

Semitone multipli		Cent multiplier		Cap (uF)		Cent		MCU freq		3200000		8000000		NCO			
Min freq		Max freq		Vmax = (U/C) * t		V = (Vmax*C*R)/t		Res		Steps		Max time (uS)		const			
7902.13282		16.35159783		61156.10293		126.5481134		0.0005		0.0005		16		0.0655359375			
Perceivable change		Required charge Real volt 16bit DC Real Vmax		Closest freq													
Note	Oct	Frequency (Hz)	Period (s)	Expected percen	Low (Hz)	High (Hz)										inc val	
C	0	16.35159783	61.15610293	1	16.34215561	16.36104561	0.008117579891	0.008163452148	4.99								
C#	0	17.32391444	57.72374642	1	17.31391064	17.33392041	0.00866195721	0.008697509786	5.02								
D	0	18.35404799	54.4838937	1	18.3444634	18.36462777	0.00917209299	0.009155274348	4.99								
D#	0	19.44543648	51.42549772	1	19.4342076	19.45667855	0.00972271824	0.009689331055	4.98								
E	0	20.60172331	48.53913106	1	20.58982572	20.61625777	0.0103006115	0.0102968282	5								
F	0	21.82766446	45.81531091	1	21.81461047	21.83370174	0.01091332823	0.01091003418	5								
F#	0	23.12465142	43.24389509	1	23.11029795	23.13810626	0.01156232571	0.01156097969	5.01								
G	0	24.49971475	40.81680176	1	24.48556725	24.51370403	0.01224985737	0.0122433252	5.01								
G#	0	25.95643636	38.5259307	1	25.94155484	25.97154102	0.0129728718	0.0129699707	5								
A	0	27.5	36.36363636	1	27.48411996	27.51588921	0.01375	0.01373291016	4.99								
A#	0	29.13525909	34.32270228	1	29.11841078	29.15209693	0.0145671755	0.0145714355	5								
B	0	30.86770333	32.39631702	1	30.84988159	30.88554317	0.01543385316	0.01541137955	4.99								
C	1	32.70319666	30.57850146	1	32.68431101	32.72092123	0.01635159783	0.0163289043	4.99								
C#	1	34.64782887	28.86183731	1	34.62782128	34.66784002	0.0173291444	0.0173182559	5								
D	1	36.70809599	27.24194685	1	36.68689868	36.72605514	0.01835404799	0.01838684082	5.01								
D#	1	38.89087297	25.71297386	1	38.864152	38.9133437	0.01944543648	0.01945495605	5								
E	1	41.20344611	24.26918153	1	41.17965144	41.22751563	0.02060172231	0.02059936523	5								
F	1	43.65352893	22.90765545	1	43.62832094	43.67875418	0.02182676446	0.0218200836	5								
F#	1	46.24938204	21.62194755	1	46.22259591	46.2760252	0.02312465142	0.02311708543	5								
G	1	48.99942952	20.40840088	1	48.97113449	49.02774085	0.02449971475	0.02449035645	5								
G#	1	51.91302782	19.26296535	1	51.88310668	51.94338203	0.025956436	0.02593994141	5								
A	1	55	18.18181818	1	54.96823993	55.03137842	0.0275	0.02746582021	4.99								
A#	1	58.27047019	17.16135114	1	58.23882717	58.30413826	0.02913523509	0.02914428711	5								
B	1	61.75841266	16.19811581	1	61.69978518	61.77106273	0.0308676533	0.03086994785	5.01								
C	2	65.49303133	15.28910273	1	65.38822022	65.44418245	0.03270319566	0.0327010254	5								
C#	2	69.2665774	14.43091865	1	69.25656256	69.33569905	0.03464782887	0.03463745117	5								
D	2	73.18161918	13.62097343	1	73.17379737	73.26581108	0.03678069569	0.0366973877	5								
D#	2	77.1814593	12.85648993	1	77.17883041	77.28688174	0.03899067297	0.03899061211	5								
E	2	81.4088923	12.13490777	1	81.39302089	81.45459036	0.0412034461	0.04119873407	5								
F	2	85.87307578	11.54382773	1	85.25664189	85.35759206	0.0436352893	0.04364013672	5								
F#	2	90.49860568	10.81097377	1	90.4519182	90.52550014	0.04624830284	0.04623413066	5								
G	2	95.998859	10.20420044	1	95.94226898	96.05544811	0.0489994295	0.04898071289	5								
G#	2	103.8261744	9.631482676	1	103.7662194	103.8861641	0.0519130872	0.05187988281	5								
A	2	110	9.090909091	1	109.9364799	110.0635688	0.055	0.05500793457	5								
A#	2	116.5409404	8.58067557	1	116.4736431	116.60782505	0.05827047019	0.05828657422	5								
B	2	123.4708253	8.099792526	1	123.3995264	123.5421655	0.06173541266	0.06172180176	5								
C	3	130.8127827	7.644512866	1	130.737244	130.8883669	0.06540639133	0.06538911313	5								
C#	3	138.5913155	7.21549327	1	138.5112851	138.6713921	0.06929565774	0.06927490234	5								
D	3	146.832384	6.810486713	1	146.7475947	146.9172228	0.07341619198	0.07339477539	5								
D#	3	155.6534919	6.428243465	1	155.4736808	155.6337442	0.0778174593	0.07781982422	5								
E	3	164.8137785	6.067453883	1	164.7186058	164.9000001	0.08240688923	0.08239746094	5								
F	3	174.6141157	5.726913863	1	174.5132838	174.7150509	0.08730705786	0.08728027344	5								
F#	3	184.9972114	5.405486886	1	184.8903836	185.1010094	0.09249860568	0.09248626172	5								
G	3	195.997718	5.10210022	1	195.884538	196.110638	0.097998859	0.09796142578	5								
G#	3	207.6523488	4.815741338	1	207.5324387	207.7723281	0.1038261744	0.10383090596	5								
A	3	220	4.545454545	1	219.8729597	220.1271337	0.11	0.1100159891	5								
A#	3	233.0818808	4.290337785	1	232.9472893	233.216553	0.116540904	0.116577484	5								
B	3	246.9416506	4.049453928	1	246.7993257	247.0843309	0.1234708253	0.1234436025	5								
C	4	261.6258553	3.822256433	1	261.4744881	261.7787288	0.1308127827	0.1308411162	5								
C#	4	277.182631	3.607729664	1	277.0225702	277.3427442	0.1385913155	0.138628096	5								
D	4	293.6647679	3.40534357	1	293.4951895	293.8344431	0.146832384	0.1468685447	5								
D#	4	311.1269837	3.214112733	1	310.9473216	311.3067496	0.155634919	0.155635345	5								
E	4	329.6275569	3.033726941	1	329.4372115	329.8190123	0.1648137785	0.1647942919	5								
F	4	349.2282314	2.863456932	1	349.0265675	349.4300118	0.1746141157	0.1746384008	5								
F#	4	369.9944227	2.702743443	1	369.7807673	370.2002610	0.1849927114	0.1850128174	5								
G	4	391.995436	2.55105011	1	391.7690759	392.2219268	0.195997718	0.1959991455	5								
G#	4	415.3046976	2.407076699	1	415.0648774	415.5446653	0.2076523488	0.2076721101	5								
A	4	440	2.272727273	1	439.7459194	440.2422174	0.22	0.220031783	5								
A#	4	466.1637615	2.145168892	1	465.884725	466.4343276	0.2330818808	0.2330780029	5								
B	4	493.8833013	2.024769814	1	493.5981055	494.1866618	0.2469416506	0.2469350151	5								
C	5	523.2511306	1.911128126	1	522.646962	523.8595633	0.2616255653	0.2616119385	5								
C#	5	554.365262	1.803864832	1	553.7252039	554.0000599	0.277182631	0.277159033	5								
D	5	587.3295358	1.702621678	1	586.6514179	588.0084376	0.2936647679	0.293653995	5								
D#	5	622.2539674	1.607060866	1	621.5355265	622.0713238	0.3111269837	0.311126709	5								
E	5	659.2551138	1.516863471	1	658.4939522	660.0171553	0.3296275569	0.3296898438	5								
F	5	698.4564629	1.431728466	1	697.6500402	699.2638177	0.3492282314	0.3491973877	5								
F#	5	739.9888454	1.351371722	1	739.1344704	740.8484028	0.3699944227	0.3700256348	5								
G	5	783.9809872	1.275525055	1	783.0856931	784.8970971	0.391995436	0.391998291	5								
G#	5	830.6093922	1.203935334	1	829.6503916	831.5695972	0.4153046976	0.4152979443	5								
A	5	880	1.136363636	1	879.9839711	881.0172033	0.44	0.4399871826	5								
A#	5	932.3271533	1.072846336	1	931.2510719	933.4052124	0.4661637615	0.4661560059	5								
B	5	987.7666205	1.012384007	1	986.6261487	988.3037346	0.4938333013	0.4938850708	5								
C	6	1048.502261	955.9411992	1	1044.690381	1048.317284	0.5232511006	0.5232230777	5								
C#	6	1108.730524	901.9324159	1	1106.810904	1110.653473	0.5543652662	0.5543518066	5								
D	6	1174.659072	851.3103991	1	1172.625305												