The Tinker's Toolbox - a Chat with Shaf Rahman of Akros on Board-Level DC Power Management

Hosted by ECN's Editorial Director, Alix Paultre, the Tinker's Toolbox is ECN's web-based interview show where we talk about the latest technology, components, and design issues for the electronic design engineering community.

In this episode, we talk with Shaf Rahman of Akros about their new family of DC-DC Controllers with gate-drive signal shaping for reduced EMI and improved efficiency. The AS12xx series is configurable for flyback, forward, boost or buck power topologies used in both isolated and non-isolated converter designs.

Right-click to download the podcast [1]

Here is another link to the Podcast: Akros Interview [1]

Here is a presentation on the new product family: Akros PowerPoint [2]

Here is a recent release on the products:
Akros Silicon Inc., a premier supplier of leading-edge intelligent energy management ICs, today announced four new energy-efficient devices for a wide

range of high-power, single-input and single-output DC-DC controllers. The AS12xx series is configurable for flyback, forward, boost or buck power topologies used in both isolated and non-isolated converter designs. Capable of providing up to 100W, the AS12xx devices' current-mode architecture provides a fast-loop response and very low "no load" power consumption. Wide input voltage range of 8.5V to 57V and high single-rail output current enable AS12xx devices to be used in a wide variety of consumer electronic equipment such as set-top boxes, LCD televisions, DVRs, printers, indoor WiFi access points as well as in industrial Ethernet, motor control applications, automotive power and telematics sub-systems.

"Akros' expanding portfolio of synchronous and non-synchronous DC-DC controllers provides designers with versatile solutions to meet their power management challenges," said J. Francois Crepin, President, International and World Wide Sales. "This new product family with high efficiency and wide-input voltage range extends our portfolio to more applications. True to our innovative achievements, the high-performance features embedded in these products help our customers deliver energy-efficient solutions in a cost-effective manner."

AS1228, AS1230, AS1257 and AS1260 devices integrate Electrostatic Discharge (ESD) and thermal protection, 100kHz to 500kHz programmable Pulse-Width Modulation (PWM) operation and programmable soft-start. FET gate drive signals are shaped to minimize switching noise and improve Electromagnetic Interference (EMI) performance. The AS12xx family provides superior gate driver output resistance and rise/fall times, further optimizing system performance to deliver > 92% efficiency.

The AS12xx product family is offered in 5x5mm, 20-lead RoHS-compliant QFN packages. Products are in full production and priced at $1.05 per unit in 1K quantities.

For more information, please visit http://www.akrossilicon.com [3].

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Links:
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