

Software upgrades on eyeheight 17C756 products

This note covers changing software on all products with PIC17C756 processors, which fit into the eyeheight 1RU chassis. These processors require physically changing to upgrade the software on these cards. This does not cover the eyeheight evolution (1/2RU) range of products or more recent products using the PIC18Fxxx series processors. The latter are “in-circuit” reprogrammable using the eyeheight “Flasher” utility which is available on the eyeheight website.

Changing the software

You will need the following tools:

- A small flat blade screwdriver
- A PLCC chip extraction tool

The instructions are as follows. (It is not necessary to take power away from the chassis)

- 1) Locate the product to be upgraded at the rear of the chassis.
- 2) Remove all connections to this module and take note of where they are for re-assembly
- 3) IF the product is a single height module* then use the screwdriver to undo the two thumbscrew fasteners at either end of the module.
- 4) IF the product is a double height module* then use the screwdriver to undo the four thumbscrew fasteners at either end of the module.
- 5) Slowly remove the module from the 1RU chassis by pulling equally on all the fasteners. (For double height modules ensure both cards are removed simultaneously).
- 6) Take the card to a suitable well-lit workbench.
- 7) Locate the PIC17C756 processor (**). This is a square PLCC chip approx 2cm across in a socket. It is in the corner of the module and it's reference will be either U1 or U6.
- 8) Using the PLCC extractor tool remove the chip from the socket, taking note of the orientation of the chip by identifying the pin 1 “pip”.
- 9) Using fingers only replace the extracted PLCC chip with the new one provided. Ensure the correct orientation of the chip.

- 10) Re-insert the module into the chassis. DO NOT tighten the fasteners yet.
- 11) Re-power the chassis IF it is not still powered. Wait approx 1 minute after re-inserting the card with power on.
- 12) Remove the module again but this time to not fully extract it. The idea is only to disconnect it momentarily, then re-insert it. (This can be achieved by re-cycling the power if desired.
- 13) Tighten the fasteners and reconnect any rear connections.
- 14) The procedure is ended.

(*) An example of a single height module is shown below:



Figure 0-1 SQ-2 Single height module

An example of a double height module is shown below:

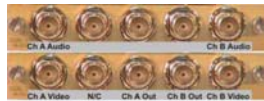


Figure 0-2 ES-4 Double height module

(**) Locating the PIC17C756:

PIC17C756

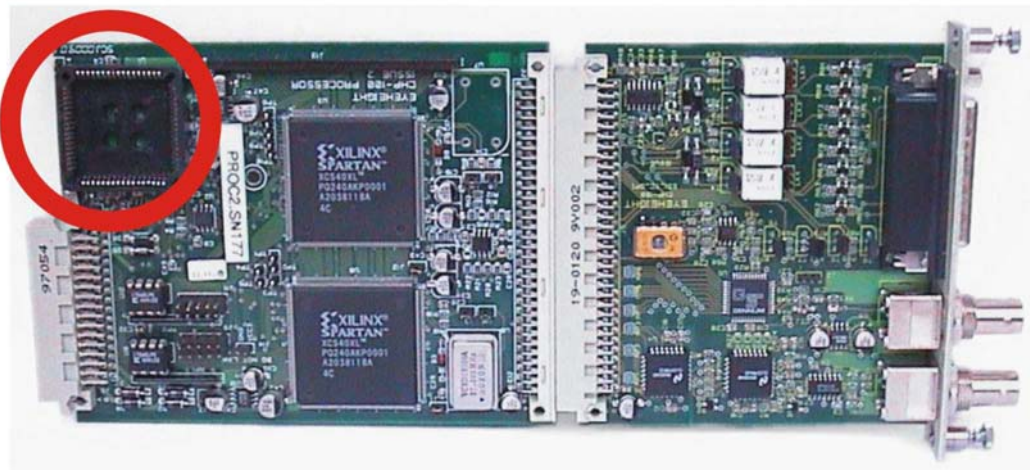


Figure 0-1 Location of PIC17C756 on a typical module