

TPS325M51 Ver.A Prime Board Quick Start Guide

Key Features

- TPS325M51 microcontroller (Arm® Cortex®-M33 (STAR) up to 156 MHz) in LQFP100 package
- USB to UART bridge
- One power LED and one user-configurable RGB LED
- One user and one reset push-button
- 32.768 kHz ELS crystal oscillator
- 24 MHz EHS crystal oscillator
- Multiple board connectors:
 - USB with Micro-B for power supply and USB to UART bridge
 - DAPLink debugging connector with SWD and UART interfaces
 - ARDUINO® Uno expansion connector
 - 2.54 mm pin headers for full access to all I/Os
- Flexible power-supply options: USB VBUS, VIN from expansion board or external DAPLink sources
- Software libraries and examples

Out-of-the-Box Materials

- 1x TPS325M51 Ver.A Prime Board
- 1x IDC20-to-IDC10_V02 Board
- 1x USB Type-A to Micro-B Cable

Quick Start

Before power on the prime board, you need to check the following configurations:

1. Check the jumper on the prime board: J11 (1-3 and 2-4 ON), J12 (3-4 ON, VCC connect to U5V), J13 (ALL ON), J14 (2-3 ON, Boot from user code), J15(1-2 ON, VREF+ on VREF side).
2. Connect the prime board to a PC with a USB cable through the USB connector J10.
3. Open a serial terminal on your computer to see the print information (Default serial terminal setting: 115200 baud rate, 8 data bits, no parity, 1 stop bit, no flow control).
4. Then the green LED LED2 lights up, and the three-color (red/green/blue) LED LED1 blinks.
5. Press the USER button to change the blink delay time (0.5s/0.2s/0.1s/0.05s).

For further details, refer to:

- Hardware: TPS325M51 Ver.A Prime Board User Guide
- Software: TPS32 Software Development Kit
- Programmer: TPS32 Programmer User Guide

Development Tools

- Keil® – MDK-ARM

- IAR Systems[®] – IAR Embedded Workbench

Embedded Software

TPS32 Software Development Kit

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