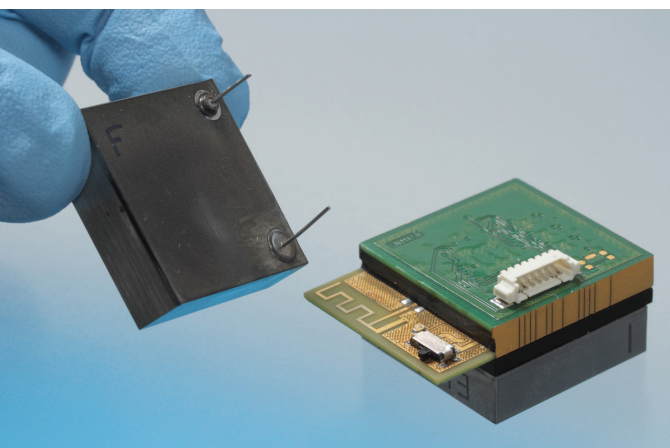
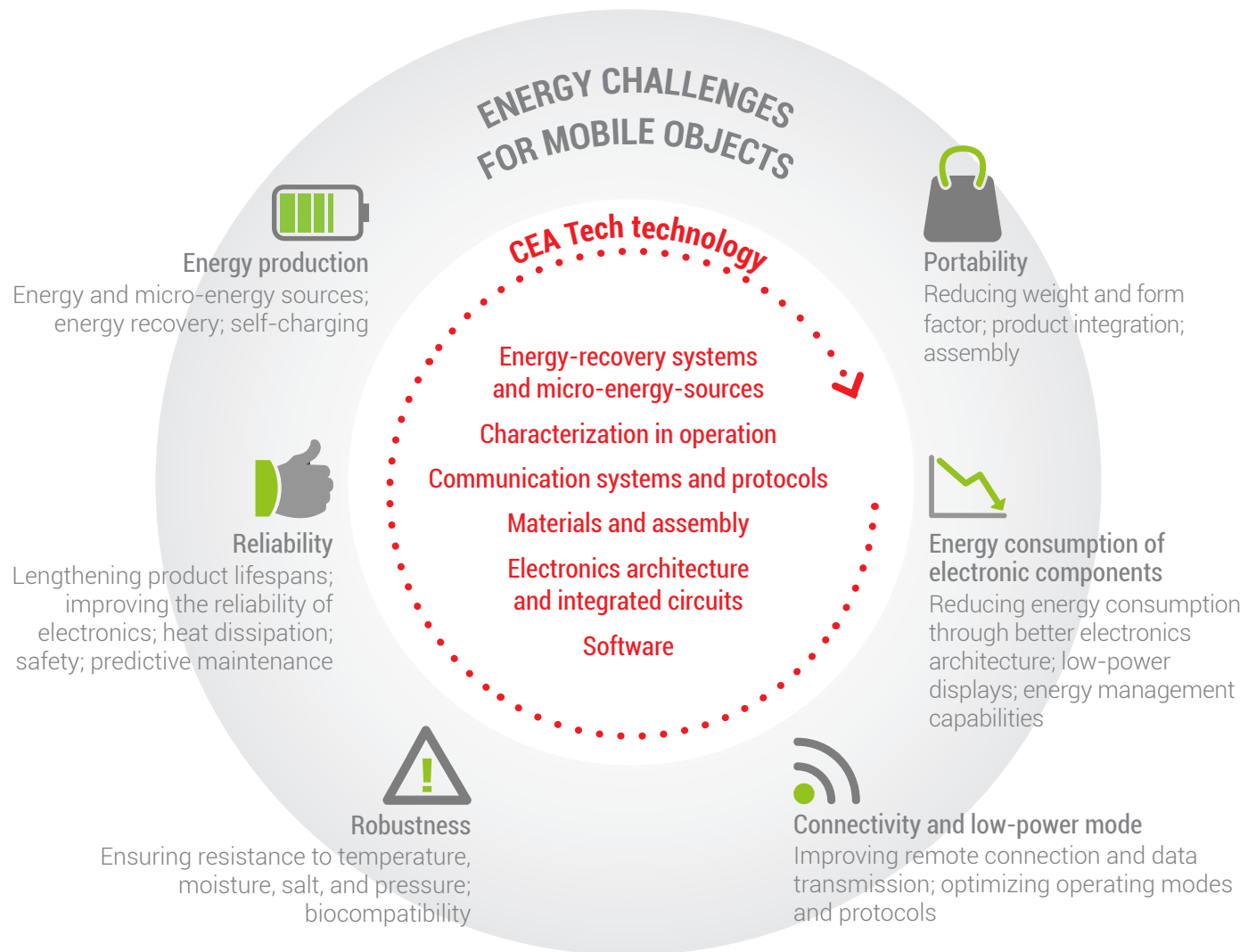


FROM RESEARCH TO INDUSTRY

cea tech

## CEA TECH ENERGY SOLUTIONS FOR MOBILE OBJECTS

Technology to meet the energy needs of mobile objects



### CEA Tech can help the following businesses:

- Semiconductor manufacturers
- Energy systems manufacturers
- Medical systems manufacturers
- E-service providers
- Integrative industries like mobile telephony and home automation

Here are some of the ways CEA Tech can support your development:



- Micro-fuel-cells*** Portable hydrogen-fuelled energy-production systems; can be used for backup charging
- Batteries*** Conformable and custom batteries for lighter weight, smaller form-factor products
- Micro-batteries*** Miniaturized batteries for integration into electronic systems
- Energy recovery systems*** Recover heat via thermoelectricity; PV solar (silicon and organic technologies); vibration energy recovery
- Energy management solutions*** Optimize system energy management; battery management systems
- Low-power architectures and components*** Integrated circuit architectures (RF, digital, and near-sensor); low-power electronics; systems-on-chip
- Antennas and propagation*** Contactless charging; antenna development for demanding environments; propagation analysis; miniaturized antennas for implanted devices
- OLED and LED*** Flexible displays and low-power lighting systems
- Miniaturized sensor systems*** Integration of self-powered sensors into equipment for residential, infrastructure, and vehicle applications
- Communication systems and protocols*** Wireless communication (RFID, Wi-Fi, Ultra Wide Band, ZigBee); network infrastructures; low-power protocols; read systems; standby mode systems
- Testing in operation*** Modelling and characterization of systems in operation: cycling, reliability, aging; temperature resistance
- Materials*** Flexible, functionalized materials; lighter-weight assembly methods; materials for energy systems

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