New Product Introduction
OptiMOS™ 6 40 V in SSO10T

March 2025

public

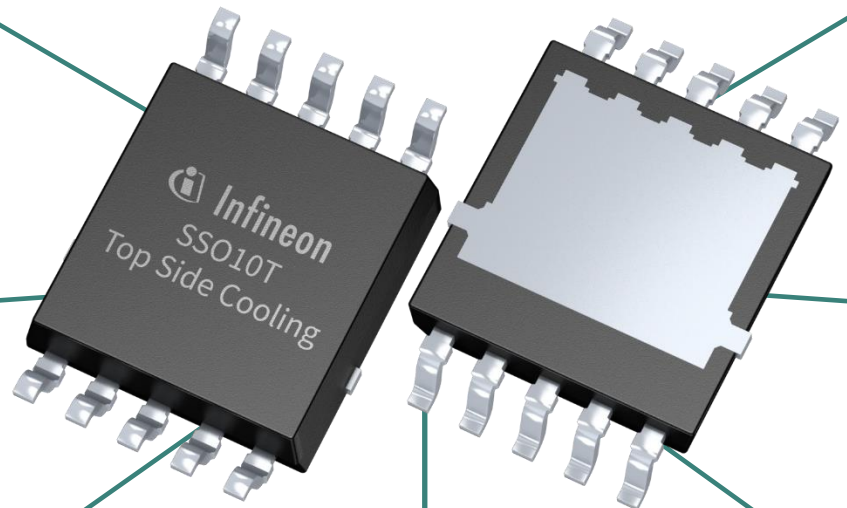
SSO10 TSC – Top Side Cooling

Best Cooling Performance + Compact Design = Perfect System Cost

Improvement of Zth, Rth and System Cooling by -20% up to -50%

Direct Cooling Path to heat sink No heat transfer into PCB

System Area Reduction Compact Design by PCB backside mounting



Largest exposed pad area→ best cooling

Higher Power Density in combination with Infineon OptiMOS™ 40V

Higher Application Current than standard SSO8 5x6

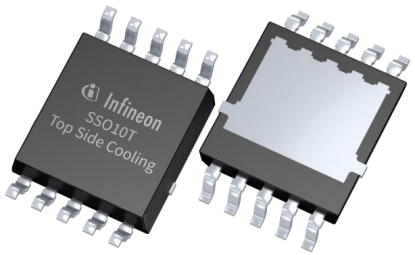
Reduction of System Costs & Design Efforts

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OptiMOS™ 6 40 V in SSO10T

Package Description

SSO10T (LHDSO-10)



L x W x H

7.7 x 5.1 x 1.3 mm³

I_{Dmax} (DC current) at Tj=25 °C:
120A

Cu-Clip soldered

Latest product family in production:
OptiMOS™ 6 with BiC: 0.75mΩ

Application Examples

Electric power steering

BLDC motor

ABS

Zonal architecture

Power distribution

DC-DC

Relay box junction box

Key features	Key benefits
– Direct cooling path to ECU housing – Improves Zth by -20% up to -50% – Improves Rth by -20% up to -50% – Enables double sided PCB design – Provides higher application currents – SSO10T TSC is JEDEC listed for open market and 2nd source compatibility	– Best cooling performance – Not heat transfer into PCB – Very compact PCB design – Reduces system area – Reduces cooling efforts & costs (no more vias) – Reduces system costs & design efforts – High power density & efficiency

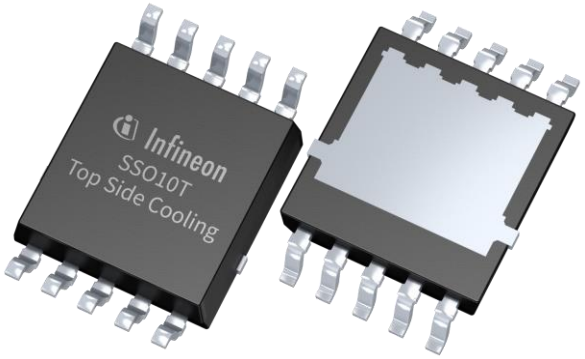
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OptiMOS™ 6 40 V in SSO10T

New Product Introduction

- Infineon introduces its new top-side-cooling package SSO10T TSC in combination with its OptiMOS™ 6 MOSFET technology.
- The package offers excellent thermal performance by a direct top side cooling concept – no more heat transfer into or through the PCB.
- Additionally, the package enables an easy and compact double side PCB design, minimizing cooling effort and system costs for future automotive power designs.

SSO10T 5x7 mm²



Product Name	Orderable Part Number (OPN)	V_{DS} [V]	$R_{DS(on)}$ max at V_{GS} 10V [mΩ]	Q_G typ. [nC]	R_{thJC} max. [K/W]	FOM [mΩ*nC]	I_D max. at 25°C [A]
IAUCN04S6N007T	IAUCN04S6N007TATMA1	40	0.75	100	0.73	75	120
IAUCN04S6N009T	IAUCN04S6N009TATMA1	40	0.9	80	0.84	72	120
IAUCN04S6N013T	IAUCN04S6N013TATMA1	40	1.32	52	1.12	68.64	120
IAUCN04S6N017T	IAUCN04S6N017TATMA1	40	1.73	38	1.46	65.74	120

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