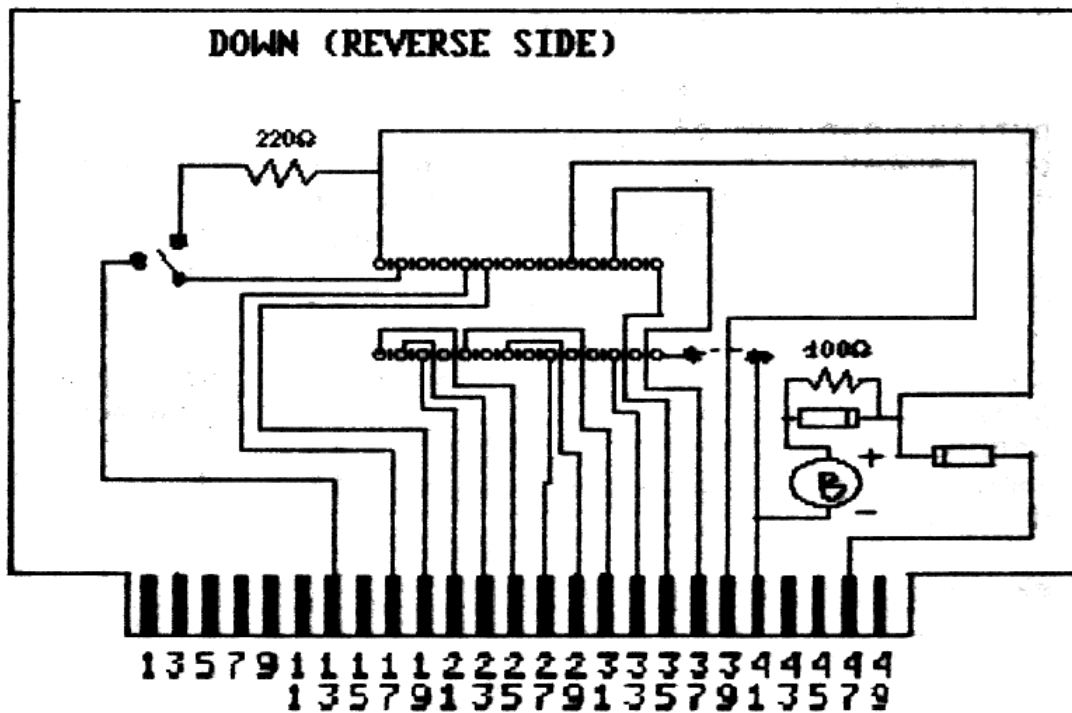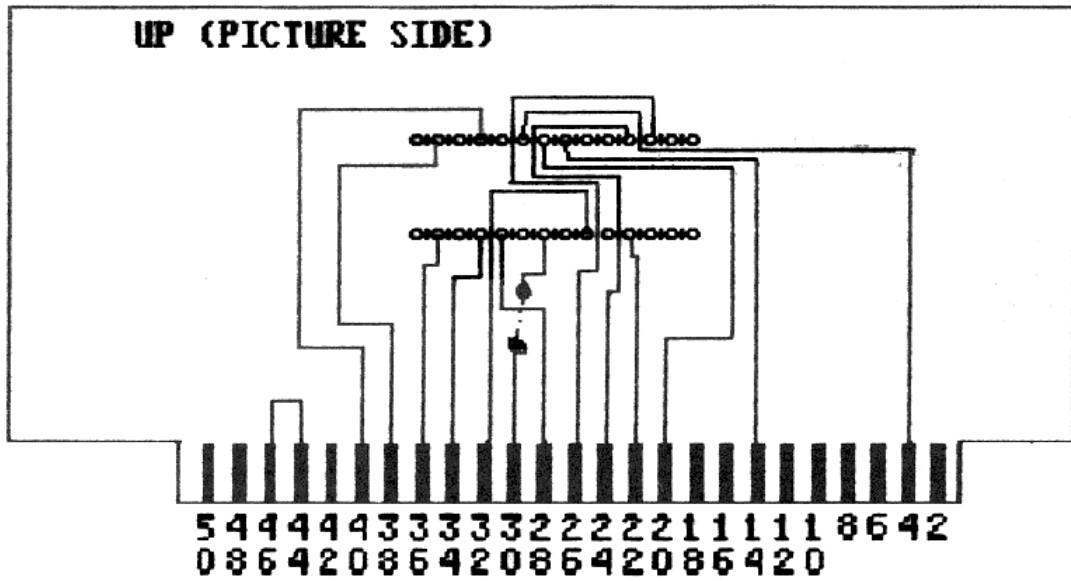# 32K SRAM Cartridge with battery backup

Translated from the danish magizine Syntax by Dan Derpaux (www.algorythms.com/MSXrebels)

Converted to PDF by HansO, 2001

This design is for a 32K cartridge with SRAM which is completely compatible with a ROM cartridge once it has been loaded with a program.

The SRAM is really cheap, and with it you can upload ROM software, enable the write protection, and then you have an emulated "cartridge" placed at the given slot.

UP (PICTURE SIDE)

```
5 4 4 4 4 4 3 3 3 3 3 2 2 2 2 2 1 1 1 1 1 8 6 4 2
0 8 6 4 2 0 8 6 4 2 0 8 6 4 2 0 8 6 4 2 0
```

DOWN (REVERSE SIDE)

220Ω

100Ω

B + −

```
1 3 5 7 9 1 1 1 1 1 2 2 2 2 2 3 3 3 3 3 4 4 4 4 4
        1 3 5 7 9 1 3 5 7 9 1 3 5 7 9 1 3 5 7 9
```

←——— *3 way switch for write protect*

←——— *2 diodes, AA119 / 1N41 / IN48*

← *Battery cells by a total of 3.5volts*
Must be Ni-Cad (Rechargeable)

2 resistors,
220 and 100 ohms

1 S-Ram IC (43256-10) →
*32*8 cmos static ram*