

6

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E

E

5mil trace; outer layer trace spacing=5; inner layer spacing=8
dielectric layer thickness: 5 mil(microstrip) and 9 mil(stripline)
will work for both symmetry and asymmetry layer stackup.

D

D

120-pin CONNs on the SCROD revA4 top layer are:
FX8C-120S-SV5(receptacle)
120-pin CONNs on Bottom layer should be:
FX8C-120P-SV5(header)

C

C

120-pin & 100-pin CONNs on the 9UM.B. top layer are:
FX8C-120P-SV5(header)
FX8C-100P-SV5(header)
120-pin & 100-pin CONNs on Top layer should be:
FX8C-120S-SV5(receptacle)
FX8C-100S-SV5(receptacle)

B

B

A

A

institution:	University of Hawai'i at Manoa High Energy Physics Group Instrumentation Development Lab
title:	SCROD RevA4 Interconnect
revision:	A
IDLAB design #:	IDL_14_031
circuit design:	xs
PCB design:	xs
sheet #:	1
sheet description:	Notes
date last modified:	2014-08-18

E

E

D

D

C

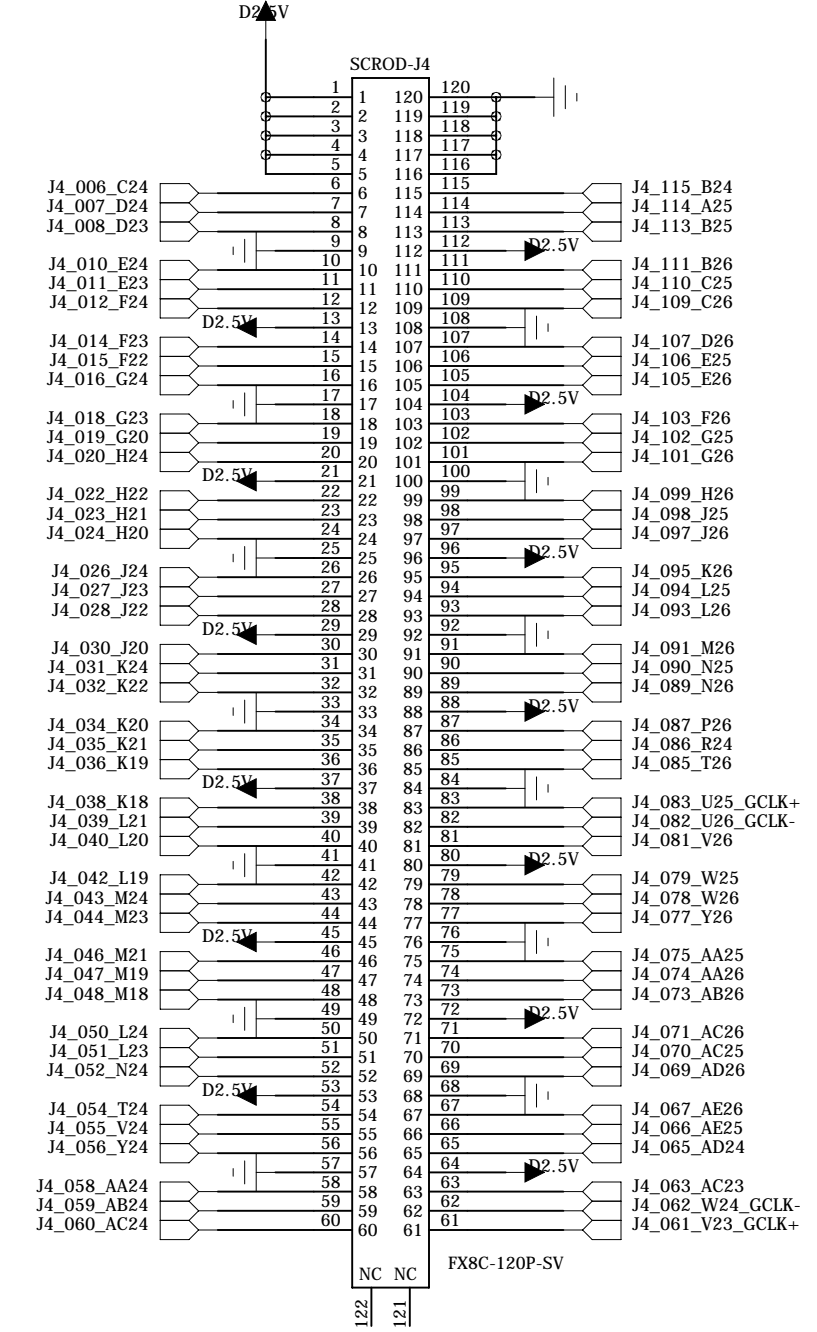
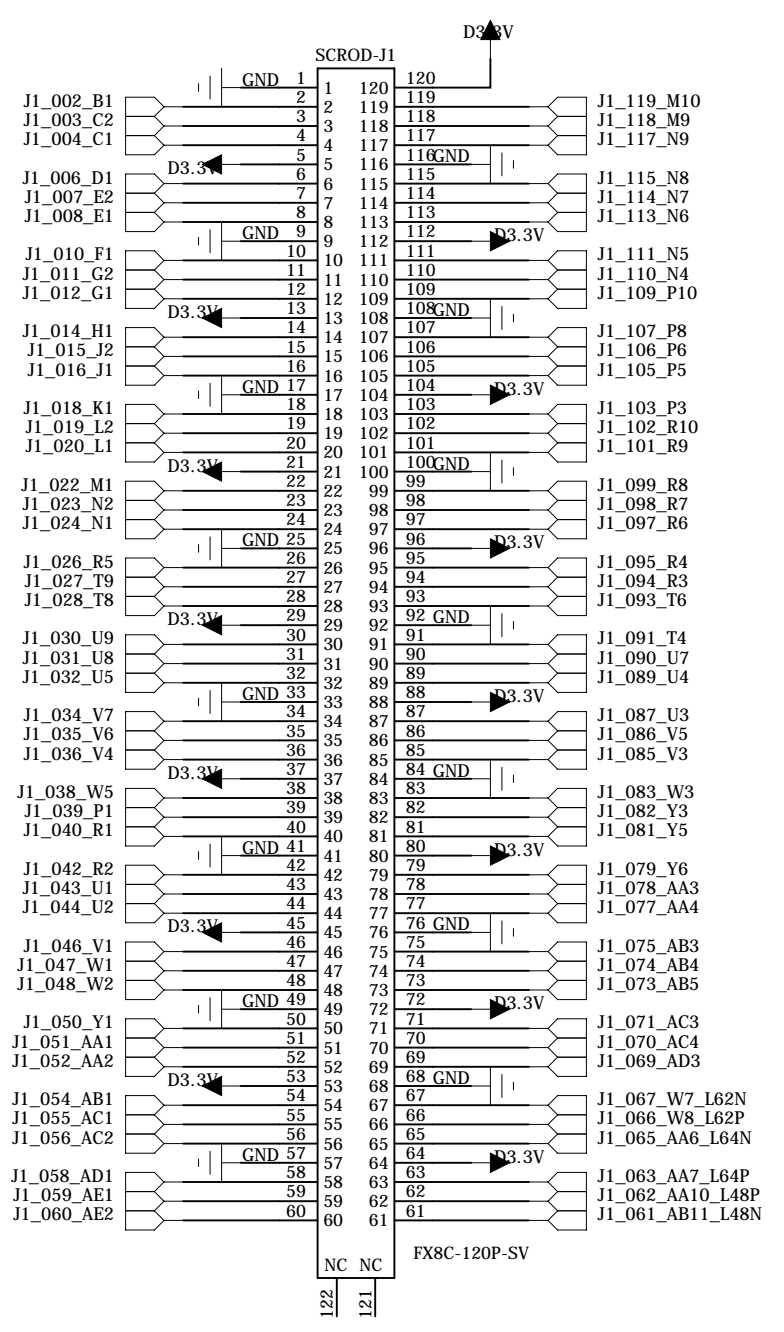
C

B

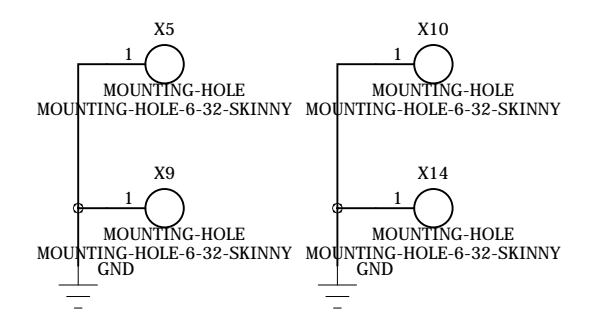
B

A

A



SHOULD BE HEADERS



institution:	University of Hawai'i at Manoa High Energy Physics Group Instrumentation Development Lab
title:	SCROD RevA4 Interconnect
revision:	A
IDLAB design #:	IDL_14_031
circuit design:	xs
PCB design:	xs
sheet #:	2
sheet description:	Headers for SCROD RevA4. Bottom layer
date last modified:	2014-08-18

6

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E

E

D

D

C

C

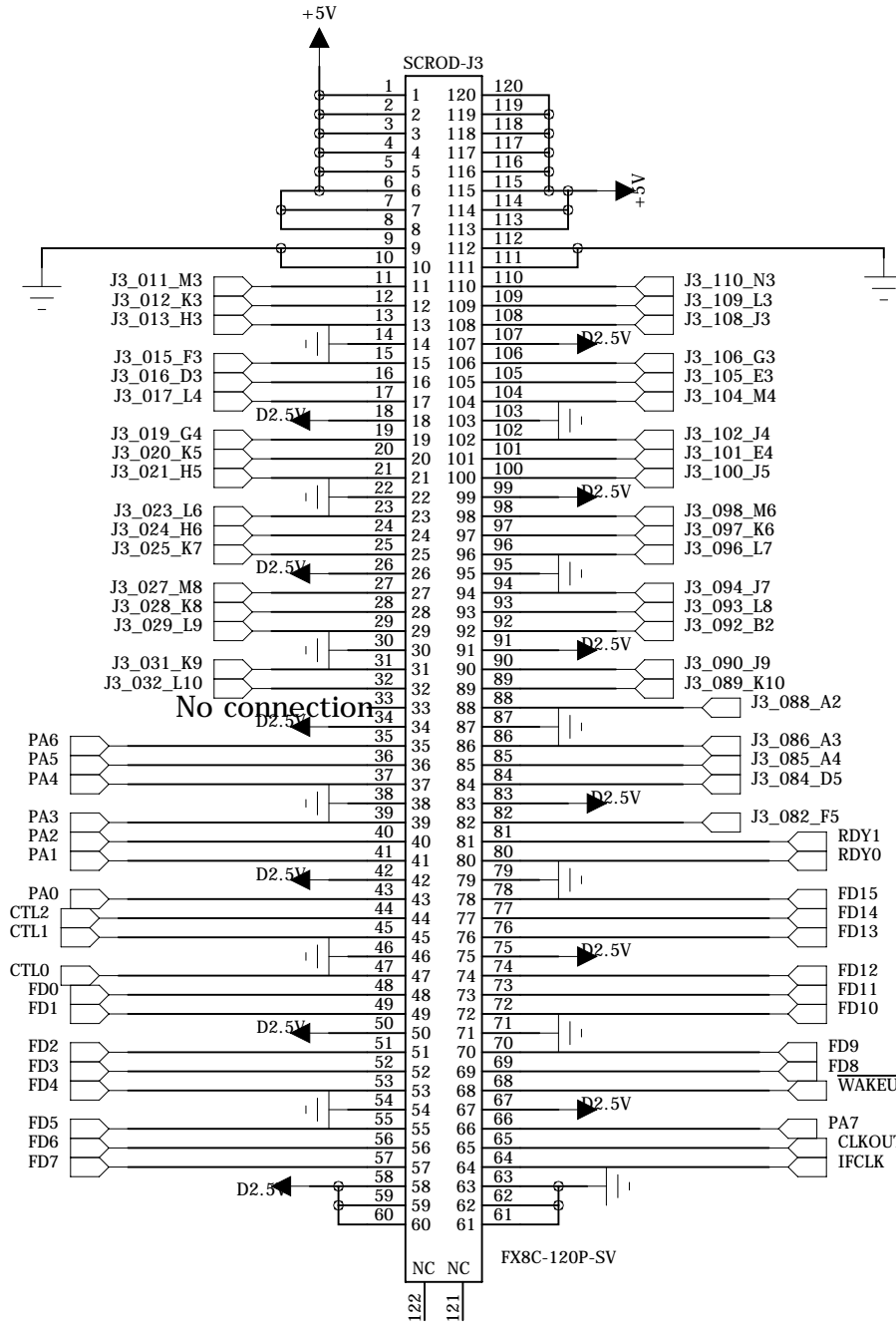
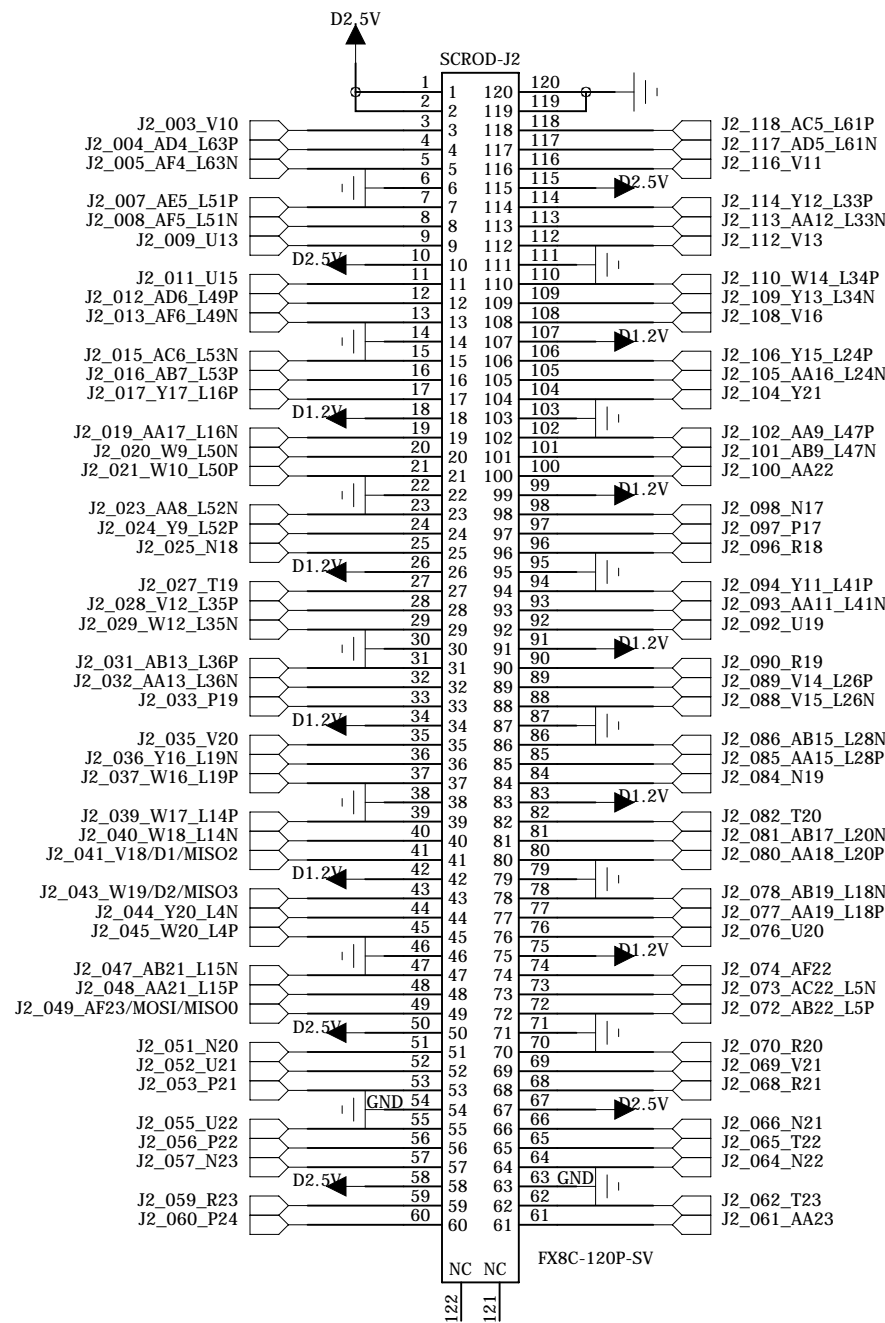
B

B

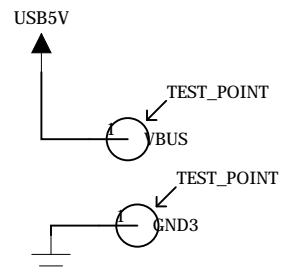
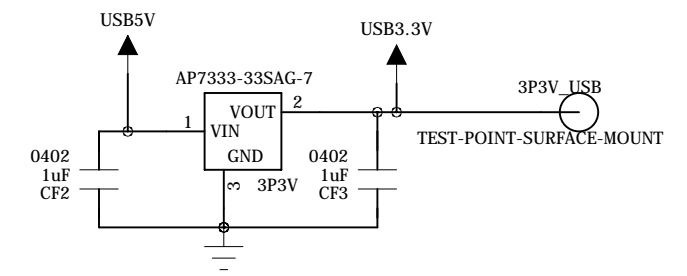
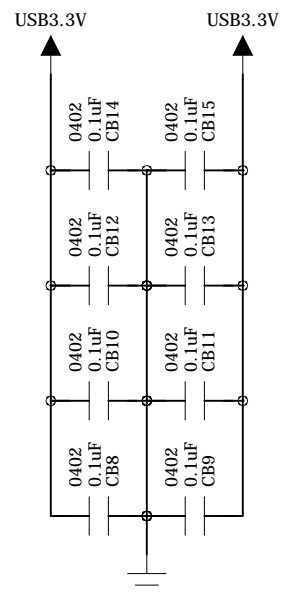
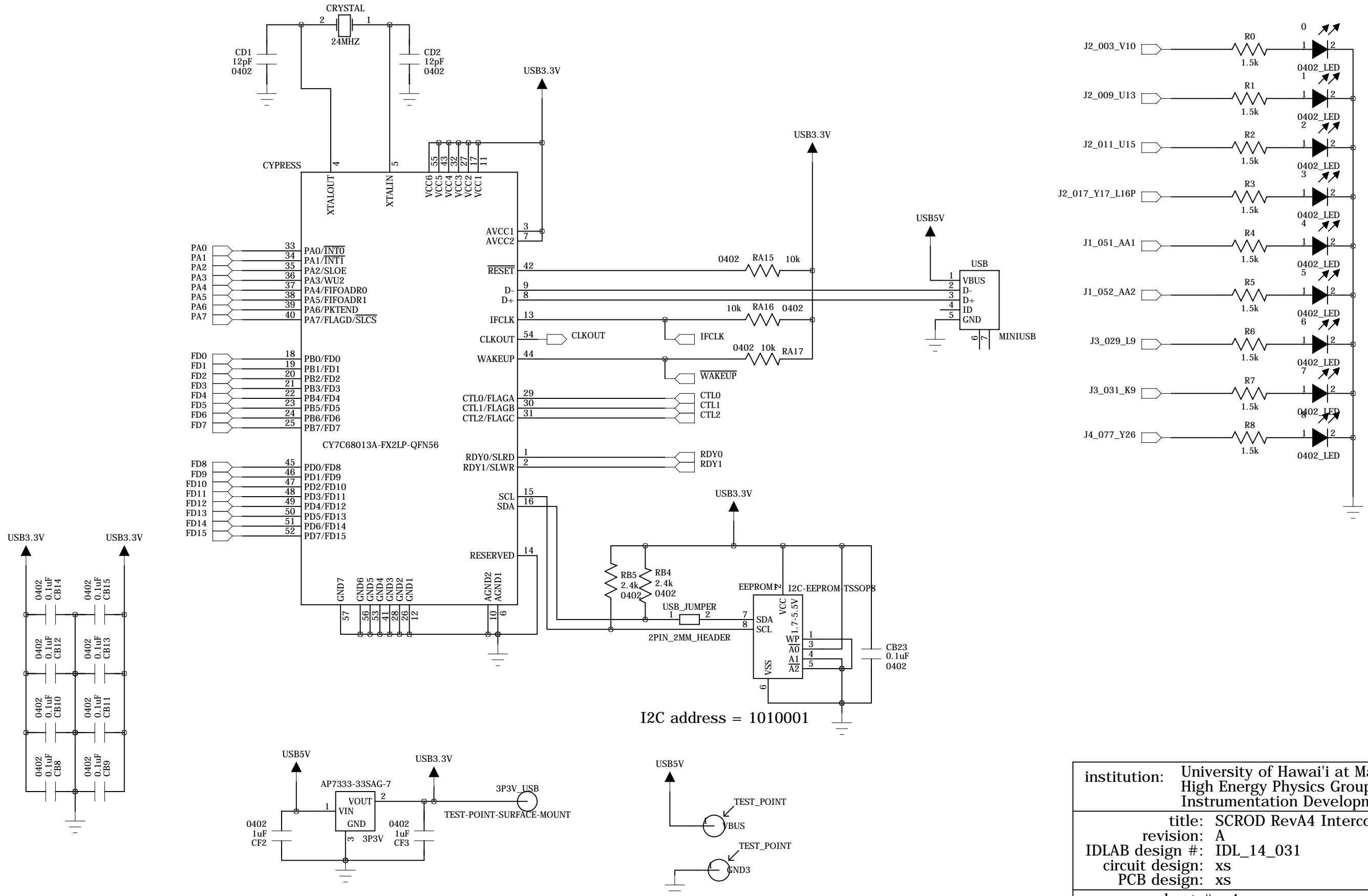
A

A

to power the SCROD from +5V on the MB
won't be able to use +5V on the TX9UMB RevA



institution:	University of Hawai'i at Manoa High Energy Physics Group Instrumentation Development Lab
title:	SCROD RevA4 Interconnect
revision:	A
IDLAB design #:	IDL_14_031
circuit design:	xs
PCB design:	xs
sheet #:	3
sheet description:	Headers for SCROD RevA4. Bottom layer.
date last modified:	2014-08-18



institution:	University of Hawai'i at Manoa High Energy Physics Group Instrumentation Development Lab
title:	SCROD RevA4 Interconnect
revision:	A
IDLAB design #:	IDL_14_031
circuit design:	xs
PCB design:	xs
sheet #:	4
sheet description:	USB interface for testing
date last modified:	2014-08-18

6

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E

D

D

C

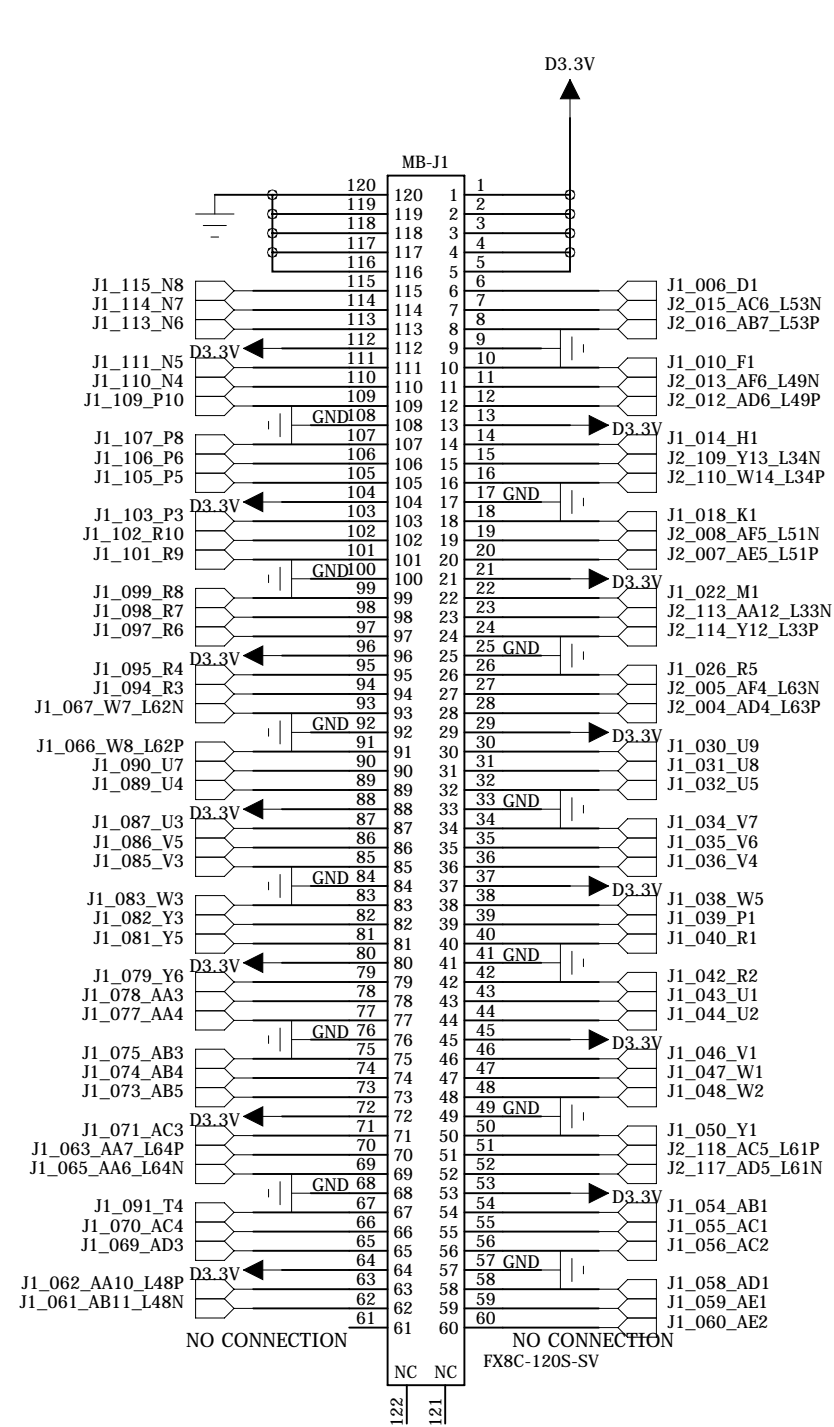
C

B

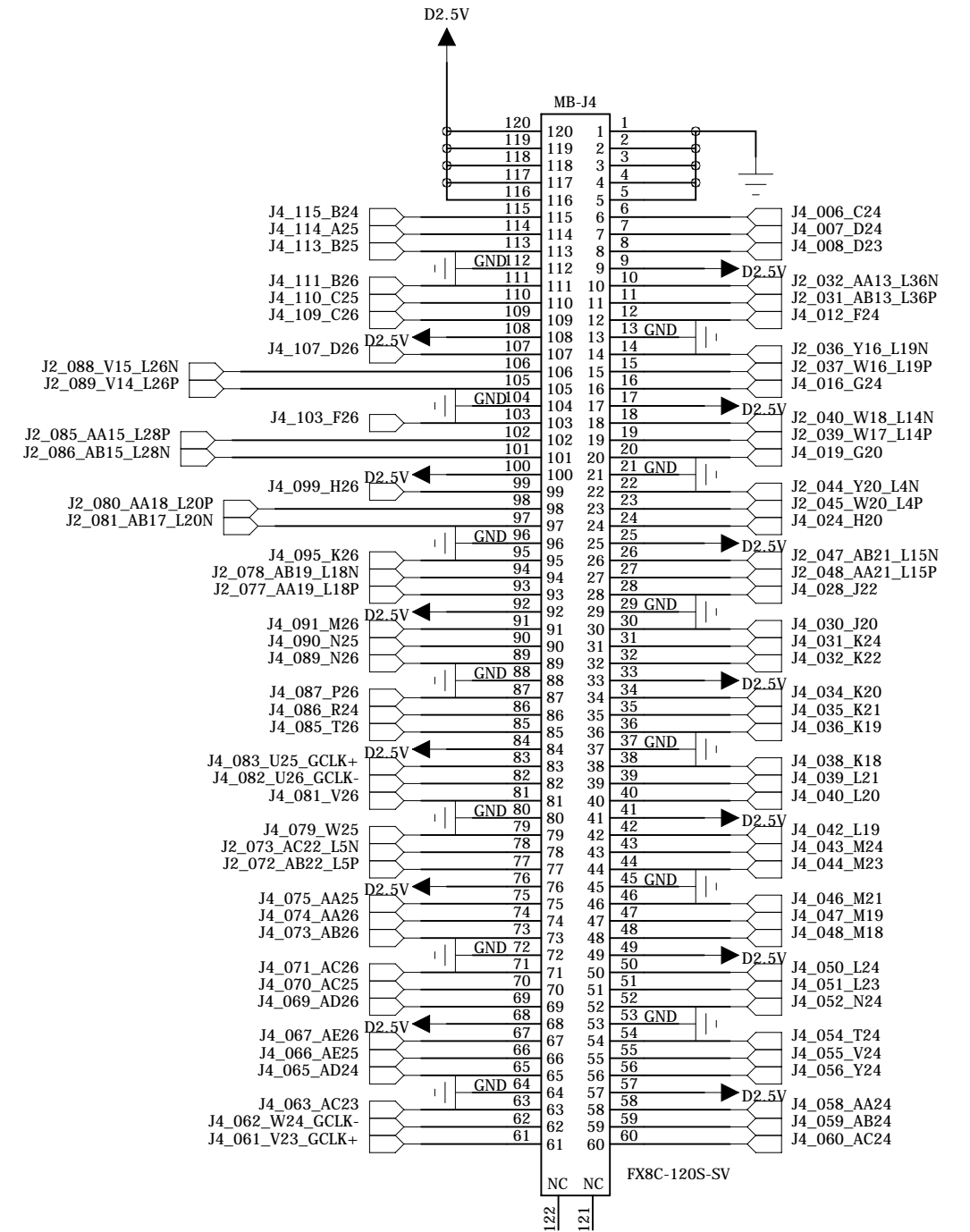
B

A

A



SHOULD BE RECEPTACLE



institution:	University of Hawai'i at Manoa High Energy Physics Group Instrumentation Development Lab
title:	SCROD RevA4 Interconnect
revision:	
IDLAB design #:	IDL_14_031
circuit design:	xs
PCB design:	xs
sheet #:	5
sheet description:	Receptacles for KLM TX9UMB. Top layer.
date last modified:	2014-08-18

E

E

D

D

C

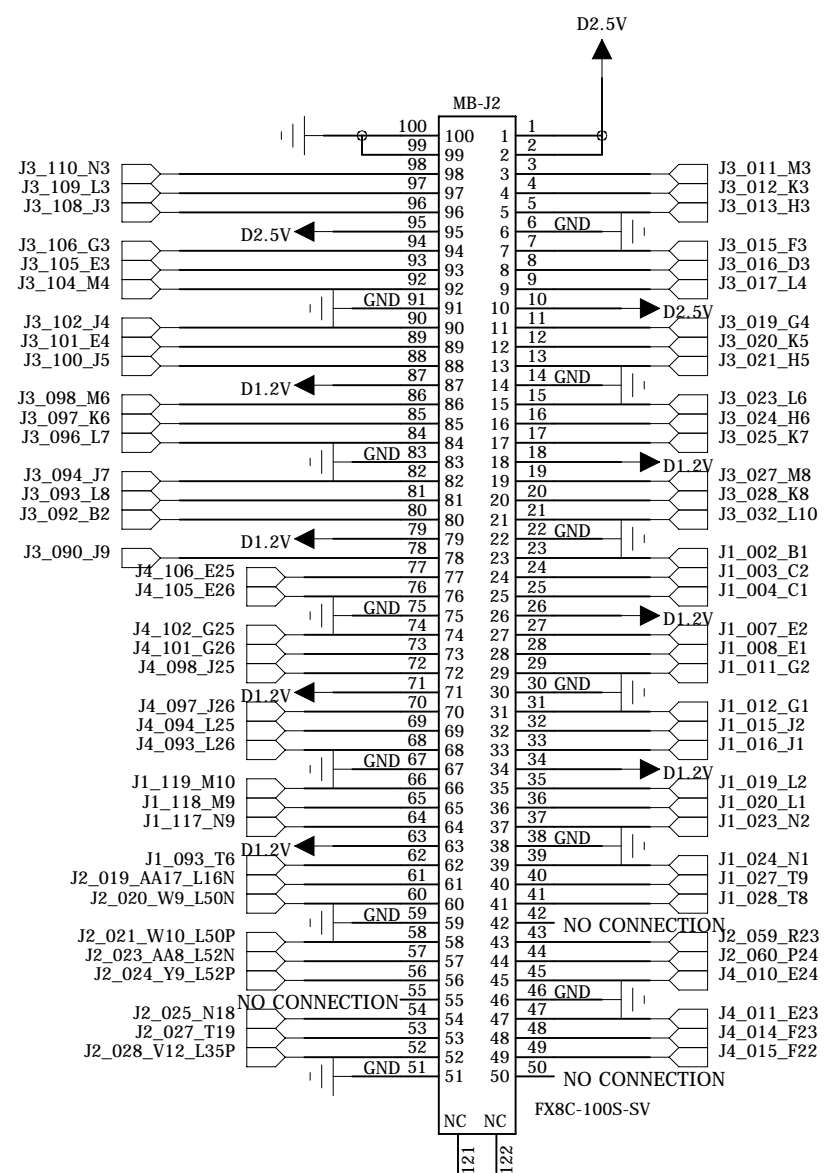
C

B

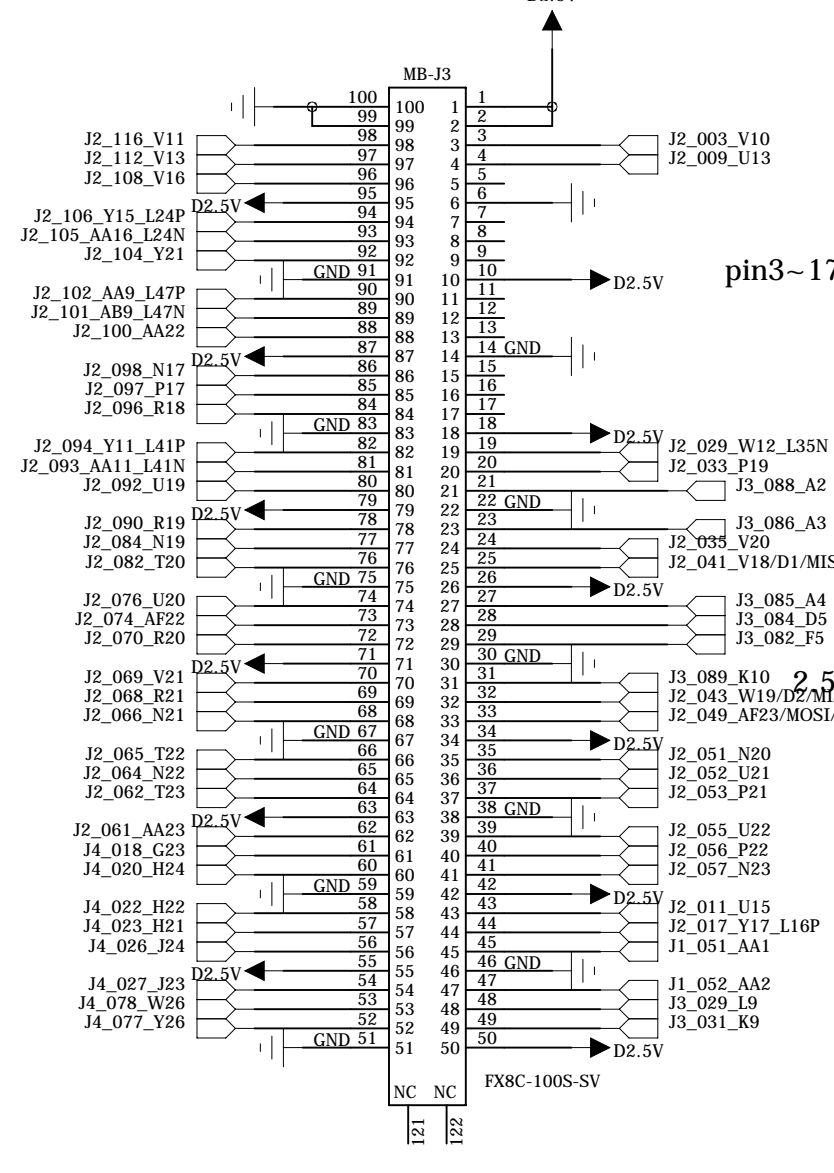
B

A

A



2.5V bank



pin3~17 and 43~52 are used for RAM on TARGTX MB RevA

3.3V bank

2.5V bank don't use the 3.3V trigger on the 9UMB

3.3V bank

pin43~52 are connect to RAMs and overloaded with LED

To improve routing, signals but NOT power pins on the connectors:

SCROD RevA4: J2 <--> 9UMB: J3

SCROD RevA4: J3 <--> 9UMB: J2

institution:	University of Hawai'i at Manoa High Energy Physics Group Instrumentation Development Lab
title:	SCROD RevA4 Interconnect
revision:	
IDLAB design #:	IDL_14_031
circuit design:	xs
PCB design:	xs
sheet #:	6
sheet description:	Receptacles for KLM TX9UMB. Top layer
date last modified:	2014-08-18