BCE-GENTrx8-001 User Guide

■ Abstract

Bestcomm RF's BCE-GENTrxN-00z development board is divided into three types (without MCU and with HT8, HT32) for users to evaluate and develop wireless products.

PN	Description
BCE-GENTrx0-00z	Without MCU
BCE-GENTRX8-00z	With HT8 MCU (8-bit)
BCE-GENTRX32-00z	With HT32 MCU (32-bit)

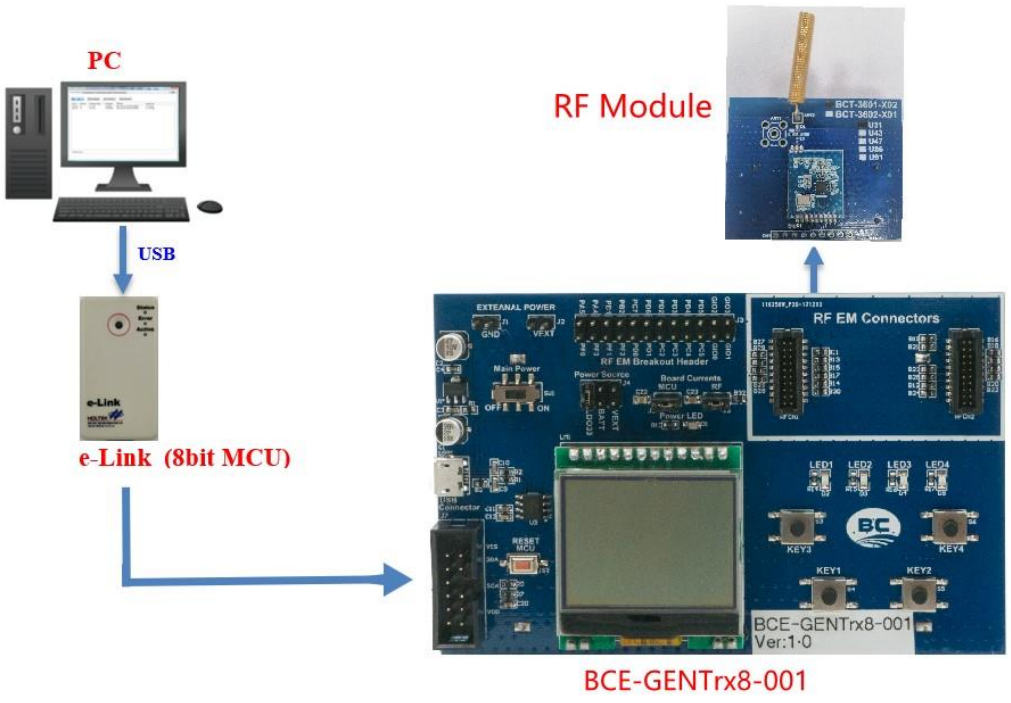
Note:

Z : Version

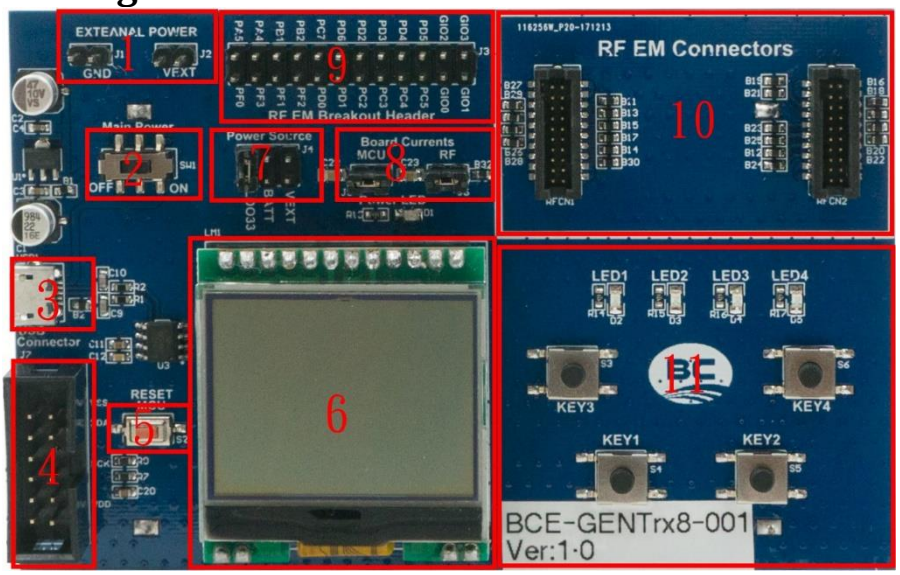
N: Type

■ System diagram

The following figure shows the system architecture of the development board. The main control chip of the development board is ht66f2370。Users can use e-Link (8-bit MCU) development tools for programming and development according to different types of RF modules.



■ Hardware diagram



1、External power input port:

User can directly supply power to the whole system through this pin. If an external power supply is required, the power source selection pin (vext) needs to be set.

2、Power switch(ON/OFF):

This is the system power switch。

3、USB interface

The Micro-USB interface can be used as the input source of the LDO and can also be used to directly supply power to the development board and also supports COM communication.

4、Emulation/programming interface:

This interface can be used with e-Link emulation and programming and can also be connected to E-Writer programming.

5、System reset button

This button is used for MCU reset.

6、LCM Module:

This LCM model is SN74LVC8T245 (128x64 display)

7、System power selection (Jump)

The system power source selection (Jump) can choose VEXT (external power port), LDO33 (LDO output), BATT (AAx2 series battery) four kinds。

8、MCU and RF module power supply port(Jump):

When the MCU needs power supply, this port needs to be shorted and this port can also be used as the measurement point of the operating current loop.

When the RF module needs power supply, this port needs to be shorted and this port can also be used as the measurement point of the operating current loop.

9、I/O interface

Connect the pin what want to use

10、Module interface

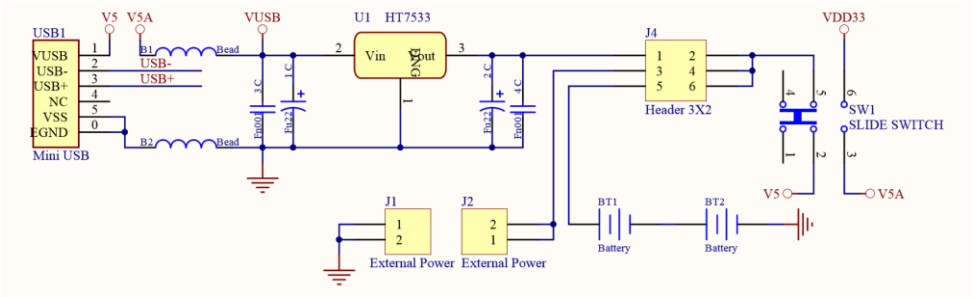
Supports BM2302-0X-1、BM3602-0X-1、BM5602-60-1 RF modules.

11、LEDs x 4 Buttons x4

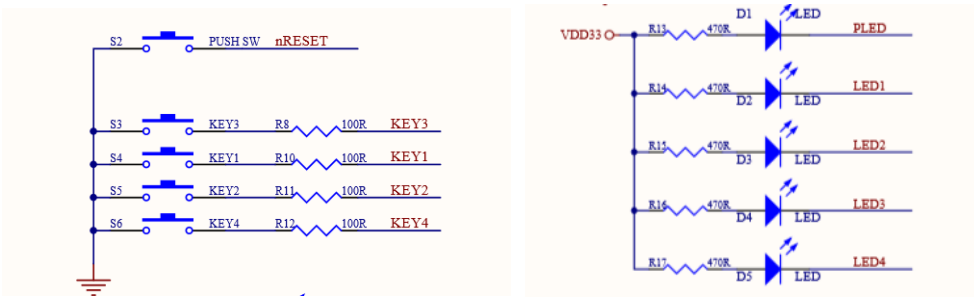
Used as GPIO output(indication) and input function.

■ Schematic diagram

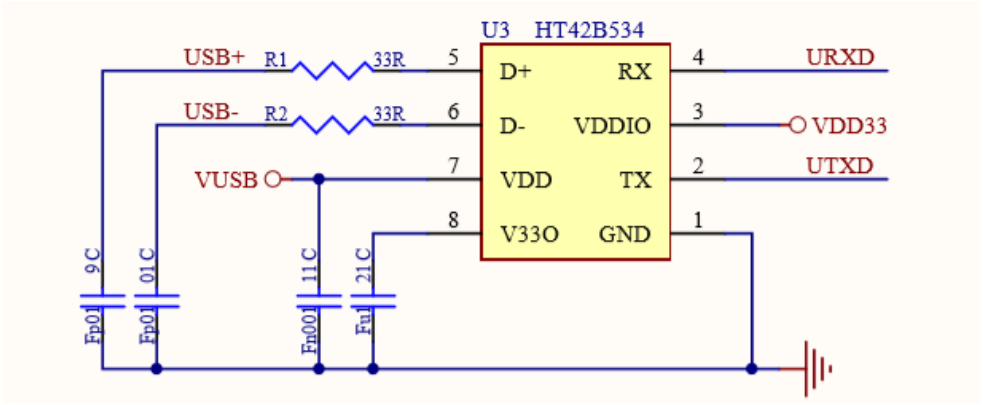
1、Power circuit:



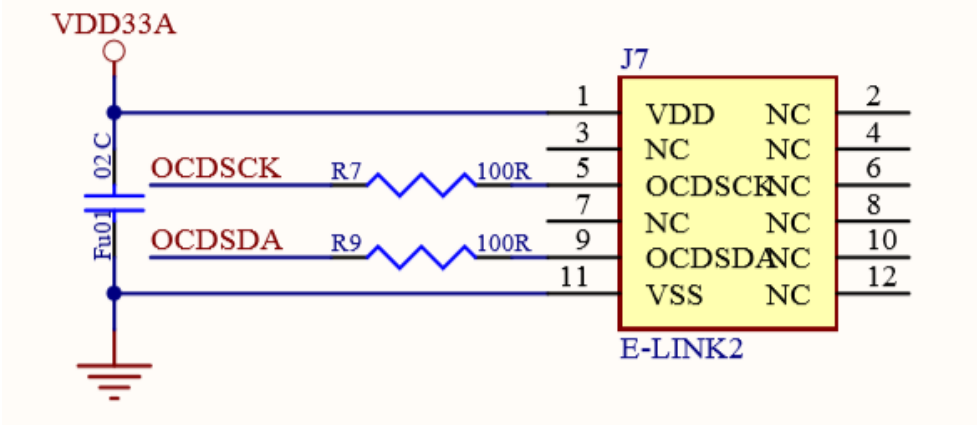
2、LED & Button circuit:



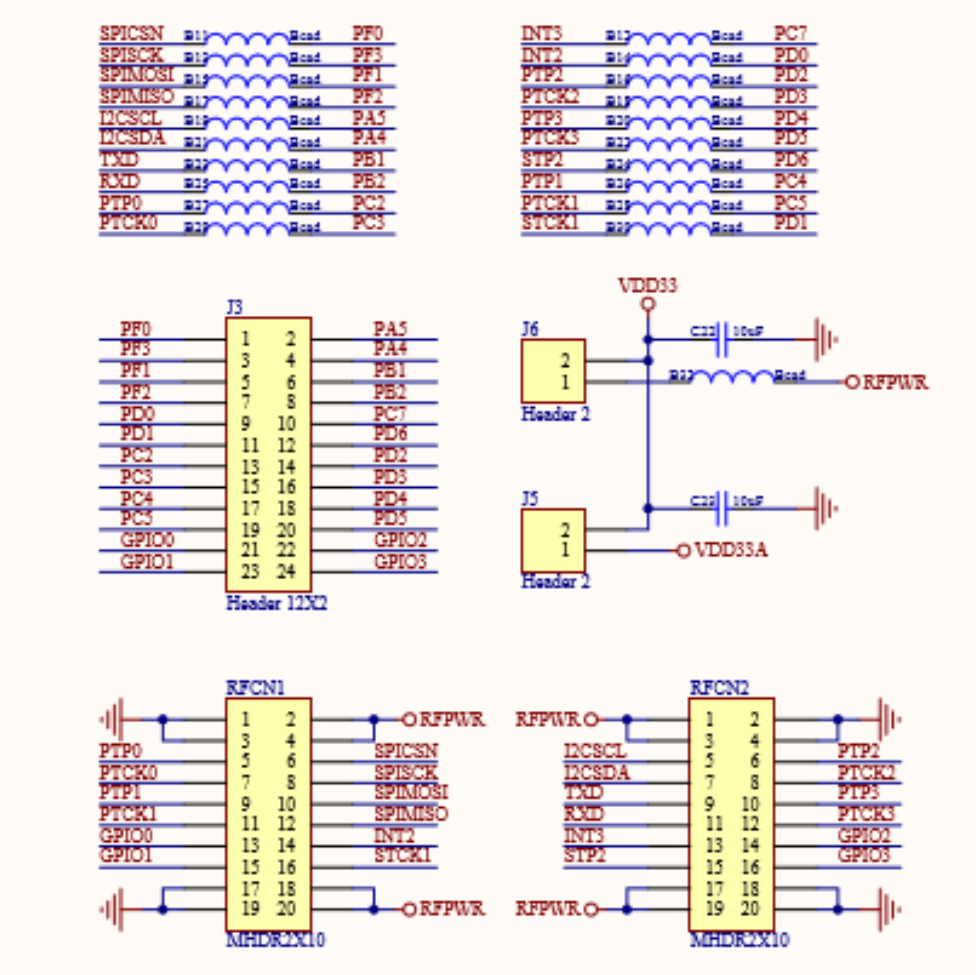
3、USB Interface circuit:



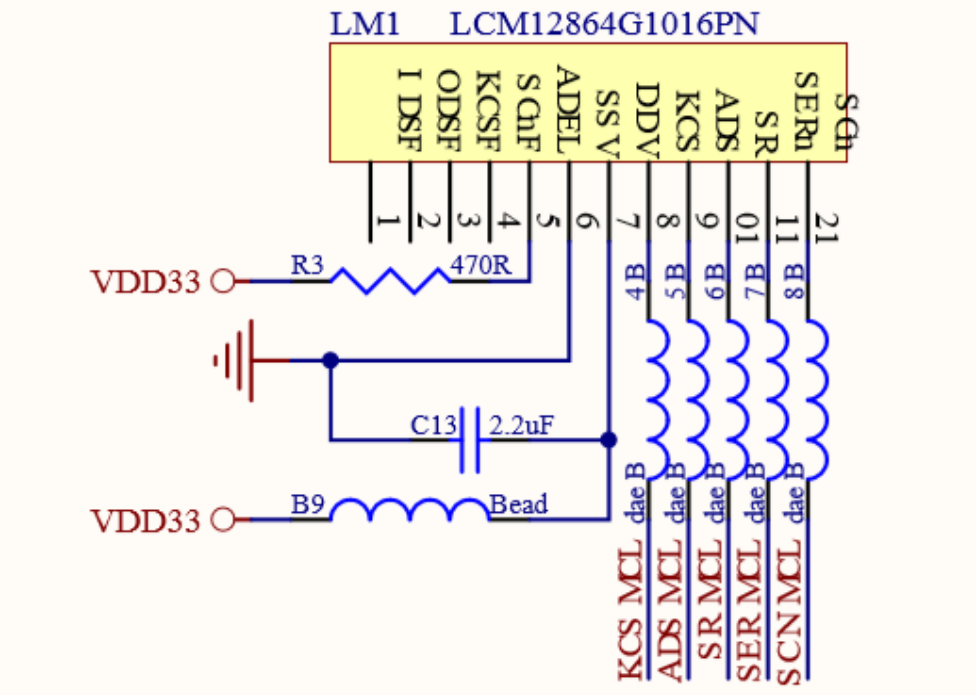
4、E-Link (E-Writer) interface circuit



5、I/O and RF Module interface circuit



6、LCM interface circuit



7、MCU system circuit