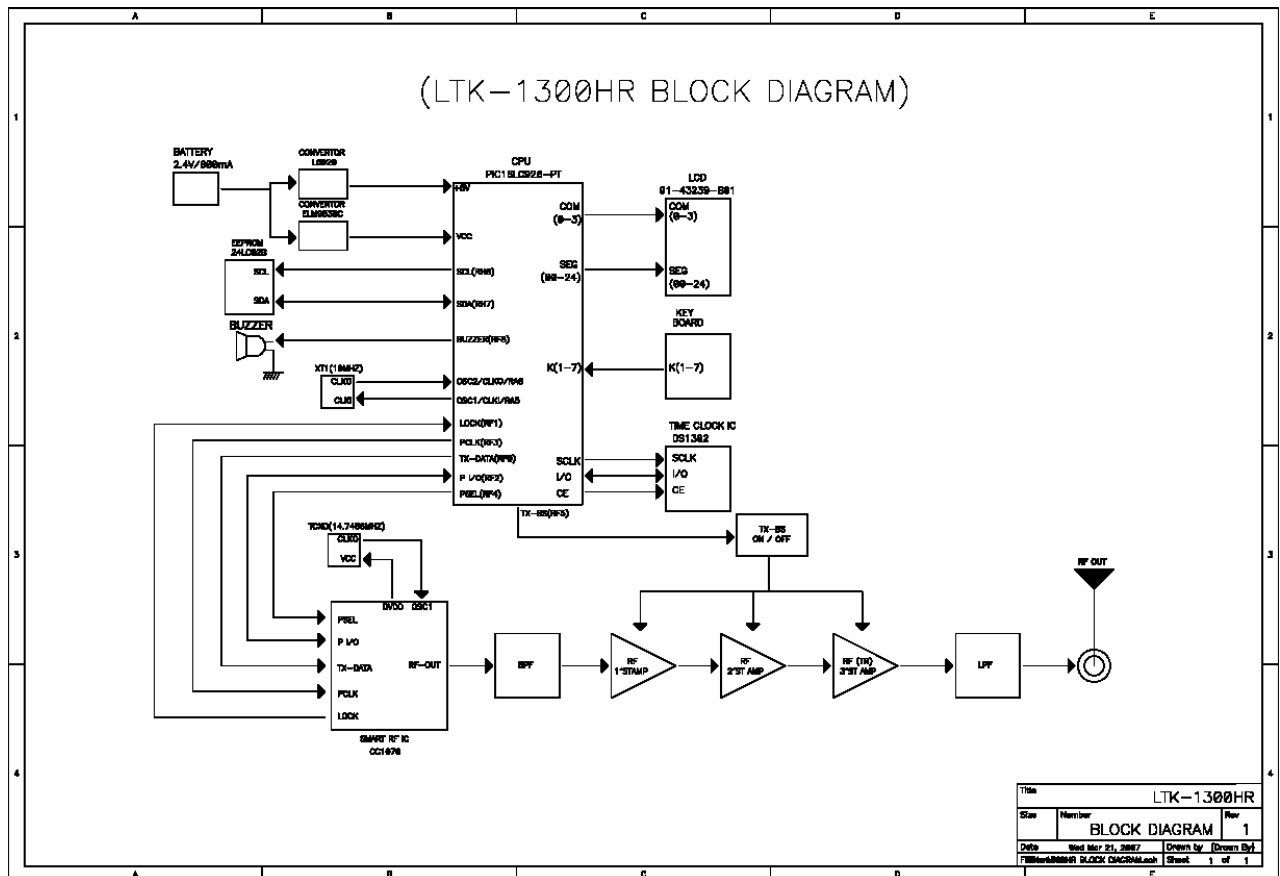


Circuit Description

* Model : LTK-1300HR

* Product : TRANSMITTER



1. SPECIFICATION

- Pocsag Code
- Carrier frequency : 457.5750MHz +/- 200Hz
- Frequency Range: 450.0000 ~ 467.8500MHz
- FM modulation & FSK (frequency shift keying)
- Deviation: 4.5KHz
- FM Accuracy : +/-5% $4.275 < 4.5 < 4.725$
- Data Rate: 1200BPS, 600Hz +/-5Hz
- Output power : 500mW
- Message: Numeric: Max. 12 digits
- Address Range: 0001 to 1249

2. CIRCUIT DESCRIPTION

Hand Transmitter uses 2.4V 600mA Battery as its Power supply.

If the power is supplied into the CPU, the time is displayed on the LCD running by the real time clock IC.

Max.12 digits numeric numbers are able to be entered and 0000 up to 1249 are available with this system in the address range. If push the Enter button after inputting, CPU(microcontroller) will interface to CC1070 via the 4 wires serial configuration interface(PDI, PDO, PCLK and PSEL). Optionally, the microcontroller can do data encoding and the microcontroller can monitor the LOCK pin for frequency lock status or other status information.

This frequency is filtered by way of BPF (L104, L105) and then amplified by Q103, Q104 and then filtered by LPF(L1) and then amplified by RF Power Transistor Q1(THN5601B) and then filtered by LPF(L108, L109, L110, L111) and transmitted to BNC connector.

3. Reference

CC1070, Single chip low power RF transmitter for Narrow band systems

- 1) Programmable frequency make crystal temperature drift compensation possible without TCXO.
- 2) Suitable for frequency hopping systems
- 3) Complies with EN 300 220, FCC CFR47 part 15 and ARIB STD T-67