

LoRaWAN™ CONCENTRATOR MODULE



Concentrator module enables receiving and sending data to/from LoRaWAN devices.

Concentrator is to be connected to an existing hardware as LoRaWAN extension card.

OVERVIEW

Universal

Using PCI express mini form factor makes it easy to use in different platforms. Additionally to standard PCI express mini pins, four reserved pins are used for SPI communication.

APPLICATIONS

Gateway building

Enabled creating LoRaWAN gateways.

FEATURES

- 8 LoRa channels
- 1 FSK channel
- Status LEDs

SPECIFICATIONS

Length:	51 mm
Height:	30 mm
Width:	1 mm
Weight:	g
Operating temperature:	-40°C ... +85°C
Tx power:	upto +27 dBm
Rx Sensitivity:	-142 dBm
MAC Layer:	LoRaWAN™
Baseband chip:	SX1301
Tranceivers:	2 x SX1257
Antenna connector:	MMCX (50 Ω impedance)

PINOUT

PCI Express Mini

Row 0		
Pin	SYMBOL	USED AS
1	WAKE#	-
3	COEX1	PPS
5	COEX2	-
7	CLKREQ#	-
9	GND	GND
11	REFCLK-	-
13	REFCLK+	-
15	GND	GND
17	RESERVED	-
19	RESERVED	-
21	GND	GND
23	PERN0	-
25	PERP0	-
27	GND	GND
29	GND	GND
31	PETN0	-
33	PETP0	-
35	GND	GND
37	GND	GND
39	3.3VAUX	+3.3V
41	3.3VAUX	+3.3V
43	GND	GND
45	RESERVED	CS
47	RESERVED	MISO
49	RESERVED	MOSI
51	RESERVED	CLOCK

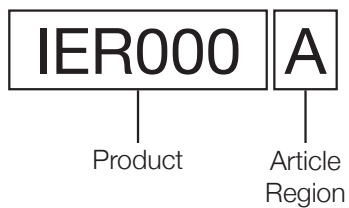
Row 1		
Pin	SYMBOL	USED AS
2	3.3 VAUX	+3.3V
4	GND	GND
6	1.5 VOLT	-
8	UIM PWR	-
10	UIM_DATA	-
12	UIM_CLK	-
14	UIM_RESET	-
16	UIM_VPP	-
18	GND	GND
20	W_DISABLE#	DISABLE
22	PERST#	RESET
24	3.3VAUX	+3.3V
26	GND	GND
28	1.5VOLT	-
30	SMB CLK	I2C_CLOCK
32	SMB DATA	I2C_DATA
34	GND	GND
36	USB_D-	USB_N
38	USB_D+	USB_P
40	GND	GND
42	LED_WWAN#	LED_PWR
44	LED_WLAN#	LED_TX
46	LED_WPAN#	LED_RX
48	1.5VOLT	-
50	GND	GND
52	3.3VAUX	+3.3V

DIMENSIONS

Dimensions



ORDERING INFORMATION



Product	Description
IER000x	LoRaWAN™ Concentrator Module

Article region	Band
A	EU868
B	AU915
C	US915
D	AS923
F	KR920
I	IN865
J	RU864

CONTACT INFORMATION

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REVISION HISTORY

1.0 - First version

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