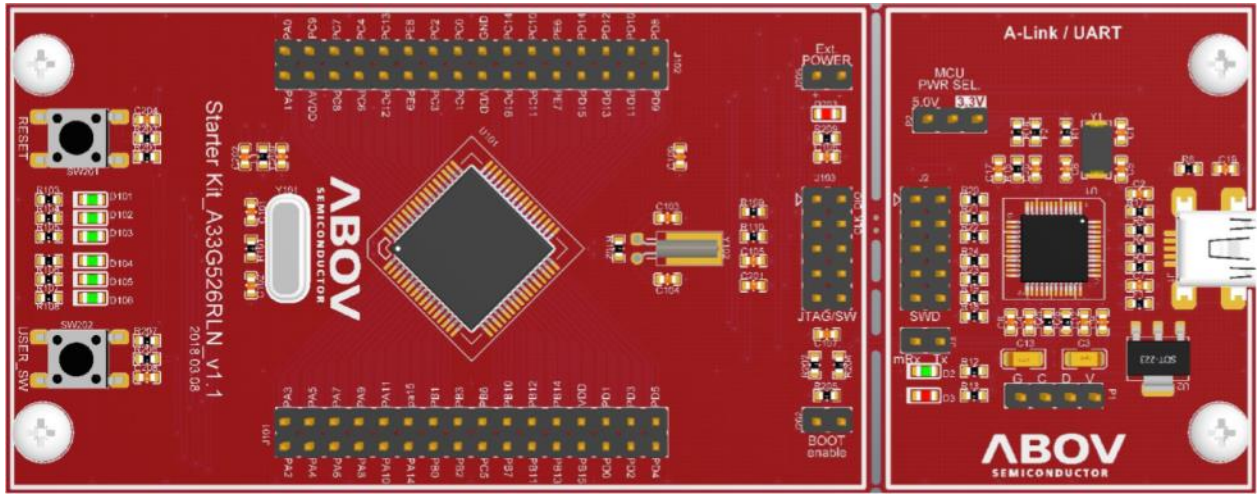
Application Note

How to use A33G526RLN v1.1 Starter Kit Board

2018.4.27

Starter Kit Board Description



[Figure1. Starter Kit board]

Contents	Main Features	Note
MCU	A33G526	ARM CORTEX-M3
Operating clock	8MHz/32.768KHz	Crystal Main/Sub
ROM	256kB/32KB flash ROM	Code / Data
RAM	24KB	
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

[Table1. Main features of Starter Kit board]

Starter Kit board (A-Link)

- **USB Connector (Mini USB type B)**
  - PC USB interface (Debug Keil, IAR ..)
  - CMSIS-DAP (Debug)
  - COM Port

- **J103 (Box Header) : JTAG/SWD Connector**

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

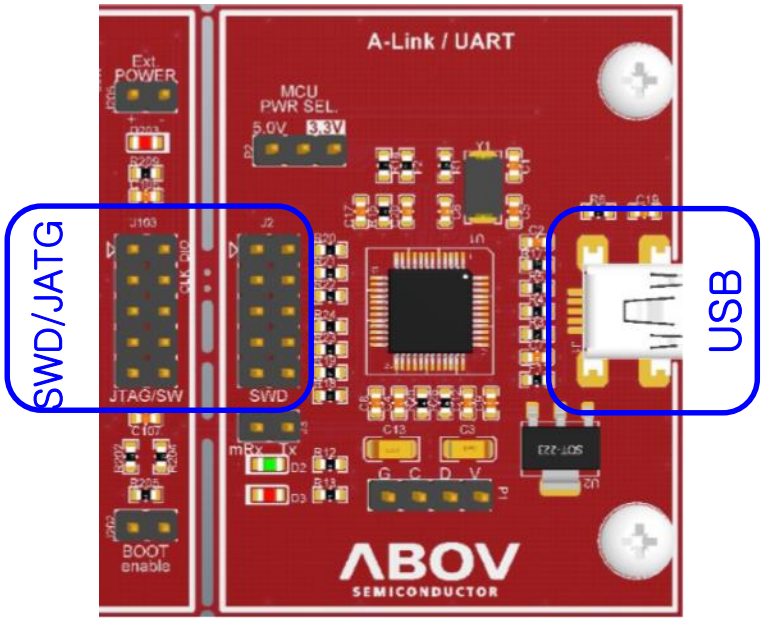
[Table2. JTAG pin description]

- **J2 (Box Header) : SWD Connector**

V-Sense	1	2	SWDIO
GND	3	4	SWCLK
GND	5	6	NC
NC	7	8	NC
GND	9	10	nRESET

[Table3. A-Link SWD Pin Description]

- **A-Link**



[Figure2. A-Link section]

Starter Kit board (A-Link)

P2 : MCU Power Selector

	5.0V
	3.3V
	External Power

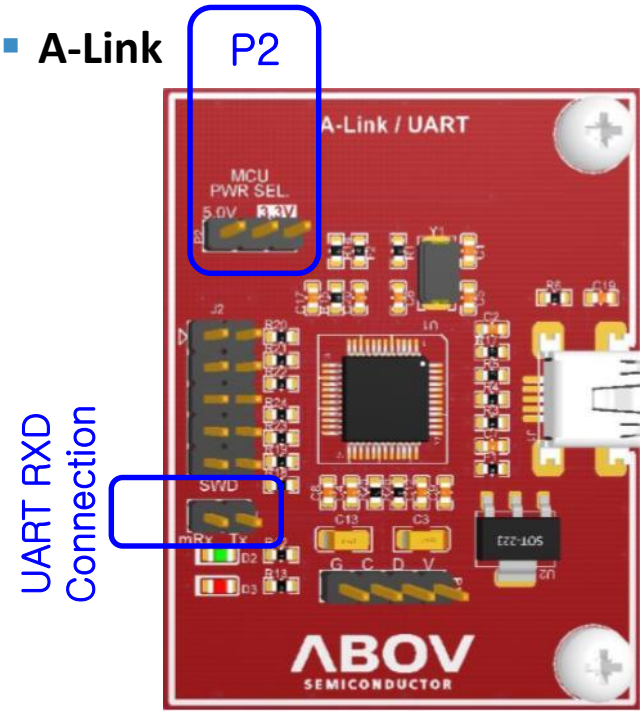
[Table4. Power Selection switch description]

J3 : USB to UART Connection

JP2	Pin	Connection
	Short	MCU RXD0 ← PC TXD
	Open	MCU RXD0 Open

[Table5. USB to UART description]

A-Link



[Figure3. A-Link section]

Power, Boot Mode and Switch

- **JP1 : External Power (Not used)**

JP1	Pin name	Connection
 + –	VDD	+3.3 ~ 5.0V
	GND	0V

[Table6. JP1 description and connection]

- **JP2 : Mode select(Boot/ Normal) pins**

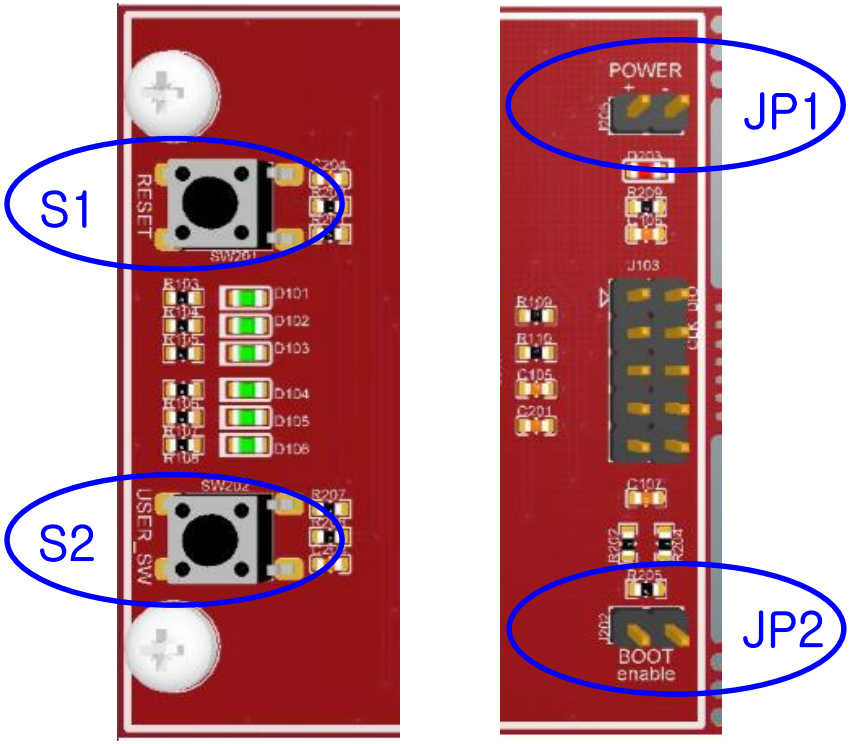
JP2	Pin	Connection
	Short	Boot mode
	Open	Normal mode

[Table7. JP2 Boot Mode selector]

- **S1, S2 : Switch**

Switch	Function
S1	**nRESET** / PC6
S2	PB1

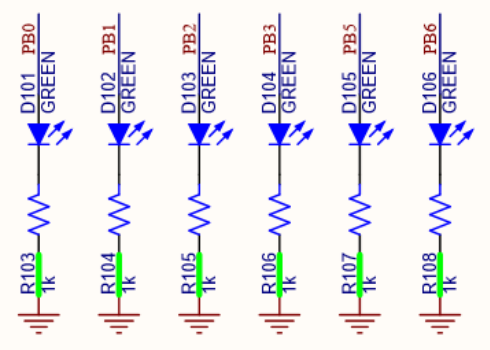
[Table8. S1, S2 description and Function]



[Figure4. Power, Boot Mode and Switch section]

LED display

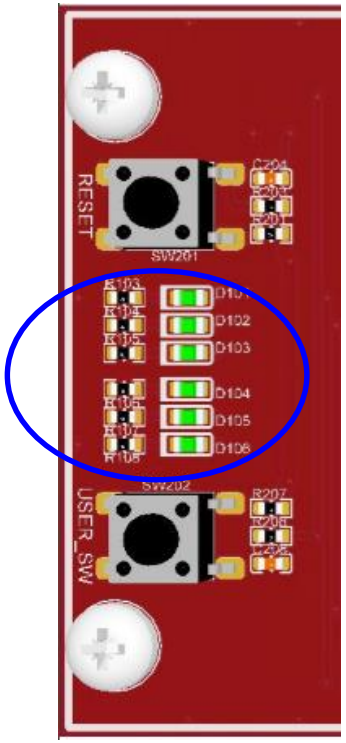
- **LED : D101~106**



[Figure5. LED schematic]

LED name	PORT
D101	PB0
D102	PB1
D103	PB2
D104	PB3
D105	PB4
D106	PB5

[Table9. LED pin description]

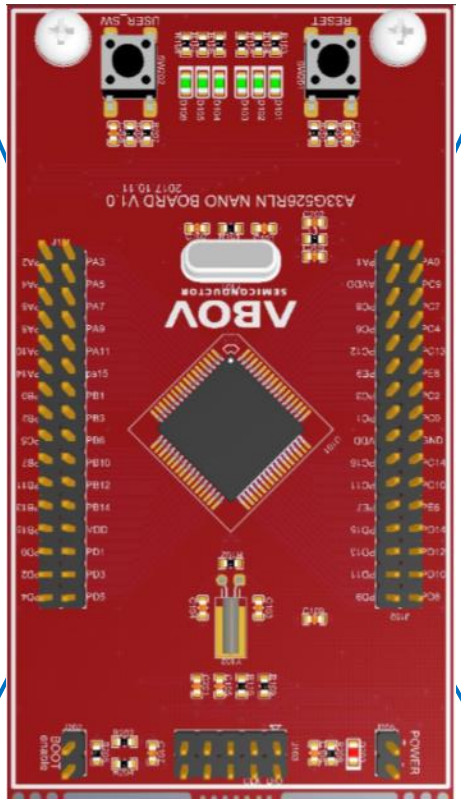


[Figure6. LED display]

Pin Header

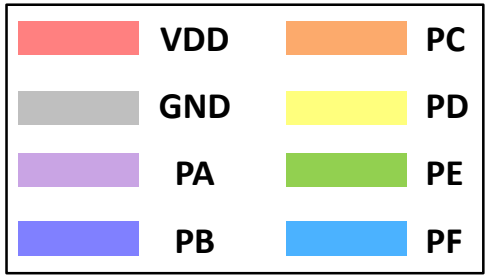
1	PA2/AN2	PA3/AN3	2
3	PA4/AN4	PA5/AN5	4
5	PA6/T0C/AN6	PA7/T1C/AN7	6
7	PA8/T2C	PA9/T3C	8
9	PA10/T3C	PA11/T4C	10
11	PA14/T9C/AN14	PA15/T9C/AN15	12
13	PB0/T0O	PB1/T1O	14
15	PB2/T2O	PB3/T3O	16
17	PB5/T5O	PB6/T6O	18
19	PB7/T7O	PB10/SS0	20
21	PB11/SCK0	PB12/MOSI0	22
23	PB13/MISO0	PB14/SCL0	24
25	PB15/SDA0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

[Table10. CN1 description]



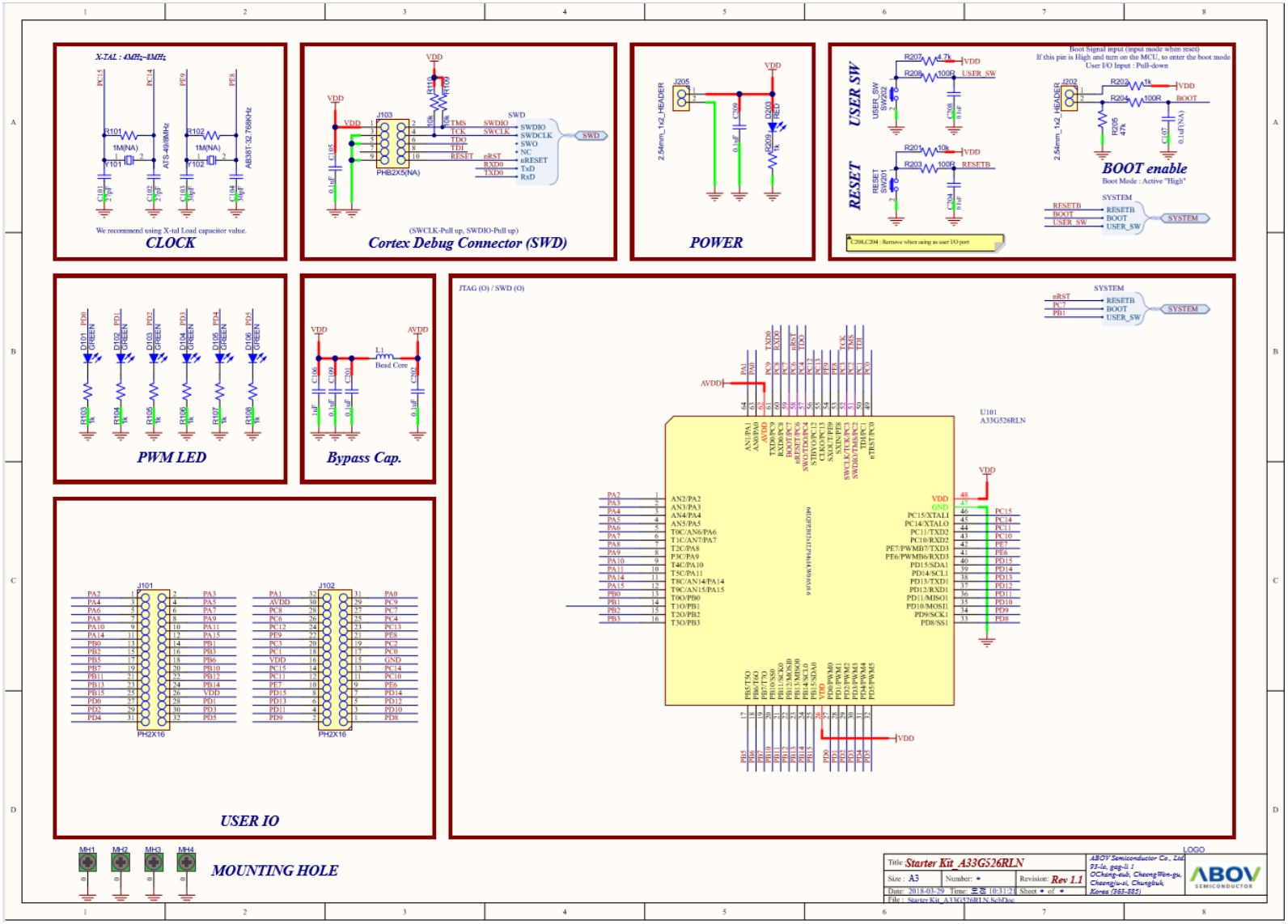
63	PA0/AN0	PA1/AN1	64
61	PC9/TXD0	AVDD	62
59	PC7/BOOT	PC8/RXD0	60
57	PC4/TDO/SWO	PC5/nRESET	58
55	PC13/CLKO	PC12/STBYO	56
53	PE8/SXIN	PE9/SXOUT	54
51	PC2/TMS/SWDIO	PC3/TCK/SWCLK	52
49	PC0/nTRST	PC1/TDI	50
47	GND	VDD	48
45	PC14/XTALO	PC15/XTALI	46
43	PC10/RXD2	PC11/TXD2	44
41	PE6/PWMB6/RXD3	PE7/PWMB7/TXD3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

[Table11. CN2 description]



[Figure7. Color index information]

Starter Kit Board Schematic



[Figure8. Schematic]