

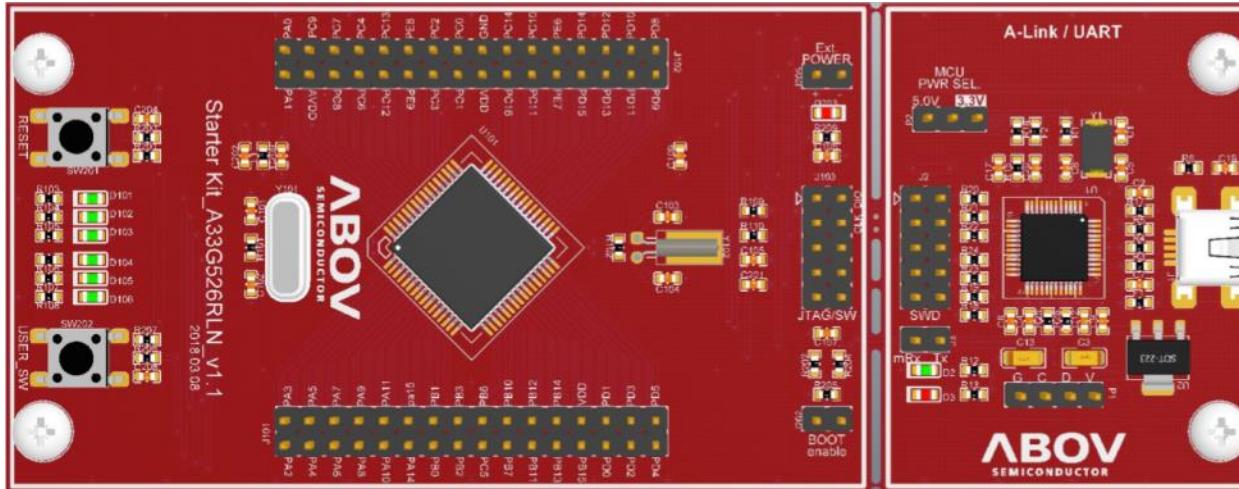
## Application Note

# How to use A33G526RLN v1.1 Starter Kit Board



2018.4.27

# Starter Kit Board Description



# 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

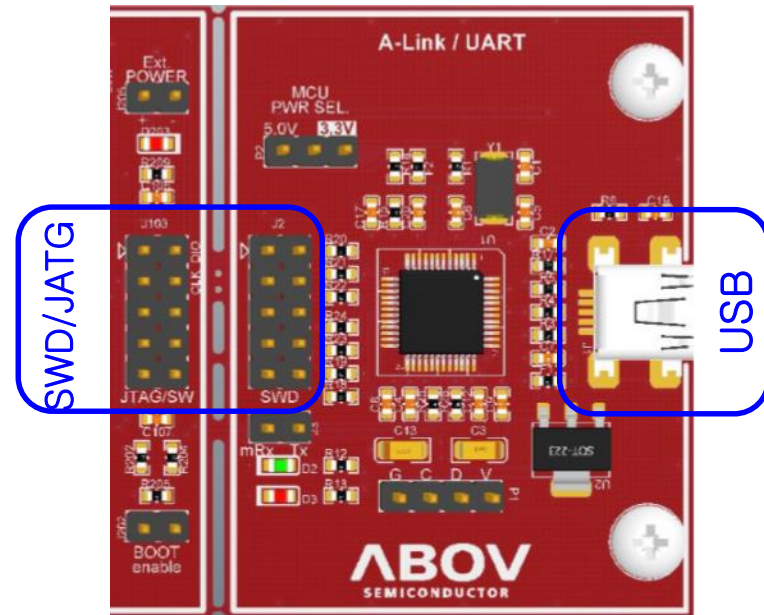
[Table2. JTAG pin description]

## ■ 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

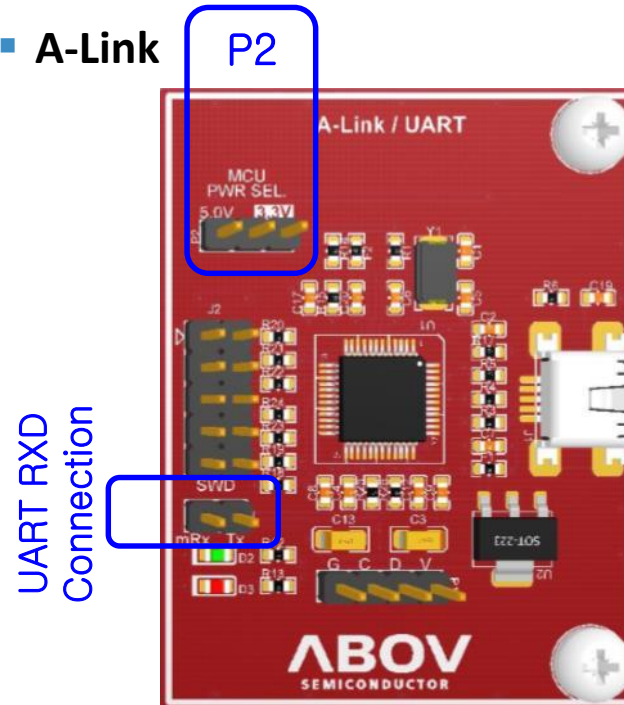
[Table4. Power Selection switch description]

## ■ 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]

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

JP2	Pin	Connection
	Short	Boot mode
	Open	Normal mode

[Table7. JP2 Boot Mode selector]

- **S1, S2 : Switch**

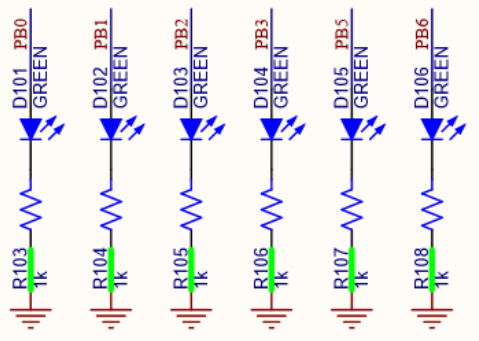
Switch	Function
S1	nRESET / PC6
S2	PB1

The left image shows the top of the PCB with the following components labeled:

- S1**: RESET button
- S2**: USER\_SW button
- JP1**: POWER header
- JP2**: BOOT enable header
- Other components**: R103, R104, R105, R106, R107, R108, D101, D102, D103, D104, D105, D106, SW201, SW202, R207, R208, R209, R210, R211, R212, R213, R214, R215, R216, R217, R218, R219, R220, R221, R222, R223, R224, R225, R226, R227, R228, R229, R230, R231, R232, R233, R234, R235, R236, R237, R238, R239, R240, R241, R242, R243, R244, R245, R246, R247, R248, R249, R250, R251, R252, R253, R254, R255, R256, R257, R258, R259, R260, R261, R262, R263, R264, R265, R266, R267, R268, R269, R270, R271, R272, R273, R274, R275, R276, R277, R278, R279, R280, R281, R282, R283, R284, R285, R286, R287, R288, R289, R290, R291, R292, R293, R294, R295, R296, R297, R298, R299, R300, R301, R302, R303, R304, R305, R306, R307, R308, R309, R310, R311, R312, R313, R314, R315, R316, R317, R318, R319, R320, R321, R322, R323, R324, R325, R326, R327, R328, R329, R330, R331, R332, R333, R334, R335, R336, R337, R338, R339, R340, R341, R342, R343, R344, R345, R346, R347, R348, R349, R350, R351, R352, R353, R354, R355, R356, R357, R358, R359, R360, R361, R362, R363, R364, R365, R366, R367, R368, R369, R370, R371, R372, R373, R374, R375, R376, R377, R378, R379, R380, R381, R382, R383, R384, R385, R386, R387, R388, R389, R390, R391, R392, R393, R394, R395, R396, R397, R398, R399, R400, R401, R402, R403, R404, R405, R406, R407, R408, R409, R410, R411, R412, R413, R414, R415, R416, R417, R418, R419, R420, R421, R422, R423, R424, R425, R426, R427, R428, R429, R430, R431, R432, R433, R434, R435, R436, R437, R438, R439, R440, R441, R442, R443, R444, R445, R446, R447, R448, R449, R450, R451, R452, R453, R454, R455, R456, R457, R458, R459, R460, R461, R462, R463, R464, R465, R466, R467, R468, R469, R470, R471, R472, R473, R474, R475, R476, R477, R478, R479, R480, R481, R482, R483, R484, R485, R486, R487, R488, R489, R490, R491, R492, R493, R494, R495, R496, R497, R498, R499, R500, R501, R502, R503, R504, R505, R506, R507, R508, R509, R510, R511, R512, R513, R514, R515, R516, R517, R518, R519, R520, R521, R522, R523, R524, R525, R526, R527, R528, R529, R530, R531, R532, R533, R534, R535, R536, R537, R538, R539, R540, R541, R542, R543, R544, R545, R546, R547, R548, R549, R550, R551, R552, R553, R554, R555, R556, R557, R558, R559, R560, R561, R562, R563, R564, R565, R566, R567, R568, R569, R570, R571, R572, R573, R574, R575, R576, R577, R578, R579, R580, R581, R582, R583, R584, R585, R586, R587, R588, R589, R590, R591, R592, R593, R594, R595, R596, R597, R598, R599, R600, R601, R602, R603, R604, R605, R606, R607, R608, R609, R610, R611, R612, R613, R614, R615, R616, R617, R618, R619, R620, R621, R622, R623, R624, R625, R626, R627, R628, R629, R630, R631, R632, R633, R634, R635, R636, R637, R638, R639, R640, R641, R642, R643, R644, R645, R646, R647, R648, R649, R650, R651, R652, R653, R654, R655, R656, R657, R658, R659, R660, R661, R662, R663, R664, R665, R666, R667, R668, R669, R670, R671, R672, R673, R674, R675, R676, R677, R678, R679, R680, R681, R682, R683, R684, R685, R686, R687, R688, R689, R690, R691, R692, R693, R694, R695, R696, R697, R698, R699, R700, R701, R702, R703, R704, R705, R706, R707, R708, R709, R710, R711, R712, R713, R714, R715, R716, R717, R718, R719, R720, R721, R722, R723, R724, R725, R726, R727, R728, R729, R730, R731, R732, R733, R734, R735, R736, R737, R738, R739, R740, R741, R742, R743, R744, R745, R746, R747, R748, R749, R750, R751, R752, R753, R754, R755, R756, R757, R758, R759, R760, R761, R762, R763, R764, R765, R766, R767, R768, R769, R770, R771, R772, R773, R774, R775, R776, R777, R778, R779, R780, R781, R782, R783, R784, R785, R786, R787, R788, R789, R790, R791, R792, R793, R794, R795, R796, R797, R798, R799, R800, R801, R802, R803, R804, R805, R806, R807, R808, R809, R810, R811, R812, R813, R814, R815, R816, R817, R818, R819, R820, R821, R822, R823, R824, R825, R826, R827, R828, R829, R830, R831, R832, R833, R834, R835, R836, R837, R838, R839, R840, R841, R842, R843, R844, R845, R846, R847, R848, R849, R850, R851, R852, R853, R854, R855, R856, R857, R858, R859, R860, R861, R862, R863, R864, R865, R866, R867, R868, R869, R870, R871, R872, R873, R874, R875, R876, R877, R878, R879, R880, R881, R882, R883, R884, R885, R886, R887, R888, R889, R890, R891, R892, R893, R894, R895, R896, R897, R898, R899, R900, R901, R902, R903, R904, R905, R906, R907, R908, R909, R910, R911, R912, R913, R914, R915, R916, R917, R918, R919, R920, R921, R922, R923, R924, R925, R926, R927, R928, R929, R930, R931, R932, R933, R934, R935, R936, R937, R938, R939, R940, R941, R942, R943, R944, R945, R946, R947, R948, R949, R950, R951, R952, R953, R954, R955, R956, R957, R958, R959, R960, R961, R962, R963, R964, R965, R966, R967, R968, R969, R970, R971, R972, R973, R974, R975, R976, R977

[Figure4. Power, Boot Mode and Switch section]

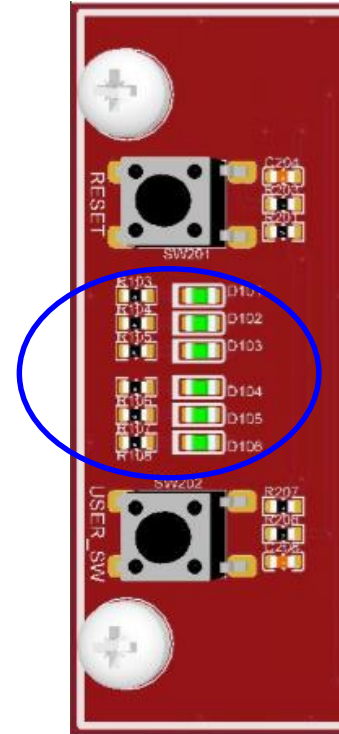
- LED : D101~106



[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]



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]

<span style="display:inline-block; width:15px; height:15px; background-color: #FF69B4; border: 1px solid black;"></span> VDD	<span style="display:inline-block; width:15px; height:15px; background-color: #FFDAB9; border: 1px solid black;"></span> PC
<span style="display:inline-block; width:15px; height:15px; background-color: #D3D3D3; border: 1px solid black;"></span> GND	<span style="display:inline-block; width:15px; height:15px; background-color: #FFFF00; border: 1px solid black;"></span> PD
<span style="display:inline-block; width:15px; height:15px; background-color: #DDA0DD; border: 1px solid black;"></span> PA	<span style="display:inline-block; width:15px; height:15px; background-color: #90EE90; border: 1px solid black;"></span> PE
<span style="display:inline-block; width:15px; height:15px; background-color: #8A2BE2; border: 1px solid black;"></span> PB	<span style="display:inline-block; width:15px; height:15px; background-color: #6495ED; border: 1px solid black;"></span> PF

[Figure7. Color index information]

# Starter Kit Board Schematic

