

48-V Input Buck Regulators Offer BGA Option

[Vicor's](#) PI354x-00-BGIZ, the latest addition to the 48-V Cool-Power ZVS buck regulator portfolio, offers a new BGA package option to the existing PI354x-00-LGIZ LGA series. Operating from 36-V to 60-V input, the PI354x regulates an output voltage ranging from 2.2 V to 14 V at currents up to 10 A. Power delivery can be further increased by using single-wire current sharing without any additional components (see the table).

The PI354x regulator's high-performance ZVS topology enables 48-V direct to PoL without sacrificing performance. With stepdown regulation from a higher voltage source, engineers can deploy more efficient power distribution architectures, reduce I²R losses, and eliminate costly and inefficient intermediate conversion stages.

The PI354x series is designed for a wide range of applications leveraging higher voltage distribution, including telecom, network infrastructure, data centers, industrial, battery, and lighting applications. When used in conjunction with the Vicor front-end products and factorized power products, the PI354x series enables a complete power chain from ac or high voltage dc (200 V+) source to PoL. For more information, see the Cool-Power ZVS Regulators [page](#).

Table. Key specs for the PI354x-00-BGIZ 48-V Cool-Power ZVS buck regulators.

Part Number	Package	Input Voltage Range (V)	Nominal Output Voltage (V)	Current (A)
PI3542-00-BGIZ	10.5-mm x 10.5-mm BGA	36 to 60	2.5	10
PI3543-00-BGIZ			3.3	
PI3545-00-BGIZ			5.0	
PI3546-00-BGIZ			12	9