

## THE Z80 INSTRUCTION SET

**BIT b, r**      Test bit b of register r.

*Function:*       $Z \leftarrow \overline{r_b}$

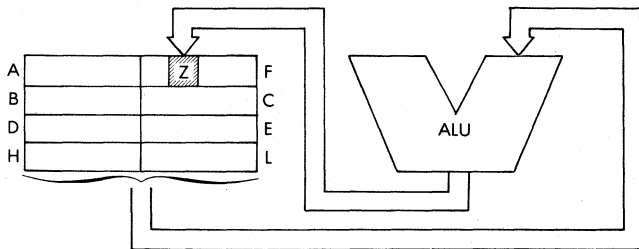
*Format:*

1	1	0	0	1	0	1	1	byte 1: CB
0	1	← b →			← r →			byte 2

*Description:*      The specified bit of the given register is tested and the zero flag is set according to the results. b and r may be any one of:

b:	0 - 000	4 - 100
	1 - 001	5 - 101
	2 - 010	6 - 110
	3 - 011	7 - 111
r:	A - 111	E - 011
	B - 000	H - 100
	C - 001	L - 101
	D - 010	

*Data Flow:*



*Timing:*      2 M cycles; 8 T states; 4 usec @ 2 MHz

*Addressing Mode:*    Implicit.

# PROGRAMMING THE Z80

## Byte Codes:

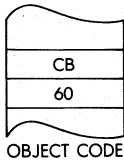
CB-	b:	r:	A	B	C	D	E	H	L
0			47	40	41	42	43	44	45
1			4F	48	49	4A	4B	4C	4D
2			57	50	51	52	53	54	55
3			5F	58	59	5A	5B	5C	5D
4			67	60	61	62	63	64	65
5			6F	68	69	6A	6B	6C	6D
6			77	70	71	72	73	74	75
7			7F	78	79	7A	7B	7C	7D

## Flags:

S	Z		H	P/V	N	C
?	●		1	?	0	

## Example:

BIT 4, B



Before:



After:

