BT DF 311 Bluetooth Carkit schematic diagram description

1. Schematic diagram description

The BT DF 311 Bluetooth carkit based on CSR BC57E687B FBGA chipset, It is support the headset profile and handfree profile. It is compliant to Bluetooth v2.1 + EDR specification.
References to the document <The BT DF 311 Bluetooth Carkit schematic diagram>

U1 is Bluetooth module buildup BC57E687B and MX29LV160DBXBI-70G. and BC57E687B is a single chip Radio and baseband IC for Bluetooth 2.4GHZ systems with a crystal oscillator of 16MHz clock frequency. it provides Bluetooth RF of the 2402 to 2480MHz Tx frequency, baseband and some power regulator functions. It is integrated DC +1.8V power supply. +1.8V uses for the PIO pull up such as the buttons. the MX29LV160DBXBI-70G is a 16-mbit flash memory.

U2 is serial EERPOM, it use for store the phone book.

U5 is a speaker of power amp.

U4 is charge ic .

The STN-LCD is display the call ID of incoming and phone number, Operation order.

The BT DF 311 uses PCB copper antenna for RF transceiver.

BT DF 311 has MFB, MODE, Volume up, Volume Down buttons to operation the headset.

2. The Signal Path description

When the carkit connects to a mobile phone , the built-in MCU will control the RF modem to process the baseband signal, indicate the working state by the LCD display. When uses the carkit, the voice can be picked by microphone. There are Multi-function Button, Volume up button and Volume Down button for you to increase the volume or decrease the volume of the speaker. The mode key for you to upload the phone book to the carkit ‘eeprom and you can mute the microphone while you talking.