BE-826 Technical Description

MIC Circuit:
The audio input is from microphone MIC101 then through audio amplifier chain of Q102 and Q103. T102 and Y101 is the crystal oscillator and it will modulate by the output of the same audio amplifier and diode D101. Then the RF signal will through buffer/matching circuit L101, L102, C101 to antenna.

Base Circuit:
The base circuit is including 3 parts:

1) CMOS camera
2) Wireless MIC receiver.
3) Audio Mixer/Effecter

1) CMOS Camera
   The CMOS camera is formed by single chip IC only and it is operating at 14.31818MHz. Its analog video signal is connected directly to output.

2) Wireless MIC receiver:
   The antenna receive RF signal and coupling through transformer T1 to transistor Q5 the regenerative mixer and detector. Then the signal will pass to Narrowband FM IF IC U3 for demodulation with squelch control. The audio signal will though wired MIC1's switch to Audio mixer/effecter circuit.

3) Audio Mixer/Effecter:
   Audio signals from wireless MIC and/or wired MIC will through Echo Effect IC U1 and Pitch Controller IC U2 to buffer amplifier which formed by Q3 and Q4. Also, external Line In audio input and sound IC audio output will directly connect to buffer amplifier to mix those signal.

4) Sound IC (Optional):
   The sound generator IC (U4) will load ROM IC (U5) music data when power up. And then it can generate music when button pressed.