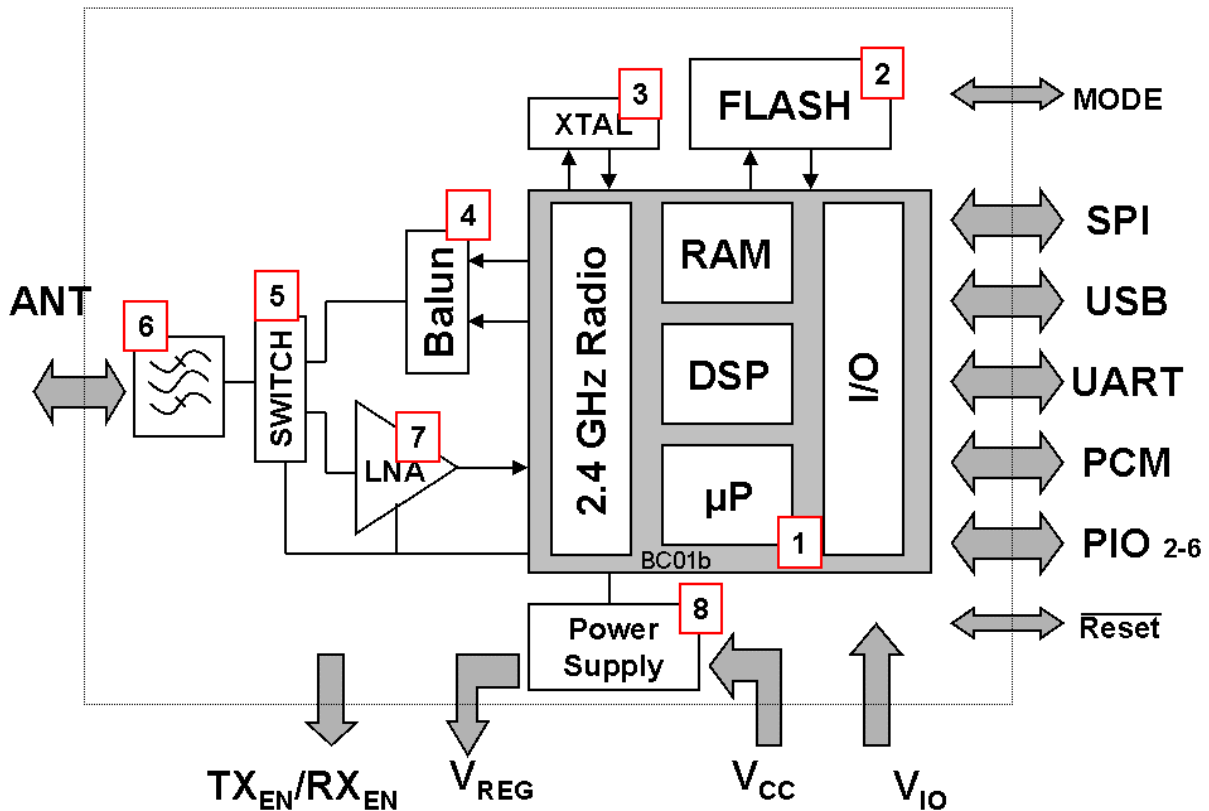


Functional Description

SieMo-S50037 is a Bluetooth™ module which is in compliance with Bluetooth specifications 1.1. The module's implementation is based on the BC01b single chip of Cambridge Silicon Radio (CSR). Block Diagram is as shown below.

Block Diagram



Functional Blocks:

1. BlueCore 01b (BC01b) CMOS-single chip bc Cambridge Silicon Radio (CSR)
2. 8 MBit Flash Memory
3. 13 MHz XTAL with asymmetric trimming capacitors, digitally trimmed during production. Initial Tolerance <0.5 ppm, <20 ppm over age and temperature.
4. BALUN (BALANCED to UNBALANCED) performs transformation from symmetrical output to asymmetrical lines and biasing of the output stage.
5. Antenna switch switches between input and output direction to transmit or receive a signal with TDM (Time Division Multiplex).
6. Output/Input Filter removes (out-of-band) spurious emissions and increases (out-of-band) blocking performance.
7. LNA Low Noise Amplifier increases sensitivity of receiver and isolation between transmit and receive path during transmission.
8. Power supply ensures that all rf-parameters fulfill the Bluetooth specification with an input voltage range from 3.25 to 6V.