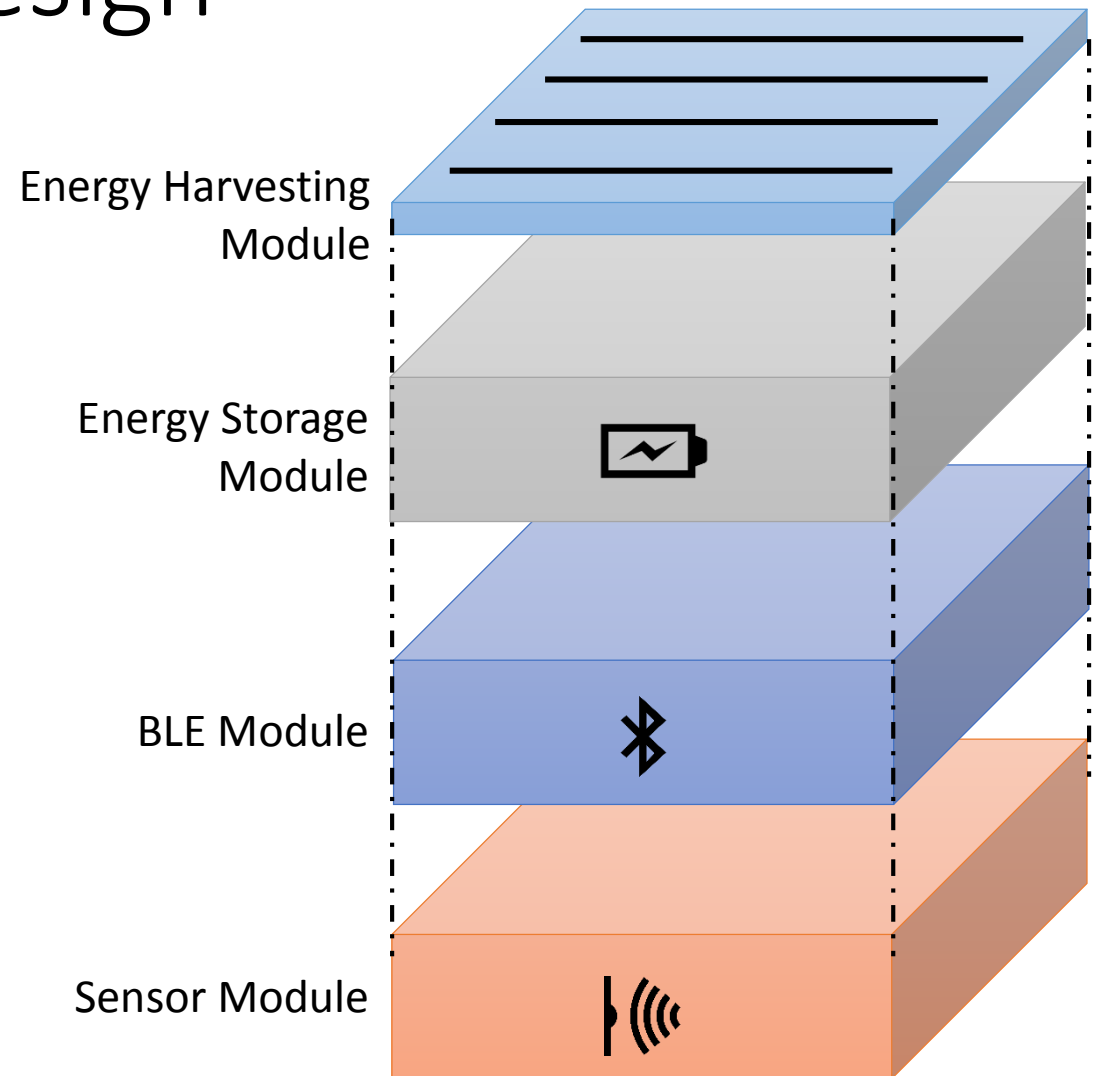


Sustainable BLE Beacon Prototype Design

Modular BLE Beacon Design

- Stackable modular design
 - Stack 1: Energy Harvesting Module
 - Solar Panel
 - Stack 2: Energy Storage
 - Rechargeable battery
 - Disposable battery
 - Supercapacitor
 - Stack 3: BLE module
 - TI chipset
 - Nordic RF chipset
 - Stack 4: Sensor Module



Current Prototype

- Current prototype uses:
 - nRF BLE chipset
 - Panasonic solar panel
 - Cypress power management IC
 - Li-ion rechargeable battery
- The prototype is currently able to operate in **indoor office lighting** at advertising interval of **500ms**.

