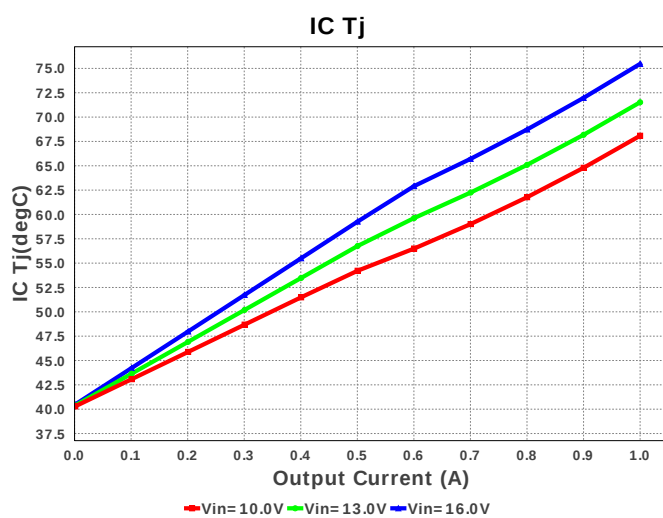
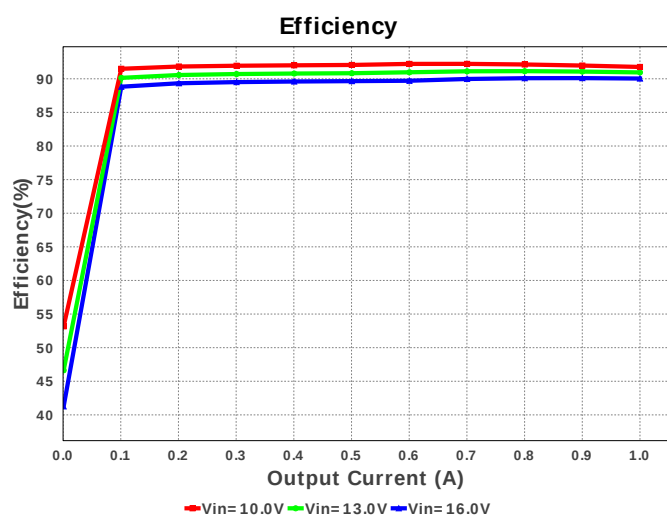
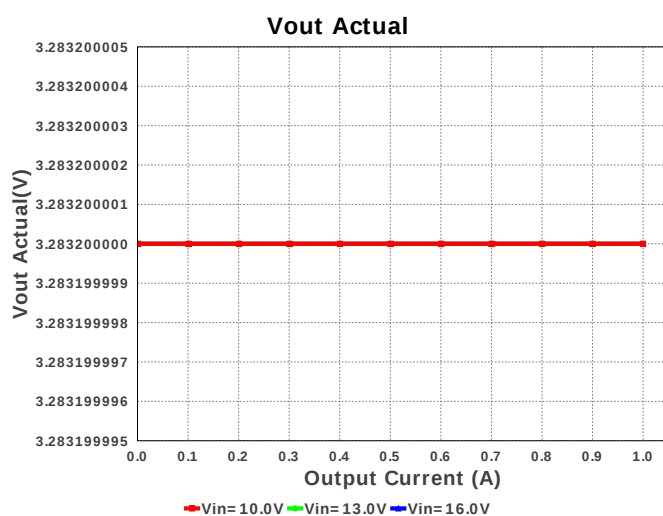
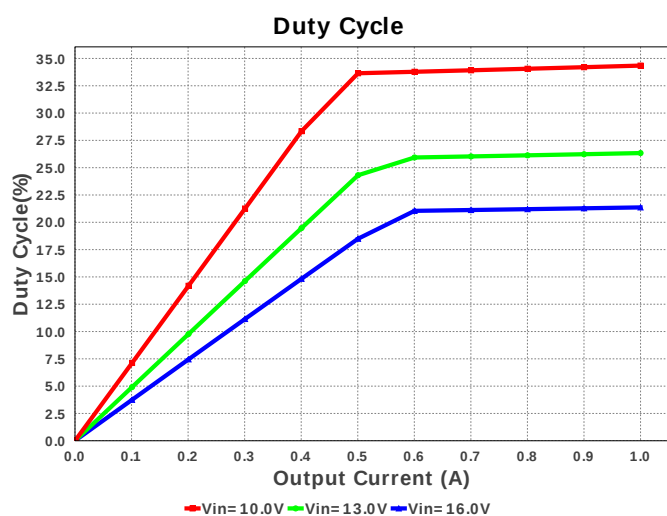
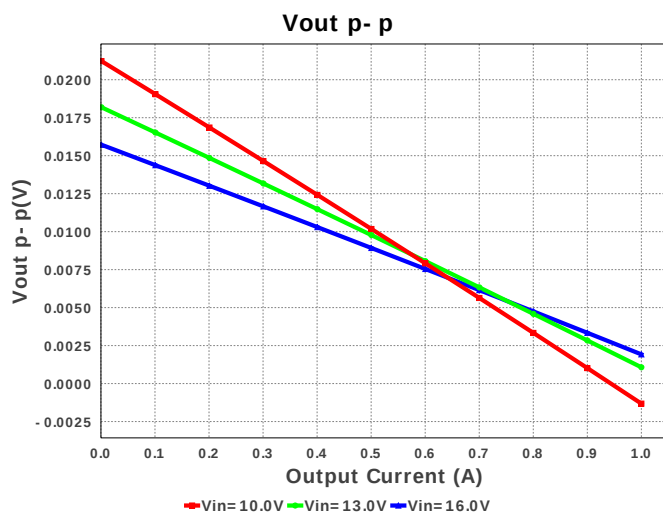
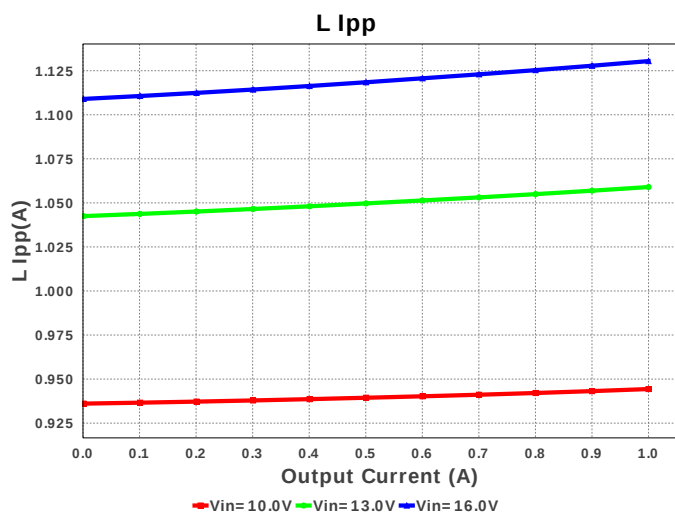
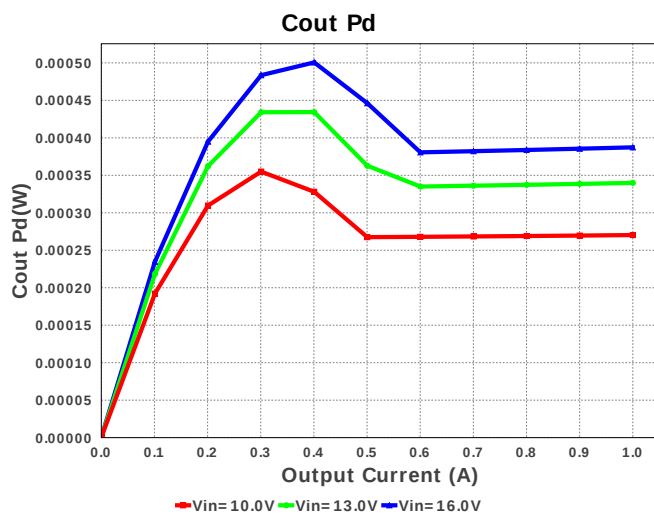
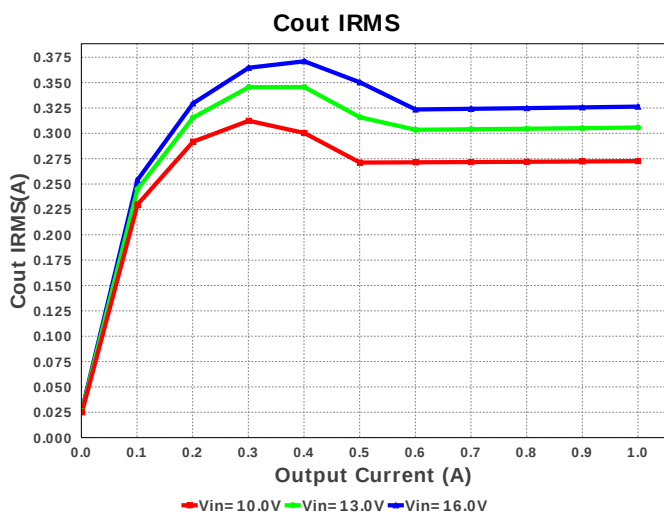
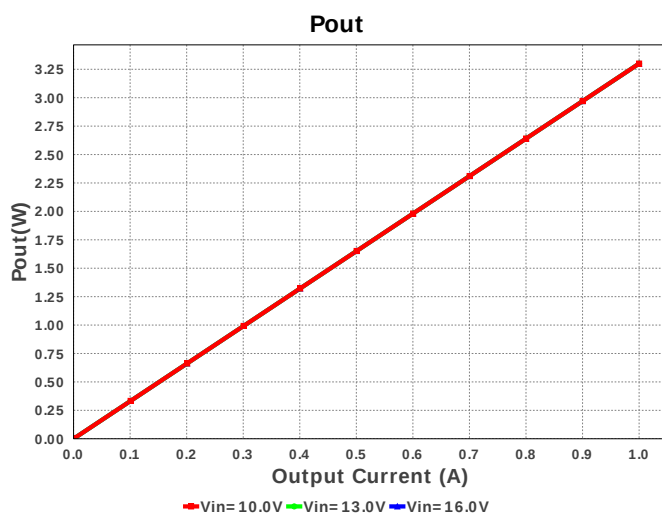
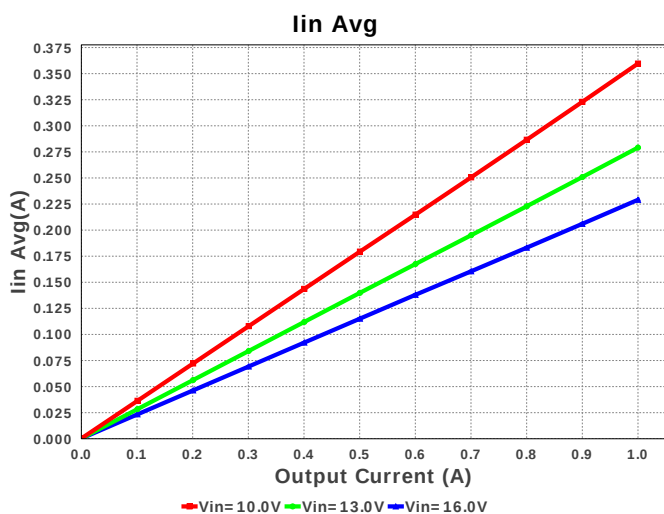
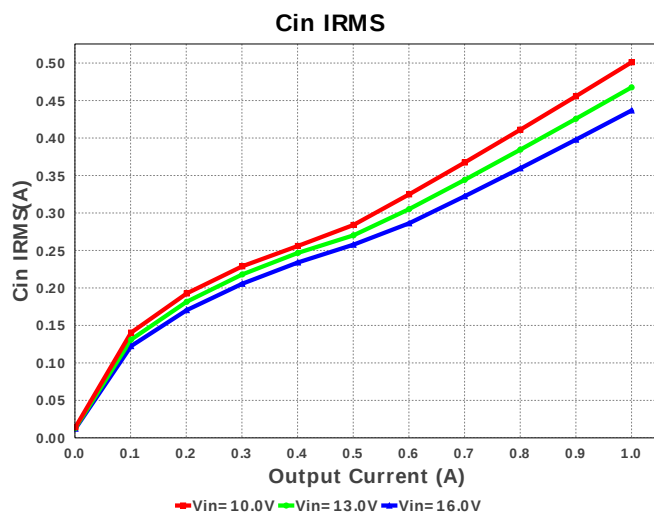
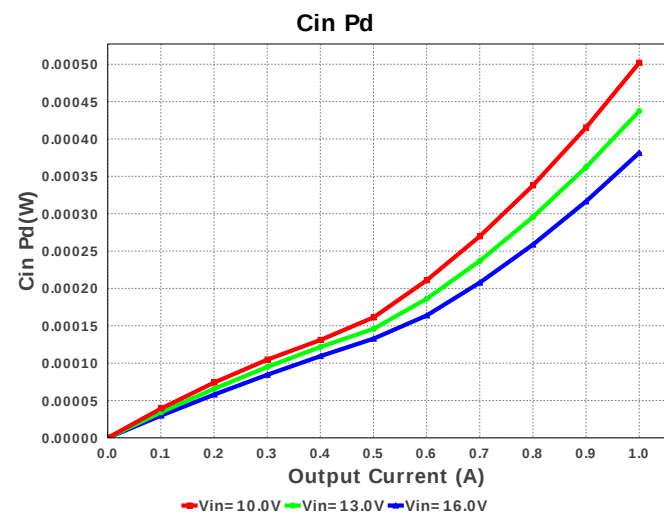
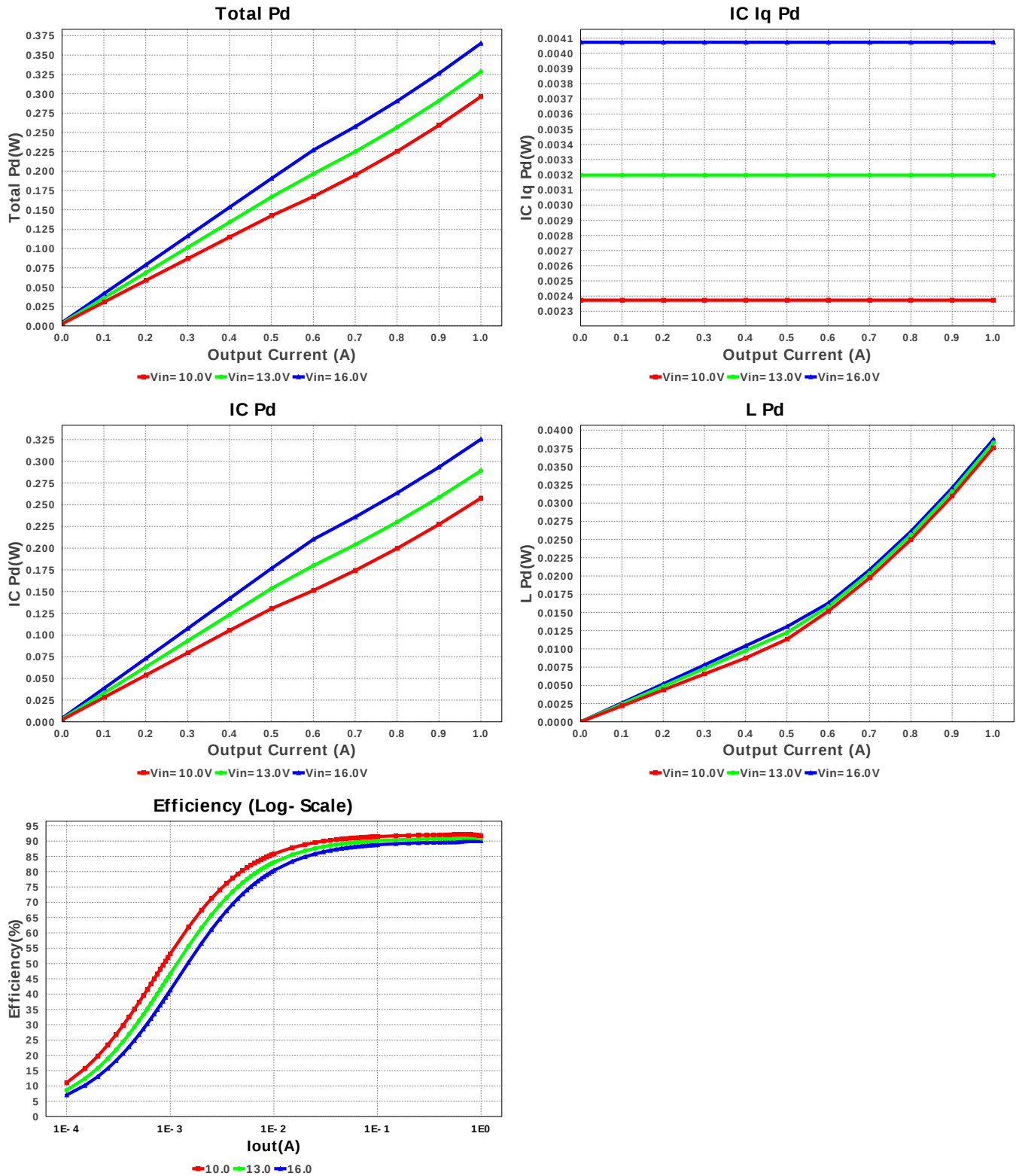




Device = TPS562200DDCR
Topology = Buck
Created = 7/18/16 6:53:49 PM
BOM Cost = \$0.99
BOM Count = 7
Total Pd = 0.37W







Operating Values

#	Name	Value	Category	Description
1.	Cin IRMS	436.749 mA	Current	Input capacitor RMS ripple current
2.	Cout IRMS	326.333 mA	Current	Output capacitor RMS ripple current
3.	Iin Avg	229.07 mA	Current	Average input current
4.	L Ipp	1.13 A	Current	Peak-to-peak inductor ripple current
5.	BOM Count	7	General	Total Design BOM count
6.	FootPrint	82.0 mm ²	General	Total Foot Print Area of BOM components
7.	Frequency	714.003 kHz	General	Switching frequency
8.	Pout	3.3 W	General	Total output power
9.	Total BOM	\$0.99	General	Total BOM Cost
10.	Vout Actual	3.283 V	Op_Point	Vout Actual calculated based on selected voltage divider resistors
11.	Vout OP	3.3 V	Op_Point	Operational Output Voltage

#	Name	Value	Category	Description
12.	Duty Cycle	21.364 %	Op_point	Duty cycle
13.	Efficiency	90.038 %	Op_point	Steady state efficiency
14.	IC Tj	75.467 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	10.389 mV	Op_point	Peak-to-peak output ripple voltage
19.	Cin Pd	381.499 μ W	Power	Input capacitor power dissipation
20.	Cout Pd	387.317 μ W	Power	Output capacitor power dissipation
21.	IC Iq Pd	4.073 mW	Power	IC Iq Pd
22.	IC Pd	325.382 mW	Power	IC power dissipation
23.	L Pd	38.727 mW	Power	Inductor power dissipation
24.	Total Pd	365.119 mW	Power	Total Power Dissipation
25.	Vout Tolerance	2.889 %		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
2.	VinMax	16.0	Maximum input voltage
3.	VinMin	10.0	Minimum input voltage
4.	Vout	3.3	Output Voltage
5.	base_pn	TPS562200	Texas Instruments Base Part Number
6.	source	DC	Input Source Type
7.	ta	40.0	Ambient temperature

Design Assistance

1. TPS562200 Product Folder : <http://www.ti.com/product/TPS562200> : contains the data sheet and other resources.

Texas Instruments' WEBENCH simulation tools attempt to recreate the performance of a substantially equivalent physical implementation of the design. Simulations are created using Texas Instruments' published specifications as well as the published specifications of other device manufacturers. While Texas Instruments does update this information periodically, this information may not be current at the time the simulation is built. Texas Instruments does not warrant the accuracy or completeness of the specifications or any information contained therein. Texas Instruments does not warrant that any designs or recommended parts will meet the specifications you entered, will be suitable for your application or fit for any particular purpose, or will operate as shown in the simulation in a physical implementation. Texas Instruments does not warrant that the designs are production worthy.

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

Use of Texas Instruments' WEBENCH simulation tools is subject to [Texas Instruments' Site Terms and Conditions of Use](#). Prototype boards based on WEBENCH created designs are provided AS IS without warranty of any kind for evaluation and testing purposes and are subject to the terms of the [Evaluation License Agreement](#).