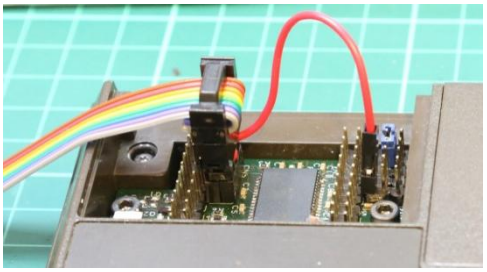
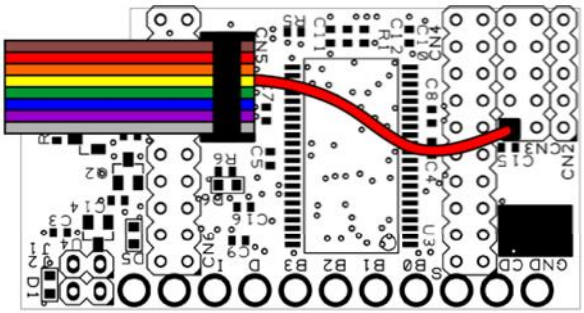
05.07.2015 Hans Brueggemann

FlashPro4/5 Programming Cable for FRAM71

In order to conserve the HP-71B's batteries, FRAM71 doesn't supply VJTAG and VPUMP to the JTAG interface. Thus, when using FLashPro programmers, VJTAG must be supplied separately during programming. This is achieved by tapping off FRAM71's 3.3V supply, which is available at CN3:2 and fed through the red cable to pins CN5:3 (VJTAG) and CN5:5 (VPUMP). Although the FLashPro5 is able to supply VPUMP, it doesn't work on my specimen, hence I opted to connect both VJTAG and VPUMP to CN3:2. You will see a VPUMP warning message in the FlashPro software, which can safely be ignored.

Close-up of 3.3V connection from CN3:2 to CN5





On the CN5-side of the cable, a 4 x 2 pin long male header is inserted into the cable's socket. A red wire with a single pole connector is connected to pins 3 and 5.

Note cross-connections on programmer side. The brown line connects pins 2 and 10.

Color sequence on left connector from top to bottom is yellow(1), brown(2), gray(3), white(4, dummy, no connection, fillet only), red(5), green(6), orange(7), violet(8), blue(9), and brown (10) again. Pin numbers in brackets refer to 10-pin programming header on FlashPro4/5.

Color sequence on right connector from top to bottom is gray(8), violet(7), blue(6), green(5), yellow(4), orange(3), red(2), brown(1). pin numbers refer to CN5 on FRAM71 (RTFM!)