

CIRCUIT DESCRIPTION

MODEL : DECT 911

1. HANDSET

1.1 Power supply block

The Supply voltage for MAIN IC (PNX8019DIHN), DATA FLASH IC (AT45DB011D), EEPROM (24C08) and Peripheral circuit is +3.3V.

Determined by "L101, C104, C105" and "etc.".

1.2 EEPROM (24WC032)

The EEPROM "U101" stores parameters, registration information, phone book and etc.

The EEPROM communicate with the MAIN IC "U201" through IIC Bus.

1.3 MAIN IC (PNX8019DIHN)

The "PNX8019" is a RF and baseband controller for digital cordless terminals of various Radio standards for cordless telephones. The device combines the functions of wireless Data transmission, handsfree operation and limited modem functions. It includes also the radio transceiver and power amplifier. If the power is supplied to the pin 19, 20 of "U201", the 'X401' start oscillation and the "U201" is activated.

1.4 RF interface

The RF interface is composed pin 45, 46, 47, 48 of "U201" and "etc.".

The interface to RF serves the transmit GFSK output signal, receive data and RSSI input signals, outputs for the reference clock output for the synthesizer.

1.5 Voiceband interface block

The voiceband input is composed of "M101" and "etc.". The signal from C-MIC is input in the pin 25, 26 of "U201".

2. BASE

2.1 Power supply block

The Supply voltage for MAIN IC BASEBAND IC (VDDIO supply domain), EEPROM (24C08) and Peripheral circuit is +3.3V.

Determined by "U401 (1117-3.3V)", "C421", "C422" and "etc.".

2.2 PABX interface block

The "DS401" is used to protect for internal circuitry from surge. The "R402" is used to protect for "D401" over current. The "Q404" and "Q405" are turned on in the conversation and turned off in the standby mode.

2.3 Speech interface block

The impedance of telephone is determined by "R416", "R417", "C407" and "C408".

The pin 25, 26 of "U501" for the receiving signals from PABX. The pin 31 of "U501" for the sending signal from HANDSET.

2.4 MAIN IC (PNX8019DIHN)

The "PNX8019" is a RF and baseband controller for digital cordless terminals of various Radio standards for cordless telephones. The device combines the functions of wireless Data transmission, handsfree operation and limited modem functions. It includes also the radio transceiver and power amplifier. If the power is supplied to the pin 19, 20 of "U501", the 'X401' start oscillation and the "U201" is activated.

2.5 EEPROM (24WC08)

The EEPROM "U402" store parameters, registration information and "etc.".

The EEPROM communicate with the MAIN IC "U501" through IIC Bus.

2.6 RF interface

The RF interface is composed pin 45, 46, 47, 48 of "U501" and "etc.".

The interface to RF serves the transmit GFSK output signal, receive data and RSSI input signals, outputs for the reference clock output for the synthesizer.