

Operational Description

1. Reference oscillator

Reference oscillator device (crystal oscillator X100) generates the reference frequency (32MHz).

2. Frequency synthesizer

Frequency synthesizer composes it with the Reference oscillator device (crystal wave detector) and VCO/PLL part. The clock divider transforms the reference signal into 1MHz. The output frequency is 2402MHz to 2480MHz (1MHz interval).

3. Transmission

The transmission circuit is to constitute with RFIC (U300) and balance/ unbalance transformation device (T100). GFSK modulation the data signal. The power supply of transmission part uses the power supply that stabilized (U2).

4. Receiver

The receiver part is a direct conversion.

The signal from the antenna passes BPF (FL100), and it is input to RFIC. GFSK demodulation the detect signal. And it is output to UART I/F.

5. Control

The Control circuit is to constitute with the Link control, Base band control, and stabilized power supply. And, it does the following control.

- : PLL frequency setting
- : Output control of Transmission and Receiver data
- : Power supply of Transmission and Receiver part
- : Confirmation of ID, and Interference prevention
- : Memory storage of the distinction mark

6. Power supply

The power supply is supplied from the printer (DC 4.75 to 5.25V). And, it stabilizes to 3.0V by IC (U2).