

Bill of Materials (Design)

Prod. Num. PropNET Module
 Prod. Name PropNET Module
 Revision: 0
 Updated: 2/16/2010 (Timothy D. Swieter)

PRINT ON A3 OR SIMILAR

Qty	Part	Description	Designator	Package	Rating	RoHS	Substitution	Manufacturer	Mfg Part #	Distributor	Dist. Part #	Data sheet link	Cost Budget*	Unit
1	Printed Circuit Board	4 layer, 1.6mm thick, 3.8" x 2.5"												
Ethernet module														
1	WIZ812MJ	W5100 plug-in module with 0.1" headers and RJ-45 jack NOTE: The WIZ811MJ can be used, but DON'T populate the LINK, TX, and RX LEDs	M1 or WIZ812MJ	TH: custom DIL, 0.1"		RoHS	3	WIZnet	WIZ812MJ	Saelig	WIZ812MJ	http://www.wiznet.co.kr/en/pro02.php?&ssl2l=2&page=1&num=91	\$ 19.500	Each
2	2x20 0.1" socket	sockets for mounting the WIZ812MJ - recommended	M1-1 and M1-2	TH: 2x20 0.1"									\$ -	Each
3	Yellow LED	LED 3.0mm, yellow. Any color can be used, adjust resistor accordingly	LINK, TX, RX LED	TH									\$ -	Each
3	330 Ω	Resistor, adjust size larger/smaller for intensity decrease/increase	R1, R2, R3	TH	5%, 1/8W								\$ -	Each
uSD Card module														
1	micro-SD Card Adapter	micro-SD card adapter with 0.1" SIL header	M2 or microSD adapter	TH: SIL, 0.1"		RoHS	3	Parallax	32312	Parallax	32312	http://www.parallax.com/StoreSearchResults/tabid/768/txtSearch/microSD/List/0/SortField/	\$ 14.990	Each
2	1x9 0.1" socket	sockets for mounting and supporting micro-SD adapter	J5, J6 or microSD adapter	TH: SIL, 0.1"									\$ -	Each
Time circuit														
1	S-35390A	RTC I2C interface	U3	SMD: 8-SOP		RoHS	1	Seiko Instruments	S-35390A-J8T1G	Digi-Key	728-1006-1-ND		\$ -	Each
1	Crystal	32.7680 KHz, 6.0 pF crystal	Q1	TH		RoHS	1	Epson Toyocom Corp	C-002RX 32.7680K-E-PBFFREE	Digi-Key	SER3205-ND		\$ 0.320	Each
1	0.1uF	Capacitor, ceramic	C1	TH									\$ -	Each
1	0.33F	Capacitor, superl Vertical mount	C2	TH	20%, 80%, 5.5V	RoHS	3	Panasonic	EEC-S0HD334V	Digi-Key	P11065-ND		\$ 1.850	Each
1		Diode	D1	TH									\$ -	Each
One-Wire circuit														
1	DS2502-E48+	EPROM IC Node address with 48-Bit MAC ID, or any 1-wire device	U1	TH: TO-92		RoHS	2	Maxim	DS2502-E48+	Digi-Key	DS2502-E48+-ND		\$ 3.920	Each
1		other 1-wire device	U2	TH: TO-92									\$ -	Each
1	4.7K Ω	Resistor, for pull-up on one-wire bus - if needed	R9	TH	5%, 1/8W								\$ -	Each
User Interface														
1	Tactile Switch	Switch, momentary	S1	TH									\$ -	Each
1	330 Ω	Resistor	R4	TH	5%, 1/8W								\$ -	Each
1	100K Ω	Resistor	R5	TH	5%, 1/8W								\$ -	Each
1	10.0K Ω	Resistor	R6	TH	5%, 1/8W								\$ -	Each
1	Yellow LED	LED 3.0mm, yellow. Any color can be used, adjust resistor accordingly	LED	TH									\$ -	Each
I/O Interface														
2	1x4 0.1" header/socket	for expansion - optional	J1, J2	TH									\$ -	Each
2	1x16 0.1" header/socket	for expansion - optional	J3, J4	TH									\$ -	Each
2	4.7K Ω	Resistor, for pull-up of Rx/Tx on serial interace - optional	R7, R8	TH	5%, 1/8W								\$ -	Each
1	2x6 2mm header/socket	for MoBo expansion - optional	J7	TH		RoHS	2	Hirose	DF11-12DS-2DSA(05)	Digi-Key	H10172-ND		\$ 1.290	Each
For Reference														

33 Total Parts

1: Yes, no approval required - must match specifications
 2: Yes, approval required
 3: No way Jose!

*Based on 1 piece