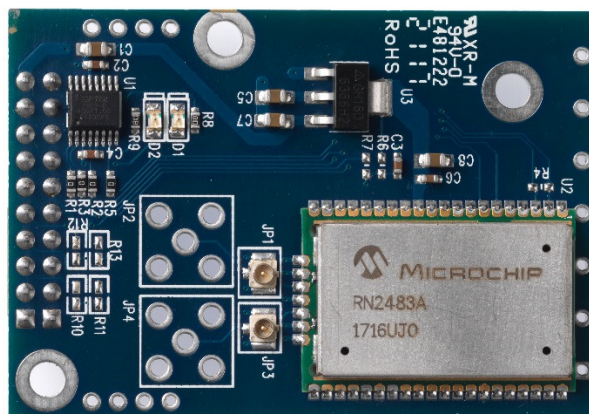


DINGO NB-LORA Module

Item specifications

Go-IoT Item Id:	DINGO-PG-NB-LORA-01
LORA Transceiver Module	RN2483A http://www.microchip.com/wwwproducts/en/RN2483
Radio Regulations	R&TTE Directive 1999/5/EC EN 300 220-2 v2.4.1 IEC 60950-1:2005 (2nd Ed: A1:2009)
Frequency	434, 868MHz
Modulation	FSK, GFSK and LoRa Technology Modulation
Data Rate	300 kbps FSK , 10937 bps with LoRa Technology
Range	Up to 15 km Coverage at Suburban and up to 5 km Coverage at Urban Area
Receiver Sensitivity	Typ 146dBm
Conducted Power	Adjustable – upto +14 dBm
Current Consumption	RX 15mA , TX 40mA
USB Interface	1
Serial TTL Interface	1 (not used)
Indicators	TX / RX Data
Antenna Connectors	SMA (option) U-FL (standard)
Drivers	Linux
Expansion Connectors	1 x 20way header from Base Board
DC Input	+5V
Temperature	-40 degree C to +85 degree C
Size (L x W x H)	58mm x 40mm x 8mm
Country/Region of Manufacture:	EU



20WAY LORA Interface

Pin	Port	Dir	Pull Up	Function	Description
1	+12V			POWER	
2	SPI_CLK	IN		SPI	SPI Clock
3	+3.3V			POWER	
4	SPI_MOSI	IN		SPI	SPI Master Out SLAVE In
5	TXD2	IN		Serial TX Data	Serial TTL Data from Host – Channel 2
6	SPI_MISO	IN		SPI	SPI Master In SLAVE Out
7	RXD2	OUT		Serial RX Data	Serial TTL Data to Host – Channel 2
8	SPI_SSx	OUT		SPI	Output from Power Line Module
9	NEVENTx	OUT		Power Line	SPI Slave Select
10	TXD3	IN		Serial TX Data	Serial TTL Data from Host – Channel 3
11	GND			POWER	
12	RXD3	OUT		Serial TX Data	Serial TTL Data to Host – Channel 3
13	ADDR1			IO	Module Specific
14	I2C_SCL	IN		I2C CLOCK	I2C – Channel 1 Clock
15	ADDR1			IO	Module Specific
16	I2C_SDA	BI		I2C DATA	I2C – Channel 1 Data
17	GPIOx	BI		IO	Module Specific
18	USB +	BI		USB Data	USB Positive Channel x
19	+5.0V	IN		POWER	+5.0V Output – 1000mA available
20	USB -	BI		USB Data	USB Negative Channel x

x = Channel / Number depend on location on Base Board

Blue Text is signals used on Module