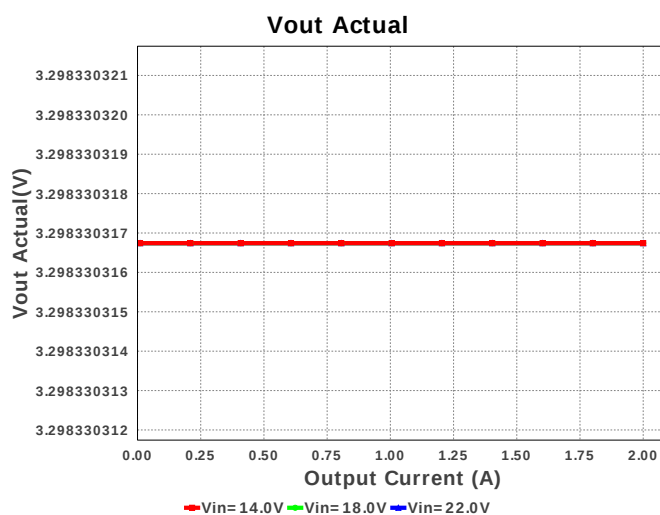
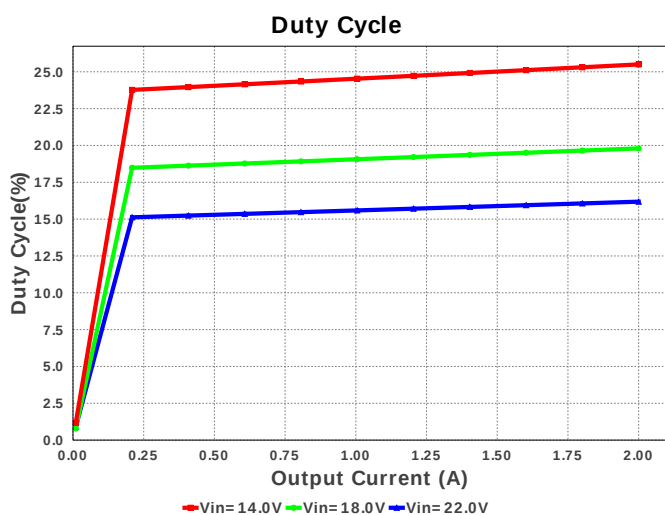
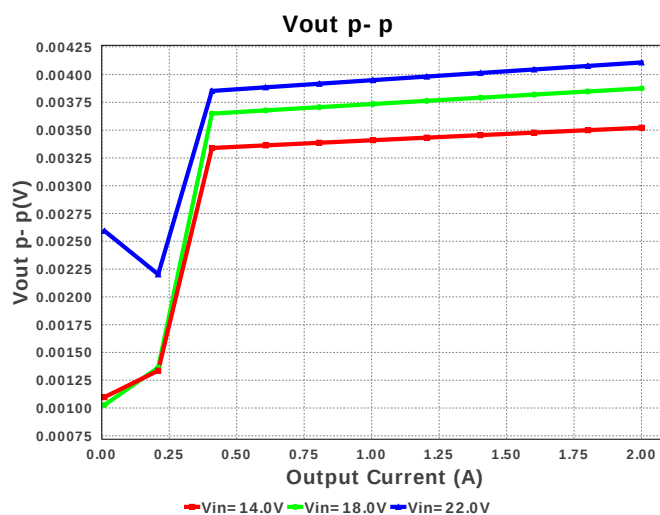
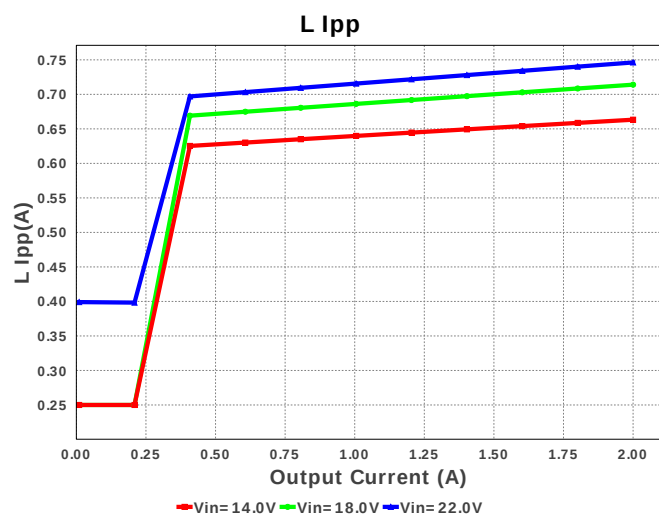
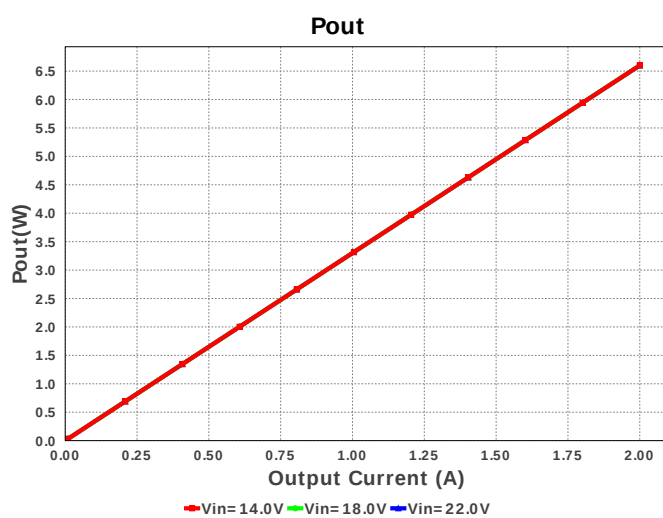
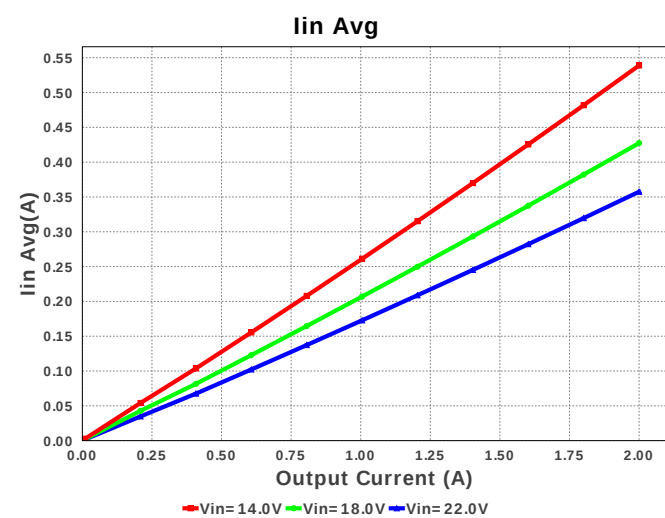
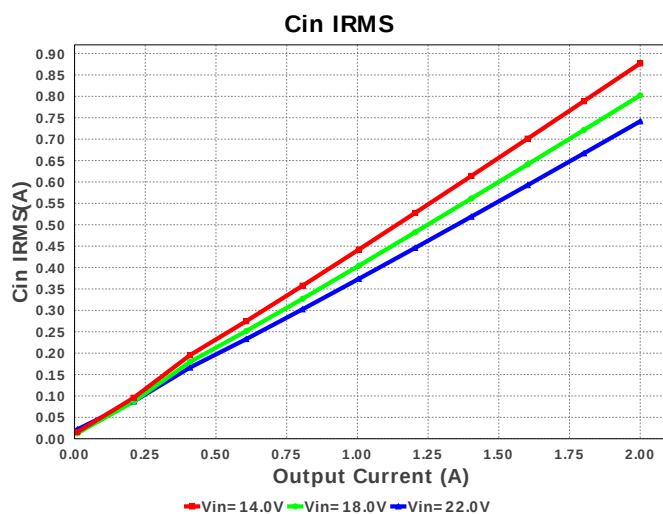
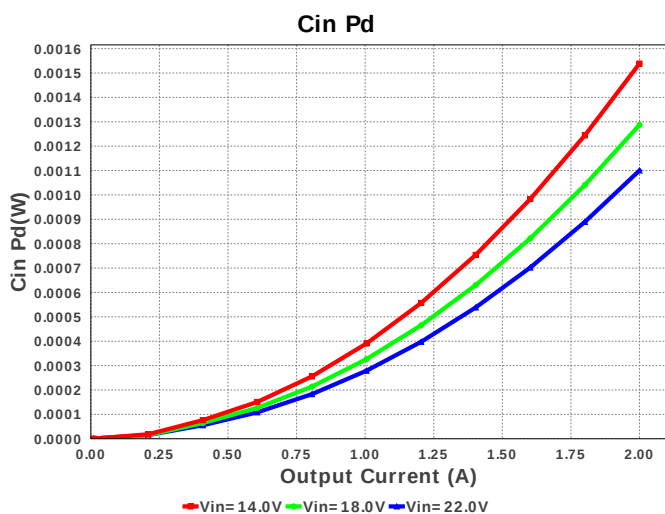
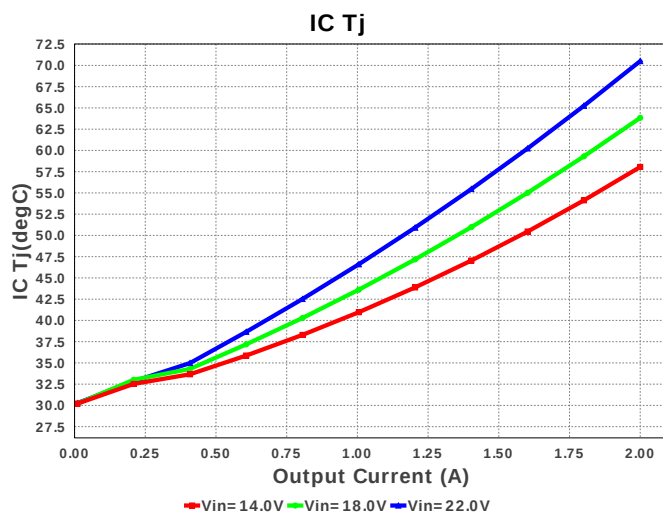
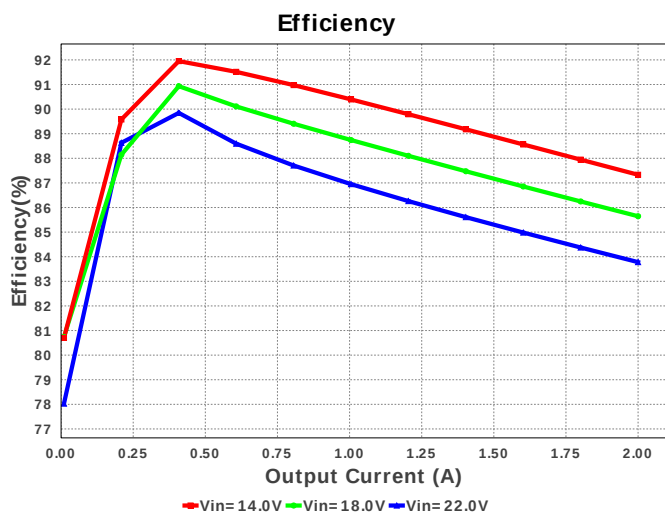
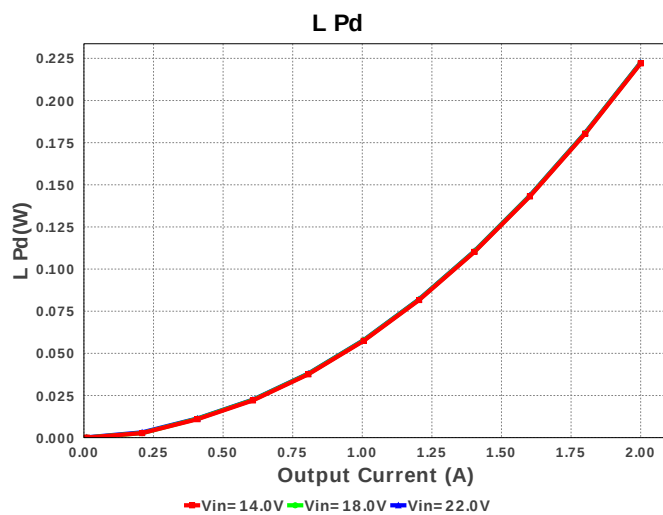
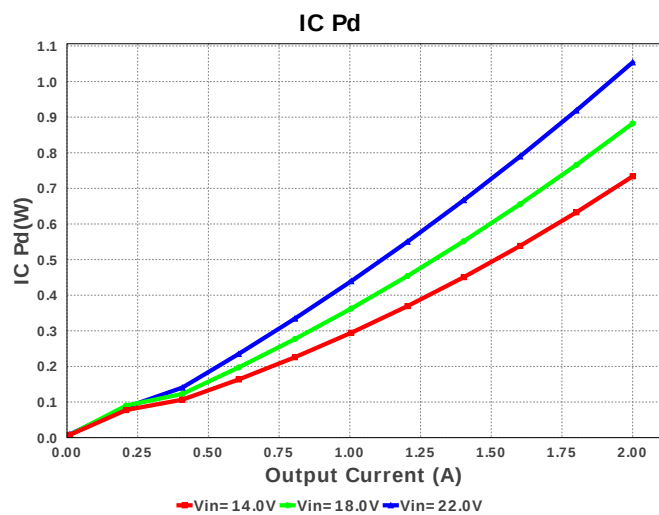
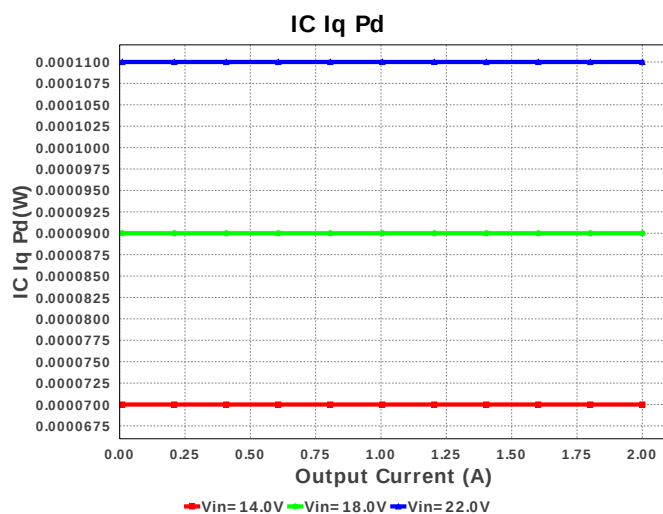
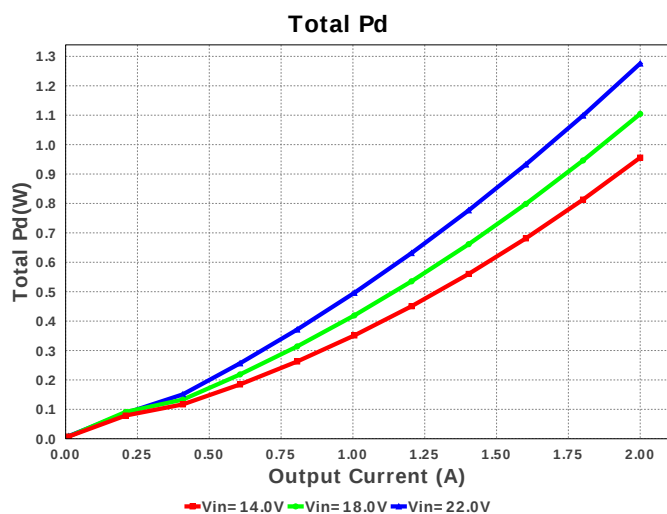
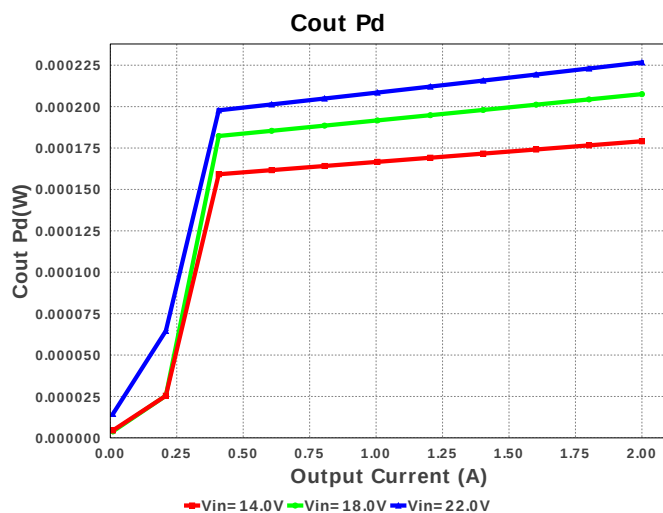
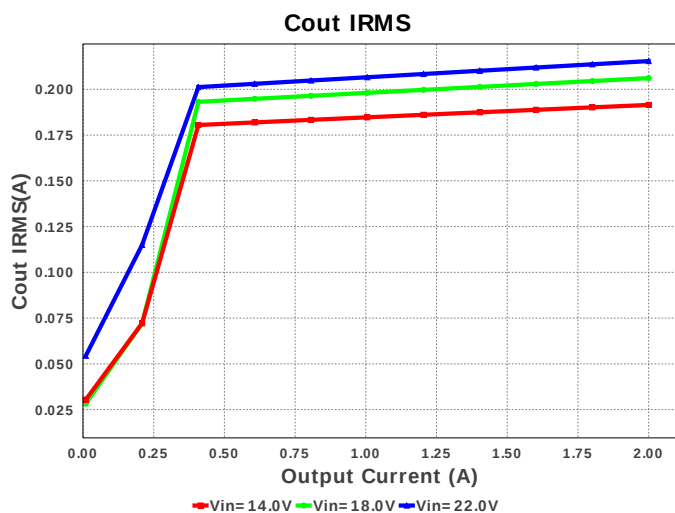


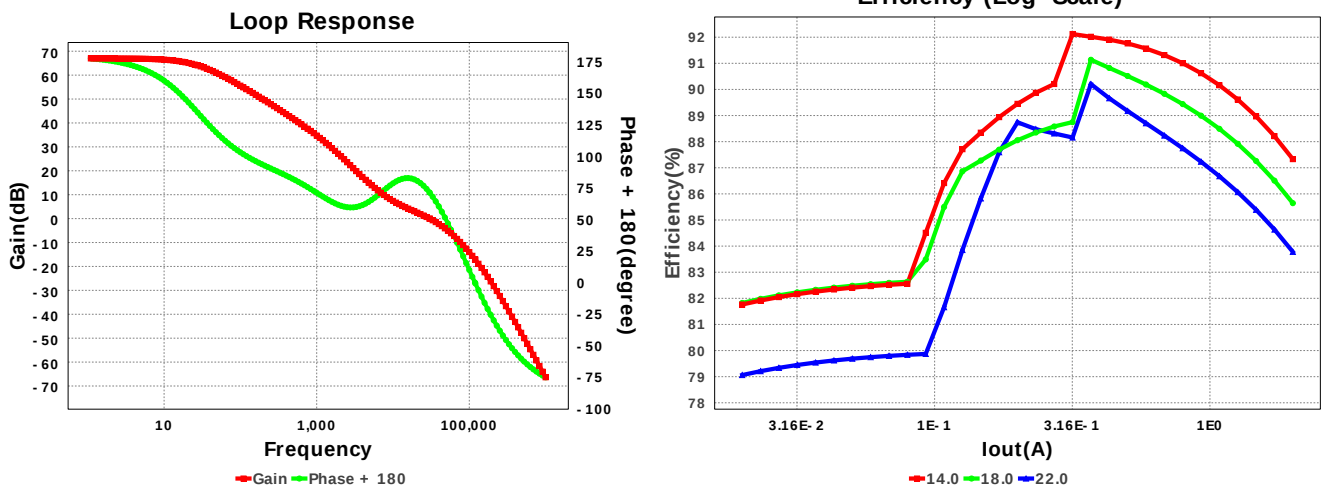
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Topology = Buck
Created = 8/21/16 5:24:31 PM
BOM Cost = \$2.33
BOM Count = 11
Total Pd = 1.28W

#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
9.	Rfbb	Vishay-Dale	CRCW0402442KFKED Series= CRCW..e3	Res= 442.0 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 3 mm ²
10.	Rfbt	Vishay-Dale	CRCW04021M00FKED Series= CRCW..e3	Res= 1000.0 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 3 mm ²
11.	U1	Texas Instruments	LM43602PWPR	Switcher	1	\$1.75	 PWP0016F 59 mm ²









Operating Values

#	Name	Value	Category	Description
1.	Cin IRMS	741.693 mA	Current	Input capacitor RMS ripple current
2.	Cout IRMS	215.417 mA	Current	Output capacitor RMS ripple current
3.	Iin Avg	357.51 mA	Current	Average input current
4.	L Ipp	746.23 mA	Current	Peak-to-peak inductor ripple current
5.	BOM Count	11	General	Total Design BOM count
6.	FootPrint	183.0 mm ²	General	Total Foot Print Area of BOM components
7.	Frequency	500.0 kHz	General	Switching frequency
8.	Mode	CCM	General	Conduction Mode
9.	Pout	6.6 W	General	Total output power
10.	Total BOM	\$2.33	General	Total BOM Cost
11.	Low Freq Gain	66.98 dB	Op_Point	Gain at 10Hz
12.	Vout Actual	3.298 V	Op_Point	Vout Actual calculated based on selected voltage divider resistors
13.	Vout OP	3.3 V	Op_Point	Operational Output Voltage
14.	Cross Freq	30.191 kHz	Op_point	Bode plot crossover frequency
15.	Duty Cycle	16.184 %	Op_point	Duty cycle
16.	Efficiency	83.78 %	Op_point	Steady state efficiency
17.	Gain Marg	-16.976 dB	Op_point	Bode Plot Gain Margin
18.	IC Tj	70.508 degC	Op_point	IC junction temperature
19.	ICThetaJA	38.9 degC/W	Op_point	IC junction-to-ambient thermal resistance
20.	IOUT_OP	2.0 A	Op_point	Iout operating point
21.	Phase Marg	71.405 deg	Op_point	Bode Plot Phase Margin
22.	VIN_OP	22.0 V	Op_point	Vin operating point
23.	Vout p-p	4.109 mV	Op_point	Peak-to-peak output ripple voltage
24.	Cin Pd	1.1 mW	Power	Input capacitor power dissipation
25.	Cout Pd	226.686 μW	Power	Output capacitor power dissipation
26.	IC Iq Pd	110.0 μW	Power	IC Iq Pd
27.	IC Pd	1.054 W	Power	IC power dissipation
28.	L Pd	222.552 mW	Power	Inductor power dissipation
29.	Total Pd	1.276 W	Power	Total Power Dissipation
30.	Vout Tolerance	2.404 %		Vout Tolerance based on IC Tolerance (no load) and voltage divider resistors if applicable

Design Inputs

#	Name	Value	Description
1.	Iout	2.0	Maximum Output Current
2.	VinMax	22.0	Maximum input voltage
3.	VinMin	14.0	Minimum input voltage
4.	Vout	3.3	Output Voltage
5.	base_pn	LM43602	Texas Instruments Base Part Number
6.	source	DC	Input Source Type
7.	ta	30.0	Ambient temperature

Design Assistance

1. LM43602 Product Folder : <http://www.ti.com/product/LM43602> : contains the data sheet and other resources.

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