# CHUNG'S ELECTRONIC CO.,LTD.

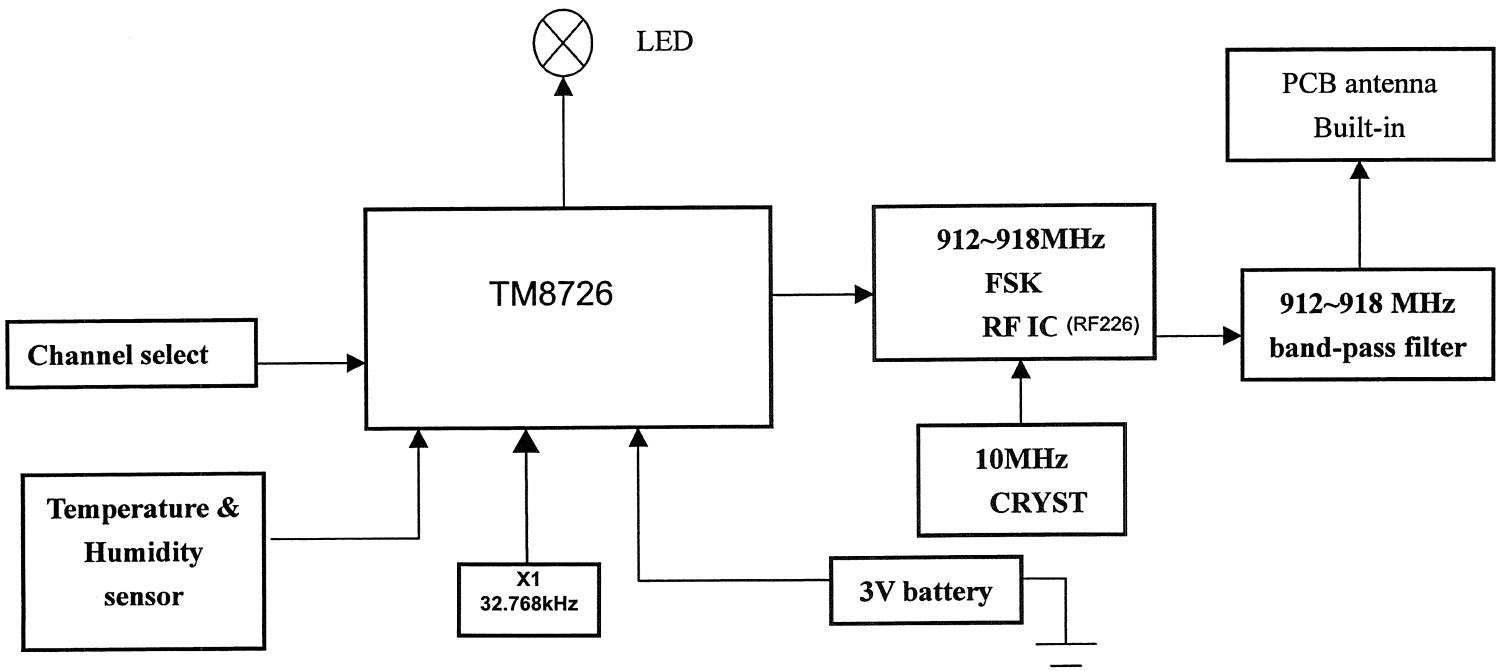
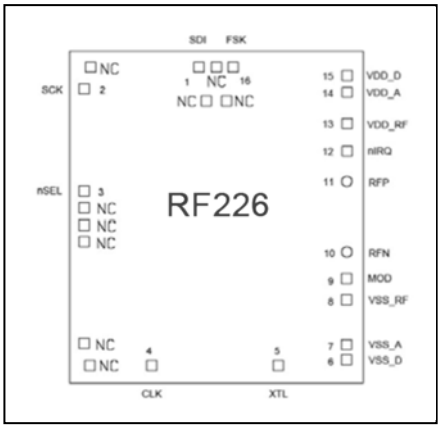



**Figure 1 C8201(915MHz)FCC Simplex Transmitter Block diagram**

| CHUNG'S EECTRONIC CO.,LTD | |
|---|---|
| Description name | Block diagram |
| Model | C8201(FCC)915MHz |
| File No | TX8201-BD915MHz |
| Date | 20/1//09 |

# RF226 Universal ISM Band FSK Transmitter

RF226




## DESCRIPTION

RF226 is a single chip, low power, multi-channel FSK transmitter designed for use in applications requiring FCC or ETSI conformance for unlicensed use in the 433, 868, and 915 MHz bands. Used in conjunction with RF225, a FSK receiver, the RF226 transmitter produces a flexible, low cost, and highly integrated solution that does not require production alignments. All required RF functions are integrated. Only an external crystal and bypass filtering are needed for operation. The RF226 offering a higher output power and an improved phase noise characteristic.

The RF226 features a completely integrated PLL for easy RF design, and its rapid settling time allows for fast frequency hopping, bypassing multipath fading and interference to achieve robust wireless links. In addition, highly stable and accurate FSK modulation is accomplished by direct closed-loop modulation with bit rates up to 115.2 kbps. The PLL's high resolution allows the use of multiple channels in any of the bands.

The integrated power amplifier of the transmitter has an open-collector differential output that directly drive a loop antenna with programmable output level. No additional matching network is required. An automatic antenna tuning circuit is built in to avoid costly trimming procedures and de-tuning due to the "hand effect".

For low-power applications, the device supports automatic activation from sleep mode. Active mode can be initiated by several wake-up events (on-chip timer timeout, low supply voltage detection).

## FUNCTIONAL BLOCK DIAGRAM