

Baby Monitor Circuit Description

1. Product Description

2M19 is 900MHZ digital baby monitor.

Operating frequency band:

Channel 0 – 907.001 MHz

Channel 3 – 919.001 MHz

Channel 1 - 908.997 MHz

Channel 4 - 920.988 MHz

Channel 2 - 912.994 MHz

Channel 5 – 927.001MHz

2. Design/development

-Temperature test :-5°C to 50°C

-Humidity test: Leave the equipment in the environment of 85%,38°C for 4 hours

-Shock test: Drop the equipment three times on the hardwood floor from the height of 1M

-Voltage change test: +/-10%

3. Circuit Description

The operations of each part are described below, based on the schematics:

3.1 Transmit unit

a) Oscillator

Y2 is a crystal oscillator . It forms a oscillator circuit with the RF A7328

b) Transmission part

The microphone picks up the baby's sound .The audio signal then pass through

U7,U7 is *Wireless baseband OTP MCU with CODEC*

c) Power supply

The nursery unit is powered by adaptor with 6VDC 200mA output .

U3 supply MCU,RF voltage form a regulator circuit. It provides 3.3V power to the circuit.

3.2 Receiver unit

a) Oscillator

Y2 is a crystal oscillator . It forms a oscillator circuit with the RF A7128

b) Receiver

The RF signal is received from the antenna and pass through a LC circuit for

Rejecting the unwanted signal .U7 is *Wireless baseband OTP MCU with CODEC*

c) Sound LED

D7-10 is a led meter driver . It drives a group of LEDs which indicate the Sound Level

Vibration Function: SW1 is vibraton swith, if SW1 set to ON, the device will turn on

The motor by enough sound level.

d) Speaker amplifier

U5 YD8602 is low voltage audio power amplifier . It amplifies the audio signal

and drives the speaker, Can select the volume level high or low by adjusting the

Volume+ or volume-.

e) Power supply

The parent unit is powered by adaptor with 6VDC 200mA output .

U3 supply MCU,RF voltage form a regulator circuit. It provides 3.3V power to the circuit.

The parent unit is use 3.7V REC battery or an adaptor with 6VDC.

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