PLL FM Stereo Radio(Transmitter) Unit
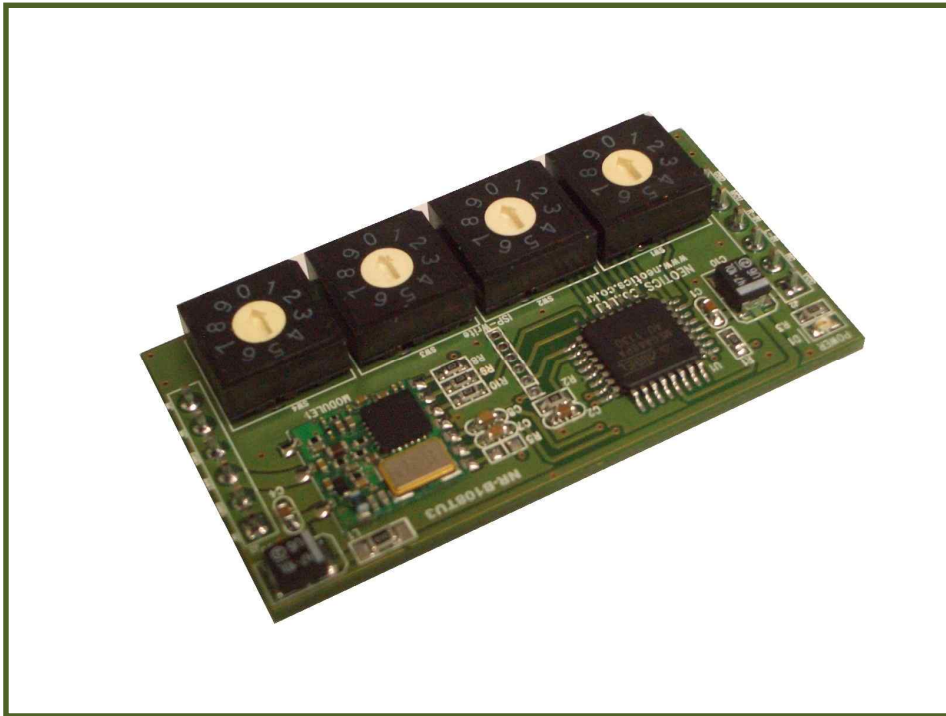
88MHz ~ 108MHz

NR – B108TU3   Ver 7.0

Related Products : NR-B108RM (PLL FM Stereo Radio Receiver Module)

NR-B108RU (PLL FM Stereo Radio Receiver Unit)

NR-B108TM3 (PLL FM Stereo Radio Transmitter Module)

1. PLL FM Stereo Radio(Transmitter) Unit.

* NR-B108TU is a transmitter that can stereo transmit voice/music signals wirelessly to
domestic FM Radios(Radio & Receiver).

* While generally used transmitters work on a single or several pre-determined frequencies,
NR-B108TU can transmit any stereo signals of any frequency within the range of 88-108MHz.

* Miniature-sized to fit into any of your products, it is especially easy to install in electronic
devices of compact size.

* You can set transmit frequencies on 4 switches.   ex) 82.6MHz .....set on 0, 8, 2 or 6.

* You can set frequencies from MCU as well.
Set frequency select switch on 0000. ----> Transmit serial data 082.6M (9600,8,1,N)

2.   Features.

. Stereo transmission from all broadcast band(88-108MHz)

. PLL system guarantees good frequency stability.

. Miniature-sized(SMD Type), easy to apply to your products.

. Controllable from CPU(MCU)-serial transmission.
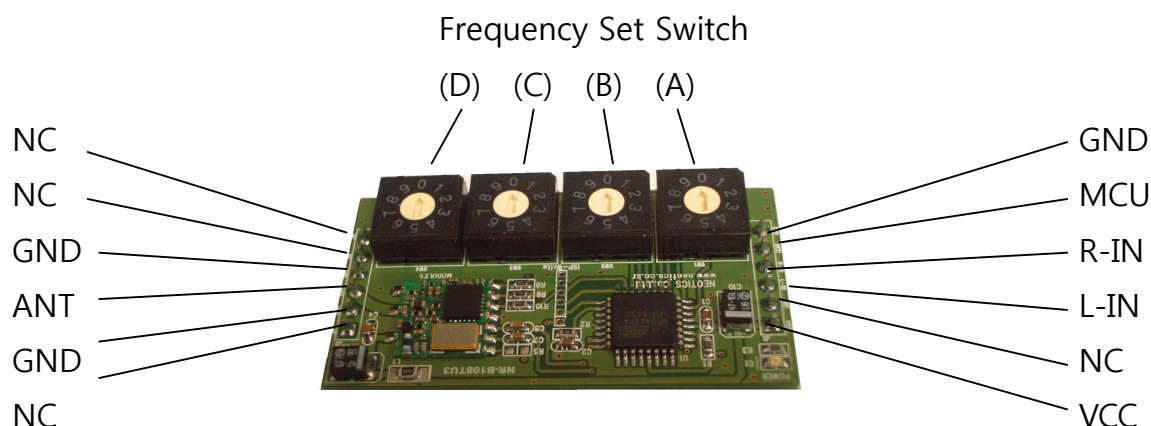
. Works on a single voltage DC 3.3V.

3. Applications

. CD Changer, CAR TV, MP3, PDA.

. Telephone & Mobile.

. CAR Navigation, Wireless Speakers.

. Personal Computer(Sound Board), Game machine.

4. PLL FM Stereo Radio(Transmitter) Unit Specification.

Item	Specification
Operating Voltage	DC 3.3V
Operating Current	Under 15mA
Transmission Frequency	88Mhz - 108Mhz
RF Output	Under -3dBm
Control	CPU(MCU) : 3-Wire Bus

5. PLL FM Stereo Radio(Transmitter) Unit Pin.

Frequency Set Switch

(D) (C) (B) (A)

NC — GND

NC — MCU

GND — R-IN

ANT — L-IN

GND — NC

NC — VCC

. VCC	: Power voltage DC 3.3V (+).
. LEFT-IN	: Left audio signal input.
. RIGHT-IN	: Right audio signal input.
. MCU	: Use when controlling by MCU (CPU).
. GND	: Power voltage DC 3.3V (-).
. NC	: Not in use.
. ANT	: Antenna terminal.
. GND	: Power voltage DC 3.3V (-).

. Frequency Set Switch

ex) 1 0 7 . 5MHz
　　　 A B C　 D

A　 : 100MHz Count Frequency Set.
B　 :　10MHz Count Frequency Set.
C　 :　 1MHz Count Frequency Set.
D　 : 100KHz Count Frequency Set.

*** How to input frequencies as serial from CPU(MCU) ***
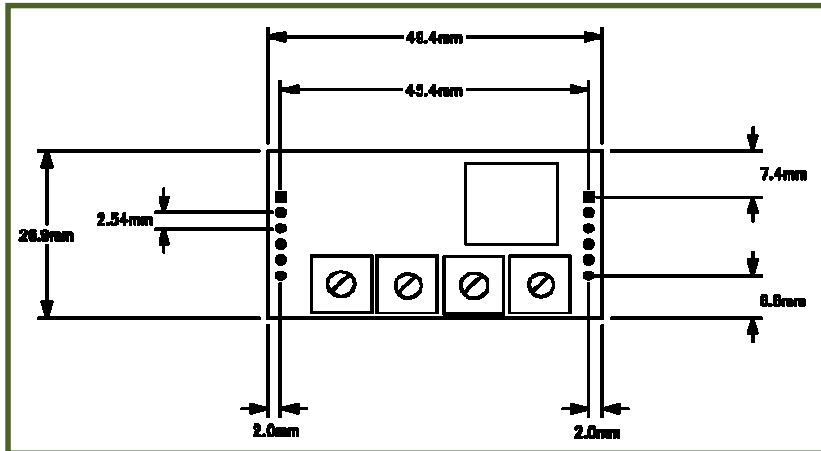
1. Set the frequency on "0000" when controlling from MCU.

2. Transmit to MCU control terminal as Serial Data (TTL level).

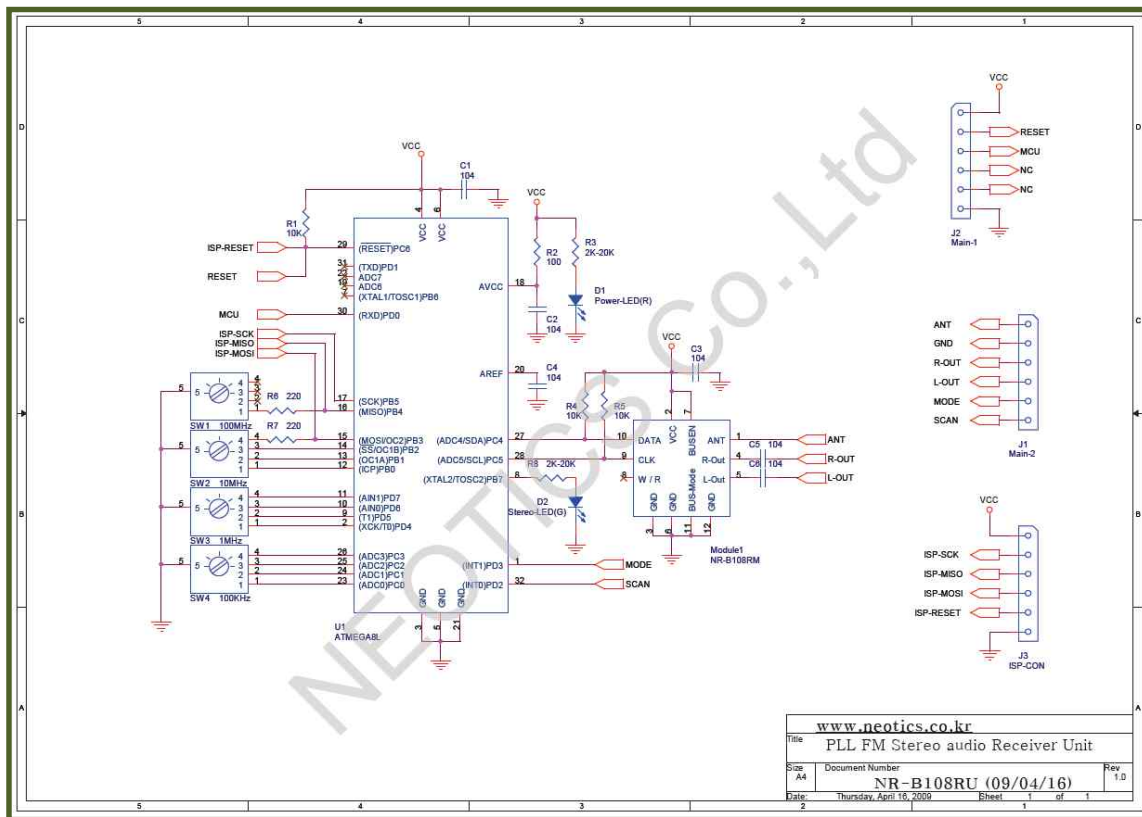　　　ex) Transmit frequency 82.6MHz.............Transmit "082.6M"　 from UART-Port TTL Level

. Please use the NR-B108 Only Antenna (PN-ANT-FM) or FM Frequency Antenna.

. Use DC 3.3V for power (VCC)

. R-IN/L-IN can be directly connected with line signal of TV, radio VTR etc.

. In case of using condenser microphone, please input through microphone-amp circuit.

** If you get noise due to weak input signal, please connect pull up

resistance to L-In/R-In as below.

6. PLL FM Stereo Radio(Transmitter) Unit Size.

7. PLL FM Stereo Radio(Transmitter) Unit Circuit.

***** Caution*****

1. Check the features first to connect with other equipment.
2. This circuit is strictly tested.
3. The developer, manufacturer or dealer is not responsible for
   any malfunctioning/damage caused by connection with other equipment.
4. Appropriate permit /approval is required for some products utilizing this
   module, depending on functions and usages.

● **For more information and inquiry, please refer to the sites below.**