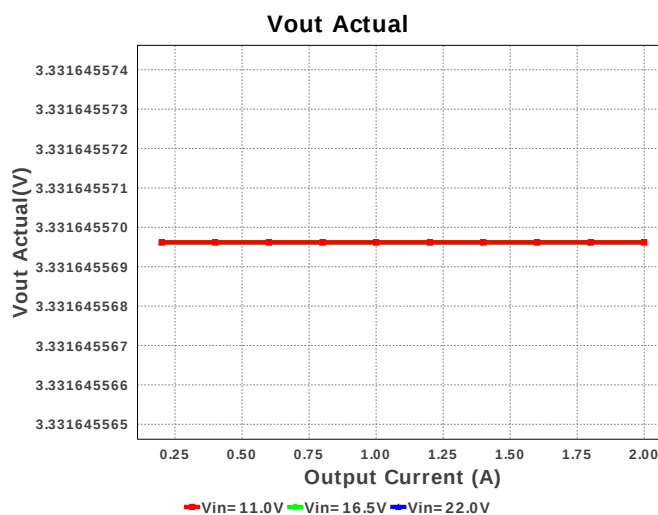
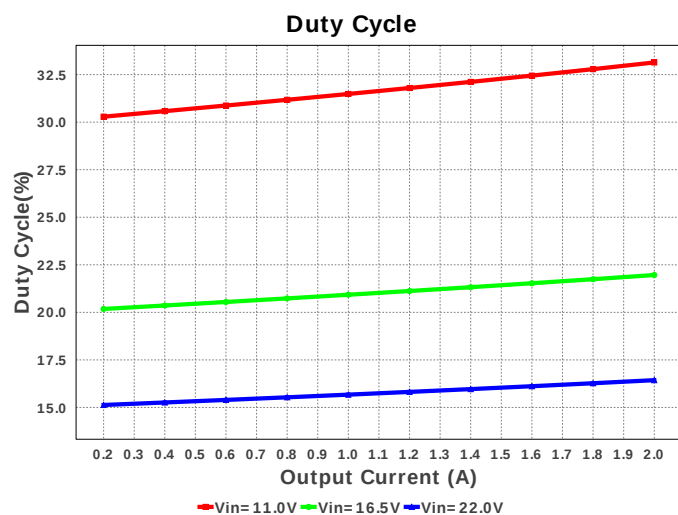
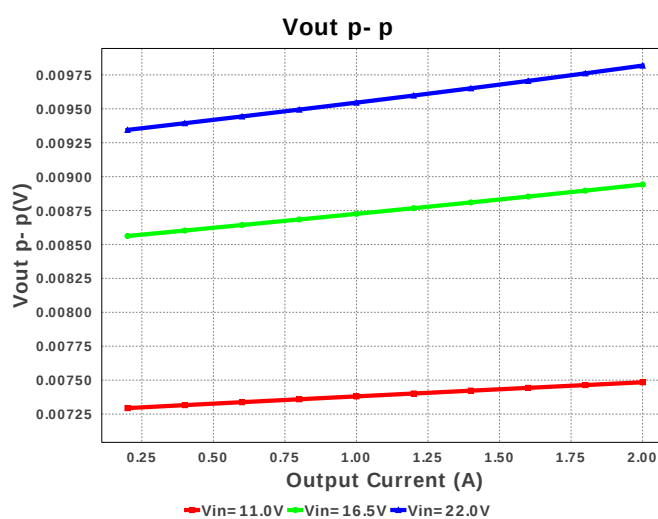
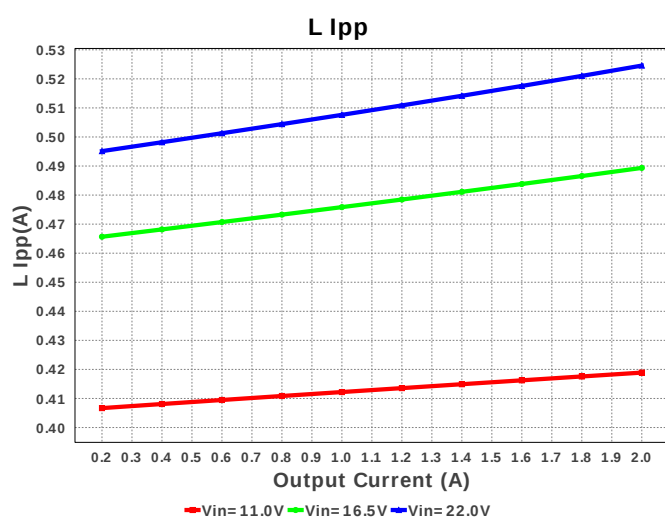
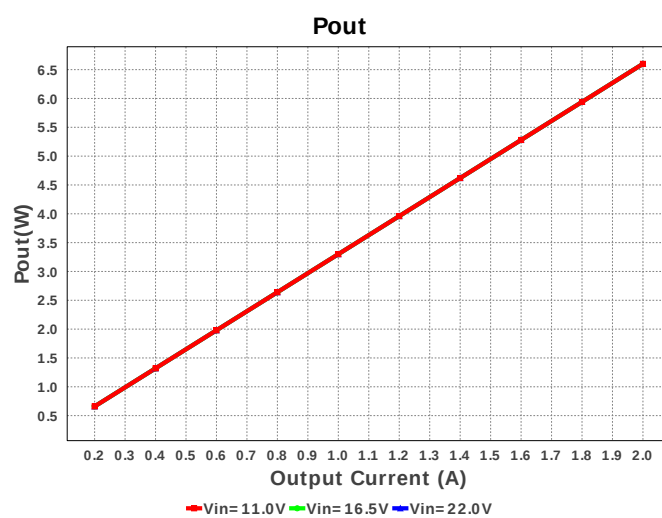
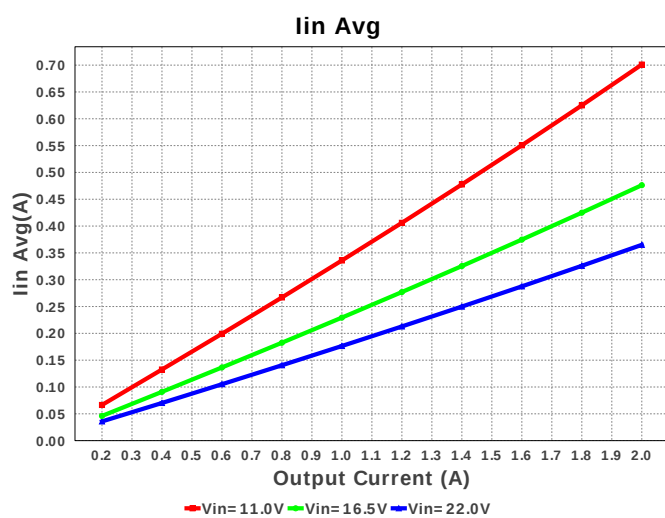
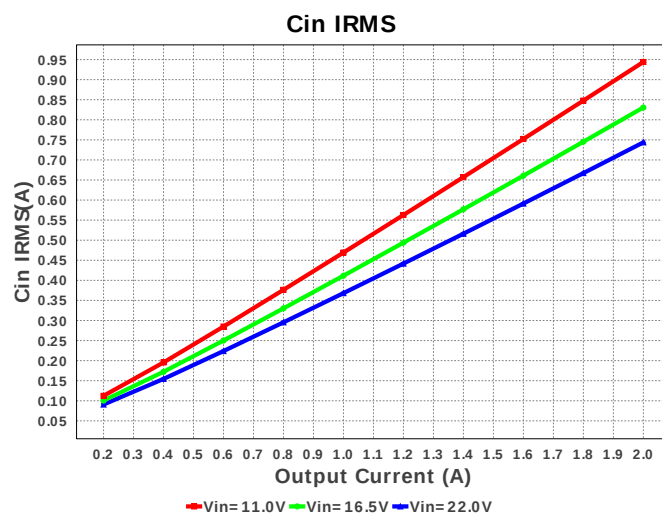
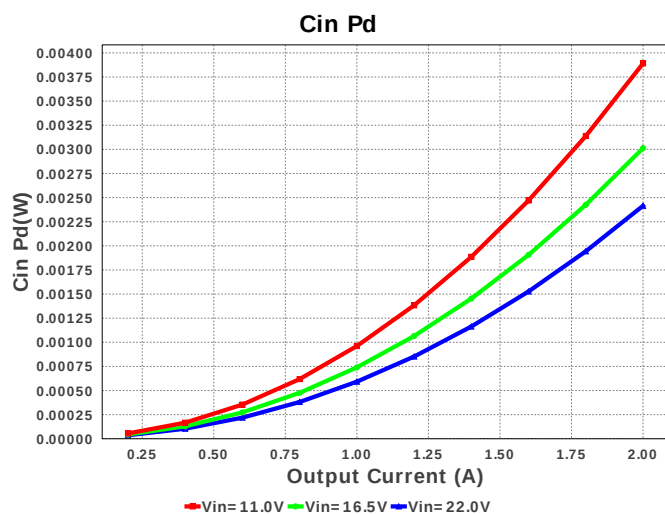
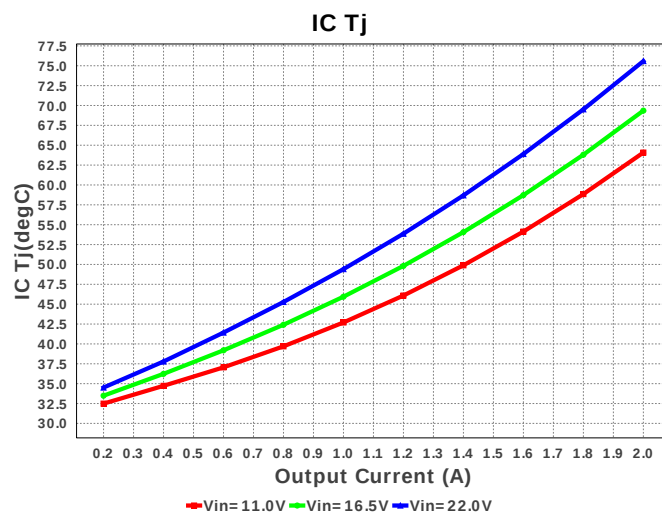
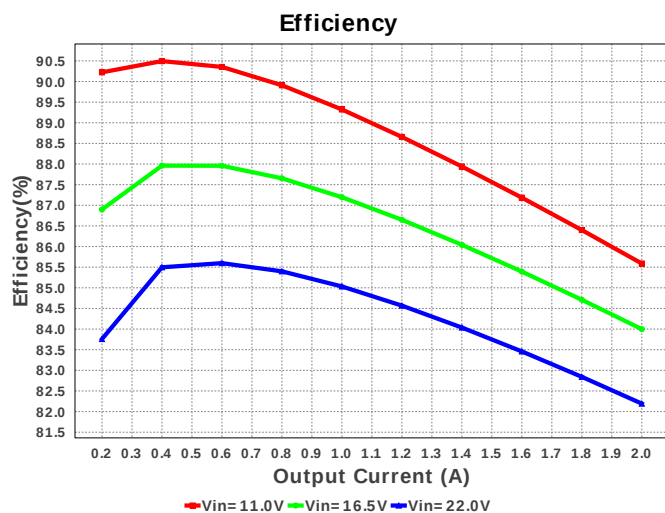
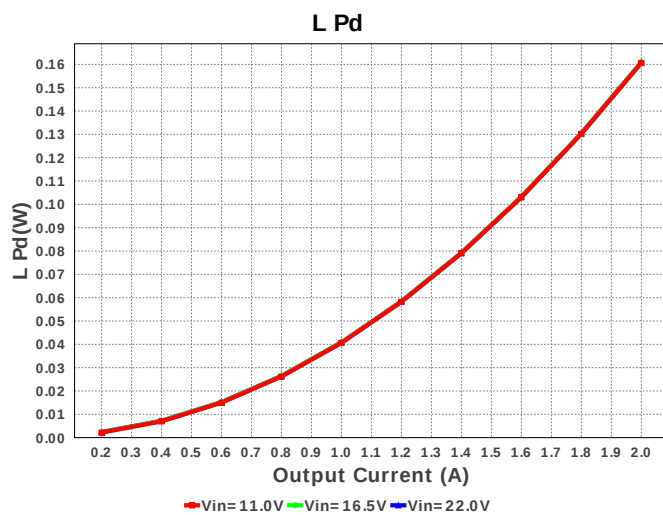
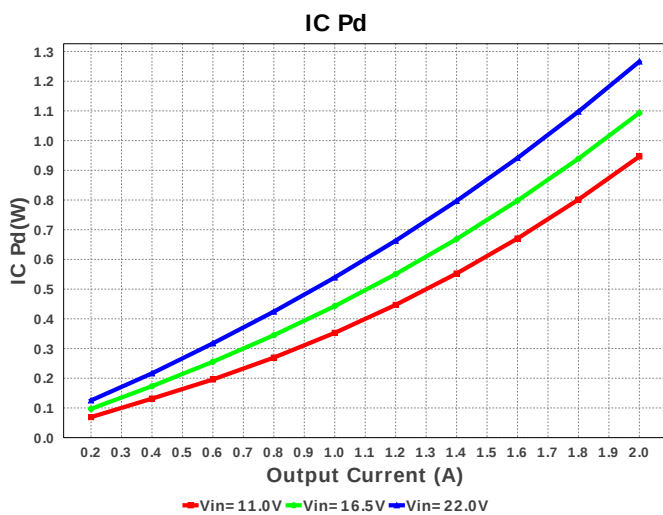
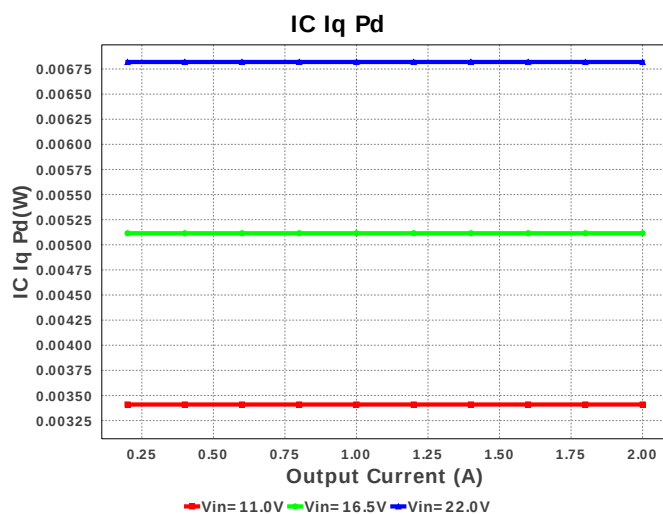
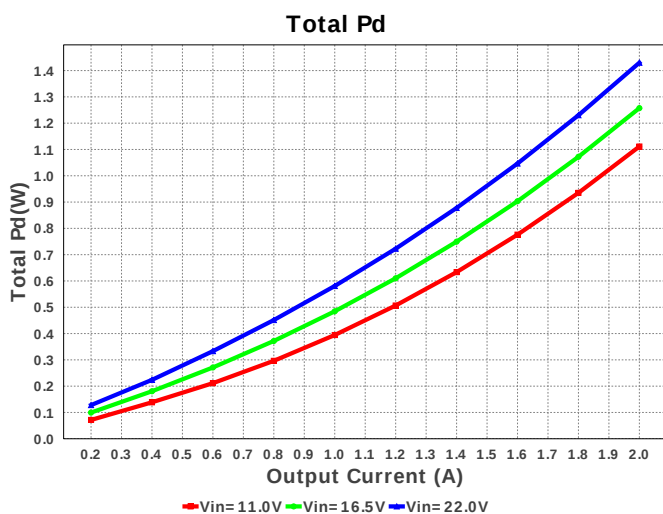
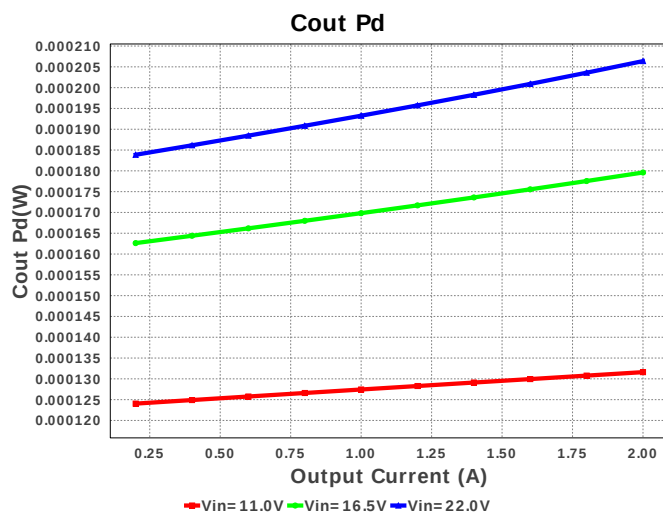
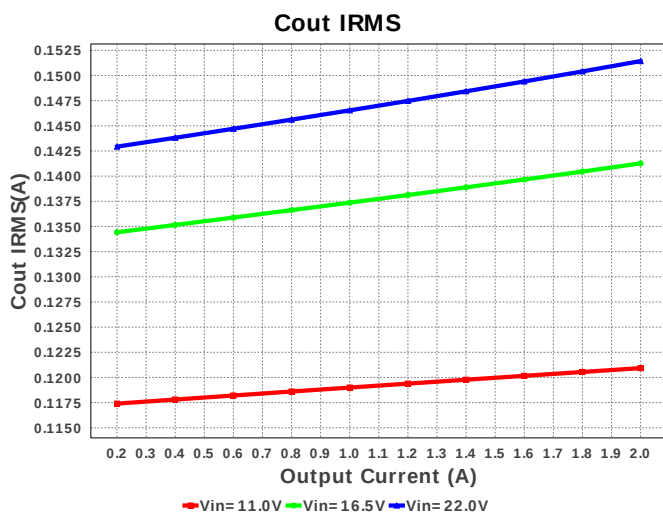


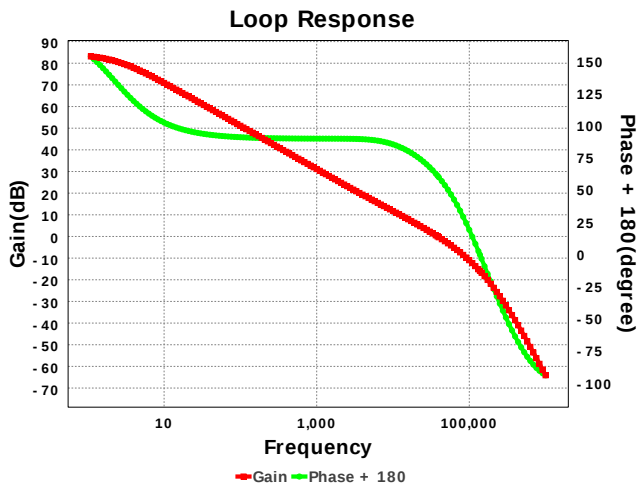


#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
11.	Rpg	Vishay-Dale	CRCW0402100KFKED Series= CRCW..e3	Res= 100.0 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 3 mm ²
12.	U1	Texas Instruments	TPS54334DRCR	Switcher	1	\$0.95	 DRC0010J 16 mm ²









Operating Values

#	Name	Value	Category	Description
1.	Cin IRMS	743.713 mA	Current	Input capacitor RMS ripple current
2.	Cout IRMS	151.43 mA	Current	Output capacitor RMS ripple current
3.	Iin Avg	364.99 mA	Current	Average input current
4.	L Ipp	524.57 mA	Current	Peak-to-peak inductor ripple current
5.	BOM Count	12	General	Total Design BOM count
6.	FootPrint	245.0 mm ²	General	Total Foot Print Area of BOM components
7.	Frequency	570.0 kHz	General	Switching frequency
8.	IC Tolerance	10.0 mV	General	IC Feedback Tolerance
9.	Mode	CCM	General	Conduction Mode
10.	Pout	6.6 W	General	Total output power
11.	Total BOM	\$1.39	General	Total BOM Cost
12.	ICThetaJA Effective	36.0 degC/W	Op_Point	Effective IC Junction-to-Ambient Thermal Resistance
13.	Low Freq Gain	83.135 dB	Op_Point	Gain at 10Hz
14.	Vout Actual	3.332 V	Op_Point	Vout Actual calculated based on selected voltage divider resistors
15.	Vout OP	3.3 V	Op_Point	Operational Output Voltage
16.	Cross Freq	38.314 kHz	Op_point	Bode plot crossover frequency
17.	Duty Cycle	16.434 %	Op_point	Duty cycle
18.	Efficiency	82.193 %	Op_point	Steady state efficiency
19.	Gain Marg	-15.927 dB	Op_point	Bode Plot Gain Margin
20.	IC Tj	75.585 degC	Op_point	IC junction temperature
21.	IOUT_OP	2.0 A	Op_point	Iout operating point
22.	Phase Marg	61.421 deg	Op_point	Bode Plot Phase Margin
23.	VIN_OP	22.0 V	Op_point	Vin operating point
24.	Vout p-p	9.818 mV	Op_point	Peak-to-peak output ripple voltage
25.	Cin Pd	2.415 mW	Power	Input capacitor power dissipation
26.	Cout Pd	206.38 μ W	Power	Output capacitor power dissipation
27.	IC Iq Pd	6.82 mW	Power	IC Iq Pd
28.	IC Pd	1.266 W	Power	IC power dissipation
29.	L Pd	160.917 mW	Power	Inductor power dissipation
30.	Total Pd	1.43 W	Power	Total Power Dissipation
31.	Vout Tolerance	2.804 %		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	11.0	Minimum input voltage
4.	Vout	3.3	Output Voltage
5.	base_pn	TPS54334	Base Product Number
6.	source	DC	Input Source Type
7.	Ta	30.0	Ambient temperature

Design Assistance

1. **TPS54334** Product Folder : <http://www.ti.com/product/TPS54334> : contains the data sheet and other resources.

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