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Starter Kit Hardware AC33M8128L v1.00

User Manual

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*For additional information or inquiry, please contact ABOV Semiconductor
or visit its website at www.abov.co.kr.*

Revision History

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Jun. 28, 2019	1.0.0	Document created.
May. 08, 2023	1.00	Changed the format of the revision number to "X.YZ" according to internal policy.

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Chapter 1. Starter kit board overview

Starter kit board exterior

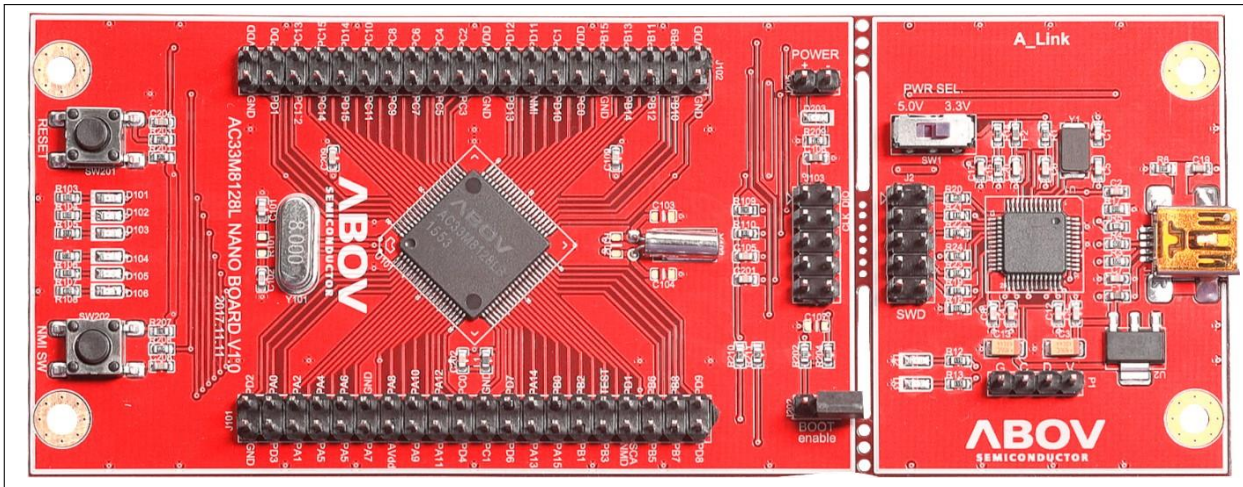


Figure 1: Starter Kit board

Starter kit board features

Table 1: Main features of starter Kit board

Main features	Specifications	Note
MCU	AC33M8128L	ARM CORTEX-M3
Operating clock	8 MHz/32.768 KHz	Crystal Main/Sub
ROM	128 KB flash ROM	Code
RAM	12 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

Chapter 2. A-Link part

USB connector (mini USB type B)

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

J103 (box header): JTAG pins

Table 2: JTAG pin description

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




J2 (box header): SWD connector

Table 3: A-Link SWD pin description

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



P2: MCU power selector

Table 4: Power selection switch description

	5.0V
	3.3V
	External Power

J3: USB to UART connection

Table 5: USB to UART description

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

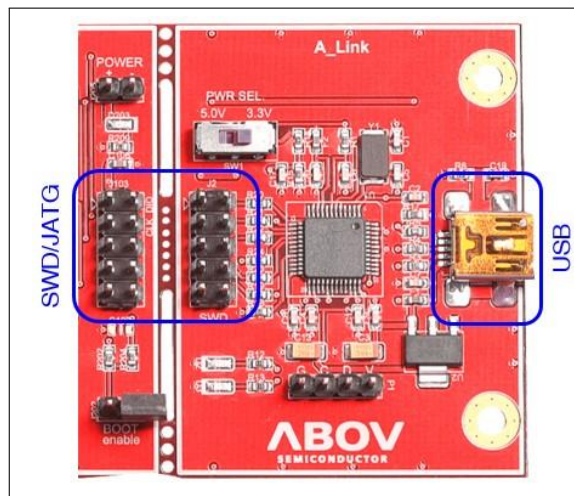


Figure 2: A-Link section - USB & SWD/JTAG

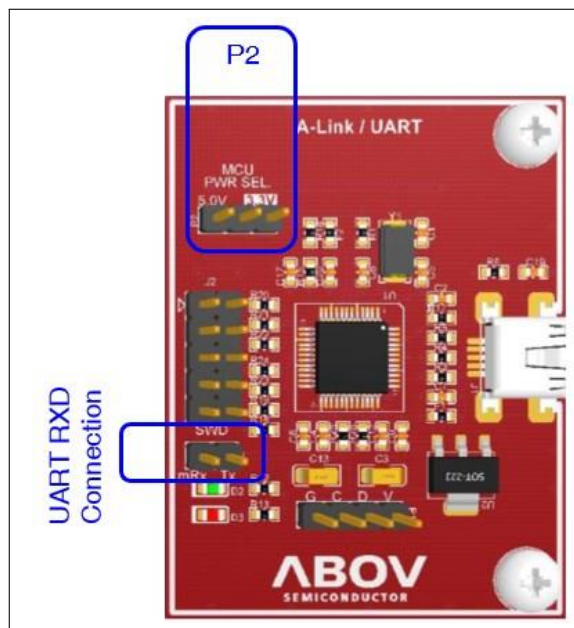


Figure 3: A-Link section - UART & P2

Chapter 3. Device part

3.1 Power/boot mode selector & switch

JP1: External power (not used)

Table 6: JP1 description and connection

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

JP2: Mode selector (boot/normal) pins

Table 7: JP2 boot mode selector

JP2	Pin	Connection
	Short	Boot mode
	Open	Normal mode

S1 & S2: switches

Table 8: S1 & S2 description and function

Switch	Function
S1	nRESET / PC10
S2	NMI

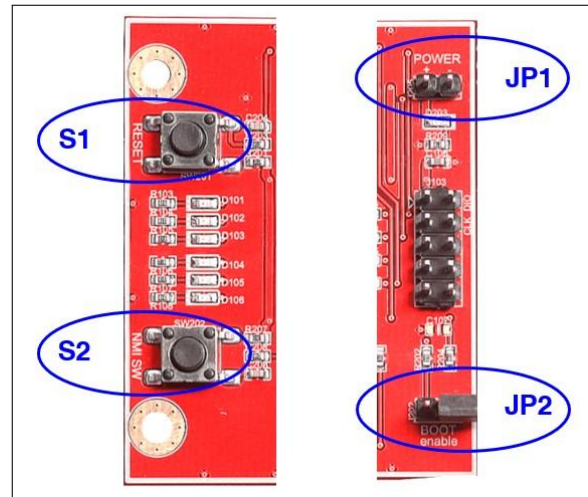


Figure 4: Power/boot mode and switch

3.2 LED display (D101 – D106)

LED schematic

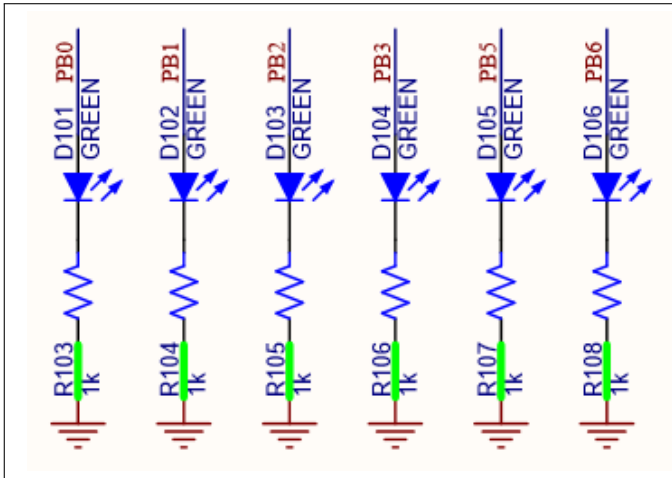


Figure 5: LED schematic

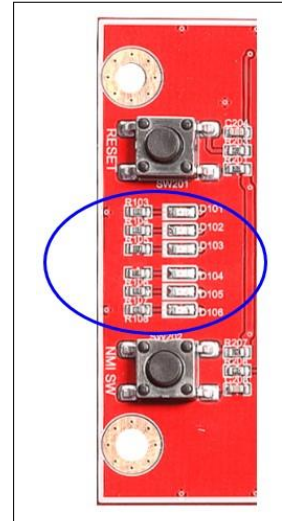


Figure 6: LED display

LED pin assignment

Table 9: LED pin description

LED name	PORT
D101	PE0
D102	PE1
D103	PE2
D104	PE3
D105	PE4
D106	PE5

3.3 Pin assignment

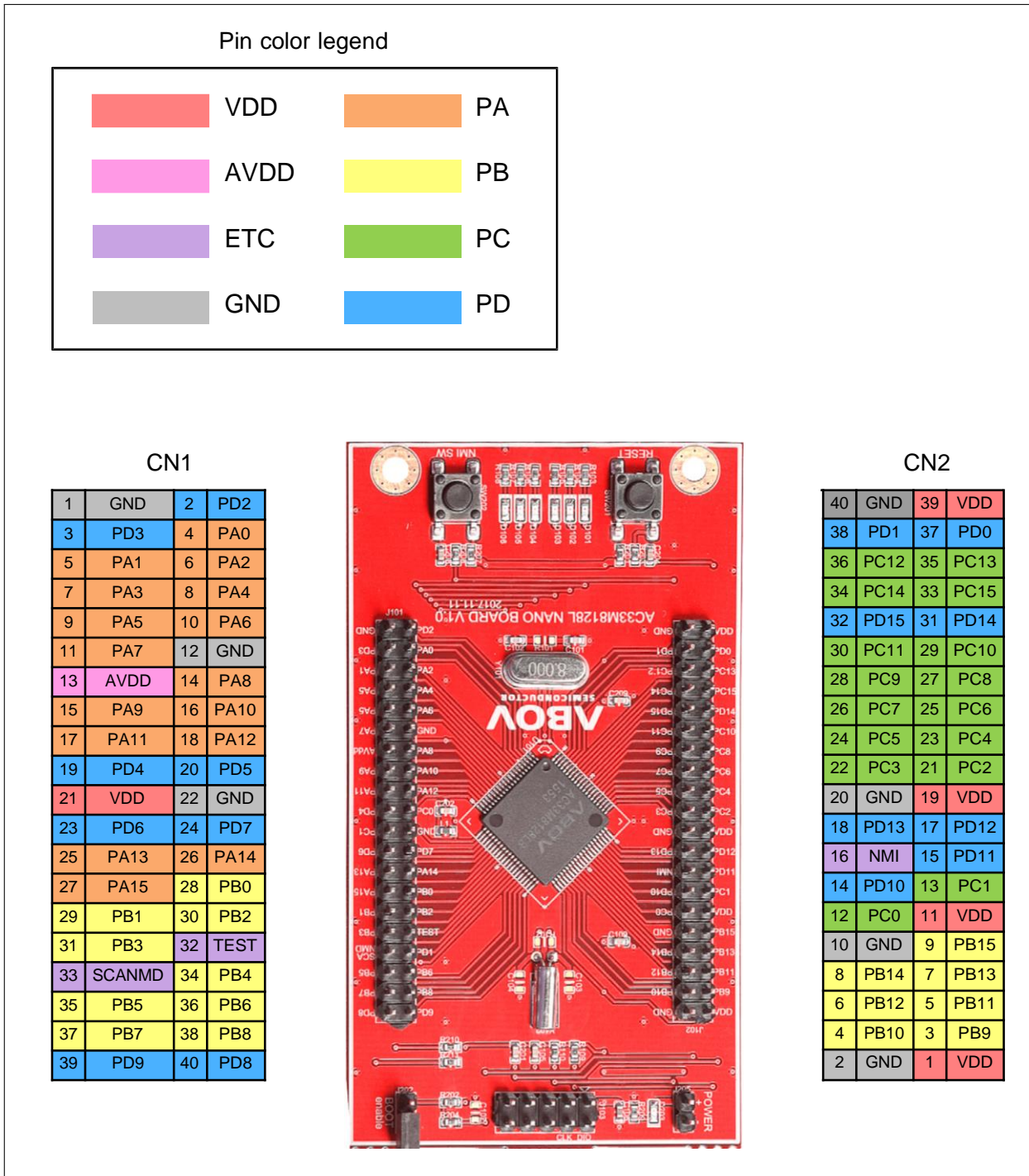


Figure 7: Pin assignment

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