ESP-PROG Programming Header

J2
CONN ESP-PROG

ESP_EN	1	2	VDD_U
ESP_TXD0	3	4	
ESP_RXD0	5	6	ESP_BOOT

J4
ProgConn-SOICBite

VCC	1	VDD_U
GPIO0	2	ESP_BOOT
GPIO2	3	
GND	4	
RX	5	ESP_RXD0
TX	6	ESP_TXD0
CH_PD	7	CH_PD
RST	8	ESP_EN

JP1 VDD_U
1 2
CH_PD EN

DebugHeader_Cortex-M_SWD_UART_10p_TagConnect

TagConnect 2050
Cortex-M SWD/UART

VDD_U	1	VTREF	RESET 10	ESP_EN
	2	SWDIO	GNDd(nc) 9	
	3	GND	jl.TX(nc) 8	ESP_TXD0
	4	SWCLK	jl.RX(nc) 7	ESP_RXD0
	5	GND(5v)	SWO 6	SWO_IO0	ESP_BOOT

1 2
SolderJumper_2_Bridged
JP2

ESP-PROG JTAG

J1
Conn_02x05_Odd_Even

VDD_U	1	2	ESP_TMS
	3	4	ESP_TCK
	5	6	ESP_TDO
	7	8	ESP_TDI
	9	10	

J6
SOICbite-JTAG

VCC	1	VDD_U
TMS	2	ESP_TMS
TCK	3	ESP_TCK
	4	
TDI	5	ESP_TDI
TDO	6	ESP_TDO
RTCK	7	
NRST	8	ESP_EN

J3
DebugHeader_Cortex-M_JTAG_10p_TagConnect

TagConnect 2050
Cortex-M JTAG

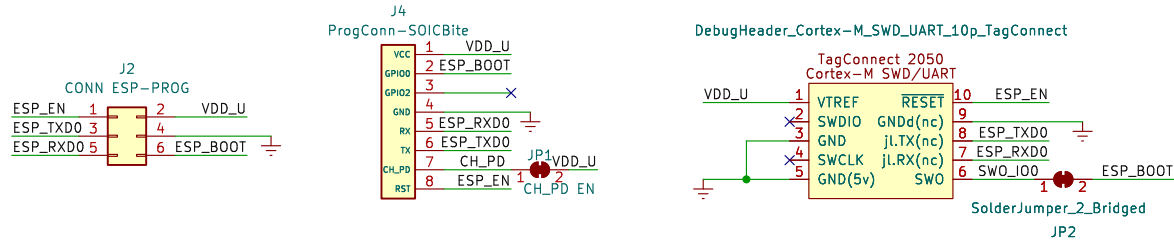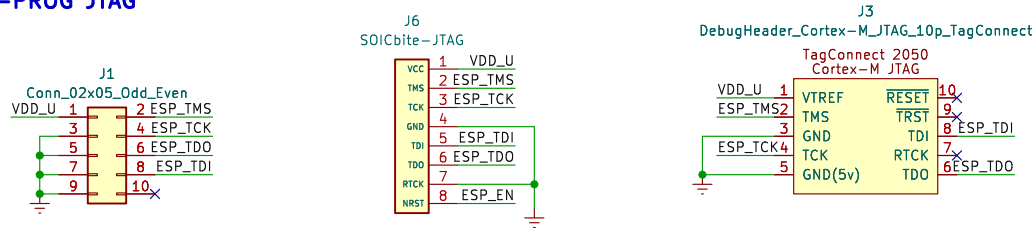|			
VDD_U	1	VTREF	RESET 10	
ESP_TMS	2	TMS	TRST 9	
	3	GND	TDI 8	ESP_TDI
ESP_TCK	4	TCK	RTCK 7	
	5	GND(5v)	TDO 6	ESP_TDO

There is no nRST on the ESP-PROG's JTAG header —
but instead of just pulling it high, it's connected to
the EN pin on the ESP prog, which is the
ESP's RST pin.

jacobbokor.com
Sheet: /
File: ESPPROG-TC2050-Adapter.kicad_sch
Title: ESP-PROG Board Connector Adapter
Size: A4 | Date: 2023-11-25 | Rev: v1.2
KiCad E.D.A. kicad 7.0.7-2.fc37 | Id: 1/1