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**Text:**

This document contains information proprietary to Freescale Semiconductor and shall not be used for engineering design, procurement or manufacture in whole or in part without the express written permission of Freescale Semiconductor.
1. Unless Otherwise Specified:
   - All resistors are in ohms
   - All capacitors are in µF
   - All voltages are DC
   - All polarized capacitors are aluminum electrolytic

2. Interrupted lines coded with the same letter or letter combinations are electrically connected.

3. Device type number is for reference only. The number varies with the manufacturer.

4. Special signal usage:
   - _B Denotes - Active-Low Signal
   - <> or [] Denotes - Vectored Signals

5. Interpret diagram in accordance with American National Standards Institute specifications, current revision, with the exception of logic block symbology.

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**Power & Ground Nets**

### Mother Board Supplied Power
- **1.25V_MB_SR** 1.25V: From the MB switching regulator
- **3.3V_MB_SR** 3.3V: From the MB switching regulator
- **5V_MB_SR** 5V: From the MB switching regulator
- **5V_MB_LR** 5V: From the MB linear regulator

### Externally Supplied Power
- **1.25V_EXT** 1.25V: External power into pin 1 of the terminal block
- **3.3V_EXT** 3.3V: External power into pin 2 of the terminal block
- **5V_EXT** 5V: External power into pin 3 of the terminal block

### Power to the MCU
- **VDD_LV_CORE** 1.25V: Power to the core logic on the MCU
- **VDD_LV_REG** 1.25V: Power derived from MB or EXT 5V or 3.3V and regulated by the MCU through an external transistor
- **VDD_LV_STBY** 3.3V or 5V: Standby power to the MCU
- **VDD_HV_IO_JTAG** 3.3V or 5V: Power to the JTAG and clock circuits on the MCU
- **VDD_HV_FLA** 3.3V: Power to the MCU flash memory (regulated internally by MCU)
- **VDD_HV_IO_FEC** 3.3V or 5V: Power to the FEC circuit on the MCU
- **VDD_HV_PMC** 5V: Power to the PMC circuit on the MCU
- **VDD_HV_IO_MAIN** 5V: Power to the I/O circuits on the MCU
- **VDD_HV_ADV_SAR** 5V: Power and reference voltage to the SAR ADC on the MCU
- **VDD_HV_ADV_SD** 5V: Power and reference voltage to the SD ADC on the MCU

### Other Power Nets
- **VDD_HV_IO_MB** 3.3V or 5V: Power for I/O circuits on the Mother Board
- **OSC_PWR** 3.3V or 5V: Power for the clock oscillator

### Ground Nets
- **GND** 0V: Main digital ground
- **VSSA_JTAG** 0V: Filtered ground for the JTAG and clock circuits
- **VSSA_ADC** 0V: Filtered ground for the on chip ADC circuits
**Clock Circuit**

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<th>Clock Source</th>
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<td>Remove, Remove, Install</td>
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<td>Shunt to connect XTAL to GND</td>
<td>Remove, Install, Remove</td>
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<td>Shunt to connect EXTAL to the crystal</td>
<td>Install, Remove, Remove</td>
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<td>Shunt to connect EXTAL to the OSC</td>
<td>Remove, Install, Remove</td>
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<td>Shunt to connect EXTAL to the SMA connector</td>
<td>Remove, Remove, Install</td>
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<td>Header to disable the Oscillator</td>
<td>Install, Remove, Install</td>
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**Reset Circuit**