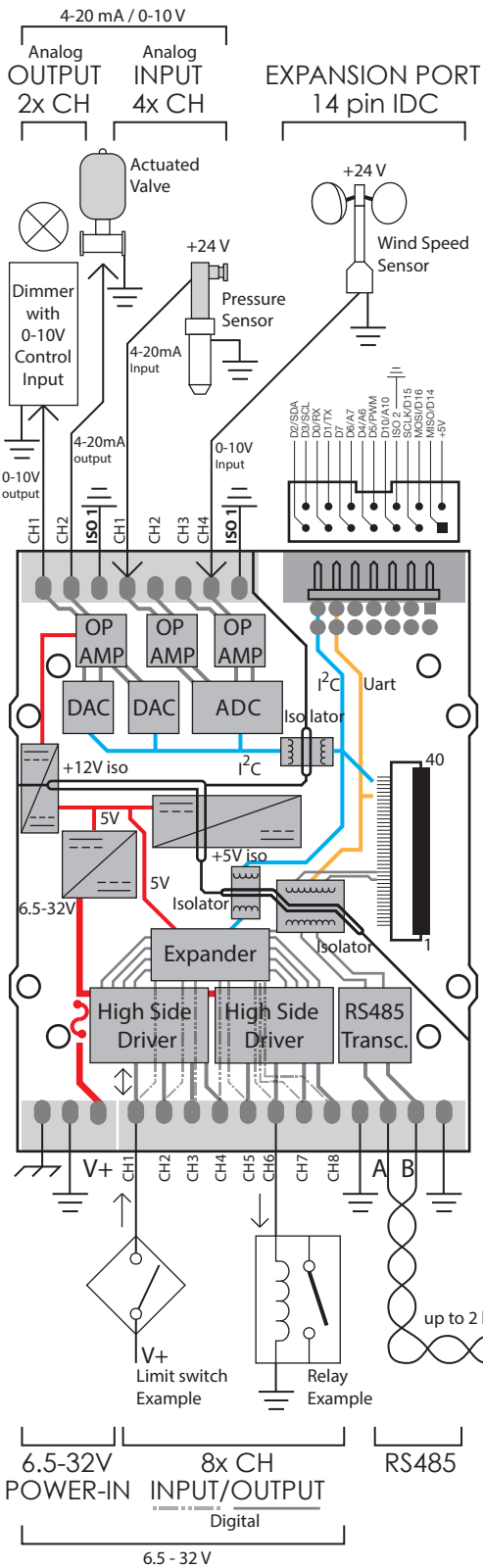


# Industruino Ind.I/O with Atmega 32u4

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IND.I/O BASEBOARD

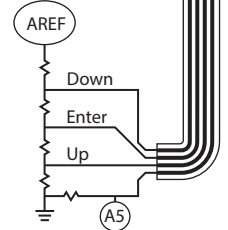
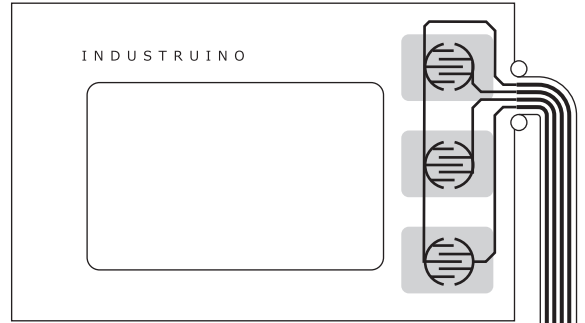


40 pin FPC cable

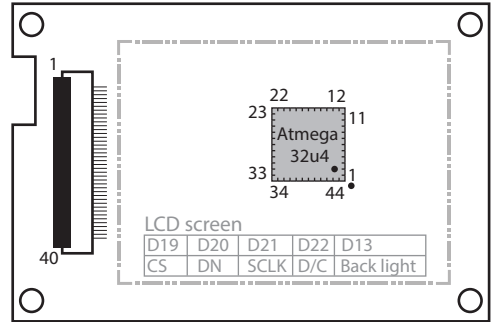
FPC pin BASE board side	Use on IND.I/O	Atmega Pin	Port Pin	Pin Function	Digital Pin	Analog Pin	PWM Pin	Serial Pin	FPC pin TOP board side
39	i2c - main control bus / 14p IDC	18	PD0	INT0/OC0B	3		3	SCL	2
37	i2c - main control bus / 14p IDC	19	PD1	INT1	2			SDA	4
35	RS485 TX / 14p IDC	21	PD3	INT3	1			TXD1	6
33	RS485 RX / 14p IDC	20	PD2	INT2	0			RXD1	8
32		8	PB0	SS/PCINT0	17				9
30	14p IDC expansion connector	9	PB1	SCLK/PCINT1	15			SCLK	11
28	14p IDC expansion connector	11	PB3	MISO/PCINT3	13			MISO	13
27	14p IDC expansion connector	10	PB2	MOSI/PCINT2	16			MOSI	14
26				3.3V					15
25				RESET					16
24				VIN					17
23	14p IDC expansion connector	25	PD4	ICP1	4	A6			18
21	14p IDC expansion connector	31	PC6	OC3A/OC4A	5		5		20
19	14p IDC expansion connector	27	PD7	OC4D/T0	6	A7	6		22
17	14p IDC expansion connector	1	PE8	INT6/AIN0	7				24
15	24V digital input PCINT	28	PB4	PCINT4	8	A8			26
13	RS485-E	29	PB5	OC1A/PCINT5/OC4B	9	A9	9		28
11	14p IDC expansion connector	30	PB6	OC1B/PCINT6/OC4B	10	A10	10		30
9		12	PB7	OC6B/OC1C/PCINT7/RTS	11		11		32
7		26	PD6	OC4D/T1	12	A11	12		34
5		32	PC7	OC4A/ICP3/CLK0	13		13		36
3		36	PF7	TDI		A0			38
2		42		AREF					39

Legend:  
 GND - ISO 1 PIN (grey)  
 VCC - ISO 1 PIN (red)  
 DIGITAL PIN (blue)  
 ANALOG PIN (green)  
 PWM PIN (yellow)  
 SERIAL PIN (orange)

BUTTON PANEL  
4 pin FPC cable



TOPBOARD 32u4



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 32u4

- Atmega 32u4 MCU
- Flash 32 KB
- SRAM 2.5 KB
- EEPROM 1 KB.

## 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.