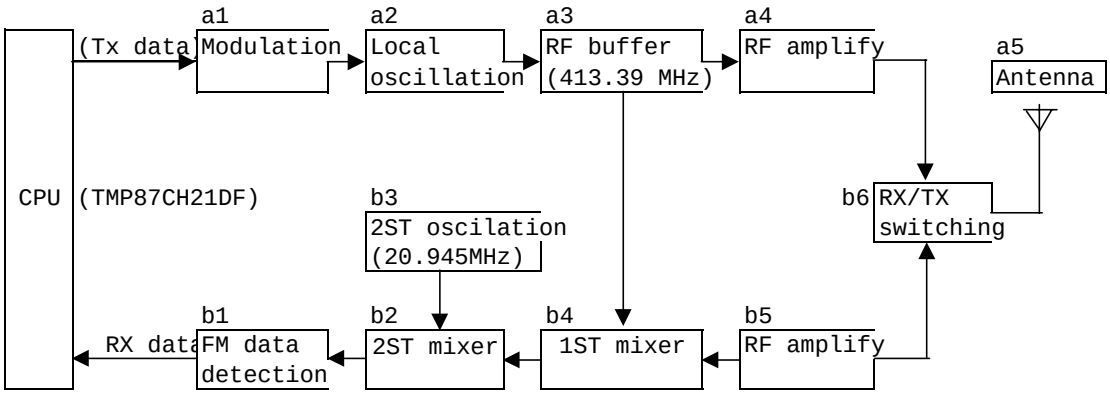
Circuit operation explanation

---- RF block diagram ----



<Picture 1>

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

1. Remote control

1.1 Transmission

Modulation signal is occurred at CPU pin no 15.
Modulation is formed at a1 (VD1), a2 (Q6).
a3 (Q7) creates frequency 413.39MHz.
Makes 413.39MHz signal transmit to the brain through a4 (Q8, Q9)-b6 (D4, D2)- a5

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 detects data signal.
Sends detected data signals to CPU no 19.

2. Brain

2.1 Transmission

Modulation signal is occurred at CPU pin no 23.
Modulation is formed at a1 (D2), a2 (Q3).
a3 (Q4) creates frequency 434.79MHz.
Makes 434.79MHz signal transmit to the remote control through a4 (Q5, Q6)-b6 (D4,

2.2 Receiver

A carrier frequency (413.39MHz) amplifies at b5 (Q7, Q8) pass through a5 (antenna
B4 (Q9) receives signals of a3 (Q4), b5 and makes 1st IF (21.4MHz) to send b2 (IC
B2 (IC1) mixes with 2nd local oscillation frequency (20.945MHz) of b3 (X102) and
455Khz demodulates FM at b1 (X103) and detects data signal.