

DESCRIPTION OF THE BLOCK DIAGRAMS FOR
MODEL OF SBC SC769 (PHL-0769-USA) – 31 OCT 2002 (REV.0)

1. RX UNIT AND CHARGER BASE:

- RF Match & RF-Amp. are achieved by using the matching capacitor of C1 and C2, which are used to match the front end to antenna for better reception. Q1 and Q2 perform the RF-AMP for amplifying the weak signal.
- OSC, Phase Lock Loop & Local Oscillator circuit are provided by the parts of X1, U2 and Q5 to generate the local oscillator frequency for Mixing purpose. The output of the oscillator signal is used and injected into the Mixer circuit for creating IF signal. The Phase Lock Loop is controlled by the CPU (U4) control signal.
- IF Circuit is constructed by a combination of parts, like Q4, U1, L2, C28 and VC1 in order to provide the IF demodulated signal to two paths, the audio path includes RC filter circuit (Q7), audio amplifier (U6), mute control (Q8, Q9) and LED Indication control circuit (Q11, Q12 and LED3-7). The other path uses to provide the coded signal for CPU detection (U4). The Code Amp & Detector circuit includes U4 & U5.
- Low-Batt Detector uses U7 to detect the VCC voltage and provides a detected signal to CPU for low battery indication.
- CPU (U4) provides a system control on several parts, like detecting the coded signal, low batt voltage, sensing the channel A & B selector setting, providing the PLL (Phase Lock Loop) control, providing the LCD indication, System check indication, Out of range sound and Low Batt indication etc.
- Regulator (U3), Charger (Q14 & Q10) and Batt. are used to provide a constant supply voltage for the circuit.
- Power Switch of SW1 is the whole unit on/off power control.
- Charging Base includes Q14 & Q10 connecting to the DC jack of adaptor.