



**IDT Technology Limited**

萬威 科 研 有 限 公 司

## **Technical descriptions of THR128**

THR128 is a remote thermo sensor. It converts analogue temperature signal into digital signal and transmits via RF channel. It composes a controller part and a transmitter part. The transmitter is basically a Colpitts oscillator, where C1, C2 and X1 are used to determinate the resonant frequency that is 433.92MHz. Transistor Q1, whose  $f_T$  is greater than 6GHz, provides a good frequency response to the circuit. There is a LC filtering circuitary L1 and C3, that is used to suppress harmonics of the oscillator. An inductor, L3, is employed to match the impedance of the antenna, L4.