Controllino

MEGA

PINOUT V1.0

Digital OUTPUT:
Pin Header Output
ESD Protection
Protection resistor → Vin
ATmega Output Port → ESD Protection → HighSide Switch or H-Bridge driver → Screw Terminal Power Output

GND	
POWER	
CONTROLLINO Function	
PHYSICAL PIN	
PORT PIN	
ARDUINO Mega Board	

ℹ General Information
⚠ Pay attention

CHIP used ATmega 2560-16AU
ATMEL

12 x Half-H-Bridge
Nominal load current = 2A (self limiting)
On-state resistance = typ 240mΩ

12 x HIGH CURRENT High Side Switch
Nominal load current = 2A (self limiting)
On-state resistance = typ 70mΩ

Relay output
Resistive Load max. current
6A 250V AC / 30V DC 6A

ℹ Operational Voltage:
12V: 10,8V-13,2V
24V: 21,6V-26,4V

⚠ Max. 30A
(Fused by not resettable fuse)

Relay OUTPUT:
Pin Header Output
ESD Protection
Protection resistor
ATmega Output Port → ESD Protection → Relay → Screw terminal Relay

Analog/Digital INPUT:
Pin Header Input
ESD Protection
Protection resistor
Screw terminal input → Automatic divider Division ratio: 12V range: 3,06 24V range: 6,14 → ESD Protection → ATmega Input Port

Signal Inputs
Logic "0" level: 0V – 3,6V (Vin=12V), 0V–7,2V (Vin=24V)
Logic "1" level: 9V – 13,2V (Vin=12V), 18V–26,4V (Vin=24V)
Maximum input current <3mA
Voltage range in case of analog input use
0 – 13,2V (Vin=12V) / 0 – 26,4V (Vin=24V)

ETHERNET
W5100

--	PJ3	66	LAN /SS → /SCS
52	PB1	20	SCK → SCLK
51	PB2	21	MOSI → MOSI
50	PE3	22	MISO → MISO
--	PE6	8	LAN /INT → /INT
--	PE7	9	/OVL

RTC
RV-2123-C2-TA-QC-020

--	PJ2	65	RTC_SS → CE
52	PB1	20	SCK → SCL
51	PB2	21	MOSI → SDI
50	PE3	22	MISO → SDO
--	PJ7	79	RTC /INT → /INT

SN65HVD08

⚠ Pin Header current limit:
Absolute max per pin 40mA recommended 20mA
Absolute max 200mA for entire Pin Header
Current limit @5V + 3V3 max 200mA (Fused by resettable fuse)
Current limit @3V3 only 150mA
All signals are protected with serial resistance

⚠ Attention to current limit

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