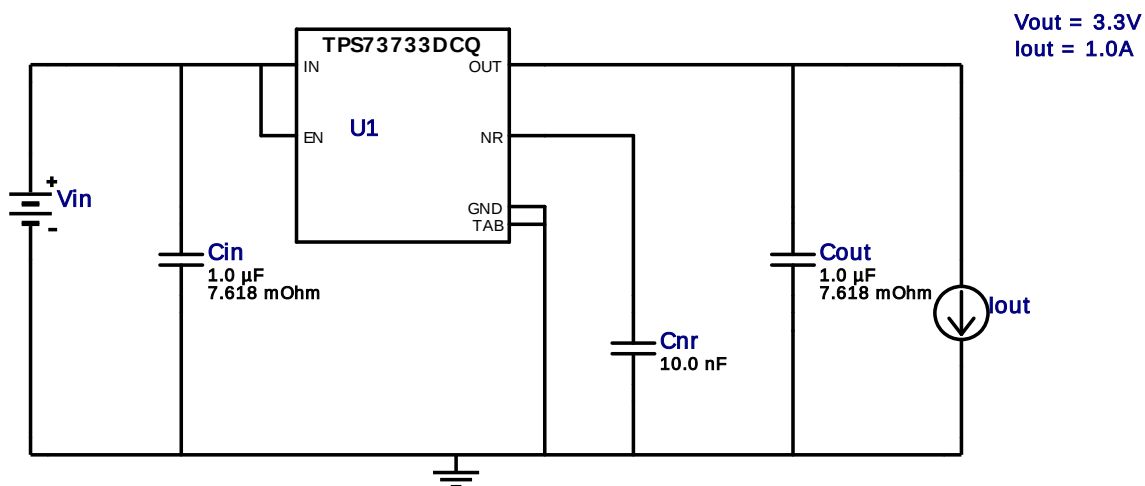


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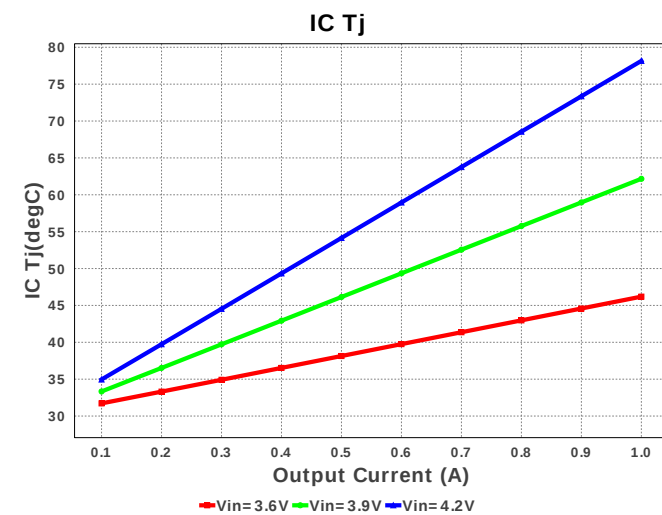
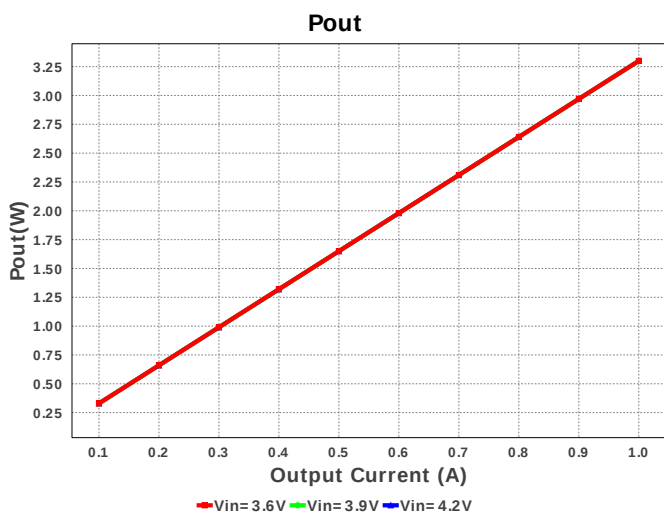
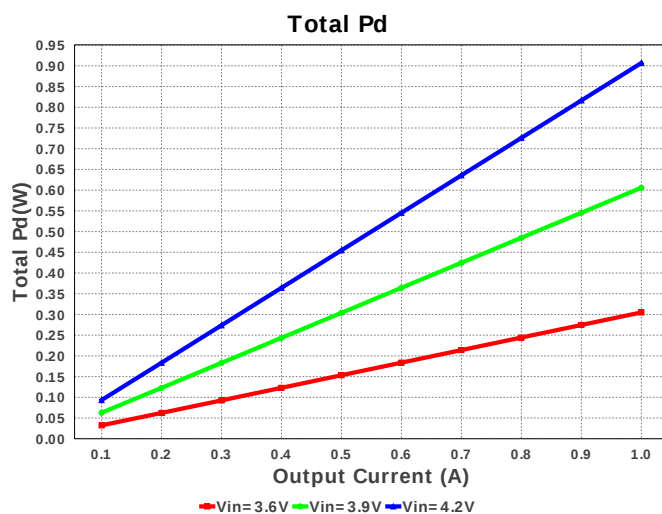
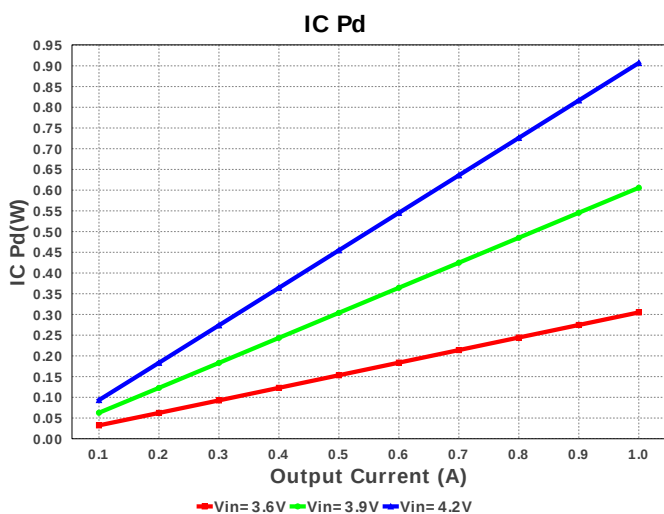
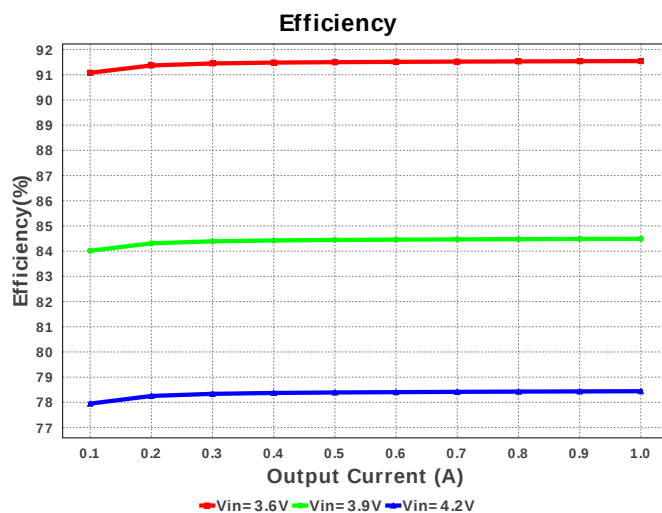
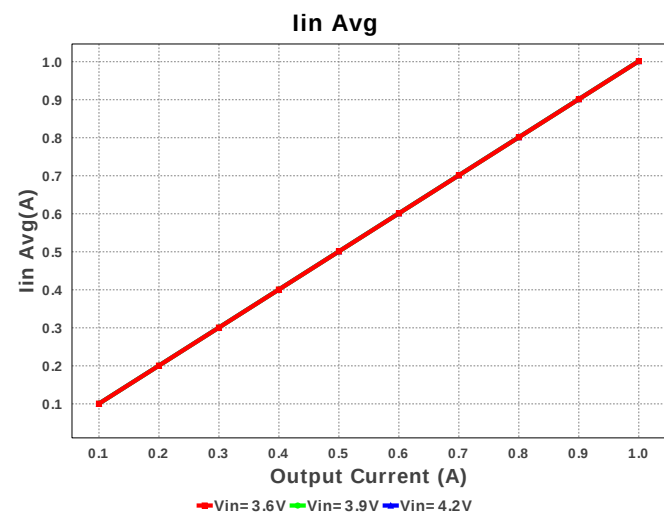
Design : 3893481/29 TPS73733DCQR
TPS73733DCQR 3.6V-4.2V to 3.30V @ 1.0A

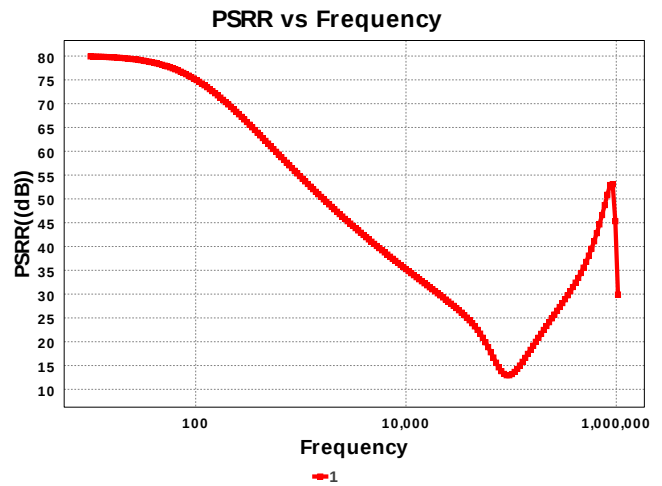
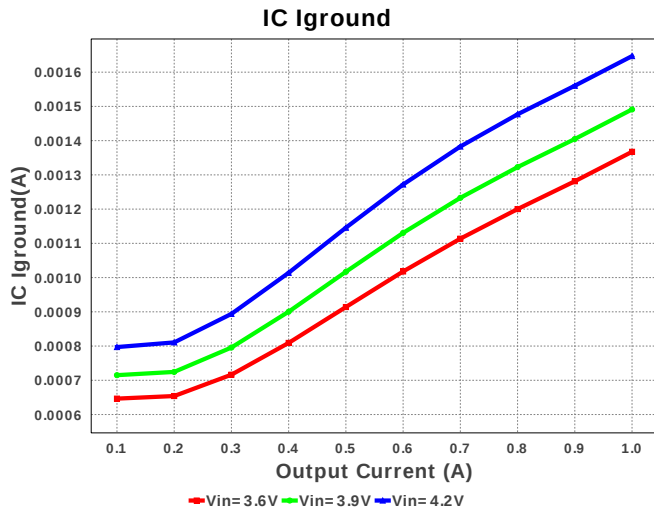


My Comments
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Electrical BOM

#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
1.	Cin	TDK	C1005X5R0J105M Series= X5R	Cap= 1.0 uF ESR= 7.618 mOhm VDC= 6.3 V IRMS= 0.0 A	1	\$0.01	0402 3 mm ²
2.	Cnr	MuRata	GRM033R60J103KA01D Series= X5R	Cap= 10.0 nF VDC= 6.3 V IRMS= 0.0 A	1	\$0.01	0201 2 mm ²
3.	Cout	TDK	C1005X5R0J105M Series= X5R	Cap= 1.0 uF ESR= 7.618 mOhm VDC= 6.3 V IRMS= 0.0 A	1	\$0.01	0402 3 mm ²
4.	U1	Texas Instruments	TPS73733DCQR	Switcher	1	\$0.58	DCQ0006A 77 mm ²





Operating Values

#	Name	Value	Category	Description
1.	IC Iground	1.647 mA	Current	IC ground current
2.	Iin Avg	1.002 A	Current	Average input current
3.	BOM Count	4	General	Total Design BOM count
4.	FootPrint	85.0 mm ²	General	Total Foot Print Area of BOM components
5.	IC Tolerance	99.0 mV	General	IC Feedback Tolerance
6.	Output Noise RMS	28.833 μ V	General	Noise RMS
7.	Pout	3.3 W	General	Total output power
8.	Total BOM	\$0.61	General	Total BOM Cost
9.	Vin p-p	42.0 mV	Op_Point	Input Source ripple voltage
10.	Vout OP	3.3 V	Op_Point	Operational Output Voltage
11.	Efficiency	78.442 %	Op_point	Steady state efficiency
12.	IC Tj	78.157 degC	Op_point	IC junction temperature
13.	ICThetaJA	53.1 degC/W	Op_point	IC junction-to-ambient thermal resistance
14.	IOUT_OP	1.0 A	Op_point	Iout operating point
15.	Input Ripple Frequency	100.0 kHz	Op_point	Input Source Ripple Frequency for PSRR Calculation
16.	PSRR est.	-13.101 dB	Op_point	Power Supply Rejection Ratio, estimated
17.	VIN_OP	4.2 V	Op_point	Vin operating point
18.	Vout p-p	9.294 mV	Op_point	Peak-to-peak output ripple voltage
19.	IC Pd	906.917 mW	Power	IC power dissipation
20.	Total Pd	906.917 mW	Power	Total Power Dissipation
21.	Vout Tolerance	3.0 %		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	4.2	Maximum input voltage
3.	VinMin	3.6	Minimum input voltage
4.	Vout	3.3	Output Voltage
5.	base_pn	TPS73733	Texas Instruments Base Part Number
6.	source	DC	Input Source Type
7.	ta	30.0	Ambient temperature

Design Assistance

-
- TPS73733 Product Folder : <http://www.ti.com/product/tps737> : 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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