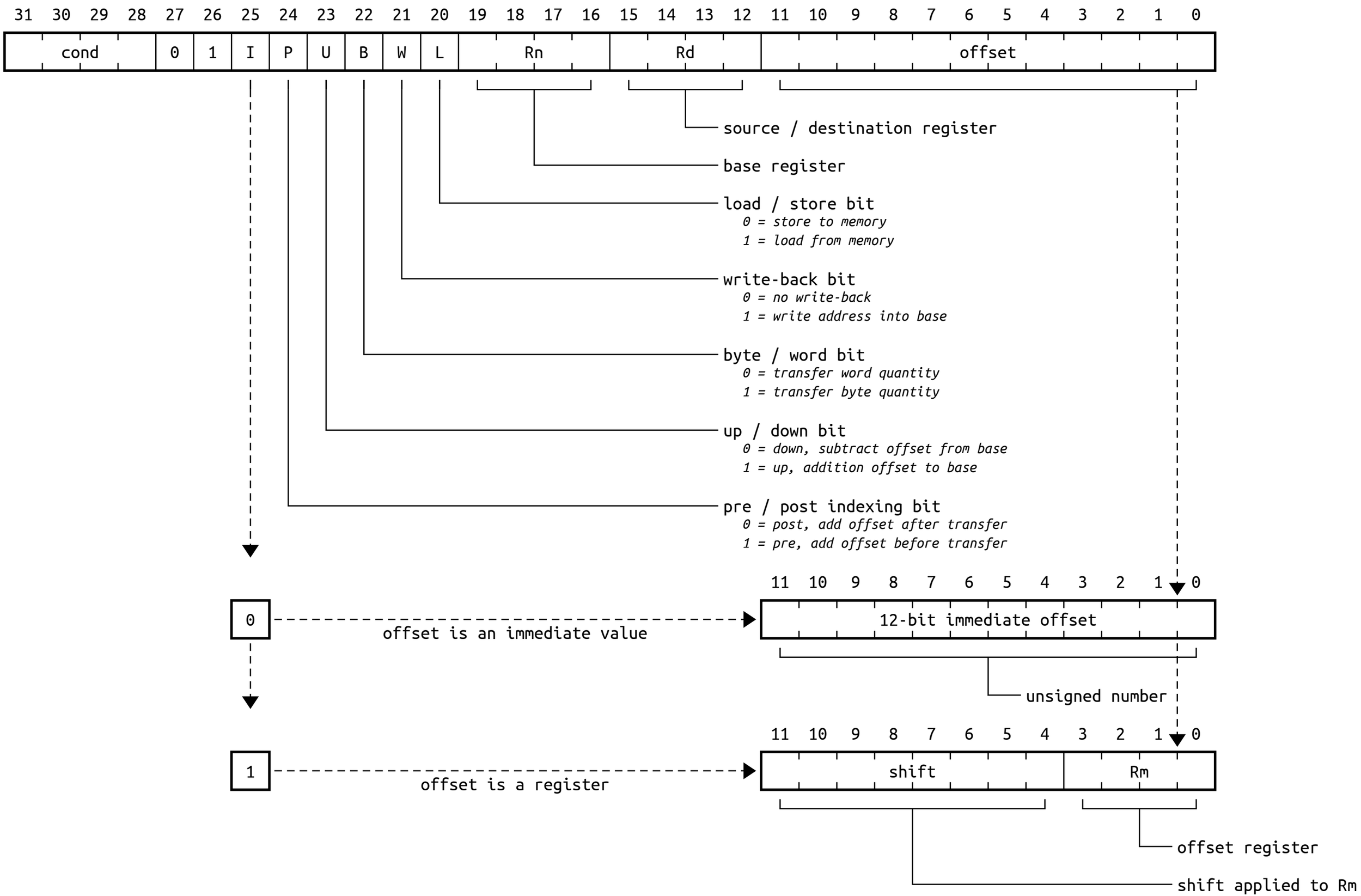
31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0
cond
0
1
I
P
U
B
W
L
Rn
Rd
offset
source / destination register
base register
load / store bit
0 = store to memory
1 = load from memory
write-back bit
0 = no write-back
1 = write address into base
byte / word bit
0 = transfer word quantity
1 = transfer byte quantity
up / down bit
0 = down, subtract offset from base
1 = up, addition offset to base
pre / post indexing bit
0 = post, add offset after transfer
1 = pre, add offset before transfer
0
offset is an immediate value
11 10 9 8 7 6 5 4 3 2 1 0
12-bit immediate offset
unsigned number
1
offset is a register
11 10 9 8 7 6 5 4 3 2 1 0
shift
Rm
offset register
shift applied to Rm