

Bill Of Materials

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Design: MPSZ for DH

Doc. no.: <NONE>

Revision: 2.1

Author: JHM

Created: 15/09/08

Modified: 16/12/11

QTY	PART-REFS	VALUE	CODE
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Resistors			

4	R1,R8,R12,R41	10k	
18	R2,R3,R7,R16,R17, R21,R24-R32,R38, R46,R58	2k	
8	R4-R6,R34,R37,R39, R47,R50	20k	
2	R9,R42	100	
1	R10	3k	
1	R11	100k	
1	R13	750	
2	R14,R45	470k	
8	R15,R22,R23,R40, R43,R44,R48,R49	1k	
1	R18	9.1k	
1	R19	2k21	
1	R20	4k7	
1	R33	1M	
3	R35,R36,R54	300	Digikey 311-470KETR-ND
1	R51	68K	Digikey 311-470KETR-ND
1	R52	10K	Digikey 311-470KETR-ND
1	R53	470k	Digikey 311-470KETR-ND
1	R55	16k	
1	R56	8k	
1	R57	4k	
1	R59	R0	
Capacitors			

2	C1,C5	220u	Maplin KQ71N
9	C2,C3,C13,C17,C19, C21,C27-C29	100n	Farnell 499-705
1	C4	220u	Maplin DT70M
2	C7,C8	15p	Farnell 499-353
4	C9,C10,C18,C20	1n	Farnell 499-705
1	C11	100n	Farnell 499-389
2	C12,C35	100n	Farnell 499-390
1	C14	1n	Farnell 499-328
3	C15,C34,C36	1u	Farnell 578-265
2	C30,C31	1n	Farnell 578-265
2	C37,C38	15p	Digikey 311-1153-1-ND
1	C39	22n	Digikey 311-1153-1-ND
1	C40	3n3	Digikey 311-1153-1-ND
Integrated Circuits			

1	U1	PIC18F2520	
1	U2	LM293	
1	U3	7805	
2	U4,U8	ULN2003A	
1	U5	HIP9011AB	
2	U6,U7	H11L1M	

Transistors

1 Q1 BC847B
1 Q2 IRF9530
1 Q3 KSE340STU

Diodes

6 D1,D2,D4,D9,D13,D16 1N5231B
2 D3,D7 LL4148
1 D5 CE
1 D6 BAS86
1 D8 SHOTKY
4 D10-D12,D15 BAT54S
1 D18 5V6

Miscellaneous

5 .60-2,DF,DH,DUI, PIN
MODE
1 FU1 FSMD010-1210
1 J1 CONN-D9F
2 J3,J4
1 MAP MPX4115
1 TTL CONN-SIL4
1 X1 8MHz
1 X2 4MHz