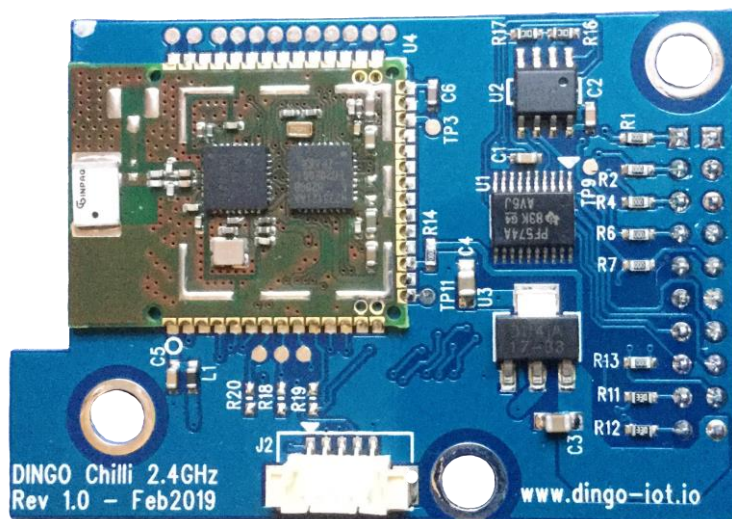


DINGO NB-CASCODA Module

1 Item specifications

Go-IoT Item Id:	DINGO-PG-NB-CASCODA-01
CASCODA Transceiver Module	CA-8210 smartrANGE TRANSCIEVER MODEM https://CASCODA.COM/CA-8210
Radio Regulations	IEEE 802.15.4-2006 & IEEE 802.15.4-2003
Frequency	2405-2480 MHz
Modulation	Direct-Sequence Spread Spectrum
Data Rate	Typ 250kbit/s
Range	Multi km
Receiver Sensitivity	-105dBm
Transmit Power	upto +9dBm
Current Consumption	20mA
USB Interface	1
SPI & I2C	1
Indicators	TX / RX Data
Antenna Connectors	SMA (option) U-FL (standard)
Security	AES security hardware accelerator
Periperals	Temperature Sensor , 10 x GPIO
Drivers	Linux , ARM mbed , Contiki
Expansion Connectors	1 x 20way header from Base Board
DC Input	+5V (operation of Module 3.6V)
Temperature	-40degree C to +85degree C
Size (L x W x H)	58mm x 40mm x 8mm
Country/Region of Manufacture:	EU



2 20WAY CASCODA 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	SPI Slave Select
9	NEVENTx		OUT		Power Line	Output from Power Line Module
10	TXD3		IN		Serial TX Data	Serial TTL Data from Host – Channel 3
11	GND				POWER	Supply ground
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 I/O	USB data Positive (D+) Channel x
19	+5.0V		IN		POWER	+5.0V Output – 1000mA available
20	USB -		BI		USB I/O	USB data Negative (D-) Channel x

x = Channel / Number depend on location on Base Board

Blue Text is signals used on Module