

WEBENCH® Power Architect

Project Report

Project : 1165565/1 : PA_Project_303 (modified from 301)

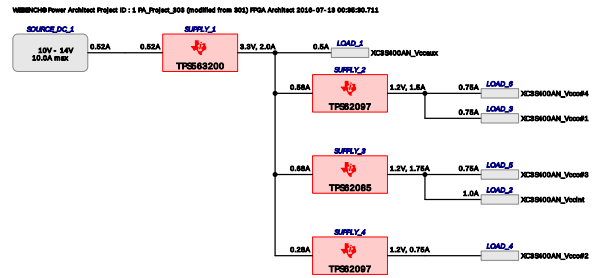
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Optimize project optFactor=3

Project Summary

1. Total System Efficiency	82.768 %
2. Total System BOM Count	28.0
3. Total System Footprint	378.0 mm ²
4. Total System BOM Cost	\$4.62
5. Total System Power Dissipation	1.343 W

--> Launch WEBENCH Power Architect.



Sequencer Flag Table

Supply	Sequencer Flag	Load	Load Name
SUPPLY_1	0	LOAD_1	XC3S400AN_Vccaux
SUPPLY_2	0	LOAD_6	XC3S400AN_Vcco#4
SUPPLY_2	0	LOAD_3	XC3S400AN_Vcco#1
SUPPLY_3	0	LOAD_5	XC3S400AN_Vcco#3
SUPPLY_3	0	LOAD_2	XC3S400AN_Vccint
SUPPLY_4	0	LOAD_4	XC3S400AN_Vcco#2

Power Supplies

#	Name	NSID	Description	Vout	Iout	Efficiency	Foot-print	Cost	Design	Page
1.	SUPPLY_1	TPS563200	Switcher : 17V, 3A,6-pin, Low Iq Synchronous buck converter with Advanced Eco-mode	3.3 V	1.999 A	92%	149	\$1.27	8	19
2.	SUPPLY_2	TPS62097	Switcher : 2-A High Efficiency Step Down Converter with DCS Control	1.2 V	1.5 A	86%	93	\$1.06	5	4
3.	SUPPLY_3	TPS62085	Switcher : 3A Step Down Converter with Hiccup Protection	1.2 V	1.75 A	89.5%	65	\$2.28	6	9
4.	SUPPLY_4	TPS62097	Switcher : 2-A High Efficiency Step Down Converter with DCS Control	1.2 V	0.75 A	89.8%	93	\$1.06	7	14

Power Loads

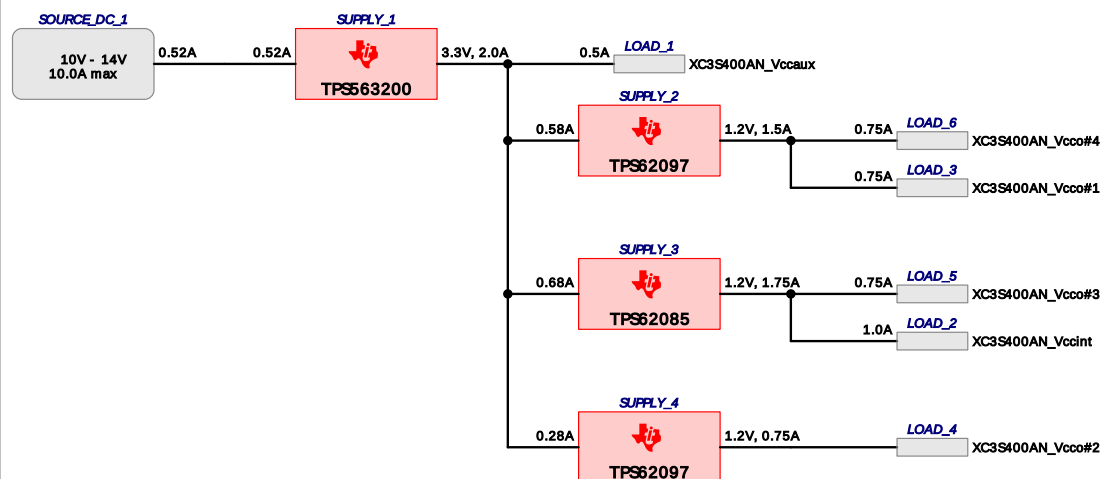
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1.	XC3S400AN_Vccaux	3.3 V	0.5 A	VoutRipple=18%, SoftStart delay=1.0 mSec
2.	XC3S400AN_Vcco#4	1.2 V	0.75 A	VoutRipple=11%
3.	XC3S400AN_Vcco#1	1.2 V	0.75 A	VoutRipple=11%
4.	XC3S400AN_Vcco#3	1.2 V	0.75 A	VoutRipple=11%, SoftStart delay=1.0 mSec
5.	XC3S400AN_Vccint	1.2 V	1 A	VoutRipple=10%, SoftStart delay=1.0 mSec
6.	XC3S400AN_Vcco#2	1.2 V	0.75 A	VoutRipple=11%, SoftStart delay=50.0 µSec

FPGAs, Processors

#	Manufacturer	Part Number	Name	Series	Description
1.	Xilinx	XC3S400AN	FPGA_1	Spartan-3AN	FPGA Xilinx Spartan-3AN XC3S400AN http://www.xilinx.com/support/documentation/data_sheets/ds557.pdf

Project Diagram

WEBENCH® Power Architect Project ID : 1 PA_Project_303 (modified from 301) FPGA Architect 2016-07-13 00:35:30.711



Electrical Procurement BOM

Manufacturer	Part Number	Description	Quantity	Budgetary Price	Footprint (mm ²)
AVX	08053C104KAT2A	0805	1	\$0.01	7
TDK	C3216JB1A476M	1206	1	\$0.34	11
Vishay-Dale	CRCW040210K0FKED	0402	1	\$0.01	3
Vishay-Dale	CRCW040210K2FKED	0402	2	\$0.01	6
Vishay-Dale	CRCW0402162KFKED	0402	1	\$0.01	3
Vishay-Dale	CRCW04021M00FKED	0402	1	\$0.01	3
Vishay-Dale	CRCW040220K5FKED	0402	2	\$0.01	6
Vishay-Dale	CRCW040233K2FKED	0402	1	\$0.01	3
Vishay-Dale	CRCW040280K6FKED	0402	1	\$0.01	3
MuRata	GRM033R61A103KA01D	0201	1	\$0.01	2
MuRata	GRM033R71C471KA01D	0201	1	\$0.01	2
MuRata	GRM188R60G106ME47D	0603	2	\$0.02	9
MuRata	GRM21BC80G226ME39L	0805	2	\$0.04	14
MuRata	GRM32ER61E226KE15L	1210	1	\$0.16	15
Taiyo Yuden	JMK212BJ226KG-T	0805	1	\$0.13	7
Taiyo Yuden	JMK212BJ226MG-T	0805	1	\$0.05	7
Bourns	SRN6045-1R0Y	SRN6045	2	\$0.16	128
Bourns	SRN8040-2R2Y	SRN8040	1	\$0.22	100
Texas Instruments	TPS563200DDCR	DDC0006A	1	\$0.52	10
Texas Instruments	TPS62085RLTR	RLT0007A	1	\$0.87	9
Texas Instruments	TPS62097RWKR	RWK0011B	2	\$0.81	18
TDK	VLS252010ET-R47N	VLS252010ET	1	\$0.15	11
Total			28	\$4.62	376.5175

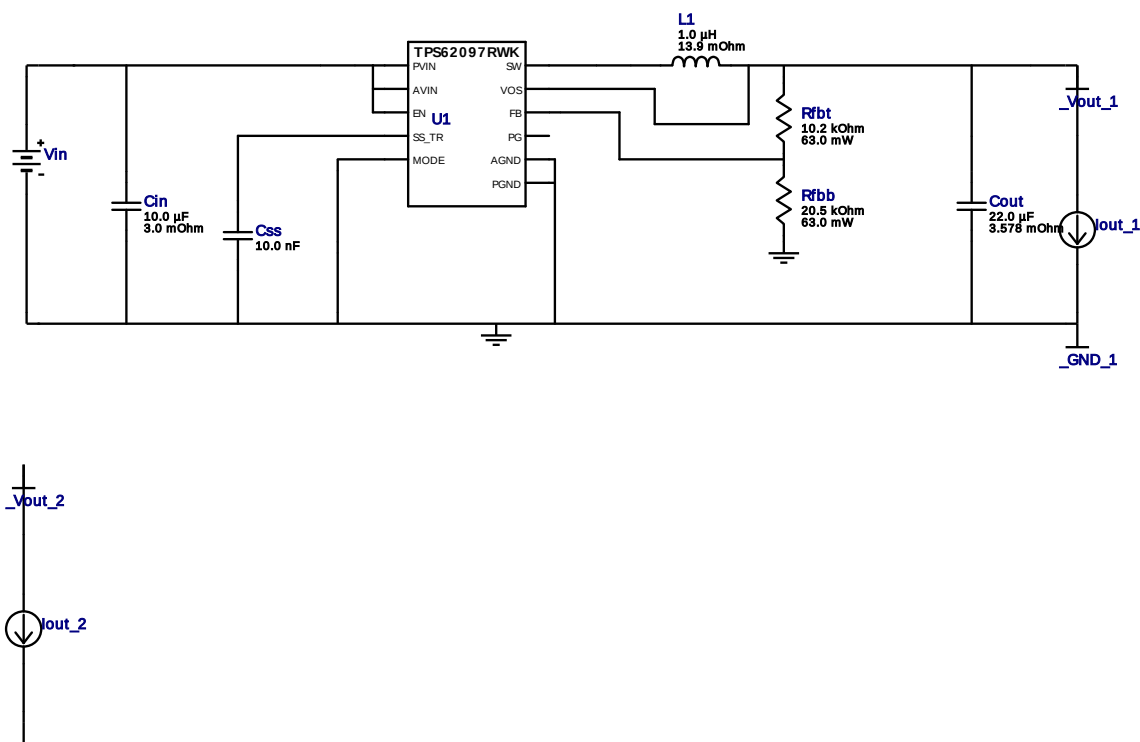


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Iout = 1.5A

Device = TPS62097RWKR
Topology = Buck
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BOM Cost = \$1.06
BOM Count = 7
Total Pd = 0.29W

WEBENCH® Design Report

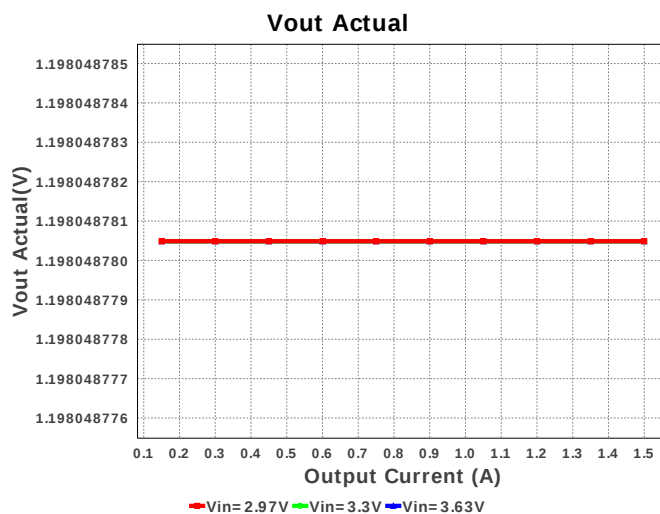
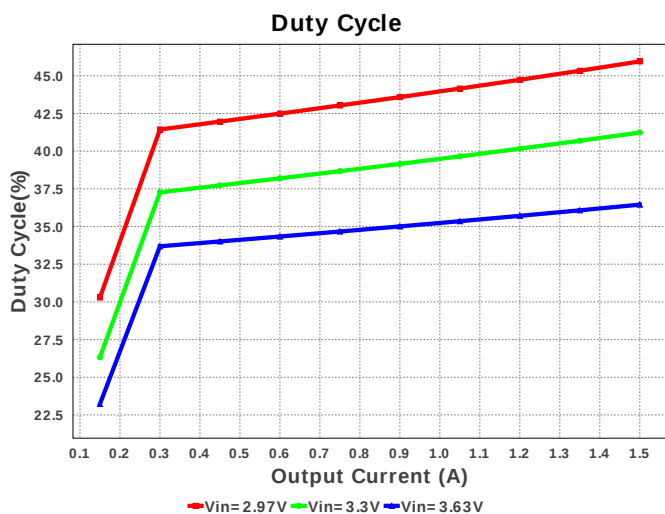
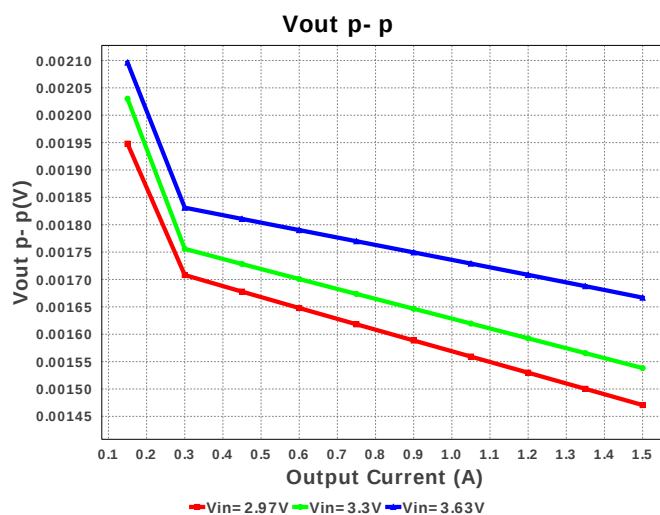
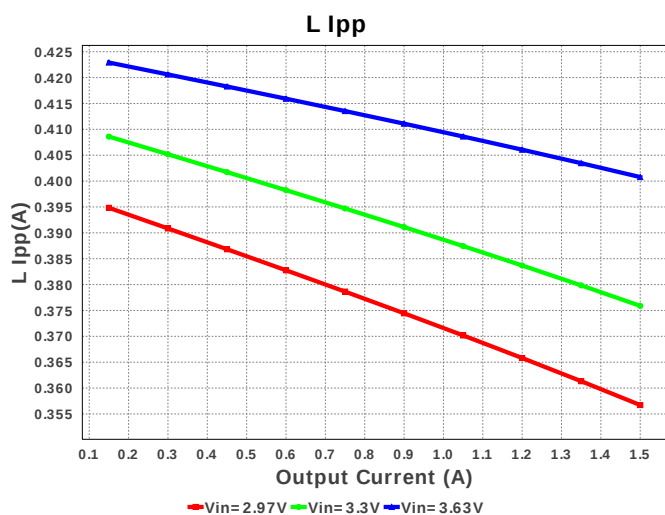
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TPS62097RWKR 2.97V-3.63V to 1.20V @ 1.5A

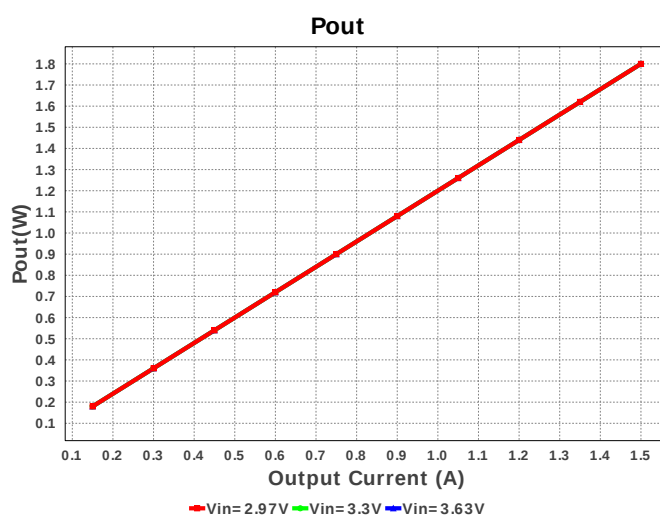
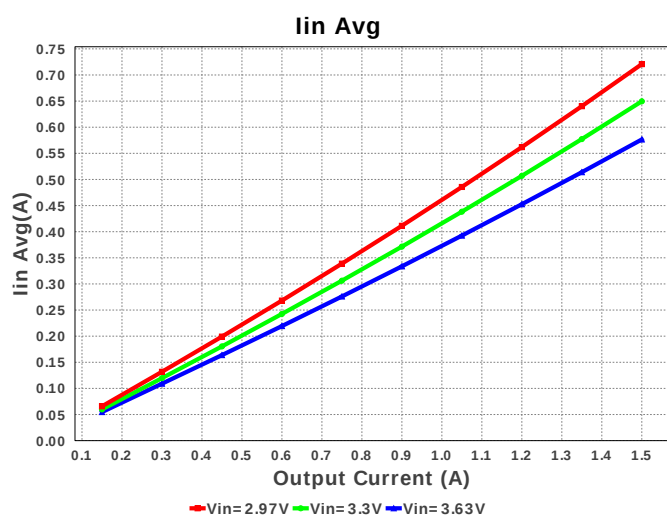
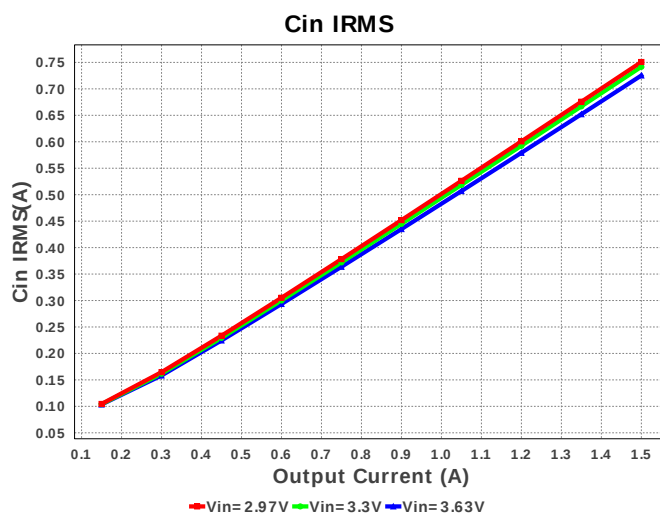
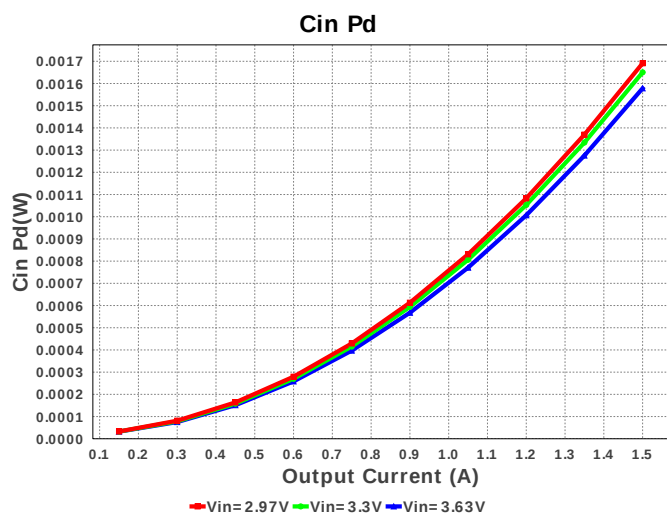
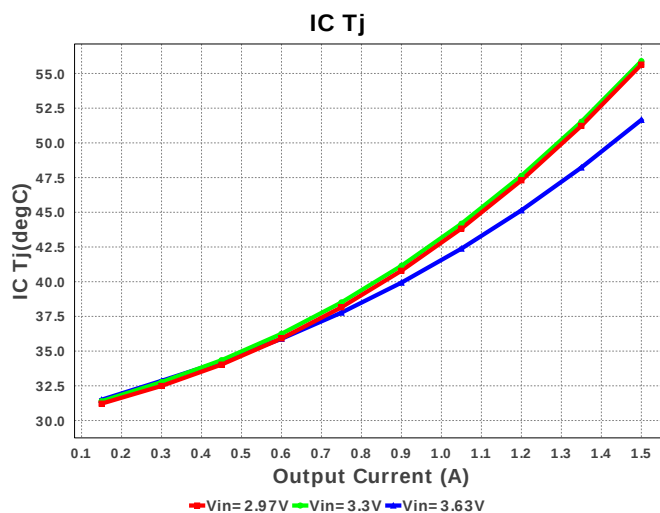
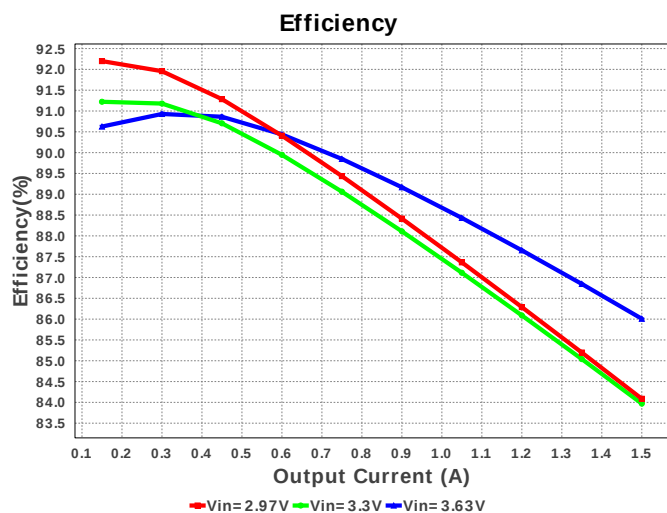


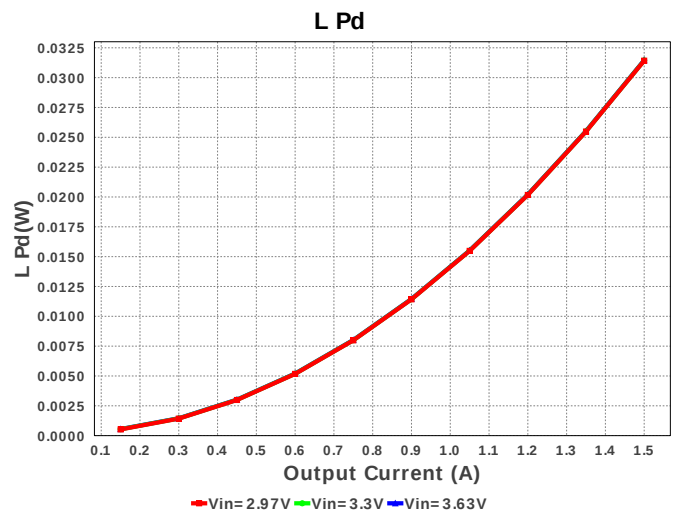
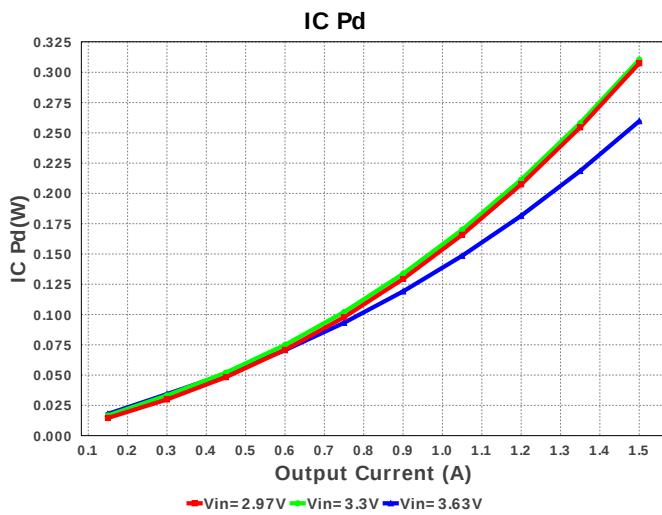
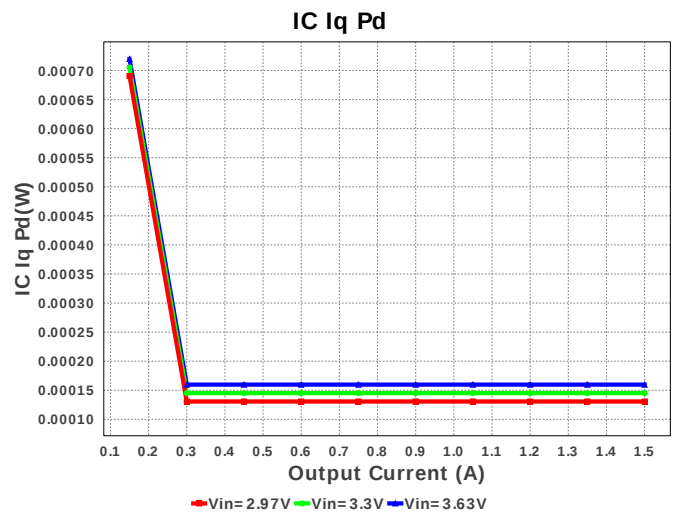
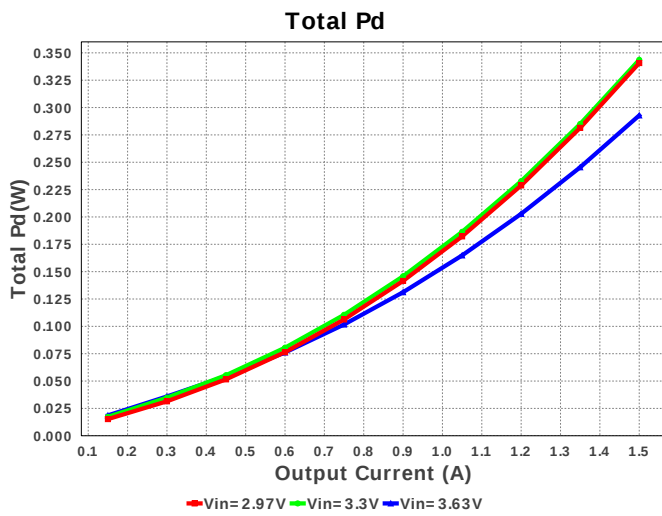
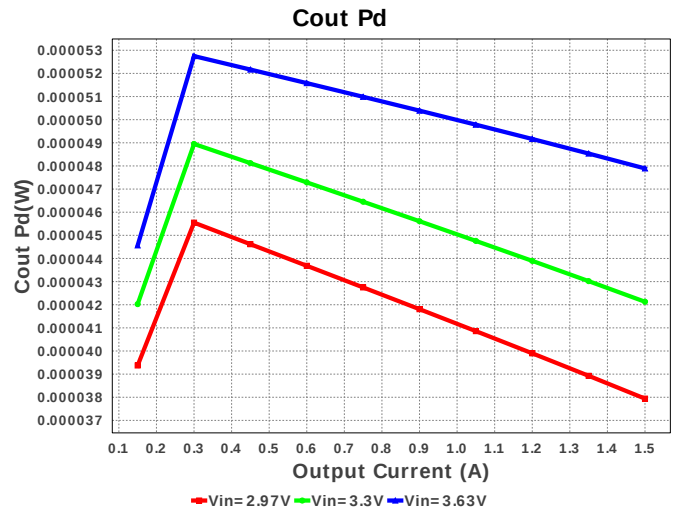
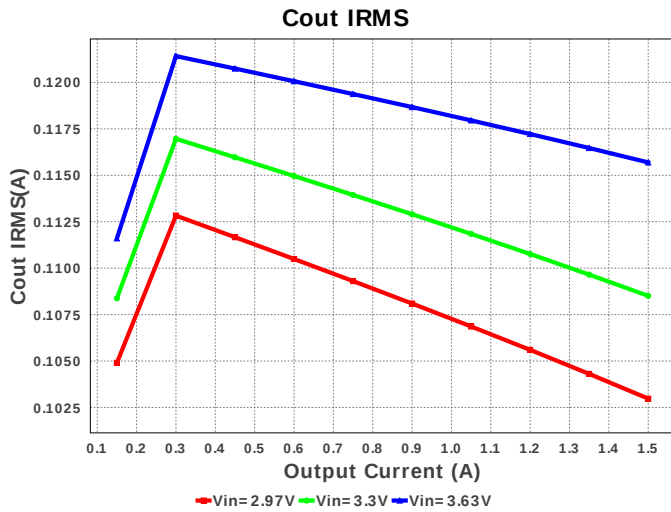
Electrical BOM

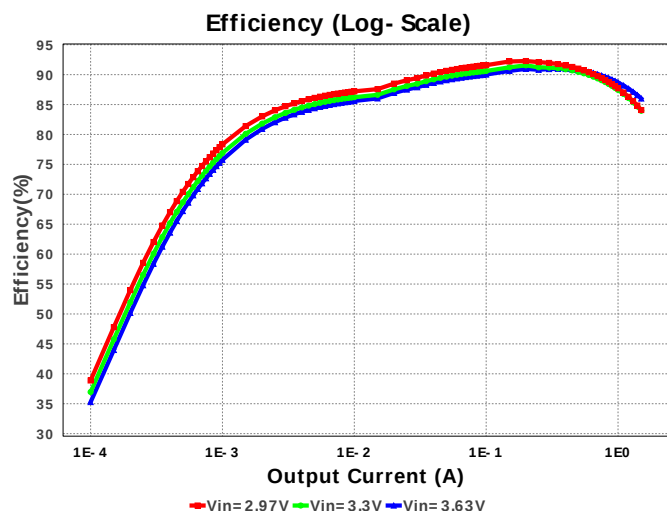
#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
1.	Cin	MuRata	GRM188R60G106ME47D Series= X5R	Cap= 10.0 uF ESR= 3.0 mOhm VDC= 4.0 V IRMS= 3.0 A	1	\$0.02	0603 5 mm ²
2.	Cout	MuRata	GRM21BC80G226ME39L Series= X6S	Cap= 22.0 uF ESR= 3.578 mOhm VDC= 4.0 V IRMS= 3.29633 A	1	\$0.04	0805 7 mm ²
3.	Css	MuRata	GRM033R61A103KA01D Series= X5R	Cap= 10.0 nF VDC= 10.0 V IRMS= 0.0 A	1	\$0.01	0201 2 mm ²
4.	L1	Bourns	SRN6045-1R0Y	L= 1.0 µH DCR= 13.9 mOhm	1	\$0.16	SRN6045 64 mm ²
5.	Rfbb	Vishay-Dale	CRCW040220K5FKED Series= CRCW..e3	Res= 20.5 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	0402 3 mm ²
6.	Rfbt	Vishay-Dale	CRCW040210K2FKED Series= CRCW..e3	Res= 10.2 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	0402 3 mm ²

#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
7.	U1	Texas Instruments	TPS62097RWKR	Switcher	1	\$0.81	 RWK0011B 9 mm ²









Operating Values

#	Name	Value	Category	Description
1.	Cin IRMS	725.316 mA	Current	Input capacitor RMS ripple current
2.	Cout IRMS	115.694 mA	Current	Output capacitor RMS ripple current
3.	Iin Avg	576.53 mA	Current	Average input current
4.	L Ipp	400.77 mA	Current	Peak-to-peak inductor ripple current
5.	BOM Count	7	General	Total Design BOM count
6.	FootPrint	93.0 mm ²	General	Total Foot Print Area of BOM components
7.	Frequency	2.023 MHz	General	Switching frequency
8.	IC Tolerance	18.0 mV	General	IC Feedback Tolerance
9.	Pout	1.8 W	General	Total output power
10.	Total BOM	\$1.06	General	Total BOM Cost
11.	Vout Actual	1.198 V	Op_Point	Vout Actual calculated based on selected voltage divider resistors
12.	Vout OP	1.2 V	Op_Point	Operational Output Voltage
13.	Duty Cycle	36.452 %	Op_point	Duty cycle
14.	Efficiency	86.009 %	Op_point	Steady state efficiency
15.	IC Tj	51.657 degC	Op_point	IC junction temperature
16.	ICThetaJA	83.4 degC/W	Op_point	IC junction-to-ambient thermal resistance
17.	IOUT_OP	1.5 A	Op_point	Iout operating point
18.	VIN_OP	3.63 V	Op_point	Vin operating point
19.	Vout p-p	1.667 mV	Op_point	Peak-to-peak output ripple voltage
20.	Cin Pd	1.578 mW	Power	Input capacitor power dissipation
21.	Cout Pd	47.892 μW	Power	Output capacitor power dissipation
22.	IC Iq Pd	159.72 μW	Power	IC Iq Pd
23.	IC Pd	259.675 mW	Power	IC power dissipation
24.	L Pd	31.461 mW	Power	Inductor power dissipation
25.	Total Pd	292.804 mW	Power	Total Power Dissipation
26.	Vout Tolerance	2.936 %		Vout Tolerance based on IC Tolerance (no load) and voltage divider resistors if applicable

Design Inputs

#	Name	Value	Description
1.	Iout	1.5	Maximum Output Current
2.	VinMax	3.63	Maximum input voltage
3.	VinMin	2.97	Minimum input voltage
4.	Vout	1.2	Output Voltage
5.	base_pn	TPS62097	Texas Instruments Base Part Number
6.	source	DC	Input Source Type
7.	ta	30.0	Ambient temperature

Design Assistance

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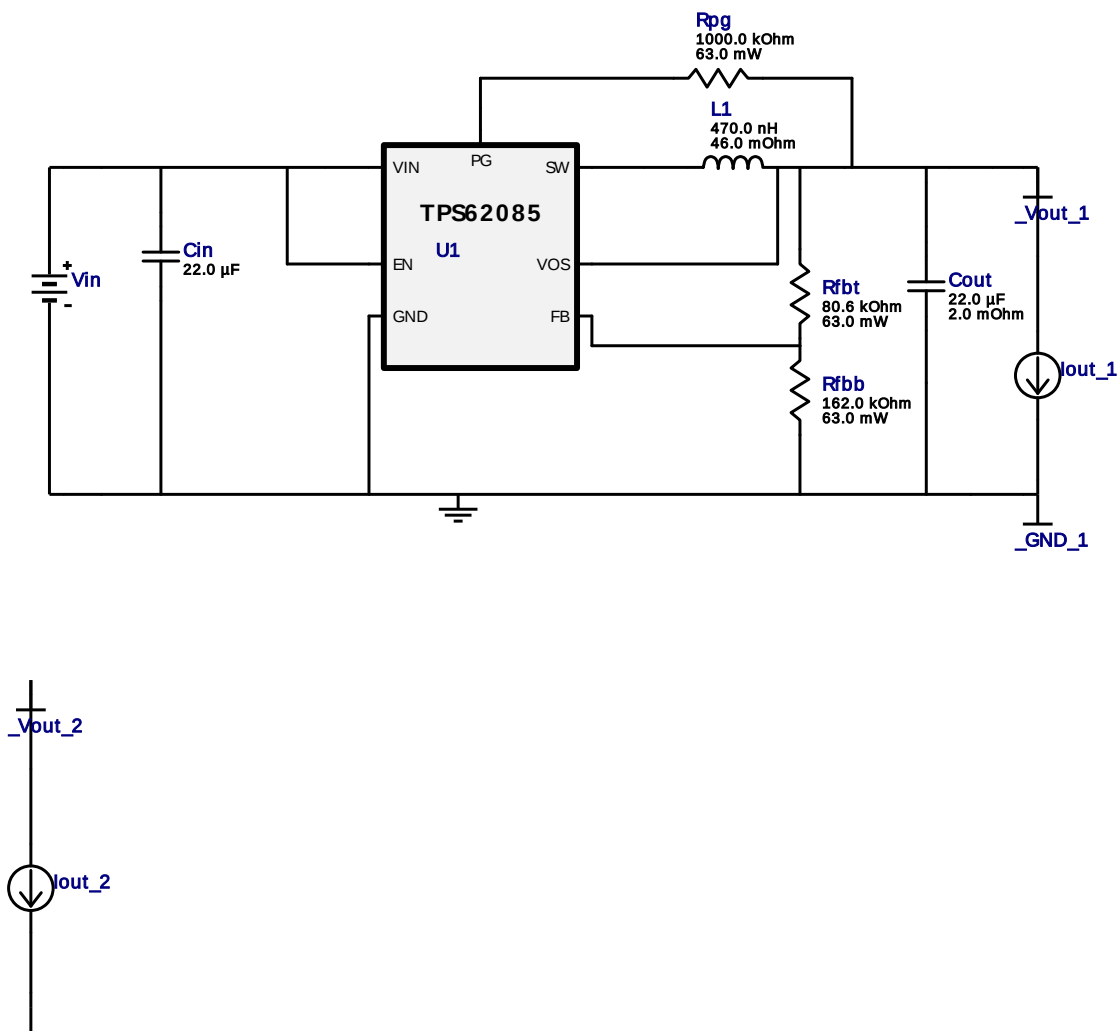


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Iout = 1.75A

Device = TPS62085RLTR
Topology = Buck
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BOM Cost = \$1.23
BOM Count = 7
Total Pd = 0.36W

WEBENCH® Design Report

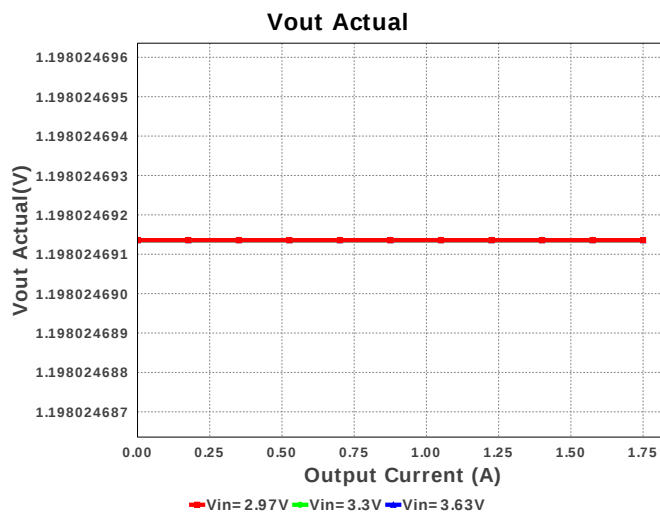
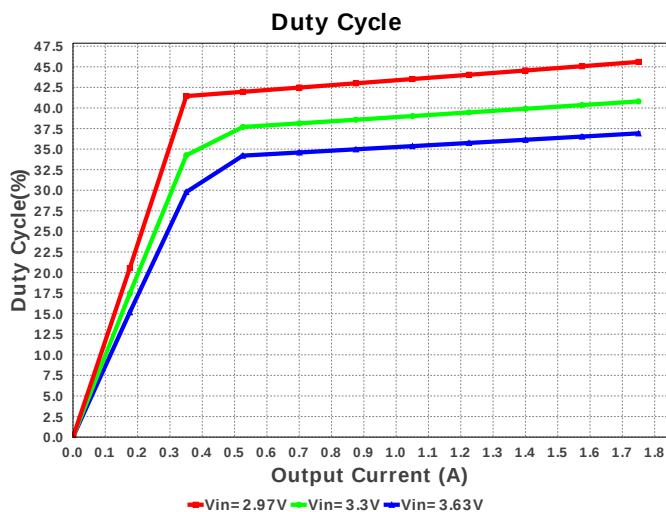
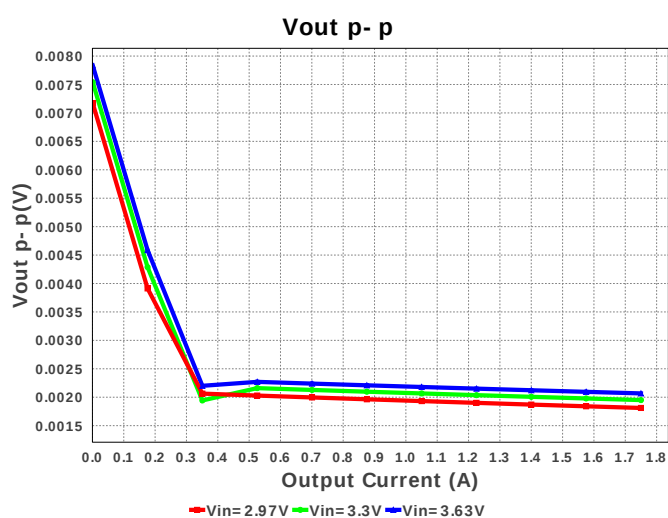
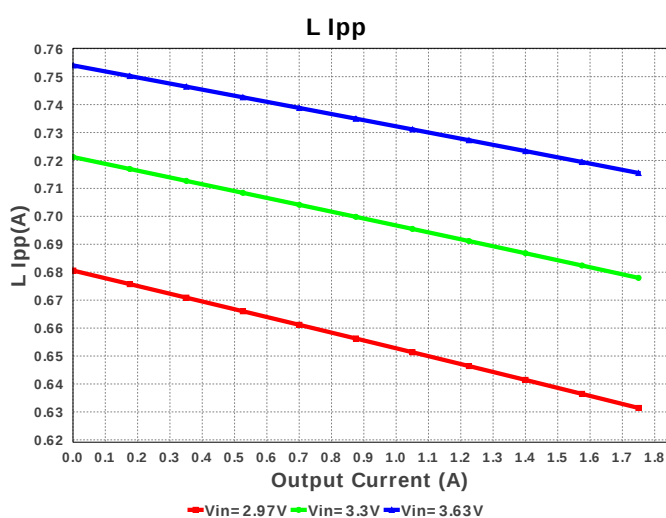
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TPS62085RLTR 2.97V-3.63V to 1.20V @ 1.75A

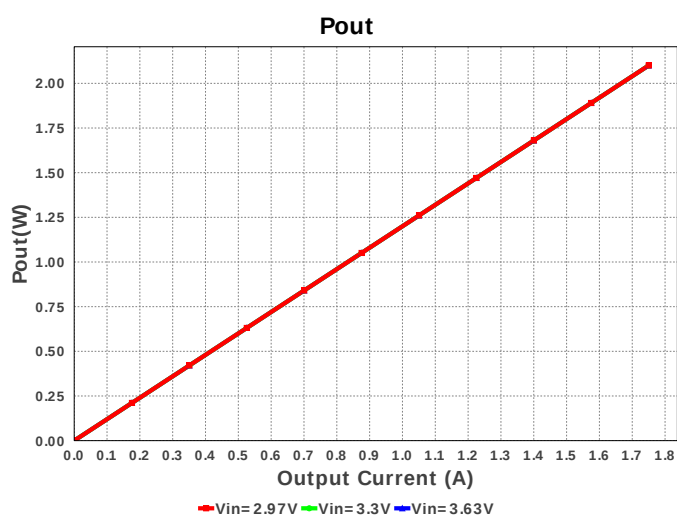
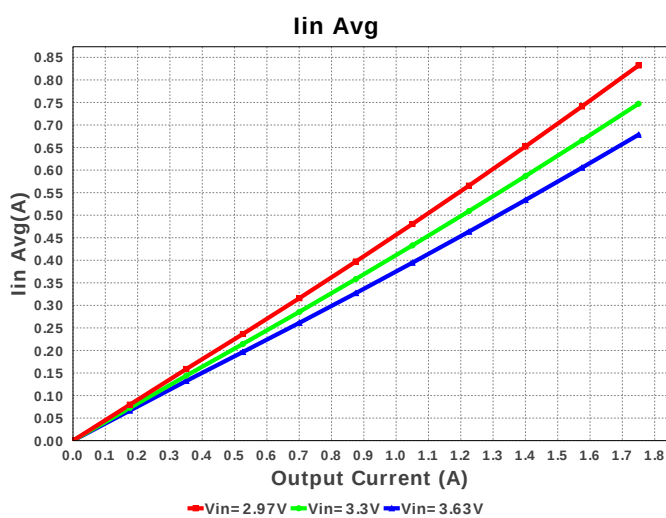
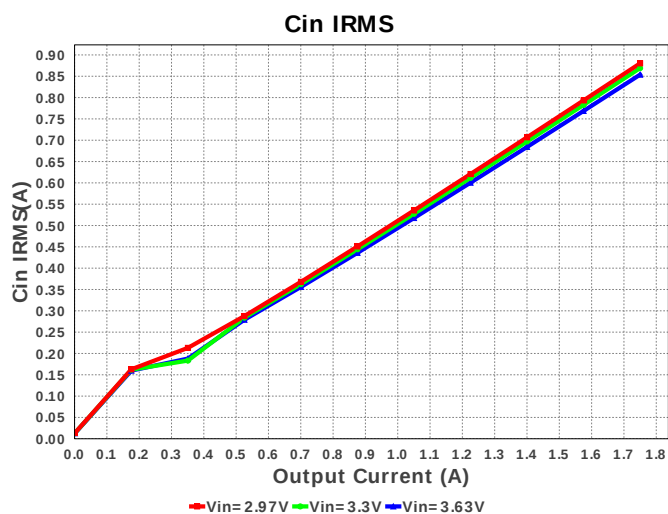
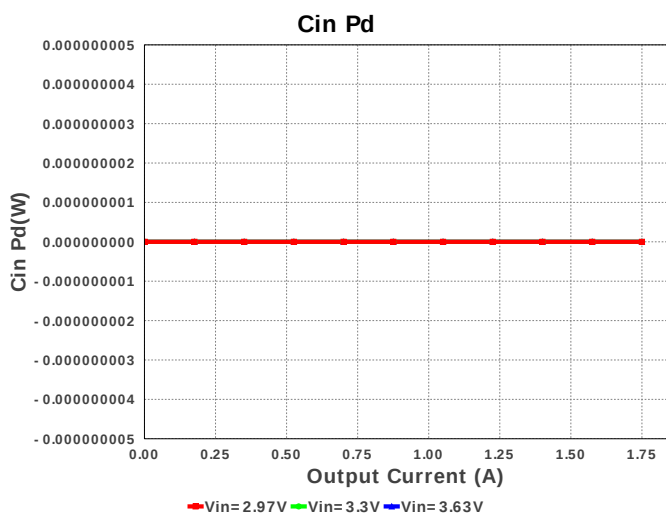
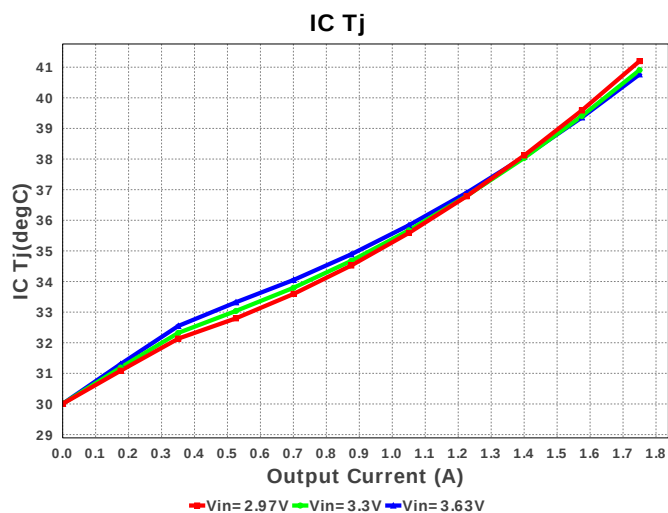
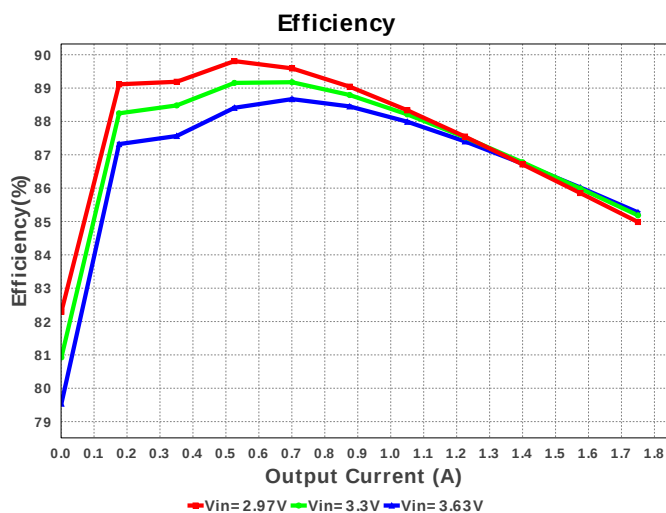


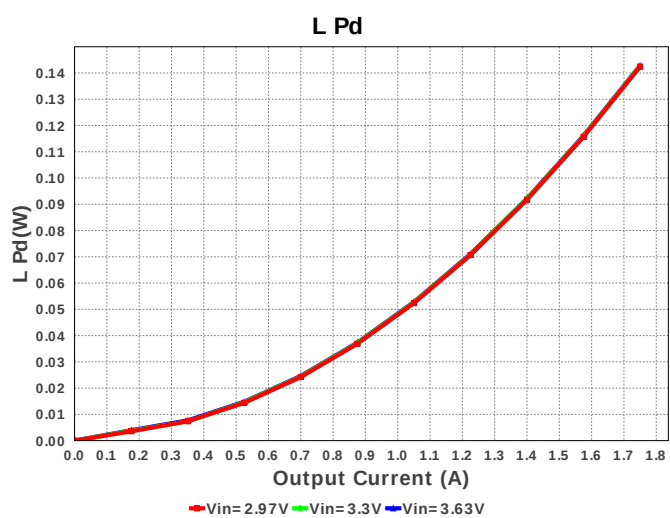
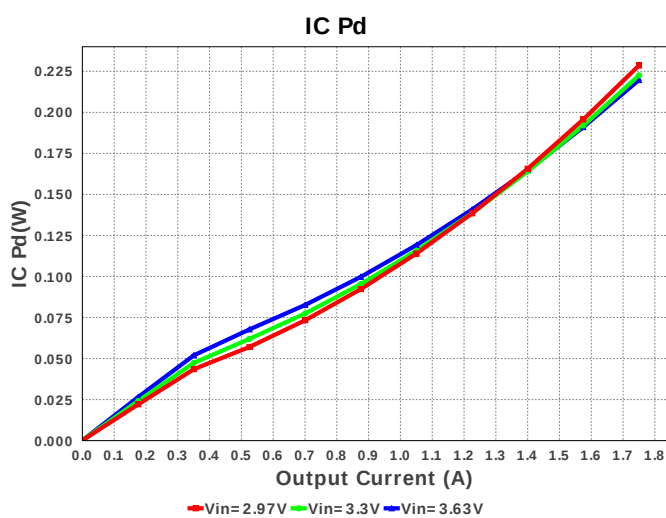
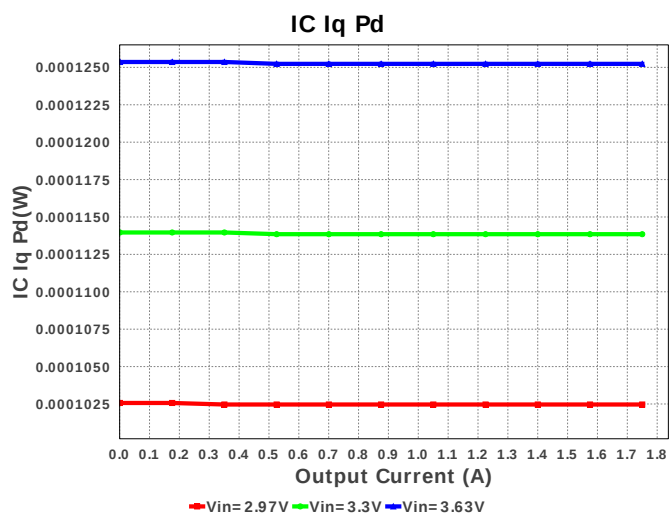
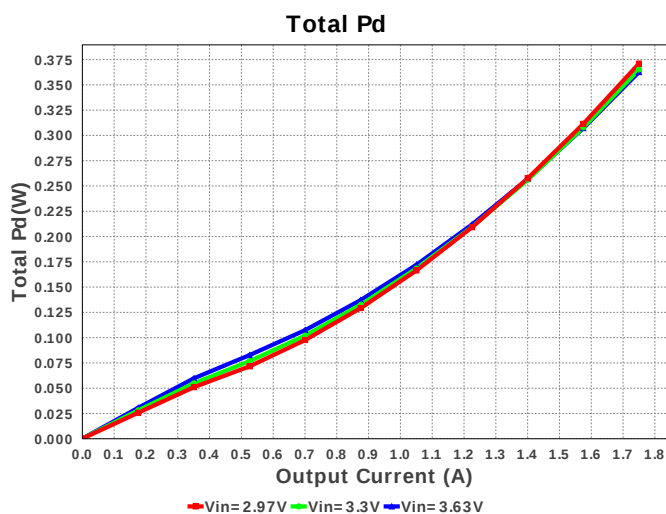
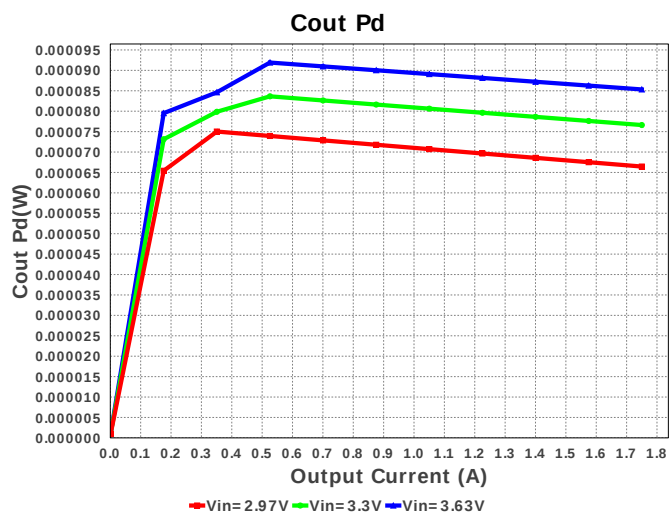
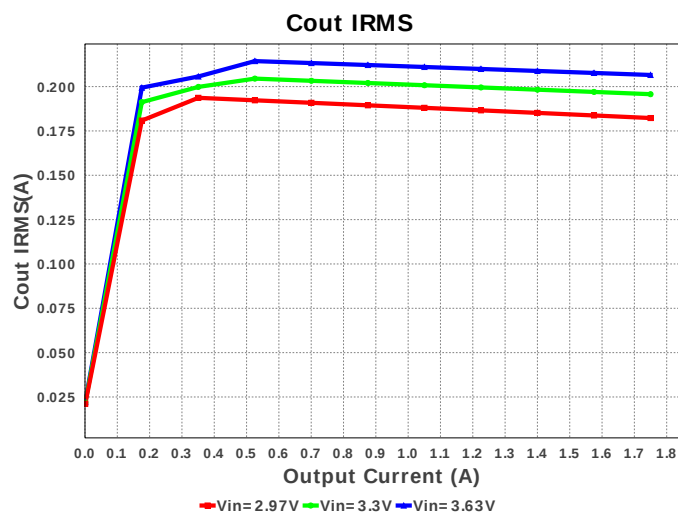
Electrical BOM

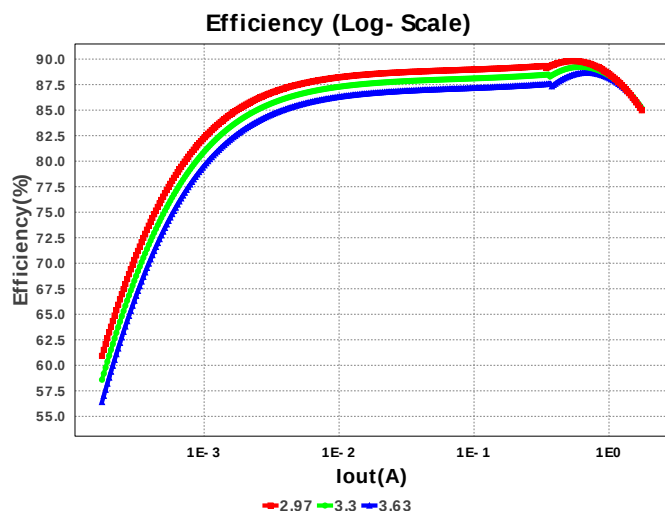
#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
1.	Cin	Taiyo Yuden	JMK212BJ226MG-T Series= X5R	Cap= 22.0 uF VDC= 6.3 V IRMS= 0.0 A	1	\$0.05	0805 7 mm ²
2.	Cout	Taiyo Yuden	JMK212BJ226KG-T Series= X5R	Cap= 22.0 uF ESR= 2.0 mOhm VDC= 6.3 V IRMS= 0.0 A	1	\$0.13	0805 7 mm ²
3.	L1	TDK	VLS252010ET-R47N	L= 470.0 nH DCR= 46.0 mOhm	1	\$0.15	VLS252010ET 11 mm ²
4.	Rfbb	Vishay-Dale	CRCW0402162KFKED Series= CRCW..e3	Res= 162.0 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	0402 3 mm ²

#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
5.	Rfbt	Vishay-Dale	CRCW040280K6FKED Series= CRCW..e3	Res= 80.6 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	0402 3 mm ²
6.	Rpg	Vishay-Dale	CRCW04021M00FKED Series= CRCW..e3	Res= 1000.0 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	0402 3 mm ²
7.	U1	Texas Instruments	TPS62085RLTR	Switcher	1	\$0.87	RLT0007A 9 mm ²









Operating Values

#	Name	Value	Category	Description
1.	Cin IRMS	853.766 mA	Current	Input capacitor RMS ripple current
2.	Cout IRMS	206.552 mA	Current	Output capacitor RMS ripple current
3.	Iin Avg	678.42 mA	Current	Average input current
4.	L Ipp	715.52 mA	Current	Peak-to-peak inductor ripple current
5.	BOM Count	7	General	Total Design BOM count
6.	FootPrint	43.0 mm ²	General	Total Foot Print Area of BOM components
7.	Frequency	2.409 MHz	General	Switching frequency
8.	IC Tolerance	20.0 mV	General	IC Feedback Tolerance
9.	Pout	2.1 W	General	Total output power
10.	Total BOM	\$1.23	General	Total BOM Cost
11.	Vout Actual	1.198 V	Op_Point	Vout Actual calculated based on selected voltage divider resistors
12.	Vout OP	1.2 V	Op_Point	Operational Output Voltage
13.	Duty Cycle	36.912 %	Op_point	Duty cycle
14.	Efficiency	85.274 %	Op_point	Steady state efficiency
15.	IC Tj	40.766 degC	Op_point	IC junction temperature
16.	ICThetaJA	49.0 degC/W	Op_point	IC junction-to-ambient thermal resistance
17.	IOUT_OP	1.75 A	Op_point	Iout operating point
18.	VIN_OP	3.63 V	Op_point	Vin operating point
19.	Vout p-p	2.067 mV	Op_point	Peak-to-peak output ripple voltage
20.	Cin Pd	0.0 W	Power	Input capacitor power dissipation
21.	Cout Pd	85.328 μW	Power	Output capacitor power dissipation
22.	IC Iq Pd	125.235 μW	Power	IC Iq Pd
23.	IC Pd	219.718 mW	Power	IC power dissipation
24.	L Pd	142.838 mW	Power	Inductor power dissipation
25.	Total Pd	362.652 mW	Power	Total Power Dissipation
26.	Vout Tolerance	3.188 %		Vout Tolerance based on IC Tolerance (no load) and voltage divider resistors if applicable

Design Inputs

#	Name	Value	Description
1.	Iout	1.75	Maximum Output Current
2.	SoftStart	1.0 ms	Soft Start Time (ms)
3.	VinMax	3.63	Maximum input voltage
4.	VinMin	2.97	Minimum input voltage
5.	Vout	1.2	Output Voltage
6.	base_pn	TPS62085	Texas Instruments Base Part Number
7.	source	DC	Input Source Type
8.	ta	30.0	Ambient temperature

Design Assistance

1. TPS62085 Product Folder : <http://www.ti.com/product/TPS62085> : contains the data sheet and other resources.

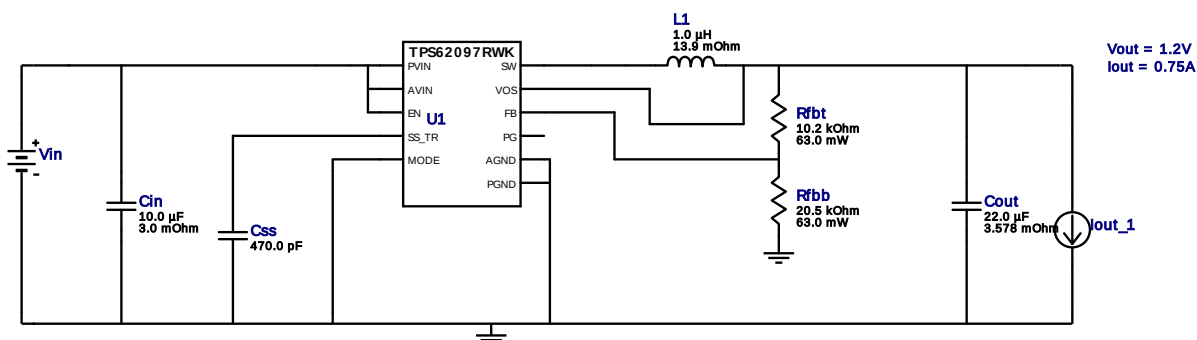


Vout = 1.2V
Iout = 0.75A

Device = TPS62097RWKR
Topology = Buck
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BOM Cost = \$1.06
BOM Count = 7
Total Pd = 0.1W

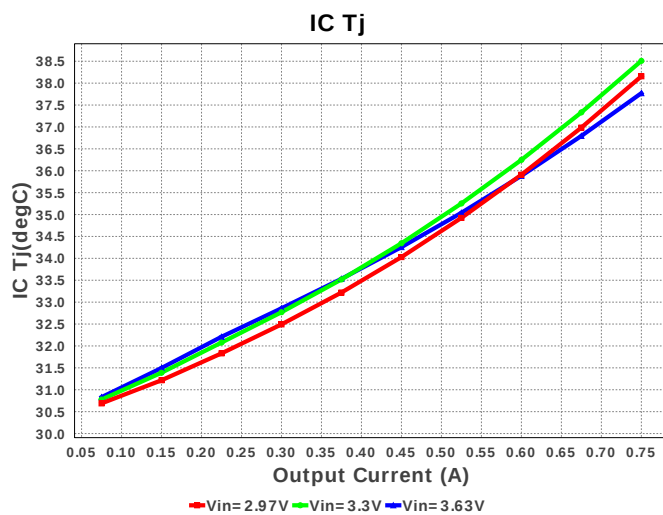
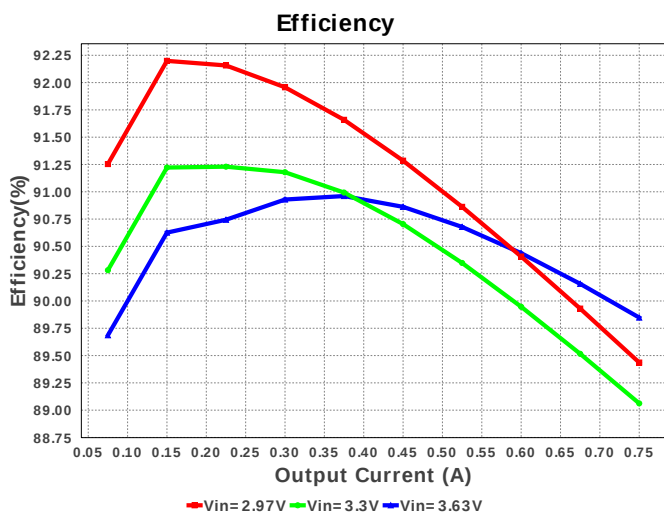
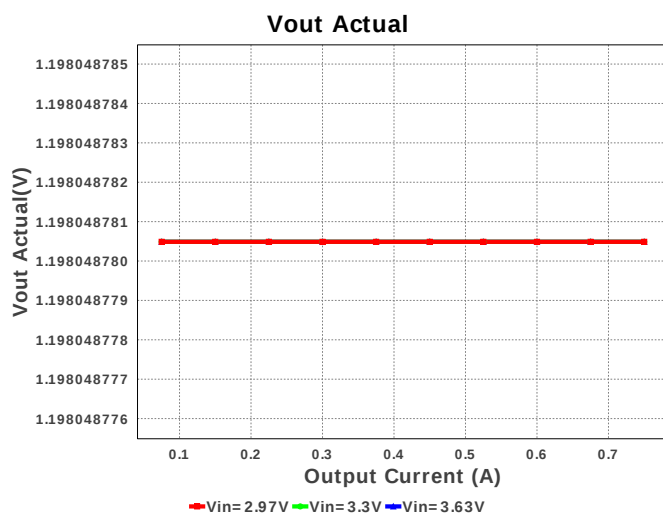
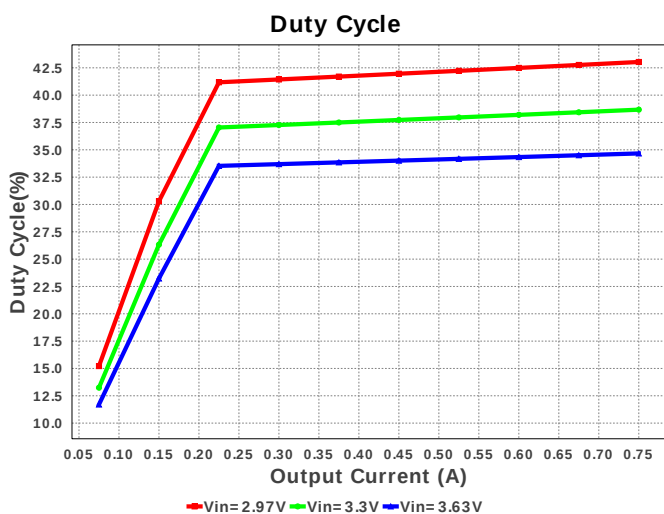
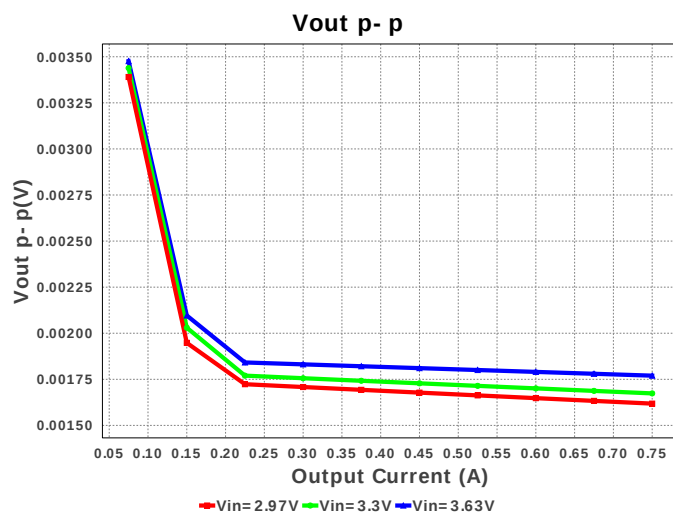
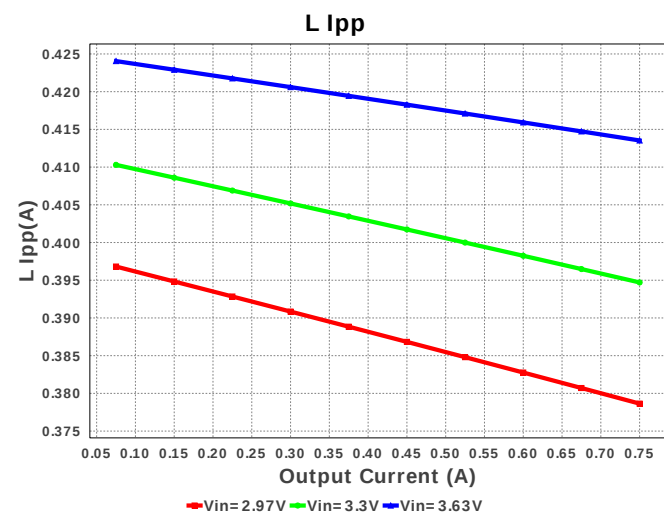
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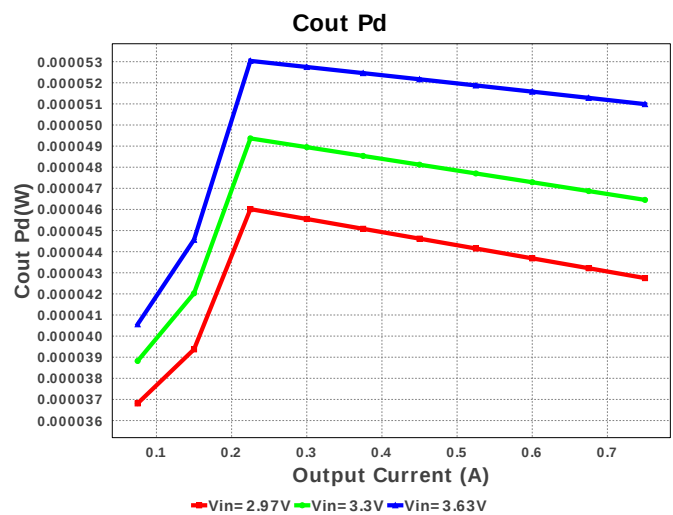
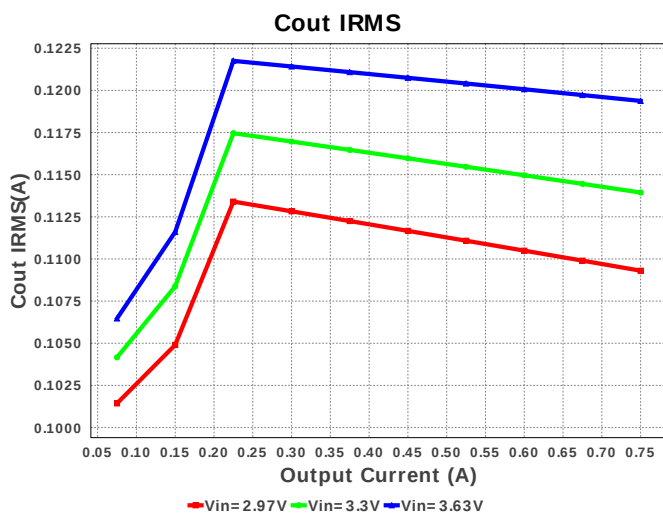
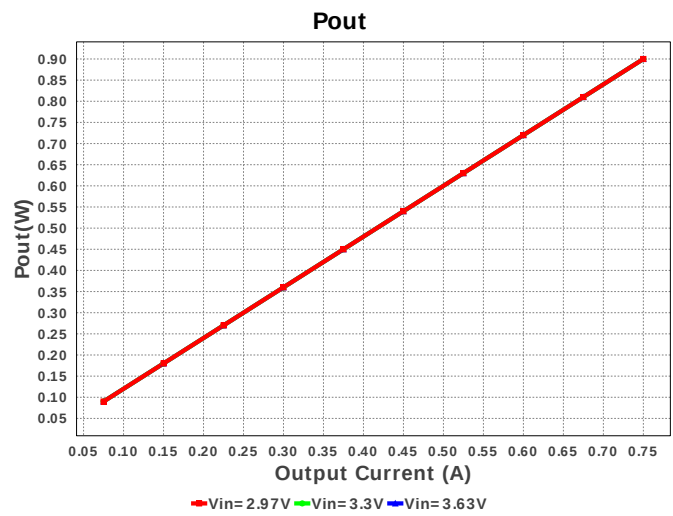
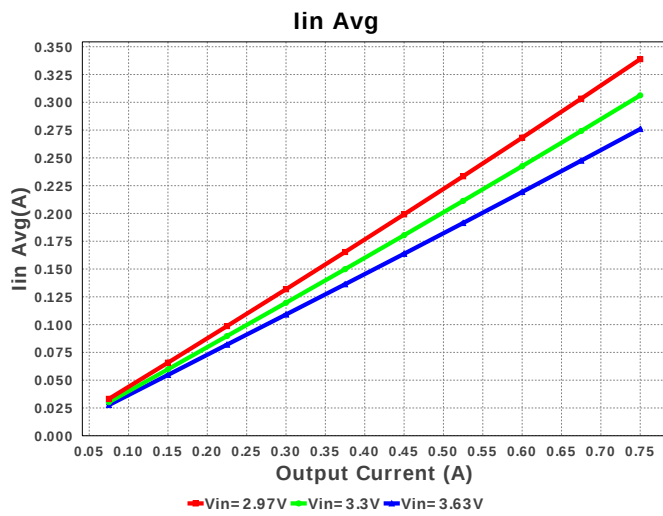
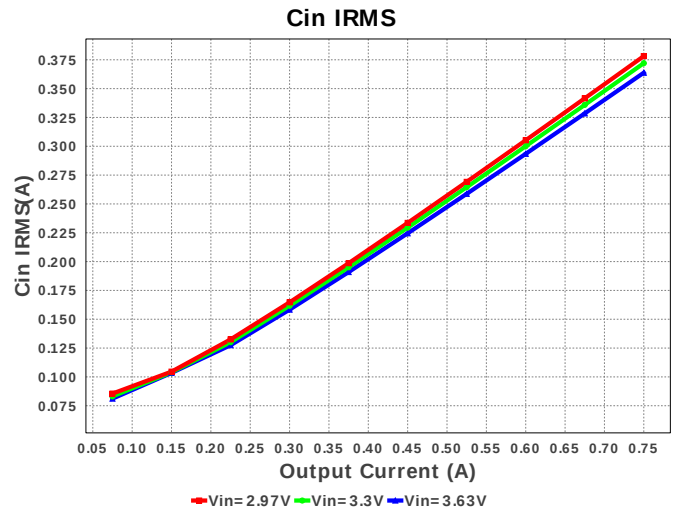
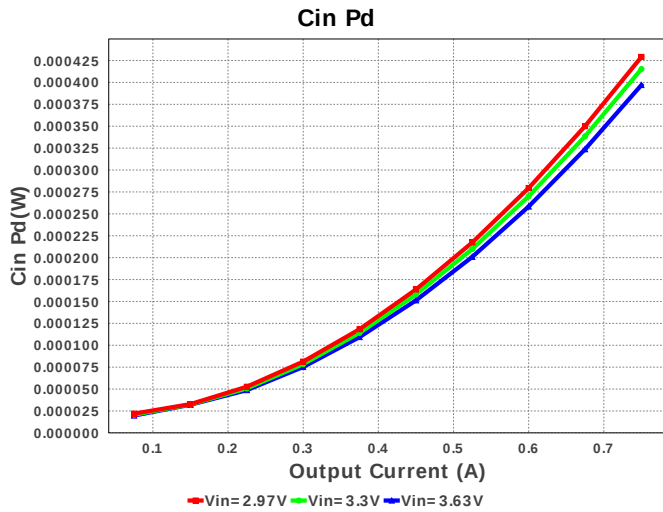
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TPS62097RWKR 2.97V-3.63V to 1.20V @ 0.75A

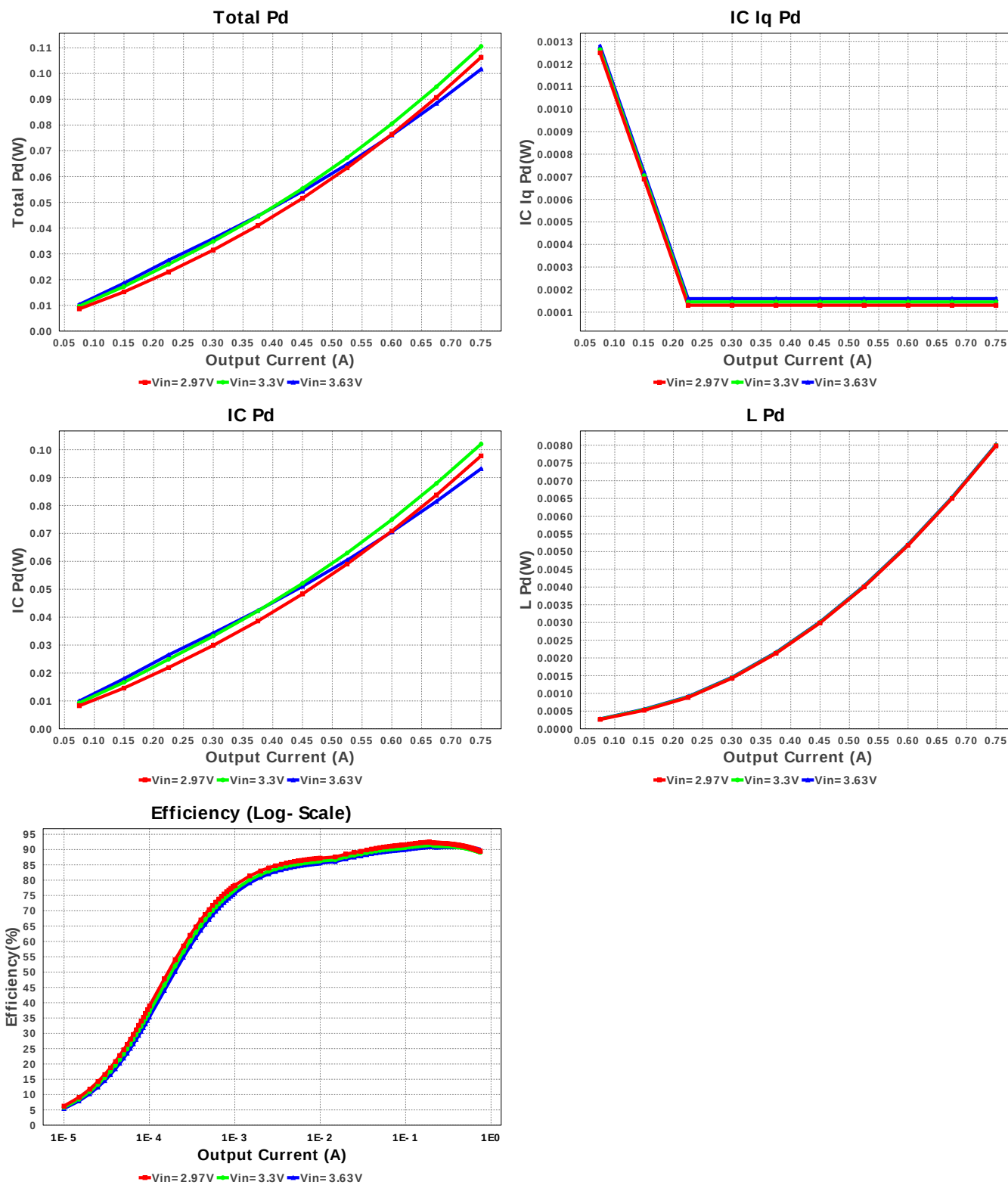


Electrical BOM

#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
1.	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
2.	Cout	MuRata	GRM21BC80G226ME39L Series= X6S	Cap= 22.0 uF ESR= 3.578 mOhm VDC= 4.0 V IRMS= 3.29633 A	1	\$0.04	0805 7 mm ²
3.	Css	MuRata	GRM033R71C471KA01D Series= X7R	Cap= 470.0 pF VDC= 16.0 V IRMS= 0.0 A	1	\$0.01	0201 2 mm ²
4.	L1	Bourns	SRN6045-1R0Y	L= 1.0 µH DCR= 13.9 mOhm	1	\$0.16	SRN6045 64 mm ²
5.	Rfbb	Vishay-Dale	CRCW040220K5FKED Series= CRCW...e3	Res= 20.5 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	0402 3 mm ²
6.	Rfht	Vishay-Dale	CRCW040210K2FKED Series= CRCW...e3	Res= 10.2 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	0402 3 mm ²
7.	U1	Texas Instruments	TPS62097RWKR	Switcher	1	\$0.81	RWK0011B 9 mm ²







Operating Values

#	Name	Value	Category	Description
1.	Cin IRMS	363.789 mA	Current	Input capacitor RMS ripple current
2.	Cout IRMS	119.376 mA	Current	Output capacitor RMS ripple current
3.	Iin Avg	275.95 mA	Current	Average input current
4.	L Ipp	413.53 mA	Current	Peak-to-peak inductor ripple current
5.	BOM Count	7	General	Total Design BOM count
6.	FootPrint	93.0 mm ²	General	Total Foot Print Area of BOM components
7.	Frequency	1.926 MHz	General	Switching frequency
8.	IC Tolerance	18.0 mV	General	IC Feedback Tolerance
9.	Pout	900.0 mW	General	Total output power
10.	Total BOM	\$1.06	General	Total BOM Cost
11.	Vout Actual	1.198 V	Op_Point	Vout Actual calculated based on selected voltage divider resistors

#	Name	Value	Category	Description
12.	Vout OP	1.2 V	Op_Point	Operational Output Voltage
13.	Duty Cycle	34.668 %	Op_point	Duty cycle
14.	Efficiency	89.848 %	Op_point	Steady state efficiency
15.	IC Tj	37.771 degC	Op_point	IC junction temperature
16.	ICThetaJA	83.4 degC/W	Op_point	IC junction-to-ambient thermal resistance
17.	IOUT_OP	750.0 mA	Op_point	Iout operating point
18.	VIN_OP	3.63 V	Op_point	Vin operating point
19.	Vout p-p	1.77 mV	Op_point	Peak-to-peak output ripple voltage
20.	Cin Pd	397.028 μ W	Power	Input capacitor power dissipation
21.	Cout Pd	50.988 μ W	Power	Output capacitor power dissipation
22.	IC Iq Pd	159.72 μ W	Power	IC Iq Pd
23.	IC Pd	93.181 mW	Power	IC power dissipation
24.	L Pd	8.017 mW	Power	Inductor power dissipation
25.	Total Pd	101.692 mW	Power	Total Power Dissipation
26.	Vout Tolerance	2.936 %		Vout Tolerance based on IC Tolerance (no load) and voltage divider resistors if applicable

Design Inputs

#	Name	Value	Description
1.	Iout	750.0 m	Maximum Output Current
2.	SoftStart	0.05 ms	Soft Start Time (ms)
3.	VinMax	3.63	Maximum input voltage
4.	VinMin	2.97	Minimum input voltage
5.	Vout	1.2	Output Voltage
6.	base_pn	TPS62097	Texas Instruments Base Part Number
7.	source	DC	Input Source Type
8.	ta	30.0	Ambient temperature

Design Assistance

1. TPS62097 Product Folder : <http://www.ti.com/product/TPS62097> : contains the data sheet and other resources.

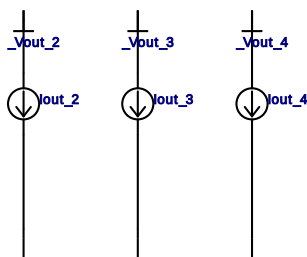
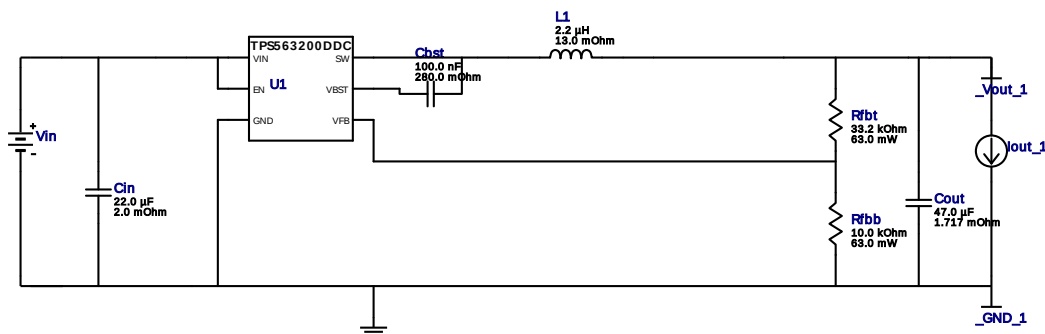


Vout = 3.3V
Iout = 2.03A

Device = TPS563200DDCR
Topology = Buck
Created = 7/13/16 12:35:29 AM
BOM Cost = \$1.27
BOM Count = 7
Total Pd = 0.59W

WEBENCH® Design Report

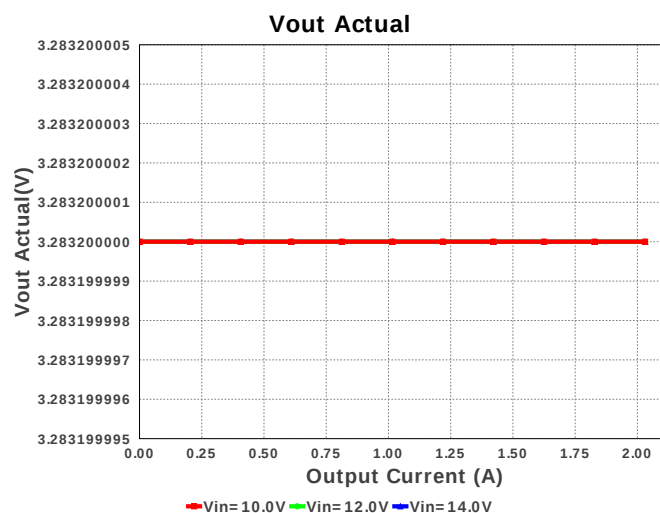
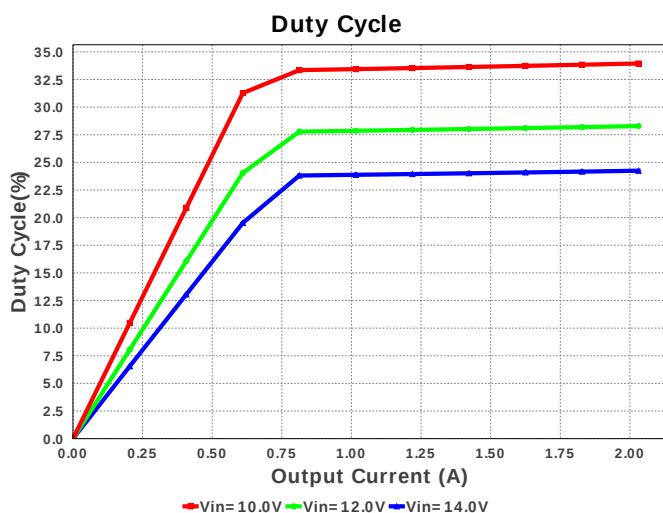
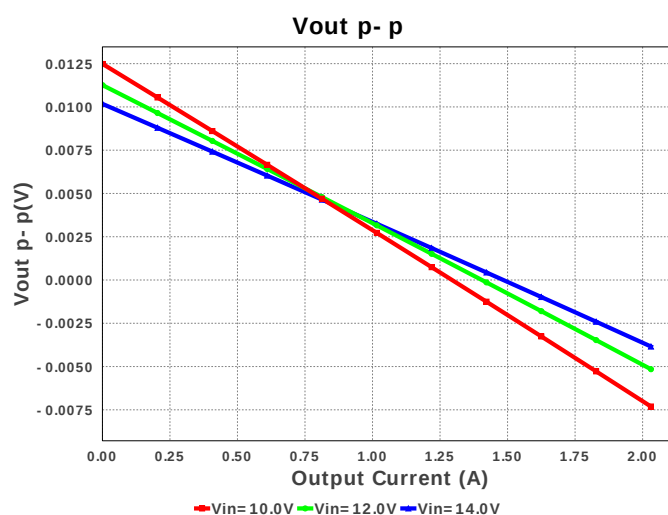
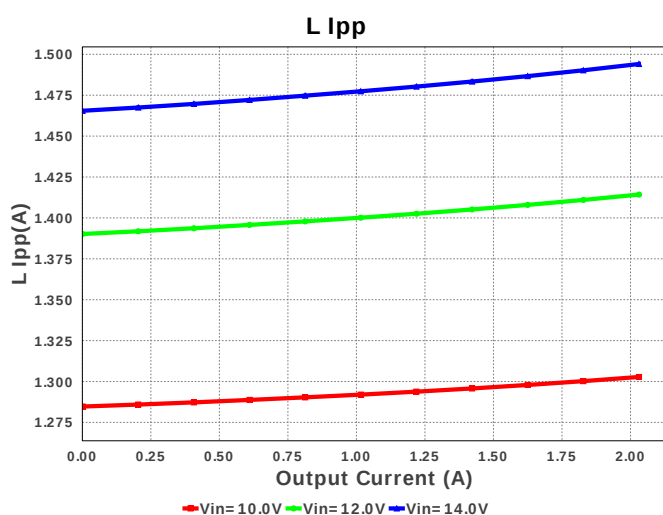
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TPS563200DDCR 10.0V-14.0V to 3.30V @ 2.0309A

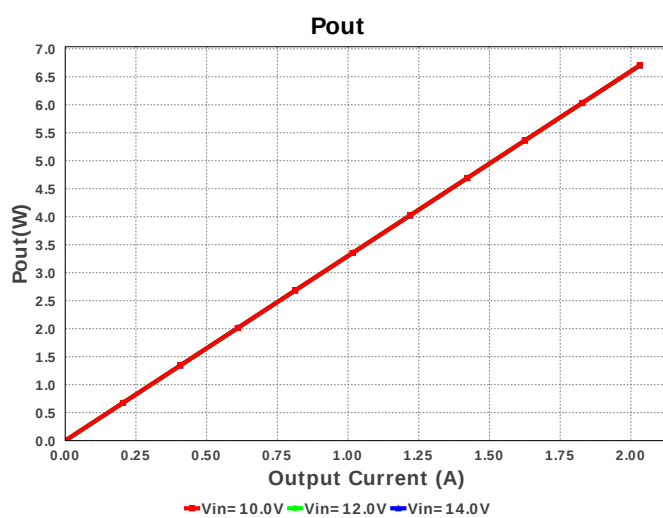
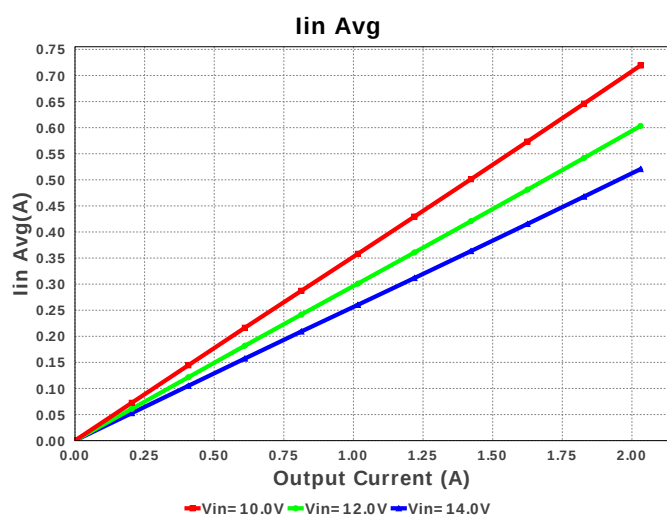
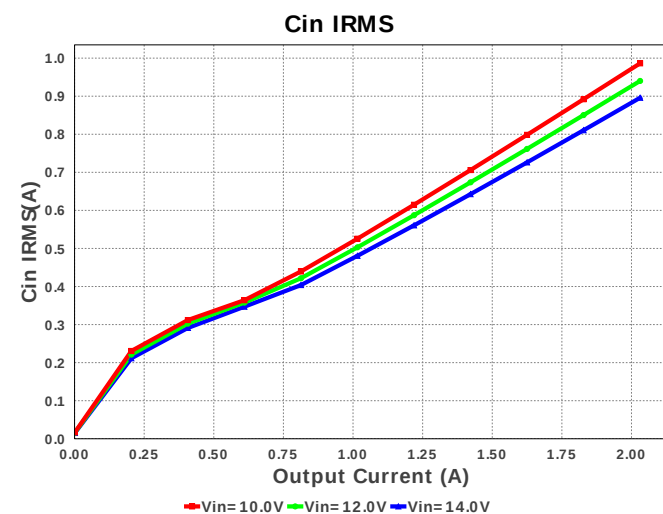
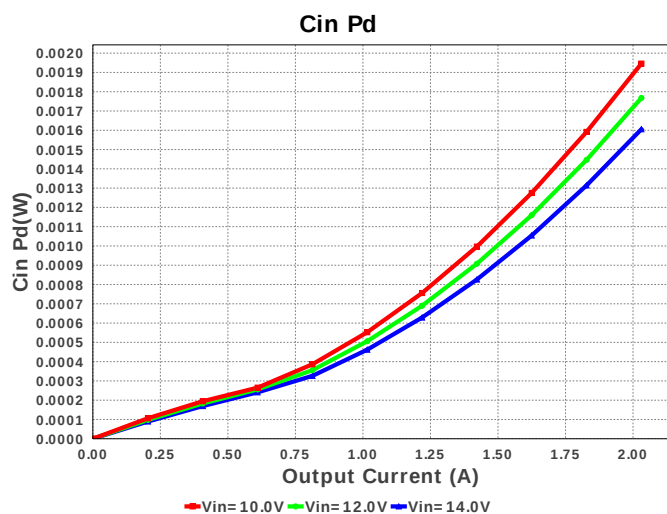
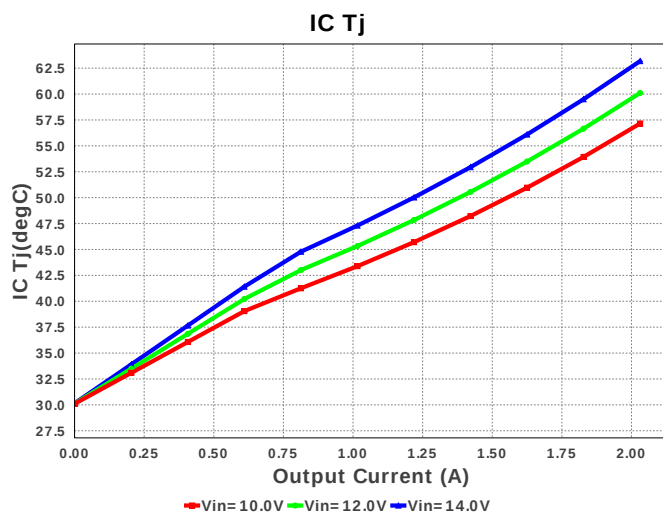
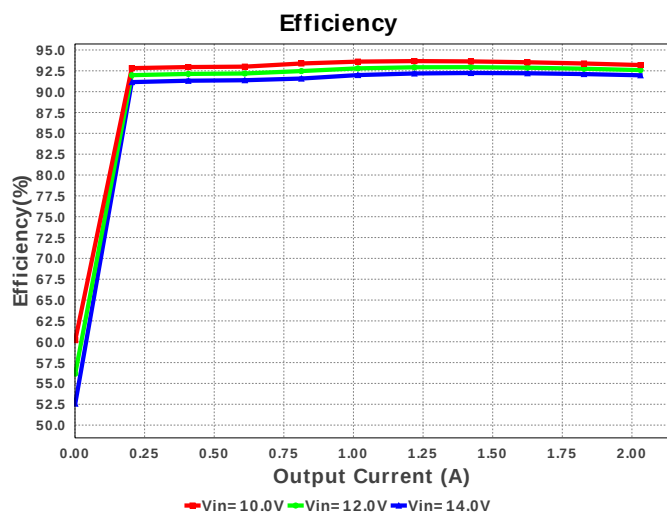


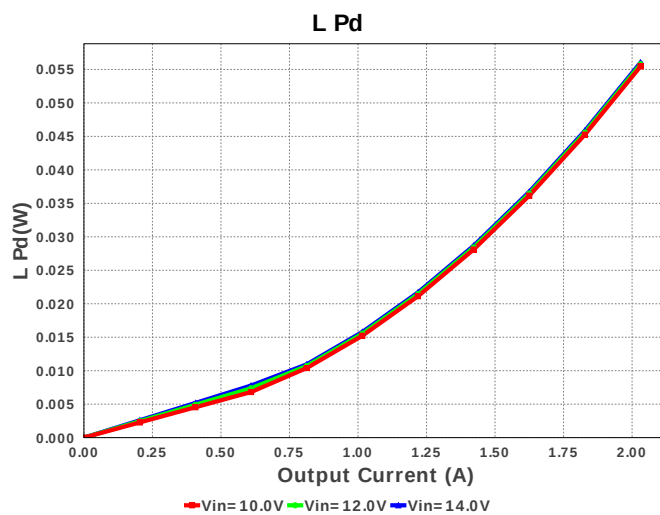
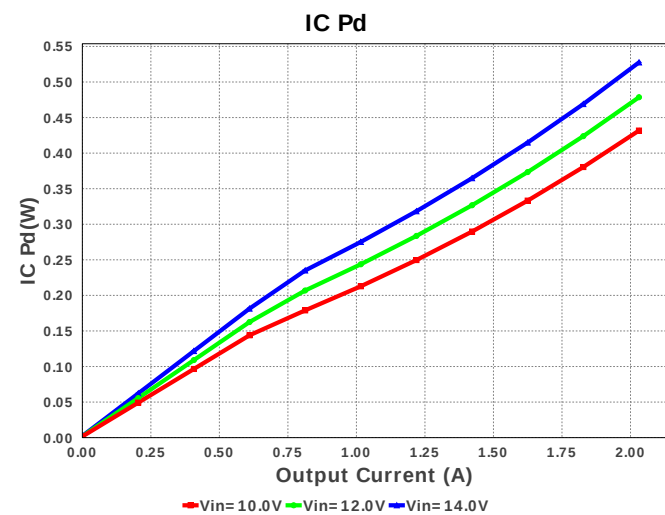
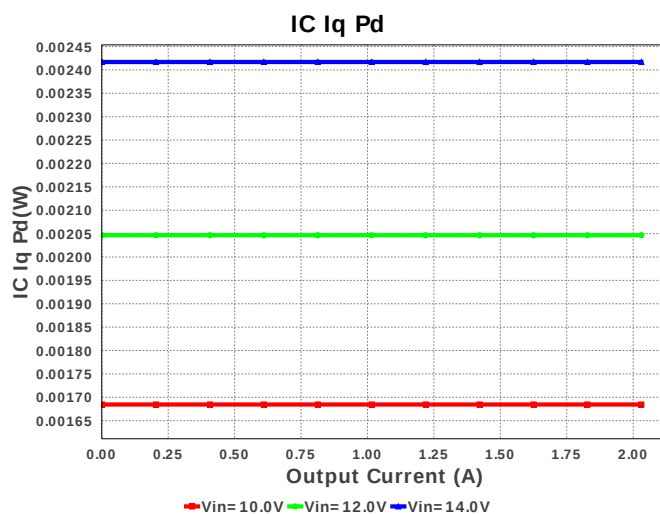
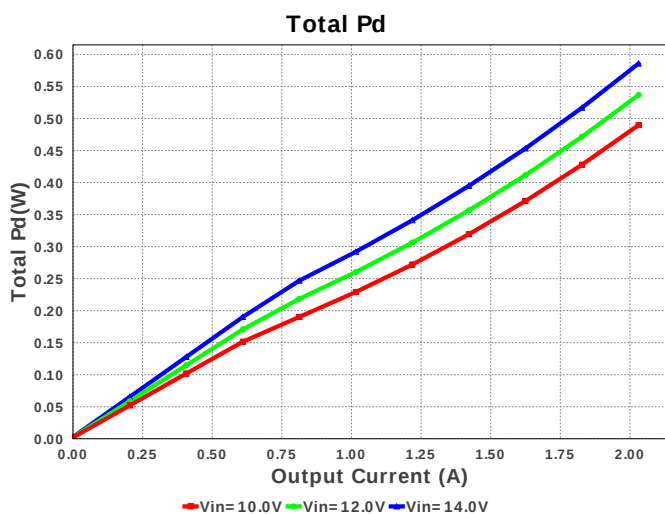
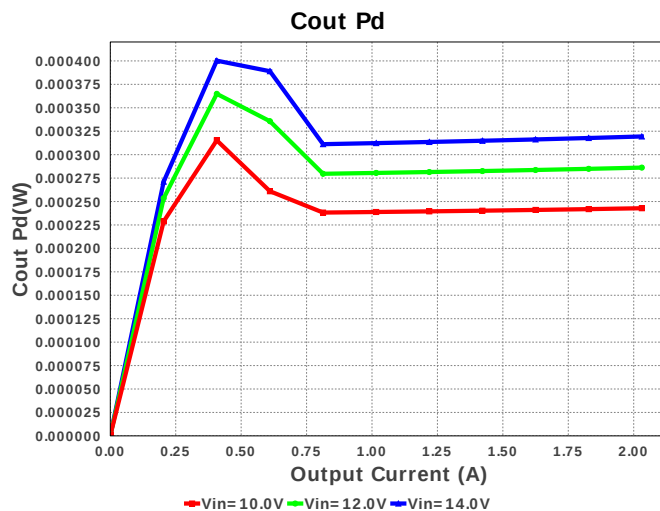
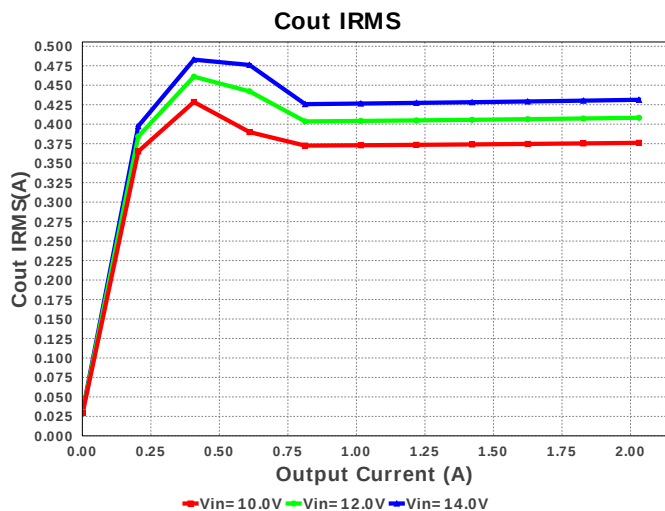
Electrical BOM

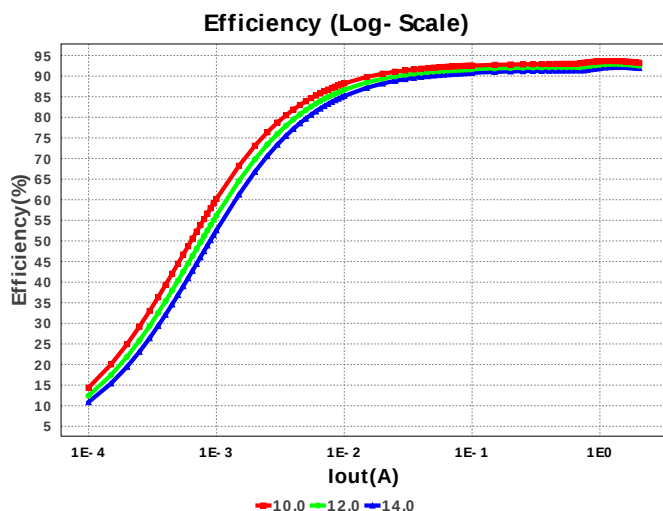
#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
1.	Cbst	AVX	08053C104KAT2A Series= X7R	Cap= 100.0 nF ESR= 280.0 mOhm VDC= 25.0 V IRMS= 0.0 A	1	\$0.01	 0805 7 mm ²
2.	Cin	MuRata	GRM32ER61E226KE15L Series= X5R	Cap= 22.0 uF ESR= 2.0 mOhm VDC= 25.0 V IRMS= 3.67 A	1	\$0.16	 1210 15 mm ²
3.	Cout	TDK	C3216JB1A476M Series= JB	Cap= 47.0 uF ESR= 1.717 mOhm VDC= 10.0 V IRMS= 0.0 A	1	\$0.34	 1206 11 mm ²
4.	L1	Bourns	SRN8040-2R2Y	L= 2.2 uH DCR= 13.0 mOhm	1	\$0.22	 SRN8040 100 mm ²
5.	Rfbb	Vishay-Dale	CRCW040210K0FKED Series= CRCW...e3	Res= 10.0 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 3 mm ²
6.	Rfbt	Vishay-Dale	CRCW040233K2FKED Series= CRCW...e3	Res= 33.2 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 3 mm ²

#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
7.	U1	Texas Instruments	TPS563200DDCR	Switcher	1	\$0.52	 DDC0006A 10 mm ²









Operating Values

#	Name	Value	Category	Description
1.	Cin IRMS	895.899 mA	Current	Input capacitor RMS ripple current
2.	Cout IRMS	431.303 mA	Current	Output capacitor RMS ripple current
3.	Iin Avg	520.55 mA	Current	Average input current
4.	L Ipp	1.494 A	Current	Peak-to-peak inductor ripple current
5.	BOM Count	7	General	Total Design BOM count
6.	FootPrint	149.0 mm ²	General	Total Foot Print Area of BOM components
7.	Frequency	780.31 kHz	General	Switching frequency
8.	Pout	6.702 W	General	Total output power
9.	Total BOM	\$1.27	General	Total BOM Cost
10.	Vout Actual	3.283 V	Op_Point	Vout Actual calculated based on selected voltage divider resistors
11.	Vout OP	3.3 V	Op_Point	Operational Output Voltage
12.	Duty Cycle	24.244 %	Op_point	Duty cycle
13.	Efficiency	91.963 %	Op_point	Steady state efficiency
14.	IC Tj	63.18 degC	Op_point	IC junction temperature
15.	ICThetaJA	62.9 degC/W	Op_point	IC junction-to-ambient thermal resistance
16.	IOUT_OP	2.031 A	Op_point	Iout operating point
17.	VIN_OP	14.0 V	Op_point	Vin operating point
18.	Vout p-p	5.921 mV	Op_point	Peak-to-peak output ripple voltage
19.	Cin Pd	1.605 mW	Power	Input capacitor power dissipation
20.	Cout Pd	319.4 μW	Power	Output capacitor power dissipation
21.	IC Iq Pd	2.417 mW	Power	IC Iq Pd
22.	IC Pd	527.505 mW	Power	IC power dissipation
23.	L Pd	56.038 mW	Power	Inductor power dissipation
24.	Total Pd	585.712 mW	Power	Total Power Dissipation
25.	Vout Tolerance	2.889 %		Vout Tolerance based on IC Tolerance (no load) and voltage divider resistors if applicable

Design Inputs

#	Name	Value	Description
1.	Iout	2.031	Maximum Output Current
2.	SoftStart	1.0 ms	Soft Start Time (ms)
3.	VinMax	14.0	Maximum input voltage
4.	VinMin	10.0	Minimum input voltage
5.	Vout	3.3	Output Voltage
6.	base_pn	TPS563200	Texas Instruments Base Part Number
7.	source	DC	Input Source Type
8.	ta	30.0	Ambient temperature

Design Assistance

1. TPS563200 Product Folder : <http://www.ti.com/product/TPS563200> : contains the data sheet and other resources.

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