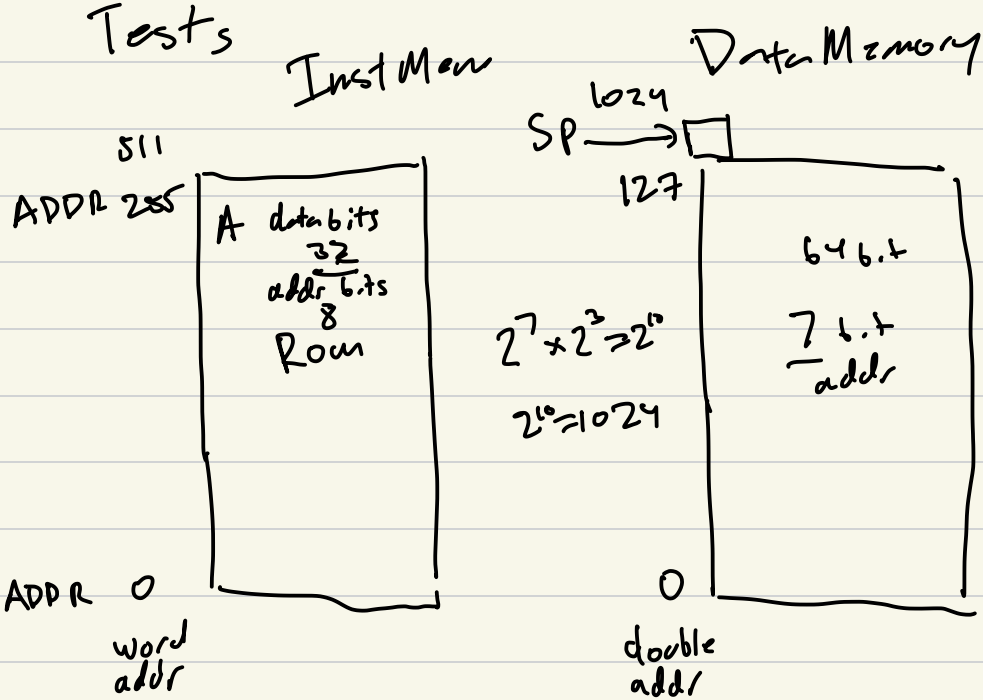
CS315-02 Lab Tests Mem

Tests



Tests

- Unit
- prog

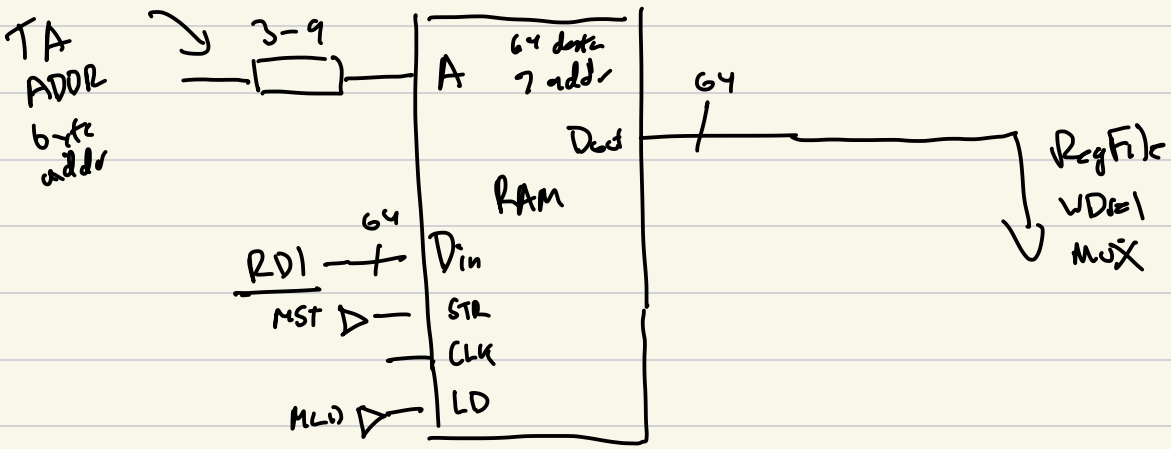
```
main:
    # setup stack pointer
    li sp, 1024
    # put data on stack
    # set args a0, a1, a2, a3
    jal func (call)
    [ pack ]
    unimp

func:
```

ld / sd

ld t0, 0(t1)

rs2 RD1 — rs1 RD0

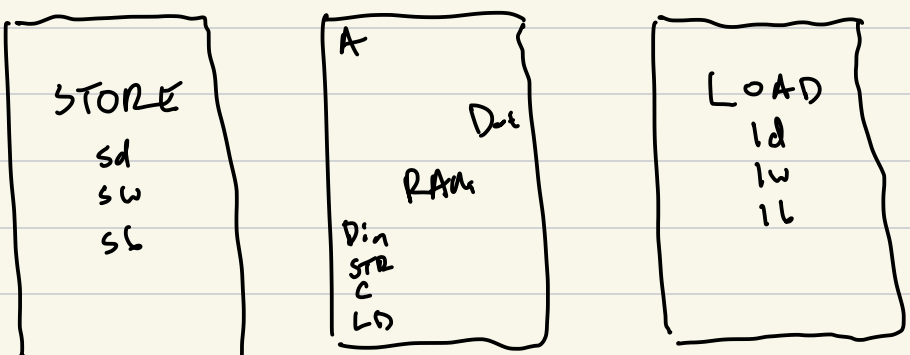
ld

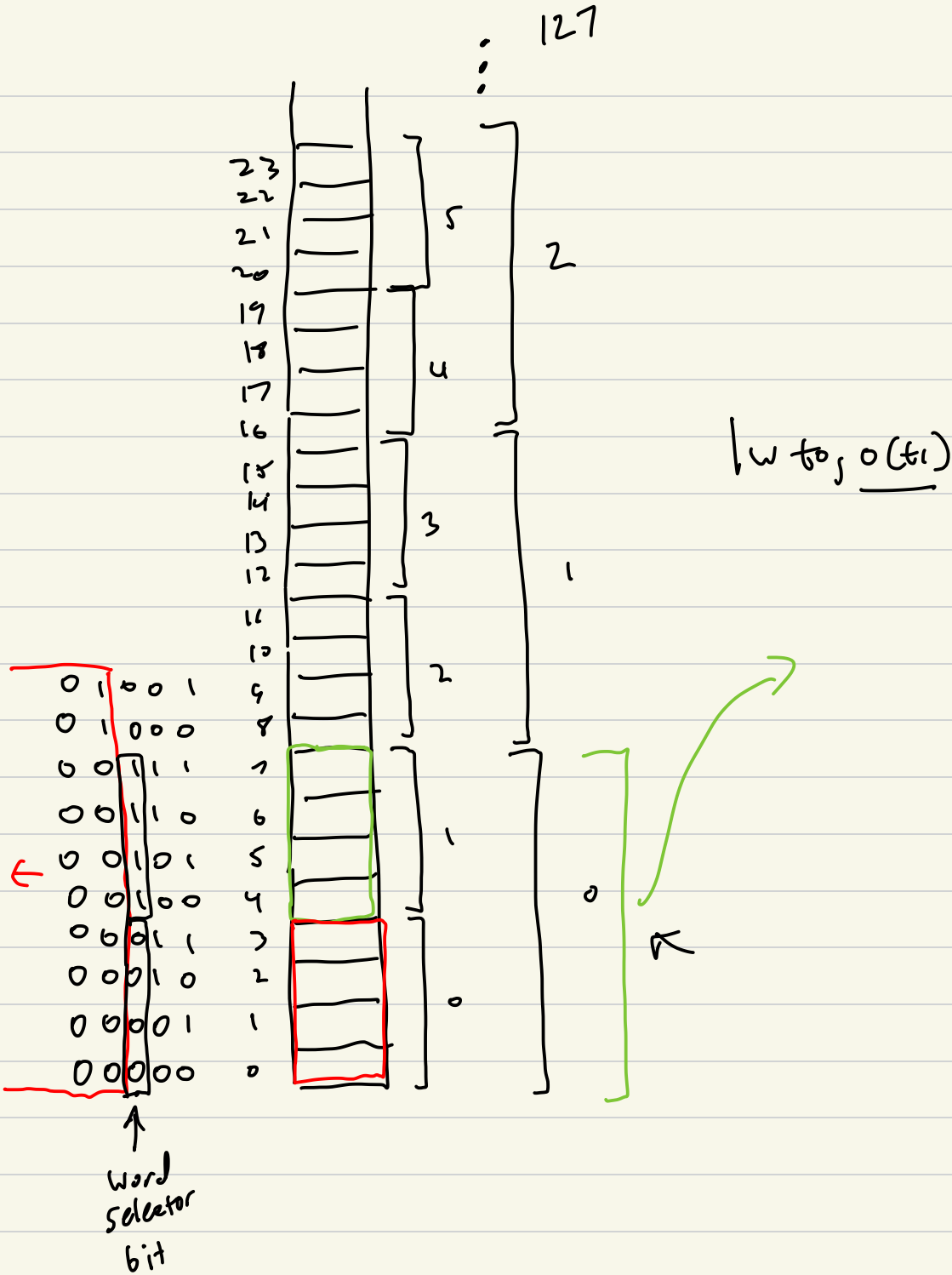


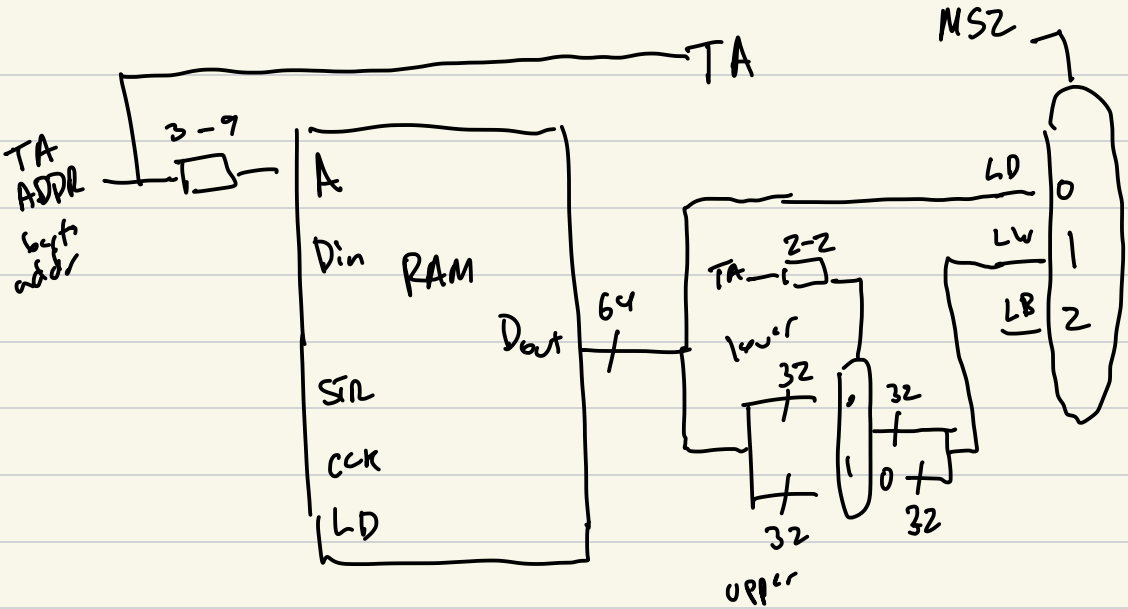
LD → MST = 0 MLD = 1

SD → MST = 1 MLD = 0

lw / sw (lb / sb)

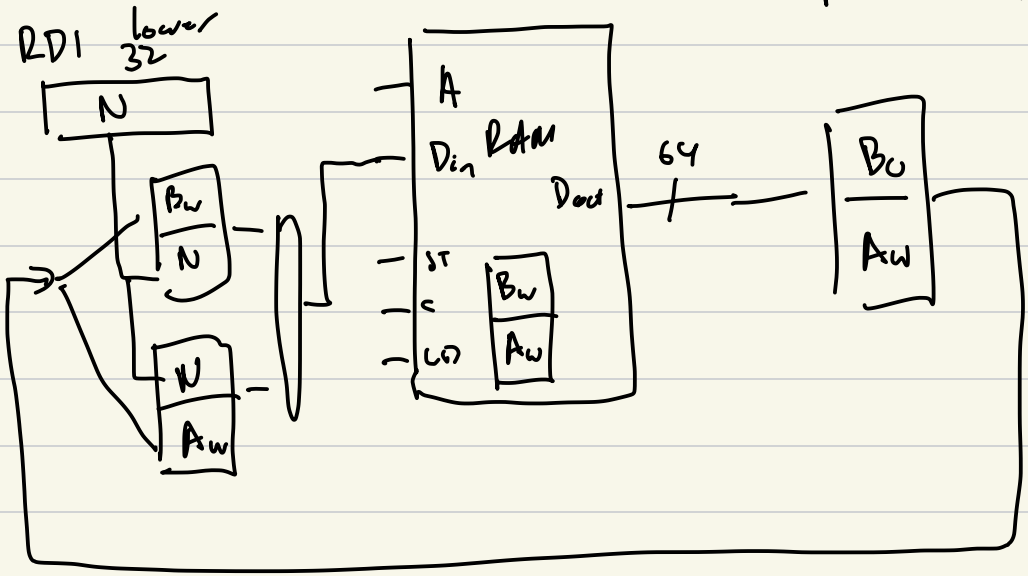



127
23
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
5
4
3
2
1
0
2
1
0
lw to, 0(t1)
word selector bit

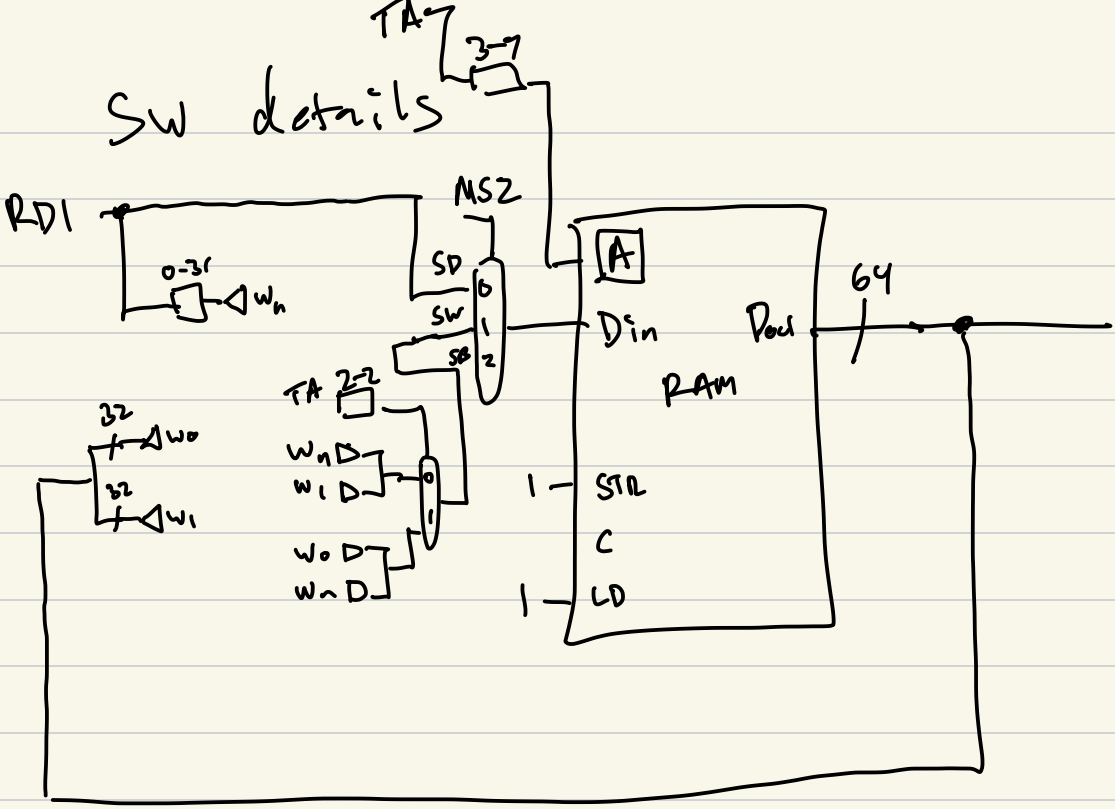


RMW
read modify write

SW



Sw details


TA
3-7
RD1
MS2
0-31
W_n
SD
SW
SB
0
1
2
A
Din
Dout
64
RAM
TA 2-2
32
W_0
32
W_1
$W_n D$
$W_1 D$
$W_0 D$
$W_n D$
0
1
1
STR
C
1
LD