

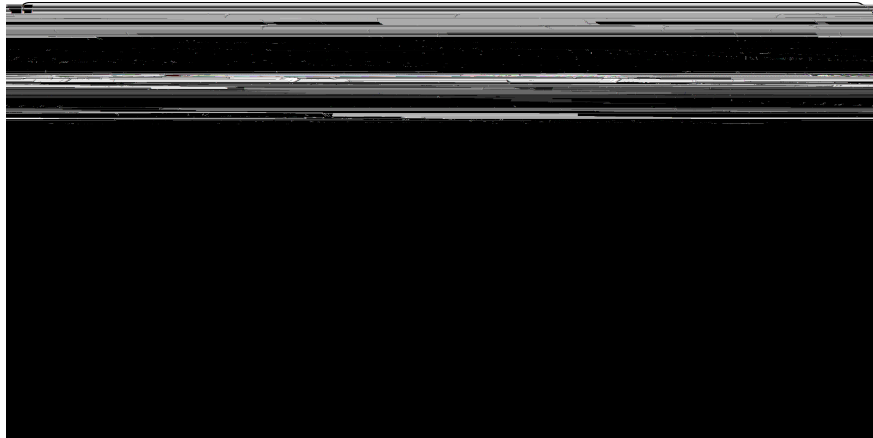


Figure 1: Internal scheme

2.2 Instruction fetch

set architecture specification, mod

```
17         ldib    r5, 0          ; mode
18
19
```

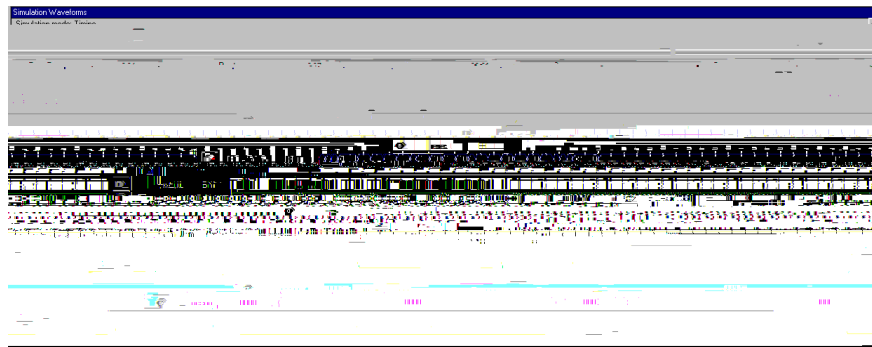


Figure 2: Simulation results

5.2 Computing factorials

The example in 2 computes the factorials of 1 ... 9 and writes the results to the PC via UART. Note that the last result transmitted will be wrong, because it is truncated to 16 bits.

Listing 2: Computing factorials

```

1  ;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
2  ;; factorial
3  ;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
4  ;; compute factorials of 1 to 9 and write results to
5  ;; the PC via UART
6  ;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
7
8  @data
9
10 @; the numbers to be written are          ;; 3c7(6(t)97(f)195(a)195(c)17(6(t272)180(2137(;;))1845

```

```

38      ldil    r8, lo(iobuf)
39      ldih    r8, hi(iobuf)
40      ldil    r9, lo(convert)
41      ldih    r9, hi(convert)
42
43      ldib    r12, -8          ; enable write interrupts
44      ldib    r11, (1 << 2)
45      store   r11, r12
46
47      ldil    r12, lo(nter

```

```
100
101  written:
102      getshfl r10
```