

91.305 digital experiment kit part listing

FULL PART LISTING OF COMPONENTS IN 91.305 KIT

Parts for assembly of UML305DEV printed circuit board

Qty	Value	Device	Parts	Catalog	\$\$Each
4		pushbutton sw	S1, S2, S3, S4	SW400-ND	0.15
1		DIP switch	S5	CT2084-ND	0.76
1		DB9 jack	J1	182-09F-ND	0.7
1		strip header	SV1, SV2, SV3, SV4	929974-01-36-ND	1.87
2	1K	resistor pack	RN1, RN2	770-101-R1K-ND	0.263
3	1K	1/4W resistor	R2, R4, R6	1.0KQBK-ND	0.01945
1	2.2K	1/4W resistor	R5	2.2KQBK-ND	0.01945
2	10K	1/4W resistor	R7, R8	10KQBK-ND	0.01945
2	47K	1/4W resistor	R1, R3	47KQBK-ND	0.01945
2	2N3904	NPN transistor	Q1, Q4	2N3904-ND	0.1584
2	2N3906	PNP transistor	Q2, Q3	2N3906-ND	0.1584
1	4AA	battery holder	BATT1	2477K-ND	1.013
1	0.1uF	capacitor	C6	80-C320C104M1U	0.1
4	10uF	electrolytic cap	C1, C2, C3, C4	P807-ND	0.1209
1	47uF	electrolytic cap	C5	P802-ND	0.193
1	1N4001	diode	D1	1N4001DICT-ND	0.1
2	HLMP1700	LED3MM (red)	LED10, LED12	HLMP1700-ND	0.1826
10	HLMP1790	LED3MM (green)	LED1-9, LED11	HLMP1790-ND	0.1826
1	MAX232	serial transceiver	IC1	MAX232CPE 25ct	1.05
1	DIP1	DIP socket	DIP1	AE8916-ND	0.288
1	PIEZOP9924	piezo beeper	X1	P9924-ND	1.525
1	SW101	slide switch	SW6	SW101-ND	1.129
1		PCB	uml305dev printed circuit board (PCB)		7

Other parts for experiment use

2		solderless breadboard		BP8011-71	6.25
1		MC68HC11E1 processor (DIP)		MC68HC11E1CP2	7.533
1		32K static RAM		K6E0808C1E-JC12000	1.138
2		74HC00 quad 2-input NAND gates		SN74HC00N	0.143
1		74HC02 quad 2-input NOR gates		SN74HC02N	0.143
2		74HC04 hex inverters		SN74HC04N	0.149
1		74HC08 quad 2-input AND gates		SN74HC08N	0.143
1		74HC10 triple 3-input NAND gates		74HC10N	0.135
1		74HC30 8-input NAND gate		SN74HC30N	0.142
1		74HC51 dual AND-OR-INVERT gate		511-M74HC51	0.34
1		74HC73 quad JK flip-flop		SN74HC73N	0.243
1		74HC86 quad 2-input XOR gates		SN74HC86N	0.155
1		74HC133 13-input NAND gate		511-M74HC133	0.34
1		74HC393 dual 4-bit binary counter		SN74HC393N	0.27
2		74HC541 input buffer		74HC541N	0.236
1		74HC573 transparent latch		SN74HC573N	0.243
1		74HC574 output latch		SN74HC574N	0.243
1		mystery chip, 74HCxx, 14 pins			
1		mystery chip, 74HCxx, 16 pins			
1		mystery chip, 74HCxx, 20 pins			
1		ceramic resonator	8 MHz resonator w/caps for 68HC11	X905-ND	0.585
2			6v, 70 mA lamp	25-1365	0.15

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2	2N3904	2N3904	NPN transistors (lamps)	2N3904-ND	0.1584
3	10K	1/4W resistor	resistors for transistor ckts (base drive), oscillator	4.7KQBK-ND	0.01945
1	10uF	electrolytic cap	capacitor for building oscillator	P807-ND	0.1209
4	HLMP1700	LED3MM (red)	extra LEDs	HLMP1700-ND	0.1826
4	1K	1/4W resistor	resistors extra LEDs	1.0KQBK-ND	0.01945
6	0.1uF	capacitor	general-purpose bypass cap	80-C320C104M1U	0.1
1			wire cutter	22-555	3.63
1			project box		
4			AA cells	P107-ND	0
1			parts box	21-4431	2.49
1			hookup wire, red	C2004R-1000-ND	
1			hookup wire, black	C2004B-1000-ND	
1			hookup wire, white	C2004W-1000-ND	