Telink Debug EVK TLSR8278DK48D User Manual

Keyword:

Features; Pin connection; User manual

Brief：

This is a user manual for Telink 8278 Dongle.

TELINK SEMICONDUCTOR

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

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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

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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.

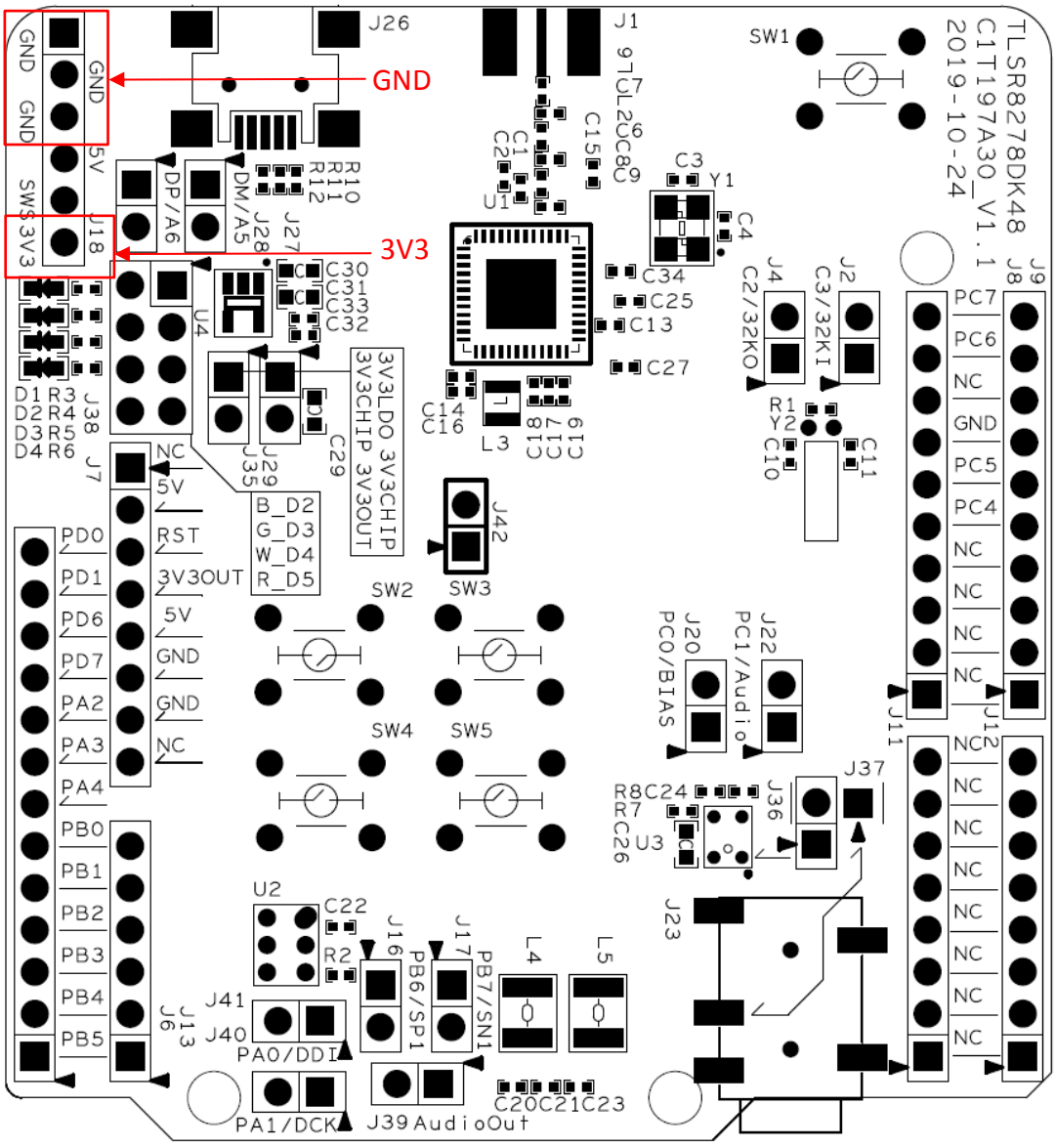

Figure 1 Connection chart to supply power

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.

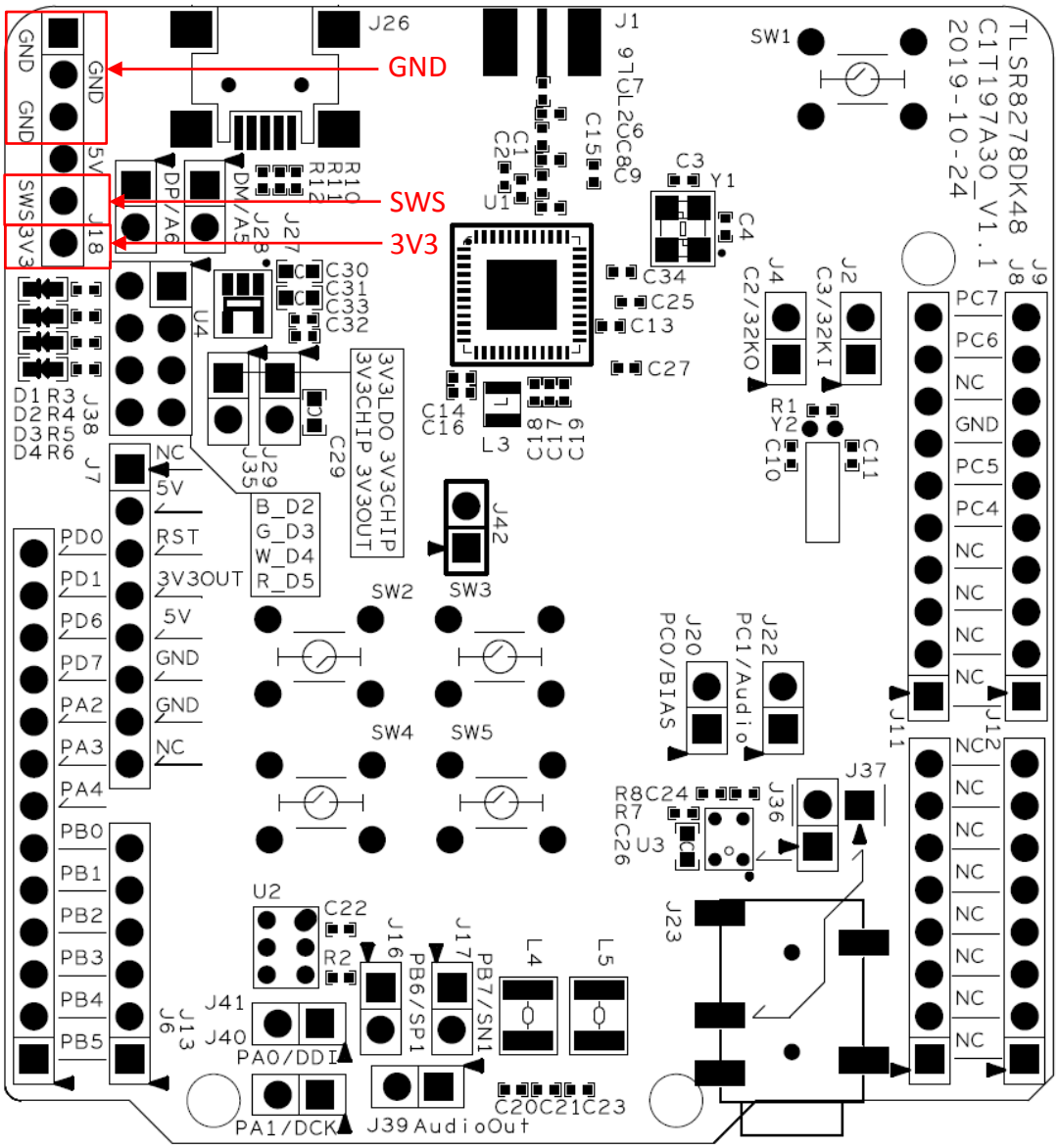

Figure 2 Connection chart to download firmware

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.

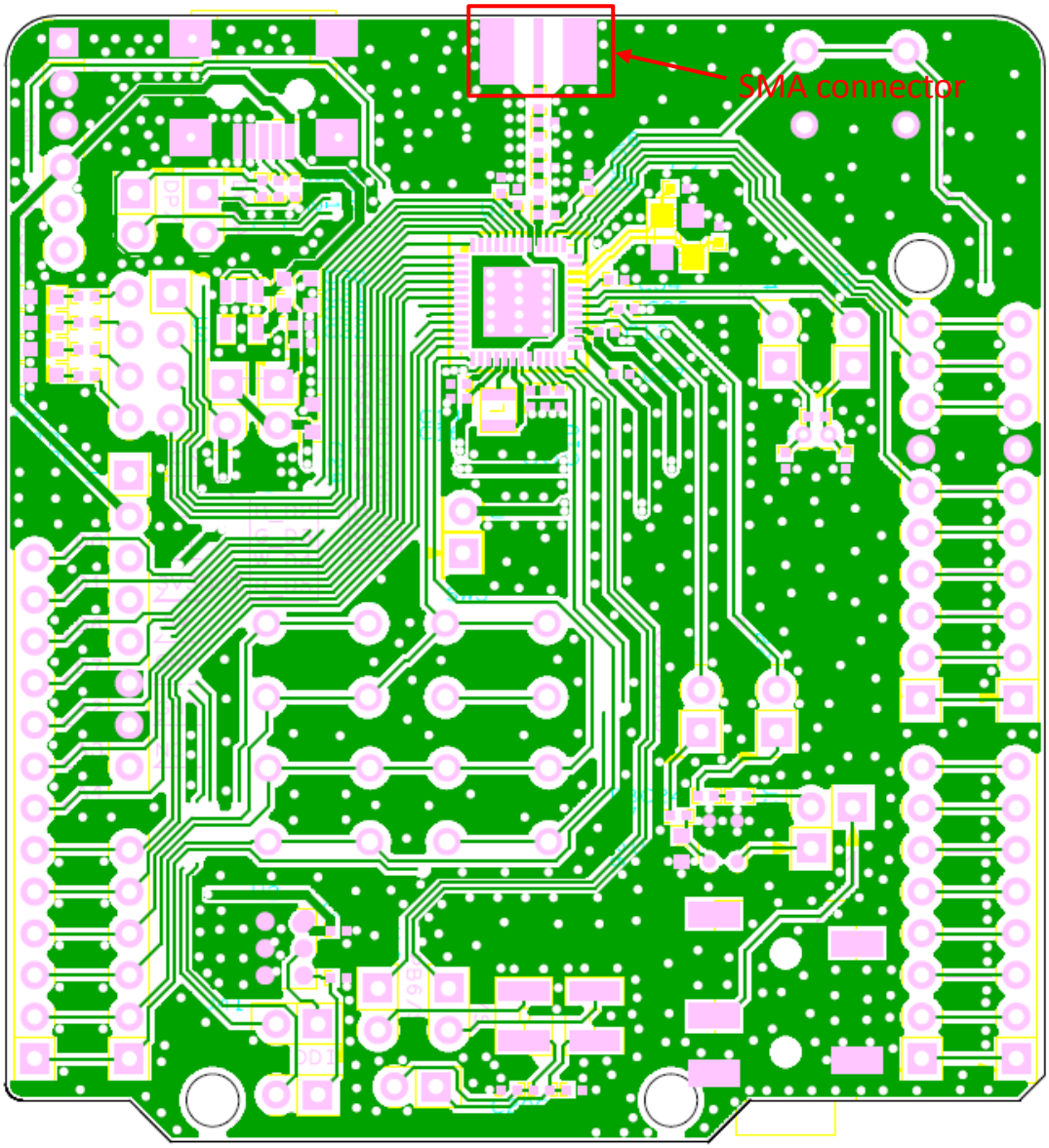

Figure 3 Connection chart to test RF signal