

# 8008 INSTRUCTIONS

T.A. BOYKO

Function	Accm	B	C	D	E	H	L	MEM
LOAD REGISTER IMMEDIATE	006	016	026	036	046	056	066	076
INCREMENT REGISTER	✗	010	020	030	040	050	060	✗
DECREMENT REGISTER	✗	011	021	031	041	051	061	✗
ADD REG to ACC → ACC	200	201	202	203	204	205	206	207
ADD REG to ACC WITH CARRY	210	211	212	213	214	215	216	217
SUB REG from ACC → ACC	220	221	222	223	224	225	226	227
SUB REG from ACC with Borrow	230	231	232	233	234	235	236	237
"AND" REG with ACC → ACC	240	241	242	243	244	245	246	247
"EXCL OR" REG with ACC → ACC	250	251	252	253	254	255	256	257
"OR" REG with ACC → ACC	260	261	262	263	264	265	266	267
"COMPARE" REG with ACC	270	271	272	273	274	275	276	277

LOAD

	Acc.	B	C	D	E	H	L	MEM	
FROM	ACCUMALATOR	300	310	320	330	340	350	360	370
	B Reg	301	311	321	331	341	351	361	371
	C Reg	302	312	322	332	342	352	362	372
	D Reg	303	313	323	333	343	353	363	373
	E Reg	304	314	324	334	344	354	364	374
	H Reg	305	315	325	335	345	355	365	375
	L Reg	306	316	326	336	346	356	366	376
MEMORY	307	317	327	337	347	357	367	✗	

STORE

000 } HALT  
 001 }  
 377 }

	UNCONDITIONAL	ZERO	ZERO	CARRY	CARRY	SIGN	SIGN	PARITY	PARITY
JUMP	104	150	110	140	100	160	120	170	130
CALL	106	152	112	142	102	162	122	172	132
RETURN	007	053	013	043	003	063	023	073	033

Rotate "A" Left - 002  
 Rotate "A" Right - 012  
 Left thru Carry - 022  
 Right thru Carry - 032

PORT	INPUT	OUT 1X	OUT 2X	OUT 3X
0	101	121	141	161
1	103	123	143	163
2	105	125	145	165
3	107	127	147	167
4	111	131	151	171
5	113	133	153	173
6	115	135	155	175
7	117	137	157	177

**RESTART (INT.)**  
 START ADDR. | INSTR.  
 0X0 | 0X5

IMMEDIATES WITH ACCUMALATOR		
		CARRY
ADD Imm	004	014
SUB Imm	024	034
"AND" Imm	044	✗
"EX OR" Imm	054	✗
"OR" Imm	064	✗
"COMPARE" Imm	074	✗