

## 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).