

PC: program counter, holds the next instruction address

MAR: holds instruction that is current reading/writing to memory.

MBR: holds the data -----

IR: holds the present executing instruction.

N: negative (1): MSB V: overflow (1): carry in XOR carry out.

Z: zero (1) C: carry (1): borrow/carry.

Carry: an unsigned value is too large to properly present

Overflow: a signed ----

RSB: RSB instruction can be used to put instance numbers in
some literal ground. e.g. RSB R0, R1, #5 ✓

SUB R0, #5, R1 ✗

BIC: AND NOT

MVN: Move Negative

MOV R0, R0, ASR#31 => sign mask.

TEQ: $a \oplus b = 0?$ => no effect to carry

CMP: $a - b = 0?$ => may set carry flag.

CMN: $a + b = 0?$