

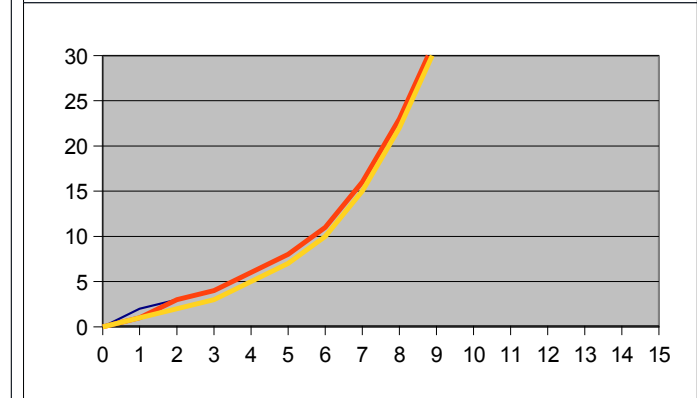
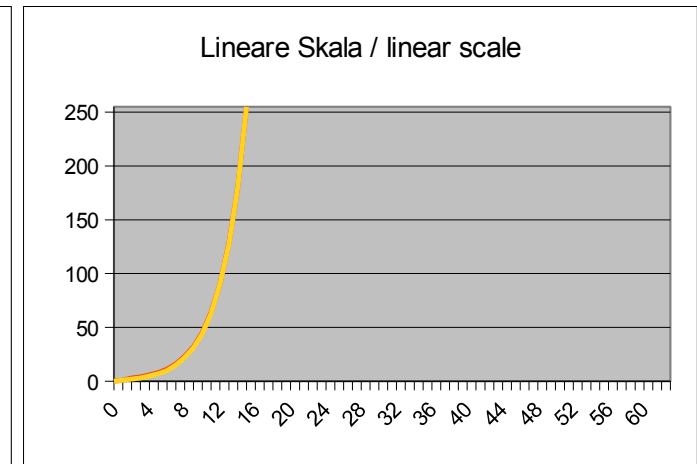
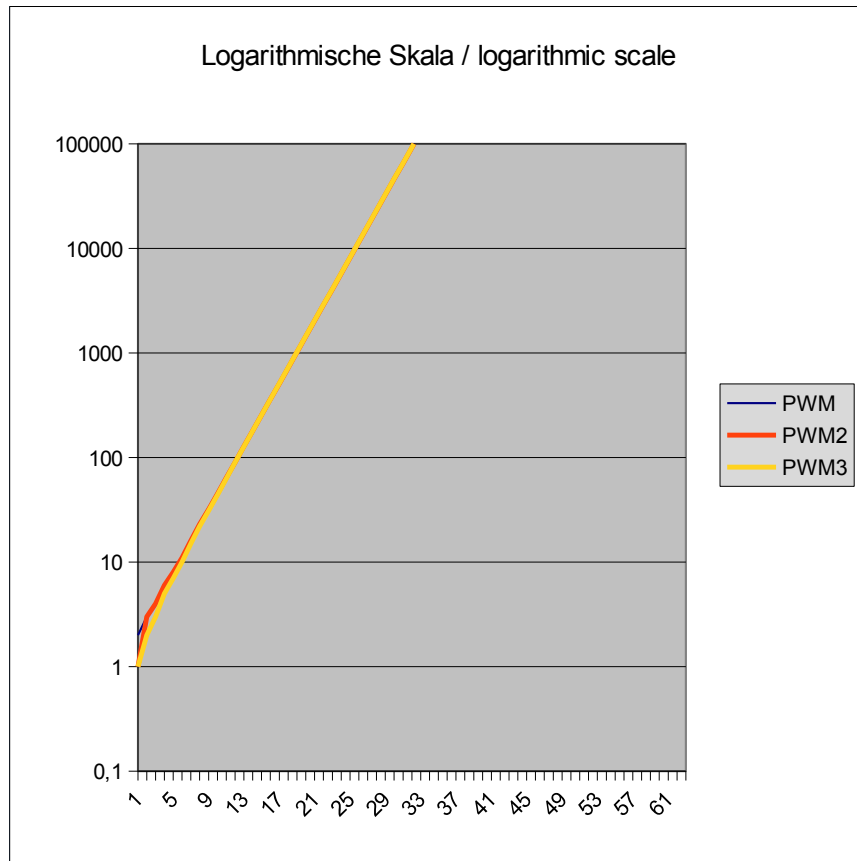
PWM Table for LED Fading or Dimming

Index	PWM	PWM2	PWM3
0	0	0	0
1	2	1	1
2	3	3	2
3	4	4	3
4	6	6	5
5	8	8	7
6	11	11	10
7	16	16	15
8	23	23	22
9	32	32	31
10	45	45	44
11	64	64	63
12	90	90	90
13	128	128	127
14	181	180	180
15	255	255	255
16	360	361	361
17	509	510	511
18	719	721	723
19	1015	1019	1023
20	1434	1441	1447
21	2025	2037	2047
22	2860	2880	2895
23	4040	4072	4095
24	5706	5757	5792
25	8060	8140	8191
26	11384	11509	11584
27	16080	16272	16383
28	22713	23007	23169
29	32081	32528	32767
30	45314	45991	46340
31	64004	65025	65535
32	90404	91937	92681
33	127693	129986	131071
34	180362	183784	185363
35	254756	259846	262143
36	359835	367387	370727

MAX PWM 255
Steps 16
Factor 1,435
No-of-Bits1 7,9943534 =LOG2(MAX PWM)
No-of-Bits2 8,0000000 =LOG2(MAX PWM + 1)
Basis 1,4124700 =(MAX PWM / Factor) ^ (1 / (Steps-1))
PWM[Index] = Round(Factor * Basis^Index); Index=1....Steps-1
PWM2[Index] = Round(2 ^ (No-of-Bits1 * (Index+1) / Steps)); Index=1....Steps-1
PWM3[Index] = Round(2 ^ (No-of-Bits2 * (Index+1) / Steps)-1); Index=0....Steps-1

Wunschwerte eintragen / Choose values
 Zwischenergebnis / Interim results
 PWM Werte für pwmtable[] / PWM values for pwmtable[]

Originalfunktion / original function
 Alternative Funktion / alternative function
 Alternative Funktion / alternative function



PWM Table for LED Fading or Dimming

08.01.2014 21:23:36

37 508257 519437 524287
 38 717897 734415 741454
 39 1E+006 1E+006 1E+006
 40 1E+006 1E+006 1E+006
 41 2E+006 2E+006 2E+006
 42 3E+006 3E+006 3E+006
 43 4E+006 4E+006 4E+006
 44 6E+006 6E+006 6E+006
 45 8E+006 8E+006 8E+006
 46 1E+007 1E+007 1E+007
 47 2E+007 2E+007 2E+007
 48 2E+007 2E+007 2E+007
 49 3E+007 3E+007 3E+007
 50 5E+007 5E+007 5E+007
 51 6E+007 7E+007 7E+007
 52 9E+007 9E+007 9E+007
 53 1E+008 1E+008 1E+008
 54 2E+008 2E+008 2E+008
 55 3E+008 3E+008 3E+008
 56 4E+008 4E+008 4E+008
 57 5E+008 5E+008 5E+008
 58 7E+008 7E+008 8E+008
 59 1E+009 1E+009 1E+009
 60 1E+009 1E+009 2E+009
 61 2E+009 2E+009 2E+009
 62 3E+009 3E+009 3E+009
 63 4E+009 4E+009 4E+009
 64 6E+009 6E+009 6E+009
 65 8E+009 8E+009 9E+009
 66 1E+010 1E+010 1E+010
 67 2E+010 2E+010 2E+010
 68 2E+010 2E+010 2E+010
 69 3E+010 3E+010 3E+010
 70 5E+010 5E+010 5E+010
 71 6E+010 7E+010 7E+010
 72 9E+010 1E+011 1E+011
 73 1E+011 1E+011 1E+011
 74 2E+011 2E+011 2E+011
 75 3E+011 3E+011 3E+011

Werte zur Generierung der Tabellen aus dem Democode
 mithilfe der Funktion PWM

Tabelle / Table	MAX PWM	Steps	Factor
pwmtable_8A	255	4	4
pwmtable_8B	255	8	2
pwmtable_8C	255	16	1,435
pwmtable_8D	255	32	1,21
pwmtable_10	1023	64	1,115
pwmtable_16	65535	256	1,04427