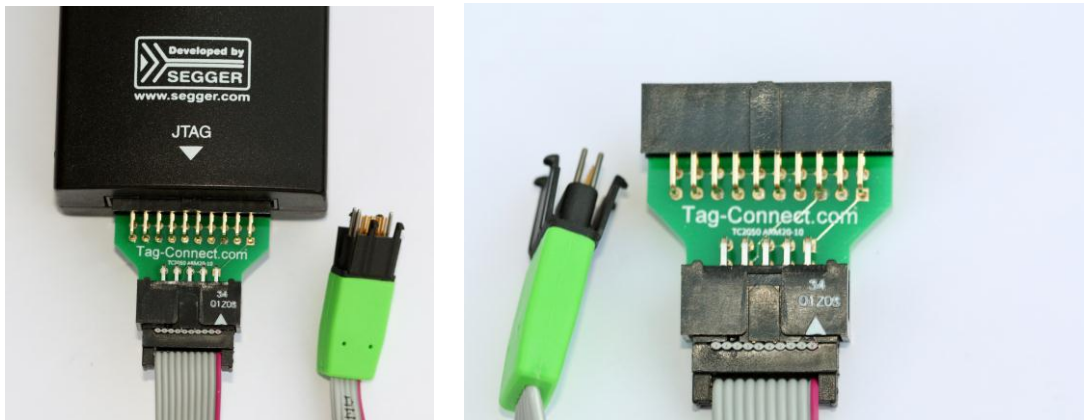


# Tag-Connect



## TC2050-ARM2010 ARM 20-pin to TC2050 Adapter

ARM 20-pin to ARM 10-pin JTAG or ARM SWD using TC2050 Cables Plug-of-Nails™ Cables.

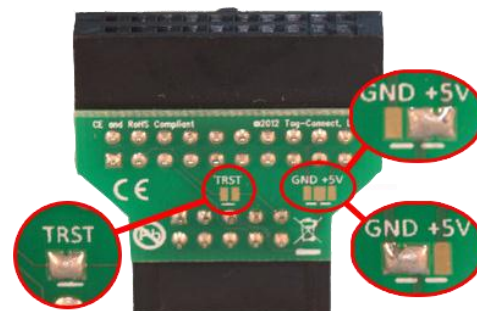


(Pictures for illustrational use only - TC2050-IDC Cable and Segger's J-Link Debugger not included!)

## *Tag-Connect - Save Cost and Space on Every Board!*

The TC2050-ARM2010 is a Tag-Connect adapter board allowing our TC2050-IDC cables to be used for ARM JTAG and ARM SWD (Serial Wire Debug) applications. Although intended for use with our patented TC2050-IDC Plug-of-Nails™ Cables, the adapter may be useful to people wishing to use 10-pin 0.1" ribbon headers on their PCB.

ARM 20-pin 0.1"		TC2050 10-pin (JTAG Mode)	TC2050 10-pin (SWD Mode)
1 VCC	2 NC	1 VCC	1 VCC
3 nTRST	4 GND	2 TMS	2 SWDIO
5 TDI	6 GND	3 GND	3 GND
7 SWDIO/TMS	8 GND	4 TCK	4 SWCLK
9 SWCLK/TCLK	10 GND	5 GND/+5V*	5 GND/+5V*
11 RTCK	12 GND	6 TDO	6 SWO
13 SWO/TDO	14 GND	7 (Not used)	7 RTCLK
15 RESET	16 GND	8 TDI	8 (Not used)
17 NC	18 GND	9 (Not used)	9 nTRST**
19 NC/+5V	20 GND	10 RESET	10 RESET



\*\* Left: Solder Bridge selects nTRST on pin 9  
 \* Above Right: Solder Bridge selects Debugger +5V on pin 9  
 Lower Right: Pin 5 is GND (improves signal integrity)

\* Pin 5 of the 10-pin connector (pin 5 of TC2050 footprint) can be used to supply power from some debuggers (see your debugger user guide for details). Solder bridge two pads as shown or select GND to improve signal integrity if power is not required. Note that some debuggers (ST-LINK/V2 for example) supply +3.3V instead of +5V.

\*\* Pin 9 of the 10-pin connector (pin 9 of the TC2050 footprint) can optionally supply nTRST - solder bridge as shown.

Visit [www.Tag-Connect.com](http://www.Tag-Connect.com) for technical support and product info.

Tag-Connect Plug-of-Nails™ Connectors are protected by U.S. Patent Nos. 7,878,834 & 8,057,248. International Patents Pending