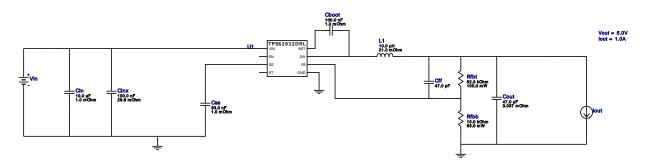
VinMin = 24.0V VinMax = 24.0V Vout = 5.0V Iout = 1.0A Device = TPS62932DRLR Topology = Buck Created = 2024-02-15 11:28:19.149 BOM Cost = \$1.22 BOM Count = 10 Total Pd = 0.26W

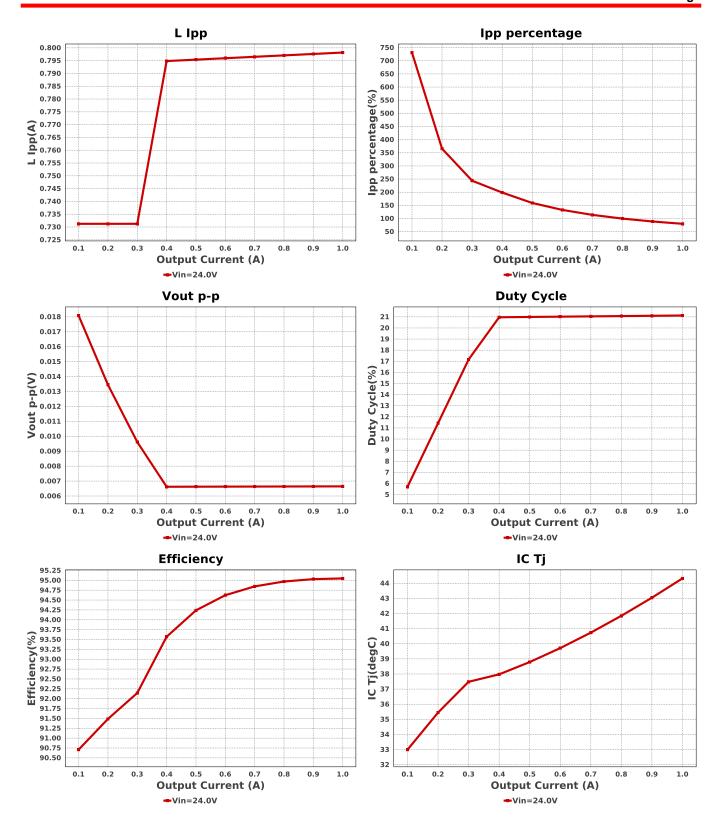
WEBENCH® Design Report

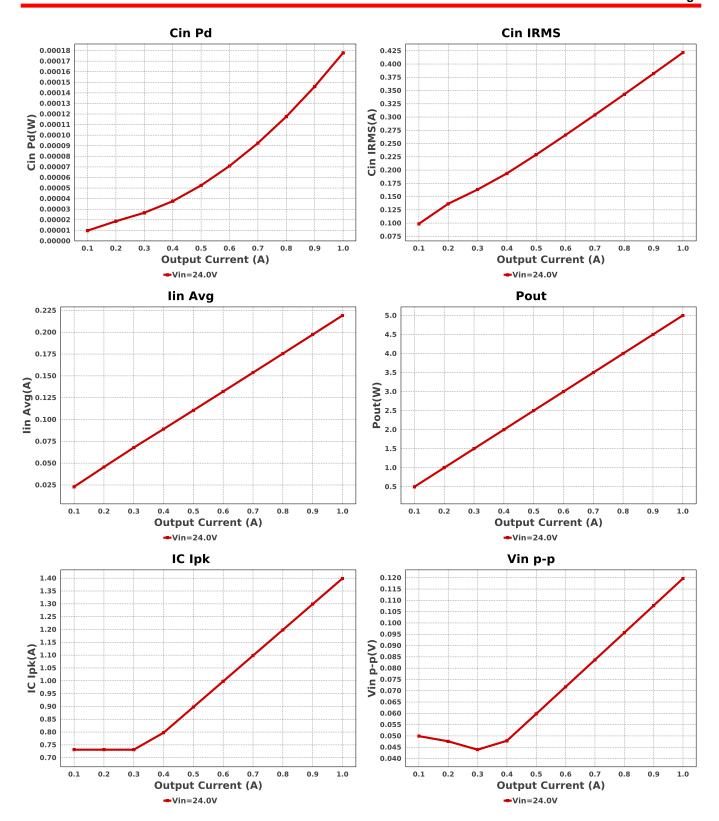
Design: 2 TPS62932DRLR TPS62932DRLR 24V-24V to 5.00V @ 1A

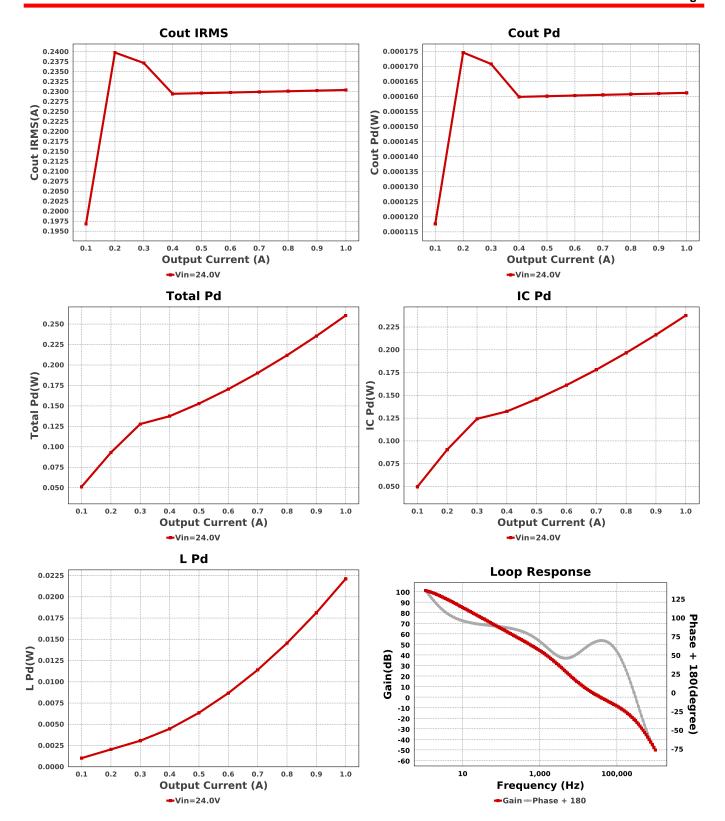


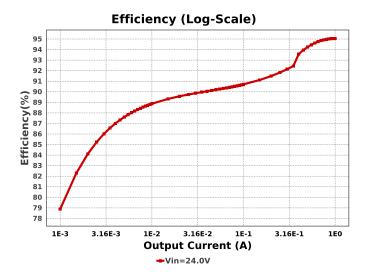
Electrical BOM

Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
Cboot	MuRata	GRM155R71A104KA01D Series= X7R	Cap= 100.0 nF ESR= 1.0 mOhm VDC= 10.0 V IRMS= 0.0 A	1	\$0.01	0402 3 mm ²
Cff	MuRata	GRM0335C1E470JA01D Series= C0G/NP0	Cap= 47.0 pF VDC= 25.0 V IRMS= 0.0 A	1	\$0.01	0201 2 mm ²
Cin	TDK	C3216X5R1H106K160AB Series= X5R	Cap= 10.0 uF ESR= 1.0 mOhm VDC= 50.0 V IRMS= 4.9 A	1	\$0.24	1206_180 11 mm ²
Cinx	TDK	CGA3E2X7R1H104K080AA Series= X7R	Cap= 100.0 nF ESR= 29.6 mOhm VDC= 50.0 V IRMS= 971.99 mA	1	\$0.01	0603 5 mm ²
Cout	MuRata	GRM32ER61C476KE15L Series= X5R	Cap= 47.0 uF ESR= 3.037 mOhm VDC= 16.0 V IRMS= 4.59346 A	1	\$0.17	1210_280 15 mm ²
Css	MuRata	GRM155R71A333KA01D Series= X7R	Cap= 33.0 nF ESR= 1.0 mOhm VDC= 10.0 V IRMS= 0.0 A	1	\$0.01	0402 3 mm ²
L1	Bourns	SRR1208-100ML	L= 10.0 μH 21.0 mOhm	1	\$0.56	SRR1208 216 mm ²
Rfbb	Vishay-Dale	CRCW040210K0FKED Series= CRCWe3	Res= 10.0 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	0402 3 mm ²
Rfbt	Yageo	RC0603FR-0752K3L Series= ?	Res= 52.3 kOhm Power= 100.0 mW Tolerance= 1.0%	1	\$0.01	0603 5 mm ²
U1	Texas Instruments	TPS62932DRLR	Switcher	1	\$0.19	DRL0008A-MFG 9 mm ²









Operating Values

Current Current	-	J			
2. Cin Pd	#	Name	Value	Category	Description
3. Cout IRMS 290.409 mA	1.	Cin IRMS	421.686 mA	Capacitor	Input capacitor RMS ripple current
4. Cout Pd 16123 µW Capacitor Output capacitor power dissipation 6. IC Pd	2.	Cin Pd	177.82 μW	Capacitor	Input capacitor power dissipation
C C Ped 1.399 A C C Peak switch current in IC	3.	Cout IRMS	230.409 mA	Capacitor	Output capacitor RMS ripple current
6. IC Pd	4.	Cout Pd	161.23 μW	Capacitor	Output capacitor power dissipation
7. IC Tj 43.19 degC IC IC junction temperature 8. IC Tolerance 16.0 mV IC IC Feedback Tolerance 9. ICThetaJA Effective 60.25 degC/W IC Average input current 10. Ilin Avg 219.19 mA IC Average input current 11. Ipp percentage 79.816 % Inductor Inductor replacement used for Information 12. L Ipp 798.16 mA Inductor Inductor Inductor ripple current percentage (with respect to average induct current) 13. L Pd 22.115 mW Inductor Inductor power dissipation 14. Cin Pd 177.82 µW Power Inductor power dissipation 15. Cout Pd 161.23 µW Power Output capacitor power dissipation 16. IC Pd 237.65 mW Power Inductor power dissipation 17. L Pd 22.115 mW Power Inductor power dissipation 18. Total Pd 26.503 mW Power Inductor power dissipation 19. BOM Count 10 System Information 20. Cross Freq 37.068 kHz System Information 21. Duty Cycle 21.122 % System Information 22. Efficiency 95.048 % System Information 23. FootPrint 271.0 mm² Information 24. Frequency 500.0 kHz System Information 25. Gain Marg -21.051 dB System Information Inductor ripple current (% of average inductor current) requirement used for Information Information 26. Inductor ripple current 40.0 % System Information Information 27. Iout 1.0 A System Information 28. Iout transient step used 500.0 mA for Cout calculations 29. Low Freq Gain 100.953 dB System Information 30. Mode CCM System Information 31. Overshoot Value 7.887 mV System Information 32. Phase Marg 69.931 deg System Information 33. Pout 5.0 W System Information 34. Total BOM \$1.22 System Information 35. System Information 36. Overshoot Value 7.887 mV System Information 37. Total BOM \$1.22 System Information 38. Total BOM \$1.22 System Information 39. System Information 30. Mode CCM System Information 31. Total BOM \$1.22 System Information 32. Phase Marg 69.931 deg System Information 33. Pout 5.0 W System Information 34. Total BOM \$1.22 System Information 35. Total BOM System Information 36. Total BOM System Information 37. Total BOM System Information 38. Total BOM Sys	5.	IC lpk	1.399 A		Peak switch current in IC
8. IC Tolerance 16.0 mV C IC IC Feedback Tolerance 9. ICT Thetapla Effective G Justician to Average input current 10. Iin Avg 219.19 m A IC Average input current 11. Ipp percentage 79.816 % Inductor Inductor inpile current percentage (with respect to average inductor unductor inpile current) 12. L Ipp 798.16 m Inductor Inductor inpile current percentage (with respect to average inductor unductor inpile current) 14. Cin Pd 177.82 µW Power Output capacitor power dissipation Injut capacitor Injut capacitor power dissipation Injut capacitor power dissipation Injut capacitor Injut capacit	6.	IC Pd	237.65 mW	IC	IC power dissipation
9. ICThetaJA Effective 10. Ilin Avg 11. Ipp percentage 17. Ipp percentage 17. Ipp percentage 17. Ipp percentage 18. Ic L Ipp 17. Ipp percentage 19. Inductor 19. L Ipp 17. Ipp percentage 19. Inductor 19. L Ipp 17. Ipp Power 19. Ic Inductor ripple current percentage (with respect to average inductor current) 19. L Pd 19. Cout Pd 16. Ic Pd 237.65 mW 17. L Pd 22.115 mW 19. Power 19. Ic Total Pd 260.503 mW 19. BOM Count 10 20. Cross Freq 21. Duty Cycle 21. 122 % 22. Efficiency 23. FootPrint 271. 0 mm² 24. Frequency 25. Gain Marg 271. 0 mm² 272. Inductor ripple current 273. FootPrint 274. On m² 275. Inductor power dissipation 176. Ic Pd 277. Io mm² 18. Total Pd 278. Total Pd 279. System Information 280. Inductor ripple current 291. Duty Cycle 292. Efficiency 295.048 % 295. System Information 295. Inductor ripple current 296. Inductor power dissipation 296. Inductor power dissipation 297. Inductor power dissipation 298. Information 299. Low Freq Gain 279. Inductor power dissipation 270. Cross Freq 270. Total Power 271. On m² 271. On m² 272. Information 273. FootPrint 274. On m² 275. Gain Marg 276. Inductor ripple current 277. Iout 278. Inductor ripple current 279. Information 279. Information 270. Inductor ripple current 270. On MA 271. On m² 271. On m² 272. Inductor ripple current 273. Power Information 274. Frequency 275. Gain Marg 276. Inductor ripple current 277. Iout 278. Inductor ripple current 279. Iout 279. Information 279. Information 270. Mode 270. Cross Freq 270. Information 271. On Mode Information 271. On Mode Information 272. Information 273. Power Information 274. Frequency Information 275. Inductor ripple current 276. Inductor ripple current 277. Inductor ripple current 278. Inductor ripple current 289. Inductor ripple current 299. Inductor ripple current 299. Information 299. Information 290. Information 290. Mode 290. On Ma 290. Mode 2	7.	IC Tj	44.319 degC	IC	IC junction temperature
10. lin Avg 219.19 mA IC Average input current Inductor ripple current percentage (with respect to average inductor current) 11. lipp percentage 79.816 % Inductor ripple current percentage (with respect to average inductor current) 12. L lpp 798.16 mA Inductor Peak-to-peak inductor ripple current Inductor percentage (with respect to average inductor current) 14. Cin Pd 177.82 µW Power Inductor power dissipation 15. Cout Pd 161.23 µW Power Inductor power dissipation 16. IC Pd 237.65 mW Power Inductor power dissipation 17. L Pd 22.115 mW Power Inductor power dissipation 18. Total Pd 260.503 mW Power Information 19. BOM Count 10 System Information 20. Cross Freq 37.068 kHz System Information 21. Duty Cycle 21.122 % System Information 22. Efficiency 95.048 % System Information 23. FootPrint 271.0 mm² System Information 24. Frequency 500.0 kHz System Information 25. Gain Marg -21.051 dB System Information Information 26. Inductor ripple current requirement used for Inductor selection 27. Iout 1.0 A System Information 28. Iout transient step used 500.0 mA for Cout calculations 29. Low Freq Gain 100.953 dB Information 30. Mode CCM System Information 31. Overshoot Value 7.887 mV System Information 32. Phase Marg 69.931 deg Nystem Information 33. Pout 5.0 W System Information 34. Total BOM \$1.22 System Information 35. System Information 36. Total BOM \$1.22 System Information 37. Total BOM St.22 System Information 38. Total BOM \$1.22 System Information 39.	8.	IC Tolerance	16.0 mV	IC	IC Feedback Tolerance
11. Ipp percentage 79.816 % Inductor current) 12. L Ipp 798.16 mA Inductor ripple current percentage (with respect to average inductor current) 13. L Pd 22.115 mW Inductor Inductor power dissipation Inductor In	9.	ICThetaJA Effective	60.25 degC/W	IC	Effective IC Junction-to-Ambient Thermal Resistance
Current) 12. L lpp 798.16 mA Inductor 13. L Pd 22.115 mW Inductor 14. Cin Pd 177.82 µW Power 15. Cout Pd 161.23 µW Power 16. IC Pd 237.65 mW Power 17. L Pd 22.115 mW Power 18. Total Pd 260.503 mW Power 19. BOM Count 10 System Information 20. Cross Freq 37.068 kHz System Information 21. Duty Cycle 21.122 % System Information 22. Efficiency 95.048 % System Information 23. FootPrint 271.0 mm² System Information 24. Frequency 500.0 kHz System Information 25. Gain Marg -21.051 dB System Information 26. Inductor ripple current 40.0 % System Information 27. lout 1.0 A System Information 28. lout transient step used 500.0 mA for Cout calculations for Cout calculations 29. Low Freq Gain 100.953 dB Information 30. Mode CCM System Information 31. Overshoot Value 7.887 mV System Information 32. Phase Marg 69.931 deg System Information 33. Pout 5.0 W System Information 34. Total BOM \$1.22 System Information 35. Total BOM \$1.22 System Information 36. Total BOM \$1.22 System Information 37. Total BOM \$1.22 System Information 38. Total BOM \$1.22 System Information 39. Total BOM \$1.22 System Information 30. Total BOM \$1.22 System Information 30. Total BOM \$1.22 System Information 30. Total BOM \$1.22 System Information 31. Total BOM \$1.22 System Information 32. Total BOM \$1.22 System Information 33. Pout 5.0 W System Information 34. Total BOM \$1.22 System Information 35. Total BOM \$1.22 System Information 36. Total BOM \$1.22 System Information 37. Total BOM \$1.22 System Information 38. Total BOM \$1.22 System Information 39. Total BOM \$1.22 System Information 39. Total BOM \$1.22 System Information 30. Total BOM \$1.22 System Information 31. Total BOM \$1.22 System Information 32. Total BOM \$1.22 System Information 33. Total BOM \$1.22 System Information 34. Total B	10.	lin Avg	219.19 mA	IC	Average input current
13. L Pd	11.	Ipp percentage	79.816 %	Inductor	Inductor ripple current percentage (with respect to average inductor current)
14. Cin Pd 177.82 μW Power Input capacitor power dissipation 15. Cout Pd 161.23 μW Power Output capacitor power dissipation 16. IC Pd 237.65 mW Power Inductor power dissipation 17. L Pd 22.115 mW Power Inductor power dissipation 18. Total Pd 260.503 mW Power Inductor power dissipation 19. BOM Count 10 System Information System Information 20. Cross Freq 37.068 kHz System Information Information 21. Duty Cycle 21.122 % System Information System Information 22. Efficiency 95.048 % System Information Information 23. FootPrint 271.0 mm² System Information Information 24. Frequency 500.0 kHz System Information Information 25. Gain Marg -21.051 dB System Information Information 26. Inductor ripple current requirement used for Inductor selection System Information Custom Inductor ripple current (% of average inductor current) requirement used for Inductor selection 27. lout 1.0 A System Information Information Custom Transient current step requirement that was used for Cout calculations 29. Low Freq Gain 100.953 dB System Information System Information Conduction Mode 31. Overshoot Value 7.887 mV System Information Information Information Sys	12.	L lpp	798.16 mA	Inductor	Peak-to-peak inductor ripple current
15. Cout Pd 161.23 juW Power IC power dissipation I	13.	L Pd	22.115 mW	Inductor	Inductor power dissipation
16. IC Pd	14.	Cin Pd	177.82 μW	Power	Input capacitor power dissipation
17. L Pd 22.115 mW Power John John John John John John John John	15.	Cout Pd	161.23 μW	Power	Output capacitor power dissipation
17. L Pd 22.115 mW Power John John John John John John John John	16.	IC Pd	•	Power	· · · · · · · · · · · · · · · · · · ·
19. BOM Count 10 System Information Information System Bode plot crossover frequency 20. Cross Freq 37.068 kHz System Information System Information 21. Duty Cycle 21.122 % System Duty cycle Information 22. Efficiency 95.048 % System Information 23. FootPrint 271.0 mm² System Information 24. Frequency 500.0 kHz System Information 25. Gain Marg -21.051 dB System Information 26. Inductor ripple current requirement used for Inductor selection 27. Iout 1.0 A System Information 28. Iout transient step used 500.0 mA for Cout calculations 29. Low Freq Gain 100.953 dB System Information 30. Mode CCM System Information 31. Overshoot Value 7.887 mV System Information 32. Phase Marg 69.931 deg System Information 33. Pout 5.0 W System Information 34. Total BOM \$1.22 System Total BOM Cost	17.	L Pd	22.115 mW	Power	Inductor power dissipation
Information System Bode plot crossover frequency	18.	Total Pd	260.503 mW	Power	Total Power Dissipation
20. Cross Freq 37.068 kHz System Information 21. Duty Cycle 21.122 % System Information 22. Efficiency 95.048 % System Information 23. FootPrint 271.0 mm² System Information 24. Frequency 500.0 kHz System Information 25. Gain Marg -21.051 dB System Information 26. Inductor ripple current 40.0 % System Information Information 27. Iout 1.0 A System Information 28. Iout transient step used 500.0 mA for Cout calculations 29. Low Freq Gain 100.953 dB System Information 30. Mode CCM System Information 31. Overshoot Value 7.887 mV System Information 32. Phase Marg 69.931 deg System Information 33. Pout 5.0 W System Information 34. Total BOM \$1.22 System Total BOM Cost	19.	BOM Count	10	System	Total Design BOM count
Information System Duty cycle Information System Information Information System Information Information System Information Information System Information Information System Information Information System Information Inform				Information	•
Information System Steady state efficiency 95.048 % System Information System Information System Information System Switching frequency Switching	20.	Cross Freq	37.068 kHz	•	Bode plot crossover frequency
Information System Total Foot Print Area of BOM components Information System Information System System Switching frequency Information System Information System Information System System System Information Information System Information	21.	Duty Cycle	21.122 %	,	Duty cycle
23. FootPrint 271.0 mm² System Information 24. Frequency 500.0 kHz System Switching frequency Information 25. Gain Marg -21.051 dB System Information 26. Inductor ripple current requirement used for Inductor selection 27. Iout 1.0 A System Information 28. Iout transient step used 500.0 mA for Cout calculations 29. Low Freq Gain 100.953 dB System Information 30. Mode CCM System Custom Transient current step requirement that was used for Cout Information 31. Overshoot Value 7.887 mV System Information 32. Phase Marg 69.931 deg System Information 33. Pout 5.0 W System Total BOM Cost	22.	Efficiency	95.048 %	•	Steady state efficiency
24. Frequency 500.0 kHz System Information 25. Gain Marg -21.051 dB System Information 26. Inductor ripple current requirement used for Inductor selection 27. Iout 1.0 A System Information 28. Iout transient step used 500.0 mA for Cout calculations 29. Low Freq Gain 100.953 dB System Information 30. Mode CCM System Conduction Mode Information 31. Overshoot Value 7.887 mV System Information 32. Phase Marg 69.931 deg System Information 33. Pout 5.0 W System Information 34. Total BOM \$1.22 System Total BOM Cost	23.	FootPrint	271.0 mm ²	System	Total Foot Print Area of BOM components
25. Gain Marg -21.051 dB System Information 26. Inductor ripple current 40.0 % System Custom Inductor ripple current (% of average inductor current) Information requirement used for Inductor selection 27. Iout 1.0 A System Iout operating point 28. Iout transient step used 500.0 mA System Information rout calculations 29. Low Freq Gain 100.953 dB System Gain at 1Hz 30. Mode CCM System Conduction Mode 31. Overshoot Value 7.887 mV System Information 32. Phase Marg 69.931 deg System Information 33. Pout 5.0 W System Information 34. Total BOM \$1.22 System Total BOM Cost	24.	Frequency	500.0 kHz	System	Switching frequency
26. Inductor ripple current requirement used for Information requirement used for Inductor selection 27. Iout 28. Iout transient step used 500.0 mA for Cout calculations 29. Low Freq Gain 20. Mode 20. CCM 20. System Information 20. System Information 20. CCM System Information 20. Dershoot Value 21. Overshoot Value 22. Phase Marg 23. Phase Marg 24. Total BOM 25. Inductor ripple current (% of average inductor current) Information System Information Total BOM \$1.22 System Total BOM Cost	25.	Gain Marg	-21.051 dB	System	Bode Plot Gain Margin
requirement used for Inductor selection 27. lout 1.0 A System Information 28. lout transient step used 500.0 mA System Information 29. Low Freq Gain 100.953 dB System Gain at 1Hz 10. Mode CCM System Conduction Mode 30. Mode CCM System Conduction Mode 31. Overshoot Value 7.887 mV System Information 32. Phase Marg 69.931 deg System Information 33. Pout 5.0 W System Total BOM Cost 10. Information requirement used for Inductor selection 10. Overshoot value outcome Information 10. Overshoot Value 7.887 mV System Information 10. System Informatio	26.	Inductor ripple current	40.0 %		Custom Inductor ripple current (% of average inductor current)
27. lout 1.0 A System Information 28. lout transient step used 500.0 mA System Custom Transient current step requirement that was used for Cour for Cout calculations Information selection (A). 29. Low Freq Gain 100.953 dB System Gain at 1Hz Information 1100.953 dB System Conduction Mode Information 1100.953 dB System Gain at 1Hz Information 1100.953 dB System Info		requirement used for		Information	· · · · · · · · · · · · · · · · · · ·
28. lout transient step used 500.0 mA for Cout calculations Information selection (A). 29. Low Freq Gain 100.953 dB System Gain at 1Hz Information 30. Mode CCM System Conduction Mode Information 31. Overshoot Value 7.887 mV System Information 32. Phase Marg 69.931 deg System Information 33. Pout 5.0 W System Total BOM System Total BOM Cost	27.		1.0 A	,	lout operating point
29. Low Freq Gain 100.953 dB System Gain at 1Hz 30. Mode CCM System Conduction Mode Information 31. Overshoot Value 7.887 mV System Information 32. Phase Marg 69.931 deg System Bode Plot Phase Margin Information 33. Pout 5.0 W System Total output power Information 34. Total BOM \$1.22 System Total BOM Cost	28.	•	d 500.0 mA	System	Custom Transient current step requirement that was used for Cout selection (A)
30. Mode CCM System Conduction Mode 31. Overshoot Value 7.887 mV System Information 32. Phase Marg 69.931 deg System Bode Plot Phase Margin Information 33. Pout 5.0 W System Total output power Information 34. Total BOM \$1.22 System Total BOM Cost	29.		100.953 dB	System	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
31. Overshoot Value 7.887 mV System Information 32. Phase Marg 69.931 deg System Information 33. Pout 5.0 W System Information 34. Total BOM \$1.22 System Total BOM Cost	30.	Mode	CCM	System	Conduction Mode
32. Phase Marg 69.931 deg System Bode Plot Phase Margin Information 33. Pout 5.0 W System Total output power Information 34. Total BOM \$1.22 System Total BOM Cost	31.	Overshoot Value	7.887 mV	System	Theoretical Vout Overshoot Value
33. Pout 5.0 W System Total output power Information 34. Total BOM \$1.22 System Total BOM Cost	32.	Phase Marg	69.931 deg	System	Bode Plot Phase Margin
34. Total BOM \$1.22 System Total BOM Cost	33.	Pout	5.0 W	System	Total output power
mornation	34.	Total BOM	\$1.22		Total BOM Cost

#	Name	Value	Category	Description
35.	Undershoot Value	27.052 mV	System Information	Theoretical Vout Undershoot Value
36.	Vin	24.0 V	System Information	Vin operating point
37.	Vin p-p	119.704 mV	System Information	Peak-to-peak input voltage
38.	Vout	5.0 V	System Information	Operational Output Voltage
39.	Vout Actual	4.984 V	System Information	Vout Actual calculated based on selected voltage divider resistors
40.	Vout Ripple requirement used for Cout calculations	1.0 %	System Information	Custom maximum output ripple requirement that was used for Cout selection(% of Vout).
41.	Vout Tolerance	3.73 %	System Information	Vout Tolerance based on IC Tolerance (no load) and voltage divider resistors if applicable
42.	Vout p-p	6.646 mV	System Information	Peak-to-peak output ripple voltage
43.	Vout transient requirement used for Cout calculations	3.0 %	System Information	Custom Transient voltage change requirement that was used for Cout selection (% of Vout).

Design Inputs

Name	Value	Description	
lout	1.0	Maximum Output Current	
VinMax	24.0	Maximum input voltage	
VinMin	24.0	Minimum input voltage	
Vout	5.0	Output Voltage	
base_pn	TPS62932	Base Product Number	
source	DC	Input Source Type	
Та	30.0	Ambient temperature	

WEBENCH® Assembly

Component Testing

Some published data on components in datasheets such as Capacitor ESR and Inductor DC resistance is based on conservative values that will guarantee that the components always exceed the specification. For design purposes it is usually better to work with typical values. Since this data is not always available it is a good practice to measure the Capacitance and ESR values of Cin and Cout, and the inductance and DC resistance of L1 before assembly of the board. Any large discrepancies in values should be electrically simulated in WEBENCH to check for instabilities and thermally simulated in WebTHERM to make sure critical temperatures are not exceeded.

Soldering Component to Board

If board assembly is done in house it is best to tack down one terminal of a component on the board then solder the other terminal. For surface mount parts with large tabs, such as the DPAK, the tab on the back of the package should be pre-tinned with solder, then tacked into place by one of the pins. To solder the tab town to the board place the iron down on the board while resting against the tab, heating both surfaces simultaneously. Apply light pressure to the top of the plastic case until the solder flows around the part and the part is flush with the PCB. If the solder is not flowing around the board you may need a higher wattage iron (generally 25W to 30W is enough).

Initial Startup of Circuit

It is best to initially power up the board by setting the input supply voltage to the lowest operating input voltage 24.0V and set the input supply's current limit to zero. With the input supply off connect up the input supply to Vin and GND. Connect a digital volt meter and a load if needed to set the minimum lout of the design from Vout and GND. Turn on the input supply and slowly turn up the current limit on the input supply. If the voltage starts to rise on the input supply continue increasing the input supply current limit while watching the output voltage. If the current increases on the input supply, but the voltage remains near zero, then there may be a short or a component misplaced on the board. Power down the board and visually inspect for solder bridges and recheck the diode and capacitor polarities. Once the power supply circuit is operational then more extensive testing may include full load testing, transient load and line tests to compare with simulation results.

Load Testing

The setup is the same as the initial startup, except that an additional digital voltmeter is connected between Vin and GND, a load is connected between Vout and GND and a current meter is connected in series between Vout and the load. The load must be able to handle at least rated output power + 50% (7.5 watts for this design). Ideally the load is supplied in the form of a variable load test unit. It can also be done in the form of suitably large power resistors. When using an oscilloscope to measure waveforms on the prototype board, the ground leads of the oscilloscope probes should be as short as possible and the area of the loop formed by the ground lead should be kept to a minimum. This will help reduce ground lead inductance and eliminate EMI noise that is not actually present in the circuit.

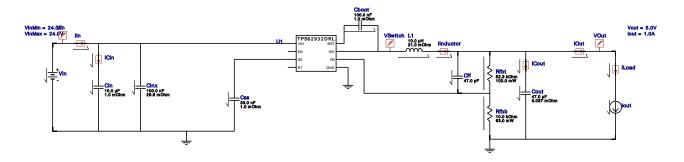


WEBENCH[®] Electrical Simulation Report

Design Id = 2

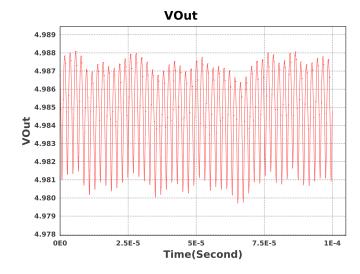
 $sim_id = 5$

Simulation Type = Steady State



Simulation Parameters

#	Name	Parameter Name	Description	Values
1.	Cout	IC	Vout	5.0
2.	Css	IC	no description	0.8
3.	L1	IC	Initial Current	1.0 A
4.	lout	1	Output Current	1.0



Design Assistance

- 1. Master key: 37C3C50233B7D137384961381C9450C6[v1]
- 2. TPS62932 Product Folder: http://www.ti.com/product/TPS62932: contains the data sheet and other resources.

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