ICH6-M IDE Integrated Series
Termination Resistors

| Code (15:0): DIOW#, DIO#, DREQ, COACK#, IOCWY, DA[2:0], DC[1:0], DCSS# | approximately 33 ohm |

ICH6-M Integrated Pull-up and pull-down Resistors

ICH6-M IDE Integrated Series

- Key-West / Kinney difference

### Key-West

<table>
<thead>
<tr>
<th>Device</th>
<th>SMBus addr.</th>
<th>USB Port</th>
<th>Key West Define</th>
</tr>
</thead>
<tbody>
<tr>
<td>ClkGen.</td>
<td>D2</td>
<td>USBF[0]</td>
<td>USB1 up connector</td>
</tr>
<tr>
<td>ISA Module 1</td>
<td>A0</td>
<td>USBF[1]</td>
<td>New card used</td>
</tr>
<tr>
<td>ISA Module 2</td>
<td>A4</td>
<td>USBF[2]</td>
<td>USB1 down connector</td>
</tr>
<tr>
<td>ISA</td>
<td>58</td>
<td>USBF[3]</td>
<td>Inc.</td>
</tr>
<tr>
<td>Battery</td>
<td>16</td>
<td>USBF[5]</td>
<td>Inc.</td>
</tr>
<tr>
<td>Error</td>
<td>A2</td>
<td>USBF[6]</td>
<td>Inc.</td>
</tr>
<tr>
<td>USB</td>
<td></td>
<td>USBF[7]</td>
<td>Inc.</td>
</tr>
</tbody>
</table>

### Kinney

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<td>D2</td>
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### PCI RESOURCE TABLE

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<td>Inc.</td>
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</table>

### PCIE Port

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<th>Key West Define</th>
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<tbody>
<tr>
<td>PE[1]</td>
<td></td>
<td>Inc.</td>
<td></td>
</tr>
<tr>
<td>PE[2]</td>
<td></td>
<td>Inc.</td>
<td></td>
</tr>
<tr>
<td>PE[3]</td>
<td></td>
<td>Inc.</td>
<td></td>
</tr>
<tr>
<td>PE[4]</td>
<td></td>
<td>Inc.</td>
<td>New card used</td>
</tr>
</tbody>
</table>
1.8V is for Dothan A2 before.

1.5V or 1.2V

First suggests Dothan A2 or later only use 1.5V

IBV_VCCA_S0

Layout Note:

VCCSENSE and VSSSENSE lines should be of equal length.

Provide a test point (with a ring to connect a scope) on a line between VCCSENSE and VSSSENSE on the location where the two 54kOhm resistors terminate the 50 ohm transmission line.
PLACE CAPS BETWEEN AND NEAR DDR SKTS
PLACE EACH 0.1UF CAP CLOSE TO POWER PIN

Address / Command/Control

- M_A_A18,11
- M_A_A38,11
- M_A_A108,11
- M_B_WE#8,11
- M_CS0_R#7,11
- M_CS1_R#7,11
- M_CS2_R#7,11
- M_CS3_R#7,11
- M_A_WE#8,11
- M_A_CAS#8,11
- M_A_A128,11
- M_A_A58,11
- M_A_A88,11
- M_A_A138,11
- M_B_A28,11
- M_B_A98,11
- M_B_A138,11
- M_B_A58,11
- M_B_A108,11
- M_A_BS0#8,11
- M_B_A2#8,11
- M_B_A12#8,11
- M_B_A7#8,11
- M_B_A12#8,11
- M_B_A9#8,11
- M_B_A0#8,11
- M_B_BS1#8,11

- 0D9V_S035,36
- 0D9V_S037,9,10,16,34,35,36,37

Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.
PCIE AC coupling caps need to be within 250 mils of the driver.
CPU Fan

1st source: 20.D0198.103
2nd source: 20.D0210.103

Guardian temp-tolerance = ±3 degree C

Glass needs to be placed near Guardian IC.

Notes:
- Vset = (Tp - 75)/16
- Where Tp = 75 to 106 degree C
- Set trip point = 85 degree C
- Vset = (85 - 75)/16 = 0.625V
- Guardian temp-tolerance = ±3 degree C

Set trip point = 85 degree C

Place on bottom side of NB and sodium
**Broadcom LAN**

**BCM4401**

Note: The BCM4401L has weak internal pullup resistors on the following signals:

- **SPROM_CLK, SPROM_DOUT, SPROM_DIN**

1st source: Atmel: AT93C46-10SI *72.93046.1001*,
2nd source: ST: M93C46-8 *72.93046.1001*.
1. Route on bottom as differential pairs.
2. Tx+/Tx- are pairs. Rx+/Rx- are pairs.
3. No vias, No 90 degree bends.
4. Pairs must be equal lengths.
5. 6mil trace width, 12mil separation.
6. 36mil between pairs and any other trace.
7. Must not cross ground moat, except RJ-45 moat.

10/100M Lan Transformer

<table>
<thead>
<tr>
<th>RJ45 PIN</th>
<th>10/100 LAN Transformer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TD+ --&gt; TX+</td>
</tr>
<tr>
<td>2</td>
<td>TD- --&gt; TX-</td>
</tr>
<tr>
<td>3</td>
<td>RD+ --&gt; RX+</td>
</tr>
<tr>
<td>4</td>
<td>RD- --&gt; RX-</td>
</tr>
</tbody>
</table>

1st source: 20.F0070.002
2nd source: 68.MGHBS.301 (TYCO)

With LED
1st source: 22.10177.691
2nd source: 22.10177.771

W/O LED
1st source: 22.10177.691
2nd source: 22.10245.H41

The blowout from the LAN magnetics to the RJ45 connector maintaining the distance between the two to be within 1 inch.

Hipot layout guide line update space > 50mil
Rj11 layout guide line update > 100mil

Change LAN solution
Change to Azalia solution

Place C582 close to the codec input (U71 pin 10, 12)
INTERNAL KEYBOARD CONNECTOR

1st source: 20.F0694.025
2nd source: 20.F0642.025

POWER BUTTON

1st source: 62.40008.061
2nd source: 62.40009.191

Cover Switch

TouchPad Connector

for EMI
512KB Flash

Unused FGPI pins must not be float

Title

Size Document Number RevDate: Sheet

Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Key-West / Kinney -2

BIOS

A3

29 37Friday, December 23, 2005

Title

Size Document Number RevDate: Sheet

Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Key-West / Kinney -2

BIOS

A3

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1st source: 72.49004.F03 (ST)
2nd source: 72.49004.G03 (PMC)
3rd source: 72.39040.J03 (Winbond)

1st source: 72.24C04.G01 (ST)
2nd source: 72.24C04.E01 (ATMEL)
3rd source: 72.49004.F03 (SST)

The symbol use 2nd source
1st source: 72.24C04.G01 (ST)
2nd source: 72.24C04.E01 (ATMEL)
Adaptor in to generate DCBATOUT

**ADAPTER IN**

Layout 200mil

1st source: 22.10037.A41
2nd source: 22.10037.A31

**BATTERY CONNECTOR**

1st source: 20.80304.006
2nd source: 20.80385.006
AC_IN Threshold 2.089V Max.
AC_IN > 2.089V --> AC DETECT

MAX1909 pin 24

V_REF : 4.2235V (<500uA)

ISOURCE_MAX = (0.075/EA)/(VCCS/VREF) = 2.84A

ECELL is "H"

than BATT is 3 serial.

<table>
<thead>
<tr>
<th>IOUT</th>
<th>VCCS</th>
<th>IOUT_SEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>IOUT</td>
<td>VCCS</td>
<td>IOUT_SEL</td>
</tr>
<tr>
<td>1.25A</td>
<td>1.25A</td>
<td>1.25A</td>
</tr>
<tr>
<td>1.25A</td>
<td>1.25A</td>
<td>1.25A</td>
</tr>
</tbody>
</table>

**Title:**

**Date:** Sheet 31 37 Friday, December 23, 2005

**Rev:**

**Document Number:**

**Key-West / Kinney**
CPU_CORE_MAX1907

OCP=30A, Vally current = 27.5A, Vlim=550mV(V5mVp-p10)

Deeper Sleep Voltage : 0.748V
S0=L, S1=H, S2=Open,

Boot-up Voltage : 1.2V
B0=L, B1=L, B2=Open

Deeper Sleep Voltage : 0.748V
S0=L, S1=H, S2=Open,

Boot-up Voltage : 1.2V
B0=L, B1=L, B2=Open

<table>
<thead>
<tr>
<th>VID</th>
<th>Vcore</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1.346</td>
</tr>
<tr>
<td>1</td>
<td>1.324</td>
</tr>
<tr>
<td>2</td>
<td>1.292</td>
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<tr>
<td>3</td>
<td>1.268</td>
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<td>4</td>
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<td>5</td>
<td>1.221</td>
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<tr>
<td>6</td>
<td>1.198</td>
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<td>7</td>
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<tr>
<td>8</td>
<td>1.152</td>
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<tr>
<td>9</td>
<td>1.129</td>
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<tr>
<td>01</td>
<td>1.106</td>
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<tr>
<td>02</td>
<td>1.083</td>
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<tr>
<td>03</td>
<td>1.060</td>
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<tr>
<td>04</td>
<td>1.037</td>
</tr>
<tr>
<td>05</td>
<td>1.014</td>
</tr>
<tr>
<td>06</td>
<td>0.991</td>
</tr>
<tr>
<td>07</td>
<td>0.968</td>
</tr>
</tbody>
</table>

Wistron Corporation
21F, Sec.1, No.38, Tai-Tu Road, Hsin-Chih Industrial Park, Hsinchu City, Taiwan
TI TPS5130 for 1.5V, 1.8V, 1.05V. (1D5V=>CH1, 1D8V=>CH2, 1D05V =>CH3)