

### BD91N01NUX

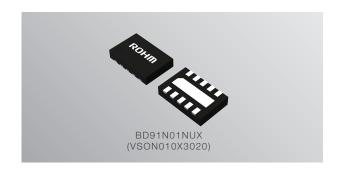
## **USB Type-C Sink Port Detection and Protection IC**

#### **GENERAL DESCRIPTION**

BD91N01NUX integrates USB Type-C CC detection including plug attach, detach, orientation and current value for power sink side port. The Pch-MOSFET switch control function is used to protect the next stage, which is on the system side of the of the circuit from VBUS over voltage and under voltage. Evaluation boards are available for full system compatibility testing and validation, thus enabling first pass design-in success

## **FEATURES**

- · Facilitating migration from USB on a Micro-B to Type-C
- · USB Type-C Specification 1.0 to 1.3 Support
- · USB Type-C Plug Attach and Detach Detection
- · USB Type-C Plug Orientation Detection
- · USB Type-C Current Detection
- · VBUS Over Voltage and Under Voltage Protection
- · Direct VBUS Power Supply Operation Support
- · Dead-battery Operation Support
- · Integrated Rd Resistor
- · 28V CC withstand eliminates need for certain additional protections ICs
- · Standalone operation, no MCU required

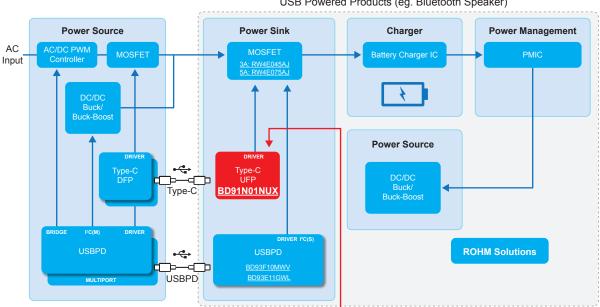


#### **APPLICATIONS**

- · Any electronic product that has a Non Power Delivery Type-C connector for power sink
- · Printers
- Scanners
- · Electric Cigarettes
- · Al Speaker
- · Cameras

#### SYSTEM APPLICATION

#### USB Powered Products (eg. Bluetooth Speaker)



BD91N01NUX For Type-C

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# **USB Type-C Sink Port Detection and Protection IC**

#### SYSTEM BLOCK DIAGRAM

