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P. Leader	Check by	Design by

Project Code & Schematics Subject: MS90 Audio & USB Daughter Board

PCB P/N:

1P-106C103-8010(FUBAI)
1P-106C506-8010(HANSTAR)
1P-106C202-8010(NAB YA)

FOXCONN

HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division

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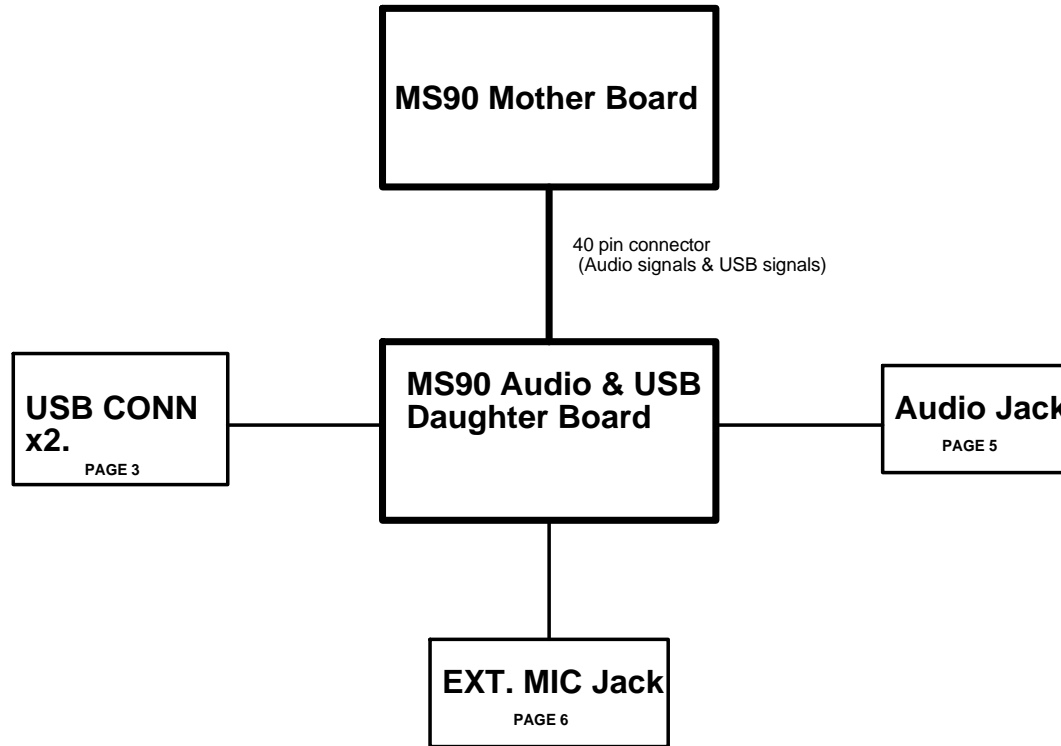
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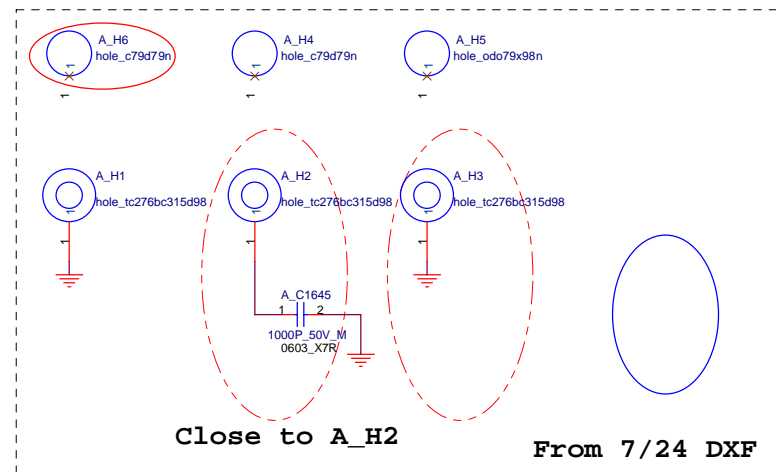
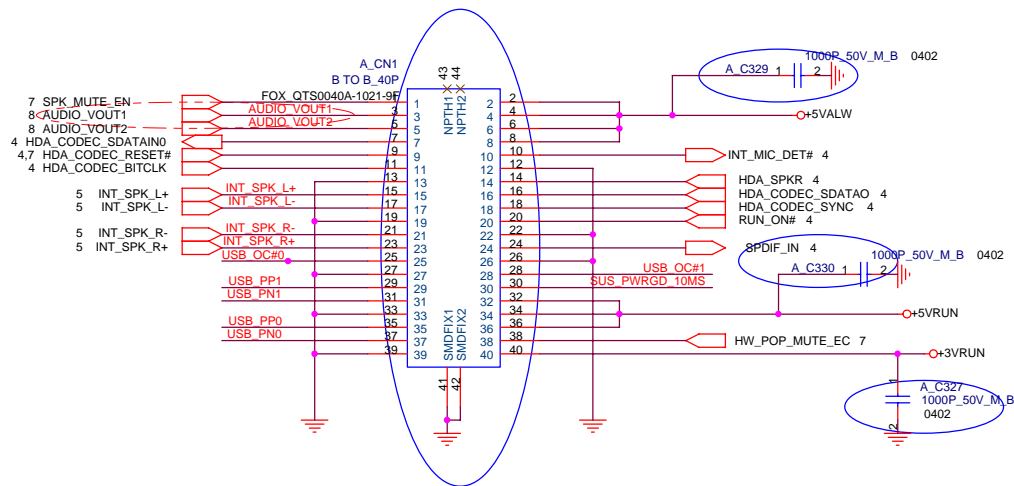
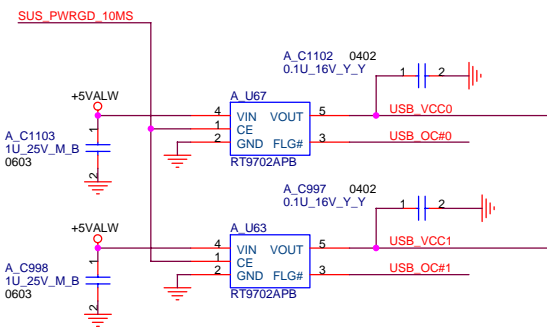
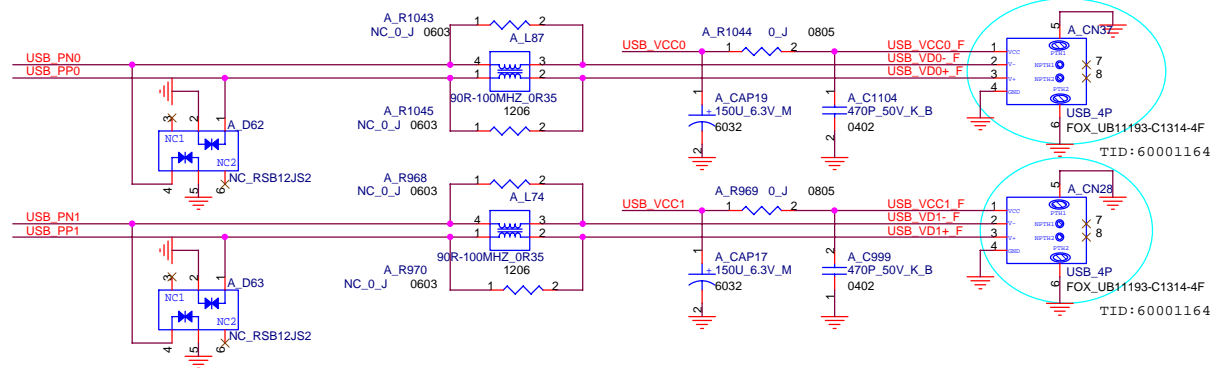
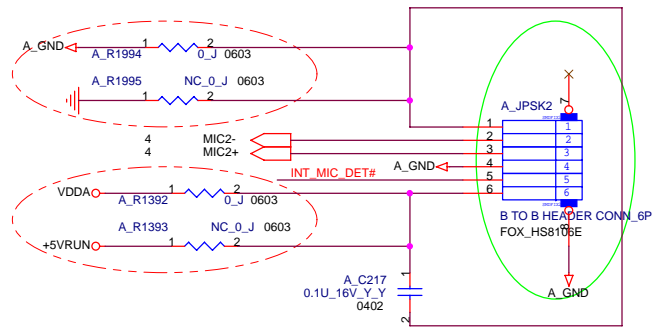
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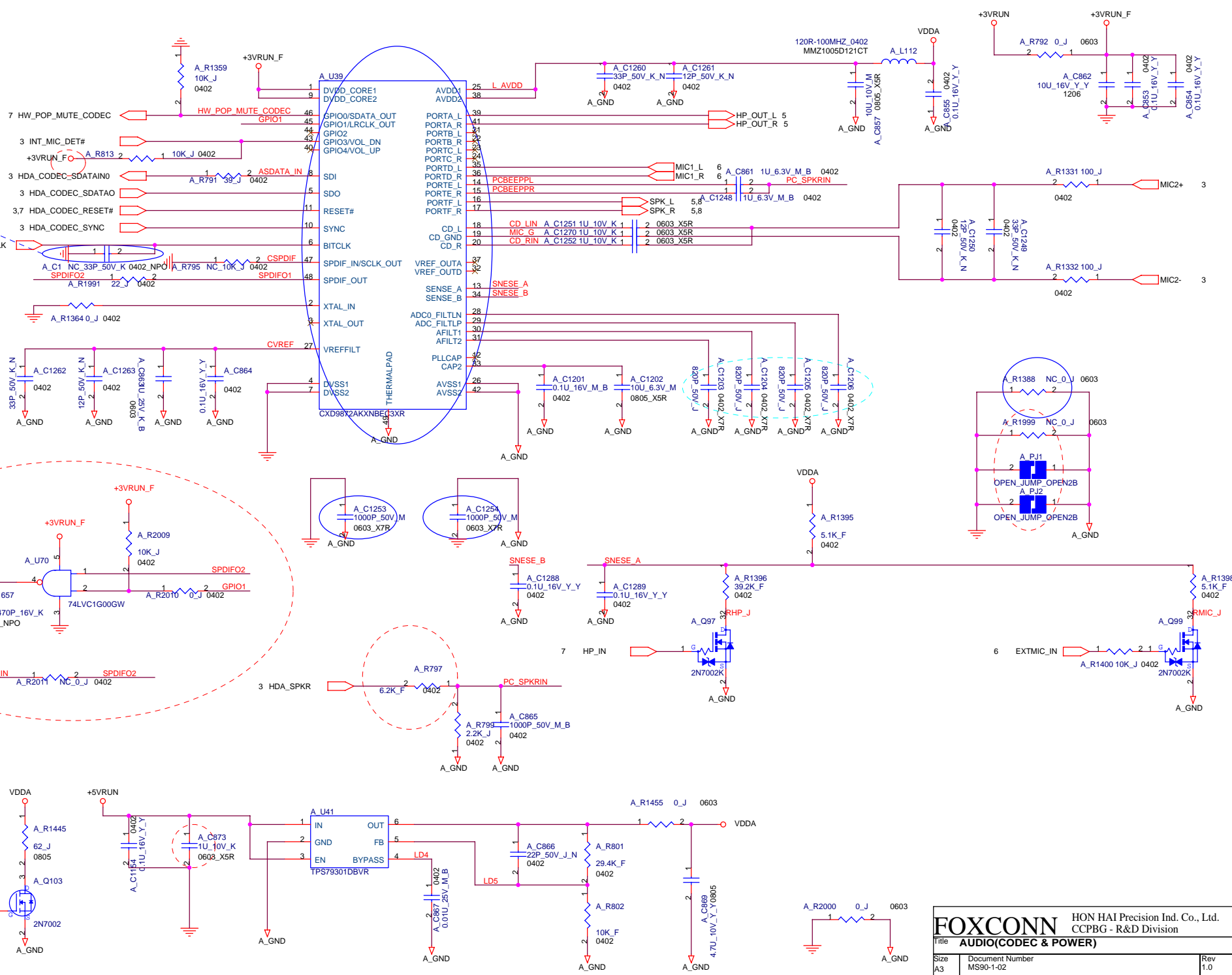
MS90 Audio & USB Daughter Board Block Diagram

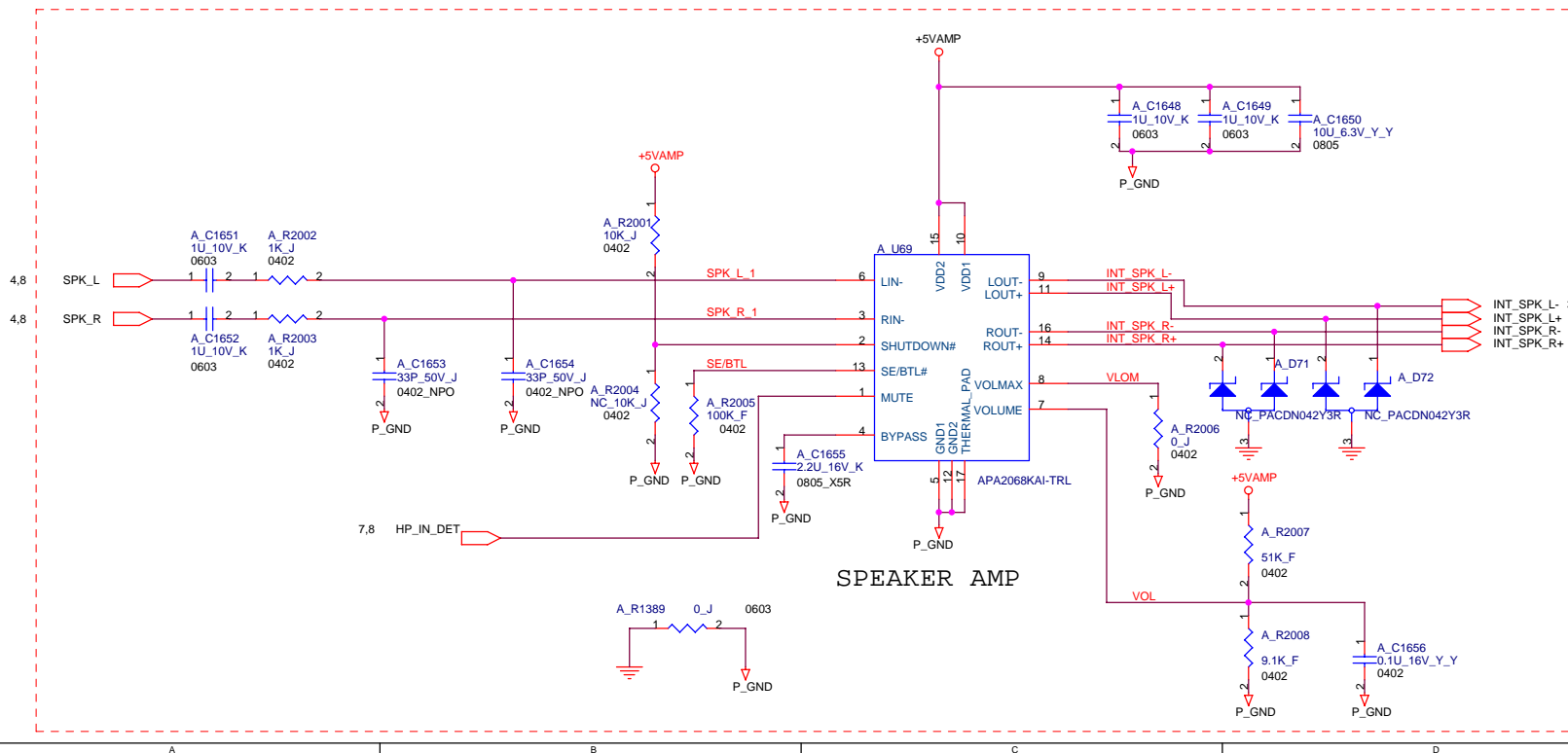
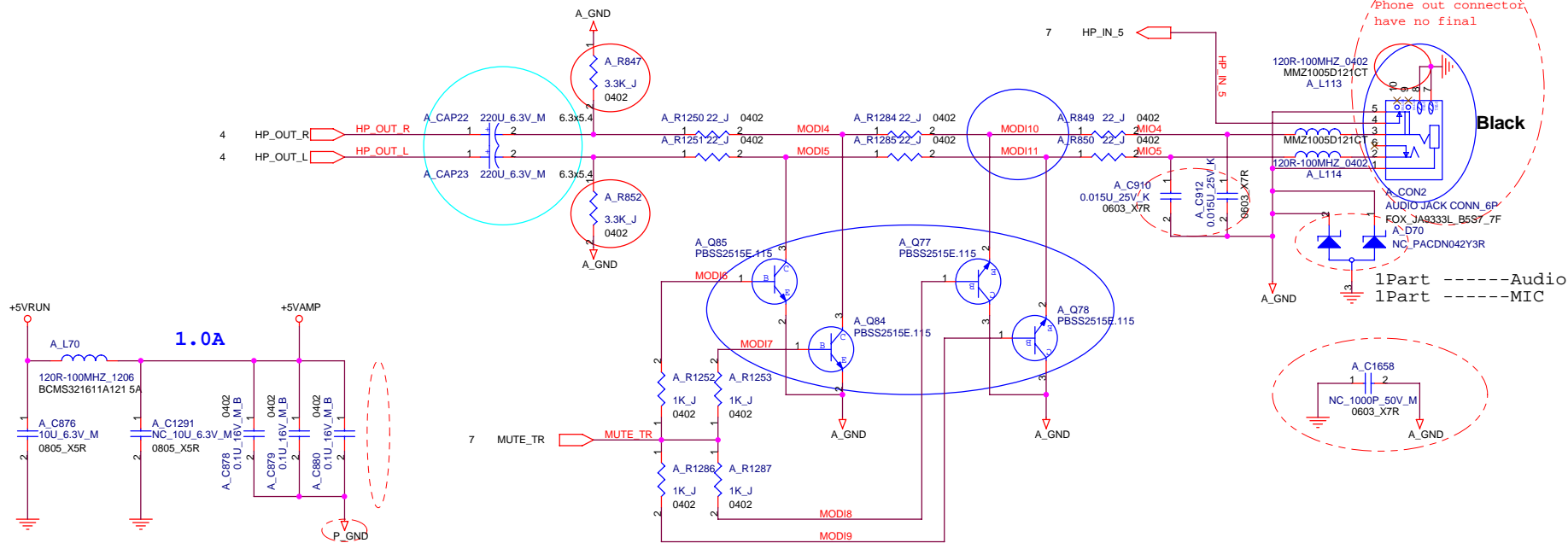


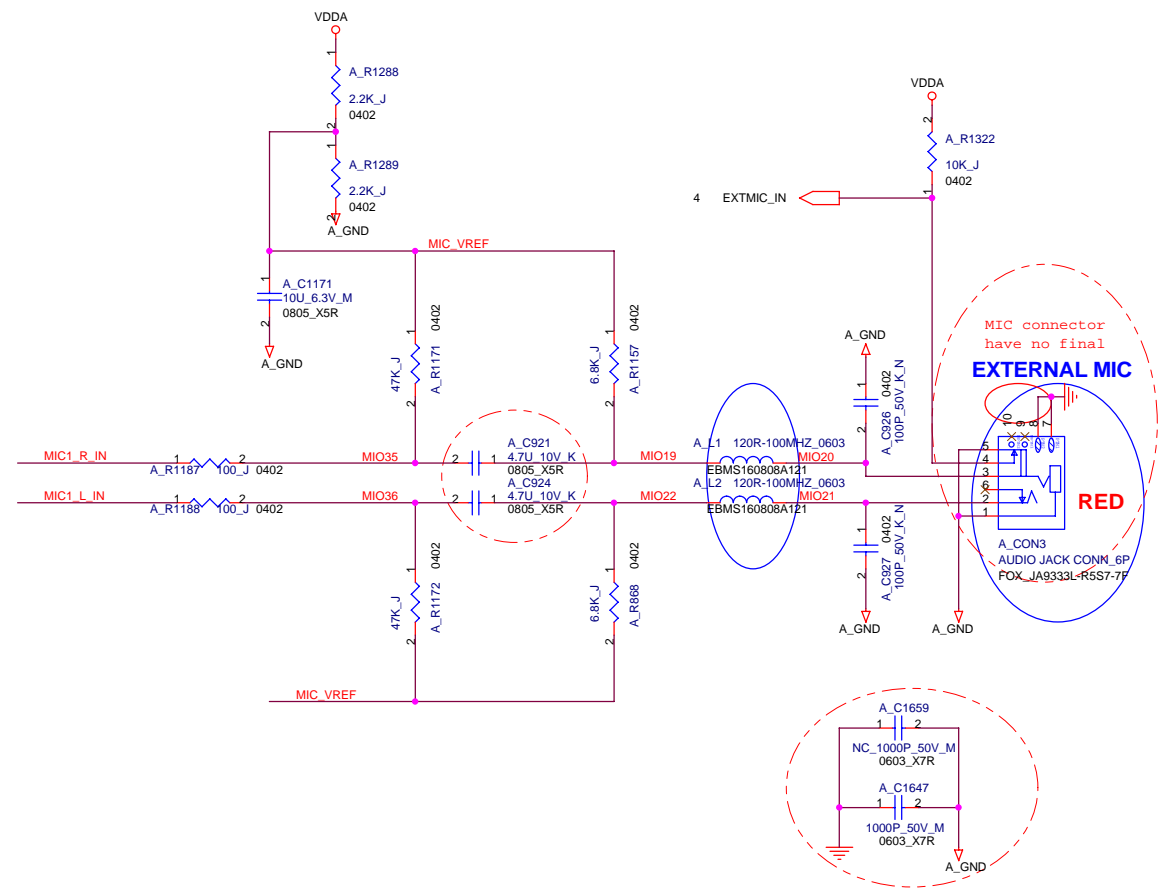
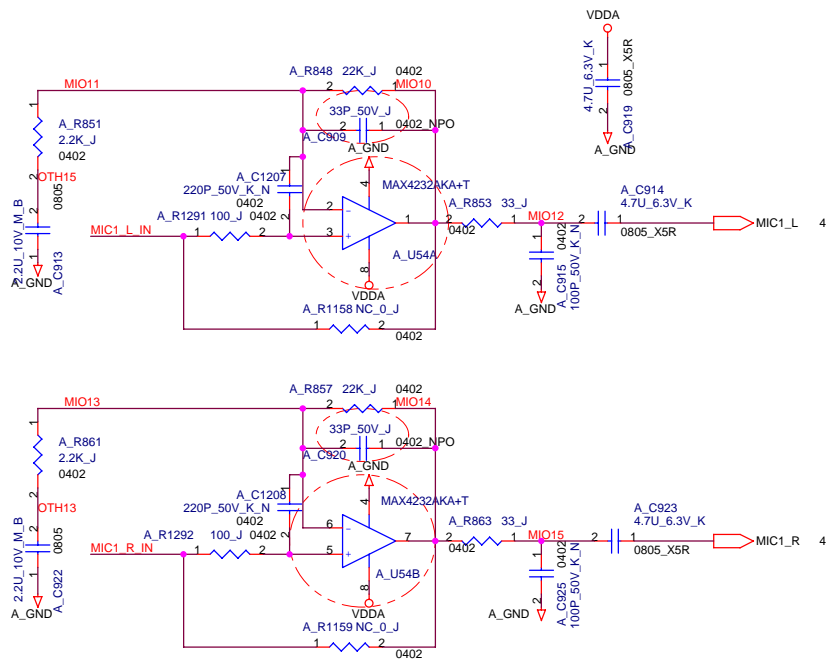


Connector for layout placement

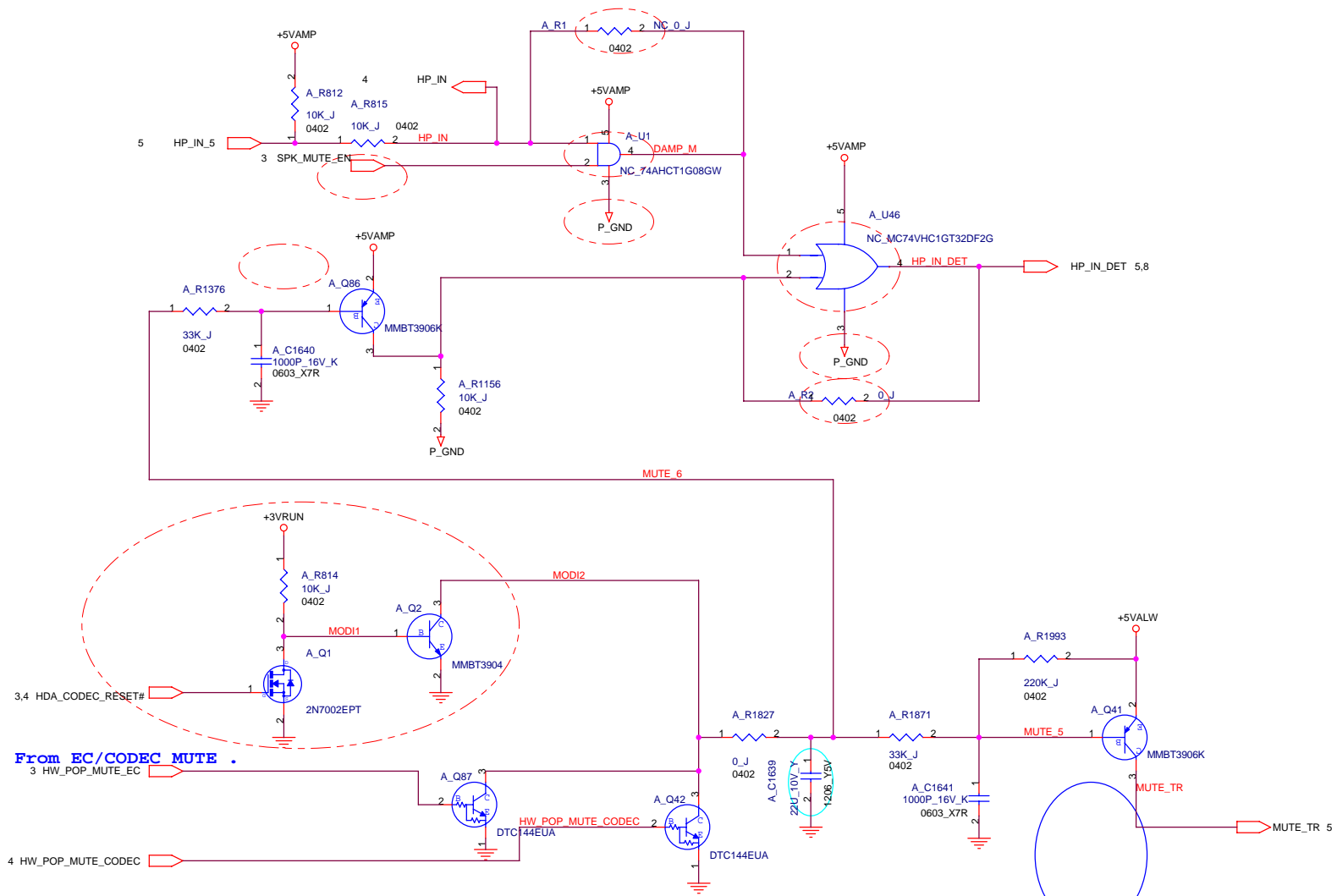
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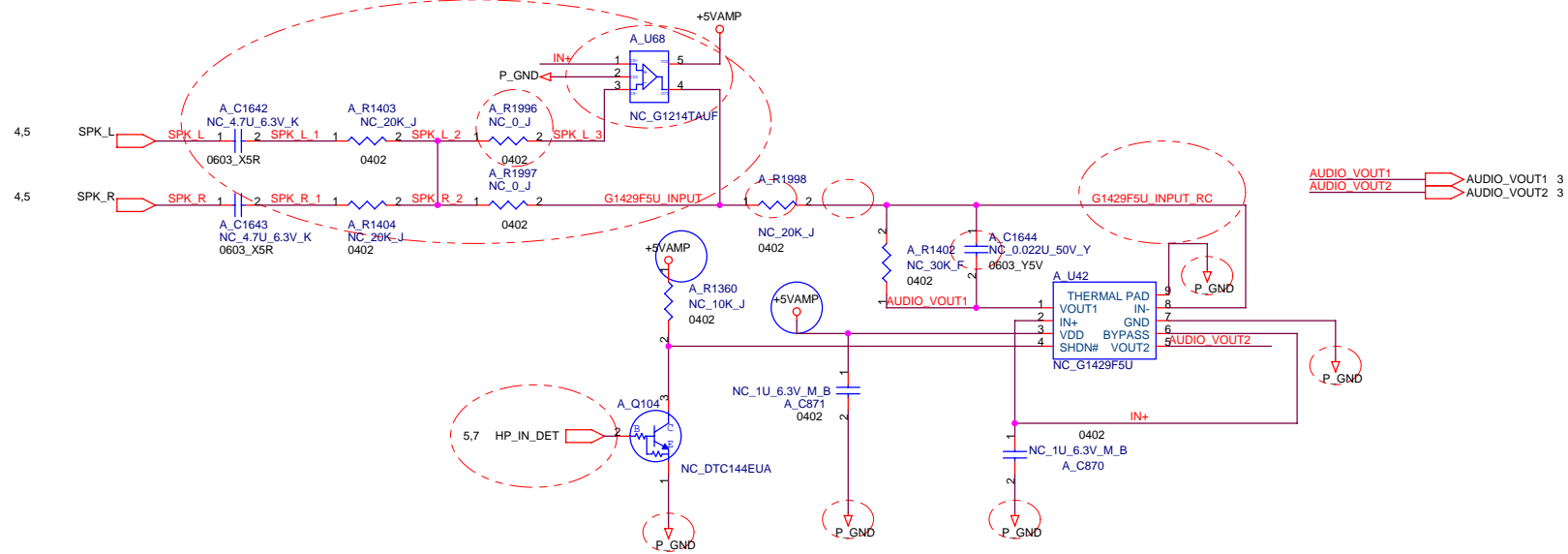




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Delete(to docking)



HISTORY

(2006/06/28)

P.03 Modify USB connector A_CN28,A_CN37 for M/E suggest.

(2006/06/29)

P.04 Change A_U39 CXD9872AKD to CXD9872AK from MOR suggest.
P.5,6 Modify A_CON2,A_CON3 connector from ME suggest.

(2006/07/12)

P.03 Adding screw A_H1~A_H4 from ME request.

(2006/07/14)

P.03 Add A_JPSK2 to MIC board connector.

(2006/07/17)

For Vista solution: (MOR suggest)

P.07 Del A_U45,A_U83

P.07 Add A_U1,A_U46,R1,R2

P.07 Add pin name SPK_MUTE_EN to EC

P.07 Del A_R1111 for no docking function

For PoP Noise Suppressor:

P.07 Del A_U50

P.07 Add A_R1827,A_R1871,A_R1992,A_R1993,A_C1639,A_C1640,A_C1641

P.07 A_R1376 Change from 10Kohm to 33Kohm

P.07 A_Q41 change from DTA114YUA to MMBT3906K

(2006/07/19)

P.03 Change A_JSPK2 to FOX_HS8804F from ME request.

(2006/07/20)

P.05 Modify internal speaker AMP gain setting,change A_R1970,A_R1971 from 4.7K (AMP output 1.12W) to 5.1Kohm(AMP output0.98W) to fit in speaker (1.0W)spec.

P.04 Pin name INT_MIC_DET connect to codec (Pin44)

P.04 Add A_R813 pull up VDDA for INT_MIC_DET

(2006/07/21)

P.03/04 Modify INT_MIC_DET pin name to INT_MIC_DET#, and change from GPIO2(Pin 44) to GPIO3 (Pin 43) for MOR suggest

P.05 Add pin name MODI10 near A_R849(Pin 1)

P.05 Add pin name MODI11 near A_R850(Pin 1)

P.05 Swap the polarity order of mute Tr to improve mute function. That is to connect MODI4 to pin #3 of A_Q84, MODI5 to pin #3 of A_Q85, and MODI10 to pin #2 of A_Q77,MODI11 to pin #2 of A_Q78

(2006/07/25)

P.04 Change A_U39 to CXD9872AKXNBEC3XR because HH P/N error.

(2006/07/26)

P.04 Change signal name MIC2_L/MIC2_R to MIC+/MIC- .

P.04 Reserve A_C1 from EMI request.

P.04 Add A_GP4,A_GP5 close jump from MOR suggest.

(2006/07/27)

P.03 Remove A_H4 from ME request.

P.03 Add A_C327~A_C329 for EMI request.

P.04 Change A_C1 value to stuff.

P.04 Change A_R1388 0402 to 0603 for EMI request.

P.06 Remove A_R1037,A_R1038,add A_L1,A_L2 for EMI request.

(2006/07/28)

P.04 Change A_C1253,A_C1254 33P to 1000P for EMI request.

P.03 Change A_JPSK2 to FOX_HS8805F for ME request.

(2006/08/02)

P.04 Delete A_CN38 connector.

P.03 Change A_JPSK2 to HS8806F for ME request.

P.03 Change A_CN1 to QTS0040A for ME request.

(2006/08/04)

P.04 Modify A_U42 power net & A_R1360.1 VDDA to +5VAMP for A_U42 power supply.

(2006/08/07)

P.03 Add A_R1392,A_R1393 for VDDA & +5VRUN option.

P.04 A_Q104 pin2 change from MUTE_TR to HP_IN_DET.

P.04 Sub-woofer of Ground change from A_GND to GND.

P.04 Del AUDIO_INPUT pin name (A_U39 pin21/22).

P.04 Add resistor A_R1403, A_1404 for Sub-woofer input.

P.04 Del CB_SPKOUT# net name to GND for PC_SPKRIN.

P.05 A_U66(Amp. TPA6011A4PWPRG4) of ground change from A_GND to P_GND.

P.05 Add A_R1389 connect P_GND of +5VAMP and GND.

P.05 Add A_R1390 connect GND and A_GND for phone out connector.

P.06 A_C921,A_C924 change from 4.7uF/6.3V to 4.7uF/10V for MOR suggest.

P.06 Add A_R1391 connect GND of and A_GND for external MIC connector.

P.07 A_U1,A_U46 from stuff to NC for MOR suggest.

P.07 Del A_R1992,A_U103,A_D67,A_C1188,A_U104,A_R1370 for MOR suggest. (Ref:MS31/51)

P.07 Add A_Q1,A_Q2,A_R814 for MOR suggest. (Ref:MS31/51)

P.07 A_R2 change from NC to stuff for MOR suggest.

(2006/08/09)

P.03 Add A_R1994,A_R1995 for GND & A_GND option.

P.03 Update A_CN1 for ME

P.07 A_U1 Pin3 change from A_GND to P_GND for +5VAMP.

P.07 A_U46 Pin3 change from A_GND to P_GND for +5VAMP.

P.05 A_R1389 change from NC to stuff for floating issue.

(2006/08/10)

P.08 Modify Sub_Woofers Circuit

Add A_C1642,A_C1643,A_C1644,A_R1996,A_R1997,A_R1998,A_U68(NC),A_R1996(NC).
Del A_C868

P.03 Swap the A_CN1 pin assign for layout

(2006/08/11)

P.03 connect pin #2 of A_C217 to pin #1 of A_JPSK2.

P.03 Del A_JPSK2 pin7 of A_GND for layout plane.

P.03 A_CN28,A_CN32 change from UB11123-C1601-FR to UB1112C-CA501-7R for ME

P.08 A_R1996 change from 30K ohm to 0 ohm for GMT FAE Suggest.

(2006/08/14)

P.03 A_CN28,A_CN32 change from UB1112C-CA501-7R to UB11123-C1601-FR for ME

P.05 A_CAP22,A_CAP23 change from 1C-42T0107-M100 to 1C-10U0227-M100 for Audio phone out (Output CAP.)

P.06 A_C909,A_C920 change from 220pF to 100pF for vista spec.

P.05 A_C910,A_C911 change from 0.033uF to 0.015uF for vista spec.

(2006/08/15)

P.05 A_CON2 change from JA9333L-G5S7-7F(Green) to JA9333L_B5S7_7F(Black)

(2006/08/16)

P.08 A_U68,A_R1996 change from stuff to NC for sub_woofer circuit.

P.07 A_U1,A_U46 change from stuff to NC for MOR suggest.

P.07 A_R1996 change from stuff to NC for MOR suggest.

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(2006/08/17)
P.03 A_H2 change from GND to A_GND for EMI suggest.
P.03 A_C1645 connect GND to A_GND for EMI suggest.
P.03 A_CN37,A_CN28 change to UB11193-C1304-4F for ME suggest.
(2006/08/18)
P.04 Del A_GP3,A_GP4,A_GP5 (Close GP)
Add A_PJ1,,A_PJ2 (Open GP), A_R1999 for MOR suggest.
P.05 A_D70 change from stuff to NC for EMI suggest.
P.05 A_CAP22,A_CAP23 change from UWR0J221MCL1GB to VE2-6V221MF55-R.
P.04 Add A_R2000 connect to GND and A_GND close to A_U41 for MOR suggest.
P.03 Add A_R2001 to GND for EMI suggest.
P.03 Del A_C1645 for EMI suggest.
(2006/08/19)
P.05 A_CON2 change from FOX_JA9333L_B5S7_7F to FOX_JA9333L-G1S9-7F for ME.
P.06 A_CON3 change from FOX_JA9333L-R5S7-7F to FOX_JA9333L-R1S9-7F for ME.
(2006/08/21)
P.03 Add A_H4,A_H5 for ME fix hole.
(2006/08/22)
P.04 A_C873 1uF change from 0805 to 0603 for +5VRUN.

DVT
(2006/10/23)
P.06 A_C909, A_C920 change from 100pF to 33pF for A-D Magnitude Response vista spec.
P.08 Change Sub_woofer circuit from stuff to NI for cost down.
P.05 A_CON2 Pin7/Pin8 change from GND to NC for HP CONN NPTH.
P.06 A_CON3 Pin7/Pin8 change from GND to NC for External MIC CONN NPTH.
P.08 A_C1644 change from 0.022uF 0402 to 0603.
P.03 Add A_H6 for ME fix hole.
P.03 Change A_JPSK2 to FOX_HS8106E from ME request.
(2006/10/24)
P.05 A_R847, A_R852 change from 10Kohm to 3.3Kohm for PoP noise.
P.06 A_CON3 change from JA9333L-R1S9-7F to JA9333L-R1M9-7F for ME request.
(2006/10/25)
P.04 A_C1 change from stuff to NC for low phase of BCLK timing.
(2006/10/31)
P.03 A_R1390 pin 1 change from GND to A_H3 pin 1 for EMI suggest.
(2006/11/1)
P.04 Del A_U40,A_C1290 for HDA_SPKR.
P.04 A_R797 change from 10Kohm to 6.2Kohm for HDA_SPKR.
(2006/11/2)
P.03 Del A_R2001,A_R1390, and add A_C1645,A_C1646 for EMI (close to A_H3,A_H2).
P.04 A_R1388 change from stuff to NC for GND & A_GND should be one point.
P.06 Del A_R1391, and add A_C1647 for EMI (close to between USB conn and Mic jack).
(2006/11/3)
P.05 A_C910,A_C912 change from 1C-2B30153-M000 (0.015uF,25V,20%,0603) to 1C-2B30153-K000 (0.015uF,25V,10%,0603)
(2006/11/6)
P.05 A_CON2 change from JA9333L-G1S9-7F to JA9333L-B1M9-7F for ME suggest.
P.05 Amplifier change TI (TPA6011A4PWPRG4) to Anpec (APA2068KAI-TRL).
(1) Del A_U66,A_C1093,A_C1092,A_C1227,A_C1229,A_C1198,A_C1226,A_C1225,A_C1264,A_C1265,A_C1266(NC),A_C1267(NC),A_C1268(NC),A_C1269(NC),A_R1970,A_R1971,A_R1366,A_R1365,A_R1367,A_R1368.
(2) Add A_U69,A_C1651,A_C1652,A_C1653,A_C1654,A_C1655,A_C1656,A_C1648,A_C1649,A_C1650,A_R2002,A_R2003,A_R2001,A_R2004,A_R2005,A_R2006,A_R2007,A_R2008,A_D71(NC),A_D72(NC).
(2006/11/7)
P.04 A_C1203,A_C1204,A_C1205,A_C1206 change from X7R to NPO for MOR suggest.
P.05 Del A_C877 for +5VAMP.

(2006/11/7)
P.06 A_CON3 change from JA9333L-R1M9-7F to JA9333L-R5S7-7F for ME.
P.05 A_CON2 change from JA9333L-B1M9-7F to JA9333L-B5S7-7F for ME.
(2006/11/8)
P.03 Del A_C1646 for A_H3.
P.05/06 Update A_CON2,A_CON3 footprint for PIH.
(2006/12/6)
P.03 Change A_CN28 A_CN37 from UB11193-C1304-4F to UB11193-C1314-4F for ME request modify connector color.
P.05 Change A_CAP22,A_CAP23 vendor from LELON to NICHICON because LELON raw material not from GP vendor.
(2006/12/27)
P.04 Add A_U70,A_R2009,A_C1657,A_GP1 for SPDIF_IN
P.04 Change A_C1203~A_C1206 from NPO to X7R for PUR convenient.
(2006/12/28)
P.04 A_U70 change from 74AHC1G00GW to 74LVC1G00GW.
P.04 Del A_GP1, Add A_R2010 for SPDIF_IN.
P.04 A_C1657 change from stuff to NC for HDMI audio noise issue.
(2006/12/29)
P.04 Add A_R2011 for option SPDIF_IN.
(2007/1/2)
P.05 Add A_C1658 close to A_CON2 for EMI option.
P.06 Add A_C1659 close to A_CON3 for EMI option.
(2007/3/23)
P.07 Change A_C1639 from 10U to 22U for PoP noise issue.

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