



TELINK SEMICONDUCTOR

Telink Debug EVK TLSR8278DK48D User Manual

Keyword:

Features; Pin connection; User manual

Brief:

This is a user manual for Telink 8278 Dongle.

Published by
Telink Semiconductor

**Bldg 3, 1500 Zuchongzhi Rd,
Zhangjiang Hi-Tech Park, Shanghai, China**

© Telink Semiconductor
All Right Reserved

Legal Disclaimer

This document is provided as-is. Telink Semiconductor reserves the right to make improvements without further notice to this document or any products herein. This document may contain technical inaccuracies or typographical errors. Telink Semiconductor disclaims any and all liability for any errors, inaccuracies or incompleteness contained herein.

Copyright (c) 2019 Telink Semiconductor (Shanghai) Ltd, Co.

Information:

For further information on the technology, product and business term, please contact Telink Semiconductor Company (www.telink-semi.com).

For sales or technical support, please send email to the address of:

telinkcnsales@telink-semi.com

telinkcnsupport@telink-semi.com

Table of contents

1	Product Introduction	3
1.1	General description.....	3
1.2	Key features	3
2	Pin Connection Guide	3
2.1	Supply power	3
2.2	Download firmware	5
2.3	Test RF signal.....	6

1 Product Introduction

This is a user manual for Telink Debug EVK TLSR8278DK48D.

1.1 General description

The TLSR8278DK48D, which is based on Telink TLSR8278F1KET48 chip, provides a Bluetooth LE .

The TLSR8278DK48D integrates a power-balanced 32-bit MCU, BLE, 64kB SRAM, 1MB internal Flash, 14bit ADC , 6-channel PWM, flexible GPIO interfaces, and nearly all the peripherals needed for IoT (Internet of Things) and HID (Human Interface Devices) application development (e.g. Bluetooth Low Energy .

1.2 Key features

- ✧ Bluetooth 5 Compliant, 1Mbps, 2Mbps, Long Range 125kbps and 500kbps
- ✧ 64kB on-chip SRAM with up to up to 32kB retention
- ✧ A rich set of I/Os: SPI, I2C, Single wire, up to 32 GPIOs, UART with hardware flow control and 7816 protocol support, DMIC (Digital Mic), AMIC (Analog Mic), I2S, Stereo Audio output
- ✧ 6-channel PWM (Pulse Width Modulation) output
- ✧ RSSI monitoring with +/-1dB resolution
- ✧ Power supply: DC3.3V

2 Pin Connection Guide

2.1 Supply power

The TLSR8278DK48D supports supply power via battery or other 3.3V power.

The power connection is shown below, connect the power to the 3V3 of J18, and

connect the GND to the GND of J18.

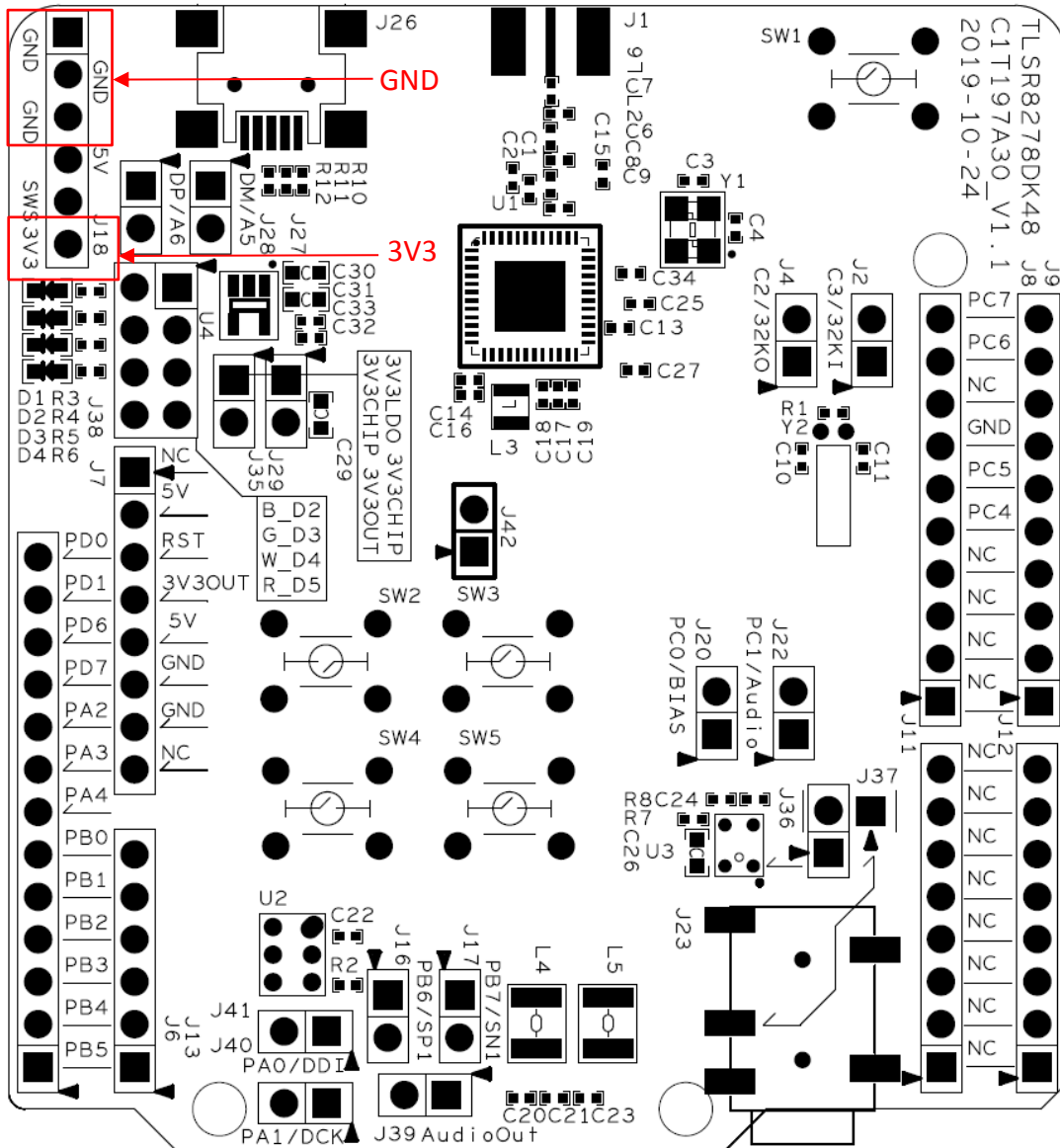


Figure 1 Connection chart to supply power

2.2 Download firmware

To download firmware into TLSR8278DK48D, first make sure the TLSR8278DK48D is supplied with power normally. That is, connect the power to the 3V3 of J18, and connect the GND to the GND of J18.

Then connect J18 (SWS) of the TLSR8278DK48D with SWM of a burning EVK. Meanwhile, connect the miniUSB interface of the burning EVK with PC USB.

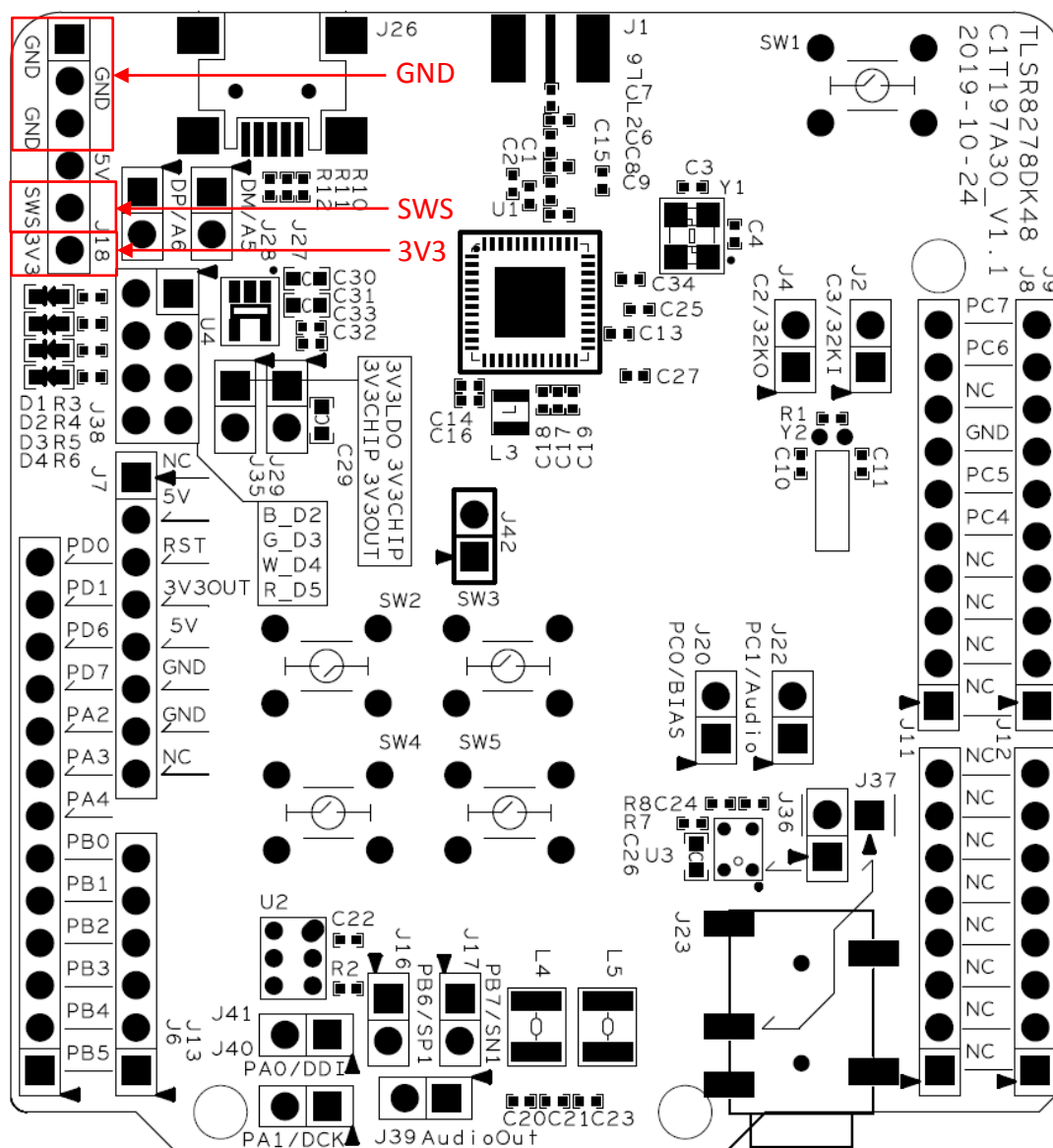


Figure 2 Connection chart to download firmware

2.3 Test RF signal

To test RF signal of TLSR8278DK48D, first make sure the TLSR8278DK48D is supplied with power normally. That is, connect the power to the 3V3 of J18, and connect the GND to the GND of J18.

In conducted mode, connect SMA connector to spectrum analyzer, or other RF instruments. In radiated mode, connect SMA connector to external antenna.

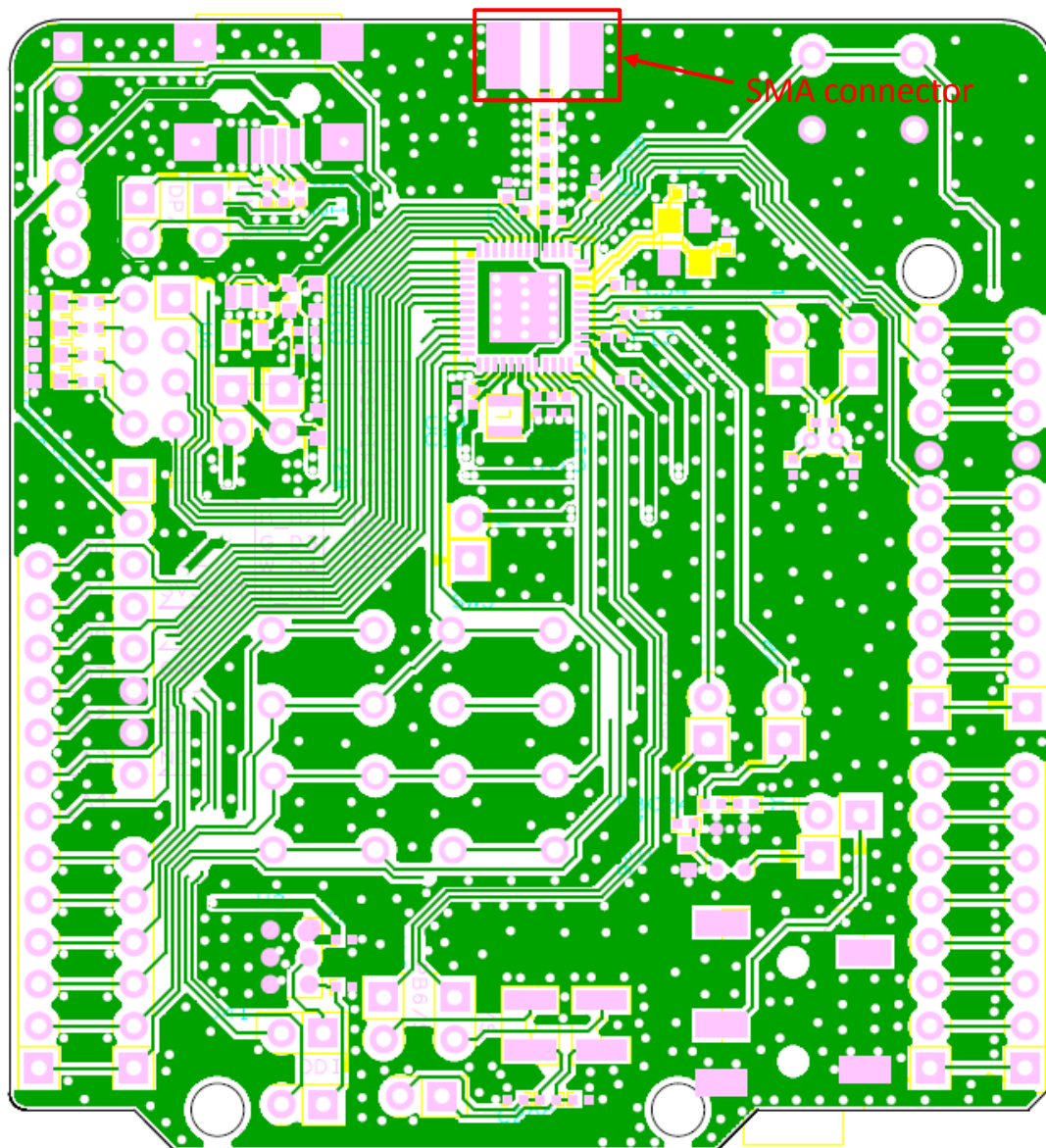


Figure 3 Connection chart to test RF signal

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into and outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.
- Changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.