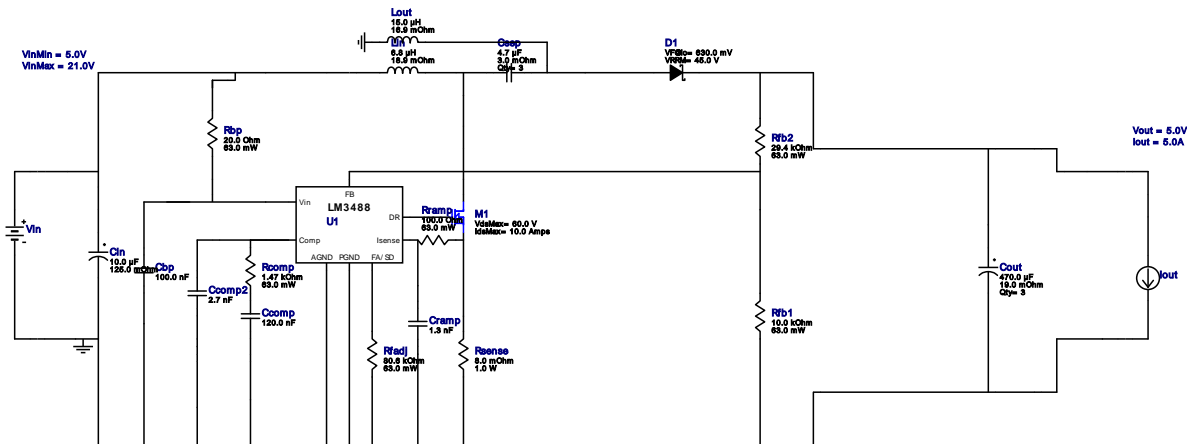
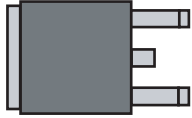




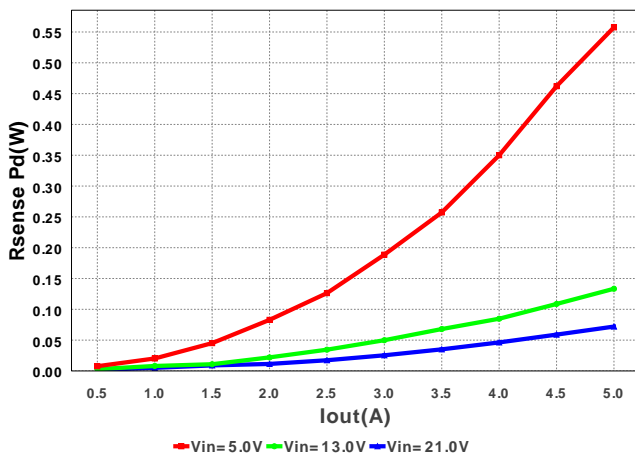
**WEBENCH® Design Report**

 Design : 3678042/53 LM3488MM/NOPB  
 LM3488MM/NOPB 5.0V-21.0V to 5.0V @ 5.0A

**Electrical BOM**

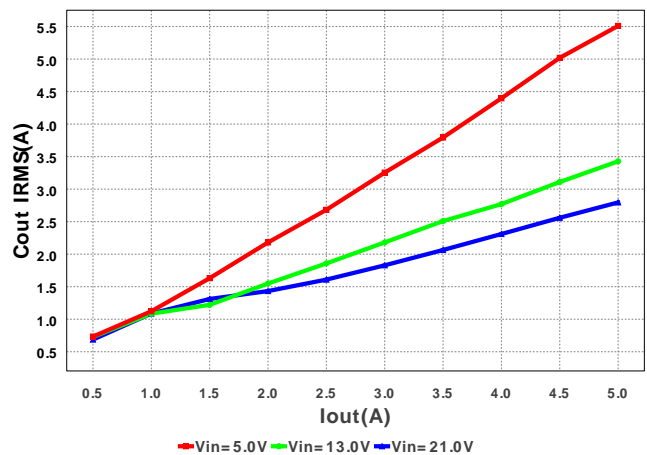
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1.	Cbp	Kemet	C0603C104K5RACTU Series= X7R	Cap= 100.0 nF VDC= 50.0 V IRMS= 0.0 A	1	\$0.01	0603 10mm2
2.	Ccomp	MuRata	GRM155R61A124KE19D Series= X5R	Cap= 120.0 nF VDC= 10.0 V IRMS= 0.0 A	1	\$0.01	0402 8mm2
3.	Ccomp2	Yageo America	CC0805KRX7R9BB272 Series= X7R	Cap= 2.7 nF VDC= 50.0 V IRMS= 0.0 A	1	\$0.01	0805 13mm2
4.	Cin	AVX	TPSD106K035R0125 Series= TPS	Cap= 10.0 µF ESR= 125.0 mOhm VDC= 35.0 V IRMS= 986.0 mA	1	\$1.01	7343-31 59mm2
5.	Cout	Nippon Chemi-Con	APXE100ARA471MJ80G Series= PXE	Cap= 470.0 µF ESR= 19.0 mOhm VDC= 10.0 V IRMS= 3.8 A	3	\$1.18	CAPSMT_62_J80 156mm2
6.	Cramp	MuRata	GRM1885C1E132JA01D Series= C0G/NP0	Cap= 1.3 nF VDC= 25.0 V IRMS= 0.0 A	1	\$0.01	0603 10mm2
7.	Csep	TDK	C4532X7R1H475M Series= X7R	Cap= 4.7 µF ESR= 3.0 mOhm VDC= 50.0 V IRMS= 2.9 A	3	\$0.35	1812 39mm2

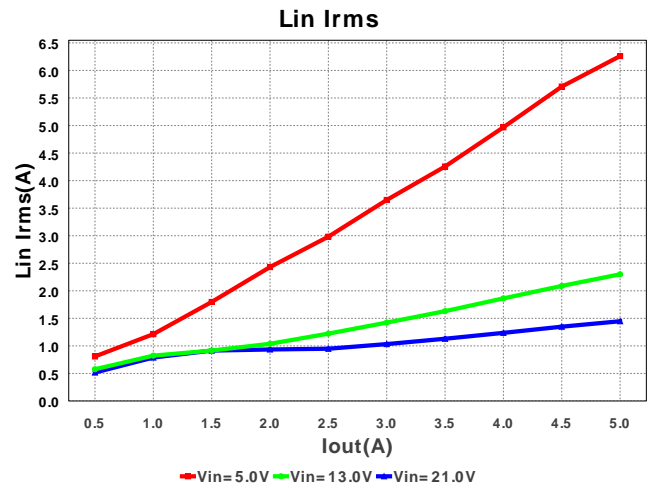
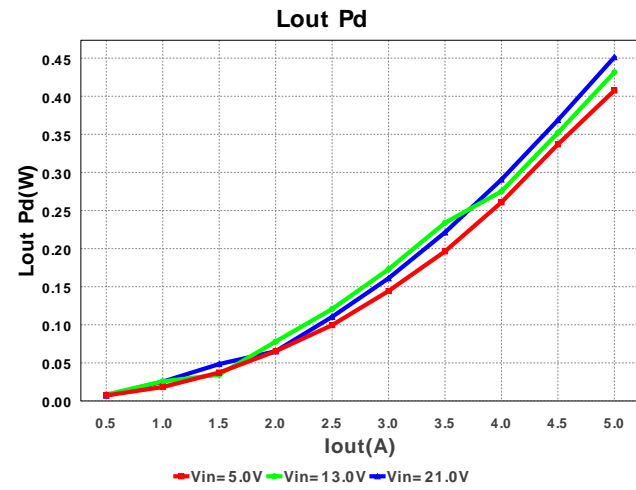
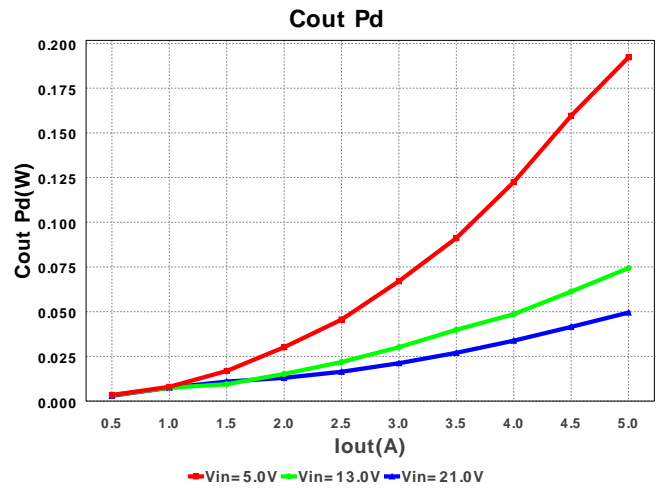
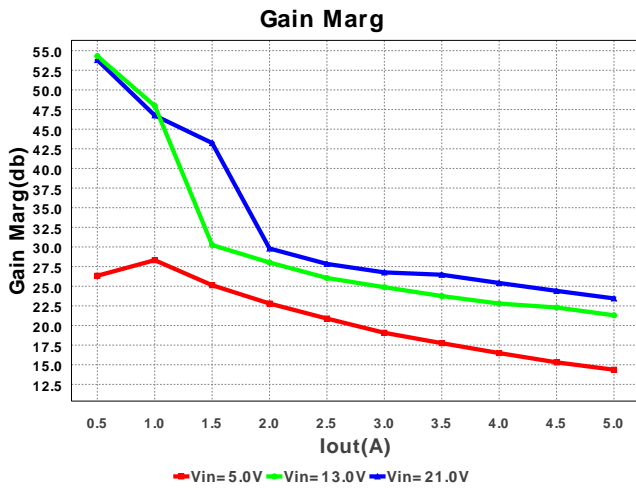
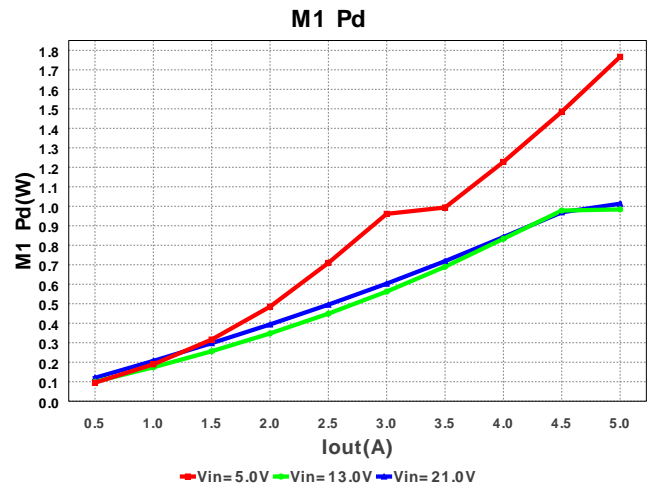
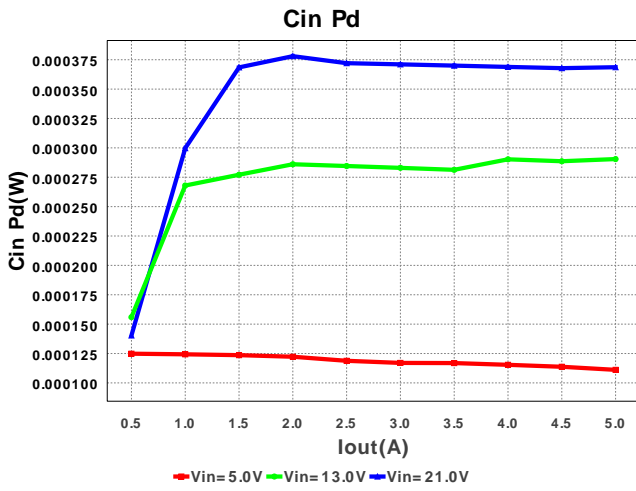
#	Name	Manufacturer	Part Number	Properties	Qty	Price	Footprint
8.	D1	Vishay-Semiconductor	MBRB1645PBF	VF@Io= 630.0 mV VRRM= 45.0 V	1	\$1.89	 DDPAK 210mm2
9.	Lin	Coilcraft	XAL6060-682MEB	L= 6.8 µH DCR= 18.9 mOhm	1	\$0.76	 XAL6060 72mm2
10.	Lout	Coilcraft	XAL1010-153MEB	L= 15.0 µH DCR= 16.9 mOhm	1	\$1.08	 XAL1010 160mm2
11.	M1	AOS	AON7246	VdsMax= 60.0 V IdsMax= 10.0 Amps	1	\$0.26	 TRANS_AOS_DFN3X3 25mm2
12.	Rbp	Vishay-Dale	CRCW040220R0FKED Series= CRCW..e3	Res= 20.0 Ohm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 8mm2
13.	Rcomp	Vishay-Dale	CRCW04021K47FKED Series= CRCW..e3	Res= 1.47 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 8mm2
14.	Rfadj	Vishay-Dale	CRCW040280K6FKED Series= CRCW..e3	Res= 80.6 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 8mm2
15.	Rfb1	Vishay-Dale	CRCW040210K0FKED Series= CRCW..e3	Res= 10.0 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 8mm2
16.	Rfb2	Vishay-Dale	CRCW040229K4FKED Series= CRCW..e3	Res= 29.4 kOhm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 8mm2
17.	Rramp	Vishay-Dale	CRCW0402100R0FKED Series= CRCW..e3	Res= 100.0 Ohm Power= 63.0 mW Tolerance= 1.0%	1	\$0.01	 0402 8mm2
18.	Rsense	Panasonic	ERJ-M1WSF8M0U Series= 1119	Res= 8.0 mOhm Power= 1.0 W Tolerance= 1.0%	1	\$0.15	 2512 43mm2
19.	U1	Texas Instruments	LM3488MM/NOPB	Switcher	1	\$0.85	 MUA08A 34mm2

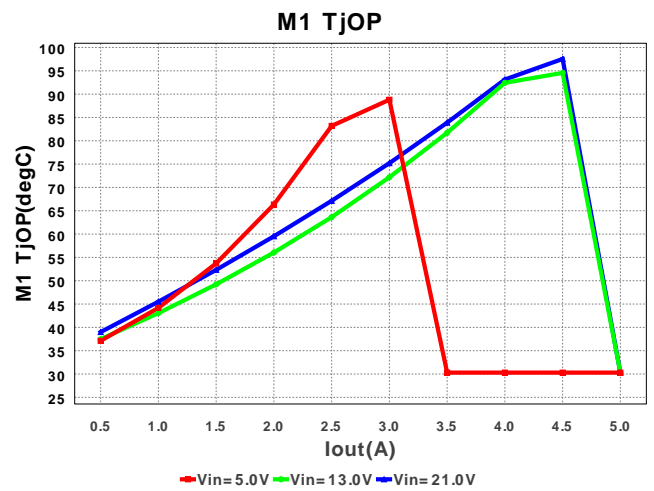
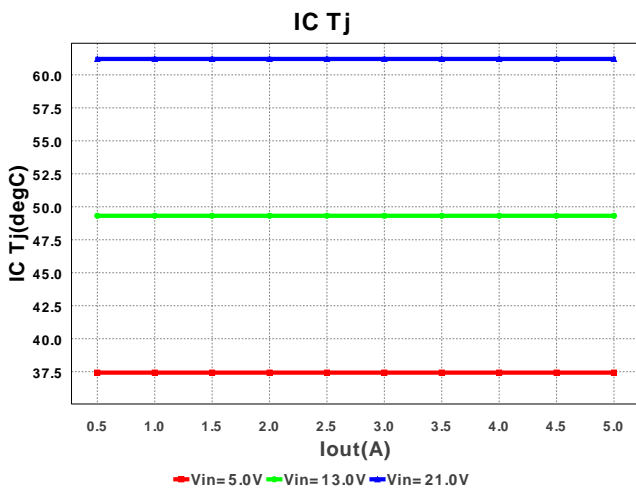
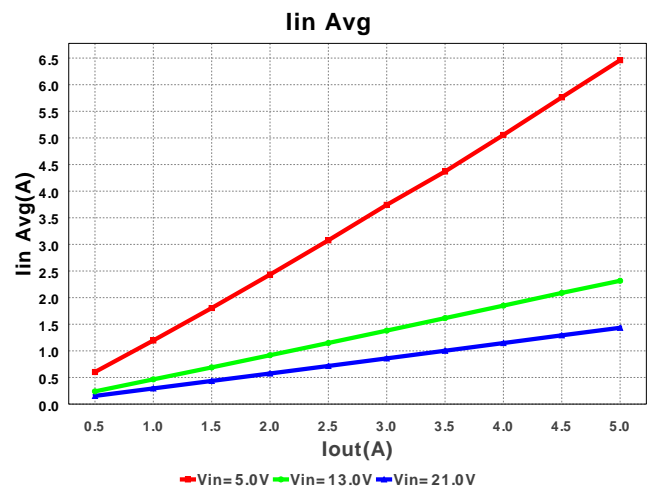
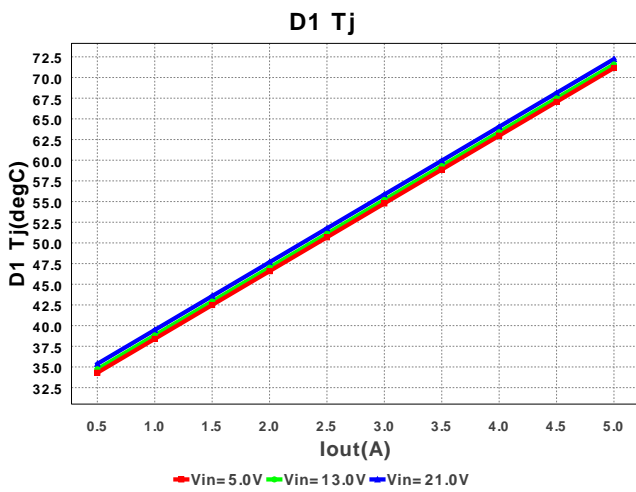
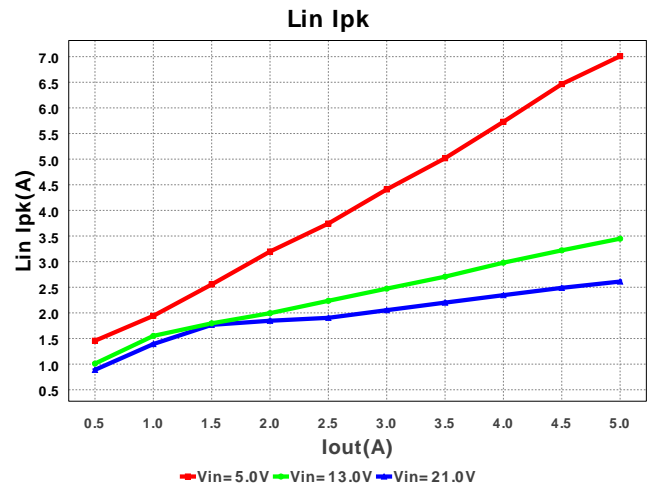
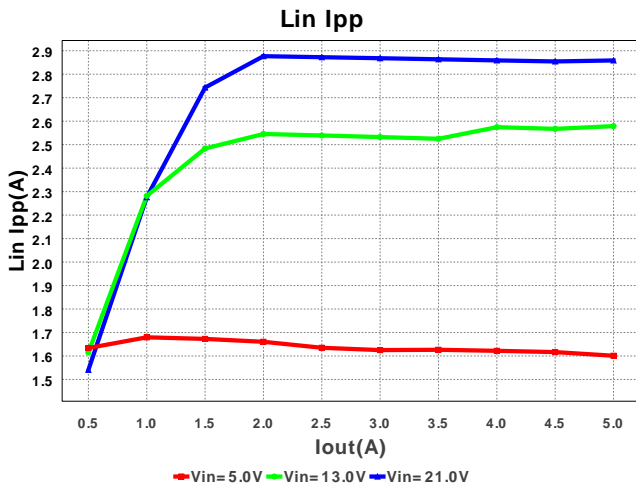
Rsense Pd

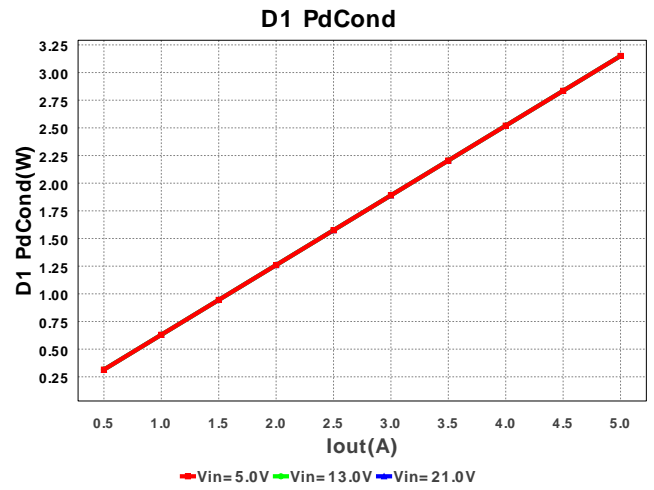
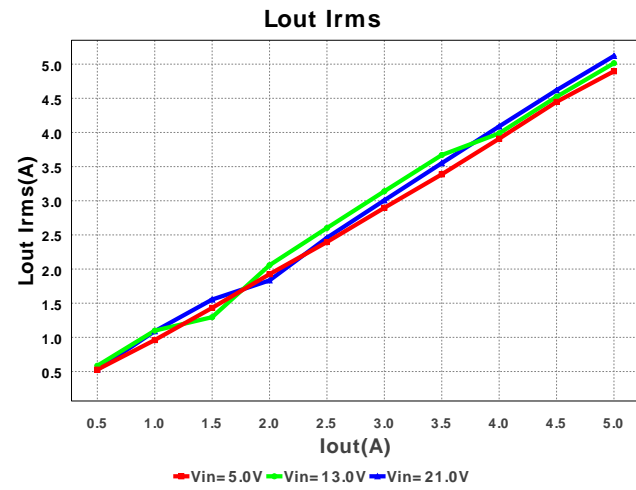
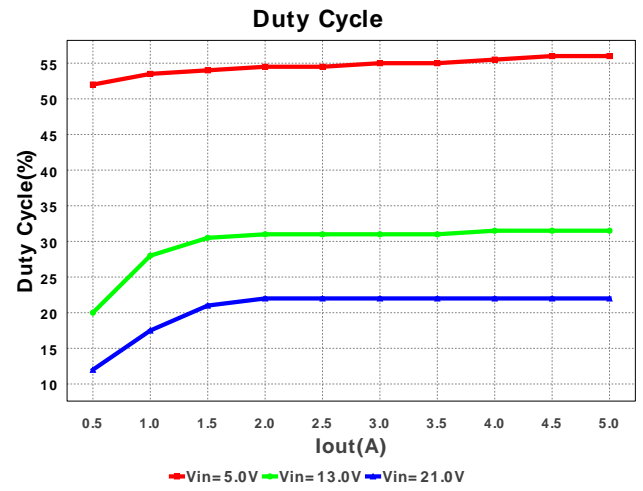
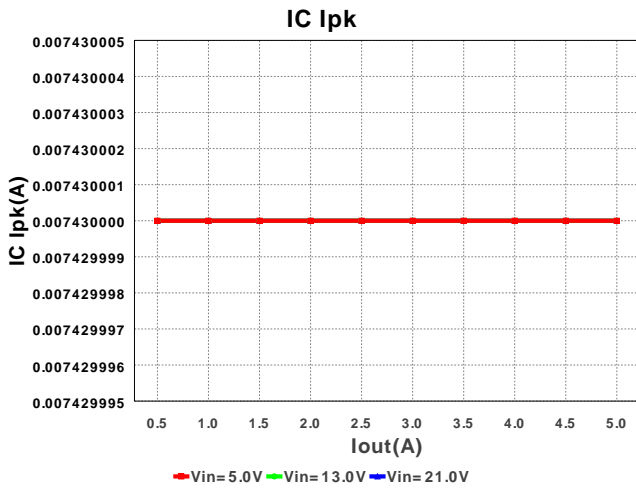
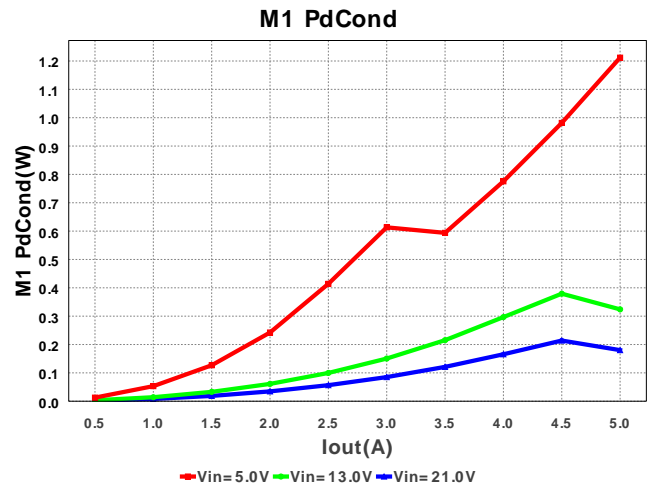
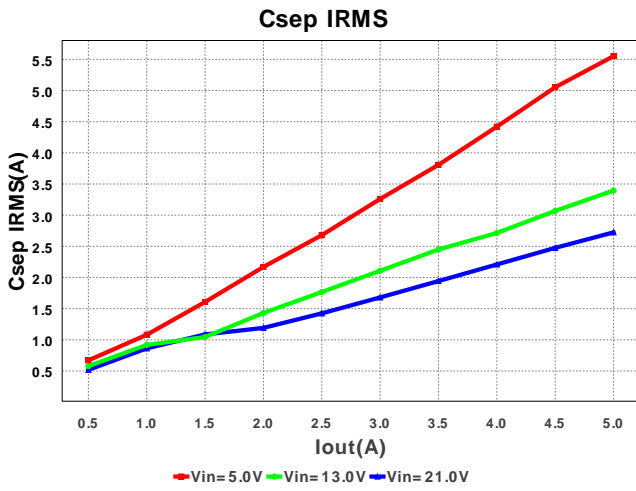


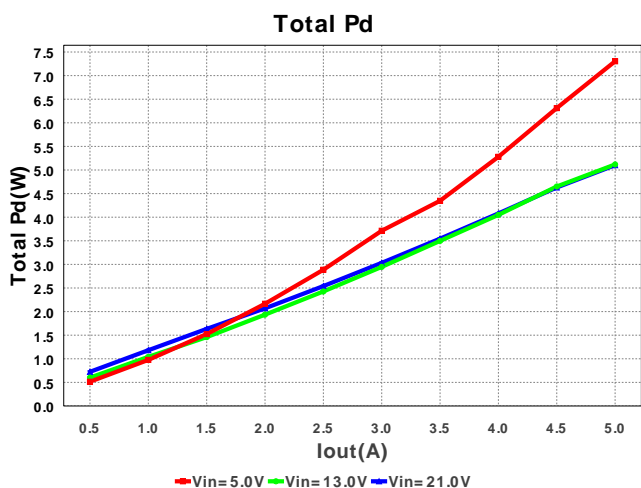
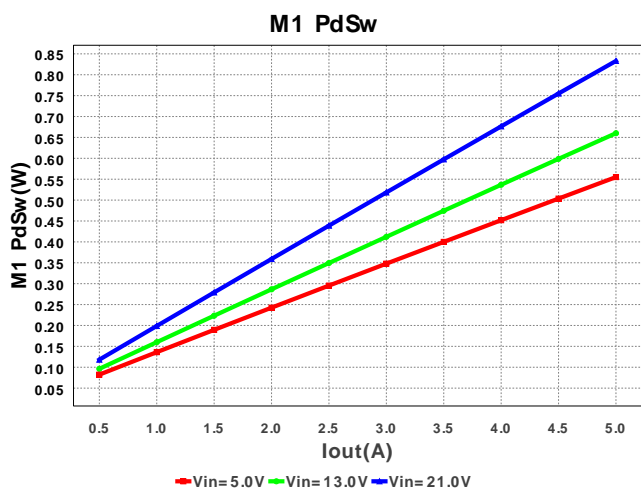
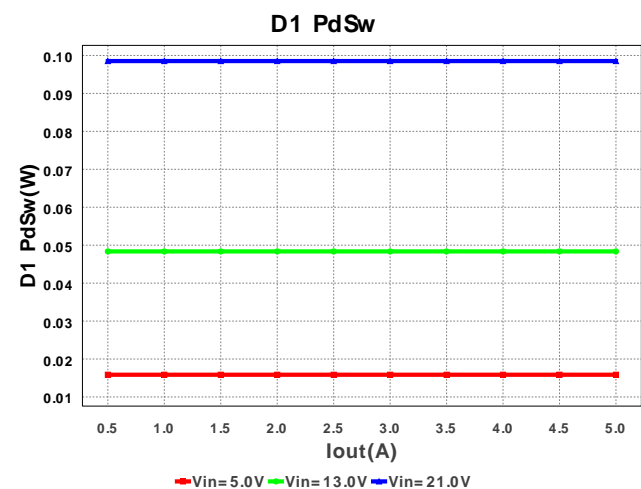
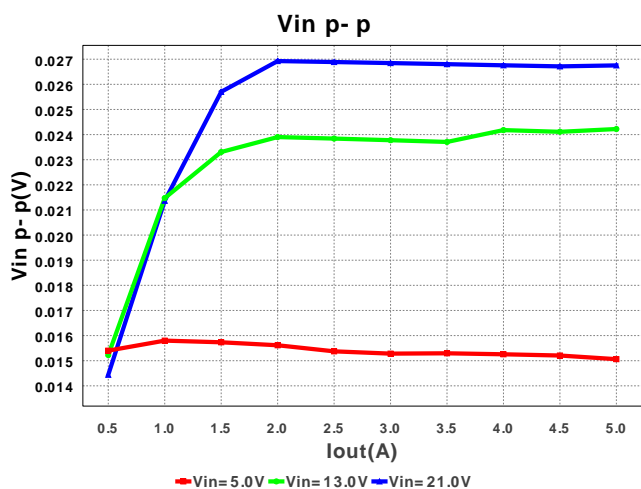
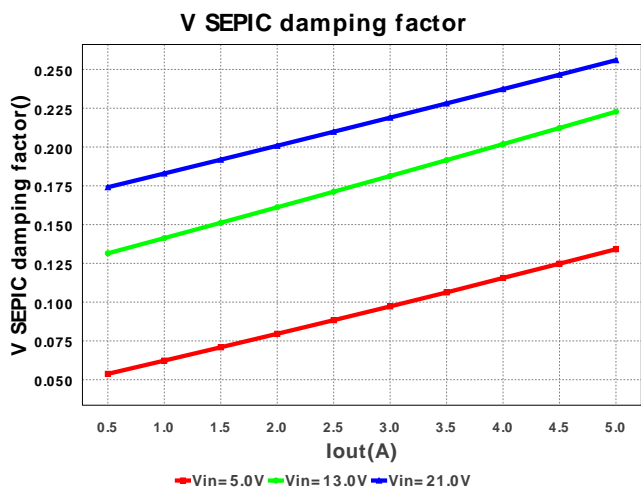
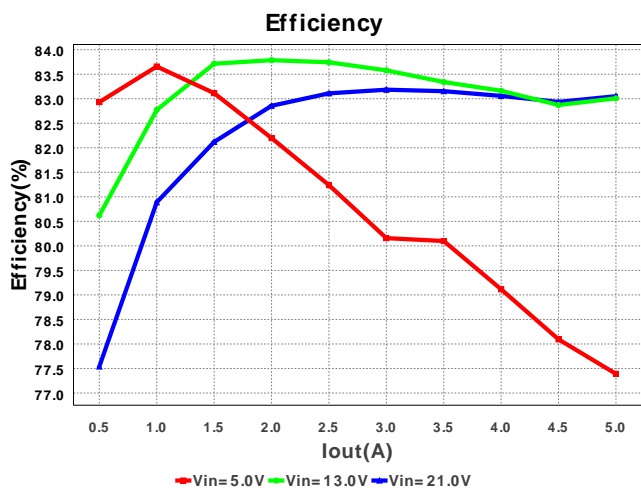
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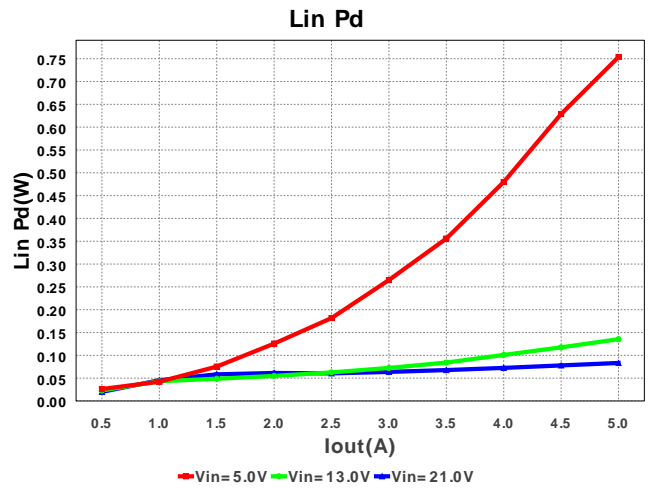
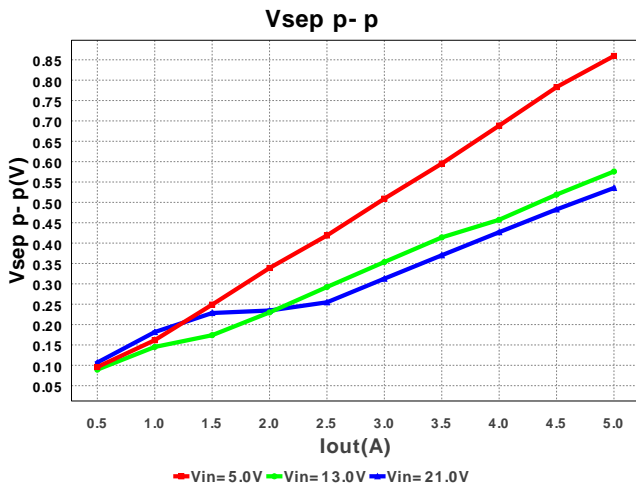
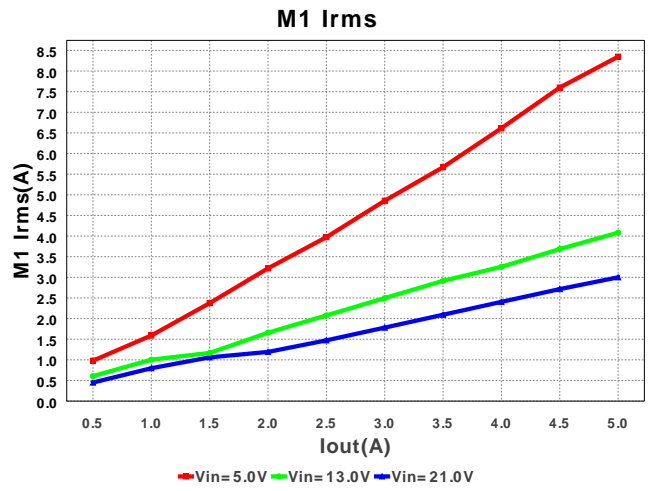
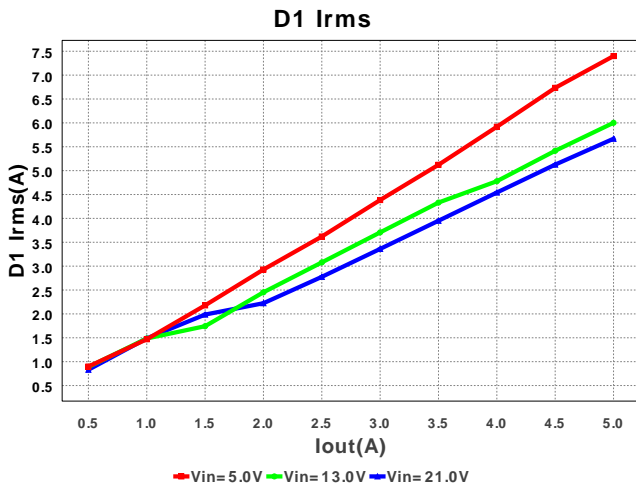
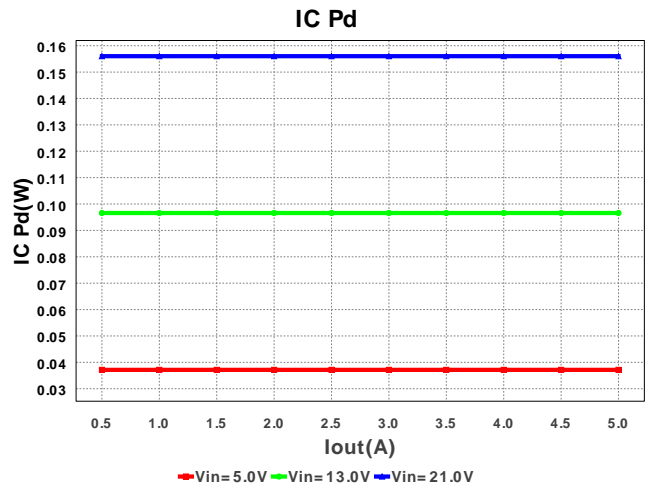
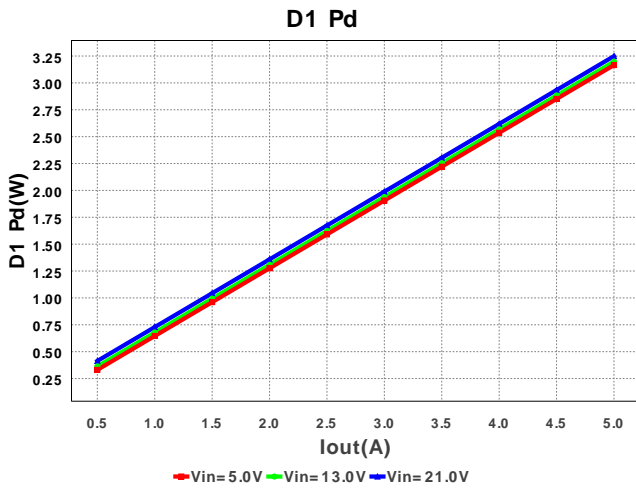


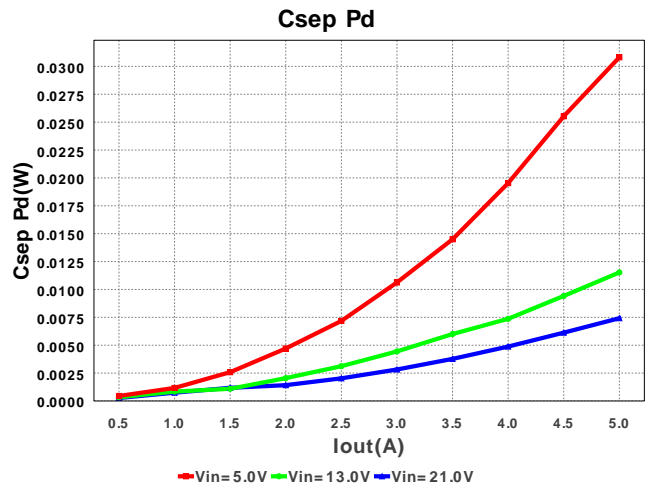
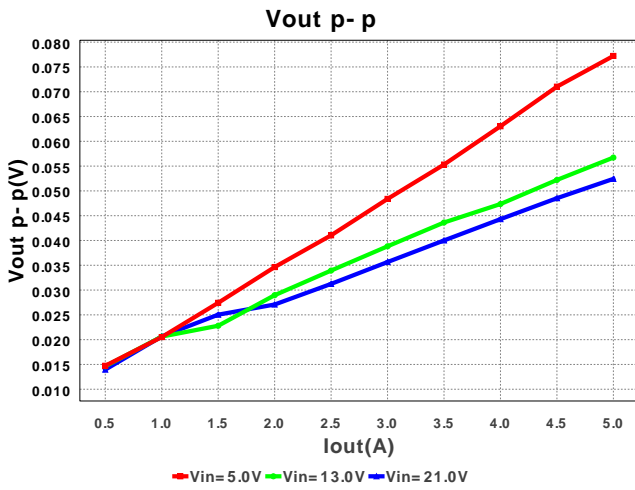
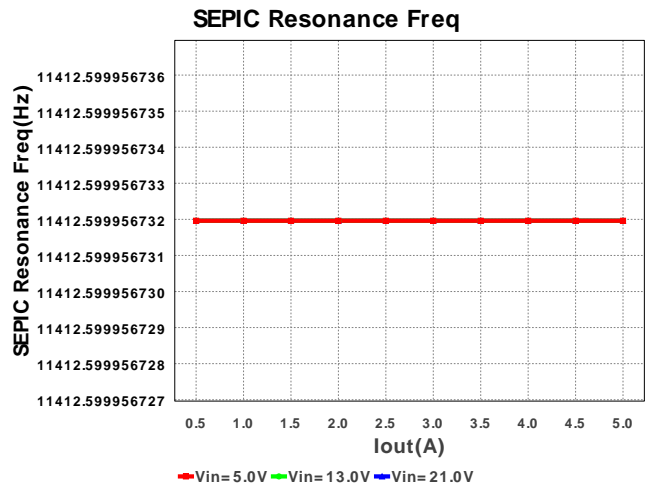
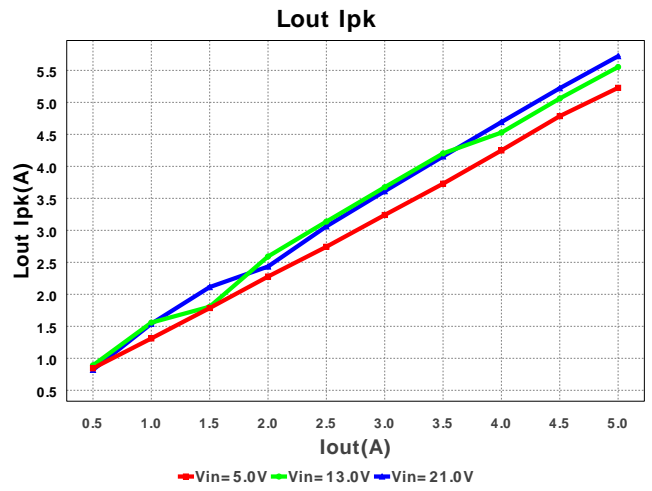
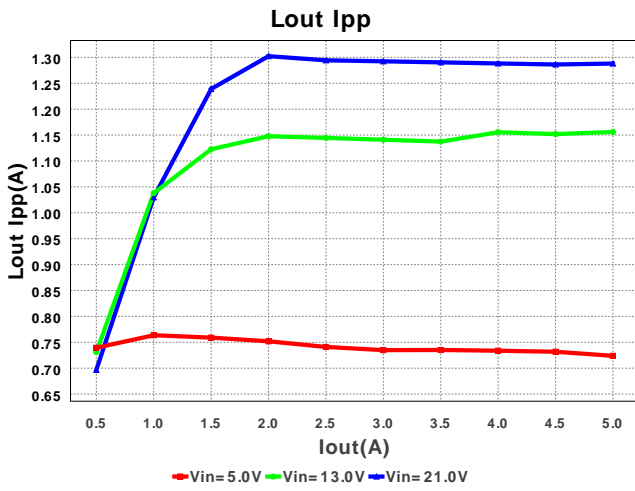




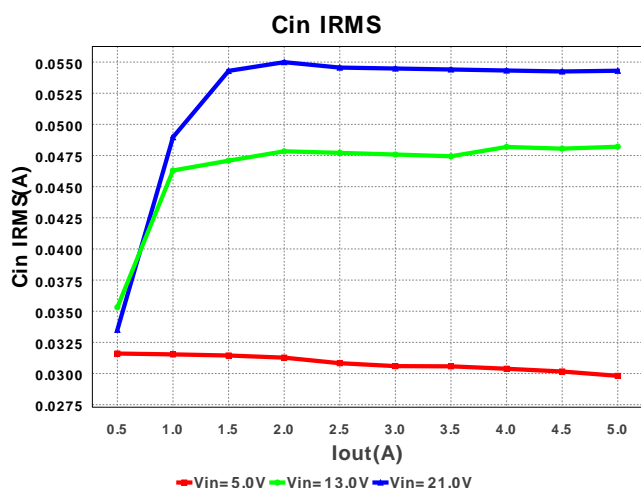












## Operating Values

#	Name	Value	Category	Description
1.	BOM Count	12	General	Total Design BOM count
2.	Total Pd	0.0 W	Power	Total Power Dissipation

## Design Inputs

#	Name	Value	Description
1.	Iout	5.0 A	Maximum Output Current
2.	Iout1	5.0 Amps	Output Current #1
3.	VinMax	21.0 V	Maximum input voltage
4.	VinMin	5.0 V	Minimum input voltage
5.	Vout	5.0 V	Output Voltage
6.	Vout1	5.0 Volt	Output Voltage #1
7.	base_pn	LM3488	Base Product Number
8.	source	DC	Input Source Type
9.	Ta	30.0 degC	Ambient temperature
10.	UserFsw	230.0 kHz	Customer Selected Frequency

## Design Assistance

1. **LM3488** Product Folder : <http://www.ti.com/product/lm3488> : contains the data sheet and other resources.

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