

---

## Ultra Low Energy Domain Specific Instruction Set Processors

**ultra low power boost converter charger energy harvester (rev. a) - ti - bq25504** evm -ultra low power boost converter with battery management for energy harvester applications this user's guide describes the bq25504 evaluation module (evm), how to perform a stand-alone evaluation and allows the evm to interface with the system and host. this evm is programmed from the **the quest for ultra-low energy computation or** - a holistic perspective on low-energy design energy = upper bound on the amount of available computation - total energy of milky way galaxy: 1059 j - minimum switching energy for digital gate (1 electron@100 mv): 1.6 10<sup>-20</sup>j (limited by thermal noise) - upper bound on number of digital operations: 6 10<sup>78</sup> **ultra-low power 2.4 ghz bluetooth low energy transceiver for audio streaming - nxp** - nxp semiconductors nxh3670uk ultra-low power 2.4 ghz bluetooth low energy transceiver for audio streaming nxh3670ukproduct data sheet all information provided in this document is subject to legal disclaimers. **ultra low power energy harvesting and power management ic (pmic) design - psma** - ultra low power (ulp) pmics low bandwidth and low average data "battery-less" (maintenance-free) systems or battery life extension to 25+ years 4 100μw