

AD1865 Dac - Parts List

Update 20-Aug-2014								
ID	Description	PKG	Manufacturer	Parts Number	Distrib	QTY	Price	Total
DAC PCB								
Semiconductors								
U1	IC, CS8414-CS, SPDIF Digital Receiver	28SIOC	Cirrus			1	12.63 \$	12.63 \$
U2	IC, SN74HC04N, HEX INVERTER	14SIOC	Texas	296-1189-1-ND	Digikey	1	0.67 \$	0.67 \$
U3	IC, AD1865N-K, DAC	24DIP	AD			1	50.00 \$	50.00 \$
Optical	Module, TORX179, Toslink 96KHz		Toshiba		ebay	1	5.33 \$	5.33 \$
Other Choice	Module, GP1FAV31RK0F, Toslink 96KHz		Sharp	13M5056	Newark	0	1.86 \$	0.00 \$
Q1,15,22,29,36	Mosfet, IRF9540, P-CH	TO220	IR	942-IRF9540NPBF	Digikey	5	1.80 \$	9.00 \$
Q3,5,10,12,17,19,24,25,31,33,38,40	J-FET, 2SK170BL	TO92	Toshiba			12	1.00 \$	12.00 \$
Q14	Trans. MJE340, PWR NPN, 300V .5A	TO126	Fairchild	512-MJE340STU	Mouser	1	0.26 \$	0.26 \$
Q7,21,28,35,42	Trans. MJE350, PWR PNP, 300V .5A	TO126	Fairchild	512-MJE350STU	Mouser	5	0.26 \$	1.30 \$
Q2,11,13,16,23,30,37	Trans. BC560, PNP, 45V, 100ma	TO92	Fairchild	512-BC560CTA	Mouser	7	0.26 \$	1.82 \$
Q4,6,9,18,20,25,27,32,34,39,41	Trans. BC550, NPN, 45V, 100ma	TO92	Fairchild	512-BC550CTA	Mouser	11	0.25 \$	2.71 \$
Q8	Mosfet, IRF540, N-CH	TO220	IR	942-IRF540NPBF	Digikey	1	2.09 \$	2.09 \$
D1-D20	Diode, CSD0160, 600V, 1A Schottky	TO220-3	Cree	941-CSD01060A	Mouser	20	1.11 \$	22.20 \$
D21	Diode, 1N4007, Rectifier	TO41	Fairchild	512-1N4007	Mouser	1	0.14 \$	0.14 \$
Led (Lock)	Led, Green	T-13/4	Lite-On	859-LTL-4234	Mouser	1	0.08 \$	0.08 \$
Resistors								
R1,11,21,31,41,51	Res. 10R, 0.25W, 1% MF, CFM-55		Dale		Mouser	6	0.25 \$	1.48 \$
R4,14,24,34,44,54	Res. 10K, 0.25W, 1% MF, CFM-55		Dale		Mouser	6	0.25 \$	1.48 \$
R2,3,9,12,13,19,22,23,29,32,33,39,42,43,49,52,53,59	Res. 221R, 0.25W, 1% MF, CFM-55		Dale		Mouser	18	0.25 \$	4.43 \$
R5,15,25,35,45,55	Res. 2K21, 0.25W, 1% MF, CFM-55		Dale	71-CCF552K21FKE36	Mouser	6	0.25 \$	1.48 \$
R6,16,26,36,46,56	Res. 475R, 0.25W, 1% MF, CFM-55		Dale	71-CCF55475RFKE36	Mouser	6	0.25 \$	1.48 \$
R7,17,27,37,47,57	Res. 1K, 0.25W, 1% MF, CFM-55		Dale	71-CCF551K00FKE36	Mouser	6	0.25 \$	1.48 \$
R10,20,30,40,50	Res. 47R5, 0.25W, 1% MF, CFM-55		Dale	71-CCF5547R5FKE36	Mouser	6	0.25 \$	1.48 \$
R61,62 (Output)	Res. 200R, 0.75W, 1% MF, MKK132		Caddock	CADDOCK-77402	PartsX	2	4.95 \$	9.90 \$
R63 (Filter)	Res. 475R, 0.25W, 1% MF, CFM-55		Dale	71-CCF55475RFKE36	Mouser	1	0.25 \$	0.25 \$
R64	Res. 75R, 0.25W, 1% MF, CFM-55		Dale	CCF5575R0FKE36	Mouser	1	0.12 \$	0.12 \$
R65 (Led)	Res. 562R, 0.25W, 1%, MF MFR25 Series		Yageo	MFR-25FBF52-562R	Digikey	1	0.10 \$	0.10 \$
VR1-VR6	Pot. 1K, 0.25W, 25T		Fairchild	T93YA-1.0K-ND	Digikey	6	1.85 \$	11.10 \$
Capacitors								
C1,5,10,13,17,21	Cap. 2200uF, 16V, Audio KA Series	D18P7.5	Nichicon	647-UKA1C222MHD1TO	Mouser	6	1.40 \$	8.40 \$
C2,3,7,8,12,13,17,18,22,23,27,28,47	Cap. 0.1uF, 100V, MKP		EPCOS	871-B32529C1104K289	Mouser	13	0.09 \$	1.17 \$
C4,5,9,10,14,15,19,20,24,25,29,30	Cap. 47uF, 16V, Audio KA Series		Nichicon	647-UKA1C470MDD1TD	Mouser	12	0.64 \$	7.68 \$
C31,33,37,39,41,43	Cap. 47uF, 16V, Oscon Series		Sanyo			6	0.25 \$	1.50 \$
C37 (Dac filter)	Cap. 68nF, 63V, MKP		EPCOS		Mouser	1	0.09 \$	0.09 \$
C35,36	Cap. 0.01uF, 63V, MKP1837		Vishay	75-MKP1837310164TR	Mouser	2	0.82 \$	1.64 \$
Other Choice	Cap. 0.01uF, 600V, PPMFX		MultiCap	MULCAP-51397	PartsX	0	4.47 \$	0.00 \$
C45,46	Cap. 0.01uF, 63V, MKP		Wima	505-MKS2.01/100/10	Mouser	2	0.43 \$	0.86 \$
Other Choice	Cap. 0.01uF, 600V, XO Series		Auricap	AURICAP XO-75913	PartsX	0	13.12 \$	0.00 \$
Others								
T1-T3	Trans. Dual Prim, 2X7V, 229ma, 3.2VA		Amgisi	L01-6310	Digikey	3	\$17.40	52.20 \$
T4	Transformer Digital, S22083		Newava	470-1003-ND	Digikey	1	\$7.60	7.60 \$
L1, L2	Inductor, 120uH		Bourns	542-LR875-121K-RC	Mouser	2	1.09 \$	2.18 \$
L3, L4, L5	Inductor, 47uH		Bourns	M10141-ND	Digikey	3	\$0.28	0.84 \$
K1	Relay, ASW-K, 5V DPDT		Fujitsu	817-A-5W-K	Mouser	1	\$3.50	3.50 \$
JUMP	Header, 3 pins				Local	1	\$0.00	0.00 \$
Digital Input BNC	Conn. BNC 75 ohm gold plated		Vampire	VAMPIRE-56013	PartsX	1	\$12.25	12.25 \$
AC1-AC5	Stack-On, PCB mount connector			A29938CT-ND	Digikey	11	\$0.06	0.66 \$
Socket U1	Socket IC, 24 pins		Mill-Max	ED56246-ND	Digikey	1	\$4.27	4.27 \$
HS1-HS6	Heatsink				Ebay	6	\$0.25	1.53 \$
IV 6H30 Section								
Semiconductors								
V1,V2	Tube, 6H30Pi, "Gold Pin", Dual Triode, 9 pin		EH	TUBEEH-68024	PartsX	2	33.95 \$	67.90 \$
U2	IC, LM311, Comparator		ON Semi	863-LM311NG	Digikey	1	0.00 \$	0.00 \$
Q6	Trans. BC337, NPN, 45V, 800ma	TO92	Fairchild	BC33740TACT-ND	Digikey	1	0.27 \$	0.27 \$
D17,18	Diode, 1N4007, Rectifier	TO41	Fairchild	512-1N4007	Mouser	2	0.14 \$	0.28 \$
Resistors								
R13,19	Res. 33R, 3W, 5% Metal Thick Film		IRC	66-GS3T033J	Mouser	2	0.68 \$	1.36 \$
R14-R17 & R20-R24	Res. 18K, 2W, None Magnetic CM Series		TKD	TKD-75483	PartsX	12	1.95 \$	23.40 \$
R27,28,33,34	Res. 470R, 0.25W, 1% MF REY Series		Takman	TAKMAN-73026	PartsX	4	0.90 \$	3.60 \$
R27,29,32,35	Res. 221R, 1/2W, 1% TAN		Shinkoh	SHINKOH-70516	PartsX	4	3.45 \$	13.80 \$
R23,24,39,40 (under pcb)	Res. 475K, 0.5W, 1% MF, RN65D		Dale	71-RN65D-F-475K	Mouser	4	0.31 \$	1.22 \$
R30,36	Res. 221K, 1/2W, 1% MF, REY Series		Takman	TAKMAN-73058	PartsX	2	0.90 \$	1.80 \$
R37 (gnd lift)	Res. 10R 0.25W, 1%, MF MFR25 Series		Yageo	MFR-25FBF52-10R	Mouser	1	0.10 \$	0.10 \$
R38 (Relay)	Res. 1K, 0.25W, 1%, MF MFR25 Series		Yageo	MFR-25FBF52-1K	Digikey	1	0.10 \$	0.10 \$
R39 (Relay)	Res. 221K, 0.25W, 1%, MF MFR25 Series		Yageo	MFR-25FRF52-221K	Digikey	1	0.10 \$	0.10 \$
R40 (Relay)	Res. 5K6, 0.25W, 1%, MF MFR25 Series		Yageo	MFR-25FBF52-5K62	Digikey	1	0.10 \$	0.10 \$
R41,42 (Relay)	Res. 4k7, 0.25W, 1%, MF MFR25 Series		Yageo	MFR-25FRF52-4K75	Digikey	2	0.10 \$	0.20 \$
Capacitors								
C12	Cap. 4.7uF, 450V, MKP (2 caps in parallel)		EPCOS	495-2920-ND	Digikey	2	4.42 \$	8.84 \$
C19,20 (Output)	Cap. 3.3uF, 450V, EVO Series Aluminum		Mundorf	MUNDORF-76400	PartsX	2	6.37 \$	12.74 \$
Other Choice	Cap. 3.3uF, 450V, M-Cap Supreme		Mundorf	MUNDORF-70331	PartsX	0	28.46 \$	0.00 \$
C14,16	Cap. 220uF, 16V, Muse ES Series		Nichicon	647-UES1C221MPM	Mouser	2	1.16 \$	2.32 \$
C15,17	Cap. 0.1uF, 160V, MKP1837		ROE	75-MKP1837410161F	Mouser	2	1.39 \$	2.78 \$
C27 (Relay)	Cap. 47uF, 16V, Electro					1	0.09 \$	0.09 \$
Others								
RLY1	Relay, DS2Y, 5V DPDT				Digikey	1	0.51 \$	0.51 \$
Socket U2	Socket IC, 8 pins		Mill-Max	575-144308	Mouser	1	0.60 \$	0.60 \$
Conn Tube	Conn. 9Pins, Ceramic, Gold contact		Connex	CONNEX-73285	PartsX	2	6.30 \$	12.60 \$
SSHV & HTR Supplies								
Semiconductors								
U1	IC, LT1084, Adj. Volt. Reg LDO	TO220	Linear	LT1084CT#PBF-ND	Digikey	1	9.49 \$	9.49 \$
Q1	Mosfet, IRF9160, P-CH	TO220	IR	844-IRF9160PBF	Digikey	1	0.27 \$	0.27 \$
Q2	Trans. MJE350, PWR PNP, 300V .5A	TO126	ON Semi	MJE350GOS-ND	Digikey	1	0.77 \$	0.77 \$
Q3	Mosfet, IRF840, N-CH	TO220	IR	844-IRF840LCPBF	Digikey	1	0.27 \$	0.27 \$
Q4	JFET, 2SK170BL, N-CH	TO92	Toshiba			1	0.00 \$	0.00 \$
Q5 (under pcb)	Trans. 2N3906, PNP, 60V, 800ma	TO92	Fairchild		Digikey	1	0.27 \$	0.27 \$
D2-D4	Led, Green	5mm	Lite-On	859-LTL-4234	Mouser	3	0.08 \$	0.23 \$
D5-D8	Zener, 1N4742A, 12V, 1W	DO41	Vishay	1N4742A-ND	Digikey	4	0.29 \$	1.16 \$
D9-D12	Diode, CSD0160, 600V, 1A Schottky	TO220-3	Cree	941-CSD01060A	Mouser	4	1.20 \$	4.80 \$
D13-D16	Diode, 1N5822, Schottky 40V 3A	DO201AD	Micro Com	1N5822-TPMSCT-ND	Digikey	4	0.64 \$	2.56 \$
D17,18	Diode, 1N4007, Rectifier	TO41	Fairchild	512-1N4007	Mouser	1	0.14 \$	0.14 \$
Resistors								
R1	Res. 33R, 3W, 5% Metal Thick Film		IRC	66-GS3T033J	Mouser	1	0.68 \$	0.68 \$
R2,6	Res. 220R, 1/2W, 1% MF				Digikey	2	0.25 \$	0.49 \$
R3, R3A, R3B	Res. 56K, 5W, 1% (3x 180K/2W in parallel)		Kiware	KIWAME-66238	PartsX	3	2.25 \$	6.75 \$
R4	Res. 180K, 2W, 1% MF		Kiware	KIWAME-66238	PartsX	1	2.25 \$	2.25 \$
R5	Res. 5K6, 2W, 1% MF, RN65D		Vishay	71-RN65D-F-5.62K	Mouser	1	0.31 \$	0.31 \$
R7	Res. 3R3, 1/2W, 5% CF		Stackpole	S3.3HCT-ND	Digikey	1	0.14 \$	0.14 \$
R8	Res. 220K, 1W, 1% MF REY Series		Takman	TAKMAN-73119	PartsX	1	1.65 \$	1.65 \$
R9	Res. 47R, 1/2W, 5% CF		Stackpole	CF12JT47R0CT-ND	Digikey	1	0.18 \$	0.18 \$
R10	Res. 47R, 0.25W, 1% MF		Vishay	71-RN60D47R0F	Mouser	1	0.20 \$	0.20 \$
R11 (Replaced by L1)	Res. 330-470R, 5W		Mills	MILLS-64628	PartsX	0	3.95 \$	0.00 \$
R12	Res. 221R, 0.25W, 1%, MF MFR25 Series		Yageo	MFR-25FRF52-221R	Digikey	1	0.10 \$	0.10 \$
R13 (under pcb)	Res. 6K8, 0.25W, 1%, MF MFR25 Series		Yageo	MFR-25FRF52-6K81	Digikey	1	0.10 \$	0.10 \$
Ra, Rb (HTR snubber)	Res. 500R, 0.25W, 1%, MF MFR25 Series		Yageo	MFR-25FRF52-499R	Digikey	2	0.10 \$	0.20 \$
VR1	Pot. 1K, 0.25W, 25T		Fairchild	T93YA-1.0K-ND	Digikey	1	1.85 \$	1.85 \$
VR2	Pot. 5K, 0.25W, 25T		Fairchild	T93YA-5.0K-ND	Mouser	1	2.06 \$	2.06 \$
Capacitors								
C1	Cap. 100uF, 25V, Electro, FC Series		Panasonic	EEU-FC1V101	Digikey	1	0.40 \$	0.40 \$
C2,3	Cap. 1uF, 450V, MKP		EPCOS	495-4749-ND	Digikey	2	1.81 \$	3.62 \$
C4,5	Cap. 220uF, 450V, Electro, 381LX		CDE	338-2490-ND	Digikey	2	5.81 \$	11.62 \$
C6,7 (HTR snubber)	Cap. 0.047uF, 100V, MKP		Wima	505-MKS2.047/100/10	Mouser	2	0.43 \$	0.86 \$
C10	Cap. 4700uF, 16V, Electro, Audio KA Series		Nichicon	647-UKA1C472MHD	Mouser	1	3.22 \$	3.22 \$
C11,12	Cap. 470uF, 16V, Electro, Audio KA Series		Nichicon	647-UKA1C471MPD1TD	Mouser	2	1.08 \$	2.16 \$
C13 (under pcb)	Cap. 47uF, 16V, Electro		Nichicon	493-12770-1-ND	Digikey	1	0.20 \$	0.20 \$
Others								
T1	Transfo. 2x115V, 200V, 100ma, wt shield, 40W R-Core			R26-90	DIYClub	1	21.00 \$	21.00 \$
T2	Transfo. 2x115V, 2x8V, 3.2A //		Triad	VPS16-1600	Digikey	1	16.18 \$	16.18 \$
L1 (Replace R11)	Choke, 10H, 100 ma, 230 Ohms		Hammond	(Recycled)	Local	1	0.00 \$	0.00 \$
Other choice	Choke, 159M, 15H, 100 ma, 256 Ohms		Hammond	HAMMOND-63090	PartsX	0	32.86 \$	0.00 \$
Conn. L1	Terminal Block, 2-pins	5mm	Phoenix	277-1667-ND	Digikey	1	\$0.52	0.52 \$
AC Input	Stack-On, PCB mount connector			A29938CT-ND	Digikey	5	0.06 \$	0.30 \$
HS1-HS3	Heatsink 3.4 C/W L41.6xW25xH50.8mm		Aavid	588-FA-T220-51E	Mouser	3	1.56 \$	4.68 \$
Hardware								
	RCA socket, GRFA S THIN		Cardas	CARDAS-62010	PartsX	2	17.60 \$	\$35.20
	AC Inlet with fuse		Furutech	FI-03R	PierreB	1	16.80 \$	\$16.80
	Ayre AC Filter					1	0.00 \$	\$0.00
	Isolation Feet (M4 screw)		EAR	EAR-55839	PartsX	4	3.50 \$	\$14.00
							Parts Total	583.74 \$