



**EUROPEAN ENERGY
VENTURE FAIR 2006**

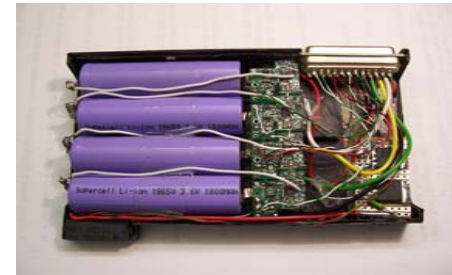
Xipower

Embedded Power Solutions

Energy Venture Fair 2006
September 11-12 2006
Zurich, Switzerland

- **General**

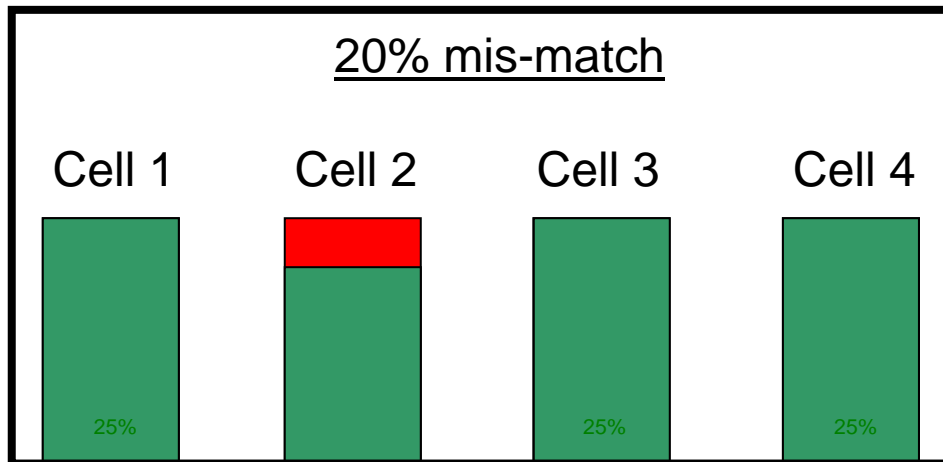
- Xipower Ltd is an electronic and microelectronic systems design company developing advanced energy management technologies for batteries, ultra capacitors and fuel cells.
- The company has developed an energy management system incorporating Active Cell Balancing which is targeted at rechargeable energy storage devices.
- Technology benefits include:-
 - Increased time between charges
 - Increased operational life
 - Advance monitoring and diagnostics
 - Enhanced low temperature performance of Lithium based batteries
 - Energy and carbon savings
- Currently discussing collaborations with energy storage device manufacturers to license technology into a range of end applications



Dell Latitude C640 Laptop battery pack model 1691P

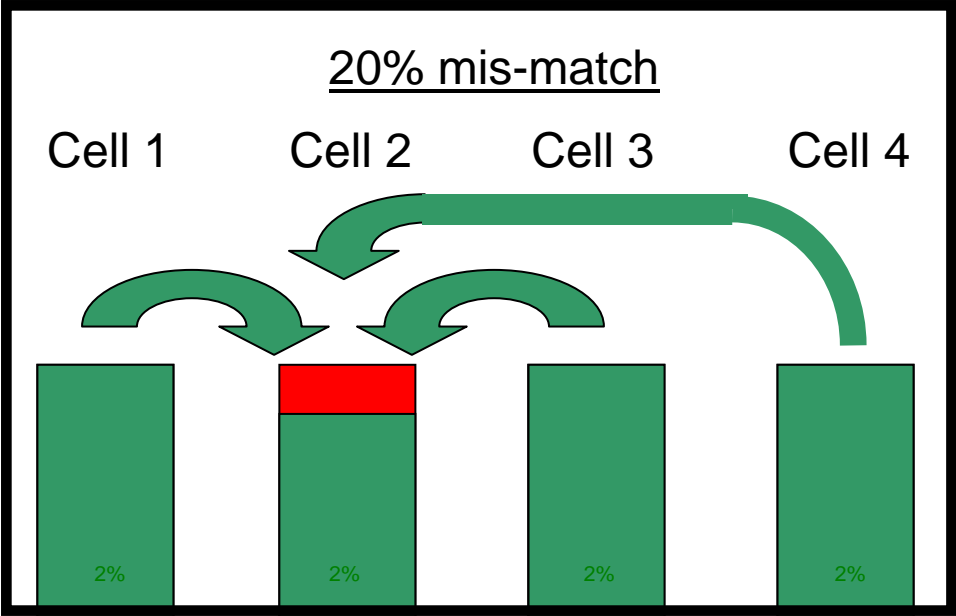
- The Problem**

Battery Pack is only as good as weakest cell



- The Solution**

Active management of stored Energy



• Technology and Product

- **Intelligent, dynamic, energy transfer between cells of an energy storage device enables maximum energy extraction and acceptance.**
 - Increased time between charges
 - Faster charge time
 - Integrated charger function
 - Energy and carbon savings
 - Direct heating of cells for enhanced low temperature performance
 - Increase in operational life through reducing charges cycles.
- **Reduces environmental impact by lowering energy consumption in each charge cycle and increased battery lives mean fewer units manufactured.**
- **Two patents filed and a further two in preparation.**
- **Functional proof of concept hardware produced during feasibility study.**
- **First product launch estimated mid 2007.**

• Market

- **Estimated 2005 global market for secondary batteries: USD 30 Billion**
 - Small form USD 7 Billion
 - Large form USD 23 Billion
- **Other markets include super capacitors and emergent fuel cells**
- **'Renewables and sustainable' market segment being targeted initially**
 - Microgeneration energy storage schemes
- **Other areas of initial interest include the Lead Acid Standby market**
 - 100 million standby cells produced annually
- **Currently in discussion with a number of potential customers including:**
 - A major UK utility, Swiss industrial component manufacturer, US defence company, and a multinational oil exploration company
- **No known competitors within targeted markets. Competition is expected 12 to 18 months after launch. Competing inferior technology exists.**

- **Management**

- **Founding directors have known each other and worked together in various roles and companies for over 18 years.**
- **Gary Macdonald – CEO BSc Computing & Technology; Executive MBA**
Extensive experience within the electronics and manufacturing industries having undertaking a wide range of activities including electronics development, programme management and business development. This includes working internationally with companies ranging from start-up to Blue Chip.
- **Mark Huggins – CTO BSc Electrical & Electronic Engineering 1st Class (Hons)**
- **A career electronics engineer with over 25 years experience and a track record of delivering world class products for companies including IBM, Texas Instruments and Semtech. Power management devices designed by Mark are currently used in millions per month in Samsung and LG mobile phones.**
- **Consultants, sub-contractors and research associates are used when need arises.**

- **Business Model / Financial**
- IP Licensing and royalty revenue
- Break-even estimated to be Q1 2009
- **Funding:**
 - GBP £600,000 Seed funding currently sought for commercialisation of existing technology.
 - Seed funding round will finance company for 18 to 24 months.
 - Second round – estimated GBP £2m to £3m to develop microelectronic devices to enable cost reduction and miniaturise of technology.
 - Funds are used to resource engineering development activities, establish markets and develop early sales and protect company IP.
- **Exit**
 - Trade sale most likely though IPO is possible

Xipower Limited – Summary of Fund Raising Offering

- **Summary of Fund Raising Offering**
- **Sigma Capital Group Plc – acting as Lead Investor**
- **GBP £300,000 already committed from Sigma Sustainable Energies Fund (SSEF)**
- **Opportunity for further investment of GBP £300,000**
- **Supporting documents available:-**
 - **Letter of interest and support from potential customers**
 - **SMART:Scotland feasibility report**
 - **Technical data report**
 - **Demonstration of hardware**