

Type A																			
Format														Instruction		Operation		Cycles	Description
0	0	0	0	0	0	0	0	1	0	1	1	1	0	0	0	JMP A	PC <= A	2	Jump
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	JC A	PC <= A, If C	1 or 2	Jump Carry
0	0	1	0	0	0	0	0	1	0	1	1	1	0	0	0	JNC A	PC <= A, If !C	1 or 2	Jump Not Carry
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	JZ A	PC <= A, If Z	1 or 2	Jump Zero
0	1	0	0	0	0	0	0	1	0	1	1	1	0	0	0	JNZ A	PC <= A, If !Z	1 or 2	Jump Not Zero
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	JN A	PC <= A, If N	1 or 2	Jump Negative
0	1	1	0	0	0	0	0	1	0	1	1	1	0	0	0	JNN A	PC <= A, If !N	1 or 2	Jump Not Negative
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	CALL A	PC <= A, STACK <= PC	2	Call
0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	CC A	(PC <= A, STACK <= PC) If C	1 or 2	Call Carry
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	CNC A	(PC <= A, STACK <= PC) If !C	1 or 2	Call Not Carry
0	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	CZ A	(PC <= A, STACK <= PC) If Z	1 or 2	Call Zero
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	CNZ A	(PC <= A, STACK <= PC) If !Z	1 or 2	Call Not Zero
1	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	CN A	(PC <= A, STACK <= PC) If N	1 or 2	Call Negative
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	CNN A	(PC <= A, STACK <= PC) If !N	1 or 2	Call Not Negative
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A				
Type No Args																			
Format														Instruction		Operation		Cycles	Description
0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	RET	PC <= STACK	3	Return
0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	RC	PC <= STACK, If Carry	1 or 3	Return Carry
0	1	0	0	0	0	0	0	1	1	0	0	1	0	0	0	RNC	PC <= STACK, If Not Carry	1 or 3	Return Not Carry
0	1	1	0	0	0	0	0	1	1	0	0	1	0	0	0	RZ	PC <= STACK, If Zero	1 or 3	Return Zero
1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	RNZ	PC <= STACK, If Not Zero	1 or 3	Return Not Zero
1	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	RN	PC <= STACK, If Negative	1 or 3	Return Negative
1	1	0	0	0	0	0	0	1	1	0	0	1	0	0	0	RNN	PC <= STACK, If Not Negative	1 or 3	Return Not Negative
0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	PUS	STACK <= S	1	Push Status Register
0	0	0	0	0	0	0	0	1	1	0	1	1	0	0	0	POS	S <= STACK	2	Pop Status Register
0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	HLT		1	Halt
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NOP		1	No Operation
Type M																			
Format														Instruction		Operation		Cycles	Description
0	0	0	0	0	M	M	M	M	1	1	1	0	0	0	0	SSR M	S <= S   M	1	Set Status Register
0	0	0	0	0	M	M	M	M	1	1	1	0	1	0	0	CSR M	S <= S & M	1	Clear Status Register