# The Tinker's Toolbox - Chad Hall of Ioxus on Ultracapacitors and Rugged Power Systems

Submitted by Guest (not verified) on Tue, 01/03/2012 - 3:29am

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

 In this podcast we talk to Chad Hall of Ioxus about ultracapacitors and their uses, particularly in rugged power systems. We'll also discuss the migration of power into application spaces that didn't use (or underused) power in the past that demand power today. Ioxus offers ultracapacitors and hybrid capacitors ranging in size from 100 Farads to 5,000 Farads for transportation, alternative energy, medical, industrial and consumer product markets.

Right-click to download the podcast [1]

Here is a link to the podcast in case the playback button isn't working: Chad Hall of Ioxus [1]

Here is a recent press release from the company on their technology:

Ioxus, a manufacturer of ultracapacitor technology for transportation, alternative energy, medical, industrial and consumer product markets, announced the iMOD series of 16V/58F ultracapacitor modules. The 16V/58F iMOD series cuts development time by delivering a ready-to-use package at the lowest cost in the industry.

With the increase in adaptation of hybrid drives and clean technologies, there is a high demand for more rugged, compact and lower price ultracapacitor modules with improved cell balancing. Ioxus is committed to providing this technology through its 16V/58F iMOD modules for wind turbine pitch control, starting systems, automotive subsystems, backup power/UPS/ride through and power conditioning for renewable energy systems.

Key features and benefits of the 16V/58 iMOD modules include:
• A 16V working voltage sized to parallel with or replace common battery sizes.
• Individually balanced cells that eliminate the need to custom design management and packaging strategies for the largest markets.
• Threaded, protected terminals that are easy to install, monitor and maintain.
• Strong environmental protection for commercial and industrial applications.
• Short module walls with short screws required for mounting, easy installation and removal of screws, and improved thermal performance.
• Low ESR with better constant current, higher power density and higher efficiency then market competition.
• Rugged design for six solder points near cell circumference for stability and an extra thick circuit board for rigidity.
• Molded-in part number that is not easily removed.
• Standard architecture that fits within the footprint of other modules on the market.

Unlike market competition, Ioxus has performed the necessary compliance standards required with all UL94-V0 materials used for the 16V/58F iMOD modules to be used in stationary and mobile applications. These tests include RoHS, UL810a pending, Vibration IEC60068-2-6, Shock IEC60068-2-27, -29 and Random Drop MIL-STD-202G METHOD 203C.

“As the alternative energy industry accelerates, new technologies and players continue to enter the market,” said Mark McGough, CEO of Ioxus. “Ultracapacitor-based systems reign above other energy storage technologies because they deliver the highest efficiency, require the least amount of management, survive the widest temperature range, have 1,000 times the cycle life and deliver two to four times the calendar life of competing battery technologies. Our release of the 16V/58F iMOD modules confirms that Ioxus remains committed to being at the forefront of providing innovative ultracapacitor cells and modules at a price point the industry can appreciate and afford.”

The 16V/58F iMOD ultracapacitor module series is available immediately. For more information on pricing, please contact sales@ioxus.com [2].

For more information, visit www.ioxus.com [3].

**Links:**
[1] http://www.ecnmag.com/sites/ecnmag.com/files/legacyfiles/ECN/Multimedia/Audio/2012/01/ioxus.MP3
[2] mailto:sales@ioxus.com
[3] http://www.ioxus.com