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VIChips: 200W bus converter module in BGA package

VICOR makes a quantum leap

With the new VIChip BGA family of power components Vicor presents a completely new concept for the distribution of power supplies on the printed circuit board.

Andover – "small, powerful, value-for-money" using this motto Vicor has developed its factorized power concept. Vicor founder and CEO, Patrizio Vinciarelli has pursued this 'no mean' goal, and is sounding the end of the classical Brick-Module on the PCB.

His plan could work, because a look at the performance data of the new DC-DC components shows that Vicor has succeeded in making a quantum technical leap. A quick poll of their competitors makes it clear that it might be some time until a similar product is available from them.

Vicor's factorized power concept is based on a variety of VIChips. The first to be introduced is the BO48K120T20, a bus-converter module for the conversion of the intermediate voltage from 48 to 12V. In a 21.5 x 32 x 6mm package it offers 200W output. It only needs a third of the space that current quarter bricks require. It offers the user a power density of 800W/in3, five times better than that available from previous quarter brick bus converters.

Also with regard to price, Vicor has set standards. In OEM quantities the BGA converter will cost 24 dollars, which means a price of 12 cents/W. Production quantities will be available at the end of this year. It is estimated that they will have a monthly manufacturing capacity in Andover of 300,000 to 400,000 converters. Over the course of the next few months additional modules will be introduced. Vinciarellis vision of almost any combination of BGA-based power supply on the PCB is becoming a reality.

You will find more on the BGA converter in our next issue.