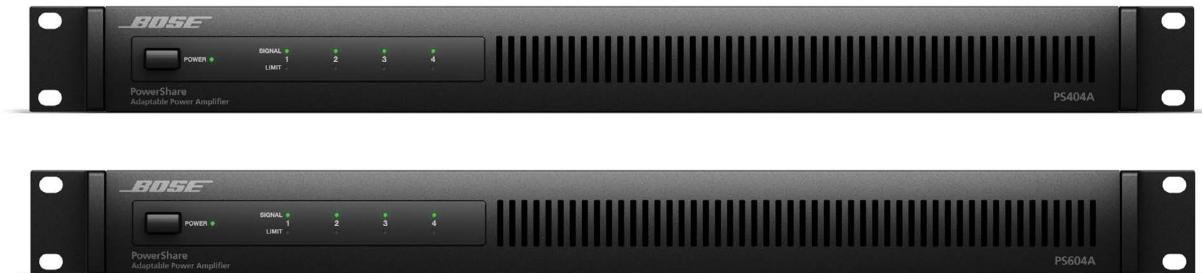


**BOSE**

# Bose® PowerShare PS404A and PS604A Adaptable Power Amplifiers (AmpLink Versions)



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# SAFETY INFORMATION

Parts that have special safety characteristics are identified by the  symbol on schematics or by special notes on the parts list. Use only replacement parts that have critical characteristics recommended by the manufacturer.

**CAUTION:** The Bose® PowerShare PS404A and PS604A amplifiers contain no user-serviceable parts. To prevent warranty infractions, refer servicing to warranty service stations or factory service.

## PROPRIETARY INFORMATION

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION OF BOSE CORPORATION WHICH IS BEING FURNISHED ONLY FOR THE PURPOSE OF SERVICING THE IDENTIFIED BOSE PRODUCT BY AN AUTHORIZED BOSE SERVICE CENTER, AND SHALL NOT BE REPRODUCED OR USED FOR ANY OTHER PURPOSE.

# WARRANTY

The Bose® PowerShare PS404A and PS604A amplifiers are covered by a limited 5-year transferable warranty.

# Accessories

ControlCenter Zone Controllers		
Material #	Model	Windchill/SAP Description
768928-0010	CV41	ControlCenter CV41 4 to 1 Conv.
768932-0110	CC-1	ControlCenter CC-1 US Black
768932-0210	CC-1	ControlCenter CC-1 US White
768932-2110	CC-1	ControlCenter CC-1 EU Black
768932-2210	CC-1	ControlCenter CC-1 EU White
768932-3110	CC-1	ControlCenter CC-1 JP Black
768932-3210	CC-1	ControlCenter CC-1 JP White
768938-0110	CC-2	ControlCenter CC-2 US Black
768938-0210	CC-2	ControlCenter CC-2 US White
768938-2110	CC-2	ControlCenter CC-2 EU Black
768938-2210	CC-2	ControlCenter CC-2 EU White
768938-3110	CC-2	ControlCenter CC-2 JP Black
768938-3210	CC-2	ControlCenter CC-2 JP White
768941-0110	CC-3	ControlCenter CC-3 US Black
768941-0210	CC-3	ControlCenter CC-3 US White
768941-2110	CC-3	ControlCenter CC-3 EU Black
768941-2210	CC-3	ControlCenter CC-3 EU White
768941-3110	CC-3	ControlCenter CC-3 JP Black
768941-3210	CC-3	ControlCenter CC-3 JP White

Note: The PowerShare Controllers are finished goods accessories, and will not be repaired. Replacement only.

# PRODUCT DESCRIPTION

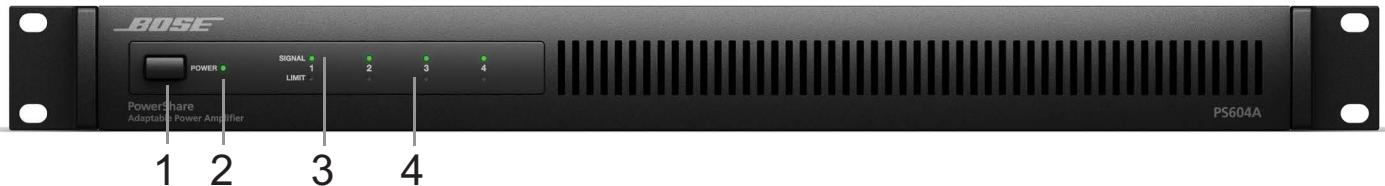


The Bose® PowerShare PS404A and PS604A adaptable power amplifiers deliver 400 and 600 watts, respectively, for fixed-install applications. Through patented technology, total amplifier power is shared across all output channels, allowing installers the freedom to utilize power where needed. With support for both low- and high-impedance loads up to 100V, PowerShare amplifiers adapt to a wide range of applications. Onboard configurable loudspeaker processing and direct access to zone controllers eliminate the need for an additional signal processor in many installations, while outstanding audio performance and reliability are assured with patented technologies inherited from the field-proven PowerMatch® line. With the inclusion of AmpLink, up to 24 digital audio channels can be sent to the amp from a Bose DSP via a shielded CAT 5 cable. This unique set of features and technologies makes PowerShare one of the most versatile high-performance amplifiers available.

## Key Features

- PowerShare Technology – Patented PowerShare technology allows the total 400 or 600 watts of power to be shared asymmetrically across all outputs, as each output is capable of delivering full power. Instead of selecting amplifier power based on the needs of the largest zone, installers now have the freedom to use total amplifier power in the application. This enables more flexibility during the initial design, or later on-site when making unplanned changes that take advantage of surplus power.
- Load-Independent Outputs – Each channel can be configured for low-impedance (4-8 Ω) or high-impedance (70/100V) applications without bridging, use of jumpers, or software settings.
- DFL™ System – The Dual Feedback Loop system, inherited from the field-proven Bose PowerMatch amplifier line, improves performance and reliability through continuous monitoring and control of both the current and voltage delivered to each output load. This combination provides improved linearity and lower distortion, while protecting loudspeakers.
- Integrated Loudspeaker Processing with Optional PowerShare Editor Configuration – For applications requiring additional signal processing the PowerShare Editor Software offers real-time selection and control of Bose loudspeaker EQs, 9-band PEQs, matrix mixing, crossover, delay, and mute/output polarity through a USB connection. For basic setups without a PC, rear-panel settings allow installers to recall Bose loudspeaker equalization and protection per output channel. These features eliminate the need for an external signal processor in many applications.
- AmpLink – Transports up to 24 uncompressed, near zero latency, digital audio channels between Bose DSPs and the PowerShare PS404A via shielded CAT 5 cable. The amp also supports a THRU path for daisy chaining up to 8 other Bose AmpLink amplifiers, at a distance of up to 10 m between products. Any combination of AmpLink amplifiers can be daisy chained.
- ControlCenter Zone Controller Accessories – Bose ControlCenter CC-1zone controllers can be directly attached for remote adjustment of amplifier outputs, further extending stand-alone amplifier applications.
- Auto-Standby – Designed to save power consumption when not in use. PowerShare amplifiers can be configured to automatically enter standby mode when the audio signal falls below a set threshold, then wake when audio returns.

# PRODUCT DESCRIPTION



**1** POWER SWITCH – ON/OFF AC power.

**2** POWER LED

- Solid green LED indicates the unit is ON.
- Blinking green LED indicates the unit is in low-power mode.
- Solid amber LED indicates an over-temperature fault.
- Solid red LED indicates a power supply fault.

**3** INPUT 1, 2, 3, 4 SIGNAL LED – Each LED operates independently.

- Green LED indicates signal is present.
- Amber LED indicates signal is near clipping.
- Red LED indicates clipping.
- LEDs will display solid red if a power supply fault is detected.

**4** OUTPUT 1, 2, 3, 4 LIMIT LED – Each LED operates independently.

- LED is amber when the amplifier is limiting the corresponding output due to exceeding the specified loudspeaker Vpeak or Vrms limits.
- If the sum of the amplifier outputs exceeds 600 watts, then the amplifier will limit all outputs equally, and all LEDs will show limiting simultaneously.
- LEDs will display solid red if an amplifier, power supply, or EHF fault is detected.
- LEDs will blink red when all outputs are muted.



**1** AmpLink – INPUT RJ-45 connector that receives up to 24 digital channels from a Bose AmpLink product. The amp also supports a THRU path for daisy-chaining all 24 digital audio channels to other Bose AmpLink products, at a maximum distance of 10 m between products.

**CAUTION:** Shielded EIA/TIA 568B straight CAT-5 cable, or equivalent, is required for proper AmpLink operation. Unshielded cable is not supported and may cause AmpLink audio to operate improperly. Do not connect either of these RJ-45s to a network

**2** AmpLink ERR LED – Solid yellow indicates muted audio from the mute connector. Blinking yellow indicates an error, which will also mute the audio.

**3** AmpLink LNK LED – Solid green indicates normal operation

**4** ANALOG INPUTS – Balanced 12-pin Euroblock line-level input connector.

**5** INPUT SELECT – Dial selects if analog or AmpLink audio inputs are used. The default state is analog 1:1.

**6** MICRO-USB – Connect the amplifier to a PC using a USB connection. This allows you to use the PC-based PowerShare Editor software to configure the advanced features of the amplifier.

**7** CHANNEL 1, 2, 3, 4 EQ – Each dial provides loudspeaker equalization presets per channel: DS 16, DS 40, DS 100, FS3B, 402, 802, MA12EX, RMU105, and RMU108. Use the Flat setting for FS3 Omni Systems.

**8** CONTROLCENTER – RJ-45 input connector for Bose CC-1 ControlCenter zone controllers or CV41 4-to-1 converter only.

**9** MUTE – Contact closure connection where a short across the mute connector will mute all outputs. Mute polarity can be inverted with the PowerShare Editor software.

**10** DIP SWITCHES – A bank of switches used to set amplifier configuration.

**11** OUTPUT ATTENUATION 1, 2, 3, 4 – Output attenuators for each output. Turn the controls clockwise to decrease attenuation and counter-clockwise to increase attenuation.

**12** OUTPUT – Inverted 8-pin Euroblock connector for loudspeaker connections. Each channel can deliver up to 600 watts regardless of load into 4 Ω, 8 Ω, 70V, or 100V. Outputs are not bridgeable.

**13** AC INLET – Removing the AC cord when the amplifier is on is equivalent to powering down using the front panel power switch, and is an acceptable power-down method.

# SPECIFICATIONS

## PS404A Amplifier

POWER RATING		
Amplifier Power	4 x 100 W ( THD+N < 0.04%, 1 kHz, 4-8 Ω, 70/100V)	
Maximum Power per Channel	400 W @ 4-8 Ω, 70/100V	
Gain (Low-Z mode)	30.2 dB	
Gain (70V mode)	35.0 dB	
Gain (100V mode)	38.0 dB	
AUDIO PERFORMANCE		
Frequency Response	4-8 Ω: 20 Hz – 20 kHz (+/- 0.5 dB @ 1 W); 70/100V: Same as 4-8 Ω with 50 Hz high-pass filter	
Channel Separation (Crosstalk)	> 85 dB @ 1 kHz, > 65 dB @ 20 kHz	
Signal to Noise Ratio	100 dB (at rated power, A-weighted)	
AUDIO INPUTS		
Input Channels	ANALOG	AMPLINK
Input Impedance	4 balanced	24 digital
Connectors	12-pin Euroblock	RJ-45 (Input)
Maximum Input Level	20 dBu (at 12 dBu sensitivity setting)	
Sensitivity	4 / 12 dBu (low / high sensitivity)	N/A
AUDIO OUTPUTS		
Outputs	ANALOG	AMPLINK
Connectors	4	24 digital
	8-pin inverted Euroblock	RJ-45 (Input)
INTEGRATED DSP		
A/D and D/A Converters	24-bit / 48 kHz	
Processing Functions	Matrix mixer, loudspeaker EQ, real-time 9-band PEQ, Vpeak/Vrms limiters, delay, band pass, mute/output polarity inversion	
Loudspeaker Presets	Flat, DS16, DS40, DS100, FS3B, 402, 802, MA12EX, RMU105 and RMU108	
Audio Latency	< 1 ms (any analog or Amplink input to loudspeaker output)	
INDICATORS AND CONTROLS		
Power LED	Solid green: Power is on. Blinking green: Unit is in standby mode. Solid amber: Thermal fault. Solid red: Supply fault.	
Input Signal LED	Green: Signal present. Amber: Input is near clipping. Red: Input is clipping. Solid red: Indicates a fault.	
Output Limit LED	Amber: Amplifier limiting an output. Blinking ed: Amplifier muted. Solid red: Indicates a fault.	
Controls, Front Panel	Power On/ Off	
Controls, Rear Panel	Amplifier mode DIP switches, loudspeaker EQ dials, input select dial , output attenuators	
ELECTRICAL		
Mains Voltage	100 VAC – 240 VAC (±10%, 50/60 Hz)	
AC Power Consumption	120 VAC: 14 W (Standby), 500 W (Max)	230 VAC: 14 W (Standby), 500 W (Max)
Mains Connector	Standard IEC (C14)	
Maximum Inrush Current	14.14 A (230 VAC / 50 Hz), 8.04 A (120 VAC / 60 Hz)	
Protections	High temperature, output short, extra high frequency (EHF), excessively low or high AC line voltage	
PHYSICAL		
Dimensions (H x W x D)	44 mm x 483 mm x 414 mm (1.7" x 19.0" x 16.3")	
Shipping Weight	7.8 kg (17.2 lb)	
Net Weight	6.4 kg (14.1 lb)	
Cooling System	Microprocessor controlled, variable speed fans, left to right air flow	
GENERAL		
Inputs (Control)	RJ-45 remote input for volume control using the CC-1 ControlCenter zone controllers, or for connection to the CV41. Micro-USB input for configuring the amplifier with the Share Editor software. Mute input control.	

For additional specifications and application information, please visit [pro.Bose.com](http://pro.Bose.com). Specifications subject to change without notice.

# SPECIFICATIONS

## PS604A Amplifier

POWER RATING		
Amplifier Power	4 x 150 W ( THD+N < 0.04%, 1 kHz, 4-8 Ω, 70/100V)	
Maximum Power per Channel	600 W @ 4-8 Ω, 70/100V	
Gain (Low-Z mode)	32.0 dB	
Gain (70V mode)	35.0 dB	
Gain (100V mode)	38.0 dB	
AUDIO PERFORMANCE		
Frequency Response	4-8 Ω: 20 Hz – 20 kHz (+/- 0.5 dB @ 1 W); 70/100V: Same as 4-8 Ω with 50 Hz high-pass filter	
Channel Separation (Crosstalk)	> 85 dB @ 1 kHz, > 65 dB @ 20 kHz	
Signal to Noise Ratio	100 dB (at rated power, A-weighted)	
AUDIO INPUTS		
Input Channels	ANALOG	AMPLINK
Input Impedance	4 balanced	24 digital
Connectors	12-pin Euroblock	RJ-45 (Input)
Maximum Input Level	20 dBu (at 12 dBu sensitivity setting)	
Sensitivity	4 / 12 dBu (low / high sensitivity)	N/A
AUDIO OUTPUTS		
Outputs	ANALOG	AMPLINK
Connectors	4	24 digital
	8-pin inverted Euroblock	RJ-45 (Thru)
INTEGRATED DSP		
A/D and D/A Converters	24-bit / 48 kHz	
Processing Functions	Matrix mixer, loudspeaker EQ, real-time 9-band PEQ, Vpeak/Vrms limiters, delay, band pass, mute/output polarity inversion	
Loudspeaker Presets	Flat, DS16, DS40, DS100, FS3B, 402, 802, MA12EX, RMU105 and RMU108	
Audio Latency	<1 ms (any analog or Amplink input to loudspeaker output)	
INDICATORS AND CONTROLS		
Power LED	Solid green: Power is on. Blinking green: Unit is in standby mode. Solid amber: Thermal fault. Solid red: Supply fault.	
Input Signal LED	Green: Signal present. Amber: Input is near clipping. Red: Input is clipping. Solid red: Indicates a fault.	
Output Limit LED	Amber: Amplifier limiting an output. Blinking red: Amplifier muted. Solid red: Indicates a fault.	
Controls, Front Panel	Power On/Off	
Controls, Rear Panel	Amplifier mode DIP switches, loudspeaker EQ dials, input select dial, output attenuators	
ELECTRICAL		
Mains Voltage	100 VAC – 240 VAC (±10%, 50/60 Hz)	
AC Power Consumption	120 VAC: 14 W (Standby), 700 W (Max)	230 VAC: 14 W (Standby), 700 W (Max)
Mains Connector	Standard IEC (C14)	
Maximum Inrush Current	14.14 A (230 VAC / 50 Hz), 8.04 A (120 VAC / 60 Hz)	
Protections	High temperature, output short, extra high frequency (EHF), excessively low or high AC line voltage	
PHYSICAL		
Dimensions (H x W x D)	44 mm x 483 mm x 414 mm (1.7" x 19.0" x 16.3")	
Shipping Weight	7.8 kg (17.2 lb)	
Net Weight	6.4 kg (14.1 lb)	
Cooling System	Microprocessor controlled, variable speed fans, left to right air flow	
GENERAL		
Inputs (Control)	RJ-45 remote input for volume control using the CC-1 ControlCenter zone controllers, or for connection to the CV41. Micro-USB input for configuring the amplifier with PowerShare Editor software. Mute input control.	

For additional specifications and application information, please visit [pro.Bose.com](http://pro.Bose.com). Specifications subject to change without notice.

# **Electrostatic Discharge Sensitive (ESDS) Device Handling**

This unit contains ESDS devices. We recommend the following precautions when repairing, replacing or transporting ESDS devices:

- Perform work at an electrically grounded work station.
- Wear wrist straps that connect to the station or heel straps that connect to conductive floor mats.
- Avoid touching the leads or contacts of ESDS devices or PC boards even if properly grounded. Handle boards by the edges only.
- Transport or store ESDS devices in ESD protective bags, bins, or totes. Do not insert unprotected devices into materials such as plastic, polystyrene foam, clear plastic bags, bubble wrap or plastic trays.

## **PART LIST NOTES**

1. The individual parts located on the PCBs are listed in the Electrical Part List.
2. This part is referenced for informational purposes only. It is not stocked as a repair part. Refer to the next higher assembly for a replacement part.
3.  This part is critical for safety purposes. Failure to use the Bose® recommended part may result in a safety hazard and may void the regulatory certification.

# PACKAGING PART LIST

PowerShare PS404A and PS604A (see Figure 1)

Item Number	Part Number	Description	Qty.	Note
1	795642-001S	CARTON, AMP, PS404A, SVCE	1	
	795643-001S	CARTON, AMP, PS604A, SVCE		
2	770267-0010	PE FOAM INSERT, REAR	1	
3	770268-0010	PE FOAM INSERT, FRONT	1	
4	770269-001S	CARTON, LINE CORD AND ACCESSORIES, SVCE	1	
5	-	POLY BAG	1	
6	799285-0010	GUIDE, INSTALL, POWERSHARE PS404A/PS604A	1	
7	774900-001S	KIT, CONNECTOR, PS404A/PS604A, SVCE	1	
-	350745-0010	CABLE, LINE CORD, IEC C13, NA	1	3 !
	350747-0010	CABLE, LINE CORD, IEC C13, EU		
	350749-0020	CABLE, LINE CORD, IEC C13, JP		
	350748-0010	CABLE, LINE CORD, IEC C13, UK		
	350746-0010	CABLE, LINE CORD, IEC C13, AU		

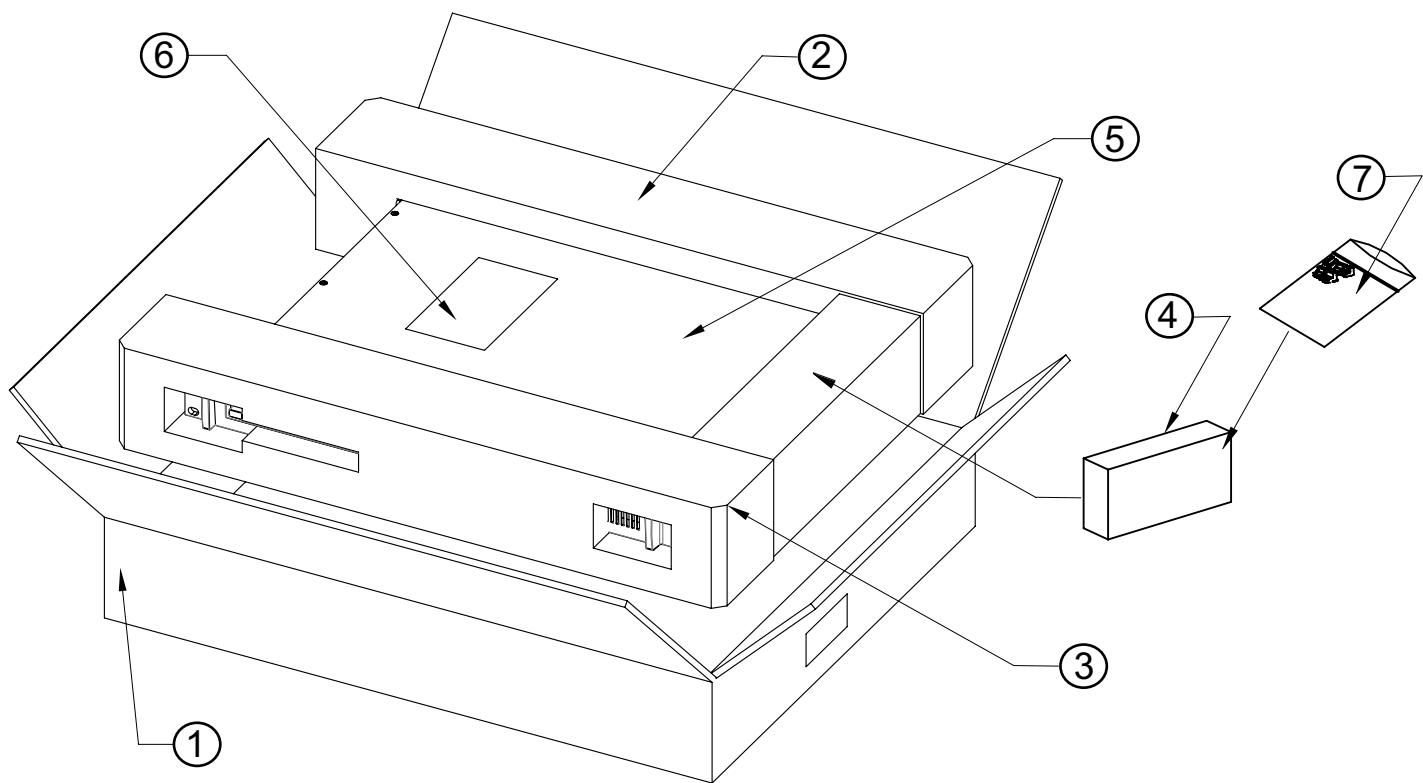


Figure 1. Packaging Exploded View

# MAIN PART LIST

PowerShare PS404A and PS604A (see Figure 2)

Item Number	Description	Part Number	Qty.	Note
1	INSULATOR, PC BOARD (USED ON TOP COVER)	748404-001S	1	 3
2	ASSY, TOP COVER, SVCE (INCLUDES PC SHEET, ITEM 1)	748388-011S	1	
3	SCREW, TOP COVER	-	12	
4	FOAM, FAN	-	0.3	
5	BRACKET, FAN	-	2	
6	SCREW, FAN BRACKET	-	8	
7	SCREW, FAN MOUNTING	-	8	
8	FAN, DC, 5V, 6000RPM (INCLUDES BRACKET, ITEM 5)	748033-001S	2	 3
9	SHEET, INSULATING, SMPS	-	1	
10	SCREW, PCB AND FRONT GROUND	-	1	
11	BRACKET, GND, LED PCB	-	1	
12	SCREW, AC POWER SWITCH	-	2	
13	SWITCH, AC POWER ON-OFF	748030-0010	1	 3
14	SCREW, FRONT BEZEL	-	4	
15	PUSH KNOB	748029-0110	1	
16	BEZEL, PLASTIC, FRONT, SVCE	747903-013S	1	
17	LIGHTPIPE, FRONT LED PCB	-	9	
18	PCB ASSY, LED, PS604A/404A, SVCE	807692-001S	1	1
19	PANEL, FRONT, AMP, PS404A, SVCE	795641-011S	1	
	PANEL, FRONT, AMP, PS604A, SVCE	795641-012S		
20	SCREW, FRONT PANEL	-	3	
21	AIR BAFFLE, CHASSIS, ONE PIECE	776140-0010		 3
22	SCREW, AMP PCB HEATSINK (BOTTOM OF UNIT)	-	4	
23	RACK EAR, FRONT, SVCE	748545-011S	2	
24	SCREW, RACK EAR	-	6	
25	PCB ASSY, AMPLIFIER	732946-0010	1	1
26	CHASSIS	-	1	
27	SCREW, REAR MOUNTING EAR	-	6	
28	BRACKET, REAR, SVCE	747855-011S	2	
29	TUBE, SPACER, 14MM	-	3	
30	PCB ASSY, DSP, PS404A/PS604A, SVCE	797164-001S	1	1
31	SCREW, DSP/AMPLINK/AMP	-	13	
32	SCREW, AMPLINK PCB	-	2	
33	PCB ASSY, AMPLINK, PS404A, SVCE	797166-001S	1	1
	PCB ASSY, AMPLINK, PS604A, SVCE	797166-002S		
34	TOOTH WASHER FOR GND	-	2	
35	NUT, GND	-	2	

# MAIN PART LIST (CONT.)

PowerShare PS404A and PS604A (see Figure 2)

Item Number	Description	Part Number	Qty.	Note
36	SCREW, AC INLET, IEC	-	2	
37	CONN, AC INLET, IEC, SERVICE	301396	1	 3
38	SCREW, REAR PCB	-	16	
39	TUBE, H=10MM	-	7	
40	TUBE, H=3.5MM	-	2	
41	SCREW, RJ45 CONNECTOR	-	2	
42	TUBE, H=6.3MM	-	2	
43	TUBE, H=18MM	-	2	
44	PCB ASSY, SMPS, PS404A/PS604A, SVCE	747922-002S	1	1
45	PCB ASSY, REAR, PS404A/PS604A, SVCE	797165-001S	1	1
46	PCB ASSY, REMOTE, PS604A/404A, SVCE	807695-001S	1	1
47	PCB ASSY, OUTPUT, PS604A/404A, SVCE	807694-001S	1	1
-	SUPPORT, RUBBER (LOCATED UNDER SMPS PCB)	-	2	
-	ASSY, CABLE, FFC, DSP TO REAR PANEL-1	753372-001S	1	
-	ASSY, CABLE, FCC, AMP TO DSP, 95LG, 10-PIN	765531-001S	1	
-	ASSY, CABLE, FFC, AMP TO DSP, 230LG, 10-PIN	765531-002S	1	
-	ASSY, CABLE, FCC, AMP TO DSP, 190LG, 20-PIN	765532-001S	1	
-	ASSY, CABLE, FFC, AMP TO DSP, 320LG, 20-PIN	765532-003S	1	
-	ASSY, CABLE, FCC, REAR PNL TO DSP, 70LG, 20-PIN	765535-001S	2	
-	ASSY, HARNESS, DSP TO PS, 140LG, 6-PIN	765536-002S	1	
-	ASSY, HARNESS, AMP TO PS, DBL CONN, 3-PIN	765538-002S	1	
-	ASSY, CABLE, GROUND INLET	765540-001S	1	 3
-	ASSY, HARNESS, IEC CONN TO AC SWITCH	765541-001S	1	 3
-	CABLE ASSY, AC SWITCH TO SMPS	774336-001S	1	 3

# EXPLODED VIEW

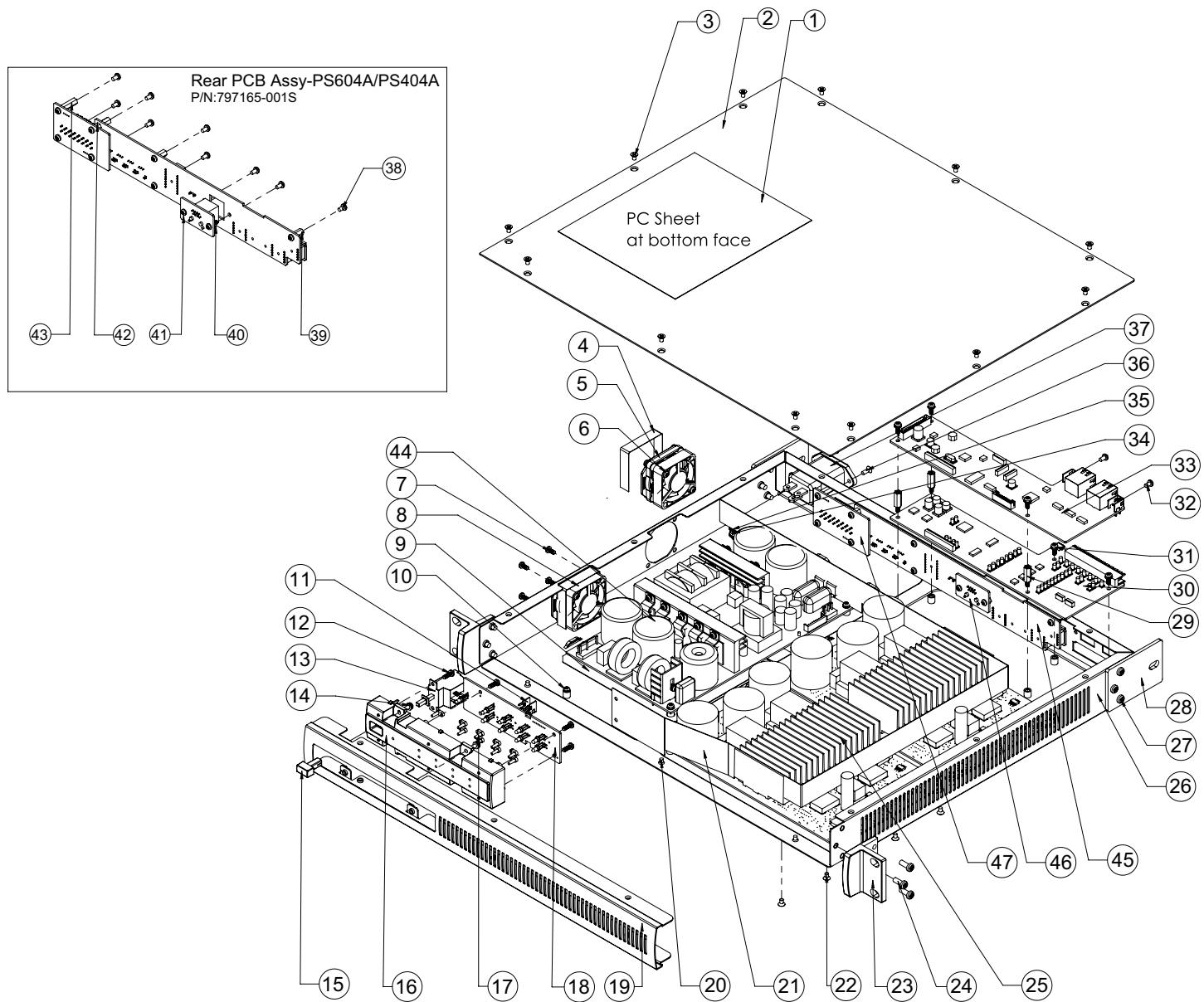


Figure 2. PowerShare PS404A and PS604A Exploded View

# ELECTRICAL PART LIST

Amplifier PCB Assembly

## Resistors

Reference Designator	Description	Part Number	Note
R100	0603, .1W, 1%, 1K	191465-1001	
R101	0603, .1W, 1%, 20K	191465-2002	
R102	0603, .1W, 1%, 10K	191465-1002	
R103	0603, .1W, 1%, 33.2K	191465-3322	
R104	THERMISTOR, 0603, B4480, 5%, 100K	329730-104J	
R105	0603, .1W, 1%, 2K	191465-2001	
R106	0603, .1W, 1%, 3.01K	191465-3011	
R107	0603, .1W, 1%, 1.65K	191465-1651	
R108	0603, .1W, 1%, 10K	191465-1002	
R109	0603, .1W, 1%, 4.02K	191465-4021	
R110	0603, .1W, 1%, 200K	191465-2003	
R111	0603, .1W, 1%, 1.65K	191465-1651	
R112	0603, .1W, 1%, 10K	191465-1002	
R113	0603, .1W, 1%, 20K	191465-2002	
R114	0603, .1W, 1%, 100K	191465-1003	
R115	0603, .1W, 1%, 10K	191465-1002	
R116	0603, .1W, 1%, 1M	191465-1004	
R117	0603, .1W, 1%, 100K	191465-1003	
R118	0603, .1W, 1%, 100 OHM	191465-1000	
R119	0603, .1W, 1%, 10K	191465-1002	
R120	0603, .1W, 1%, 100 OHM	191465-1000	
R121	0603, .1W, 1%, 20K	191465-2002	
R122	0603, .1W, 1%, 10K	191465-1002	
R123	0603, .1W, 1%, 66.5K OHMS	191465-6652	
R124	0603, .1W, 1%, 8.66K	191465-8661	
R125	0603, .1W, 1%, 1K	191465-1001	
R126	0603, .1W, 1%, 3.01K	191465-3011	
R127	0603, .1W, 1%, 10K	191465-1002	
R128	0805, .125W, 1%, 150K	133625-1503	
R129	0603, .1W, 1%, 10K	191465-1002	
R130	0603, .1W, 1%, 10K	191465-1002	
R131	0603, .1W, 1%, 10K	191465-1002	
R132	0603, .1W, 1%, 100 OHM	191465-1000	
R133	0603, .1W, 1%, 10K	191465-1002	
R134	0603, .1W, 1%, 10K	191465-1002	
R135	0603, .1W, 1%, 1K	191465-1001	
R136	0603, .1W, 1%, 9.76K	191465-9761	
R137	0603, .1W, 1%, 1K	191465-1001	
R138	0603, .1W, 1%, 10K	191465-1002	
R139	0603, .1W, 1%, 64.9K	191465-6492	
R140	0603, 0.1W, 1%, 3.57k OHMS	191465-3571	
R141	0603, 0.1W, 1%, 3.57k OHMS	191465-3571	

# ELECTRICAL PART LIST

Amplifier PCB Assembly

Resistors (continued)

Reference Designator	Description	Part Number	Note
R142	0603, .1W, 1%, 7.15K	191465-7151	
R143	0603, .1W, 1%, 7.15K	191465-7151	
R144	0603, .1W, 1%, 200K	191465-2003	
R145	0603, .1W, 1%, 200K	191465-2003	
R146	0805, .125W, 1%, 100K	133625-1003	
R147	0805, .125W, 1%, 100K	133625-1003	
R148	0603, .1W, 1%, 1K	191465-1001	
R149	0603, .1W, 1%, 10K	191465-1002	
R200	0805, .125W, 1%, 49.9K	133625-4993	
R201	0603, .1W, 1%, 1K	191465-1001	
R202	0603, .1W, 1%, 1K	191465-1001	
R203	0805, .125W, 1%, 49.9K	133625-4993	
R204	0603, .1W, 1%, 1K	191465-1001	
R205	0603, .1W, 1%, 3.09K	191465-3091	
R206	0603, .1W, 1%, 1K	191465-1001	
R207	0805, .125W, 1%, 49.9K	133625-4993	
R208	0805, .125W, 1%, 49.9K	133625-4993	
R209	0603, .1W, 1%, 3.09K	191465-3091	
R210	0603, .1W, 1%, 3.09K	191465-3091	
R211	0603, .1W, 1%, 3.09K	191465-3091	
R212	0603, .1W, 1%, 2.15K OHM	191465-2151	
R213	0603, .1W, 1%, 2.15K OHM	191465-2151	
R214	0603, .1W, 1%, 14.7K	191465-1472	
R215	0603, .1W, 1%, 14.7K	191465-1472	
R216	0603, .1W, 1%, 14.7K	191465-1472	
R217	0603, .1W, 1%, 14.7K	191465-1472	
R218	0603, .1W, 1%, 30.1K	191465-3012	
R219	0603, .1W, 1%, 30.1K	191465-3012	
R220	0603, 0.1W, 1%, 1.30K	191465-1301	
R221	0603, 0.1W, 1%, 1.30K	191465-1301	
R222	0603, 0.1W, 1%, 1.30K	191465-1301	
R223	0603, .1W, 1%, 24.9 OHM	191465-24R9	
R224	0603, .1W, 1%, 24.9 OHM	191465-24R9	
R225	0603, 0.1W, 1%, 1.30K	191465-1301	
R226	0603, .1W, 1%, 30.1K	191465-3012	
R227	0603, .1W, 1%, 30.1K	191465-3012	
R228	0603, .1W, 1%, 2.0K	191465-2001	
R229	0603, .1W, 1%, 2.0K	191465-2001	
R230	0603, 0.1W, 1%, 374 OHMS	191465-3740	
R231	0603, 0.1W, 1%, 374 OHMS	191465-3740	
R232	0603, 0.1W, 1%, 976 OHMS	191465-9760	
R233	0603, .1W, 1%, 1K	191465-1001	

# ELECTRICAL PART LIST

Amplifier PCB Assembly

Resistors (continued)

Reference Designator	Description	Part Number	Note
R234	0603, 0.1W, 1%, 976 OHMS	191465-9760	
R235	0603, .1W, 1%, 1.4K	191465-1401	
R236	0603, .1W, 1%, 1.4K	191465-1401	
R237	0603, .1W, 1%, 1K	191465-1001	
R238	0603, .1W, 1%, 1K	191465-1001	
R239	MR, 0603, 25ppm/C, 0.1W, 0.1%, 2K	765579-2001B	
R240	0603, .1W, 1%, 1K	191465-1001	
R241	MR, 0603, 25ppm/C, 0.1W, 0.1%, 2K	765579-2001B	
R242	0603, 100MW, 1%, 3.40 K	191465-3401	
R243	MR, 0603, 25ppm/C, 0.1W, 0.1%, 2K	765579-2001B	
R244	0603, 100MW, 1%, 3.40 K	191465-3401	
R245	MR, 0603, 25ppm/C, 0.1W, 0.1%, 2K	765579-2001B	
R246	MR, 0603, 25ppm/C, 0.1W, 0.1%, 2K	765579-2001B	
R247	0603, .1W, 1%, 100K	191465-1003	
R248	MR, 0603, 25ppm/C, 0.1W, 0.1%, 2K	765579-2001B	
R249	MR, 0603, 25ppm/C, 0.1W, 0.1%, 2K	765579-2001B	
R250	MR, 0603, 25ppm/C, 0.1W, 0.1%, 2K	765579-2001B	
R251	0603, 100MW, 1%, SMD, 825 OHM	191465-8250	
R252	0603, .1W, 1%, 422 OHMS	191465-4220	
R253	MR, 0805, 25ppm/C, 0.25W, 0.1%, 26.7K	765580-2672B	
R254	MR, 0805, 25ppm/C, 0.25W, 0.1%, 26.7K	765580-2672B	
R255	0603, 100MW, 1%, SMD, 825 OHM	191465-8250	
R256	0603, 100MW, 1%, SMD, 825 OHM	191465-8250	
R257	0603, .1W, 1%, 1K	191465-1001	
R258	0603, .1W, 1%, 1K	191465-1001	
R259	MR, 0805, 25ppm/C, 0.25W, 0.1%, 26.7K	765580-2672B	
R260	MR, 0805, 25ppm/C, 0.25W, 0.1%, 26.7K	765580-2672B	
R261	0603, .1W, 1%, 422 OHMS	191465-4220	
R262	0603, .1W, 1%, 100K	191465-1003	
R266	0603, .1W, 1%, 1K	191465-1001	
R267	0603, 100MW, 1%, SMD, 825 OHM	191465-8250	
R268	0603, .1W, 1%, 20K	191465-2002	
R269	0603, .1W, 1%, 20K	191465-2002	
R270	0603, .1W, 1%, 649 OHMS	191465-6490	
R273	0603, 0.1W, 1%, 66.5 ohm	191465-66R5	
R274	0603, .1W, 1%, 20K	191465-2002	
R276	0603, .1W, 1%, 649 OHMS	191465-6490	
R277	0603, 0.1W, 1%, 59 OHMS	191465-59R0	
R278	0603, .1W, 1%, 1K	191465-1001	
R279	0603, 0.1W, 1%, 1.74k OHMS	191465-1741	
R280	0603, 0.1W, 1%, 34.8 OHMS	191465-34R8	
R281	0603, .1W, 1%, 28 OHM	191465-28R0	

# ELECTRICAL PART LIST

Amplifier PCB Assembly

Resistors (continued)

Reference Designator	Description	Part Number	Note
R283	0603, 0.1W, 1%, 66.5 OHMS	191465-66R5	
R284	0603, .1W, 1%, 20K	191465-2002	
R285	0603, 0.1W, 1%, 66.5 OHMS	191465-66R5	
R286	0603, 0.1W, 1%, 1.47K	191465-1471	
R287	0603, 0.1W, 1%, 59 OHMS	191465-59R0	
R288	0603, 0.1W, 1%, 1.74kOHMS	191465-1741	
R289	0603, 0.1W, 1%, 34.8 OHMS	191465-34R8	
R290	0603, .1W, 1%, 28 OHMS	191465-28R0	
R291	0603, .1W, 1%, 100 OHMS	191465-1000	
R292	0603, .1W, 1%, 100 OHMS	191465-1000	
R293	0603, 0.1W, 1%, 59 OHMS	191465-59R0	
R294	0603, 0.1W, 1%, 66.5 OHMS	191465-66R5	
R295	0603, 0.1W, 1%, 1.47K	191465-1471	
R296	0603, 0.1W, 1%, 59 OHMS	191465-59R0	
R297	0603, .1W, 1%, 2.15K OHM	191465-2151	
R298	0603, .1W, 1%, 2.15K OHM	191465-2151	
R300	0603, .1W, 1%, 100K	191465-1003	
R301	0603, .1W, 1%, 100K	191465-1003	
R302	0603, .1W, 1%, 49.9K	191465-4992	
R303	0603, .1W, 1%, 10K	191465-1002	
R304	0603, .1W, 1%, 49.9K	191465-4992	
R305	0603, .1W, 1%, 10 OHM	191465-10R0	
R306	0603, .1W, 1%, 10K	191465-1002	
R307	0603, .1W, 1%, 10K	191465-1002	
R308	0805, .125W, 1%, 100K	133625-1003	
R309	0805, .125W, 1%, 100K	133625-1003	
R310	0603, .1W, 1%, 10 OHM	191465-10R0	
R311	0603, .1W, 1%, 1K	191465-1001	
R312	0603, .1W, 1%, 10K	191465-1002	
R313	0603, .1W, 1%, 11K	191465-1102	
R314	0603, .1W, 1%, 10 OHM	191465-10R0	
R315	0603, .1W, 1%, 1K	191465-1001	
R316	0603, .1W, 1%, 1K	191465-1001	
R317	0603, .1W, 1%, 10K	191465-1002	
R318	0603, .1W, 1%, 30.1K	191465-3012	
R319	1206, 1/4W, 1%, 1.50K	124894-1501	
R320	1206, 1/4W, 1%, 1.50K	124894-1501	
R321	0603, .1W, 1%, 10K	191465-1002	
R322	0603, .1W, 1%, 20K	191465-2002	
R323	0603, .1W, 1%, 20K	191465-2002	
R324	0603, .1W, 1%, 20K	191465-2002	
R325	0603, .1W, 1%, 4.02K	191465-4021	

# ELECTRICAL PART LIST

Amplifier PCB Assembly

Resistors (continued)

Reference Designator	Description	Part Number	Note
R326	0603, 0.1W, 1%, 40.2 OHM	191465-40R2	
R327	0603, .1W, 1%, 10K	191465-1002	
R328	0603, .1W, 1%, 33.2K	191465-3322	
R329	0603, 0.1W, 1%, 40.2 OHM	191465-40R2	
R330	0603, 0.1W, 1%, 4.99 OHMS	191465-4R99	
R331	0603, .1W, 1%, 10 OHM	191465-10R0	
R332	0603, 0.1W, 1%, 4.99 OHMS	191465-4R99	
R333	0603, .1W, 1%, 20 OHM	191465-20R0	
R334	0603, 0.1W, 1%, 40.2 OHM	191465-40R2	
R335	0603, 0.1W, 1%, 4.99 OHMS	191465-4R99	
R336	0603, .1W, 1%, 10 OHM	191465-10R0	
R337	0603, 0.1W, 1%, 4.99 OHMS	191465-4R99	
R338	0603, 0.1W, 1%, 40.2 OHM	191465-40R2	
R339	0603, .1W, 1%, 24.9 OHM	191465-24R9	
R340	0603, 0.1W, 1%, 40.2 OHM	191465-40R2	
R341	0603, .1W, 1%, 20 OHM	191465-20R0	
R342	0603, 0.1W, 1%, 4.99 OHMS	191465-4R99	
R343	0603, .1W, 1%, 10 OHM	191465-10R0	
R344	0603, 0.1W, 1%, 4.99 OHMS	191465-4R99	
R345	0603, 0.1W, 1%, 4.99 OHMS	191465-4R99	
R346	0603, .1W, 1%, 10 OHM	191465-10R0	
R347	0603, 0.1W, 1%, 4.99 OHMS	191465-4R99	
R348	0603, .1W, 1%, 20 OHM	191465-20R0	
R349	0603, .1W, 1%, 20 OHM	191465-20R0	
R350	0603, .1W, 1%, 76.8 OHM	191465-76R8	
R351	0603, .1W, 1%, 24.9 OHM	191465-24R9	
R352	0603, .1W, 1%, 24.9 OHM	191465-24R9	
R353	0603, .1W, 1%, 24.9 OHM	191465-24R9	
R354	0603, .1W, 1%, 76.8 OHM	191465-76R8	
R355	0603, .1W, 1%, 100K	191465-1003	
R356	0603, .1W, 1%, 76.8 OHM	191465-76R8	
R357	0603, .1W, 1%, 76.8 OHM	191465-76R8	
R358	0603, .1W, 1%, 100K	191465-1003	
R359	0603, .1W, 1%, 100K	191465-1003	
R360	0603, .1W, 1%, 100K	191465-1003	
R361	1206, 250mW, 1%, 5.11 OHMS	124894-5R11	
R362	1206, 250mW, 1%, 5.11 OHMS	124894-5R11	
R363	1206, 250mW, 1%, 5.11 OHMS	124894-5R11	
R364	1206, 250mW, 1%, 5.11 OHMS	124894-5R11	
R365	0603, .1W, 1%, 1K	191465-1001	
R366	0603, 0.1W, 1%, 665 OHMS	191465-6650	
R367	0603, .1W, 1%, 549 OHM	191465-5490	

# ELECTRICAL PART LIST

Amplifier PCB Assembly

Resistors (continued)

Reference Designator	Description	Part Number	Note
R368	0603, .1W, 1%, 267 OHM	191465-2670	
R369	0603, 0.1W, 1%, 340 OHMS	191465-3400	
R370	0603, 0.1W, 1%, 665 OHMS	191465-6650	
R371	0603, .1W, 1%, 7.32K	191465-7321	
R372	0603, .1W, 1%, 549 OHM	191465-5490	
R373	0603, .1W, 1%, 1K	191465-1001	
R374	0603, .1W, 1%, 7.32K	191465-7321	
R375	0603, .1W, 1%, 88.7K	191465-8872	
R376	0603, 0.1W, 1%, 953 OHMS	191465-9530	
R377	0603, 0.1W, 1%, 806 OHM	191465-8060	
R378	0603, 0.1W, 1%, 69.8K OHMS	191465-6982	
R379	0603, .1W, 1%, 19.6K	191465-1962	
R380	0805, 0.125W, 1%, 681K	133625-6813	
R381	0603, .1W, 1%, 5.9K	191465-5901	
R400	0603, .1W, 1%, 49.9K	191465-4992	
R401	0603, .1W, 1%, 100K	191465-1003	
R402	0603, .1W, 1%, 100K	191465-1003	
R403	0603, .1W, 1%, 49.9K	191465-4992	
R404	0805, .125W, 1%, 100K	133625-1003	
R405	0805, .125W, 1%, 100K	133625-1003	
R406	0603, .1W, 1%, 10K	191465-1002	
R407	0603, .1W, 1%, 10K	191465-1002	
R408	0603, .1W, 1%, 10K	191465-1002	
R409	0805, .125W, 1%, 100K	133625-1003	
R410	0805, .125W, 1%, 100K	133625-1003	
R411	0805, .125W, 1%, 100K	133625-1003	
R412	0805, .125W, 1%, 100K	133625-1003	
R413	0603, .1W, 1%, 1K	191465-1001	
R414	0603, .1W, 1%, 10K	191465-1002	
R415	0603, .1W, 1%, 11K	191465-1102	
R416	0603, .1W, 1%, 10K	191465-1002	
R417	0603, .1W, 1%, 1K	191465-1001	
R418	0603, .1W, 1%, 1K	191465-1001	
R419	0603, .1W, 1%, 30.1K	191465-3012	
R420	0603, .1W, 1%, 20K	191465-2002	
R421	0603, .1W, 1%, 20K	191465-2002	
R422	1206, 1/4W, 1%, 1.50K	124894-1501	
R423	1206, 1/4W, 1%, 1.50K	124894-1501	
R424	0603, .1W, 1%, 10K	191465-1002	
R425	0603, .1W, 1%, 4.02K	191465-4021	
R426	0603, 0.1W, 1%, 40.2 OHM	191465-40R2	
R427	0603, .1W, 1%, 10K	191465-1002	

# ELECTRICAL PART LIST

Amplifier PCB Assembly

Resistors (continued)

Reference Designator	Description	Part Number	Note
R428	0603, 0.1W, 1%, 40.2 OHM	191465-40R2	
R429	0603, 0.1W, 1%, 4.99 OHMS	191465-4R99	
R430	0603, .1W, 1%, 10 OHM	191465-10R0	
R431	0603, 0.1W, 1%, 4.99 OHMS	191465-4R99	
R432	0603, .1W, 1%, 20 OHM	191465-20R0	
R433	0603, 0.1W, 1%, 40.2 OHM	191465-40R2	
R434	0603, 0.1W, 1%, 4.99 OHMS	191465-4R99	
R435	0603, .1W, 1%, 10 OHM	191465-10R0	
R436	0603, 0.1W, 1%, 4.99 OHMS	191465-4R99	
R437	0603, 0.1W, 1%, 40.2 OHM	191465-40R2	
R438	0603, .1W, 1%, 24.9 OHM	191465-24R9	
R439	0603, 0.1W, 1%, 40.2 OHM	191465-40R2	
R440	0603, .1W, 1%, 20 OHM	191465-20R0	
R441	0603, 0.1W, 1%, 4.99 OHMS	191465-4R99	
R442	0603, .1W, 1%, 10 OHM	191465-10R0	
R443	0603, 0.1W, 1%, 4.99 OHMS	191465-4R99	
R444	0603, 0.1W, 1%, 4.99 OHMS	191465-4R99	
R445	0603, .1W, 1%, 10 OHM	191465-10R0	
R446	0603, 0.1W, 1%, 4.99 OHMS	191465-4R99	
R447	0603, .1W, 1%, 20 OHM	191465-20R0	
R448	0603, .1W, 1%, 20 OHM	191465-20R0	
R449	0603, .1W, 1%, 76.8 OHM	191465-76R8	
R450	0603, .1W, 1%, 24.9 OHM	191465-24R9	
R451	0603, .1W, 1%, 24.9 OHM	191465-24R9	
R452	0603, .1W, 1%, 24.9 OHM	191465-24R9	
R453	0603, .1W, 1%, 76.8 OHM	191465-76R8	
R454	0603, .1W, 1%, 100K	191465-1003	
R455	0603, .1W, 1%, 76.8 OHM	191465-76R8	
R456	0603, .1W, 1%, 76.8 OHM	191465-76R8	
R457	0603, .1W, 1%, 100K	191465-1003	
R458	0603, .1W, 1%, 100K	191465-1003	
R459	0603, .1W, 1%, 100K	191465-1003	
R460	1206, 250mW, 1%, 5.11 OHMS	124894-5R11	
R461	1206, 250mW, 1%, 5.11 OHMS	124894-5R11	
R462	1206, 250mW, 1%, 5.11 OHMS	124894-5R11	
R463	1206, 250mW, 1%, 5.11 OHMS	124894-5R11	
R464	0603, .1W, 1%, 1K	191465-1001	
R465	0603, 0.1W, 1%, 665 OHMS	191465-6650	
R466	0603, .1W, 1%, 549 OHM	191465-5490	
R467	0603, .1W, 1%, 267 OHM	191465-2670	
R468	0603, 0.1W, 1%, 340 OHMS	191465-3400	
R469	0603, 0.1W, 1%, 665 OHMS	191465-6650	

# ELECTRICAL PART LIST

Amplifier PCB Assembly

Resistors (continued)

Reference Designator	Description	Part Number	Note
R470	0603, .1W, 1%, 7.32K	191465-7321	
R471	0603, .1W, 1%, 549 OHM	191465-5490	
R472	0603, .1W, 1%, 1K	191465-1001	
R473	0603, .1W, 1%, 7.32K	191465-7321	
R474	0603, .1W, 1%, 88.7K	191465-8872	
R475	0603, 0.1W, 1%, 953 OHMS	191465-9530	
R476	0603, 0.1W, 1%, 806 OHM	191465-8060	
R477	0603, 0.1W, 1%, 69.8K OHMS	191465-6982	
R478	0603, .1W, 1%, 19.6K	191465-1962	
R479	0805, 0.125W, 1%, 681K	133625-6813	
R480	0603, .1W, 1%, 5.9K	191465-5901	
R2100	0603, .1W, 1%, 4.99K	191465-4991	
R2101	0603, .1W, 1%, 2.15K OHM	191465-2151	
R2102	0603, .1W, 1%, 2.15K OHM	191465-2151	
R2104	0603, .1W, 1%, 4.99K	191465-4991	
R2105	0603, .1W, 1%, 2.49K	191465-2491	
R2106	0603, .1W, 1%, 2.49K	191465-2491	
R2107	0603, .1W, 1%, 4.99K	191465-4991	
R2108	0603, .1W, 1%, 200K	191465-2003	
R2109	0603, .1W, 1%, 200K	191465-2003	
R2111	0603, .1W, 1%, 82.5K	191465-8252	
R2112	0603, .1W, 1%, 82.5K	191465-8252	
R2113	0603, .1W, 1%, 4.99K	191465-4991	
R2114	0603, .1W, 1%, 200K	191465-2003	
R2115	0603, .1W, 1%, 200K	191465-2003	
R2116	0603, .1W, 1%, 332 OHM	191465-3320	
R2117	0603, .1W, 1%, 332 OHM	191465-3320	
R2118	0603, .1W, 1%, 3.01K	191465-3011	
R2119	0603, .1W, 1%, 3.01K	191465-3011	
R2120	0603, .1W, 1%, 332 OHM	191465-3320	
R2121	0603, .1W, 1%, 332 OHM	191465-3320	
R2122	0603, .1W, 1%, 332 OHM	191465-3320	
R2123	0603, .1W, 1%, 332 OHM	191465-3320	
R2124	0603, .1W, 1%, 100 OHM	191465-1000	
R2125	0603, .1W, 1%, 100 OHM	191465-1000	
R2126	0603, 100MW, 1%, 1.33K	191465-1331	
R2127	0603, 100MW, 1%, 1.33K	191465-1331	
R2128	0603, .1W, 1%, 3.32K	191465-3321	
R2129	0603, .1W, 1%, 1K	191465-1001	
R2130	0603, .1W, 1%, 681 OHM	191465-6810	
R2131	0603, .1W, 1%, 20K	191465-2002	
R2132	0603, .1W, 1%, 681 OHM	191465-6810	

# ELECTRICAL PART LIST

Amplifier PCB Assembly

Resistors (continued)

Reference Designator	Description	Part Number	Note
R2133	0603, 100MW, 1%, 1.33K	191465-1331	
R2134	0603, 100MW, 1%, 1.33K	191465-1331	
R2135	0603, .1W, 1%, 49.9K	191465-4992	

## Capacitors

Reference Designator	Description	Part Number	Note
C100	1206, X7R, 25V, 10%, 4.7uF	262063-475	
C101	1206, X7R, 25V, 10%, 4.7uF	262063-475	
C102	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C103	0805, X7R, 50V, 0.1uF	133623-104	
C104	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C105	0805, X7R, 50V, 0.1uF	133623-104	
C106	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C107	0805, X7R, 50V, 0.1uF	133623-104	
C108	C0G, 0603, 50V, 5%, 470pF	188454-471	
C109	0805, X7R, 50V, 0.1uF	133623-104	
C110	X7R, 1210, 25V, 10%, 22uF, COMM	759068-226K1E	
C111	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C112	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C113	X7R, 0603, 16V, 10%, 1uF	257154-105K16	
C114	X7R, 0805, 6.3V, 10%, 10uF	359399-106K	
C115	X7R, 0603, 16V, 10%, 1uF	257154-105K16	
C116	0805, X7R, 50V, 0.1uF	133623-104	
C117	C0G, 0603, 50V, 5%, 470pF	188454-471	
C118	X7R, 0805, 6.3V, 10%, 10uF	359399-106K	
C119	0805, X7R, 50V, 0.1uF	133623-104	
C120	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C121	0805, X7R, 50V, 0.1uF	133623-104	
C122	1206, X7R, 25V, 10%, 4.7uF	262063-475	
C123	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C125	1206, X7R, 25V, 10%, 4.7uF	262063-475	
C126	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C127	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C128	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C129	0805, X7R, 10%, 25V, 1UF	181264-105	
C130	1206, X7R, 25V, 10%, 4.7uF	262063-475	
C131	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C132	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C133	0805, X7R, 10%, 25V, 1uF	181264-105	
C134	C0G, 0603, 50V, 5%, 330pF	188454-331	
C135	EL, 105C, 25V, 20%, 1000uF, 10mm DIA, CUT	196991-102E6P50	

# ELECTRICAL PART LIST

Amplifier PCB Assembly  
Capacitors (continued)

Reference Designator	Description	Part Number	Note
C136	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C137	1206, X7R, 25V, 10%, 4.7uF	262063-475	
C138	0805, X7R, 50V, 0.1uF	133623-104	
C139	C0G, 0603, 50V, 5%, 330pF	188454-331	
C141	0805, X7R, 50V, 0.1uF	133623-104	
C142	1206, X7R, 25V, 10%, 4.7uF	262063-475	
C200	0603, X7R, 5%, 25V, 6800PF	196999-682	
C201	0603, X7R, 5%, 25V, 6800PF	196999-682	
C202	0603, X7R, 5%, 25V, 6800PF	196999-682	
C203	0603, X7R, 5%, 25V, 6800PF	196999-682	
C204	0805, X7R, 50V, 0.1uF	133623-104	
C205	0805, X7R, 50V, 0.1uF	133623-104	
C206	C0G, 0603, 50V, 5%, 2700pF	188454-272	
C207	C0G, 0603, 50V, 5%, 2700pF	188454-272	
C208	C0G, 0603, 50V, 5%, 2700pF	188454-272	
C209	C0G, 0603, 50V, 5%, 2700pF	188454-272	
C212	0805, X7R, 50V, 0.1uF	133623-104	
C213	0805, X7R, 50V, 0.1uF	133623-104	
C214	C0G, 0603, 50V, 5%, 270pF	188454-271	
C215	C0G, 0603, 50V, 5%, 270pF	188454-271	
C216	C0G, 0603, 50V, 5%, 270pF	188454-271	
C217	C0G, 0603, 50V, 5%, 270pF	188454-271	
C218	X7R, SMD, 5%, 25V, 0603, 68NF	196999-683	
C219	X7R, SMD, 5%, 25V, 0603, 68NF	196999-683	
C220	X7R, 1210, 25V, 10%, 22uF, COMM	759068-226K1E	
C221	X7R, 1210, 25V, 10%, 22uF, COMM	759068-226K1E	
C222	C0G, 0603, 50V, 5%, 510pF	188454-511	
C223	C0G, 0603, 50V, 5%, 510pF	188454-511	
C224	C0G, 0603, 50V, 5%, 390pF	188454-391	
C225	C0G, 0603, 50V, 5%, 390pF	188454-391	
C226	0805, X7R, 50V, 0.1uF	133623-104	
C227	0805, X7R, 50V, 0.1uF	133623-104	
C228	C0G, 0603, 50V, 5%, 560pF	188454-561	
C229	C0G, 0603, 50V, 5%, 1000pF	188454-102	
C230	C0G, 0603, 50V, 5%, 560pF	188454-561	
C231	C0G, 0603, 50V, 5%, 560pF	188454-561	
C232	C0G, 0603, 50V, 5%, 1000pF	188454-102	
C233	C0G, 0603, 50V, 5%, 560pF	188454-561	
C234	C0G, 0603, 50V, 5%, 180pF	188454-181	
C235	C0G, 0603, 50V, 5%, 180pF	188454-181	
C236	C0G, 0603, 50V, 5%, 180pF	188454-181	
C237	C0G, 0603, 50V, 5%, 1800pF	188454-182	

# ELECTRICAL PART LIST

Amplifier PCB Assembly  
Capacitors (continued)

Reference Designator	Description	Part Number	Note
C238	C0G, 0603, 50V, 5%, 270pF	188454-271	
C239	C0G, 0603, 50V, 5%, 1800pF	188454-182	
C240	C0G, 0603, 50V, 5%, 1800pF	188454-182	
C241	C0G, 0603, 50V, 5%, 220pF	188454-221	
C242	C0G, 0603, 50V, 5%, 270pF	188454-271	
C243	C0G, 0603, 50V, 5%, 1800pF	188454-182	
C244	C0G, 0603, 50V, 5%, 1800pF	188454-182	
C245	C0G, 0603, 50V, 5%, 180pF	188454-181	
C246	C0G, 0603, 50V, 5%, 1800pF	188454-182	
C247	C0G, 0603, 50V, 5%, 1800pF	188454-182	
C248	C0G, 0603, 50V, 5%, 1800pF	188454-182	
C249	C0G, 0603, 50V, 5%, 1800pF	188454-182	
C250	C0G, 0603, 50V, 5%, 220pF	188454-221	
C251	C0G, 0603, 50V, 5%, 1800pF	188454-182	
C252	C0G, 0603, 50V, 5%, 1800pF	188454-182	
C253	C0G, 0603, 50V, 5%, 1800pF	188454-182	
C254	C0G, 0603, 50V, 5%, 470pF	188454-471	
C255	C0G, 0603, 50V, 5%, 470pF	188454-471	
C256	C0G, 0603, 50V, 5%, 220pF	188454-221	
C257	C0G, 0603, 50V, 5%, 220pF	188454-221	
C258	C0G, 0603, 50V, 5%, 10pF	188454-100	
C259	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C260	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C261	C0G, 0603, 50V, 5%, 10pF	188454-100	
C262	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C263	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C264	0805, X7R, 10%, 25V, 1uF	181264-105	
C265	0603, C0G, SMD, 25V, 5%, 10nF	268368-103	
C266	0603, C0G, SMD, 25V, 5%, 10nF	268368-103	
C267	0805, X7R, 50V, 0.1uF	133623-104	
C268	0805, X7R, 10%, 25V, 1uF	181264-105	
C269	C0G, 0603, 50V, 5%, 82pF	188454-820	
C270	0603, X7R, 50V, .01uF	191470-103	
C271	C0G, 0603, 50V, 5%, 82pF	188454-820	
C272	C0G, 0603, 50V, 5%, 10pF	188454-100	
C273	C0G, 0603, 50V, 5%, 10pF	188454-100	
C274	C0G, 0603, 50V, 5%, 1800pF	188454-182	
C275	C0G, 0603, 50V, 5%, 1800pF	188454-182	
C300	0603, X7R, 50V, 10%, .033uF	191470-333	
C301	0603, X7R, 50V, 10%, .033uF	191470-333	
C302	0805, X7R, 50V, 0.1uF	133623-104	
C303	0603, X7R, 50V, 10%, .033uF	191470-333	

# ELECTRICAL PART LIST

Amplifier PCB Assembly  
Capacitors (continued)

Reference Designator	Description	Part Number	Note
C304	0603, X7R, 50V, 10%, .033uF	191470-333	
C305	C0G, 0603, 50V, 5%, 220pF	188454-221	
C306	X7R, 0603, 16V, 5%, 4.7nF	257154-472J16	
C307	C0G, 0603, 50V, 5%, 220pF	188454-221	
C308	0603, X7R, 5%, 25V, 2.2nF	196999-222	
C309	0805, X7R, 50V, 0.1uF	133623-104	
C310	0805, X7R, 10%, 25V, 1uF	181264-105	
C311	C0G, 0603, 50V, 5%, 470pF	188454-471	
C312	C0G, 0603, 50V, 5%, 47pF	188454-470	
C313	0805, X7R, 10%, 25V, 1uF	181264-105	
C314	0805, X7R, 10%, 25V, 1uF	181264-105	
C315	0603, X7R, 5%, 25V, 4.7 nF	196999-472	
C316	1411, TANT, 20V, 20%, 4.7uF	188588-475	
C317	C0G, 0603, 50V, 5%, 4700pF	188454-472	
C318	0603, C0G, SMD, 25V, 5%, 10nF	268368-103	
C319	0805, X7R, 10%, 25V, 1uF	181264-105	
C320	C0G, 0603, 50V, 5%, 470pF	188454-471	
C321	0805, X7R, 10%, 25V, 1uF	181264-105	
C322	0805, X7R, 10%, 25V, 1uF	181264-105	
C323	0805, X7R, 10%, 25V, 1uF	181264-105	
C324	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C325	X7R, 0603, 25V, 5%, 220pF	196999-221	
C326	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C327	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C328	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C329	X7R, 0603, 16V, 5%, 47nF	257154-473J16	
C330	0805, X7R, 10%, 25V, 1uF	181264-105	
C331	X7R, 0603, 16V, 10%, 1uF	257154-105K16	
C332	X7R, 0603, 16V, 5%, 47nF	257154-473J16	
C333	X7R, 0603, 16V, 5%, 47nF	257154-473J16	
C334	0805, X7R, 10%, 25V, 1uF	181264-105	
C335	X7R, 0603, 16V, 10%, 1uF	257154-105K16	
C336	X7R, 0603, 16V, 5%, 47nF	257154-473J16	
C337	0805, X7R, 10%, 25V, 1uF	181264-105	
C338	X7R, 0603, 16V, 10%, 1uF	257154-105K16	
C339	0805, X7R, 10%, 25V, 1uF	181264-105	
C340	X7R, 0603, 16V, 10%, 1uF	257154-105K16	
C341	0603, X7R, 50V, 330pF	191470-331	
C342	0603, X7R, 50V, 330pF	191470-331	
C343	0603, X7R, 50V, 330pF	191470-331	
C344	0603, X7R, 50V, 330pF	191470-331	
C345	0805, C0G, 200V, 10%, 220pF	260668-221K	

# ELECTRICAL PART LIST

Amplifier PCB Assembly  
Capacitors (continued)

Reference Designator	Description	Part Number	Note
C346	0805, C0G, 200V, 10%, 220pF	260668-221K	
C347	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C348	0805, C0G, 200V, 10%, 220pF	260668-221K	
C349	X7R, 1210, 25V, 10%, 22uF, COMM	759068-226K1E	
C350	0805, C0G, 200V, 10%, 220pF	260668-221K	
C351	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C352	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C353	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C354	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C355	C0G, 0603, 50V, 5%, 430pF	188454-431	
C356	C0G, 0603, 50V, 5%, 430pF	188454-431	
C357	C0G, 0603, 5%, 25V, 8.2nF	268368-822	
C358	C0G, 0603, 50V, 5%, 430pF	188454-431	
C359	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C360	C0G, 1206, 100V, 5%, 0.047uF	354973-473J	
C361	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C362	C0G, 0603, 50V, 5%, 1000pF	188454-102	
C363	C0G, 0603, 50V, 5%, 200pF	188454-201	
C364	C0G, 0603, 50V, 5%, 470pF	188454-471	
C365	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C366	C0G, 0603, 50V, 5%, 1200pF	188454-122	
C367	X7R, 0603, 200V, 10%, 1000pF, COMM	718875-102K2D	
C368	X7R, 0603, 100V, 10%, 1000pF, COMM	718875-102K2A	
C369	0805, X7R, 50V, 0.1uF	133623-104	
C370	0805, X7R, 50V, 0.1uF	133623-104	
C371	FILM, 15mm LS, BULK, 10%, 250Vdc, 0.47uF	354214-474IKB	
C373	X7R, 0603, 100V, 10%, 1000pF, COMM	718875-102K2A	
C374	C0G, 1206, 100V, 5%, 0.047uF	354973-473J	
C375	X7R, 0603, 100V, 10%, 1000pF, COMM	718875-102K2A	
C377	X7R, 0603, 100V, 10%, 1000pF, COMM	718875-102K2A	
C378	C0G, 0603, 50V, 5%, 430pF	188454-431	
C400	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C401	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C402	C0G, 0603, 50V, 5%, 220pF	188454-221	
C403	C0G, 0603, 50V, 5%, 220pF	188454-221	
C404	X7R, 0603, 16V, 5%, 4.7nF	257154-472J16	
C405	C0G, 0603, 50V, 5%, 470pF	188454-471	
C406	C0G, 0603, 50V, 5%, 47pF	188454-470	
C407	EL, SNAP-IN, DISK, 105C, 200V, 20%, 1500uF	629718-152DDBW	
C408	EL, SNAP-IN, DISK, 105C, 200V, 20%, 1500uF	629718-152DDBW	
C409	0603, X7R, 5%, 25V, 4.7nF	196999-472	
C410	C0G, 0603, 50V, 5%, 4700pF	188454-472	

# ELECTRICAL PART LIST

Amplifier PCB Assembly  
Capacitors (continued)

Reference Designator	Description	Part Number	Note
C411	EL, SNAP-IN, DISK, 105C, 200V, 20%, 1500uF	629718-152DDBW	
C412	C0G, 0603, 50V, 5%, 470pF	188454-471	
C413	0603, C0G, SMD, 25V, 5%, 10nF	268368-103	
C414	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C415	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C416	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C417	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C418	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C419	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C420	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C421	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C422	X7R, 0603, 16V, 5%, 47nF	257154-473J16	
C423	0805, X7R, 10%, 25V, 1uF	181264-105	
C424	X7R, 0603, 16V, 10%, 1uF	257154-105K16	
C425	X7R, 0603, 16V, 5%, 47nF	257154-473J16	
C426	X7R, 0603, 16V, 5%, 47nF	257154-473J16	
C427	0805, X7R, 10%, 25V, 1uF	181264-105	
C428	X7R, 0603, 16V, 10%, 1uF	257154-105K16	
C429	X7R, 0603, 16V, 5%, 47nF	257154-473J16	
C430	0805, X7R, 10%, 25V, 1uF	181264-105	
C431	X7R, 0603, 16V, 10%, 1uF	257154-105K16	
C432	0805, X7R, 10%, 25V, 1uF	181264-105	
C433	X7R, 0603, 16V, 10%, 1uF	257154-105K16	
C434	0603, X7R, 50V, 330pF	191470-331	
C435	0603, X7R, 50V, 330pF	191470-331	
C436	0603, X7R, 50V, 330pF	191470-331	
C437	0603, X7R, 50V, 330pF	191470-331	
C438	0805, C0G, 200V, 10%, 220pF	260668-221K	
C439	0805, C0G, 200V, 10%, 220pF	260668-221K	
C440	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C441	0805, C0G, 200V, 10%, 220pF	260668-221K	
C442	X7R, 1210, 25V, 10%, 22uF, COMM	759068-226K1E	
C443	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C444	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C445	0805, C0G, 200V, 10%, 220pF	260668-221K	
C446	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C447	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C448	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C449	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C450	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C451	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C452	C0G, 0603, 50V, 5%, 430pF	188454-431	

# ELECTRICAL PART LIST

Amplifier PCB Assembly  
Capacitors (continued)

Reference Designator	Description	Part Number	Note
C453	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C454	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C455	C0G, 0603, 50V, 5%, 430pF	188454-431	
C456	C0G, 0603, 5%, 25V, 8.2nF	268368-822	
C457	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C458	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C459	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C460	C0G, 0603, 50V, 5%, 430pF	188454-431	
C461	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C462	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C463	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C464	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C465	C0G, 1206, 100V, 5%, 0.047uF	354973-473J	
C466	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C467	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C468	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C469	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C470	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C471	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C472	C0G, 0603, 50V, 5%, 1000pF	188454-102	
C473	C0G, 0603, 50V, 5%, 470pF	188454-471	
C474	C0G, 0603, 50V, 5%, 200pF	188454-201	
C475	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C476	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C477	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C478	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C479	X7R, 0603, 10%, 0.1uF, 50V	191470-104	
C480	C0G, 0603, 50V, 5%, 1200pF	188454-122	
C481	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C482	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C483	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C484	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C485	X7R, 0603, 200V, 10%, 1000pF, COMM	718875-102K2D	
C486	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C487	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C488	FILM, 15mm LS, BULK, 10%, 250Vdc, 0.47uF	354214-474IKB	
C489	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C490	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C491	C0G, 1206, 100V, 5%, 0.047uF	354973-473J	
C492	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C493	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C494	X7R, 1210, 200V, 10%, 220nF	327916-224K	

# ELECTRICAL PART LIST

Amplifier PCB Assembly  
Capacitors (continued)

Reference Designator	Description	Part Number	Note
C495	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C496	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C497	X7R, 1210, 200V, 10%, 220nF	327916-224K	
C498	C0G, 0603, 50V, 5%, 430pF	188454-431	

## Inductors

Reference Designator	Description	Part Number	Note
L300	CORE, FERRITE, EQ20, LOW PROFILE	326426-0010	
L301	INDUCTOR, BALANCED OUT, PQ26/25	753038-0010	
L400	CORE, FERRITE, EQ20, LOW PROFILE	326426-0010	
L401	INDUCTOR, BALANCED OUT, PQ26/25	753038-0010	
T300	CORE, FERRITE, EQ20	326424-0010	
T400	CORE, FERRITE, EQ20	326424-0010	

## Diodes

Reference Designator	Description	Part Number	Note
D100	SCHOTTKY, SC70, 30V, SINGLE	268381-001	
D101	SW, 75V, 0.3A, SOT-323, BAV99W	298763-075	
D102	SWITCHING, SOD123, 1N4148W	257662	
D103	SW, 75V, 0.3A, SOT-323, BAV99W	298763-075	
D104	SW, 75V, 0.3A, SOT-323, BAV99W	298763-075	
D105	SW, 75V, 0.3A, SOT-323, BAV99W	298763-075	
D106	SW, 75V, 0.3A, SOT-323, BAV99W	298763-075	
D107	SW, 75V, 0.3A, SOT-323, BAV99W	298763-075	
D108	SW, 75V, 0.3A, SOT-323, BAV99W	298763-075	
D201	SW, 75V, 0.3A, SOT-323, BAV99W	298763-075	
D202	SW, 75V, 0.3A, SOT-323, BAV99W	298763-075	
D206	SW, 75V, 0.3A, SOT-323, BAV99W	298763-075	
D207	SW, 75V, 0.3A, SOT-323, BAV99W	298763-075	
D208	SCHOTTKY, SC70, 30V, SINGLE	268381-001	
D209	SCHOTTKY, SC70, 30V, SINGLE	268381-001	
D300	SCHOTTKY, SC70, 30V, SINGLE	268381-001	
D301	SCHOTTKY, SC70, 30V, SINGLE	268381-001	
D302	SCHOTTKY, SC70, 30V, SINGLE	268381-001	
D303	SCHOTTKY, SC70, 30V, SINGLE	268381-001	
D304	SCHOTTKY, SC70, 30V, SINGLE	268381-001	
D305	SCHOTTKY, SC70, 30V, SINGLE	268381-001	
D306	SCHOTTKY, SC70, 30V, SINGLE	268381-001	
D307	SCHOTTKY, SC70, 30V, SINGLE	268381-001	
D308	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D309	SCHOTTKY, 1A, 30V, SOD123	317122-001	

# ELECTRICAL PART LIST

Amplifier PCB Assembly

Diodes (continued)

Reference Designator	Description	Part Number	Note
D310	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D311	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D312	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D313	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D314	SCHOTTKY, 1A, 40V, SOD-123	329019-0010	
D315	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D316	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D317	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D318	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D319	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D320	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D321	SCHOTTKY, 1A, 40V, SOD-123	329019-0010	
D322	SCHOTTKY, 1A, 40V, SOD-123	329019-0010	
D323	SCHOTTKY, 1A, 40V, SOD-123	329019-0010	
D324	SCHOTTKY, 1A, 40V, SOD-123	329019-0010	
D325	SCHOTTKY, 1A, 40V, SOD-123	329019-0010	
D326	SCHOTTKY, 1A, 40V, SOD-123	329019-0010	
D327	SCHOTTKY, 1A, 40V, SOD-123	329019-0010	
D328	SW, 75V, 0.3A, SOT-323, BAV99W	298763-075	
D400	SCHOTTKY, SC70, 30V, SINGLE	268381-001	
D401	SCHOTTKY, SC70, 30V, SINGLE	268381-001	
D402	SCHOTTKY, SC70, 30V, SINGLE	268381-001	
D403	SCHOTTKY, SC70, 30V, SINGLE	268381-001	
D404	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D405	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D406	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D407	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D408	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D409	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D410	SCHOTTKY, 1A, 40V, SOD-123	329019-0010	
D411	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D412	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D413	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D414	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D415	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D416	SCHOTTKY, 1A, 30V, SOD123	317122-001	
D417	SCHOTTKY, 1A, 40V, SOD-123	329019-0010	
D418	SCHOTTKY, 1A, 40V, SOD-123	329019-0010	
D419	SCHOTTKY, 1A, 40V, SOD-123	329019-0010	
D420	SCHOTTKY, 1A, 40V, SOD-123	329019-0010	
D421	SCHOTTKY, 1A, 40V, SOD-123	329019-0010	
D422	SCHOTTKY, 1A, 40V, SOD-123	329019-0010	

# ELECTRICAL PART LIST

Amplifier PCB Assembly

Diodes (continued)

Reference Designator	Description	Part Number	Note
D423	SCHOTTKY, 1A, 40V, SOD-123	329019-0010	
D424	SW, 75V, 0.3A, SOT-323, BAV99W	298763-075	
ZR100	ZENER, 10.V, 225MW, 5%, SOT-23	135247-5240	
ZR101	ZENER, 10.V, 225MW, 5%, SOT-23	135247-5240	
ZR200	ZENER, 5.6V, 250mW, 1%, SOT-23	135247-1232	
ZR201	ZENER, 5.6V, 250mW, 1%, SOT-23	135247-1232	
ZR202	ZENER, 5.6V, 250mW, 1%, SOT-23	135247-1232	
ZR203	ZENER, 5.6V, 250mW, 1%, SOT-23	135247-1232	
ZR204	ZENER, 7.5V, 250mW, 1%, SOT-23	135247-1236	
ZR205	ZENER, 7.5V, 250mW, 1%, SOT-23	135247-1236	
ZR206	ZENER, 7.5V, 250mW, 1%, SOT-23	135247-1236	
ZR207	ZENER, 7.5V, 250mW, 1%, SOT-23	135247-1236	
ZR300	ZENER, 10.V, 225MW, 5%, SOT-23	135247-5240	
ZR400	ZENER, 10.V, 225MW, 5%, SOT-23	135247-5240	

## Transistors

Reference Designator	Description	Part Number	Note
Q100	BPLR, N, 40V, 200mA, SOT23	146819	
Q101	BPLR, P, 40V, 200mA, SOT23	148596	
Q102	BPLR, N, 40V, 200mA, SOT23	146819	
Q103	BPLR, N, 40V, 200mA, SOT23	146819	
Q104	BPLR, N, 40V, 200mA, SOT23	146819	
Q105	BPLR, N, 40V, 200mA, SOT23	146819	
Q106	BPLR, P, 40V, 200mA, SOT23	148596	
Q204	BPLR, N, 40V, 200mA, SOT23	146819	
Q205	BPLR, N, 40V, 200mA, SOT23	146819	
Q300	BPLR, N, 40V, 200mA, SOT23	146819	
Q301	BPLR, N, 40V, 200mA, SOT23	146819	
Q302	BPLR, N, 40V, 200mA, SOT23	146819	
Q303	BPLR, N, 40V, 200mA, SOT23	146819	
Q304	BPLR, P, 40V, 200mA, SOT23	148596	
Q305	BPLR, N, 40V, 200mA, SOT23	146819	
Q306	BPLR, P, 40V, 200mA, SOT23	148596	
Q307	PNP, LO SAT, 30V, 5.5A, SOT89	326379-0010	
Q308	NPN, LO SAT, 30V, 6A, SOT89	326375-0010	
Q309	MFET, N-CH, 3.5A, 30V, SOT-23	362339-0010	
Q310	MFET, N-CH, 60mA, 200V, SOT-23	354011-0010	
Q311	PNP, LO SAT, 30V, 5.5A, SOT89	326379-0010	
Q312	PNP, LO SAT, 30V, 5.5A, SOT89	326379-0010	
Q313	NPN, LO SAT, 30V, 6A, SOT89	326375-0010	
Q314	MFET, N-CH, 3.5A, 30V, SOT-23	362339-0010	

# ELECTRICAL PART LIST

Amplifier PCB Assembly  
Transistors (continued)

Reference Designator	Description	Part Number	Note
Q315	PNP, LO SAT, 30V, 5.5A, SOT89	326379-0010	
Q316	PNP, LO SAT, 30V, 5.5A, SOT89	326379-0010	
Q317	NPN, LO SAT, 30V, 6A, SOT89	326375-0010	
Q318	MFET, N-CH, 3.5A, 30V, SOT-23	362339-0010	
Q319	NPN, LO SAT, 30V, 6A, SOT89	326375-0010	
Q320	MFET, N-CH, 3.5A, 30V, SOT-23	362339-0010	
Q321	MFET, N-CH, 60mA, 200V, SOT-23	354011-0010	
Q322	PNP, LO SAT, 30V, 5.5A, SOT89	326379-0010	
Q323	MFET, N-CH, 60mA, 200V, SOT-23	354011-0010	
Q324	MFET, N-CH, 60mA, 200V, SOT-23	354011-0010	
Q325	PNP, LO SAT, 30V, 5.5A, SOT89	326379-0010	
Q326	PNP, LO SAT, 30V, 5.5A, SOT89	326379-0010	
Q327	DIRECTFET, N-CH, 200V, 19A, MZ	326382-0010	
Q328	DIRECTFET, N-CH, 200V, 19A, MZ	326382-0010	
Q329	DIRECTFET, N-CH, 200V, 19A, MZ	326382-0010	
Q330	DIRECTFET, N-CH, 200V, 19A, MZ	326382-0010	
Q331	DIRECTFET, N-CH, 200V, 19A, MZ	326382-0010	
Q332	DIRECTFET, N-CH, 200V, 19A, MZ	326382-0010	
Q333	DIRECTFET, N-CH, 200V, 19A, MZ	326382-0010	
Q334	DIRECTFET, N-CH, 200V, 19A, MZ	326382-0010	
Q400	BPLR, N, 40V, 200mA, SOT23	146819	
Q401	BPLR, N, 40V, 200mA, SOT23	146819	
Q402	BPLR, N, 40V, 200mA, SOT23	146819	
Q403	BPLR, N, 40V, 200mA, SOT23	146819	
Q404	BPLR, P, 40V, 200mA, SOT23	148596	
Q405	BPLR, N, 40V, 200mA, SOT23	146819	
Q406	BPLR, P, 40V, 200mA, SOT23	148596	
Q407	PNP, LO SAT, 30V, 5.5A, SOT89	326379-0010	
Q408	MFET, N-CH, 3.5A, 30V, SOT-23	362339-0010	
Q409	NPN, LO SAT, 30V, 6A, SOT89	326375-0010	
Q410	MFET, N-CH, 60mA, 200V, SOT-23	354011-0010	
Q411	PNP, LO SAT, 30V, 5.5A, SOT89	326379-0010	
Q412	PNP, LO SAT, 30V, 5.5A, SOT89	326379-0010	
Q413	NPN, LO SAT, 30V, 6A, SOT89	326375-0010	
Q414	MFET, N-CH, 3.5A, 30V, SOT-23	362339-0010	
Q415	PNP, LO SAT, 30V, 5.5A, SOT89	326379-0010	
Q416	PNP, LO SAT, 30V, 5.5A, SOT89	326379-0010	
Q417	NPN, LO SAT, 30V, 6A, SOT89	326375-0010	
Q418	MFET, N-CH, 3.5A, 30V, SOT-23	362339-0010	
Q419	MFET, N-CH, 3.5A, 30V, SOT-23	362339-0010	
Q420	NPN, LO SAT, 30V, 6A, SOT89	326375-0010	
Q421	MFET, N-CH, 60mA, 200V, SOT-23	354011-0010	

# ELECTRICAL PART LIST

Amplifier PCB Assembly  
Transistors (continued)

Reference Designator	Description	Part Number	Note
Q422	PNP, LO SAT, 30V, 5.5A, SOT89	326379-0010	
Q423	MFET, N-CH, 60mA, 200V, SOT-23	354011-0010	
Q424	MFET, N-CH, 60mA, 200V, SOT-23	354011-0010	
Q425	PNP, LO SAT, 30V, 5.5A, SOT89	326379-0010	
Q426	PNP, LO SAT, 30V, 5.5A, SOT89	326379-0010	
Q427	DIRECTFET, N-CH, 200V, 19A, MZ	326382-0010	
Q428	DIRECTFET, N-CH, 200V, 19A, MZ	326382-0010	
Q429	DIRECTFET, N-CH, 200V, 19A, MZ	326382-0010	
Q430	DIRECTFET, N-CH, 200V, 19A, MZ	326382-0010	
Q431	DIRECTFET, N-CH, 200V, 19A, MZ	326382-0010	
Q432	DIRECTFET, N-CH, 200V, 19A, MZ	326382-0010	
Q433	DIRECTFET, N-CH, 200V, 19A, MZ	326382-0010	
Q434	DIRECTFET, N-CH, 200V, 19A, MZ	326382-0010	

## Integrated Circuits

Reference Designator	Description	Part Number	Note
U100	LOGBUS XCVR, 1B, 3S, 74LVC1T45, SOT	759041-0010	
U101	OP AMP, DUAL, JFET, TLE2072A, SO8	326336-0231	
U102	SCHMIT TRIG, IN, 74HC14, SO14	260624	
U103	COUNTER, SYNCHRONOUS BINARY, 4-BIT	727921-0010	
U104	OP AMP, QUAD, SO-14, TL074BCDT	188953-001	
U200	OP AMP, QUAD, FET INPUT, 4134, 14SOIC	330248-0010	
U201	SWITCH, ANALOG, TRIPLE, ADG1433, 16TSSOP	326367-0010	
U203	OP AMP, QUAD, FET INPUT, 120uV, 4140, 14SO	757494-0404	
U204	COMPARATOR, DUAL, LM2903, 8SOIC	322174-0010	
U205	COMPARATOR, 5.5V, 4.5nS, TLV3502, SOT23-8	353940-0010	
U206	COMPARATOR, 5.5V, 4.5nS, TLV3502, SOT23-8	353940-0010	
U300	HALL-EFFECT CURRENT SENSOR, ACS711, 8SO	330390-0010	
U301	OP AMP, QUAD, JFET, TLE2074, SO16W, 3mV	326336-0040	
U302	SWITCH, ANALOG, SPST, ADG452, 16TSSOP	328693-0010	
U303	POWER STAGE AMPLIFIER, 2X15W, 32HTSSOP	353939-0010	
U304	COMPARATOR, QUAD, LM2901, 14SOIC	310919-001	
U400	HALL-EFFECT CURRENT SENSOR, ACS711, 8SO	330390-0010	
VR100	3 TERM ADJ REG, LM317MQDCYR	271642-001	
VR101	3 TERM ADJ REG, LM317MQDCYR	271642-001	
VR102	VOLT REG, POS, LDO, 3A, ADJ, LD1085, DPAK	362098-0010	
VR103	VOLTAGE REG, NEGATIVE, LM337, SOT-223	328992-0010	

# ELECTRICAL PART LIST

Amplifier PCB Assembly

Miscellaneous

Reference Designator	Description	Part Number	Note
HS100	HEAT SINK, DPAK	320438-002	
HS300	HEAT SINK, D2PAK	320438-001	
J100	CONN, FFC, 0.5mm, T ENTRY, 20POS, WHT	269863-020	
J101	CONN, FFC, 0.5mm, T ENTRY, 10POS, WHT	269863-010	
J300	CONN, HEADER, INLINE, PCB MNT, 4P	133220-04	
J400	CONN, HEADER, INLINE, 3P, BLACK	133220-103	
Y100	OSCILLATOR, 5.6MHz, 25PPM, 3.3V, 3225	757550-5M60000	
-	HEATSINK, TOP, AMP	732979-0010	
-	THERMAL PAD, AMP	720281-0010	Qty. 2
-	SCREW, M3 X 8MM, SKT HD CAP	473028-0010	Qty. 3
-	HEATSINK, BOTTOM, AMP	623674-0010	

# ELECTRICAL PART LIST

SMPS PCB Assembly

Resistors

Reference Designator	Description	Vendor Part Number	Note
R200	RMG, 1/16W, 0R, 1%, 0603	4723-000A	
R202	RMG, 1/10W, 3.3K, 1%, 0805	4720-332A	
R203	RMG, 1/16W, 3K, 1%, 0603	4723-302A	
R204	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R205	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991	
R206	RMG, 1/10W, 82 OHMS, 5%, 0805	4720-820J	
R207	RMG, 1/8W, 330K, 1%, 1206	4721-334A	
R208	RMG, 1/8W, 330K, 1%, 1206	4721-334A	
R209	RMG, 1/8W, 330K, 1%, 1206	4721-334A	
R210	RMG, 1/8W, 330K, 1%, 1206	4721-334A	
R211	RMG, 1/8W, 330K, 1%, 1206	4721-334A	
R212	RMG, 1/8W, 330K, 1%, 1206	4721-334A	
R213	RMG, 1/10W, 91K, 1%, 0603	4720-913A	
R214	RMG, 1/10W, 75 OHMS, 5%, 0805	4720-750J	
R215	RMG, 1/4W, 200K, 1%, 1206	4725-204A	
R216	RMG, 1/8W, 0 OHMS, 1%, 1206	4721-000A	
R217	RMG, 1/16W, 30K, 1%, 0603/1608	4723-303A	
R218	RMG, 1/8W, 1.5K, 5%, 1206	4721-152J	
R220	RMG, 1/8W, 1.5K, 5%, 1206	4721-152J	
R221	RMG, 1/8W, 1.5K, 5%, 1206	4721-152J	
R222	RMG, 1/10W, 249 OHM, 1%, 0805	4720-249A	
R223	RMG, 1/16W, 51K, 1%, 0603/1608	4723-513A	
R224	RMG, 1/16W, 56K, 1%, 0603	4723-563AR	
R225	RMG, 1/16W, 560K, 1%, 0603/1608	4723-564A	
R226	RMG, 1/16W, 13K, 1%, 0603	4723-133AR	
R227	RMG, 1/16W, 0 OHMS, 1%, 0603	4723-000A	
R228	RMG, 1/10W, 15 OHMS, 1%, 0805	4720-150A	
R229	RMG, 1/10W, 15 OHMS, 1%, 0805	4720-150A	
R230	RMG, 1/10W, 4.99K, 1%, 0805	4720-4991	
R232	RMG, 1/10W, 18K, 5%, 0805	4720-183J	
R233	RMG, 1/4W, 100 OHMS, 1%, 1206	4725-101A	
R234	RMG, 1/4W, 100 OHMS, 1%, 1206	4725-101A	
R235	RMG, 1/16W, 1K, 1%, 0603/1608	4723-102A	
R236	RMG, 1/16W, 1K, 1%, 0603/1608	4723-102A	
R237	RMG, 1/10W, 750 OHMS, 1%, 0805	4720-751A	
R238	RMG, 1/16W, 240 OHMS, 1%, 0603/1608	4723-241A	
R239	RMG, 1/16W, 240 OHMS, 1%, 0603/1608	4723-241A	
R240	RMG, 1/16W, 1K, 1%, 0603/1608	4723-102A	
R241	RMG, 1/16W, 1K, 1%, 0603/1608	4723-102A	

# ELECTRICAL PART LIST

SMPS PCB Assembly

Resistors (continued)

Reference Designator	Description	Vendor Part Number	Note
R242	RMG, 1/8W, 2.2 OHMS, 5%, 1206	4721-2R2J	
R243	RMG, 1/8W, 330K, 5%, 1206	4721-334J	
R244	RMG, 1/8W, 330K, 5%, 1206	4721-334J	
R245	RMG, 1/8W, 330K, 5%, 1206	4721-334J	
R246	RMG, 1/16W, 0 OHMS, 1%, 0603	4723-000A	
R248	RMG, 1/8W, 47 OHMS, 5%, 1206	4721-470J	
R249	RMG, 1/8W, 47 OHMS, 5%, 1206	4721-470J	
R251	RMG, 1/8W, 47 OHMS, 5%, 1206	4721-470J	
R252	RMG, 1/8W, 47 OHMS, 5%, 1206	4721-470J	
R253	RMG, 1W, 10K, 5%, 2512	4728-103J	
R254	RMG, 1/4W, 5.1K, 5%, 1206	4725-512J	
R257	RMG, 1/4W, 5.1K, 5%, 1206	4725-512J	
R258	RMG, 1/10W, 750 OHMS, 1%, 0805	4720-751A	
R259	RMG, 1/10W, 750 OHMS, 1%, 0805	4720-751A	
R260	RMG, 1/10W, 750 OHMS, 1%, 0805	4720-751A	
R261	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991	
R262	RMG, 1/16W, 10 OHMS, 1%, 0603	4723-100AR	
R263	RMG, 1/16W, 10 OHMS, 1%, 0603	4723-100AR	
R264	RMG, 1/16W, 10 OHMS, 1%, 0603	4723-100AR	
R265	RMG, 1/16W, 10K, 1%, 0603	4723-103AR	
R266	RMG, 1/16W, 10K, 1%, 0603	4723-103AR	
R267	RMG, 1W, 10K, 5%, 2512	4728-103J	
R268	RMG, 1/10W, 100 OHMS, 1%, 0805	4720-101A	
R270	RMG, 1/16W, 100 OHMS, 1%, 0603	4723-101A	
R271	RMG, 1/16W, 100 OHMS, 1%, 0603	4723-101A	
R272	RMG, 1/16W, 100K, 1%, 0603	4723-104AR	
R273	RMG, 1/16W, 100K, 1%, 0603	4723-104AR	
R274	RMG, 1/4W, 200K, 1%, 1206	4725-204A	
R275	RMG, 1/16W, 100K, 1%, 0603	4723-104AR	
R276	RMG, 1/16W, 100K, 1%, 0603	4723-104AR	
R277	RMG, 1/16W, 100K, 1%, 0603	4723-104AR	
R278	RMG, 1/16W, 100K, 1%, 0603	4723-104AR	
R282	RCF, 1/4W, 100K, 5%, AT	4705-104J	
R283	RCF, 1/4W, 100K, 5%, AT	4705-104J	
R284	RMG, 1/10W, 10K, 1%, 0805	4720-103A	
R285	RMG, 1/16W, 1M, 1%, 0603	4723-105A	
R286	RMG, 1/16W, 1M, 1%, 0603	4723-105A	
R287	RMG, 1W, 0.33 OHMS, 1%, 2512	4728-R33A	
R288	RMG, 1/16W, 16K, 1%, 0603/1608	4723-163A	
R289	RMG, 1/16W, 16K, 1%, 0603/1608	4723-163A	

# ELECTRICAL PART LIST

SMPS PCB Assembly

Resistors (continued)

Reference Designator	Description	Vendor Part Number	Note
R290	RMG, 1/16W, 470K, 1%, 0603	4723-474A	
R291	RMG, 1/16W, 2K, 1%, 0603/1608	4723-202A	
R292	RMG, 1/16W, 13K, 1%, 0603	4723-133AR	
R293	RMG, 1/16W, 12K, 1%, 0603	4723-123AR	
R294	RMG, 1/16W, 12K, 1%, 0603	4723-123AR	
R295	RWR, 5W, 2.5 OHMS, 5%, SQZ, RL	474B-2R5J	
R296	RWR, 5W, 2.5 OHMS, 5%, SQZ, RL	474B-2R5J	
R297	RMG, 1/16W, 5.1K, 1%, 0603/1608	4723-512A	
R298	RMG, 1/16W, 2K, 1%, 0603/1608	4723-202A	
R299	RMF, 3W, 0.025 OHMS, 1%, ATW, NON-INDUCTIVE	471A-R025H	
R306	RMG, 1/10W, 220 OHMS, 5%, 0805	4720-221J	
R307	RMG, 1/16W, 10K, 1%, 0603	4723-103AR	
R308	RMG, 1/16W, 10K, 1%, 0603	4723-103AR	
R309	RMG, 1/8W, 1M, 1%, 1206	4721-105A	
R310	RMG, 1/8W, 560K, 1%, 1206	4721-564A	
R311	RMG, 1/8W, 560K, 1%, 1206	4721-564A	
R312	RMG, 1/16W, 10K, 1%, 0603/1608	4723-103A	
R313	RMG, 1/16W, 43K, 1%, 0603/1608	4723-433A	
R319	RMG, 1/10W, 56R, 1%, 0805	4720-560A	
R320	RMG, 1/16W, 10K, 1%, 0603	4723-103AR	
R323	RMG, 1/16W, 47K, 1%, 0603	4723-473AR	
R324	RMG, 1/16W, 47K, 1%, 0603	4723-473AR	
R325	RMG, 1/16W, 47K, 1%, 0603	4723-473AR	
R326	RMG, 1/16W, 18K, 1%, 0603/1608	4723-183A	
R327	RMG, 1/10W, 56R, 1%, 0805	4720-560A	
R328	RMG, 1/16W, 10K, 1%, 0603	4723-103AR	
R338	RMG, 1/16W, 10K, 1%, 0603	4723-103AR	
R339	RMG, 1/4W, 200K, 1%, 1206	4725-204A	
R340	RMG, 1/4W, 200K, 1%, 1206	4725-204A	
R345	RCF, 1/4W, 100K, 5%, AT	4705-104J	
R346	RCF, 1/4W, 100K, 5%, AT	4705-104J	
R351	RMG, 1/8W, 1.5K, 5%, 1206	4721-152J	
R352	RMG, 1/16W, 0 OHMS, 1%, 0603	4723-000A	
R353	RMG, 1/8W, 100 OHMS, 1%, 1206	4721-101A	
R354	RMG, 1/16W, 100 OHMS, 1%, 0603	4723-101A	
R355	RMG, 1/16W, 0 OHMS, 1%, 0603	4723-000A	
R356	VARISTOR, 320V, 10%, 6KV, 3KA, 10MM, RL	4735-0016	3 
R357	RMG, 1/10W, 45.3K, 1%, 0603	4720-4532	

# ELECTRICAL PART LIST

SMPS PCB Assembly

Resistors (continued)

Reference Designator	Description	Vendor Part Number	Note
R358	RMG, 1/10W, 4.02K, 1%, 0603	4720-4021	
R359	RMG, 1/16W, 44.2K, 1%, 0603	4723-4422	
R360	RMG, 1/10W, 4.02K, 1%, 0603	4720-4021	
R361	RMG, 1/16W, 10K, 1%, 0603	4723-103AR	
R362	RMG, 1/16W, 1K, 1%, 0603/1608	4723-102A	
R363	RMG, 1/8W, 4.7 OHMS, 1%, 1206	4721-4R7A	
R367	RMG, 1/16W, 2K, 1%, 0603/1608	4723-202A	
R368	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991	
R389	RMG, 1/16W, 2.2K, 1%, 0603/1608	4723-222A	
R390	RMG, 1/16W, 2.2K, 1%, 0603/1608	4723-222A	
R391	RMG, 1/16W, 2.2K, 1%, 0603/1608	4723-222A	
R392	RMG, 1/16W, 2.2K, 1%, 0603/1608	4723-222A	
R393	RMG, 1/16W, 3.3K, 1%, 0603	4723-332AR	
R394	RMG, 1/16W, 1.5K, 1%, 0603	4723-152AR	
R395	RMG, 1/16W, 510 OHMS, 1%, 0603	4723-511A	
R398	RMG, 1/16W, 10K, 1%, 0603	4723-103AR	

## Capacitors

Reference Designator	Description	Vendor Part Number	Note
C200	CC, 50V, 0.1uF, 5%, 0603	150F-104JAC	
C201	CC, 50V, 0.1uF, 5%, 0603	150F-104JAC	
C202	CC, 50V, 0.1uF, 5%, 0603	150F-104JAC	
C204	CC, 50V, 0.1uF, 5%, 0603	150F-104JAC	
C205	CC, 50V, 0.1uF, 5%, 0603	150F-104JAC	
C206	CC, 50V, 0.1uF, 5%, 0603	150F-104JAC	
C207	CC, 50V, 0.1uF, 5%, 0603	150F-104JAC	
C208	CC, 50V, 0.1uF, 5%, 0603	150F-104JAC	
C209	CC, 50V, 1000pF, 5%, 0603, X7R	150F-102JAC	
C210	CC, 50V, 1000pF, 5%, 0603, X7R	150F-102JAC	
C211	CC, 50V, 1000pF, 5%, 0603, X7R	150F-102JAC	
C212	CC, 50V, 1000pF, 5%, 0603, X7R	150F-102JAC	
C213	CC, 50V, 120pF, 5%, 0603, C0G	150F-121JAC	
C214	CE, 50V, 10uF, 20%, RLT, 5X11, 105C, RX, NOVER	157F-106MIUTU	
C215	CC, 25V, 10uF, 10%, 1206, 3.2X1.6, X5R	150E-106KCF	
C216	CC, 25V, 10uF, 10%, 1206, 3.2X1.6, X5R	150E-106KCF	
C218	CC, 50V, 0.01uF, 5%, 0603	150F-103JAC	
C219	CC, 50V, 0.01uF, 5%, 0603	150F-103JAC	
C220	CE, 100V, 2000uF, 20%, RL, 35X25, SNAP-105C	157H-208M^T	
C221	CE, 100V, 2000uF, 20%, RL, 35X25, SNAP-105C	157H-208M^T	
C225	CC, 500V, 0.022uF, 10%, 1206	150L-223KCF	

# ELECTRICAL PART LIST

SMPS PCB Assembly  
Capacitors (continued)

Reference Designator	Description	Vendor Part Number	Note
C226	CC, 500V, 0.022uF, 10%, 1206	150L-223KCF	
C227	CC, 630V, 0.1uF, 10%, 1812, X7R	150M-104KHF	
C232	CC, 100V, 100pF, 10%, 0805, 1.2X2, NPO	150H-101KBD	
C233	CC, 100V, 100pF, 10%, 0805, 1.2X2, NPO	150H-101KBD	
C234	CC, 100V, 100pF, 10%, 0805, 1.2X2, NPO	150H-101KBD	
C235	CC, 100V, 100pF, 10%, 0805, 1.2X2, NPO	150H-101KBD	
C239	CE, 35V, 100uF, 20%, RLT, 6.3X11, 105C, LOW ESR	157Q-107MLUTR	
C243	CC, 630V, 100pF, 5%, 1206, 3.2X1.6	150M-101JCF	
C244	CC, 630V, 100pF, 5%, 1206, 3.2X1.6	150M-101JCF	
C245	CC, 630V, 100pF, 5%, 1206, 3.2X1.6	150M-101JCF	
C246	CC, 630V, 100pF, 5%, 1206, 3.2X1.6	150M-101JCF	
C247	CC, 400V, 470pF, +20%, RL, 9.5X8.0, AH09B471KLO	150T-471MRO	3 
C248	CC, 400V, 470pF, +20%, RL, 9.5X8.0, AH09B471KLO	150T-471MRO	3 
C249	CE, 450V, 270uF, 20%, RL, 35X30, SNAP-105C	1574-277M^\$T	
C250	CE, 450V, 270uF, 20%, RL, 35X30, SNAP-105C	1574-277M^\$T	
C251	CP, 275V, 0.47uF, 20%, RB, 18X16	158Z-474M75	3 
C252	CP, 275V, 0.47uF, 20%, RB, 18X16	158Z-474M75	3 
C254	CC, 1000V, 2200pF, 10%, 1206, X7R	150N-222KCF	
C255	CC, 1000V, 2200pF, 10%, 1206, X7R	150N-222KCF	
C256	CC, 50V, 1500pF, 10%, 0805, 1.2x2.0	150F-152KBD	
C257	CM, 400V, 0.47uF, 5%RB, 16X16, X7, METALLIZED, FARATRON-IC	153T-474J55M4	3 
C259	CC, 50V, 0.1uF, 10%, 0805, 1.2X2.0	150F-104KBD	
C260	CC, 50V, 0.1uF, 10%, 0805, 1.2X2.0	150F-104KBD	
C261	CC, 50V, 0.1uF, 10%, 0805, 1.2X2.0	150F-104KBD	
C262	CC, 50V, 0.1uF, 10%, 0805, 1.2X2.0	150F-104KBD	
C263	CC, 50V, 0.1uF, 10%, 0805, 1.2X2.0	150F-104KBD	
C264	CC, 50V, 2200pF, 5%, 0603, 0.8X1.6	150F-222JAC	
C265	CC, 50V, 0.47uF, 10%, 0805, 1.25X2, X7R	150F-474KBD	
C267	CE, 25V, 470uF, 20%, RLT, 10X16, 105C, RX, NOVER	157E-477MS5TU	
C268	CE, 35V, 1000uF, 20%, RLT, 10X30, 105C-LESR	157Q-108MS\$TR	
C269	CE, 25V, 470uF, 20%, RLT, 10X16, 105C, RX, NOVER	157E-477MS5TU	
C270	CE, 35V, 1000uF, 20%, RLT, 10X30, 105C-LESR	157Q-108MS\$TR	
C271	CE, 35V, 100uF, 20%, RLT, 6.3X11, 105C, LOW, ESR	157Q-107MLUTR	

# ELECTRICAL PART LIST

SMPS PCB Assembly

Capacitors (continued)

Reference Designator	Description	Vendor Part Number	Note
C272	CE, 16V, 470uF, 20%, RLT, 10X12.5, 105C, LOW, ESR	157D-477MSXTR	
C273	CC, 50V, 0.47uF, 10%, 0805, 1.25X2, X7R	150F-474KBD	
C274	CC, 500V, 0.022uF, 10%, 1206	150L-223KCF	
C275	CC, 50V, 100pF, 5%, 0603, C0G	150F-101JAC	
C276	CC, 50V, 100pF, 5%, 0603, C0G	150F-101JAC	
C277	CC, 50V, 100pF, 5%, 0603, C0G	150F-101JAC	
C278	CC, 50V, 100pF, 5%, 0603, C0G	150F-101JAC	
C279	CC, 50V, 100pF, 5%, 0603, C0G	150F-101JAC	
C280	CE, 35V, 47uF, 20%, RLT, 6.3X11, 105C, RX, NOVER	157Q-476MLUTU	
C282	CM, 630V, 0.1uF, 10%, RB, 17X16X10, P15, FARATRONIC	153M-104K654	
C283	CM, 630V, 0.1uF, 10%, RB, 17X16X10, P15, FARATRONIC	153M-104K654	
C284	CC, 50V, 1uF, 10%, 0805	150F-105KBD	
C285	CC, 50V, 0.01uF, 5%, 0603	150F-103JAC	
C286	CC, 50V, 0.01uF, 5%, 0603	150F-103JAC	
C287	CC, 250V, 0.1uF, 10%, X7R, 1206, 1.6X3.2	150R-104KCF	
C288	CC, 250V, 0.1uF, 10%, X7R, 1206, 1.6X3.2	150R-104KCF	
C289	CC, 50V, 0.1uF, 5%, 0603	150F-104JAC	
C290	CC, 50V, 0.1uF, 5%, 0603	150F-104JAC	
C293	CC, 50V, 0.01uF, 5%, 0603	150F-103JAC	
C294	CC, 50V, 0.01uF, 5%, 0603	150F-103JAC	
C295	CC, 50V, 0.01uF, 5%, 0603	150F-103JAC	
C296	CE, 25V, 470uF, 20%, RLT, 10X16, 105C, RX, NOVER	157E-477MS5TU	
C297	CE, 16V, 470uF, 20%, RLT, 10X12.5, 105C, LOW, ESR	157D-477MSXTR	
C298	CC, 50V, 0.1uF, 10%, 0805, 1.2X2.0	150F-104KBD	
C299	CC, 50V, 0.1uF, 10%, 0805, 1.2X2.0	150F-104KBD	
C300	CC, 50V, 0.01uF, 5%, 0603	150F-103JAC	
C306	CC, 50V, 0.1uF, 5%, 0603	150F-104JAC	
C307	CC, 50V, 0.1uF, 5%, 0603	150F-104JAC	
C308	CC, 50V, 0.1uF, 5%, 0603	150F-104JAC	
C310	CER2, 1206, X7R, 50V, 100nF, PM10, R	150F-104KCF	
C311	CER2, 1206, X7R, 50V, 100nF, PM10, R	150F-104KCF	
C312	CC, 630V, 0.1uF, 10%, 1812, X7R	150M-104KHF	
C313	CC, 50V, 0.47uF, 10%, 0805, 1.25X2, X7R	150F-474KBD	
C314	CC, 500V, 0.022uF, 10%, 1206	150L-223KCF	
C315	CC, 630V, 0.1uF, 10%, 1812, X7R	150M-104KHF	
C316	CC, 250V, 220pF, 10%, RL, 8.4X6, X7R	150R-221KPK	 3
C317	CC, 250V, 220pF, 10%, RL, 8.4X6, X7R	150R-221KPK	 3

# ELECTRICAL PART LIST

SMPS PCB Assembly

Capacitors (continued)

Reference Designator	Description	Vendor Part Number	Note
C318	CC, 50V, 0.1uF, 10%, 0805, 1.2X2.0	150F-104KBD	
C319	CC, 50V, 0.1uF, 10%, 0805, 1.2X2.0	150F-104KBD	
C324	CC, 50V, 0.1uF, 5%, 0603	150F-104JAC	
C325	CC, 50V, 0.1uF, 5%, 0603	150F-104JAC	
C326	CC, 50V, 0.1uF, 5%, 0603	150F-104JAC	
C327	CC, 50V, 0.1uF, 5%, 0603	150F-104JAC	
C331	CC, 50V, 0.47uF, 10%, 0805, 1.25X2, X7R	150F-474KBD	
C333	CC, 50V, 100pF, 5%, 0603, C0G	150F-101JAC	

## Inductors

Reference Designator	Description	Vendor Part Number	Note
L200	FERRITE, BEAD, CHIP, SEBW201209U121MT, 0805	1808-0872	
L201	FERRITE, BEAD, CHIP, SEBW201209U121MT, 0805	1808-0872	
L202	FERRITE-BEAD, 2.0X1.2, 0805, 300R/100MHZ, 3A	1808-0913	
L203	FERRITE-BEAD, 2.0X1.2, 0805, 300R/100MHZ, 3A	1808-0913	
L204	FERRITE-BEAD, 2.0X1.2, 0805, 300R/100MHZ, 3A	1808-0913	
L207	FERRITE, BEAD, CHIP, SEBW201209U121MT, 0805	1808-0872	
L211	FERRITE, BEAD, CHIP, SEBW201209U121MT, 0805	1808-0872	

## Diodes

Reference Designator	Description	Vendor Part Number	Note
BR200	DIODE, BRIDGE, 600V, 15A, GB, U15J, RL	480U-15J0	
D200	DIODE, IN5408-B, 3A, 1000V	4805-4080	
D201	DIODE, SCHOTTKY, SK16, DO-214AA, 60V, 1A, SMD, PANJIT	480S-K160	
D202	DIODE, SCHOTTKY, 650V, 6A, IDH06G65C5, TO-220, RL	4806-5C50	
D203	DIODE, SCHOTTKY, 200V, 20A, MBR20200FCT, ITO-220AB, RL	4800-FCT0	
D204	DIODE, SCHOTTKY, 200V, 20A, MBR20200FCT, ITO-220AB, RL	4800-FCT0	
D205	DIODE, SCHOTTKY, 200V, 20A, MBR20200FCT, ITO-220AB, RL	4800-FCT0	
D206	DIODE, SCHOTTKY, 200V, 20A, MBR20200FCT, ITO-220AB, RL	4800-FCT0	
D207	DIODE, SCHOTTKY, 40V, 2A, SK24, SMB, SM, PANJIT	480S-K240	
D208	DIODE, BAV99, SOT23, PHILIPS	4840-8970	
D209	DIODE, ULTRA, 600V, 1A, MURS, 160T3, SMB, CASE403A, SM	4806-0T30	
D210	DIODE, ULTRA, 600V, 1A, MURS, 160T3, SMB, CASE403A, SM	4806-0T30	
D211	DIODE, ULTRA, 600V, 1A, MURS, 160T3, SMB, CASE403A, SM	4806-0T30	
D212	DIODE, ULTRA, 600V, 1A, MURS, 160T3, SMB, CASE403A, SM	4806-0T30	
D213	DIODE, SUPPRESSOR, 200V, P6KE200A, AT	4802-00A0	
D214	DIODE, 600V, 1A, 75NS, US1J, SOD124	480U-S1J0	
D215	RECTIFIER, ES1D, 200V, 1.1A, SMD	4840-9190	
D216	DIODE, FAST, 75V, 0.5A, BAS316, SOD323, SM	480S-3160	

# ELECTRICAL PART LIST

SMPS PCB Assembly

Diodes (continued)

Reference Designator	Description	Vendor Part Number	Note
D217	DIODE, FAST, 75V, 0.5A, BAS316, SOD323, SM	480S-3160	
D218	DIODE, FAST, 75V, 0.5A, BAS316, SOD323, SM	480S-3160	
D219	DIODE, FAST, 75V, 0.5A, BAS316, SOD323, SM	480S-3160	
D222	DIODE, FAST, 75V, 0.5A, BAS316, SOD323, SM	480S-3160	
D223	DIODE, RECT, 200V, 2A, ER2D, SMB/DO-214AA	480E-R2D0	
D224	DIODE, RECT, 200V, 5A, ER502, AT	480R-5020	
D225	DIODE, FAST, 75V, 0.5A, BAS316, SOD323, SM	480S-3160	
D226	RECTIFIER, ES1D, 200V, 1.1A, SMD	4840-9190	
D227	DIODE, FAST, 75V, 0.5A, BAS316, SOD323, SM	480S-3160	
D229	DIODE, BAV99, SOT23, PHILIPS	4840-8970	
D230	DIODE, BAV99, SOT23, PHILIPS	4840-8970	
D232	DIODE, SCHOTTKY, SK16, DO-214AA, 60V, 1A, SMD, PANJIT	480S-K160	
Z200	DZ, 1/2W, 15V, 5%, SOD-123C, MMSZ5245BT1G	4837-15V9	
Z201	DZ, 1/2W, 18V, 5%, SOD-123C, MMSZ5248BT1G	4837-18V9	
Z202	DZ, 1/2W, 11V, 0.6V, BZX84JC11, SOD323F, SM, PHILIPS	4837-1103	
Z203	DZ, 1/2W, 18V, 5%, SOD-123C, MMSZ5248BT1G	4837-18V9	
Z204	DZ, 1/2W, 15V, 5%, SOD-123C, MMSZ5245BT1G	4837-15V9	
Z205	DZ, 1/2W, 11V, 0.6V, BZX84JC11, SOD323F, SM, PHILIPS	4837-1103	

## Transistors

Reference Designator	Description	Vendor Part Number	Note
Q200	MOSFET, N-CH600V, TK20A60U20A, TO-220F, RL, TOSHIBA	490A-60U0	
Q201	MOSFET, N-CH600V, TK20A60U20A, TO-220F, RL, TOSHIBA	490A-60U0	
Q202	MOSFET, N-CH, 100V, IRLR3110, 63A, D-PAK, SM	4903-1100	
Q203	TR, 3904, HFE, 100-300, SM	4860-0640	
Q204	MOSFET, N-CH, 100V, IRLR3110, 63A, D-PAK, SM	4903-1100	
Q205	TR, NPN, BCP56-10, SOT223	485C-P560	
Q206	MOSFET, N-CH, 800V, 08N808A, TO220, RL	4908-N800	
Q207	TR, 3904, HFE, 100-300, SM	4860-0640	
Q208	TR, 3904, HFE, 100-300, SM	4860-0640	
Q209	MOSFET, N-CH, 650V, STP28N60M2, 22A, TO-220, RL	4906-0M20	
Q210	TR, MMBTA92, PNP, SOT23, KEC	4860-5360	
Q211	TR, NPN, BCP56-10, SOT223	485C-P560	
Q212	MOSFET, N-CH, 60V, 115MA, 2N7002, SOT-23, SM	4907-0020	
Q213	TR, 3904, HFE, 100-300, SM	4860-0640	
Q214	TR, 3904, HFE, 100-300, SM	4860-0640	
Q215	TR, 3904, HFE, 100-300, SM	4860-0640	
Q217	TR, 3906, PNP, SM	4853-9060	

# ELECTRICAL PART LIST

SMPS PCB Assembly

Integrated Circuits

Reference Designator	Description	Vendor Part Number	Note
U200	IC, DRIVER, NCP5181DR2G, SOIC-8	3132-8471	
U201	IC, LM19, THERMAL, SENSOR, TO-92, NS	3132-2581	
U202	IC, LM339, SMD, COMPARATORS	3132-1250	
U203	PHOTOCOUPLER, EL817S1, S1	4818-17S1	3 
U204	PHOTOCOUPLER, EL817S1, S1	4818-17S1	3 
U205	PHOTOCOUPLER, EL817S1, S1	4818-17S1	3 
U206	IC, REGULATOR, 5V, LM78L05ACM, SO-8	3131-3390	
U207	IC, PFC, CONTROLER, IR1155S, SO8	3132-9880	
U208	IC, POWER, NCP1271, SO-8, ONSEMI	3132-806111	
U209	IC, LLC, SMPS, UCC25600, SOIC-8	3132-8371	
U210	IC, REGULATOR, TL432BIDBZR, SOT-23-3, TI	3132-769116	
U211	IC, REGULATOR, TL432BIDBZR, SOT-23-3, TI	3132-769116	
U212	PHOTOCOUPLER, EL817S1, S1	4818-17S1	3 
U213	IC, LM317T, REGULATOR, ST	3130-5610	
U214	IC, REGULATOR, TL432BIDBZR, SOT-23-3, TI	3132-769116	
U215	IC, REGULATOR, TL432BIDBZR, SOT-23-3, TI	3132-769116	

## Miscellaneous

Reference Designator	Description	Vendor Part Number	Note
Clamp	SCREW, MACHINE, PAN, M3X8, CROSS-RECESS, BZ	2900-3008	
Clamp	CLAMP, IC, SUS301, T=1, NATURAL, 3/4H	4136-0932	
F200	FUSE, T6.3A, 250V, 8X8.5VDE/PSE/CCC, RLT, LITTLEFUSE	5120-1158L	3 
HS200	WASHER, METAL, ID, 3.3, 0D8, T=0.5	2600-3005	
HS200	NUT, HEX, M3X22X5.4, YZ	2640-3022	
HS200	SCREW, M3X10, W/S&F, WASHER, (BLK)	2900-3010	
HTS 120 70	SCREW, MACHINE, BIND, HEAD, M3X8, CROSS-RECESS, BZ	2904-3008	
Htsink IC	HEATSINK, IC, 25.4X12.7X30, AL, PLATE, MSMGMA100	5401-0181	
J201	12P, ST.WAFER, P=2.5, COULOMB	2102-121S	
J202	WAFER, 3PIN, P=3.96	2101-3065	
J203	WAFER, 3P, P7.92/11.88, STRAIGHT	2101-3097	
J204	JM24182-2P, WAFER	2101-9120	
J205	JM24182-2P, WAFER	2101-9120	
L=120	HEATSINK, SMPS, 14X30, L120, AL-EXT, ANODIZE, BLACK	5401-0701	

# ELECTRICAL PART LIST

SMPS PCB Assembly  
Miscellaneous (continued)

Reference Designator	Description	Vendor Part Number	Note
L=70	HEATSINK, SMPS, 14X30, L=70, AL-EXT, ANODIZE, BLACK	5401-0702	
NTC200	THERMISTOR, NTC, 5R, 20%, 240V, 6A, 200C, RL, THINKING	5202-0045	 3
Silicon PAD	INSULATN-SHEET, SIL-PAD, 800, 55X22	3101-0961	
T200	TRANS, PWR, 385V/80V, 600W, 4A, ER40	1806-4235	 3
T201	CHOKE, COMMON, MODE, 10MH, MIN, 5A, SPACERS, 2.5MM, AT	1805-0090	 3
T202	CHOKE, COIL, 440UH, 15%, 17A, MI	1805-0570	 3
T203	CHOKE, COMMON, MODE, 10MH, MIN, 5A, SPACERS, 2.5MM, AT	1805-0090	 3
T204	TRANS, PWR, 385V, 40W, ER28	1806-4236	 3
T205	TRANS, CURRENT, 20A, EE8.3, SENSE	1806-4237	
T206	TRANS, CURRENT, 20A, EE8.3, SENSE	1806-4237	

# ELECTRICAL PART LIST

## Rear Panel PCB Assembly Resistors

Reference Designator	Description	Vendor Part Number	Note
R840	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R841	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R842	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R843	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R844	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R845	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R846	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R847	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R848	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R849	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R850	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R851	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R852	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R853	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R854	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R855	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R856	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R857	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R858	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R859	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R860	RMG, 1/16W, 5.1K, 1%, 0603/1608	4723-512A+P	
R861	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R862	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R863	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R864	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R865	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R866	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R867	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R868	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R869	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R870	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R871	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R872	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R873	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R874	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R875	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R876	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R877	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R878	RCFA, 1/16W, 47RX4, 5%, 0603	4703-470J+P-04	
R879	RCFA, 1/16W, 47RX4, 5%, 0603	4703-470J+P-04	

# ELECTRICAL PART LIST

## Rear Panel PCB Assembly Resistors (continued)

Reference Designator	Description	Vendor Part Number	Note
R880	RCFA, 1/16W, 47RX4, 5%, 0603	4703-470J+P-04	
R881	RCFA, 1/16W, 47RX4, 5%, 0603	4703-470J+P-04	
R882	RMG, 1/16W, 100R, 1%, 0603	4723-101A+P	
R883	RMG, 1/16W, 100R, 1%, 0603	4723-101A+P	
R884	RMG, 1/16W, 100R, 1%, 0603	4723-101A+P	
R885	RMG, 1/16W, 100R, 1%, 0603	4723-101A+P	
R890	RMG, 1/16W, 1M, 1%, 0603	4723-105A+P	
R891	RMG, 1/16W, 1M, 1%, 0603	4723-105A+P	
R892	RMG, 1/16W, 1M, 1%, 0603	4723-105A+P	
R893	RMG, 1/16W, 1M, 1%, 0603	4723-105A+P	
R894	RMG, 1/10W, 5.1K, 1%, 0805	4720-512A+J	
R895	RMG, 1/10W, 5.1K, 1%, 0805	4720-512A+J	
R896	RMG, 1/10W, 5.1K, 1%, 0805	4720-512A+J	
R897	RMG, 1/10W, 5.1K, 1%, 0805	4720-512A+J	

## Capacitors

Reference Designator	Description	Vendor Part Number	Note
C840	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C841	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C842	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C843	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C844	CC, 6.3V, 22U, 10%, 1206, 3.2X1.6	150B-226K+6-CF	
C845	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C846	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C847	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C848	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C849	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C850	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C851	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C852	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C853	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C854	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C855	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C856	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C857	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C858	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C859	CC, 100V, 0.1U, 10%, 0805, X7R	150H-104K+J-BD	
C860	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C861	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C862	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	

# ELECTRICAL PART LIST

Rear Panel PCB Assembly  
Capacitors (continued)

Reference Designator	Description	Vendor Part Number	Note
C863	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C864	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C865	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C866	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C867	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C868	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C869	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C870	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C871	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C872	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C873	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C874	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C875	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C876	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C877	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C878	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C879	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C880	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C881	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C882	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C883	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C884	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C885	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C886	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C887	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C888	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C889	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C890	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C891	CC, 100V, 0.1U, 10%, 1206, AVX	150H-104K+6-CFD	
C892	CC, 100V, 0.1U, 10%, 1206, AVX	150H-104K+6-CFD	
C893	CC, 100V, 0.1U, 10%, 1206, AVX	150H-104K+6-CFD	
C894	CC, 100V, 0.1U, 10%, 1206, AVX	150H-104K+6-CFD	
C895	CC, 100V, 0.1U, 10%, 1206, AVX	150H-104K+6-CFD	

## Diodes

Reference Designator	Description	Vendor Part Number	Note
D840	DIODE, BAV99, SOT23, PHILIPS	4840-8970+3	
D841	DIODE, FAST, 75V, 0.5A, BAS316, SOD323, SM	480S-3160+3	
Z840	DZ, 1/2W, 6.2VB, SMD, LL-34, ROHM (RLZTE-116.2B)	4837-6V21+3	
Z841	DZ, 1/2W, 6.2VB, SMD, LL-34, ROHM (RLZTE-116.2B)	4837-6V21+3	

# ELECTRICAL PART LIST

Rear Panel PCB Assembly  
Diodes (continued)

Reference Designator	Description	Vendor Part Number	Note
Z842	DZ, 1/2W, 6.2VB, SMD, LL-34, ROHM (RLZTE-116.2B)	4837-6V21+3	
Z843	DZ, 1/2W, 6.2VB, SMD, LL-34, ROHM (RLZTE-116.2B)	4837-6V21+3	
Z844	DZ, 1/2W, 6.2VB, SMD, LL-34, ROHM (RLZTE-116.2B)	4837-6V21+3	

## Integrated Circuits

Reference Designator	Description	Vendor Part Number	Note
U840	IC, CD74HC4067M96, MUX, SO24	3132-3021+0	
U841	IC, SN74HC166DR, SHIFT, REG, 8BIT, PISO, 32NS, SO16	3132-3281+0	
U842	IC, SN74HC166DR, SHIFT, REG, 8BIT, PISO, 32NS, SO16	3132-3281+0	
U843	IC, SN74HC166DR, SHIFT, REG, 8BIT, PISO, 32NS, SO16	3132-3281+0	

## Miscellaneous

Reference Designator	Description	Vendor Part Number	Note
J840	SOCKET, M, 2P, P5, 300V, 15A, BLACK	2113-3361+1	
J841B	CONN, HEADER, 5P, P2.54, DIP, ST, M, L=11.08	2101-3409+0	
J842B	CONN, HEADER, 5P, P2.54, DIP, ST, M, L=11.08	2101-3409+0	
J843B	CONN, HEADER, 5P, P2.54, DIP, ST, M, L=11.08	2101-3409+0	
J844B	CONN, HEADER, 5P, P2.54, DIP, ST, M, L=11.08	2101-3409+0	
J845B	CONN, HEADER, 5P, P2.54, DIP, ST, M, L=11.08	2101-3409+0	
J846B	CONN, HEADER, 8P, P2.54, DIP, ST, M, L=8.54	2101-3408+0	
J847B	CONN, HEADER, 8P, P2.54, DIP, ST, M, L=8.54	2101-3408+0	
J849	CONNECTOR, PIN, HEADER, 4P, P2.54, ST, F	2101-3294+0	
J850	CONNECTOR, PIN, HEADER, 4P, P2.54, ST, F	2101-3294+0	
J851	CONN, FFC, 20P, P0.5, SMT, ST, F	2101-3376+1	
VR840	VR, ROTARY, 20BKX1, 20%, V, L=15, 18TEETH, CTR	4751-226E+0	
VR841	VR, ROTARY, 20BKX1, 20%, V, L=15, 18TEETH, CTR	4751-226E+0	
VR842	VR, ROTARY, 20BKX1, 20%, V, L=15, 18TEETH, CTR	4751-226E+0	
VR843	VR, ROTARY, 20BKX1, 20%, V, L=15, 18TEETH, CTR	4751-226E+0	

# ELECTRICAL PART LIST

DSP PCB Assembly  
Resistors

Reference Designator	Description	Vendor Part Number	Note
R600	RMG, 1/16W, 4.3K, 1%, 0603/1608	4723-432A+P	
R601	RMG, 1/16W, 3.9K, 5%, 0603, HK, RESISTOR/SAMSUNG	4723-392J+P-R	
R602	RMG, 1/16W, 3.9K, 5%, 0603, HK, RESISTOR/SAMSUNG	4723-392J+P-R	
R603	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R604	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R605	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R606	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R607	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R608	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R609	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R610	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R611	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R612	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R613	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R614	RMG, 1/16W, 47K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-473A+P-R	
R615	RMG, 1/16W, 47K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-473A+P-R	
R616	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R617	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R618	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R619	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R620	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R621	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R622	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R623	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R624	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R625	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R626	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R627	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R628	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R629	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R630	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R631	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R632	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R633	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R634	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R635	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R636	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R637	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R638	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R639	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	

# ELECTRICAL PART LIST

DSP PCB Assembly  
Resistors (continued)

Reference Designator	Description	Vendor Part Number	Note
R640	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R641	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R642	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R643	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R644	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R645	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R646	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R647	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R648	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R649	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R650	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R651	RMG, 1/16W, 4.99K, 1%, 0603	4723-4991+P	
R652	RMG, 1/16W, 634R, 1%, 0603	4723-6340+P	
R653	RMG, 1/16W, 634R, 1%, 0603	4723-6340+P	
R654	RMG, 1/16W, 634R, 1%, 0603	4723-6340+P	
R655	RMG, 1/16W, 634R, 1%, 0603	4723-6340+P	
R656	RMG, 1/16W, 634R, 1%, 0603	4723-6340+P	
R657	RMG, 1/16W, 634R, 1%, 0603	4723-6340+P	
R658	RMG, 1/16W, 634R, 1%, 0603	4723-6340+P	
R659	RMG, 1/16W, 634R, 1%, 0603	4723-6340+P	
R660	RMG, 1/16W, 7.15K, 1%, 0603/1608	4723-7151+P	
R661	RMG, 1/16W, 7.15K, 1%, 0603/1608	4723-7151+P	
R662	RMG, 1/16W, 7.15K, 1%, 0603/1608	4723-7151+P	
R663	RMG, 1/16W, 7.15K, 1%, 0603/1608	4723-7151+P	
R664	RMG, 1/16W, 8.87K, 1%, 0603/1608	4723-8871+P	
R665	RMG, 1/16W, 8.87K, 1%, 0603/1608	4723-8871+P	
R666	RMG, 1/16W, 8.87K, 1%, 0603/1608	4723-8871+P	
R667	RMG, 1/16W, 8.87K, 1%, 0603/1608	4723-8871+P	
R668	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R669	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R670	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R671	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R672	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R673	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R674	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R675	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R676	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R677	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R678	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R679	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	

# ELECTRICAL PART LIST

DSP PCB Assembly  
Resistors (continued)

Reference Designator	Description	Vendor Part Number	Note
R680	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R681	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R682	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R683	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R684	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R685	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R686	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R687	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R688	RMG, 1/16W, 1K, 1%, 0603/1608	4723-102A+P	
R689	RMG, 1/16W, 1K, 1%, 0603/1608	4723-102A+P	
R690	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R691	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R692	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R693	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R694	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R695	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R696	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R697	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R698	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R699	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R700	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R701	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R702	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R703	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R704	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R705	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R706	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R707	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R708	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R709	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R710	RMG, 1/10W, 100R, 1%, 0805	4720-101A+J	
R711	RMG, 1/10W, 100R, 1%, 0805	4720-101A+J	
R712	RMG, 1/10W, 100R, 1%, 0805	4720-101A+J	
R713	RMG, 1/10W, 100R, 1%, 0805	4720-101A+J	
R714	RMG, 1/10W, 100R, 1%, 0805	4720-101A+J	
R715	RMG, 1/10W, 100R, 1%, 0805	4720-101A+J	
R716	RMG, 1/10W, 100R, 1%, 0805	4720-101A+J	
R717	RMG, 1/10W, 100R, 1%, 0805	4720-101A+J	
R718	RMG, 1/16W, 100R, 1%, 0603	4723-101A+P	
R719	RMG, 1/16W, 100R, 1%, 0603	4723-101A+P	

# ELECTRICAL PART LIST

DSP PCB Assembly  
Resistors (continued)

Reference Designator	Description	Vendor Part Number	Note
R720	RMG, 1/16W, 100R, 1%, 0603	4723-101A+P	
R721	RMG, 1/16W, 100R, 1%, 0603	4723-101A+P	
R722	RMG, 1/16W, 100R, 1%, 0603	4723-101A+P	
R723	RMG, 1/16W, 100R, 1%, 0603	4723-101A+P	
R724	RMG, 1/16W, 100R, 1%, 0603	4723-101A+P	
R725	RMG, 1/16W, 100R, 1%, 0603	4723-101A+P	
R734	RMG, 1/16W, 100K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-104A+P-R	
R735	RMG, 1/16W, 100K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-104A+P-R	
R736	RMG, 1/16W, 100K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-104A+P-R	
R737	RMG, 1/16W, 100K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-104A+P-R	
R738	RMG, 1/16W, 100K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-104A+P-R	
R739	RMG, 1/16W, 100K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-104A+P-R	
R740	RMG, 1/16W, 100K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-104A+P-R	
R741	RMG, 1/16W, 100K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-104A+P-R	
R742	RMG, 1/16W, 100K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-104A+P-R	
R743	RMG, 1/16W, 100K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-104A+P-R	
R744	RMG, 1/16W, 100K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-104A+P-R	
R745	RMG, 1/16W, 100K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-104A+P-R	
R746	RMG, 1/16W, 100K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-104A+P-R	
R747	RMG, 1/16W, 100K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-104A+P-R	
R748	RMG, 1/16W, 100K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-104A+P-R	
R749	RMG, 1/16W, 100K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-104A+P-R	
R750	RMG, 1/10W, 2.55K, 1%, 0603	4720-2551+P	
R751	RMG, 1/10W, 2.55K, 1%, 0603	4720-2551+P	
R752	RMG, 1/10W, 2.55K, 1%, 0603	4720-2551+P	
R753	RMG, 1/10W, 2.55K, 1%, 0603	4720-2551+P	
R754	RMG, 1/10W, 2.55K, 1%, 0603	4720-2551+P	
R755	RMG, 1/10W, 2.55K, 1%, 0603	4720-2551+P	
R756	RMG, 1/10W, 2.55K, 1%, 0603	4720-2551+P	
R757	RMG, 1/10W, 2.55K, 1%, 0603	4720-2551+P	
R758	RMG, 1/16W, 806R, 1%, 0603	4723-806R+P	
R759	RMG, 1/16W, 806R, 1%, 0603	4723-806R+P	
R760	RMG, 1/16W, 806R, 1%, 0603	4723-806R+P	
R761	RMG, 1/16W, 806R, 1%, 0603	4723-806R+P	
R762	RMG, 1/16W, 806R, 1%, 0603	4723-806R+P	
R763	RMG, 1/16W, 806R, 1%, 0603	4723-806R+P	
R764	RMG, 1/16W, 806R, 1%, 0603	4723-806R+P	
R765	RMG, 1/16W, 806R, 1%, 0603	4723-806R+P	
R766	RMG, 1/16W, 1M, 1%, 0603	4723-105A+P	
R767	RMG, 1/16W, 1M, 1%, 0603	4723-105A+P	

# ELECTRICAL PART LIST

DSP PCB Assembly  
Resistors (continued)

Reference Designator	Description	Vendor Part Number	Note
R768	RMG, 1/16W, 1M, 1%, 0603	4723-105A+P	
R769	RMG, 1/16W, 1M, 1%, 0603	4723-105A+P	
R770	RMG, 1/16W, 1M, 1%, 0603	4723-105A+P	
R771	RMG, 1/16W, 1M, 1%, 0603	4723-105A+P	
R772	RMG, 1/16W, 1M, 1%, 0603	4723-105A+P	
R773	RMG, 1/16W, 1M, 1%, 0603	4723-105A+P	
R774	RMG, 1/10W, 301R, 1%, 0805	4720-3010+J	
R775	RMG, 1/10W, 301R, 1%, 0805	4720-3010+J	
R776	RMG, 1/10W, 301R, 1%, 0805	4720-3010+J	
R777	RMG, 1/10W, 301R, 1%, 0805	4720-3010+J	
R778	RMG, 1/16W, 220R, 1%, 0603/1608	4723-221A+P	
R779	RMG, 1/16W, 220R, 1%, 0603/1608	4723-221A+P	
R780	RMG, 1/16W, 220R, 1%, 0603/1608	4723-221A+P	
R781	RMG, 1/10W, 4.53K, 1%, 0603	4720-4531+P	
R782	RMG, 1/10W, 4.53K, 1%, 0603	4720-4531+P	
R783	RMG, 1/10W, 4.53K, 1%, 0603	4720-4531+P	
R784	RMG, 1/10W, 4.53K, 1%, 0603	4720-4531+P	
R785	RMG, 1/16W, 2K, 1%, 0603/1608	4723-202A+P	
R786	RMG, 1/16W, 2K, 1%, 0603/1608	4723-202A+P	

## Capacitors

Reference Designator	Description	Vendor Part Number	Note
C600	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C601	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C602	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C603	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C604	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C605	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C606	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C607	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C608	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C609	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C610	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C611	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C612	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C613	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C614	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C615	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C616	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C617	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	

# ELECTRICAL PART LIST

DSP PCB Assembly  
Capacitors (continued)

Reference Designator	Description	Vendor Part Number	Note
C618	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C619	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C620	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C621	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C622	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C623	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C624	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C625	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C626	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C627	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C628	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C629	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C630	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C631	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C632	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C633	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C634	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C635	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C636	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C637	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C638	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C639	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C640	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C641	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C642	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C643	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C644	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C645	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C646	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C647	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C648	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C649	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C650	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C651	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C652	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C653	CT, 10V, 10uF, 20%, SM, 1.6X3.2	154C-106M+3-CF	
C654	CE, 25V, 100UF, 20%, 6.3X7.7, SMD	157E-107M+3-LO	
C655	CE, 25V, 100UF, 20%, 6.3X7.7, SMD	157E-107M+3-LO	
C656	CC, 50V, 0.01U, 5%, 0603	150F-103J+P-AC	
C657	CC, 50V, 1U, 10%, 0805	150F-105K+J-BD	

# ELECTRICAL PART LIST

DSP PCB Assembly  
Capacitors (continued)

Reference Designator	Description	Vendor Part Number	Note
C658	CC, 50V, 1U, 10%, 0805	150F-105K+J-BD	
C659	CT, 6.3V, 47U, 10%, SMD, 85C, 1.6X3.2	154B-476K+3-CF	
C660	CT, 6.3V, 47U, 10%, SMD, 85C, 1.6X3.2	154B-476K+3-CF	
C661	CC, 16V, 1U, 10%, 0603, 0.8X1.6	150D-105K+P-AC	
C662	CC, 16V, 1U, 10%, 0603, 0.8X1.6	150D-105K+P-AC	
C663	CC, 16V, 1U, 10%, 0603, 0.8X1.6	150D-105K+P-AC	
C664	CC, 16V, 1U, 10%, 0603, 0.8X1.6	150D-105K+P-AC	
C665	CC, 16V, 1U, 10%, 0603, 0.8X1.6	150D-105K+P-AC	
C666	CC, 16V, 1U, 10%, 0603, 0.8X1.6	150D-105K+P-AC	
C667	CC, 16V, 1U, 10%, 0603, 0.8X1.6	150D-105K+P-AC	
C668	CC, 16V, 1U, 10%, 0603, 0.8X1.6	150D-105K+P-AC	
C669	CE, 35V, 47U, 20%, SM, 6.6X5.7, LOW, ESR, LELON	157Q-476M+3-MKR5	
C670	CE, 35V, 47U, 20%, SM, 6.6X5.7, LOW, ESR, LELON	157Q-476M+3-MKR5	
C671	CT, 35V, 4.7U, 20%, SMD, 3.5X2.8	154Q-475M+3-FE	
C672	CT, 35V, 4.7U, 20%, SMD, 3.5X2.8	154Q-475M+3-FE	
C673	CC, 50V, 10PF, 5%, 0603, C0G	150F-100J+P-AC	
C674	CC, 50V, 10PF, 5%, 0603, C0G	150F-100J+P-AC	
C675	CC, 50V, 10PF, 5%, 0603, C0G	150F-100J+P-AC	
C676	CC, 50V, 10PF, 5%, 0603, C0G	150F-100J+P-AC	
C677	CC, 50V, 10PF, 5%, 0603, C0G	150F-100J+P-AC	
C678	CC, 50V, 10PF, 5%, 0603, C0G	150F-100J+P-AC	
C679	CC, 50V, 10PF, 5%, 0603, C0G	150F-100J+P-AC	
C680	CC, 50V, 10PF, 5%, 0603, C0G	150F-100J+P-AC	
C681	CC, 50V, 2700PF, 10%, 0603, X7R	150F-272K+P-AC	
C682	CC, 50V, 2700PF, 10%, 0603, X7R	150F-272K+P-AC	
C683	CC, 50V, 2700PF, 10%, 0603, X7R	150F-272K+P-AC	
C684	CC, 50V, 2700PF, 10%, 0603, X7R	150F-272K+P-AC	
C685	CC, 50V, 0.01U, 5%, 0603	150F-103J+P-AC	
C686	CC, 50V, 0.01U, 5%, 0603	150F-103J+P-AC	
C687	CC, 50V, 0.01U, 5%, 0603	150F-103J+P-AC	
C688	CC, 50V, 0.01U, 5%, 0603	150F-103J+P-AC	
C689	CC, 50V, 0.01U, 5%, 0603	150F-103J+P-AC	
C690	CC, 50V, 0.01U, 5%, 0603	150F-103J+P-AC	
C691	CC, 50V, 150PF, 5%, 0603, C0G	150F-151J+P-AC	
C692	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C693	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C694	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C695	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C696	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C697	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	

# ELECTRICAL PART LIST

DSP PCB Assembly  
Capacitors (continued)

Reference Designator	Description	Vendor Part Number	Note
C698	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C699	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C700	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C701	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C702	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C703	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C704	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C705	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C706	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C707	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C708	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C709	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C710	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C711	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C712	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C713	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C714	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C715	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C716	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C717	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C718	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C719	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C720	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C721	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C722	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C723	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C724	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C725	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C726	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C727	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C728	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C729	CE, 16V, 10U, 20%, SM, 3X5.4, 85C-2000H	157D-106M+3-EJ	
C730	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C731	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C732	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C733	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C734	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C735	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C736	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C737	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	

# ELECTRICAL PART LIST

DSP PCB Assembly  
Capacitors (continued)

Reference Designator	Description	Vendor Part Number	Note
C738	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C739	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C740	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C741	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C742	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C743	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C744	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C745	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C746	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C747	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C748	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C749	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C750	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C751	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C752	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C753	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C754	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C755	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C756	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C757	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C758	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C759	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C760	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C761	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C762	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C763	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C764	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C765	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C766	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C767	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C768	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C769	CC, 50V, 100PF, 5%, 0603, C0G	150F-101J+P-AC	
C770	CC, 50V, 5600PF, 10%, 0603, X7R	150F-562K+P-AC	
C771	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C772	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C773	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C774	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C775	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C776	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C777	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	

# ELECTRICAL PART LIST

DSP PCB Assembly  
Capacitors (continued)

Reference Designator	Description	Vendor Part Number	Note
C778	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C779	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C780	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C781	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C782	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C783	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C784	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C785	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C786	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C787	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C788	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C789	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C790	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C793	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C794	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C795	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C796	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C797	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C798	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C799	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C800	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C801	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C802	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C803	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C804	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C805	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C806	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C807	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C808	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C809	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C810	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C811	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C812	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C813	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C814	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C815	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C816	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C817	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C818	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	

# ELECTRICAL PART LIST

## DSP PCB Assembly Inductors

Reference Designator	Description	Vendor Part Number	Note
L600	FERRITE BEAD, CHIP, SEBW201209U121MT, 0805	1808-0872+0	
L601	FERRITE BEAD, CHIP, SEBW201209U121MT, 0805	1808-0872+0	
L602	FERRITE, CHIP, 0603, BLM18AG102SN1D, MURATA	1808-0878+0	
L603	FERRITE, CHIP, 0603, BLM18AG102SN1D, MURATA	1808-0878+0	
L604	FERRITE, CHIP, 0603, BLM18AG102SN1D, MURATA	1808-0878+0	
L605	FERRITE, CHIP, 0603, BLM18AG102SN1D, MURATA	1808-0878+0	
L606	FERRITE, CHIP, 0603, BLM18AG102SN1D, MURATA	1808-0878+0	
L607	FERRITE, CHIP, 0603, BLM18AG102SN1D, MURATA	1808-0878+0	
L608	FERRITE, CHIP, 0603, BLM18AG102SN1D, MURATA	1808-0878+0	
L609	FERRITE, CHIP, 0603, BLM18AG102SN1D, MURATA	1808-0878+0	
L610	FERRITE, CHIP, 0603, BLM18AG102SN1D, MURATA	1808-0878+0	
L611	FERRITE, CHIP, 0603, BLM18AG102SN1D, MURATA	1808-0878+0	
L612	FERRITE, CHIP, 0603, BLM18AG102SN1D, MURATA	1808-0878+0	
L613	FERRITE BEAD, CHIP, SEBW201209U121MT, 0805	1808-0872+0	
L614	FERRITE BEAD, CHIP, SEBW201209U121MT, 0805	1808-0872+0	

## Diodes

Reference Designator	Description	Vendor Part Number	Note
D600	LED, SMD, 2.0X1.25X0.8, GN, SUPER, EVLITE	3700-7839+G	
D601	LED, SMD, 2.0X1.25X0.8, GN, SUPER, EVLITE	3700-7839+G	
D602	DIODE, BAV99, SOT23, PHILIPS	4840-8970+3	
D603	DIODE, BAV99, SOT23, PHILIPS	4840-8970+3	
D604	DIODE, BAV99, SOT23, PHILIPS	4840-8970+3	
D605	DIODE, BAV99, SOT23, PHILIPS	4840-8970+3	
D606	DIODE, BAV99, SOT23, PHILIPS	4840-8970+3	
D607	DIODE, BAV99, SOT23, PHILIPS	4840-8970+3	
D608	DIODE, BAV99, SOT23, PHILIPS	4840-8970+3	
D609	DIODE, BAV99, SOT23, PHILIPS	4840-8970+3	
D610	LED, SMD, 2.0X1.25X0.8, RD, SUPER, EVLITE	3700-7839+R	
D611	DOUBLE, DIODE, BAT54S, SOT-23, SCHOTTKY, SMD	480T-54S0+3	
D612	DOUBLE, DIODE, BAT54S, SOT-23, SCHOTTKY, SMD	480T-54S0+3	
D613	DOUBLE, DIODE, BAT54S, SOT-23, SCHOTTKY, SMD	480T-54S0+3	
D614	DOUBLE, DIODE, BAT54S, SOT-23, SCHOTTKY, SMD	480T-54S0+3	
D615	DOUBLE, DIODE, BAT54S, SOT-23, SCHOTTKY, SMD	480T-54S0+3	
D616	DOUBLE, DIODE, BAT54S, SOT-23, SCHOTTKY, SMD	480T-54S0+3	
D617	DOUBLE, DIODE, BAT54S, SOT-23, SCHOTTKY, SMD	480T-54S0+3	
D618	DOUBLE, DIODE, BAT54S, SOT-23, SCHOTTKY, SMD	480T-54S0+3	

# ELECTRICAL PART LIST

DSP PCB Assembly

Transistors

Reference Designator	Description	Vendor Part Number	Note
Q600	TR, PNP, 2SA2058, HFE:125, 2-3S1A, SM	4852-0580+3	

## Integrated Circuits

Reference Designator	Description	Vendor Part Number	Note
U600	IC, DG211BDY-T1-E3, ANA, SW, 50OHM, SPST, 4CH, SO16	3133-0661+0	
U601	IC, NJM2068M, OPAMP, QUAD, +/-18V, AUD, 27M, 6V/US, DMP8	3130-6890+0	
U602	IC, NJM2068M, OPAMP, QUAD, +/-18V, AUD, 27M, 6V/US, DMP8	3130-6890+0	
U603	IC, NJM2068M, OPAMP, QUAD, +/-18V, AUD, 27M, 6V/US, DMP8	3130-6890+0	
U604	IC, NJM2068M, OPAMP, QUAD, +/-18V, AUD, 27M, 6V/US, DMP8	3130-6890+0	
U605	IC, NJM2068M, OPAMP, QUAD, +/-18V, AUD, 27M, 6V/US, DMP8	3130-6890+0	
U606	IC, NJM2068M, OPAMP, QUAD, +/-18V, AUD, 27M, 6V/US, DMP8	3130-6890+0	
U607	IC, NJM2068M, OPAMP, QUAD, +/-18V, AUD, 27M, 6V/US, DMP8	3130-6890+0	
U608	IC, NJM2068M, OPAMP, QUAD, +/-18V, AUD, 27M, 6V/US, DMP8	3130-6890+0	
U609	IC, NJM2068M, OPAMP, QUAD, +/-18V, AUD, 27M, 6V/US, DMP8	3130-6890+0	
U610	IC, NJM2068M, OPAMP, QUAD, +/-18V, AUD, 27M, 6V/US, DMP8	3130-6890+0	
U611	IC, NJM2068M, OPAMP, QUAD, +/-18V, AUD, 27M, 6V/US, DMP8	3130-6890+0	
U612	IC, NJM2068M, OPAMP, QUAD, +/-18V, AUD, 27M, 6V/US, DMP8	3130-6890+0	
U613	IC, NJM2068M, OPAMP, QUAD, +/-18V, AUD, 27M, 6V/US, DMP8	3130-6890+0	
U614	IC, NJM2068M, OPAMP, QUAD, +/-18V, AUD, 27M, 6V/US, DMP8	3130-6890+0	
U615	IC, NJM2068M, OPAMP, QUAD, +/-18V, AUD, 27M, 6V/US, DMP8	3130-6890+0	
U616	IC, CS4272-CZZR, ADDA, 2CH, 24BIT, 192K, 114DB, TSSOP28	3132-4471+0	
U617	IC, CS4272-CZZR, ADDA, 2CH, 24BIT, 192K, 114DB, TSSOP28	3132-4471+0	
U618	IC, ADAU1450WBCPZ, DSP, FIX, 147MHZ, 8KWORD, LFCSP72	3132-9471+0	
U619	IC, SN74LVC3G34DCUR, BUFFE, R, TRIPLE, VSSOP8	3133-1431+0	
U620	IC, SN7815D, REG, 15V, 1A, TO-252	3132-8161+0-49	
U621	IC, SN7915D, REG, -15V, 1.5A, TO-252	3132-8171+0-49	
U622	IC, TPD2E001DZDR, ESD PROTECT, 2CH, SOT533	3132-7831+0	

## Miscellaneous

Reference Designator	Description	Vendor Part Number	Note
J600	FFC, CONN., 30PIN, P1.0, TOP, ENTRY	2101-3073+0	
J601	DIN SOCKET, M, 12P, P5, 300V, 15A, L=60, GREEN, RA	2113-3482+0	
J603	CONN, FFC, 10P, P0.5, SMT, ST, F	2101-3375+1	
J604	CONN, FFC, 10P, P0.5, SMT, ST, F	2101-3375+1	
J605	MICRO, USB, F, 5P, P0.65, 5V, 2A, 8X5.74X3, LEADERWISE	2113-3460+0	
J608	WIRE-CONN, 1P, #18, UL1007, L=30, BK, S4/S6	7013-5930+0	

# ELECTRICAL PART LIST

LED PCB Assembly

Resistors

Reference Designator	Description	Vendor Part Number	Note
R900	RMG, 1/16W, 47R, 1%, 0603	4723-470A+P	
R901	RMG, 1/16W, 47R, 1%, 0603	4723-470A+P	
R904	RMG, 1/16W, 1.5K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-152A+P-R	
R905	RMG, 1/16W, 220R, 1%, 0603/1608	4723-221A+P	
R906	RMG, 1/16W, 1.5K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-152A+P-R	
R907	RMG, 1/16W, 220R, 1%, 0603/1608	4723-221A+P	
R908	RMG, 1/16W, 1.5K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-152A+P-R	
R909	RMG, 1/16W, 220R, 1%, 0603/1608	4723-221A+P	
R910	RMG, 1/16W, 1.5K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-152A+P-R	
R911	RMG, 1/16W, 220R, 1%, 0603/1608	4723-221A+P	
R912	RMG, 1/16W, 220R, 1%, 0603/1608	4723-221A+P	
R913	RMG, 1/16W, 1.5K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-152A+P-R	
R914	RMG, 1/16W, 220R, 1%, 0603/1608	4723-221A+P	
R915	RMG, 1/16W, 1.5K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-152A+P-R	
R916	RMG, 1/16W, 220R, 1%, 0603/1608	4723-221A+P	
R917	RMG, 1/16W, 1.5K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-152A+P-R	
R918	RMG, 1/16W, 220R, 1%, 0603/1608	4723-221A+P	
R919	RMG, 1/16W, 1.5K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-152A+P-R	
R921	RMG, 1/16W, 220R, 1%, 0603/1608	4723-221A+P	
R922	RMG, 1/16W, 1.5K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-152A+P-R	

Capacitors

Reference Designator	Description	Vendor Part Number	Note
C900	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C901	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C902	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C903	CC, 50V, 0.01uF, 10%, 0603, X7R	150F-103K+P-AC	
C904	CC, 16V, 1U, 10%, 0603, 0.8X1.6	150D-105K+P-AC	

Diodes

Reference Designator	Description	Vendor Part Number	Note
D900	LED, SP, 3X5, RD/GN, SUPER, WHITE, DIFFUSED, EVERLIGHT	3700-2861+RG	
D901	LED, SP, 3X5, RD/GN, SUPER, WHITE, DIFFUSED, EVERLIGHT	3700-2861+RG	
D902	LED, SP, 3X5, RD/GN, SUPER, WHITE, DIFFUSED, EVERLIGHT	3700-2861+RG	
D903	LED, SP, 3X5, RD/GN, SUPER, WHITE, DIFFUSED, EVERLIGHT	3700-2861+RG	
D905	LED, SP, 3X5, RD/GN, SUPER, WHITE, DIFFUSED, EVERLIGHT	3700-2861+RG	
D906	LED, SP, 3X5, RD/GN, SUPER, WHITE, DIFFUSED, EVERLIGHT	3700-2861+RG	
D907	LED, SP, 3X5, RD/GN, SUPER, WHITE, DIFFUSED, EVERLIGHT	3700-2861+RG	
D908	LED, SP, 3X5, RD/GN, SUPER, WHITE, DIFFUSED, EVERLIGHT	3700-2861+RG	
D909	LED, SP, 3X5, RD/GN, SUPER, WHITE, DIFFUSED, EVERLIGHT	3700-2861+RG	

# ELECTRICAL PART LIST

LED PCB Assembly

Integrated Circuits

Reference Designator	Description	Vendor Part Number	Note
U900	IC, CD74HC4094, SHIFT REG, 8 BIT, SIPO, 33NS, SO16	3132-4431+0	
U901	IC, CD74HC4094, SHIFT REG, 8 BIT, SIPO, 33NS, SO16	3132-4431+0	

## Miscellaneous

Reference Designator	Description	Vendor Part Number	Note
J900	WIRE-CONN, 10P, P2.0, #26, U, L1007, 485, RD/WH, F/M, HST	7013-4910+0	

## EQ Output PCB Assembly

### Capacitors

Reference Designator	Description	Vendor Part Number	Note
C950	CC, 630V, 1000P, 10%, 1206	150M-102K+6-CF	
C951	CC, 630V, 1000P, 10%, 1206	150M-102K+6-CF	
C952	CC, 630V, 1000P, 10%, 1206	150M-102K+6-CF	
C953	CC, 630V, 1000P, 10%, 1206	150M-102K+6-CF	
C954	CC, 630V, 1000P, 10%, 1206	150M-102K+6-CF	
C955	CC, 630V, 1000P, 10%, 1206	150M-102K+6-CF	
C956	CC, 630V, 1000P, 10%, 1206	150M-102K+6-CF	
C957	CC, 630V, 1000P, 10%, 1206	150M-102K+6-CF	
C960	CC, 630V, 1000P, 10%, 1206	150M-102K+6-CF	
C961	CC, 630V, 1000P, 10%, 1206	150M-102K+6-CF	
C962	CC, 630V, 1000P, 10%, 1206	150M-102K+6-CF	
C963	CC, 630V, 1000P, 10%, 1206	150M-102K+6-CF	
C964	CC, 630V, 1000P, 10%, 1206	150M-102K+6-CF	
C965	CC, 630V, 1000P, 10%, 1206	150M-102K+6-CF	
C966	CC, 630V, 1000P, 10%, 1206	150M-102K+6-CF	
C967	CC, 630V, 1000P, 10%, 1206	150M-102K+6-CF	

### Inductors

Reference Designator	Description	Vendor Part Number	Note
L950	CHOKE, COMMON, MODE, 40U, +/-10%, 10A, TC1305, MI	1805-0450+0	
L951	CHOKE, COMMON, MODE, 40U, +/-10%, 10A, TC1305, MI	1805-0450+0	
L960	CHOKE, COMMON, MODE, 40U, +/-10%, 10A, TC1305, MI	1805-0450+0	
L961	CHOKE, COMMON, MODE, 40U, +/-10%, 10A, TC1305, MI	1805-0450+0	

# ELECTRICAL PART LIST

EQ Output PCB Assembly

Miscellaneous

Reference Designator	Description	Vendor Part Number	Note
ENCODER840	ENCODER, ROTARY, 10P1T, DC50V, 0.1A, 10X10, COPAL	5200-5097+0-27	
ENCODER841	ENCODER, ROTARY, 10P1T, DC50V, 0.1A, 10X10, COPAL	5200-5097+0-27	
ENCODER842	ENCODER, ROTARY, 10P1T, DC50V, 0.1A, 10X10, COPAL	5200-5097+0-27	
ENCODER843	ENCODER, ROTARY, 10P1T, DC50V, 0.1A, 10X10, COPAL	5200-5097+0-27	
ENCODER844	ENCODER, ROTARY, 10P1T, DC50V, 0.1A, 10X10, COPAL	5200-5097+0-27	
J848	RJ45, F, 8P, P2.54, 12VAC, 1.5A, 17X16, SIL, ST	2113-3451+0	
J852	CONNECTOR, PIN, HEADER, 4P, P2.54, ST, M, L=15	2101-3295+0	
J853	CONNECTOR, PIN, HEADER, 4P, P2.54, ST, M, L=15	2101-3295+0	
J952	WIRE-CONN, 4P, P3.96, #18, U, L1007, L=300, F/M, FERRITE	7013-5270+0	
J953	WIRE-CONN, 4P, P3.96, #18, U, L1007, L=210, F/M, FERRITE	7013-5271+0	
J966	DIN, SOCKET, F, 8P, P5.08, 300V, 12A, 41.16, GREEN	2113-3456+0	
SW840	SW, DIP, SPST, 24V, 25MA, P2.54, 8P	5200-5084+0	

# ELECTRICAL PART LIST

AmpLink PCB Assembly, PS404A Amplifier

## Resistors

Reference Designator	Description	Vendor Part Number	Note
R400	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R401	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R402	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R403	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R404	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R405	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R406	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R407	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R408	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R409	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R410	RMG, 1/16W, 1K, 1%, 0603/1608	4723-102A	
R411	RMG, 1/16W, 1K, 1%, 0603/1608	4723-102A	
R412	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R413	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R414	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R416	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R418	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R422	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R423	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R424	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R425	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R426	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R427	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R428	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R429	RMG, 1/16W, 47K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-473AR	
R430	RMG, 1/16W, 68K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-683AR	
R431	RMG, 1/16W, 47K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-473AR	
R432	RMG, 1/16W, 47K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-473AR	
R433	RMG, 1/16W, 330R, 1%, 0603	4723-331A	
R434	RMG, 1/16W, 330R, 1%, 0603	4723-331A	
R435	RMG, 1/16W, 330R, 1%, 0603	4723-331A	
R436	RMG, 1/16W, 330R, 1%, 0603	4723-331A	
R437	RMG, 1/16W, 5.1K, 1%, 0603/1608	4723-512A	
R438	RMG, 1/16W, 5.6K, 1%, 0603/1608	4723-562A	
R439	RMG, 1/16W, 4R7, 1%, 0603	4723-4R7A	
R440	RMG, 1/16W, 750R, 1%, 0603	4723-751A	
R441	RMG, 1/16W, 8.2K, 1%, 0603/1608	4723-822A	
R442	RMG, 1/10W, 1.91K, 1%, 0603	4720-1911	
R443	RMG, 1/16W, 0R, 1%, 0603	4723-000A	
R448	RMG, 1/16W, 0R, 1%, 0603	4723-000A	

# ELECTRICAL PART LIST

AmpLink PCB Assembly, PS404A Amplifier

Resistors (continued)

Reference Designator	Description	Vendor Part Number	Note
R449	RMG, 1/16W, 0R, 1%, 0603	4723-000A	
R450	RMG, 1/16W, 0R, 1%, 0603	4723-000A	
R451	RMG, 1/16W, 0R, 1%, 0603	4723-000A	
R452	RMG, 1/16W, 0R, 1%, 0603	4723-000A	
R458	RMG, 1/16W, 0R, 1%, 0603	4723-000A	
R459	RMG, 1/16W, 0R, 1%, 0603	4723-000A	
R460	RMG, 1/16W, 0R, 1%, 0603	4723-000A	
R461	RCFA, 1/16W, 47RX4, 5%, 0603	4703-470J04	
R462	RCFA, 1/16W, 47RX4, 5%, 0603	4703-470J04	
R463	RCFA, 1/16W, 47RX4, 5%, 0603	4703-470J04	
R464	RCFA, 1/16W, 47RX4, 5%, 0603	4703-470J04	
R465	RCFA, 1/16W, 47RX4, 5%, 0603	4703-470J04	
R466	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R467	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R468	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R469	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R470	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R471	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R472	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R473	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R474	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R476	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R477	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R479	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R481	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R483	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R484	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R485	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R486	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R487	RMG, 1/16W, 2K, 1%, 0603/1608	4723-202A	
R488	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R489	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R490	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R491	RMG, 1/16W, 2K, 1%, 0603/1608	4723-202A	
R493	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R494	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R495	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R496	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R497	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R499	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	

# ELECTRICAL PART LIST

AmpLink PCB Assembly, PS404A Amplifier

Resistors (continued)

Reference Designator	Description	Vendor Part Number	Note
R500	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R501	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A	
R502	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R503	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R504	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R505	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R506	RMG, 1/10W, 1.62K, 1%, 0603	4720-1621	
R507	RMG, 1/16W, 100R, 1%, 0603	4723-101A	
R508	RMG, 1/16W, 100R, 1%, 0603	4723-101A	
R509	RMG, 1/16W, 100R, 1%, 0603	4723-101A	
R510	RMG, 1/16W, 100R, 1%, 0603	4723-101A	
R511	RMG, 1/16W, 100R, 1%, 0603	4723-101A	
R512	RMG, 1/16W, 100R, 1%, 0603	4723-101A	
R513	RMG, 1/10W, 10.2K, 1%, 0603	4720-1022	
R514	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R515	RMG, 1/16W, 150R, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-151AR	
R516	RMG, 1/16W, 1.8K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-182AR	
R517	RMG, 1/16W, 220R, 1%, 0603/1608	4723-221A	
R518	RMG, 1/16W, 220R, 1%, 0603/1608	4723-221A	
R519	RMG, 1/10W, 2.49K, 1%, 0805	4720-2491	
R520	RMG, 1/16W, 100K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-104AR	
R521	RMG, 1/10W, 330K, 1%, 0603	4720-334A	
R522	RMG, 1/10W, 29.4K, 1%, 0805	4720-2942	
R523	RMG, 1/16W, 200K, 1%, 0603/1608	4723-204A	
R524	RMG, 1/16W, 200K, 1%, 0603/1608	4723-204A	
R525	RMG, 1/16W, 1.5K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-152AR	
R526	RMG, 1/16W, 1.5K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-152AR	
R530	RMG, 1/16W, 1.58K, 1%, 0603	4723-1581	
R531	RMG, 1/16W, 2.2K, 1%, 0603/1608	4723-222A	
R532	RMG, 1/16W, 2.2K, 1%, 0603/1608	4723-222A	
R533	RMG, 1/10W, 2.2K, 1%, 0805	4720-222A	
R534	RMG, 1/16W, 22K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-223AR	
R535	RMG, 1/10W, 499R, 1%, 0805	4720-4990	
R536	RMG, 1/16W, 22R, 5%, 0603, HK, RESISTOR/SAMSUNG	4723-220JR	
R537	RMG, 1/16W, 22R, 5%, 0603, HK, RESISTOR/SAMSUNG	4723-220JR	
R538	RMG, 1/10W, 49.9K, 1%, 0805	4720-4992	
R540	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R542	RMG, 1/16W, 0R, 1%, 0603	4723-000A	
R543	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R544	RMG, 1/16W, 33R, 1%, 0603	4723-330A	

# ELECTRICAL PART LIST

AmpLink PCB Assembly, PS404A Amplifier

Resistors (continued)

Reference Designator	Description	Vendor Part Number	Note
R545	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R546	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R547	RMG, 1/16W, 33R, 1%, 0603	4723-330A	
R550	RMG, 1/16W, 47K, 1%, 0603, HK, RESISTOR/, SAMSUNG	4723-473AR	
R551	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103AR	
R552	RMG, 1/10W, 0R, 5%, 0805	4720-000J	
R553	RMG, 1/10W, 0R, 5%, 0805	4720-000J	
R554	RMG, 1/10W, 0R, 5%, 0805	4720-000J	
R555	RMG, 1/10W, 0R, 5%, 0805	4720-000J	
R556	RMG, 1/16W, 0R, 1%, 0603	4723-000A	

## Capacitors

Reference Designator	Description	Vendor Part Number	Note
C401	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C402	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C403	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C404	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C405	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C406	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C407	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C408	CC, 6.3V, 22U, 10%, 1206, 3.2X1.6	150B-226KCF	
C409	CC, 6.3V, 22U, 10%, 1206, 3.2X1.6	150B-226KCF	
C410	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106KBD	
C411	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106KBD	
C412	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106KBD	
C413	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106KBD	
C414	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106KBD	
C415	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106KBD	
C416	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106KBD	
C417	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106KBD	
C418	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106KBD	
C419	CC, 25V, 10U, 10%, 1206, 3.2X1.6, X5R	150E-106KCF	
C420	CC, 100V, 0.1U, 10%, 0805, X7R	150H-104KBD	
C421	CC, 50V, 4700PF, 10%, 0603, X7R	150F-472KAC	
C422	CT, 16V, 10U, 20%, SMD, 1.6X3.2	154D-106MCF	
C423	CE, 25V, 220U, 20%, SM, 8.4X10, LOW, ESR, LELON	157E-227MPSR5	
C424	CC, 50V, 1U, 10%, 0805	150F-105KBD	
C426	CC, 50V, 1U, 10%, 0805	150F-105KBD	
C427	CT, 6.3V, 47U, 10%, SMD, 85C, 1.6X3.2	154B-476KCF	
C428	CT, 6.3V, 47U, 10%, SMD, 85C, 1.6X3.2	154B-476KCF	

# ELECTRICAL PART LIST

AmpLink PCB Assembly, PS404A Amplifier

Capacitors (continued)

Reference Designator	Description	Vendor Part Number	Note
C429	CC, 10V, 4.7U, 10%, 0805, X7R	150C-475KBD	
C430	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C431	CC, 50V, 0.1U, 5%, 0805, 1.25X2	150F-104JBD	
C432	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C433	CC, 50V, 39P, 5%, 0603, COG	150F-390JAC	
C434	CC, 50V, 0.01U, 5%, 0603	150F-103JAC	
C436	CC, 50V, 18PF, 5%, 0603, C0G	150F-180JAC	
C438	CC, 50V, 1000P, 5%, 0603, X7R	150F-102JAC	
C439	CE, 6.3V, 100UF, 20%, SM, 06.3, L5.4	157B-107MLJ	
C440	CC, 50V, 22P, 5%, 0603, C0G	150F-220JAC	
C441	CC, 50V, 22P, 5%, 0603, C0G	150F-220JAC	
C442	CC, 50V, 22P, 5%, 0603, C0G	150F-220JAC	
C443	CC, 50V, 22P, 5%, 0603, C0G	150F-220JAC	
C444	CC, 50V, 47PF, 5%, 0603, C0G	150F-470JAC	
C445	CC, 50V, 0.01U, 5%, 0603	150F-103JAC	
C446	CC, 50V, 0.01U, 5%, 0603	150F-103JAC	
C447	CC, 50V, 0.01U, 5%, 0603	150F-103JAC	
C448	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C449	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C450	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C451	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C452	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C453	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C454	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C455	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C456	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C457	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C458	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C459	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C460	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C461	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C462	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C463	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C464	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C465	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C466	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C467	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C468	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C469	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C470	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	

# ELECTRICAL PART LIST

AmpLink PCB Assembly, PS404A Amplifier

Capacitors (continued)

Reference Designator	Description	Vendor Part Number	Note
C471	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C472	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C473	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C474	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C475	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C476	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C477	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C478	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C479	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C480	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C481	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C482	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C483	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C484	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C485	CE, 16V, 47U, 20%, SM, 6.6X5.7, LOW, ESR, LELON	157D-476MMKR5	
C486	CC, 16V, 1U, 10%, 0603, 0.8X1.6	150D-105KAC	
C487	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C488	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106KBD	
C490	CC, 50V, 150PF, 5%, 0603, C0G	150F-151JAC	
C491	CC, 50V, 150PF, 5%, 0603, C0G	150F-151JAC	
C494	CC, 50V, 150PF, 5%, 0603, C0G	150F-151JAC	
C495	CC, 50V, 150PF, 5%, 0603, C0G	150F-151JAC	
C498	CC, 50V, 150PF, 5%, 0603, C0G	150F-151JAC	
C499	CC, 50V, 150PF, 5%, 0603, C0G	150F-151JAC	
C502	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C503	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C504	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C505	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C506	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C507	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C508	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	
C509	CC, 50V, 68PF, 5%, 0603, C0G	150F-680JAC	
C510	CC, 50V, 1000P, 5%, 0603, X7R	150F-102JAC	
C511	CC, 50V, 0.1U, 5%, 0603	150F-104JAC	

# ELECTRICAL PART LIST

AmpLink PCB Assembly, PS404A Amplifier

## Inductors

Reference Designator	Description	Vendor Part Number	Note
L400	INDUCTOR, 10UH, 20%, 7X7, X4.5, CER7042BA-100M, SM	1803-01523	
L401	INDUCTOR, 10UH, 20%, 7X7, X4.5, CER7042BA-100M, SM	1803-01523	
L402	FERRITE, BEAD, CHIP, SEBW201209U121MT, 0805	1808-0872	
L403	FERRITE, BEAD, CHIP, SEBW201209U121MT, 0805	1808-0872	
L404	FERRITE, BEAD, CHIP, SEBW201209U121MT, 0805	1808-0872	
L405	FERRITE, BEAD, CHIP, SEBW201209U121MT, 0805	1808-0872	
L406	INDUCTOR, 2.2UH, 20%, 3X3X, 1.2, 1.1A, SM	1803-00643	
L407	FERRITE, CHIP, 0603, BLM18AG102SN1D, MURATA	1808-0878	

## Diodes

Reference Designator	Description	Vendor Part Number	Note
D400	DIODE, SCHOTTKY, 40V, 2A, SK24, SMB, SM, PANJIT	480S-K240	
D401	DIODE, SCHOTTKY, SK16, DO-, 214AA, 60V, 1A, SMD, PANJIT	480S-K160	
D402	DIODE, SCHOTTKY, 40V, 2A, SK24, SMB, SM, PANJIT	480S-K240	
D403	DIODE, BAV99, SOT23, PHILIPS	4840-8970	
D404	DIODE, BAV99, SOT23, PHILIPS	4840-8970	
D405	LED, SMD, 2.0X1.25X0.8, RD, SUPER, EVLITE	3700-7839	
D406	DOUBLE, DIODE, BAT54S, SOT-23, SCHOTTKY, SMD	480T-54S0	
D407	DIODE, 1SS355TE-17, ROHM	4840-1660	

## Transistors

Reference Designator	Description	Vendor Part Number	Note
Q1	TR, 3904, HFE, 100-300, SM	4860-0640	
Q400	TR, KTA1504Y	4851-504Y	
Q401	TR, 3904, HFE, 100-300, SM	4860-0640	
Q402	TR, 3904, HFE, 100-300, SM	4860-0640	

## Integrated Circuits

Reference Designator	Description	Vendor Part Number	Note
U400	IC, LPC11U35FBD48/401, MCU, 32-BIT, W_USB, LQFP48	3132-9481	
U401	IC, MX25L4006EM1I-12G, FLASH, 4MBIT, SOP8	3132-8711	
U402	IC, NCP301LSN09T1G, RESET, 0.9V2%, 20-66MS, SOT235	3133-1521	
U403	IC, CD74HC4067M96, MUX, SO24	3132-3021	
U404	IC, TPS54331DR, REG, SW, ADJ, 3A, SO8	3132-949116	
U405	IC, TPS54331DR, REG, SW, ADJ, 3A, SO8	3132-949116	
U406	IC, SN65MLVD203DR, M-LVDS, RX, TX, EIA899, SO14	3133-1421	
U407	IC, SN65MLVD203DR, M-LVDS, RX, TX, EIA899, SO14	3133-1421	
U408	IC, SN65MLVD203DR, M-LVDS, RX, TX, EIA899, SO14	3133-1421	
U409	IC, SN74LVC2G17DCKR, BUFFE, R, DUAL, ST, SC70-6	3132-7450	

# ELECTRICAL PART LIST

AmpLink PCB Assembly, PS404A Amplifier

Integrated Circuits (continued)

Reference Designator	Description	Vendor Part Number	Note
U410	IC, XL208-256-TQ64-C10, MC, U, 32-BIT, HI, PWR, TQFP64	3133-141164	
U411	IC, SN74LVC3G34DCUR, BUFFE, R, TRIPLE, VSSOP8	3133-1431	
U412	IC, LM3674MF-ADJ, REG, SW, 5.5V, ADJ, 0.6A, SOT-23	3133-1391	
U413	IC, CD74HC4094, SHIFT, REG, 8BIT, SIPO, 33NS, SO16	3132-4431	
U414	IC, TPD2E001DZDR, ESD PROTECT, 2CH, SOT533	3132-7831	
U415	IC, TPD2E001DZDR, ESD PROTECT, 2CH, SOT533	3132-7831	
U416	IC, TPD2E001DZDR, ESD PROTECT, 2CH, SOT533	3132-7831	
U417	IC, TPD2E001DZDR, ESD PROTECT, 2CH, SOT533	3132-7831	
U418	IC, TPD2E001DZDR, ESD PROTECT, 2CH, SOT533	3132-7831	
U419	IC, TPD2E001DZDR, ESD PROTECT, 2CH, SOT533	3132-7831	
U420	IC, W25X20CLSNIG, FLASH, 2MBIT, SO8	3133-140130	
U421	IC, TL432BIDBZR, REG, V-REF, 2.5-36V, SOT-23	3132-769116	
U422	IC, CS2100CP-CZZ, PROG, CLOCK, 3.5V, MSOP10	3133-1621	

## Miscellaneous

Reference Designator	Description	Vendor Part Number	Note
J400	FFC, CONN., 30PIN, P1.0, TOP, ENTRY	2101-3073	
J401	BRACKET, GROUNDING	4132-6221	
J402	BRACKET, GROUNDING	4132-6221	
J403	WAFER, 10, PIN, P2	2102-100S	
J404	CONN, FFC, 20P, P0.5, SMT, ST, F	2101-3376	
J405	CONN, FFC, 20P, P0.5, SMT, ST, F	2101-3376	
J406	CONN, FFC, 20P, P0.5, SMT, ST, F	2101-3376	
J407	CONNECTOR, HEADER, 7P, P2.54, ST, M, SINGLE, BODY	2101-3297	
J408	HEADER, 2X3P, P2.54, ST, MALE	2101-3124	
J409	12P, ST., WAFER, P=2.5, COULOMB	2102-121S	
J410	RJ45, F, 8P8C, 21.1X15.9X, 13.35, W/LED, S-USA	2113-3481	
J411	RJ45, F, 8P8C, 21.1X15.9X, 13.35, W/LED, S-USA	2113-3481	
T400	CHOKE, COMMODE, 90R@10, 0MHZ, 100MA, 1.1R, SMD, 0504	1805-0700	
T401	CHOKE, COMMODE, 90R@10, 0MHZ, 100MA, 1.1R, SMD, 0504	1805-0700	
T402	CHOKE, COMMODE, 90R@10, 0MHZ, 100MA, 1.1R, SMD, 0504	1805-0700	
T403	CHOKE, COMMODE, 90R@10, 0MHZ, 100MA, 1.1R, SMD, 0504	1805-0700	
T404	CHOKE, COMMODE, 90R@10, 0MHZ, 100MA, 1.1R, SMD, 0504	1805-0700	
T405	CHOKE, COMMODE, 90R@10, 0MHZ, 100MA, 1.1R, SMD, 0504	1805-0700	
X400	CRYSTAL, 12MHZ, -40, C, SMD	2300-2430	
X401	CRYSTAL, 24.576MHZ, 25PPM, 7.0X5.0X1.5, SM	2300-3323	

# ELECTRICAL PART LIST

AmpLink PCB Assembly, PS604A Amplifier

## Resistors

Reference Designator	Description	Vendor Part Number	Note
R400	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R401	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R402	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R403	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R404	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R405	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R406	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R407	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R408	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R409	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R410	RMG, 1/16W, 1K, 1%, 0603/1608	4723-102A+P	
R411	RMG, 1/16W, 1K, 1%, 0603/1608	4723-102A+P	
R412	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R413	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R414	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R416	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R418	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R422	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R423	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R424	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R425	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R426	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R427	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R428	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R429	RMG, 1/16W, 47K, 1%, 0603, HK, RESISTOR/, SAMSUNG	4723-473A+P-R	
R430	RMG, 1/16W, 68K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-683A+P-R	
R431	RMG, 1/16W, 47K, 1%, 0603, HK, RESISTOR/, SAMSUNG	4723-473A+P-R	
R432	RMG, 1/16W, 47K, 1%, 0603, HK, RESISTOR/, SAMSUNG	4723-473A+P-R	
R433	RMG, 1/16W, 330R, 1%, 0603	4723-331A+P	
R434	RMG, 1/16W, 330R, 1%, 0603	4723-331A+P	
R435	RMG, 1/16W, 330R, 1%, 0603	4723-331A+P	
R436	RMG, 1/16W, 330R, 1%, 0603	4723-331A+P	
R437	RMG, 1/16W, 5.1K, 1%, 0603/1608	4723-512A+P	
R438	RMG, 1/16W, 5.6K, 1%, 0603/1608	4723-562A+P	
R439	RMG, 1/16W, 4R7, 1%, 0603	4723-4R7A+P	
R440	RMG, 1/16W, 750R, 1%, 0603	4723-751A+P	
R441	RMG, 1/16W, 8.2K, 1%, 0603/1608	4723-822A+P	
R442	RMG, 1/10W, 1.91K, 1%, 0603	4720-1911+P	
R443	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R448	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	

# ELECTRICAL PART LIST

AmpLink PCB Assembly, PS604A Amplifier

Resistors (continued)

Reference Designator	Description	Vendor Part Number	Note
R449	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R450	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R451	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R452	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R458	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R459	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R460	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	
R461	RCFA, 1/16W, 47RX4, 5%, 0603	4703-470J+P-04	
R462	RCFA, 1/16W, 47RX4, 5%, 0603	4703-470J+P-04	
R463	RCFA, 1/16W, 47RX4, 5%, 0603	4703-470J+P-04	
R464	RCFA, 1/16W, 47RX4, 5%, 0603	4703-470J+P-04	
R465	RCFA, 1/16W, 47RX4, 5%, 0603	4703-470J+P-04	
R466	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R467	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R468	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R469	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R470	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R471	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R472	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R473	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R474	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R476	RMG, 1/16W, 4.7K, 1%, 0603/1608.	4723-472A+P	
R477	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R479	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R481	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R483	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R484	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R485	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R486	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R487	RMG, 1/16W, 2K, 1%, 0603/1608	4723-202A+P	
R488	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R489	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R490	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R491	RMG, 1/16W, 2K, 1%, 0603/1608	4723-202A+P	
R493	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R494	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R495	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R496	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R497	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R499	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	

# ELECTRICAL PART LIST

AmpLink PCB Assembly, PS604A Amplifier

Resistors (continued)

Reference Designator	Description	Vendor Part Number	Note
R500	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R501	RMG, 1/16W, 4.7K, 1%, 0603/1608	4723-472A+P	
R502	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R503	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R504	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R505	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R506	RMG, 1/10W, 1.62K, 1%, 0603	4720-1621+P	
R507	RMG, 1/16W, 100R, 1%, 0603	4723-101A+P	
R508	RMG, 1/16W, 100R, 1%, 0603	4723-101A+P	
R509	RMG, 1/16W, 100R, 1%, 0603	4723-101A+P	
R510	RMG, 1/16W, 100R, 1%, 0603	4723-101A+P	
R511	RMG, 1/16W, 100R, 1%, 0603	4723-101A+P	
R512	RMG, 1/16W, 100R, 1%, 0603	4723-101A+P	
R513	RMG, 1/10W, 10.2K, 1%, 0603	4720-1022+P	
R514	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R515	RMG, 1/16W, 150R, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-151A+P-R	
R516	RMG, 1/16W, 1.8K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-182A+P-R	
R517	RMG, 1/16W, 220R, 1%, 0603/1608	4723-221A+P	
R518	RMG, 1/16W, 220R, 1%, 0603/1608	4723-221A+P	
R519	RMG, 1/10W, 2.49K, 1%, 0805	4720-2491+J	
R520	RMG, 1/16W, 100K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-104A+P-R	
R521	RMG, 1/10W, 330K, 1%, 0603	4720-334A+P	
R522	RMG, 1/10W, 29.4K, 1%, 0805	4720-2942+J	
R523	RMG, 1/16W, 200K, 1%, 0603/1608	4723-204A+P	
R524	RMG, 1/16W, 200K, 1%, 0603/1608	4723-204A+P	
R525	RMG, 1/16W, 1.5K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-152A+P-R	
R526	RMG, 1/16W, 1.5K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-152A+P-R	
R530	RMG, 1/16W, 1.58K, 1%, 0603	4723-1581+P	
R531	RMG, 1/16W, 2.2K, 1%, 0603/1608	4723-222A+P	
R532	RMG, 1/16W, 2.2K, 1%, 0603/1608	4723-222A+P	
R533	RMG, 1/10W, 2.2K, 1%, 0805	4720-222A+J	
R534	RMG, 1/16W, 22K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-223A+P-R	
R535	RMG, 1/10W, 499R, 1%, 0805	4720-4990+J	
R536	RMG, 1/16W, 22R, 5%, 0603, HK, RESISTOR/SAMSUNG	4723-220J+P-R	
R537	RMG, 1/16W, 22R, 5%, 0603, HK, RESISTOR/SAMSUNG	4723-220J+P-R	
R538	RMG, 1/10W, 49.9K, 1%, 0805	4720-4992+J	
R540	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R541	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R543	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R544	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	

# ELECTRICAL PART LIST

AmpLink PCB Assembly, PS604A Amplifier

Resistors (continued)

Reference Designator	Description	Vendor Part Number	Note
R545	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R546	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R547	RMG, 1/16W, 33R, 1%, 0603	4723-330A+P	
R550	RMG, 1/16W, 47K, 1%, 0603, HK, RESISTOR/, SAMSUNG	4723-473A+P-R	
R551	RMG, 1/16W, 10K, 1%, 0603, HK, RESISTOR/SAMSUNG	4723-103A+P-R	
R552	RMG, 1/10W, 0R, 5%, 0805	4720-000J+J	
R553	RMG, 1/10W, 0R, 5%, 0805	4720-000J+J	
R554	RMG, 1/10W, 0R, 5%, 0805	4720-000J+J	
R555	RMG, 1/10W, 0R, 5%, 0805	4720-000J+J	
R556	RMG, 1/16W, 0R, 1%, 0603	4723-000A+P	

## Capacitors

Reference Designator	Description	Vendor Part Number	Note
C401	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C402	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C403	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C404	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C405	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C406	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C407	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C408	CC, 6.3V, 22U, 10%, 1206, 3.2X1.6	150B-226K+6-CF	
C409	CC, 6.3V, 22U, 10%, 1206, 3.2X1.6	150B-226K+6-CF	
C410	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106K+J-BD	
C411	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106K+J-BD	
C412	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106K+J-BD	
C413	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106K+J-BD	
C414	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106K+J-BD	
C415	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106K+J-BD	
C416	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106K+J-BD	
C417	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106K+J-BD	
C418	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106K+J-BD	
C419	CC, 25V, 10U, 10%, 1206, 3.2X1.6, X5R	150E-106K+6-CF	
C420	CC, 100V, 0.1U, 10%, 0805, X7R	150H-104K+J-BD	
C421	CC, 50V, 4700PF, 10%, 0603, X7R	150F-472K+P-AC	
C422	CT, 16V, 10U, 20%, SMD, 1.6X3.2	154D-106M+3-CF	
C423	CE, 25V, 220U, 20%, SM, 8.4X10, LOW ESR, LELON	157E-227M+3-PSR5	
C424	CC, 50V, 1U, 10%, 0805	150F-105K+J-BD	
C426	CC, 50V, 1U, 10%, 0805	150F-105K+J-BD	
C427	CT, 6.3V, 47U, 10%, SMD, 85C, 1.6X3.2	154B-476K+3-CF	

# ELECTRICAL PART LIST

AmpLink PCB Assembly, PS604A Amplifier

Capacitors (continued)

Reference Designator	Description	Vendor Part Number	Note
C428	CT, 6.3V, 47U, 10%, SMD, 85C, 1.6X3.2	154B-476K+3-CF	
C429	CC, 10V, 4.7U, 10%, 0805, X7R	150C-475K+J-BD	
C430	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C431	CC, 50V, 0.1U, 5%, 0805, 1.25X2	150F-104J+J-BD	
C432	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C433	CC, 50V, 39P, 5%, 0603, COG	150F-390J+P-AC	
C434	CC, 50V, 0.01U, 5%, 0603	150F-103J+P-AC	
C436	CC, 50V, 18PF, 5%, 0603, C0G	150F-180J+P-AC	
C438	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C439	CE, 6.3V, 100UF, 20%, SM, 06.3, L5.4	157B-107M+3-LJ	
C440	CC, 50V, 22P, 5%, 0603, C0G	150F-220J+P-AC	
C441	CC, 50V, 22P, 5%, 0603, C0G	150F-220J+P-AC	
C442	CC, 50V, 22P, 5%, 0603, C0G	150F-220J+P-AC	
C443	CC, 50V, 22P, 5%, 0603, C0G	150F-220J+P-AC	
C444	CC, 50V, 47PF, 5%, 0603, C0G	150F-470J+P-AC	
C445	CC, 50V, 0.01U, 5%, 0603	150F-103J+P-AC	
C446	CC, 50V, 0.01U, 5%, 0603	150F-103J+P-AC	
C447	CC, 50V, 0.01U, 5%, 0603	150F-103J+P-AC	
C448	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C449	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C450	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C451	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C452	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C453	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C454	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C455	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C456	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C457	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C458	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C459	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C460	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C461	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C462	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C463	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C464	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C465	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C466	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C467	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C468	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C469	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	

# ELECTRICAL PART LIST

AmpLink PCB Assembly, PS604A Amplifier

Capacitors (continued)

Reference Designator	Description	Vendor Part Number	Note
C470	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C471	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C472	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C473	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C474	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C475	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C476	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C477	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C478	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C479	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C480	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C481	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C482	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C483	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C484	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C485	CE, 16V, 47U, 20%, SM, 6.6X5.7, LOW ESR, LELON	157D-476M+3-MKR5	
C486	CC, 16V, 1U, 10%, 0603, 0.8X1.6	150D-105K+P-AC	
C487	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C488	CC, 6.3V, 10U, 10%, 0805, X5R	150B-106K+J-BD	
C490	CC, 50V, 150PF, 5%, 0603, C0G	150F-151J+P-AC	
C491	CC, 50V, 150PF, 5%, 0603, C0G	150F-151J+P-AC	
C494	CC, 50V, 150PF, 5%, 0603, C0G	150F-151J+P-AC	
C495	CC, 50V, 150PF, 5%, 0603, C0G	150F-151J+P-AC	
C498	CC, 50V, 150PF, 5%, 0603, C0G	150F-151J+P-AC	
C499	CC, 50V, 150PF, 5%, 0603, C0G	150F-151J+P-AC	
C502	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C503	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C504	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C505	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C506	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C507	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C508	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	
C509	CC, 50V, 68PF, 5%, 0603, C0G	150F-680J+P-AC	
C510	CC, 50V, 1000P, 5%, 0603, X7R	150F-102J+P-AC	
C511	CC, 50V, 0.1U, 5%, 0603	150F-104J+P-AC	

# ELECTRICAL PART LIST

AmpLink PCB Assembly, PS604A Amplifier

## Inductors

Reference Designator	Description	Vendor Part Number	Note
L400	INDUCTOR, 10UH, +/-20%, 7X7, X4.5, CER7042BA-100M, SM	1803-0152+0-3	
L401	INDUCTOR, 10UH, +/-20%, 7X7, X4.5, CER7042BA-100M, SM	1803-0152+0-3	
L402	FERRITE, BEAD, CHIP, SEBW201209U121MT, 0805	1808-0872+0	
L403	FERRITE, BEAD, CHIP, SEBW201209U121MT, 0805	1808-0872+0	
L404	FERRITE, BEAD, CHIP, SEBW201209U121MT, 0805	1808-0872+0	
L405	FERRITE, BEAD, CHIP, SEBW201209U121MT, 0805	1808-0872+0	
L406	INDUCTOR, 2.2UH, 20%, 3X3X, 1.2, 1.1A, SM	1803-0064+0-3	
L407	FERRITE, CHIP, 0603, BLM18AG102SN1D, MURATA	1808-0878+0	

## Diodes

Reference Designator	Description	Vendor Part Number	Note
D400	DIODE, SCHOTTKY, 40V, 2A, SK24, SMB, SM, PANJIT	480S-K240+3	
D401	DIODE, SCHOTTKY, SK16, DO-, 214AA, 60V, 1A, SMD, PANJIT	480S-K160+3	
D402	DIODE, SCHOTTKY, 40V, 2A, SK24, SMB, SM, PANJIT	480S-K240+3	
D403	DIODE, BAV99, SOT23, PHILIPS	4840-8970+3	
D404	DIODE, BAV99, SOT23, PHILIPS	4840-8970+3	
D405	LED, SMD, 2.0X1.25X0.8, RD, SUPER, EVLITE	3700-7839+R	
D406	DOUBLE, DIODE, BAT54S, SOT-23, SCHOTTKY, SMD	480T-54S0+3	
D407	DIODE, 1SS355TE-17, ROHM	4840-1660+0	

## Transistors

Reference Designator	Description	Vendor Part Number	Note
Q1	TR, 3904, HFE, 100-300, SM	4860-0640+3	
Q400	TR, KTA1504Y	4851-504Y+3	
Q401	TR, 3904, HFE, 100-300, SM	4860-0640+3	
Q402	TR, 3904, HFE, 100-300, SM	4860-0640+3	

## Integrated Circuits

Reference Designator	Description	Vendor Part Number	Note
U400	IC, LPC11U35FBD48/401, MCU, 32-BIT, W_USB, LQFP48	3132-9481+0	
U401	IC, MX25L4006EM1I-12G, FLASH, 4MBIT, SOP8	3132-8711+0	
U402	IC, NCP301LSN09T1G, RESET, 0.9V+/-2%, 20-66MS, SOT235	3133-1521+0	
U403	IC, CD74HC4067M96, MUX, SO24	3132-3021+0	
U404	IC, TPS54331DR, REG, SW, ADJ, 3A, SO8	3132-9491+0-16	
U405	IC, TPS54331DR, REG, SW, ADJ, 3A, SO8	3132-9491+0-16	
U406	IC, SN65MLVD203DR, M-LVDS, RX, TX, EIA899, SO14	3133-1421+0	
U407	IC, SN65MLVD203DR, M-LVDS, RX, TX, EIA899, SO14	3133-1421+0	
U408	IC, SN65MLVD203DR, M-LVDS, RX, TX, EIA899, SO14	3133-1421+0	
U409	IC, SN74LVC2G17DCKR, BUFFE, R, DUAL, ST, SC70-6	3132-7450+0	

# ELECTRICAL PART LIST

AmpLink PCB Assembly, PS604A Amplifier

Integrated Circuits (continued)

Reference Designator	Description	Vendor Part Number	Note
U410	IC, XL208-256-TQ64-C10, MC, U, 32-BIT, HI, PWR, TQFP64	3133-1411+0-64	
U411	IC, SN74LVC3G34DCUR, BUFFE, R, TRIPLE, VSSOP8	3133-1431+0	
U412	IC, LM3674MF-ADJ, REG, SW, 5.5V, ADJ, 0.6A, SOT-23	3133-1391+0	
U413	IC, CD74HC4094, SHIFT, REG, 8BIT, SIPO, 33NS, SO16	3132-4431+0	
U414	IC, TPD2E001DZDR, ESD PROTECT, 2CH, SOT533	3132-7831+0	
U415	IC, TPD2E001DZDR, ESD PROTECT, 2CH, SOT533	3132-7831+0	
U416	IC, TPD2E001DZDR, ESD PROTECT, 2CH, SOT533	3132-7831+0	
U417	IC, TPD2E001DZDR, ESD PROTECT, 2CH, SOT533	3132-7831+0	
U418	IC, TPD2E001DZDR, ESD PROTECT, 2CH, SOT533	3132-7831+0	
U419	IC, TPD2E001DZDR, ESD PROTECT, 2CH, SOT533	3132-7831+0	
U420	IC, W25X20CLSNIG, FLASH, 2MBIT, SO8	3133-1401+0-30	
U421	IC, TL432BIDBZR, REG, V-REF, 2.5-36V, SOT-23	3132-7691+0-16	
U422	IC, CS2100CP-CZZ, PROG, CLOCK, 3.5V, MSOP10	3133-1621+0	

## Miscellaneous

Reference Designator	Description	Vendor Part Number	Note
J400	FFC, CONN., 30PIN, P1.0, TOP, ENTRY	2101-3073+0	
J401	BRACKET, GROUNDING	4132-6221+0	
J402	BRACKET, GROUNDING	4132-6221+0	
J403	WAFER, 10, PIN, P2	2102-100S+003	
J404	CONN, FFC, 20P, P0.5, SMT, ST, F	2101-3376+1	
J405	CONN, FFC, 20P, P0.5, SMT, ST, F	2101-3376+1	
J406	CONN, FFC, 20P, P0.5, SMT, ST, F	2101-3376+1	
J407	CONNECTOR, HEADER, 7P, P2.54, ST, M, SINGLE, BODY	2101-3297+0	
J408	HEADER, 2X3P, P2.54, ST, MALE	2101-3124+0	
J409	12P, ST., WAFER, P=2.5, COULOMB	2102-121S+004	
J410	RJ45, F, 8P8C, 21.1X15.9X, 13.35, W/LED, S-USA	2113-3481+0	
J411	RJ45, F, 8P8C, 21.1X15.9X, 13.35, W/LED, S-USA	2113-3481+0	
T400	CHOKE, COMMODE, 90R@100MHZ, 100MA, 1.1R, SMD 0504	1805-0700+0	
T401	CHOKE, COMMODE, 90R@100MHZ, 100MA, 1.1R, SMD 0504	1805-0700+0	
T402	CHOKE, COMMODE, 90R@100MHZ, 100MA, 1.1R, SMD 0504	1805-0700+0	
T403	CHOKE, COMMODE, 90R@100MHZ, 100MA, 1.1R, SMD 0504	1805-0700+0	
T404	CHOKE, COMMODE, 90R@100MHZ, 100MA, 1.1R, SMD 0504	1805-0700+0	
T405	CHOKE, COMMODE, 90R@100MHZ, 100MA, 1.1R, SMD 0504	1805-0700+0	
X400	CRYSTAL, 12MHZ, -40+85, C, SMD	2300-2430+0	
X401	CRYSTAL, 24.576MHZ, +/-25PPM, 7.0X5.0X1.5, SM	2300-3323+0	

# DISASSEMBLY PROCEDURE

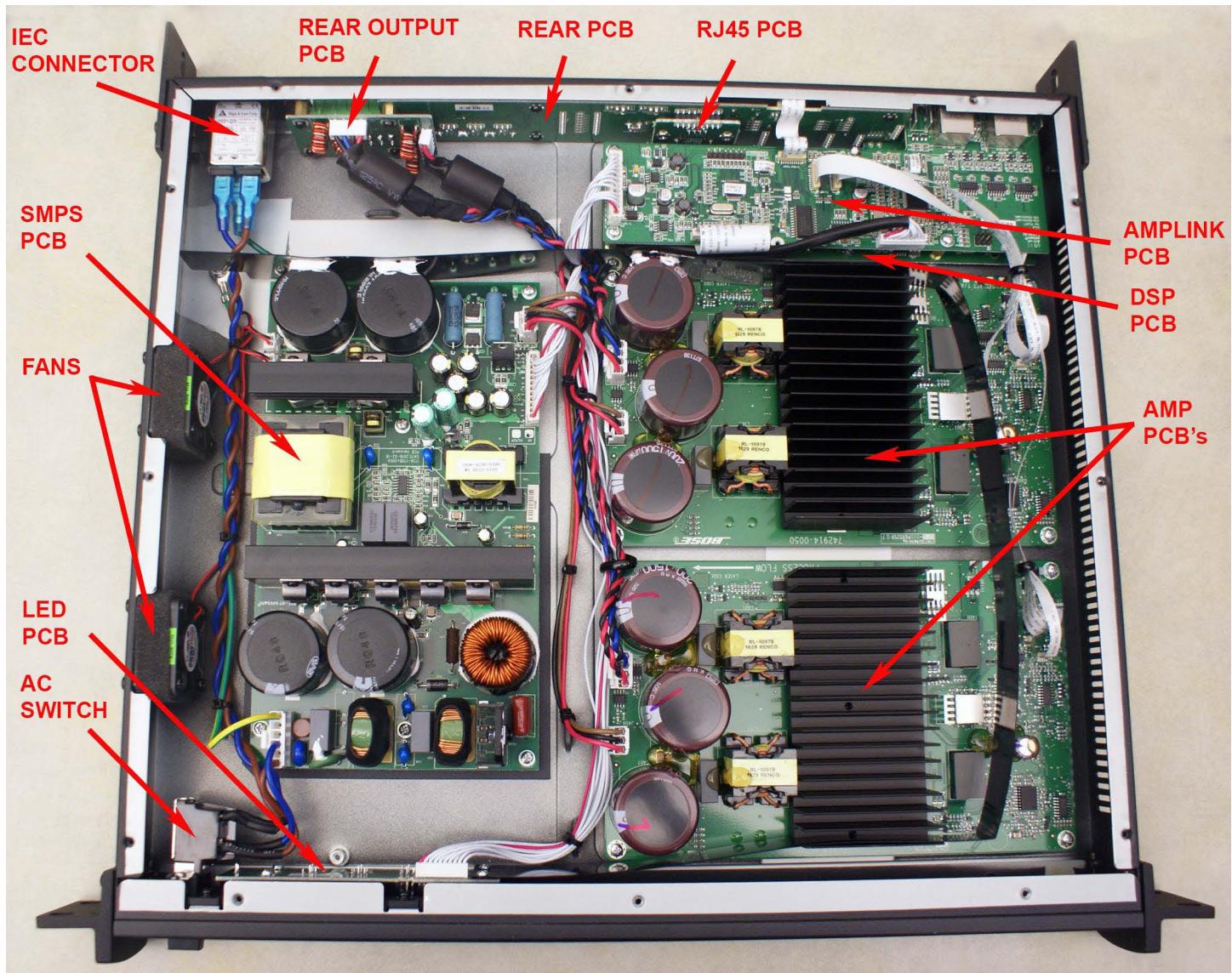


Figure 3. Chassis View - PCB Locations

# DISASSEMBLY PROCEDURE

## PS404A and PS604A Amplifiers

### DANGER: SHOCK HAZARD

The PowerShare amplifiers have high voltage (up to 400 VDC) on the heatsink and much of the circuitry on the power supply PCB during operation. These PCBs can retain a dangerous charge for a significant period of time.

- DO NOT touch the power supply heatsink when the amplifier is operating.
- DO NOT use the power supply heatsink as a ground point for test equipment. Damage to your equipment could result.
- Allow at least five (5) minutes after operation before removing the cover or attempting to replace a PCB assembly.

**Note:** Refer to Figure 3 (page 79) for the following procedures.

### 1. Top Cover Removal

- 1.1 Remove the twelve screws that secure the top cover to the chassis. Lift off the top cover.

### 2. Rack Ear Removal

- 2.1 Remove the three screws that secure the rack ear to the chassis. Lift off the rack ear.

### 3. Rear Bracket Removal

- 3.1 Remove the three screws that secure the rear bracket to the chassis. Lift off the rear bracket.

### 4. Front Panel Removal

**Re-assembly Note:** Make a note of the wiring harness routings and tie wrap locations for the following procedure. You will need to re-install all of the tie wraps in the same locations in order to avoid noise pickup after repair.

- 4.1 Perform procedure 1.

- 4.2 Remove the three screws that secure the bottom of the front panel to the chassis.

- 4.3 Disconnect the AC wiring harness from the SMPS PCB assembly at J203.

4.4 Disconnect the AC wiring harness blue and brown wires from the IEC AC inlet.

4.5 Disconnect the AC wiring harness green/yellow ground wire from the chassis.

4.6 Unplug the wiring harness on the front panel LED PCB assembly at J409 on the AmpLink PCB.

4.7 Disconnect the air baffle from the Amplifier PCB heatsink. This air baffle runs over to the LED PCB and is secured with two screws.

**Re-assembly Note:** Be sure to re-install the air baffle after repair of the unit. Secure the air baffle to the amplifier PCB heatsink using RTV compound, or similar. Failure to re-install the air baffle will result in chassis overheating.

4.8 Remove the one screw that secures the bottom of the LED PCB to the chassis. Lift off the front panel assembly.

### 5. AC Power Switch Removal

- 5.1 Perform procedure 1.

- 5.2 On the front panel, remove the AC power button by pulling it straight off.

- 5.3 On the back of the AC power switch, remove the two screws that secure it to the front panel. Lift out the AC power switch.

### 6. LED PCB Removal

- 6.1 Perform procedure 4.

- 6.2 Remove the four screws that secure the LED PCB to the front panel. Lift off the LED PCB.

**Re-assembly Note:** Be sure to re-install the air baffle to avoid chassis overheating after repair.

### 7. Front Bezel Removal

- 7.1 Perform procedure 6.

- 7.2 Remove the AC Switch button from the front panel by pulling it straight off.

# DISASSEMBLY PROCEDURE

7.3 Remove the two screws that secure the AC power switch to the back of the front bezel. Lift it straight off.

7.4 Remove the four screws that secure the front bezel to the front panel. Lift off the plastic front bezel.

## 8. Fan Assembly Removal

8.1 Perform procedure 1.

8.2 Disconnect the fan wiring harness from the SMPS PCB at J204 or J205.

8.3 Remove the four screws that secure the fan assembly to the chassis. Lift the fan assembly out of the chassis.

## 9. SMPS PCB Removal

9.1 Perform procedure 1.

9.2 Gently remove the air baffle from the SMPS PCB where it is glued to the capacitors.

**Re-assembly Note:** You will need to re-install the air baffle and secure it in place using RTV or similar. Failure to re-install the air baffle will result in chassis overheating.

9.3 Disconnect the AC wiring harness at J203. Disconnect the amplifier PCB wiring harness at J202. Disconnect the DSP wiring harness at J201. Disconnect the fan wiring harnesses at J204 and J205.

9.4 Remove the six screws that secure the SMPS PCB to the chassis. Lift out the SMPS PCB assembly.

## 10. Amplifier PCB Removal

10.1 Perform procedure 1 to remove the top cover.

10.2 On the bottom of the chassis, remove the two screws that secure the amplifier PCB's heatsink to the chassis.

10.3 Gently remove the two air baffles from the Amplifier PCB heatsink.

**Re-assembly Note:** You will need to re-install the air baffle and secure it in place using RTV or similar. Failure to re-install the air baffle will result in chassis overheating.

10.4 Disconnect the wiring harnesses at J300 and J400. Disconnect the ribbon cables at J100 and J101.

10.5 Remove the four screws that secure the Amplifier PCB to the chassis. Lift out the Amplifier PCB assembly.

**Re-assembly Note:** Be sure to re-install the two screws that secure the amplifier PCB heatsink to the bottom of the chassis.

## 11. AmpLink PCB Removal

11.1 Perform procedure 1 to remove the top cover.

11.2 Unplug the wiring harness at J409 and J403. Disconnect the ribbon cables at J400, J404, J405 and J406. Unsolder the jumper wire to the DSP PCB below the AmpLink PCB.

**Re-assembly Note:** The ribbon cable at J404 on the AmpLink PCB connects to J100 on the Amp PCB nearest the AmpLink PCB. The ribbon cable at J405 connect to the Amp PCB furthest away from the AmpLink PCB.

11.3 Remove the two screws on the rear panel next to the AmpLink RJ45 connectors. Remove the three screws that secure the PCB to the standoffs.

11.4 Lift out the AmpLink PCB.

## 12. DSP PCB Removal

12.1 Perform procedure 11.

12.2 Unplug the ribbon cables at J603 and J604.

12.3 Remove the three standoffs and one screw that secure the DSP PCB to the chassis. Lift out the DSP PCB.

# DISASSEMBLY PROCEDURE

<b>13. Rear Panel PCB Removal</b>  13.1 Perform procedure 1.  13.2 Disconnect the ribbon cable at J406 on the AmpLink PCB. Disconnect the wiring harness at J300 on the amplifier PCB's.  13.3 On the rear of the chassis, remove the twelve screws that secure the rear panel PCB to the chassis. Lift out the rear panel PCB.	<b>15. IEC AC Input Jack Removal</b>  15.1 Perform procedure 1.  15.2 Make a note of the wiring configuration, and disconnect the AC wiring harness Faston connectors from the three lugs on the IEC connector.  15.3 On the rear of the chassis, remove the two screws that secure the IEC connector to the chassis. Lift out the IEC connector.
<b>14. Rear Panel Output PCB Removal</b>  14.1 Perform procedure 1.  14.2 Disconnect the wiring harness at J300 on the amplifier PCB's.  14.3 Remove the four screws that secure the rear panel output PCB to the rear panel PCB and the chassis. Lift off the rear panel output PCB.	

# TEST PROCEDURE



## PS404A and PS604A (AmpLink Version) Amplifier Tests

### Analog Input Tests

#### Required Items:

- Audio Precision ATS-1 or equivalent
- Audio Precision AUX-0025 digital filter or similar
- 4 - 4 Ohm, 250W load resistors
- 4 - 16 Ohm, 250W load resistors
- 4 - 32 Ohm, 250W load resistors

#### UUT Switch Settings:

Set the PS404A or PS604A rear panel controls as listed below for following tests.

- Analog Input Select Rotary Switch to position 1, 1:1
- Rotary EQ switches to position 1 FLAT
- Output Trims 1 - 4 to MAX (fully CW)
- DIP switch setting: all switches to LEFT

**Important Note:** All measurements for the power amp require an Audio Precision AUX-0025 Digital Filter (or equivalent) with a 20Hz-20kHz filter in order to get the correct output noise and level readings.

### 1. Gain Test - Low-Z Mode

- 1.1 Set the Output 1 - 4 DIP switches to Low-Z mode (right).
- 1.2 Connect 4 Ohm, 250W loads to the channel 1 - 4 outputs.
- 1.3 Apply a 1 kHz, -19.3 dBV input to the channel 1 - 4 inputs.
- 1.4 Measure the output level at the channel 1 - 4 outputs. It should be +11.2 dBV $\pm$ 1 dBV (PS404A) or +13 dBV $\pm$ 1 dBV (PS604A).

### 2. Gain Test - Hi-Z 70V Mode

- 2.1 Set the Output 1 - 4 DIP switches to Hi-Z mode (left). Set the GLOBAL OUT DIP switch to 70V (left).
- 2.2 Connect 16 Ohm, 250W loads to the channel 1 - 4 outputs.
- 2.3 Apply a 1 kHz, -19.3 dBV input to the channel 1 - 4 RCA inputs.
- 2.4 Measure the output level at the channel 1 - 4 outputs. It should be +16 dBV $\pm$ 1 dBV.

### 3. Gain Test - Input Sensitivity, 100V and 70V Settings

- 3.1 Set the Output 1 - 4 DIP switches to Hi-Z mode (left). Set the GLOBAL OUT DIP switch to 100V (right). Set the SENSITIVITY DIP switch to 12 dBu (right).

# TEST PROCEDURE

- 3.2 Connect 32 Ohm, 250W loads to the channel 1 - 4 outputs.
- 3.3 Apply a 1 kHz, -19.3 dBV input to the channel 1 - 4 inputs.
- 3.4 Measure the output level at the channel 1 - 4 outputs. It should be +11 dBV  $\pm$ 1 dBV.
- 3.5 Set the SENSITIVITY switch to the 4 dBu position.
- 3.6 Apply a 1 kHz, -19.3 dBV input to the channel 1 - 4 inputs.
- 3.7 Measure the output level at the channel 1 - 4 outputs. It should be +19 dBV  $\pm$ 1 dBV.

## 4. THD+N Test

- 4.1 Set the Output 1 - 4 DIP switches to Hi-Z mode (left). Set the GLOBAL OUT DIP switch to 100V (right). Set the SENSITIVITY DIP switch to 4 dBu (left).
- 4.2 Connect 32 Ohm, 250W loads to the channel 1 - 4 outputs.
- 4.3 Apply a 1 kHz, -19.3 dBV input to the channel 1 - 4 inputs.
- 4.4 Measure the output level at the channel 1 - 4 outputs. Adjust the input level to attain an output of 100W from both channels.
- 4.5 Measure the THD+N level at the channel 1 - 4 outputs. It should be < 0.1%.

## 5. Frequency Response and Noise Test

- 5.1 Set the Output 1 and 2 DIP switches to Low-Z mode (right). Set the GLOBAL OUT DIP switch to 70V (left). Set the SENSITIVITY DIP switch to 4 dBu (left).
- 5.2 Connect 4 Ohm, 250W loads to the channel 1 and 2 outputs.
- 5.3 Apply a 1 kHz, -19.3 dBV input to the channel 1 - 4 inputs.
- 5.4 Measure the output level at the channel 1 - 4 outputs. Decrease the input level to attain an output of 1W from all channels. Change the dB meter scale to dBr. Reference a dB meter to the output level.
- 5.5 Change the input frequency to 20 Hz. Measure the output level. It should be 0 dBr +/- 1.0 dB.
- 5.6 Change the input frequency to 20 kHz. Measure the output level. It should be 0 dBr +/- 1.0 dB.
- 5.7 Turn off the signal generator.
- 5.8 Set the Output 1 - 4 DIP switches to Hi-Z mode (left). Set the GLOBAL OUT DIP switch to 100V (right).
- 5.9 Measure the output noise level using a 20 kHz filter and A-weighting. It should be < -57 dBV for all inputs.

# TEST PROCEDURE

## 6. Signal LED Test

6.1 Apply a -50.2 dBV +/- 2 dBV, 1 kHz sine wave to the channel 1 - 4 EURO BLOCK connectors. Verify that the SIGNAL LED lights GREEN.

6.2 Change the input level to +6.8 dBV +/- 2 dBV. Verify that the SIGNAL LED lights AMBER.

6.3 Change the input level to +9.8 dBV +/- 2 dBV. Verify that the SIGNAL LED lights RED.

## 7. Limit LED Test

7.1 Apply a + 2.0 dBV +/- 2 dBV, 1 kHz sine wave to the channel 1 - 4 EURO BLOCK connectors. Verify that the LIMIT LED lights AMBER.

## 8. Crosstalk Test

8.1 Set the Output 1 - 4 DIP switches to Hi-Z mode (left). Set the GLOBAL OUT DIP switch to 100V (right). Set the SENSITIVITY DIP switch to 4 dBu (left). All other DIP switches should be set to the left.

8.2 Connect 32 Ohm, 250W loads to the channel 1 - 4 outputs.

8.3 Using a 20 Hz to 20 kHz filter, apply a 1 kHz, -19.3 dBV input to the channel 1 input jack.

8.4 Adjust the input signal level to get a 100W output at the channel 1 output.

8.5 With the above input applied to the channel 1 input, measure the output level at the channel 2, 3 and 4 outputs. It should be  $\geq$  -70 dB.

8.6 Change the input frequency to 20 kHz. Measure the output level at the channel 2, 3 and 4 outputs. It should be  $\geq$  -55 dB.

8.7 Repeat steps 8.3 to 8.6 for the channel 2, 3 and 4 inputs.

## AmpLink Functionality Tests

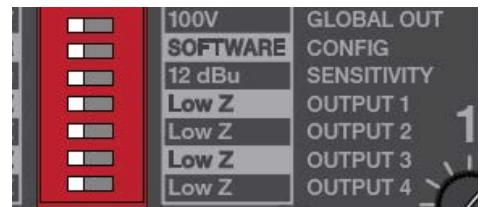
### Required Items:

- Audio Precision ATS-1 or equivalent
- Audio Precision AUX-0025 digital filter or similar
- Windows PC with Bose® ControlSpace® Designer version 5.0 or greater installed
- Bose ControlCenter CC-1, part number 768932-0110 or similar
- Bose ControlSpace ESP-880 digital processor or other AmpLink source, i.e. CS EX-1280C
- dB Meter
- 4 - 4 Ohm, 250W load resistors
- 4 - 16 Ohm, 250W load resistors
- 4 - 32 Ohm, 250W load resistors

### UUT Switch Settings:

Set the PS404A or PS604A rear panel controls as listed below for following tests.

- Analog Input Select Rotary Switch to position 1, 1:1
- Rotary EQ switch to position 1 FLAT
- Output Trim 1 - 4 to MAX (fully CW)
- DIP switch setting: all switches to LEFT

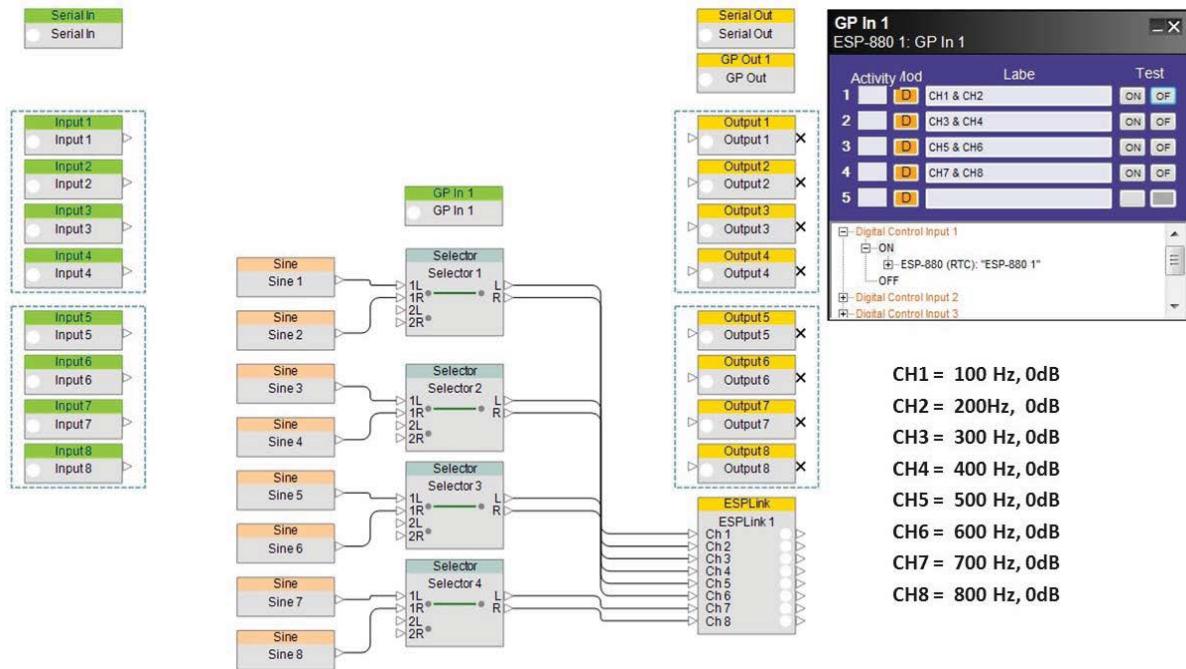


# TEST PROCEDURE

**Important Note:** All measurements for power amp require a AUX-0025 Digital Filter (or equivalent) with a 20Hz-20kHz filter in order to get the correct output noise and level readings.

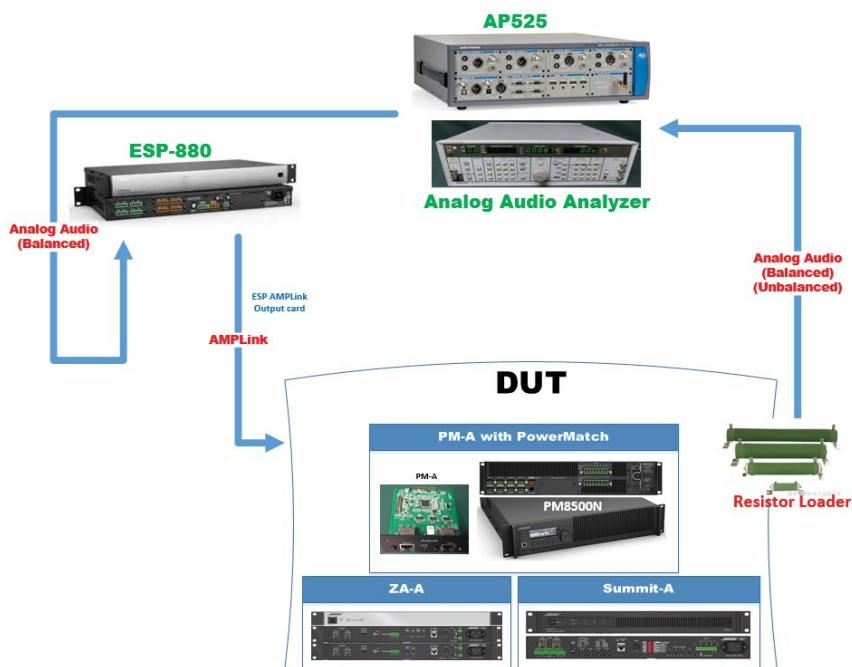
## AmpLink Test Setup

1. Open the ControlSpace Designer software. Configure the ESP-880 (or similar) as an AmpLink signal source. Refer to the diagram below.



ESP-880 in ControlSpace Designer window - Open CSD and double-click to view.

2. Set up the Device Under Test (DUT is Summit-A) as shown in the below diagram.



# TEST PROCEDURE

## 9. AmpLink Output Level and Frequency Response Test

9.1 Connect a 32 ohm load to the amplifier output channels. Set the rear panel 70V/100V dip switch to 100V. All other dip switches should be set to the LEFT. On the UUT rear panel, set the Input Select rotary switch to position 3, AmpLink inputs 1-4.

9.2 Connect a shielded RJ45 ethernet cable from the AmpLink connector on the ESP-880 to the AmpLink input on the amplifier (UUT).

9.3 Using the ControlSpace ESP-880 (or similar) as an AmpLink signal source, set the output of the ESP-880 to supply a 1kHz, 0dB signal.

9.4 Verify that the output level from the PS404A or PS604A amplifier is  $25.5\text{dBV} \pm 1\text{dBV}$ .

9.5 Reference a dB meter to the output level.

9.6 Change the input frequency to 20Hz. Verify that the output level is  $0\text{dBr} \pm 1\text{dBr}$ .

9.7 Change the input frequency to 20kHz. Verify that the output is level  $0\text{dBr} \pm 1\text{dBr}$ .

## 10. AmpLink THD+N Test

10.1 Set the ESP-880 output level to get a 100W per channel output at 1kHz from the amplifier.

10.2 Measure the THD+N level at the UUT amplifier outputs. Verify that it is  $< 0.1\%$ .

## 11. Output Noise Test

11.1 Connect a 4 ohm load to the amplifier output channels. Set the rear panel output 1-4 dip switches to Low-Z (right). All other dip switches should be set to the LEFT. On the UUT rear panel, set the Input Select rotary switch to position 3, AmpLink inputs 1-4.

11.2 Using an Audio Precision AUX-0025 digital filter (or equivalent) with a 20kHz filter and A-weighting, measure the output noise level at the amplifier's output jacks. Verify that it is  $\leq 62\text{dBV}$ .

## 12. Output Gain Control Range Test

12.1 Set the Output 1 - 4 DIP switches to Hi-Z mode (left). Set the GLOBAL OUT DIP switch to 100V (right). Set the SENSITIVITY DIP switch to 4 dBu (left).

12.2 Connect 32 Ohm, 250W loads to the channel 1 - 4 outputs.

12.3 Apply a 1 kHz, -19.3 dBV input to the channel 1 - 4 input jacks.

12.4 Measure the output level at the channel 1 - 4 output jacks. It should be  $+19\text{ dBV} +/- 1\text{ dBV}$ .

12.5 Decrease the signal input level to attain a 0 dBV output from channels 1 - 4.

12.6 With the above signal applied, rotate the channel 1 - 4 OUTPUT ATTEN controls from zero to -infinity. Verify that the output level decreases from 0 dBV to infinity.

# TEST PROCEDURE

## 13. Input Priority Test

- 13.1 Using a CAT-5 cable, connect a Bose® CC-1 ControlCenter Zone Controller to the ControlCenter RJ-45 jack on the rear panel. Refer to the table on page 12 for part numbers for the CC-1 controller.
- 13.2 Set the Output 1 and 2 DIP switches to Hi-Z mode (left). Set the GLOBAL OUT DIP switch to 100V (right).
- 13.3 Connect 32 Ohm, 250W loads to the channel 1 and 2 outputs.
- 13.4 Apply a 1 kHz, -19.3 dBV input to the channel 1 and 2 RCA input jacks.
- 13.5 Measure the output level at the channel 1 and 2 output jacks. It should be +31 dBV +/- 1 dBV.
- 13.6 With the above signal applied, rotate the CC-1 volume control from maximum volume (fully CW) to minimum (fully CCW). Verify that the output level decreases from + 31 dBV to 0 dBV.

## 14. Mute Control Test

- 14.1 Connect the black 2-pin mute connector to a SPST toggle switch. Plug the mute connector into the MUTE jack on the amplifier rear panel.
- 14.2 Set the Output 1 and 2 DIP switches to Hi-Z mode (left). Set the GLOBAL OUT DIP switch to 100V (right).
- 14.3 Connect 32 Ohm, 250W loads to the channel 1 and 2 outputs.
- 14.4 Apply a 1 kHz, -19.3 dBV input to the channel 1 and 2 RCA input jacks.
- 14.5 Measure the output level at the channel 1 and 2 output jacks. It should be +19 dBV +/- 1 dBV.
- 14.6 With the above signal applied, close the SPST toggle switch. Verify that the output level immediately decreases from +19 dBV to 0 dBV. Open the switch and verify that the output level returns to +19 dBV.

## 15. Auto Standby Test

- 15.1 Set the AUTO STANDBY DIP switch on the rear panel to the ON (right) position. Set the Output 1 and 2 DIP switches to Hi-Z mode (left). Set the GLOBAL OUT DIP switch to 100V (right). Set the SENSITIVITY DIP switch to 4 dBu (left).
- 15.2 Connect 32 Ohm, 250W loads to the channel 1 and 2 outputs.
- 15.3 Apply a 1 kHz, -19.3 dBV input to the channel 1 and 2 RCA input jacks.
- 15.4 Measure the output level at the channel 1 and 2 output jacks. It should be +19 dBV +/- 1 dBV.
- 15.5 Reduce the input signal level to < -55.2 dBV. Verify that after a 20 minute period that the amplifier switches to standby mode.
- 15.6 Increase the input signal level above -55.2 dBV. Verify that the amplifier comes out of standby mode after about 2 seconds.

# TEST PROCEDURE

## Hi-Pot Test

### THIS IS A MANDATORY TEST

**Note:** If the unit under test requires disassembly as part of the repair, it MUST be Hi-Pot tested before being returned to the customer to ensure that there is no potential shock hazard. This test requires a Hi-Pot tester with a ground bond attachment to perform this test.

#### Connections:

The Hi-Pot tester connects to the unit under test (UUT) by means of a wiring harness. The AC line cord of the UUT plugs into the Hi-Pot tester AC adapter box. The return line connects to all output connectors.

#### Hi-Pot Tester Settings:

##### AC Input to Earthed Parts

All units - 1500 VAC, rise time = 1 sec., dwell = 3 seconds, current limit = 5.0 mA

- Connect the AC mains cord to loudspeaker under test. Plug the other end of the AC cord into the Hi-Pot tester AC adapter box. The AC adapter box connects to the High Voltage (HV) connection on the Hi-Pot tester.
- Connect the Hi-Pot tester RETURN line to a ground point on the chassis.
- With the tester set to the above parameters, perform the test. If the unit fails, troubleshoot it and repair the problem. If it passes this portion of the test, proceed to the below test.

## Ground Bond Test

**Note:** This test only needs to be performed if the chassis ground wire from the AC IEC connector to the inside of the chassis of the unit has been removed or disturbed as part of a repair. If it has not, this test does not need to be performed. This test measures current handling capability between the ground blade on the AC inlet or mains plug and the earth bond point on the chassis of the unit.

#### Ground Bond Tester Settings:

10A, < 12VAC open circuit, < 0.1 Ohms from AC earth terminal on IEC connector in chassis, to earth bond point on rear of chassis. Test duration = 4 seconds.

- Connect the AC mains cord to the back of the amplifier under test. Plug the other end of the AC cord into the ground bond test box.
- With the tester set to the above parameters, perform the test. If the unit fails, remove the top cover and repair the problem. Once the unit is repaired, repeat the Hi-Pot and the ground bond tests to ensure the unit is safe to return to the customer.

# FIRMWARE UPDATE PROCEDURE

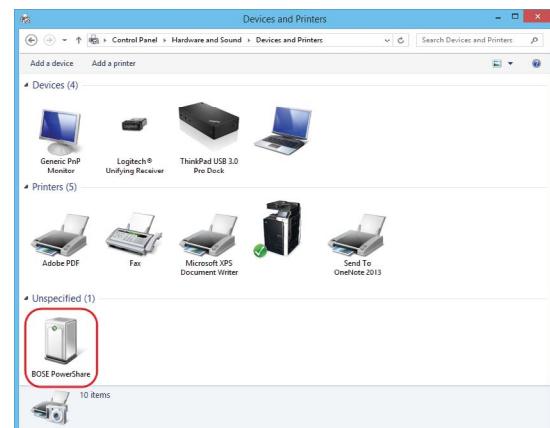
Download and install the PowerShare Editor software from the <http://pro.bose.com> web site. This software is located on the PowerShare product page. **Note:** The PowerShare Editor software is compatible with Windows PC's only.

## Connect the Amplifier

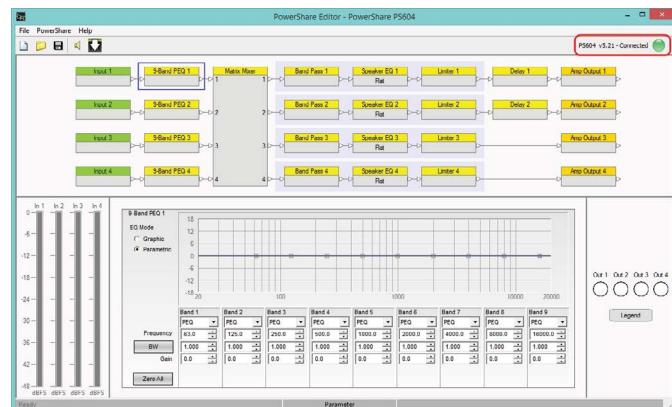
The PowerShare Editor software communicates with the amplifier using a standard USB connection and a standard USB-controlled human interface device (HID).

To establish a connection between the software and the amplifier:

1. Connect the amplifier to the PC using a USB cable.
2. Turn on the amplifier.
3. Confirm that the PC recognizes the amplifier by locating the device in Control Panel > Hardware and Sound > Devices and Printers. Refer to the dialog box at right.



4. Launch the PowerShare Editor software. The software automatically detects the amplifier and establishes a connection. It also displays the device type, firmware version, and a green "Connected" icon to the right of the toolbar.



5. When the device detection dialog box appears (see below right), select from the following options:

- Upload - Upload parameter settings from PowerShare Editor software interface to the amplifier.
- Download - Download parameter settings from the amplifier and load them into the PowerShare Editor software interface.

**Note:** If no device is found, the software shows a red "Disconnected" icon instead of a green "Connected" icon to the right of the toolbar, and the device detection dialog box does not appear. You can still use the PowerShare Editor software to create a configuration for the amplifier offline, and then upload the settings to the amplifier when it is connected.



# FIRMWARE UPDATE PROCEDURE

## Upgrade and Downgrade Firmware

### Upgrade Amplifier Firmware

If an amplifier is connected to the PowerShare Editor software, the version number of the firmware on the amplifier is displayed to the right of the toolbar.

The PowerShare amplifier firmware is stored in the directory C:\Program Files (x86)\Bose\PowerShare Editor\Firmware. Firmware updates are periodically available at pro.Bose.com. When a firmware update is made available online, download the file and place it in the firmware directory.

When PowerShare Editor finds a firmware version in the directory that is newer than the firmware on the connected amplifier, a prompt appears to update it:

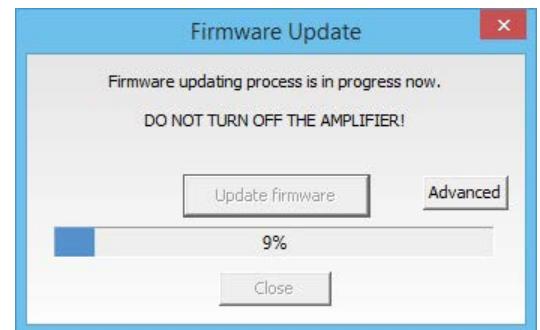
1. Click Yes to launch the Firmware Update dialog.



2. When the Firmware Update dialog appears, click Update firmware to begin the firmware update process.



3. Caution: Do not turn off the amplifier while the firmware is updating.



4. Once the firmware is successfully updated, click Close.



# FIRMWARE UPDATE PROCEDURE

## Downgrade Amplifier Firmware

To downgrade the firmware version on a connected amplifier:

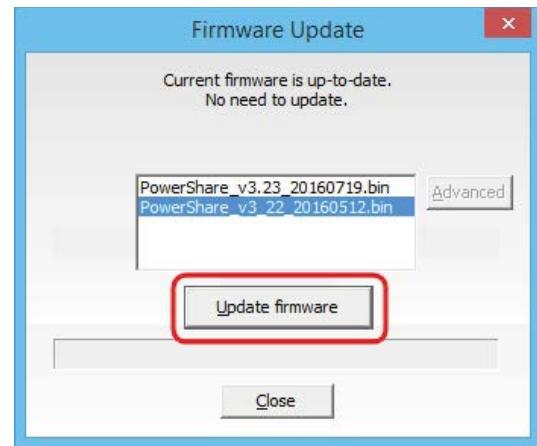
1. Select PowerShare > Firmware Update in the menu bar.



2. Click Advanced in the Firmware Update dialog:

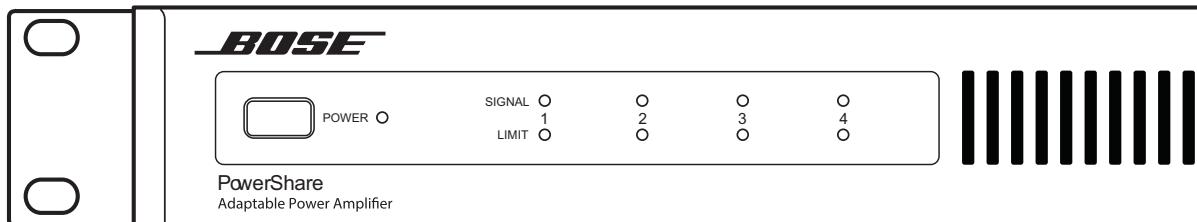
3. Select the desired firmware version from the list and click Update firmware.

By default, the firmware files are stored in the directory C:\Program Files (x86)\Bose\PowerShare Editor\Firmware. Any firmware versions stored in this directory will appear in the list.



# TROUBLESHOOTING

## LED Fault Indications - PS404A and PS604A



### POWER LED

Solid amber LED indicates an over-temperature fault

Solid red LED indicates a power supply fault

### SIGNAL LED

All four LEDs will display solid red if a power supply fault is detected

### LIMIT LED

Each LIMIT LED will individually display solid red if there is an EHF fault on that channel

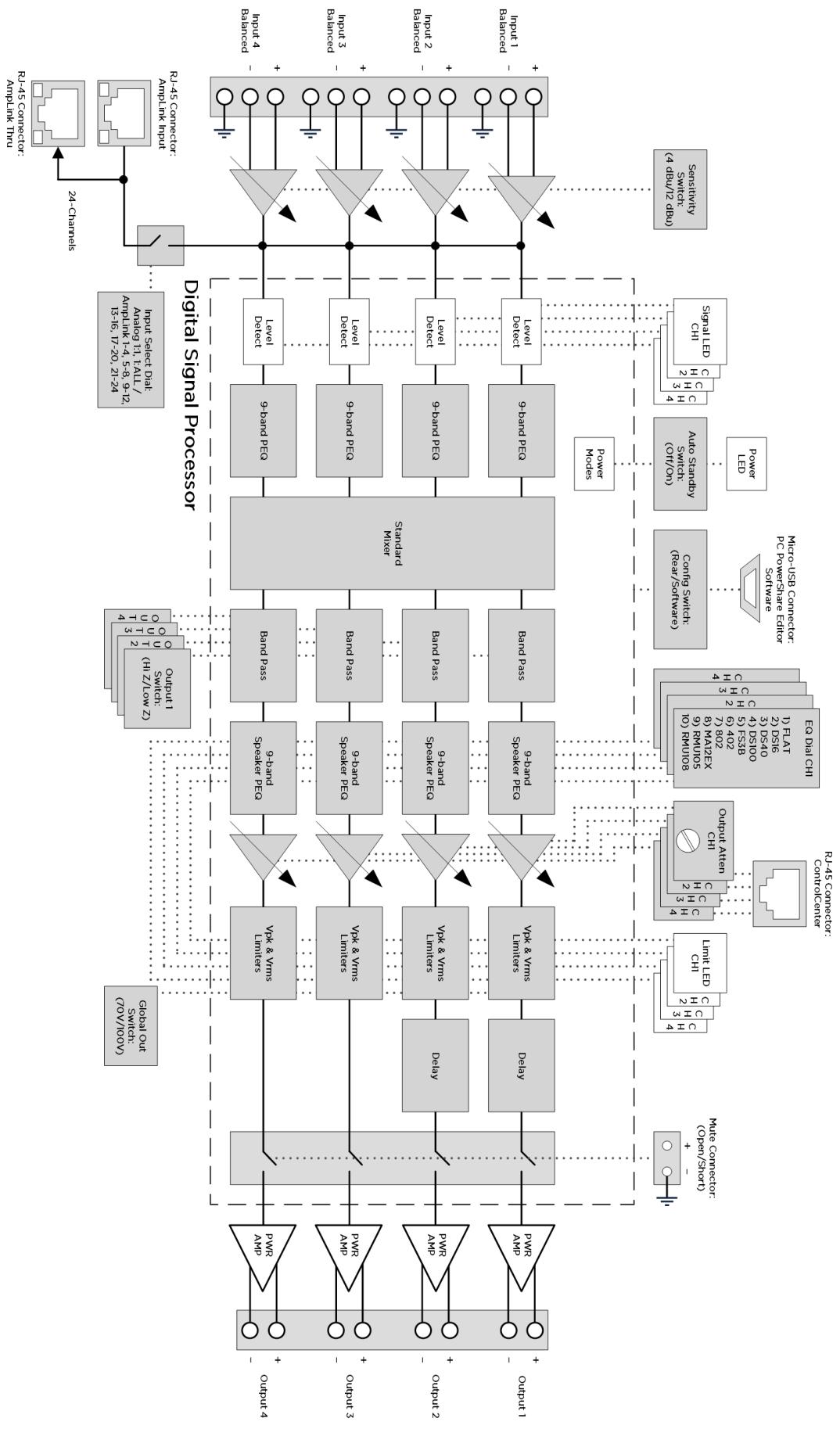
LIMIT LED 1 & 2 will display solid red when the outputs are muted due to an amplifier one fault

LIMIT LED 3 & 4 will display solid red when the outputs are muted due to an amplifier two fault

All four LEDs will display solid red if there is a power supply fault

Problem	What to do
No power	<ul style="list-style-type: none"><li>Turn on power. Green LED on front panel will be visible when power is on.</li><li>Make sure the power cord is plugged in.</li><li>Try a different AC outlet that is working with another piece of equipment.</li></ul>
Power is on, but no sound	<ul style="list-style-type: none"><li>Make sure the input source is turned on.</li><li>Verify that there is an input signal from the source.</li><li>Check the cable connections from the source to the amplifier.</li><li>Make sure the OUTPUT ATTENUATION controls are not turned down to mute.</li><li>If a CC-1 zone controller is connected to the ControlCenter connector on the rear panel, make sure the volume control on the zone controller is turned up.</li><li>If a contact closure is connected to the MUTE connector on the rear panel, check the switch to ensure the mute function has not been triggered.</li><li>Make sure that loudspeaker taps are set correctly.</li><li>Check that the amplifier has adequate ventilation. Improper ventilation could cause the amplifier to go into thermal protection mode and no audio will be heard.</li><li>Ensure that the output wiring is correct. A short circuit will cause the amplifier to go into protection mode and no audio will be heard.</li></ul>
Power is on, but sound is low	<ul style="list-style-type: none"><li>Verify that the audio input source output is turned up to a nominal level.</li><li>Check the cable connections from the source to the amplifier.</li><li>Make sure the OUTPUT ATTENUATION controls are not turned down too low.</li><li>If a CC-1 zone controller is connected to the ControlCenter connector on the rear panel, make sure the volume control on the user interface is turned up.</li><li>Make sure that loudspeaker taps are set correctly.</li></ul>
Sound is distorted	<ul style="list-style-type: none"><li>Verify that the SIGNAL LED on the front-panel is not red, indicating clipping. If it is red, reduce the source output level, or increase the amplifier sensitivity to 12 dBu.</li><li>If the input source signal is clean, verify that the loudspeakers are not overdriven or damaged. Check the loudspeaker tap setting.</li></ul>
Unnatural sound	<ul style="list-style-type: none"><li>Verify that the proper EQ preset is selected for the loudspeakers being used.</li></ul>

# BLOCK DIAGRAM



## PS604A and PS404A PowerShare Amplifiers

# SERVICE MANUAL REVISION HISTORY

Date	Revision Level	Description of Change	Change Driven By	Page(s) Affected
1/2018	00	Document released at revision 00	Initial Release	ALL



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