

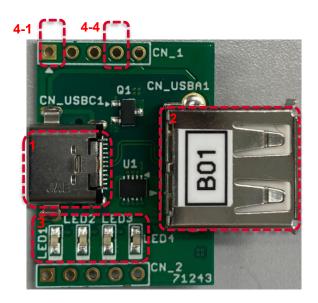
**USB PD Controller Series** 

# **BD91N01NUX EVK Quick Start Guide**

# Introduction

The document is the quick start guide of the BD91N01NUX EVK.

### **Overview of the EVK**



#### The descriptions of each component (The number is referred to the above figure).

- 1. Type-C side is UFP and can be used for only a source device.
- 2. Type-A side is DFP and can be used for only a sink device.
- 3. These four LEDs indicate the orientation of the inserted plug, capabilities of the source, and supplying power.
- 4-1. The terminal 4-1 is GND.
- 4-4. The terminal 4-4 is VBUS of Type-A side.



LED1	LED2	Description
OFF	OFF	No connection / A connection with illegal cable.
OFF	ON	USB Type-C default (Depending on the enumeration)
ON	OFF	USB Type-C 1.5A
ON	ON	USB Type-C 3.0A

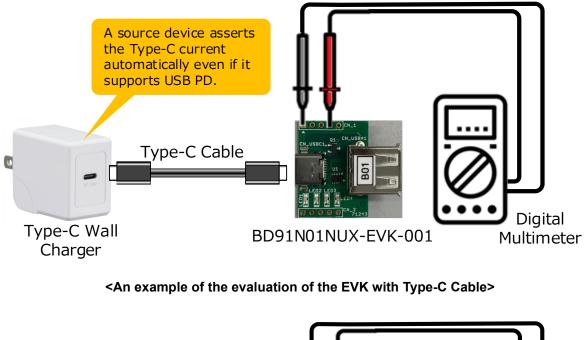
LED3	Description	LED4	Description
OFF	No connection or connect with CC1 on the plug.	OFF	The Bus power is NOT supplied to Type-A Connector (CN_USBA1.)
ON	CC2 on the plug	ON	The Bus power is being supplied to Type-A Connector (CN_USBA1.)

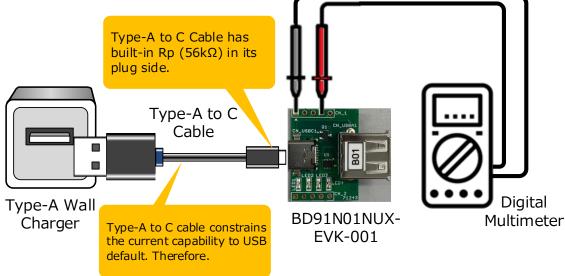
Note: The EVK supports Bus Powered (Dead Battery), therefore no external power is required.

© 2022 ROHM Co., Ltd.

# The connection and operation

Prepare a Type-C(PD) adapter in market and connect it to the EVK via a Type-C cable, or Type-A to C cable, then VBUS voltage can be monitored by a digital multimeter with terminal 4-4.





<An example of the evaluation of the EVK with Type-A to C Cable>



<An example of the actual evaluation with USB C adapter, Type-C Meter, the EVK, and USB load>

#### **Revision History**

Date	Revision Number	Description	
Feb. 24. 2022.	001	Initial Release	

Notes					
1)	The information contained herein is subject to change without notice.				
2)	Before you use our Products, please contact our sales representative and verify the latest specifica- tions :				
3)	Although ROHM is continuously working to improve product reliability and quality, semicon- ductors can break down and malfunction due to various factors. Therefore, in order to prevent personal injury or fire arising from failure, please take safety measures such as complying with the derating characteristics, implementing redundant and fire prevention designs, and utilizing backups and fail-safe procedures. ROHM shall have no responsibility for any damages arising out of the use of our Poducts beyond the rating specified by ROHM.				
4)	Examples of application circuits, circuit constants and any other information contained herein are provided only to illustrate the standard usage and operations of the Products. The peripheral conditions must be taken into account when designing circuits for mass production.				
5)	The technical information specified herein is intended only to show the typical functions of and examples of application circuits for the Products. ROHM does not grant you, explicitly or implicitly, any license to use or exercise intellectual property or other rights held by ROHM or any other parties. ROHM shall have no responsibility whatsoever for any dispute arising out of the use of such technical information.				
6)	The Products specified in this document are not designed to be radiation tolerant.				
7)	For use of our Products in applications requiring a high degree of reliability (as exemplified below), please contact and consult with a ROHM representative : transportation equipment (i.e. cars, ships, trains), primary communication equipment, traffic lights, fire/crime prevention, safety equipment, medical systems, servers, solar cells, and power transmission systems.				
8)	Do not use our Products in applications requiring extremely high reliability, such as aerospace equipment, nuclear power control systems, and submarine repeaters.				
9)	ROHM shall have no responsibility for any damages or injury arising from non-compliance with the recommended usage conditions and specifications contained herein.				
10)	ROHM has used reasonable care to ensure the accuracy of the information contained in this document. However, ROHM does not warrants that such information is error-free, and ROHM shall have no responsibility for any damages arising from any inaccuracy or misprint of such information.				
11)	Please use the Products in accordance with any applicable environmental laws and regulations, such as the RoHS Directive. For more details, including RoHS compatibility, please contact a ROHM sales office. ROHM shall have no responsibility for any damages or losses resulting non-compliance with any applicable laws or regulations.				
12)	When providing our Products and technologies contained in this document to other countries, you must abide by the procedures and provisions stipulated in all applicable export laws and regulations, including without limitation the US Export Administration Regulations and the Foreign Exchange and Foreign Trade Act.				
13)	This document, in part or in whole, may not be reprinted or reproduced without prior consent of ROHM.				



Thank you for your accessing to ROHM product informations. More detail product informations and catalogs are available, please contact us.

# ROHM Customer Support System

http://www.rohm.com/contact/