

## WEBENCH<sup>®</sup> Thermal Simulation Report

 Design : 4368542/5 TPS563200DDCR  
 TPS563200DDCR 11.0V-16.0V to 5.00V @ 2.0A

### Operating Condition

Name	Value
VIN_OP	16.0V
IOUT_OP	2.0A

### Ambient Temperature

Name	Temperature
Ambient_plus_Z	30.0
Ambient_minus_Z	30.0





### Air Flow

Name	Direction
Flow_Type	Convection
Flow_Rate	0.0LFM
Flow_Direction	Top to Bottom

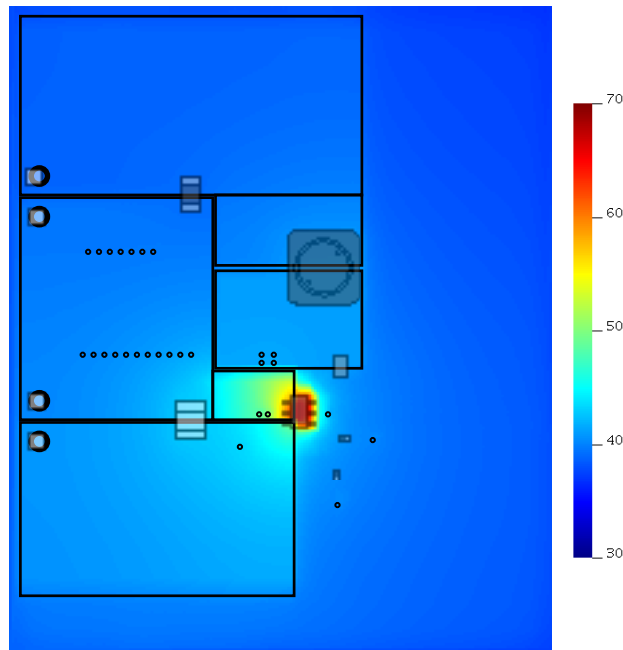
### Edge Temperature

Name	Temperature	Thermal Type
Edge_plus_X (Right)		Insulated
Edge_minus_X (Left)		Insulated
Edge_plus_Y (Top)		Insulated
Edge_minus_Y (Bottom)		Insulated

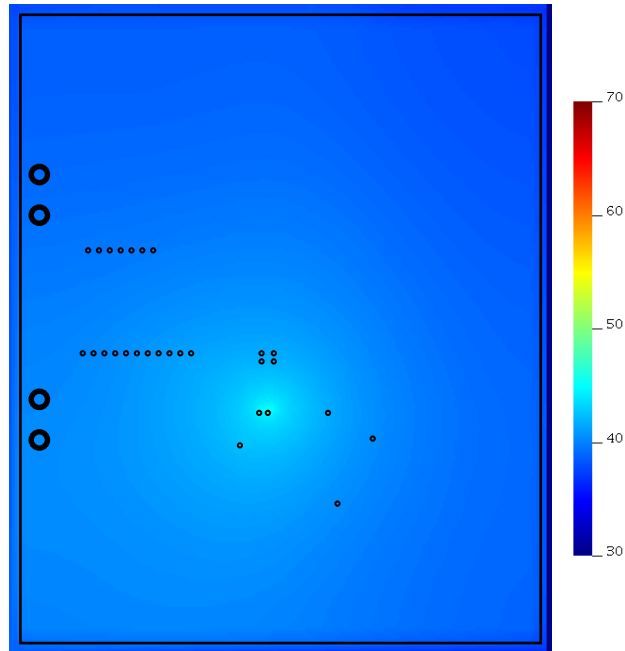
### BOM

Component Name(s)	Part Number	Max Temp	Power Dissipation	Manufacture	Properties	Qty	Price	Footprint
pcb_bottom		45°C						
L1	SRR6038-3R3Y	41°C	0.083W	Bourns	L=3.3E-6H DCR=0.02Ohm	1	\$0.26	 SRR6038 77.44 mm <sup>2</sup>
Cin	GRM32ER61E226KE15L	43°C	0.002W	MuRata	VDC=25.0V ESR=0.002Ohm IRMS=3.67A Cap=2.2E-5F	1	\$0.16	 1210 14.7 mm <sup>2</sup>
Cout	GRM31CR61A476KE15L	39°C	0.001W	MuRata	VDC=10.0V ESR=0.01Ohm IRMS=0.0A Cap=4.7E-5F	1	\$0.21	 1206 10.92 mm <sup>2</sup>
U1	TPS563200DDCR	67°C		Texas Instruments		1	\$0.52	 DDC0006A 10.468 mm <sup>2</sup>
pcb_top		66°C						

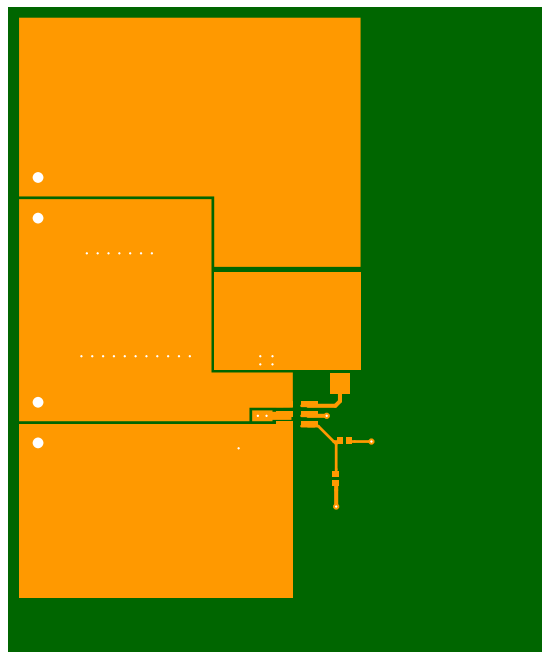
## Thermal Images



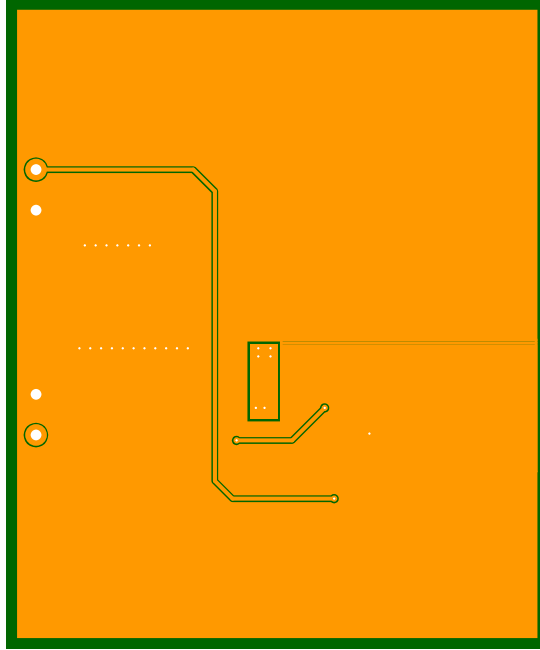
Thermal Top Image



Thermal Bottom Image

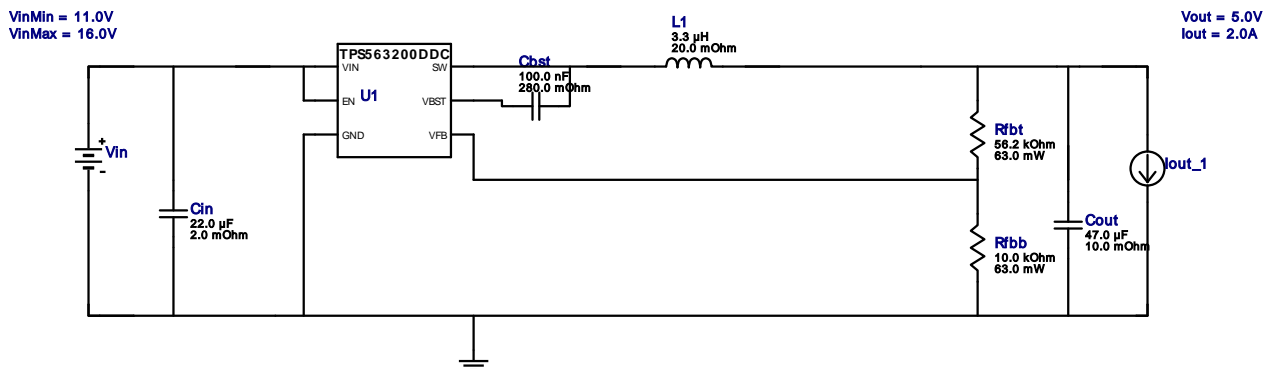


PCB Top Image



PCB Bottom Image

## Schematic



## Design Assistance

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

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