

## EINSY RAMBO PINS

### Pins

The extension headers are in the format "Extension Name" "Pin Number" "Function". Example: MX1-5 Direc

Pin Number ↕	Pin Number ↕	Arduino Pin Name ↕	Function ↕
1	PG5 ( OC0B )	Digital pin 4 (PWM)	Bed Heater
2	PE0 ( RXD0/PCINT8 )	Digital pin 0 (PWM) (RX0)	USB – serial comms
3	PE1 ( TXD0 )	Digital pin 1 (PWM) (TX0)	USB – serial comms
4	PE2 ( XCK0/AIN0 )	RamboDigital pin 78	
5	PE3 ( OC3A/AIN1 )	Digital pin 5 (PWM)	P2 1
6	PE4 ( OC3B/INT4 )	Digital pin 2 (PWM)	nAC_FAULT, J19 3
7	PE5 ( OC3C/INT5 )	Digital pin 3 (PWM)	Heat 0
8	PE6 ( T3/INT6 )	RamboDigital pin 79	
9	PE7 ( CLK0/ICP3/INT7 )	RamboDigital pin 80	
10	VCC	VCC	VCC
11	GND	GND	GND
12	PH0 ( RXD2 )	Digital pin 17 (RX2)	P3 5
13	PH1 ( TXD2 )	Digital pin 16 (TX2)	P3 3
14	PH2 ( XCK2 )	RamboDigital pin 84	P1 10 (LCD Beeper)
15	PH3 ( OC4A )	Digital pin 6 (PWM)	Fan 2
16	PH4 ( OC4B )	Digital pin 7 (PWM)	
17	PH5 ( OC4C )	Digital pin 8 (PWM)	Fan 1
18	PH6 ( OC2B )	Digital pin 9 (PWM)	P1 9 (LCD BTN Click)
19	PB0 ( SS/PCINT0 )	Digital pin 53 (PWM)(SPI-SS)	J19 5
20	PB1 ( SCK/PCINT1 )	Digital pin 52 (PWM)(SCK)	P2 9, J19 11
21	PB2 ( MOSI/PCINT2 )	Digital pin 51 (PWM)(MOSI)	P2 5, J19 12
22	PB3 ( MISO/PCINT3 )	Digital pin 50(MISO)	P2 10, J19 9
23	PB4 ( OC2A/PCINT4 )	Digital pin 10 (PWM)	Z Min Endstop
24	PB5 ( OC1A/PCINT5 )	Digital pin 11 (PWM)	Y Min Endstop
25	PB6 ( OC1B/PCINT6 )	Digital pin 12 (PWM)	X Min Endstop
26	PB7 ( OC0A/OC1C/PCINT7 )	Digital pin 13 (PWM)	LED
27	PH7 ( T4 )	RamboDigital pin 85	P1 4 (LCD D6)
28	PG3 ( TOSC2 )	RamboDigital pin 71	P1 3 (LCD D7)
29	PG4 ( TOSC1 )	RamboDigital pin 70	P1 5 (LCD D5)
30	RESET	RESET	Reset
31	VCC	VCC	VCC
32	GND	GND	GND
33	XTAL2	XTAL2	XTAL2
34	XTAL1	XTAL1	XTAL1
35	PL0 ( ICP4 )	Digital pin 49	X Direction
36	PL1 ( ICP5 )	Digital pin 48	Y Direction
37	PL2 ( T5 )	Digital pin 47	Z Direction
38	PL3 ( OC5A )	Digital pin 46 (PWM)	
39	PL4 ( OC5B )	Digital pin 45 (PWM)	

40	PL5 ( OC5C )	Digital pin 44 (PWM)	
41	PL6	Digital pin 43	E Direction
42	PL7	Digital pin 42	
43	PD0 ( SCL/INT0 )	Digital pin 21 (SCL)	P3 6
44	PD1 ( SDA/INT1 )	Digital pin 20 (SDA)	P3 8
45	PD2 ( RXDI/INT2 )	Digital pin 19 (RX1)	J19 6
46	PD3 ( TXDI/INT3 )	Digital pin 18 (TX1)	J19 8
47	PD4 ( ICP1 )	RamboDigital pin 81	
48	PD5 ( XCK1 )	RamboDigital pin 82	P1 7 (LCD RS)
49	PD6 ( T1 )	RamboDigital pin 83	
50	PD7 ( T0 )	Digital pin 38	
51	PG0 ( WR )	Digital pin 41	X Chipselect
52	PG1 ( RD )	Digital pin 40	
53	PC0 ( A8 )	Digital pin 37	X Step
54	PC1 ( A9 )	Digital pin 36	Y Step
55	PC2 ( A10 )	Digital pin 35	Z Step
56	PC3 ( A11 )	Digital pin 34	E0 Step
57	PC4 ( A12 )	Digital pin 33	
58	PC5 ( A13 )	Digital pin 32	SPI Flash Chipselect
59	PC6 ( A14 )	Digital pin 31	
60	PC7 ( A15 )	Digital pin 30	
61	VCC	VCC	VCC
62	GND	GND	GND
63	PJ0 ( RXD3/PCINT9 )	Digital pin 15 (RX3)	P2 4 (LCD SD Detect)
64	PJ1 ( TXD3/PCINT10 )	Digital pin 14 (TX3)	P2 6 (LCD BTN_EN1)
65	PJ2 ( XCK3/PCINT11 )	RamboDigital pin 72	P2 8 (LCD BTN_EN2)
66	PJ3 ( PCINT12 )	RamboDigital pin 73	J19 7
67	PJ4 ( PCINT13 )	RamboDigital pin 75	
68	PJ5 ( PCINT14 )	RamboDigital pin 76	P3 9
69	PJ6 ( PCINT 15 )	RamboDigital pin 77	P2 7 (SDSS)
70	PG2 ( ALE )	Digital pin 39	Y Chipselect
71	PA7 ( AD7 )	Digital pin 29	X Enable
72	PA6 ( AD6 )	Digital pin 28	Y Enable
73	PA5 ( AD5 )	Digital pin 27	Z Enable
74	PA4 ( AD4 )	Digital pin 26	E0 Enable
75	PA3 ( AD3 )	Digital pin 25	
76	PA2 ( AD2 )	Digital pin 24	
77	PA1 ( AD1 )	Digital pin 23	
78	PA0 ( AD0 )	Digital pin 22	
79	PJ7	RamboDigital pin 74	
80	VCC	VCC	VCC

81	GND	GND	GND
82	PK7 ( ADC15/PCINT23 )	Analog pin 15 (69)	Y Diag
83	PK6 ( ADC14/PCINT22 )	Analog pin 14 (68)	Z Diag
84	PK5 ( ADC13/PCINT21 )	Analog pin 13 (67)	Z Chipselect
85	PK4 ( ADC12/PCINT20 )	Analog pin 12 (66)	E Chipselect
86	PK3 ( ADC11/PCINT19 )	Analog pin 11 (65)	E Diag
87	PK2 ( ADC10/PCINT18 )	Analog pin 10 (64)	X Diag
88	PK1 ( ADC9/PCINT17 )	Analog pin 9 (63)	
89	PK0 ( ADC8/PCINT16 )	Analog pin 8 (62)	P3 10
90	PF7 ( ADC7/PCINT15 )	Analog pin 7 (61)	P1 8 (LCD Enable)
91	PF6 ( ADC6/PCINT14 )	Analog pin 6 (60)	
92	PF5 ( ADC5/TMS )	Analog pin 5 (59)	P1 6 (LCD D4)
93	PF4 ( ADC4/TMK )	Analog pin 4 (58)	
94	PF3 ( ADC3 )	Analog pin 3 (57)	Z Probe Thermistor
95	PF2 ( ADC2 )	Analog pin 2 (56)	Thermistor 2
96	PF1 ( ADC1 )	Analog pin 1 (55)	Thermistor 1
97	PF0 ( ADC0 )	Analog pin 0 (54)	Thermistor 0
98	AREF	Analog Reference	
99	GND	GND	GND
100	AVCC	VCC	VCC