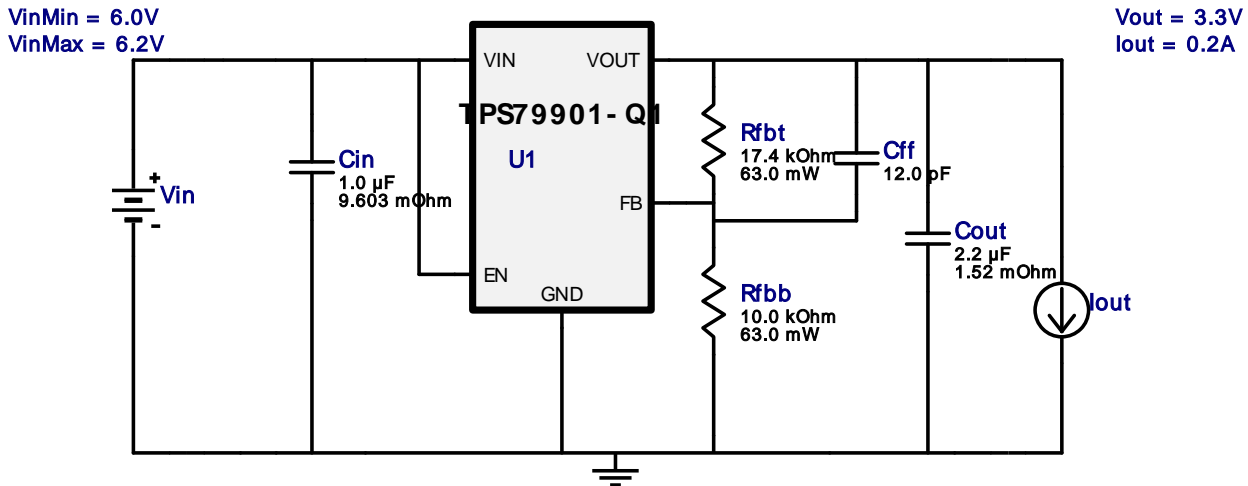


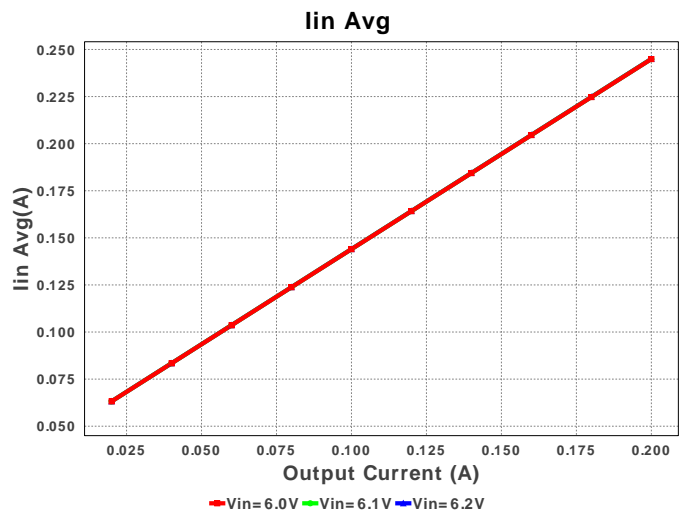
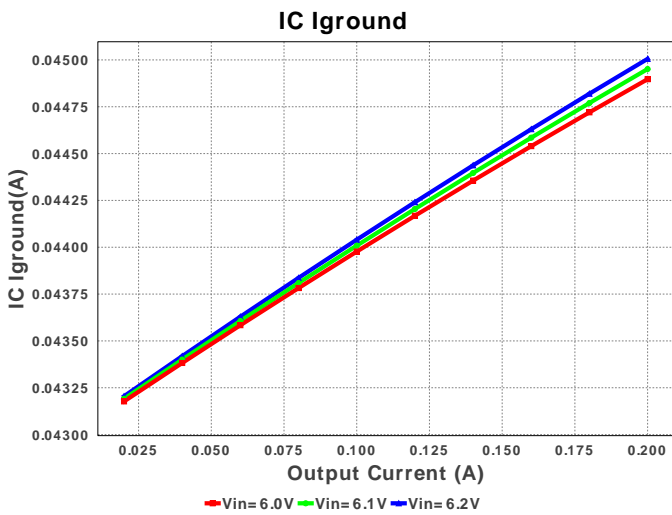
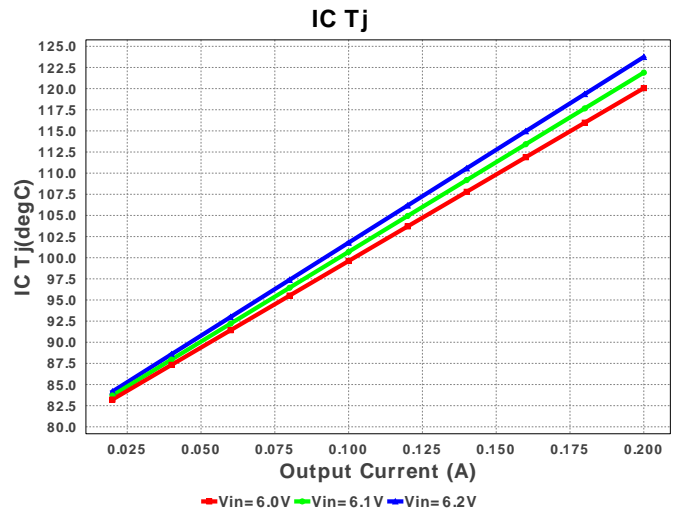
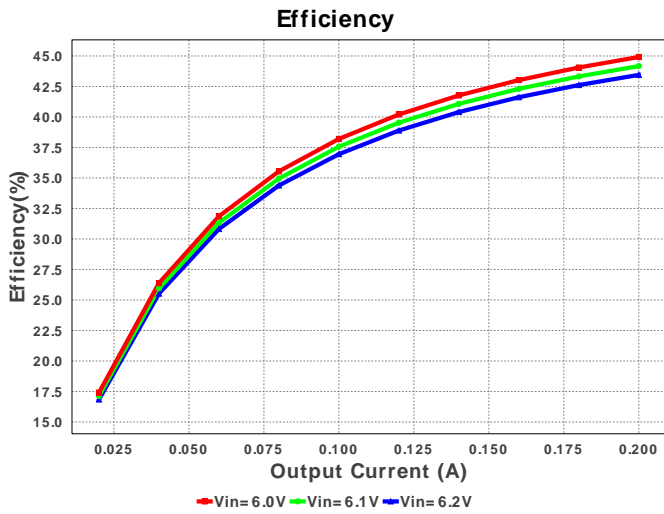
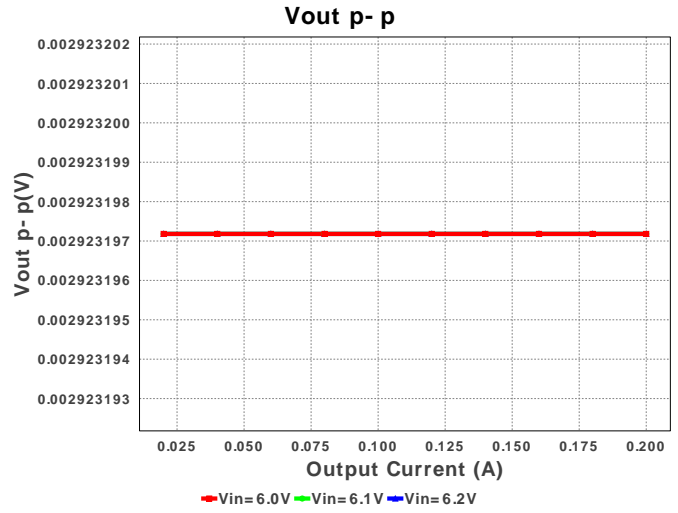
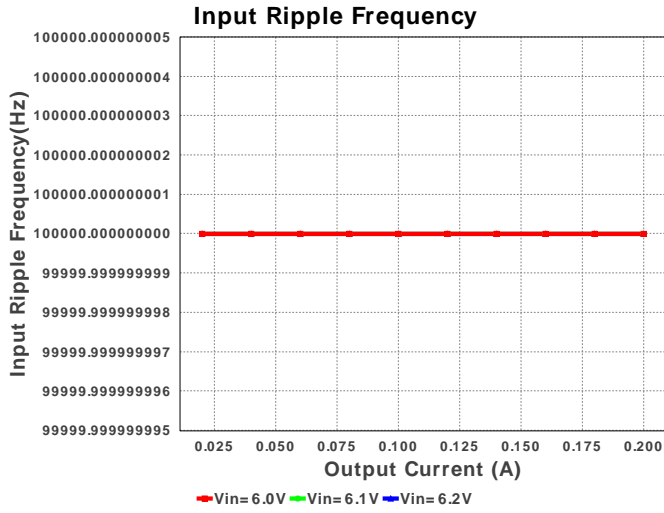
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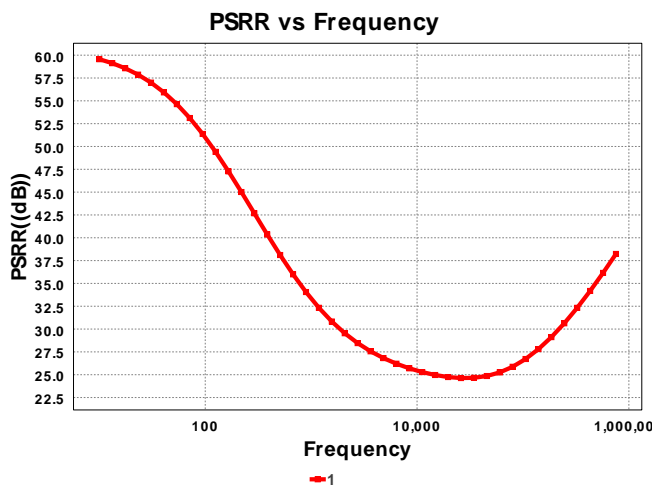
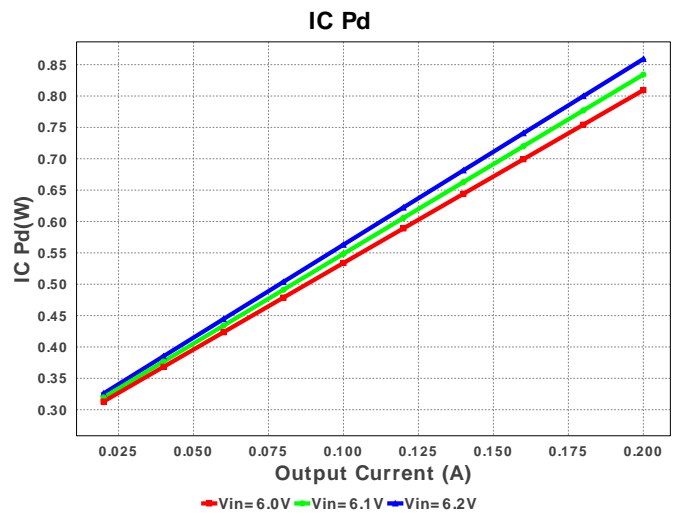
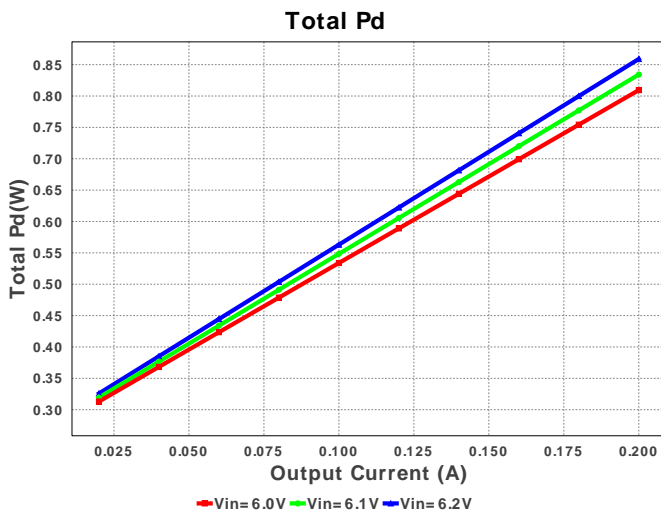
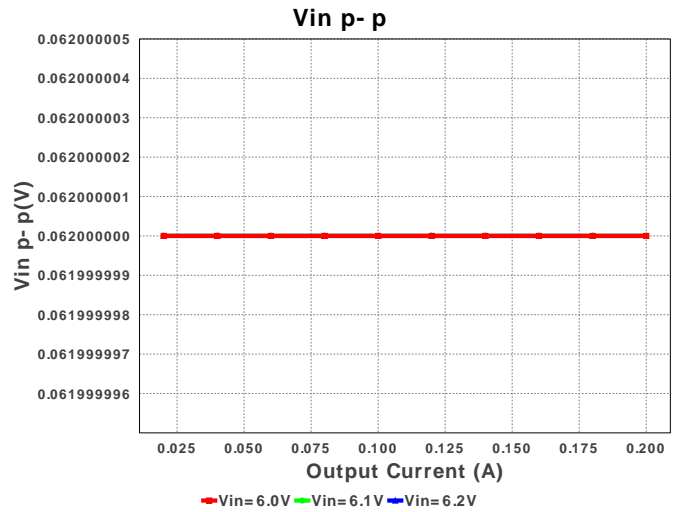
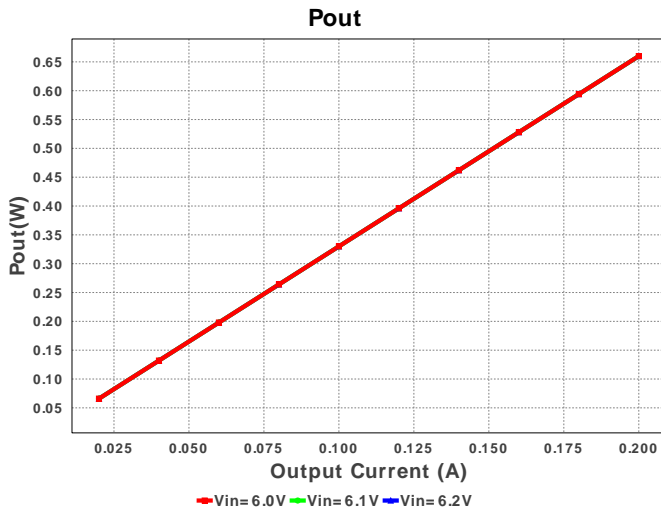
 Design : 498454/520 TPS79901QDRVRQ1
 TPS79901QDRVRQ1 6.0V-6.2V to 3.3V @ 0.2A


1. This regulator device is qualified for Automotive applications. All passives and other components selected in this design may not be qualified for Automotive applications. The user is required to verify that all components in the design meet the qualification and safety requirements for their specific application. View WEBENCH(R) Disclaimer.

Electrical BOM

#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
1.	Cff	Yageo America	CC0805JRNP09BN120 Series= C0G/NP0	Cap= 12.0 pF VDC= 50.0 V IRMS= 0.0 A	1	\$0.01	0805 7mm ²
2.	Cin	TDK	C1608X5R1A105K Series= 285	Cap= 1.0 µF ESR= 9.603 mOhm VDC= 10.0 V IRMS= 0.0 A	1	\$0.01	0603 5mm ²
3.	Cout	Taiyo Yuden	JMK105BJ225MV-F Series= X5R	Cap= 2.2 µF ESR= 1.52 mOhm VDC= 6.3 V IRMS= 0.0 A	1	\$0.03	0402 3mm ²
4.	Rfbb	Vishay-Dale	CRCW040210K0FKED Series= CRCW..e3	Res= 10.0 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	0402 3mm ²
5.	Rfbt	Vishay-Dale	CRCW040217K4FKED Series= CRCW..e3	Res= 17.4 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	0402 3mm ²
6.	U1	Texas Instruments	TPS79901QDRVRQ1	Switcher	1	\$0.35	R-XBGA-N5 5mm ²





Operating Values

#	Name	Value	Category	Description
1.	IC Iground	45.007 mA	Current	IC ground current
2.	Iin Avg	245.01 mA	Current	Average input current
3.	BOM Count	6	General	Total Design BOM count
4.	FootPrint	25.0 mm2	General	Total Foot Print Area of BOM components
5.	IC Tolerance	12.5 mV	General	IC Feedback Tolerance
6.	Pout	660.0 mW	General	Total output power
7.	Total BOM	\$0.42	General	Total BOM Cost
8.	Vin p-p	62.0 mV	Op_Point	Input Source ripple voltage
9.	Efficiency	43.378 %	Op_point	Steady state efficiency
10.	IC Tj	123.741 degC	Op_point	IC junction temperature
11.	ICThetaJA	74.2 degC/W	Op_point	IC junction-to-ambient thermal resistance

#	Name	Value	Category	Description
12.	IOUT_OP	200.0 mA	Op_point	Iout operating point
13.	Input Ripple Frequency	100.0 kHz	Op_point	Input Source Ripple Frequency for PSRR Calculation
14.	PSRR est.	-26.531 dB	Op_point	Power Supply Rejection Ratio estimated
15.	VIN_OP	6.2 V	Op_point	Vin operating point
16.	Vout p-p	2.923 mV	Op_point	Peak-to-peak output ripple voltage
17.	IC Pd	859.042 mW	Power	IC power dissipation
18.	Total Pd	859.042 mW	Power	Total Power Dissipation

Design Inputs

#	Name	Value	Description
1.	Iout	200.0 mA	Maximum Output Current
2.	Iout1	200.0 mAmps	Output Current #1
3.	VinMax	6.2 V	Maximum input voltage
4.	VinMin	6.0 V	Minimum input voltage
5.	Vout	3.3 V	Output Voltage
6.	Vout1	3.3 Volt	Output Voltage #1
7.	base_pn	TPS79901-Q1	Base Product Number
8.	source	DC	Input Source Type
9.	Ta	60.0 degC	Ambient temperature

Design Assistance

1. **TPS79901-Q1** Product Folder : <http://www.ti.com/product/tps79901-q1> : 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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