



## Tandy Electronics ( China ) Limited

TEL : (0752)25701244 FAX : (0752)2261798

### Circuit Description

Prepared by	
Approved. by	
Rev.	A

**Cat No.: 33-1197(T#760)**

**Description: 900 MHz Rechargeable Analog Wireless Stereo Headphone**

#### Transmitter Section

U201 C203 U202 C208 Q204 Z201 and C209 are used to build the regulator circuit for DC power. When you press the Tact SW201 once, the MCU U203 controls the Q203 Q202 Q201 to generate 8V DC power (TX\_+8v) which provide power for transmitter RF section, Power LED D202 lights on then.

X201 resonator provides the clock signal for MCU U203, SW201 is tact switch to toggle the power ON and OFF. D204 R212 R211 and R210 are used to build the battery recharge circuit. When the receiver headset is putting on the transmitter, the batteries will be charging, the Charge LED D203 will light on to indicate it is in charging.

JK1 JK2 are the stereo sound signal inputs, U204 and U205 are Compressor IC to improve the dynamic range, C247 R235 R236 C232 R226 and R227 are the pre-emphasis circuit to improve SNR. VR201 and VR202 adjust the AF level in order to achieve the desired FM modulation level.

U206 is PLL IC, X202 is the crystal provides the reference clock signal for U206. The TX frequency is controlled by the MCU.

Q206 Q209 L201 L209 VD201 and VD202 are used to build the VCO circuit, R250 C260 R251 C261 R252 C262 C296 R274 C297 R275 and C298 are the Low passed filter circuit, Q207 and Q210 are buffer, Q208 and Q211 are used to build the PA circuit, L206 L207 R266 L208 and C284 are the antenna matching circuit.