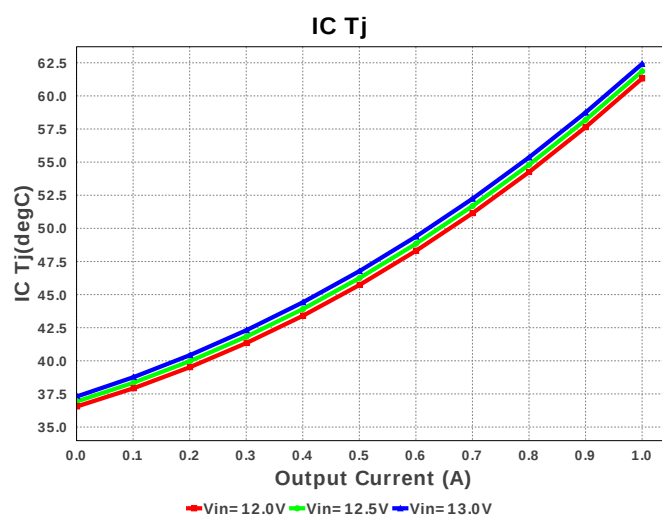
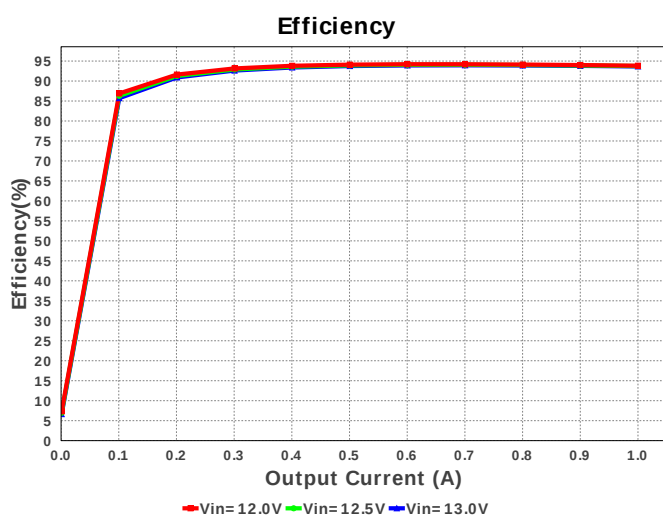
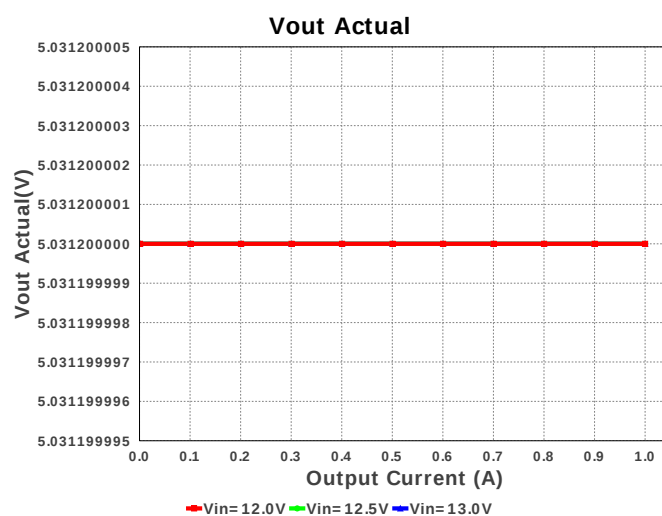
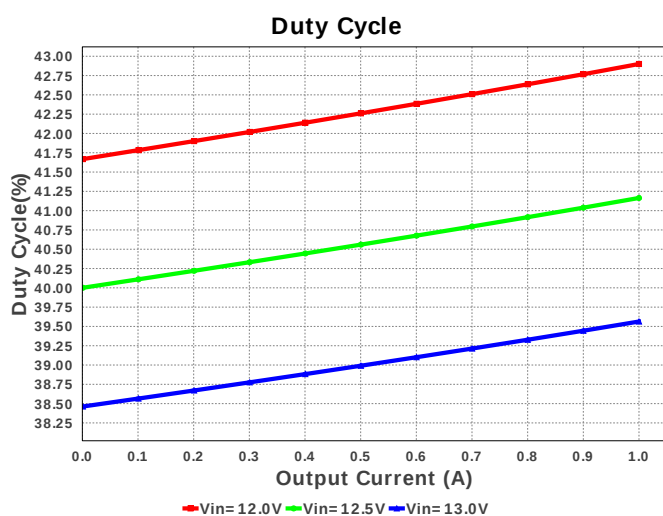
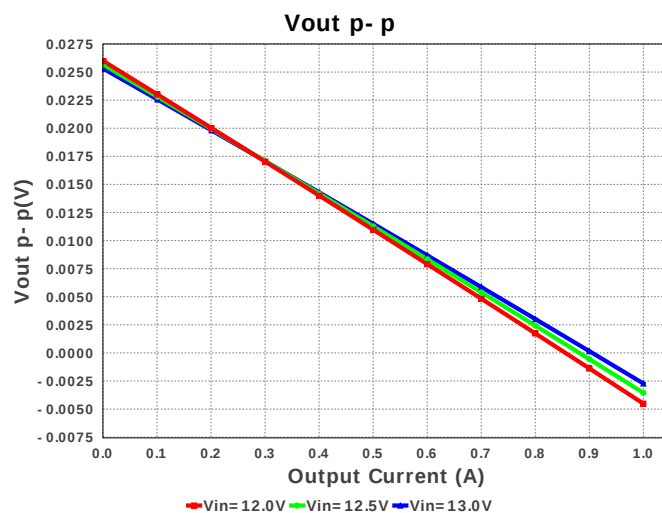
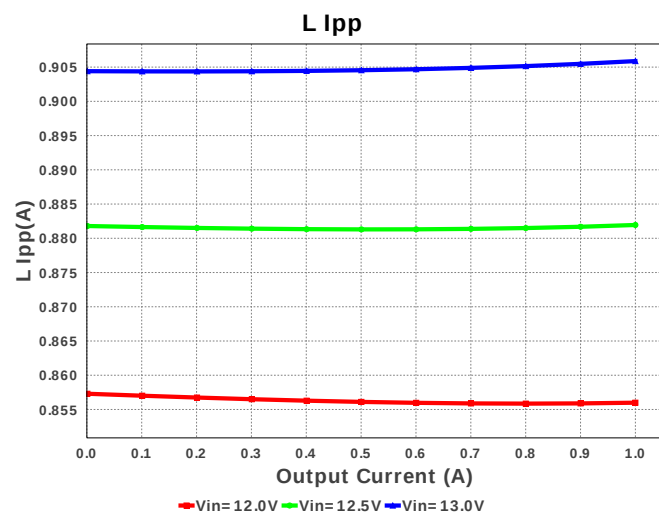
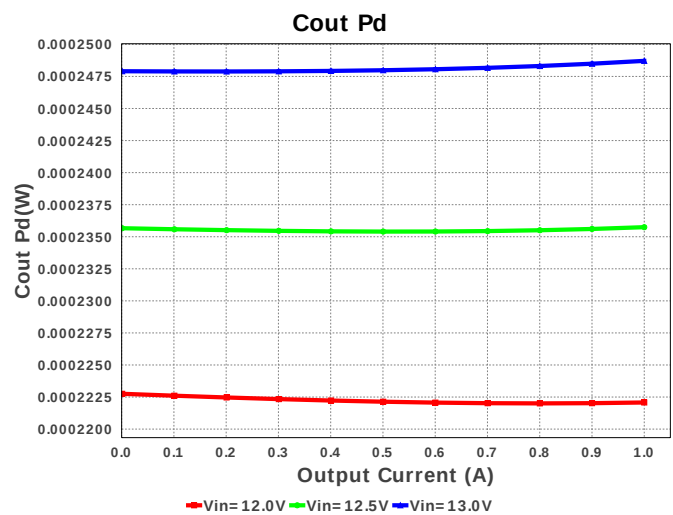
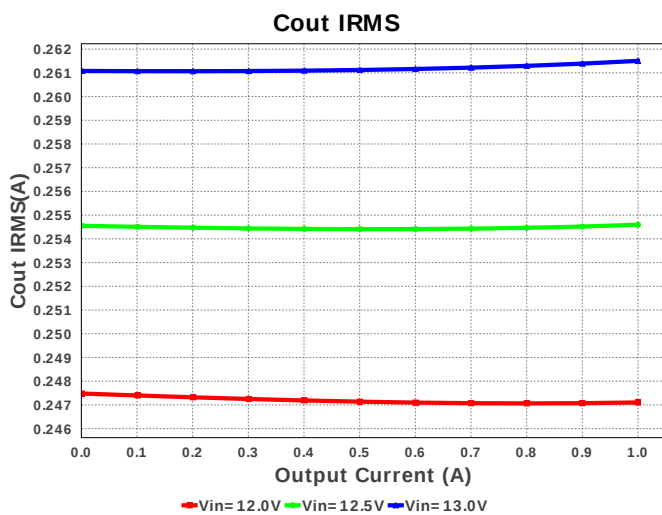
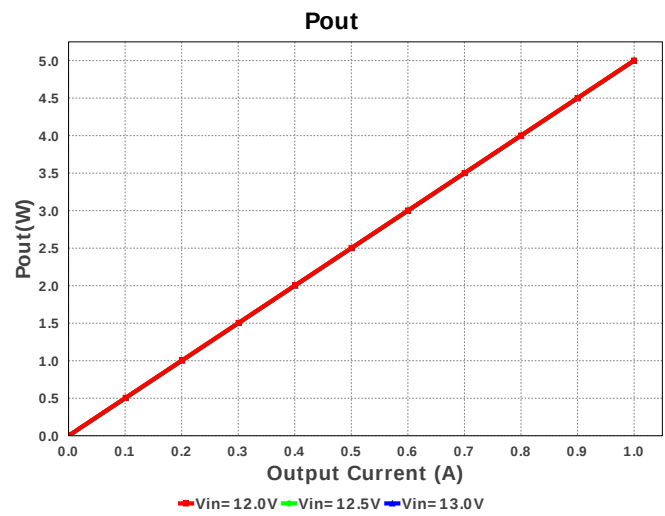
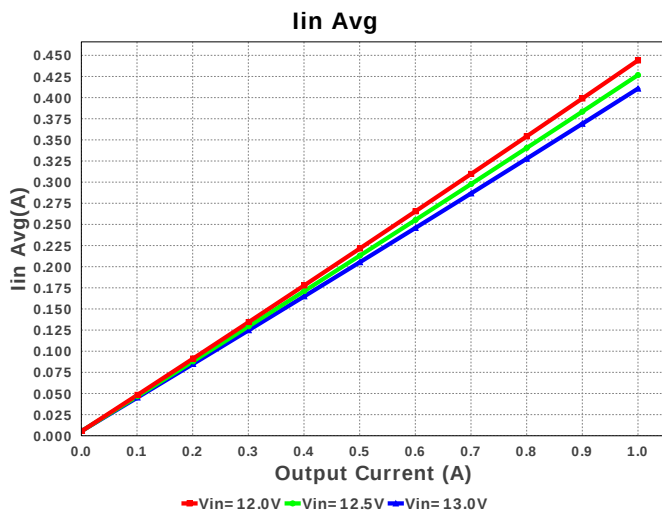
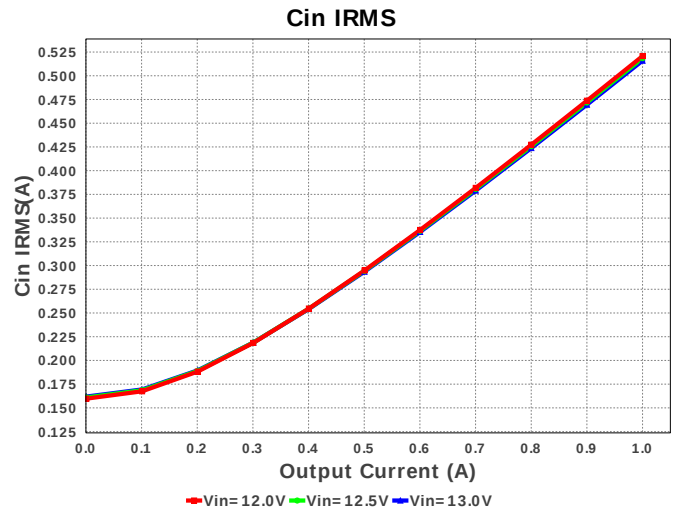
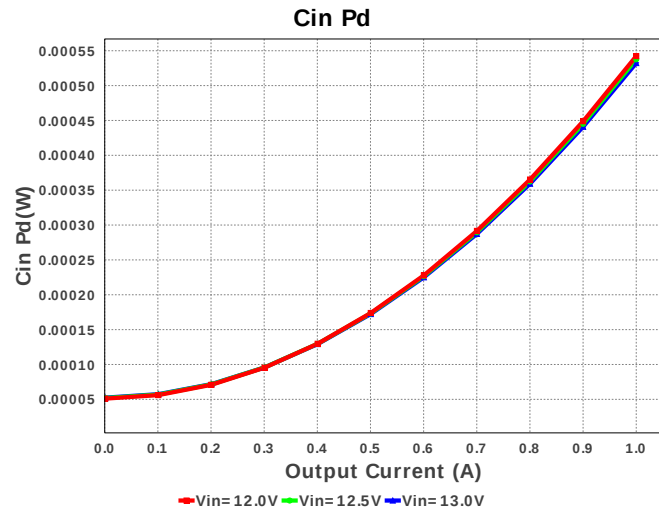
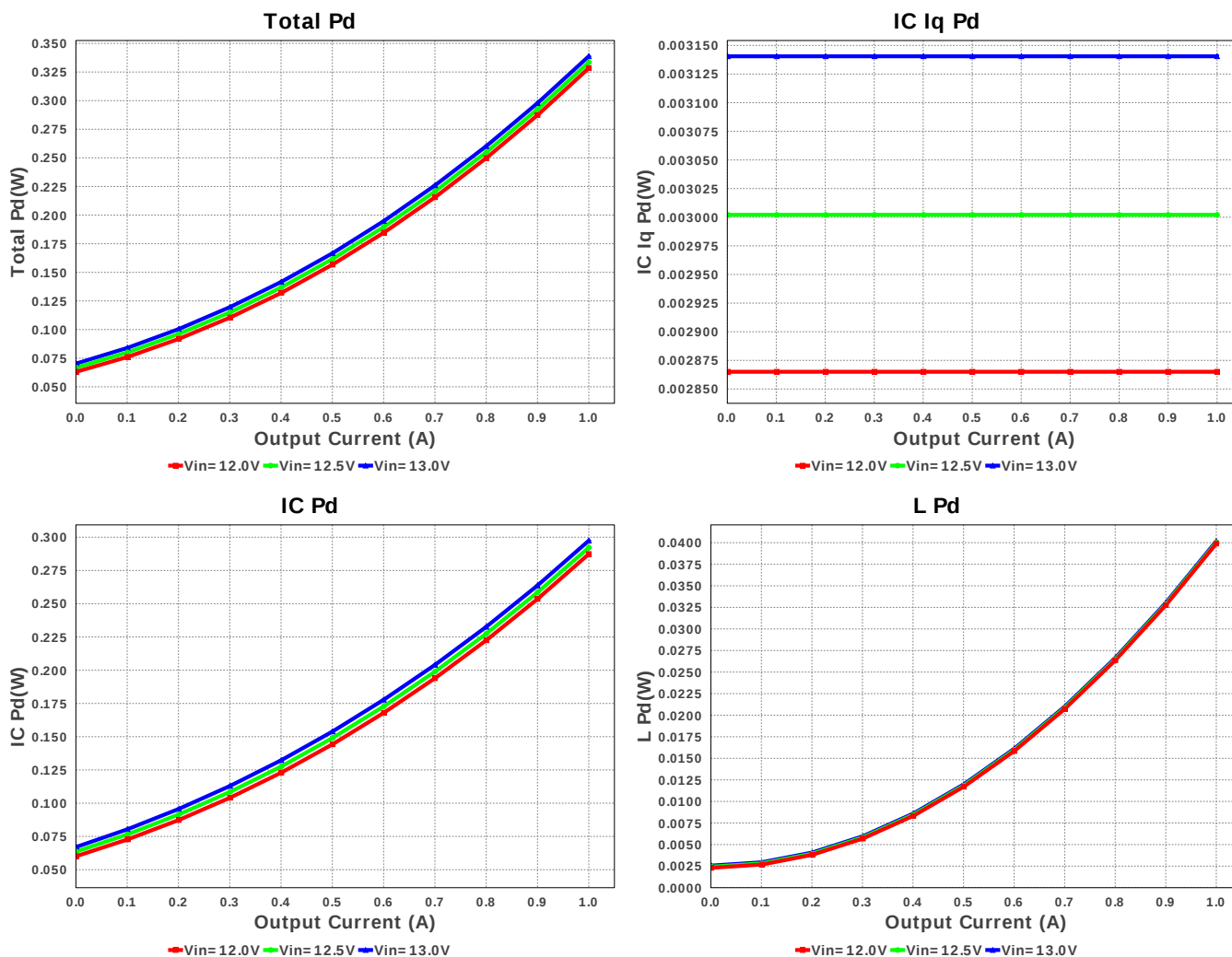




Device = TPS562209DDCR
Topology = Buck
Created = 7/15/16 9:00:38 PM
BOM Cost = \$0.89
BOM Count = 7
Total Pd = 0.34W







Operating Values

#	Name	Value	Category	Description
1.	Cin IRMS	515.91 mA	Current	Input capacitor RMS ripple current
2.	Cout IRMS	261.504 mA	Current	Output capacitor RMS ripple current
3.	Iin Avg	410.67 mA	Current	Average input current
4.	L Ipp	905.88 mA	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	721.554 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	39.563 %	Op_point	Duty cycle
13.	Efficiency	93.655 %	Op_point	Steady state efficiency
14.	IC Tj	62.418 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	13.0 V	Op_point	Vin operating point
18.	Vout p-p	8.613 mV	Op_point	Peak-to-peak output ripple voltage
19.	Cin Pd	532.326 μW	Power	Input capacitor power dissipation
20.	Cout Pd	248.714 μW	Power	Output capacitor power dissipation
21.	IC Iq Pd	3.141 mW	Power	IC Iq Pd
22.	IC Pd	297.413 mW	Power	IC power dissipation
23.	L Pd	40.171 mW	Power	Inductor power dissipation
24.	Total Pd	338.741 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	13.0	Maximum input voltage
3.	VinMin	12.0	Minimum input voltage
4.	Vout	5.0	Output Voltage
5.	base_pn	TPS562209	Base Product 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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