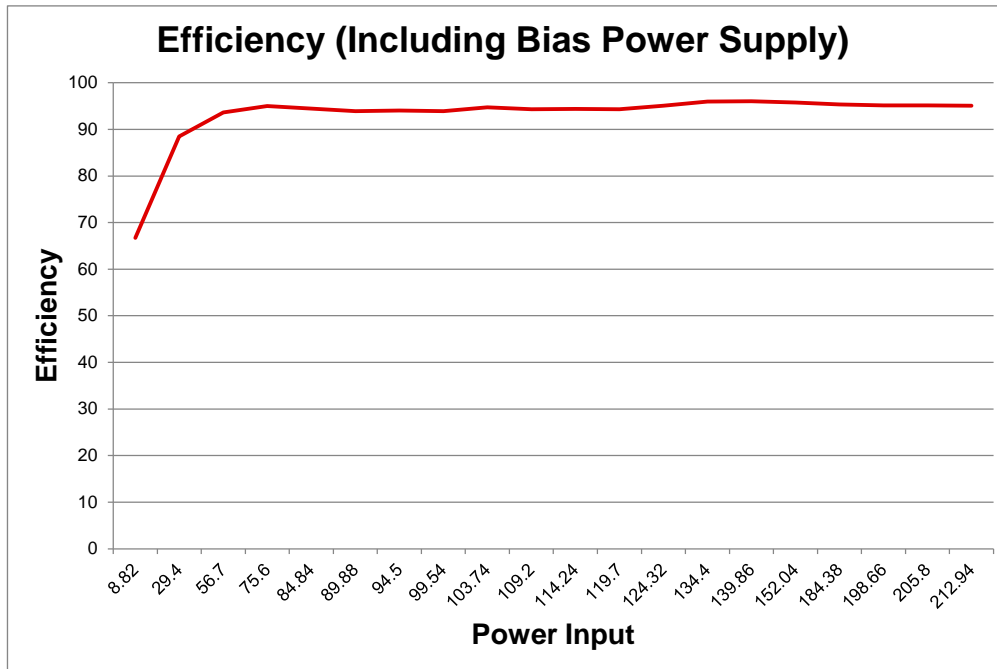


Power Stage Efficiency, Including Bias Power Consumption

Vin	Vout	Iin	Iout	Pin	Pout	Efficiency (includes Bias Power supply consumption)	Mode	Duty	Duty*2		
42	9.86	0.21	0.597	8.82	5.88642	66.73945578	Buck				
42	20.73	0.7	1.2547	29.4	26.00993	88.46915306	Buck				
42	29.62	1.35	1.7929	56.7	53.1057	93.66084303	Buck				
42	34.43	1.8	2.0858	75.6	71.81409	94.99218783	Buck	0.425	0.85		
42	36.37	2.02	2.2031	84.84	80.12675	94.44453913	Br-A	0.45	0.9		
42	37.33	2.14	2.2619	89.88	84.43673	93.94384401	Br-A	0.46	0.92	BuckModeMaxGain	0.9
42	38.3	2.25	2.32	94.5	88.856	94.02751323	Br-A	0.469	0.938	ConstantBoostModeMaxGain	0.95
42	39.29	2.37	2.3794	99.54	93.48663	93.9186518	Br-B	0.476	0.952	ConstantBuckModeMaxGain	1.05
42	40.28	2.47	2.4396	103.74	98.26709	94.7243956	Br-B	0.488	0.976	Constant Boost Mode Duty Value	0.07
42	41.23	2.6	2.498	109.2	102.9925	94.31551282	Br-B	0.5	1	Constant Buck Mode Duty Value	0.92
42	42.21	2.72	2.5545	114.24	107.8254	94.38501838	Br-B	0.51	1.02	C1	0.03
42	43.17	2.85	2.6158	119.7	112.9241	94.33925313	Br-B	0.522	1.044	C2	0.87
42	44.17	2.96	2.6765	124.32	118.221	95.09411599	Boost - Br-B	0.5227	1.0454	C3	0.96
42	46.14	3.2	2.7955	134.4	128.9844	95.97051339	Boost	0.528	1.056		
42	47.09	3.33	2.8529	139.86	134.3431	96.05538467	Boost				
42	49.02	3.62	2.9701	152.04	145.5943	95.76052486	Boost				
42	53.86	4.39	3.2646	184.38	175.8314	95.36357306	Boost				
42	55.84	4.73	3.384	198.66	188.9626	95.11857445					
42	56.84	4.9	3.4448	205.8	195.8024	95.14209524					
42	57.84	5.07	3.5	212.94	202.44	95.06903353					



Gain & Efficiency Worksheet

Use OPEN_LOOP==1 in the Project Settings.h

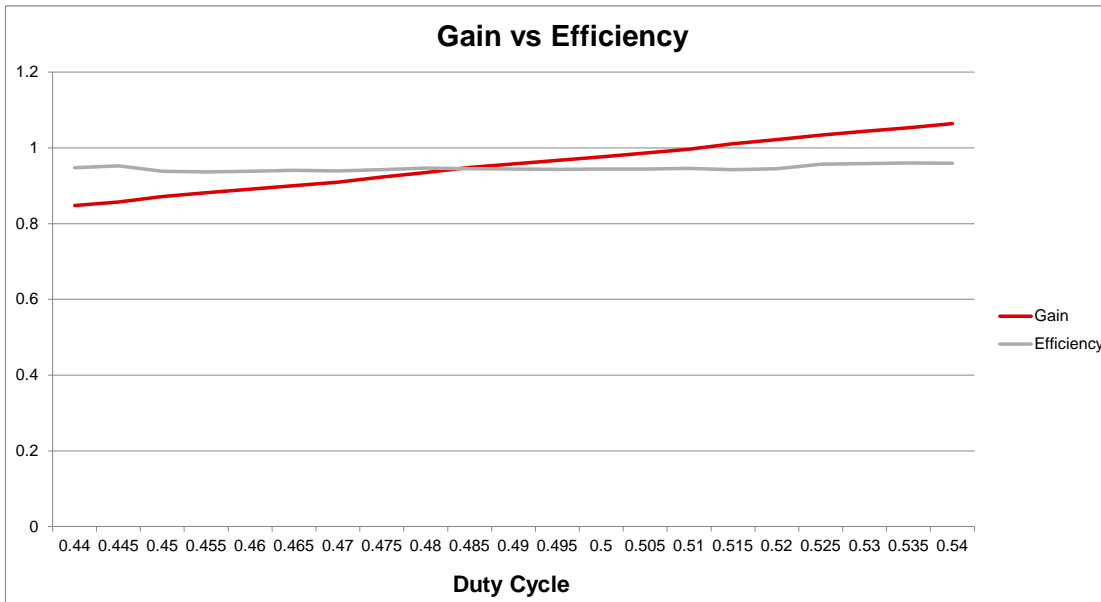
Duty	Duty*2	Vin	Iin	Vout	Iout	Gain	Pin	Pout	Efficiency
0.2	0.4	42	0.44	15.88	0.9614	0.378095	18.48	15.26703	0.826138095
0.4	0.8	42	1.6	32.28	1.9535	0.768571	67.2	63.05898	0.938377679
0.42	0.84	42	1.75	33.95	2.055	0.808333	73.5	69.76725	0.949214286
0.44	0.88	42	1.93	35.62	2.1562	0.848095	81.06	76.80384	0.947493758
0.445	0.89	42	1.96	36	2.1791	0.857143	82.32	78.4476	0.952959184
0.45	0.9	42	2.06	36.62	2.2173	0.871905	86.52	81.19753	0.938482732
0.455	0.91	42	2.11	37.02	2.2414	0.881429	88.62	82.97663	0.936319431
0.46	0.92	42	2.15	37.41	2.2654	0.890714	90.3	84.74861	0.938522857
0.465	0.93	42	2.19	37.81	2.2893	0.900238	91.98	86.55843	0.94105711
0.47	0.94	42	2.24	38.2	2.3132	0.909524	94.08	88.36424	0.939245748
0.475	0.95	42	2.3	38.78	2.3481	0.923333	96.6	91.05932	0.942643043
0.48	0.96	42	2.35	39.27	2.3784	0.935	98.7	93.39977	0.946299574
0.485	0.97	42	2.42	39.82	2.4114	0.948095	101.64	96.02195	0.944725974
0.49	0.98	42	2.47	40.22	2.4355	0.957619	103.74	97.95581	0.944243397
0.495	0.99	42	2.52	40.61	2.4596	0.966905	105.84	99.88436	0.943729743
0.5	1	42	2.57	41.02	2.484	0.976667	107.94	101.8937	0.943984436
0.505	1.01	42	2.62	41.42	2.5088	0.98619	110.04	103.9145	0.944333842
0.51	1.02	42	2.67	41.85	2.5345	0.996429	112.14	106.0688	0.945860754
0.515	1.03	42	2.76	42.47	2.5718	1.01119	115.92	109.2243	0.94223901
0.52	1.04	42	2.81	42.91	2.5987	1.021667	118.02	111.5102	0.944841696
0.525	1.05	42	2.84	43.41	2.6295	1.033571	119.28	114.1466	0.956963405
0.53	1.06	42	2.89	43.83	2.6549	1.043571	121.38	116.3643	0.958677435
0.535	1.07	42	2.94	44.25	2.6804	1.053571	123.48	118.6077	0.960541788
0.54	1.08	42	3	44.68	2.7063	1.06381	126	120.9175	0.959662571
0.55	1.1	42	3.15	45.76	2.7716	1.089524	132.3	126.8284	0.9586426

BuckModeMaxGain 0.9

ConstantBoostModeMaxGain 0.95
 Constant Boost Mode Duty Value 0.07
 C1 0.041

ConstantBuckModeMaxGain 1.05
 Constant Buck Mode Duty Value 0.907
 C2 0.87

C3 0.982



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