

A96L523
Starter Kit
STK-A96L523-LRN-A

Starter Kit H/W Manual

Version 1.12

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1. Starter Kit Board Overview

In this chapter, users can see the Starter Kit Board's exterior in Figure 1, and learn the main features of it by reading Table 1.

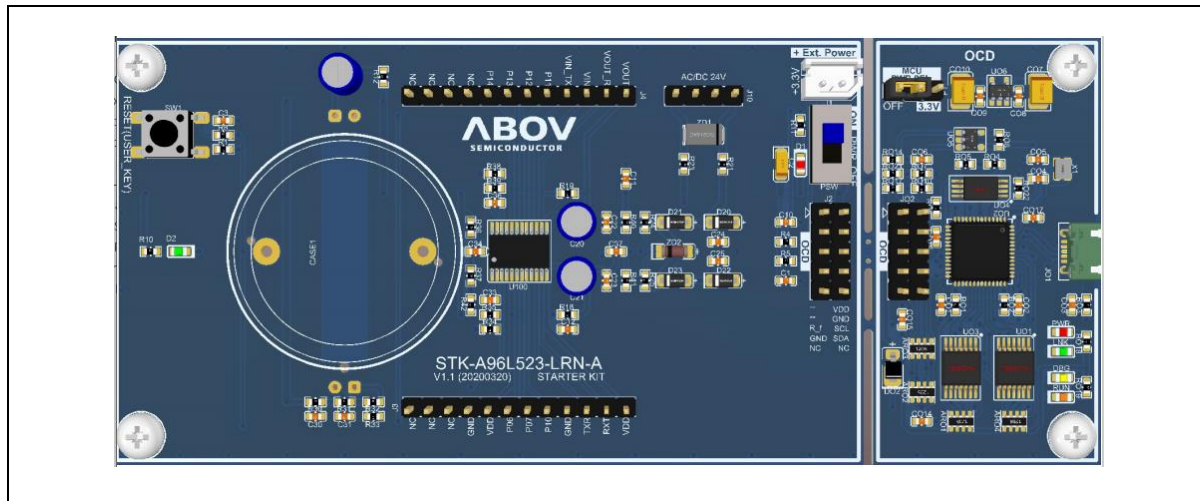


Figure 1. Starter Kit Board

Table 1. Main Features of Starter Kit Board

Main feature	Specifications	Remark
MCU	A96L523	Enhanced 8051
Operating clock	Int. 1MHz	
ROM	4KB flash ROM	Code
EEPROM	128B	Data
IRAM	256B	Data
Communication Port	USB 2.0	Micro USB Type B 5-pin
Input Buttons	1 reset, 2 event input	TACT Switch

2. OCD Part

2.1 OCD

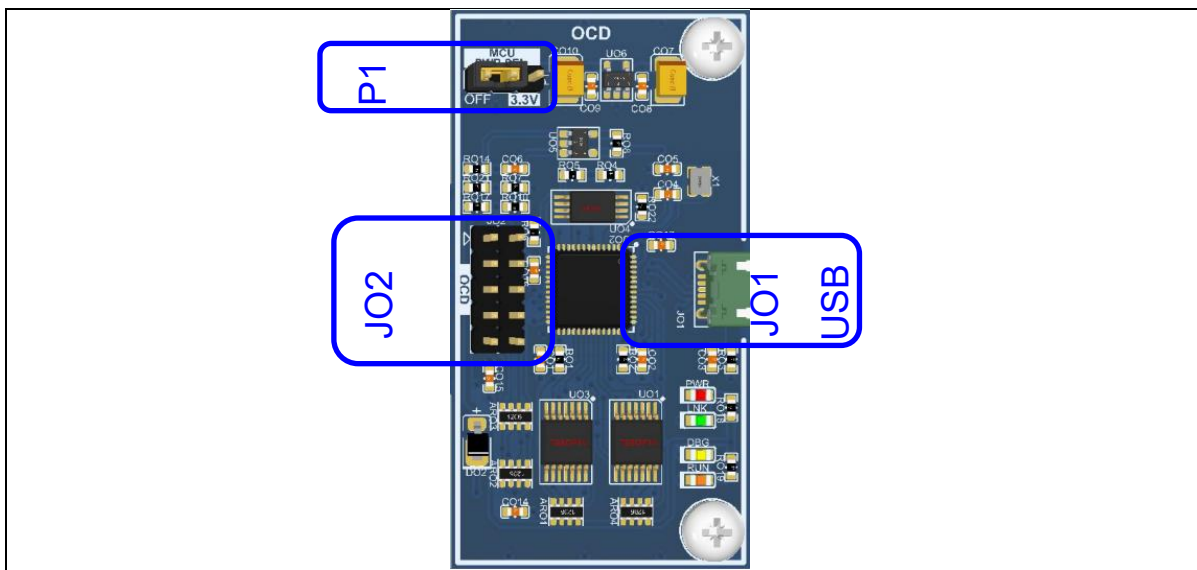


Figure 2. UART to USB Section

2.1.1 J01: OCD USB Connector

- Micro USB type B
- Use a 1.5M USB cable
- Include OCD

2.1.2 P1 (Pin Header): MCU Power Connection

The operating voltage is different for each device. Refer to the Device spec to use 5V power.

Table 2. P1 MCU Power Selector

P1	VDD	P1	VDD	P1	VDD
	5.0V		3.3V		External Power

2.1.3 JO2 (Pin Header): OCD Connector**Table 3. OCD Writing Interface**

Pin name	Pin number	Pin number	Pin name
MCU_RxD	1	2	VDD
MCU_RxD	3	4	GND
RUN_flag	5	6	DSCL
GND	7	8	DSDA
NC	9	10	NC

3. Device Part

3.1 Power, OCD Interface and Switch

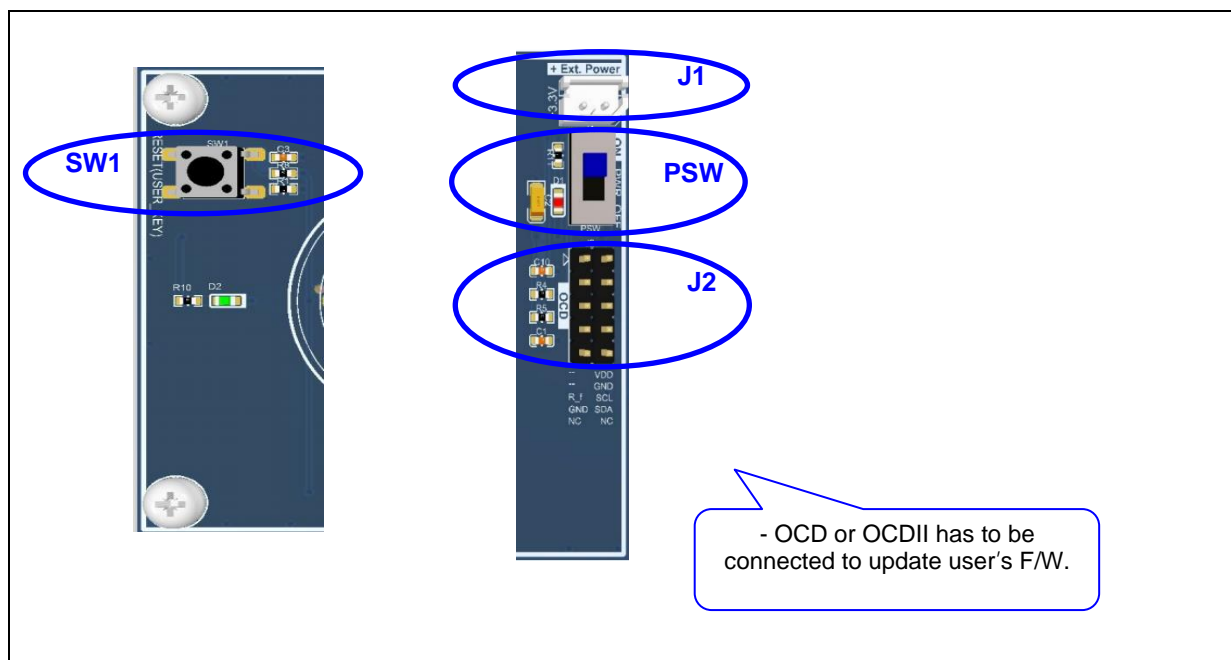
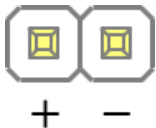


Figure 3. Power, OCD Interface and Switch

3.1.1 J1: External Power (Not Used)

If OCD Power is not used in P1 (Pin Header): MCU Power Connection, Use External Power.

Table 4. J1 Description and Connection

J1	Pin name	Connection
	VDD	+3.3V
	GND	0V

3.1.2 PSW: VDD Power Switch (ON/OFF)

Using PSW, users can turn on and turn off the power.

- On : Power on
- Off : Power off

3.1.3 SW1: Switch

Table 5. SW1 Description and Function

Switch	Function
SW1	RESETB(P10)

3.1.4 J2: OCD Interface

Table 6. OCD Debug Interface

Pin name	Pin number	Pin number	Pin name
NC (RXD)	1	2	VDD
NC (TXD)	3	4	GND
RUN_flag	5	6	DSCL
GND	7	8	DSDA
NC	9	10	NC

3.2 LED Display (D2)

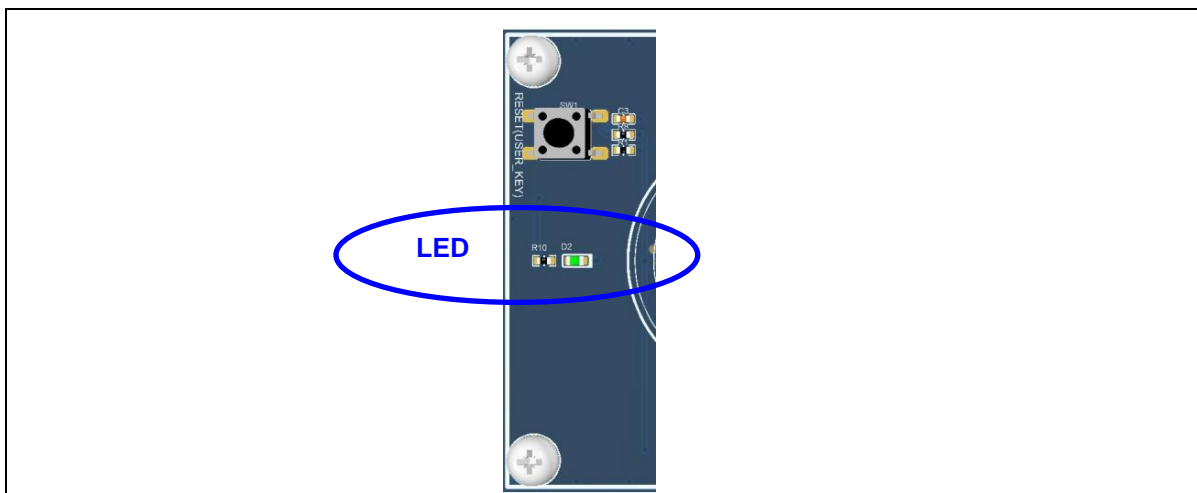


Figure 4. LED Display

3.2.1 LED Schematic

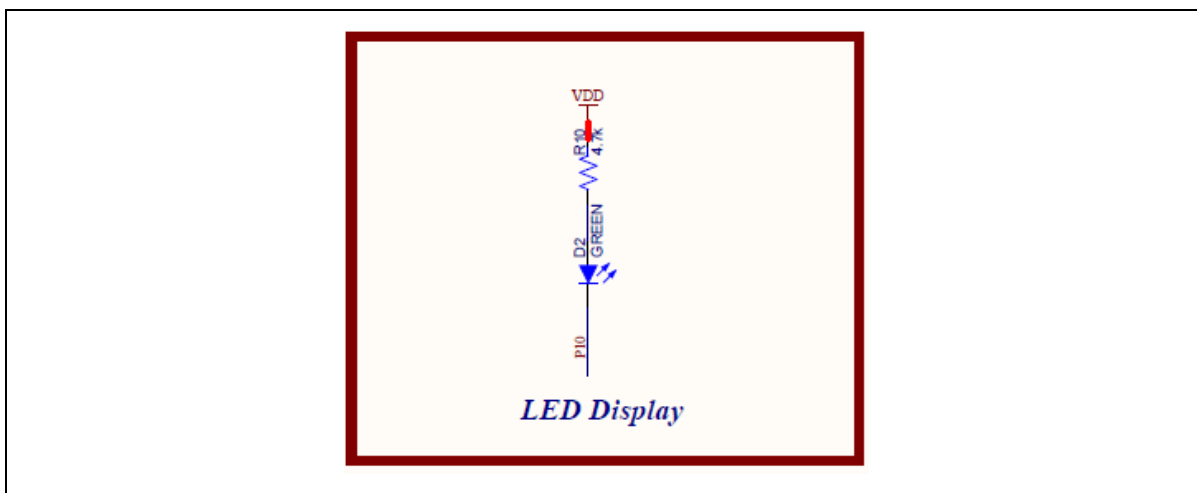


Figure 5. LED Schematic

3.2.2 LED Pin Assignment

Table 7. LED Pin Description

LED name	PORT
D2	P10

3.3 Pin Assignment

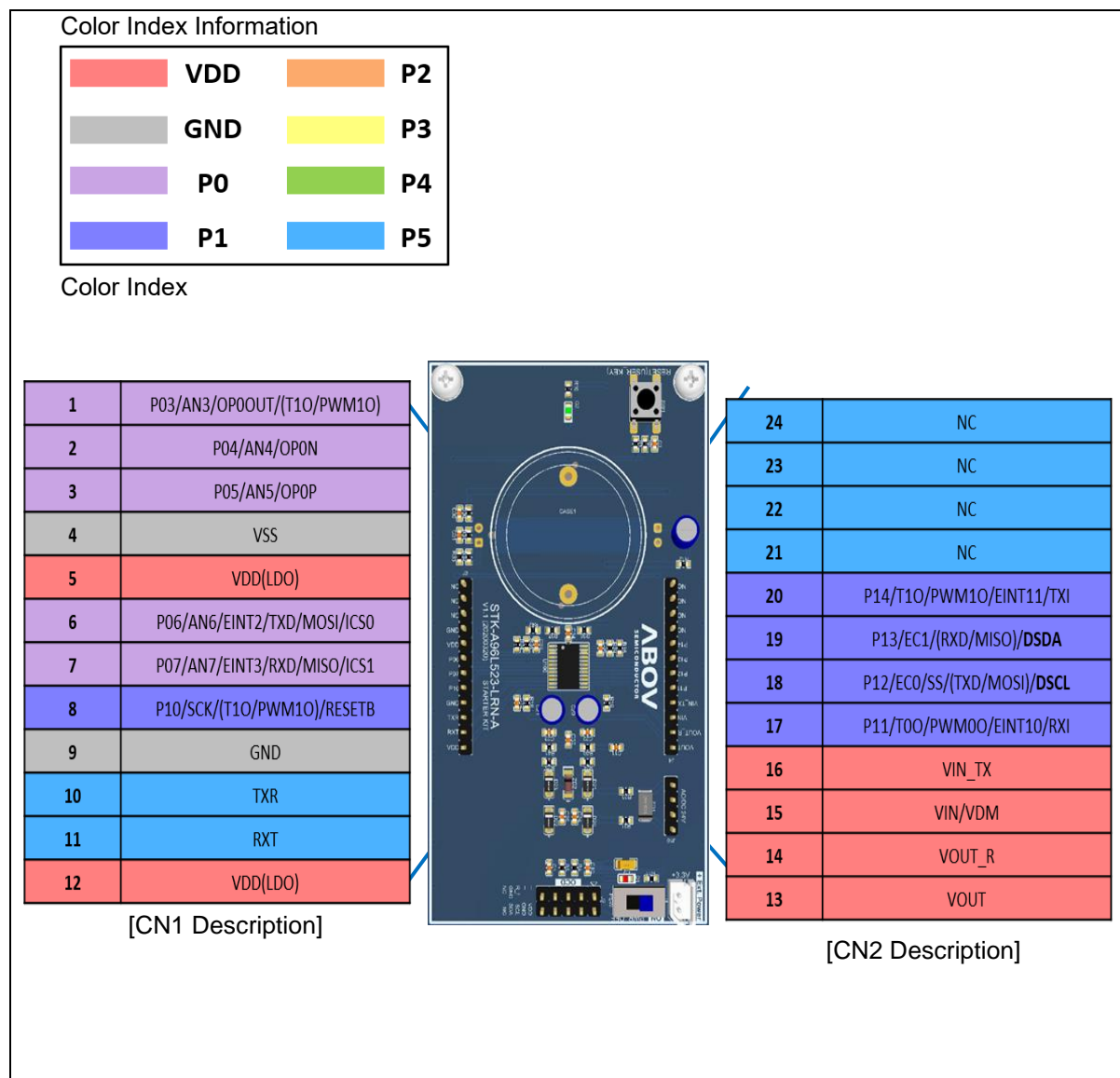


Figure 6. Pin Header

4. OCD and MCU Power Connection

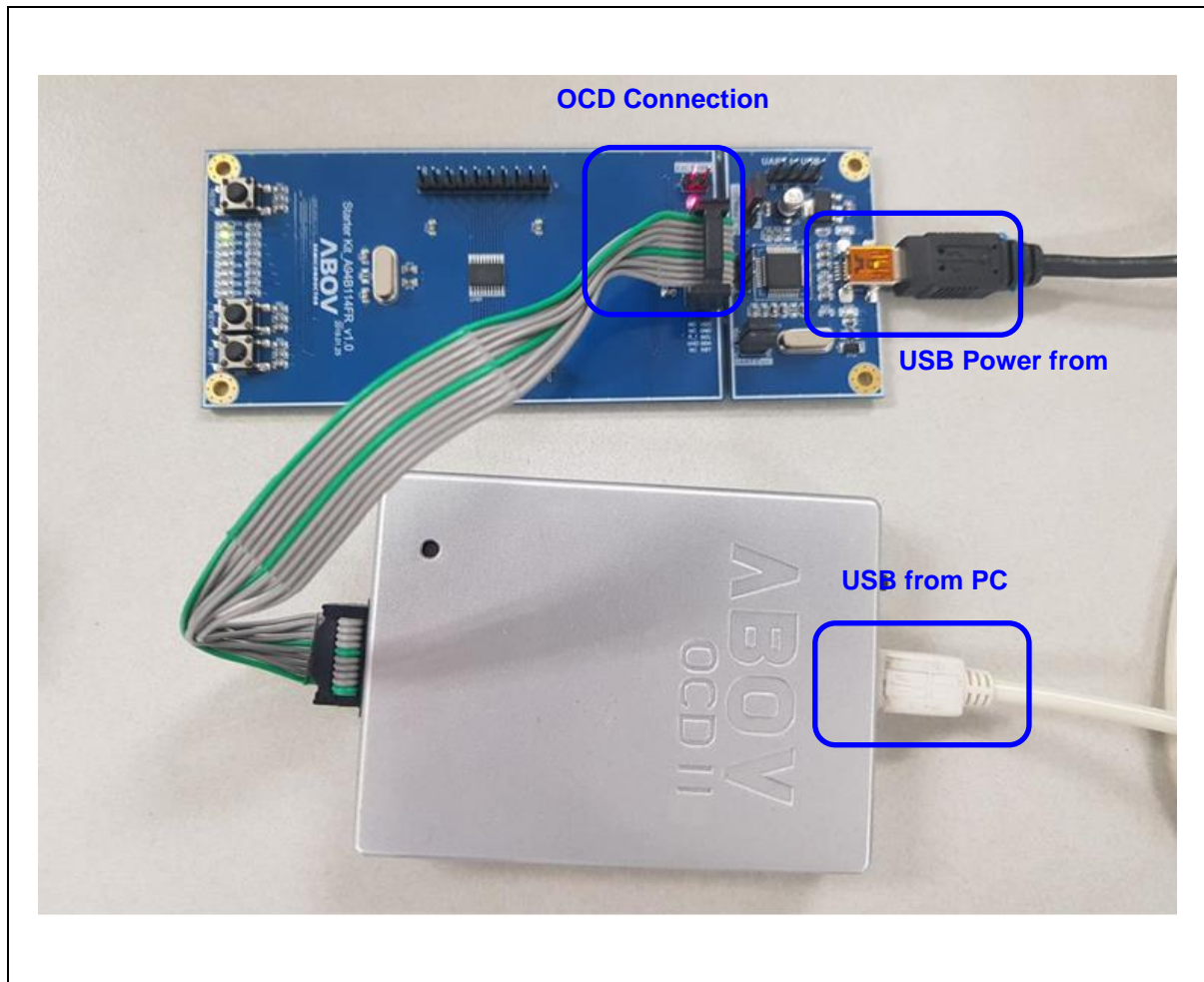


Figure 7. OCD and MCU Power Connection to Starter Kit

Revision History

Date	Version	Description
20.03.20	1.00	Document created
21.02.05	1.11	Document format changed
22.11.09	1.12	Revised the font of this document

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