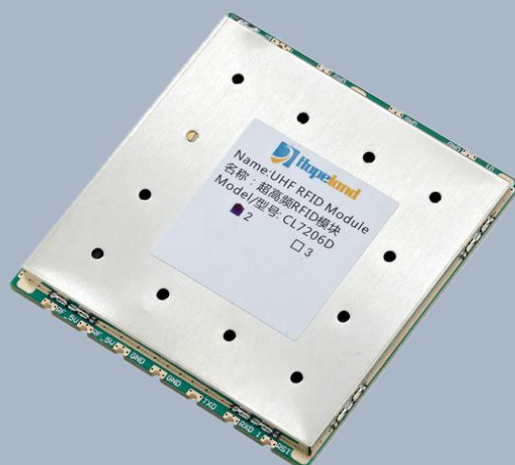




CL7206D2

General Description

The CL7206D2 module is a miniaturized UHF RFID reader. The core component adopts R2000 as the core platform. R2000 is a high-performance and highly integrated reader IC, integrating functions such as analog radio frequency front end and baseband digital signal processing module, etc. The user only needs to do power processing on the basis of the module, which can be easily controlled through the API function library, suitable for the development of various application scenarios.

Typical Applications

- ✓ Handheld RFID Reader integration
- ✓ Split-type Fixed RFID Reader integration
- ✓ Integrated RFID Reader
- ✓ RFID Tag Writer
- ✓ RFID embedded equipment such as Tag Printer, ATM, anti-counterfeiting equipment, identification system equipment, WMS system channel equipment and so on, intelligent mobile phone, handheld terminal, desktop reader, industrial control device and so

Key Features

- ✓ UHF RFID Transceiver
- ✓ Frequency range: 840MHz - 960MHz
- ✓ Power consumption: 650mA @ +27dBm
- ✓ +5V single supply operation
- ✓ ISO 18000-6B, EPC global UHF Class 1 Gen 2 / ISO 18000-6C support
- ✓ Decoding: FM0, Miller 2/4/8



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- ✓ package: 47.5mm x 45mm x 3.9mm
- ✓ Fully interoperable in different global regulatory environments such as US, EU, GB
- ✓ Data rate: 40k ,160k,320k, 400k

1.1 Absolute Maximum Ratings

Parameter	Symbol	Min	Typ	Max	Unit
Storage temperature	Ts	-40		+85	°C
Junction temperature	Tj			+125	°C
Supply voltage	VCC			+6.0	V
Supply Current	A			1200 (30dBm)	mA

1.2 Specifications

VCC = 5V, TA = 25°C

Parameter	Conditions	Min	Typ	Max	Unit
RF					
Frequency Range		840		960	MHz
Frequency Step	GB		250		KHz
Transmitting Frequency Stability	Operating Temperature +25°C		10		PPm
Output Power		0		30	dBm
Transmitting Power, Step			1		dB
Power Flatness		-1		+1	dB
Occupy bandwidth	Output Power = 27dBm		100		KHz
ACP	±250 kHz(±1 CH) ±500 kHz(±2 CH)		-45 -65		dBc
Output Load VSWR	Output Power = 27dBm		1.5		
Power Supply					
Supply Voltage		3.5	5	6.0	V
Supply Current	Operating Temperature 25°C	600	650	700	mA
Temperature Range					
Operating Temperature	Output Power = 27dBm	-20		55	°C

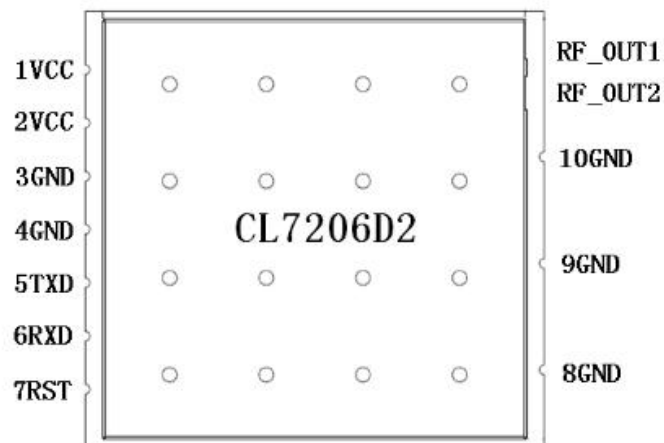
1.3 Function

- ★ Air Interface Protocol: ISO 18000-6B, EPC global UHF Class 1 Gen 2 / ISO 18000-6C support
- ★ Optional working mode: constant frequency / frequency hopping
- ★ Adjustable RF output power, 1 dB step-by-step
- ★ Support for polling work or designated antenna work (two-channel antenna port)
- ★ Support RSSI: The intensity of the perceived signal
- ★ Support tag data filtering
- ★ support Anti-collision algorithm
- ★ Support multiple tags inventory

1.4 Technical parameter

- ★ Working frequency: GB, 920MHz ~ 925MHz,
GB, 840MHz ~ 845MHz,
FCC, 902MHz ~ 928MHz,
ETSI, 865MHz ~ 868MHz (optional)
- ★ Output power (port): 30dBm±1dB (MAX)
- ★ Forward link modulation: PR-ASK, DSB-ASK
- ★ Continuous reading tag distance (EPC code reading): 0-10 m, with 100 consecutive readings, the success rate is greater than 95% (without interference).
Test condition: 8dBi line polarization antenna, radio frequency cable insertion loss less than 1dB, standard tag (sensitivity better than -18dbm)
- ★ Continuous writing tag distance (EPC code writing): 0-4 m, with 100 consecutive writings, the success rate is greater than 90% (without interference).
Test condition: 8dBi line polarization antenna, radio frequency cable insertion loss less than 1dB, standard tag (sensitivity better than -18dbm)
- ★ Inventory Speed: > 400 tags/sec
- ★ Meet FCC and ETSI standards

1.5 Pin Configuration and Function Descriptions



Name	Description
VCC	VCC, +5V, Power supply
GND	Device Ground
RXD	UART Receive Data, TTL compatibility
TXD	UART Transmit Data, TTL compatibility
RF_OUT1	Power Amplifier output 1 (Antenna 1)
RF_OUT2	Power Amplifier output 2 (Antenna 2)

1.6 Outline Dimensions

