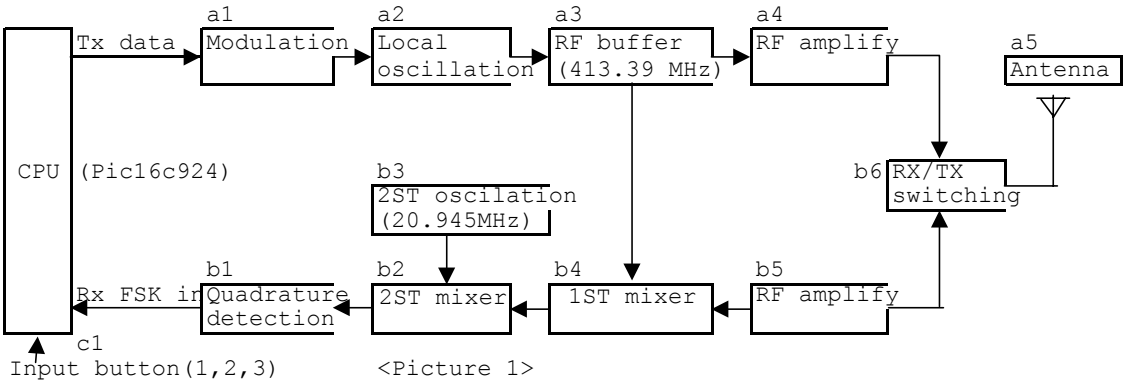
# Circuit operation explanation

---- Remote rf block diagram ----




<Picture 1>

- A basic carrier frequency consists of a1, a2, a3 (on picture 1).
- Receiver : super heterodyne recever
- Modulation type : FM FSK(frequncy shift keying)
- Remote transmitting frequncy : 413.39MHz
- Remote receive local oscillation frequncy : 413.39MHz
- Remote receive frequncy : 434.79MHz

1. Remote control

1.1 Transmission

Press input button(1,2,3) Modulation signal is occurred at CPU(location u1) pin n
Modulation is formed at a1 (VD1), a2 (Q6).
a3 (Q7) creates frequency 413.39MHz.
The frequency of 413.39MHZ is amplified through the components
of a4(Q8,Q9) and b6(rx/tx switching) and transferred to antenna.

1.2 Receiver

A carrier frequency (434.79MHz) amplifies at b5 (Q1, Q2) pass through a5 (antenna
b4 (Q3) receives signals of a3 (Q7), b5 and makes 1st IF (21.4MHz) to send b2 (U1
b2 (U1) mixes with 2nd local oscillation frequency (20.945MHz) of b3 (X2) and mak
455Khz demodulates FM at b1 (X3) and quadrature detects
Sends Fsk out to CPU(location u1) pin no 2.