A33G526

Starter Kit
Starter Kit_A33G526RLN

Starter Kit H/W Manual

Version 1.03

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1 Introduction of starter kit board

Figure 1 shows a starter kit board of A33G526RLN. In Table 1, you can see main features of the starter kit board.

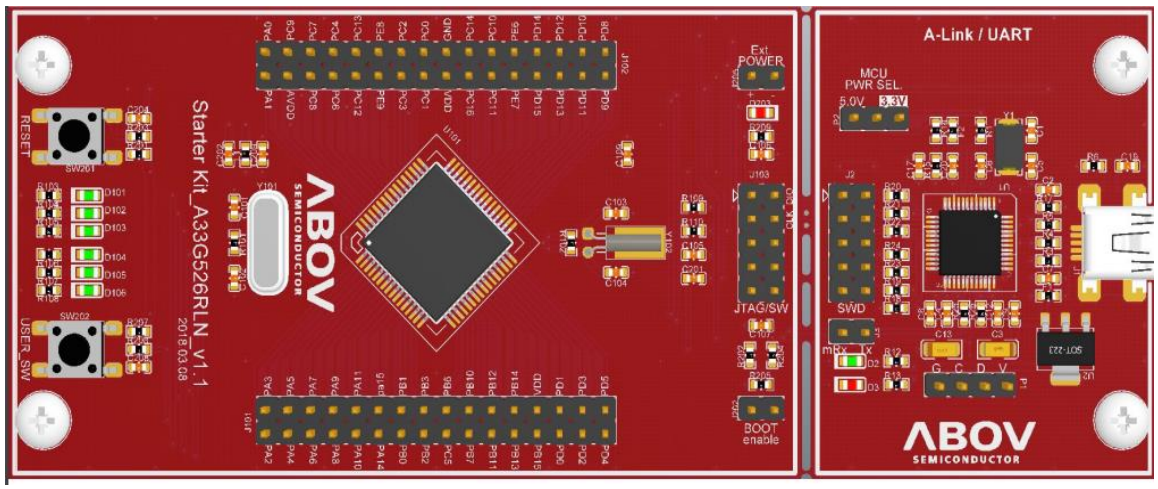


Figure 1. Starter Kit Board

Table 1. Main Features of Starter Kit Board

Main feature	Specifications	Remark
MCU	A33G526RLN	ARM CORTEX-M3
Operating clock	8 MHz / 32.768 KHz	Crystal Main / Sub
ROM	256 KB / 32 KB	Code Flash / Data Flash
RAM	24 KB	
Communication Port	USB 2.0	Mini USB Type B 5-pin
Debugging Port	SWD / JTAG	10-pin Connector
Input Buttons	1 reset & 1 event input	TACT Switch

2 A-link part

In this chapter, A-link part of the starter kit board is introduced.

2.1 A-link section

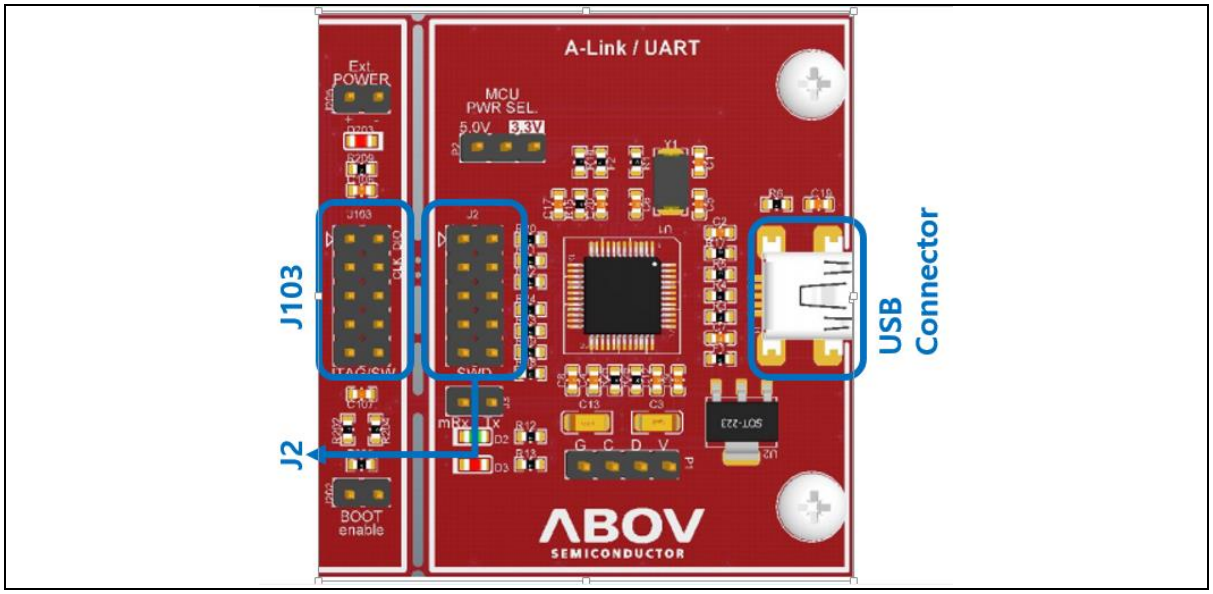


Figure 2. A-Link Section

2.1.1 USB connector (mini USB type B)

- PC USB interface (Debug Keil, IAR ..)
- CMSIS-DAP (Debug)
- COM Port

2.1.2 J103 (Box Header): SWD Connector on MCU Board

Table 2. SWD Pin Description on MCU Board

V-Sense	**1**	**2**	SWDIO/TMS
GND	**3**	**4**	SWCLK/TCK
GND	**5**	**6**	TDO
NC	**7**	**8**	TDI
GND	**9**	**10**	nRESET/RESET

2.1.3 J2 (Box Header): SWD Connector on A-Link Board

Table 3. A-Link SWD Pin Description

V-Sense	**1**	**2**	SWDIO/TMS
GND	**3**	**4**	SWCLK/TCK
GND	**5**	**6**	SWO/TDO
RTCK	**7**	**8**	NC/TDI
GND	**9**	**10**	nRESET

2.2 Power, USB to UART section

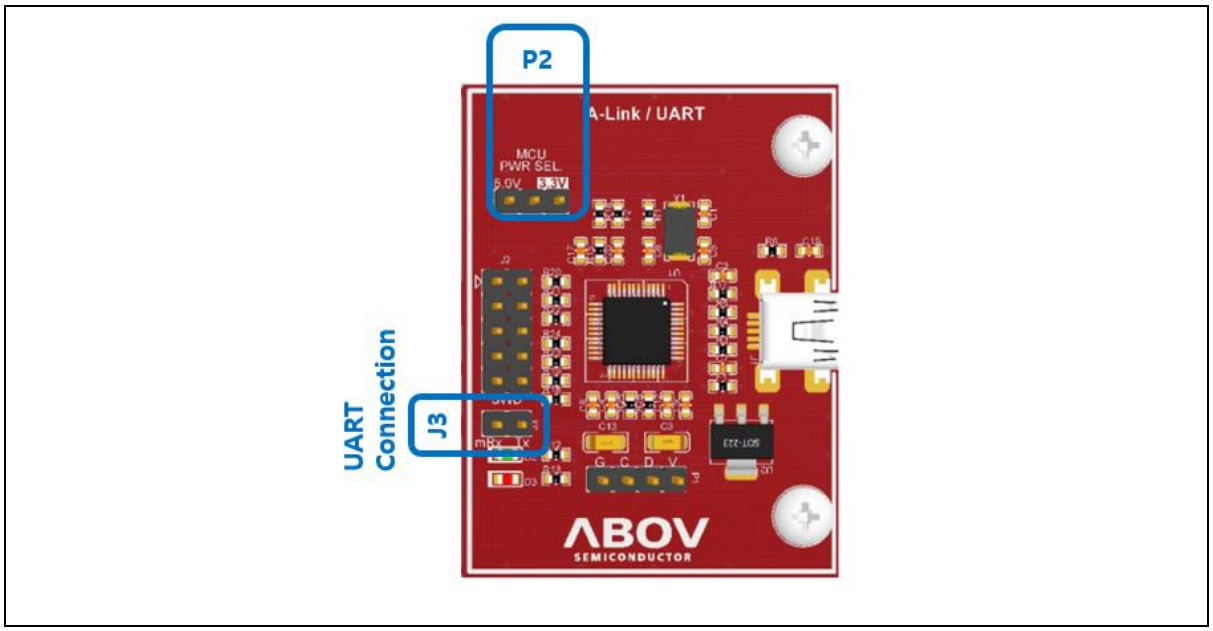


Figure 3. Power, USB to UART Section

2.2.1 P2: MCU Power Selector

Table 4. P2 MCU Power Selector

P2	VDD
	5.0V
	3.3V
	External Power

2.2.2 J3: USB to UART connection

Table 5. USB to UART Description

J3	Pin	Connection
	Short	(mRX) MCU RXD ← PC TXD
	Open	(mRx) MCU RXD Open

3 Device part

In this chapter, power, a boot mode selector and switches of the starter kit board are introduced.

3.1 Power, Boot mode selector and switch

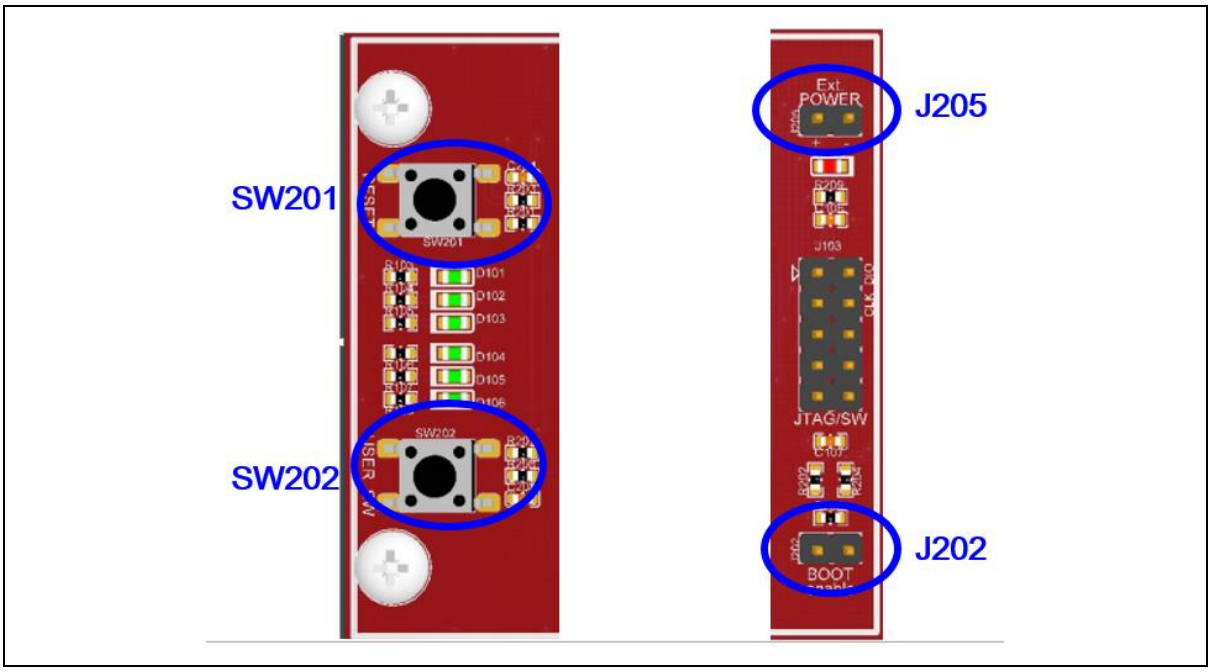
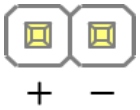


Figure 4. Power, Boot mode and Switch

3.1.1 J205: external power (not used)

Table 6. J205 Description and Connection

J205	Pin name	Connection
	VDD	+3.3 ~ 5.0V
	GND	0V

3.1.2 J202: mode select (boot/normal) pins

Table 7. J202 Boot Mode Selector

J202	Pin name	Connection
	Short	Boot mode
	Open	Normal mode

3.1.3 SW201, SW202: switch

Table 8. SW201, SW202 Description and Function

Switch	Function
SW201	nRESET/PC6
SW202	PB1

3.2 LED display (D101 – D106)

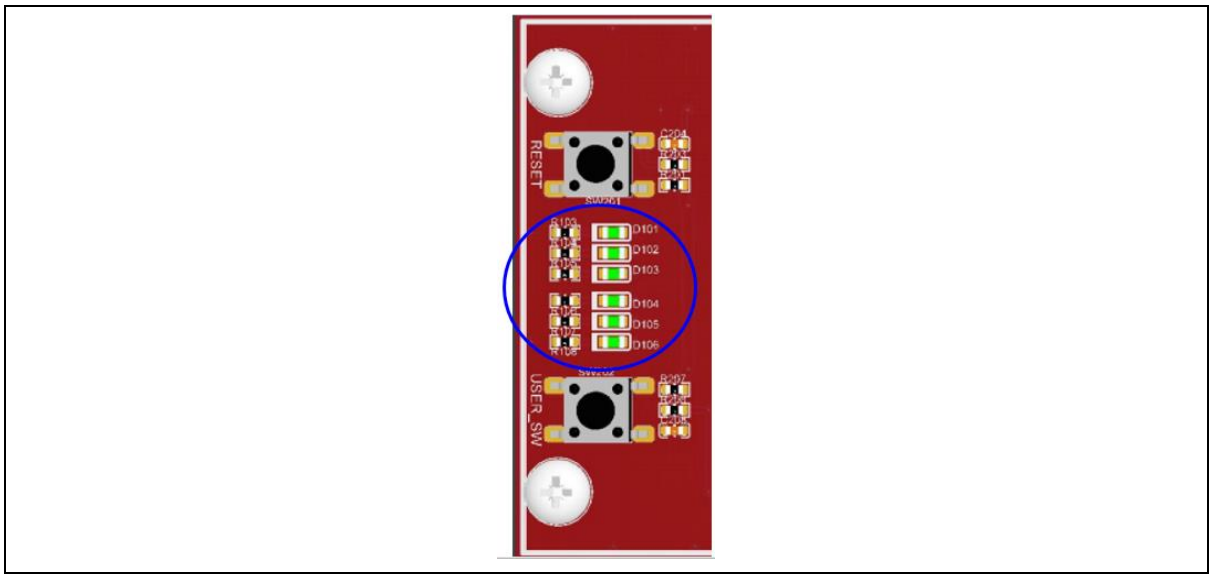


Figure 5. LED Display

3.2.1 LED schematic

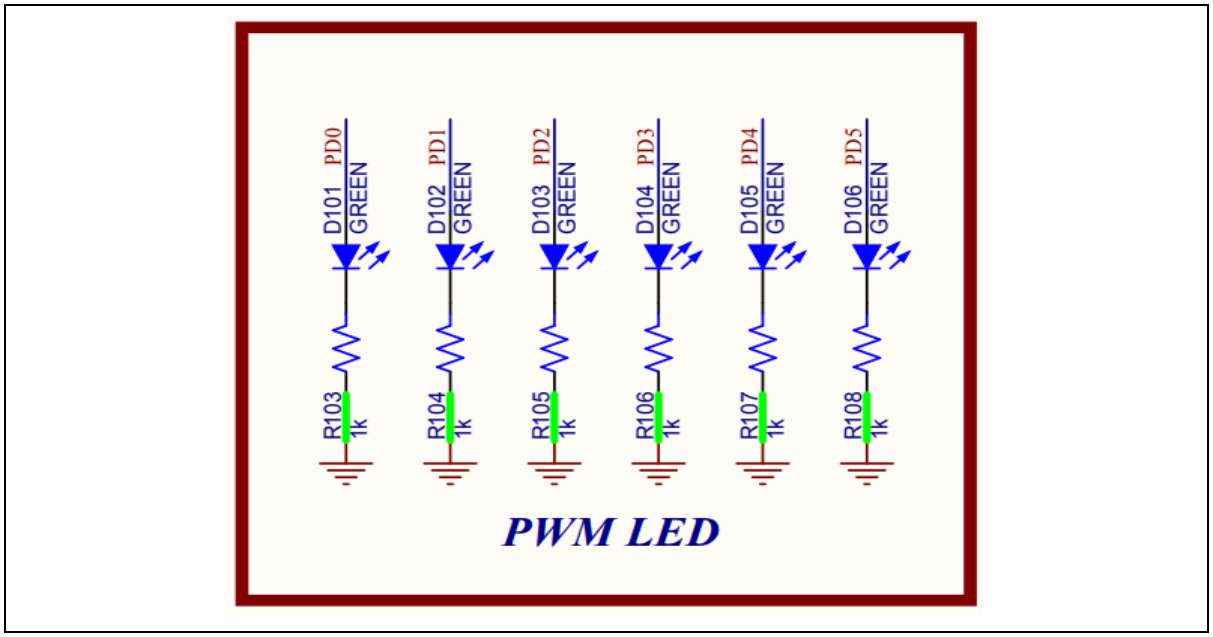


Figure 6. LED Schematic

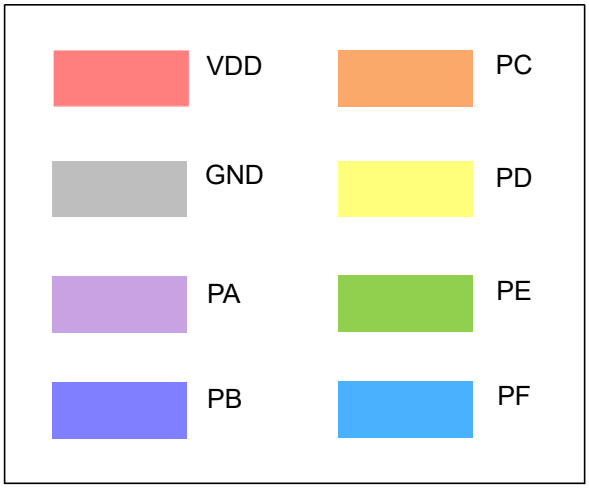
3.2.2 LED pin assignment

Table 9. LED Pin Description

LED name	PORT
D101	PD0
D102	PD1
D103	PD2
D104	PD3
D105	PD4
D106	PD5

3.3 Pin assignment

Pin color legend



CN1

1	PA2/AN2	PA3/AN3	2
3	PA4/AN4	PA5/AN5	4
5	PA6/T0C/AN6	PA7/T1C/AN7	6
7	PA8/T2C	PA9/T3C	8
9	PA10/T3C	PA11/T4C	10
11	PA14/T9C/AN14	PA15/T9C/AN15	12
13	PB0/T0O	PB1/T1O	14
15	PB2/T2O	PB3/T3O	16
17	PB5/T5O	PB6/T6O	18
19	PB7/T7O	PB10/SS0	20
21	PB11/SCK0	PB12/MOSI0	22
23	PB13/MISO0	PB14/SCL0	24
25	PB15/SDA0	VDD	26
27	PD0/PWM0	PD1/PWM1	28
29	PD2/PWM2	PD3/PWM3	30
31	PD4/PWM4	PD5/PWM5	32

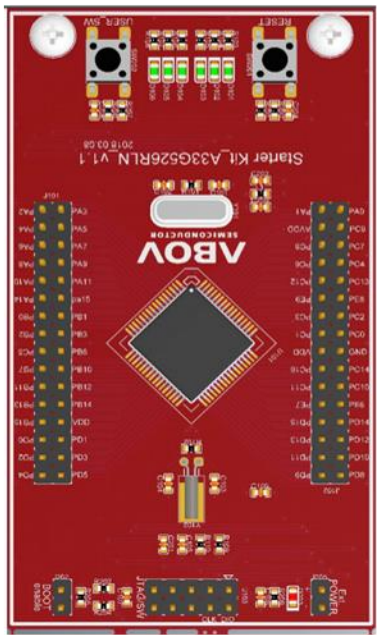


Figure 7. Pin Assignment

CN2

PA0/AN0	PA1/AN1	64
PC9/TXD0	AVDD	62
PC7/BOOT	PC8/RXD0	60
PC4/TDO/SWO	PC5/nRESET	58
PC13/CLKO	PC12/STBYO	56
PE8/SXIN	PE9/SXOUT	54
PC2/TMS/SWDIO	PC3/TCK/SWCLK	52
PC0/nTRST	PC1/TDI	50
GND	VDD	48
PC14/XTALO	PC15/XTALI	46
PC10/RXD2	PC11/TXD2	44
PE6/PWMB6/RXD3	PE7/PWMB7/TXD3	42
PD14/SCL1	PD15/SDA1	40
PD12/RXD1	PD13/TXD1	38
PD10/MOSI1	PD11/MISO1	36
PD8/SS1	PD9/SCK1	34

Revision history

Date	Version	Description
20.03.31	1.00	Document created
21.01.28	1.01	Updated Starter Kit figures. Modified item name to match STK with a PCB silk.
22.11.01	1.02	Revised the font of this document
24.11.22	1.03	Updated the disclaimer

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