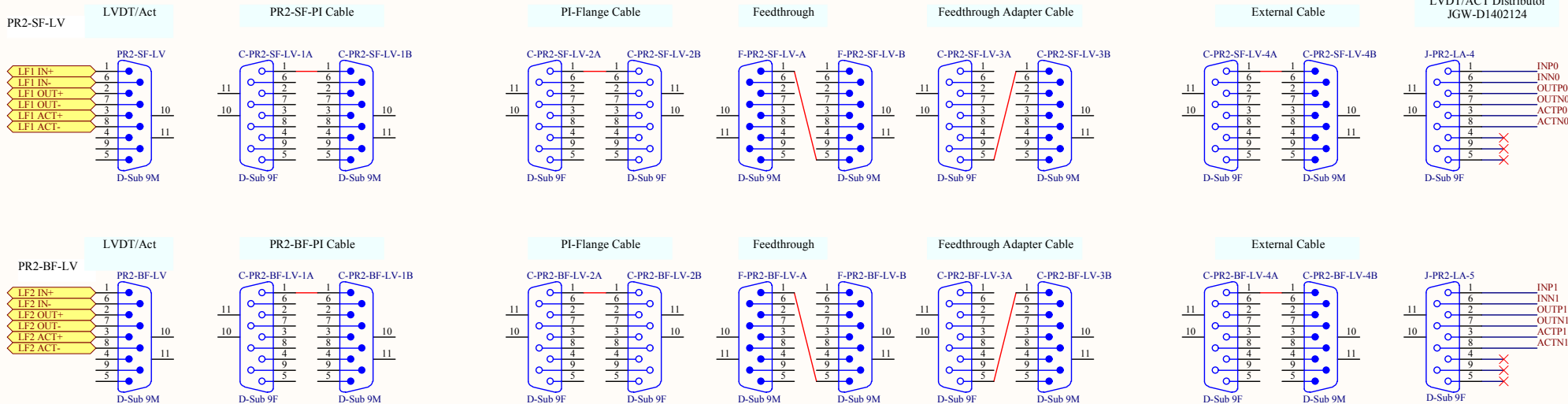


BF and SF LVDT/ACTs

2 Feedthroughs



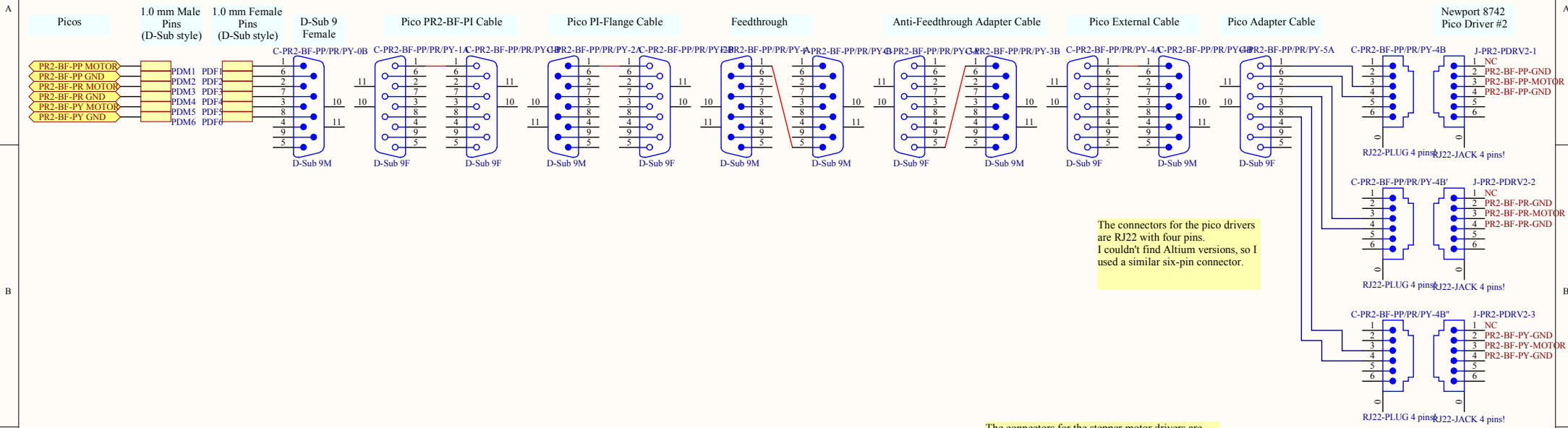
J-PR2-LA-6 and J-PR2-LA-7 not used

Title			PR2 Suspension Cabling - Bottom and Standard Filter LVDTs		
Size	Number	Revision			
A3	JGW-D1503614	-v1			
Date:	2015/06/09	Sheet of			
File:	Z:\Work\BF&SF LVDTs.SchDoc	Drawn By:			

BF and SF Picomotors and Steppers

3 Feedthroughs

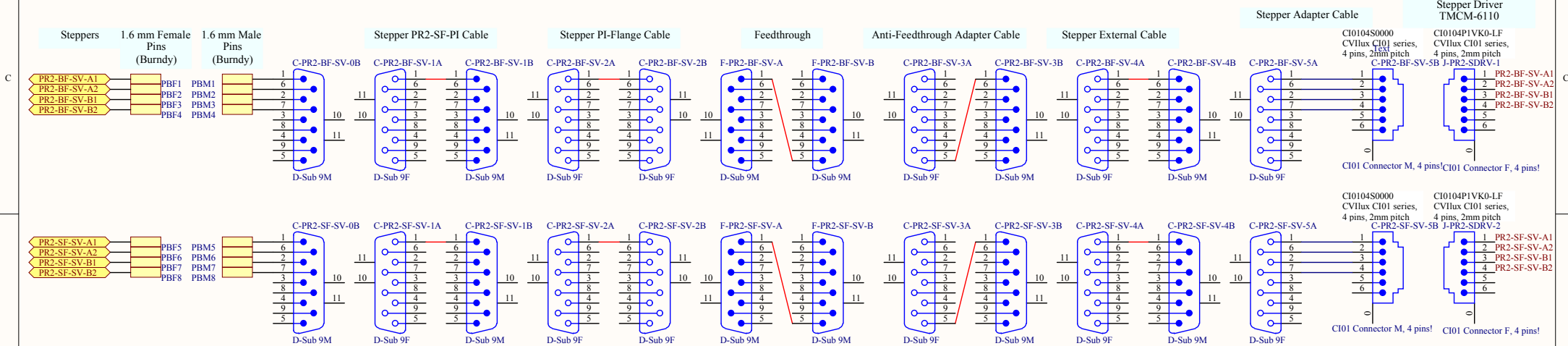
Pin-1 Black Not Connected
Pin-2 Red Ground
Pin-3 Green Motor
Pin-4 Yellow Ground



The connectors for the pico drivers are RJ22 with four pins. I couldn't find Altium versions, so I used a similar six-pin connector.

The connectors for the stepper motor drivers are CVIlux: CI01045000-A (plug, female), CI0104P1VK0-LF (jack, male) pairs with four pins. I couldn't find Altium versions, so I used a similar six-pin connector.

Pin	Label	Direction	Description
1	A1	Output	Pin 1 of motor coil A
2	A2	Output	Pin 2 of motor coil A
3	B1	Output	Pin 1 of motor coil B
4	B2	Output	Pin 2 of motor coil B



Pin	Label	Direction	Description
1	A1	Output	Pin 1 of motor coil A
2	A2	Output	Pin 2 of motor coil A
3	B1	Output	Pin 1 of motor coil B
4	B2	Output	Pin 2 of motor coil B

Pin	Label	Direction	Description
1	A1	Output	Pin 1 of motor coil A
2	A2	Output	Pin 2 of motor coil A
3	B1	Output	Pin 1 of motor coil B
4	B2	Output	Pin 2 of motor coil B

6 Feedthroughs

IM OSEMs

OSEM

OSEM-BF Cable

OSEM BF-PI Cable

OSEM PI-Flange Cable

Feedthrough

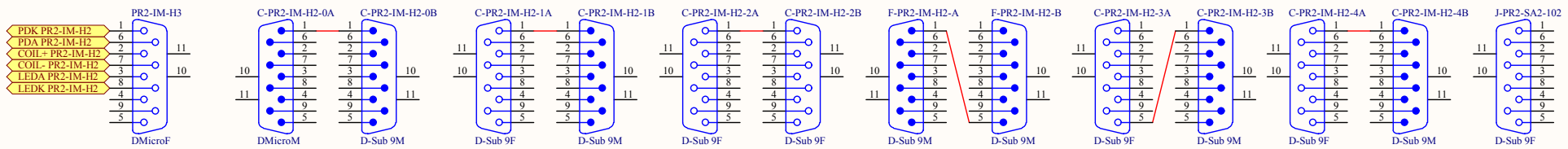
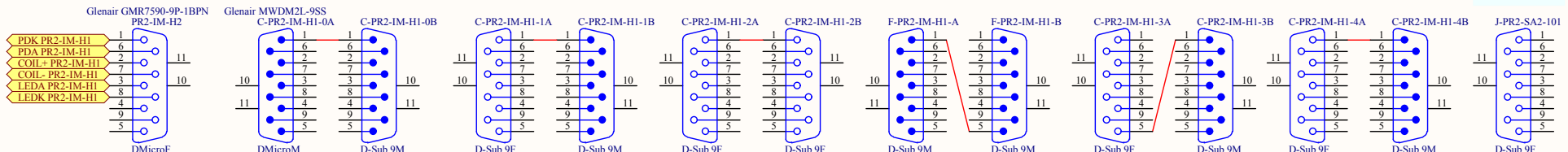
Anti-Feedthrough Adapter Cable

OSEM External Cable

Sat Amp #2 D1402809

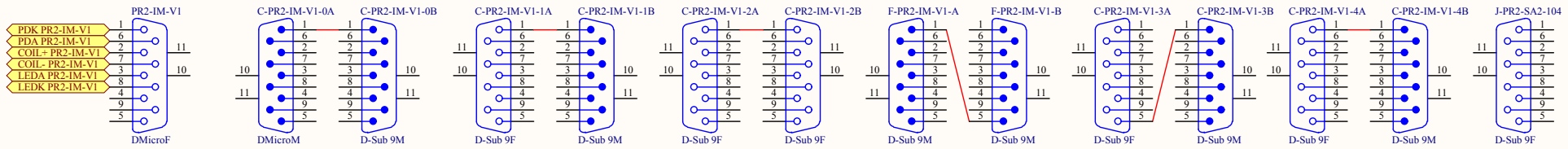
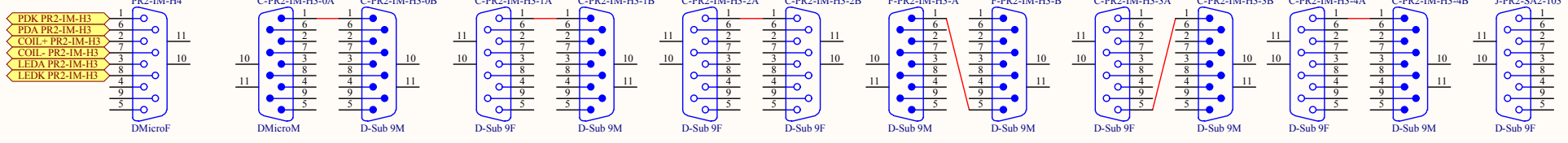
A

A



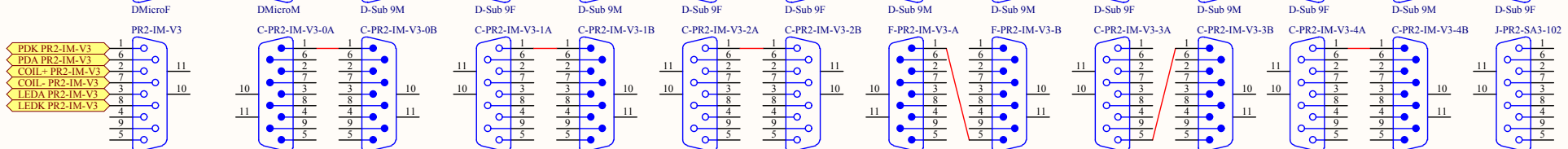
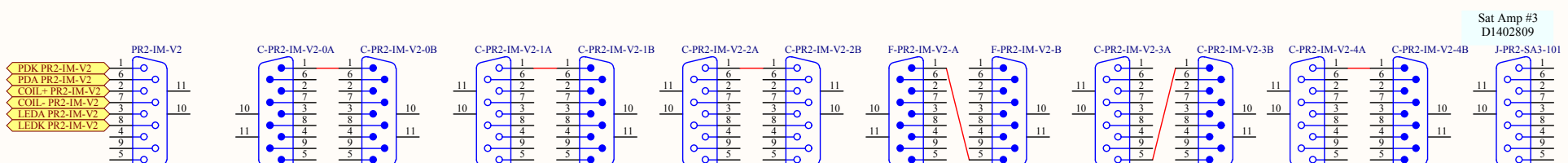
B

B



C

C



D

D

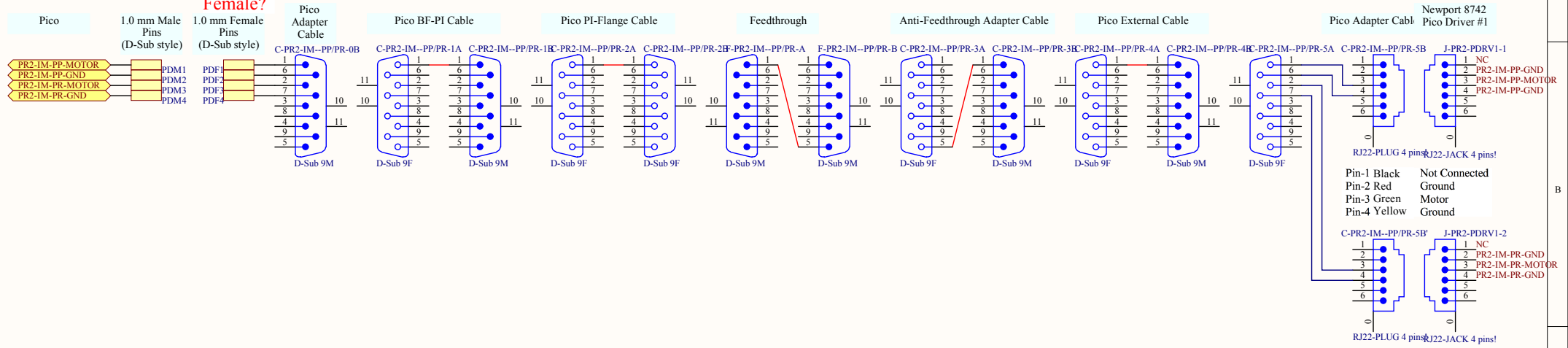
J-PR2-SA3-103 and J-PR2-SA3-104 not used

Title PR2 Suspension Cabling - Intermediate Mass OSEMs		
Size A3	Number JGW-D1503614	Revision -v1
Date: 2015/06/09	Sheet of	
File: Z:\Work\IM OSEMs.SchDoc	Drawn By:	

1 Feedthrough

IM Picomotors

Maybe
D-Sub
Female?



Title PR2 Suspension Cabling - Intermediate Mass Picos			
Size A3	Number JGW-D1503614	Revision -v1	
Date: 2015/06/09	Sheet of 1	Sheet of 1	Drawn By:
File: Z:\Work\IM Picos.SchDoc			

4 Feedthroughs

TM OSEMs

A

OSEM

OSEM-BF Cable

OSEM BF-PI Cable

OSEM PI-Flange Cable

Feedthrough

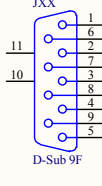
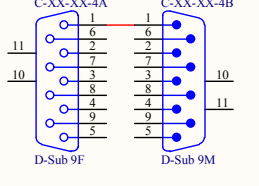
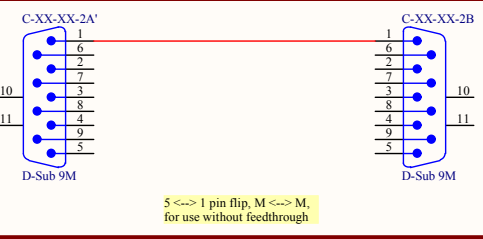
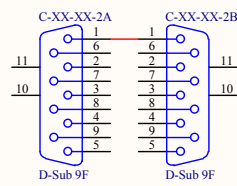
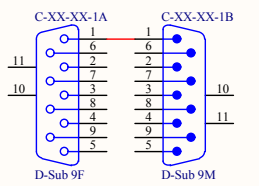
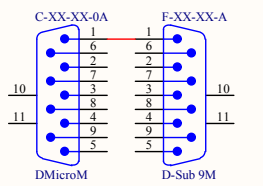
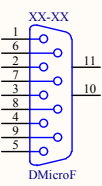
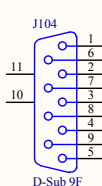
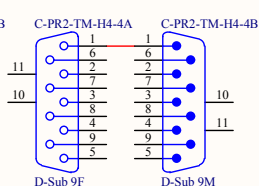
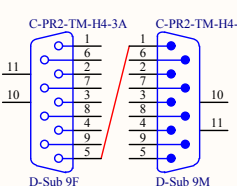
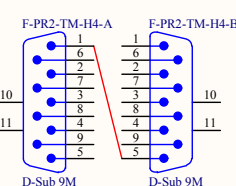
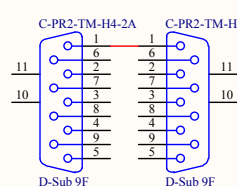
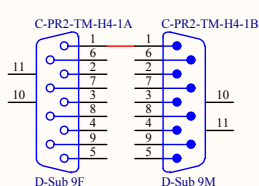
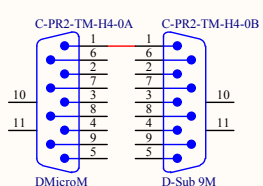
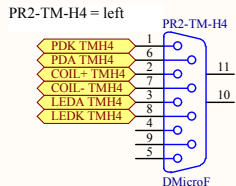
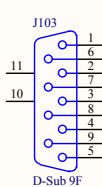
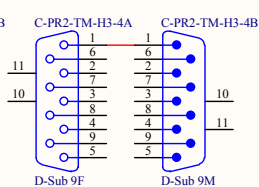
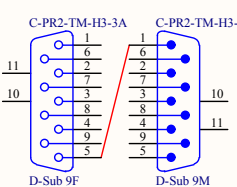
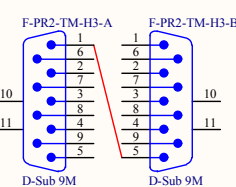
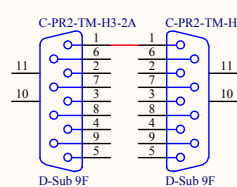
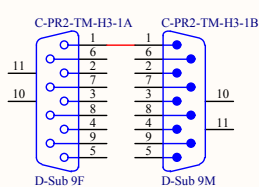
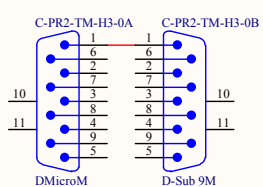
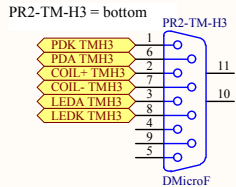
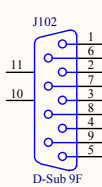
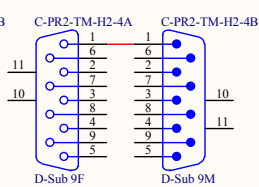
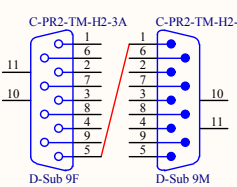
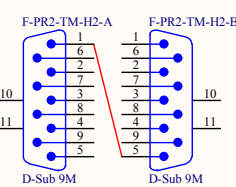
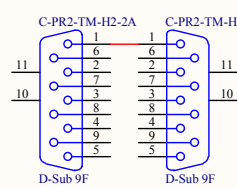
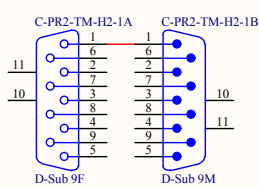
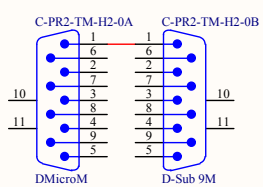
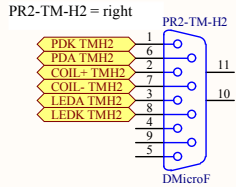
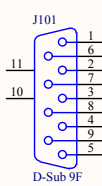
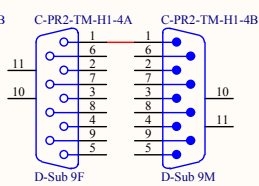
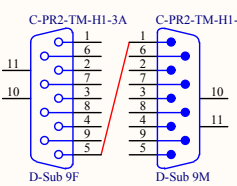
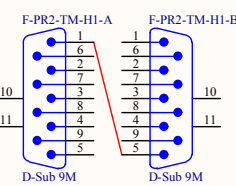
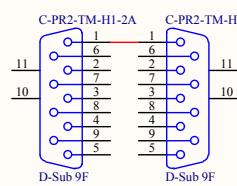
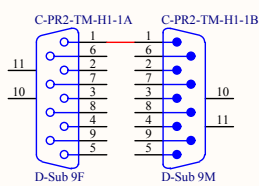
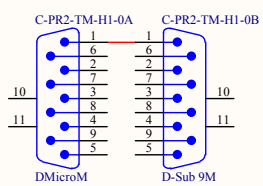
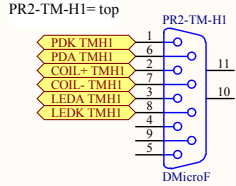
Anti-Feedthrough Adapter Cable

OSEM External Cable

Sat Amp #1 D1402809

Glenair GMR7590-9P-1BPN

Glenair MWDM2L-9SS



For testing the suspension outside the vacuum tank, there should be a supply of plain M-M gender changers to replace the combination of Feedthrough+Anti-Feedthrough adapter cable.

C

D

Title			PR2 Suspension Cabling - Test Mass OSEMs		
Size	Number	Revision			
A3	JGW-D1503614	-v1			
Date:	2015/06/09	Sheet of			
File:	Z:\Work\TM OSEMs.SchDoc	Drawn By:			

2? Feedthroughs

Traverser Position Sensors

Add position sensors here!

Title			PR2 Suspension Cabling - Traverser Steppers and Position Sensors		
Size	Number	Revision			
A3	JGW-D1503614	-v1			
Date:	2015/06/09	Sheet	of		
File:	Z:\Work\TR Position Sensors.SchDoc	Drawn By:			

4 Feedthroughs

Traverser Steppers

A

B

C

D

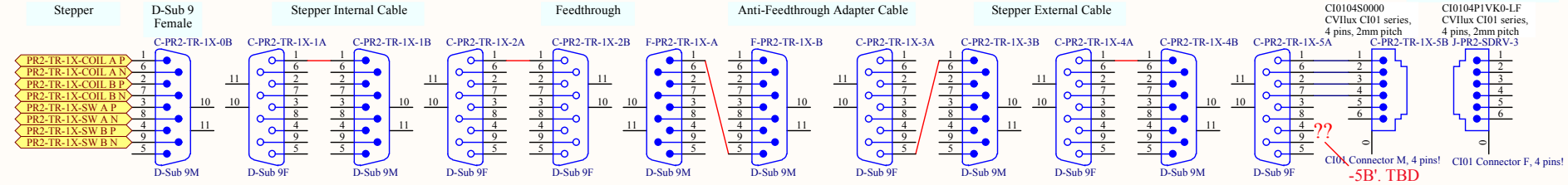
A

B

C

D

Pin	Function
1	COIL A P
2	COIL A N
3	COIL B P
4	COIL B N
5	Switch 1 P
6	Switch 1 N
7	COIL 2 P
8	COIL 2 N
9	Switch 2 P
10	Switch 2 N

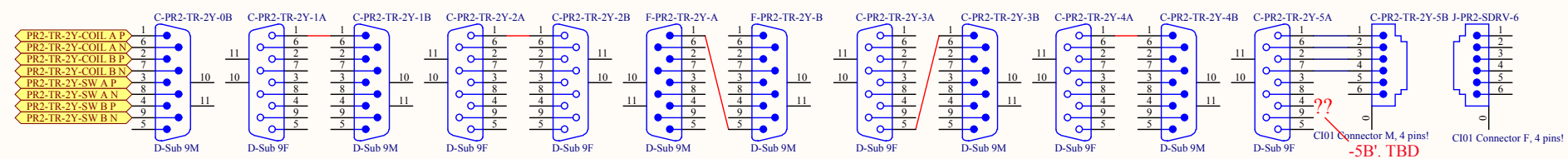
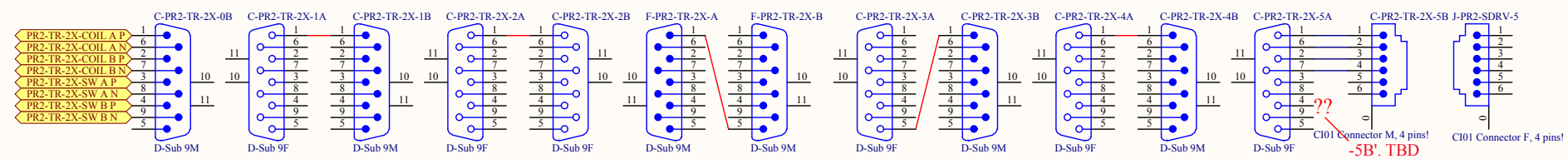
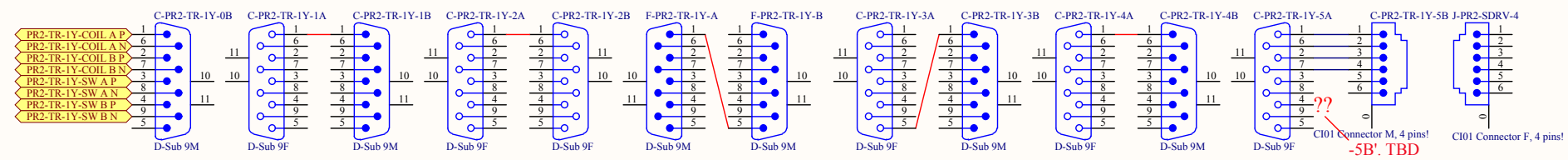


Pin	Label	Direction	Description
1	A1	Output	Pin 1 of motor coil A
2	A2	Output	Pin 2 of motor coil A
3	B1	Output	Pin 1 of motor coil B
4	B2	Output	Pin 2 of motor coil B

Controller motor inputs.

Pin	Label	Direction	Description
1	GN2	Power (GND)	Signal and system ground
2	V _{SMU}	Power (Supply output)	Connected to V _{SMU}
3	REF L	Input	Input for reference / limit switch left
4	REF R	Input	Input for reference / limit switch right

Controller switch inputs - don't know if these are actually going to be used.



Title		
PR2 Suspension Cabling - Traverser Steppers		
Size	Number	Revision
A3	JGW-D1503614	-v1
Date:	2015/06/09	Sheet of
File:	Z:\Work\TR Steppers.SchDoc	Drawn By: