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48-V Buck Regulator Delivers 20 A In Less Than 740 mm² Of PCB Space

<u>Vicor's</u> PI3525-00-LGIZ is the latest addition to the company's Cool-Power ZVS buck regulator portfolio with a 48-V (30-V to 60-V) input. The PI352x is a higher current offering to the existing PI354x portfolio enabling scalable power options for 48-V direct to point-of-load applications. The PI3525-00-LGIZ is a 5-V output regulator, supplying up to 20 A, packaged in a 10-mm x 14-mm LGA SiP package (see the figure.)

Offering all the same features as Vicor's existing 48-V Cool-Power ZVS buck regulators, the PI352x portfolio extends performance by delivering twice the power of the PI354x regulators using only a 40% larger package. The PI3525-00-LGIZ requires only an output inductor and minimal passives for a complete cost effective design that consumes less than 740 mm² of PCB real estate. Designed to be easily paralleled in combinations of up to three regulators, the PI352x regulators can be scaled to support applications with even higher load currents.

The PI352x family addresses the growing need for 48-V direct to point-of-load solutions in many applications including lighting, communications, automotive equipment, and datacenter applications. The Cool-Power ZVS regulators are focused on high power density & high efficiency while being simple to use. The end result is first pass design success with best-in-class performance, says the vendor.

For more information, see <u>http://www.vicorpower.com/new-products/cool-power-zvs-buck-regulator</u>.



Figure. Housed in a 10-mm x 14-mm LGA SiP package, the PI3525-00-LGIZ buck regulator converts a 48-V input to 5-V output while supplying up to 20 A. The regulator requires only an output inductor and minimal passives for a complete cost-effective design that consumes less than 740 mm² of PCB real estate. Up to three devices can be paralleled to deliver higher output currents.