



AMD Geode™ GX SOM-144 Base Board Lite

This schematic is for a simplified base board to be used with the GX SOM-144 CPU Module Board. Features include 2 USB ports; a VGA port; AC97 audio CODEC with line-in, line-out, microphone; IDE port, ethernet controller and port; and power button. This schematic is intended only as a reference. It was neither built or tested.

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Revision History:

AMD Geode™ GX SOM-144 Base Board Lite REV A Date: 04/22/2005

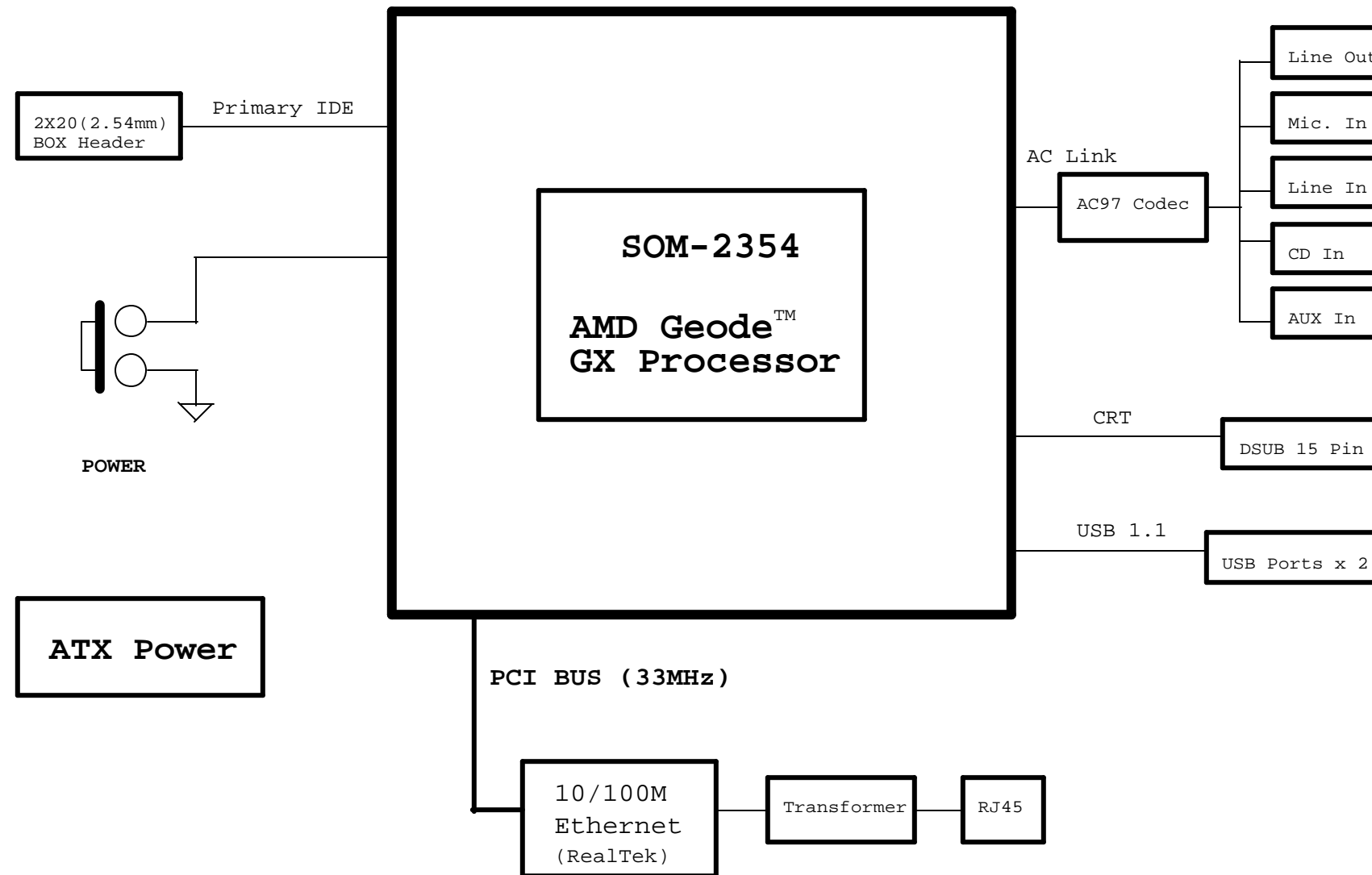
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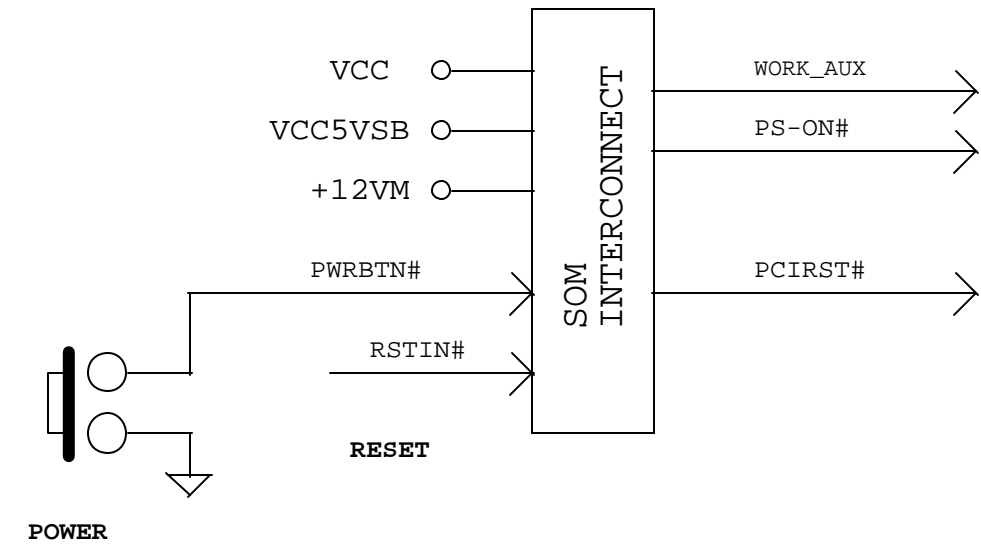
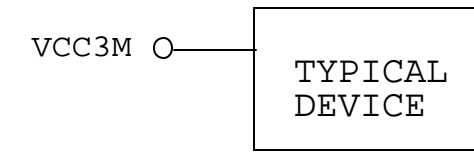
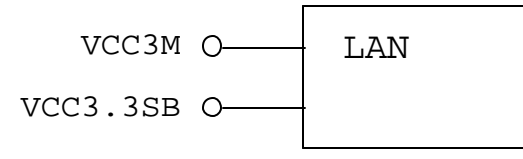
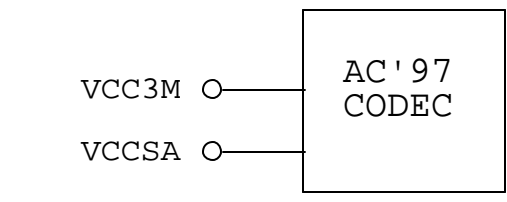
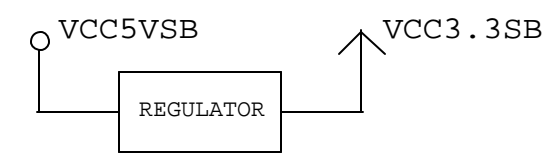
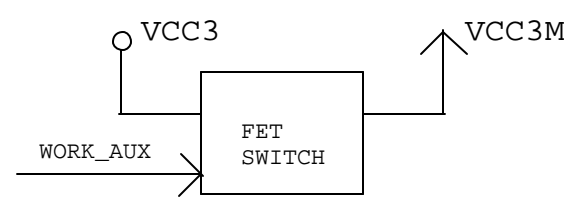
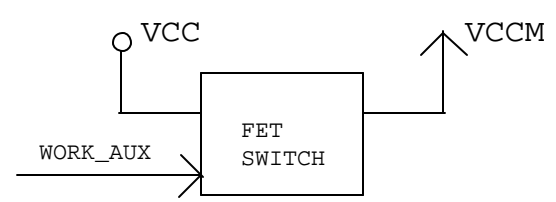
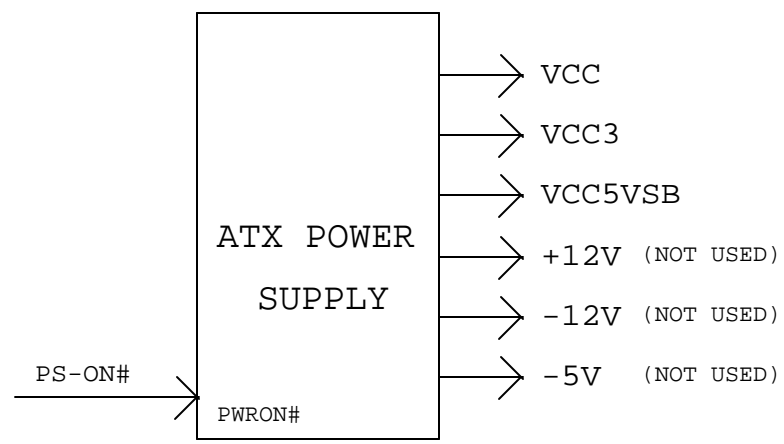
GX SOM-144 System Block Diagram



PCI Resource Assignments			
Device	IDSEL	Interrupt	REQ/GNT
LAN	AD23	INT#D	0

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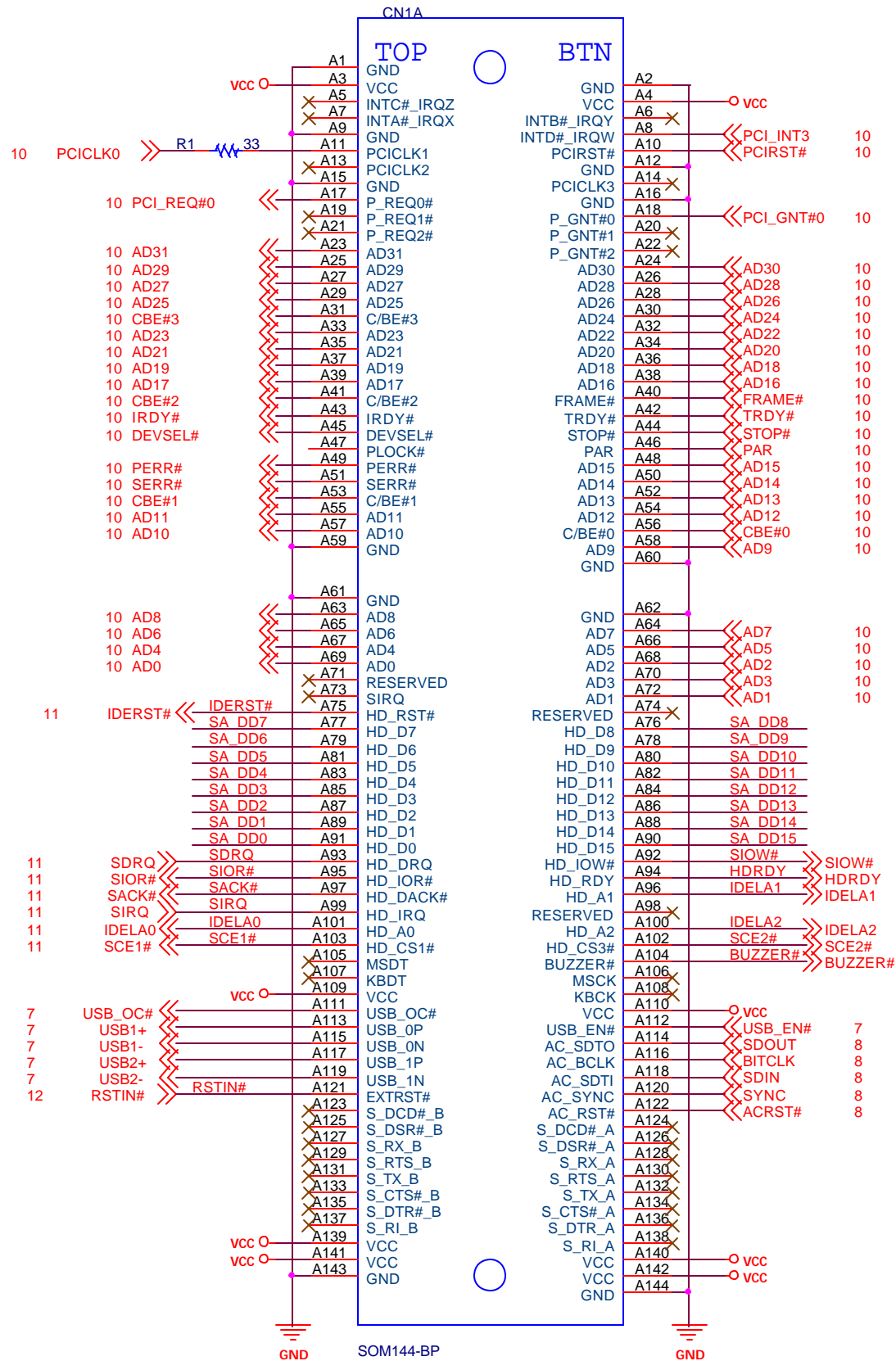
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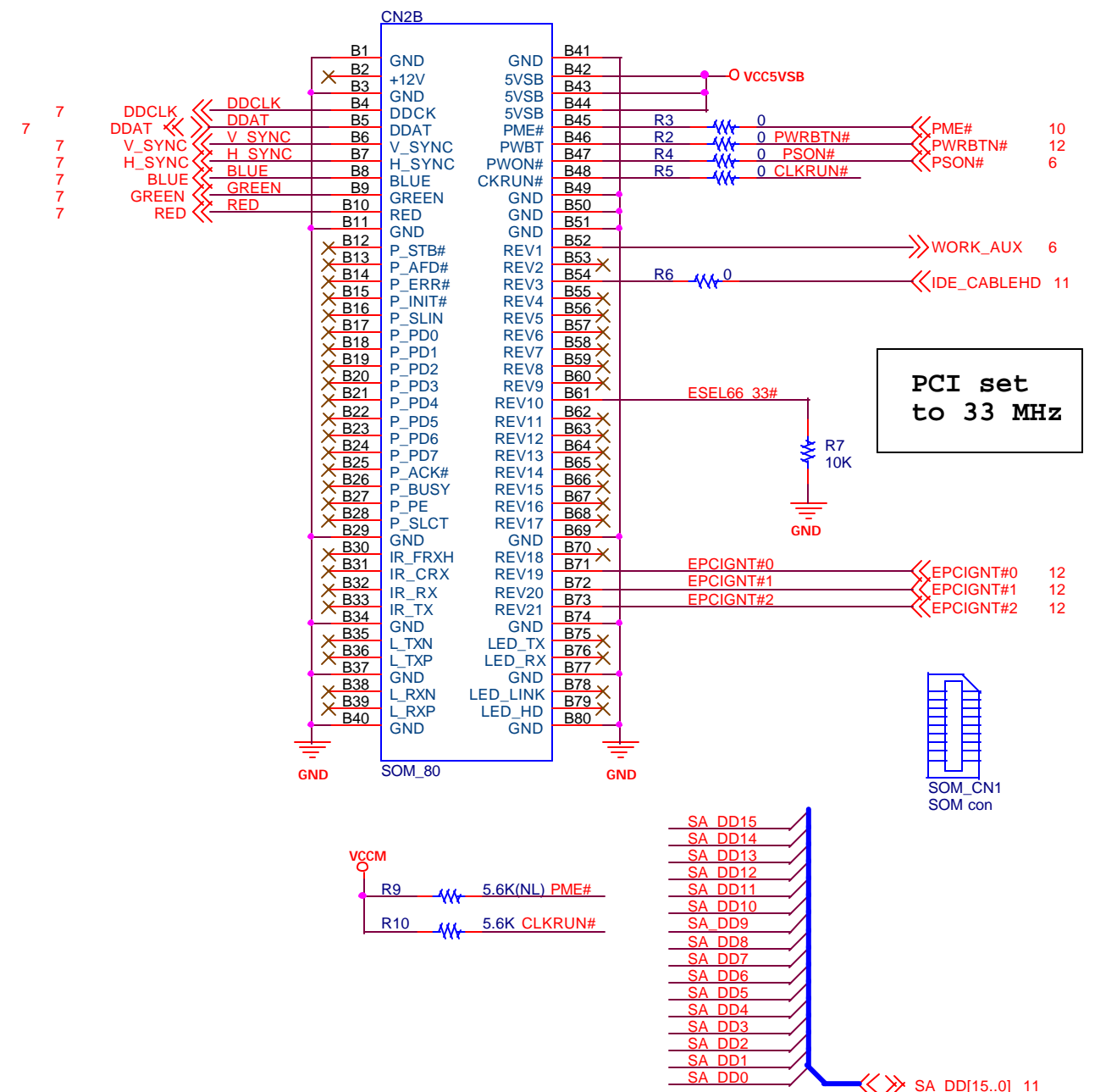
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SOM 144PIN




SOM 80PIN



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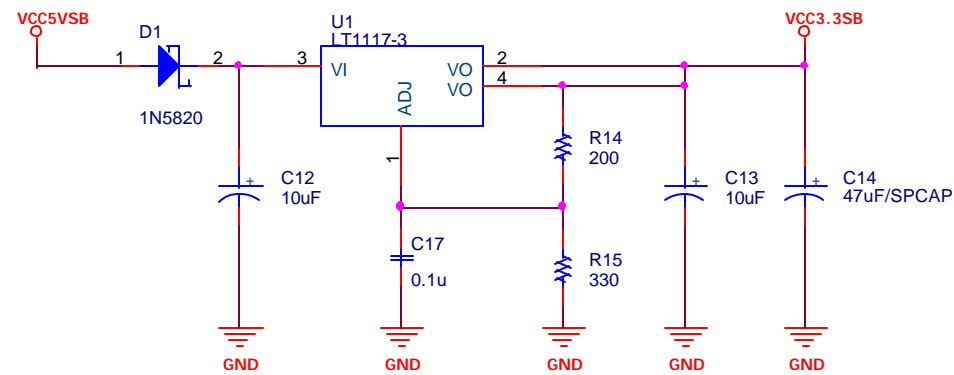
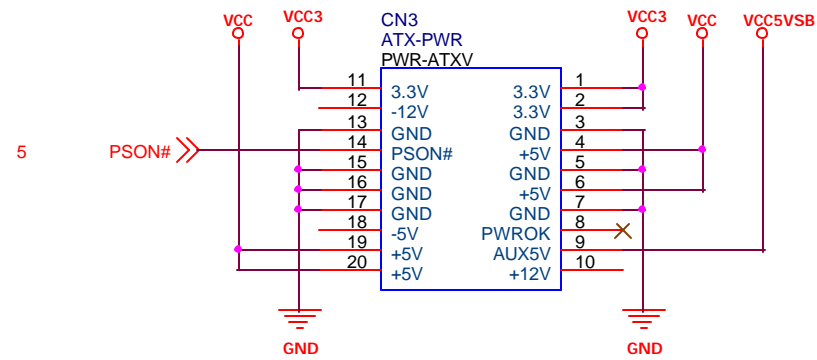
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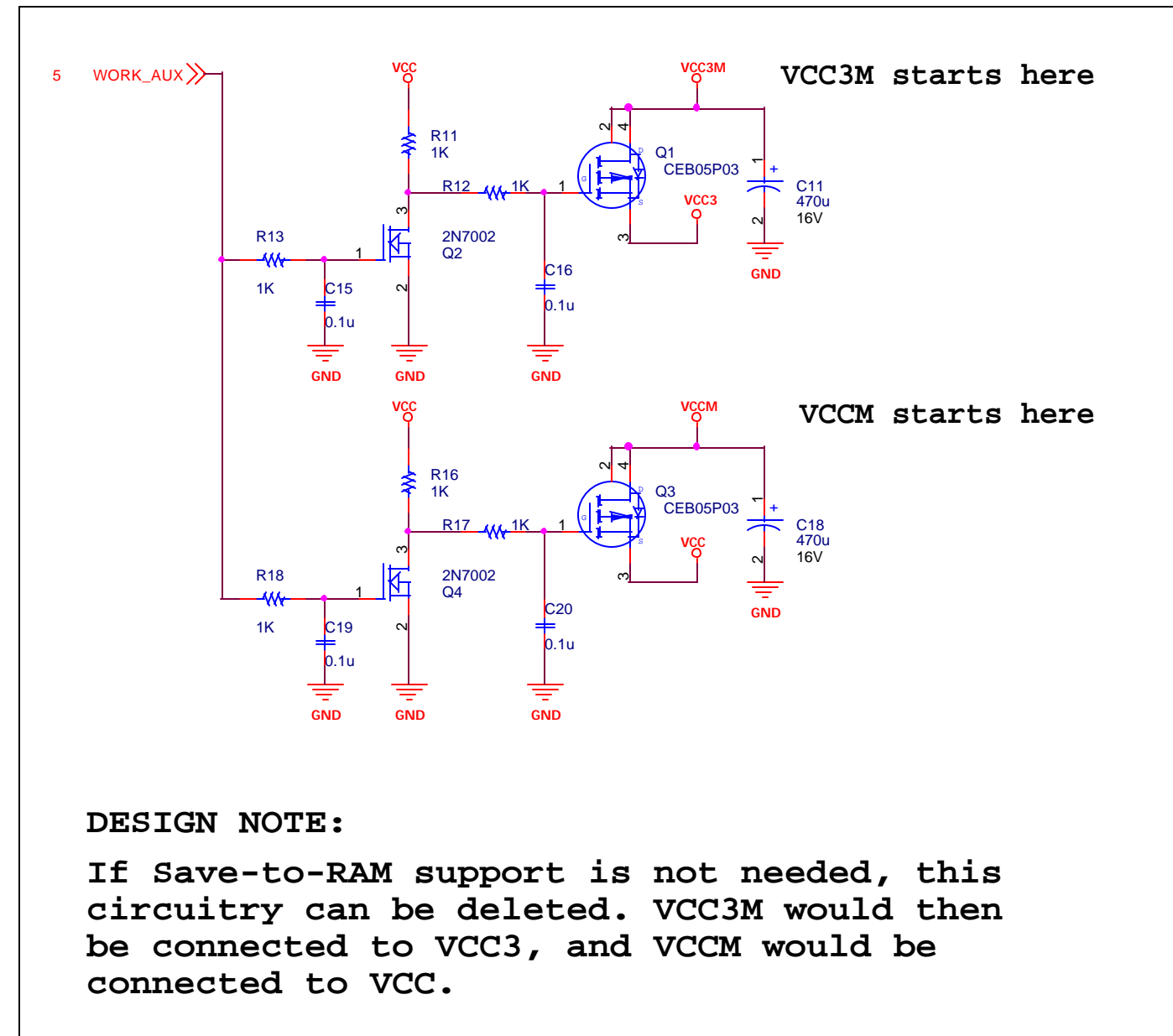
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ATX POWER



DESIGN NOTE:

The ATX supply can be replaced by an appropriate power supply.



DESIGN NOTE:

If Save-to-RAM support is not needed, this circuitry can be deleted. VCC3M would then be connected to VCC3, and VCCM would be connected to VCC.

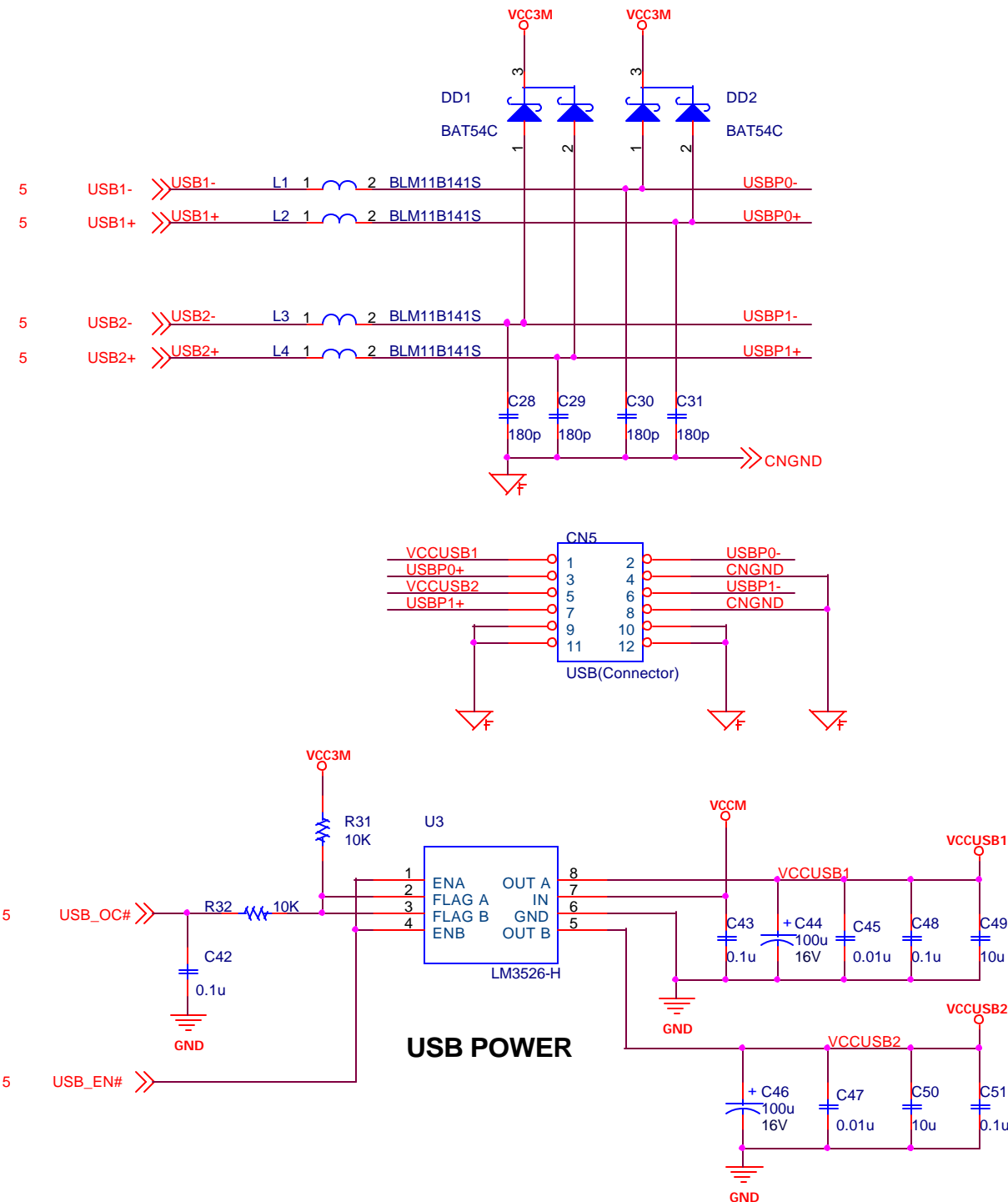
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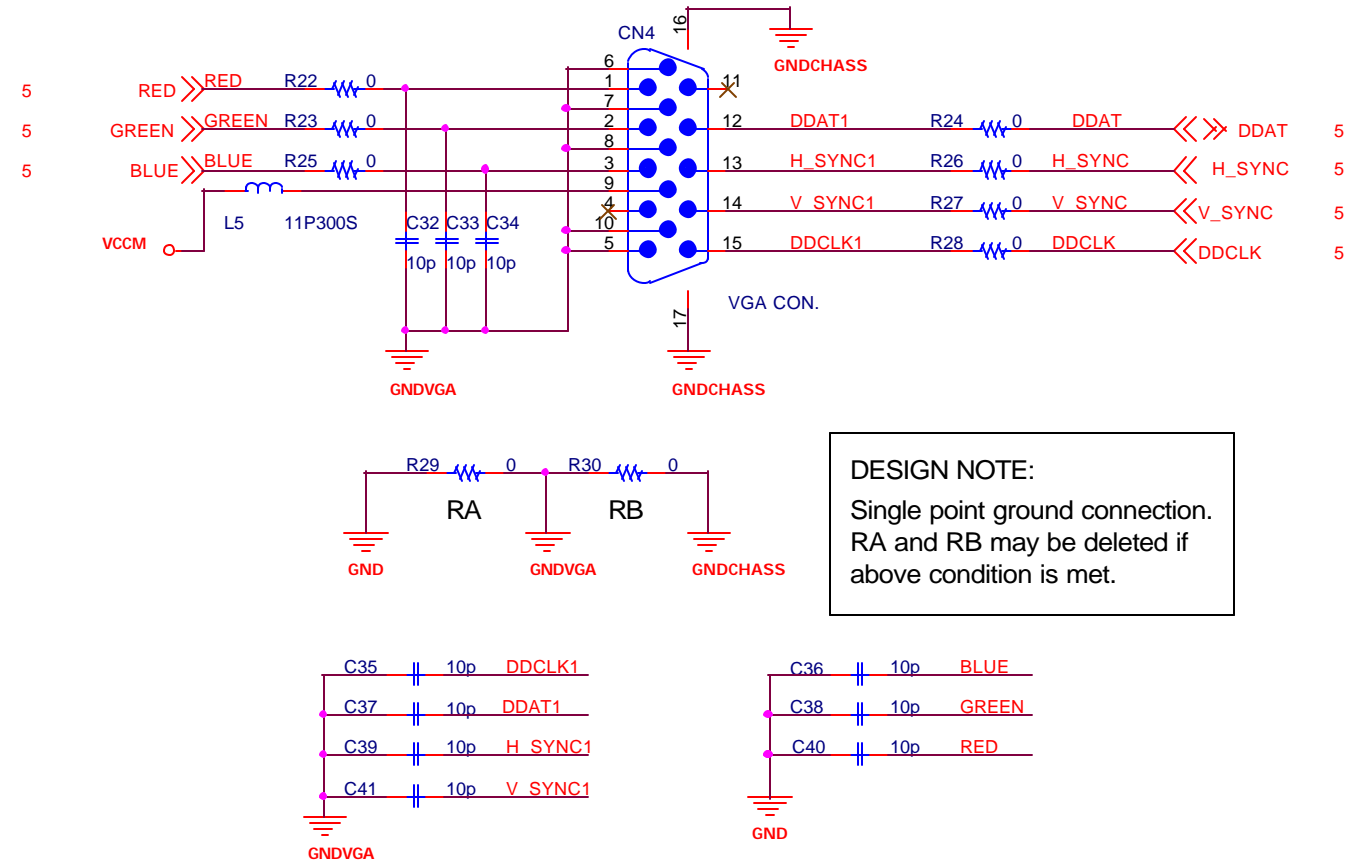
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USB CONNECTOR



DESIGN NOTE:
 Only two ports are implemented in this design. The SOM module can support up to four USB ports.

VGA



DESIGN NOTE:
 Single point ground connection. RA and RB may be deleted if above condition is met.

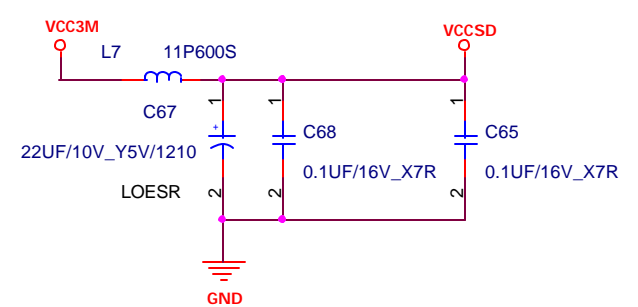
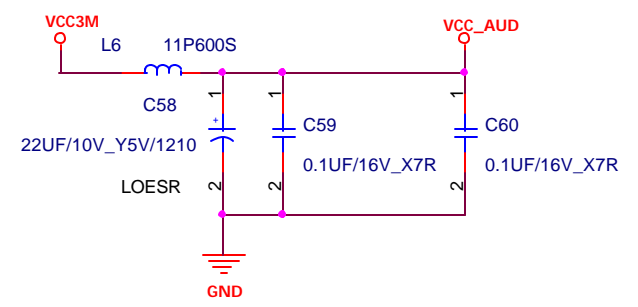
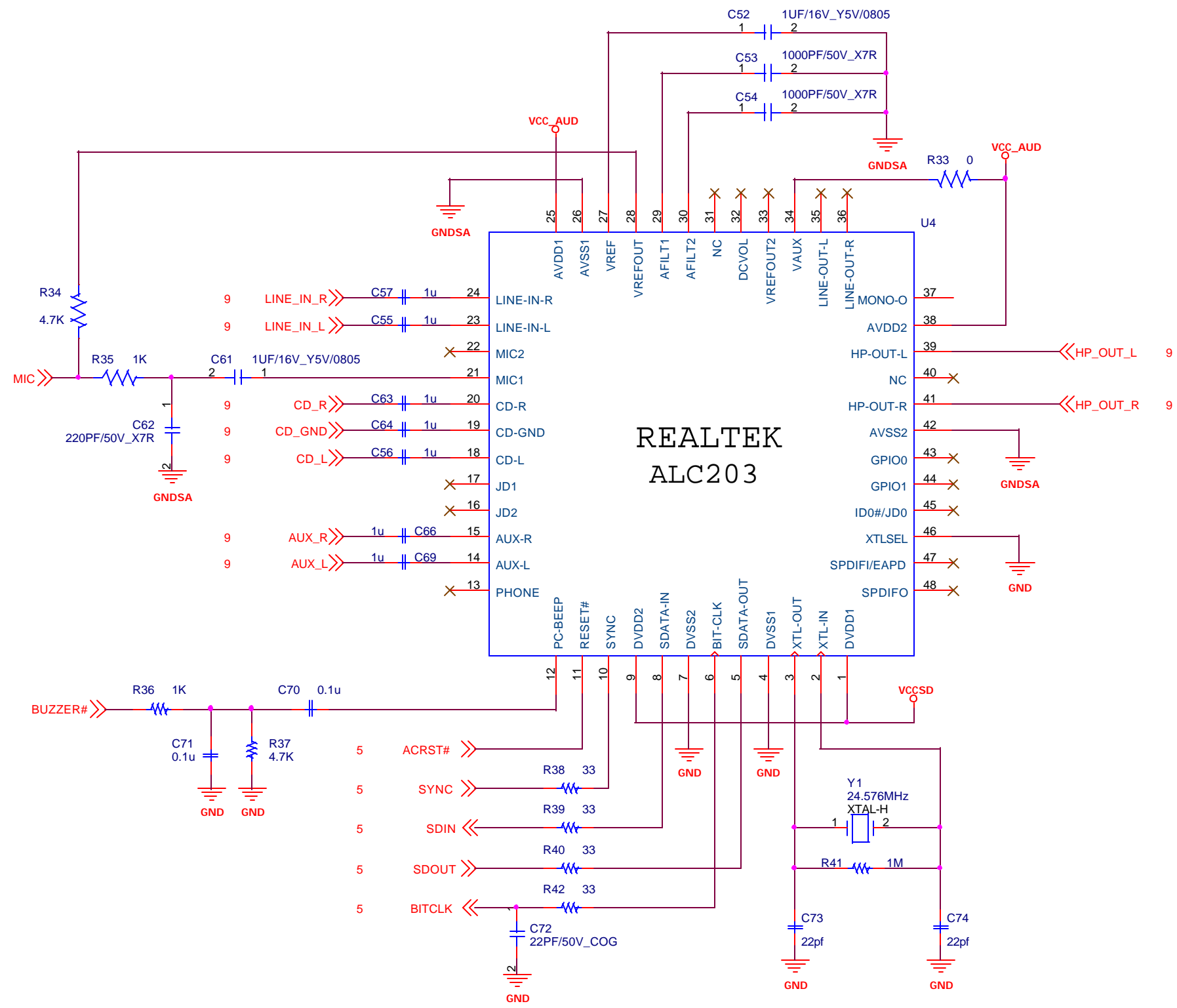
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DESIGN NOTE:
Tied at one point only
under or near the codec

DESIGN NOTE:
ALC203 E version and later version
will not support secondary mode due
to pin-45 is re-defined as Jack-Detect
pin 0 (JD0) for auto MIC jack sensing.

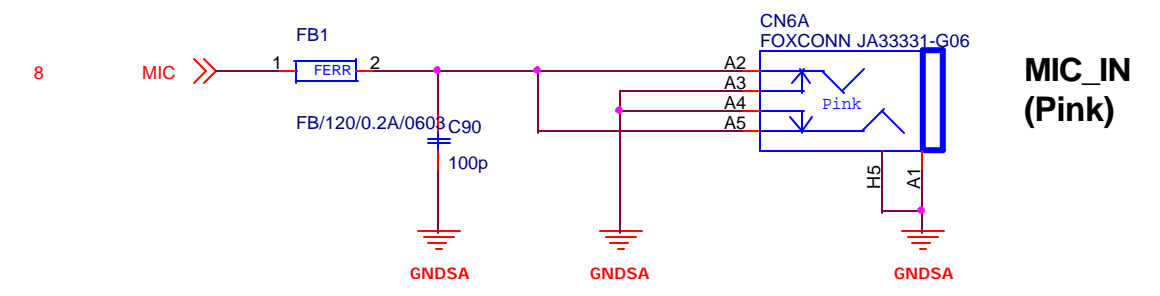
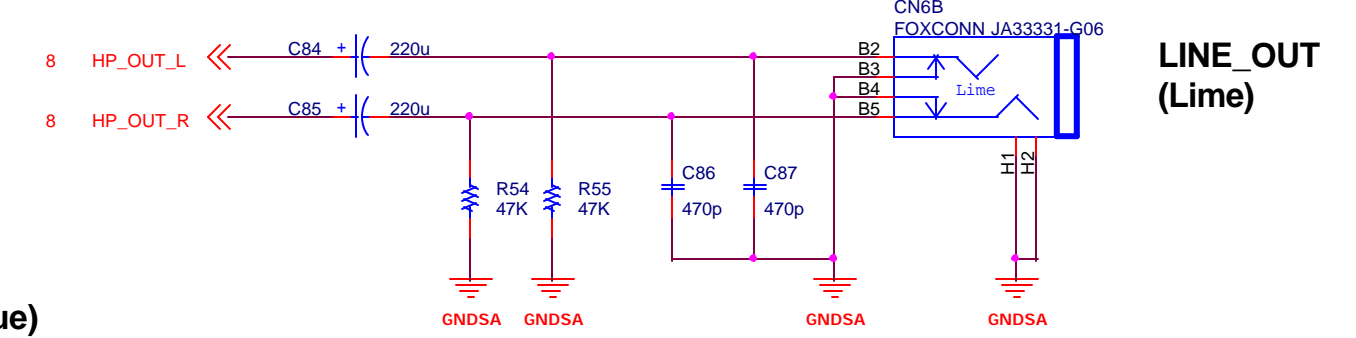
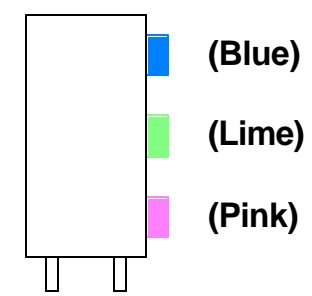
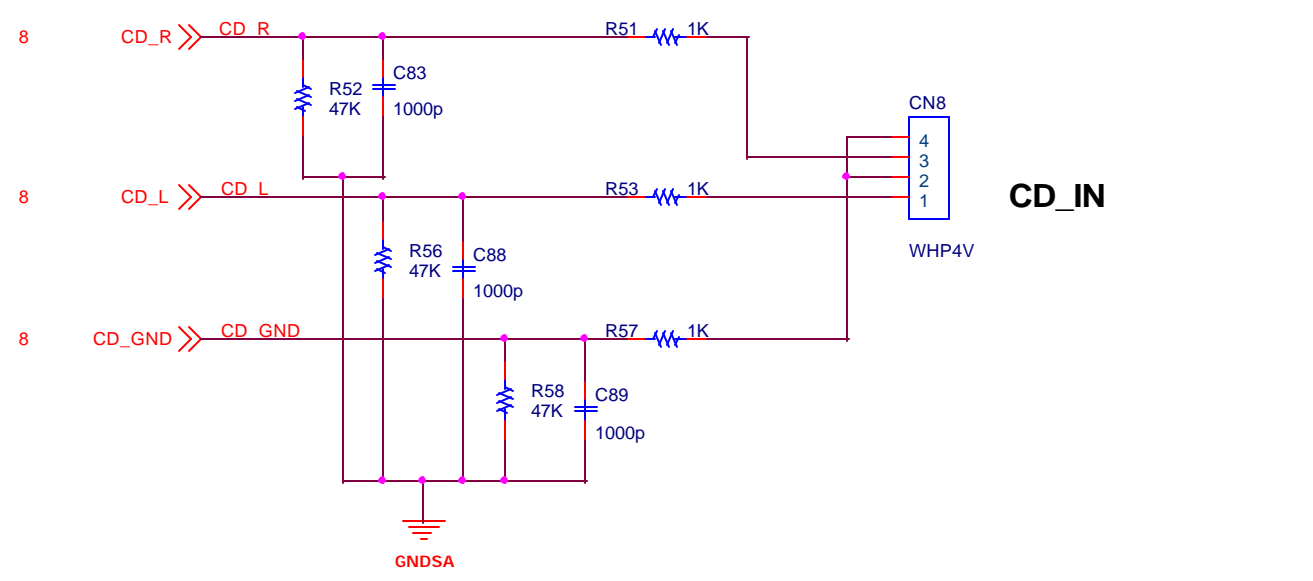
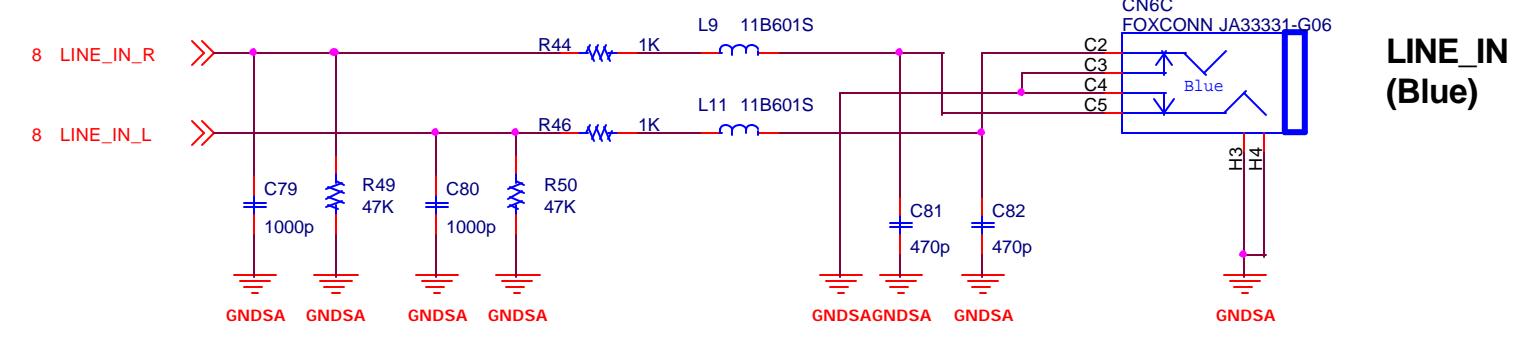
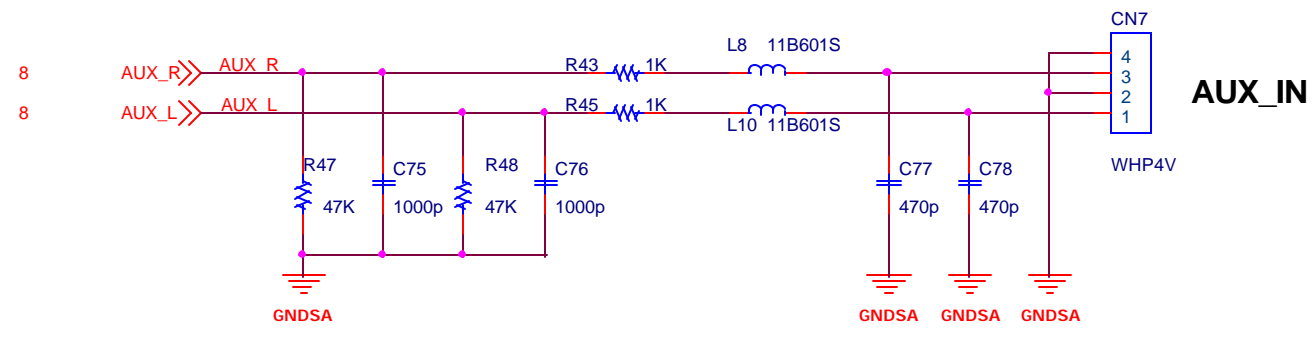
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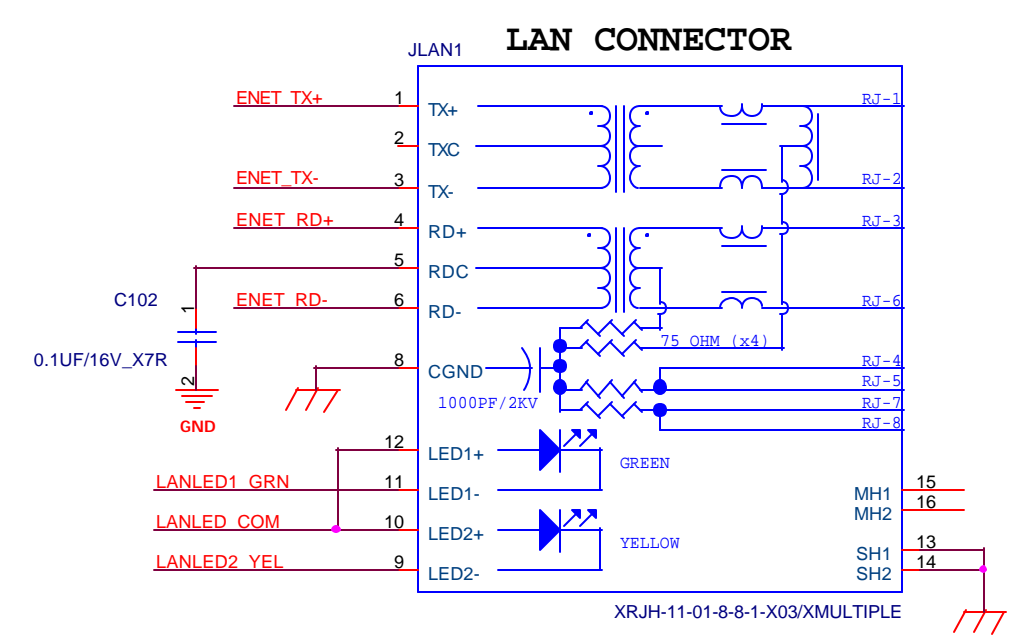
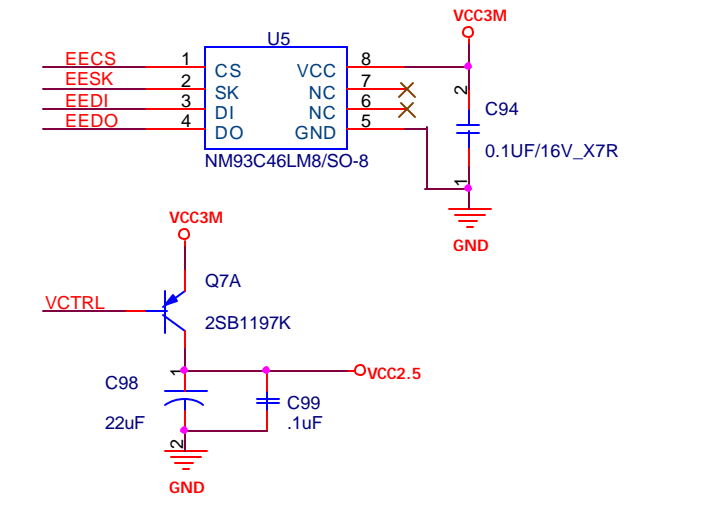
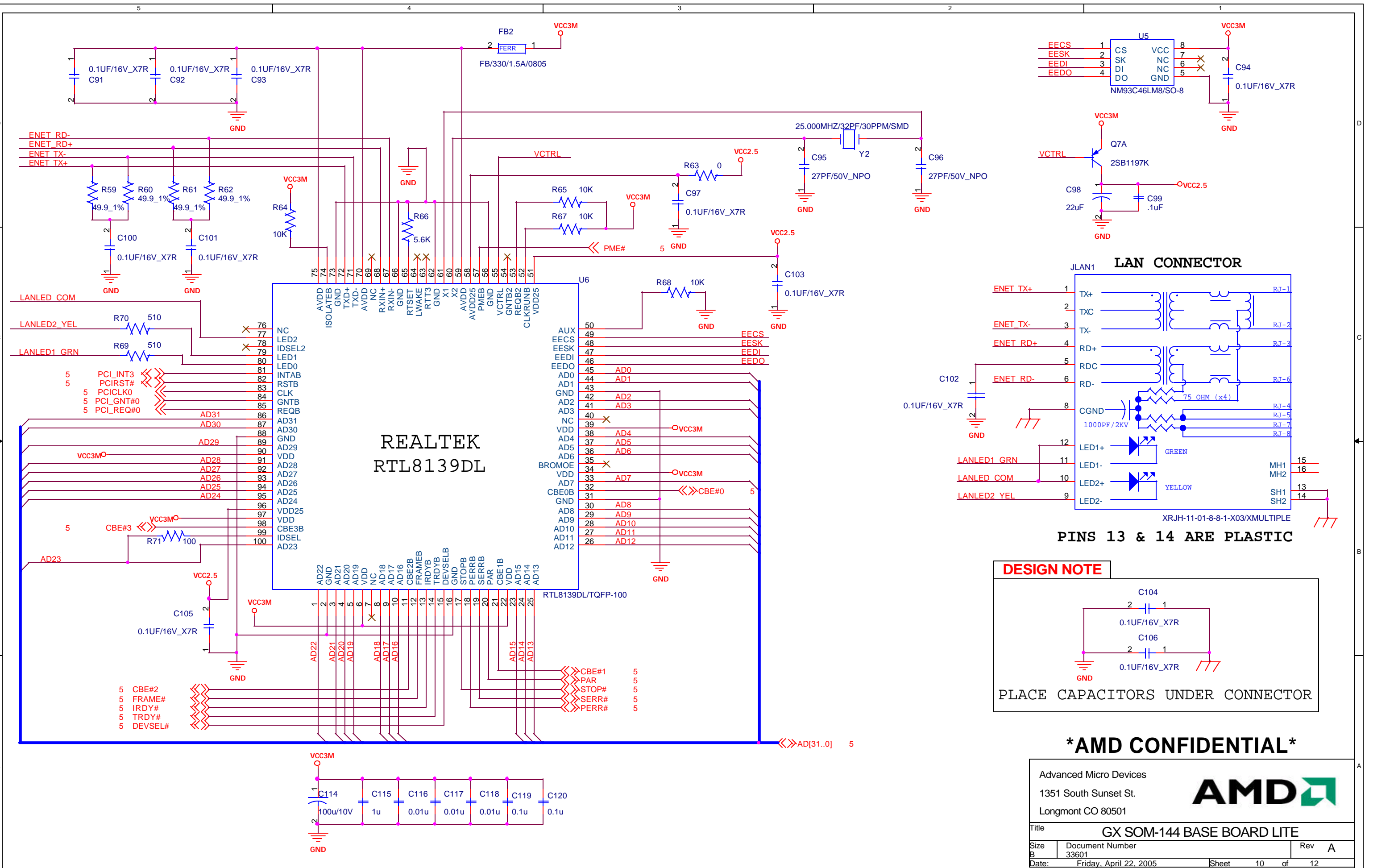
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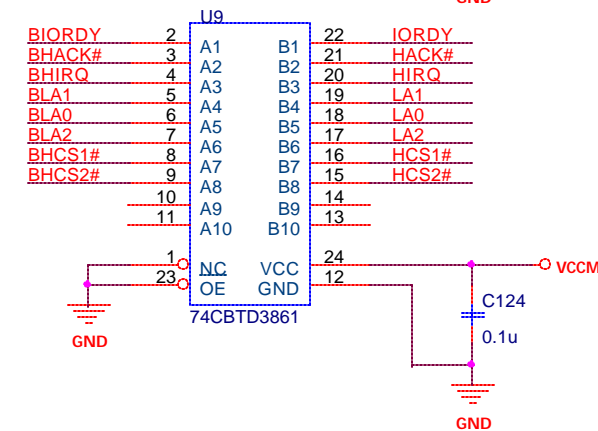
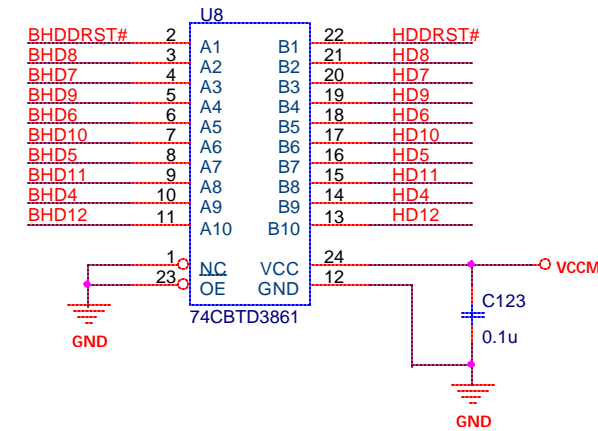
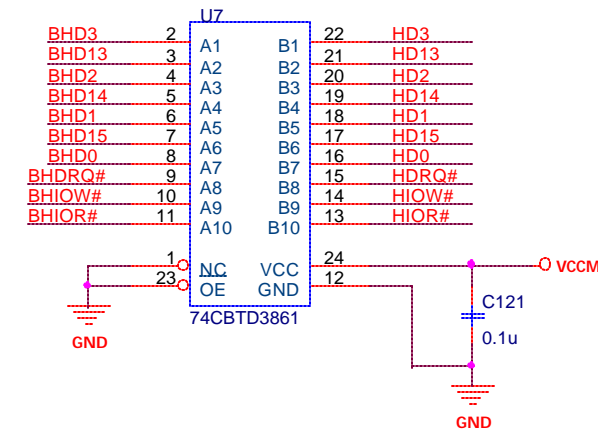
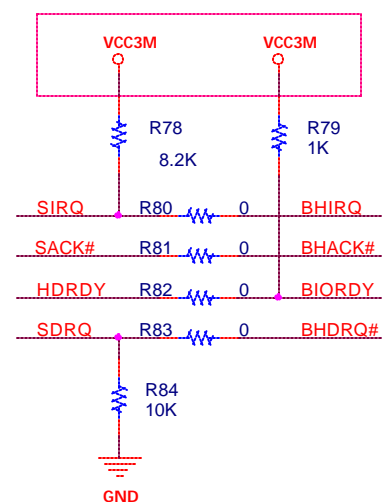
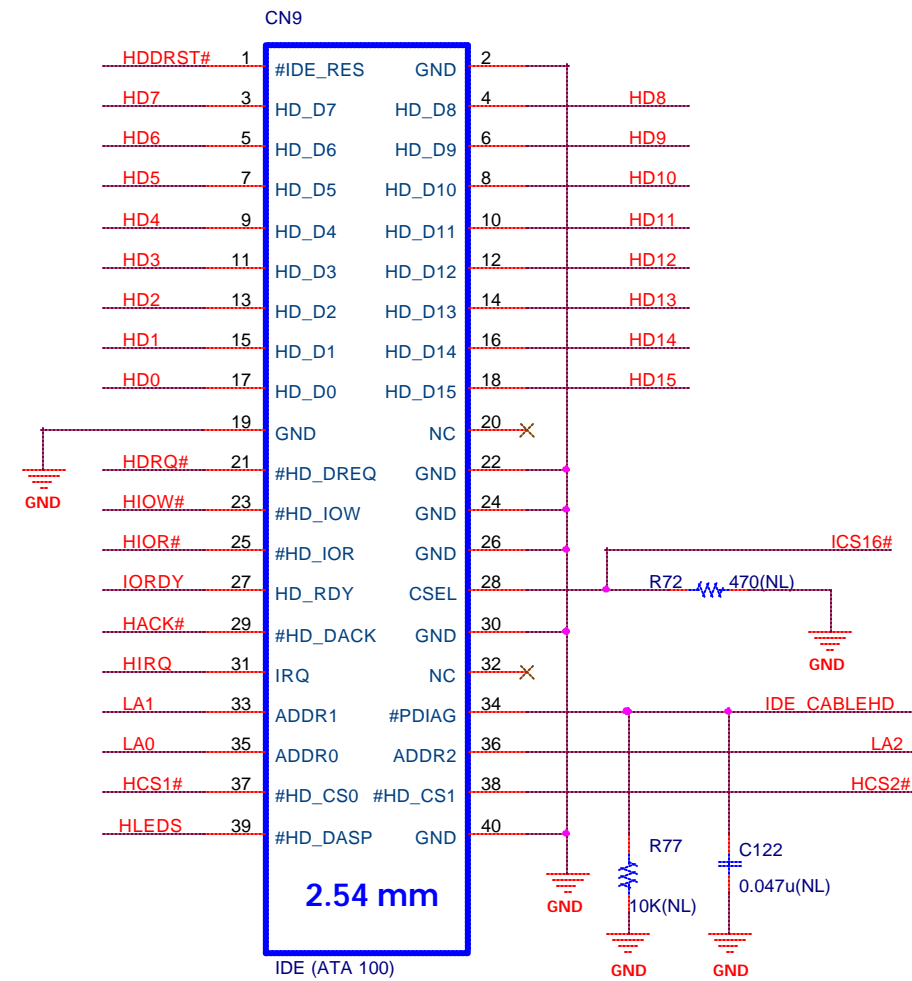
DESIGN NOTE

PLACE CAPACITORS UNDER CONNECTOR

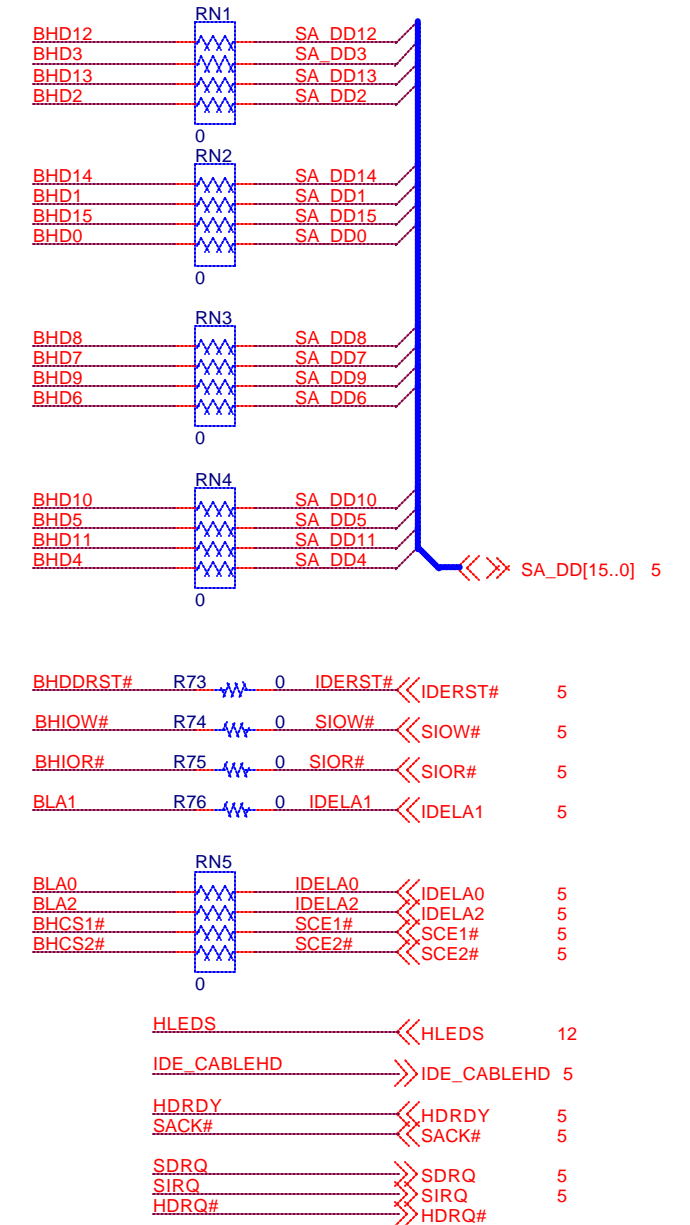
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IDE



DESIGN NOTE:
Signal level translation required only to support drives that signal above 3.3VDC.

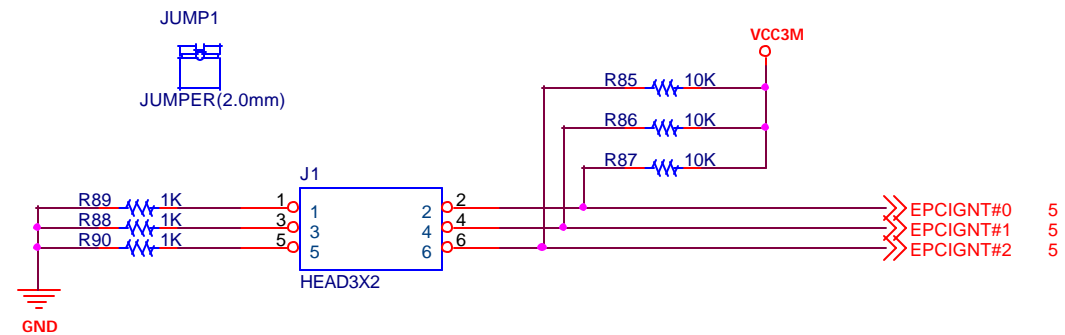


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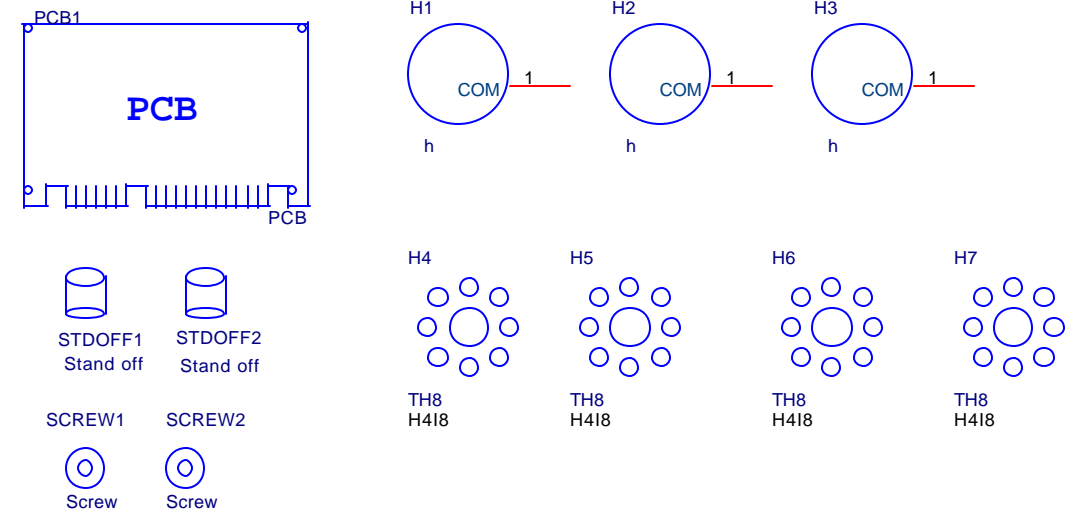
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Mechanical

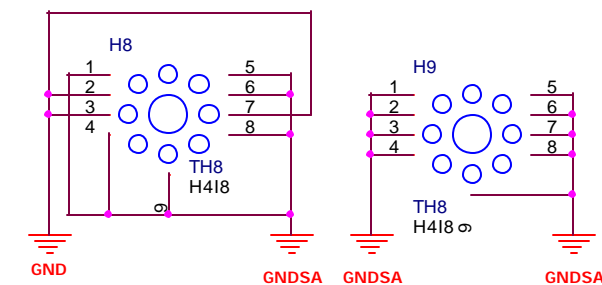
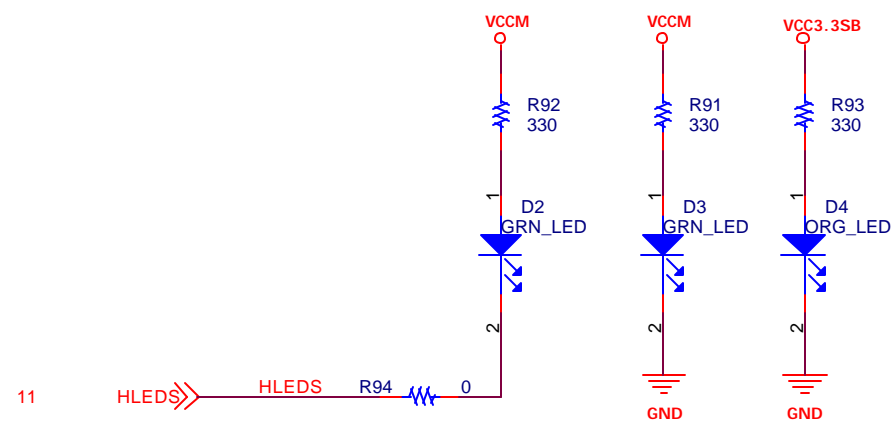


CPU AND MEMORY FREQUENCY SELECT

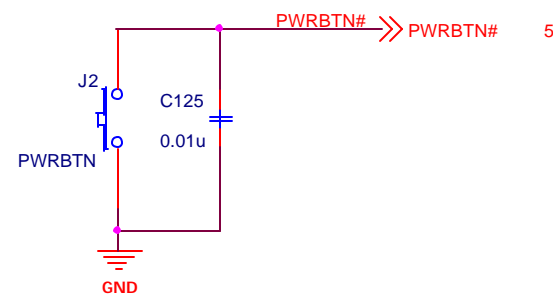
JUMPER SETTING			FREQUENCY SETTING	
5-6	3-4	1-2	CPU	MEMORY
ON	OFF	OFF	333M	222M
OFF	ON	ON	366M	244M
OFF	ON	OFF	400M	266M

(DEFAULT)

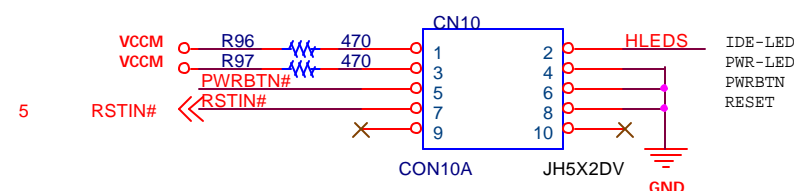
IDE Active POWER 3.3SB



PWRBTN



EXTERNAL PWRBTN, LEDs, RESET HEADER



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