1. All resistance values are in Ohms, 0.1 Watt +/- 5%.
2. All capacitance values are in microfarads.
3. All crystals & oscillator values are in hertz.
### Mechanical Parts

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<th>BOARD_CAD_P/N</th>
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<td>FENCE,2,BTM,MLB,J2</td>
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### Signal Aliases Required by This Page:

- (NONE)

### BOM Options Provided by This Page:

- (NONE)
**WIFI ALIASES**

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<tr>
<th>WiFi Alias</th>
<th>Description</th>
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<tr>
<td>WIFI_RX</td>
<td>WiFi Receiver Input</td>
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<tr>
<td>WIFI_TX</td>
<td>WiFi Transmitter Output</td>
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**UART ALIASES**

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<td>UART0_RXD</td>
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**OBSOLETE ALIASES**

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*References to obsolete aliases may indicate a need for further investigation or adjustment. Please consult the latest documentation for compatibility and usage.*
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EXTERNAL (HEADSET) MIC INPUT CIRCUITRY

AUDIO: DETECT/MIC BIAS
SYNC_DATE=02/03/2011
SYNC_MASTER=KAVITHA
HEADPHONE JACK CONNECTION IS ON FRONT PANEL FLEX, CSA 55/PDF 29

PLACE ALL COMPONENTS NEAR J5401

HEADSET JACK INSERTION DETECT
DEBUG RESET ACCESS

PLACE OUTSIDE OF CAN

DEBUG AND MISC

Apple Inc.

SYNC_DATE=10/04/2010
SYNC_MASTER=ALEX

FORCE_DFU
PMU_SHDWN
PPBATT_VCC
PWR_ON_LED

LED9000
R9002
1
2

R9000
1
2

051-8773
10.0.0

90 OF 157
39 OF 48
PLATED THROUGH HOLES

PLATING SIZE: 1.4MM X 0.7MM
PLATED THROUGH HOLES

SYNC_MASTER=ALEX
THE POSESSOR AGREES TO THE FOLLOWING:

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### MLB Constraints

#### Physical Rules
- **BGA Area Physical Rules**
  - **90 Ohms**
  - **50 Ohms**
- **Single-Ended Physical Rules**
  - **90 Ohms**
  - **50 Ohms**
  - **45 Ohms**

#### Spacing Constraints
- **Default/BGA Spacing Rules**
  - **Regular Spacing Rules**
  - **Power/Gnd Spacing Rules**

#### Notes:
- Assumed 0.060 mm dielectric thickness
- Minimum line widths:
  - BGA: 0.060 mm
  - 90 Ohms: 0.055 mm
  - 50 Ohms: 0.050 mm
  - 45 Ohms: 0.055 mm
- Minimum neck width:
  - BGA: 0.060 mm
  - 90 Ohms: 0.050 mm
  - 50 Ohms: 0.050 mm
- Maximum neck length:
  - BGA: 0.100 mm
  - 90 Ohms: 3.00 mm
  - 50 Ohms: 3.00 mm
- Diffpair primary gap:
  - BGA: 0.080 mm
  - 90 Ohms: 0.076 mm
  - 50 Ohms: 0.062 mm
- Diffpair neck gap:
  - BGA: 0.120 mm
  - 90 Ohms: 0.110 mm
  - 50 Ohms: 0.110 mm

### Physical Constraints

#### Single-Ended Physical Rules
- **90 Ohms**
  - **50 Ohms**
  - **45 Ohms**

### Differential Pair Physical Rules
- **90 Ohms**
  - **50 Ohms**

### Misc Physical Rules
- **MINIMUM LINE WIDTH**
  - STANDARD = 0.055 MM
  - DEFAULT = 0.060 MM
- **MINIMUM NECK WIDTH**
  - STANDARD = 0.060 MM
  - DEFAULT = 0.100 MM
- **MAXIMUM NECK LENGTH**
  - STANDARD = 12.7 MM
  - DEFAULT = 30.0 MM
- **DIFFPAIR PRIMARY GAP**
  - STANDARD = 0.076 MM
  - DEFAULT = 0.080 MM
- **DIFFPAIR NECK GAP**
  - STANDARD = 0.120 MM
  - DEFAULT = 0.120 MM

#### Power/Gnd Spacing Rules
- **PWR_P1SPACING**
  - STANDARD = 0.2 MM
  - DEFAULT = 0.2 MM
- **GND_P1SPACING**
  - STANDARD = 0.1 MM
  - DEFAULT = 0.1 MM
- **SWITCHNODE**
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**Constraints:** DEBUG

**NOTICE OF PROPRIETARY PROPERTY:**

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**Sync Master:** MIKE

**Sync Date:** 01/21/2011

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