

ADC Value	AVG	Feedback	
	128	0	0
	128	128	8
	128	248	16
	128	361	23
	128	466	29
	128	565	35
	128	658	41
	128	744	47
	128	826	52
	128	902	56
	128	974	61
	128	1041	65
	128	1104	69
	128	1163	73
	128	1218	76
	128	1270	79
	128	1319	82
	128	1364	85
	128	1407	88
	128	1447	90
	128	1485	93
	128	1520	95
	128	1553	97
	128	1584	99
	128	1613	101
	128	1640	103
	128	1666	104
	128	1689	106
	128	1712	107
	1024	1733	108
	1024	2649	166
	1024	3507	219
	1024	4312	269
	1024	5066	317
	1024	5774	361
	1024	6437	402
	1024	7059	441
	1024	7641	478
	1024	8188	512
	1024	8700	544
	1024	9180	574
	1024	9631	602
	1024	10053	628
	1024	10448	653
	1024	10819	676
	1024	11167	698

1024	11493	718
1024	11799	737
1024	12085	755
1024	12354	772
1024	12606	788
1024	12842	803
1024	13063	816
1024	13271	829
1024	13466	842
1024	13648	853
1024	13819	864
1024	13979	874
1024	14130	883
1024	14270	892
1024	14403	900
1024	14526	908
1024	14643	915
1024	14751	922
256	14853	928
256	14181	886
256	13551	847
256	12960	810
256	12406	775
256	11886	743
256	11400	712
256	10943	684
256	10515	657
256	10114	632
256	9738	609
256	9385	587
256	9055	566
256	8745	547
256	8454	528
256	8182	511
256	7926	495
256	7687	480
256	7463	466
256	7252	453
128	7055	441
128	6742	421
128	6449	403
128	6174	386
128	5916	370
128	5674	355
128	5447	340
128	5235	327
128	5036	315

128	4849	303
128	4674	292
128	4510	282
128	4356	272
128	4212	263
128	4076	255

This spreadsheet shows how the algorithm in use works. There are 100 ticks per second so the sheet has 100 rows. This simulates the performance during a single second.

The current feedback is set to 16. The max value of the AVG variable is MAX\_AVERAGE, so 16 feedback makes the AVG max out at 16k.





C \* Feedback