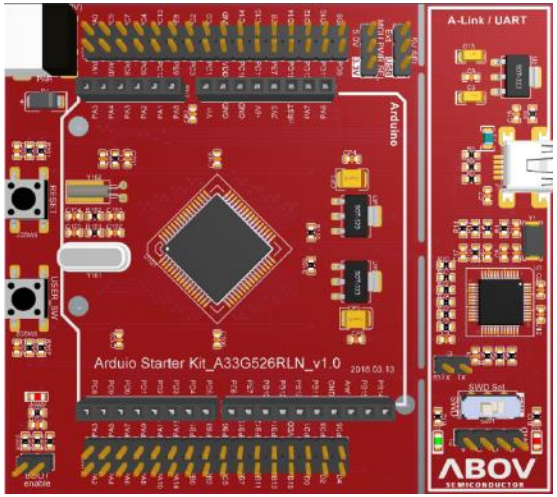
Application Note

How to use A33G526RLN(UNO) 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	10-pin Connector
Input Buttons	1 reset, 1 event input	TACT Switch

[Table1. Main features of Starter Kit board]

Power, Boot Mode and Switch

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

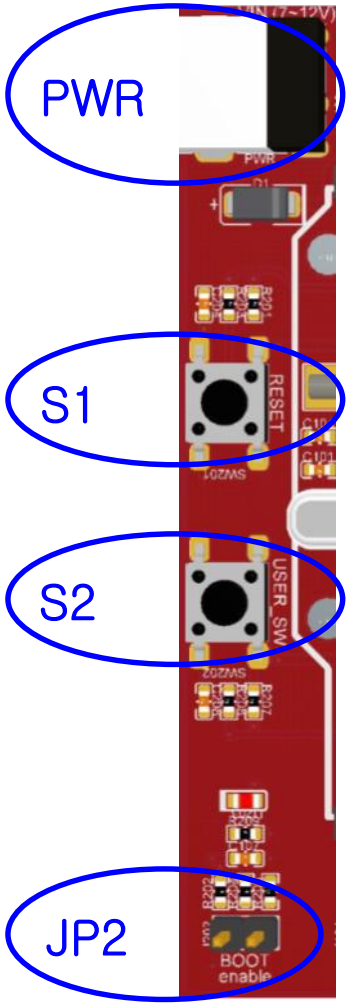
JP2	Pin	Connection
	Short	Boot mode
	Open	Normal mode

[Table2. JP2 Boot Mode selector]

- **S1, S2 : Switch**

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

[Table3. S1, S2 description and Function]



[Figure2. Power, Boot Mode and Switch section]

Power, Boot Mode and Switch

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

PWR	Pin name	Connection
	Center	+7 ~ 12V
	GND	0V

[Table4. JP1 description and connection]

- **PS1 : Power Select pins (5V)**

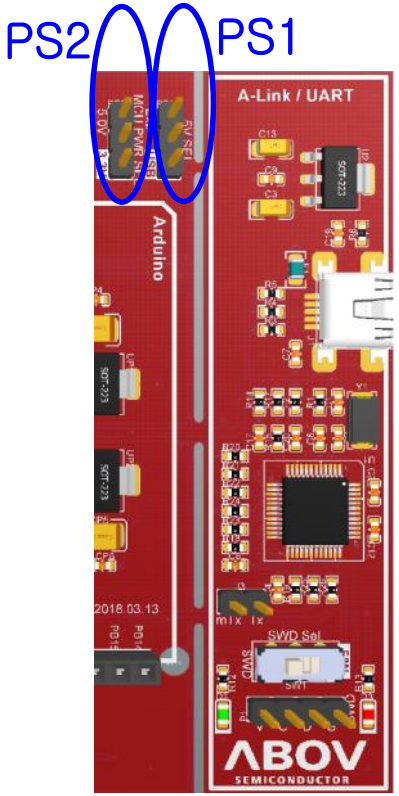
PS1	Pin	Connection
	1~2 Short	External power
	2~3 Short	USB Power

[Table5. PS2 Power selector]

- **PS2 : MCU Power Selector (3.3V/5V)**

PS1	Pin	Connection
	1~2 Short	5.0V
	2~3 Short	3.3V

[Table6. PS2 MCU Power Selector]



[Figure3. Power, Boot Mode and Switch section]

Starter Kit board (A-Link)

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

- **SWD interface**

1	V-Sense (VDD)
2	SWDIO
3	SWCLK
4	GND

[Table7. SWD pin description]

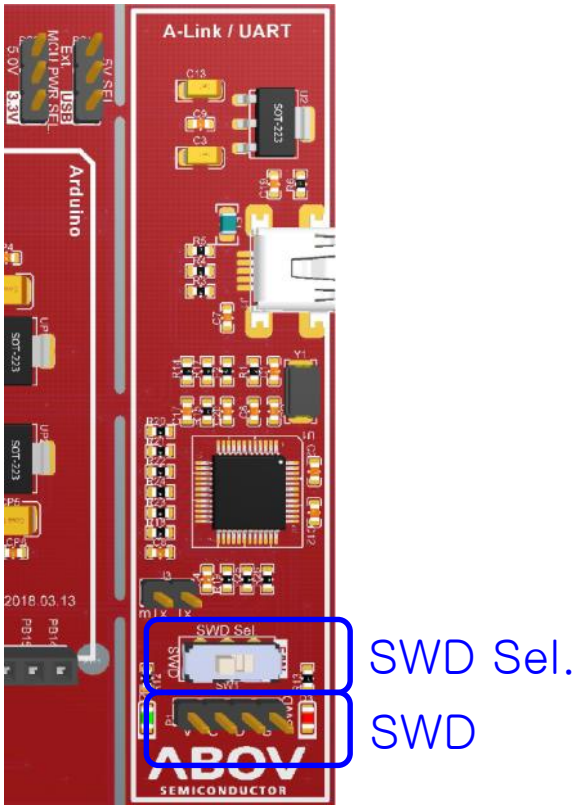
- **SWD Selector Switch**

F/W	1	A-Link
SWD	2	MCU SWD

[Table8. SWD Selector Switch description]

1) VDD, 2) SWDIO, 3) SWCLK, 4) GMD

- **A-Link**

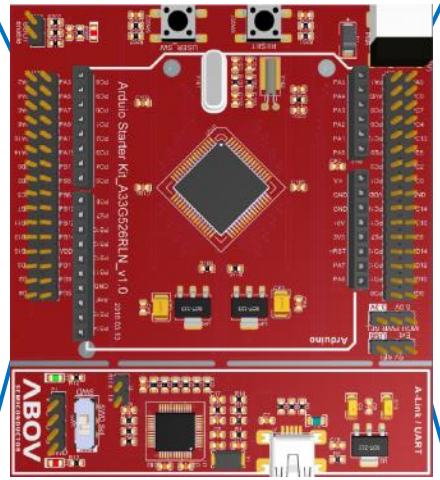


[Figure4. A-Link section]

Pin Header

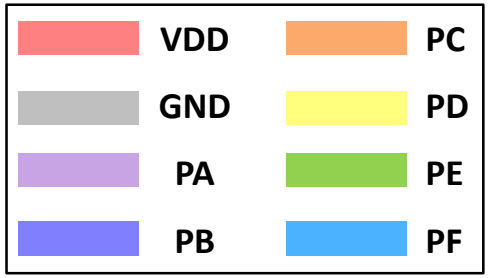
1	PA2/AN2	PA3/AN3	2
3	PA4/AN4	PA5/AN5	4
5	PA6/T0C/AN6	PA7/T1C/AN7	6
7	PA8/T2C	PA9/T3C	8
9	PA10/T3C	PA11/T4C	10
11	PA14/T9C/AN14	PA15/T9C/AN15	12
13	PB0/T0O	PB1/T1O	14
15	PB2/T2O	PB3/T3O	16
17	PB5/T5O	PB6/T6O	18
19	PB7/T7O	PB10/SS0	20
21	PB11/SCK0	PB12/MOSI0	22
23	PB13/MISO0	PB14/SCL0	24
25	PB15/SDA0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

[Table9. 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

[Table10. CN2 description]

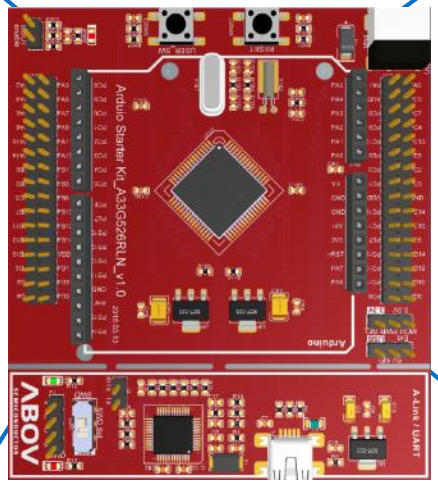


[Figure5. Color index information]

Pin Header (Arduino interface)

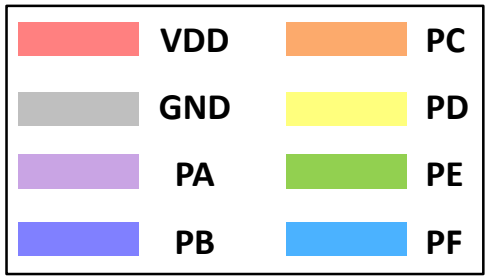
PC8/RX0	1
PC9/TX0	2
PD0/PWM0	3
PD1/PWM1	4
PD2/PWM2	5
PD3/PWM3	6
PD4/PWM4	7
PD5/PWM5	8
PE6/PWM6/RX3	1
PE7/PWM7/TX3	2
PB10/SS0	3
PB12/MOSI0	4
PB13/MISO0	5
PB11/SCK0	6
GND	7
AREF	8
PB15/SDA0	9
PB14/SCL0	10

[Table11. PH3/4 description]



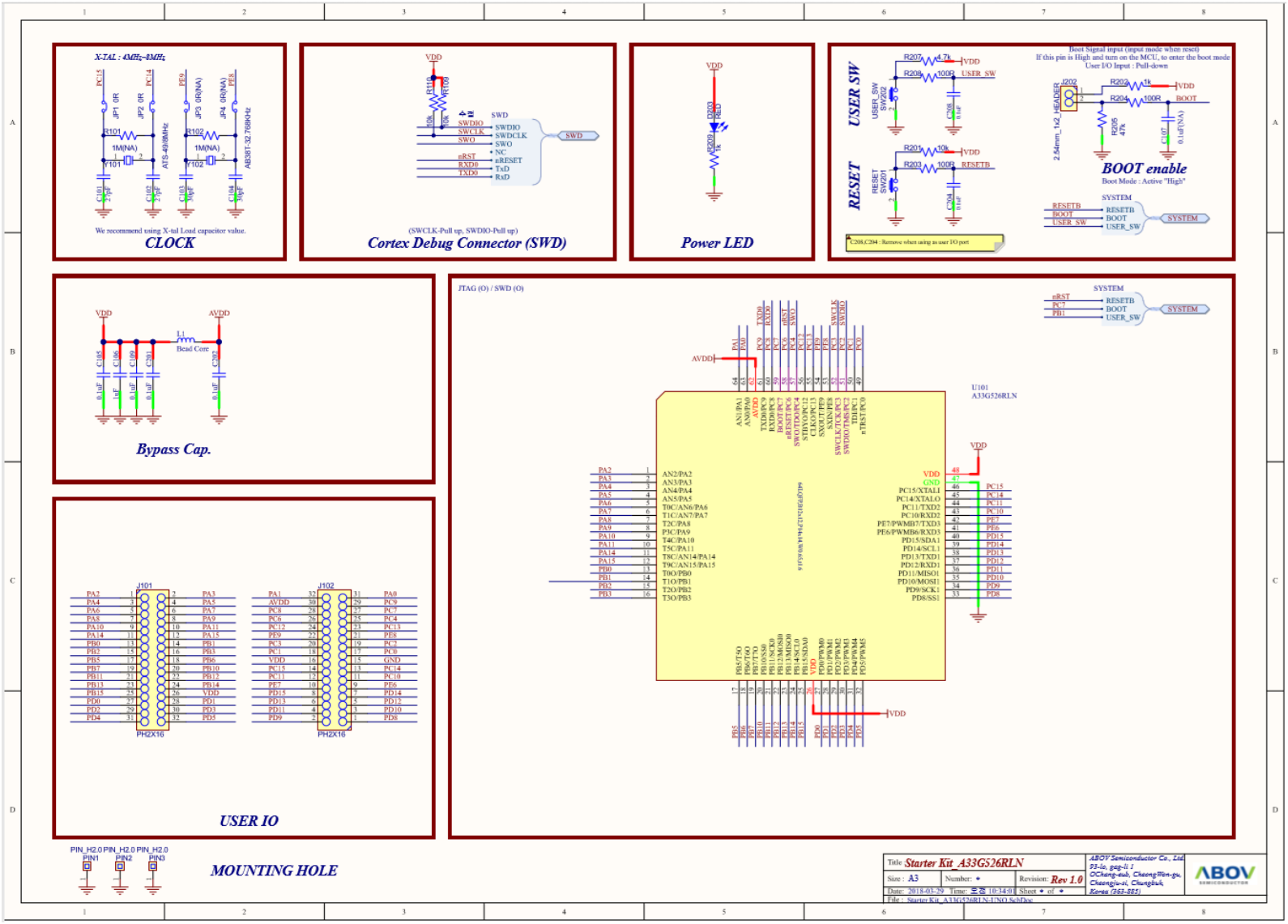
6	PA5/AN5
5	PA4/AN4
4	PA3/AN3
3	PA2/AN2
2	PA1/AN1
1	PA0/AN0
8	VIN
7	GND
6	GND
5	5V
4	3.3V
3	RESETB
2	PA7/AN7
1	PA6/AN6

[Table12. PH1/2 description]



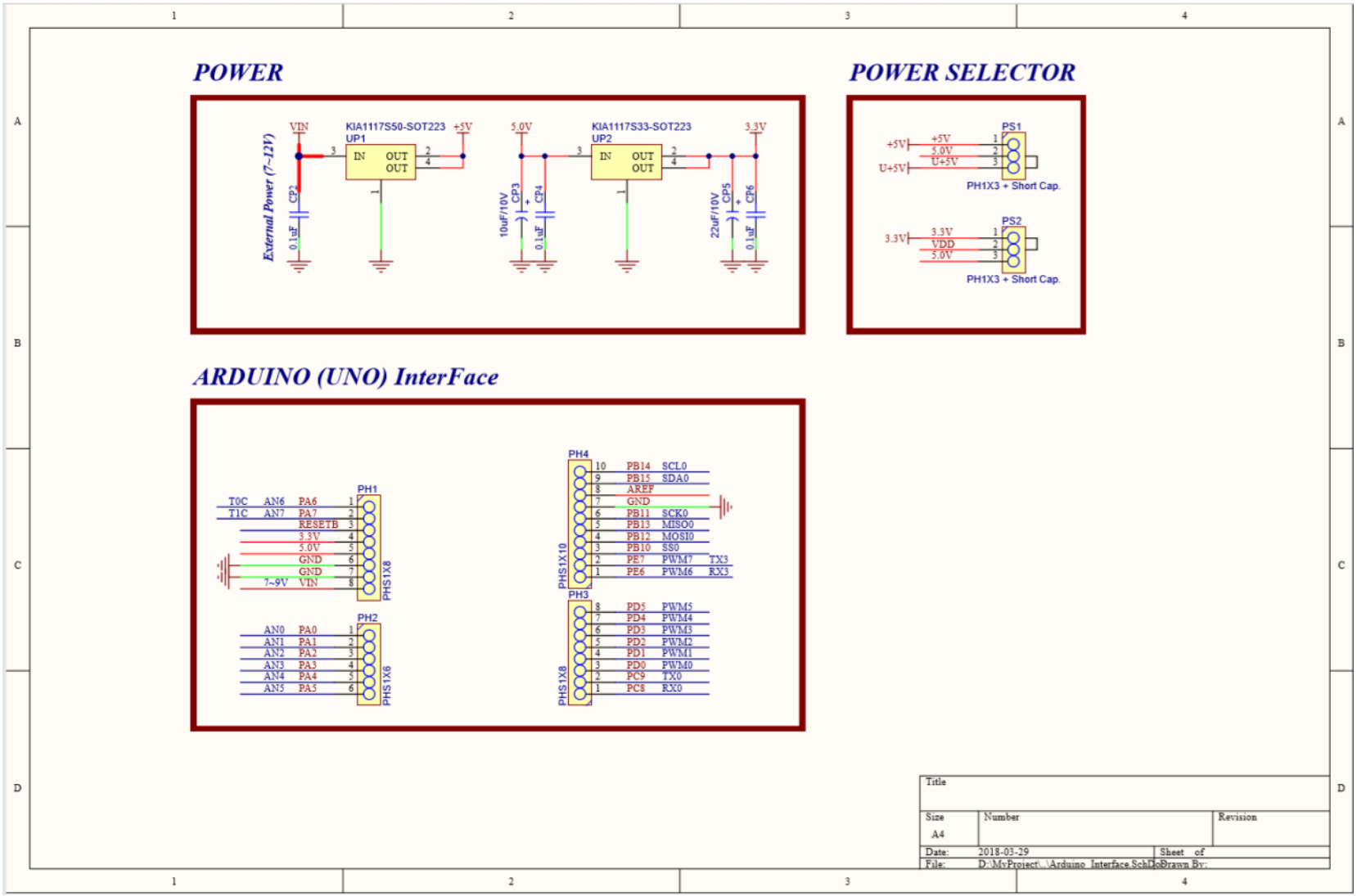
[Figure6. Color index information]

Starter Kit Board Schematic



[Figure7. Schematic]

Starter Kit Board Schematic (arduino interface)



[Figure8. Schematic]