Zilog Z80 instruction set

Prefix CB

Prefix DD

Prefix DDCB

Prefix ED

Prefix FD

Prefix FDCB

Flags affected are always shown in **S Z Y H X P/V N C** order. If flag is marked by "**0**" it means it is reset after the instruction. If it is marked by "**1**" it is set. If it is marked by "**-**" it is not changed. If it is marked by its name, it is affected as expected by its function. Flag **P** behaves like even parity flag when marked "**P**" and like overflow flag when marked "**V**". Undocumented instructions are marked by ***** in front of their name. If they are useful they are put into particular instruction group marked by well background color, if they are more aliases for other instruction they are marked by gray background. Opcodes and their length in bytes are shown in bottom left corner.

@# means immediate 8 bit data.
@#@ means immediate 16 bit address.
e means 8 bit signed offset, which are added to program counter or index registers (IX or IY).

Registers

Main register set:	
15 ... 8	7 ... 0
A (accumulator)	F (flags)
B	C
D	E
H	L
	I (interrupt vector)
	R (memory refresh)

15 ... 0
IX (index register)
IY (index register)
SP (stack pointer)
PC (program counter)

Alternate register set:	
15 ... 8	7 ... 0
A' (accumulator)	F' (flags)
B'	C'
D'	E'
H'	L'

Flag register (F) bits:							
7	6	5	4	3	2	1	0
S	Z	Y	H	X	P	N	C

S - Sign Flag
Z - Zero Flag
Y - Y Flag (undocumented)
H - Half Carry Flag
X - X Flag (undocumented)
P - Parity / Overflow Flag
N - Add / Subtract Flag
C - Carry Flag