

## PTR6201PA

### *2.4GHz Wireless Embedded Data Transceiver Module with 2Mbps high Speed and +20dBm RF power*

#### Features:

- 2.4GHz ISM Band
- Power supply range:2.7~3.6 V
- 5V tolerant input signal for data I/O
- Digital interface SPI speed :0~8Mbps
- Base On nRF24L01P+&PA&LNA, Full RF tested
- LNA with 12dB gain, PA with max +20dBm RF output
- **High Speed:** Data rate 250Kbit/s, 1Mbit/s, 2Mbit/s
- **Enhanced Output Power:** maximum output power : Max +20dBm
- **SMA Antenna interface**
- **Mini size:** Miniature PCB Mounting module (about 45x17mm)
- **Enhanced ShockBurst™:**
  - MultiCeiver™-6 data pipes
  - Auto acknowledgement
  - Auto re-transmission
  - Packet identity
  - Carrier sense-stationary disturbance
  - Packet error counter
  - Three level deep RX FIFO and three level deep TX FIFO

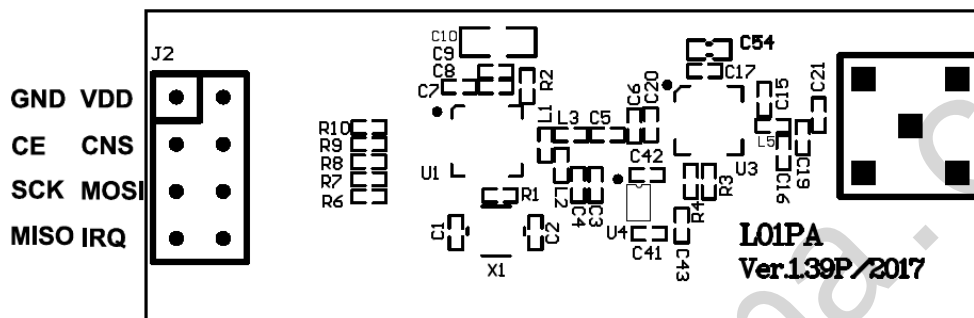
#### Typical Applications:

- Long distance RFID
- Security Applications
- Vehicle alarm systems
- Remote meter reading
- Remote data acquisition
- Alarm and Security System
- Authorization / Access control
- Automatic Meter Reading (AMR)
- High integrity wireless Fire / Security alarms
- Building environment control / monitoring
- Wireless mouse/keyboard and PC peripherals
- Wireless hands free
- Sports and leisure equipment
- Game pads
- Wireless Communication

## Performance Data:

Parameter	Value
frequency	2400MHz~2524MHz
Maximum output power	+20 dBm
Maximum data rate	2000 kbps
Sensitivity @250kbps	-106dBm
Supply current in TX mode@+20dBm	about 120mA
Supply current in RX mode@2000 kbps	about 18mA

## Pin Description (Top View) :



Pin		function	direct
Pin1	GND	Ground	
Pin2	VCC	Power supply	
Pin3	CE	Chip enable control RX or TX mode	
Pin4	CNS	SPI Chip Select	
Pin5	SCK	SPI Clock	
Pin6	MOSI	SPI Slave Data Input	
Pin7	MISO	SPI Slave Data Output	O
Pin8	IRQ	interrupt output pin	O

## Hardware Interface:

The pin arrangement is completely compatible with PTR6100 serial modules, it can directly replace PTR6100/PTR6200. But attention, the current supply ability must higher than 200mA, to assurance dynamic performance functions.

## Software Program:

Due to special PA control logic design of PTR6201PA, the configuration word setup and software program of PTR6201PA is completely compatible with nRF24L01+ , no need to change source codes.

## Distance:

**Open space:** about 600~1000 meters

**Indoor:** about 60~100 meters

*Note: this value is only for reference, in practice distance is also related with environment effects*

## ATTENTION!

Electrostatic Sensitive Device

Observe Precaution for handling