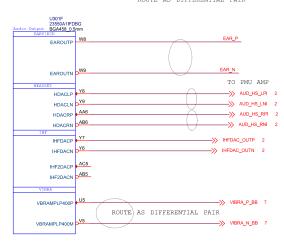
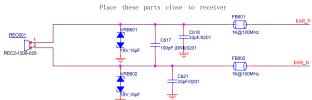
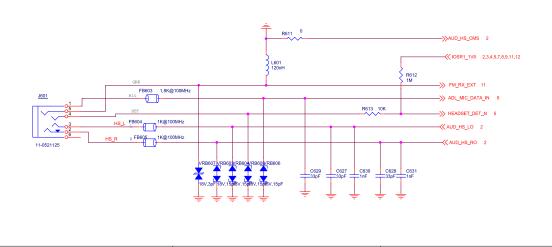


EARPIECE

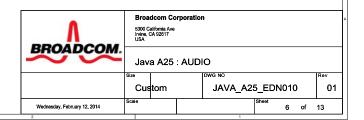
ROUTE AS DIFFERENTIAL PAIR

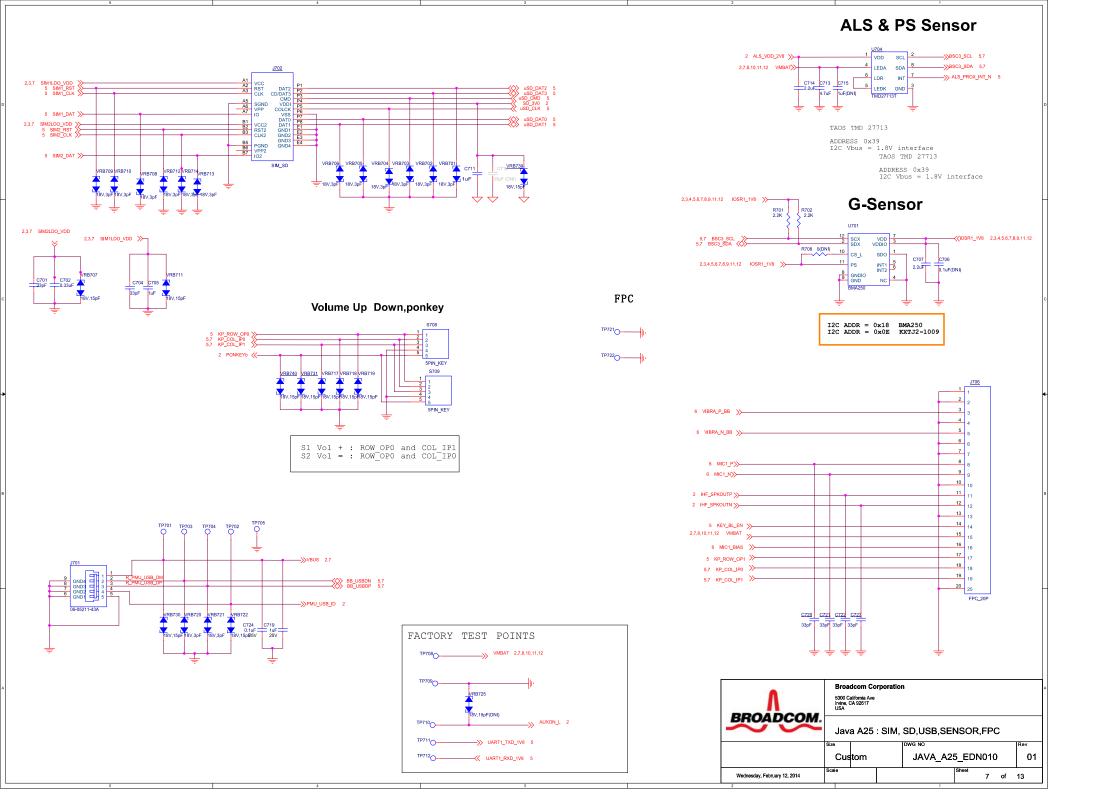


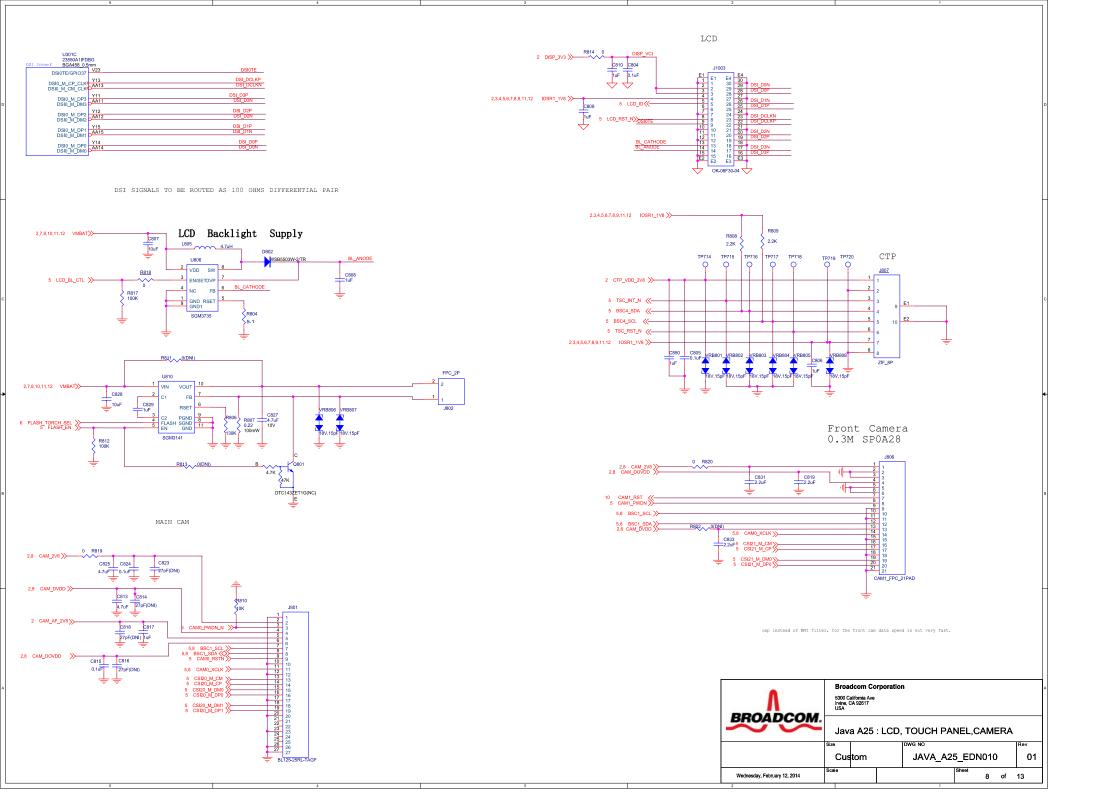


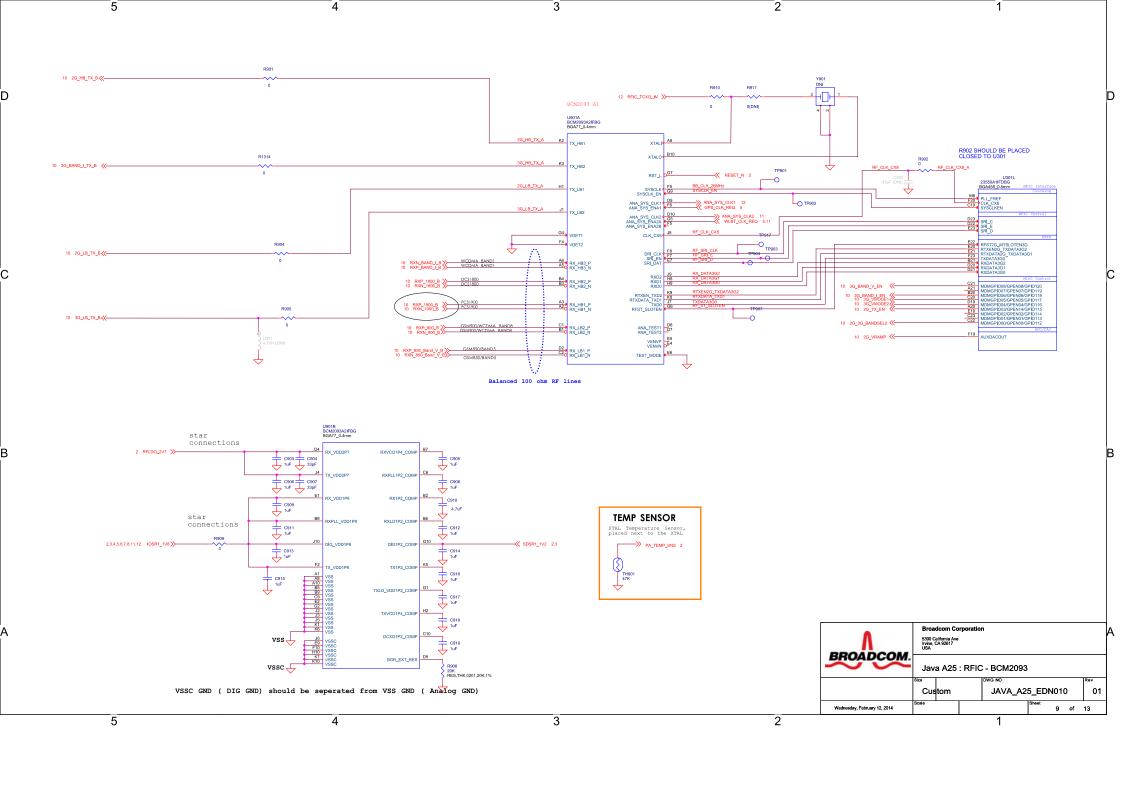


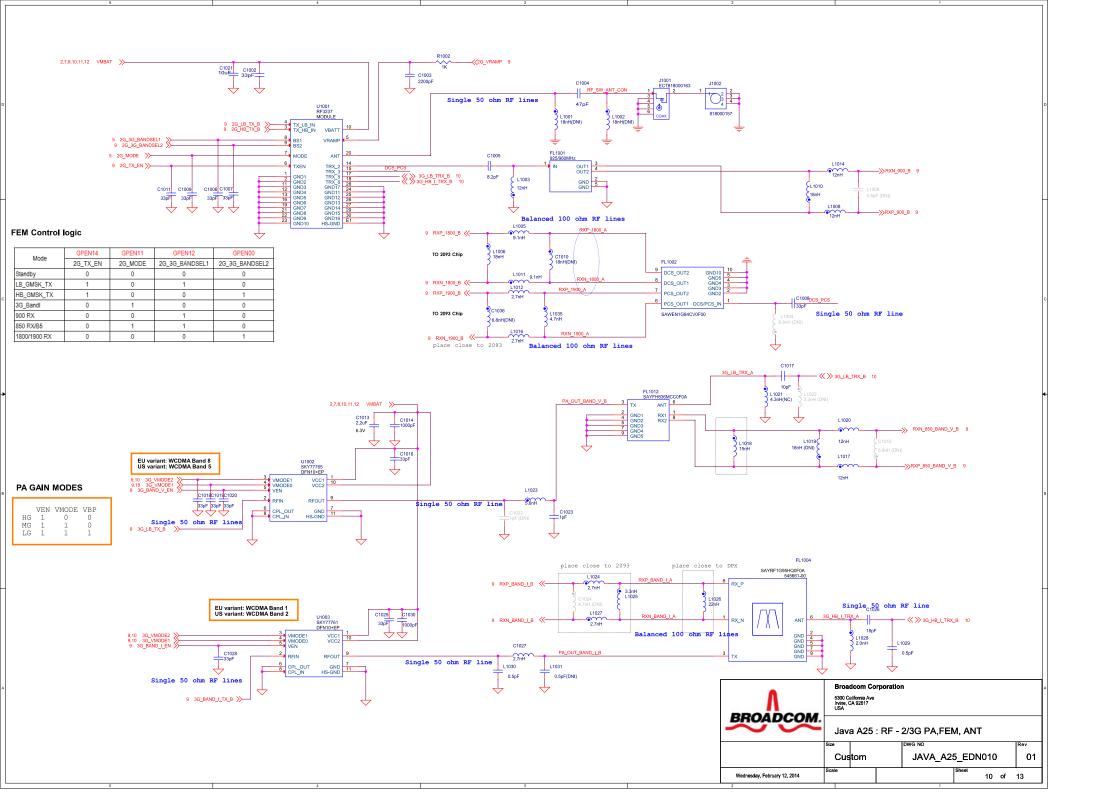
Stereo PA: DNI by default



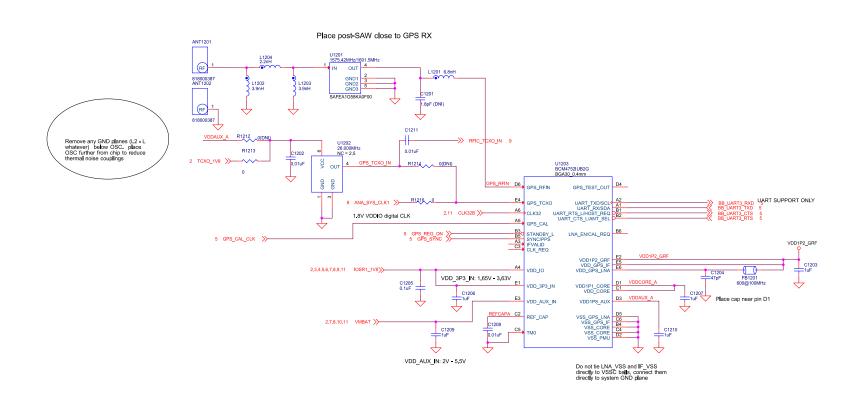


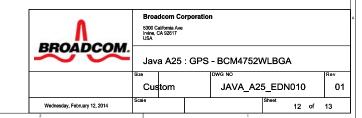






WLAN/BT/FM **Dual-Band, Single Antenna** L1102 3.9nH (DNI) GA0000110-1207-B 早 L1101 3.9nH (DNI) C1101 10pF WL_2G_RXIN C1102 10pF WRF RFOUT 2G WRF RFOUT 5G ANT1301 GA0000110-1207-B R1315 _ 0 FM_TX 早 FL3 LTB-2012-2G4H6-B14-RU 2.4GHz NC = 2 C1103 10pF WRF_GPIO_OUT E4__ C1105 | 10pF GND 3.6nH(NC) C1107 C1108 C1109 G3 WRF_TCXO_IN 10pF Place shunt caps close to SP3T switch SW_CTRLS were arranged this way for routability BGA133_0.4mm OUT1 (RX) => VCONT1 = low; VCONT2 = high OUT2 (TX) => VCONT1 = high; VCONT2 = low VMBAT_4330 2,7,8,10,12 VMBAT>> Use 2 vias to tie the GND pads to a GND C1111 4.7uF M10 Place these LDO's caps close to chip VOUT_3P1 FM_AOUT1 B12 FM_AOUT2 C1114 4.7uF VOUT_CLDO VDDIO_RF C1115 4.7uF VOUT_LNLDO1 WL_VDDC_E7 WL_VDDC_K7 WL_VDDC_K1 BT_VDDC_E8 F5 JTAG_SEL pin E9 = CLK_REQ mode NC_E9 NC_D7 BT_CLK_REQ_OUT WRF_VCOLDO_OUT_1P2 FB1102 EXT_SMPS_REQ EXT_PWM_REQ PMU_AVSS WRF_GND SDIO DATA : WLBT CLK REQ 5,9 VDDIO assumes 1.8V: max 0.22uF SDIO DATA 3 SDIO DATA 1 SDIO DATA 1 SDIO DATA 0 SDIO CMD BT I2S_WS BT_I2S_CLK BT_GPIO_5 BT_GPIO_4 BT_GPIO_3 BT_GPIO_2 BT_GPIO_1 BT_GPIO_0 2,3,4,5,6,7,8,9,12 IOSR1_1V8 120@100N FB1104 C1117 0.1uF WRF GND 25 WRF GND IM 25 WRF GND IM 25 RF_LÖGEN, A, GND F1 WRF_VCO_GND H2 WRF_PA_GND_86 WRF_PA_GND_84 WRF_PA_GND_84 WRF_PA_GND_84 WRF_PA_GND_84 WRF_PA_GND_84 WRF_PA_GND_84 WRF_PA_GND_84 WRF_PA_GND_85 L5 WL_VSS_1 WL_VSS_1 F8 WL VDDIO Place C1119 close to pin M3 BT_I2S_DI BT_I2S_DO 120@100N FB1105 C1118 0.1uF Route pin A4 directly to C1120; route pin C3 directly to C1121. Use two vias to tie GND pad of capacitors to GND plane. BT_VDDIO 0.1uF C1120 4.7uF WL_GPIO_6 WL_GPIO_5 WL_GPIO_3 WL_GPIO_2 WL_GPIO_1 WL_GPIO_0 C1122 0.1uF VOUT_3P3 VDD_WRF power pins (chip) VDD_LNLDQ1 BT_VSSC HSIC_DATA HSIC_STROBE HSIC_RREF HSIC_AVSS G11 BT_TM0 WRF XTAL VDD1P2 F3 600@100MHz C1126 WRF_TCXO_VDD BCM4330XKUBG BGA133_0.4mm Ideally, tie each GND pin to a GND plane to reduce GND bounce. If no room, tie GND balls together only if they have the same netname. Otherwise, connect each pin to a GND plane 0.22uF WRF_VDD_VCOLDO_IN_1P8 VDD_BT BT_VCOVDD1P2 BT_PLLVDD1P2 BT_RFVDD1P2 BT_IFVDD1P2 FM_PLLVSS C9 0.22uF BCM4330XKUBO **Broadcom Corporation** 5300 California Ave Irvine, CA 92617 **BROADCOM** Java A25: WLAN/BT/FM - BCM4330 Custom JAVA_A25_EDN010 01 11 of 13





ALL PASSIVE COMPONENTS ARE 0402 SIZE UNLESS OTHERWISE NOTED