1.HSIC1_WLAN2SOC_DEVICE_RDY 2.PMU_GPIO_BT_REG_ON_R 3.PMU GPIO WLAN REG ON R 4.PMU_GPIO_BT_REG_ON 5.PMU_GPIO_WLAN_REG_ON 6.JTAG_WLAN_TMS_TX_BLANK 7.JTAG_WLAN_TDI_OSCAR_A 8.HSIC1_SOC2WLAN_HOST_RDY_R 9.JTAG_WLAN_SEL 10.TP_JTAG_WLAN_TCK

11.TP_JTAG_WLAN_TRST_L

12.JTAG WLAN TDO OSCAR B 13.OSCAR2RADIO_CONTEXT_A 14.PMU GPIO WLAN HOST WAKE 15.VCC MAIN GRAPE RAMP 16.WLAN TX BLANK 17.PP3V3 S2R 18.GPIO BT WAKE 19.SIM_TRAY_DETECT 20.UART2_SOC2WLAN_TX_R

21.SIMCRD_CLK_CONN_FILT

22. UART2_WLAN2SOC_TX_R

23.UART_BB2WLAN_LTE_COEX_R 24.UART WLAN2BB LTE COEX F 25.BOARD TEMP3 P 26.SIMCRD_CLK_CONN

1.PMU_GPIO_CLK_32K_WLAN_R 2.UART1_BT2SOC_RTS_L 3.UART1_BT2SOC_TX 4.UART1_SOC2BT_RTS_I 5&12&15&17&21&26&28.GND 6.GPIO_SOC2GRAPE_RESET_L

7.CUMULUS_M_VDDCORE 8.CUMULUS_M_VDDANA 9. CUMULUS_S_VDDCORE 10.TP CUMULUS S H SDO 11.TP_CUMULUS_S_H_SDI 13.CUMULUS_MS_CK 14.CUMULUS_S_BCFG_RTCK 16.JTAG CUMULUS S TMS 18.CUMULUS_MS_SD 19.TP_CUMULUS_S_H_SCLK 20.CUMULUS_S_VDDANA

22.PP5V25_GRAPE

24.GPIO_GRAPE2SOC_IRQ_L 25.PP1V8_GRAPE_SW 27 DISPLAY SYNC 29.CUMULUS_M_BCFG_RTCK 30.SPI2_GRAPE_MOSI 31.TP_JTAG_CUMULUS_M_TDI 32.TP_JTAG_CUMULUS_M_TDO 33 SPI2 GRAPE CS L 34.TP JTAG CUMULUS M TCK 35 SPI2 GRAPE SCLK

36.JTAG_CUMULUS_M_TMS

23.TP_CUMULUS_S_H_CS_L

1&19&20&22&24&25&26&27&28&29&30&31&32&33.GND 2.PP1V8 SW1 FOREHEAD 3.PP_RF1_1V8_DIG

4.GPIO_SOC2BB_WAKE_MODEM

5.HSIC2_SOC2BB_HOST_RDY 11.BB_JTAG_TRST_L 6.PS_HOLD_PMIC 12.BB_JTAG_TCK 7.BB_JTAG_TMS 13.BB_JTAG_TDI 8 DEBUG RST I 14.BB_JTAG_TDO 9.USB BB DEBUG N 15.BB_JTAG_RTCLK 10.USB BB DEBUG P

16.PP_SMPS1_MSMC_1V05 17.PP_SMPS4_RF2_2V05 18.TP_BB_TEST_MODE_1 21 TP BB TEST MODE 0 23.PP SMPS2 RF1 1V3

3.PP3V0_SENSOR_PROX_AD7149_FILT 7.PP2V9_AVDD_CAM_REAR_FILT 8.PP2V6_CAM_REAR_AF_FILT 9.CAM_REAR_VSYNC 10.PP1V8_CAM_REAR_FILT 11.ISP0_CAM_REAR_SHUTDOWN_L_F 12.ISP0_CAM_REAR_SDA_F 13.PP1V3_CAM_REAR_FILT 14.ISP0_CAM_REAR_CLK_F 15.ISP0_CAM_REAR_SCL_F 16.PP1V8 S2R SW3 COMP

e6

d6

920

27

28

29

e24

_17 _21

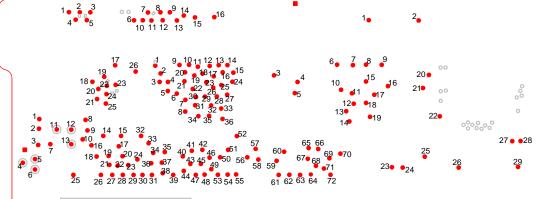
e22

23

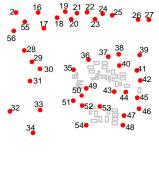
-13

15

1&2&4&5&6 GND



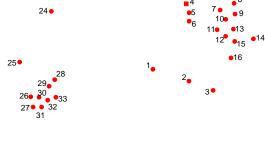
___ g17• 18 20 22 • **•**23 24 70 00 8 1 00 0 **2**6 9 10



1 3. 4 5 6 7 8 9 10 11 12 13 14 15

53 • 54

27 28 29 30 31 32 19 ●18 21 23 24 •26 0 0 0 0 **2**5 35 34 6 7 12 15 16 17 10 11 13 **-**18 **-**19 **e**23 **2**0 22 51(56



1.SIM_TRAY_DETECT_FILT 2.SIMCRD_RST_CONN_FILT 3.PP3V0 S2R NAVAJO FILT 4&5&6.PPVBUS_E75_USB_CONN 7.PMU_GPIO_MB_HALL1_IRQ 8.SIMCRD_IO_CONN_FILT 9.PP_LDO6_RUIM_1V8_FILT 10.PMU_GPIO_MB_HALL2_IRQ_FILT 11&12&13&14&60.GND 15.MAX983X4 L1 GAIN 16.PMU GPIO MB HALL2 IRQ 17.SPKRAMP_L1_OUT_P 18.LEFT_CH_OUT_N 19.LEFT_CH_OUT_P 20.SPKRAMP_L1_OUT_N 21.MAX983X4_L2_GAIN 22.AUD SPKRAMP MUTE L 23.RIGHT_CH_OUT_N 24.RIGHT_CH_OUT_P 25.PPOUT_E75_ACC_ID1_CONN 26.SPKRAMP_L2_OUT_N 27.SPKRAMP L2 OUT P 28.PPOUT_E75_ACC_ID2_CONN 29.E75_DPAIR2_CONN_N 30.E75_DPAIR2_CONN_P 31.SPKRAMP_R2_OUT_P 32.MAX983X4_R1_GAIN 33.SPKRAMP_R1_OUT_P 34.SPKRAMP R1_OUT_N 35.MAX983X4_R2_GAIN 36.SPKRAMP_R2_OUT_N 37.E75_ACC_DET_CONN_L

1.FMI0 CLE 2. BOARD_TEMP5_P 3.GPIO_BTN_HOME_L 4.PPVREF FMI NAND 5.PP1V8_EXT_SW 6.FMI0_RE_L 7.FMI0_CE0_L 8.FMI0_WE_L 9. FMIO ALE 10.FMI0 AD<7> 11.FMI0 DQS 12.FMI0_AD<6> 13.FMI0_AD<5> 14.FMI0_AD<4> 15.FMI0_AD<0> 16.FMI1_AD<0> 17.FMI0_AD<1> 18.FMI0_AD<2> 19.FMI0_AD<3> 20.PP1V2_S2R 21.PP1V2_SW1 22.PP3V3_SW 23.I2C2 SDA 1V8 24.VCC_MAIN_PP3V3SW_RAMP 25.PP1V8 SW1 26.I2C2 SCL 1V8 27.JTAG_SOC_TDI

28.JTAG_SOC_SEL

29.UART6_TS_ACC_TXD

1.WDOG_SOC 2.SOC_TST_CLKOUT 3.PP1V2_SW1 4.JTAG_SOC_TRST_L 5.TP_JTAG_SOC_TDO 6.PPVREF_FMI_SOC 7&10&11&13&14.GND 8.HSIC1_WLAN2SOC_REMOTE_WAKE 9.UART6_TS_ACC_RXD 12.SOC_TESTMODE 15.UART1_SOC2BT_TX 16.TP GPIO DFU STATUS 17.SPI2_GRAPE_MISO 18.SPI3_CODEC_CS_L 19.GPIO_SOC2PMU_KEEPACT 20.UART0_SOC_TXD 21.WDOG_SOC2PMU_RESET_IN 22.SOC_TST_CPUSWITCH_OUT 23.PMU_GPIO_BT_HOST_WAKE 24.SOCHOT0_L 25.OSCAR_TIME_SYNC_HOST_INT 26.BOARD_TEMP7_P

1.GPIO_TS2SOC2PMU_INT 2.SPI_OSCAR2COMPASS_CS_L 3.GPIO_FORCE_DFU 4.GPIO SOC2BB RST I 5.PMU_GPIO_CLK_32K_OSCAR 6.GPIO SOC2OSCAR DBGEN 7.TP OSCAR P0 22 8.UART4_SOC2OSCAR_TXD 9.SPI_OSCAR_MISO 10.GPIO_SOC2OSCAR_DBGEN_R 11.PP3V0_S2R_SENSOR 12.PP1V2_S2R_SW2 13.GPIO_BB2SOC_GPS_SYNC 14.OSCAR2RADIO_CONTEXT_B 15.PP1V8_S2R_SW3 16.SOCHOTO R L 17.PPVDD_SRAM 18.PP3V0_UVLO 20.PMU_SHDWN 21.PP3V0_S2R_NAVAJO 22.UART4 OSCAR2SOC RXD 23.PPVDD_SOC 24.ACCEL2OSCAR_INT1 25.GPIO_OSCAR_RESET_L 26.PP2V9_CAM 27.PPVBUS_USB_DCIN 28.PPVDD_GPU 29.DWI AP CLK 30.SOCHOT1 L 31.PPVDD_CPU 32.PP1V0_SOC 33.USB VBUS DETECT 34.PP1V8_ALWAYS 35.BOARD_TEMP2_P 36.GPIO_PMU2SOC_IRQ_L 37.PP3V0_S2R_TRISTAR 38.PP2V6_CAM_AF 39.VBUS_PROT_G 40.PMU TCAL 41.PP3V0_ALS 42.PMU_GPIO_PMU2BBPMU_RST_L 43.PPVBUS_PROT 44.BOARD_TEMP8_P 45.PMU_VCENTER 46.BOARD_TEMP6_P 47.TP HV CHG EN 48.PPVCC MAIN 49.TP_AMUX_B3 50.TP_AMUX_BY 51.TP_AMUX_AY 52 TP AMUX A3 53.DWI AP DO 54.PP1V3 CAM 55. I2C0 SCL 1V8 56. I2C0_SDA_1V8

1.GPIO_SOC2BB_WAKE_MODEM 2.GPIO BTN VOL UP L 3.GYRO2OSCAR INT2 4.GPIO_BTN_VOL_DOWN_L 5.GPIO_BTN_SRL_L_FILT 6.PP3V0 GYRO 7.SPI_OSCAR2GYRO_CS_L 8.GPIO_BTN_VOL_UP_L_FILT 9.SIMCRD_IO_CONN 10.SIMCRD_RST_CONN 11.GPIO_BTN_ONOFF_L_FILT 12.GPIO_BTN_VOL_DOWN_L_FILT 13.GPIO_HS4_SHUNT_EN 14.PP3V0_SPARE1 15.PP6V0_LCM_VBOOST 16.GPIO_BB2SOC_RESET_DET_L 17.UART_WLAN2BB_LTE_COEX 18&58.BATT_NTC 19.GPIO_SOC2BB_RADIO_ON_L 20.GPIO_BTN_SRL_L 21.GPIO_BTN_ONOFF_L 22.PA_NTC_P 23.PP_LDO6_RUIM_1V8 24.GPIO_CODEC2SOC_IRQ_L 25.SPI3 CODEC MISO 26.SPI3_CODEC_SCLK 27.GPIO_BB2SOC_GSM_TXBURST 28.ACCEL2OSCAR INT2 29.GYRO2OSCAR_INT1 30.GYRO DEN 31.SPI_OSCAR2ACCEL_CS_L 32.PP3V0 ACCEL 33.PPBATT_POS_RC 34 AIN3P 35.DMIC1_FF_SCLK 36.AIN3N 37.SPI3_CODEC_MOSI 38.PMU_GPIO_CODEC_HS_INT_L 39.L81_SPEAKER_VQ 40.GND 41.GND_AUDIO_CODEC 42&64&65&66&69.PPBATT_VCC 43&57.BATT_SWI_CONN 44.PMU_GPIO_BB_VBUS_DET 45.PMU_GPIO_BB2PMU_HOST_WAKE 46.PP1V8_S2R

1.PP3V0_COMP 2.PP3V0_S2R_SENSOR 3.SPI_OSCAR_SCLK 4.SPI_OSCAR_MOSI 5.PP1V8_COMP 6.I2C0_CAM_ALS_SCL_1V8_F 7.GPIO_CAM_ALS2SOC_IRQ_L_F 8.ISP1_CAM_FRONT_SDA_F 9.ISP1_CAM_FRONT_SCL_F 10.PP3V0_ALS_FILT 11.I2C0_CAM_ALS_SDA_1V8_F 12.ISP1_CAM_FRONT_CLK_F 13.ISP1_CAM_FRONT_SHUTDOWN_L_F 14.PP2V9_AVDD_CAM_FRONT_FILT 15.PP1V8_CAM_FRONT_FILT 16.GPIO_HS3_SHUNT_EN_FILT 17.CONN_HP_HEADSET_DET_FILT 18.GPIO_HS4_SHUNT_EN_FILT 19.CONN HP HS4 REF FILT 20.CONN HP HS3 FILT 21.CONN_HP_RIGHT_FILT 22.CONN_HP_LEFT_FILT 23. CONN_HP_HS4_FILT 24.CONN_HP_HS3_REF_FILT 25 BOARD TEMP4 P 26.DMIC1_FF_SCLK_FILT 27.DMIC1_FF_SD 28.DMIC1_FF_SD_FILT 29.PP1V8_DMIC_FILT 30. GPIO_HS3_SHUNT_EN

60.PP1V7_VA_VCP 61.PP1V7_VCP 62.L81_DMIC1_FF_SD 63.CODEC_HP_DET_R 67.GPIO_PROX2SOC_IRQ_L 70.BATT_SNS 73.PP_SMPS5_DSP_1V05 74.PP LDO1

38.E75_DPAIR1_CONN_N 39.E75_DPAIR1_CONN_P 40.LED_IO_1_B 41.LED_IO_2_B 42.LED_IO_4_B 43.LED_IO_3_B 44.LED_IO_6_A 45.LED IO 5 B 46.LED_IO_6_B 47.LED IO 5 A 48.LED IO 4 A 49.LED IO 3 A 50.PPVCC_MAIN_LCD_SW_CONN 51.PPVCC_MAIN_LCD_SW 52.CLK_32K_SOC2CUMULUS 53.LED_IO_2_A 54.LED IO 1 A 55.EDP_HPD_EMI_CONN 56.PPLED_BACK_REG_A 57.PPLED BACK REG B 58.PPLED OUT A

59.PP1V8_SW2 61.PP3V3_ACC 62.PMU_USB_BRICKID 63.RESET_SOC_L 64.UARTO SOC RXD 65.USB_SOC_P 66.USB_SOC_N 67.JTAG_SOC_TCK 68.USB_BB_P 69.TS E75 ACC DET L 70.JTAG SOC TMS 71.USB_BB_N 72.PMU_E75_ACC_DET_L 19.PMU_GPIO_OSCAR2PMU_HOST_WAKE 47.PPLED_OUT_B 48.COMPASS2OSCAR_INT 50&51&52&56&59&71&72.GND 53.UART_BB2WLAN_LTE_COEX 54.MIKEY_TS_P 55.MIKEY_TS_N

