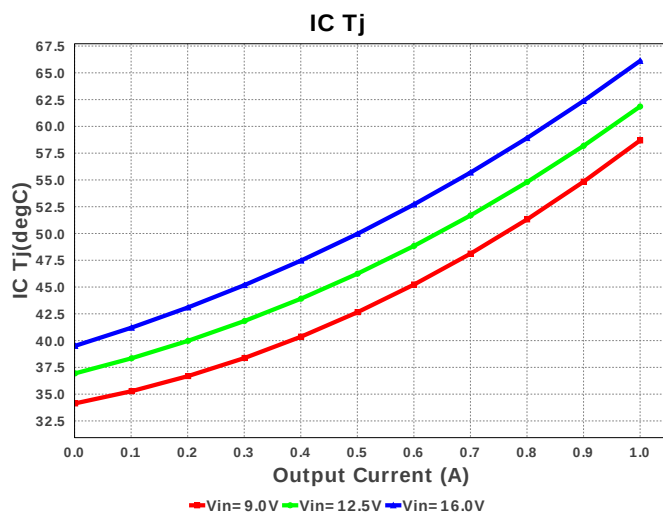
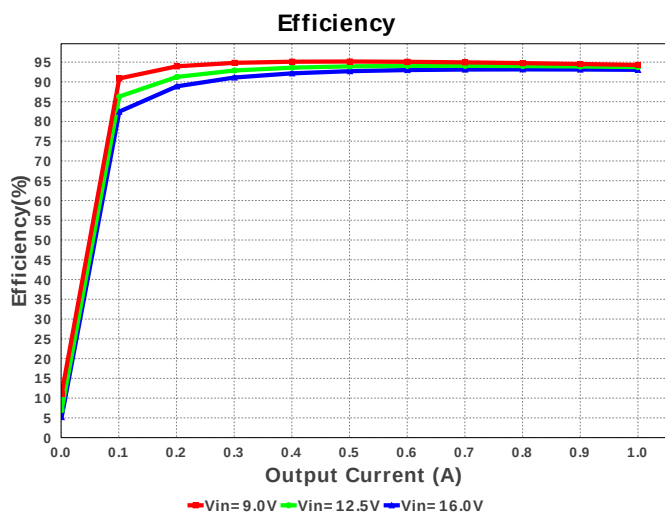
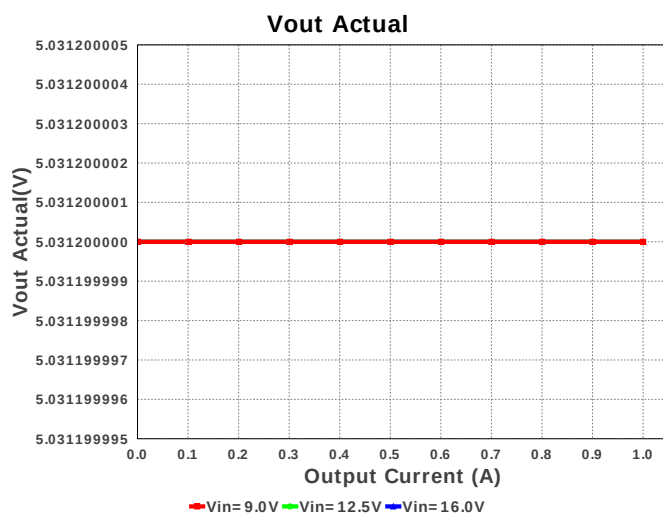
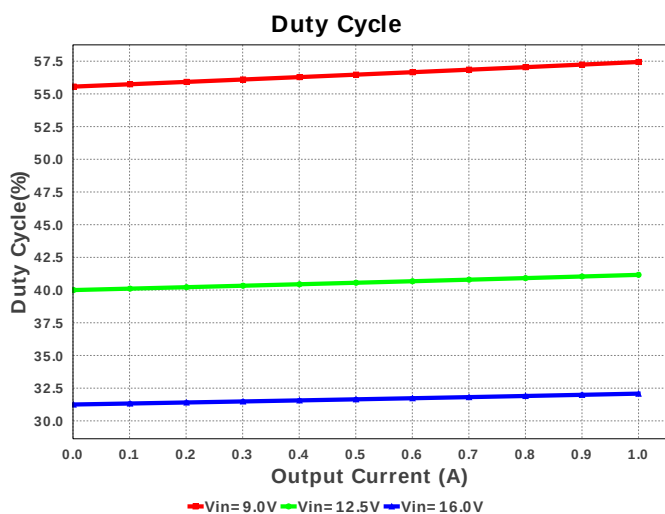
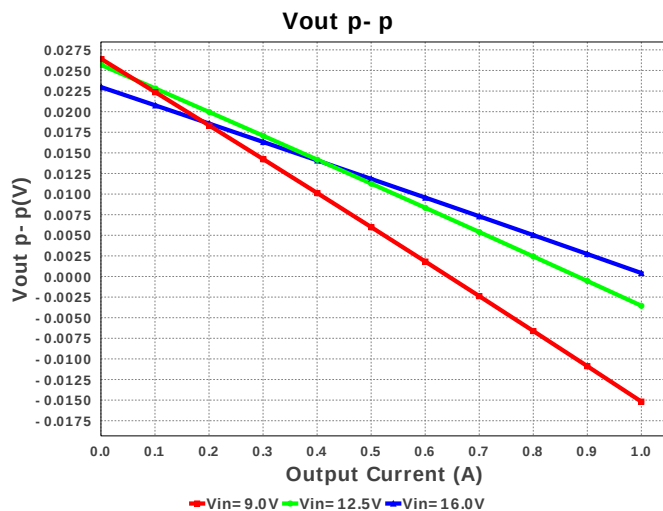
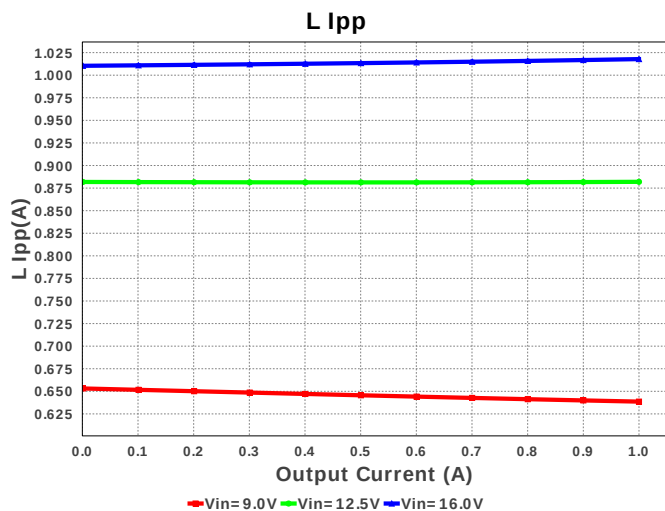
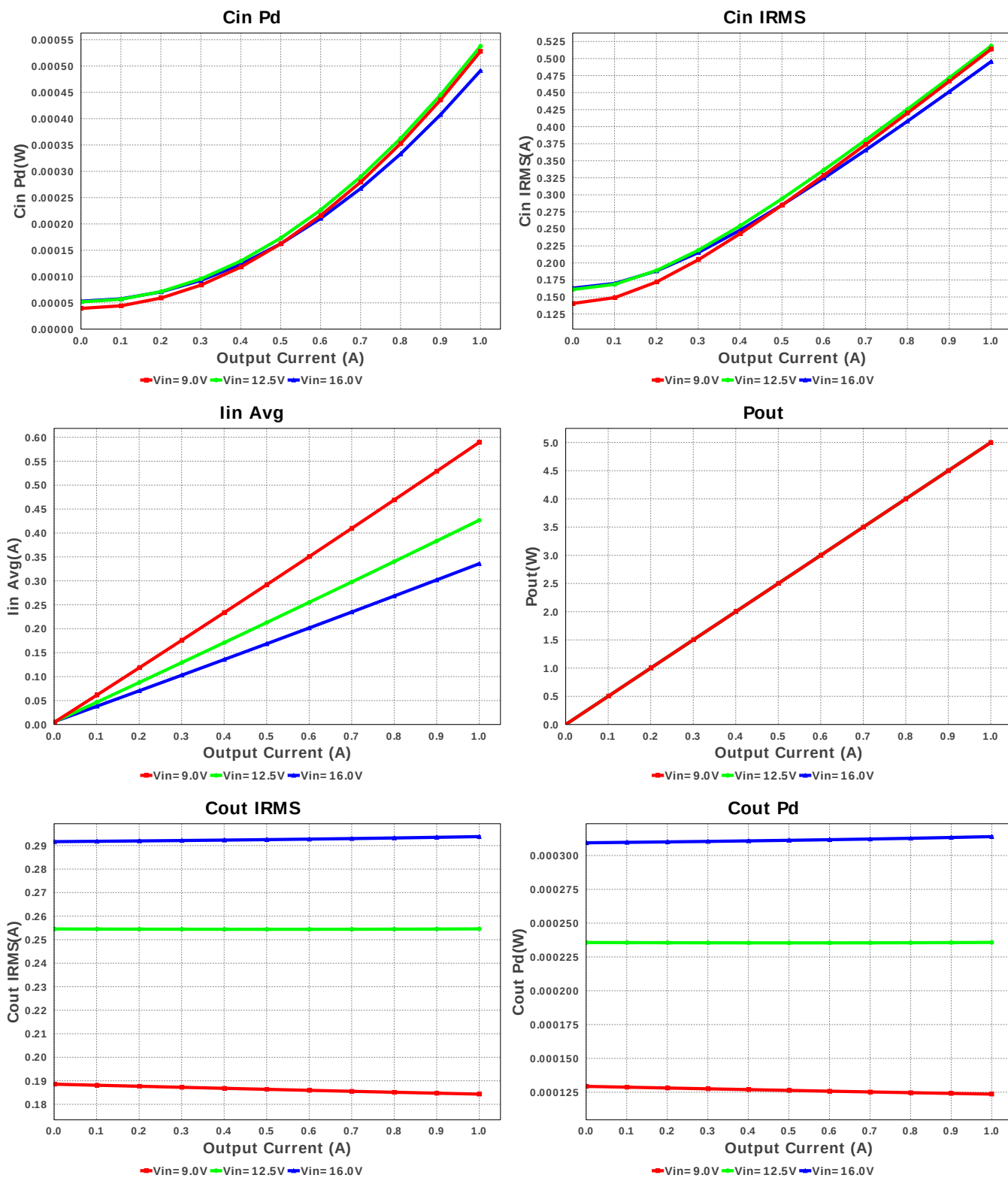
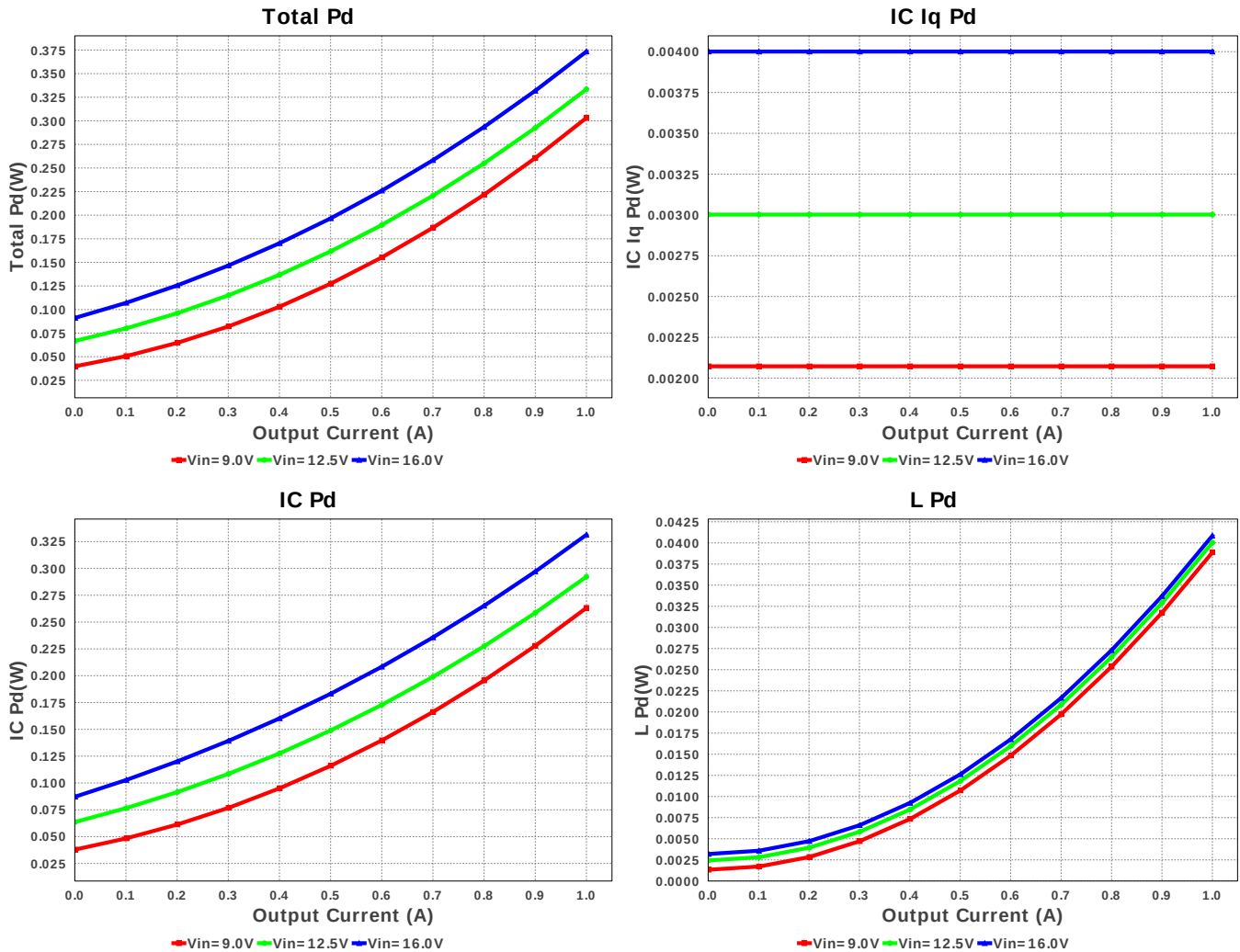




Device = TPS562209DDCR
Topology = Buck
Created = 8/9/16 8:08:09 AM
BOM Cost = \$0.89
BOM Count = 7
Total Pd = 0.37W







Operating Values

#	Name	Value	Category	Description
1.	Cin IRMS	495.572 mA	Current	Input capacitor RMS ripple current
2.	Cout IRMS	293.818 mA	Current	Output capacitor RMS ripple current
3.	Iin Avg	335.84 mA	Current	Average input current
4.	L Ipp	1.018 A	Current	Peak-to-peak inductor ripple current
5.	BOM Count	7	General	Total Design BOM count
6.	FootPrint	113.0 mm ²	General	Total Foot Print Area of BOM components
7.	Frequency	721.961 kHz	General	Switching frequency
8.	Pout	5.0 W	General	Total output power
9.	Total BOM	\$0.89	General	Total BOM Cost
10.	Vout Actual	5.031 V	Op_Point	Vout Actual calculated based on selected voltage divider resistors
11.	Vout OP	5.0 V	Op_Point	Operational Output Voltage
12.	Duty Cycle	32.082 %	Op_point	Duty cycle
13.	Efficiency	93.051 %	Op_point	Steady state efficiency
14.	IC Tj	66.117 degC	Op_point	IC junction temperature
15.	ICThetaJA	109.0 degC/W	Op_point	IC junction-to-ambient thermal resistance
16.	IOUT_OP	1.0 A	Op_point	Iout operating point
17.	VIN_OP	16.0 V	Op_point	Vin operating point
18.	Vout p-p	9.71 mV	Op_point	Peak-to-peak output ripple voltage
19.	Cin Pd	491.184 μW	Power	Input capacitor power dissipation
20.	Cout Pd	313.978 μW	Power	Output capacitor power dissipation
21.	IC Iq Pd	4.001 mW	Power	IC Iq Pd
22.	IC Pd	331.35 mW	Power	IC power dissipation
23.	L Pd	40.846 mW	Power	Inductor power dissipation
24.	Total Pd	373.4 mW	Power	Total Power Dissipation
25.	Vout Tolerance	3.053 %		Vout Tolerance based on IC Tolerance (no load) and voltage divider resistors if applicable

Design Inputs

#	Name	Value	Description
1.	Iout	1.0	Maximum Output Current

#	Name	Value	Description
2.	VinMax	16.0	Maximum input voltage
3.	VinMin	9.0	Minimum input voltage
4.	Vout	5.0	Output Voltage
5.	base_pn	TPS562209	Texas Instruments Base Part Number
6.	source	DC	Input Source Type
7.	ta	30.0	Ambient temperature

Design Assistance

1. TPS562209 Product Folder : <http://www.ti.com/product/TPS562209> : contains the data sheet and other resources.

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You should completely validate and test your design implementation to confirm the system functionality for your application prior to production.

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