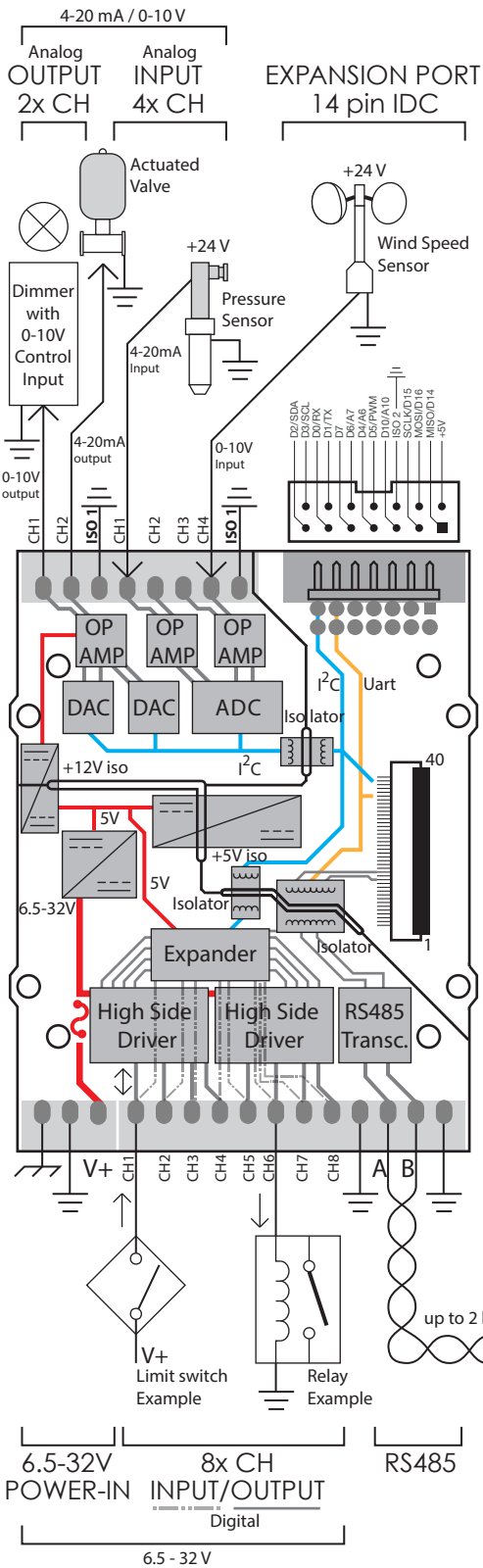


# Industruino Ind.I/O

with ATSAMD21G18 MCU

www.industruino.com  
connect@industruino.com

IND.I/O BASEBOARD

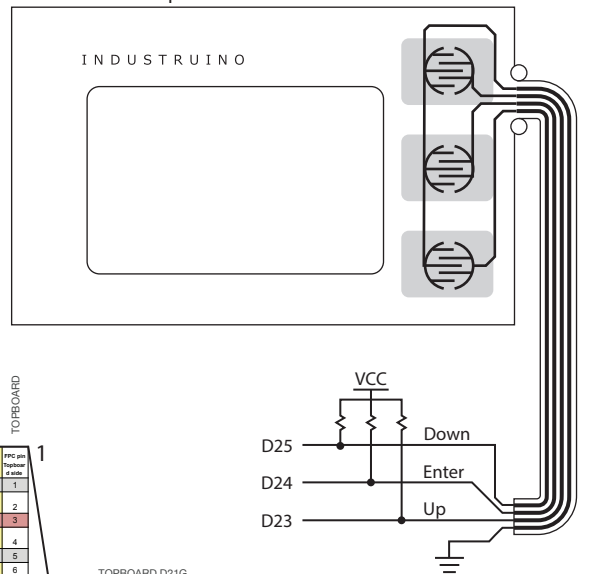


40 pin FPC cable

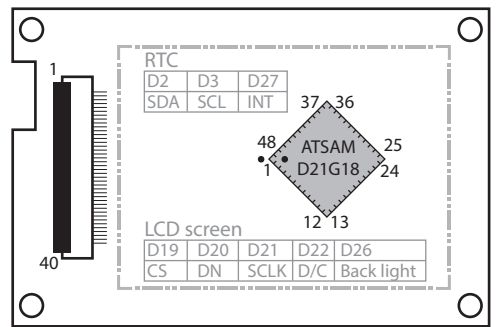
BASEBOARD	ATMEGA PIN	PORT PIN	TOPBOARD
40	Pin Function	MCU Pin	Port Pin
39	i2c - main control bus / 14p IDC	26 PA17	I2c SCL 3
38	i2c - main control bus / 14p IDC	25 PA16	I2c SDA 2
37	RS485 TX / 14p IDC	27 PA18	Serial TX 1
36			
35	RS485 RX / 14p IDC	28 PA19	Serial RX 0
34		31 PA22	17
33	RS485 RX / 14p IDC	28 PA19	Serial RX 0
32			
31			
30	SPI 14p IDC	32 PA23	SPI SCLK 15
29			
28	SPI 14p IDC	37 PB22	SPI MISO 14
27	SPI 14p IDC	38 PB23	SPI MOSI 16
26			
25			
24	14p IDC	7 PB08	A A4 4
23			
22	14p IDC	15 PA10	Serial TX 5
21	14p IDC	8 PB09	A A6 6
20			
19	14p IDC	8 PB09	A A6 6
18	14p IDC	9 PA04	A A7 7
17			
16			
15	24V digital input PCINT	10 PA05	A A8 8
14			
13	RS485-E	11 PA06	A A9 9
12			
11	14p IDC	12 PA07	Serial RX 10
10			
9		13 PA08	A A11 11
8			
7		14 PA09	A A12 12
6			
5		16 PA11	A A13 13
4			
3		3 PA02	DAC 18
2		4 PA03	AD/DIAC 28
1			

Legend:  
 GND PIN  
 VCC PIN  
 DIGITAL PIN  
 ANALOG PIN  
 PWM PIN  
 SERIAL PIN

BUTTON PANEL  
4 pin FPC cable



TOPBOARD D21G



IND.I/O is an Arduino IDE programmable controller.

\*"Power-in /digital field zone", "Analog field zone" and "MCU zone" are isolated from each other. Where single power supply is used for both power-in and analog peripherals the respective GND's need to be tied together.

\*The majority of IND.I/O board functions are controlled via i2c, therefore it requires the "Indio" library which can be found on our website.

**Ind.I/O Baseboard**  
 8 CH 24V digital I/O  
 4 CH 0-10V/4-20mA analog IN  
 2 CH 0-10V/4-20mA analog OUT  
 Isolated RS485 transceiver  
 3 isolated supply rails.

**Topboard D21G**  
 ATSAM D21G18 MCU  
 Flash Memory 256 KB  
 SRAM 32 KB  
 Clock Speed 48 MHz

## INDUSTRUINO



Arduino libraries are available for download on our website:  
www.industruino.com

Industruino is an Arduino compatible industrial controller with LCD screen, housed in a robust DIN-rail casing.