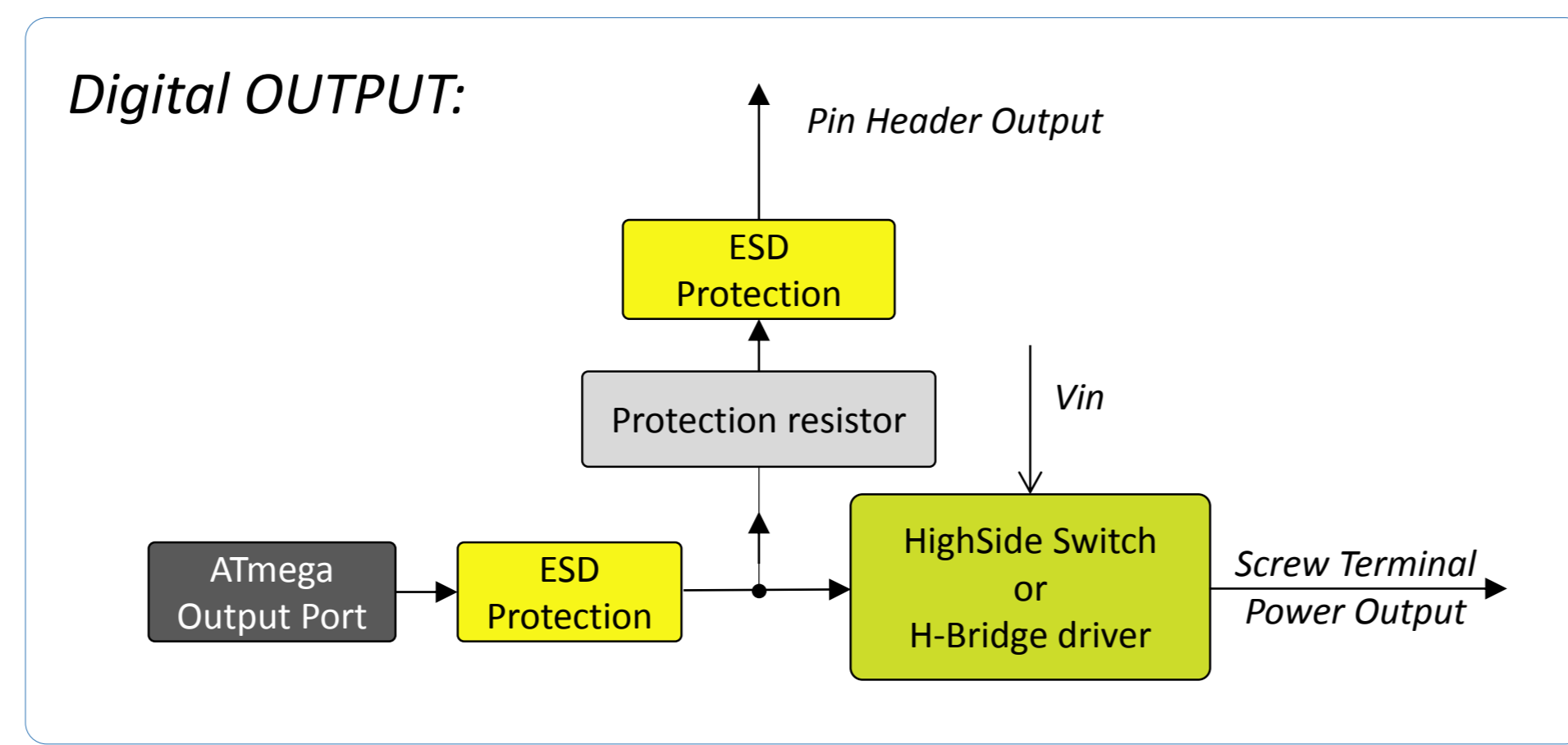




MEGA PINOUT V1.1



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	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																		
PE4	PE5	PG5	PE3	PH3	PH4	PH5	PH6	PB4	PB5	PB6	PB7	PL7	PL6	PL5	PL4	PL3	PL2	PL1	PL0	PD4	PD5	PD6	PD7	PD8	PD9	PD10	PD11	PD12	PD13	PD14	PD15	PD16	PD17	PD18	PD19	PD20	PD21	PD22	PD23	PD24	PD25	PD26	PD27	PD28	PD29	PD30	PD31	PD32	PD33	PD34	PD35	PD36	PD37	PD38	PD39	PD40	PD41	PD42	PD43	PD44	PD45	PD46	PD47	PD48	PD49	PD50	PD51	PD52	PD53	PD54	PD55	PD56	PD57	PD58	PD59	PD60	PD61	PD62	PD63	PD64	PD65	PD66	PD67	PD68	PD69	PD70	PD71	PD72	PD73	PD74	PD75	PD76	PD77	PD78	PD79	PD80	PD81	PD82	PD83	PD84	PD85	PD86	PD87	PD88	PD89	PD90	PD91	PD92	PD93	PD94	PD95	PD96	PD97	PD98	PD99	PD100
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	Digital 24	Digital 25	Digital 26	Digital 27	Digital 28	Digital 29	Digital 30	Digital 31	Digital 32	Digital 33	Digital 34	Digital 35	Digital 36	Digital 37	Digital 38	Digital 39	Digital 40	Digital 41	Digital 42	Digital 43	Digital 44	Digital 45	Digital 46	Digital 47	Digital 48	Digital 49	Digital 50	Digital 51	Digital 52	Digital 53	Digital 54	Digital 55	Digital 56	Digital 57	Digital 58	Digital 59	Digital 60	Digital 61	Digital 62	Digital 63	Digital 64	Digital 65	Digital 66	Digital 67	Digital 68	Digital 69	Digital 70	Digital 71	Digital 72	Digital 73	Digital 74	Digital 75	Digital 76	Digital 77	Digital 78	Digital 79	Digital 80	Digital 81	Digital 82	Digital 83	Digital 84	Digital 85	Digital 86	Digital 87	Digital 88	Digital 89	Digital 90	Digital 91	Digital 92	Digital 93	Digital 94	Digital 95	Digital 96	Digital 97	Digital 98	Digital 99	Digital 100																

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	Digital 24			

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	Digital 24			

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)

OUTPUT: D0-D15, D16-D31, GND, 12V/24V DC, PWM

INPUT: A0-A15, IN0-IN15, GND, +5V

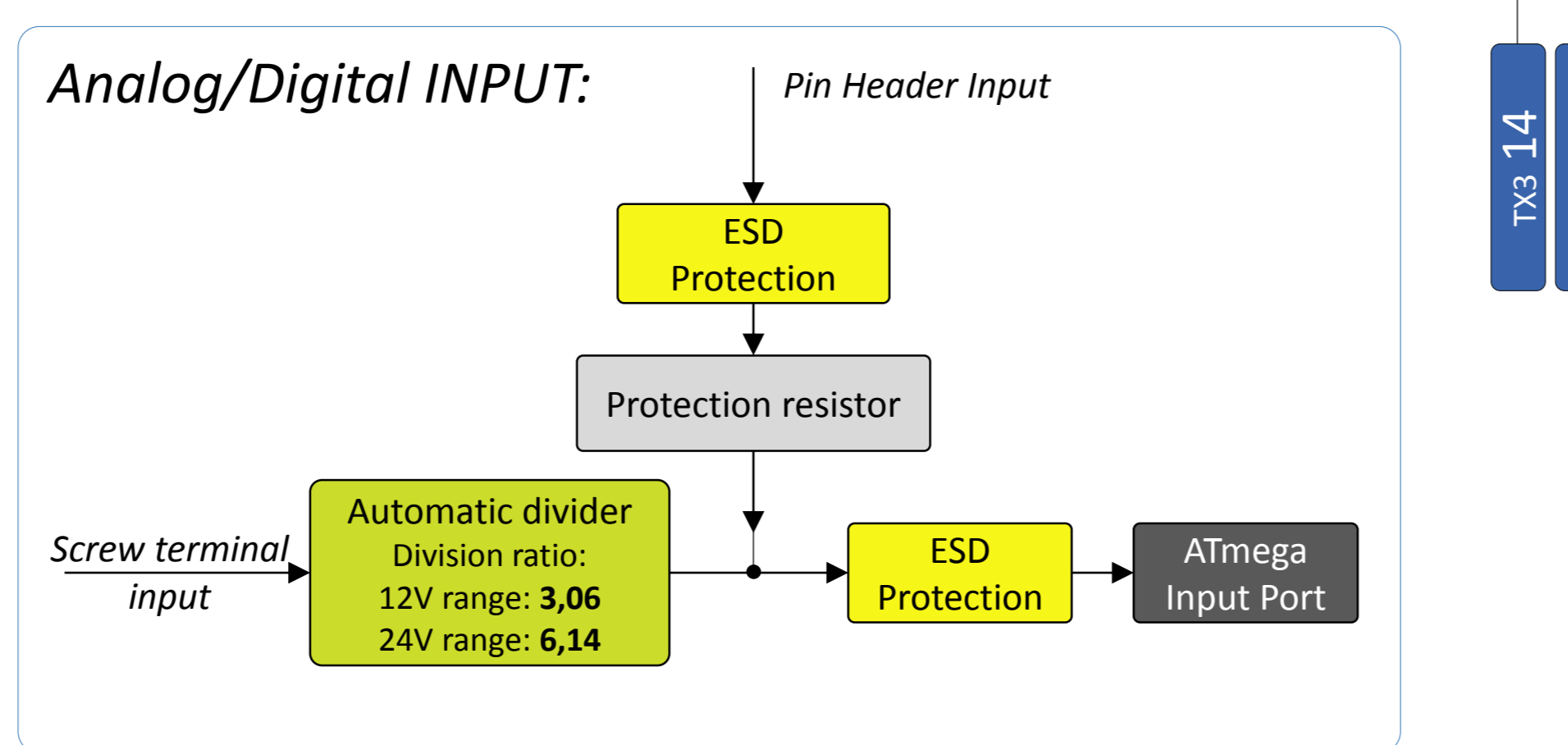
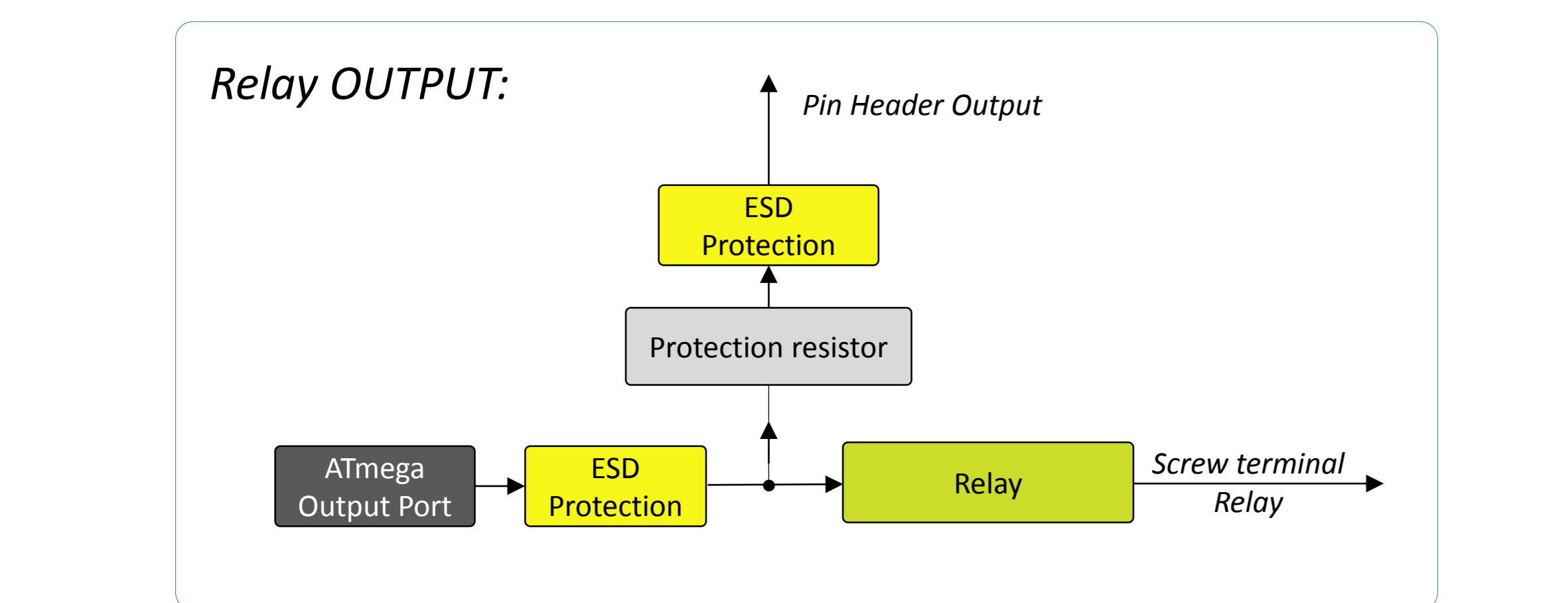
Relay output: R0-R9, CMN, R10-R15, CMN, GND, 12V/24V DC, PWM

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

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 <math>< 3mA</math>
Voltage range in case of analog input use
0 - 13.2V (Vin=12V) / 0 - 26.4V (Vin=24V)

Attention to current limit ⚠️ **5V**

22	PA0	78	Relay 0	Relay 1	77	PA1	23
23	PA1	77	Relay 2	Relay 3	75	PA3	25
24	PA2	76	Relay 4	Relay 5	73	PA5	27
25	PA3	75	Relay 6	Relay 7	71	PA7	29
26	PA4	74	Relay 8	Relay 9	69	PA9	31
27	PA5	73	Relay 10	Relay 11	67	PA11	33
28	PA6	72	Relay 12	Relay 13	65	PA13	35
29	PA7	71	Relay 14	Relay 15	63	PA15	37
30	PC7	60	Relay 16	Relay 17	58	PC7	38
31	PC6	59	Relay 18	Relay 19	56	PC6	40
32	PC5	58	Relay 20	Relay 21	54	PC5	42
33	PC4	57	Relay 22	Relay 23	52	PC4	44
34	PC3	56	Relay 24	Relay 25	50	PC3	46
35	PC2	55	Relay 26	Relay 27	48	PC2	48
36	PC1	54	Relay 28	Relay 29	46	PC1	50
37	PC0	53	Relay 30	Relay 31	44	PC0	52



Attention to current limit ⚠️ **5V**

--	PE7	9	/OVL	LAN /SS	/SCS
--	PI3	66	LAN /SS	SCK	SCL
52	PB1	20	SCK	MOSI	MOSI
51	PB2	21	MOSI	MISO	MISO
50	PB3	22	MISO	LAN /INT	/INT
--	PE6	8	LAN /INT		

ETHERNET
WS100

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

Relay output: R0-R9, CMN, R10-R15, CMN, GND, 12V/24V DC, PWM

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
A10	PK2	87	Analog 10	Analog 11	86	PK3	A11
A12	PK4	85	Analog 12	Analog 13	84	PK5	A13
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		
--			N.C.	AREF	98	AREF	AREF

Attention to current limit ⚠️ **5V**

--	PI2	65	RTC SS	CE			
52	PB1	20	SCK	SCL			
51	PB2	21	MOSI	SDI			
50	PB3	22	MISO	SDO			
--	PI7	79	RTC /INT	/INT			

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

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
A10	PK2	87	Analog 10	Analog 11	86	PK3	A11
A12	PK4	85	Analog 12	Analog 13	84	PK5	A13
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		
--			N.C.	AREF	98	AREF	AREF

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