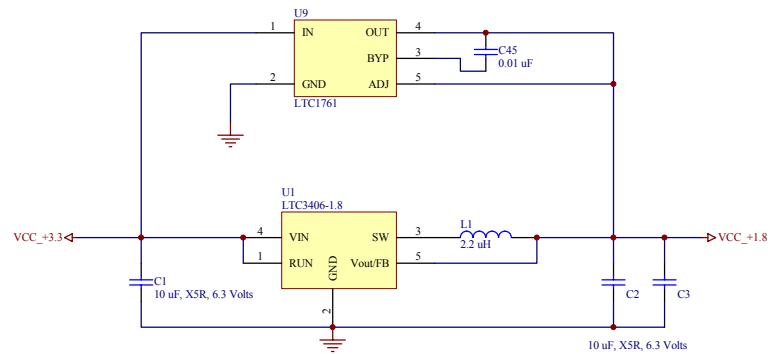


This linear regulator is used to assure that the +1.8v rail quickly passes the 0.5v threshold at powerup, thus minimizing power sequencing issues and making sure that the DSP does not draw excessive power as the power rails ramp up. This linear regulator is set with $V_{out}=1.22v$, so it is effectively shut off once the switching regulator comes up. Further testing and characterization of the DSP is required to determine if this linear regulator is in fact required.



This is a simple switching regulator. It produces 1.8V at >500 mA at about 90% efficiency. A simple low drop out linear regulator would be a cheaper alternative at the expense of power. A linear regulator would dissipate about 0.75 watts max. This switching regulator dissipates about 0.10 watts max.

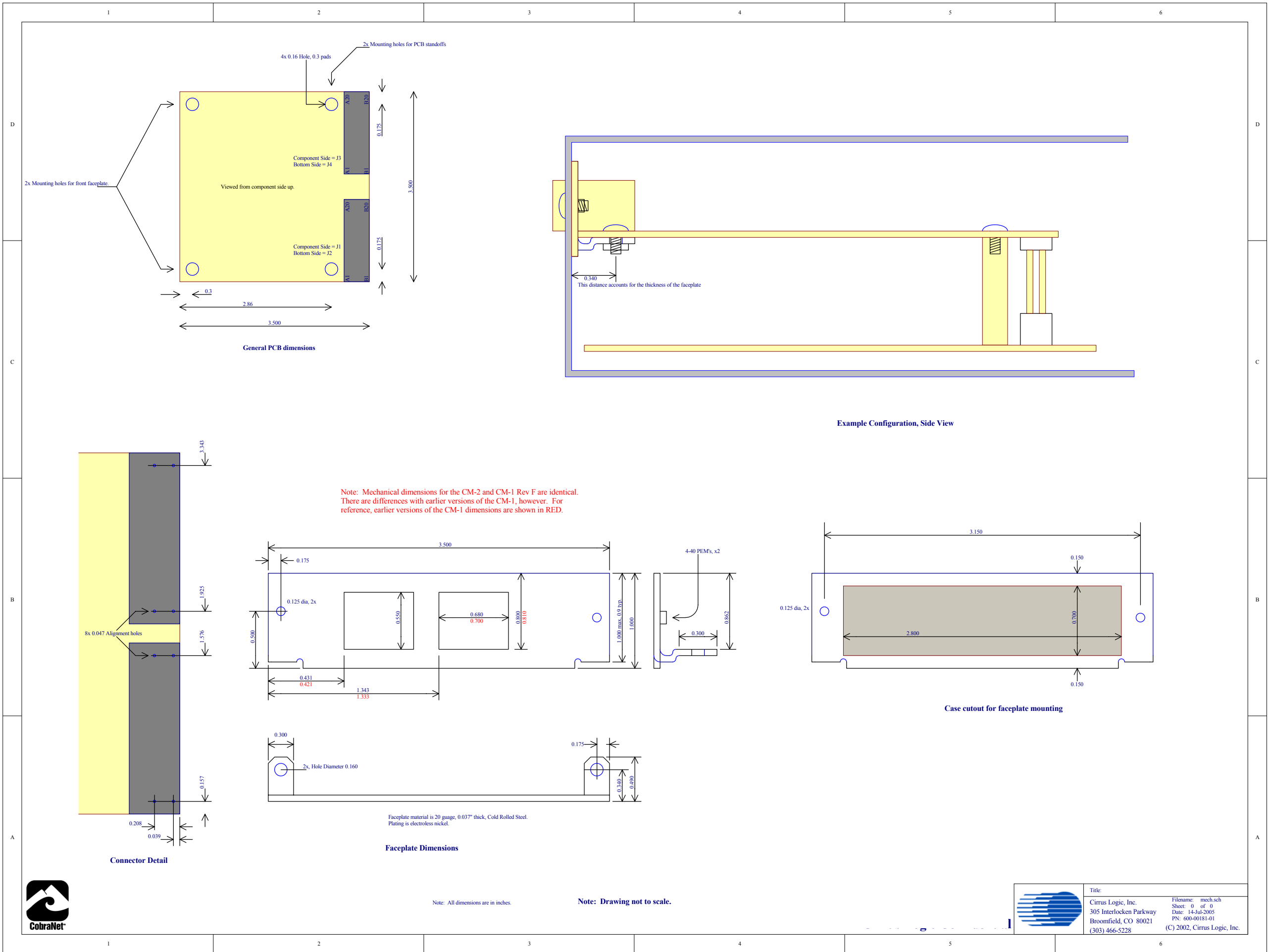
Revision F

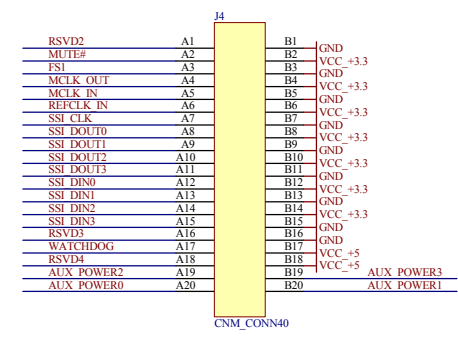
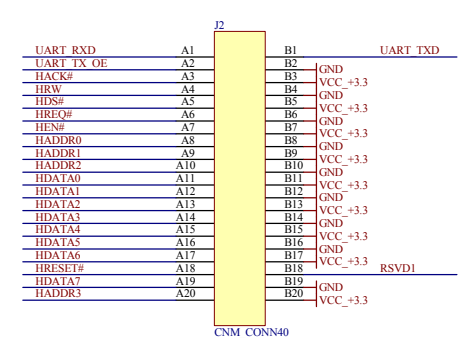
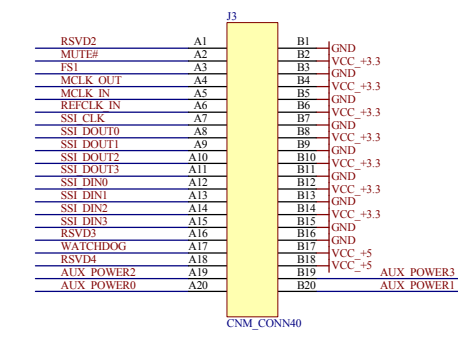
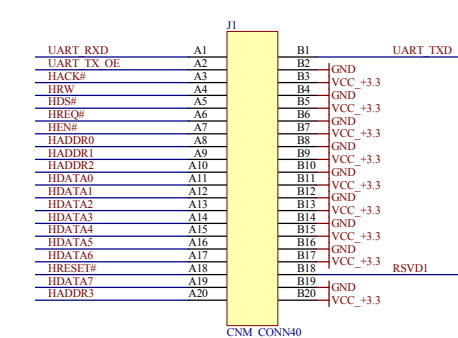
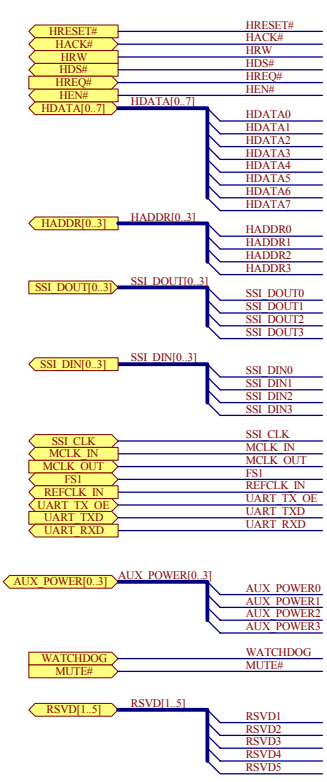


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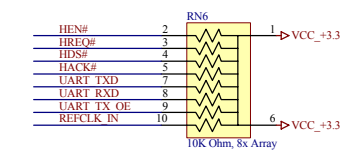
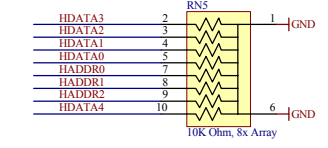
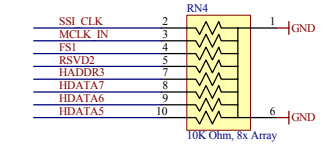
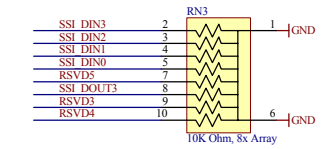


Title: **CM-2 Main Page**
 Cirrus Logic, Inc.
 305 Interlocken Parkway
 Broomfield, CO 80021
 (303) 466-5228
 Filename: cm2_main.sch
 Sheet: 1 of 7
 Date: 14-Jul-2005
 PN: 600-00181-01
 (C) 2002, Cirrus Logic, Inc.

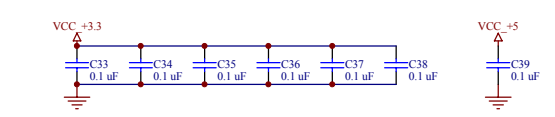
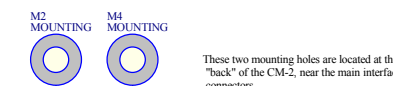
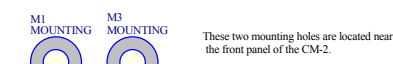




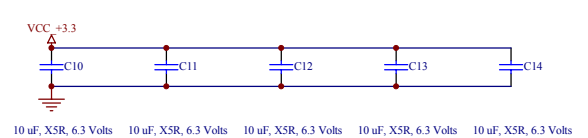
Note: Pull-ups/downs on SSI_DOUT[0..4] are located on the DSP schematic page.



These pullups/downs are used to assure a valid logic level if a signal is tri-stated or not connected. In some situations, these may not be required.



AC Signal Return Path Caps
Note: Similar AC signal return path caps must be included on the motherboard near the connector.



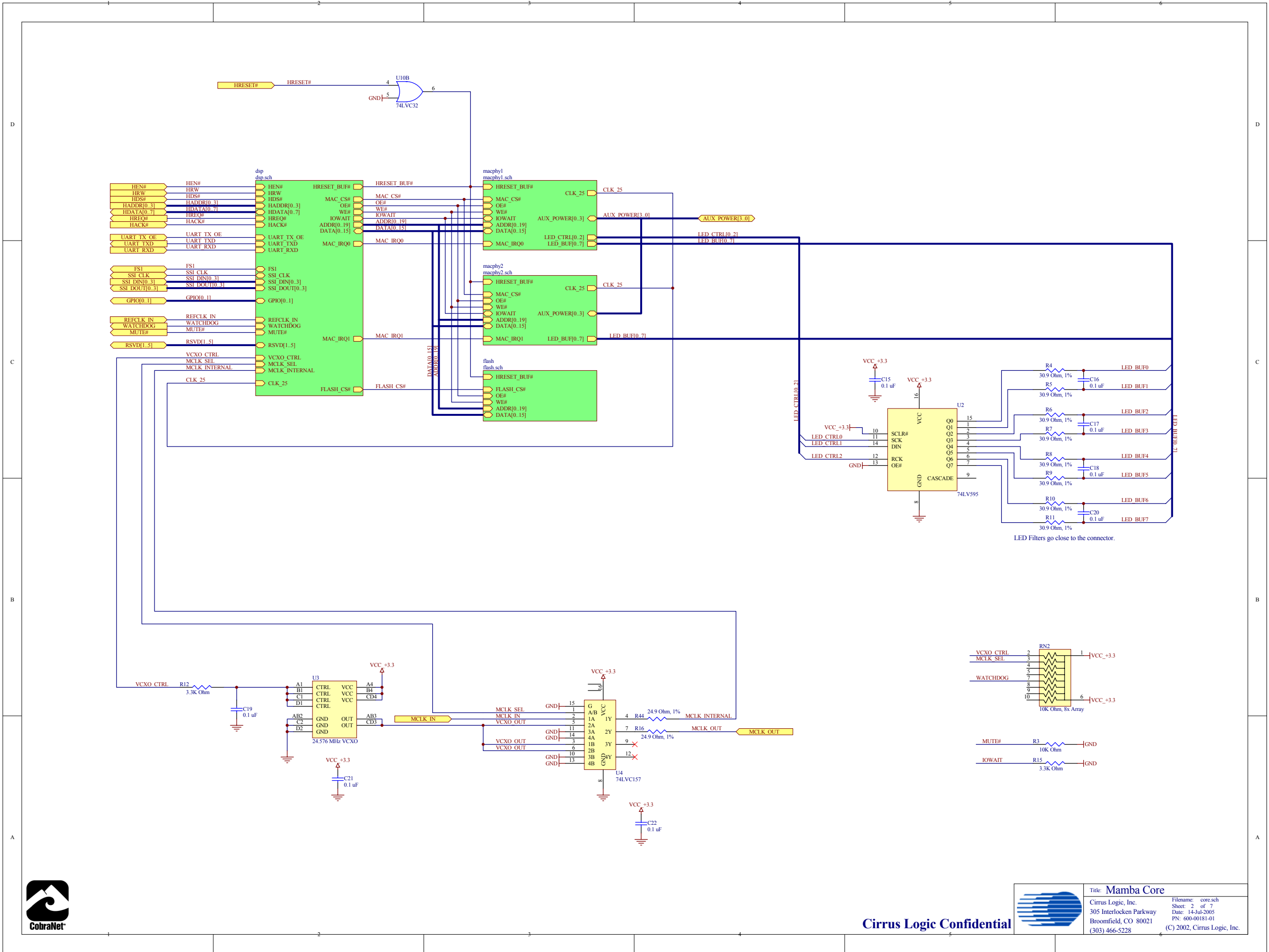
Power Decoupling Caps



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Title: Host Interface Connector
 Cirrus Logic, Inc.
 305 Interlocken Parkway
 Broomfield, CO 80021
 (303) 466-5228

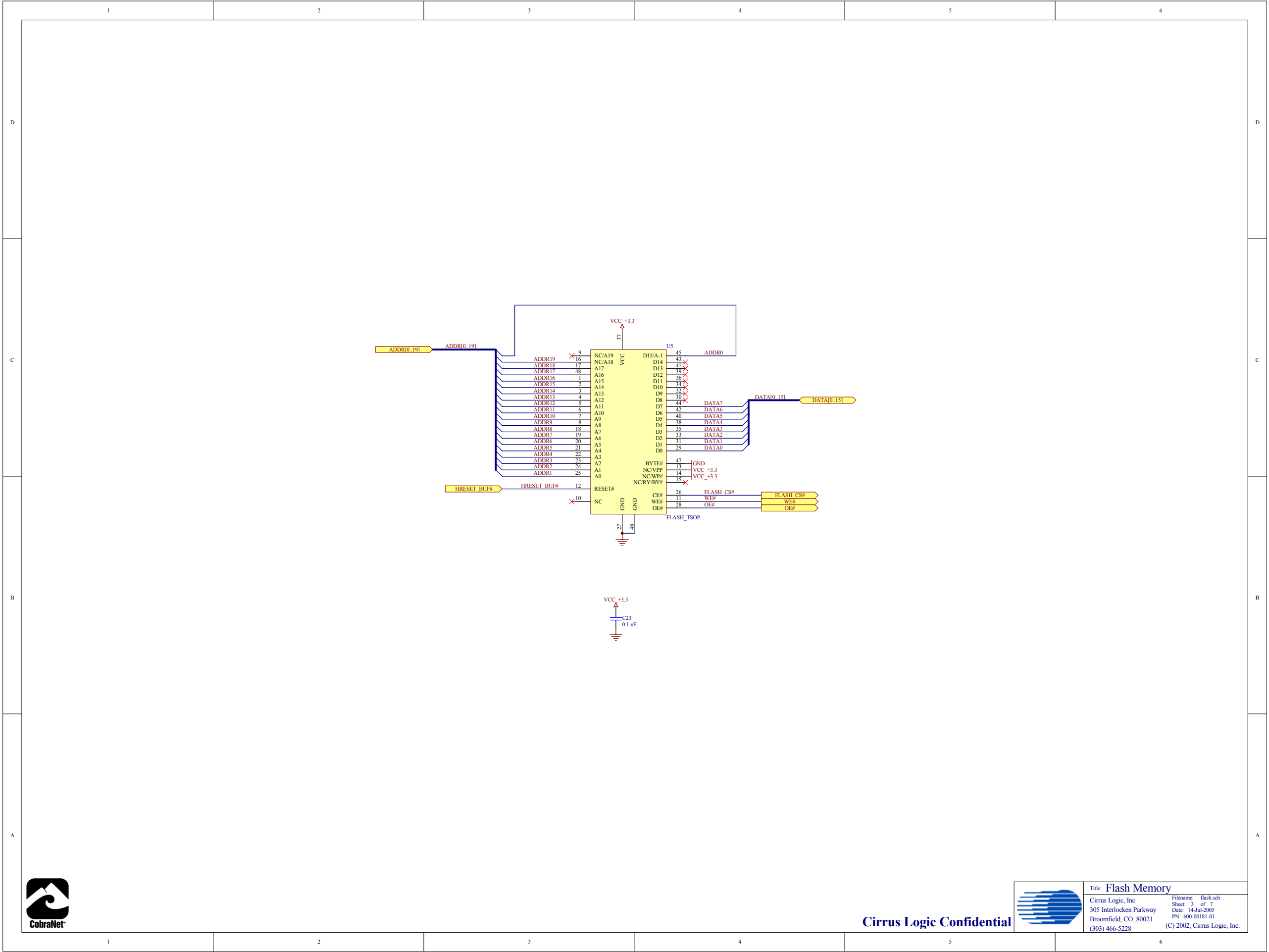
Filename: connector.sch
 Sheet: 7 of 7
 Date: 14-Jul-2005
 PN: 600-00181-01
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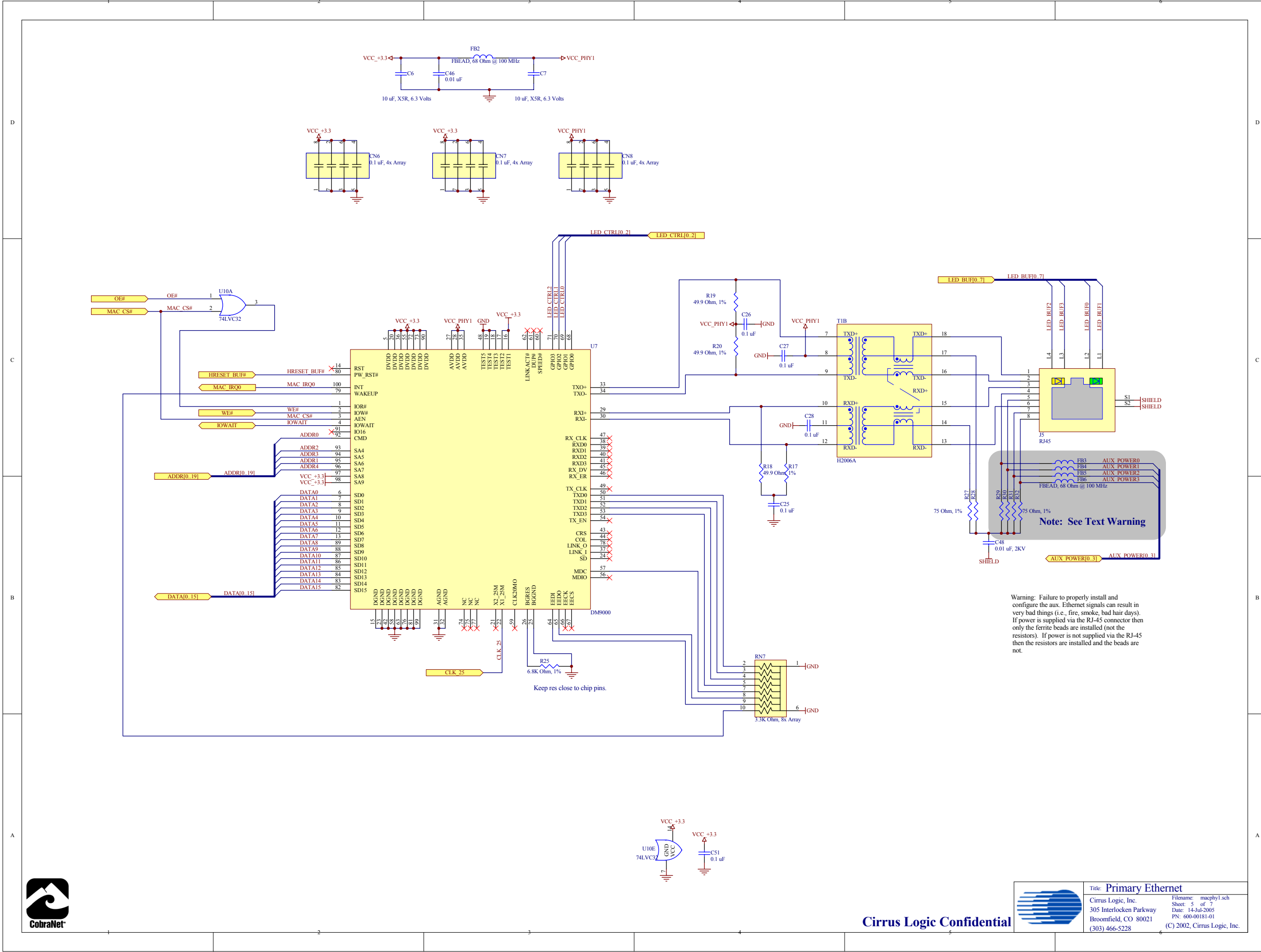


Title: Mamba Core
 Cirrus Logic, Inc.
 305 Interlocken Parkway
 Broomfield, CO 80021
 (303) 466-5228
 Filename: core.sch
 Sheet: 2 of 7
 Date: 14-Jul-2005
 PN: 600-00181-01
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	Title: Flash Memory	
	Cirrus Logic, Inc.	Filename: flash.sch
	305 Interlocken Parkway	Sheet: 3 of 7
	Broomfield, CO 80021	Date: 14-Jul-2005
	(303) 466-5228	PN: 600-00181-01
		(C) 2002, Cirrus Logic, Inc.

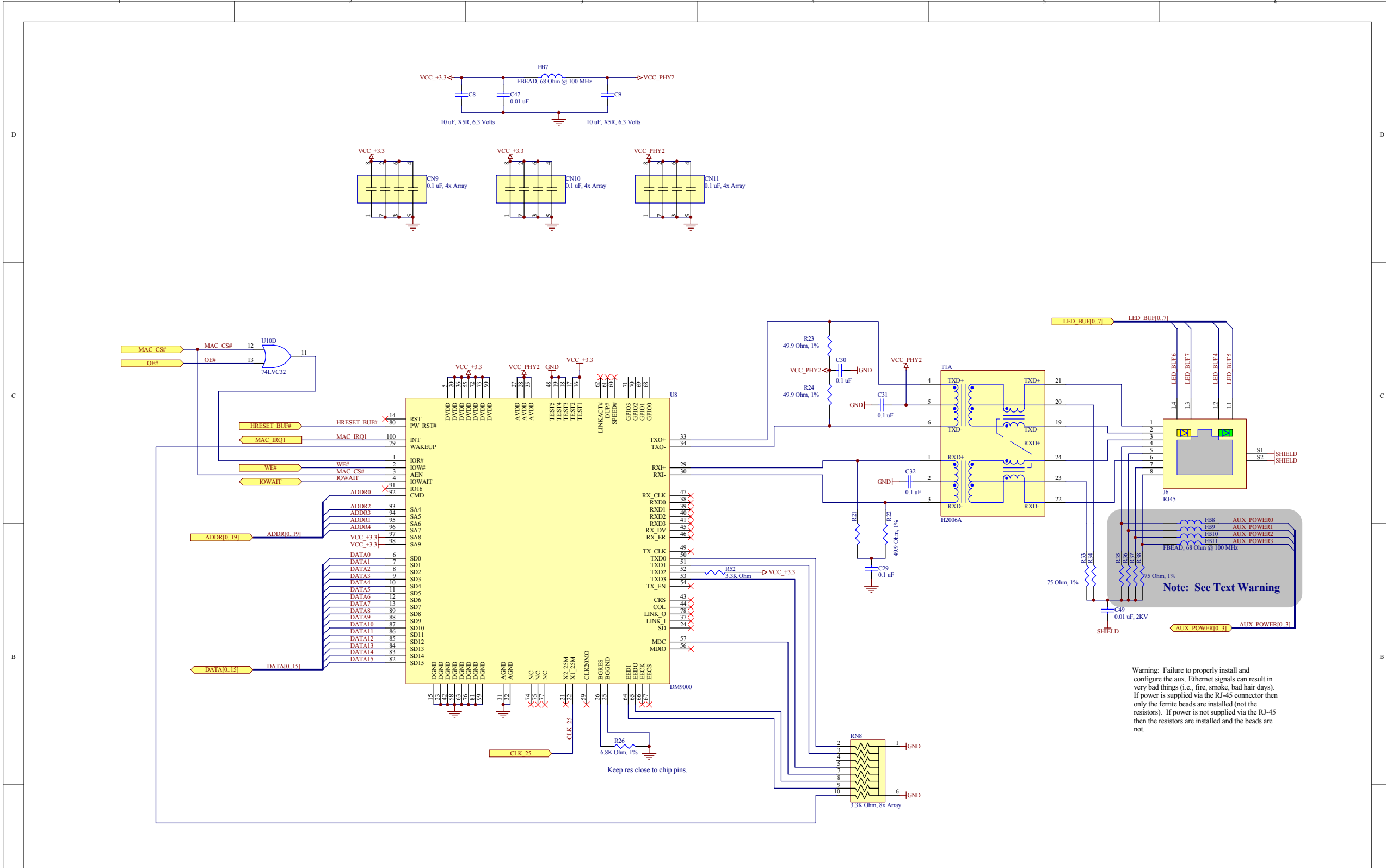


Warning: Failure to properly install and configure the aux. Ethernet signals can result in very bad things (i.e., fire, smoke, bad hair days). If power is supplied via the RJ-45 connector then only the ferrite beads are installed (not the resistors). If power is not supplied via the RJ-45 then the resistors are installed and the beads are not.



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	Title: Primary Ethernet	
	Cirrus Logic, Inc.	
	305 Interlocken Parkway	
	Broomfield, CO 80021	
Filename: mxcphy1.sch Sheet: 5 of 7 Date: 14-Jul-2005 PN: 600-00181-01 (303) 466-5228		(C) 2002, Cirrus Logic, Inc.

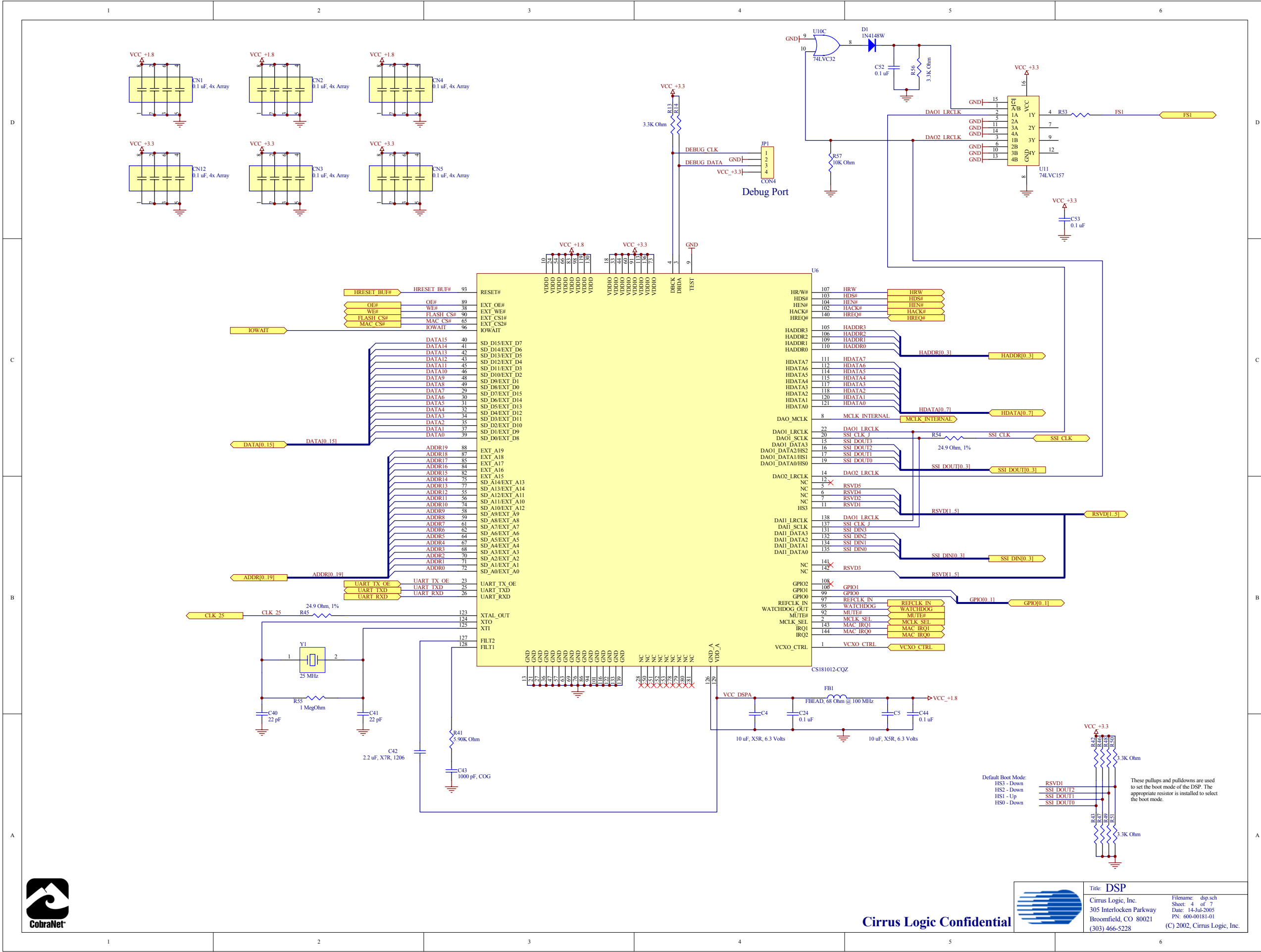


The secondary Ethernet MAC and connector are optional.
 If it is not required then all parts on this page can be depopulated
 (or removed entirely from a new design based on this circuit).



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	Title: Secondary Ethernet	
	Cirrus Logic, Inc.	
	305 Interlocken Parkway	
	Broomfield, CO 80021	
	(303) 466-5228	
Filename: mxcphy2.sch	Sheet: 6 of 7	Date: 14-Jul-2005
PN: 600-00181-01	(C) 2002, Cirrus Logic, Inc.	



Default Boot Mode:
 HS3 - Down
 HS2 - Down
 HS1 - Up
 HS0 - Down

These pullups and pulldowns are used to set the boot mode of the DSP. The appropriate resistor is installed to select the boot mode.



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Title: DSP

Cirrus Logic, Inc.
 305 Interlocken Parkway
 Broomfield, CO 80021
 (303) 466-5228

Filename: dsp.sch
 Sheet: 4 of 7
 Date: 14-Jul-2005
 PN: 600-00181-01
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