

PCB thermal calculator

The PCB thermal calculator helps you estimate the junction temperatures of components which use exposed-pad packages. This tool generates a quick estimate of the expected junction temperature based on the copper spreading area on the PCB.

Enter/select a device

BUF08630RGWR

Theta JC, Bottom

0.3 °C/W ⓘ

Enter device power dissipation

1.0

W

Select system reference temperature

Ambient ▾

50.0

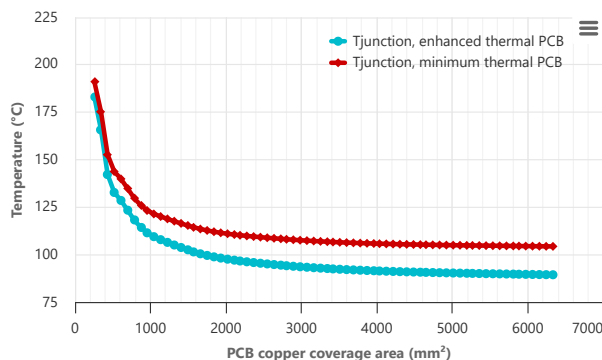
°C ⓘ

Update

[View BUF08630 product details \(http://www.ti.com/product/BUF08630\)](http://www.ti.com/product/BUF08630)

Temperature vs. PCB copper coverage area ⓘ

Click on the legend to toggle series in the chart.



☐ Show board temperature

Featured design resources

[Using Thermal Calculation Tools for Analog Devices \(https://www.ti.com/lit/slva566\)](https://www.ti.com/lit/slva566)

This document provides general guidance on the use of tools and calculations for thermal estimates of component operating temperatures for analog devices.

[Read now > \(https://www.ti.com/lit/slva566\)](https://www.ti.com/lit/slva566)

[PowerPAD™ Thermally Enhanced Package \(https://www.ti.com/lit/slma002\)](https://www.ti.com/lit/slma002)

This document focuses on the specifics of integrating a PowerPAD™ package into the PCB design.

[Read now > \(https://www.ti.com/lit/slma002\)](https://www.ti.com/lit/slma002)

[Semiconductor and IC Package Thermal Metrics \(https://www.ti.com/lit/spra953\)](https://www.ti.com/lit/spra953)

This document describes traditional and new thermal metrics and puts their application in perspective with respect to system-level junction temperature estimation.

[Read now > \(https://www.ti.com/lit/spra953\)](https://www.ti.com/lit/spra953)

[Filter design tool \(https://webench.ti.com/filter-design-tool/filter-type\)](https://webench.ti.com/filter-design-tool/filter-type)

The filter design tool lets you design, optimize, and simulate complete multi-stage active filter solutions within minutes.

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