

**Bill of Materials**  
**for**  
**LME49830 EF125WT1 Reference Design**

6/19/2008

Assembly Notes:

- No special considerations.

Reference	Value	Tolerance	Type/Description	Manufacturer	Part Number
C <sub>S1</sub> , C <sub>S2</sub> , C <sub>S3</sub> , C <sub>S4</sub> , C <sub>S10</sub> , C <sub>S11</sub> , C <sub>S9</sub> , C <sub>SN1</sub>	0.1μF	10%	250V, metalized polyester film, 7.5mm lead spacing	Panasonic	ECQ-E2104KF
C <sub>S7</sub> , C <sub>S8</sub>	470μF	20%	100V, radial electrolytic, 7.5mm lead spacing	Panasonic	EEU-FC2A471
C <sub>C1</sub>	20pF	5%	500V multilayer mica, 3.6mm lead spacing	CDE Cornell Dubilier	CD15ED200J03
C <sub>B1</sub>	30pF	5%	500V multilayer mica, 3.6mm lead spacing	CDE Cornell Dubilier	CD15ED300J03
C <sub>B2</sub> , C <sub>M</sub>	47μF	20%	16V, radial electrolytic, 2mm lead spacing	Panasonic	EEU-FC1C470
C <sub>I1</sub>	220μF	20%	35V radial electrolytic, 3.5mm lead spacing	Panasonic	EEU-FC1V221L
C <sub>T</sub>	180pF	10%	Polyester film, 5mm lead spacing	Panasonic	ECQ-B1H181KF
C <sub>C2</sub> , C <sub>I2</sub> , C <sub>I3</sub>			Not Used		
D <sub>1</sub>	12V	5%	500mW Zener Diode, DO-35	Fairchild Semiconductor	1N5242BTR
D <sub>G1</sub> , D <sub>G2</sub> , D <sub>G3</sub> , D <sub>G4</sub> , D <sub>G5</sub> , D <sub>G6</sub> , D <sub>G7</sub> , D <sub>G8</sub>	10V	5%	1W Zener diode, DO-41	Fairchild Semiconductor	1N4740A
U <sub>1</sub>	200V		Complementary MOSFET power amplifier input stage	National Semiconductor	LME49830TB
Q <sub>VBE1</sub>	80V 1.5A		NPN transistor, TO-126	Fairchild Semiconductor	BD13916STU
Q <sub>1</sub> , Q <sub>3</sub>	200V 12A		N-Channel MOSFET, 150W, TO-3PL (2-21F1B)	Toshiba	2SK1530-YF
Q <sub>2</sub> , Q <sub>4</sub>	200V 12A		P-Channel MOSFET, 150W, TO-3PL (2-21F1B)	Toshiba	2SJ201-YF
R <sub>SN1</sub>	10Ω	5%	3 Watt metal oxide, axial through hole	Vishay/BCcomponents	NFR0300001009JAC00
R <sub>G1</sub> , R <sub>G3</sub>	22.1Ω	1%	¼ Watt metal film, axial through hole	International Yageo Corp.	MFR-25FBF-22R1

$R_{G2}, R_{G4}$	10.0 $\Omega$	1%	¼ Watt metal film, axial through hole	International Yageo Corp.	MFR-25FBB-10R0
$R_{E1}, R_{E2}, R_{E3}, R_{E4}$	0.1 $\Omega$	1%	5 Watt silicone wirewound, through hole	Vishay/Dale	RS005R1000FS73
$R_{C2}$	0 $\Omega$	5%	¼ Watt metal film, SMT 1206 (3216)	Panasonic	ERJ-S080R00V
$R_{B1}$	392 $\Omega$	1%	¼ Watt metal film, axial through hole	International Yageo Corp.	MFR-25FBB-392R
$R_{B2}$	750 $\Omega$	1%	¼ Watt metal film, axial through hole	International Yageo Corp.	MFR-25FBB-750R
$R_{B3}$	1.10k $\Omega$	1%	¼ Watt metal film, axial through hole	International Yageo Corp.	MFR-25FBB-1K10
$R_{P1}$	200 $\Omega$	25%	0.2 Watt single turn potentiometer, through hole	Bourns Inc.	3306W-1-201
$R_{IN}, R_I$	249 $\Omega$	1%	¼ Watt metal film, axial through hole	International Yageo Corp.	MFR-25FBB-249R
$R_T, R_{F1}$	6.81k $\Omega$	1%	¼ Watt metal film, axial through hole	International Yageo Corp.	MFR-25FBB-6K81
$R_{M1}$	75.0k $\Omega$	1%	¼ Watt metal film, axial through hole	International Yageo Corp.	MFR-25FBB-75K0
$R_{M2}$	20.0k $\Omega$	1%	¼ Watt metal film, axial through hole	International Yageo Corp.	MFR-25FBB-20K0
$R_{Z1}$	39.2k $\Omega$	1%	¼ Watt metal film, axial through hole	International Yageo Corp.	MFR-25FBB-39K2
$R_{B01}, R_{B02}, R_{C1}$			Not Used		
$S_1$	20V		SPDT On-On right angle, through hole	C & K Components	ET01MD1ABE
$J_1$			3 pin 156mil header, straight, tin plating	Molex/Waldom Electronics Corp.	26-60-4030
$J_3$			2 pin 156mil header, straight, tin plating	Molex/Waldom Electronics Corp.	26-60-4020
$J_4$			RCA phono jack, PCB mount, black	Kobiconn	161-0097-E
$J_2, J_9, J_{10}, J_{12}$			2 pin 100mil header, straight, tin plating	Molex/Waldom Electronics Corp.	22-23-2021
$J_{11}$			3 pin 100mil header, straight, tin plating	Molex/Waldom Electronics Corp.	22-03-2031
	6.3°C/W		LME49830 heat sink	Aavid Thermalloy	530101B00150
	0.62°C/W		Output stage heat sink, 4 inch length	Aavid Thermalloy	65605