



Date: 12<sup>th</sup> January 1999

## Fitting more FLASH to an Echelon

Echelon consoles with serial numbers up to and including B99xxx require additional FLASH memory to be fitted in order to run version 3 and later software. This tech note describes the modifications necessary to fit the CPU in these consoles with the larger FLASH devices.

### Parts required

The following parts are required:

- Four by 4Mbit FLASH RAM ICs (29F040).
- One boot ROM V1.18 or later
- Fine connecting wire
- Operating software diskette

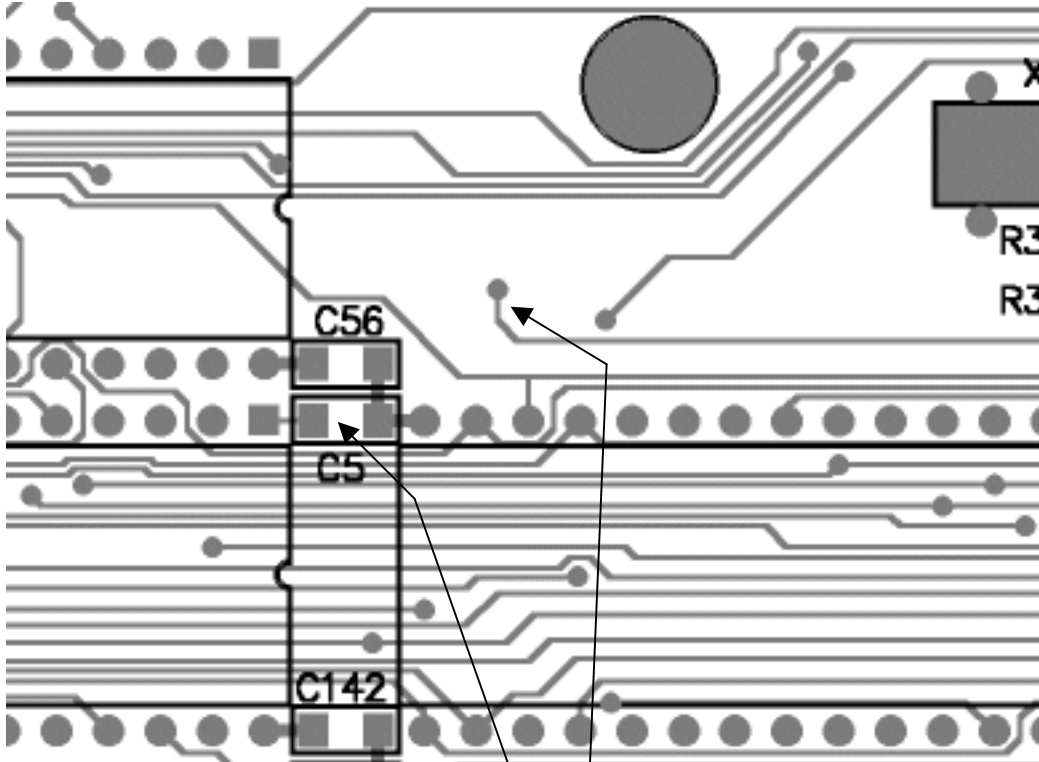
An upgrade kit of the above parts may be obtained from the Jands Service Department or authorised dealer.

### Tools Required

- Soldering Iron
- #1 Posidrive screwdriver
- IC removal tool

### Procedure

1. Save any show information
2. Switch off the console
3. Remove the base
4. Locate and remove the existing FLASH parts in sockets IC11, IC12, IC13, and IC14 near the centre of the CPU card
5. Insert the four replacement FLASH RAM ICs, noting orientation marks on the PCB
6. Locate and remove surface mount capacitors C2, C3, C4, and C5 near pin 1 of the sockets listed in step #4
7. Locate and remove the boot ROM in socket IC25
8. Insert the replacement boot ROM IC, noting orientation marks on the PCB
9. Solder a wire link between the positions as indicated on the diagram
10. Remove the jumper from J3
11. Hold the Enter button down while turning power on
12. Insert the operating software into the disk drive
13. Press 2 to select "Reload software"
14. Reload any saved show information



Insert link between points indicated, as viewed from the component side