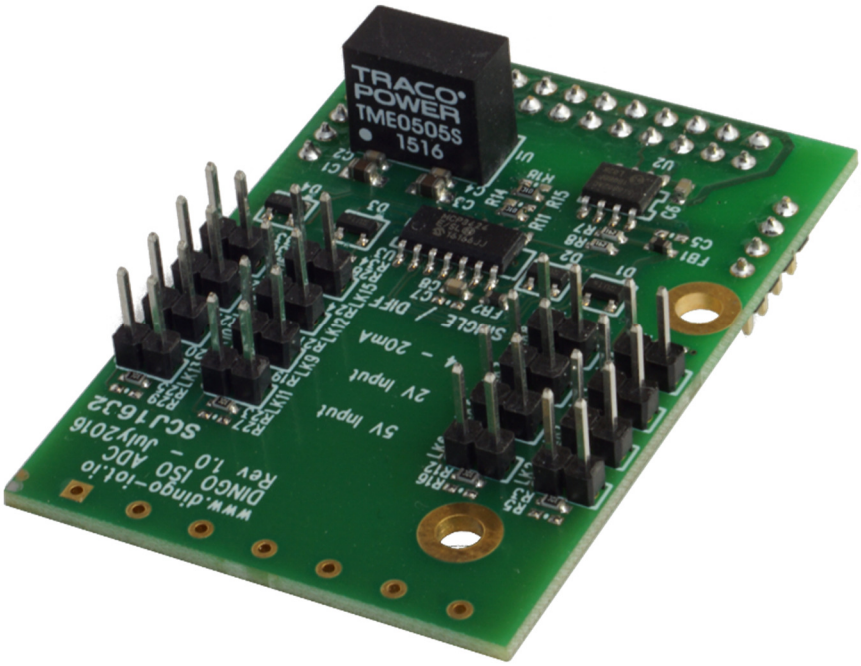
DINGO PLUG-IN

Opto Isolated 4 Channel 18bit ADC Plug-in

DATASHEET COMPLETE

Item specifications

Go-IoT Item Id:	Option	DINGO-PG-AI4-01
ADC Convertor		MCP3424-E/SL – 18bit
ADC Inputs	A B C D	0V to +2V , -2V to +2V 0V to +5V , -5V to +5V 0V to +10V , -10V to +10V 0mA to 20mA
Sample Rate		3,75 to 240 Samples per Second
I2C Channel 1 Interface		0xD0
Isolation Voltage		2.5kV RMS
Drivers		Linux , DINgo Stack
Expansion Connectors		1 x 20way header from Base Board 2 x 4way headers from Base Board
DC Input		+5V
Temperature		-20degree C to +85degree C
Size (L x W)		60 x 40 mm
Country/Region of Manufacture:		EU



20WAY ADC 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

8WAY ADC Interface to External Connectors

21	Channel 1+	IN		Analog Channel 1 + Input	
22	Channel 1-	IN		Analog Channel 1 - Input	
23	Channel 2+	IN		Analog Channel 2 + Input	
24	Channel 2-	IN		Analog Channel 2 - Input	
25	Channel 3+	IN		Analog Channel 3+ Input	
26	Channel 3-	IN		Analog Channel 3- Input	
27	Channel 4+	IN		Analog Channel 4 + Input	
28	Channel 4-	IN		Analog Channel 4 - Input	