

IC Clips

IC clips connect to a chip on the circuit board, and two IC clips are included in the package. The two clips are for 8-pin DIP and 8-pin SOIC packages. Most serial EEPROMs, serial flash and some dataflash are in these packages.

The common programming interface for memory chips are I2C, SPI and Microwire and the pin descriptions of the flexible connector of the USB Serial EEPROM programmer is shown in the table.

E2-ISP Flying Lead

| PIN | Colour | I2C | Microwire | SPI |
|-----|--------|---------|-----------|-----|
| 1 | Orange | | SI | DI |
| 2 | Red | | CS | CS |
| 3 | Green | VCC | VCC | VCC |
| 4 | Brown | GND/VSS | GND | GND |
| 5 | Blue | SDA | DO | SO |
| 6 | Yellow | SCL | CLK | SCK |

The wires on the programmer need to be connected to the correct pins of the IC clip. Which pin is which depends on the device you are using and you should check the device pinouts in the datasheet. Most Serial EEPROM, serial flash and dataflash datasheets are available online.

Some typical device pin-outs

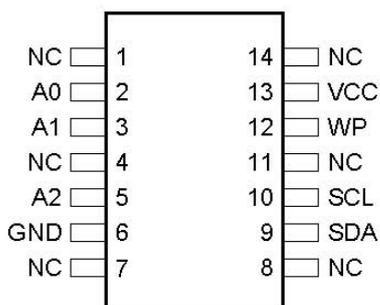
I2C

I2C interface is used by **24 series Serial EEPROMs** and most have these pinouts.

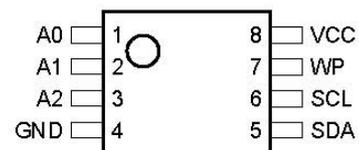
Pin Configurations

| Pin Name | Function |
|----------|--------------------|
| A0 - A2 | Address Inputs |
| SDA | Serial Data |
| SCL | Serial Clock Input |
| WP | Write Protect |
| NC | No Connect |

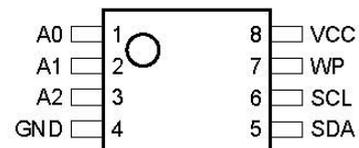
14-Pin SOIC



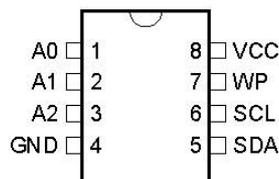
8-Pin TSSOP



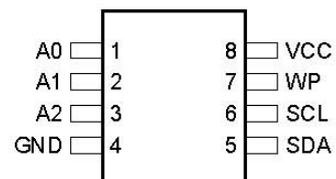
8-Pin MSOP



8-Pin PDIP



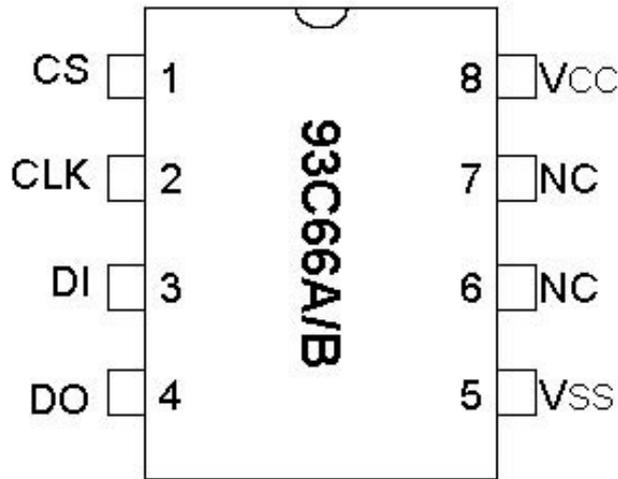
8-Pin SOIC



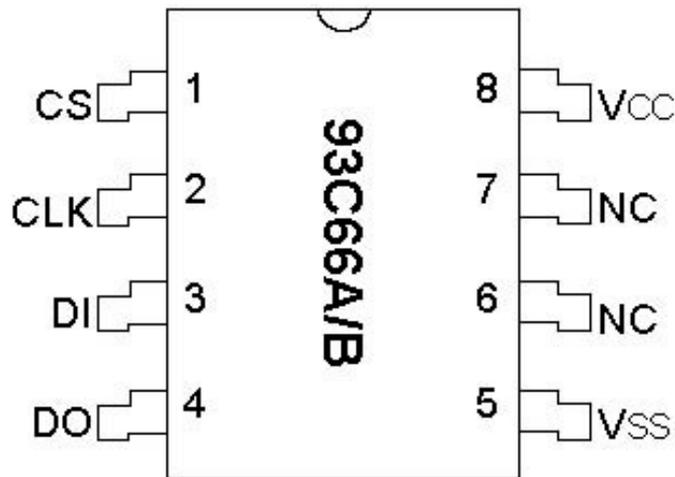
Microwire

Microwire Interface is used to program **93 series Serial EEPROMs**. The typical device pinout is shown here

PDIP



SOIC



SPI

25 series Serial EEPROMs, Serial Flash Memory and some Dataflash use SPI bus for programming. Typical pinouts are

AT45 Dataflash

SOIC Top View

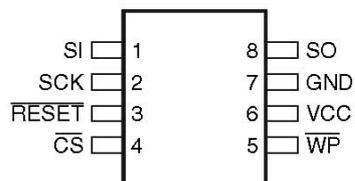
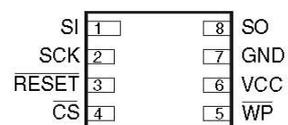
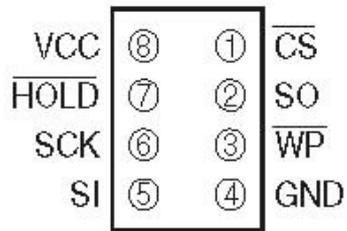


Figure 2-2. UDFN Top View⁽¹⁾



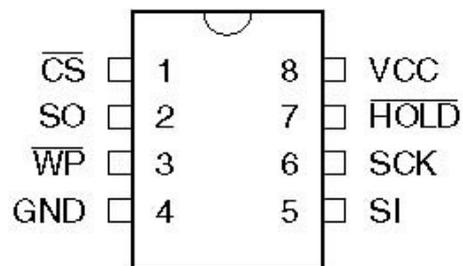
25 Series Serial EEPROMs

8-ball dBGA2

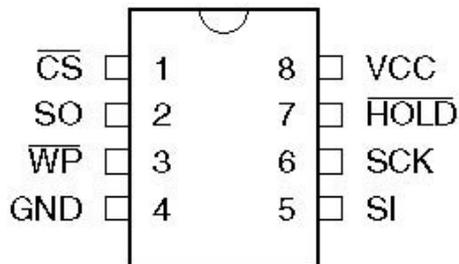


Bottom View

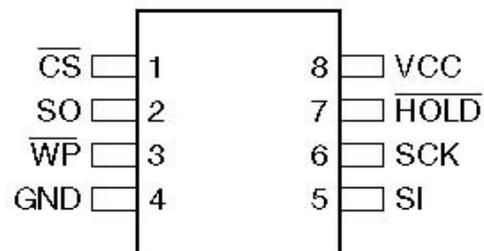
8-lead TSSOP



8-lead PDIP



8-lead SOIC



Serial Flash Memory including AT25F, AT25DF, SST25VF and M25PE Serial Flash Memory

8-SOIC Top View

