

Direct-To-Bare-Board Plug-of-Nails - "No Header No Brainer"

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Tag-Connect's In-Circuit Programming and Debug Cables connect directly to a tiny PCB footprint of pads and holes, eliminating most of the space and all of the cost of a traditional programming / debug / test header on every board.



Tag-Connect announced they are adding support for most Renesas MCU's including a solution for H8 and R8C programming with a tiny 0.02 square inch PCB footprint, and extending the long and growing list of MCU's, FPGA's and Programmable Devices that are directly supported with the Tag-Connect Plug-of-Nails™ JTAG cables and adapters. Solutions already exists for Altera, Altium (Mini-HDMI USB JTAG), ARM, Atmel, AVR, Cypress, Lattice, Microchip PIC, dsPIC and PIC32, MSP430, TI DSP, Zilog, and others.

Tag-Connect's "Plug-of-Nails" cables utilize a clever arrangement of high-reliability spring-pins, locating pins and feet that snap securely into the PCB thus eliminating the need for bulky and costly connectors traditionally required for in-circuit programming. The crown-tipped Spring-Pins make a secure and dependable connection for simple programming as well as prolonged debug connections.

"No-Header No-Brainer!" is the Tag-Connect motto. "Why waste a ton of board space and volume on a honking-big programming connector that is typically used maybe once?". You simply can't get a Greener or Cheaper Connector than a Connector that isn't there!

The new 10-pin TC2050-MiniHDMI cable supports Altium's new Cross-Platform USB JTAG Adaptor which (similar to the TC2050 10-pin cables) supports ARM, Xilinx / Altera / Lattice and Cypress FPGA / CPLD configuration and most popular MCU's, CPLD's and programmable logic devices.

The patented Plug-of-Nails™ spring-pin cables are available in both "legged" and

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"no-legs" versions. The "legged" versions have plastic retaining feet that snap into holes in the PCB and securely hold the connector in place during a prolonged programming or debugging session. A quick squeeze releases the connector.

The "no legs" cable versions are designed to be hand-held during a quick programming operation and have extremely small footprints the smallest of which uses roughly the same board space as an 0805 resistor making it perfect for space-constrained designs.

Tag-Connect's Plug-of-Nails™ connectors have spring-pins rated for over 100,000 operations making them ideal for use in production, development and test environments.

Another increasingly common application for Plug-of-Nails™ Cables is to provide access to test signals on space-constrained PCB's. For instance, a tiny footprint can be added next to each SPI / IIC device allowing zero-cost per board convenient test access for hookup to a protocol analyzer or logic analyzer. As PCB's shrink and device pin-densities increase, board designers now increasingly have to consider how to make available critical test signals.

Tag-Connect is a trusted Microchip Premier 3rd Party Tools Supplier. Most Tag-Connect products are available at DigiKey.

www.Tag-Connect.com [1]

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[1] <http://www.Tag-Connect.com>