Application note : Using the analogue input of the Z80-MBC3.

The analogue input is continguously sampled by the ADC in the ATMEGA4809 microcontroller and updated 16 times per second. The resolution of the ADC converter is 10 bits, so producing a value in the range from 0 to 1023. The A-D conversion value is accumulated 16 times, so the result will be in the range from 0 – 16368.

To retrieve the result with the Z80 processor, the I/O commands listed below need to be executed :

```
OUT   1,136
R = INP(0) * 256 + INP(0)
```

The following BASIC program shows how to code this in a MBASIC program :