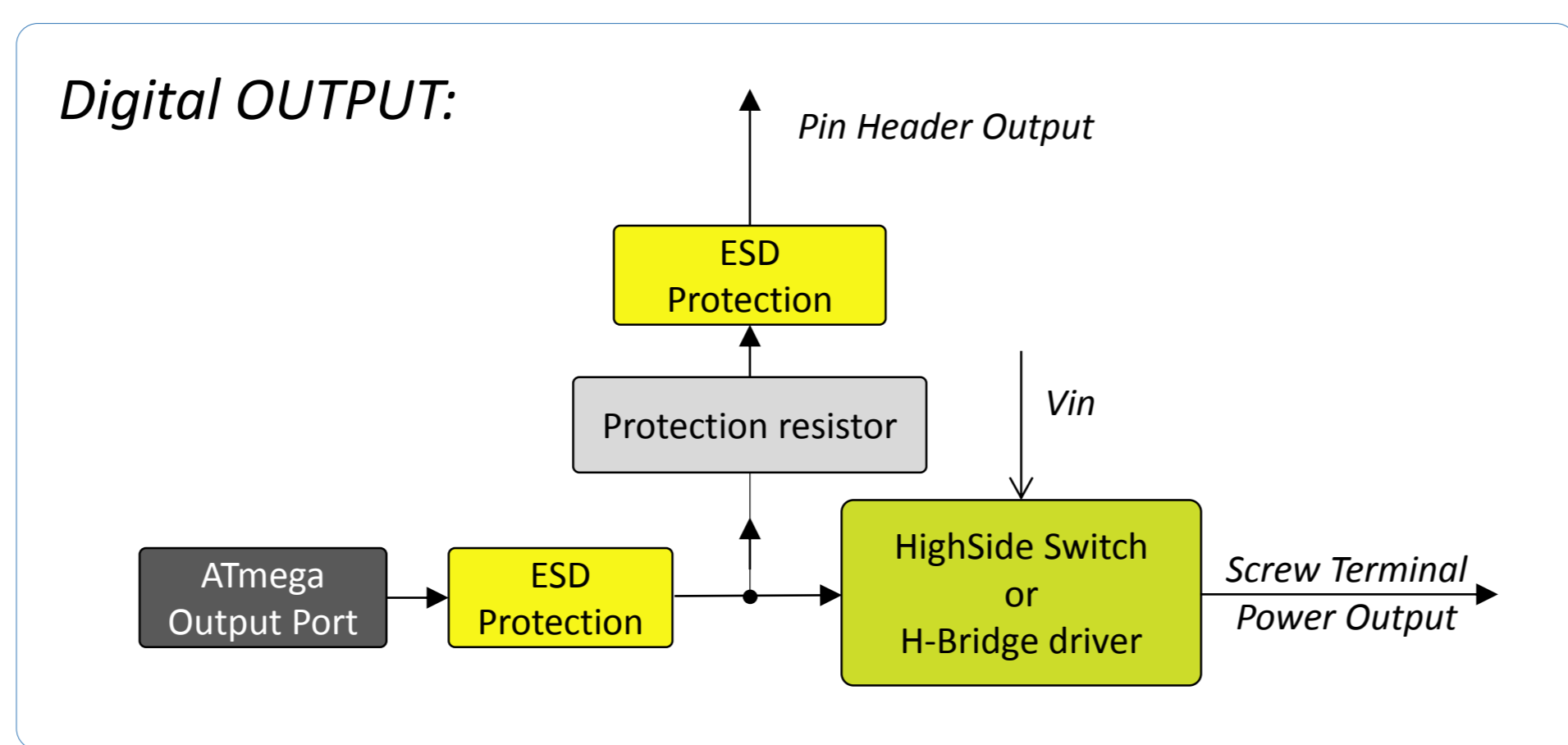




# MEGA PINOUT V1.0



GND
POWER
CONTROLLINO Function
PHYSICAL PIN
PORT PIN
ARDUINO Mega Board

General Information  
Pay attention

CHIP used ATmega 2560-16AU

Attention to current limit ⚠️ 5V

A0	PF0	97	Analog 0	Analog 1	96	PF1	A1
A2	PF2	95	Analog 2	Analog 3	94	PF3	A3
A4	PF4	93	Analog 4	Analog 5	92	PF5	A5
TX1 18	PD3	46	Interrupt 0	Interrupt 1	45	PD2	RX1 19
RESET	/RESET	30	/Reset	Digital 0	6	PE4	2
3	PE5	7	Digital 1	Digital 2	1	PG5	4
5	PE3	5	Digital 3	Digital 4	15	PH3	6
7	PH4	16	Digital 5	SDA	44	PD1	SDA 20
SCL 21	PD0	43	SCL	/SS	19	PB0	53
51	PB2	21	MOSI	MISO	22	PB3	50
52	PB1	20	SCK	3V3	⚠️ Attention to current limit		
TX 1	PE1	3	TXD	RXD	2	PE0	RX 0

**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

2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
PE4	PE5	PG5	PE3	PH3	PH4	PH5	PH6	PB4	PB5	PB6	PB7	PL7	PL6	PL5	PL4	PL3	PL2	PL1	PL0	PD4	PD5	PD6	PD7
Digital 0	Digital 1	Digital 2	Digital 3	Digital 4	Digital 5	Digital 6	Digital 7	Digital 8	Digital 9	Digital 10	Digital 11	Digital 12	Digital 13	Digital 14	Digital 15	Digital 16	Digital 17	Digital 18	Digital 19	Digital 20	Digital 21	Digital 22	Digital 23

Attention to current limit ⚠️ 5V

A14	PK6	83	Analog 14	Analog 15	82	PK7	A15
38	PD7	50	Input 16	Input 17	70	PG2	39
40	PG1	52	Input 18	N.C.			
RESET	/RESET	30	/Reset	Digital 16	38	PL3	46
47	PL2	37	Digital 17	Digital 18	36	PL1	48
49	PL0	35	Digital 19	Digital 20	47	PD4	--
--	PD5	48	Digital 21	Digital 22	49	PD6	--
--	PI4	67	Digital 23	GND			

Attention to current limit ⚠️ 5V

A0	A8	I16	D0	D8	D16	R0	R8
A1	A9	I17	D1	D9	D17	R1	R9
A2	A10	I18	D2	D10	D18	R2	R10
A3	A11	INO	D3	D11	D19	R3	R11
A4	A12	INI	D4	D12	D20	R4	R12
A5	A13		D5	D13	D21	R5	R13
A6	A14		D6	D14	D22	R6	R14
A7	A15		D7	D15	D23	R7	R15

**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

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

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

Max. 30A  
(Fused by not resettable fuse)

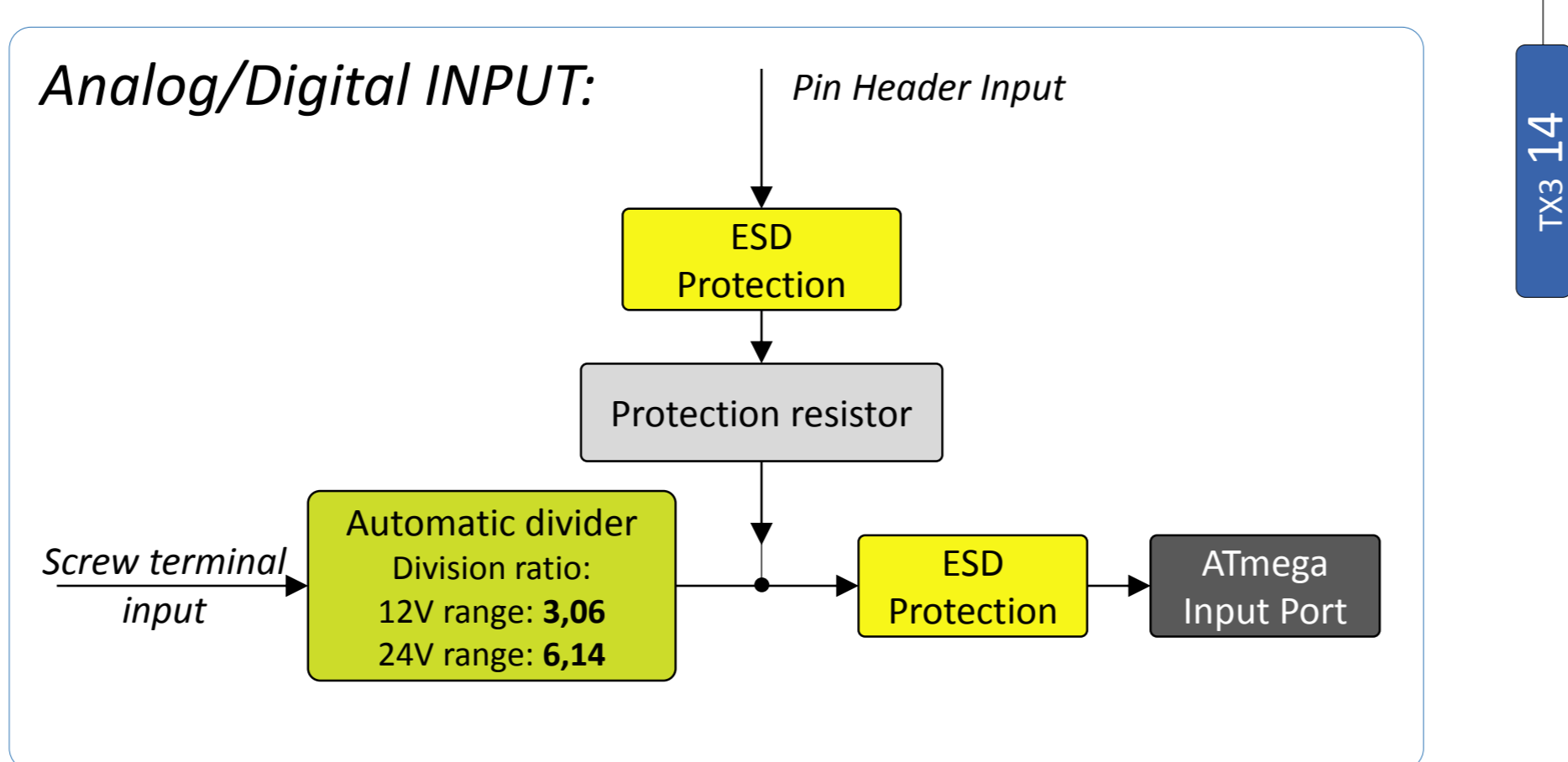
Relay 10	Relay 11	Relay 12	Relay 13	Relay 14	Relay 15
PC5	PC4	PC3	PC2	PC1	PC0
58	57	56	55	54	53
32	33	34	35	36	37

Relay output

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

Relay 0	Relay 1	Relay 2	Relay 3	Relay 4	Relay 5	Relay 6	Relay 7	Relay 8	Relay 9
PA0	PA1	PA2	PA3	PA4	PA5	PA6	PA7	PC7	PC6
78	77	76	75	74	73	72	71	60	59
22	23	24	25	26	27	28	29	30	31

**Signal Inputs**  
Logic "0" level: 0V - 3.6V (V<sub>in</sub>=12V), 0V-7.2V (V<sub>in</sub>=24V)  
Logic "1" level: 9V - 13.2V (V<sub>in</sub>=12V), 18V-26.4V (V<sub>in</sub>=24V)  
Maximum input current <math>< 3mA</math>  
Voltage range in case of analog input use  
0 - 13.2V (V<sub>in</sub>=12V) / 0 - 26.4V (V<sub>in</sub>=24V)



Attention to current limit ⚠️ 5V

22	PA0	78	Relay 0	Relay 1	77	PA1	23
24	PA2	76	Relay 2	Relay 3	75	PA3	25
26	PA4	74	Relay 4	Relay 5	73	PA5	27
28	PA6	72	Relay 6	Relay 7	71	PA7	29
30	PC7	60	Relay 8	Relay 9	59	PC6	31
32	PC5	58	Relay 10	Relay 11	57	PC4	33
34	PC3	56	Relay 12	Relay 13	55	PC2	35
36	PC1	54	Relay 14	Relay 15	53	PC0	37
			N.C.				

Attention to current limit ⚠️ 5V

A6	PF6	91	Analog 6	Analog 7	90	PF7	A7
A8	PK0	89	Analog 8	Analog 9	88	PK1	A9
A12	PK4	93	Analog 12	Analog 13	92	PK5	A13
A14	PK6	83	Analog 14	Analog 15	82	PK7	A15
RESET	/RESET	30	/Reset	Digital 6	17	PH5	8
9	PH6	18	Digital 7	Digital 8	23	PB4	10
11	PB5	24	Digital 9	Digital 10	25	PB6	12
13	PB7	26	Digital 11	Digital 12	42	PL7	42
43	PL6	41	Digital 13	Digital 14	40	PL5	44
45	PL4	39	Digital 15	TXD2	13	PH1	TX2 16
RX2 17	PH0	12	RXD2	3V3	⚠️ Attention to current limit		
			GND	AREF	98	AREF	AREF

RTC

PI2	65	RTC SS	CE
52	PB1	SCK	SCL
51	PB2	MOSI	SDI
50	PE3	MISO	SDO
	PI7	RTC /INT	/INT

RV-2123-C2-TA-QC-020

