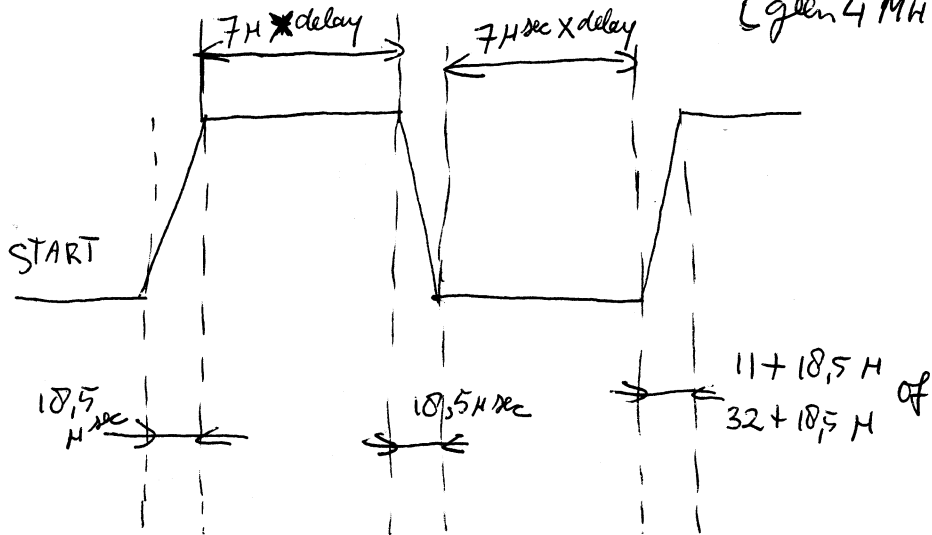


Vergelykingstabel "noten" naar "HEX"

280-clock = 0,48 μ sec \rightarrow 2,083 MHz !
(geen 4 MHz)



tel $f = 1000$ Hz.



tel tijdsduur = 0,5 sec = \pm 1 tel.

\rightarrow 500 msec.

\rightarrow 500 impulse

decimale waarde van het product $M \times L = \underline{500}$

\rightarrow registers

(om een toon van 1000 Hz 0,5 sec te laten dueren).

MUZIEKSPELLETJE

*
;
*8
****444444

.E :AS
EXIDY Z-80 ASSEMBLER

ADDR	OBJECT	ST #				
		0001	:			
		0002	:			
		0003	:	MUZIEKSPELLETJE		
		0004	:			
		0005		PSECT	ABS	
		0006	:			
		0007		ORG	01000H	
1000	00	0008		NOP		
>002E		0009	LLIED	EQU	000046D	
>1100		0010	TIJDSD	EQU	01100H	
>1200		0011	IMPULST	EQU	01200H	
1001	00	0012		NOP		
1002	162E	0013	START	LD	D, LLIED	
1004	DD210011	0014		LD	IX, TIJDSD	
1008	FD210012	0015		LD	IV, IMPULST	
100C	DD6600	0016	RESTART	LD	H, (IX)	: INHOUD IX NAAR H
100F	DD6E01	0017		LD	L, (IX+1)	: INHOUD NAAR L
1012	3E00	0018		LD	A, 000H	
1014	BD	0019		CP	L	: IS L "0" ?
1015	CA5010	0020		JP	Z, PAUZE	: DAN GEEN TOON
1018	CD2910	0021		CALL	TOON	
101B	15	0022	VERVOLG	DEC	D	: NOOT VAN NOTENTAFEL
101C	CA0210	0023		JP	Z, START	: EINDE DAN OPNIEUW
101F	DD23	0024		INC	IX	
1021	DD23	0025		INC	IX	: TABEL IX 2 OMHOOG
1023	FD23	0026		INC	IV	: IV EEN OMHOOG
1025	C30C10	0027		JP	RESTART	: VOLGENDE TOON
1028	00	0028		NOP		
1029	3E00	0029	TOON	LD	A, 000H	
102B	D3FF	0030		OUT	(0FFH), A	: "0" NAAR POORT FF
102D	FD4600	0031		LD	B, (IV)	: HAAL IMPULSTIJD OP,
		0032				: OP PLAATS AANGEG. DOOR I
1030	05	0033	OPN1	DEC	B	
1031	C23010	0034		JP	NZ, OPN1	
1034	3EFF	0035		LD	A, 0FFH	
1036	D3FF	0036		OUT	(0FFH), A	
1038	FD4600	0037		LD	B, (IV)	
103B	05	0038	OPN2	DEC	B	
103C	C23B10	0039		JP	NZ, OPN2	
103F	00	0040		NOP		
1040	00	0041		NOP		
1041	2D	0042		DEC	L	
1042	C22910	0043		JP	NZ, TOON	
1045	DD6E01	0044		LD	L, (IX+1)	: OUDE WAARDE VAN
		0045				: L OPHALEN
1048	25	0046		DEC	H	: EEN VAN H ERAF
1049	C22910	0047		JP	NZ, TOON	: ZIJN WE AL KLAAR,
		0048				: ANDERS NAAR BEGIN
104C	C9	0049		RET		: KLAAR : TERUG
104D	00	0050		NOP		
104E	00	0051		NOP		
104F	00	0052		NOP		
1050	FD4600	0053	PAUZE	LD	B, (IV)	: IV NU PAUZETIJD
1053	05	0054	OPN3	DEC	B	
1054	C25310	0055		JP	NZ, OPN3	
1057	25	0056		DEC	H	
1058	C25010	0057		JP	NZ, PAUZE	
105B	C31B10	0058		JP	VERVOLG	: PAUZE KLAAR
105E	00	0059		NOP		

105F	00	0060	NOP
1060	00	0061	NOP
1061	00	0062	NOP
		0063	:
		0064	:
		0065	:
		0066	:
		0067	:
		0068	:
		0069	:

KLAAR

ERRORS=0000

IMPULS	1200	LLIED	002E	OPN1	1030
OPN2	103B	OPN3	1053	PAUZE	1050
RESTAR	100C	START	1002	TIJDSD	1100
TOON	1029	VERVOL	101B		

>DU 1000 12FF

ADDR	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
1000:	00	00	16	46	DD	21	00	11	FD	21	00	12	DD	66	00	DD
1010:	6E	01	3E	00	BD	CA	50	10	CD	29	10	15	CA	02	10	DD
1020:	23	DD	23	FD	23	C3	0C	10	00	3E	00	D3	FF	FD	46	00
1030:	05	C2	30	10	3E	FF	D3	FF	FD	46	00	05	C2	3B	10	00
1040:	00	2D	C2	29	10	DD	6E	01	25	C2	29	10	C9	00	00	00
1050:	FD	46	00	05	C2	53	10	25	C2	50	10	C3	1B	10	00	00
1060:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1070:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1080:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1090:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
10A0:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
10B0:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
10C0:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
10D0:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
10E0:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
10F0:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00

programma

ADDR	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
1100:	49	04	62	04	62	04	6E	02	7C	02	83	02	6E	02	7C	04
1110:	6E	02	7C	02	83	04	7C	04	6E	02	62	02	6E	04	62	08
1120:	C4	00	49	04	62	04	62	04	6E	02	7C	02	83	02	6E	02
1130:	7C	04	6E	02	7C	02	83	04	7C	04	6E	02	62	02	6E	04
1140:	62	08	C4	00	7C	02	83	02	93	08	A5	04	93	08	83	04
1150:	7C	04	6E	02	7C	02	83	04	7C	04	6E	04	62	04	6E	08
1160:	C4	00	49	04	62	02	57	02	62	02	6E	02	7C	04	6E	08
1170:	C3	00	62	04	57	04	49	04	52	02	57	02	62	04	62	04
1180:	57	04	62	08	FF	00	FF	00	FF	00	FF	00	FF	00	FF	00
1190:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
11A0:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
11B0:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
11C0:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
11D0:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
11E0:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
11F0:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00

tijdsduur tabel

IX

voor
Wilhelmus

ADDR	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
1200:	7C	5D	5D	52	49	44	52	49	52	49	44	49	52	5D	52	5D
1210:	50	7C	5D	5D	52	49	44	52	49	52	49	44	49	52	5D	52
1220:	5D	50	49	44	3D	36	3D	44	49	52	49	44	49	52	5D	52
1230:	50	7C	5D	62	5D	52	49	52	50	5D	62	7C	6F	62	5D	5D
1240:	62	5D	FF	FF	FF	FF	FF	00	FF	00	FF	00	FF	00	FF	00
1250:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1260:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1270:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1280:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1290:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
12A0:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
12B0:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
12C0:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
12D0:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
12E0:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
12F0:	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00

noten tabel

IY