POWERING AI

High-current, high-density, and fast multi-phase VR

We offer second-stage optimization in power delivery for AI and high-performance computing. With the latest generation of multi-phase controllers and trans-inductor voltage regulator (TLVR) power modules, we are developing innovative solutions offering approx. 90% energy efficiency and fast dynamic responses to meet the rapidly growing demands of advanced computing.

Benefits

- 2 A/mm² current density, 90% peak efficiency
- 3× lower junction-to-board thermal impedance
- Fast transient response, with fewer output capacitors
- Support vertical power delivery (VPD)
- Lower system complexity and reduced TCO

Highlight products

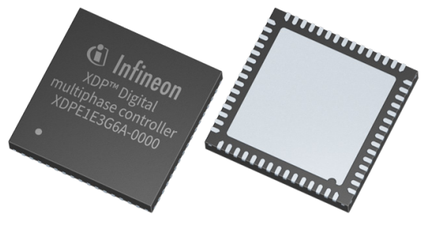
- Quad TLVR module: 10×9×5 mm, 160 A TDC / 280 A EDC, >2 A/mm²
- Dual TLVR module: 8×8×5 mm, 80 A TDC / 140 A EDC, 1.5 A/mm²
- Multi-protocol digital controller

Applications

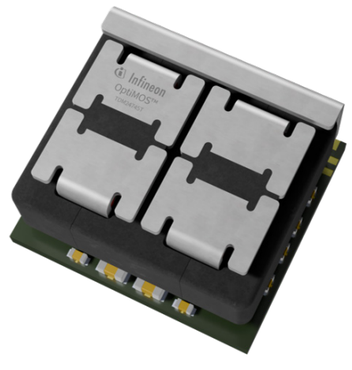
- AI GPUs (graphics processing units) and accelerators
- AI/HPC (high-performance computing) servers
- Cloud data centers
- Networking ASICs



Dual TLVR Module



3-loop/16-phase (7x7 mm)
4-loop/9-phase (6x6 mm)



Quad TLVR Module