

Addition and subtraction of hexadecimal numbers.

Setting the C (Carry), V (overflow), N (negative) and Z (zero) bits

How the C, V, N and Z bits of the CCR are changed

Condition Code Register Bits N, Z, V, C

N bit is set if result of operation is negative (MSB = 1)

Z bit is set if result of operation is zero (All bits = 0)

V bit is set if operation produced an overflow

C bit is set if operation produced a carry (borrow on subtraction)

Note: Not all instructions change these bits of the CCR

Addition of hexadecimal numbers

ADDITION:

C bit set when result does not fit in word

V bit set when $P + P = N$
 $N + N = P$

N bit set when MSB of result is 1

Z bit set when result is 0

<u>7A</u> <u>+52</u>	<u>2A</u> <u>+52</u>	<u>AC</u> <u>+8A</u>	<u>AC</u> <u>+72</u>
CC	7C	36	1E
C: 0	C: 0	C: 1	C: 1
V: 1	V: 0	V: 1	V: 0
N: 1	N: 0	N: 0	N: 1
Z: 0	Z: 0	Z: 0	Z: 0