

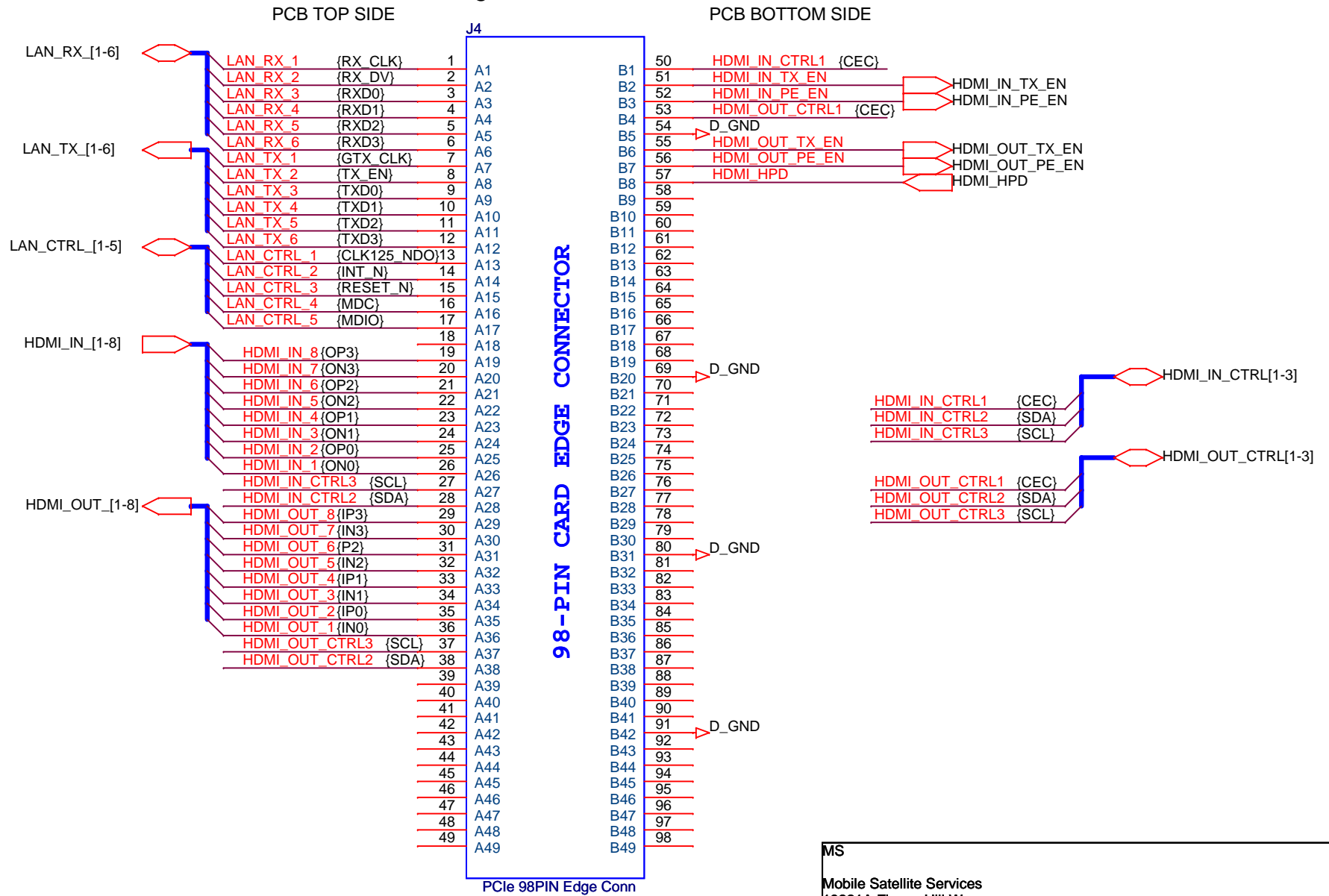
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General Layout Notes:  
 - use RC0603 for all 0603  
 - use RC0402 for all 0402

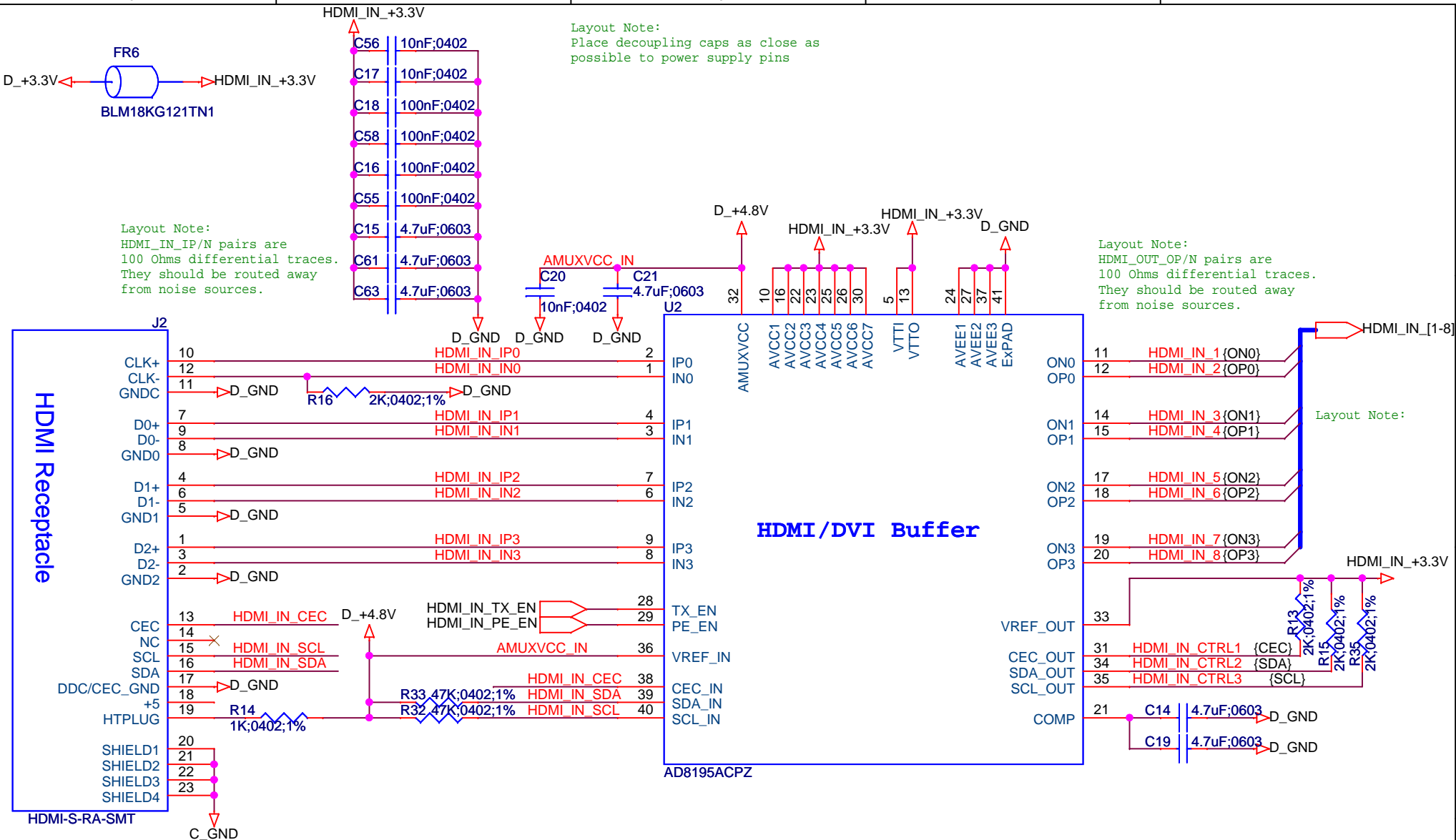
MS		
Mobile Satellite Services 18221A Flower Hill Way Gaithersburg, MD 20879 USA		
Title		
<b>COM-5102 / MAIN</b>		
Size	Document Number	Rev
A	<b>Y11003</b>	0
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# Right Side Connector

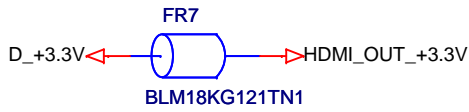


Layout Note:  
Place large ground vias near  
the connectors' ground pins

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<b>COM-5102 / DIGITAL CONNECTOR</b>		
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Title		
<b>COM-5102 / HDMI IN</b>		
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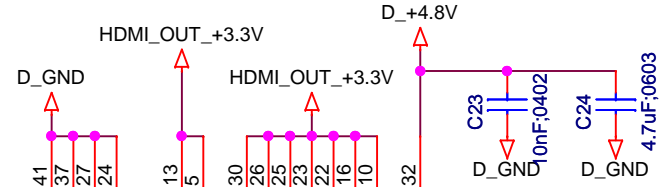


HDMI\_OUT\_+3.3V

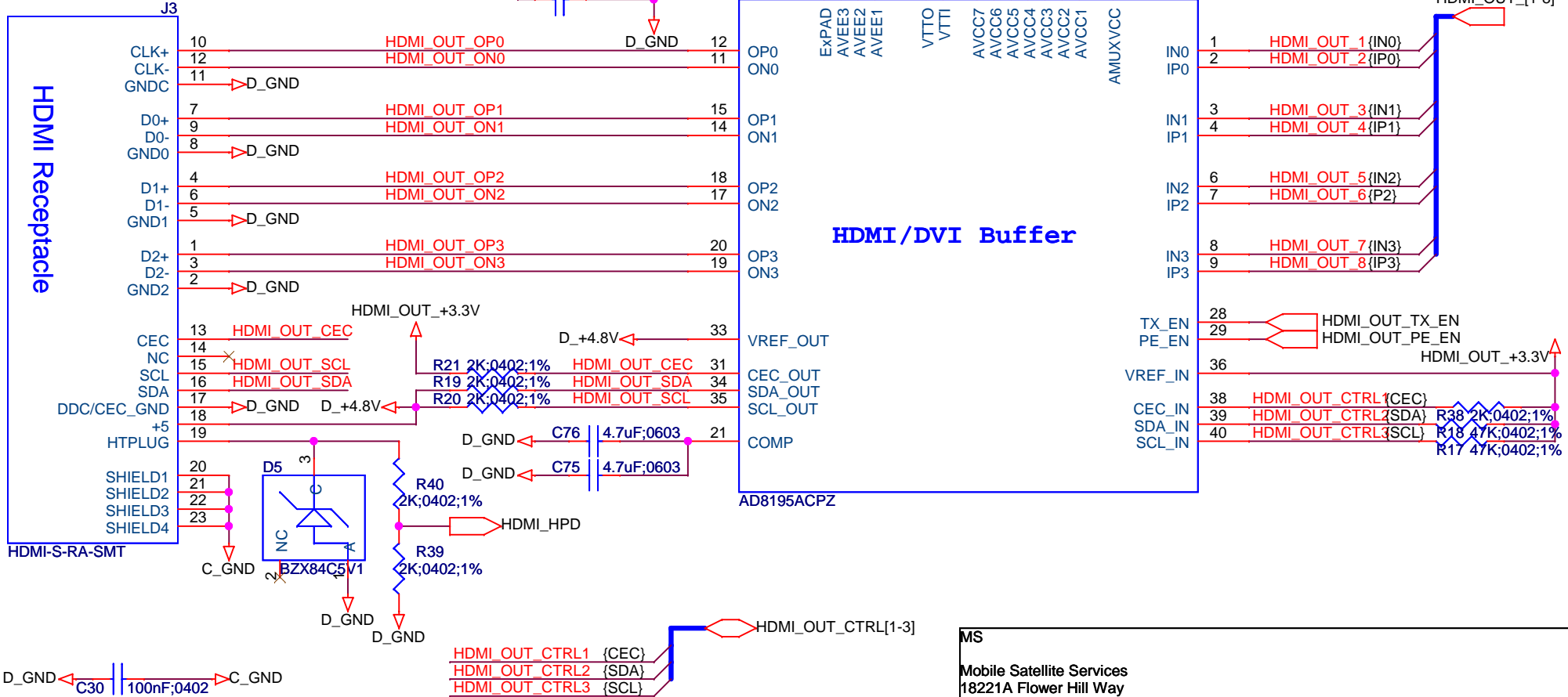
- C27 10nF;0402
- C28 10nF;0402
- C26 100nF;0402
- C29 100nF;0402
- C72 100nF;0402
- C74 100nF;0402
- C66 4.7uF;0603
- C25 4.7uF;0603
- C68 4.7uF;0603

Layout Note:  
Place decoupling caps as close as possible to power supply pins

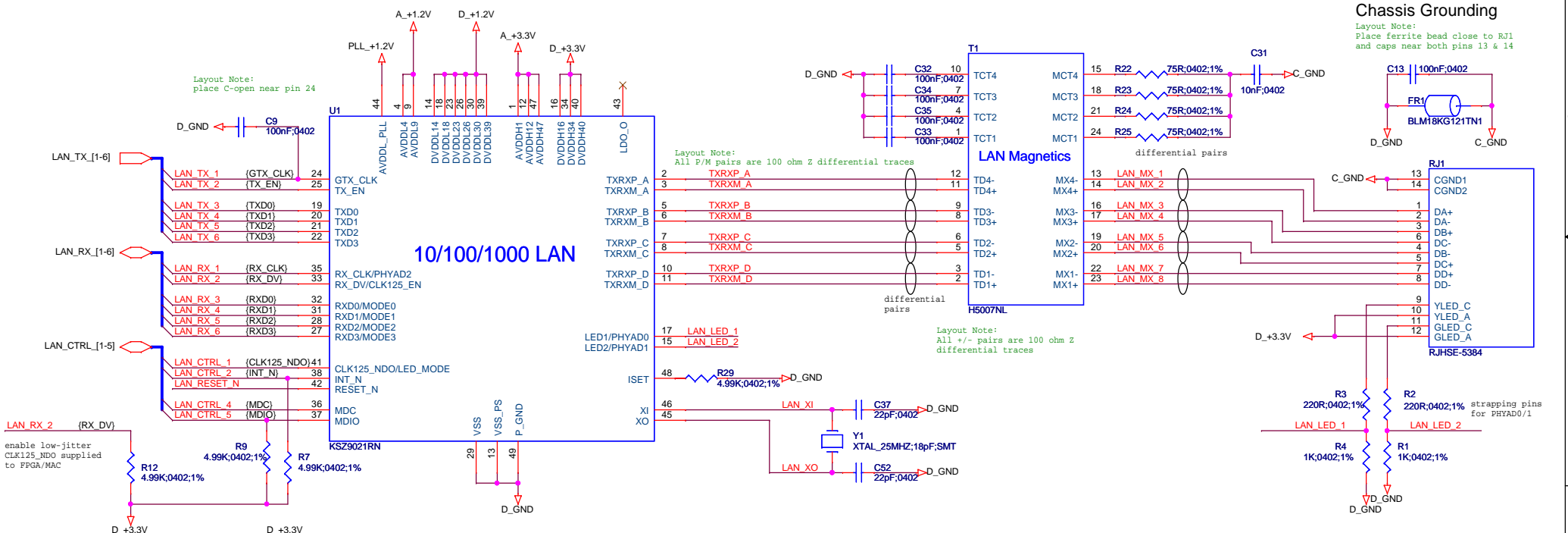
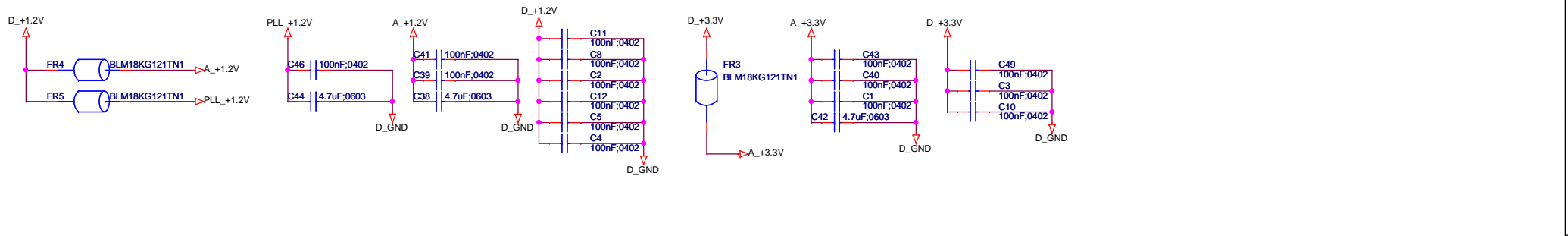
Layout Note:  
HDMI\_OUT\_OP/N pairs are 100 Ohms differential traces. They should be routed away from noise sources.



Layout Note:  
HDMI\_OUT\_IP/N pairs are 100 Ohms differential traces. They should be routed away from noise sources.



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<b>COM-5102 / HDMI OUT</b>		
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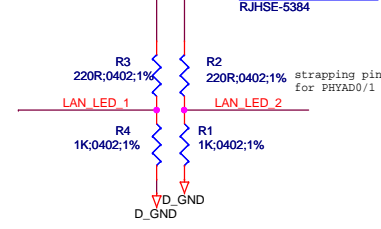
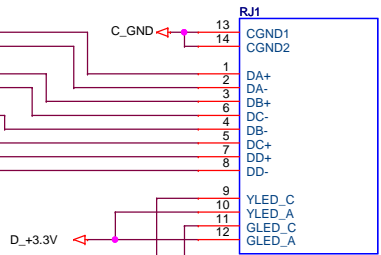
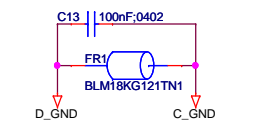
Layout Note:  
place C-open near pin 24

Layout Note:  
All P/M pairs are 100 ohm Z differential traces

Layout Note:  
All +/- pairs are 100 ohm Z differential traces

### Chassis Grounding

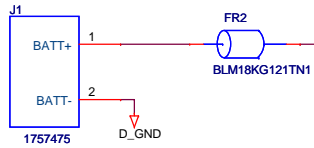
Layout Note:  
Place ferrite bead close to RJ1 and caps near both pins 13 & 14



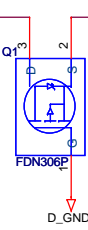
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Title <b>COM-5102 / LAN PHY</b>		
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# +5V Supply

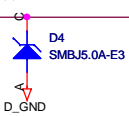
Green Terminal Block  
OPERATIONAL RANGE: 4.75 - 5.75V



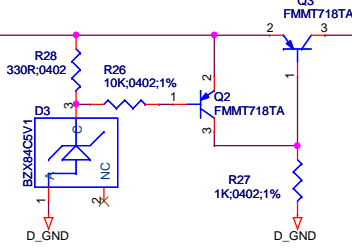
Reverse Voltage Protection



Transient Voltage Suppression

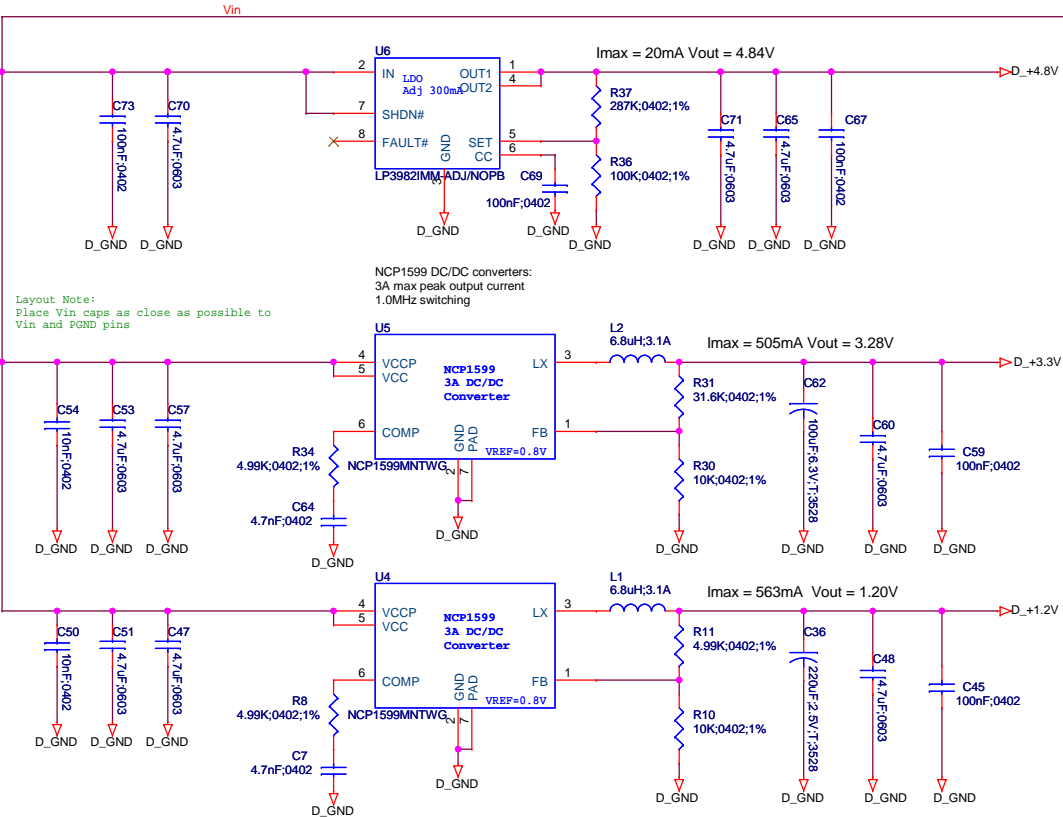


Over Voltage Protection (5.85V)



Layout Note:  
TVS component placed near DC/DC Converter in ground return path to terminal block

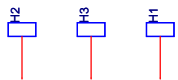
Layout Note:  
Route Vin with wide traces



Layout Note:  
Place Vin caps as close as possible to Vin and PGND pins

Layout Note:  
Route 1.2V outputs with wide traces

PCB Mounting Holes



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