

The Device block diagram is as follows.

The synthesizer, is driven by a 12 MHz TCXO which is multiplied up to 2.4-2.48 GHz. The synthesizer is controlled by a microcontroller with a 32 KHz external oscillator and an internal 0-4MHz adjustable oscillator. LCD, keypad, buzzer, non-volatile FeRAM and wake up circuits connect directly to the microcontroller. The microcontroller controls the charger interface and can runs off of battery power through an LDO. A separate LDO controls power to the RF synthesizer. The Battery is Charged through a uniquely size power adapter that provides 9 V power. The battery voltage is 8.4 Volts nominal when fully charged and has protection circuitry in the battery pack to disconnect the battery if power is depleted below 5 Volts.

