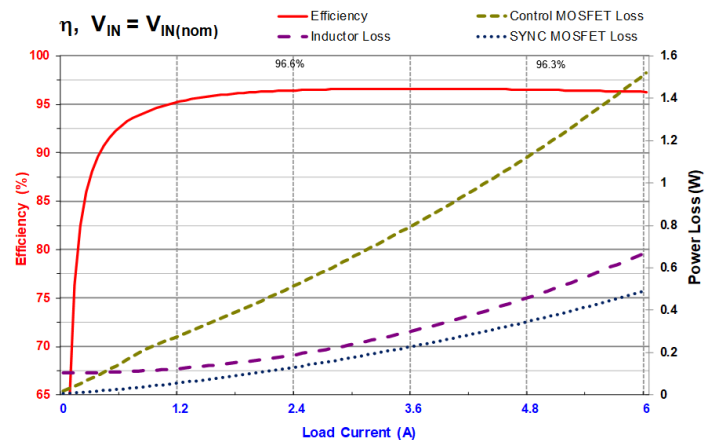
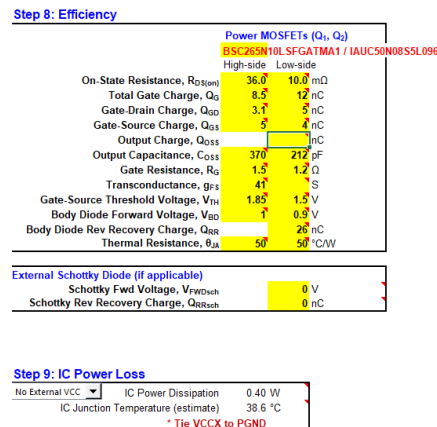


Voltage Output Measurements at Various loads:

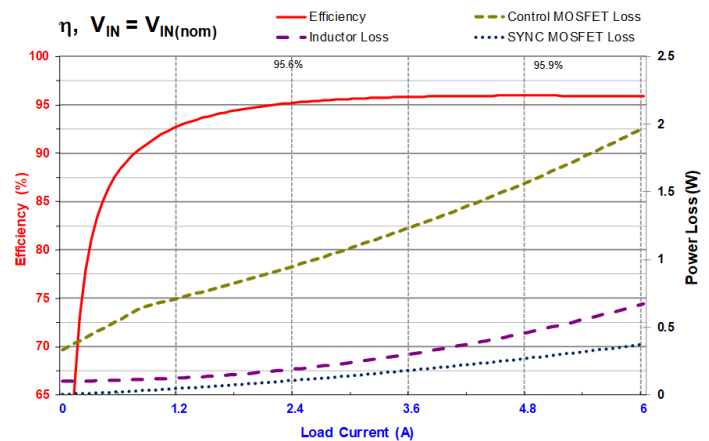
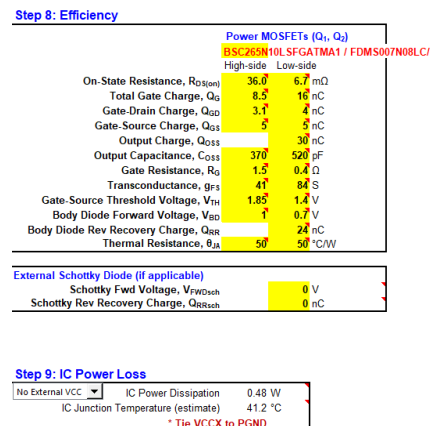
Board #	Mosfet (Q7)	Testing	No Load	1A Load	1.6A Load	2A Load
7	CSD19532Q5B (Original Rev 2 Mosfet)	15V Output (V)	15.5	15.15	14.9	9.7
		VCC (V)	4.979	4.88	4.98	4.98
13	IAUC50N08S5L096ATMA1 (Datasheet Recommended)	15V Output (V)	15.04	8.9	2.37	NA
		VCC (V)	4.984	4.99	4.991	NA
11	BSC034N10LS5ATMA1	15V Output (V)	15.23	14.78	11.14	5.21
		VCC (V)	5.003	4.997	5.01	5.014
9	FDMS007N08LC	15V Output (V)	15.23	14.86	14.57	9.55
		VCC (V)	4.99	5.007	5.007	5.007

Efficiency/Power Loss Plot (derived from TI QuickStart Calculator)

- IAUC50N08S5L096ATMA1



- BSC034N10LS5ATMA1



- FDMS007N08LC

Efficiency / Power Loss Analyzer

Step 8: Efficiency

Power MOSFETs (Q1, Q2)			
BSC265N10LSFGATMA1 / FDM507N08LC/			
		High-side	Low-side
On-State Resistance, $R_{DS(on)}$		36.0	6.7 mΩ
Total Gate Charge, Q_g		8.5	16 nC
Gate-Drain Charge, Q_{gd}		3.1	4 nC
Gate-Source Charge, Q_{gs}		5	5 nC
Output Charge, Q_{oss}			40 nC
Output Capacitance, C_{oss}		370	520 pF
Gate Resistance, R_g		1.5	0.4 Ω
Transconductance, g_{fs}		47	84 S
Gate-Source Threshold Voltage, V_{th}		1.85	1.4 V
Body Diode Forward Voltage, V_{BD}		↑	0.7 V
Body Diode Rev Recovery Charge, Q_{RR}			24 nC
Thermal Resistance, θ_{JA}		50	50 °C/W

External Schottky Diode (if applicable)	
Schottky Fwd Voltage, V_{FSDsch}	0 V
Schottky Rev Recovery Charge, Q_{RRsch}	0 nC

Step 9: IC Power Loss

No External VCC	IC Power Dissipation	0.48 W
	IC Junction Temperature (estimate)	41.2 °C
* Tie VCCX to PGND		

