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For Immediate Release

CAP-XX Announces the Availability of 16V, 230F Supercapacitor Modules and 1400F Prismatic Supercapacitors

CAP-XX, a world leader in supercapacitor development, announces the availability of large prismatic supercapacitors and multi-cell modules for purchase in sample quantities

Sydney, May 27, 2013: Global demand for high energy, high power supercapacitors (ultracapacitors, electric double layer capacitors or EDLC) is growing rapidly as a host of real world applications come to market. These include Stop-Start and Kinetic Energy Recovery Systems (KERS) for cars, trucks, buses, cranes, construction machinery and elevators, ride-through power for trams and trains, uninterruptable power supplies, renewable energy management, power factor correction and on-grid/off-grid storage.

Why supercapacitors? Because they do things batteries can't, in a package that weighs less, takes up less space and has negligible environmental costs. They deliver the high currents demanded by peak loads like engine cranking in [Stop-Start systems](#), accept the high currents and rapid recharge generated during coasting and braking in [micro-hybrid vehicles](#), and keep doing it for millions of cycles, even at [temperatures that leave batteries cold](#).

Australian company CAP-XX, which has long been recognised as a leader in small supercapacitor markets, has now developed a large prismatic supercapacitor for use in these emerging applications, together with a proprietary supercapacitor management system for multi-cell modules operating at higher voltages. The critical success factors for these products are size, weight, energy and power. This translates to a need for high energy density (thousands of Farads in the smallest possible device) and high power



density (very low series resistance in a very efficient package). CAP-XX meets these requirements first by using the most advanced materials available inside the cell, and then by packaging them in an extremely efficient prismatic cell. Thin, flat CAP-XX supercapacitors offer as much as 30% greater packing efficiency internally than an equivalent cylindrical supercapacitor, and another 10 - 20% advantage over cans when stacked into a multi-cell module. This combination of best in class materials *and* packaging delivers energy and power density ratings for CAP-XX which are more than double those of competitive products:

Parameter	Units	CAP-XX GC1 EDLC Cell	CAP-XX GC6 EDLC Module	Comp 1 200F EDLC Module	Comp 2 500F EDLC Module	Comp 3 1200F Hyb Module
CAP	F	1400	230	200	500	1200
ESR	mΩ	0.26	2.90	2.90	2.10	3.00
Voltage	V	2.7	16.0	16.0	16.0	12.0
Length	mm	195	220	422	418	369
Width	mm	110	145	73	68	181
Height	mm	9.5	75	91	179	215
Volume	L	0.20	2.4	2.8	5.1	14.4
Weight	kg	0.23	1.9	4.4	5.5	21.0
Energy Density	Wh/kg	6.2	4.3	1.6	3.2	1.1
Power Density	W/kg	30,477	11,615	5,016	5,531	571

Laboratory testing and in-vehicle trials of the CAP-XX automotive modules have already been completed. To facilitate further research by customers and potential licensees, CAP-XX has now commissioned a small-scale production line to manufacture the GC1 supercapacitors and GC6 modules for evaluation. Single cell supercapacitors are available now in sample quantities for US\$100/piece, and 16V modules suitable for automotive use will be shipping in June at a price of \$900/module, including the proprietary CAP-XX supercapacitor management system.

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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, and to an increasing extent, in larger applications such as automotive and renewable energy. 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 automotive solutions, visit www.cap-xx.com or contact Peter Buckle, VP Sales & Marketing at sales@cap-xx.com.