

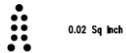
# Tag-Connect



## TC2030-CTX Plug-of-Nails™ Cable

ARM Cortex 10-pin Cable with 6-Pin TC2030 Plug-of-Nails™ Connector.

Tag-Connect Plug-of-Nails™  
TC2030-NL



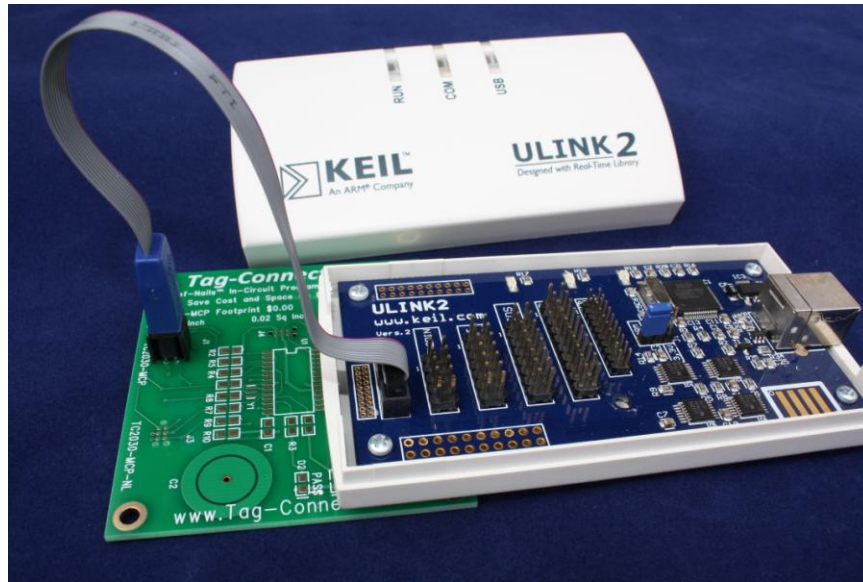
0.02 Sq Inch



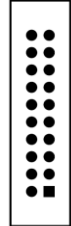
0.06 Sq Inch

Cortex SWD  
FTSH-105 micro header

**Footprint Space  
Comparison**  
**66% Space Saving**



ARM 20-Pin



TC2030

**ARM 20-Pin vs  
TC2030**  
**84% Space  
Saving**

*(Illustration only - ULINK2 not included!)*

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

The TC2050-CTX and TC2030-CTL-NL are Plug-of-Nails™ Spring-Pin cables intended for ARM CORTEX SWD (Single Wire Debug) applications. Our patented Plug-of-Nails™ connectors plug directly to a tiny footprint of pads and locating holes in your PCB saving you cost and PCB space. The cable's ribbon connector plugs into the standard FTSH-105 style 10-pin Cortex Debug Connector as found in KEIL's ULINK2 and other CORTEX compatible debuggers.

### Connections:

10-Pin Cortex Debug Connector		6-Pin TC2030 Footprint
1 VCC	2 SWDIO / TMS	1 VCC
3 GND	4 SWCLK / TCK	2 SWDIO / TMS
5 GND	6 SWO / TDO	3 nRESET
7 NC / RTCK	8 NC / TDI	4 SWCLK / TCK
9 GNDDetect	10 nRESET	5 GND (also connected to GNDDetect)
		6 SWO / TDO

### Notes

Please refer to TC2030-IDC or TC2030-IDC-NL datasheets for details of the TC2030 footprints. See also our TC2050-ARM2010 20-pin ARM adapter for use with our TC2050-IDC series cables.

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

TC2050-IDC Plug-of-Nails™ Connectors are protected by U.S. Patent Nos. 7,878,834 & 8,057,248. International Patent Pending