Setting up JTAG on Radon Quick Start Guide

Intro:

Due to form factor limitations Radon board doesn't include a JTAG header, and to be able to use JTAG with Radon, it is necessary to solder a cable directly to the JTAG test points on the Radon board. You can get more 10-pin ribbon cables online. (https://www.adafruit.com/products/1675)
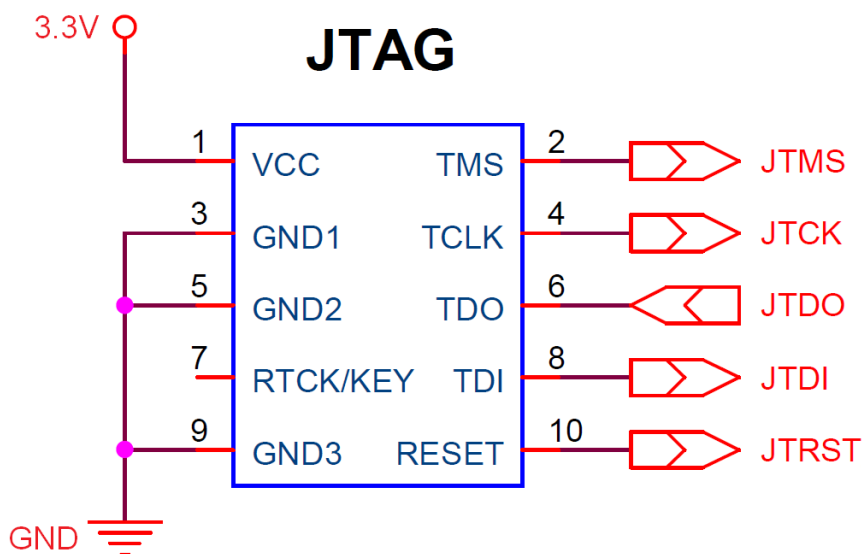
A Note for ISPC Users:

The Radon board is very similar to Arduino 101 from hardware perspective. Therefore ISPC based firmware configured and compiled for and tested on the Arduino 101 should work on Radon without any changes.

Connecting JTAG

Schematic

Schematic diagram below shows the connection for the JTAG connector to the Radon Board.

Ribbon Cable	Radon Board
1 (see note below to identify pin 1)	3.3V
2	JTMS
3	GND
4	JTCK
5	GND
6	JTDO
7	NC
8	JTDI
9	GND
0	JTRST

Note on finding pin 1: Some ribbon cables have a red wire for pin 1, but some don't. If yours doesn't the easiest way to tell pin 1 is to plug your connector into the board, with the ribbon cable facing the Flyswatter, and the pin 1 is the wire closest to the center of the flyswatter, like below.
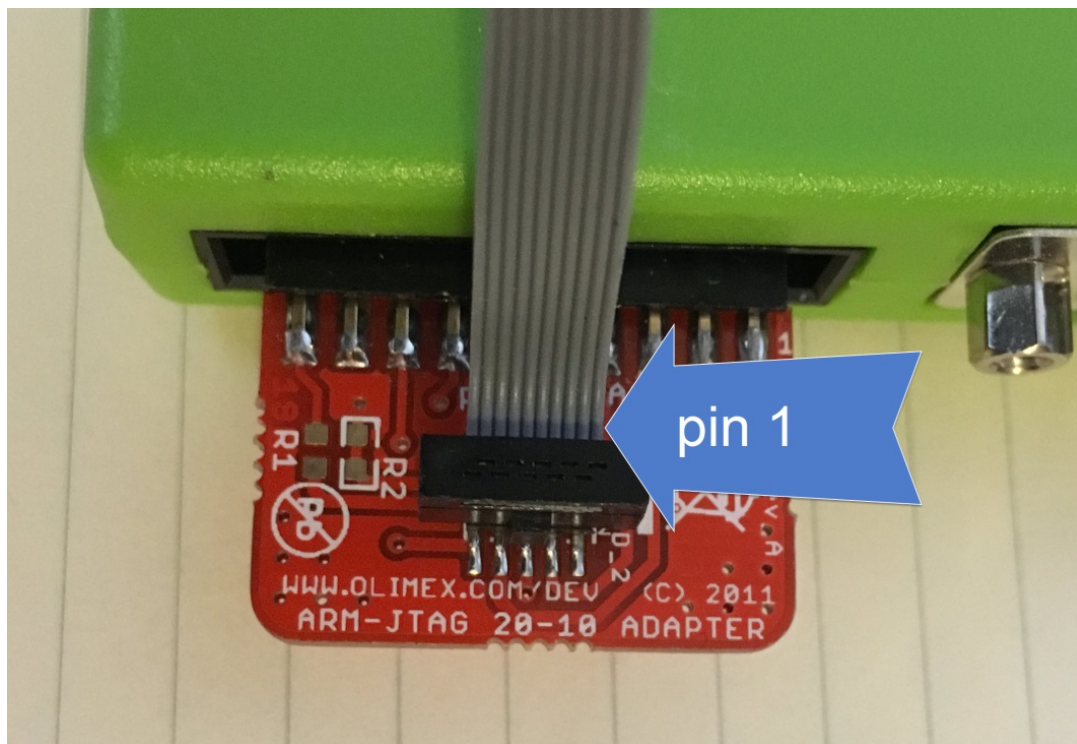
Soldering

Use fine tipped soldering iron to solder the ribbon cable as shown on the photo below. Secure the cable using a drop of hot glue or similar adhesive. To simplify prototyping it is also recommended to solder two 12-pin 100mil pin headers.

Complete Setup

The photo below shows the complete Radon setup to use with ISPC. It includes Flyswatter2 debugger, Radon board mounted on a breadboard, and FTDI cable for serial console connected using 3 jumper wires.