FM72MHz TRANSMITTER BLOCK DIAGRAM

ANT   72MHz

LCD (D1)
BZ (SP1)

14MHz

POWER
E1、D3

OSC
CR1、L1、D1

Regulator
C8、R9、Q4

double Amp.
CR1、L1、D1

Band Pass Filter
C15、L3

CPU
FM-12T-IC1

modulator
Q1、C1、Q2
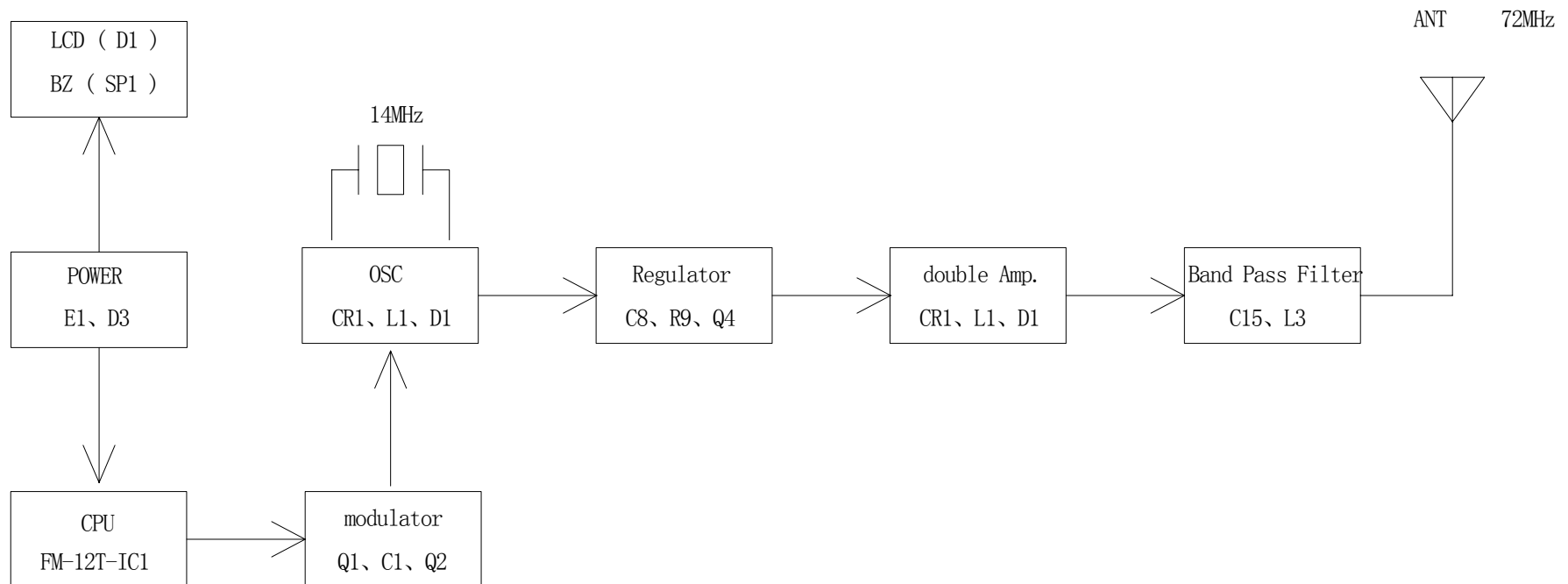
1. Accept the analog voltages from the control inputs (joysticks, switch)

2. power offer to the　LCD　(D12)　and BZ　(SP1) 、　encoder circuit、tuned circuit、transmit circuit, etc.

3. Process width of the pulse to create control mixing , adding ,reversing ,etc., as desired by the user.

4. pulse of synchronization and pulse of　channel 1-3 output from CPU . (encoder circuit)

5. then modulator the pulse.

6. The oscillator excite by a quartz crystal. the crystal supports oscillation at the crystal's fundamental frequency (approximately 14MHz). (L1、CR1、D1)

7. Its output frequency is 5* crystal

8. The tuned circuit in the oscillator transistor's collector is tuned to the second harmonic of this frequency .

9. double Amp.

10. Band Pass Filter　(C15、L3)

11. send signal from the ANT .

SPECIFICATION OF RYSTAL UNIT

1. FREQUENCY: 72MHz (72MHz)

2. HOLDER TYPE: HC-50U

3. FREQUNCY TOLERANCE:+ -7PPM/+25C.

4. EQUIVALENT RESISTANCE: 20 OHMS MAX/SERIES

5. OPERABLE TEMPERATURE RANGE: （－20℃～＋60℃）

6. TEMPERATURE DRIFT: +-20PPM

7. MADE OF OSCILLATION: FUNDAMENTAL (AT CUT)

8. MODE OF MODULATE: FREQUENCY

9. DROPPING FROM 75 CM HEEIGHT 3TIMES ON FIRM WOOD

10. BANDWIDTH OF CARRIER WAVE:≤±2.5kHz

11. VIBRATION TEST

    TEST TIME 120MINUTES IN EACH DIRECTION

12. AGING: + − 5PPM/YEAR