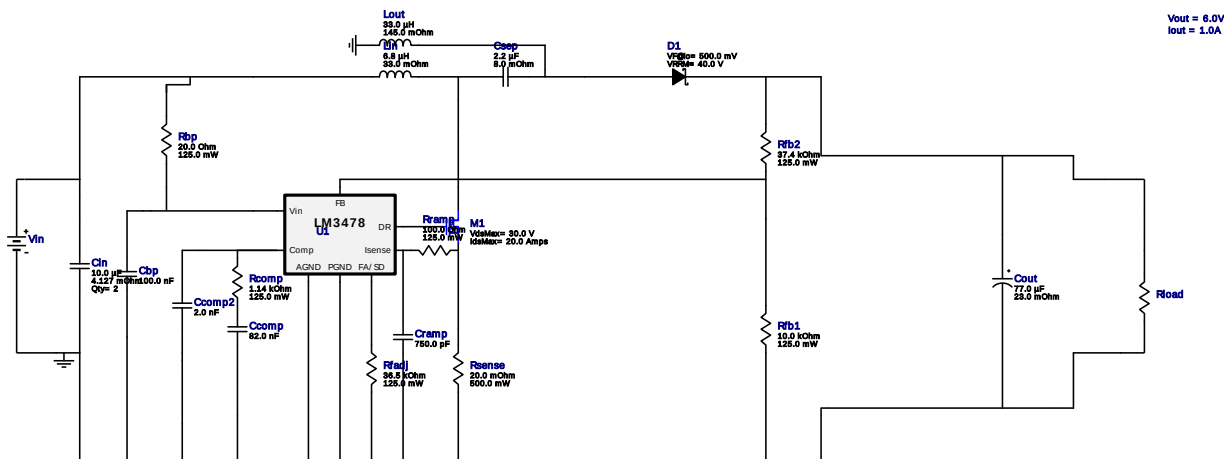


WEBENCH® Design Report

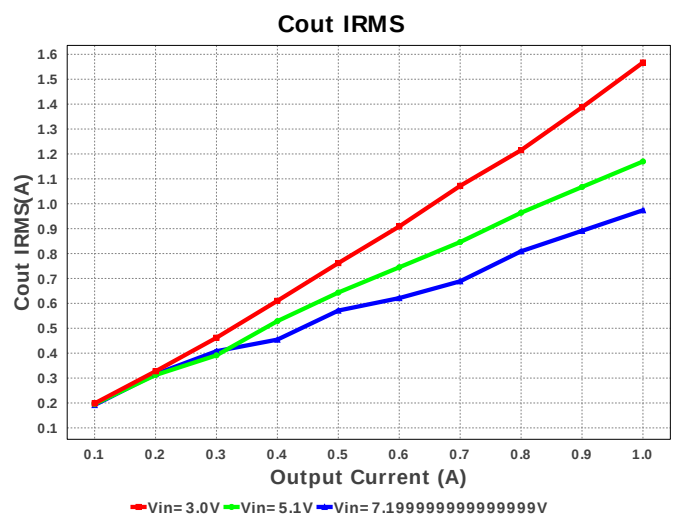
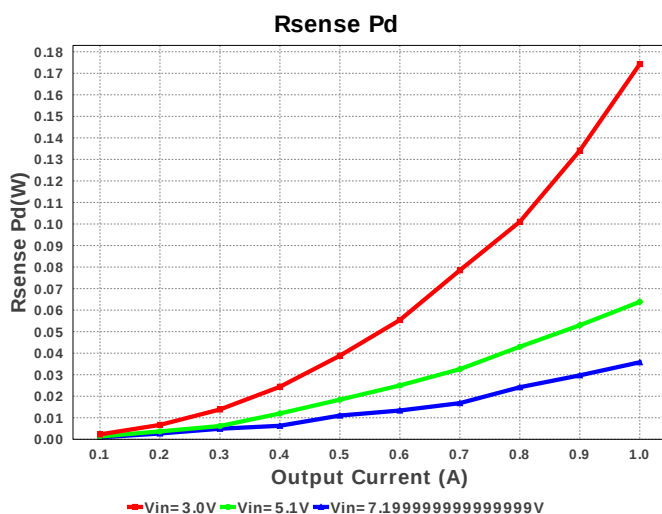
Design : 1974949/31 LM3478MMX/NOPB
LM3478MMX/NOPB 3.0V-7.2V to 6.00V @ 1.0A

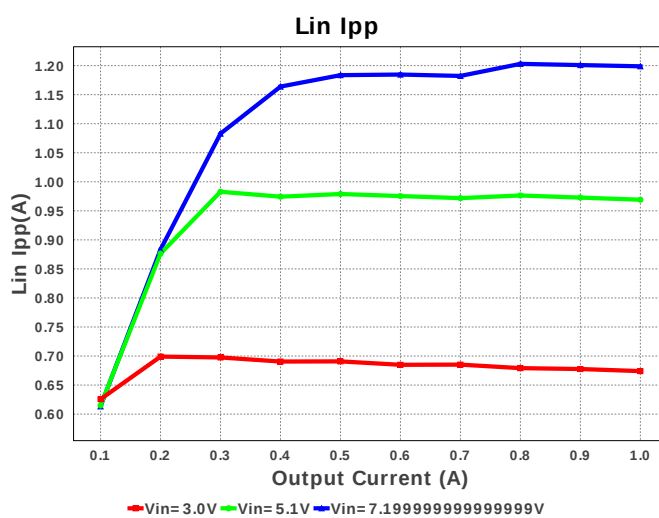
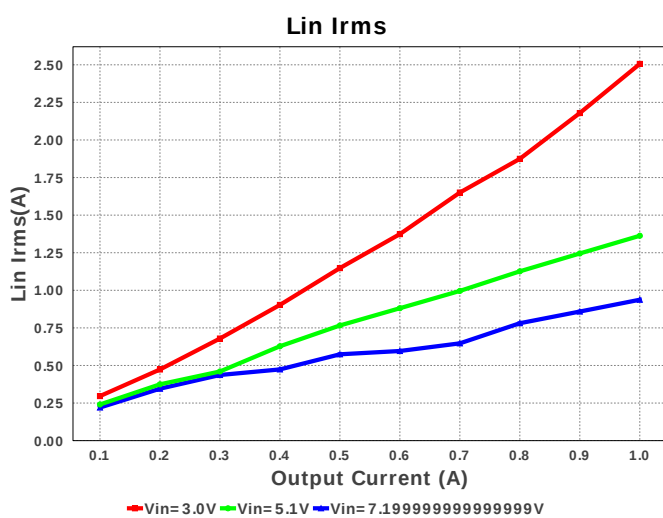
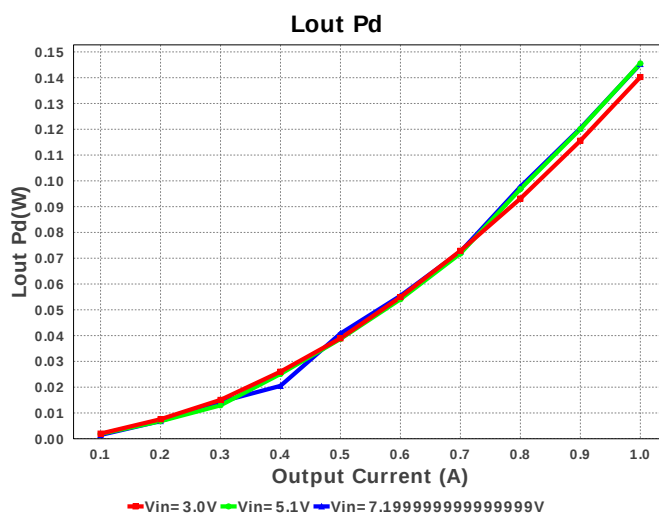
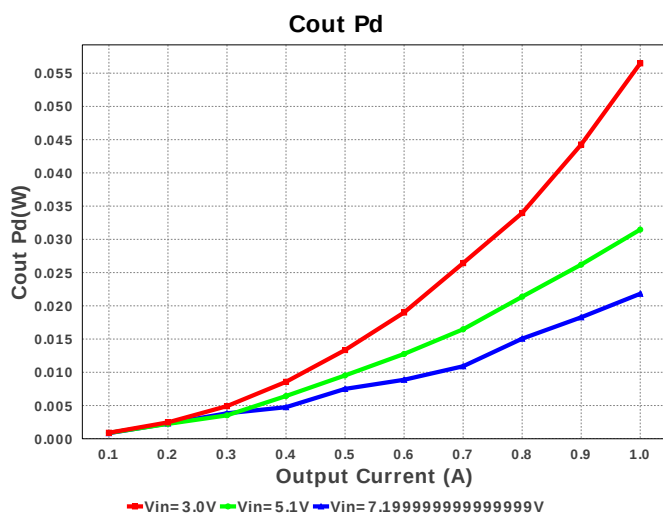
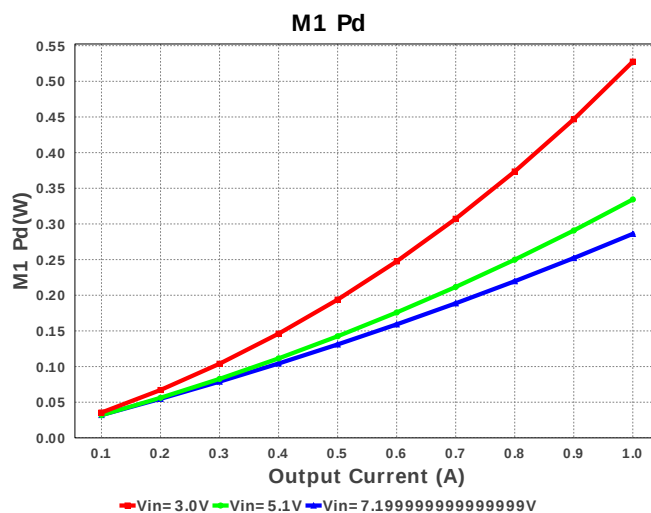
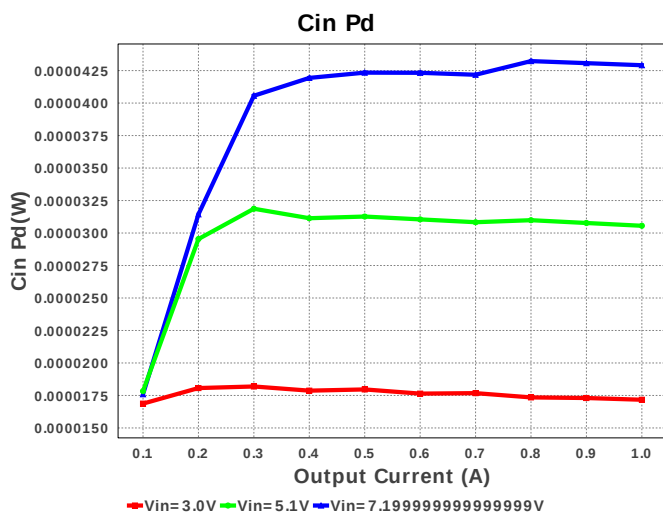


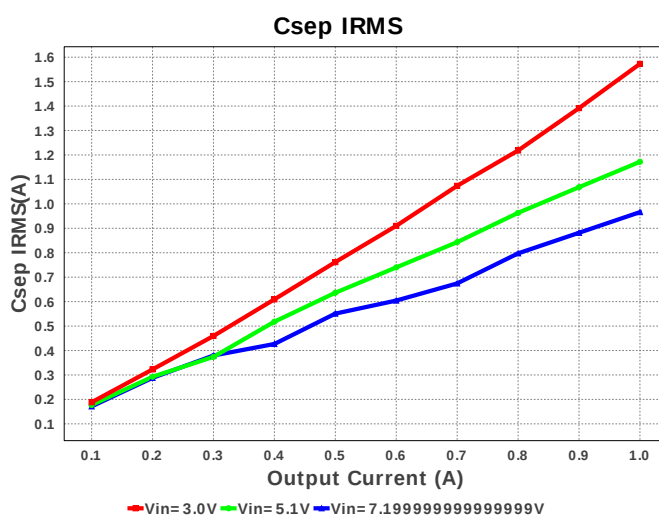
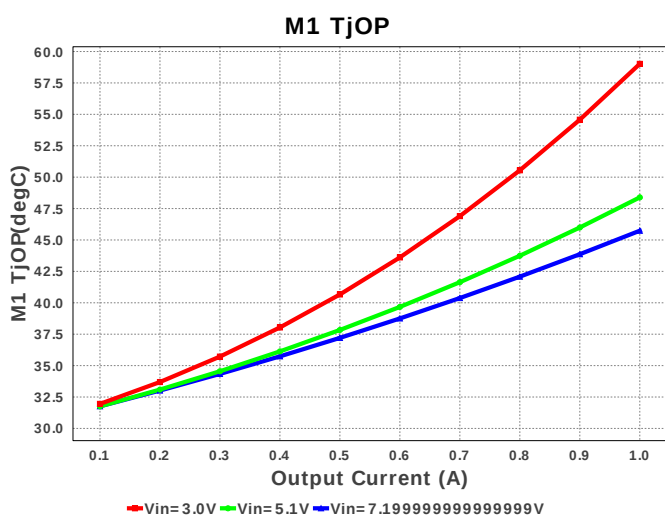
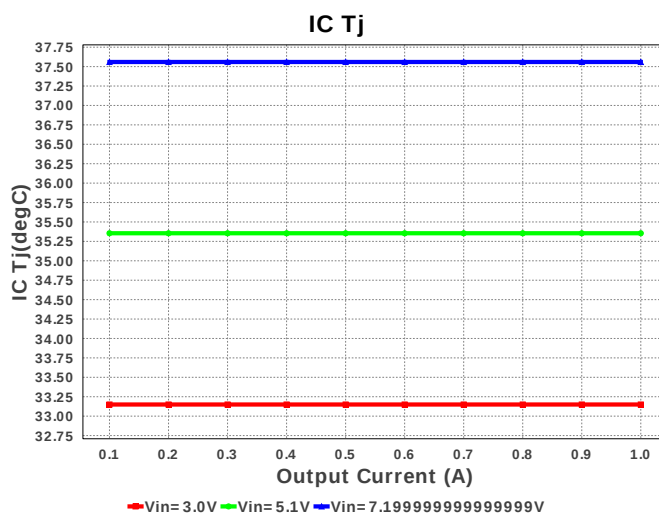
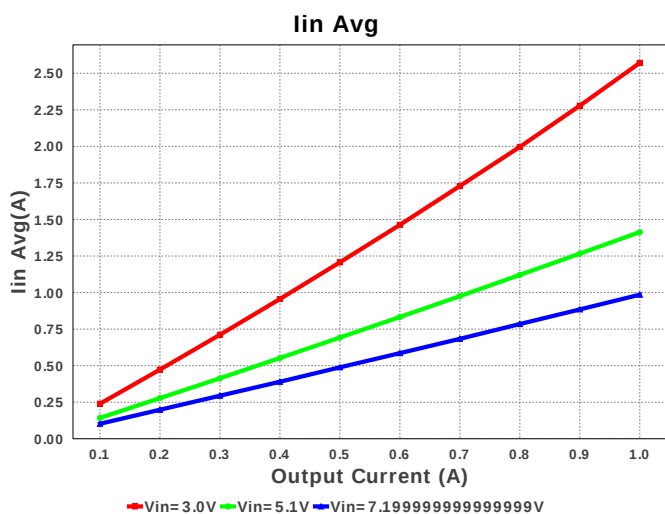
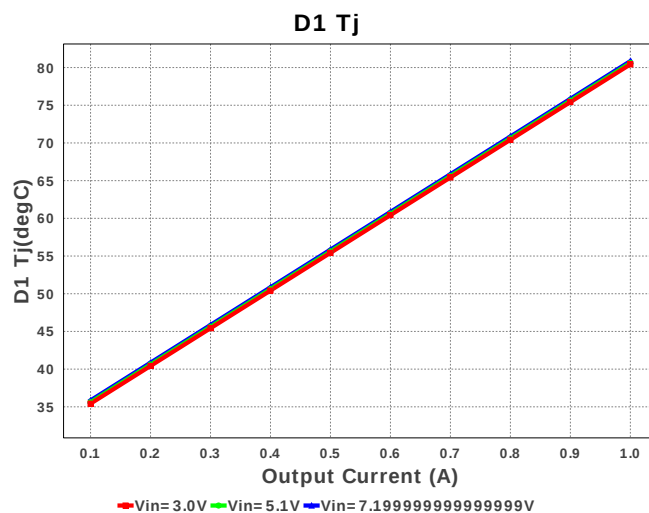
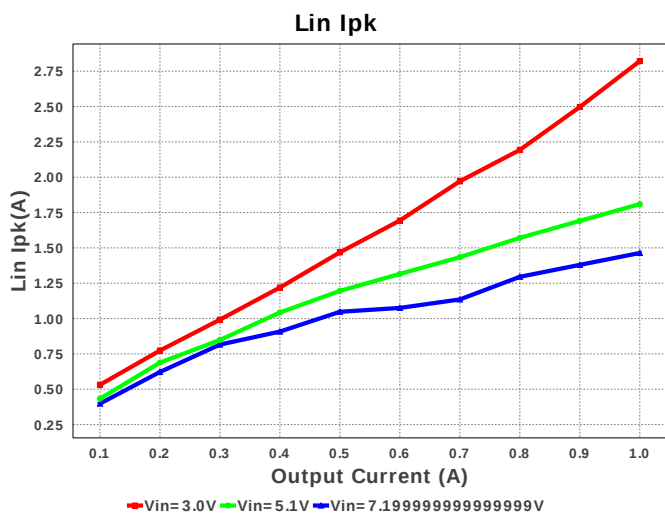
Electrical BOM

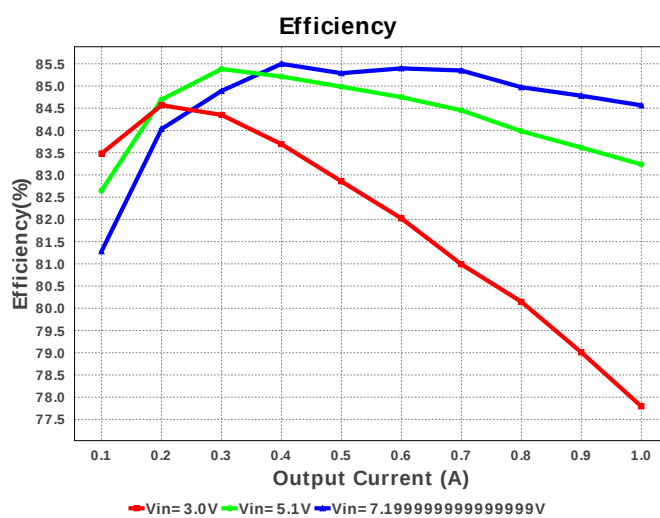
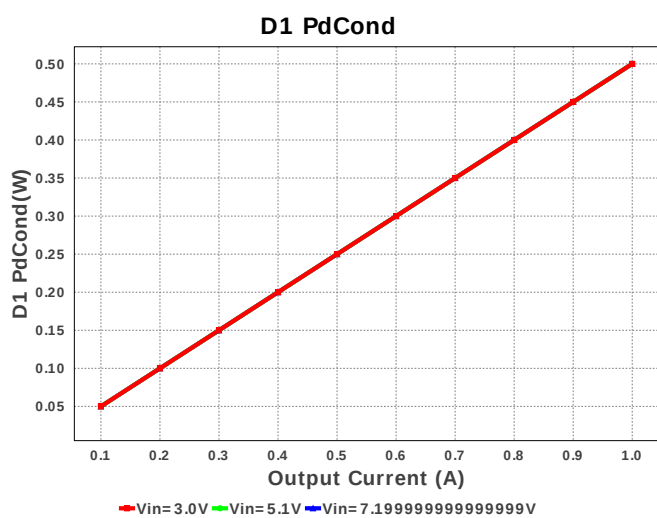
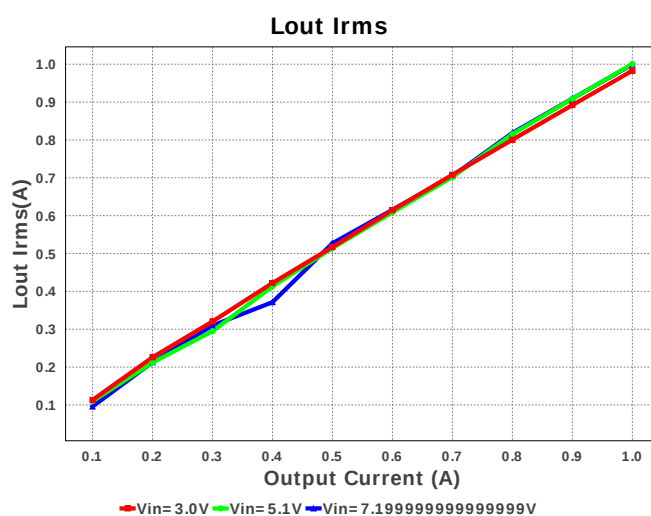
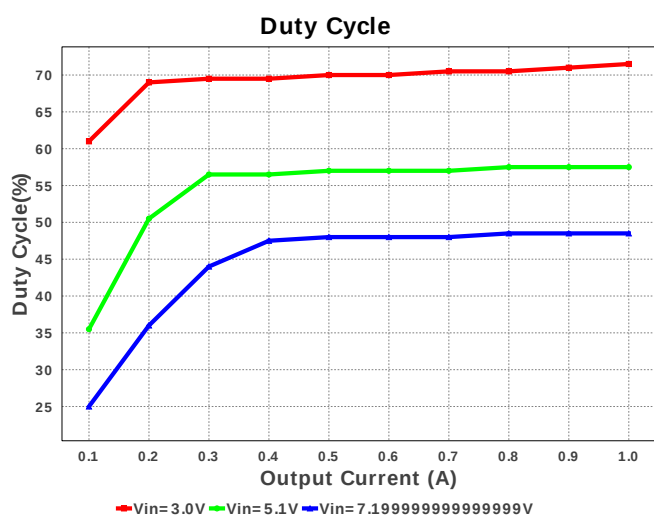
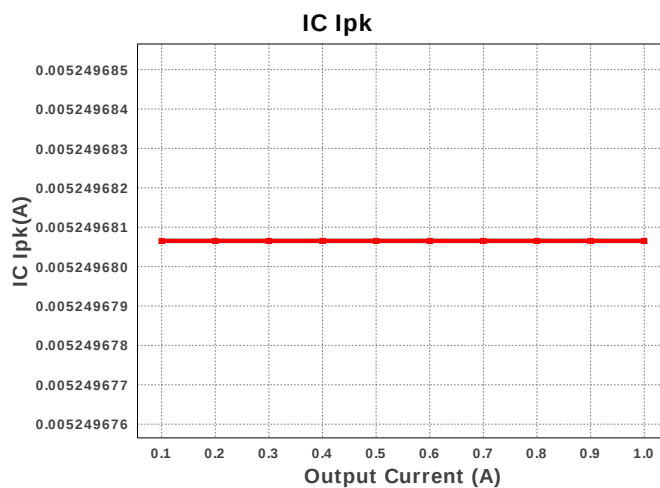
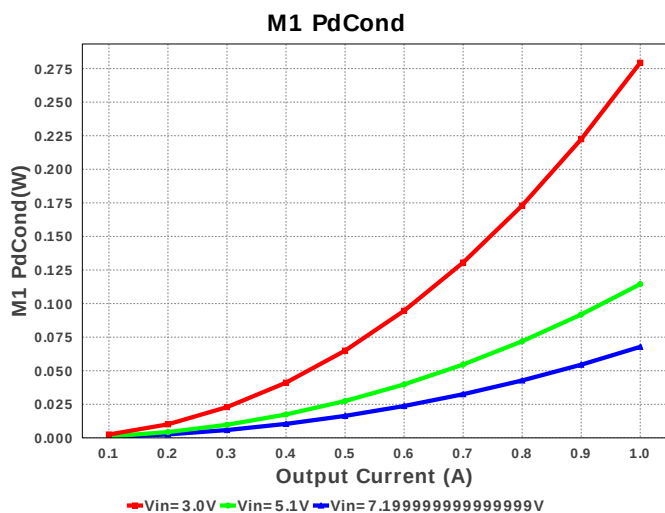
#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
1.	Cbp	MuRata	GRM21BR71E104KA01L Series= X7R	Cap= 100.0 nF VDC= 25.0 V IRMS= 0.0 A	1	\$0.01	 0805 7 mm ²
2.	Ccomp	MuRata	GRM21BR71E823KA01L Series= X7R	Cap= 82.0 nF VDC= 25.0 V IRMS= 0.0 A	1	\$0.03	 0805 7 mm ²
3.	Ccomp2	MuRata	GRM2165C1H202JA01D Series= C0G/NP0	Cap= 2.0 nF VDC= 50.0 V IRMS= 0.0 A	1	\$0.03	 0805 7 mm ²
4.	Cin	MuRata	GRM21BR61C106KE15L Series= X5R	Cap= 10.0 uF ESR= 4.127 mOhm VDC= 16.0 V IRMS= 2.46634 A	2	\$0.03	 0805 7 mm ²
5.	Cout	Chemi-Con	APXC100ARA820MF60G Series= PXC	Cap= 77.0 uF ESR= 23.0 mOhm VDC= 10.0 V IRMS= 2.4 A	1	\$0.43	 CAPSMT_62_F60 77 mm ²
6.	Cramp	Samsung Electro-Mechanics	CL21C751JBCNNNC Series= C0G/NP0	Cap= 750.0 pF VDC= 50.0 V IRMS= 0.0 A	1	\$0.03	 0805 7 mm ²
7.	Csep	Kemet	C0805C225K8RACTU Series= X7R	Cap= 2.2 uF ESR= 8.0 mOhm VDC= 10.0 V IRMS= 15.55 A	1	\$0.03	 0805 7 mm ²
8.	D1	Diodes Inc.	B340A-13-F	VF@Io= 500.0 mV VRRM= 40.0 V	1	\$0.11	 SMA 37 mm ²
9.	Lin	Bourns	SRN8040-6R8Y	L= 6.8 uH DCR= 33.0 mOhm	1	\$0.22	 SRN8040 100 mm ²

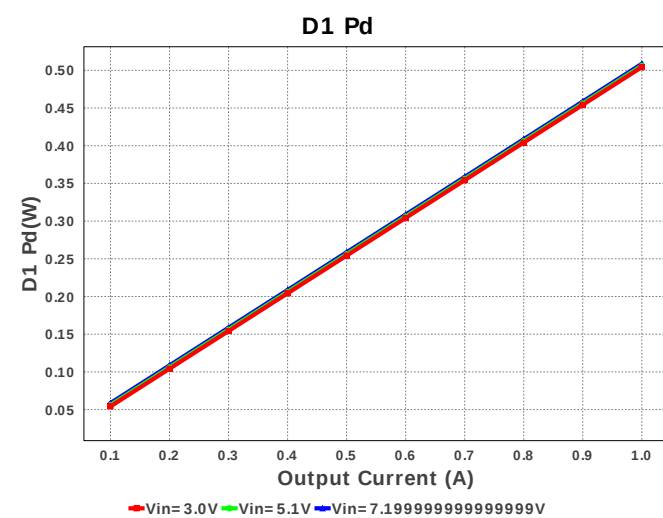
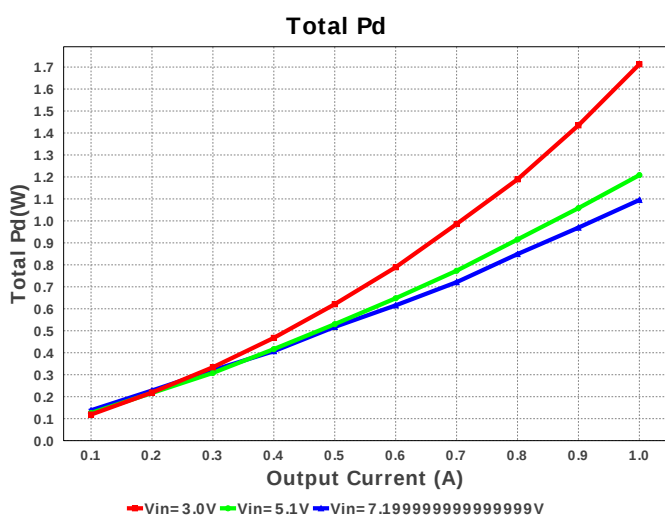
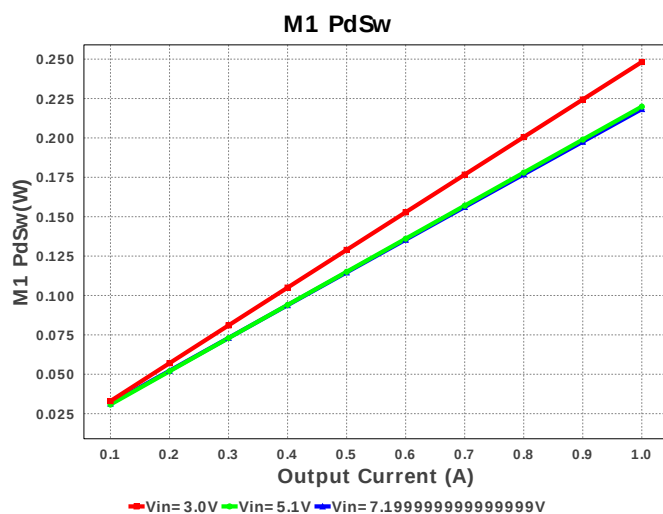
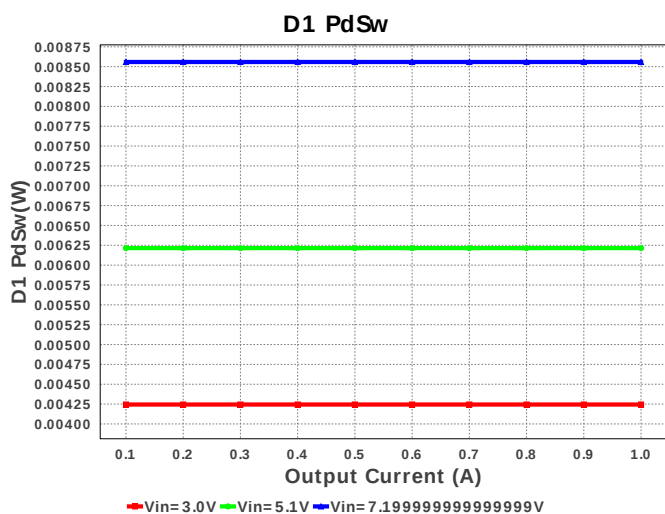
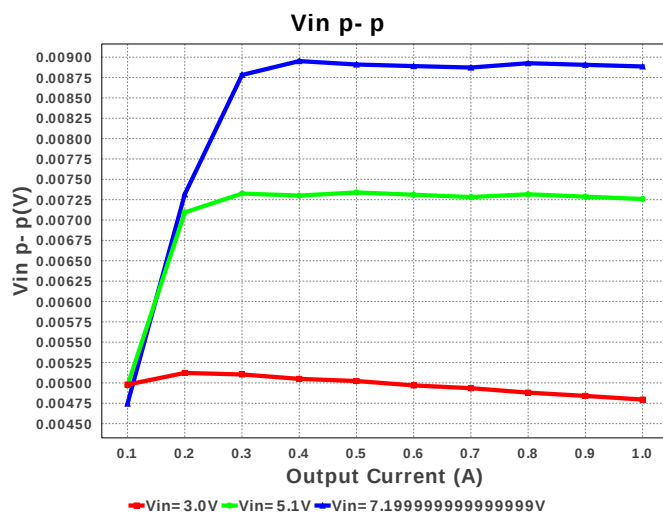
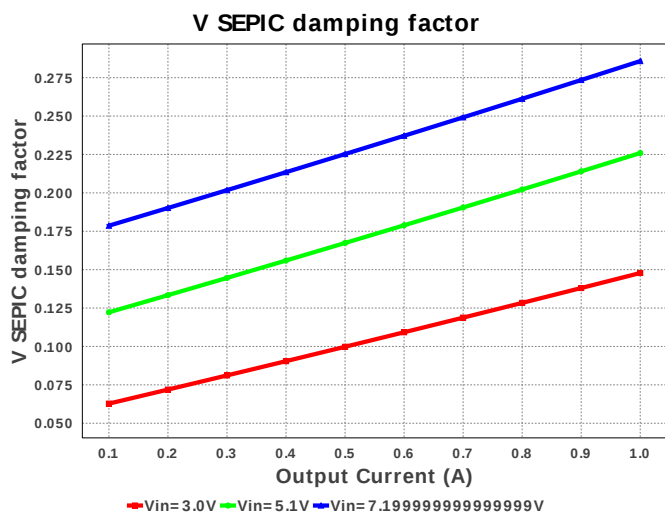
#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
10.	Lout	Bourns	SRN8040-330M	L= 33.0 μ H DCR= 145.0 mOhm	1	\$0.22	 SRN8040 100 mm ²
11.	M1	Texas Instruments	CSD17579Q3A	VdsMax= 30.0 V IdsMax= 20.0 Amps	1	\$0.19	 DNH0008A 18 mm ²
12.	Rbp	Vishay-Dale	CRCW080520R0FKEA Series= CRCW..e3	Res= 20.0 Ohm Power= 125.0 mW Tolerance= 1.0%	1	\$0.01	 0805 7 mm ²
13.	Rcomp	Yageo America	RT0805BRD071K14L Series= RT0805	Res= 1.14 kOhm Power= 125.0 mW Tolerance= 0.1%	1	\$0.05	 0805 7 mm ²
14.	Rfadj	Panasonic	ERJ-6ENF3652V Series= ERJ-6E	Res= 36.5 kOhm Power= 125.0 mW Tolerance= 1.0%	1	\$0.01	 0805 7 mm ²
15.	Rfb1	Panasonic	ERJ-6ENF1002V Series= ERJ-6E	Res= 10.0 kOhm Power= 125.0 mW Tolerance= 1.0%	1	\$0.01	 0805 7 mm ²
16.	Rfb2	Panasonic	ERJ-6ENF3742V Series= ERJ-6E	Res= 37.4 kOhm Power= 125.0 mW Tolerance= 1.0%	1	\$0.01	 0805 7 mm ²
17.	Rramp	Vishay-Dale	CRCW0805100RFKEA Series= CRCW..e3	Res= 100.0 Ohm Power= 125.0 mW Tolerance= 1.0%	1	\$0.01	 0805 7 mm ²
18.	Rsense	Stackpole Electronics Inc	CSR1206FK20L0 Series= ?	Res= 20.0 mOhm Power= 500.0 mW Tolerance= 1.0%	1	\$0.10	 1206 11 mm ²
19.	U1	Texas Instruments	LM3478MMX/NOPB	Switcher	1	\$0.80	 MUA08A 24 mm ²

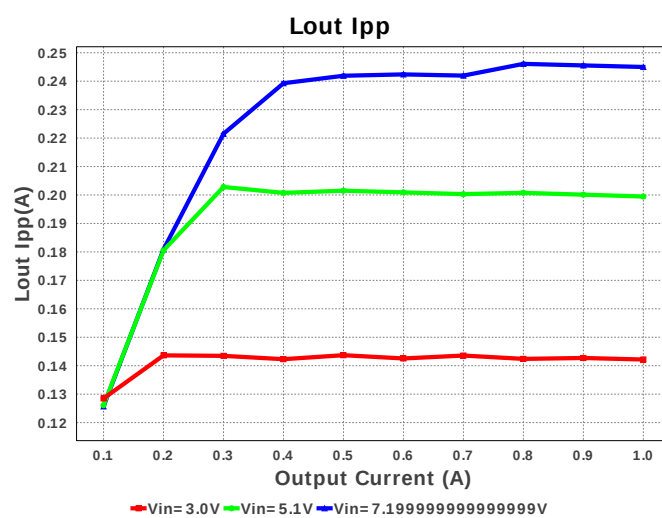
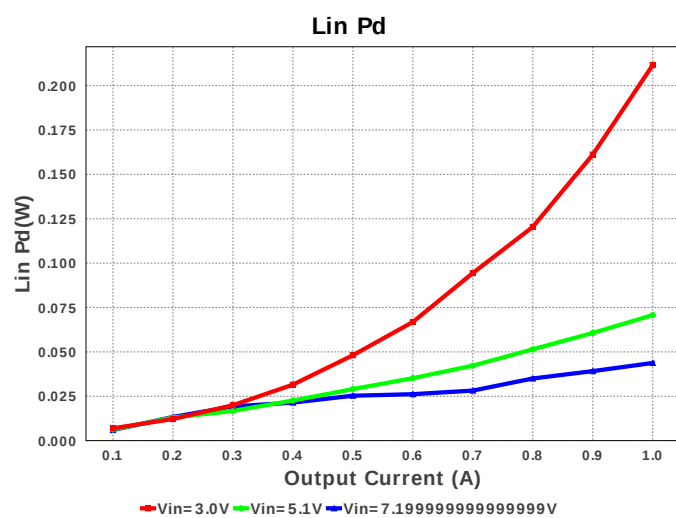
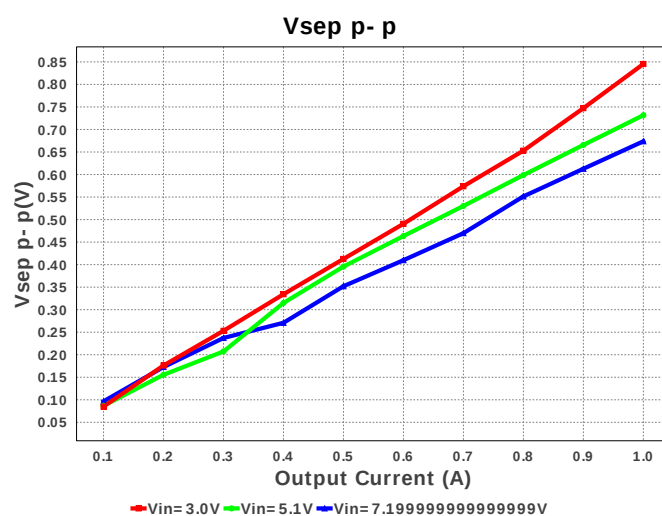
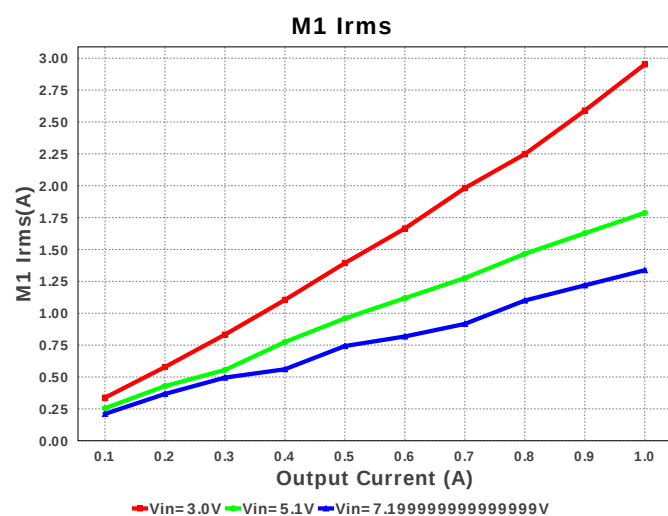
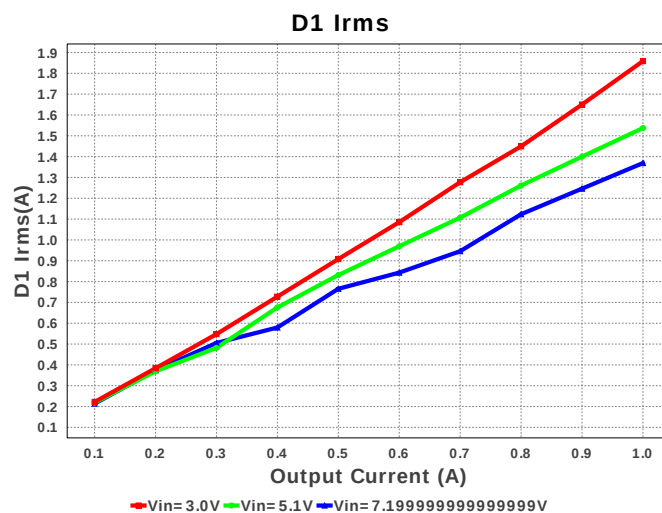
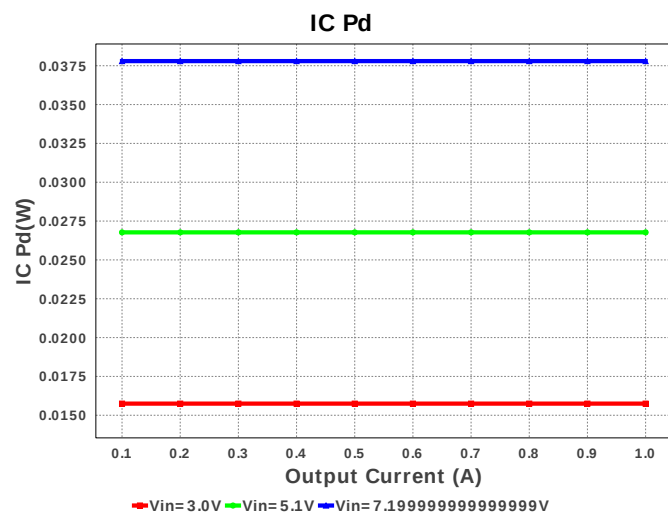


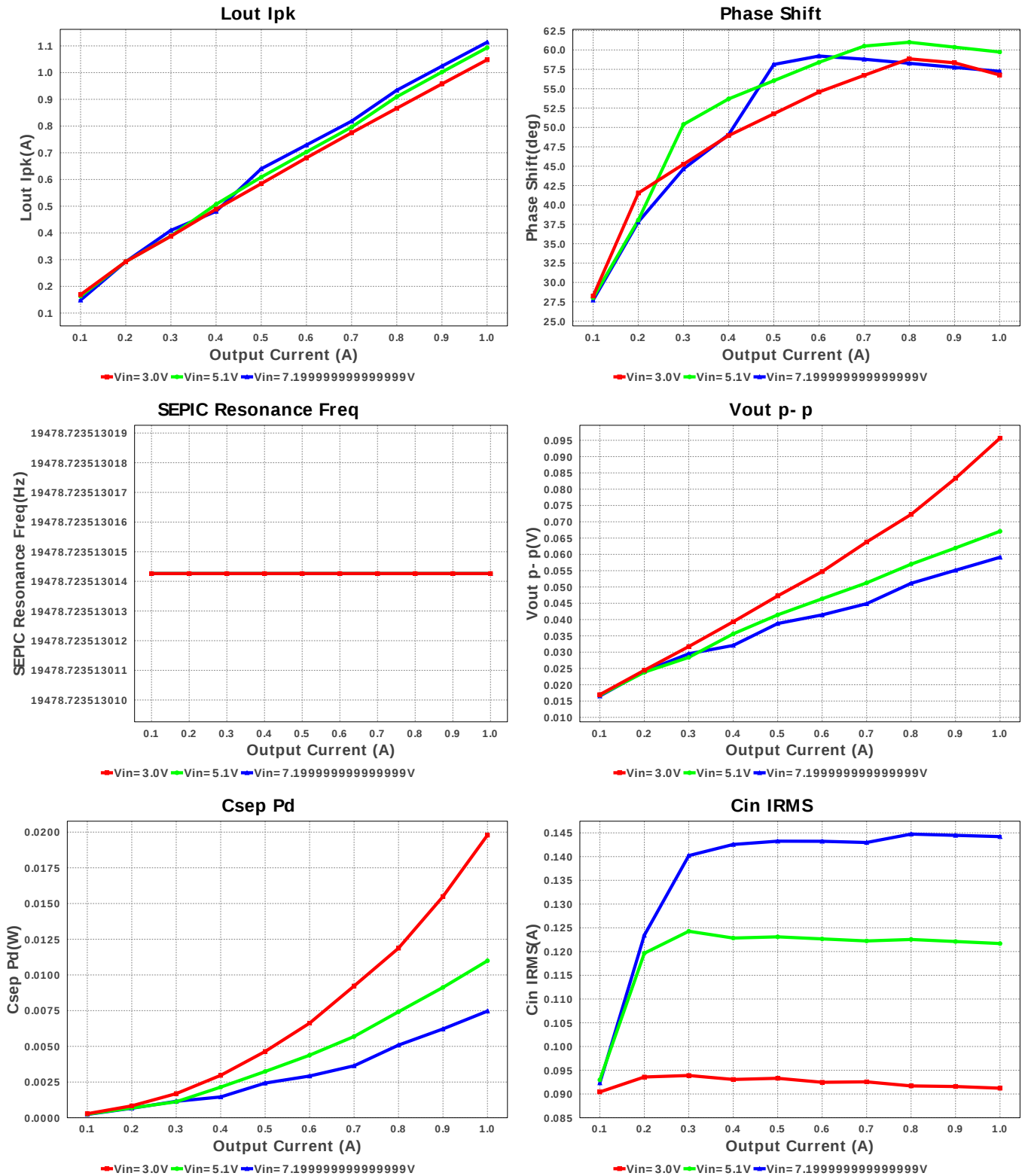


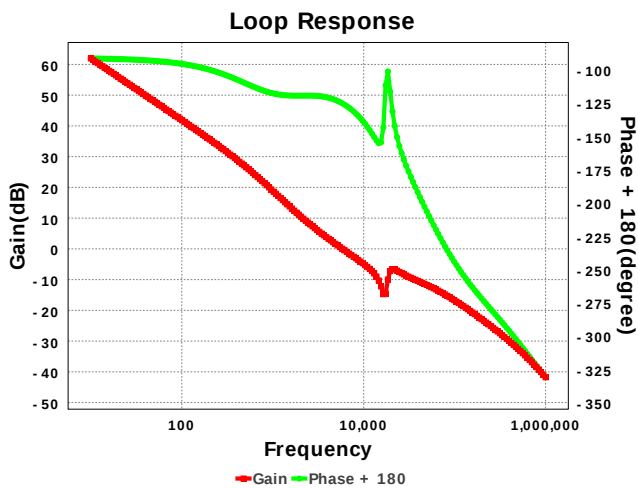












Operating Values

#	Name	Value	Category	Description
1.	BOM Count	9	General	Total Design BOM count
2.	Total Pd	0.0 W	Power	Total Power Dissipation

Design Inputs

#	Name	Value	Description
1.	Iout	1.0	Maximum Output Current
2.	VinMax	7.2	Maximum input voltage
3.	VinMin	3.0	Minimum input voltage
4.	Vout	6.0	Output Voltage
5.	base_pn	LM3478	Base Product Number
6.	source	DC	Input Source Type
7.	Ta	30.0	Ambient temperature

Design Assistance

1. **LM3478** Product Folder : <http://www.ti.com/product/LM3478> : 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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