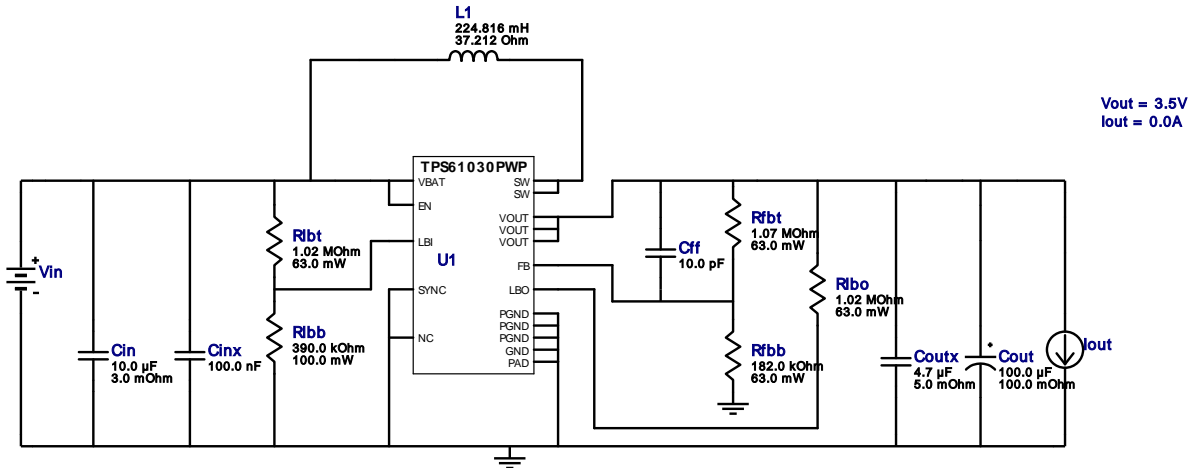



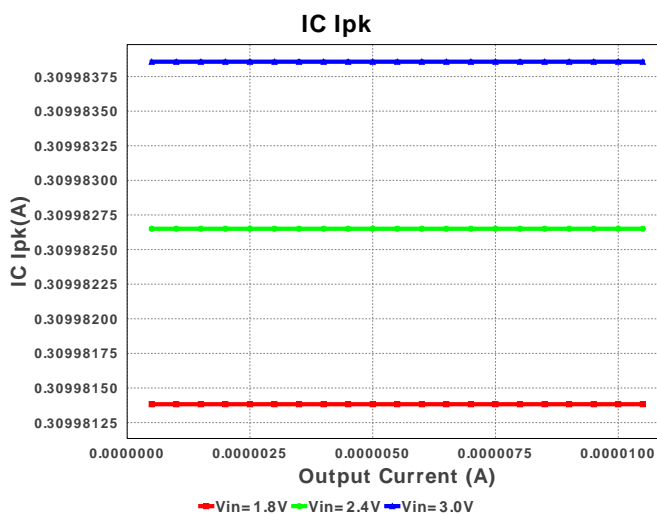
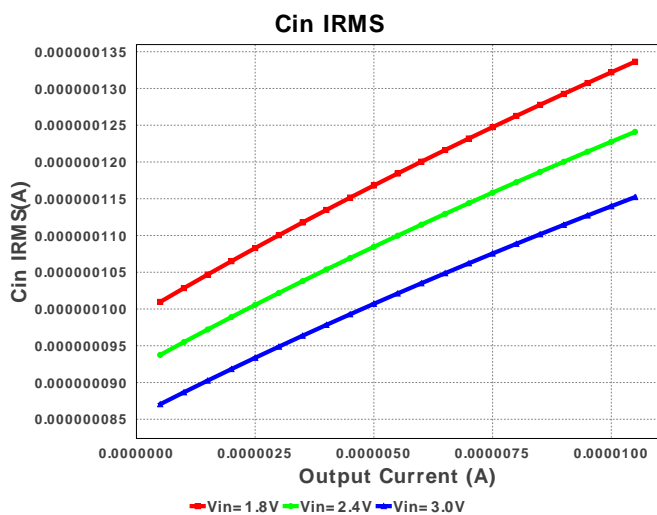
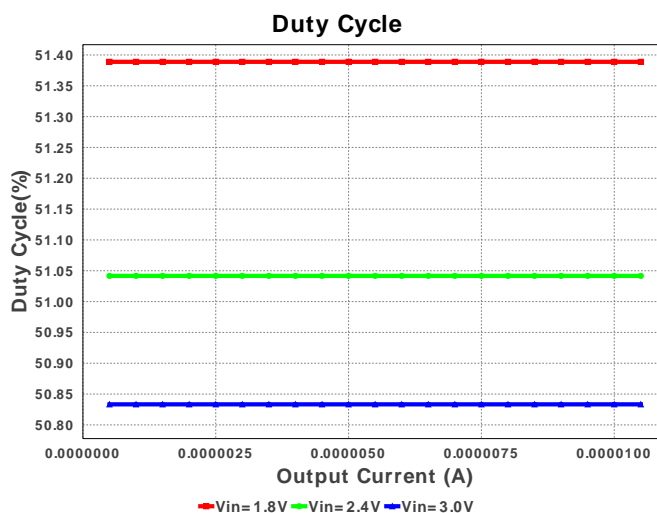
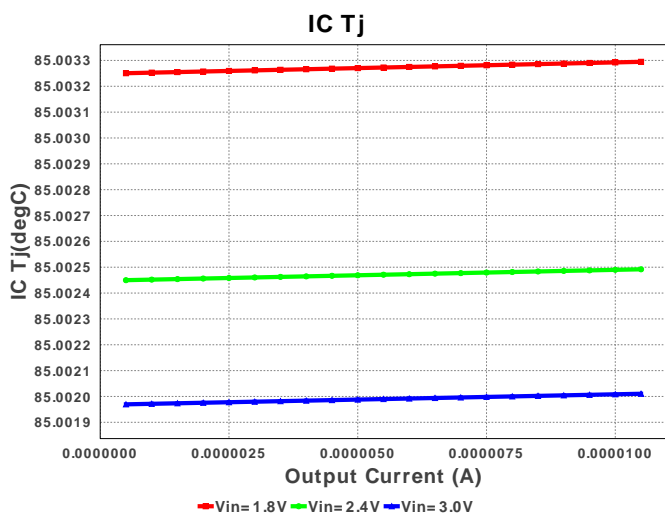
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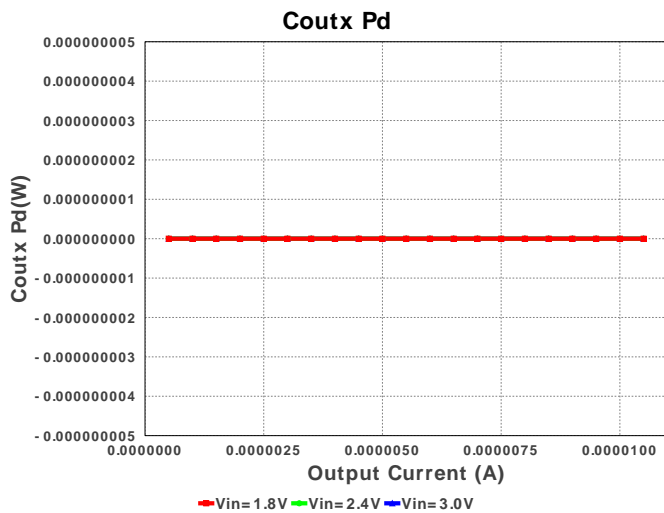
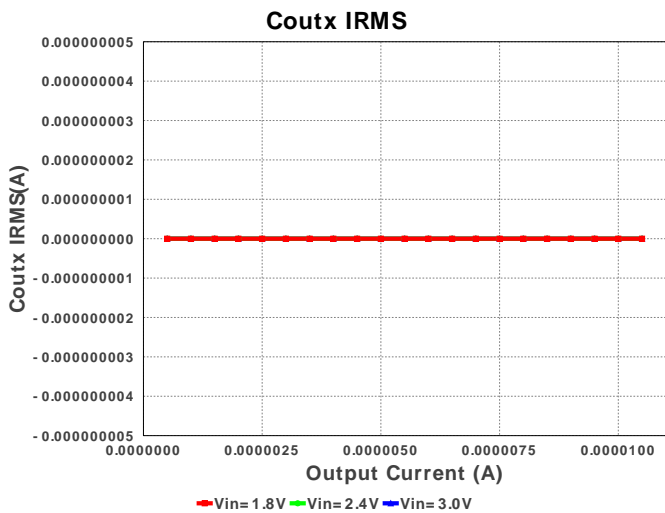
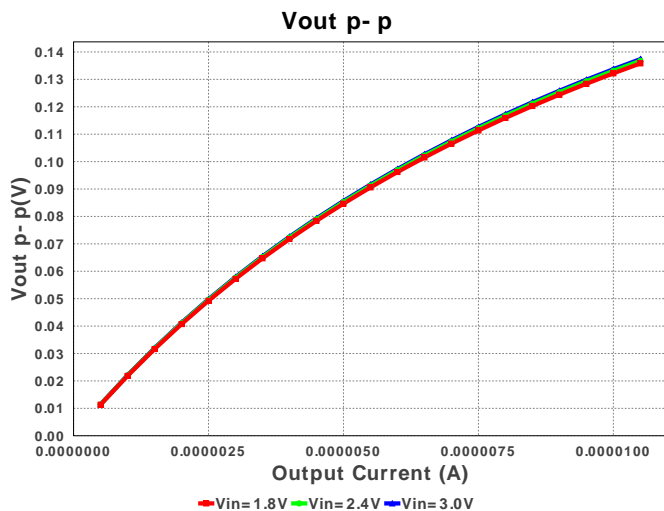
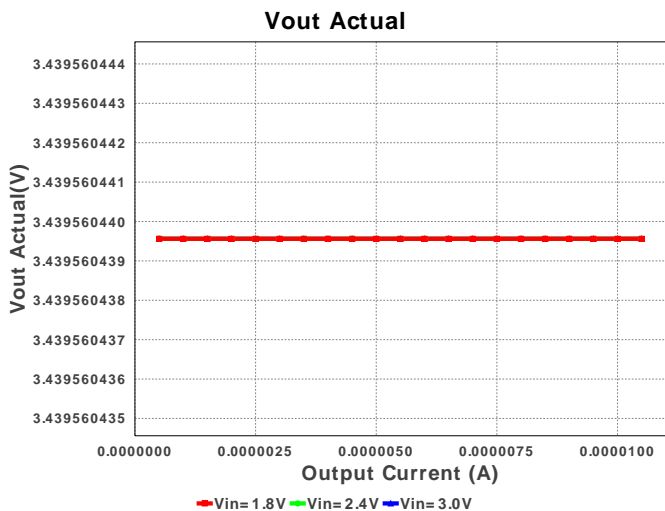
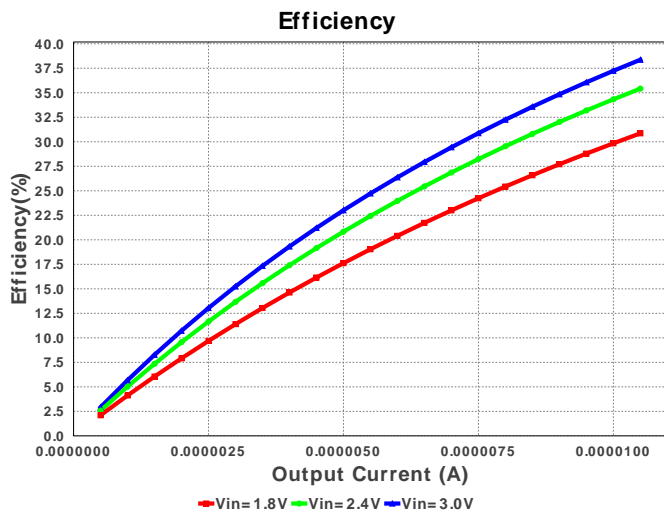
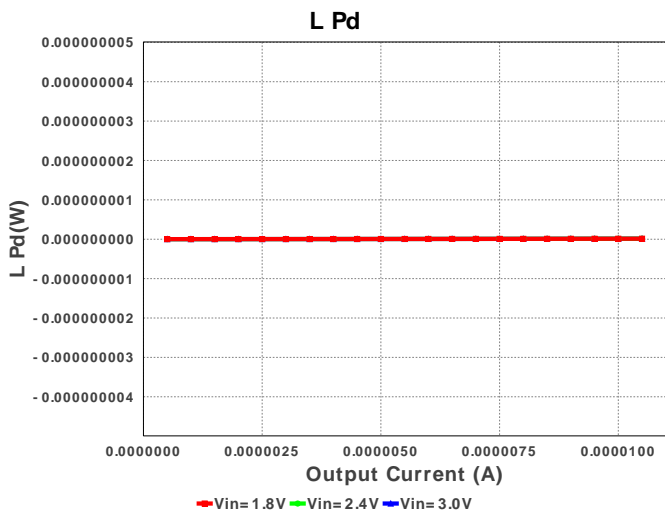
 Design : 1732623/913 TPS61030PWPR
 TPS61030PWPR 1.8V-3.0V to 3.50V @ 1.0E-5A

My Comments
 No comments

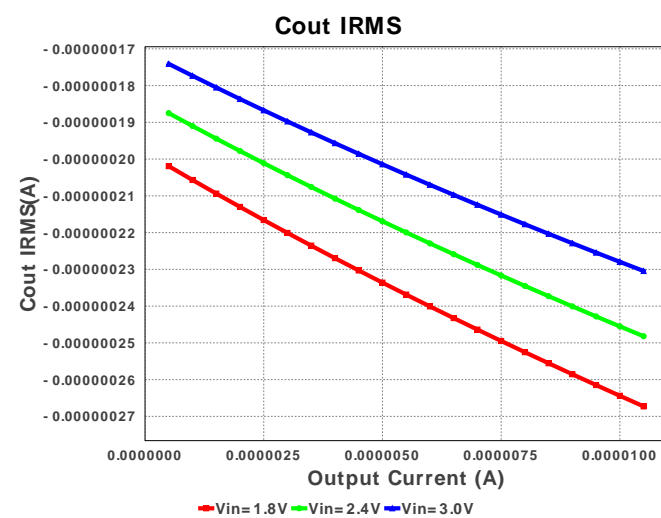
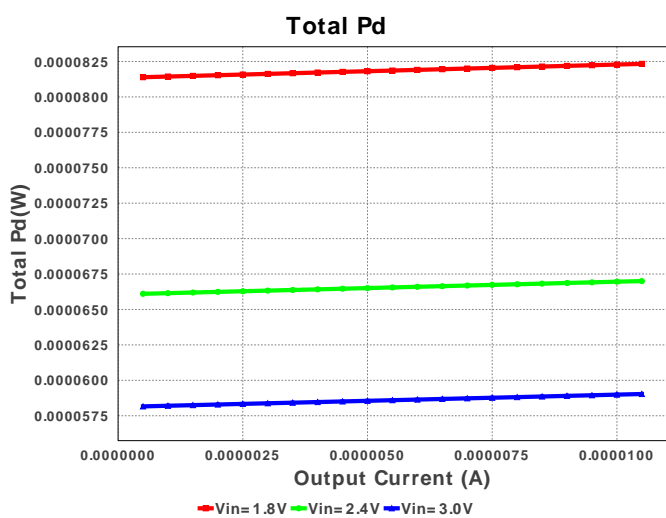
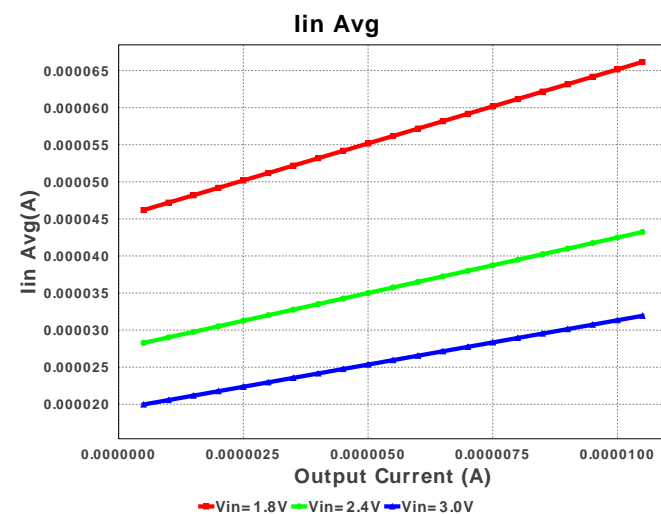
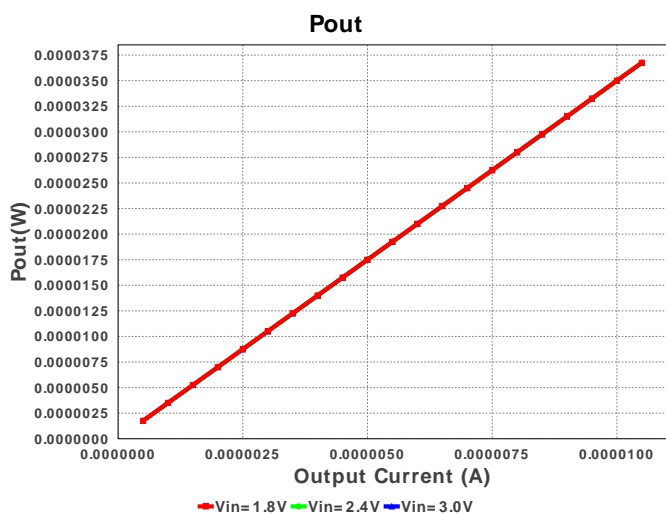
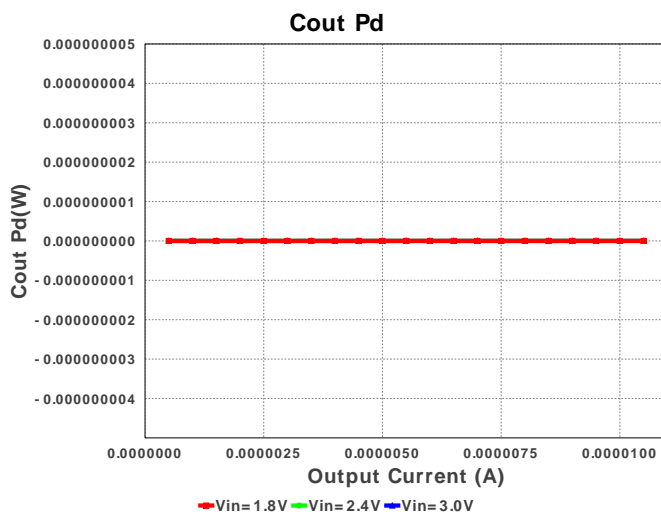
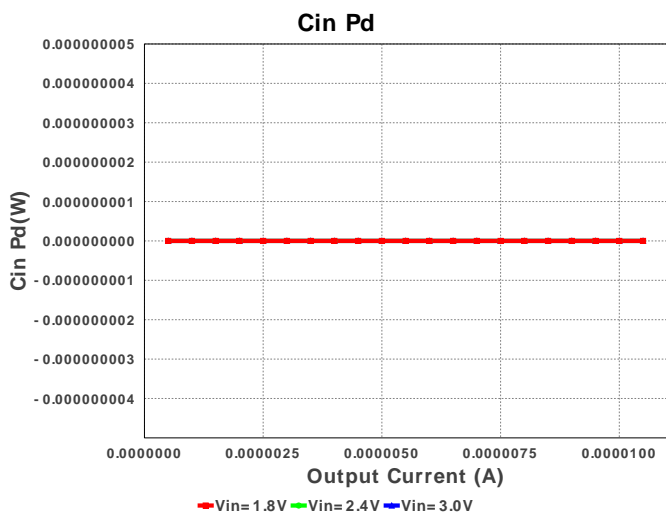
Electrical BOM

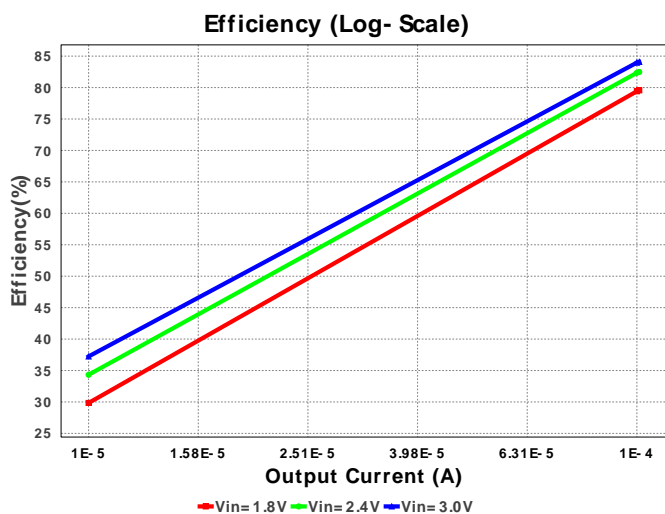
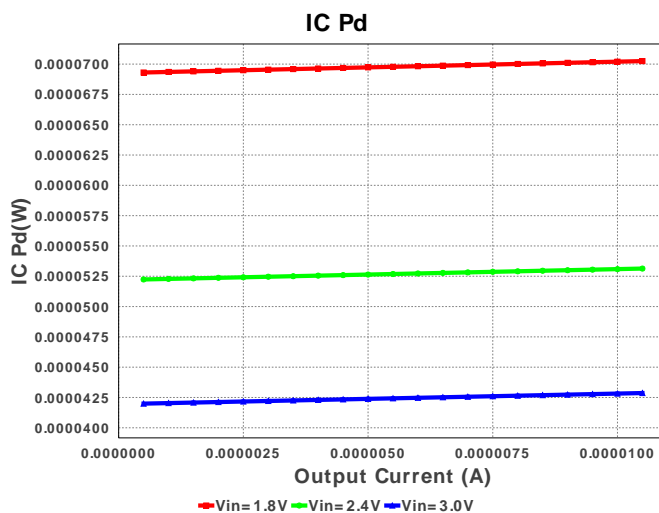
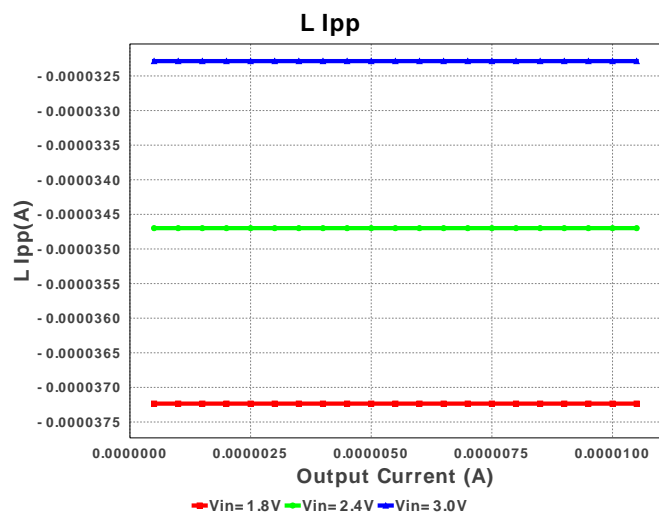
#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
1.	Cff	Kemet	C0805C100M4GACTU Series= COG/NPO	Cap= 10.0 pF VDC= 16.0 V IRMS= 0.0 A	1	\$0.01	0805 7 mm ²
2.	Cin	MuRata	GRM188R60G106ME47D Series= X5R	Cap= 10.0 uF ESR= 3.0 mOhm VDC= 4.0 V IRMS= 3.0 A	1	\$0.02	0603 5 mm ²
3.	Cinx	MuRata	GRM155R60J104KA01D Series= X5R	Cap= 100.0 nF VDC= 6.3 V IRMS= 0.0 A	1	\$0.01	0402 3 mm ²
4.	Cout	Panasonic	6TPH100MAEA Series= ?	Cap= 100.0 uF ESR= 100.0 mOhm VDC= 6.3 V IRMS= 670.0 mA	1	\$0.34	CAPSMT_6_A09 11 mm ²
5.	Coutx	MuRata	GRM188R60J475KE19D Series= X5R	Cap= 4.7 uF ESR= 5.0 mOhm VDC= 6.3 V IRMS= 2.0 A	1	\$0.01	0603 5 mm ²
6.	L1	CUSTOM	CUSTOM	L= 224.816 mH DCR= 37.212 Ohm	1	NA	CUSTOM 0 mm ²
7.	Rfbb	Vishay-Dale	CRCW0402182KFKED Series= CRCW..e3	Res= 182.0 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	0402 3 mm ²
8.	Rfbt	Vishay-Dale	CRCW04021M07FKED Series= CRCW..e3	Res= 1.07 MOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	0402 3 mm ²
9.	Rlbb	Yageo America	RC0603FR-07390KL Series= ?	Res= 390.0 kOhm Power= 100.0 mW Tolerance= 1.0%	1	\$0.01	0603 5 mm ²
10.	Rlbo	Vishay-Dale	CRCW04021M02FKED Series= CRCW..e3	Res= 1.02 MOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	0402 3 mm ²

#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
11.	R1bt	Vishay-Dale	CRCW04021M02FKED Series= CRCW...e3	Res= 1.02 MOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	0402 3 mm ²
12.	U1	Texas Instruments	TPS61030PWPR	Switcher	1	\$1.25	 PWP0016K_N 59 mm ²









Operating Values

#	Name	Value	Category	Description
1.	Cin IRMS	132.199 nA	Current	Input capacitor RMS ripple current
2.	Cout IRMS	-264.399 nA	Current	Output capacitor RMS ripple current
3.	Coutx IRMS	2.0 A	Current	Output capacitor_x RMS ripple current
4.	IC Ipk	309.981 mA	Current	Peak switch current in IC
5.	Iin Avg	65.157 μ A	Current	Average input current
6.	L Ipp	-37.234 μ A	Current	Peak-to-peak inductor ripple current
7.	BOM Count	12	General	Total Design BOM count
8.	FootPrint	156.0 mm ²	General	Total Foot Print Area of BOM components
9.	Frequency	756.349 mHz	General	Switching frequency
10.	Pout	35.0 μ W	General	Total output power
11.	Total BOM	\$0.0	General	Total BOM Cost
12.	Vout Actual	3.44 V	Op_Point	Vout Actual calculated based on selected voltage divider resistors
13.	Duty Cycle	51.389 %	Op_point	Duty cycle
14.	Efficiency	29.842 %	Op_point	Steady state efficiency
15.	IC Tj	85.003 degC	Op_point	IC junction temperature
16.	ICThetaJA	46.9 degC/W	Op_point	IC junction-to-ambient thermal resistance
17.	IOUT_OP	10.0 μ A	Op_point	Iout operating point
18.	VIN_OP	1.8 V	Op_point	Vin operating point
19.	Vout p-p	132.194 mV	Op_point	Peak-to-peak output ripple voltage
20.	Cin Pd	0.052 fW	Power	Input capacitor power dissipation
21.	Cout Pd	6.991 fW	Power	Output capacitor power dissipation
22.	Coutx Pd	0.0 W	Power	Output capacitor_x power loss
23.	IC Pd	70.201 μ W	Power	IC power dissipation
24.	L Pd	13.029 pW	Power	Inductor power dissipation
25.	Total Pd	82.283 μ W	Power	Total Power Dissipation
26.	Vout Tolerance	5.796 %		Vout Tolerance based on IC Tolerance (no load) and voltage divider resistors if applicable

Design Inputs

#	Name	Value	Description
1.	Iout	10.0 μ	Maximum Output Current
2.	VinMax	3.0	Maximum input voltage
3.	VinMin	1.8	Minimum input voltage
4.	Vout	3.5	Output Voltage
5.	base_pn	TPS61030	Texas Instruments Base Part Number
6.	source	DC	Input Source Type
7.	ta	85.0	Ambient temperature

Design Assistance

1. TPS61030 Product Folder : <http://www.ti.com/product/TPS61030> : contains the data sheet and other resources.

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