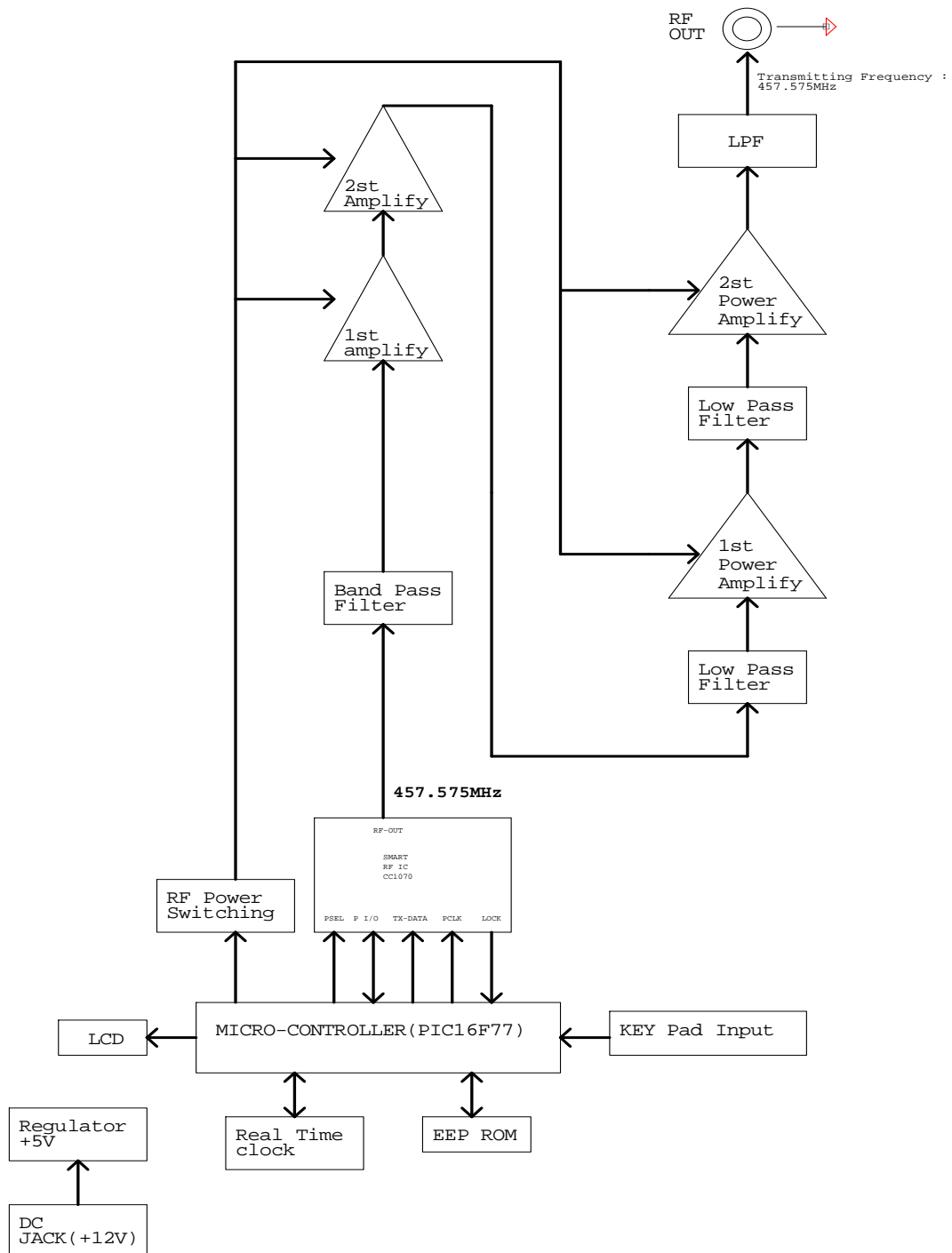


# Circuit Description

\*Model : LTK-1100H

\*Product : Pager Transmitter

LTK-1100H Block Diagram



## 1. SPECIFICATION

- Pocsag Code
- Carrier frequency : 457.5750MHz  $\pm$  200Hz
- Frequency Range: 450.0000 ~ 467.8750MHz
- FM modulation & FSK (frequency shift keying)
- Deviation: 4.5KHz
- FM Accuracy :  $\pm$ 5%  $4.275 < 4.5 < 4.725$
- Data Rate: 1200BPS, 600Hz  $\pm$ 5Hz
- Output power : 2W
- Message: Numeric: Max. 12 digits
- Address Range: 0001 to 1249
- Dimension : W(185) X D(190) X H(51.5)

## 2. CIRCUIT DESCRIPTION

LTK-1100H uses 12V 2.5A DC Power Supply as its Power supply.

If the power is supplied into the DC Jack, it supplies the power to CPU and LCD by U4-1(7805) which converts the power to +5V..

Input message by use of Keypad and press ENTER,

and then CPU(RA5,RE0,RE1,RE2, RC2,RC3) sends the data.

With sending a data, it makes the TX On S/W work and supplies the power to RF module.

Max. 16 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(L2,L3) and then amplified by Q4,Q5,Q6 Q7,Q8,Q9,Q10 and then filtered by LPF( L11,L12,L13,L16,L17,L18) and transmitted to BNC connector.