

H110 AROYA Gateway/Sink Operational Description

Functional Blocks

- EFR32MG12
- 2.4GHz two-way antenna for Bluetooth communication
- 38.4 MHz oscillator for high frequency for precise timing reference
- 32.768 kHz oscillator for low frequency, low energy timing reference

Main System-on-Chip

- Silicon labs - EFR32MG12P332F1024GL125-C, 2.4 GHz @ 10 dBm

Communication Protocol -

- Bluetooth Low Energy
- Modulation: 2 GFSK, BT = 0.5
- Frequency Band: 2400MHz-2483.5MHz unlicensed SRD (Short Range Devices) band, divided into 40 channels with channel bandwidth as 1 MHz and channel Spacing as 2 MHz
- Lower Channel freq: 2402 MHz
- Highest Channel freq: 2480 MHz
- Middle Channel freq: 2444 MHz
- Data rate: 1 Mbps