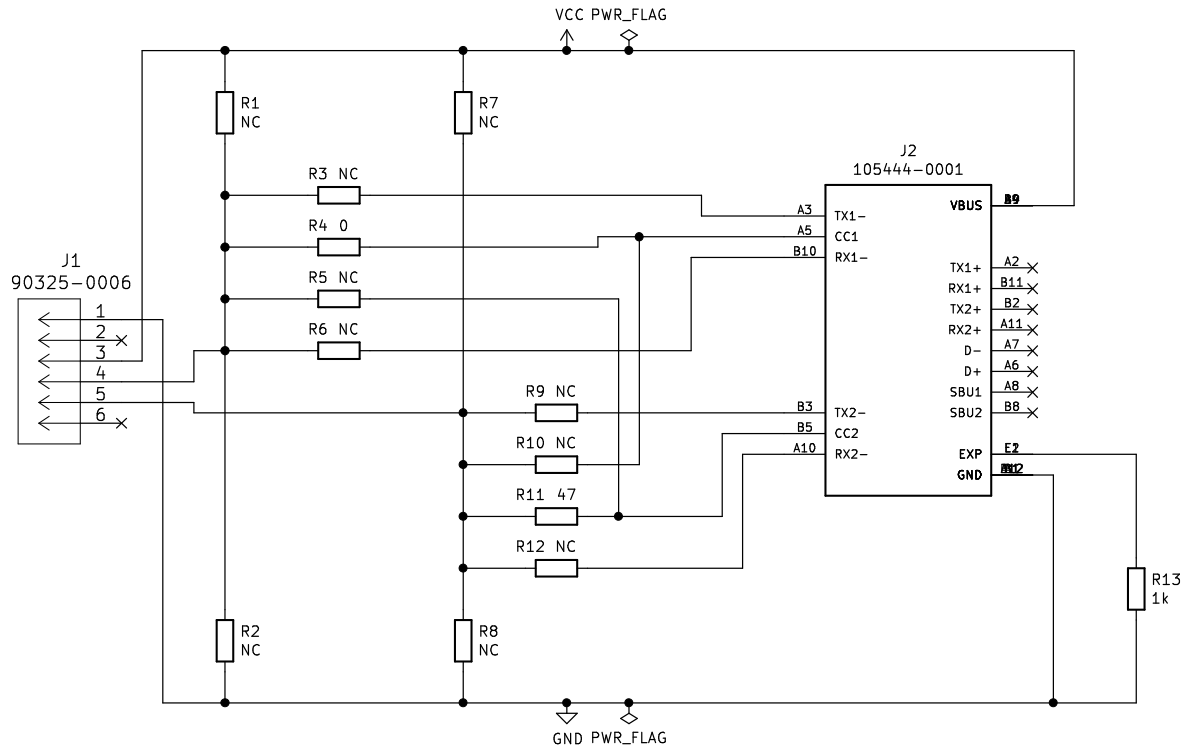
3 Bill of materials

Table 1. Bill of materials

Reference	Part number / part value	Description	Supplier	Package
R1, R2, R3, R5, R6, R7, R8, R9, R10, R12	N.M.	SMD resistor	Vishay	0603
R4	0 Ω	SMD resistor	Vishay	0603
R11	47 Ω	SMD resistor	Vishay	0603
R13	1 kΩ	SMD resistor	Vishay	0603
J1	90325-0006	Molex Picoflex connector 6-way 1.27 mm pitch	Molex	1.27 mm pitch
J2	105444-0001	Plug Type C 3.1 USB connector	Molex	

Revision history

Table 2. Document revision history

Date	Version	Changes
04-Nov-2022	1	Initial release.

Contents

IMPORTANT NOTICE – READ CAREFULLY