

EE CHARACTERIZATION TP

FOR FRANK (SEG)

NAND

PP9401	1	FMI0_DQS	PLACE_SIDE=BOTTOM PLACE_NEAR=U0652.D34:2MM	4 12 53
PP9402	1	FMI0_AD<3>	PLACE_SIDE=BOTTOM PLACE_NEAR=U0652.C34:2MM	6 12
PP9403	1	FMI0_DQS	PLACE_NEAR=U0652.D34:2MM	4 12 53
PP9410	1	TP_TCKC_U1400		12
PP9411	1	TP_TMCS_U1400		12
PP9412	1	TP_U1400_RB0		12
PP9413	1	TP_U1400_RB1		12

DWI

PP9405	1	DWI_AP_DO	PLACE_SIDE=BOTTOM PLACE_NEAR=U8100:2MM	6 48
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AUDIO

PP9406	1	I2S0_CODEC_ASP_MCK	PLACE_NEAR=U1900:2MM	6 15
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PP9416	1	I2S2_CODEC_XSP_LRCK	PLACE_NEAR=U1900:2MM	6 15
PP9417	1	I2S2_CODEC_XSP_DOUT	PLACE_NEAR=U1900:2MM	6 15

PP9419	1	I2S1_SPKAMP_MCK	PLACE_NEAR=U2040:2MM	6 16
PP9420	1	I2S1_SPKAMP_BCLK	PLACE_NEAR=U2040:2MM	6 16
PP9421	1	I2S1_SPKAMP_LRCK	PLACE_NEAR=U2040:2MM	6 16
PP9422	1	I2S1_SPKAMP_DOUT	PLACE_NEAR=U2040:2MM	6 16
PP9423	1	I2S1_SPKAMP_DIN	PLACE_SIDE=BOTTOM PLACE_NEAR=U0652:2MM	6 16

PP9424	1	SPI2_CODEC_SCLK	PLACE_NEAR=U1900:2MM	6 15
PP9425	1	SPI2_CODEC_MOSI	PLACE_NEAR=U1900:2MM	6 15
PP9426	1	SPI2_CODEC_MISO	PLACE_SIDE=BOTTOM PLACE_NEAR=U0652:2MM	6 15

GRAPE

OSCAR

PP9428	1	UART4_SOC2OSCAR_TXD	PLACE_SIDE=BOTTOM PLACE_NEAR=U2400:2MM	6 19
PP9429	1	UART4_OSCAR2SOC_RXD	PLACE_SIDE=BOTTOM PLACE_NEAR=U0652:2MM	6 19

UART5

PP9450	1	PPVDD_SOC_SOC_SENSE	PLACE_NEAR=U0652.V31:1MM	
PP9451	1	PPVDD_CPU_SOC_SENSE	PLACE_NEAR=U0652.AN30:1MM	

WIFI

PP9480	1	HSIC1_WLAN2SOC_DEVICE_RDY		5 44
PP9481	1	HSIC1_WLAN2SOC_REMOTE_WAKE		5 44
PP9482	1	PMU_GPIO_WLAN_HOST_WAKE		44 48
PP9483	1	HSIC1_SOC2WLAN_HOST_RDY		5 44

GPIO_BT_WAKE	FUNC_TEST=TRUE	5 44
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FOR HSIC CHARACTERIZATION

PP9460	1	HSIC1_WLAN_DATA	PLACE_NEAR=U0652.AM33:3MM	4 44 53
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PP9462	1	HSIC1_WLAN_DATA	PLACE_NEAR=U5800.13:3MM	4 44 53
PP9463	1	HSIC1_WLAN_STB	PLACE_NEAR=U5800.14:3MM	4 44

PP9468	1	UART1_BT2SOC_TX	PLACE_NEAR=U0652:3MM	5 44
PP9469	1	UART1_SOC2BT_TX	PLACE_NEAR=U5800:3MM	5 44

PP9471	1	UART2_WLAN2SOC_TX	PLACE_NEAR=U0652:3MM	5 44
PP9472	1	UART2_SOC2WLAN_TX	PLACE_NEAR=U5800:3MM	5 44

BASEBAND

USB_BB_P	FUNC_TEST=TRUE	11 24 52
USB_BB_N	FUNC_TEST=TRUE	11 24 52

FOR HSIC CHARACTERIZATION

PP9465	1	HSIC2_BB_STB	PLACE_NEAR=U0652.B27:3MM	4 24 27
PP9466	1	HSIC2_BB_DATA	PLACE_NEAR=U3400.C7:3MM	4 24 27

PROX

HIGH SPEED, NO TEST

MIPI0C_CAM_REAR_CLK_P	NO_TEST=TRUE	7 23 53
MIPI0C_CAM_REAR_CLK_N	NO_TEST=TRUE	7 23 53
MIPI0C_CAM_REAR_DATA_P<0..3>	NO_TEST=TRUE	7 23 53
MIPI0C_CAM_REAR_DATA_N<0..3>	NO_TEST=TRUE	7 23 53
MIPI0C_CAM_REAR_CLK_FILT_P	NO_TEST=TRUE	23
MIPI0C_CAM_REAR_CLK_FILT_N	NO_TEST=TRUE	23
MIPI0C_CAM_REAR_DATA_FILT_P<0..3>	NO_TEST=TRUE	23
MIPI0C_CAM_REAR_DATA_FILT_N<0..3>	NO_TEST=TRUE	23
MIPI0C_CAM_FRONT_CLK_P	NO_TEST=TRUE	7 20 53
MIPI0C_CAM_FRONT_CLK_N	NO_TEST=TRUE	7 20 53
MIPI0C_CAM_FRONT_DATA_P<0>	NO_TEST=TRUE	7 20 53
MIPI0C_CAM_FRONT_DATA_N<0>	NO_TEST=TRUE	7 20 53
MIPI0C_CAM_FRONT_CLK_FILT_P	NO_TEST=TRUE	20
MIPI0C_CAM_FRONT_CLK_FILT_N	NO_TEST=TRUE	20
MIPI0C_CAM_FRONT_DATA_FILT_P<0>	NO_TEST=TRUE	20
MIPI0C_CAM_FRONT_DATA_FILT_N<0>	NO_TEST=TRUE	20
EDP_DATA_P<0..3>	NO_TEST=TRUE	7 18
EDP_DATA_N<0..3>	NO_TEST=TRUE	7 18
EDP_DATA_EMI_P<0..3>	NO_TEST=TRUE	18
EDP_DATA_EMI_N<0..3>	NO_TEST=TRUE	18
EDP_DATA_EMI_CONN_P<0..3>	NO_TEST=TRUE	18
EDP_DATA_EMI_CONN_N<0..3>	NO_TEST=TRUE	18

CAMERA

PP9440	1	MIPI1C_CAM_FRONT_CLK_P	PLACE_NEAR=U0652.AR33:3MM	7 20 53
PP9441	1	MIPI1C_CAM_FRONT_CLK_N	PLACE_NEAR=U0652.AR34:3MM	7 20 53
PP9442	1	MIPI1C_CAM_FRONT_DATA_P<0>	PLACE_NEAR=U0652.AT33:3MM	7 20 53
PP9443	1	MIPI1C_CAM_FRONT_DATA_N<0>	PLACE_NEAR=U0652.AT34:3MM	7 20 53
PP9444	1	MIPI0C_CAM_REAR_CLK_P	PLACE_NEAR=U0652.AU25:3MM	7 23 53
PP9445	1	MIPI0C_CAM_REAR_CLK_N	PLACE_NEAR=U0652.AV25:3MM	7 23 53
PP9446	1	MIPI0C_CAM_REAR_DATA_P<0>	PLACE_NEAR=U0652.AU27:3MM	7 23 53
PP9447	1	MIPI0C_CAM_REAR_DATA_N<0>	PLACE_NEAR=U0652.AV27:3MM	7 23 53

SYNC MASTER=J72_MLB_C		SYNC DATE=11/26/2012	
TEST: EE TP/PP			
Apple Inc.		DRAWING NUMBER	051-0886
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POWER CONNECTIONS

BUCK0

52 46 PPVDD_CPU == =PPVDD_CPU 9

BUCK1

52 46 PPVDD_GPU == =PPVDD_GPU 9

BUCK2

52 46 PPVDD_SOC == =PPVDD_SOC 9

BUCK3

52 47 44 PP1V8_S2R == =PP1V8_S2R_MISC 5 51
 == =PP1V8_S2R_VDDIO_WLAN_BT 44
 == =PP1V8_S2R_TRISTAR 11
 == =PP1V8_S2R_DDR 8
 == =PP1V8_S2R_GRAPE 13
 == =PP1V8_S2R_EXT_SWITCH 50
 == =PP1V8_S2R_REAR_CAMERA 13
 == =PP1V8_S2R_MESA 13
 == =PP1V8_S2R_VDD_CORE_GPS 13
 == =PP1V8_S2R_VDD_IO_GPS 13

BUCK3_SW

52 50 46 PP1V8_SW1 == =PP1V8_AUDIO 15
 == =PP1V8_DMIC 14
 == =PP1V8_CAM_FRONT 20
 == =PP1V8_CAM_REAR 23
 == =PP1V8_PROX 22

BUCK3_EXT SW

52 50 46 PP1V8_SW1 == =PP1V8_VDDIO18_SOC 8 9
 == =PP1V8_SOC 4 5 7 10 18
 == =PP1V8_MIPI_SOC 7
 == =PP1V8_EDP_SOC 7
 == =PP1V8_NAND_SOC 6
 == =PP1V8_NAND 12 48
 == =PP1V8_PLL_SOC 4
 == =PP1V8_SPKRAMP 13
 == =PP1V8_EEPROM 51
 == =PP1V8_BEACON 13

BUCK3_SW2

52 46 PP1V8_SW2 == =PP1V8_GRAPE 13

BUCK3_SW3

46 PP1V8_S2R_SW3 == =PP1V8_S2R_GYRO 21
 == =PP1V8_S2R_ACCEL 21
 == =PP1V8_S2R OSCAR 19

BUCK3_SW3 COMP

54 52 PP1V8_S2R_SW3_COMP == =PP1V8_S2R_COMP 21

PP1V8_S2R_SW3 SHOULD BE ON IN HIBERNATE CURRENTLY POWERS OSCAR AND 1.8V RAIL ON SENSOR

BUCK4

52 47 46 PP1V2_S2R == =PP1V2_S2R_DDR 8
 == =PP1V2_S2R_DDR_SOC 8
 == =PP1V2_S2R_CAM_REAR 8

BUCK4_SW

52 46 PP1V2_SW1 == =PP1V2_VDDO_DDR 8
 == =PP1V2_VDDIOD_SOC 8
 == =PP1V2_HSIC_SOC 4

BUCK4_SW2

52 46 PP1V2_S2R_SW2 == =PP1V2_S2R OSCAR 19

PP1V2_S2R_SW2 SHOULD BE ON IN HIBERNATE PROVIDE 1.2V TO OSCAR

BUCK5

52 46 PPVDD_SRAM == =PPVDD_SRAM_CPU 9
 == =PPVDD_SRAM_SOC 9

BUCK6

52 46 PP3V3_S2R == =PP3V3_S2R_SWITCH 48
 == =PP3V3_S2R_WIFI_PA 44

BUCK6_SW

52 48 PP3V3_SW == =PP3V3_EDP_PU 13
 == =PP3V3_NAND 13
 == =PP3V3_USB_SOC 4

LDO1

52 47 PP3V0_SPARE1 == =PP3V0_SPARE1 49

LDO2

52 47 16 PP1V7_VA_VCP == =PP1V7_VA_VCP 15 16

LDO3

52 47 PP3V0_S2R_SENSOR == =PP3V0_S2R_HALL 13
 == =PP3V0_S2R_GYRO 21
 == =PP3V0_S2R_ACCEL 21
 == =PP3V0_S2R_COMP 21

LDO3 SHOULD BE ON IN HIBERNATE COMPASS, ACCEL, GYRO, PROX ARE ON OSCAR HALL EFFECT NEEDS TO BE ON IN HIBERNATE

LDO4

52 47 PP3V0_ALS == =PP3V0_ALS 20
 == =PP3V0_PROX 22
 == =PP3V0_HP_ALS 22
 == =PP3V0_IO_ALS 22

SHOULD IO ALS POWER HERE?

LDO5

52 47 PP3V0_UVLO == =PP3V0_UVLO 49

LDO6

52 47 PP3V3_ACC == =PP3V3_ACC 11

LDO7

52 47 PP3V0_S2R_TRISTAR == =PP3V0_S2R_TRISTAR 11

LDO7 SHOULD BE ON IN HIBERNATE

LDO8

47 NC_LDO8 NO_TEST=TRUE == =NC_LDO8

LDO9

52 47 PP1V3_CAM == =PP1V3_CAM_FRONT 23
 == =PP1V3_CAM_REAR 23

BACKUP RAIL. CAN BE BOOSTED TO MEET 1.1V MIN ON CAMERA IF NEEDED.

LDO10

52 47 PP1V0_SOC == =PP1V0_USB_SOC 4
 == =PP1V0_MIPI_SOC 7
 == =PP1V0_EDP_PAD_DVDD_SOC 7

LDO11

52 47 PP2V6_CAM_AF == =PP2V6_CAM_REAR_AF 23

LDO13

52 47 PP2V9_CAM == =PP2V9_CAM_FRONT 20
 == =PP2V9_CAM_REAR 23

VLCM1

47 PP5V25_GRAPE == =PP5V25_GRAPE 13

CHARGER MAIN

52 49 48 47 46 PPVCC_MAIN == =PPVCC_MAIN_AUDIO 15 16
 == =PPVCC_MAIN_LED 47
 == =PPVCC_MAIN_DOCK 43
 == =PPVCC_MAIN_DEV 46
 == =PPVCC_MAIN_CPU 46
 == =PPVCC_MAIN_GPU 46
 == =PPVCC_MAIN_SOC 46
 == =PPVCC_MAIN_GRAPE 13
 == =PPVCC_MAIN_LCD 18
 == =PPVCC_MAIN_NAVAJA 47
 == =PPVCC_MAIN_VDD_LCM 44
 == =PPVCC_MAIN_WLAN 44
 == =PPVCC_MAIN_GPS 44

BATTERY

52 46 PPBATT_VCC == =PPBATT_POS_CONN 45
 == =PPBATT_VCC_BB 24 25 33 34 35 36 37 38
 == =PPBATT_AUDIO 45

USB POWER INPUT

52 46 PPVBUS_USB_DCIN == =PPVBUS_USB_EMI 43

ON_BUF

52 47 PP1V8_ALWAYS == =PP1V8_ALWAYS 5

BACKLIGHT BOOST

52 47 PPLED_OUT_A == =PPLED_REG_A 18

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