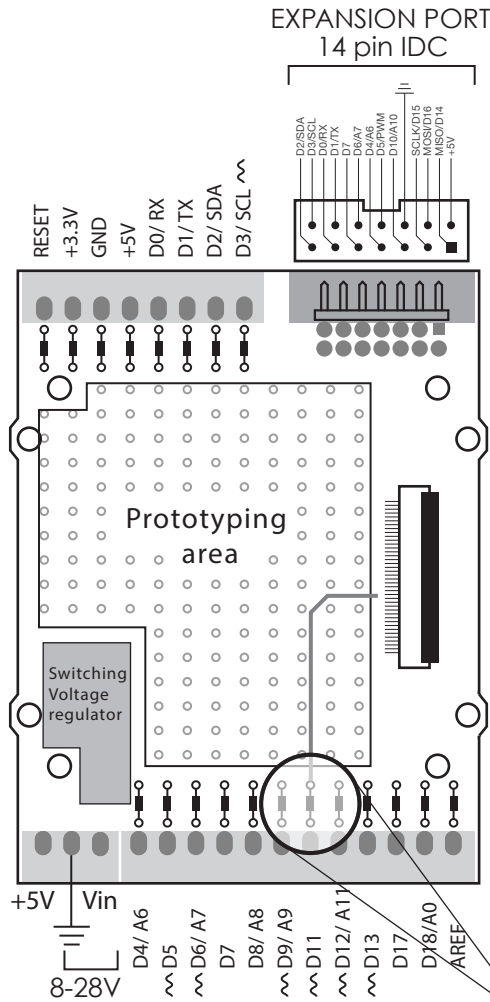


Industruino Proto with Atmega 32u4

www.industruino.com
connect@industruino.com

PROTO BASEBOARD



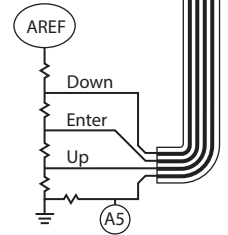
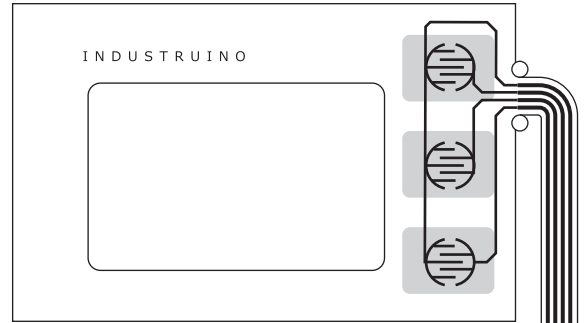
EXPANSION PORT
14 pin IDC

40 pin FPC cable

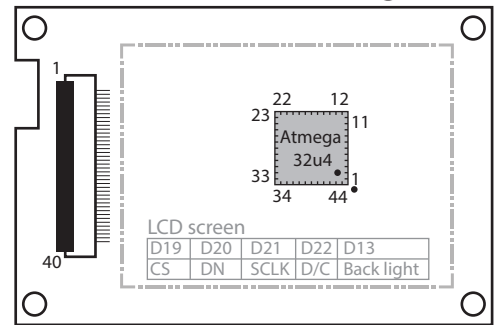
BASEBOARD	ATMEGA PIN	PORT PIN	PORT PIN	PORT PIN	PORT PIN	TOPBOARD		
FPC pin Base board side	Atmega Pin	Port Pin	Pin Function	Digital Pin	Analog Pin	PWM Pin	Serial Pin	FPC pin Top board side
39	18	PD0	INT0/OC0B	3		3	SCL	2
37	19	PD1	INT1	2			SDA	4
35	21	PD3	INT3	1			TXD1	6
33	20	PD2	INT2	0			RXD1	8
32	8	PB0	SS/PCINT0	17				9
30	9	PB1	SCLK/PCIN T1	15			SCLK	11
28	11	PB3	MISO/PCIN T3	14			MISO	13
27	10	PB2	MOSI/PCIN T2	16			MOSI	14
26			3.3V					15
25			RESET					16
24			VIN					17
23	25	PD4	ICP1	4	A6			18
21	31	PC6	OC3A/OC4 A	5		5		20
19	27	PD7	OC4D/T0	6	A7	6		22
17	1	PE6	INT6/AIN0	7				24
15	28	PB4	PCINT4	8	A8			26
13	29	PB5	OC1A/PCIN T5/OC4B	9	A9	9		28
11	30	PB6	OC1B/PCIN T6/OC4B	10	A10	10		30
9	12	PB7	OC0B/OC1 C/PCINT7/ RTS	11		11		32
7	26	PD6	OC4D/T1	12	A11	12		34
5	32	PC7	OC4A/PC3 /CLK0	13		13		36
3	36	PF7	TDI	18	A0			38
2	42		AREF					39

GND PIN
VCC PIN
DIGITAL PIN
ANALOG PIN
PWM PIN
SERIAL PIN

BUTTON PANEL
4 pin FPC cable



TOPBOARD 32u4



POWER-IN



- 1) 0 Ω resistors can be removed to disconnect MCU pin from external connector.
- 2) 2 pads are available per pin; one to connect your internal components to an MCU, the other to connect your internal components to the external connectors.

Industruino PROTO is a robust fully enclosed Arduino compatible controller.

+5V connection on bottom left 3 pin power connector is by default not connected to the internal 5V rail. This is to protect from accidental connection to Vin voltage. The 5V rail can be connected to the external connector by bridging the jumper labelled "+5V out" on the bottom side of the board.

The PROTO baseboard has 20 screw connectors that by default are connected to the MCU pins via 0 Ohm resistors.

Ind.I/O Baseboard

Prototyping area
8-28 Vin -> 5V/2A switching voltage regulator
TVS protected supply rail
15 digital pins (7 with PWM support)
7 analog pins (shared with digital pins).

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.