

EXHIBIT C

[FCC Ref. 2.1033(b)(4)]

"Description of Circuit Functions"

Circuit Description

Model: 28031

The following circuit description for model 28031 is based on the circuit diagram and block diagram of 28031

Handset Unit

1. Receiving Path

The receiving path is established as below sections

Antenna, Mixer, Demodulator

RF signal is pick up by a solid wire antenna, the signal pass the TX/RX Switch IC U2 (XM2458) and then filtered by the 5.8G LC filter, and input to RX of U3 (DH58RFC05) converter IC Then through U4 (DH24RF17B) transceiver IC mixer and FSK data output from demodulator

FSK data demodulate

The FSK data is output from DH24RF17B transceiver IC, then go to EDCT controller chip DE56107 for decode to an audio signal before output to the handset receiver or speaker through internal audio amplifier.

2. Transmitting Path

The transmitting path is established as below sections

Mic amplifier and encoder

Audio signal pick up by handset microphone is amplified by internal mic amplifier of U2 DE56107 EDCT controller, then go to encoding.

Modulator and RF Power amplifier

The FSK data is output from the EDCT controller chip, then input to transceiver IC U4 (DH24RF17B), then go to converter IC U3 (DH58RFC05) to amplifier IC U1 (XF5800PD). The modulated signals go to 5.8G LC Filter, and then pass through the TX/RX Switch IC U2 (XM2458). Finally, the RF signal propagates through a solid wire antenna.

Base Unit

1. Receiving Path

The receiving path is established as below sections

Antenna, Mixer, Demodulator

RF signal is picked up by either one of the two solid wire antennas and then filtered by the 5.8G LC filter and input to RX of U3 (DH58RFC05) converter IC. Then through U4 DH24RF17B transceiver IC mixer and ADFSK data output from demodulator

FSK data demodulate

The FSK data is output from DH24RF17B transceiver IC, then go to EDCT controller chip DE56CM569 for decode to an audio signal before output to the handset speaker through audio amplifier.

2. Transmitting Path

The transmitting path is established as below sections

Mic amplifier and encoder

Audio signal pick up by handset microphone is amplified by internal mic amplifier of U1 DE56CM569 EDCT controller, then go to encoding.

Antenna, Modulator and RF Power amplifier

The FSK data is output from the EDCT controller chip, then input to transceiver IC DH24RF17B. The modulated signals go to converter DH58RFC05 then to amplifier IC XF5800PD. The signal through 5.8G LC Filter, and then pass through the TX/RX Switch IC XM2458SB. Finally, the RF signal propagates through either one of the two solid wire antennas.

3. Antenna Diversity

Antenna diversity is implemented by IC XM2458 to select alternately the two antennas ANT_A, ANT_B respectively for TX/RX.

4. Telephone Line interface

The telephone line interface circuit is established by below sections

Line seize and isolation

Line isolation is mainly preformed by Q13, Q14 and Q3. Q3 also has a function of controlling

Line-seize. Both audio input and output will though Q13 and Q14.

Ring detect circuit, Caller ID System and Answer Machine system.

The ring signal and CID signals though C63, C64 (22n, 400V), R113 and R114 (470K ohm) input to U1 DCH36119 EDCT controller to demodulate the CID data then displayed on the Handset LCD display. The Answer Machine System is controlled by U1 DLH36569 EDCT controller, and voice promote is stored in NAND type Flash IC

Digital Security coding system

The handset and Base is pre-registered with 20bits for base and handset unit identification digital security codes, which are stored into the non-volatile memory. This is fulfilling the FCC Part 15.214(d) requirement that there must be at least 256 discrete digital codes. Moreover, the identification digital security codes and handset's numbers of handset is factory-exchanged to the Base and vice versa, before having packed to the gift-box.