

JLINK V8 Debugger J-LINK Arm Cortex-M4/M0 Emulation Downloader User's Manual



Interface specification

JTAG interface

VTref	1 ●	● 2	VOUT
nTRST	3 ●	● 4	GND
TDI	5 ●	● 6	GND
TMS	7 ●	● 8	GND
TCK	9 ●	● 10	GND
RTCK	11 ●	● 12	GND
TDO	13 ●	● 14	GND
RESET	15 ●	● 16	GND
DBGREQ	17 ●	● 18	GND
5V-Supply	19 ●	● 20	GND

SWD interface

VTref	1 ●	● 2	VOUT
Not used	3 ●	● 4	GND
Not used	5 ●	● 6	GND
SWDIO	7 ●	● 8	GND
SWCLK	9 ●	● 10	GND
Not used	11 ●	● 12	GND
SWO	13 ●	● 14	GND
RESET	15 ●	● 16	GND
Not used	17 ●	● 18	GND
5V-Supply	19 ●	● 20	GND

5V-Supply pin can control the output with instructions as follows:

Command	Explanation
Power On	Switch Target Power On(Put through power supply)
Power Off	Switch Target Power Off(Shut off the power)
Power On Perm	Set Target Power Supply Default To "On"(Power on by default)
Power Off Perm	Set Target Power Supply Default To "Off"(Power off by default)

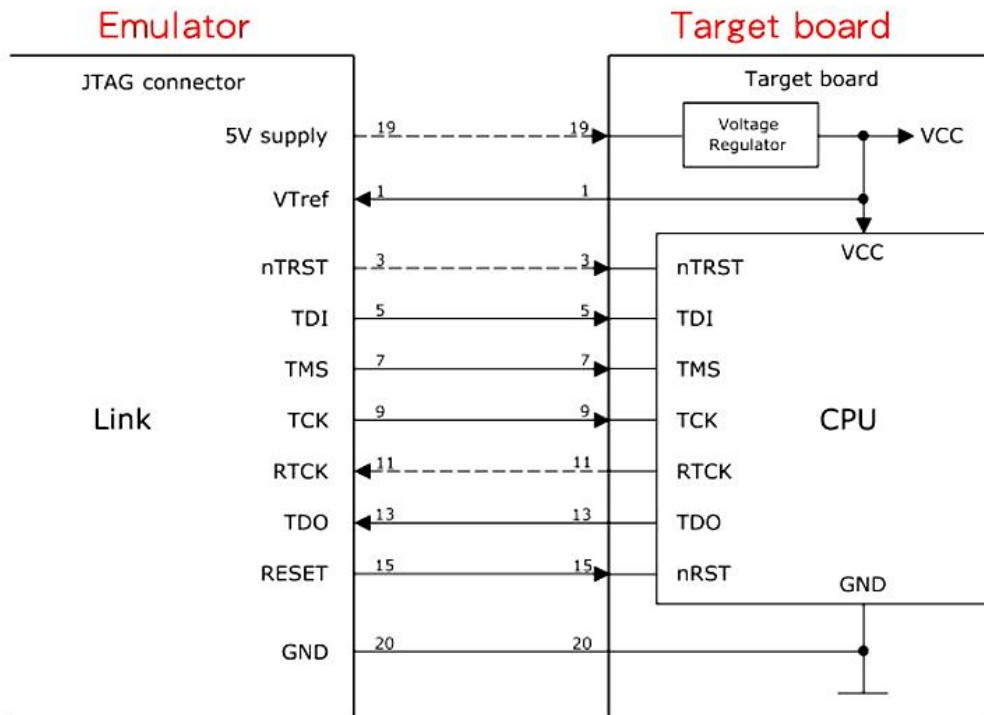
VOUT is a 3.3V voltage output pin.

The user can remove the short circuit cap inside the rear device and turn off the 3.3V output.

VTREF is the internal voltage reference and this pin must be connected to the VCC of the MCU.

Instructions

JTAG connection mode

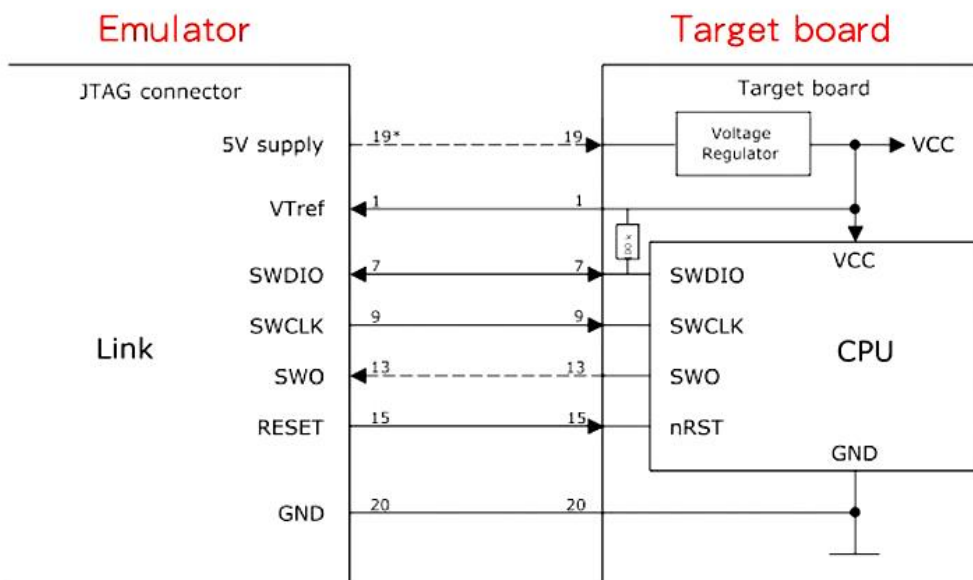


There are generally three kinds of power supply:

1. Use 5V-Supply pin to power MCU through LDO of target board.
2. Connect VOUT pin directly to VCC of MCU for power supply.
3. the user can also choose the target board with power supply.

Note: Regardless of the power supply, the VTREF pin must be connected to the VCC of the MCU.

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