

# **H89/90 Hardware Configuration & Z67 Card Configuration**

It seems that the Original Heath Z67 cards are a bit rare, so Norberto reverse engineered the card and is offering a replacement card. Now H8/H89/90 computer users can implement the Z67-IDE on their Heath. Since there are two different cards and due to the differences in the cards, I will discuss both.

## **H-89/90 Hardware Configuration For Z-67 Co-existing with H-17 or H-37**

Before the software installation, we need to configure the hardware so the software can do its magic.

To install the Z67-IDE into an H-89/90 we have to decide where the Z67 Controller and Floppy Controller boards will reside. The two most common configurations with which we will be dealing are the H17/Z67-IDE and H37/Z67-IDE implementations.

### **H17/Z67-IDE:**

The H-17 controller MUST run in the right position (P506/P512) at address 7Ch, therefore the Z-67 card moves to the left (P-504/P510) slot at address 78h. For the Z-67 card to be able to run in either the left or right position, we must have a way of telling it which address to use. This is accomplished by jumpers J1 and J2 located near to the board bus connectors. If the board is to live in the left position (78h) then J1 and J2 must short pins 1 & 2 where pin 1 is the pin closest to the connectors on the Standard Heath Z67 card. Now the card will know its address. On the Norby Z67 card the configuration is similar with the jumpers again being numbered J1 and J2, but the shorting pins are set a bit different. J1 is set to short pins 2 & 3 (78), closer to the center of the board. J2 is set to short pins 1 & 2 (DSK) closer to the board connectors. (Refer to card pictorial below.)

Likewise, the computer needs to know what complement of cards are installed and the address of those cards. This is accomplished by SW-501 on the CPU card. For the H-17/Z-67 combination, the switch setting would be:

0 1 2 3 4 5 6 7 - Switch Digit

0 0 0 1 0 1 0 0 - SW-501 Setting

where digit zero is at the top of the switch.

### **H37/Z67-IDE:**

When the Z-67 card co-exists with the H-37 card, it will occupy the right hand slot (P506/P512) at address 7Ch and the H-37 card will take the left position (P504/P510) at address 78h. In this position, we need to set the Z-67 jumpers J1 and J2 to short pins 2 & 3 on the Standard Heath Z67. On the Norby Z67 card, J1 is set to short pins 1 & 2 (7C) and J2 is set to short pins 2 & 3 (FLP). (Refer to card pictorial below.)

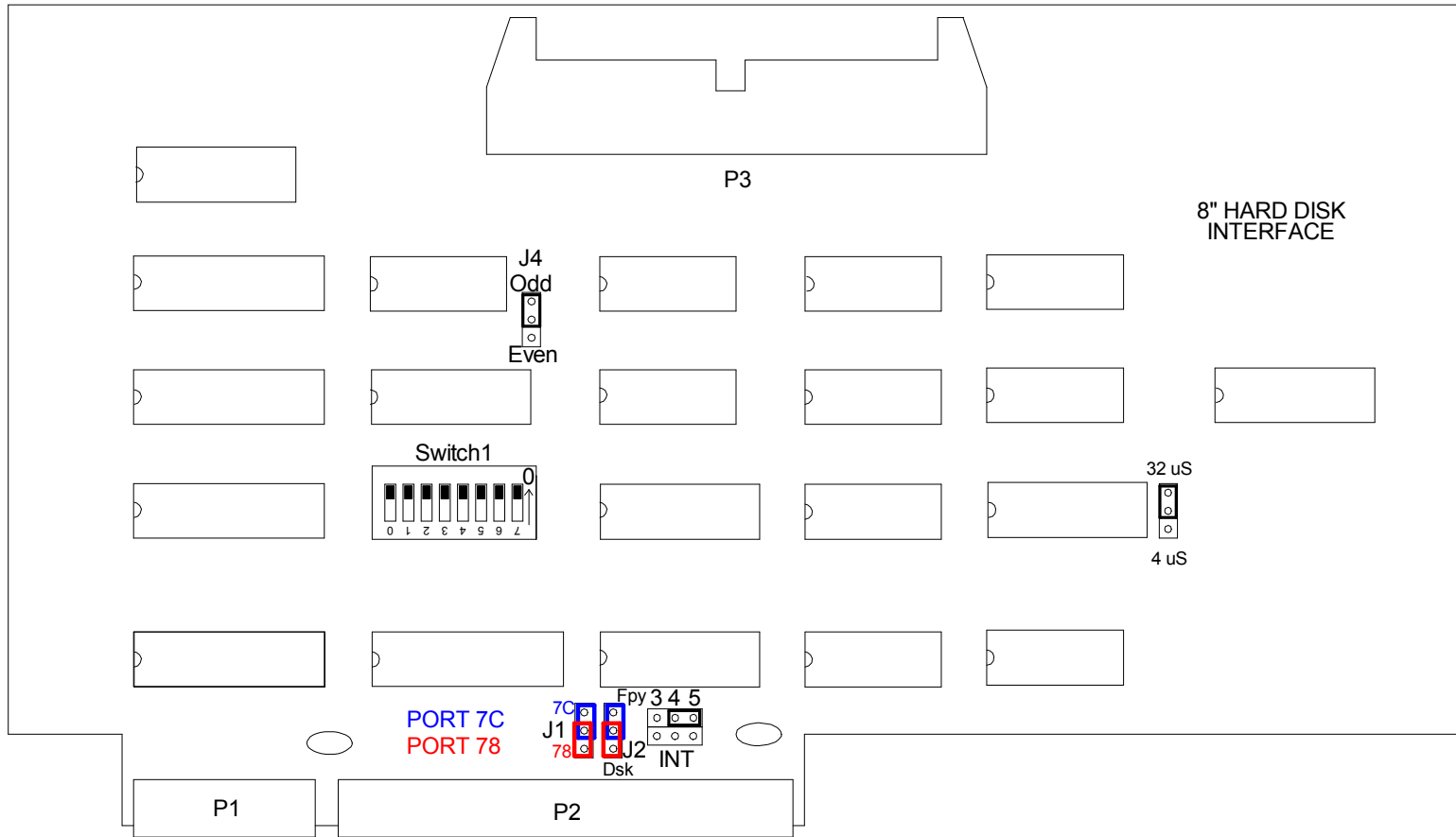
Now that the complement of cards and their position has changed, we need to set SW-501 to reflect the current situation. For the H-37/Z-67 combination SW-501 is set to:

0 1 2 3 4 5 6 7 - Switch Digit

0 1 0 0 0 1 0 0 - SW-501 Setting

where digit zero is at the top of the switch.

# Standard Heath Z67 Card



# Norberto's Z67 Card

