



IDT Technology Limited

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Technical descriptions of GA128

The GA128 is a set of transmitter unit and a receiver unit. The transmitter has a thermos probe and is put to measure the temperature of the meat or food that being BBQ. The actual temperature data is then send to the receiver through 433.92MHz carrier frequency. The receiver then pickup and display the data , a voice is activated if the meat reach to the target temperature.

The transmitter is made of a Colipittis oscillator, where 433.92MHz SAW resonator provides the center frequency. L2C, C18 to R8 are the matching network.

The 433.92MHz receiver is an enhanced super-regenerative type by adding a front-end LNA. It is made of matching network, front-end amplifier, mixer, envelop detector and a comparator, The circuitry of L4 to L2 matched the antenna to LNA. Components around the Q1 and Q5 are the biasing network. C12 to C16 are the matching between LNA and super-regenerator. The signal is extracted through the envelop detector R14, C21 and C27, then is amplified and output in digital form through the final stage of the comparator.