CIRCUIT DESCPITION

A. Audio transmit

The handset microphone's signal passed through C43, R19 to UAA3515 IC pin27. After amplifier, then output at pin28, then pass through C45 to VCO circuit, and TXPOWER amplifier inside UAA3515, and pass through C15 to DUPLEXER F1, then transmit by the ANTENNA.

The base unit antenna receives the carrier wave, then pass through to DUPLEXER, then pass through the filter which consisted by C2, L2 C3, L1, L5, C5, C4 to UAA3515, And UAA3515 have a single architecture with integrated image rejection mixer, the signal pass thought it, then output at pin 63, and filtered by external two IF (10.7MHz F3, F4) filters and amplified by internal two amplifiers. Then have demodulator and AMP at IC internal. Then transmit pass through to pin46 input, then pass through pin42 to C79, C99, R49, R50, Q10, then to TRANSFORMER T1, then pass through Q9, C95, C96 to POLARITY PROTECTION D1, D2, D3, D4, then pass through R99, RL1, Z1 to TELEPHONE LINE.

B. Audio receive

TELEPHONE LINE receives audio signal, pass through R99, RL1, Z1 to POLARITY PROTECTIO CIRCUIT D1, D2, D3, D4, then pass through Q9, C95, C96 to TRANSFORMER T1, then pass through Q10, R90, C108, C102, R100, R51, C100 and C43, R19 to UAA3515 IC pin27 input, pin28 output, then pass through C45 pin29 to compressor and hard limiter, then pass through C42, R18 to TXPOWER AMPLIFIER, then pass through C15 to DUPLEXER F1, then pass through the base ANTENNA to transmit.

The handset antenna receives the carrier wave, then pass through to DUPLEXER, then pass through the filter which consisted by C2, L2 C3, L1, L5, C5, C4 to UAA3515, And UAA3515 have a single architecture with integrated image rejection mixer, the signal pass thought it, then output at pin 63, and filtered by external two IF (10.7MHz F3, F4) filters and amplified by internal two amplifiers. Then have demodulator and AMP at IC internal. Then transmit pass through to pin46 input to earpiece amplifier. Then pass through REC1.

C. Data transmit and receive

The handset TX data from MCU U2 pin 14 output, then pass through C17, R8 to UAA3515 VCO circuit, then pass to TXPOWER amplifier, then pass through C15 to DUPLEXER F1, then pass to ANTENNA to transmit.

The base unit antenna receives the carrier wave, then pass through to DUPLEXER, then pass through the filter which consisted by C2, L2 C3, L1, L5, C5, C4 to UAA3515, And UAA3515 have a single architecture with integrated image rejection mixer, the signal pass thought it, then output at pin 63, and filtered by external two IF (10.7MHz F3, F4) filters and amplified by internal two amplifiers. Then have demodulator and AMP at IC internal. Then transmit pass through to pin40 input, then pass through pin39 to MCU U4 pin25.

The handset TX data from MCU U4 pin 14 output, then pass through C17, R8 to UAA3515 VCO circuit, then pass to TXPOWER amplifier, then pass through C15 to DUPLEXER F1, then pass to ANTENNA to transmit.

The base unit antenna receives the carrier wave, then pass through to DUPLEXER, then pass through the filter which consisted by C2, L2 C3, L1, L5, C5, C4 to UAA3515, And UAA3515 have a single architecture with integrated image rejection mixer, the signal pass thought it, then output at pin 63, and filtered by external two IF (10.7MHz F3, F4) filters and amplified by internal two amplifiers. Then have demodulator and AMP at IC internal. Then transmit pass through to pin40 input, then pass through pin39 to MCU pin25.