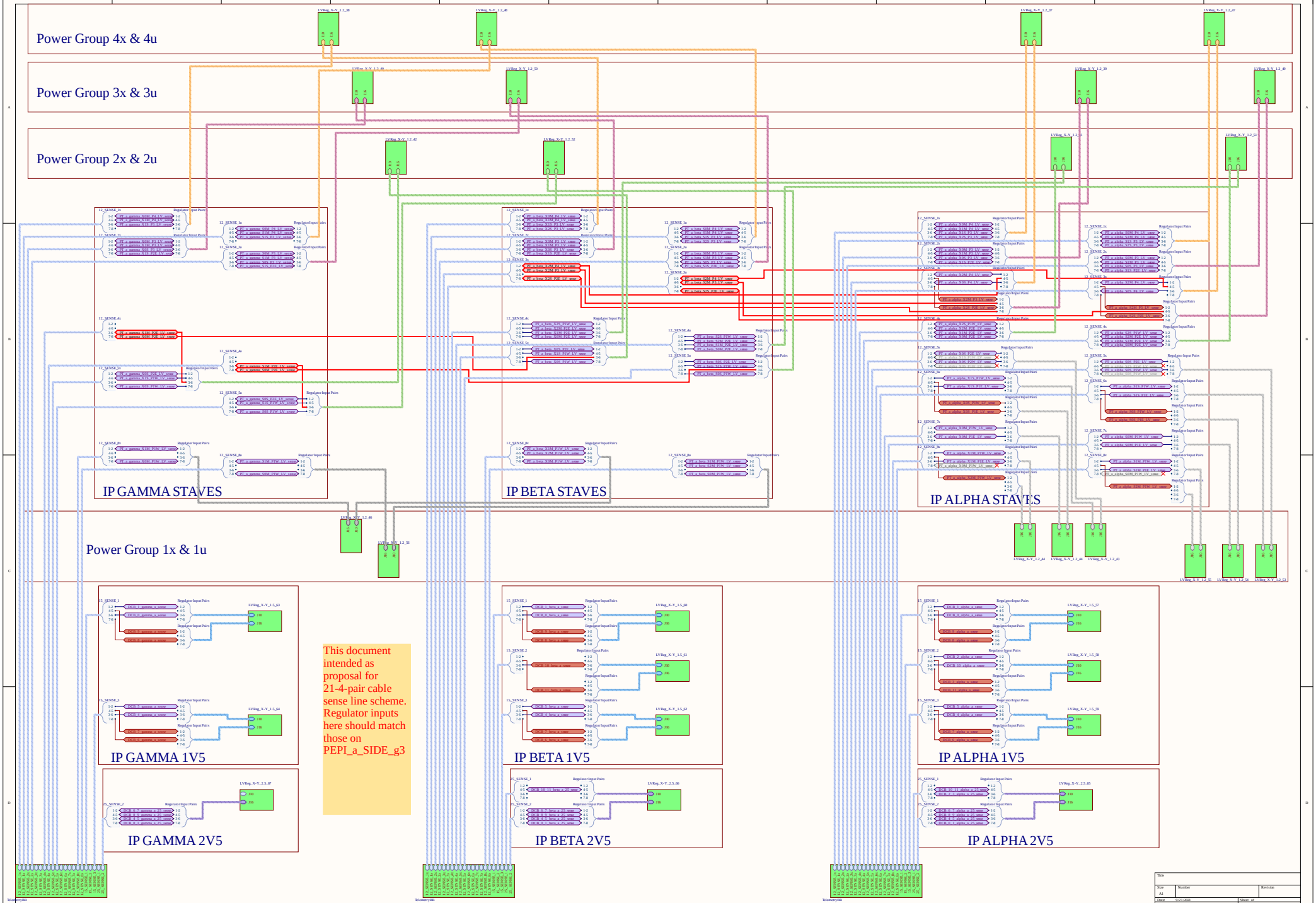
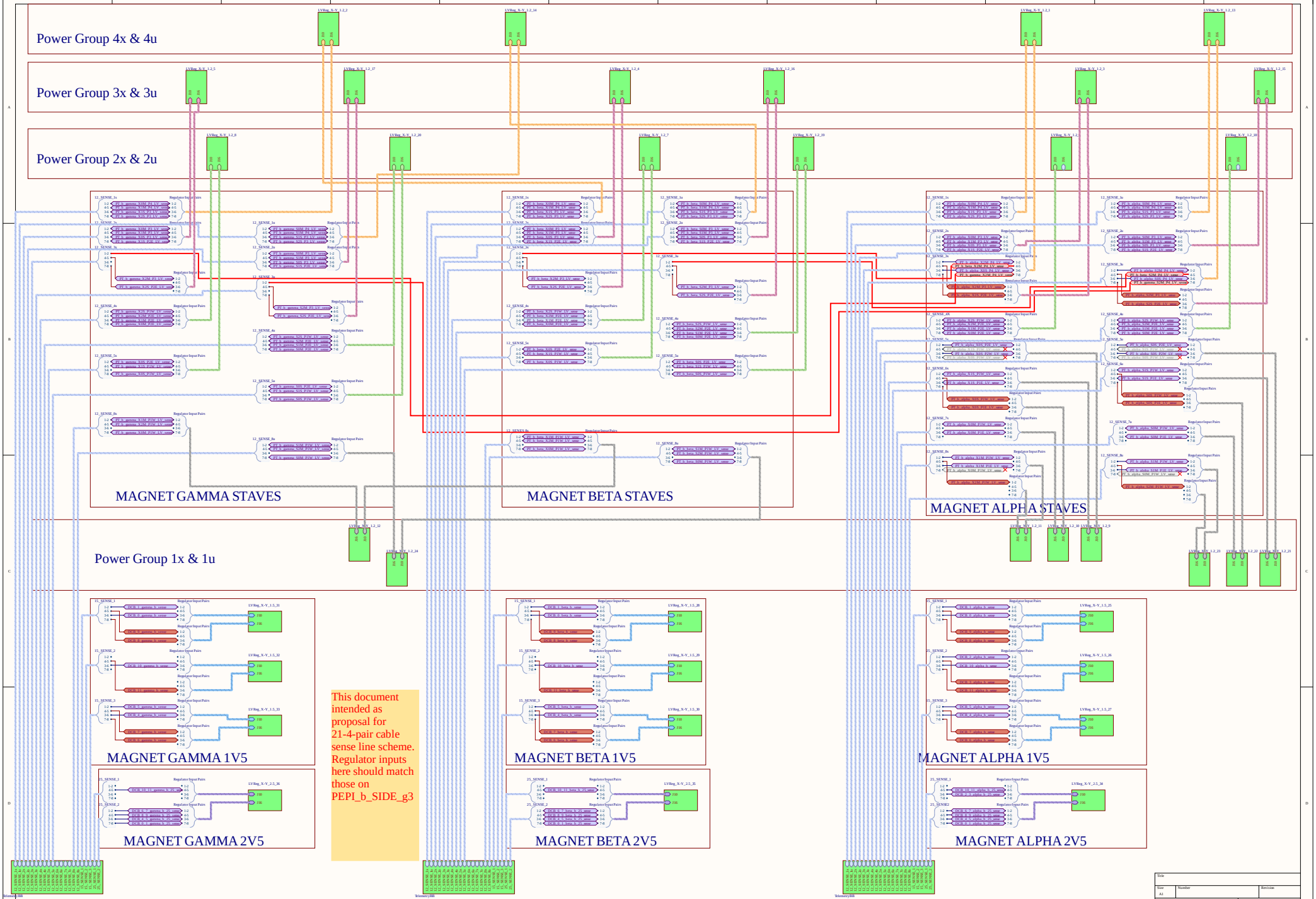
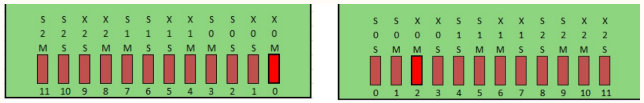

Power Group 4x & 4u
Power Group 3x & 3u
Power Group 2x & 2u
Power Group 1x & 1u
IP GAMMA STAVES
IP BETA STAVES
IP ALPHA STAVES
IP GAMMA 1V5
IP BETA 1V5
IP ALPHA 1V5
IP GAMMA 2V5
IP BETA 2V5
IP ALPHA 2V5
This document intended as proposal for 21-4-pair cable sense line scheme. Regulator inputs here should match those on PEPI_a_SIDE_g3


Power Group 4x & 4u
Power Group 3x & 3u
Power Group 2x & 2u
Power Group 1x & 1u
MAGNET GAMMA STAVES
MAGNET BETA STAVES
MAGNET ALPHA STAVES
MAGNET GAMMA 1V5
MAGNET BETA 1V5
MAGNET ALPHA 1V5
MAGNET GAMMA 2V5
MAGNET BETA 2V5
MAGNET ALPHA 2V5
This document intended as proposal for 21-4-pair cable sense line scheme. Regulator inputs here should match those on PEPI_b_SIDE_g3

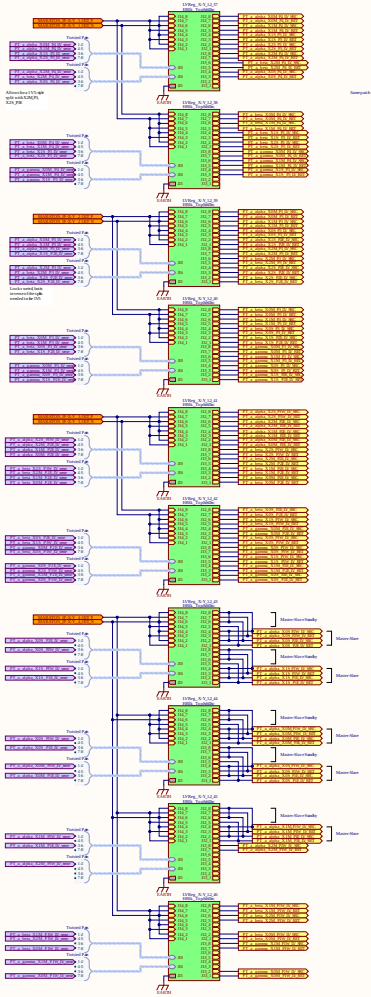
PEPI IP ("a" planes) power

1.2 V Rail

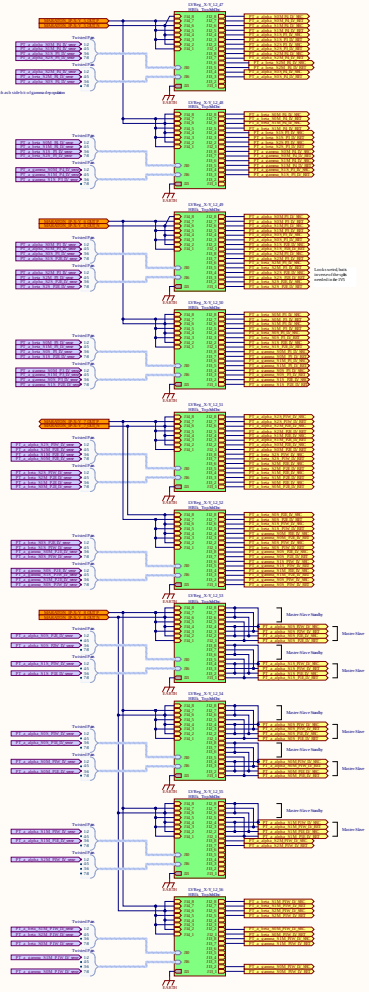


The diagram on the left shows true-type, and the diagram on the right shows mirror-type. True-type

X Staves



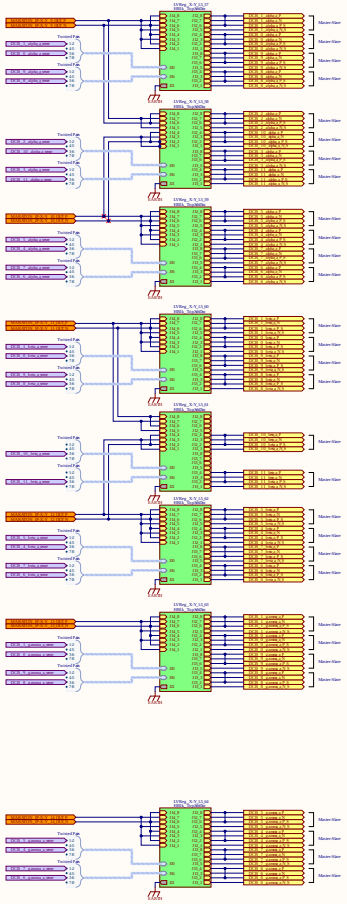
Stereo Staves



8-ASIC Hybrids powered by master-slave pairs with a second (redundant) master-slave pair on "standby"

Requires X-splice of Master and Slave Source lines and Y-splice of redundant pair outputs into primary pair outputs

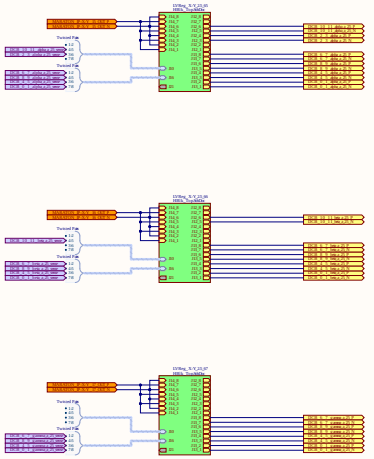
1.5 V Rail



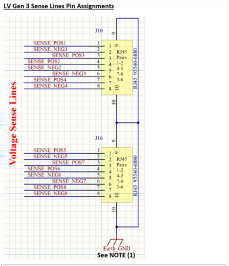
DCB 1.5V rails use Master-Slave current sharing.

Requires low-ohm X-splicing of Master and slave source wires for 50/50 sharing across non-matched cable

2.5V Rail



Key/Notes



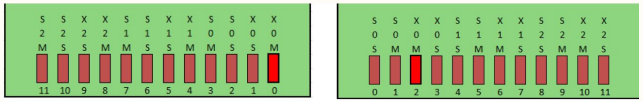
Every "output port" (pictured) corresponds to one long 4mm2 wire in the cable tray

"wires" on diagram from regulator pins to ports represent splices required at the service bay

Key:
PT=pigtail (vs DCB)
a = a-planes (Upstream) vs b-planes (downstream)
alpha = backplane position (vs beta, gamma)
X0M = pigtail ID
X=Vertical, S=Stereo
0,1,2=Slave number on backplane (from beampipe out)
M,S = medium or short type (long->short)
P1W = 4-ASIC group served
SRC/RET = Source/Return

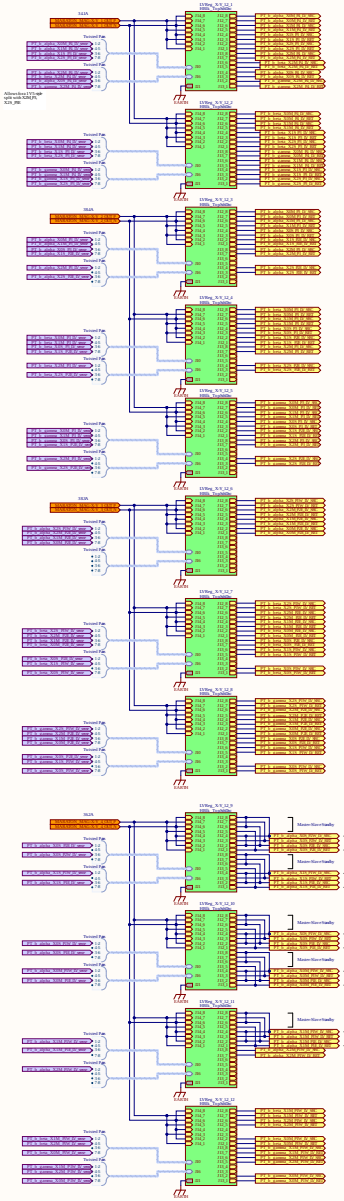
PEPI Magnet ("b" planes) power

1.2 V Rail

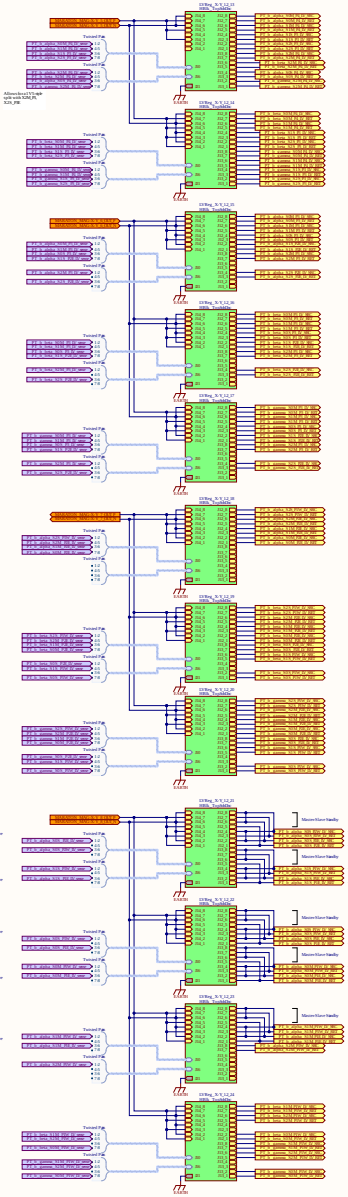


The diagram on the left shows true-type, and the diagram on the right shows mirror-type. True-type

X Staves



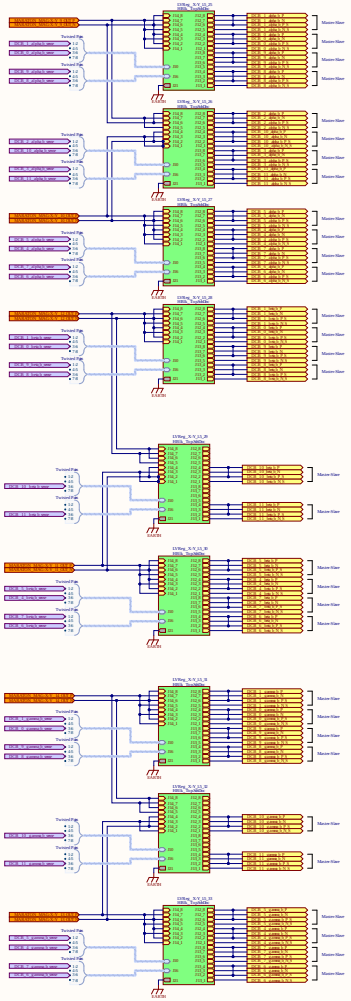
Stereo Staves



8-ASIC Hybrids powered by master-slave pairs with a second (redundant) master-slave pair on "standby"

Requires X-splice of Master and Slave Source lines and Y-splice of redundant pair outputs into primary pair outputs

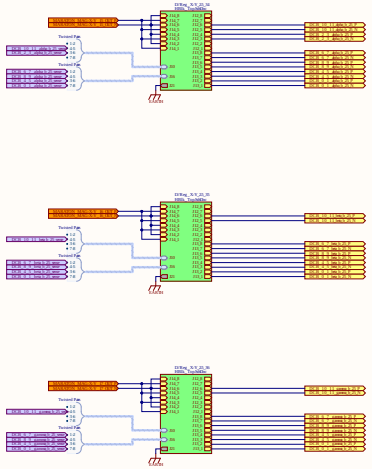
1.5 V Rail



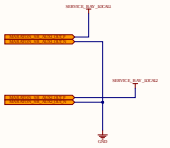
DCB 1.5V rails use Master-Slave current sharing.

Requires low-ohm X-splicing of Master and slave source wires for 50/50 sharing across non-matched cable

2.5V Rail



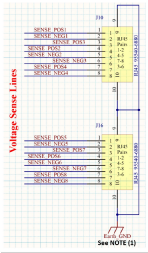
Rack Local Power (5V?)



2 MARATON channels reserved for use by "other" SB boards & telemetry systems

Key/Notes

LV Gen 3 Sense Lines Pin Assignments



Note (1) EARTH GND A.K.A. SHIELD GROUND--- is connected to the Outer Shell of these RJ45 connectors

Every "output port" (pictured) corresponds to one long 4mm2 wire in the cable tray

"wires" on diagram from regulator pins to ports represent splices required at the service bay

Key:
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alpha = backplane position (vs beta, gamma)
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X=Vertical, S=Stereo
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