

1. Common test sequences

All projects will run sequence A (all):

```
LOOP:
    mov     0x1020, w1    ;INW0=aaab
    mov     0x1022, w2    ;INW1=5555
    add     w1,w2,w3
    sub     w1,w2,w4
    and     w1,w2,w5
    ior     w1,w2,w6
    mov     w1,0x1024
    mov     w2,0x1024
    mov     w3,0x1024
    mov     w4,0x1024
    mov     w5,0x1024
    mov     w6,0x1024
    bra     LOOP
```

Test sequence for flag Z (zero):

```
LOOP:
    mov     0x1020, w1    ;INW0=ffff
    mov     0x1022, w2    ;INW1=0001
    add     w1,w2,w3      ;0000, Z=1
    add     w2,w2,w7      ;0002, Z=0
    sub     w2,w2,w4      ;0000, Z=1
    sub     w4,w2,w4      ;ffff, Z=0
    and     w1,w3,w5      ;0000, Z=1
    and     w1,w1,w5      ;ffff, Z=0
    ior     w3,w3,w6      ;0000, Z=1
    ior     w1,w2,w6      ;FFFF, Z=0
    mov     w1, 0x1024
    mov     w2, 0x1024
    mov     w3, 0x1024
    mov     w4, 0x1024
    mov     w5, 0x1024
    mov     w6, 0x1024
    bra     LOOP
```

Test sequence for flag N (Negative):

```
LOOP:
    mov     0x1020, w1    ;INW0=7fff
    mov     0x1022, w2    ;INW1=0001
    add     w1,w2,w3      ;8000, N=1
    add     w3,w3,w3      ;0000, N=0
    sub     w3,w2,w4      ;ffff, N=1
    sub     w4,w4,w3      ;0000, N=0
    and     w4,w4,w5      ;ffff, N=1
    and     w4,w2,w5      ;0001, N=0
    ior     w4,w1,w6      ;ffff, N=1
    ior     w1,w1,w6      ;7fff, N=0
    mov     w1, 0x1024
    mov     w2, 0x1024
    mov     w3, 0x1024
    mov     w4, 0x1024
    mov     w5, 0x1024
    mov     w6, 0x1024
    bra     LOOP
```

Test sequence for flag C (carry):

```
LOOP:
    mov     0x1020, w1    ;INW0=ffff
    mov     0x1022, w2    ;INW1=0001
    add     w1,w2,w3      ;0000, C=1
    and     w1,w2,w5      ;C nemodificat
    add     w3,w2,w3      ;0001, C=0
    sub     w3,w2,w4      ;0000, C=1
    ior     w1,w2,w6      ;C nemodificat
    sub     w4,w2,w4      ;ffff, C=0
    mov     w1, 0x1024
    mov     w2, 0x1024
    mov     w3, 0x1024
    mov     w4, 0x1024
    mov     w5, 0x1024
    mov     w6, 0x1024
    bra     LOOP
```

Test sequence for flag OV (overflow):

```
LOOP:
    mov     0x1020, w1    ;INW0=7fff
    mov     0x1022, w2    ;INW1=0001
    add     w1,w2,w3      ;w3=8000, OV=1
    add     w2,w2,w8      ;w8=2, OV=0
    add     w3,w3,w4      ;w4=0000, OV=1
    add     w3,w2,w8      ; OV=0
    sub     w2,w3,w5      ;w5=8001, OV=1
    sub     w1,w2,w8      ; OV=0
    sub     w5,w1,w7      ;w6=0002, OV=1
    and     w1,w2,w5      ;OV nemodificat
    ior     w1,w2,w6      ;OV nemodificat
    mov     w1, 0x1024
    mov     w2, 0x1024
    mov     w3, 0x1024
    mov     w4, 0x1024
    mov     w5, 0x1024
    bra     LOOP
```