

IPACT MOSFETs - AI Server Racks

Sales Cheat Sheet

VISHAY

The DNA of tech®

▶ FOCUS PRODUCTS

- LVM: TrenchFET® Gen IV and V technology in PowerPAK® SO-8DC (5x6 / dual cooling) and PowerPAK® SO-8S packages
- HVM: Superjunction 4 E / EF series in PowerPAK® 10x12(TOLL)

▶ WHERE TO HUNT

Look-alike Targets:

- CSP (Google, Meta, AWS, Microsoft)
- OEM (Zion, Dell, Lenovo)
- Power supplies (Delta, MPS, Vicor, TDK-Lambda, Artesyn)

Door Opener Questions:

- Do you require an advanced MOSFET package for thermal performance improvement?
- Are you looking for an advanced MOSFET package to support heatsink attaching for air cooling or liquid cooling in AI servers?
- Do you require a MOSFET that can provide the highest performance to achieve a higher power density requirement?

Target Applications:

- PSU: PFC, LLC, SSR, OringFET
- Computing tray / switching tray: 48 V_{IN} / 12 V_{OUT} power conversion
- BBU / PCS: buck / boost and OringFET

▶ HOW TO SELL

Lead With Thermal + Power Density

- Best in class products to achieve the lowest R_{DS(on)} and lowest FOM (R_{DS} * Q_g) for AI server high performance requirements

Position the Package Advantage

- Innovative double-sided cooling design to fit for air cooling or liquid cooling market requirements
- Lower thermal resistance and lower dimension profile to fit for high power density requirement

▶ HOW TO CLOSE : Advancing the opportunity

“Work closely with the right customer engineers with the right product solutions for first design-in target.”

- Engagement: technical support by FAEs for topology / circuit discussion, product proposal, schematic / layout review, debug / testing supporting
- Design resources / tools: infographics, selection guides, calculation tool, simulation models, sample bank
- Infographic www.vishay.com/en/landingpage/infographics/mosfets_sir680adp/
- Selection guide: www.vishay.com/docs/47011/ai-mosfets.pdf
- MOSFET selector calculator: www.vishay.com/en/mosfets/calc-mosfet-selector/

IPACT MOSFETs - Industrial

Sales Cheat Sheet

▶ FOCUS PRODUCTS

- LVM: TrenchFET® Gen IV and V technology in PowerPAK® SO-8DC (5x6 / dual cooling) and PowerPAK® SO-8S packages
- HVM: Superjunction 4 E / EF series in PowerPAK® 10x12(TOLL) and PowerPAK® 8x8 / 8x8LR(top cooling)

▶ WHERE TO HUNT

Look-alike Targets:

- Solar / energy storage: Enphase, Generac, Sol-Ark, Form Energy, Lunar Energy, Stored Energy
- Forklift / factory automation: Curtis Instrument, Amazon, Rockwell Automation, ABB
- Power tools / gardening equipment: Milwaukee, DeWalt, Stanley & Becker, Ryobi, Deere & Company, Toro Robotics

Door Opener Questions:

- Do you require a high voltage superjunction MOSFET to lower the switching losses for soft-switching applications?
- Do you require a robust and reliable MOSFET for motor drive applications?

Target Applications :

- Energy storage: AC/DC, DC/DC, DC/AC
- Industrial lighting: AC/DC
- Motor driving: 3-phase BLDC and BMS for power tools, robotics, automation

▶ HOW TO SELL:

Lead with High Power + High Efficiency + High Power Density

- Best in class products to achieve the low $R_{DS(on)}$ and low effective capacitance $C_{o(tr)}$ for high performance requirements

Position the Package Advantage

- Best thermal capability of surface-mount packages
- Lower profile MOSFET package than D²PAK
- Support the top-cooling requirement for a better thermal dissipation path

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- Design resources / tools: infographics, selection guides, calculation tool, simulation models, sample bank
- Infographic: www.vishay.com/en/landingpage/infographics/mosfets_powerpak_10x12_600V/
- Video: SJ MOSFETs (PowerPAK® 10x12) www.vishay.com/en/videos/mosfets/MOSFETs-Gen4-SuperJunction-MOSFETs-PowerPAK%C2%AE10x12Package/
- Industrial toolbox: www.vishay.com/en/landingpage/et4/et4_ind/