



Specifications:

Physical	LxWxH cm 13.1 x 7 x 2.8
Weight	
Power supply	External DC 8-24V input DC 5V on board regulator LM2575-5.0 1Amp DC 3.3V on board regulator TCP1262-3.3 500mA
Micro Controller	Arduino Nano (ATMEGA328p or 328PB)
i2C bus	5V bus two ports, 3.3V bus two ports
EEPROM	i2C bus, 8KB
Voltage Reference	Precision band gap, programmable reference TL431, set through a POT
On Chip ADC	10bit 6 channel, can also be used as GPIO
External ADC	16bit , 4 Channel ADS1115
Serial Interface	Jumper selectable TTL or RS485
Spare GPIO	Available through two 2x5 headers

Connector Details:

DC-1	Power input to board
DC1.1	Central Pin Vin 8-24V DC
DC1.2	Outer Pin Gnd

P1 Berg 16 Pin	LCD Interface 4 bit mode
P1.1	Gnd
P1.2	5V
P1.3	Contrast
P1.4	Register Select (RS)
P1.5	Read/Write (Gnd)
P1.6	Enable (EN)
P1.7, P1.8, P1.9, P1.10	DB0-DB3 (Gnd)
P1.11	DB4
P1.12	DB5
P1.13	DB6
P1.14	DB7
P1.15	Anode (5V)
P1.16	Cathode (Gnd)

P2 Berg 2 Pin	RS485 Interface
P2.1	B
P2.2	A

P3 & P4 Berg 4 Pin	i2C 5V Bus
P3/P4.1	5V
P3/P4.2	SCL
P3/P4.3	SDA
P3/P4.4	Gnd

P5 & P6 Berg 4 Pin	i2C 3.3V Bus
P5/P6.1	3.3V
P5/P6.2	SCL
P5/P6.3	SDA
P5/P6.4	Gnd

P7 Berg 5 x 2	Serial Comm & GPIO
P7.1	5V
P7.2	Gnd
P7.3	TTL RX
P7.4	D3
P7.5	TTL RX
P7.6	D4
P7.7	TTL D2
P7.8	D13
P7.9	3.3V
P7.10	Gnd

P8 Berg 5 x 2	Analog input 10 bit & PWM
P8.1	5V
P8.2	Gnd
P8.3	A0 (Ch0)
P8.4	A6 (Ch6)
P8.5	A1 (Ch1)
P8.6	A7 (Ch7)
P8.7	A2 (Ch2)
P8.8	PWM (D5)
P8.9	A3 (Ch3)
P8.10	PWM (D6)

P9 Berg 5 x 2	ADS1115 16bit Channels
P9.1	Ch1+
P9.2	Ch2+
P9.3	Ch2+
P9.4	N.C
P9.5	Ch3+
P9.6	Ch4+
P9.7	Ch4+
P9.8	N.C

Jmp1 Berg 3 Pin	TTL Serial/RS485
Jmp1.1	TTL RX
Jmp1.2	D0
Jmp1.3	RXD-RS485

Jmp2 Berg 3 Pin	TTL Serial/ RS485
Jmp2.1	TTL TX
Jmp2.2	D1
Jmp2.3	TXD-RS485

Jmp3 Berg 3 Pin	RS485 Direction Control
Jmp3.1	TTL D2
Jmp3.2	D2
Jmp3.3	DDIR

Jmp5 Berg 2 Pin	ADS1115 Int Pin
Jmp5.1	RDY/ALERT
Jmp5.2	D3

