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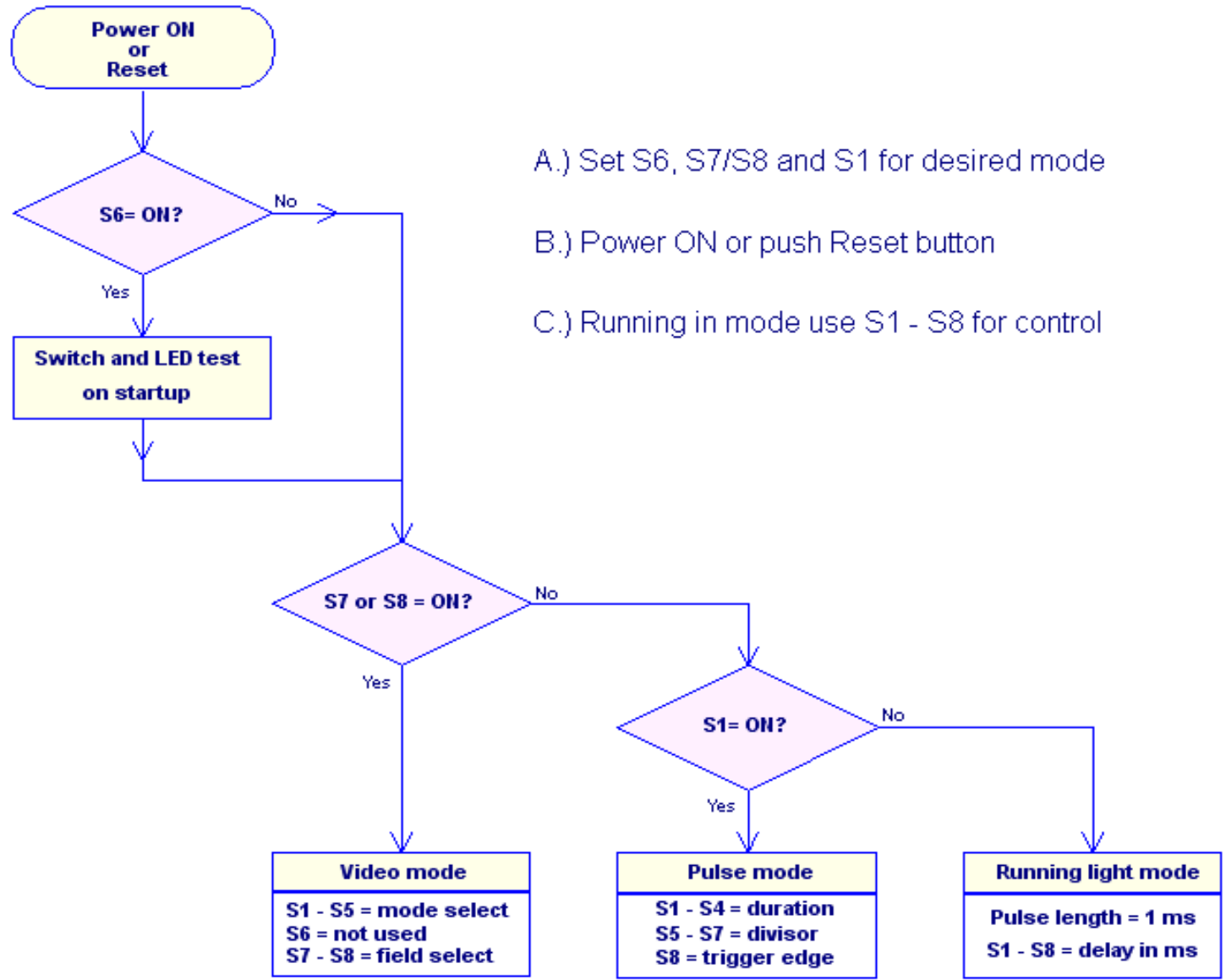
Select 1 of 3 modes on startup sequence

S1	S7	S8	Mode after startup
OFF	OFF	OFF	Running light mode
ON	OFF	OFF	Pulse mode
OFF	ON	OFF	Video mode
ON	ON	OFF	Video mode
OFF	OFF	ON	Video mode
ON	OFF	ON	Video mode
OFF	ON	ON	Video mode
ON	ON	ON	Video mode

Select additional switch and LED test on startup

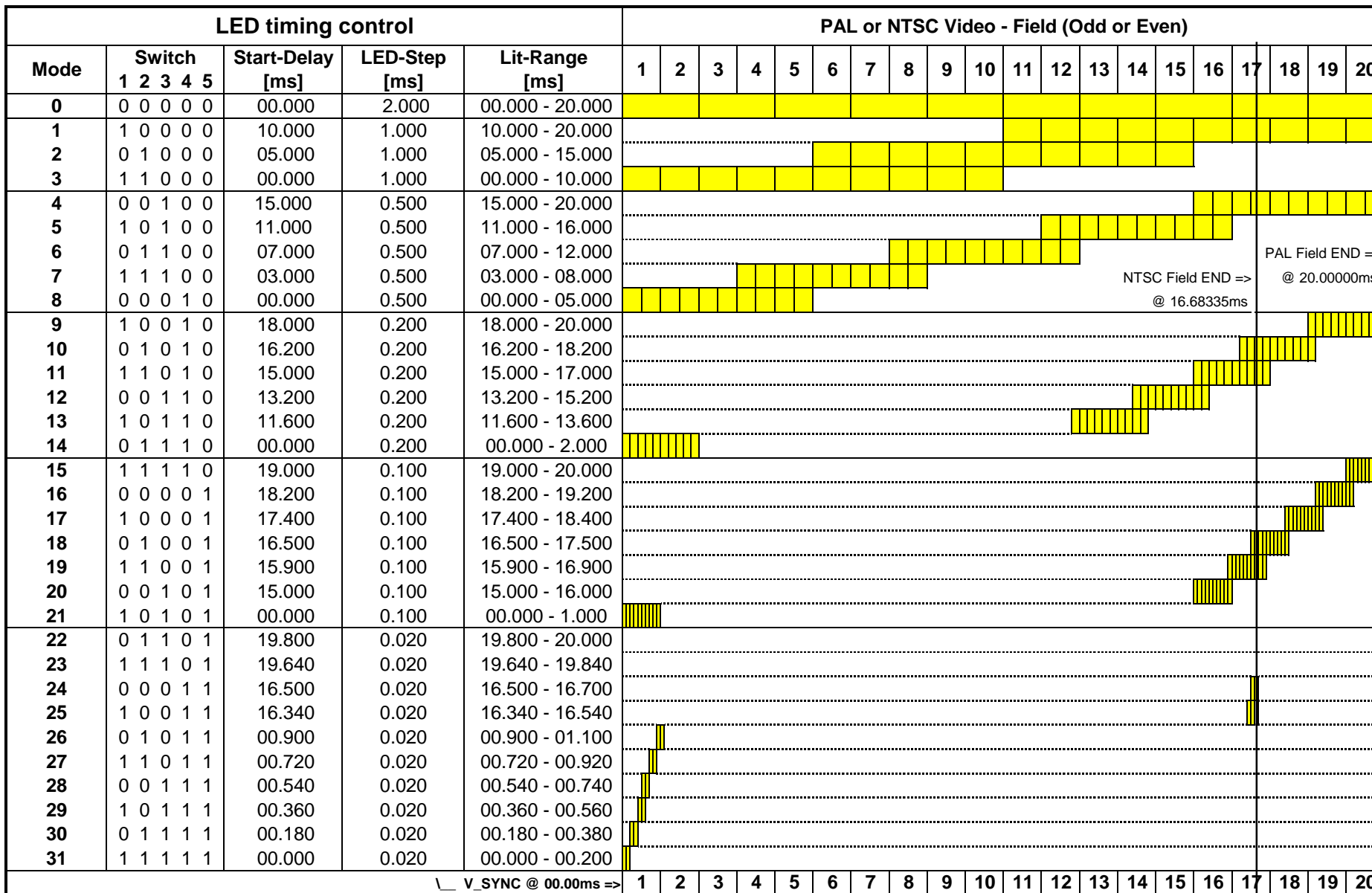
S6	Switch and LED Test on startup
OFF	No
ON	Yes

Positions of S2, S3 , S4 and S5 are not relevant during startup sequence



- A.) Set S6, S7/S8 and S1 for desired mode
- B.) Power ON or push Reset button
- C.) Running in mode use S1 - S8 for control

After startup sequence use switches S1 - S8 for details control in selected mode



System	Rate	Frame	Field
PAL	25.00 fps	40.0000 ms	20.00000 ms
NTSC	29.97 fps	33.3667 ms	16.68335 ms

Switch	S1	S2	S3	S4	S5	S6	S7	S8
Function	LED timing control						Odd	Even

[Yellow bar] = Single LED ON (1 of 10)

Mode	LED	ON	OFF	Dur.
Mode 0	1	10	2000	1990
	2	2000	4000	2000
	3	4000	6000	2000
	4	6000	8000	2000
	5	8000	10000	2000
	6	10000	12000	2000
	7	12000	14000	2000
	8	14000	16000	2000
	9	16000	18000	2000
	10	18000	20000	2000

Mode	LED	ON	OFF	Dur.
Mode 4	1	15000	15500	500
	2	15500	16000	500
	3	16000	16500	500
	4	16500	17000	500
	5	17000	17500	500
	6	17500	18000	500
	7	18000	18500	500
	8	18500	19000	500
	9	19000	19500	500
	10	19500	20000	500

Mode	LED	ON	OFF	Dur.
Mode 8	1	10	500	490
	2	500	1000	500
	3	1000	1500	500
	4	1500	2000	500
	5	2000	2500	500
	6	2500	3000	500
	7	3000	3500	500
	8	3500	4000	500
	9	4000	4500	500
	10	4500	5000	500

Mode	LED	ON	OFF	Dur.
Mode 12	1	13200	13400	200
	2	13400	13600	200
	3	13600	13800	200
	4	13800	14000	200
	5	14000	14200	200
	6	14200	14400	200
	7	14400	14600	200
	8	14600	14800	200
	9	14800	15000	200
	10	15000	15200	200

Mode	LED	ON	OFF	Dur.
Mode 1	1	10000	11000	1000
	2	11000	12000	1000
	3	12000	13000	1000
	4	13000	14000	1000
	5	14000	15000	1000
	6	15000	16000	1000
	7	16000	17000	1000
	8	17000	18000	1000
	9	18000	19000	1000
	10	19000	20000	1000

Mode	LED	ON	OFF	Dur.
Mode 5	1	11000	11500	500
	2	11500	12000	500
	3	12000	12500	500
	4	12500	13000	500
	5	13000	13500	500
	6	13500	14000	500
	7	14000	14500	500
	8	14500	15000	500
	9	15000	15500	500
	10	15500	16000	500

Mode	LED	ON	OFF	Dur.
Mode 9	1	18000	18200	200
	2	18200	18400	200
	3	18400	18600	200
	4	18600	18800	200
	5	18800	19000	200
	6	19000	19200	200
	7	19200	19400	200
	8	19400	19600	200
	9	19600	19800	200
	10	19800	20000	200

Mode	LED	ON	OFF	Dur.
Mode 13	1	11600	11800	200
	2	11800	12000	200
	3	12000	12200	200
	4	12200	12400	200
	5	12400	12600	200
	6	12600	12800	200
	7	12800	13000	200
	8	13000	13200	200
	9	13200	13400	200
	10	13400	13600	200

Mode	LED	ON	OFF	Dur.
Mode 2	1	5000	6000	1000
	2	6000	7000	1000
	3	7000	8000	1000
	4	8000	9000	1000
	5	9000	10000	1000
	6	10000	11000	1000
	7	11000	12000	1000
	8	12000	13000	1000
	9	13000	14000	1000
	10	14000	15000	1000

Mode	LED	ON	OFF	Dur.
Mode 6	1	7000	7500	500
	2	7500	8000	500
	3	8000	8500	500
	4	8500	9000	500
	5	9000	9500	500
	6	9500	10000	500
	7	10000	10500	500
	8	10500	11000	500
	9	11000	11500	500
	10	11500	12000	500

Mode	LED	ON	OFF	Dur.
Mode 10	1	16200	16400	200
	2	16400	16600	200
	3	16600	16800	200
	4	16800	17000	200
	5	17000	17200	200
	6	17200	17400	200
	7	17400	17600	200
	8	17600	17800	200
	9	17800	18000	200
	10	18000	18200	200

Mode	LED	ON	OFF	Dur.
Mode 14	1	10	200	190
	2	200	400	200
	3	400	600	200
	4	600	800	200
	5	800	1000	200
	6	1000	1200	200
	7	1200	1400	200
	8	1400	1600	200
	9	1600	1800	200
	10	1800	2000	200

Mode	LED	ON	OFF	Dur.
Mode 3	1	10	1000	990
	2	1000	2000	1000
	3	2000	3000	1000
	4	3000	4000	1000
	5	4000	5000	1000
	6	5000	6000	1000
	7	6000	7000	1000
	8	7000	8000	1000
	9	8000	9000	1000
	10	9000	10000	1000

Mode	LED	ON	OFF	Dur.
Mode 7	1	3000	3500	500
	2	3500	4000	500
	3	4000	4500	500
	4	4500	5000	500
	5	5000	5500	500
	6	5500	6000	500
	7	6000	6500	500
	8	6500	7000	500
	9	7000	7500	500
	10	7500	8000	500

Mode	LED	ON	OFF	Dur.
Mode 11	1	15000	15200	200
	2	15200	15400	200
	3	15400	15600	200
	4	15600	15800	200
	5	15800	16000	200
	6	16000	16200	200
	7	16200	16400	200
	8	16400	16600	200
	9	16600	16800	200
	10	16800	17000	200

Mode	LED	ON	OFF	Dur.
Mode 15	1	19000	19100	100
	2	19100	19200	100
	3	19200	19300	100
	4	19300	19400	100
	5	19400	19500	100
	6	19500	19600	100
	7	19600	19700	100
	8	19700	19800	100
	9	19800	19900	100
	10	19900	20000	100

Mode	LED	ON	OFF	Dur.
Mode 16	1	18200	18300	100
	2	18300	18400	100
	3	18400	18500	100
	4	18500	18600	100
	5	18600	18700	100
	6	18700	18800	100
	7	18800	18900	100
	8	18900	19000	100
	9	19000	19100	100
	10	19100	19200	100

Mode	LED	ON	OFF	Dur.
Mode 20	1	15000	15100	100
	2	15100	15200	100
	3	15200	15300	100
	4	15300	15400	100
	5	15400	15500	100
	6	15500	15600	100
	7	15600	15700	100
	8	15700	15800	100
	9	15800	15900	100
	10	15900	16000	100

Mode	LED	ON	OFF	Dur.
Mode 24	1	16500	16520	20
	2	16520	16540	20
	3	16540	16560	20
	4	16560	16580	20
	5	16580	16600	20
	6	16600	16620	20
	7	16620	16640	20
	8	16640	16660	20
	9	16660	16680	20
	10	16680	16700	20

Mode	LED	ON	OFF	Dur.
Mode 28	1	540	560	20
	2	560	580	20
	3	580	600	20
	4	600	620	20
	5	620	640	20
	6	640	660	20
	7	660	680	20
	8	680	700	20
	9	700	720	20
	10	720	740	20

Mode 17	1	17400	17500	100
	2	17500	17600	100
	3	17600	17700	100
	4	17700	17800	100
	5	17800	17900	100
	6	17900	18000	100
	7	18000	18100	100
	8	18100	18200	100
	9	18200	18300	100
	10	18300	18400	100

Mode 21	1	10	100	90
	2	100	200	100
	3	200	300	100
	4	300	400	100
	5	400	500	100
	6	500	600	100
	7	600	700	100
	8	700	800	100
	9	800	900	100
	10	900	1000	100

Mode 25	1	16340	16360	20
	2	16360	16380	20
	3	16380	16400	20
	4	16400	16420	20
	5	16420	16440	20
	6	16440	16460	20
	7	16460	16480	20
	8	16480	16500	20
	9	16500	16520	20
	10	16520	16540	20

Mode 29	1	360	380	20
	2	380	400	20
	3	400	420	20
	4	420	440	20
	5	440	460	20
	6	460	480	20
	7	480	500	20
	8	500	520	20
	9	520	540	20
	10	540	560	20

Mode 18	1	16500	16600	100
	2	16600	16700	100
	3	16700	16800	100
	4	16800	16900	100
	5	16900	17000	100
	6	17000	17100	100
	7	17100	17200	100
	8	17200	17300	100
	9	17300	17400	100
	10	17400	17500	100

Mode 22	1	19800	19820	20
	2	19820	19840	20
	3	19840	19860	20
	4	19860	19880	20
	5	19880	19900	20
	6	19900	19920	20
	7	19920	19940	20
	8	19940	19960	20
	9	19960	19980	20
	10	19980	20000	20

Mode 26	1	900	920	20
	2	920	940	20
	3	940	960	20
	4	960	980	20
	5	980	1000	20
	6	1000	1020	20
	7	1020	1040	20
	8	1040	1060	20
	9	1060	1080	20
	10	1080	1100	20

Mode 30	1	180	200	20
	2	200	220	20
	3	220	240	20
	4	240	260	20
	5	260	280	20
	6	280	300	20
	7	300	320	20
	8	320	340	20
	9	340	360	20
	10	360	380	20

Mode 19	1	15900	16000	100
	2	16000	16100	100
	3	16100	16200	100
	4	16200	16300	100
	5	16300	16400	100
	6	16400	16500	100
	7	16500	16600	100
	8	16600	16700	100
	9	16700	16800	100
	10	16800	16900	100

Mode 23	1	19640	19660	20
	2	19660	19680	20
	3	19680	19700	20
	4	19700	19720	20
	5	19720	19740	20
	6	19740	19760	20
	7	19760	19780	20
	8	19780	19800	20
	9	19800	19820	20
	10	19820	19840	20

Mode 27	1	720	740	20
	2	740	760	20
	3	760	780	20
	4	780	800	20
	5	800	820	20
	6	820	840	20
	7	840	860	20
	8	860	880	20
	9	880	900	20
	10	900	920	20

Mode 31	1	10	20	10
	2	20	40	20
	3	40	60	20
	4	60	80	20
	5	80	100	20
	6	100	120	20
	7	120	140	20
	8	140	160	20
	9	160	180	20
	10	180	200	20

Select output pulse duration

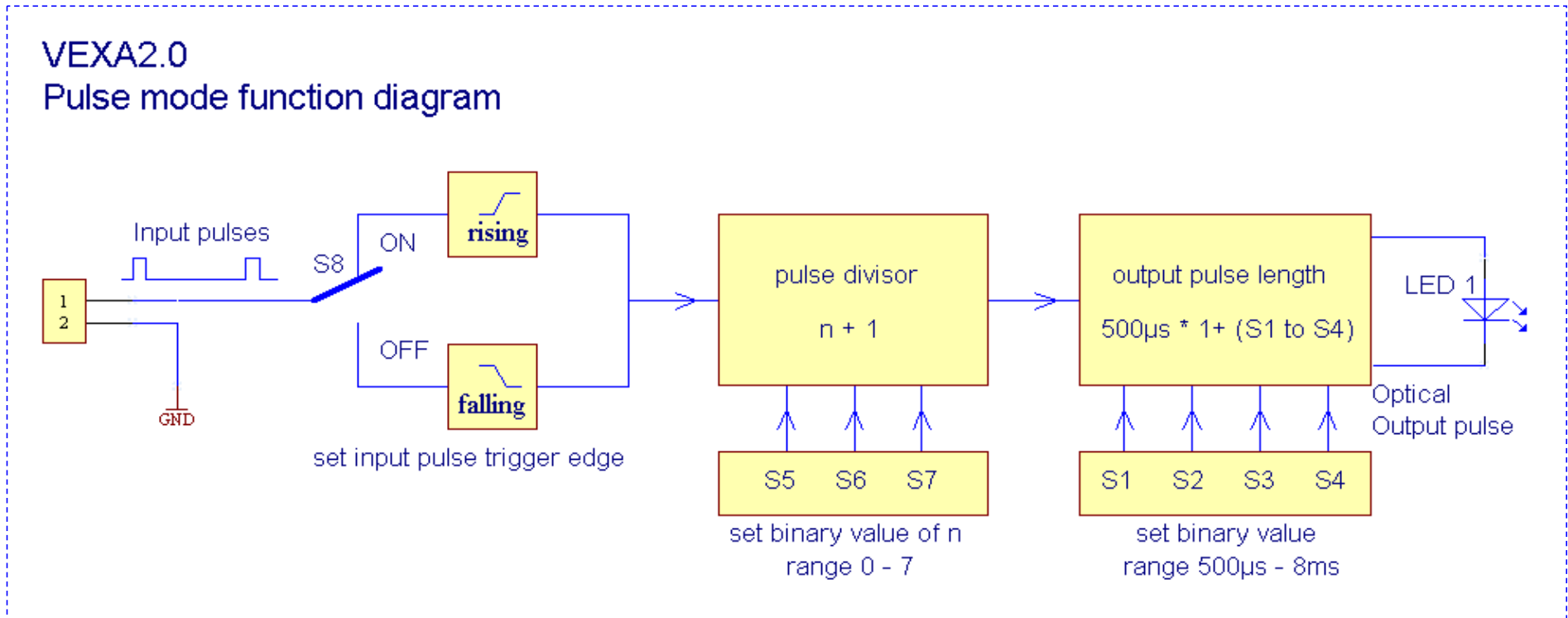
S1	S2	S3	S4	Output pulse duration
OFF	OFF	OFF	OFF	0.5 ms
ON	OFF	OFF	OFF	1.0 ms
OFF	ON	OFF	OFF	1.5 ms
ON	ON	OFF	OFF	2.0 ms
OFF	OFF	ON	OFF	2.5 ms
ON	OFF	ON	OFF	3.0 ms
OFF	ON	ON	OFF	3.5 ms
ON	ON	ON	OFF	4.0 ms
OFF	OFF	OFF	ON	4.5 ms
ON	OFF	OFF	ON	5.0 ms
OFF	ON	OFF	ON	5.5 ms
ON	ON	OFF	ON	6.0 ms
OFF	OFF	ON	ON	6.5 ms
ON	OFF	ON	ON	7.0 ms
OFF	ON	ON	ON	7.5 ms
ON	ON	ON	ON	8.0 ms

Select input pulse divisor

S5	S6	S7	Input pulses	Output pulses
OFF	OFF	OFF	1	1
ON	OFF	OFF	2	1
OFF	ON	OFF	3	1
ON	ON	OFF	4	1
OFF	OFF	ON	5	1
ON	OFF	ON	6	1
OFF	ON	ON	7	1
ON	ON	ON	8	1

Select input pulse trigger edge

S8	input pulse trigger edge
OFF	Output pulse starts on input pulse falling edge
ON	Output pulse starts on input pulse rising edge



Delay between LED light steps			Sequence n Start	VEXA 2.0 - Running light mode - Function table										Sequence n+1 Start	
Delay switch		Mode Nr.	LED 01 ON	LED 02 ON	LED 03 ON	LED 04 ON	LED 05 ON	LED 06 ON	LED 07 ON	LED 08 ON	LED 09 ON	LED 10 ON	LED 01 ON		
1	2		3	4	5	6	7	8	Dur . =1ms	Dur . =1ms	Dur . =1ms	Dur . =1ms	Dur . =1ms	Dur . =1ms	Dur . =1ms
ON		0	0	1	2	3	4	5	6	7	8	9	10		
OFF			0	1	2	3	4	5	6	7	8	9	10		
ON		1	0	2	4	6	8	10	12	14	16	18	20		
OFF			0	2	4	6	8	10	12	14	16	18	20		
ON		2	0	3	6	9	12	15	18	21	24	27	30		
OFF			0	3	6	9	12	15	18	21	24	27	30		
ON		3	0	4	8	12	16	20	24	28	32	36	40		
OFF			0	4	8	12	16	20	24	28	32	36	40		
ON		4	0	5	10	15	20	25	30	35	40	45	50		
OFF			0	5	10	15	20	25	30	35	40	45	50		
ON		5	0	6	12	18	24	30	36	42	48	54	60		
OFF			0	6	12	18	24	30	36	42	48	54	60		
ON		6	0	7	14	21	28	35	42	49	56	63	70		
OFF			0	7	14	21	28	35	42	49	56	63	70		
ON		7	0	8	16	24	32	40	48	56	64	72	80		
OFF			0	8	16	24	32	40	48	56	64	72	80		
ON		8	0	9	18	27	36	45	54	63	72	81	90		
OFF			0	9	18	27	36	45	54	63	72	81	90		
ON		9	0	10	20	30	40	50	60	70	80	90	100		
OFF			0	10	20	30	40	50	60	70	80	90	100		
ON		10	0	11	22	33	44	55	66	77	88	99	110		
OFF			0	11	22	33	44	55	66	77	88	99	110		
ON		11	0	12	24	36	48	60	72	84	96	108	120		
OFF			0	12	24	36	48	60	72	84	96	108	120		
ON		12	0	13	26	39	52	65	78	91	104	117	130		
OFF			0	13	26	39	52	65	78	91	104	117	130		
ON		13	0	14	28	42	56	70	84	98	112	126	140		
OFF			0	14	28	42	56	70	84	98	112	126	140		
ON		14	0	15	30	45	60	75	90	105	120	135	150		
OFF			0	15	30	45	60	75	90	105	120	135	150		
ON		15	0	16	32	48	64	80	96	112	128	144	160		
OFF			0	16	32	48	64	80	96	112	128	144	160		
ON		16	0	17	34	51	68	85	102	119	136	153	170		
OFF			0	17	34	51	68	85	102	119	136	153	170		
ON		17	0	18	36	54	72	90	108	126	144	162	180		
OFF			0	18	36	54	72	90	108	126	144	162	180		
ON		18	0	19	38	57	76	95	114	133	152	171	190		
OFF			0	19	38	57	76	95	114	133	152	171	190		
ON		19	0	20	40	60	80	100	120	140	160	180	200		
OFF			0	20	40	60	80	100	120	140	160	180	200		
ON		20	0	21	42	63	84	105	126	147	168	189	210		
OFF			0	21	42	63	84	105	126	147	168	189	210		
ON		21	0	22	44	66	88	110	132	154	176	198	220		
OFF			0	22	44	66	88	110	132	154	176	198	220		
ON		22	0	23	46	69	92	115	138	161	184	207	230		
OFF			0	23	46	69	92	115	138	161	184	207	230		
ON		23	0	24	48	72	96	120	144	168	192	216	240		
OFF			0	24	48	72	96	120	144	168	192	216	240		

Delay between LED light steps			Sequence n Start	VEXA 2.0 - Running light mode - Function table										Sequence n+1 Start																																																																																																																																																																																																																																																																																																																																																																																																			
Delay switch 1 2 3 4 5 6 7 8		Mode Nr.	LED 01 ON Dur .:=1ms	LED 02 ON Dur .:=1ms	LED 03 ON Dur .:=1ms	LED 04 ON Dur .:=1ms	LED 05 ON Dur .:=1ms	LED 06 ON Dur .:=1ms	LED 07 ON Dur .:=1ms	LED 08 ON Dur .:=1ms	LED 09 ON Dur .:=1ms	LED 10 ON Dur .:=1ms	LED 01 ON Dur .:=1ms																																																																																																																																																																																																																																																																																																																																																																																																				
ON			24	0	25	50	75	100	125	150	175	200	225	250																																																																																																																																																																																																																																																																																																																																																																																																			
OFF		ON														25	0	26	52	78	104	130	156	182	208	234	260	OFF		ON		26	0	27	54	81	108	135	162	189	216	243	270	OFF		ON		27	0	28	56	84	112	140	168	196	224	252	280	OFF		ON		28	0	29	58	87	116	145	174	203	232	261	290	OFF		ON		29	0	30	60	90	120	150	180	210	240	270	300	OFF		ON		30	0	31	62	93	124	155	186	217	248	279	310	OFF		ON		31	0	32	64	96	128	160	192	224	256	288	320	OFF		ON		32	0	33	66	99	132	165	198	231	264	297	330	OFF		ON		33	0	34	68	102	136	170	204	238	272	306	340	OFF		ON		34	0	35	70	105	140	175	210	245	280	315	350	OFF		ON		35	0	36	72	108	144	180	216	252	288	324	360	OFF		ON		36	0	37	74	111	148	185	222	259	296	333	370	OFF		ON		37	0	38	76	114	152	190	228	266	304	342	380	OFF		ON		38	0	39	78	117	156	195	234	273	312	351	390	OFF		ON		39	0	40	80	120	160	200	240	280	320	360	400	OFF		ON		40	0	41	82	123	164	205	246	287	328	369	410	OFF		ON		41	0	42	84	126	168	210	252	294	336	378	420	OFF		ON		42	0	43	86	129	172	215	258	301	344	387	430	OFF		ON		43	0	44	88	132	176	220	264	308	352	396	440	OFF		ON		44	0	45	90	135	180	225	270	315	360	405	450	OFF		ON		45	0	46	92	138	184	230	276	322	368	414	460	OFF		ON		46	0	47	94	141	188	235	282	329	376	423	470	OFF		ON		47	0	48	96	144	192	240	288	336	384	432	480	OFF		ON		48	0	49	98	147	196	245	294	343	392	441	490	OFF		ON		49	0
ON		25	0	26	52	78	104	130	156	182	208	234	260																																																																																																																																																																																																																																																																																																																																																																																																				
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OFF														ON		36	0	37	74	111	148	185	222	259	296	333	370	OFF		ON		37	0	38	76	114	152	190	228	266	304	342	380	OFF		ON		38	0	39	78	117	156	195	234	273	312	351	390	OFF		ON		39	0	40	80	120	160	200	240	280	320	360	400	OFF		ON		40	0	41	82	123	164	205	246	287	328	369	410	OFF		ON		41	0	42	84	126	168	210	252	294	336	378	420	OFF		ON		42	0	43	86	129	172	215	258	301	344	387	430	OFF		ON		43	0	44	88	132	176	220	264	308	352	396	440	OFF		ON		44	0	45	90	135	180	225	270	315	360	405	450	OFF		ON		45	0	46	92	138	184	230	276	322	368	414	460	OFF		ON		46	0	47	94	141	188	235	282	329	376	423	470	OFF		ON		47	0	48	96	144	192	240	288	336	384	432	480	OFF		ON		48	0	49	98	147	196	245	294	343	392	441	490	OFF		ON		49	0	50	100	150	200	250	300	350	400	450	500	OFF																																																																																																																																																																					
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OFF														ON		37	0	38	76	114	152	190	228	266	304	342	380	OFF		ON		38	0	39	78	117	156	195	234	273	312	351	390	OFF		ON		39	0	40	80	120	160	200	240	280	320	360	400	OFF		ON		40	0	41	82	123	164	205	246	287	328	369	410	OFF		ON		41	0	42	84	126	168	210	252	294	336	378	420	OFF		ON		42	0	43	86	129	172	215	258	301	344	387	430	OFF		ON		43	0	44	88	132	176	220	264	308	352	396	440	OFF		ON		44	0	45	90	135	180	225	270	315	360	405	450	OFF		ON		45	0	46	92	138	184	230	276	322	368	414	460	OFF		ON		46	0	47	94	141	188	235	282	329	376	423	470	OFF		ON		47	0	48	96	144	192	240	288	336	384	432	480	OFF		ON		48	0	49	98	147	196	245	294	343	392	441	490	OFF		ON		49	0	50	100	150	200	250	300	350	400	450	500	OFF																																																																																																																																																																																					
ON		37	0	38	76	114	152	190	228	266	304	342	380																																																																																																																																																																																																																																																																																																																																																																																																				
OFF														ON		38	0	39	78	117	156	195	234	273	312	351	390	OFF		ON		39	0	40	80	120	160	200	240	280	320	360	400	OFF		ON		40	0	41	82	123	164	205	246	287	328	369	410	OFF		ON		41	0	42	84	126	168	210	252	294	336	378	420	OFF		ON		42	0	43	86	129	172	215	258	301	344	387	430	OFF		ON		43	0	44	88	132	176	220	264	308	352	396	440	OFF		ON		44	0	45	90	135	180	225	270	315	360	405	450	OFF		ON		45	0	46	92	138	184	230	276	322	368	414	460	OFF		ON		46	0	47	94	141	188	235	282	329	376	423	470	OFF		ON		47	0	48	96	144	192	240	288	336	384	432	480	OFF		ON		48	0	49	98	147	196	245	294	343	392	441	490	OFF		ON		49	0	50	100	150	200	250	300	350	400	450	500	OFF																																																																																																																																																																																																					
ON		38	0	39	78	117	156	195	234	273	312	351	390																																																																																																																																																																																																																																																																																																																																																																																																				
OFF														ON		39	0	40	80	120	160	200	240	280	320	360	400	OFF		ON		40	0	41	82	123	164	205	246	287	328	369	410	OFF		ON		41	0	42	84	126	168	210	252	294	336	378	420	OFF		ON		42	0	43	86	129	172	215	258	301	344	387	430	OFF		ON		43	0	44	88	132	176	220	264	308	352	396	440	OFF		ON		44	0	45	90	135	180	225	270	315	360	405	450	OFF		ON		45	0	46	92	138	184	230	276	322	368	414	460	OFF		ON		46	0	47	94	141	188	235	282	329	376	423	470	OFF		ON		47	0	48	96	144	192	240	288	336	384	432	480	OFF		ON		48	0	49	98	147	196	245	294	343	392	441	490	OFF		ON		49	0	50	100	150	200	250	300	350	400	450	500	OFF																																																																																																																																																																																																																					
ON		39	0	40	80	120	160	200	240	280	320	360	400																																																																																																																																																																																																																																																																																																																																																																																																				
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OFF														ON		42	0	43	86	129	172	215	258	301	344	387	430	OFF		ON		43	0	44	88	132	176	220	264	308	352	396	440	OFF		ON		44	0	45	90	135	180	225	270	315	360	405	450	OFF		ON		45	0	46	92	138	184	230	276	322	368	414	460	OFF		ON		46	0	47	94	141	188	235	282	329	376	423	470	OFF		ON		47	0	48	96	144	192	240	288	336	384	432	480	OFF		ON		48	0	49	98	147	196	245	294	343	392	441	490	OFF		ON		49	0	50	100	150	200	250	300	350	400	450	500	OFF																																																																																																																																																																																																																																																																					
ON		42	0	43	86	129	172	215	258	301	344	387	430																																																																																																																																																																																																																																																																																																																																																																																																				
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OFF														ON		44	0	45	90	135	180	225	270	315	360	405	450	OFF		ON		45	0	46	92	138	184	230	276	322	368	414	460	OFF		ON		46	0	47	94	141	188	235	282	329	376	423	470	OFF		ON		47	0	48	96	144	192	240	288	336	384	432	480	OFF		ON		48	0	49	98	147	196	245	294	343	392	441	490	OFF		ON		49	0	50	100	150	200	250	300	350	400	450	500	OFF																																																																																																																																																																																																																																																																																																					
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OFF														ON		45	0	46	92	138	184	230	276	322	368	414	460	OFF		ON		46	0	47	94	141	188	235	282	329	376	423	470	OFF		ON		47	0	48	96	144	192	240	288	336	384	432	480	OFF		ON		48	0	49	98	147	196	245	294	343	392	441	490	OFF		ON		49	0	50	100	150	200	250	300	350	400	450	500	OFF																																																																																																																																																																																																																																																																																																																					
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OFF														ON		46	0	47	94	141	188	235	282	329	376	423	470	OFF		ON		47	0	48	96	144	192	240	288	336	384	432	480	OFF		ON		48	0	49	98	147	196	245	294	343	392	441	490	OFF		ON		49	0	50	100	150	200	250	300	350	400	450	500	OFF																																																																																																																																																																																																																																																																																																																																					
ON		46	0	47	94	141	188	235	282	329	376	423	470																																																																																																																																																																																																																																																																																																																																																																																																				
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OFF														ON		48	0	49	98	147	196	245	294	343	392	441	490	OFF		ON		49	0	50	100	150	200	250	300	350	400	450	500	OFF																																																																																																																																																																																																																																																																																																																																																																					
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OFF														ON		49	0	50	100	150	200	250	300	350	400	450	500	OFF																																																																																																																																																																																																																																																																																																																																																																																					
ON		49	0	50	100	150	200	250	300	350	400	450	500																																																																																																																																																																																																																																																																																																																																																																																																				
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Delay between LED light steps		Mode Nr.	VEXA 2.0 - Running light mode - Function table										Sequence n+1 Start
Delay switch 1 2 3 4 5 6 7 8			Sequence n Start	LED 01 ON Dur .=1ms	LED 02 ON Dur .=1ms	LED 03 ON Dur .=1ms	LED 04 ON Dur .=1ms	LED 05 ON Dur .=1ms	LED 06 ON Dur .=1ms	LED 07 ON Dur .=1ms	LED 08 ON Dur .=1ms	LED 09 ON Dur .=1ms	LED 10 ON Dur .=1ms
ON	OFF	50	0	51	102	153	204	255	306	357	408	459	510
ON	OFF	51	0	52	104	156	208	260	312	364	416	468	520
ON	OFF	52	0	53	106	159	212	265	318	371	424	477	530
ON	OFF	53	0	54	108	162	216	270	324	378	432	486	540
ON	OFF	54	0	55	110	165	220	275	330	385	440	495	550
ON	OFF	55	0	56	112	168	224	280	336	392	448	504	560
ON	OFF	56	0	57	114	171	228	285	342	399	456	513	570
ON	OFF	57	0	58	116	174	232	290	348	406	464	522	580
ON	OFF	58	0	59	118	177	236	295	354	413	472	531	590
ON	OFF	59	0	60	120	180	240	300	360	420	480	540	600
ON	OFF	60	0	61	122	183	244	305	366	427	488	549	610
ON	OFF	61	0	62	124	186	248	310	372	434	496	558	620
ON	OFF	62	0	63	126	189	252	315	378	441	504	567	630
ON	OFF	63	0	64	128	192	256	320	384	448	512	576	640
ON	OFF	64	0	65	130	195	260	325	390	455	520	585	650
ON	OFF	65	0	66	132	198	264	330	396	462	528	594	660
ON	OFF	66	0	67	134	201	268	335	402	469	536	603	670
ON	OFF	67	0	68	136	204	272	340	408	476	544	612	680
ON	OFF	68	0	69	138	207	276	345	414	483	552	621	690
ON	OFF	69	0	70	140	210	280	350	420	490	560	630	700
ON	OFF	70	0	71	142	213	284	355	426	497	568	639	710
ON	OFF	71	0	72	144	216	288	360	432	504	576	648	720
ON	OFF	72	0	73	146	219	292	365	438	511	584	657	730
ON	OFF	73	0	74	148	222	296	370	444	518	592	666	740
ON	OFF	74	0	75	150	225	300	375	450	525	600	675	750
ON	OFF	75	0	76	152	228	304	380	456	532	608	684	760

Delay between LED light steps		Mode Nr.	VEXA 2.0 - Running light mode - Function table										Sequence n+1 Start
Delay switch 1 2 3 4 5 6 7 8			Sequence n Start	LED 01 ON Dur .=1ms	LED 02 ON Dur .=1ms	LED 03 ON Dur .=1ms	LED 04 ON Dur .=1ms	LED 05 ON Dur .=1ms	LED 06 ON Dur .=1ms	LED 07 ON Dur .=1ms	LED 08 ON Dur .=1ms	LED 09 ON Dur .=1ms	LED 10 ON Dur .=1ms
ON	█	76	0	77	154	231	308	385	462	539	616	693	770
OFF	█		0	77	154	231	308	385	462	539	616	693	770
ON	█	77	0	78	156	234	312	390	468	546	624	702	780
OFF	█		0	78	156	234	312	390	468	546	624	702	780
ON	█	78	0	79	158	237	316	395	474	553	632	711	790
OFF	█		0	79	158	237	316	395	474	553	632	711	790
ON	█	79	0	80	160	240	320	400	480	560	640	720	800
OFF	█		0	80	160	240	320	400	480	560	640	720	800
ON	█	80	0	81	162	243	324	405	486	567	648	729	810
OFF	█		0	81	162	243	324	405	486	567	648	729	810
ON	█	81	0	82	164	246	328	410	492	574	656	738	820
OFF	█		0	82	164	246	328	410	492	574	656	738	820
ON	█	82	0	83	166	249	332	415	498	581	664	747	830
OFF	█		0	83	166	249	332	415	498	581	664	747	830
ON	█	83	0	84	168	252	336	420	504	588	672	756	840
OFF	█		0	84	168	252	336	420	504	588	672	756	840
ON	█	84	0	85	170	255	340	425	510	595	680	765	850
OFF	█		0	85	170	255	340	425	510	595	680	765	850
ON	█	85	0	86	172	258	344	430	516	602	688	774	860
OFF	█		0	86	172	258	344	430	516	602	688	774	860
ON	█	86	0	87	174	261	348	435	522	609	696	783	870
OFF	█		0	87	174	261	348	435	522	609	696	783	870
ON	█	87	0	88	176	264	352	440	528	616	704	792	880
OFF	█		0	88	176	264	352	440	528	616	704	792	880
ON	█	88	0	89	178	267	356	445	534	623	712	801	890
OFF	█		0	89	178	267	356	445	534	623	712	801	890
ON	█	89	0	90	180	270	360	450	540	630	720	810	900
OFF	█		0	90	180	270	360	450	540	630	720	810	900
ON	█	90	0	91	182	273	364	455	546	637	728	819	910
OFF	█		0	91	182	273	364	455	546	637	728	819	910
ON	█	91	0	92	184	276	368	460	552	644	736	828	920
OFF	█		0	92	184	276	368	460	552	644	736	828	920
ON	█	92	0	93	186	279	372	465	558	651	744	837	930
OFF	█		0	93	186	279	372	465	558	651	744	837	930
ON	█	93	0	94	188	282	376	470	564	658	752	846	940
OFF	█		0	94	188	282	376	470	564	658	752	846	940
ON	█	94	0	95	190	285	380	475	570	665	760	855	950
OFF	█		0	95	190	285	380	475	570	665	760	855	950
ON	█	95	0	96	192	288	384	480	576	672	768	864	960
OFF	█		0	96	192	288	384	480	576	672	768	864	960
ON	█	96	0	97	194	291	388	485	582	679	776	873	970
OFF	█		0	97	194	291	388	485	582	679	776	873	970
ON	█	97	0	98	196	294	392	490	588	686	784	882	980
OFF	█		0	98	196	294	392	490	588	686	784	882	980
ON	█	98	0	99	198	297	396	495	594	693	792	891	990
OFF	█		0	99	198	297	396	495	594	693	792	891	990
ON	█	99	0	100	200	300	400	500	600	700	800	900	1000
OFF	█		0	100	200	300	400	500	600	700	800	900	1000
ON	█	100	0	101	202	303	404	505	606	707	808	909	1010
OFF	█		0	101	202	303	404	505	606	707	808	909	1010
ON	█	101	0	102	204	306	408	510	612	714	816	918	1020
OFF	█		0	102	204	306	408	510	612	714	816	918	1020

Delay between LED light steps		Mode Nr.	VEXA 2.0 - Running light mode - Function table										Sequence n+1 Start
Delay switch 1 2 3 4 5 6 7 8			Sequence n Start	LED 01 ON Dur .=1ms	LED 02 ON Dur .=1ms	LED 03 ON Dur .=1ms	LED 04 ON Dur .=1ms	LED 05 ON Dur .=1ms	LED 06 ON Dur .=1ms	LED 07 ON Dur .=1ms	LED 08 ON Dur .=1ms	LED 09 ON Dur .=1ms	LED 10 ON Dur .=1ms
ON	OFF	102	0	103	206	309	412	515	618	721	824	927	1030
ON	OFF	103	0	104	208	312	416	520	624	728	832	936	1040
ON	OFF	104	0	105	210	315	420	525	630	735	840	945	1050
ON	OFF	105	0	106	212	318	424	530	636	742	848	954	1060
ON	OFF	106	0	107	214	321	428	535	642	749	856	963	1070
ON	OFF	107	0	108	216	324	432	540	648	756	864	972	1080
ON	OFF	108	0	109	218	327	436	545	654	763	872	981	1090
ON	OFF	109	0	110	220	330	440	550	660	770	880	990	1100
ON	OFF	110	0	111	222	333	444	555	666	777	888	999	1110
ON	OFF	111	0	112	224	336	448	560	672	784	896	1008	1120
ON	OFF	112	0	113	226	339	452	565	678	791	904	1017	1130
ON	OFF	113	0	114	228	342	456	570	684	798	912	1026	1140
ON	OFF	114	0	115	230	345	460	575	690	805	920	1035	1150
ON	OFF	115	0	116	232	348	464	580	696	812	928	1044	1160
ON	OFF	116	0	117	234	351	468	585	702	819	936	1053	1170
ON	OFF	117	0	118	236	354	472	590	708	826	944	1062	1180
ON	OFF	118	0	119	238	357	476	595	714	833	952	1071	1190
ON	OFF	119	0	120	240	360	480	600	720	840	960	1080	1200
ON	OFF	120	0	121	242	363	484	605	726	847	968	1089	1210
ON	OFF	121	0	122	244	366	488	610	732	854	976	1098	1220
ON	OFF	122	0	123	246	369	492	615	738	861	984	1107	1230
ON	OFF	123	0	124	248	372	496	620	744	868	992	1116	1240
ON	OFF	124	0	125	250	375	500	625	750	875	1000	1125	1250
ON	OFF	125	0	126	252	378	504	630	756	882	1008	1134	1260
ON	OFF	126	0	127	254	381	508	635	762	889	1016	1143	1270

Delay between LED light steps		Mode Nr.	VEXA 2.0 - Running light mode - Function table										Sequence n+1 Start
Delay switch 1 2 3 4 5 6 7 8			Sequence n Start	LED 01 ON Dur .=1ms	LED 02 ON Dur .=1ms	LED 03 ON Dur .=1ms	LED 04 ON Dur .=1ms	LED 05 ON Dur .=1ms	LED 06 ON Dur .=1ms	LED 07 ON Dur .=1ms	LED 08 ON Dur .=1ms	LED 09 ON Dur .=1ms	LED 10 ON Dur .=1ms
ON		127	0	128	256	384	512	640	768	896	1024	1152	1280
OFF			0	128	256	384	512	640	768	896	1024	1152	1280
ON		128	0	129	258	387	516	645	774	903	1032	1161	1290
OFF			0	129	258	387	516	645	774	903	1032	1161	1290
ON		129	0	130	260	390	520	650	780	910	1040	1170	1300
OFF			0	130	260	390	520	650	780	910	1040	1170	1300
ON		130	0	131	262	393	524	655	786	917	1048	1179	1310
OFF			0	131	262	393	524	655	786	917	1048	1179	1310
ON		131	0	132	264	396	528	660	792	924	1056	1188	1320
OFF			0	132	264	396	528	660	792	924	1056	1188	1320
ON		132	0	133	266	399	532	665	798	931	1064	1197	1330
OFF			0	133	266	399	532	665	798	931	1064	1197	1330
ON		133	0	134	268	402	536	670	804	938	1072	1206	1340
OFF			0	134	268	402	536	670	804	938	1072	1206	1340
ON		134	0	135	270	405	540	675	810	945	1080	1215	1350
OFF			0	135	270	405	540	675	810	945	1080	1215	1350
ON		135	0	136	272	408	544	680	816	952	1088	1224	1360
OFF			0	136	272	408	544	680	816	952	1088	1224	1360
ON		136	0	137	274	411	548	685	822	959	1096	1233	1370
OFF			0	137	274	411	548	685	822	959	1096	1233	1370
ON		137	0	138	276	414	552	690	828	966	1104	1242	1380
OFF			0	138	276	414	552	690	828	966	1104	1242	1380
ON		138	0	139	278	417	556	695	834	973	1112	1251	1390
OFF			0	139	278	417	556	695	834	973	1112	1251	1390
ON		139	0	140	280	420	560	700	840	980	1120	1260	1400
OFF			0	140	280	420	560	700	840	980	1120	1260	1400
ON		140	0	141	282	423	564	705	846	987	1128	1269	1410
OFF			0	141	282	423	564	705	846	987	1128	1269	1410
ON		141	0	142	284	426	568	710	852	994	1136	1278	1420
OFF			0	142	284	426	568	710	852	994	1136	1278	1420
ON		142	0	143	286	429	572	715	858	1001	1144	1287	1430
OFF			0	143	286	429	572	715	858	1001	1144	1287	1430
ON		143	0	144	288	432	576	720	864	1008	1152	1296	1440
OFF			0	144	288	432	576	720	864	1008	1152	1296	1440
ON		144	0	145	290	435	580	725	870	1015	1160	1305	1450
OFF			0	145	290	435	580	725	870	1015	1160	1305	1450
ON		145	0	146	292	438	584	730	876	1022	1168	1314	1460
OFF			0	146	292	438	584	730	876	1022	1168	1314	1460
ON		146	0	147	294	441	588	735	882	1029	1176	1323	1470
OFF			0	147	294	441	588	735	882	1029	1176	1323	1470
ON		147	0	148	296	444	592	740	888	1036	1184	1332	1480
OFF			0	148	296	444	592	740	888	1036	1184	1332	1480
ON		148	0	149	298	447	596	745	894	1043	1192	1341	1490
OFF			0	149	298	447	596	745	894	1043	1192	1341	1490
ON		149	0	150	300	450	600	750	900	1050	1200	1350	1500
OFF			0	150	300	450	600	750	900	1050	1200	1350	1500
ON		150	0	151	302	453	604	755	906	1057	1208	1359	1510
OFF			0	151	302	453	604	755	906	1057	1208	1359	1510
ON		151	0	152	304	456	608	760	912	1064	1216	1368	1520
OFF			0	152	304	456	608	760	912	1064	1216	1368	1520

Delay between LED light steps		Mode Nr.	VEXA 2.0 - Running light mode - Function table										Sequence n+1 Start
Delay switch 1 2 3 4 5 6 7 8			Sequence n Start	LED 01 ON Dur .=1ms	LED 02 ON Dur .=1ms	LED 03 ON Dur .=1ms	LED 04 ON Dur .=1ms	LED 05 ON Dur .=1ms	LED 06 ON Dur .=1ms	LED 07 ON Dur .=1ms	LED 08 ON Dur .=1ms	LED 09 ON Dur .=1ms	LED 10 ON Dur .=1ms
ON		152	0	153	306	459	612	765	918	1071	1224	1377	1530
OFF			0	153	306	459	612	765	918	1071	1224	1377	1530
ON		153	0	154	308	462	616	770	924	1078	1232	1386	1540
OFF			0	154	308	462	616	770	924	1078	1232	1386	1540
ON		154	0	155	310	465	620	775	930	1085	1240	1395	1550
OFF			0	155	310	465	620	775	930	1085	1240	1395	1550
ON		155	0	156	312	468	624	780	936	1092	1248	1404	1560
OFF			0	156	312	468	624	780	936	1092	1248	1404	1560
ON		156	0	157	314	471	628	785	942	1099	1256	1413	1570
OFF			0	157	314	471	628	785	942	1099	1256	1413	1570
ON		157	0	158	316	474	632	790	948	1106	1264	1422	1580
OFF			0	158	316	474	632	790	948	1106	1264	1422	1580
ON		158	0	159	318	477	636	795	954	1113	1272	1431	1590
OFF			0	159	318	477	636	795	954	1113	1272	1431	1590
ON		159	0	160	320	480	640	800	960	1120	1280	1440	1600
OFF			0	160	320	480	640	800	960	1120	1280	1440	1600
ON		160	0	161	322	483	644	805	966	1127	1288	1449	1610
OFF			0	161	322	483	644	805	966	1127	1288	1449	1610
ON		161	0	162	324	486	648	810	972	1134	1296	1458	1620
OFF			0	162	324	486	648	810	972	1134	1296	1458	1620
ON		162	0	163	326	489	652	815	978	1141	1304	1467	1630
OFF			0	163	326	489	652	815	978	1141	1304	1467	1630
ON		163	0	164	328	492	656	820	984	1148	1312	1476	1640
OFF			0	164	328	492	656	820	984	1148	1312	1476	1640
ON		164	0	165	330	495	660	825	990	1155	1320	1485	1650
OFF			0	165	330	495	660	825	990	1155	1320	1485	1650
ON		165	0	166	332	498	664	830	996	1162	1328	1494	1660
OFF			0	166	332	498	664	830	996	1162	1328	1494	1660
ON		166	0	167	334	501	668	835	1002	1169	1336	1503	1670
OFF			0	167	334	501	668	835	1002	1169	1336	1503	1670
ON		167	0	168	336	504	672	840	1008	1176	1344	1512	1680
OFF			0	168	336	504	672	840	1008	1176	1344	1512	1680
ON		168	0	169	338	507	676	845	1014	1183	1352	1521	1690
OFF			0	169	338	507	676	845	1014	1183	1352	1521	1690
ON		169	0	170	340	510	680	850	1020	1190	1360	1530	1700
OFF			0	170	340	510	680	850	1020	1190	1360	1530	1700
ON		170	0	171	342	513	684	855	1026	1197	1368	1539	1710
OFF			0	171	342	513	684	855	1026	1197	1368	1539	1710
ON		171	0	172	344	516	688	860	1032	1204	1376	1548	1720
OFF			0	172	344	516	688	860	1032	1204	1376	1548	1720
ON		172	0	173	346	519	692	865	1038	1211	1384	1557	1730
OFF			0	173	346	519	692	865	1038	1211	1384	1557	1730
ON		173	0	174	348	522	696	870	1044	1218	1392	1566	1740
OFF			0	174	348	522	696	870	1044	1218	1392	1566	1740
ON		174	0	175	350	525	700	875	1050	1225	1400	1575	1750
OFF			0	175	350	525	700	875	1050	1225	1400	1575	1750
ON		175	0	176	352	528	704	880	1056	1232	1408	1584	1760
OFF			0	176	352	528	704	880	1056	1232	1408	1584	1760
ON		176	0	177	354	531	708	885	1062	1239	1416	1593	1770
OFF			0	177	354	531	708	885	1062	1239	1416	1593	1770

Delay between LED light steps		Mode Nr.	VEXA 2.0 - Running light mode - Function table										Sequence n+1 Start																	
Delay switch			Sequence n Start	LED 01 ON	LED 02 ON	LED 03 ON	LED 04 ON	LED 05 ON	LED 06 ON	LED 07 ON	LED 08 ON	LED 09 ON	LED 10 ON	LED 01 ON																
1	2		3	4	5	6	7	8	Dur . =1ms	Dur . =1ms	Dur . =1ms	Dur . =1ms	Dur . =1ms	Dur . =1ms	Dur . =1ms	Dur . =1ms	Dur . =1ms													
ON																	177	0	178	356	534	712	890	1068	1246	1424	1602	1780		
OFF																		178	0	179	358	537	716	895	1074	1253	1432	1611	1790	
ON																		179	0	180	360	540	720	900	1080	1260	1440	1620	1800	
OFF																		180	0	181	362	543	724	905	1086	1267	1448	1629	1810	
ON																		181	0	182	364	546	728	910	1092	1274	1456	1638	1820	
OFF																		182	0	183	366	549	732	915	1098	1281	1464	1647	1830	
ON																		183	0	184	368	552	736	920	1104	1288	1472	1656	1840	
OFF																		184	0	185	370	555	740	925	1110	1295	1480	1665	1850	
ON																		185	0	186	372	558	744	930	1116	1302	1488	1674	1860	
OFF																		186	0	187	374	561	748	935	1122	1309	1496	1683	1870	
ON																		187	0	188	376	564	752	940	1128	1316	1504	1692	1880	
OFF																		188	0	189	378	567	756	945	1134	1323	1512	1701	1890	
ON																		189	0	190	380	570	760	950	1140	1330	1520	1710	1900	
OFF																		190	0	191	382	573	764	955	1146	1337	1528	1719	1910	
ON																		191	0	192	384	576	768	960	1152	1344	1536	1728	1920	
OFF																		192	0	193	386	579	772	965	1158	1351	1544	1737	1930	
ON																		193	0	194	388	582	776	970	1164	1358	1552	1746	1940	
OFF																		194	0	195	390	585	780	975	1170	1365	1560	1755	1950	
ON																		195	0	196	392	588	784	980	1176	1372	1568	1764	1960	
OFF																		196	0	197	394	591	788	985	1182	1379	1576	1773	1970	
ON																		197	0	198	396	594	792	990	1188	1386	1584	1782	1980	
OFF																		198	0	199	398	597	796	995	1194	1393	1592	1791	1990	
ON																		199	0	200	400	600	800	1000	1200	1400	1600	1800	2000	
OFF																		200	0	201	402	603	804	1005	1206	1407	1608	1809	2010	
ON																		201	0	202	404	606	808	1010	1212	1414	1616	1818	2020	
OFF																														

Delay between LED light steps		Mode Nr.	VEXA 2.0 - Running light mode - Function table										Sequence n+1 Start
Delay switch 1 2 3 4 5 6 7 8			Sequence n Start	LED 01 ON Dur .=1ms	LED 02 ON Dur .=1ms	LED 03 ON Dur .=1ms	LED 04 ON Dur .=1ms	LED 05 ON Dur .=1ms	LED 06 ON Dur .=1ms	LED 07 ON Dur .=1ms	LED 08 ON Dur .=1ms	LED 09 ON Dur .=1ms	LED 10 ON Dur .=1ms
ON	OFF	202	0	203	406	609	812	1015	1218	1421	1624	1827	2030
ON	OFF	203	0	204	408	612	816	1020	1224	1428	1632	1836	2040
ON	OFF	204	0	205	410	615	820	1025	1230	1435	1640	1845	2050
ON	OFF	205	0	206	412	618	824	1030	1236	1442	1648	1854	2060
ON	OFF	206	0	207	414	621	828	1035	1242	1449	1656	1863	2070
ON	OFF	207	0	208	416	624	832	1040	1248	1456	1664	1872	2080
ON	OFF	208	0	209	418	627	836	1045	1254	1463	1672	1881	2090
ON	OFF	209	0	210	420	630	840	1050	1260	1470	1680	1890	2100
ON	OFF	210	0	211	422	633	844	1055	1266	1477	1688	1899	2110
ON	OFF	211	0	212	424	636	848	1060	1272	1484	1696	1908	2120
ON	OFF	212	0	213	426	639	852	1065	1278	1491	1704	1917	2130
ON	OFF	213	0	214	428	642	856	1070	1284	1498	1712	1926	2140
ON	OFF	214	0	215	430	645	860	1075	1290	1505	1720	1935	2150
ON	OFF	215	0	216	432	648	864	1080	1296	1512	1728	1944	2160
ON	OFF	216	0	217	434	651	868	1085	1302	1519	1736	1953	2170
ON	OFF	217	0	218	436	654	872	1090	1308	1526	1744	1962	2180
ON	OFF	218	0	219	438	657	876	1095	1314	1533	1752	1971	2190
ON	OFF	219	0	220	440	660	880	1100	1320	1540	1760	1980	2200
ON	OFF	220	0	221	442	663	884	1105	1326	1547	1768	1989	2210
ON	OFF	221	0	222	444	666	888	1110	1332	1554	1776	1998	2220
ON	OFF	222	0	223	446	669	892	1115	1338	1561	1784	2007	2230
ON	OFF	223	0	224	448	672	896	1120	1344	1568	1792	2016	2240
ON	OFF	224	0	225	450	675	900	1125	1350	1575	1800	2025	2250
ON	OFF	225	0	226	452	678	904	1130	1356	1582	1808	2034	2260
ON	OFF	226	0	227	454	681	908	1135	1362	1589	1816	2043	2270

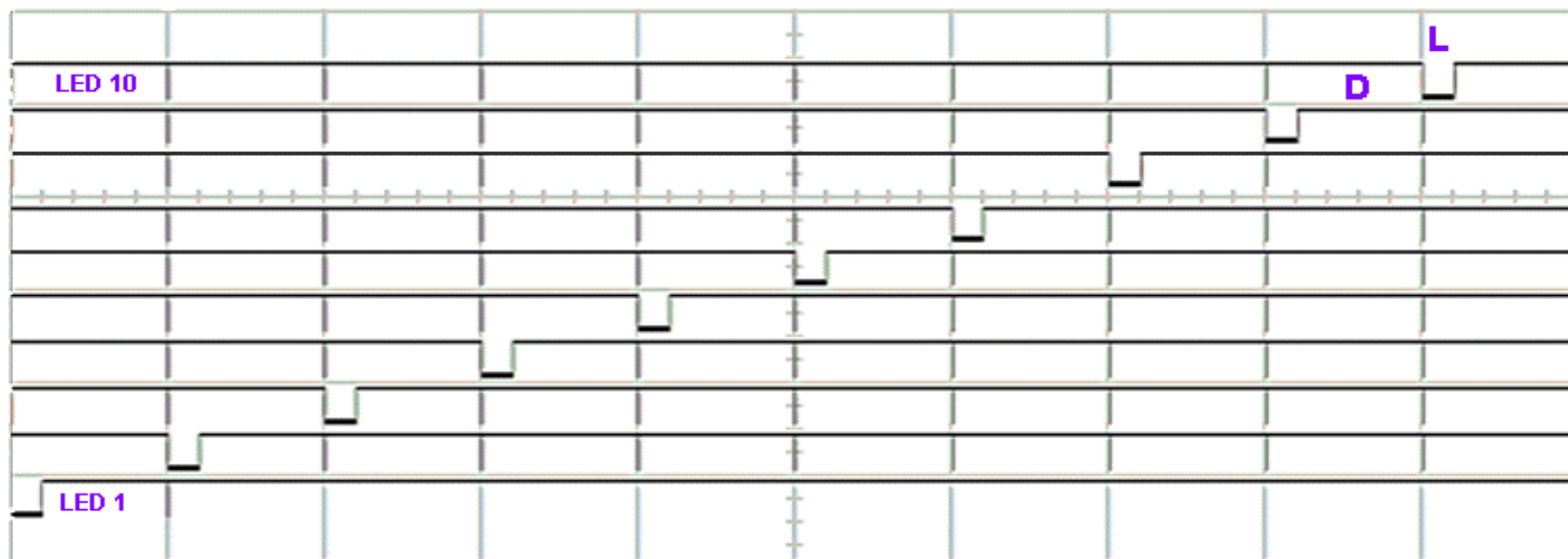
Delay between LED light steps		Mode Nr.	VEXA 2.0 - Running light mode - Function table										Sequence n+1 Start
Delay switch 1 2 3 4 5 6 7 8			Sequence n Start	LED 01 ON Dur .=1ms	LED 02 ON Dur .=1ms	LED 03 ON Dur .=1ms	LED 04 ON Dur .=1ms	LED 05 ON Dur .=1ms	LED 06 ON Dur .=1ms	LED 07 ON Dur .=1ms	LED 08 ON Dur .=1ms	LED 09 ON Dur .=1ms	LED 10 ON Dur .=1ms
ON	■	227	0	228	456	684	912	1140	1368	1596	1824	2052	2280
OFF	■		0	228	456	684	912	1140	1368	1596	1824	2052	2280
ON	■	228	0	229	458	687	916	1145	1374	1603	1832	2061	2290
OFF	■		0	229	458	687	916	1145	1374	1603	1832	2061	2290
ON	■	229	0	230	460	690	920	1150	1380	1610	1840	2070	2300
OFF	■		0	230	460	690	920	1150	1380	1610	1840	2070	2300
ON	■	230	0	231	462	693	924	1155	1386	1617	1848	2079	2310
OFF	■		0	231	462	693	924	1155	1386	1617	1848	2079	2310
ON	■	231	0	232	464	696	928	1160	1392	1624	1856	2088	2320
OFF	■		0	232	464	696	928	1160	1392	1624	1856	2088	2320
ON	■	232	0	233	466	699	932	1165	1398	1631	1864	2097	2330
OFF	■		0	233	466	699	932	1165	1398	1631	1864	2097	2330
ON	■	233	0	234	468	702	936	1170	1404	1638	1872	2106	2340
OFF	■		0	234	468	702	936	1170	1404	1638	1872	2106	2340
ON	■	234	0	235	470	705	940	1175	1410	1645	1880	2115	2350
OFF	■		0	235	470	705	940	1175	1410	1645	1880	2115	2350
ON	■	235	0	236	472	708	944	1180	1416	1652	1888	2124	2360
OFF	■		0	236	472	708	944	1180	1416	1652	1888	2124	2360
ON	■	236	0	237	474	711	948	1185	1422	1659	1896	2133	2370
OFF	■		0	237	474	711	948	1185	1422	1659	1896	2133	2370
ON	■	237	0	238	476	714	952	1190	1428	1666	1904	2142	2380
OFF	■		0	238	476	714	952	1190	1428	1666	1904	2142	2380
ON	■	238	0	239	478	717	956	1195	1434	1673	1912	2151	2390
OFF	■		0	239	478	717	956	1195	1434	1673	1912	2151	2390
ON	■	239	0	240	480	720	960	1200	1440	1680	1920	2160	2400
OFF	■		0	240	480	720	960	1200	1440	1680	1920	2160	2400
ON	■	240	0	241	482	723	964	1205	1446	1687	1928	2169	2410
OFF	■		0	241	482	723	964	1205	1446	1687	1928	2169	2410
ON	■	241	0	242	484	726	968	1210	1452	1694	1936	2178	2420
OFF	■		0	242	484	726	968	1210	1452	1694	1936	2178	2420
ON	■	242	0	243	486	729	972	1215	1458	1701	1944	2187	2430
OFF	■		0	243	486	729	972	1215	1458	1701	1944	2187	2430
ON	■	243	0	244	488	732	976	1220	1464	1708	1952	2196	2440
OFF	■		0	244	488	732	976	1220	1464	1708	1952	2196	2440
ON	■	244	0	245	490	735	980	1225	1470	1715	1960	2205	2450
OFF	■		0	245	490	735	980	1225	1470	1715	1960	2205	2450
ON	■	245	0	246	492	738	984	1230	1476	1722	1968	2214	2460
OFF	■		0	246	492	738	984	1230	1476	1722	1968	2214	2460
ON	■	246	0	247	494	741	988	1235	1482	1729	1976	2223	2470
OFF	■		0	247	494	741	988	1235	1482	1729	1976	2223	2470
ON	■	247	0	248	496	744	992	1240	1488	1736	1984	2232	2480
OFF	■		0	248	496	744	992	1240	1488	1736	1984	2232	2480
ON	■	248	0	249	498	747	996	1245	1494	1743	1992	2241	2490
OFF	■		0	249	498	747	996	1245	1494	1743	1992	2241	2490
ON	■	249	0	250	500	750	1000	1250	1500	1750	2000	2250	2500
OFF	■		0	250	500	750	1000	1250	1500	1750	2000	2250	2500
ON	■	250	0	251	502	753	1004	1255	1506	1757	2008	2259	2510
OFF	■		0	251	502	753	1004	1255	1506	1757	2008	2259	2510
ON	■	251	0	252	504	756	1008	1260	1512	1764	2016	2268	2520
OFF	■		0	252	504	756	1008	1260	1512	1764	2016	2268	2520

Delay between LED light steps		Mode Nr.	VEXA 2.0 - Running light mode - Function table										Sequence n+1 Start
Delay switch 1 2 3 4 5 6 7 8			LED 01 ON Dur . =1ms	LED 02 ON Dur . =1ms	LED 03 ON Dur . =1ms	LED 04 ON Dur . =1ms	LED 05 ON Dur . =1ms	LED 06 ON Dur . =1ms	LED 07 ON Dur . =1ms	LED 08 ON Dur . =1ms	LED 09 ON Dur . =1ms	LED 10 ON Dur . =1ms	LED 01 ON Dur . =1ms
ON	OFF	252	0	253	506	759	1012	1265	1518	1771	2024	2277	2530
ON	OFF	253	0	254	508	762	1016	1270	1524	1778	2032	2286	2540
ON	OFF	254	0	255	510	765	1020	1275	1530	1785	2040	2295	2550
ON	OFF	255	0	256	512	768	1024	1280	1536	1792	2048	2304	2560

Running light example:

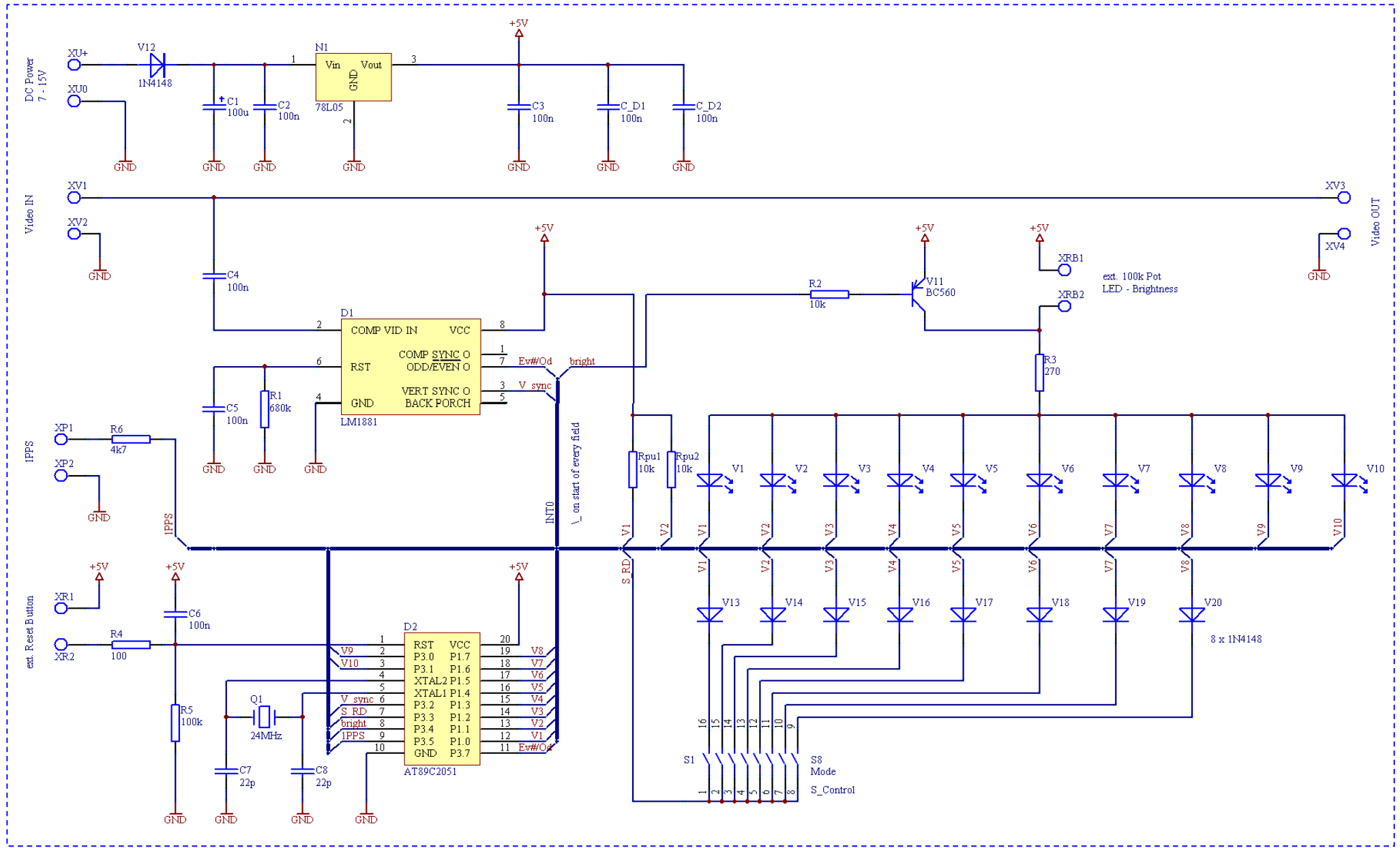
In every mode each LED is lit for 1ms. The mode number determine the dark delay between every lit LED in ms.
 In mode 4 for instance the dark delay is 4ms and every 5ms a new LED is lit for 1ms duration.

VEXA 2.0 - Running light mode



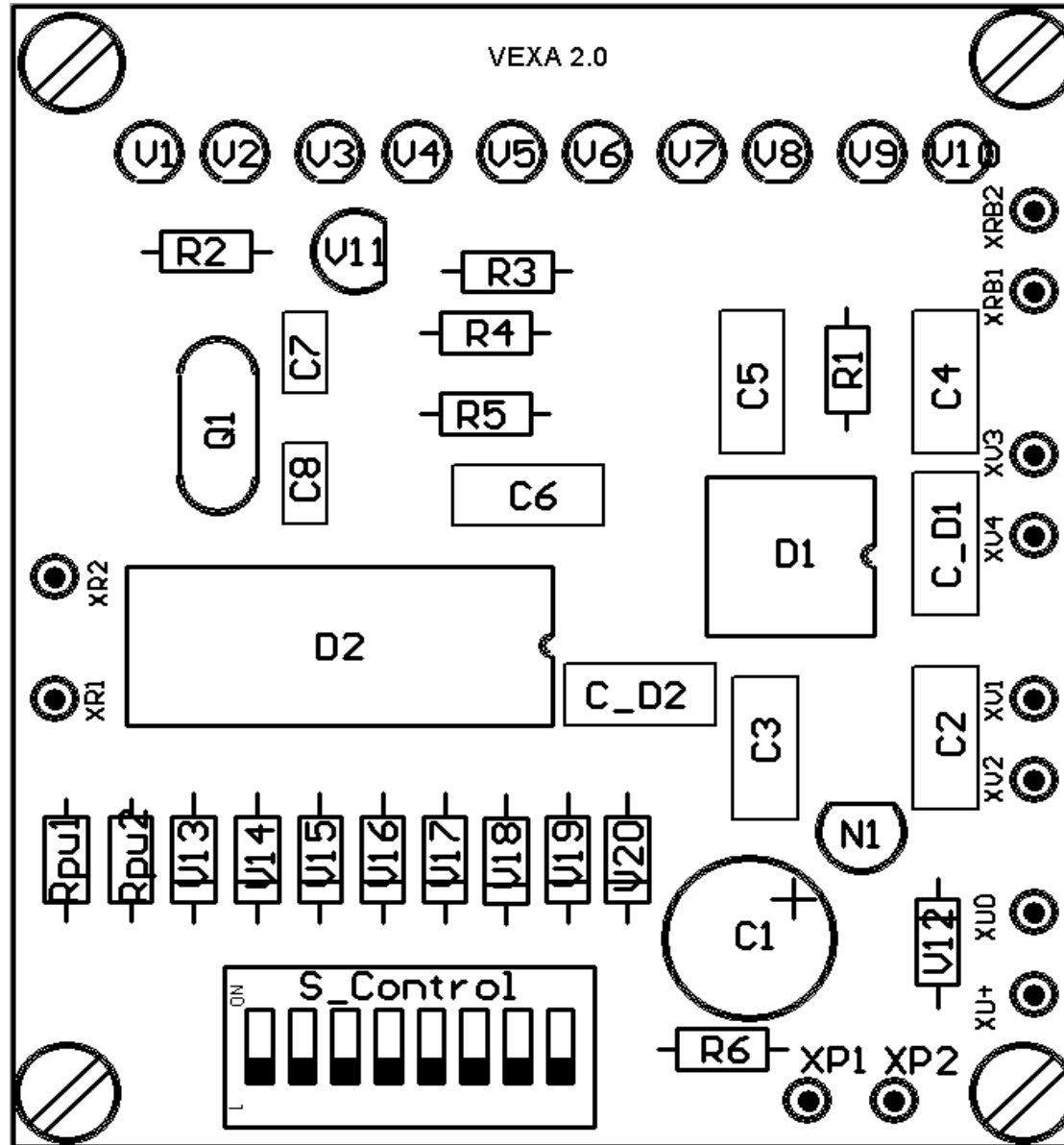
L ... LED lit time is always a fixed value of 1ms

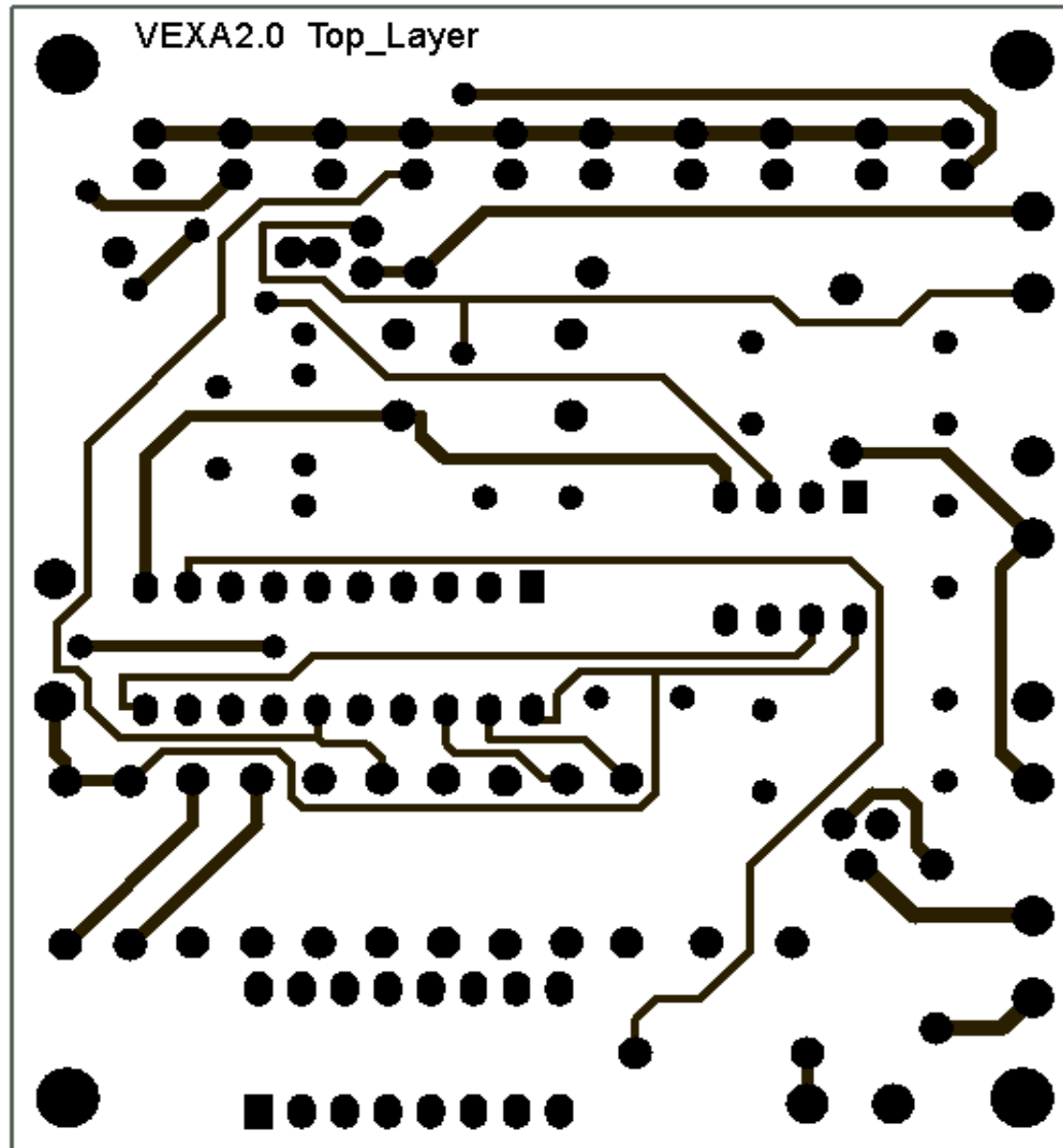
D ... Delay between lit LEDs 1 to 10 is set as binary value with S1 to S8 (0 - 255ms)

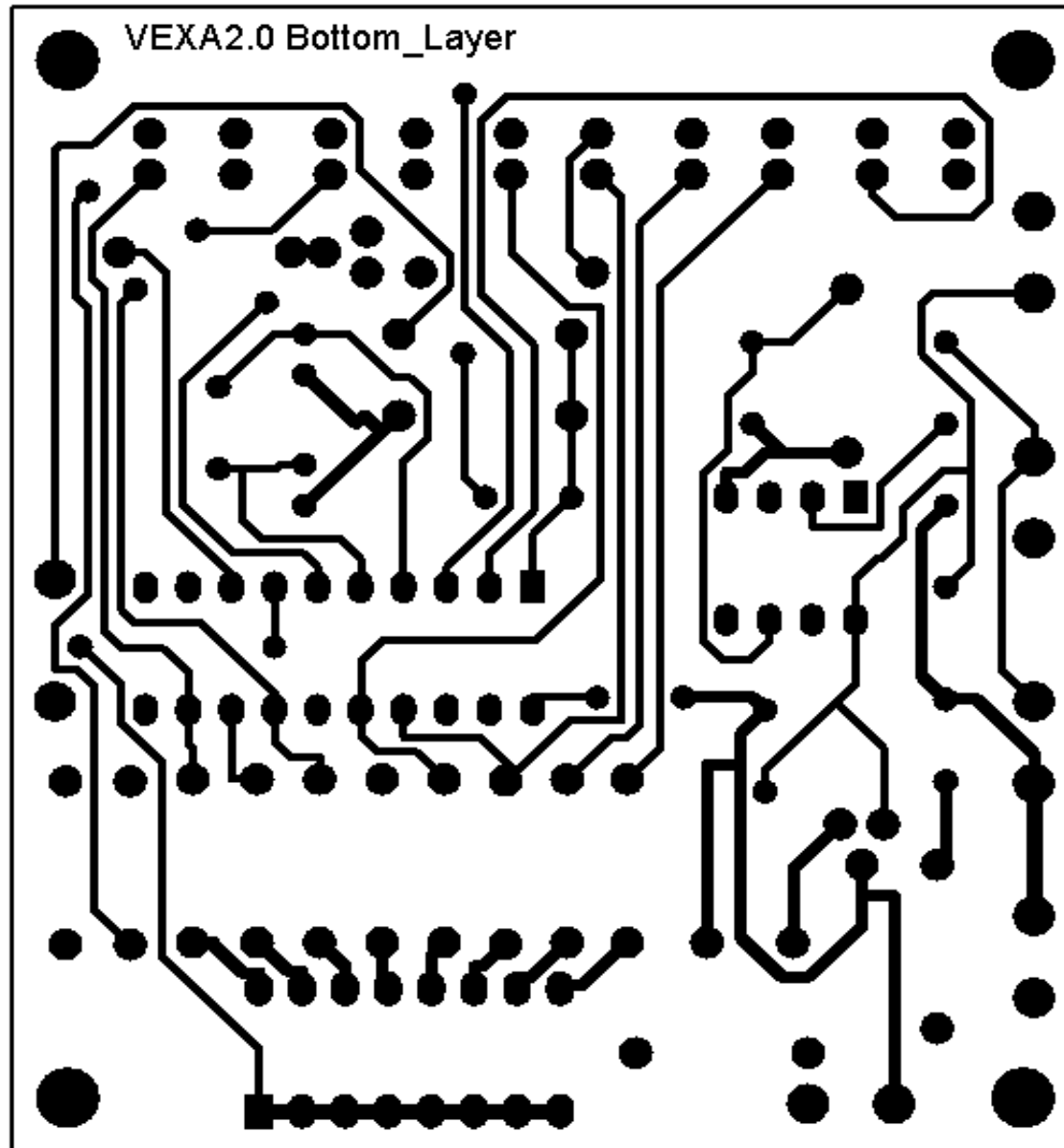


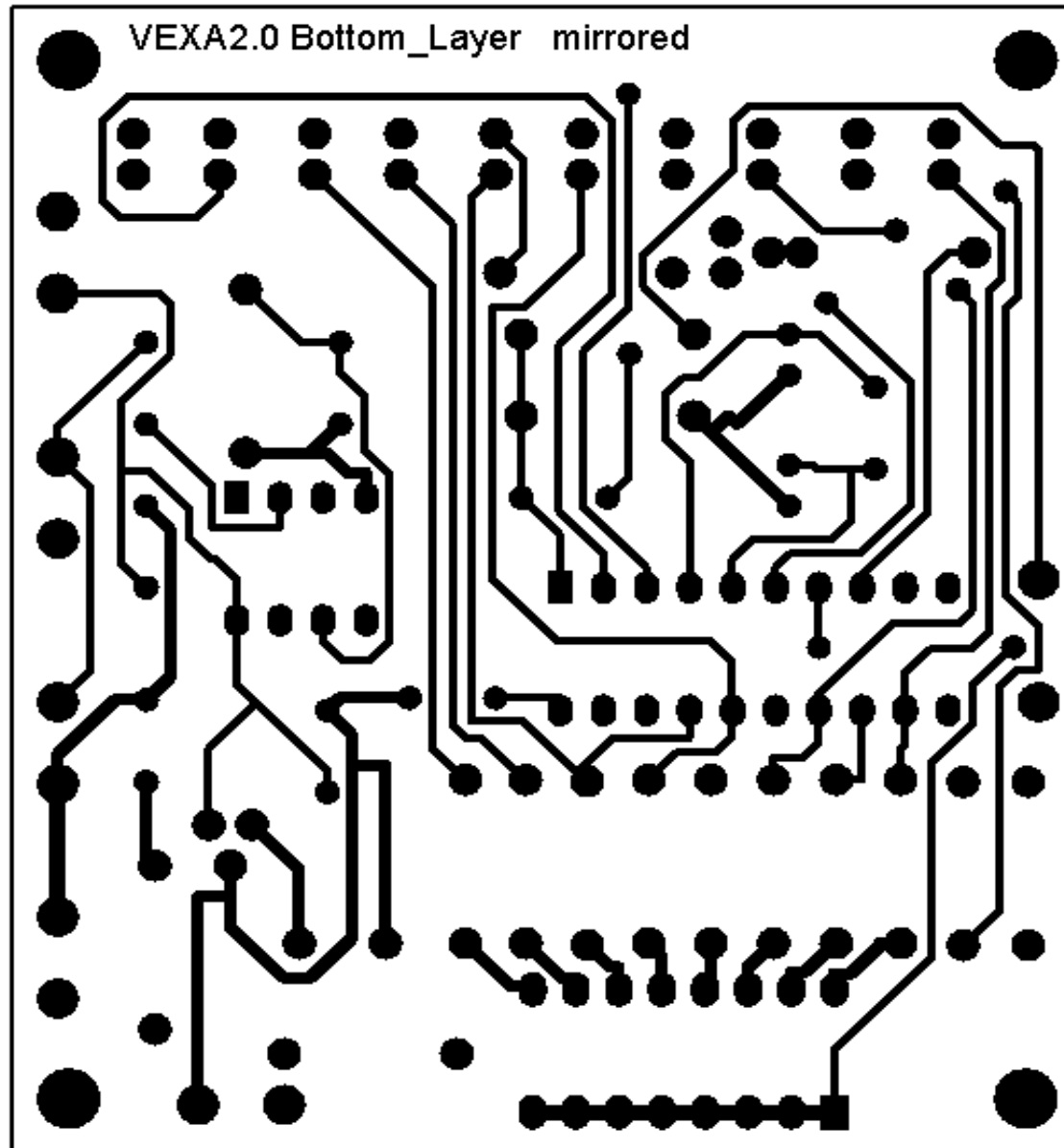
Quantity	Description	Value	Position
1	Capacitor electrolytic	100u/63V	C1
7	Capacitor	100n	C_D1, C_D2, C2, C3, C4, C5, C6
2	Capacitor	22p	C7, C8
1	Monolithic Video Sync Separator	LM1881	D1
1	IC Socket	DIL 8	D1
1	Microcontroller flash programmed - VEXA2.0	AT89C2051	D2
1	IC Socket	DIL 20	D2
1	Positive Voltage regulator 5V/100mA	78L05	N1
1	Crystal - fundamental freq. type (no overtone)	24MHz	Q1
1	Resistor	680k	R1
3	Resistor	10k	R2, Rpu1, Rpu2
1	Resistor	270	R3
1	Resistor	100	R4
1	Resistor	100k	R5
1	Resistor	4k7	R6
1	Pot	100k	RP1 (external)
1	DIP_Switch 8	DIP_S8	S_Control
1	Reset button	push	external
10	LED	3mm red	V1, V2, V3, V4, V5, V6, V7, V8, V9, V10
1	Small signal transistor PNP	BC560	V11
9	Small Diode	1N4148	V12, V13, V14, V15, V16, V17, V18, V19, V20
1	RCA Jack	yellow	Video IN
1	RCA Plug	yellow	Video Out
1	DC Plug	individual	DC Power 07 - 15 Volt
1	PCB	71 x 63 mm	8 vias manually to solder
4	Bolt Nylon	M3 x 25	PCB corner (for sure standing)
4	Nut Nylon	M3	PCB corner
	some wires		Video, Power, Reset, RP1 and vias

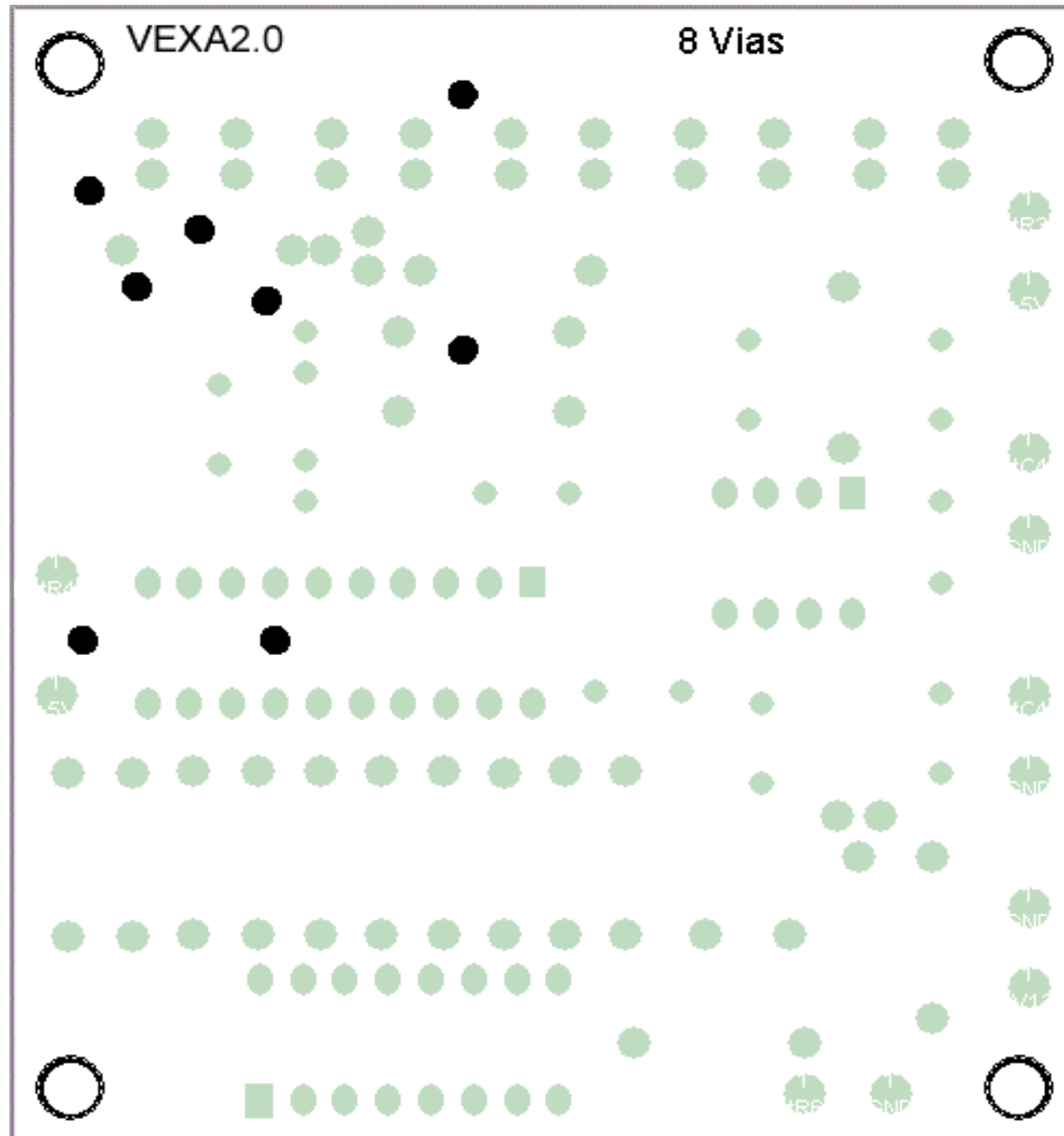
Type of transistor and diodes can be changed to equivalent one



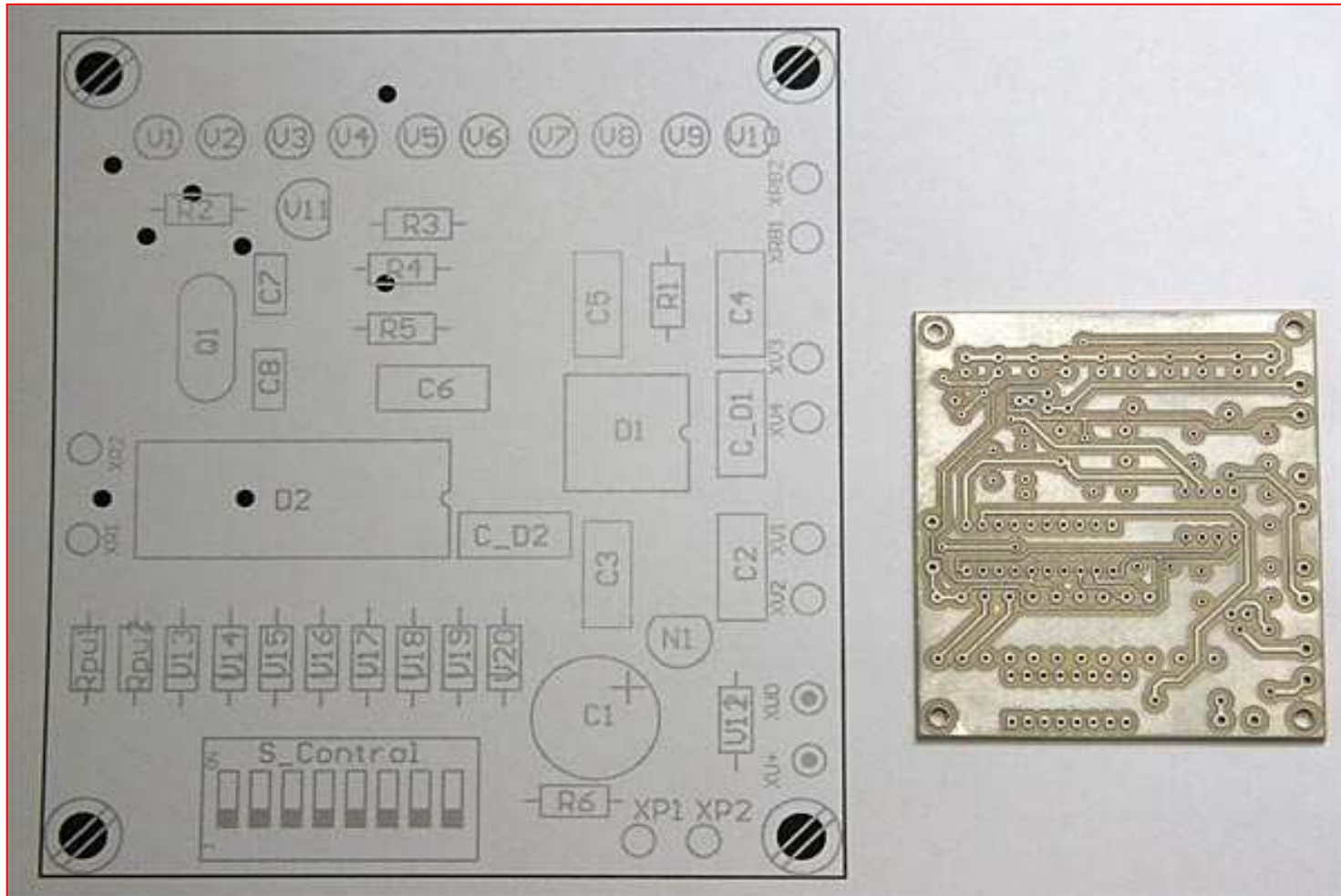




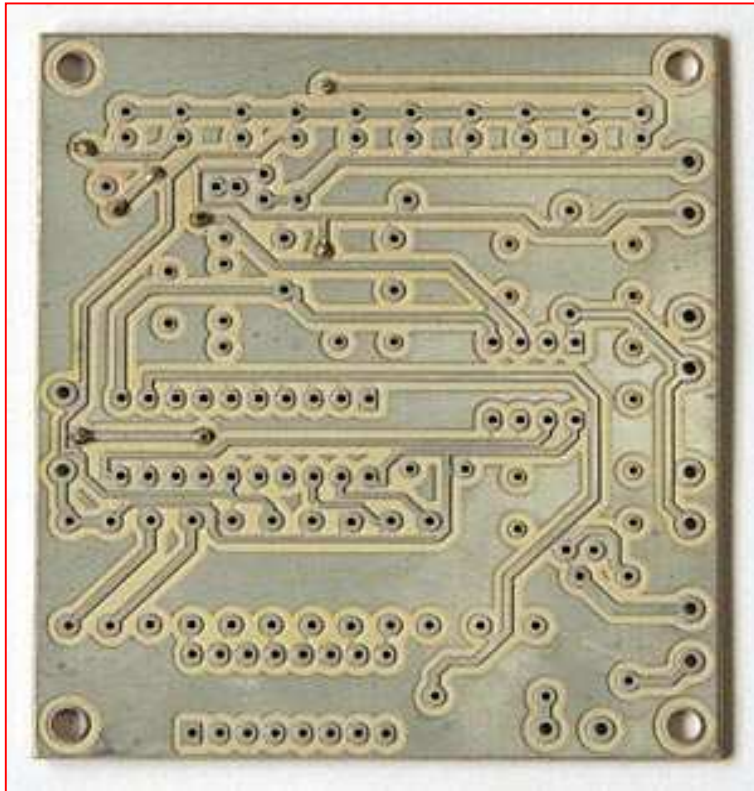




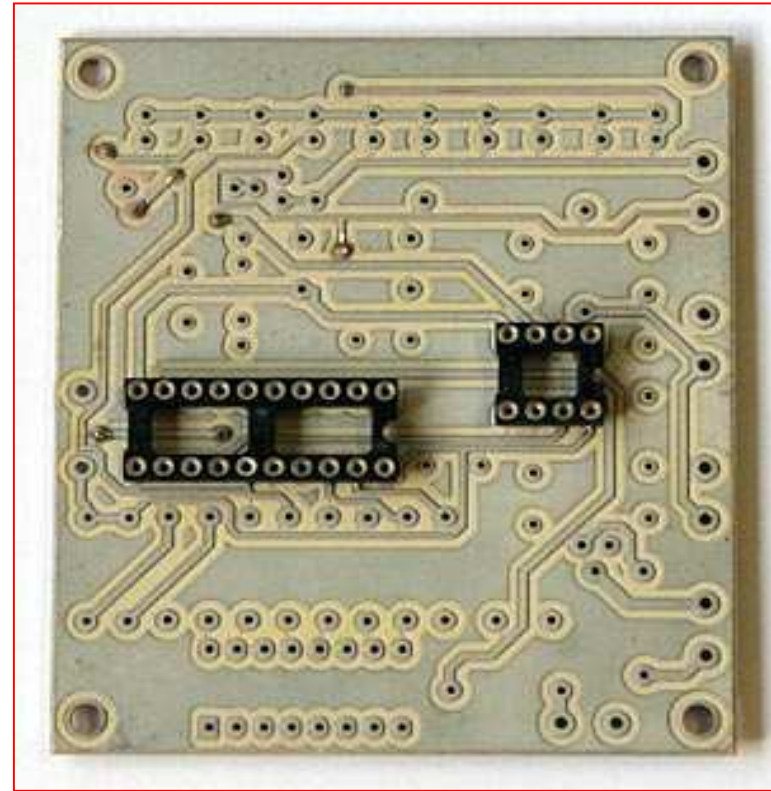
Assembling diagram and blank PCB manufactured with milling technics



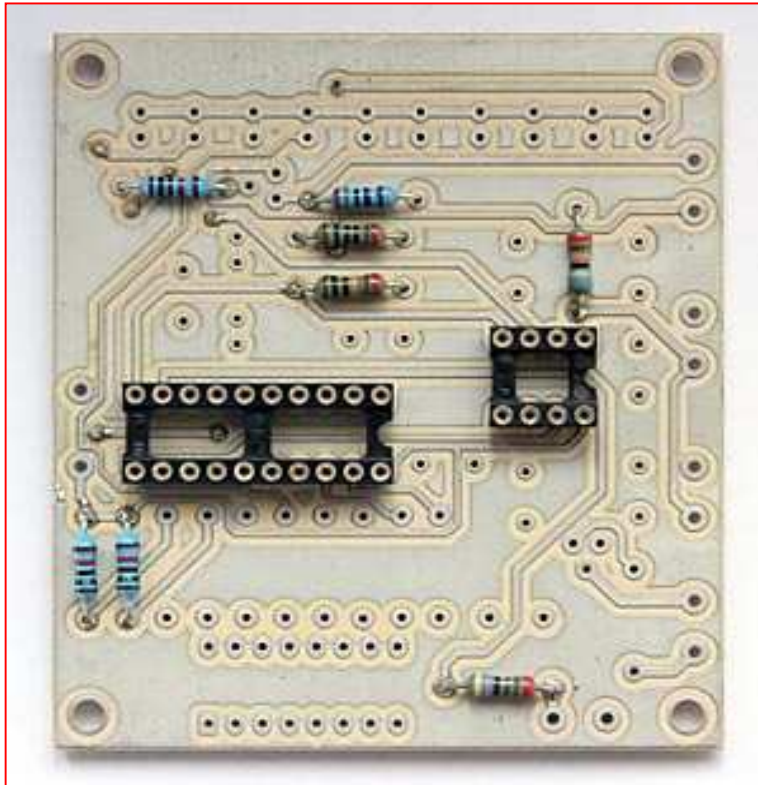
+ Vias



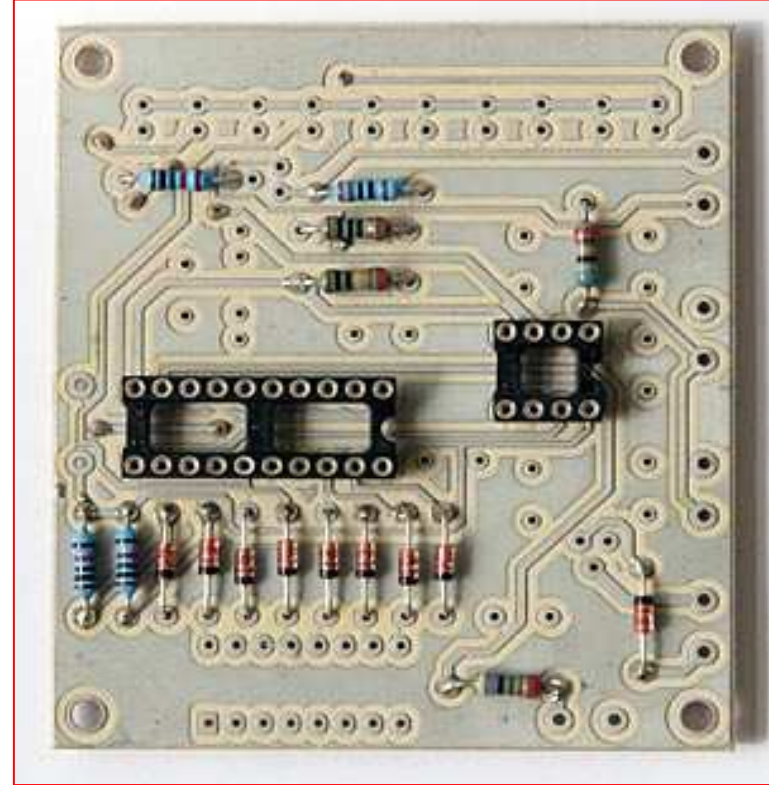
+ IC sockets



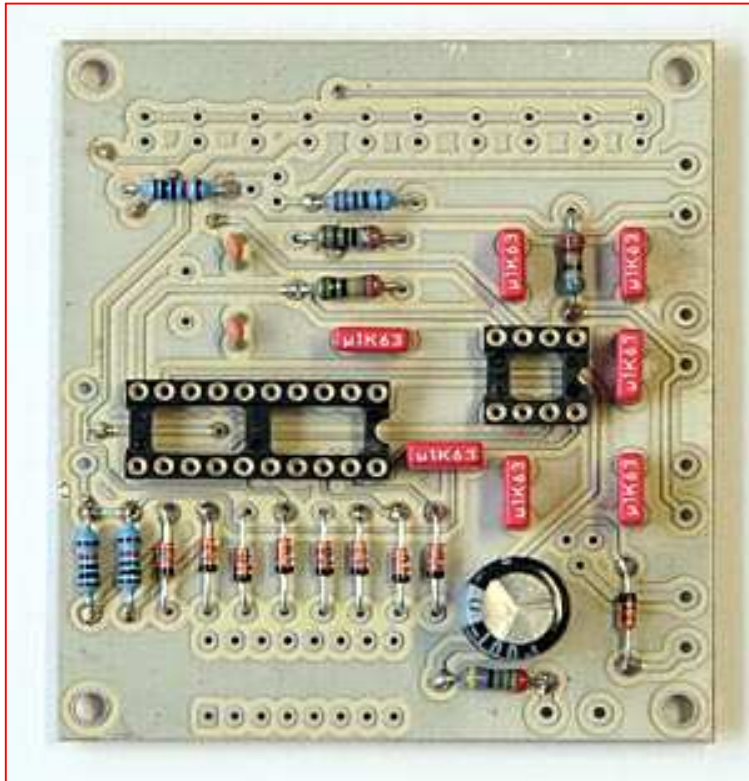
+ Resistors



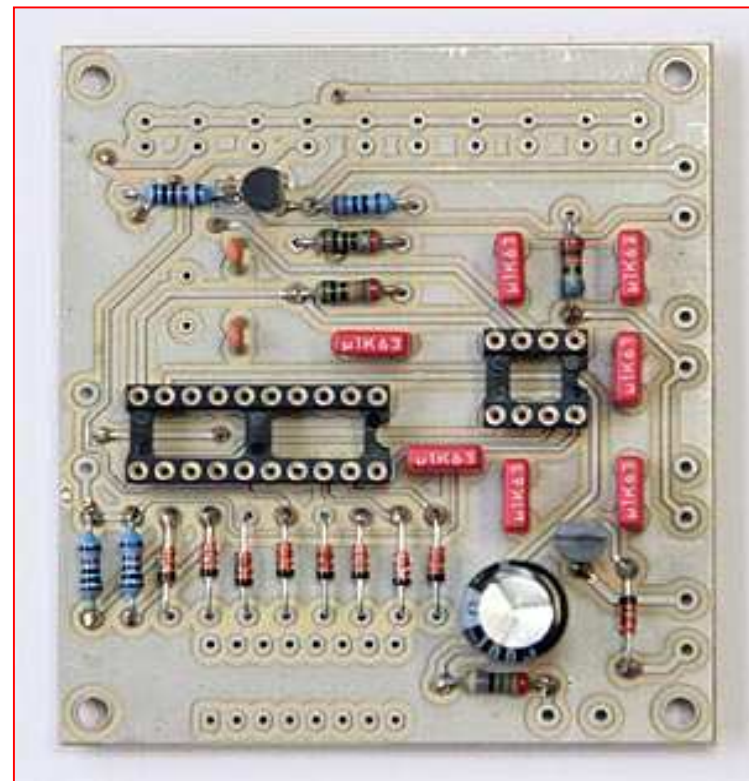
+ Diodes



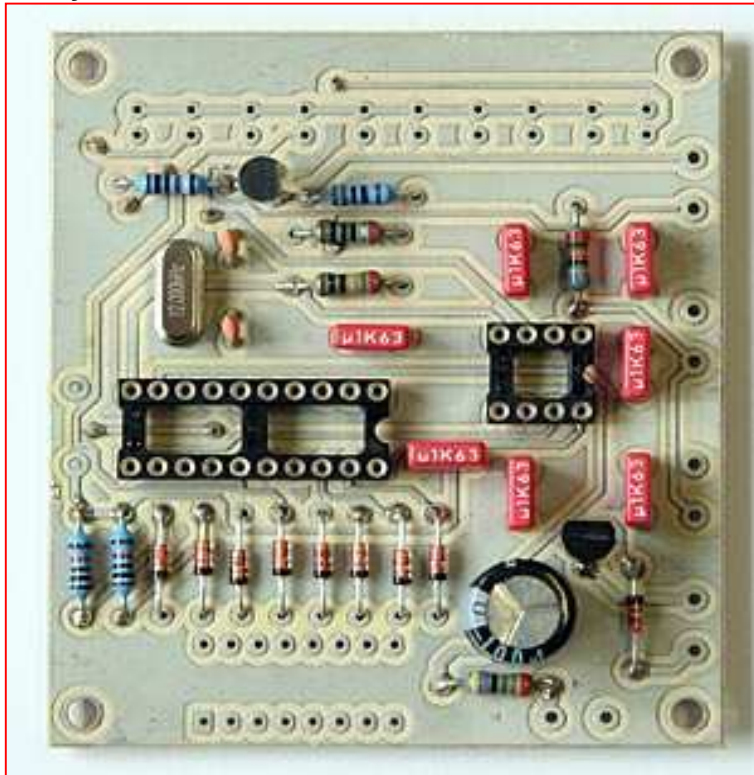
+ Capacitors



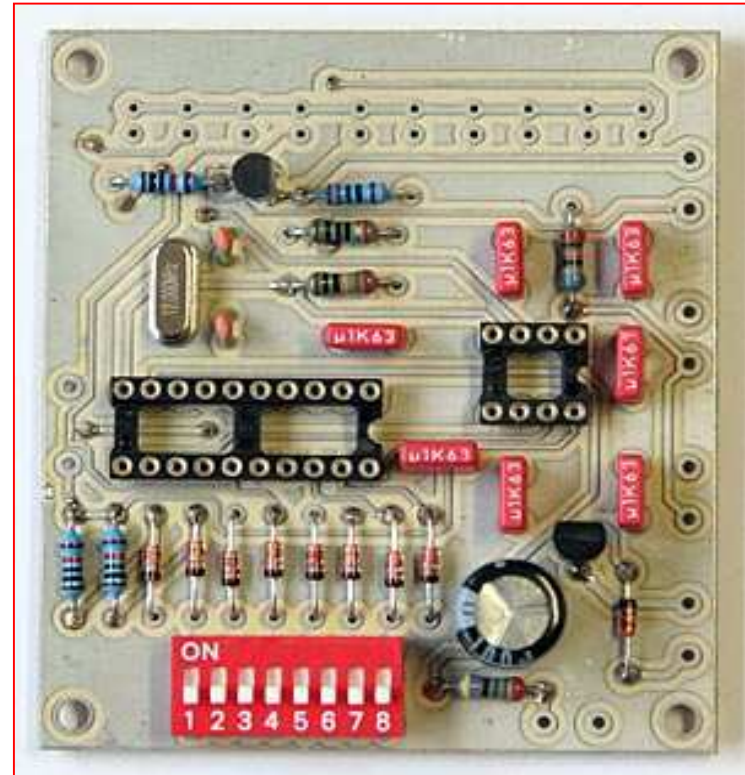
+ Transistor and voltage regulator



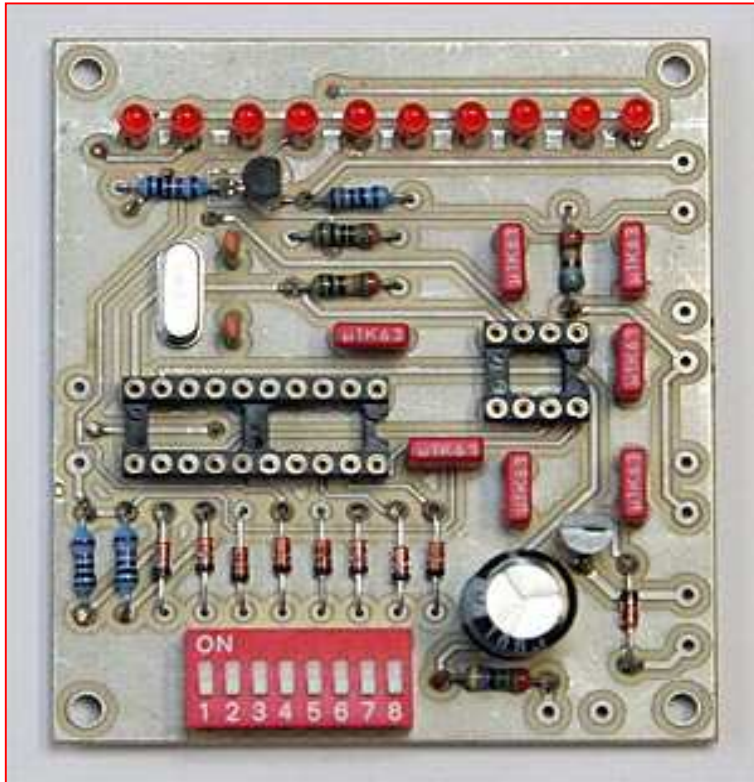
+ Crystal



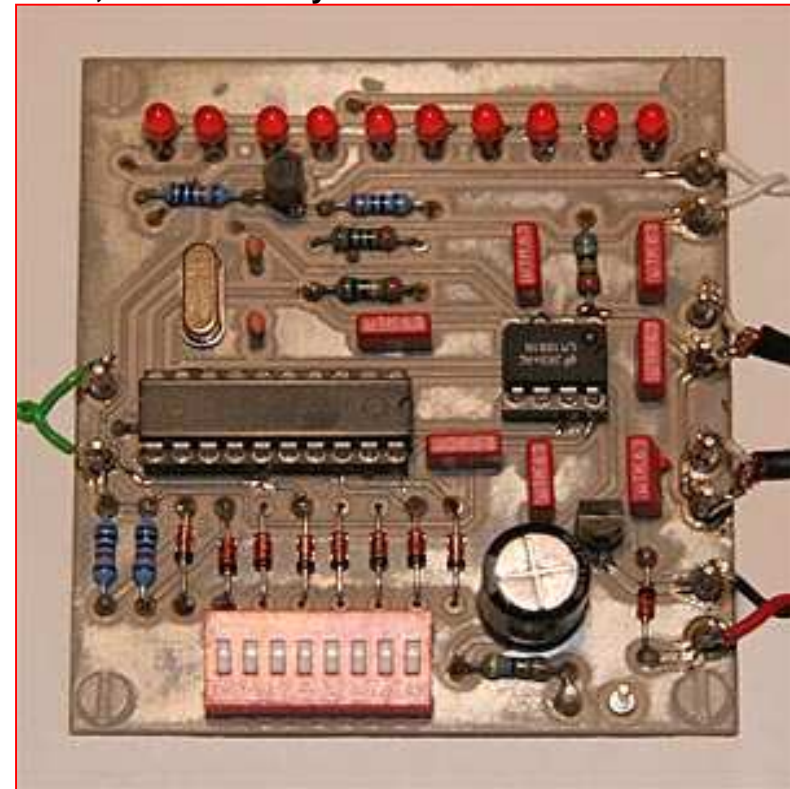
+ DIP-Switch



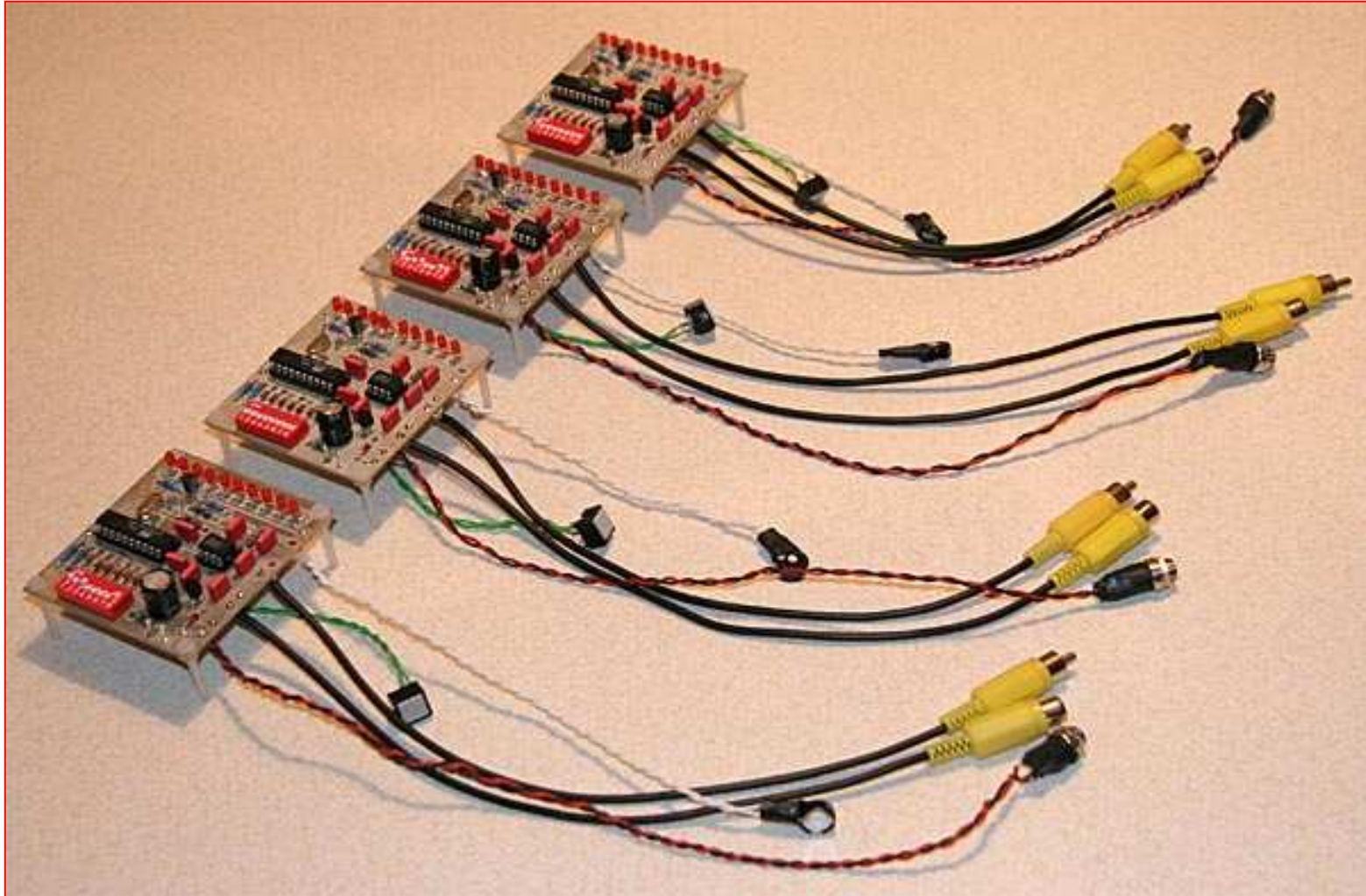
+ LEDs



+ ICs, cables and Nylon bolts



VEXA 2.0 devices finished



Notes: