



Unit 9, 12 Mars Rd  
Lane Cove NSW 2066  
Australia

Tel: +61 2 9420 0690  
Fax: +61 2 9420 0692  
www.cap-xx.com

CAP-XX (Australia) Pty Ltd  
ABN 28 077 060 872  
ACN 077 060 872

For Immediate Release

## **CAP-XX Automotive Supercapacitor Module successfully completes in-vehicle Stop-Start trials with Club Assist**

Sydney, April 30, 2013

Stop-Start systems are a hot topic in automotive circles, and are appearing in many new vehicles as part of an industry-wide effort to reduce fuel consumption and carbon emissions. Trouble is, they typically rely on the vehicle's battery to supply the cranking current, and with tens, or even hundreds of starts required each day, that's a sure-fire recipe for a short battery life.

To address this issue, manufacturers have had to opt for larger or more expensive batteries, but a better option is to use a supercapacitor module to supply the cranking current to the starter motor and stick with the cheaper battery. The supercapacitor supports all high current loads, and is recharged by the alternator when the engine is running, so battery operating life is no longer an issue. And as an added bonus, the supercapacitor improves engine starting performance in cold weather *and* stores the energy harvested by Kinetic Energy Recovery Systems (KERS) in "micro-hybrid" vehicles.

In 2012, Australian company CAP-XX announced the development of a new line of automotive supercapacitors, and demonstrated their capabilities in a series of bench tests using the New European Drive Cycle. The CAP-XX supercapacitor module (150F at 14V, with an ESR of just 4.5 milliohms) offers the best power density available today, and enough energy to support repeated start cycles in all weather and traffic conditions. In the NEDC tests it delivered more than 110,000 starts with minimal wear on the battery. Now, together with Club Assist - the world's largest mobile retailer of automotive batteries - they've taken it out for a road test.



The CAP-XX module was installed in a Club Assist roadside support vehicle (2.5L petrol Nissan X-Trail) and driven 2,750 kilometres in 42 days – a return trip from Adelaide to Melbourne, and on to several country locations in South Australia. This in-vehicle trial replicated “real world” driver experiences, and subjected the module to a full range of operating conditions - from hot climate environments, to long-distance highway cycles and urban stop-start driving.

During the journey, the supercapacitor module provided over 500 starts without complaint, and in one “flat battery cranking” simulation, achieved 8 sequential engine starts without a recharge. The X-Trail was equipped with instruments to capture data on start performance, charge capacity and charge time, which showed the supercapacitor module accepting a full recharge in less than 8 seconds.

Alan Bradshaw, Vice President, Product and Technical Development with Club Assist said: “We are impressed by the results of our initial evaluation of CAP-XX’s supercapacitor-enhanced stop-start system, which we will continue to evaluate.”

Anthony Kongats, Chief Executive of CAP-XX said: “We’re delighted with the results of Club Assist’s “in-vehicle” trial, which demonstrates the performance advantages available from a supercapacitor-enhanced battery system.”

CAP-XX is working with automobile manufacturers and Tier-1 component suppliers to commercialise this technology.

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### **About CAP-XX**

CAP-XX (LSE:CPX) is a world leader in the design and manufacture of thin, flat supercapacitors and energy management systems used in portable and small-scale electronic devices. The unique feature of CAP-XX supercapacitors is their very high power density and high energy storage capacity in a space-efficient prismatic package. These attributes are essential in power-hungry consumer and industrial electronics, and deliver similar benefits in automotive and other transportation applications. For more information about CAP-XX, visit [www.cap-xx.com](http://www.cap-xx.com) or contact Peter Buckle, VP Sales & Marketing at [sales@cap-xx.com](mailto:sales@cap-xx.com).

### **About Club Assist**

Club Assist partners with trusted motoring club organizations worldwide to provide automotive battery supply and roadside replacement, glass repair and replacement, roadside assistance and other member services. It is the largest mobile automotive battery retailer in the world, serving more than 68 automotive club partners across the globe. For more information about Club Assist, visit [www.clubassist.com](http://www.clubassist.com) or contact Doragnes Bradshaw, Corporate Communications Manager on +61 (0) 3 9797 8632