

Bill Of Materials for 3chLCDVIDEO

27 Capacitors

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Description</u>
17	C1-C2,C5-C7,C10-C12,C14,C18-C23,C26-C27	0.1u	CAP SMD1206
6	C3-C4,C13,C17,C24-C25	0.68u	CAP SMD1206
2	C8-C9	10u	Electrolytic Capacitor, Miniature, 10 μ F, 25 V, ML Series, \pm 20%, Radial Leaded, 4 mm
2	C15-C16	47u	Electrolytic Capacitor, Miniature, 10 μ F, 25 V, ML Series, \pm 20%, Radial Leaded, 4 mm

Sub-totals:

50 Resistors

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Description</u>
1	R1	3k3	Through Hole Resistor 1/10W 1%
19	R2,R4,R6-R8,R10-R11,R14,R16,R19,R21-R23,R25,R36,R38,R161,R171,R241	10k	SMD1206 Resistor 1/10W 1%
4	R3,R5,R9,R20	100k	SMD1206 Resistor 1/10W 1%
9	R12-R13,R28-R29,R35,R37,R39,R81,R91	680	SMD1206 Resistor 1/10W 1%
3	R15,R24,R191	5K6	SMD1206 Resistor 1/10W 1%
3	R17,R26,R181	5k6	SMD1206 Resistor 1/10W 1%
3	R18,R27,R291	47K	SMD1206 Resistor 1/10W 1%
3	R30,R33,R101	6K8	SMD1206 Resistor 1/10W 1%
1	R31	100	SMD1206 Resistor 1/10W 1%
3	R32,R34,R131	3K3	SMD1206 Resistor 1/10W 1%
1	R141	33K	SMD1206 Resistor 1/10W 1%

Sub-totals:

12 Integrated Circuits

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Description</u>
5	U1,U3-U4,U6,U12	AD822AP	Dual, Single Supply, Precision, Rail-To-Rail,Low Power, FET-Input Operational Amplifier (1.9MHz, 3V/us, 3V-36V)
3	U2,U5,U7	LM35	Precision Centigrade Temperature Sensor (-55C to 150C)
1	U8	IRM-05-15S	AC/DC PCB Mount Power Supply (PSU), ITE, 1 Output, 5 W, 15 V, 330 mA
1	U9	ICL7660	Switched-Capacitor Voltage Converters.
1	U10	ATMEGA8	8 KBytes Flash, 1088 Bytes SRAM, 512 Bytes EEPROM, ADC, Analog Comparator, TWI, SPI, 3 Ports, 3 Timers, 1 USART
1	U11	7805	5V Fixed 1A Positive Power Supply Regulator.

Sub-totals:

4 Transistors

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Description</u>
3	Q1,Q3-Q4	MPSA06	Silicon NPN Low Power Bipolar Transistor (625mW, 150cC)
1	Q2	BC857A	PNP Silicon Planar General Purpose Transistor

Sub-totals:

8 Diodes

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Description</u>
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3	D1-D2,D10	D10	Silicon Rectifier. Maximum Recurrent Peak Reverse Voltage 50V. Maximum Average Forward Rectified Current 1.0A
1	D3	1N4740A	10V 25mA Zener Diode
1	D9	BAT81	Small Signal Schottky Diode, Single, 40 V, 30 mA, DO35
3	D12-D14	LED-RED	LED 5MMI (Red)

Sub-totals:

51 Miscellaneous

<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>Description</u>
1	LCD2	LM016L	16x2 Alphanumeric LCD
3	RL1-RL3	12V	RT424012 Power Relay, DPDT, 12 VDC, 8 A, RT2 Series, Through Hole,
3	RV1,RV4,RV6	11k	Rotary Potentiometer, Carbon, 10 kohm, 1 Turns, Linear, 50 mW, $\pm 20\%$, PTV09A Series
3	RV2-RV3,RV41	10k	Trimmer Potentiometer, 10 kohm, 1 Turns, Through Hole
3	RV5,RV7,RV21	10k	Rotary Potentiometer, Carbon, 50 kohm, 1 Turns, Linear, 50 mW, $\pm 20\%$, PTV09A Series
6	SW2-SW7	TL 46P 0	Lever switch, DPDT TL series, 2x ON - ON
32	X1-X32	CONN-SIL2	MKDSN1,5/2-5,08

Sub-totals:

Totals: