

Replacing SC12 with SC13

The FM23 has been designed to update easily existing SC12/FS22 designs for the new IPC@CHIP SC13. It provides the 10/100BaseT Transformer and all passive components on a single module, only two additional connections have to be wired (5V and GND).

1. Ethernet Interface

- Remove the following parts of your SC12 application: SC12, C1 (10nF), R1 (47Ω), R2 (47Ω).
- Replace FS22 with FM23.
- Connect GND to pin 5 of the FM23.
- Connect Vcc (5V) of your board to pin 6 of the FM23 or use the via what is labeled with "5V".
- Place SC13 into socket.

ready.

2. Power Supply

Be sure that your power supply is able to source the additional load of SC13 and FM23. The FM23 needs about 120mA at 10MBit. The SC13 needs about 150mA more current than the SC12. This results in 270mA more, that your power supply has to source in addition to the old SC12 design.

(For more details of power consumption see SC1x hardware manual and FM23 datasheet).

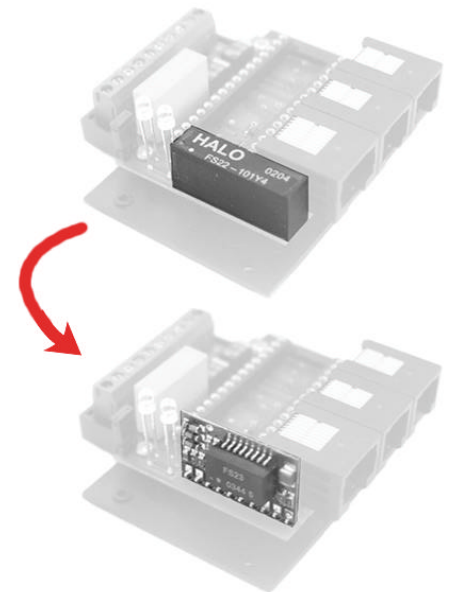


Fig.: Example of FM23 replacement on the DK40

Schematic

