## Change List

<table>
<thead>
<tr>
<th>Model</th>
<th>REV</th>
<th>DATE</th>
<th>CHANGE</th>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1A</td>
<td>2009/04/09</td>
<td>Page 11: Exchange Pin define for LVDS ON &amp; PWM.</td>
<td>Power</td>
<td></td>
</tr>
<tr>
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<td>2009/04/16</td>
<td>Page 21: U2D Footprint change to trf-10-1-4p-364b1.</td>
<td>Power</td>
<td></td>
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<tr>
<td></td>
<td>2009/04/17</td>
<td>Page 22: CN23 Footprint change to mpn-pcb1a23-461p-7-5p-4nb.</td>
<td>Power</td>
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<tr>
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<td>2009/04/21</td>
<td>Page 23: R460 change to 33 ohm:CS56 change to 10P for EMI.</td>
<td>Power</td>
<td></td>
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<tr>
<td></td>
<td>2009/04/22</td>
<td>Page 24: Remove R284,mount C347 for EMI.</td>
<td>Power</td>
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<tr>
<td>HW</td>
<td>2009/04/09</td>
<td>Page 25: Add PC162,PC163 for EMI.</td>
<td>Power</td>
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<tr>
<td></td>
<td>2009/04/10</td>
<td>Page 26: Add C359,C600 30P (+1.2V,DD dVSTTX) for EMI.</td>
<td>Power</td>
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<tr>
<td></td>
<td>2009/04/17</td>
<td>Page 27: R120,R112,R388,R116,R387 change to short pad 0402.</td>
<td>Power</td>
<td></td>
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<tr>
<td></td>
<td>2009/04/21</td>
<td>Page 28: U20 Footprint change to trf-10-1-4p-364b1.</td>
<td>Power</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2009/04/22</td>
<td>Page 29: U20 Footprint change to trf-10-1-4p-364b1.</td>
<td>Power</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2009/04/23</td>
<td>Page 30: Unmount C347 for EMI.</td>
<td>Power</td>
<td></td>
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<tr>
<td></td>
<td>2009/04/24</td>
<td>Page 31: Remove JP8,JP9</td>
<td>Power</td>
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<td></td>
<td>2009/04/25</td>
<td>Page 32: Add PC164,PC165</td>
<td>Power</td>
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<tr>
<td></td>
<td>2009/04/26</td>
<td>Page 33: Modify component from AO4496 to AO6402A.</td>
<td>Power</td>
<td></td>
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</tbody>
</table>

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- Page 11: Exchange Pin define for LVDS ON & PWM.
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- Page 32: Add PC164,PC165.
- Page 33: Modify component from AO4496 to AO6402A.
PLACE THEM CLOSE TO CPU WITHIN 1"
Follow AMD schematic, change DIMM2 SPD Address from 0xA4 to 0xA2
0318 Modify for AMD suggestion.
It must ready refore RSMRST#

OVERLAP COMMON PADS WHERE POSSIBLE FOR DUAL-OP RESISTORS.

REQUIRED STRAPS

POSSIBLE FOR DUAL-OP RESISTORS.

It must ready before RSMRST#

OVERLAP COMMON PADS WHERE POSSIBLE FOR DUAL-OP RESISTORS.

REQUIRED STRAPS

It must ready before RSMRST#
Close to HDMI Connector

DDC4 is 5V tolerance, the MOSFET level shifter no need.

4/22 Modify for AMD suggestion.
4/23 Modify HDMI detect circuit.

Change to short pad 4/22

HDMI connector

4/22 Modify for AMD suggestion.

HDMI HPD SENSE

2/2 Modify HDMI detect circuit.
4 IN 1 CARD READER

RT5159E

B-stage mount R432 for RT5159 in vista support auto-delink mode.

MODE_SEL Table (Please refer to Realtek Application Notes for more detail description)

<table>
<thead>
<tr>
<th>MODE_SEL</th>
<th>R432</th>
<th>C524</th>
<th>Power mode</th>
<th>SD_D1 Out from</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTS 5159E</td>
<td>NC</td>
<td>NC</td>
<td>Power Saving</td>
<td>Pin23</td>
</tr>
<tr>
<td>RTS 5159</td>
<td>0 ohm</td>
<td>NC</td>
<td>Power Saving</td>
<td>Pin23</td>
</tr>
</tbody>
</table>

Power Saving mode need install Realtek icon driver.
USB Hotfix KB941600 is also needed for Vista SP0 but SP1.
Vout = (PR150/PR149) * 0.75 + 0.75

FOR DDR II

\[ \frac{(10u*PR35)}{R_{dson} + \Delta I/2} = I_{ocp} \]

\[ R_{dson} = 3.8\text{~mOhm} \]

\[ OCP = 12.21 + 0.5A \]

\[ 4.6m*12 = R_{ILIM}*10uA \]

\[ R_{ILIM} = 5.62K \]

\[ L(ripple current) = (19-1.8)*1.8/(2.2u*400k*19) \]

\[ -1.03A \]

For RT8207 400KHZ

\[ OCP: 18A \]

REMOVE SHORT PAD 4/17

change to long pad 4/17

\[ PR136 \times 0.6 \]

\[ PR136 \times 0.6 \]

\[ PR135 \times 5.1 \]

\[ PR135 \times 5.1 \]

\[ PR147 \times 8.66 \]

\[ PR147 \times 8.66 \]

\[ PR148 \text{ short0603} \]

\[ 2R2uH-5.8mR \]
For EC control thermal protection (output 3.3V)