



4/14/04

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## **Errata: EDB9312**

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This errata contains the full text and drawings for two Engineering Change Notices (ECN) from Videon. These are Videon ECN # CM-0306-24 and CM-0403-05. Both ECNs describe modifications needed on the EDB9312 circuit board. These ECNs provide all details needed to update existing boards to the new modification level.

### **CONTACTING CIRRUS LOGIC SUPPORT**

For a complete listing of direct Distributor, Sales, and Sales Representative contacts, visit the Cirrus Logic website at <http://www.cirrus.com/>

 <h2 style="margin: 0;">Engineering Change Notice</h2>	ECN No. <span style="border: 1px solid black; padding: 2px 10px; display: inline-block;">CM-0306-24</span>
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Sheet 1 of 3

<b>Reason for Change:</b> (Engr.) <table style="width: 100%; border: none;"> <tr> <td><input type="checkbox"/> New Release</td> <td><input type="checkbox"/> Facilitate Production/Inspection</td> <td><input type="checkbox"/> Customer Directed</td> </tr> <tr> <td><input checked="" type="checkbox"/> Design Error</td> <td><input checked="" type="checkbox"/> Product Upgrade (no errors)</td> <td><input type="checkbox"/> Marketing Directed</td> </tr> <tr> <td><input type="checkbox"/> Drafting Error</td> <td><input type="checkbox"/> Schedule Improvement</td> <td><input type="checkbox"/> Vendor Requested</td> </tr> <tr> <td><input type="checkbox"/> Cost Improvement</td> <td><input type="checkbox"/> Other - Explain: <input style="width: 50px;" type="text"/></td> <td>PR/ECR # _____</td> </tr> </table>			<input type="checkbox"/> New Release	<input type="checkbox"/> Facilitate Production/Inspection	<input type="checkbox"/> Customer Directed	<input checked="" type="checkbox"/> Design Error	<input checked="" type="checkbox"/> Product Upgrade (no errors)	<input type="checkbox"/> Marketing Directed	<input type="checkbox"/> Drafting Error	<input type="checkbox"/> Schedule Improvement	<input type="checkbox"/> Vendor Requested	<input type="checkbox"/> Cost Improvement	<input type="checkbox"/> Other - Explain: <input style="width: 50px;" type="text"/>	PR/ECR # _____
<input type="checkbox"/> New Release	<input type="checkbox"/> Facilitate Production/Inspection	<input type="checkbox"/> Customer Directed												
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<input type="checkbox"/> Cost Improvement	<input type="checkbox"/> Other - Explain: <input style="width: 50px;" type="text"/>	PR/ECR # _____												
<b>Class of Change:</b> (Engr.) <input checked="" type="checkbox"/> II - Interchangeable <input type="checkbox"/> III - Documentation Only	<b>Priority:</b> (Engr.) <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Urgent	<b>Top Level Item Affected:</b> (Ex. HDTV PCI) (Engr.) <h3 style="margin: 0;">CIRRUS EDB9312 BOARD</h3>												

<b>Brief Description of Problem:</b> (Engr.) The 1.8v power supply sags/dips to an unacceptable voltage level under heavy processor load. The fuse and board layout account for a large enough voltage drop such that the minimum voltage requirements of the EP9312 are not met.
<b>Description of Change:</b> (Engr.) Recommended Solution- Replace the 1.8V regulator with an adjustable one to achieve 1.9V output. Use a sense wire from this voltage regulator's ADJ pin to sense the voltage at the load (i.e. the EP9312 device).  <u>Change required to solve the problem:</u> Remove 1.8V regulator VR2 from the board and also remove the heatsink from this regulator. Replace this regulator with an adjustable one Part # LT1764AET and install the heatsink on this device. Remove R384, R385 on the component side near the 1.8V regulator (VR2) and install a 2.4K ohm 0603 1% resistor at R385. Leave R384 unpopulated. Install a 1.4K ohm 1206 1% resistor to the regulator pin 5 on the bottomside. Remove C20 and C38 on the bottom side near the EP9312 device and replace with 100uF TC tantalum caps (Vishay Part # 595D107X9010C2T) or equivalent. Add 2 additional caps (100uF TC as above) between JP2-p2 and JP105-p26 Attach a wire (22 AWG) on bottomside of board from JP2-p1 to the other end of the 1.4K resistor placed on pin 5 of the new regulator and glue in place. Mark change on board at assembly revision block making the new rev 2A.  These changes are illustrated on page 2(bottom view) and page 3 (top view).

Items Affected (Engr.)	Y	N
Product Spec	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Schematics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Assembly Dwg.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Test Spec	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
BOM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Software	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Manuals	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Spare Parts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tooling	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>

Attachments (Engr.)	
Marked Document(s)	<input type="checkbox"/>
Marked Drawing(s)	<input checked="" type="checkbox"/>
PRECR	<input type="checkbox"/>
Other:	<input type="checkbox"/>

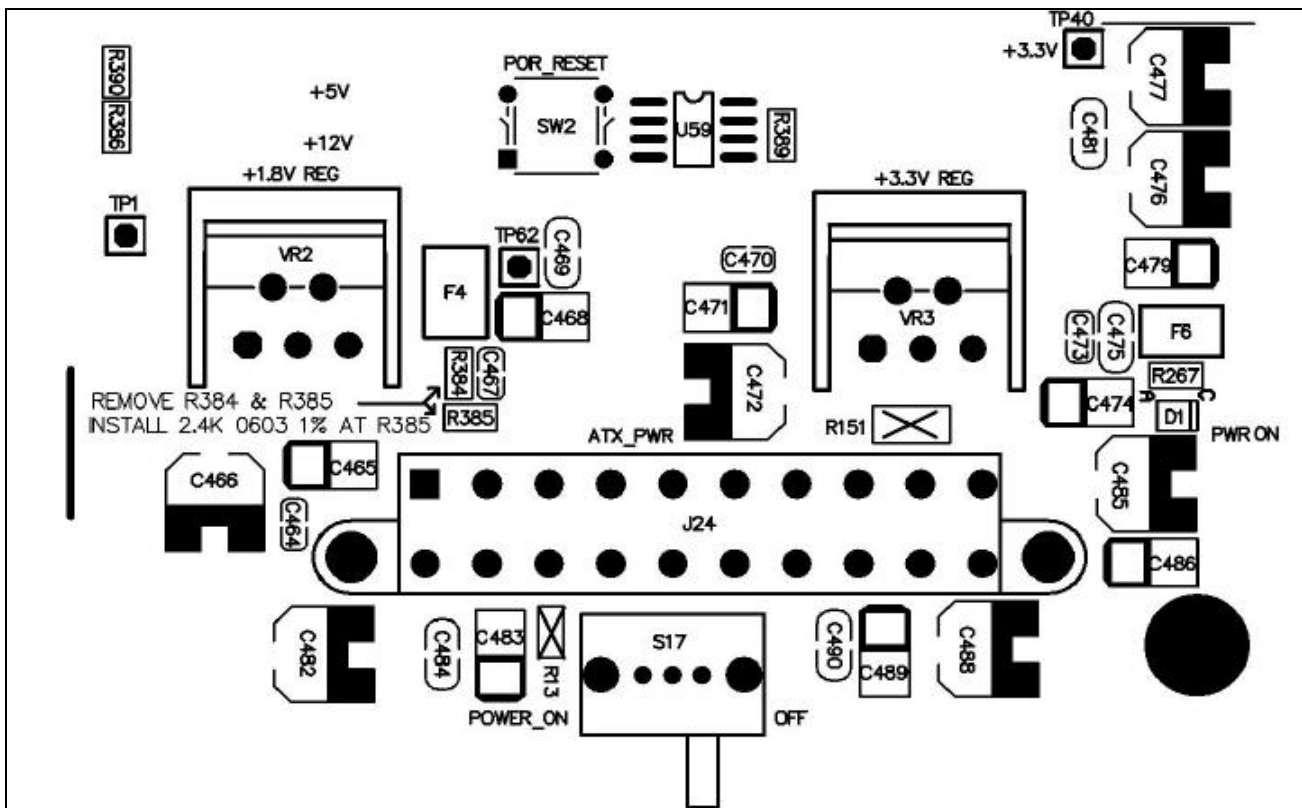
Charge Numbers (PM)	
<b>Engineering:</b>	
<b>Manufacturing:</b>	
<b>Materials &amp; Services:</b>	

Management Authorizations:	
Engineering: Paul Brown	Date: _____
Manufacturing: CR Bargo	Date: _____
Quality:	Date: _____
Purchasing:	Date: _____
Marketing/Programs:	Date: _____



	<h2 style="text-align: center;">Engineering Change Notice</h2>	ECN No.	CM-0306-24
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Topside view:



 <h2 style="margin: 0;">Engineering Change Notice</h2>	ECN No. <span style="border: 1px solid black; padding: 2px 10px; display: inline-block;">CM-0403-05</span>
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Sheet 1 of 2

<b>Reason for Change:</b> (Engr.)		
<input type="checkbox"/> New Release <input checked="" type="checkbox"/> Design Error <input type="checkbox"/> Drafting Error <input type="checkbox"/> Cost Improvement	<input type="checkbox"/> Facilitate Production/Inspection <input checked="" type="checkbox"/> Product Upgrade (no errors) <input type="checkbox"/> Schedule Improvement <input type="checkbox"/> Other - Explain: <input style="width: 30px;" type="text"/>	<input type="checkbox"/> Customer Directed <input type="checkbox"/> Marketing Directed <input type="checkbox"/> Vendor Requested PR/ECR # _____

<b>Class of Change:</b> (Engr.) <input checked="" type="checkbox"/> II - Interchangeable <input type="checkbox"/> III - Documentation Only	<b>Priority:</b> (Engr.) <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Urgent	<b>Top Level Item Affected:</b> (Ex. HDTV PCI) (Engr.) CIRRUS EDB9312 BOARD
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<b>Brief Description of Problem:</b> (Engr.) The SDCLK signal going to buffer U7 needs to be cut. The cut improves the quality of the clock signal going to the SDRAM devices. One side affect is that the SDCLK will no longer be available on the Mictor connectors.
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<b>Description of Change:</b> (Engr.) Refer to the drawing provided in this ECN. Use a sharp Exacto knife and cut the trace indicated.  These changes are illustrated on page 2 (top view).
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Items Affected (Engr.)	Y	N
Product Spec	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Schematics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Assembly Dwg.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Test Spec	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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Software	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Manuals	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Spare Parts	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tooling	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Attachments (Engr.)
Marked Document(s) <input type="checkbox"/>
Marked Drawing(s) <input checked="" type="checkbox"/>
PR/ECR <input type="checkbox"/>
Other: <input type="checkbox"/>

Charge Numbers (PM)	
<b>Engineering:</b>	
<b>Manufacturing:</b>	
<b>Materials &amp; Services:</b>	

Management Authorizations:	
Engineering: Paul Brown /Signature on File	Date: March 5, 2004
Manufacturing: CR Bargo /Signature on File	Date: March 5, 2004
Quality:	Date:
Purchasing:	Date:
Marketing/Programs:	Date:



# Engineering Change Notice

ECN No.

CM-0403-05

EDB9312 board modification.

Cut the trace in the blue circle. It is on the top layer near R14.

