AsReader

High Performance UHF RFID Fixed Reader

Asterisk, Inc.

GENERAL DESCRIPTION

ASREADER BOX is a high performance UHF RFID fixed reader. It is designed upon fully self-intellectual property. Based on proprietory efficient digital signal processing algorithm, it supports fast tag read/write operation with high identification rate. It can be widely applied in many RFID application systems such as logistics, access control, anti-counterfeit and industrial production process control system.

FEATURES

- Self-intellectual property;
- Based on Impinj R2000 high performance RF engine;
- Support ISO18000-6C(EPC C1G2) , ISO18000-6B protocol tag;
- 860~868MHz/902~928MHz frequency band(frequency customization optional);
- FHSS or Fix Frequency transmission;
- RF output power up to 30dbm(adjustable);
- Support 4 SMA antenna port with antenna auto-tuning and failure-detection;
- Support answer and real-time-inventory work mode;
- Support RSSI;
- Maximum inventory speed over 500pcs;
- Tag buffer: 600pcs@max. 128bitsEPC or 180pcs@max.496bitsEPC；
- Low power dissipation with single +9 DC power supply;
- Support USB(Slave), RS232, RJ45(TCPIP) with POE optional;
- High reliability design.

CHARACTERISTICS

- Absolute Maximum Rating

Table 1

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	16	V
Operating Temp.	T_{OPR}	-10~+55	**℃**
Storage Temp.	T_{STR}	-20~+75	**℃**

- Electrical and Mechanical Specification

Under T_A＝25**℃**，VCC＝+9V unless specified

Table 2

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC	8	9	12	V
Current Dissipation	I_C		0.5	1.2	A
Frequency	F_{REQ}	840	860~868 902~928	960	MHz
Size	L x W x H		158/189x92x25		mm

INTERFACE

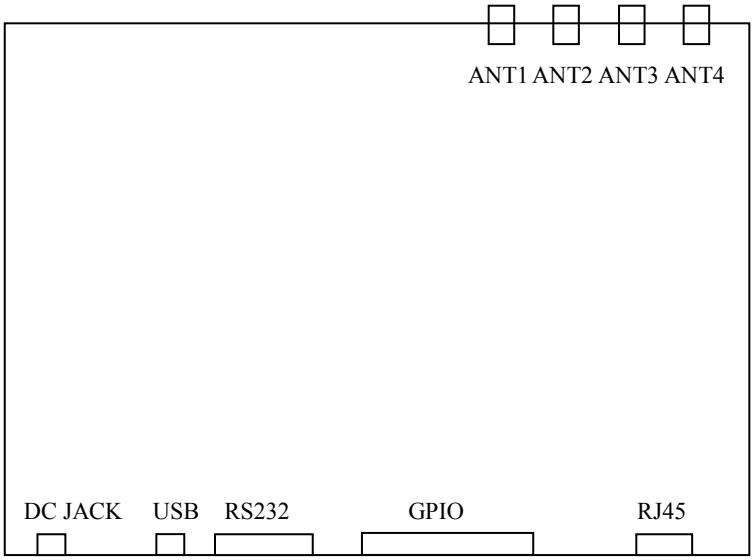

Figure 1

1. Power (DC JACK)

Table 3

No.	Symbol	Comment
Central	PWR	+9VDC
Outer	GND	Ground

2. USB

3. UART （RS232 DB9 Female）

Table 4

No.	Symbol	Comment
1	NC	Reserved
2	TXD	Data output in RS232
3	RXD	Data input in RS232
4	NC	Reserved
5	GND	Ground
6	NC	Reserved
7	NC	Reserved
8	NC	Reserved
9	NC	Reserved

4. GPIO （DB15 Female）

Table 5

No.	Symbol	Comment
1	Output1	General Output1 (internally used as the buzzer driver with low level effective)
2	Output2	General Output2
3	NC	Reserved
4	NC	Reserved
5	NC	Reserved
6	NC	Reserved
7	NC	Reserved
8	NC	Reserved
9	Input	General input with internal pull-up to 5V through a 10k resistor
10	NC	Reserved
11	NC	Reserved
12	NC	Reserved
13	NC	Reserved
14	NC	Reserved
15	NC	Reserved

5. TCPIP network (RJ45)

6. SMA antenna port ANT1~ANT4