

H8 WizNET GPIO PCB Bill of Materials

Board Rev "D"

References	Value	Description	Quantity	Notes
C1, C4, C8, C10, C12, C15, C16, C19, C21, C106, C107, C201, C202, C203, C204, C205, C206, C207, C208, C209, C210, C212, C213, C214, C215, C216, C302, C303	0.1uf	Ceramic, 50v, 0.1"	28	
C101	.47uf	Ceramic, 50v, 0.1"	1	
C103, C104, C105, C108	1uf	Ceramic, 50v, X7R, 0.1"	4	
C2, C6	10uf	>=25v, radial, 0.1", Al-polymer or tantalum	2	
C211	22pf	Ceramic, 50v, 0.1"	1	
C5, C7, C102	33uf	>=25v, radial, 3.50mm, Al-polymer or tantalum	3	
D2	5VA	3mm Blue	1	[1]
D201	SS-A	3mm Blue	1	[1]
D202	SS-B	3mm Blue	1	[1]
D203	SS-C	3mm Blue	1	[1]
D204	SS-D	3mm Blue	1	[1]
D3	3.3VA	3mm Blue	1	[1]
D102	READ	3mm Green	1	[1]
D101	WRITE	3mm Red	1	[1]
D105	SPI	3mm Red	1	[1]
D1	5V	5mm Green	1	[1]
D103, D104	1N5819	D041	2	
F1	1.1A	BelFuse 0ZRR0110FF1A	1	
F301	0.5A	BelFuse 0ZRR0050FF1E	1	
JP201	NVRAM_WP	1x2 male header	1	
JP203	MISO_PU	1x2 male header	1	
JP204	OFF	1x2 male header	1	
JP205, JP206	ON	1x2 male header	2	
JP301	EN	1x2 male header	1	
J316, J321	SPI	1x3 male header	2	
J318, J322	I2C	1x3 male header	2	
J319, J320	I2C-SPI	1x3 male header	2	
JP1	READ	1x3 male header	1	

JP2	WRITE	1x3 male header	1
JP202	NVRAM_VCC	1x3 male header	1
J305	/INT1A	1x4 male header	1
J306	/INT1B	1x4 male header	1
J307	/INT2A	1x4 male header	1
J308	/INT2B	1x4 male header	1
J310, J311, J312	H8INT	1x4 male header	3
J201	WizNET-L	1x6 female socket header	1
J202	WizNET-R	1x6 female socket header	1
J313	3V	1x6 male header	1
J314	PPE_SEL	1x6 male header	1
J315	5V	1x6 male header	1
J103	+5VA	1x8 male header	1
J104	GND	1x8 male header	1
J11	RB-E	2x10 male header	1
J16	RB-F	2x10 male header	1
J207	MISO	2x3 male header	1
J203	WizNET	2x4 male header	1
J205	RDY-INP	2x4 male header	1
J317	I2C IN	Molex KK254, 22-23-2041 (1x4)	1
J303	Cascade IRQ	Molex KK254, 22-23-2051 (1x5)	1
J204	SPI-3	Molex KK254, 22-23-2061 (1x6)	1
J206	SPI-5	Molex KK254, 22-23-2061 (1x6)	1
J10	OUT-E	Molex KK254, 22-23-2101 (1x10)	1
J12	IN-E	Molex KK254, 22-23-2101 (1x10)	1
J15	OUT-F	Molex KK254, 22-23-2101 (1x10)	1
J18	IN-F	Molex KK254, 22-23-2101 (1x10)	1
J301	1B	Molex KK254, 22-23-2101 (1x10)	1
J302	1A	Molex KK254, 22-23-2101 (1x10)	1
J304	2A	Molex KK254, 22-23-2101 (1x10)	1
J309	2B	Molex KK254, 22-23-2101 (1x10)	1
J3	H8_Bus_High	Molex/Samtec 25-pin right angle	1
J4	H8_Bus_Low	Molex/Samtec 25-pin right angle	1
Q201, Q301, Q302	2N3904	TO-92	3

R3	180	0.25w axial 5%	1	
R1, R2, R208, R209, R210, R211	330	0.25w axial 5%	6	
R103, R104, R107	330	0.25w axial 5%	3	
R101, R102, R212, R213	10K	0.25w axial 5%	4	
R201, R203, R204, R206	10K	0.25w axial 5%	4	
R105, R106	120K	0.25w axial 5%	2	
R205	2.2K	0.25w axial 5%	1	
R202	3.3K	0.25w axial 5%	1	
R304, R306	4.7K	0.25w axial 5%	2	
R207	47K	0.25w axial 5%	1	
R303, R305	47K	0.25w axial 5%	2	
RN2, RN3, RN102, RN103, RN201	10K	SIP Array, Bourns 4609X-101-103 (1x9, 8 res)	5	[4]
RN301, RN302	10K	SIP Array, Bourns 4605X-101-103 (1x5, 4 res)	2	
TP201	CNTR_MR	Keystone 5005-5009 Compact Testpoint	1	[5]
TP202	SCLK-DIS	Keystone 5005-5009 Compact Testpoint	1	[5]
TP203, TP205, TP206, TP207	GND	Keystone 5005-5009 Compact Testpoint	4	[5]
TP204	/CE	Keystone 5005-5009 Compact Testpoint	1	[5]
U209	25LCxxx	DIP-8	1	
U214, U215	74AHCT125	DIP-14	2	
U9, U13	74ALS574	DIP-20	2	[7]
U206	74F02	DIP-14	1	[2]
U210	74F04	DIP-14	1	[2]
U1	74F14	DIP-14	1	[2]
U211	74F161	DIP-16	1	[2]
U6, U212	74F74	DIP-14	2	[2]
U102, U104	74LS123	DIP-16	2	
U204	74LS125	DIP-14	1	
U207	74LS164	DIP-14	1	
U205	74LS165	DIP-16	1	
U203	74LS175	DIP-16	1	
U208	74LS31	DIP-16	1	
U2, U202	74LS540	DIP-20	2	
U11, U14	74LS541	DIP-20	2	
U105	74LS640	DIP-20	1	

U8, U201	GAL16V8	DIP-20	2	
U101	LM3940	or switching equivalent - confirm pinout!	1	[3]
U5, U7	LM7805	or switching equivalent	2	
U302, U303	MCP23x17	DIP-28 (0.3")	2	[6]
U213	TXB0104	Adafruit 1875	1	
		WizNET850io Module	1	
		Jumper shunts	as reqd	[8]
IC Sockets		DIP-8	1	
		DIP-14	9	
		DIP-16	6	
		DIP-20	9	
		DIP-28 (0.3")	2	
		H8 PCB mounting bracket/heat sink	1	
		Hardware to attach regulators, bracket	as reqd	

Notes:

- [1] Size and color of LEDs is at builder's discretion
- [2] Do not substitute for "F" series chips
- [3] Note pinout order carefully if substituting
- [4] Your application may not require pull-ups on output ports
- [5] SPI testpoints are at builder's discretion
- [6] MCP23S17 for SPI, MCP23017 for I2C
- [7] Output latches could be families LS, ALS, HCT, AHCT, AS. Select based on desired output current capability (see notes on schematic).
- [8] Can use 2x3, 2x5, 2x6 or 2x10 shunts if desired.