



IDT Technology Limited

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Technical descriptions of PCR122

PCR122 is a remote rain gauge sensor. It converts analogue rain amount 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 C6, C4 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 C7, that is used to suppress harmonics of the oscillator. Inductors of L3 and L4, and capacitors of C7 and C9 are employed to match the impedance of the antenna.