N66 MLB - EVT_MD

LAST_MODIFICATION=Tue Mar 24 12:47:11 2015
### Active Diode Alternate

<table>
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<tr>
<th>PART NUMBER</th>
<th>SIMULATION</th>
<th>REFERENCE DESIGNATOR(S)</th>
<th>QTY</th>
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<tr>
<td>152S00118</td>
<td>152S00075</td>
<td>IND, PWR, SHLD, 1.2 UH, 3.0A, 0.080 OHM</td>
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<td>152S00123</td>
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### NAND BOM Options

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<td>335S00074</td>
<td>U1500 H, B0, 1Y, MLC, 16Gx8</td>
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<td>806-02655</td>
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### Carbon BOM Options

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### Power Inductor Alternates

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<tr>
<td>138S0702</td>
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<td>138S0657 CAP, X5R, 4.3UF, 4V, 0610?</td>
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<tr>
<td>138S00024</td>
<td>?</td>
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### SIM Callouts

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<tr>
<td>138S0835</td>
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<td>? 138S00006 CAP, 3-TERM, 4.3UF, 4V, 0402</td>
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### Global Capacitor Alternates

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<tr>
<td>131S0307</td>
<td>C0730 NOSTUFFCAP, CER, NP0/C0G, 100PF, 5%, 16V, 010052</td>
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### Global Ferrite Alternates

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### Global Varistor Alternates

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<td>377S0168 VARISTOR, 6.8V, 100PF, 01005?</td>
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### DDR PLL Alternate

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<td>118S0764 RES, 3.92K, 0.1%, 0201</td>
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### Low Noise Caps

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<tr>
<td>138S0702</td>
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### Maui AP Alternates

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### SEP EEPROM Alternate

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TESTPOINTS

POWER

- VIN
- 5V PDH
- 5V PDR
- 3.3V PDH
- 3.3V PDR
- GND
- TESTPOWER

RESET

- Bypass cap
- 5V to system cold reset
- SOC & DR reset

DFU

- FORCE DFU
- JTAG reset

BOOTSTRAPPING: BOARD REV

BOARD ID

BOOT CONFIG

AMUX

- DAC AMUX AV
- DAC AMUX BV
- DAC AMUX CV
- DAC AMUX DV
- DAC AMUX DW
- DAC AMUX EX
- DAC AMUX F
- DAC AMUX G

UAT GND Ring Opening

N66 I2C DEVICE MAP

I2C ADDRESS

- 11101000
- 10101010
- 11001000
- 10001000
- 00001000
- 00000100
- 00000010

I2C ADDRESS

- 11101000
- 10101010
- 11001000
- 10001000
- 00001000
- 00000100

Mesa to Boost En

- 10101000
- 10001000
- 00001000

PMU Amux By

- 10101000
- 10001000
- 00001000

Mesa to Boost En

- 10101000
- 10001000
- 00001000

PMU Amux By

- 10101000
- 10001000
- 00001000

TP14 IS TO HELP WITH USB SI IN THE FACTORY FIXTURE.

TP04 IS TO HELP WITH USB SI IN THE FACTORY FIXTURE.

TP03 IS TO HELP WITH USB SI IN THE FACTORY FIXTURE.

TP02 IS TO HELP WITH USB SI IN THE FACTORY FIXTURE.

TP01 IS TO HELP WITH USB SI IN THE FACTORY FIXTURE.

TP00 IS TO HELP WITH USB SI IN THE FACTORY FIXTURE.

TP09 IS TO HELP WITH USB SI IN THE FACTORY FIXTURE.

TP08 IS TO HELP WITH USB SI IN THE FACTORY FIXTURE.

TP07 IS TO HELP WITH USB SI IN THE FACTORY FIXTURE.

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TP01 IS TO HELP WITH USB SI IN THE FACTORY FIXTURE.

TP00 IS TO HELP WITH USB SI IN THE FACTORY FIXTURE.
MAUI - CAMERA & DISPLAY INTERFACES

---

**Room:** SOC

**Notes:**
- MIPI_RCAM_TO_AP_CLK_CONN_N
- MIPI_RCAM_TO_AP_CLK_CONN_P
- MIPI_RCAM_TO_AP_DATA3_CONN_N
- MIPI_RCAM_TO_AP_DATA3_CONN_P
- MIPI_RCAM_TO_AP_DATA2_CONN_N
- MIPI_RCAM_TO_AP_DATA2_CONN_P
- MIPI_RCAM_TO_AP_DATA1_CONN_N
- MIPI_RCAM_TO_AP_DATA1_CONN_P
- MIPI_RCAM_TO_AP_DATA0_CONN_P
- MIPI_AP_TO_LCM_CLK_P
- MIPI_AP_TO_LCM_DATA3_N
- MIPI_AP_TO_LCM_DATA2_N
- MIPI_AP_TO_LCM_DATA2_P
- MIPI_AP_TO_LCM_DATA1_N
- MIPI_AP_TO_LCM_DATA1_P
- MIPI_AP_TO_LCM_DATA0_P
- MIPI0C_CLK_N
- MIPI0C_CLK_P
- MIPI0C_DATA3_P
- MIPI0C_DATA3_N
- MIPI0C_DATA2_N
- MIPI0C_DATA2_P
- MIPI0C_DATA1_N
- MIPI0C_DATA1_P
- MIPI0C_DATA0_N
- MIPI0C_DATA0_P
- MIPI0C_REXT
- MIPI0C_CLK_N
- MIPI0C_CLK_P
- MIPI0C_DATA3_P
- MIPI0C_DATA3_N
- MIPI0C_DATA2_N
- MIPI0C_DATA2_P
- MIPI0C_DATA1_N
- MIPI0C_DATA1_P
- MIPI0C_DATA0_N
- MIPI0C_DATA0_P
- MIPI0C_REXT

---

**Notes:**
- VDD085_MIPI
- VDD12_LPDP
- VDD18_MIPI
- SENSOR1_RST
- SENSOR1_CLK
- SENSOR0_RST
- SENSOR0_CLK
- SENSOR0_XSTROBE

---

**Notes:**
- AP_TO_MUON_BL_STROBE_EN
- MIPI_FCAM_TO_AP_DATA0_N
- MIPI_FCAM_TO_AP_DATA0_P
- MIPI_FCAM_TO_AP_DATA1_N
- MIPI_FCAM_TO_AP_DATA1_P
- MIPI_FCAM_TO_AP_CLK_N
- MIPI_FCAM_TO_AP_CLK_R
- AP_TO_FCAM_CLK_R
- AP_TO_RCAM_CLK_R
- AP_TO_RCAM_SHUTDOWN_L
- AP_TO_FCAM_SHUTDOWN_L

---

**Notes:**
- 1.62-1.98V @23mA MAX
- 1.00K5%
- 1/32W
- 0.1UF20%
- 6.3VX5R
- 0.1UF20%
- 6.3VX5R-CERM01005
- 0.1UF20%
- 6.3VX5R-CERM01005
- 0.1UF20%
- 6.3VX5R-CERM01005
- 1.00K5%
- 1/32W
- 1/32W
- MF 1%
- MF 1%
- 1% 1/32W
- 1% 1/32W

---

**Notes:**
- PP1V8
- PP_FIXED
- 0.756-0.893V @11mA MAX
- CRITICAL
- SYM 3 OF 14
- SYM 4 OF 14
- CRITICAL

---

**Notes:**
- EVEN WHEN LPDP IS NOT USED
- NOTE: VDD12_LPDP SHOULD BE POWERED EVEN WHEN SHIP IS NOT USED

---

**Notes:**
- MAUI-2GB-25NM-DDR-H
- Apple Inc.
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**Page Title:** MAUI - CAMERA & DISPLAY INTERFACES

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**Drawing Number:** 051-00094

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**Revision:** 4.0.0

---

**Size:** D

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**Branch:** SOC:CAMERA & DISPLAY

---

**Drawing:** U0600

---

**Room:** SOC

---

**Notes:**
- MIPI_FCAM_TO_AP_DATA0_N
- MIPI_FCAM_TO_AP_DATA0_P
- MIPI_FCAM_TO_AP_DATA1_N
- MIPI_FCAM_TO_AP_DATA1_P
- MIPI_FCAM_TO_AP_CLK_N
- MIPI_FCAM_TO_AP_CLK_R
- AP_TO_FCAM_CLK_R
- AP_TO_RCAM_CLK_R
- AP_TO_RCAM_SHUTDOWN_L
- AP_TO_FCAM_SHUTDOWN_L

---

**Notes:**
- 1.00K5%
- 1/32W
- 1/32W
- MF 1%
- MF 1%
- 1% 1/32W
- 1% 1/32W

---

**Notes:**
- PP1V2
- CRITICAL
- SYM 3 OF 14
- SYM 4 OF 14
- CRITICAL

---

**Notes:**
- EVEN WHEN LPDP IS NOT USED
- NOTE: VDD12_LPDP SHOULD BE POWERED EVEN WHEN SHIP IS NOT USED
ANTIGUA PMU - GPIOs, NTCs

NOTE: 100PF CAPS ARE THE SAMPLING CAPS FOR PMU ADC

ROOM=PMU01005

100PF 5%

C2210 1

100PF

C2220 1

ROOM=PMU

R2240 180KOHM-1%

ROOM=PMU

R2210 10KOHM-1%

ROOM=PMU

C2200 18PF

ROOM=PMU

C2203 1/20W 0.1%

ROOM=PMU

C2204 1/20W 0.1%

ROOM=PMU

C2205 1000PF

ROOM=PMU

NOTE: INPUT PULL-DOWN 100-300k

NOTE (1): INPUT PULL-DOWN 1M

NOTE (2): OUTPUT OPEN-DRAIN, REQUIRES PULL-UP

NOTE (3): OUTPUT FULL-UP OR DOWN 1000-3000A

NOTE (4): OUTPUT OVER-DRAIN, REQUIRES FULL-UP

CONTROL PIN NOTES:

Remarks:
1. All capacitance values are in microFarads.
2. All resistance values are in ohms, 0.1 watt +/- 5%.

### PART# DESCRIPTION QTY

#### MARCH 26, 2015

1. **VINYL RESISTOR**

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### ROW HB PAD MATCHING BOM OPTIONS

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WLAN LAT 2.4GHZ BAW BPF
### Baseband: GPIOs

#### Buffer on RFFE5

SCLK/SDATA_A is output

#### RFFE Clock Filters

Place C3405_RF close to BB and C3406_RF.

#### RFFE Usage Table

- **RFFE1 WTR**
- **RFFE2 LB/MB/MB PAD, 2G PA, LB/MB/MB ASM**
- **RFFE3 DIV ASM**
- **RFFE4 QPOET**
- **RFFE5 DIV LNA, ANT TUNERS**

---

**PCIE Pull-ups to BB Rail**

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**Baseband: GPIOS**

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**Baseband: GPIOs**

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**Cellular Baseband: GPIOs**

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**Notice of Proprietary Property**

Apple Inc.

Confidential and Proprietary Apple System Design. For Reference Purpose Only - Not a Change Request.
OPEN ITEM: CAN R3801-R3805 AND C3809-C3813 BE DELETED?
IMPROVES RXBN BY 4DB

PLACE CAP CLOSE TO MDM GPIO14

TRANSCEIVER: DRX/GPS PORTS

PLACE NEAR U_WTR

DRX MODULE PORTS ARE DC BLOCKED

GPS FILTER

PLACE NEAR U_WTR
MID BAND PA+DUPLEXERS
HB PAD VBATT DECOUPLING CAPS ARE SHARED WITH LB PAD
AT C4201_RF AND C4202_RF.

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53 OF 60
051-00094

C4403_RF
L4405_RF
C4409_RF
C4408_RF
C4407_RF
C4406_RF
L4407_RF
L4406_RF
L4405_RF
L4403_RF

C4410_RF
L4401_RF
L4404_RF
L4410_RF

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