HP48GX Cycle Counts

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Opcode	Mnemonic		Even	Odd
0C	P=P+1		2.75	3.00
0D	P=P-1		2.75	3.00
2n	P=	n	2.50	2.50
809	C+P+1		5.50	6.75
80Cn	C=P	n	5.75	6.00
80Dn	P=C	n	5.75	6.00
88nyy	?P#	n	+6.00	+7.25
89nyy	?P=	n	+6.00	+7.25

Opcode	Mnemonic		Even	Odd
08	CLRST		3.75	4.00
09	C=ST		3.75	4.00
0A	ST=C		3.75	4.00
0B	CSTEX		3.75	4.00
84n	ST=0	n	3.50	4.75
85n	ST=1	n	3.50	4.75
86nyy	?ST=0	n	+6.50	+7.75
87nyy	?ST=1	n	+6.50	+7.75
82n	CLRHSN	n	3.00	4.50
821	XM=0		3.00	4.50
822	SB=0		3.00	4.50
824	SR=0		3.00	4.50
828	MP=0		3.00	4.50
82F	CLRHST		3.00	4.50
83nyy	?HS=0	n	+6.00	+7.25
831yy	?XM=0		+6.00	+7.25
832yy	?SB=0		+6.00	+7.25
834yy	?SR=0		+6.00	+7.25
838yy	?MP=0		+6.00	+7.25

Opcode	Mnemonic		Even	Odd
04	SETHEX		2.75	3.00
05	SETDEC		2.75	3.00
06	RSTK=C		5.25	5.50
07	C=RSTK		5.25	5.50
800	OUT=CS		3.50	4.75
801	OUT=C		4.50	5.75
802	A=IN		?	-
803	C=IN		?	-
804	UNCNFG		?	?
805	CONFIG		8.50	10.00
806	C=ID		8.50	10.00
807	SHUTDN		?	?
8080	INTON		5.25	5.50
808F	INTOFF		5.25	5.50
80810	RSI		5.75	7.50
80A	RESET		?	?
80E	SREQ?		6.50	8.00
80B	BUSCC		?	?
8083	BUSCB		?	?
808D	BUSCD		?	?

Opcode	Mnemonic		Even	Odd
00	RTNSXM		7.50	7.50
01	RTN		7.50	7.50
02	RTNSC		7.50	7.50
03	RTNCC		7.50	7.50
0F	RTI		7.50	7.50
400	RTNC		+3.00	+4.50
500	RTNNC		+3.00	+4.50
4aa	GOC	lab	+3.00	+4.50
5aa	GONC	lab	+3.00	+4.50
6300	NOP3		10.00	10.00
64000	NOP4		10.00	10.00
6aaa	GOTO	lab	10.00	10.00
7aaa	GOSUB	lab	10.25	10.50
8Caaaa	GOLONG	lab	12.50	12.50
8Daaaaa	GOVLNG	lab	13.00	14.50
8Eaaaa	GOSUBL	lab	12.75	13.00
8Faaaaa	GOSBVL	lab	13.25	15.00
81B2	PC=A		12.25	12.50
81B3	PC=C		12.25	12.50
81B4	A=PC		7.25	7.50
81B5	C=PC		7.25	7.50
81B6	APCEX		12.25	12.50
81B7	CPCEX		12.25	12.50
808C	PC=(A)		!20.50	!20.50
808E	PC=(C)		!20.50	!20.50

Opcode	Mnemonic		Even	Odd
10t	R0=A		11.00	12.25
11t	A=R0		11.00	12.25
12t	AR0EX		11.00	12.25
81Aa0r	R0=A.F	P	7.75	8.00
81Aa0r	R0=A.F	S	7.75	8.00
81Aa0r	R0=A.F	XS	7.75	8.00
81Aa0r	R0=A.F	B	8.25	8.50
81Aa0r	R0=A.F	X	8.75	9.00
81Aa0r	R0=A.F	A	9.75	10.00
81Aa0r	R0=A.F	M	13.25	13.50
81Aa0r	R0=A.F	W	15.25	15.50
81Aa0r	R0=A.F	0	7.75	8.00
81Aa0r	R0=A.F	1	8.25	8.50
81Aa0r	R0=A.F	2	8.75	9.00
81Aa0r	R0=A.F	3	9.25	9.50
81Aa0r	R0=A.F	4	9.75	10.00
...				
81Aa0r	R0=A.F	15	15.25	15.50

Opcode	Mnemonic		Even	Odd
130	D0=A		5.50	6.75
132	AD0EX		5.50	6.75
138.00	D0=AS		5.00	6.25
13A	AD0XS		5.00	6.25
16m	D0=D0+	n	5.00	6.25
18m	D0=D0-	n	5.00	6.25
19nn	D0=(2)	n	5.00	5.00
1Annnn	D0=(4)	n	7.50	7.50
1Bnnnnn	D0=(5)	n	8.00	9.50

Opcode	Mnemonic		Even	Odd
14t	DAT0=A	A	17.75	19.25
14t	DAT0=A	B	+11.50	+13.00
15ta	DAT0=A	P	17.50	17.75
15ta	DAT0=A	S	17.50	17.75
15ta	DAT0=A	XS	17.50	17.75
15ta	DAT0=A	X	20.00	20.25
15ta	DAT0=A	M	+28.75	+29.00
15ta	DAT0=A	W	+33.75	+34.00
15ta	DAT0=A	1	17.50	17.75
15ta	DAT0=A	2	+16.25	+16.50
15ta	DAT0=A	3	20.00	20.25
15ta	DAT0=A	4	+18.75	+19.00
15ta	DAT0=A	5	22.50	22.75
15ta	DAT0=A	6	+21.25	+21.50
15ta	DAT0=A	7	25.00	25.25
15ta	DAT0=A	8	+23.75	+24.00
15ta	DAT0=A	9	27.50	27.75
15ta	DAT0=A	10	+26.25	+26.50
15ta	DAT0=A	11	30.00	30.25
15ta	DAT0=A	12	+28.75	+29.00
15ta	DAT0=A	13	32.50	32.75
15ta	DAT0=A	14	+31.25	+31.50
15ta	DAT0=A	15	35.00	35.25
15ta	DAT0=A	16	+33.75	+34.00
14t	A=DAT0	A	-16.50	-18.00
14t	A=DAT0	B	13.50	15.00
15ta	A=DAT0	P	-16.25	-16.50
15ta	A=DAT0	S	-16.25	-16.50
15ta	A=DAT0	XS	-16.25	-16.50
15ta	A=DAT0	X	-18.75	-19.00
15ta	A=DAT0	M	30.75	31.00
15ta	A=DAT0	W	35.75	36.00
15ta	A=DAT0	1	-16.25	-16.50
15ta	A=DAT0	2	18.25	18.50
15ta	A=DAT0	3	-18.75	-19.00
15ta	A=DAT0	4	20.75	21.00
15ta	A=DAT0	5	-21.25	-21.50
15ta	A=DAT0	6	23.25	23.50
15ta	A=DAT0	7	-23.75	-24.00
15ta	A=DAT0	8	25.75	26.00
15ta	A=DAT0	9	-26.25	-26.50
15ta	A=DAT0	10	28.25	28.50
15ta	A=DAT0	11	-28.75	-29.00
15ta	A=DAT0	12	30.75	31.00
15ta	A=DAT0	13	-31.25	-31.50
15ta	A=DAT0	14	33.25	33.50
15ta	A=DAT0	15	-33.75	-34.00
15ta	A=DAT0	16	35.75	36.00

Opcode	Mnemonic		Even	Odd
30n	LC(1)	n	3.0	4.5
31nn	LC(2)	n	5.0	5.0
32nnn	LC(3)	n	5.5	7.0
33nnnn	LC(4)	n	7.5	7.5
34nnnnn	LC(5)	n	8.0	9.5
35nn..	LC(6)	n	10.0	10.0
36nn..	LC(7)	n	10.5	12.0
37nn..	LC(8)	n	12.5	12.5
38nn..	LC(9)	n	13.0	14.5
39nn..	LC(10)	n	15.0	15.0
3Ann..	LC(11)	n	15.5	17.0
3Bnn..	LC(12)	n	17.5	17.5
3Cnn..	LC(13)	n	18.0	19.5
3Dnn..	LC(14)	n	20.0	20.0
3Enn..	LC(15)	n	20.5	22.0
3Fnn..	LC(16)	n	22.5	22.5
80820n	LA(1)	n	7.5	7.5
80821nn	LA(2)	n	8.0	9.5
80821..	LA(3)	n	10.0	10.0
80821..	LA(4)	n	10.5	12.0
80821..	LA(5)	n	12.5	12.5
80821..	LA(6)	n	13.0	14.5
80821..	LA(7)	n	15.0	15.0
80821..	LA(8)	n	15.5	17.0
80821..	LA(9)	n	17.5	17.5
80821..	LA(10)	n	18.0	19.5
80821..	LA(11)	n	20.0	20.0
80821..	LA(12)	n	20.5	22.0
80821..	LA(13)	n	22.5	22.5
80821..	LA(14)	n	23.0	24.5
80821..	LA(15)	n	25.0	25.0
80821..	LA(16)	n	25.5	27.0

Opcode	Mnemonic		Even	Odd
8084n	ABIT=0	n	6.00	7.25
8086nyy	?ABIT=0	n	+9.00	+10.25
81s	ASLC		12.00	13.25
81s	ASRC		12.00	13.25
81s	ASRB		11.50	12.75
819as	ASRB.F	P,n	6.50	7.75
819as	ASRB.F	S,n	6.50	7.75
819as	ASRB.F	XS,n	6.50	7.75
819as	ASRB.F	B,n	7.00	8.25
819as	ASRB.F	X,n	7.50	8.75
819as	ASRB.F	A,n	8.50	9.75
819as	ASRB.F	M,n	12.00	13.25
819as	ASRB.F	W,n	14.00	15.25
819as	ASRB.F	0,n	6.50	7.75
819as	ASRB.F	1,n	7.00	8.25
819as	ASRB.F	2,n	7.50	8.75
819as	ASRB.F	3,n	8.00	9.25
819as	ASRB.F	4,n	8.50	9.75
...				
819as	ASRB.F	15,n	14.00	15.25

Opcode	Mnemonic		Even	Odd
0Eas	A=A!C	P	5.25	5.50
0Eas	A=A!C	S	5.25	5.50
0Eas	A=A!C	XS	5.25	5.50
0Eas	A=A!C	B	5.75	6.00
0Eas	A=A!C	X	6.25	6.50
0Eas	A=A!C	A	7.25	7.50
0Eas	A=A!C	M	10.75	11.00
0Eas	A=A!C	W	12.75	13.00
0Eas	A=A!C	0	5.25	5.50
0Eas	A=A!C	1	5.75	6.00
0Eas	A=A!C	2	6.25	6.50
0Eas	A=A!C	3	6.75	7.00
0Eas	A=A!C	4	7.25	7.50
...				
0Eas	A=A!C	15	12.75	13.00

Opcode	Mnemonic		Even	Odd
818fsn	A=A+CON	P,n	15.25	15.50
818fsn	A=A+CON	S,n	15.25	15.50
818fsn	A=A+CON	XS,n	15.25	15.50
818fsn	A=A+CON	B,n	7.75	8.00
818fsn	A=A+CON	X,n	8.25	8.50
818fsn	A=A+CON	A,n	9.25	9.50
818fsn	A=A+CON	M,n	12.75	13.00
818fsn	A=A+CON	W,n	14.75	15.00
818fsn	A=A+CON	0,n	15.25	15.50
818fsn	A=A+CON	1,n	7.75	8.00
818fsn	A=A+CON	2,n	8.25	8.50
818fsn	A=A+CON	3,n	8.75	9.00
818fsn	A=A+CON	4,n	9.25	9.50
...				
818fsn	A=A+CON	15,n	14.75	15.00

Opcode	Mnemonic		Even	Odd
9atyy	?A=C	P	+6.50	+7.75
9atyy	?A=C	S	+6.50	+7.75
9atyy	?A=C	XS	+6.50	+7.75
9atyy	?A=C	B	+7.00	+8.25
9atyy	?A=C	X	+7.50	+8.75
8Btyy	?A=C	A	+8.50	+9.75
9atyy	?A=C	M	+12.00	+13.25
9atyy	?A=C	W	+14.00	+15.25
9atyy	?A=C	0	+6.50	+7.75
9atyy	?A=C	1	+7.00	+8.25
9atyy	?A=C	2	+7.50	+8.75
9atyy	?A=C	3	+8.00	+9.25
9atyy	?A=C	4	+8.50	+9.75
...				
9atyy	?A=C	15	+14.00	+15.25

Opcode	Mnemonic		Even	Odd
Bat	A=A+1	P	3.50	4.75
Bat	A=A+1	S	3.50	4.75
Bat	A=A+1	XS	3.50	4.75
Bat	A=A+1	B	4.00	5.25
Bat	A=A+1	X	4.50	5.75
Et	A=A+1	A	4.75	5.00
Bat	A=A+1	M	9.00	10.25
Bat	A=A+1	W	11.00	12.25
Bat	A=A+1	0	3.50	4.75
Bat	A=A+1	1	4.00	5.25
Bat	A=A+1	2	4.50	5.75
Bat	A=A+1	3	5.00	6.25
Bat	A=A+1	4	5.50	6.75
...				
Bat	A=A+1	15	11.50	12.25

Opcode	Mnemonic		Even	Odd
Bat	ASL	P	4.00	5.25
Bat	ASL	S	4.00	5.25
Bat	ASL	XS	4.00	5.25
Bat	ASL	B	4.50	5.75
Bat	ASL	X	5.00	6.25
Ft	ASL	A	5.25	5.50
Bat	ASL	M	9.50	10.75
Bat	ASL	W	11.50	12.75
Bat	ASL	0	4.00	5.25
Bat	ASL	1	4.50	5.75
Bat	ASL	2	5.00	6.25
Bat	ASL	3	5.50	6.75
Bat	ASL	4	6.00	7.25
...				
Bat	ASL	15	11.50	12.75

\+ = +5.0 cycles if branch is taken
\+ = +5.0 cycles if D0/D1 is odd
\- = +1.5 cycles if D0/D1 is odd
! = +7.0 cycles if A[A]/C[A] is odd