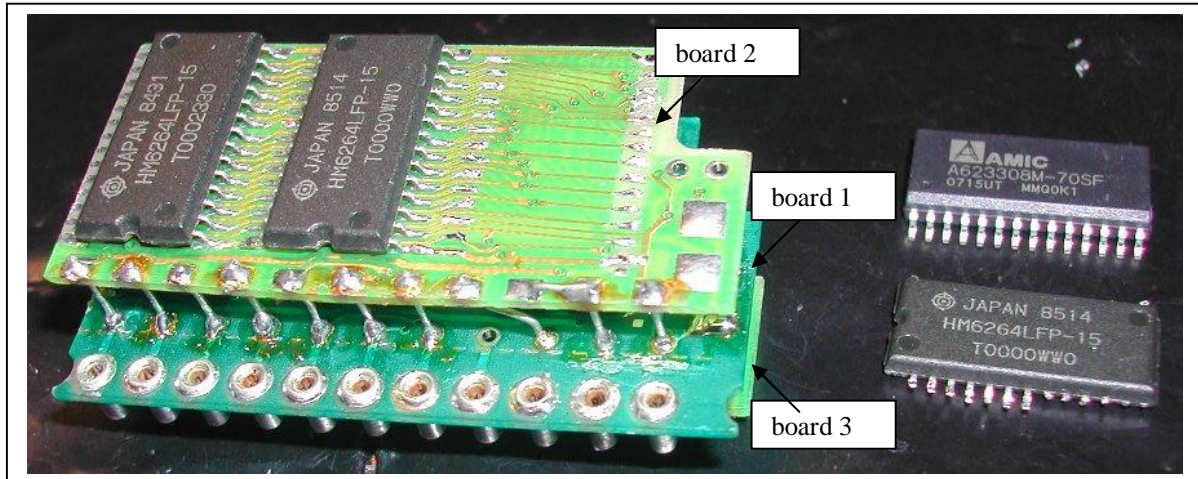


A Few Notes on the HHP 96k RAM Module for the HP-71B and the 1LQ4(?) Interface Chip.

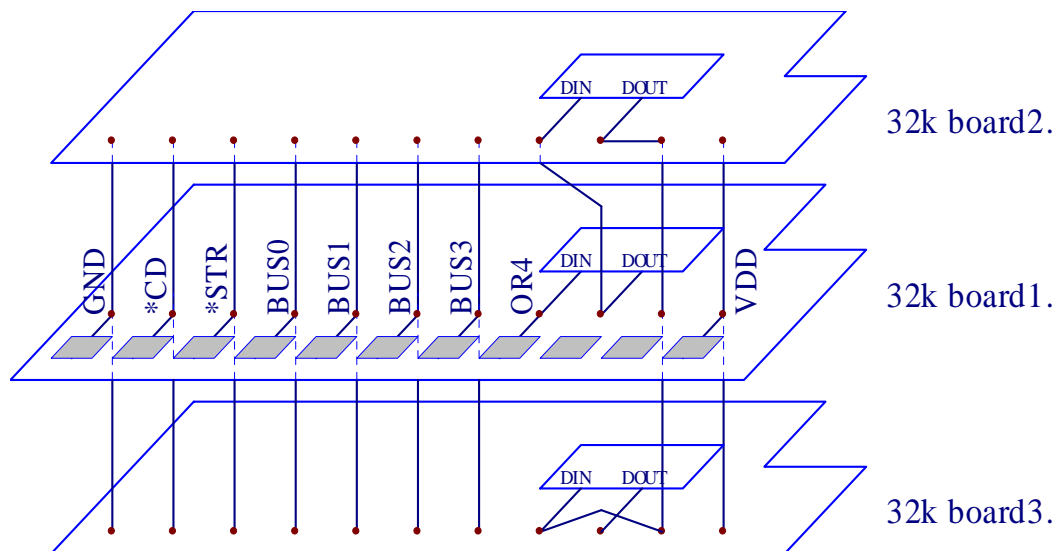
By default, the HHP 96k RAM module is made of 3 separate 32k ports. There is, however, provision to configure the module in other ways. This document is an attempt to describe how to change the module configuration.

Module description:



(picture taken while replacing a defective memory chip).

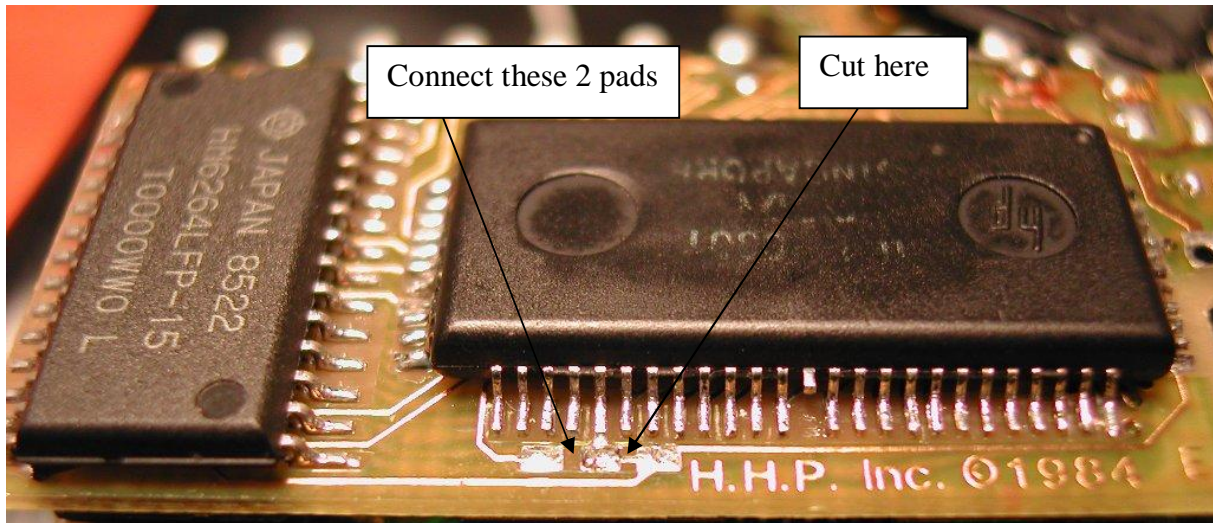
Board interconnexion:



The 3 x 32k boards are chained by the DIN/DOUT pins of the 1LQ4(?) interface chip.

One 1LQ4(?) pin is used to mark a device as the last of a chain, by default it is high assigning the 3 x 32k boards as 3 separated 32k ports. On the HHP boards, the pin connexion can be changed to ground, in this case the device is linked to the next one, making a single 64k port from two consecutive 32k boards.

Modification to do on board 2 to link boards 2 and 3 as a single 64k port, producing a 32k PORT(5) and a 64k PORT(5.01):



CAUTION: be sure to cut the short track between the 2 pads as indicated, otherwise a short-circuit will occur on the battery supply that may damage the small PCB tracks! Double check recommended!

Note: for use with the HP-71B 1BBBB, it is recommended to have a independant 32k RAM port before the 64k RAM port as described for instance in the Soft Forth manual (p.2.2):
“For the HP-71B with VER\$=1BBBB, there is a bug [..]. It shows up only if there are IRAM(s) in the HP-71B which have a chip size of 32K bytes, the first IRAM containing 32K byte chips has two or more chips, and the system does NOT include a FORTH/Assembler Module. Both the 64K and 96K RAM modules from Hand Held Products have a chip size of 32K bytes. [...] The 96K RAM module is usable without the FORTH/Assembler module if the PORT(5) is 32K bytes and PORT(5.01) is 64K bytes.”

1LQ4(?) interface chip:



Tentative 1LQ4(?) pinout description:

