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#### I2C Address Table

<table>
<thead>
<tr>
<th>ADDRESS</th>
<th>DEVICE</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0x38</td>
<td>00111000B</td>
<td>PCF8574</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USER INPUT Expander - 0111(A2)(A1)(A0)</td>
</tr>
<tr>
<td>0x39</td>
<td>00111001B</td>
<td>PCF8574</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LED Expander - 0111(A2)(A1)(A0)</td>
</tr>
<tr>
<td>0x3A</td>
<td>00111010B</td>
<td>PCF8574</td>
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<tr>
<td></td>
<td></td>
<td>VIC PLL Expander - 0111(A2)(A1)(A0)</td>
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<tr>
<td>0x3B</td>
<td>00111011B</td>
<td>PCF8574</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VLYNQ IO Expander - 0111(A2)(A1)(A0)</td>
</tr>
<tr>
<td>0x50</td>
<td>01010000B</td>
<td>CAT24C256</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EEPROM - 1010(A2)(A1)(A0)</td>
</tr>
<tr>
<td>0x51</td>
<td>00111011B</td>
<td>AIC33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AUDIO CODEC - 00110(MFP1)(MFP0)</td>
</tr>
<tr>
<td>0x5D</td>
<td>01011101B</td>
<td>TVP5146</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VIDEO DECODER - 101110(I2CA)</td>
</tr>
</tbody>
</table>
OPTIONAL OSCILLATOR POPULATION

CRYSTAL AND CAPS REMOVED WHEN OSCILLATOR IS USED:

- Crystal: ASFL3-27.000MHZ-EK-T
- Capacitors: C1 (1uF), C2 (18pF), C3 (1uF), C4 (18pF)
- Resistors: R1 (10K), R5 (0), R19 (NO-POP)
- Jumper: JP3 (HEADER 2 NO-POP)
Designers must use routing techniques from DDR2 PCB
Layout Application Note
Layout schematic is shown for the 92-ball DDR Package but is compatible with 84-ball DDR2 Devices.
MEM.EM_A21
MEM.EM_A19
MEM.EM_A17
MEM.EM_A20
MEM.EM_A18
MEM.EM_A14
MEM.EM_A13
MEM.EM_A19
MEM.EM_A18
MEM.EM_A16
MEM.EM_A15
MEM.EM_A21
MEM.EM_A13
MEM.EM_A16
MEM.EM_A15
MEM.EM_A21
MEM.EM_A13
MEM.EM_A16
MEM.EM_A15
B.CI4
B.CI5
B.CI6
B.CI7
B.CI3
B.CI0
B.CI1
B.CI2
B.CI4
B.CI5
B.CI6
B.CI7
B.CI3
B.CI0
B.CI1
B.CI2
COUT1
COUT0
COUT7
COUT6
COUT5
COUT4
COUT3
COUT2
COUT1
COUT0
COUT7
COUT6
COUT5
COUT4
COUT3
COUT2

MEM.EM_D7-0 SELECT
MEM_EMD7-0_ENABLEn30
MEM.EM_A21
MEM.EM_A13
MEM.EM_A16
MEM.EM_A15
MEM.EM_D7-0 SELECT13
CI_EMA_ENABLEn30

PIN 1 TO 2 FLASH
PIN 3 TO 4 NAND FLASH
PIN 5 TO 6 SRAM
PIN 7 TO 8 DAUGHTERCARD

6 EM_CS2
EM_CS2 SELECT

Title: TMS320DM6437 Evaluation Module
Page Contents: EMIF Muxing
Revision: A
Size: B
DWG NO 509102-0001
Sheet 15 of 34
Date: Wednesday, December 06, 2006
PCI Connector

Length to Cap no greater than 0.25 inches
Any number of pin shares as long as does not exceed length
Trace size to cap 20 mil

Trace size to cap 20 mil
Any number of pin shares as long as does not exceed length

Any number of pin shares as long as does not exceed length
Trace size to cap 20 mil

Any number of pin shares as long as does not exceed length

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Trace size to cap 20 mil

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Any number of pin shares as long as does not exceed length

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Any number of pin shares as long as does not exceed length

Any number of pin shares as long as does not exceed length
Trace size to cap 20 mil

Trace size to cap 20 mil
Any number of pin shares as long as does not exceed length
Check the layout library regarding pins 125-128.
Isolate digital and analog GNDs and connect at a single location in the ground plane.
The Fig and resistor in series with it can be removed if voltage scaling is not desired.