

## Cymbet EnerChip Bare Die Solid State Batteries Verified Non-cytotoxic In vitro tests show EnerChip™ batteries are ideal for implanted medical devices

Minneapolis, July 31, 2012 - Cymbet Corporation announced today the successful results of in vitro biocompatibility feasibility studies that were conducted to evaluate the cytotoxicity potential of the EnerChip™ Rechargeable Solid State Battery. EnerChip bare die battery samples were gamma sterilized and evaluated using two in vitro test methods for cytotoxicity: a) Medium Eluate Method (MEM) -1X CMEM Cell Growth Medium Extract, and b) Agar Diffusion − Solid Sample. These in vitro cell culture assays are considered to be excellent screening assays for biocompatibility.

## Cymbet EnerChip Batteries Show 0% Cell Lysis

The gamma sterilized Cymbet EnerChip™ bare die batteries were found to be non-cytotoxic (0% cell lysis) using both the Medium Eluate Method Eluation Test and Agar Diffusion Test feasibility screening procedures. The lack of any adverse biological responses in these very sensitive in vitro cell culture assays is indicative (although not a guarantee) of biocompatible test results in the other in vitro and in vivo aspects of biocompatibility as suggested by the ISO 10993-1 and FDA G95-1 guidelines.

Cymbet EnerChip solid state batteries are uniquely fabricated using standard semiconductor integrated circuit processes with patented construction techniques. EnerChip batteries are REACH compliant as they contain no hazardous substances as shown on the Substances of Very High Concern (SVHC) candidate list published on the European Chemicals Agency (ECHA) website. Additionally, EnerChip rechargeable solid state batteries have been fully tested as RoHS compliant.

"These biocompatibility test results demonstrate why EnerChip Solid State Batteries are such a unique and safe battery technology," said Bill Priesmeyer Cymbet CEO. "Our medical and veterinary device customers are very pleased with the outcome of these tests. But for all our global customers, these test results highlight the intrinsic health and environmental safety characteristics of EnerChip batteries that are significantly better than legacy commercial battery chemistries."

## Design Tools for Embedding EnerChip Energy Storage Directly Into Devices

Cymbet EnerChip rechargeable solid state batteries are commercially available in either bare die form or in standard plastic IC packaged parts. Cymbet provides many technical resources for product design teams:

- Embedded energy video demonstration and design information can be found here: http://www.cymbet.com/products/embedded-energy.php
- Environmental standards and Eco-Friendly features are explained on this webpage: http://www.cymbet.com/products/eco-friendly-features.php
- Data sheets on all the EnerChip products can be found here: http://www.cymbet.com/products/enerchip-solid-state-batteries.php
- Free design consultation resources can be requested here: <a href="http://www.cymbet.com/design-center/support.php">http://www.cymbet.com/design-center/support.php</a>
- EnerChip bare die batteries can be purchased directly from Cymbet Distributors including Micross at <a href="http://www.micross.com/solid-state-batteries.aspx">http://www.micross.com/solid-state-batteries.aspx</a>

## **About Cymbet**

Cymbet Corporation is the leader in solid state energy storage technology. The company is the first to market eco-friendly rechargeable storage devices that provide embedded systems designers with new embedded energy capabilities. The company's EnerChip™ solid state batteries with integrated power management enable new concepts in energy storage application for ICs and new products for medical, sensor, RFID, industrial control, communications and portable electronic devices. Visit Cymbet online at <a href="https://www.cymbet.com">www.cymbet.com</a>.

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