This product is designed based on Nordic Semiconductor s nRF51 series, nRF51822 chipset. It consists of a 32-bit ARM Cortex M0 CPU with 256kB flash and 16kB RAM. As shown in Figure 3 Gooro Block Diagram, the main chipset handles the communication using Bluetooth 4.0 with other terminals. Its printed quarter wave length antenna is matched to the single ended pin input. The MCU uses two crystal oscillators for clock references.

The module consists of the following peripherals:
| Battery Monitor, which measures the battery voltage using MCU s internal ADC.
| Power Management, which controls the soft shutdown/reset/hard shutdown to manage the power consumption.
| USB Charging Control, which monitors the battery charging status and sets the charging current.
| One-Wire ID, which uses a hardcoded chipset, uniquely determines the module s identification.
| LED driver, which drives the 3.5 watts LED

The module s main power source is a in-built 1400mAh lithium-ion battery which provides VDDA 3.7 Volts. It is down converted to 3.3 Volt as digital VDDD for the chipset. The external USB charging net is also protected.