Sol Chip is a cutting edge solar technology company with long-standing expertise in the semiconductor industry.

Sol Chip develops, sells and licenses a cost-effective, compact Everlasting Solar Battery technology that integrates solar energy sources to power wireless sensors, wireless systems, low-power microprocessors, LP Bluetooth, LP GPS systems and many others. The company offers the missing technology that will eliminate the need of a battery as a power source in low power applications or extend battery life in some cases.

Sol Chip’s new and innovative technology provides wireless sensors their freedom and reduce battery dependency in low power applications.

With Sol Chip’s Everlasting Solar Battery, wireless applications will operate autonomously with a sustainable energy source to perform their duties without maintenance or power limitations.
Sol Chip’s revolutionary power harvesting technology is a compact, cost-effective, environmentally friendly device that's ideal for any low power application, such as:

- Autonomous operation of low power applications
- Extended battery life or elimination of battery altogether
- Reduced environmental hazard
- Integration of components required for harvesting solar energy into single solar battery
- Reduced system cost of ownership (Reduced cost of silicon, system and maintenance)
- Increased solar battery efficiency and reliability
- Easy integration for OEM (original equipment manufacturer)

Sol Chip™ Energy Harvester

Sol Chip Energy Harvester is a unique Photo Voltaic (PV) cell which produces six selectable voltage levels: 0.7 volt, 1.4 volt, 2.1 volt, 2.8 volt, 4.2 volt and 8.4 volt. Each selectable voltage delivers a different current. The maximum power which can be extracted in full daylight is ~8 mWatt and in office lighting the power extracted is up to 100 µWatt, dependent on ambient lighting intensity.

Additional voltage levels and also several voltage and power levels can be delivered simultaneously from separate pins of the device.

Product Specification

- Voc: 0.7V, 1.4V, 2.1V, 2.8V, 4.2V, 8.4V
- ISC1 at full daylight: 20 mAmp
- Pmax at full daylight: 8 mWatt
- Pmax at office light2: up to 100 µWatt

1 For the case of Voc=0.7v.
2 Depends on light conditions

Wireless Sensors for:
- Agriculture
- Livestock
- Smart cities
- Positioning/GPS Smart house
- Industrial monitoring
- Homeland Security
- Military smart metering
- Medical
- Environmental monitoring
- Transportation
- And more...

Active RFID in:
- Smart Card
- Tracking systems
- Security
- Merchandise tagging, etc.
- Medical
- Pharmaceutical