

# Bill Of Materials for Fuente de Laboratorio

**Design Title** Fuente de Laboratorio  
**Author** Enrique Walter Philippeaux  
**Document Number** 1  
**Revision** 1.3  
**Design Created** lunes, 28 de agosto de 2017  
**Design Last Modified** lunes, 4 de septiembre de 2017  
**Total Parts In Design** 127

## 32 Capacitors

<u>Quantity</u>	<u>References</u>	<u>PCB Package</u>	<u>Value</u>	<u>Unit Cost</u>
3	C1, C25, C26	ELEC-RAD10	1uF	\$0,03
2	C2, C6	ELEC-RAD20	1000uF	\$0,31
6	C3, C17, C18, C23, C24, C29	CAP20	100nF	\$0,02
6	C4, C7, C8, C30, C31, C32	ELEC-RAD30	4700uF	\$0,63
3	C5, C9, C10	ELEC-RAD30	4700uF	\$1,27
10	C11, C12, C13, C14, C15, C16, C19, C20, C21, C22	ELEC-RAD10	100uF	\$0,04
2	C27, C28	CAP10	22pF	\$0,01
Sub-totals:				\$8,94

## 45 Resistors

<u>Quantity</u>	<u>References</u>	<u>PCB Package</u>	<u>Value</u>	<u>Unit Cost</u>
5	R1, R2, R9, R14, R19	RES-3W	1R	\$0,19
8	R3, R4, R27, R28, R30, R31, R32, R45	RES-1/4W	10k	
2	R5, R6	RES-1/4W	20k	
14	R7, R8, R10, R12, R15, R17, R20, R22, R24, R35, R37, R42, R43, R44	RES-1/4W	1k	
6	R11, R13, R16, R18, R21, R23	RES-1/4W	4k	
3	R25, R26, R29	RES-1/4W	4.7k	
3	R33, R34, R41	RES-1/4W	100	
2	R36, R38	RES-1/4W	2.2k	
2	R39, R40	RES-1/4W	470	
Sub-totals:				\$0,95

## 12 Integrated Circuits

<u>Quantity</u>	<u>References</u>	<u>PCB Package</u>	<u>Value</u>	<u>Unit Cost</u>
2	U1, U2	TO220	LM317T	\$0,56
1	U3	DIL14	LM324	\$0,28
1	U4	TO92	MCP1541	\$1,17
2	U5, U6	P1	7805	
2	U7, U8	P1	7812	
1	U9	P1	7912	\$0,46
1	U10	DIL40	PIC16F887	
1	U11	DIL08	MCP4921	\$3,73
1	U12	DIL08	LM741	
Sub-totals:				\$6,77

## 5 Transistors

<u>Quantity</u>	<u>References</u>	<u>PCB Package</u>	<u>Value</u>	<u>Unit Cost</u>
5	Q1, Q2, Q3, Q4, Q5	TO92	2N2222A	
Sub-totals:				\$0,00

## 15 Diodes

<u>Quantity</u>	<u>References</u>	<u>PCB Package</u>	<u>Value</u>	<u>Unit Cost</u>
7	D1, D3, D5, D6, D8, D9, D10	DIODE30	1N4007	
5	D2, D4, D7, D11, D12	DO41	1N4733A	
2	D13, D14	LED	LED	
1	D15	DO35	BZX55C3V0RL	
Sub-totals:				\$0,00

## 18 Miscellaneous

<u>Quantity</u>	<u>References</u>	<u>PCB Package</u>	<u>Value</u>	<u>Unit Cost</u>
1	B1	CONN-SIL5	BOTONERA	
3	BR1,BR2,BR3	BRIDGE1	BRIDGE	\$0,72
2	FU1,TRAFO1	NULL		
1	HC1	CONN-SIL6	HC-05	
1	J1	SIL-156-08	TRAFO	
1	J2	HEADER-1X6	ICSP	
1	J3	SIL-100-04	FAN	
1	J4	SIL-100-04	RGB	
1	LCD1	LCD16X2	LM016L_BL	
1	RENC1	CONN-SIL3	ROTARY_ENCODER	
1	RL1	RLY-OMRON-C4	G5CLE-14-DC5	
3	RV1,RV2,RV3	PRE-SQ1	100K	
1	X1	XTAL18	20MHz	\$0,56
Sub-totals:				\$2,71

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Totals: \$19,38

*lunes, 4 de septiembre de 2017 9:23:21 a. m.*