

90 minutes:

Duration

➔ Overview of WEBENCH tools & new features

0:15

Amplifier Designer + Hands-on

0:10 + 0:05

Capacitive Sensing Designer

0:10 + 0:10

Filter Designer + Hands-on

0:05 + 0:10

Clock Architect + Hands-on

0:10 + 0:10

Coil Designer + Hands-on

0:10 + 0:10

Wrap Up

0:05

Optional Review Topics

Interface Designer , Inductive Sensing Designer , Sensor AFE

Interactive Product Folder With Compare

1) Click Interactive Design



New! Interactive Design
Click to instantly view a schematic, charts, Bill of Materials, and Operating Values.

WEBENCH® Designer LM43603

	Min	Max	Range
Vin	10.00	25.00	V 3.5 to 36.0V
Vout		5.00	V 1.01 to 28.0V
Iout		3	A ≤ 3A
Ambient Temp	30		°C -40 to 125°C

Lowest BOM Cost
Smallest Footprint
Highest Efficiency

Footprint: 238.0mm² | BOM Cost: \$3.85 | Efficiency: 89.0%

Open Design | Simulate Now

Enter Your Design Inputs

	Min	Max	Range
Vin	10.0	25.0	V 3.5 – 36.0 V
Vout	5.0		V 1.01 – 28.0 V
Iout	3.0		A ≤ 3.0 A
Amb. Temp	30.0		°C -40.0 - 125.0 °C

Lowest BOM Cost
Smallest Footprint
Highest Efficiency

Footprint: 208 mm² | BOM Cost: \$3.73 | Efficiency: 88.9%

Update Interactive Design | Open Design | Simulate Now

Click the knob or "Update Interactive Design" to instantly view changes to your inputs.
To open this design in WEBENCH® Designer, click "Open Design" or click "Simulate Now" to go straight to simulations.
Click "Compare Solution" to interactively compare LM43603 with similar WEBENCH® solutions.

View

Schematic

Charts

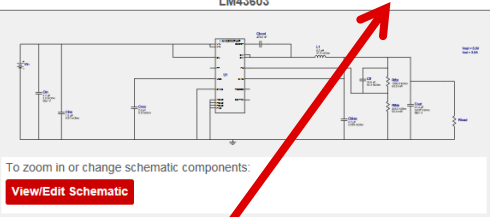
BOM

Op

Val

PCB

LM43603



To zoom in or change schematic components:
View/Edit Schematic

2) Click Compare Solution

3) Side by side comparison

WEBENCH® LM43603 Interactive Design

Enter Your Design Inputs

	Min	Max	Range
Vin	10.0	25.0	V 3.5 – 36.0 V
Vout	5.0		V 1.01 – 28.0 V
Iout	3.0		A ≤ 3.0 A
Amb. Temp	30		°C -40 - 125 °C

Lowest BOM Cost
Smallest Footprint
Highest Efficiency

LM43603 | Footprint: 208 mm² | BOM Cost: \$3.73 | Efficiency: 88.9%
TPS54311 | Footprint: 274 mm² | BOM Cost: \$2.49 | Efficiency: 86.5%

Update Interactive Design

Compare a Different Design

Efficiency (%) | Duty Cycle (%)

Output Current (A)

Vin=25.0V | Vin=17.5V | Vin=10.0V

Open Charts

New tools/features

- Amplifier Designer (Stealth)
- Coil Designer w/ support for LDC0805 stacked coil topology
- Enhanced Filter Designer improved frequency response and AC simulation results + 12 how to videos
- Enhanced Clock Architect with Spurs and lock time + video
- TINA-TI updated (no restriction for education) + 9 new how to videos
- WEBENCH Help documentation w/search (webench.ti.com/help)
- Unencrypted models on ti.com (ti.com/spicerack)
- Public share for designs/projects (Power/LED Arch, Clock Arch)
- Simulate Now

WEBENCH® Product Resources

Power Designer Parts Listing

Listing of all parts in Power WEBENCH. Now shows/filters more features.

SpiceRack search/filter to product list and download models

WEBENCH Visualizer search

Unencrypted Models

- Some available on web
- Others require CIP

WEBENCH Tools

- [Circuit Calculator](#)
- [Thermal Simulation](#)
- [Electrical Simulation](#)
- [Build It](#)
- [Compensation](#)
- [Sim Export](#)
- [CAD Export](#)

TEXAS INSTRUMENTS WEBENCH® SpiceRack Device Model Search

Search for models in

Tina fet Q5 Show only selected (0 of 4648 models)

Current filter: Tina fet Q5 14 Results.

<input type="checkbox"/>	TI Part	Part Description	Model Description
<input type="checkbox"/>	CSD16321Q5	N-Channel NexFET™ Power MOSFET	CSD16321Q5 TINA-TI Spice Mo
<input type="checkbox"/>		N-Channel NexFET™ Power MOSFETs	CSD16322Q5 TINA-TI Transier
<input type="checkbox"/>		N-Channel NexFET Power MOSFET	CSD16325Q5 TINA-TI Transier

Amb. Temp: 30 °C Ext Syn Use Advanced Options >>

Efficiency NA

TPS73718 (ACTIVE) ★

Single Output LDO, 1

1A Low-Dropout Regula

Description & parametrics | Technical documents | **Tools & software**

Models | Design kits & evaluation modules | TI designs & reference designs

Models (2)

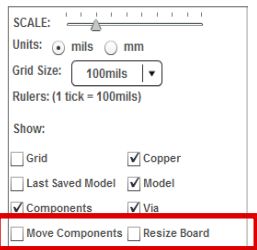
Title	Category	Type	Size (K)
TPS73718 PSpice Transient Model (Rev. A)	PSpice Model	ZIP	21 KB
TPS73718 Unencrypted PSpice Model	PSpice Model	ZIP	1 KB

Visualizer search: Bubble Size: BOM Cost, Part: LM25119-Q1-Du, Solution: Open U, Smallest & Most Efficient

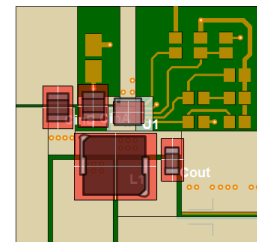
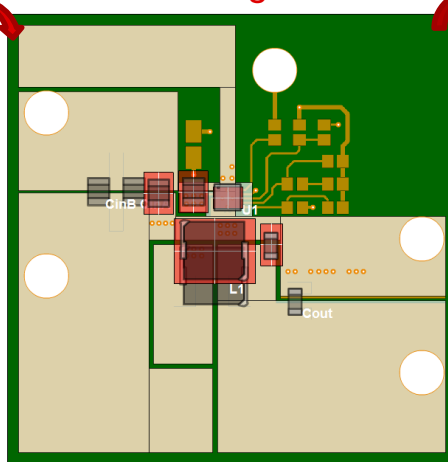
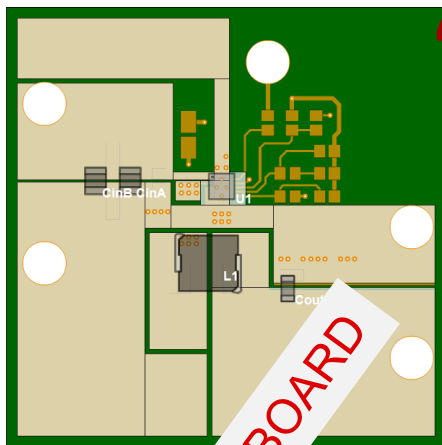
The WebTHERM PCB Model

Move components closer together

Shrink Board



New buttons available



Analyze thermal results

