

CIRCUIT DESCRIPTION

EXHIBIT 2-1

CFS8DL5828V

The diversity antennas are selected via the antenna selector switch SW2, which is feeds TR Switch SW3 in order to select the receivers input or the transmitters output. SW2 and SW3 are under the control of microprocessor U1.

The transmitter consists of U15, YL6, L6, L7, C50, C78, C79, etc. U15 is the phase-locked TX chip its FDE is YL6 ($10.78125 \text{ Mhz} \times 32 = 345.0 \text{ Mhz}$). Microprocessor U1 performs message encoding, and RX / TX switching.

The receiver consists of U11, FL1, YL5, etc., and uses low side L.O. injection, it's FDE is YL4 ($20.89375 \text{ Mhz} \times 16 = 334.3 \text{ Mhz}$). The raw base-band data is processed by U13, U14, etc., before being sent to the microprocessor U1 for message decoding.

U1 also encodes the keypad, and performs all control functions. U6 is a tone generator chip. U7 is the audio recorder / playback chip. U8 is the LCD display decoder chip.