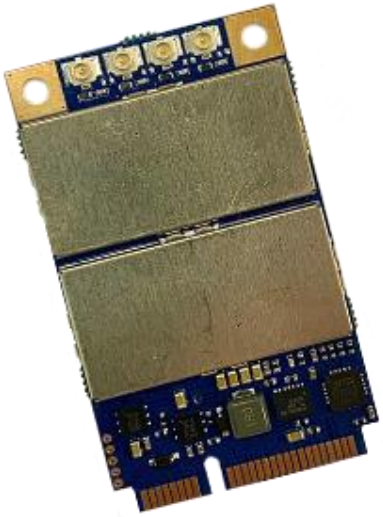
REYAX
TECHNOLOGY CORPORATION, LTD

16-SEP-2020 56312E35

RYRR39U

USB/ UART Interface UHF RFID Reader
mini PCIe card form factor

Datasheet



Represented by:

first FC components

FIRST Components s.r.l.
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PRODUCT DESCRIPTION

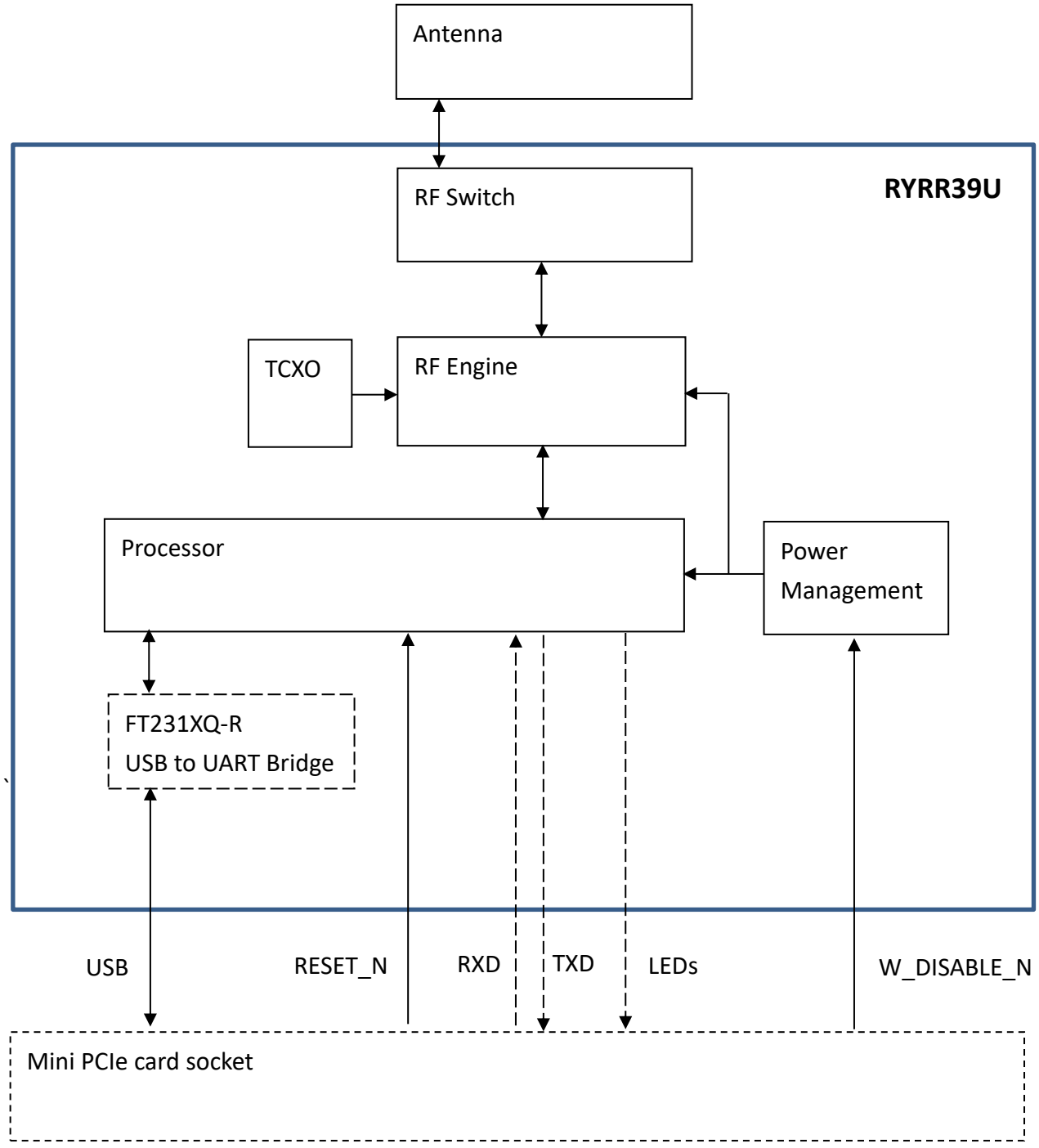
The RYRR39U is an EPC Class 1 Gen 2 RFID reader product that implements all the relevant protocols. It offers a complete set of RFID features and support for frequency-hopping, low-level transmission coding, low-level decode, data framing and CRC checking.

FEATURES

- Protocol support for: ISO 18000-6C (EPC Class1 Gen2), ISO 29143 (Air interface for mobile RFID), ISO 18000-6A/B through direct mode.
- Temperature range: -40 °C to 85 °C
- Standard mini PCIe and plug PCB design.
- Mini PCIe Signal Type USB2.0.
- Support USB / UART Interface.
- Data transfer up to 3M baud rate.
- USB Drivers for Windows, Linux, Android, Mac OS.

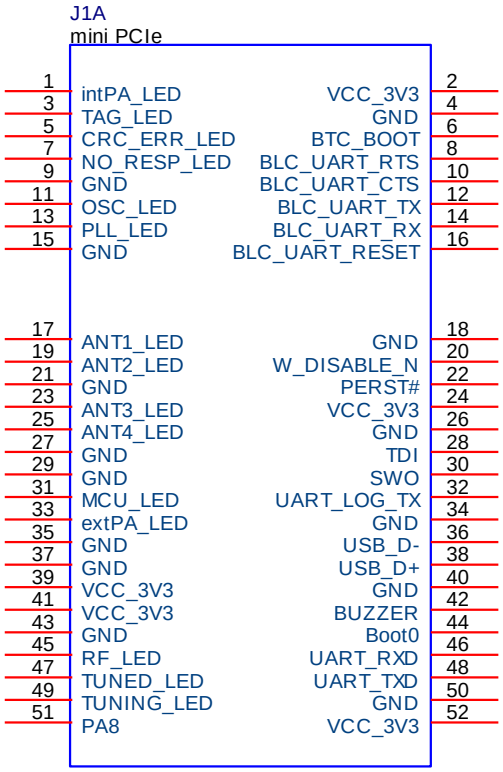
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BLOCK DIAGRAM



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PIN DESCRIPTION



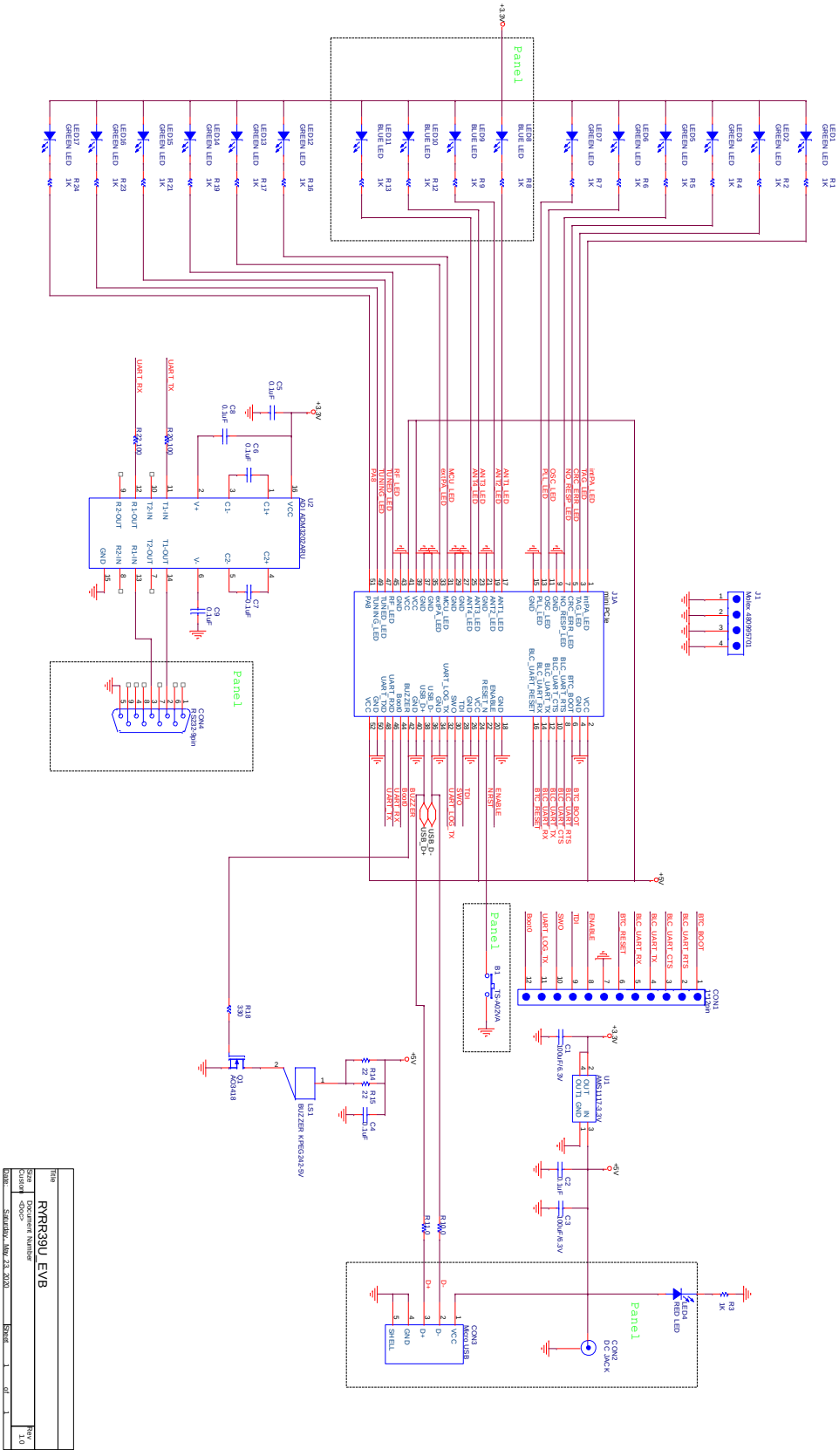
Pin	Name	Input/Output	USB version Description	UART version Description
1	GPIO	I/O		GPIO Reserved
2	VCC	Power	Power Input	
3	GPIO	I/O		GPIO Reserved
4	GND		Power Ground	
5	GPIO	I/O		GPIO Reserved
6	GPIO	I/O		GPIO Reserved
7	GPIO	I/O		GPIO Reserved
8	GPIO	I/O		GPIO Reserved
9	GND		Power Ground	
10	GPIO	I/O		GPIO Reserved
11	GPIO	I/O		GPIO Reserved
12	GPIO	I/O		GPIO Reserved
13	GPIO	I/O		GPIO Reserved
14	GPIO	I/O		GPIO Reserved
15	GND		Power Ground	
16	GPIO	I/O		GPIO Reserved
17	GPIO	I/O		GPIO Reserved

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18	GND		Power Ground	
19	GPIO	I/O		GPIO Reserved
20	ENABLE	Input	H : Enable or Open L : Disable	H : Enable or Open L : Disable
21	GND		Power Ground	
22	RESET_N	Input	External low reset.	External low reset.
23	GPIO	I/O		GPIO Reserved
24	VCC	Power	Power Input	
25	GPIO	I/O		GPIO Reserved
26	GND		Power Ground	
27	GND		Power Ground	
28	GPIO	I/O		GPIO Reserved
29	GND		Power Ground	
30	GPIO	I/O		GPIO Reserved
31	GPIO	I/O		GPIO Reserved
32	GPIO	I/O		GPIO Reserved
33	GPIO	I/O		GPIO Reserved
34	GND		Power Ground	
35	GND		Power Ground	
36	USB_DN	Input/Output	USB Data Negative	
37	GND		Power Ground	
38	USB_DP	Input/Output	USB Data Positive	
39	VCC	Power	Power Input	
40	GND		Power Ground	
41	VCC	Power	Power Input	
42	GPIO	I/O		GPIO Reserved
43	GND		Power Ground	
44	GPIO	I/O		GPIO Reserved
45	GPIO	I/O		GPIO Reserved
46	UART_RXD	Input		UART data input
47	GPIO	I/O		GPIO Reserved
48	UART_TXD	Input		UART data Output
49	GPIO	I/O		GPIO Reserved
50	GND		Power Ground	
51	GPIO	I/O		GPIO Reserved
52	VCC	Power	Power Input	

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APPLICATION SCHEMATIC



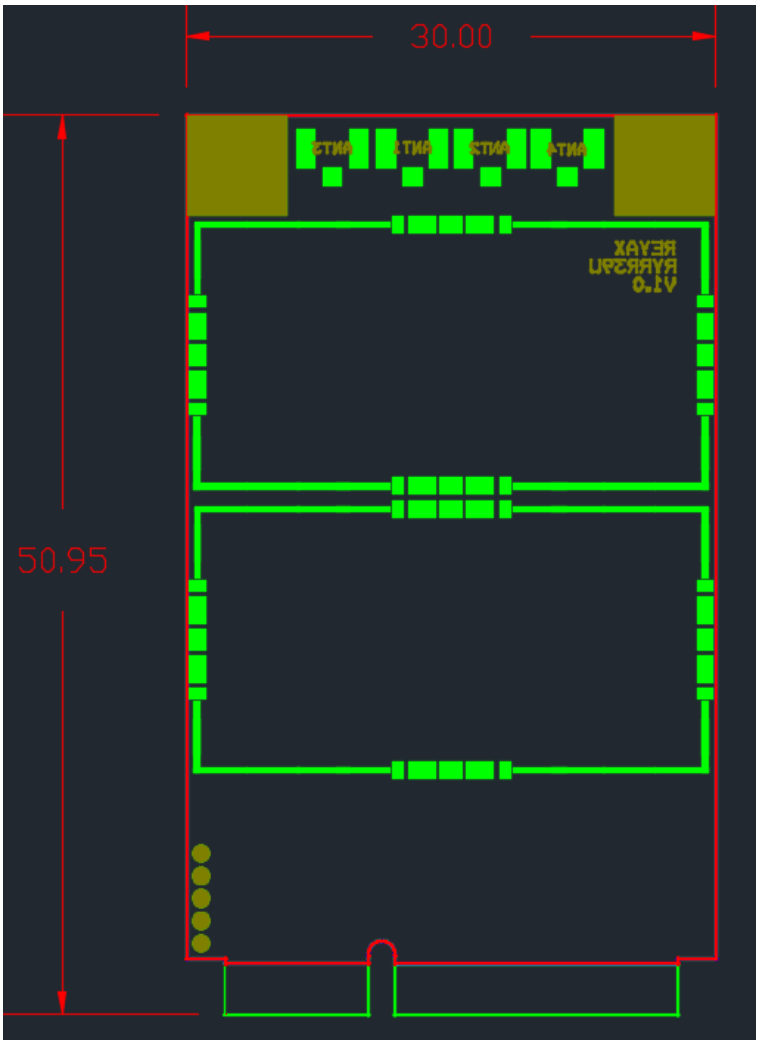
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SPECIFICATION

Item	Min.	Typical	Max.	Unit	Condition
Power Supply Voltage	3	3.3	5.5	V	VCC
Current		600		mA	
Default Baud Rate		115200	3000000	bps	8,N,1
Digital input level high	0.7*VDD		VDD+0.3	V	VIH
Digital input level low	-0.3		0.3*VDD	V	VIL
Digital output level high	0.8*VDD		VDD	V	VOH 2mA
Digital output level low	0		0.2*VDD	V	VOL 2mA
Antenna port impedance					
RF Output power		27		dBm	
RF Sensitivity		-90		dBm	
Read tag time		10		ms	Baud rate 3M bps
Communication Range		9		M	9dBi Gain Antenna
Frequency Range	840	868/915	960	MHz	
Antenna port impedance		50		Ω	
Antenna port		2	4		
USB Interface					V2.0
Operating Temperature	-40	25	+85	˚C	
Dimension				mm	mini PCIe Standard 50.95mm*30mm
Weight		5		g	

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DIMENSIONS



unit : mm

ORDER INFORMATION

Ordering No.	Interface
RYRR39U	USB 2.0
RYRR39U_UART	UART

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