

CPU Online: Instruction Set

Instruction	Opcode	Description
ADD #data,A	00	Add to reg. A an immediate oper
ADD #data,B	01	Add to reg. B an immediate oper
ADD addr,A	02	Add to reg. A from a direct addr
ADD addr,B	03	Add to reg. B from a direct addr
ADD A,B	04	Add B reg. to contents of A reg
ADD B,A	05	Add A reg. to contents of B reg
SUB #data,A	06	Subtract an immediate oper. from A reg
SUB #data,B	07	Subtract an immediate oper. from B reg
SUB addr,A	08	Subtract from reg. A a direct oper
SUB addr,B	09	Subtract from reg. B a direct oper
SUB B,A	0A	Subtract from reg. A the contents of reg B
SUB A,B	0B	Subtract from reg. B the contents of reg A
CMP #data,A	0C	Compare an immediate oper. with A reg
CMP #data,B	0D	Compare an immediate oper. with B reg
CMP addr,A	0E	Compare a direct oper. with A reg
CMP addr,B	0F	Compare a direct oper. with B reg
CMP B,A	10	Compare A and B reg
CMP A,B	11	Compare B and A reg
MOVE #data,A	12	Move an immediate oper. into A
MOVE #data,B	13	Move an immediate oper. into B
MOVE addr,A	14	Load reg. A from a direct addr
MOVE addr,B	15	Load reg. B from a direct addr
MOVE B,A	16	Move B reg. to A reg
MOVE A,B	17	Move A reg. to B reg
MOVE A,addr	18	Store the A reg. in memory at a direct addr
MOVE B,addr	19	Store the B reg. in memory at a direct addr
MOVE A,(addr)	1A	Store reg. A at a mem. indirect addr
MOVE B,(addr)	1B	Store reg. B at a mem. indirect addr
JMP #data	1C	Jump to a immediate addr
JMP addr	1D	Jump to a direct addr
BCC #data	1E	Branch to a immediate addr. if carry flag clear (C=0)
BCS #data	1F	Branch to a immediate addr. if carry flag set (C=1)
BCC addr	20	Branch to a direct addr. if carry flag clear (C=0)
BCS add	21	Branch to a direct addr. if carry flag set (C=1)
BPL #data	22	Branch to a immediate addr. if negative flag clear (N=0)
BMI #data	23	Branch to a immediate addr. if negative flag set (N=1)
BPL addr	24	Branch to a direct addr. if negative flag clear (N=0)
BMI addr	25	Branch to a direct addr. if negative flag set (N=1)
BNE #data	26	Branch to a immediate addr. if zero flag clear (Z=0)
BEQ #data	27	Branch to a immediate addr. if negative flag set (Z=1)
BNE addr	28	Branch to a direct addr. if zero flag clear (Z=0)
BEQ addr	29	Branch to a direct addr. if negative flag set (Z=1)
BVC #data	2A	Branch to a immediate addr. if zero flag clear (V=0)
BVS #data	2B	Branch to a immediate addr. if negative flag set (V=1)
BVC addr	2C	Branch to a direct addr. if zero flag clear (V=0)
BVS addr	2D	Branch to a direct addr. if negative flag set (V=1)
HALT	FF	Halt processor