



12th February 2004

SPIRE-RAL-NOT-001940

To: Spire Project

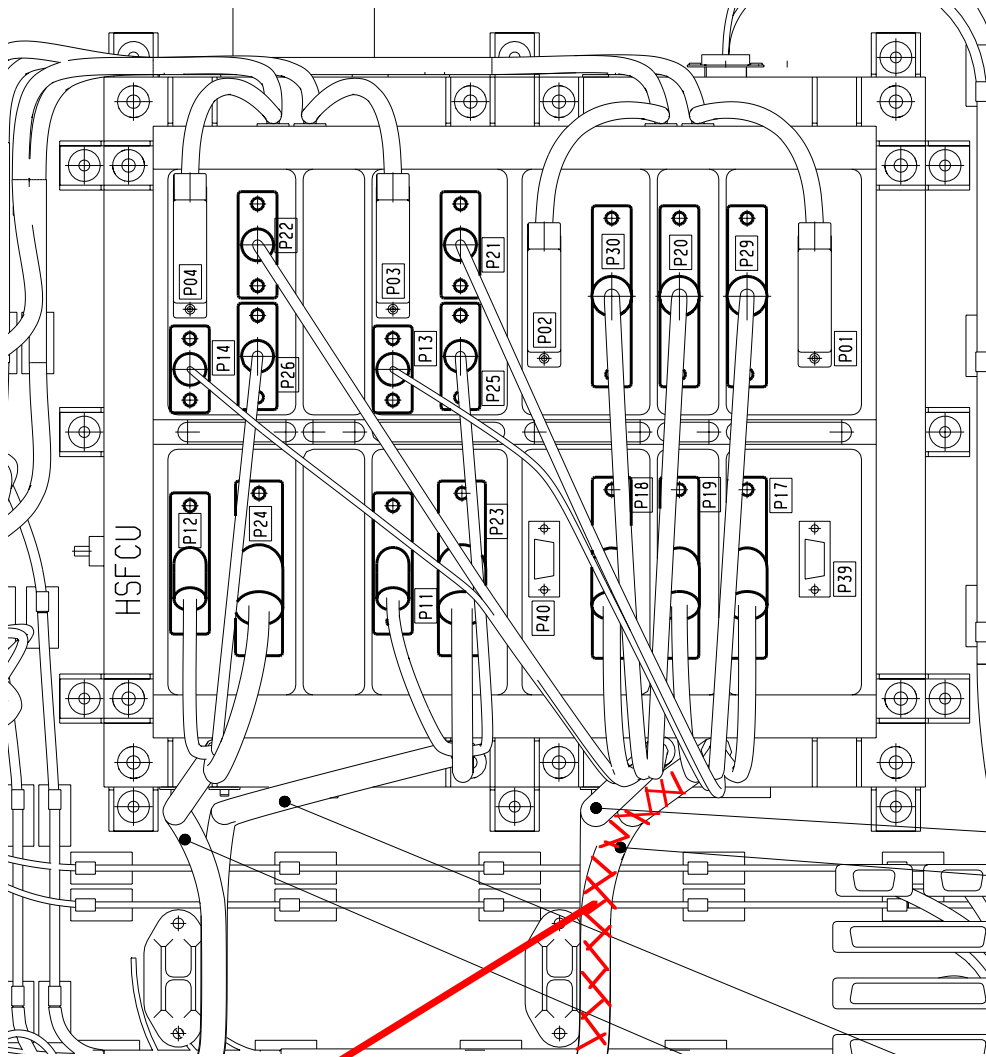
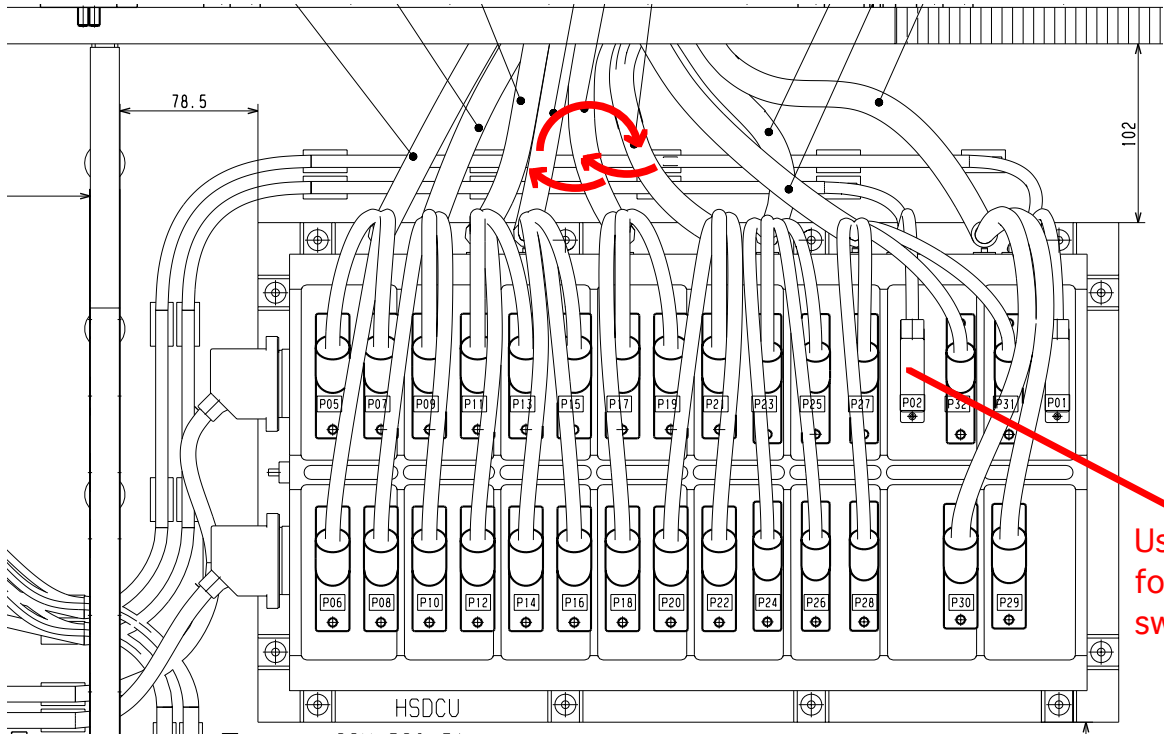
From: John Delderfield

QM DRCU INTEGRATION

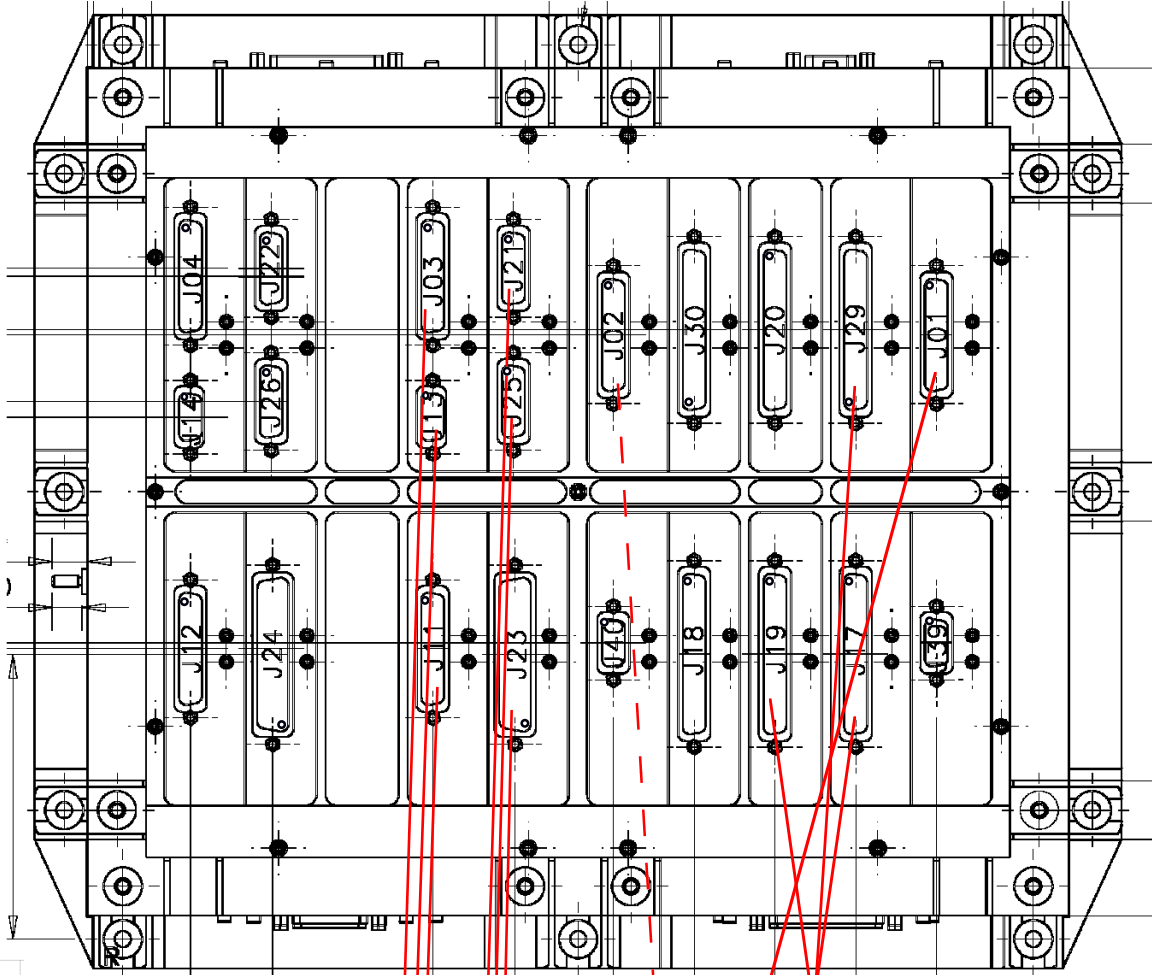
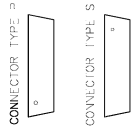
At this Tuesday's ESA meeting, in addition to the long-identified need for all interface connectors to be present, we noted that Astrium had accepted the units could be accommodated mechanically (actually subject to some ongoing negotiation on power lead length as I now recall) but asked the question as to whether the units could mate with flight type SVM cryoharness and warm harness.

The three sheets that follow lead me to conclude that integration is possible and practicable.

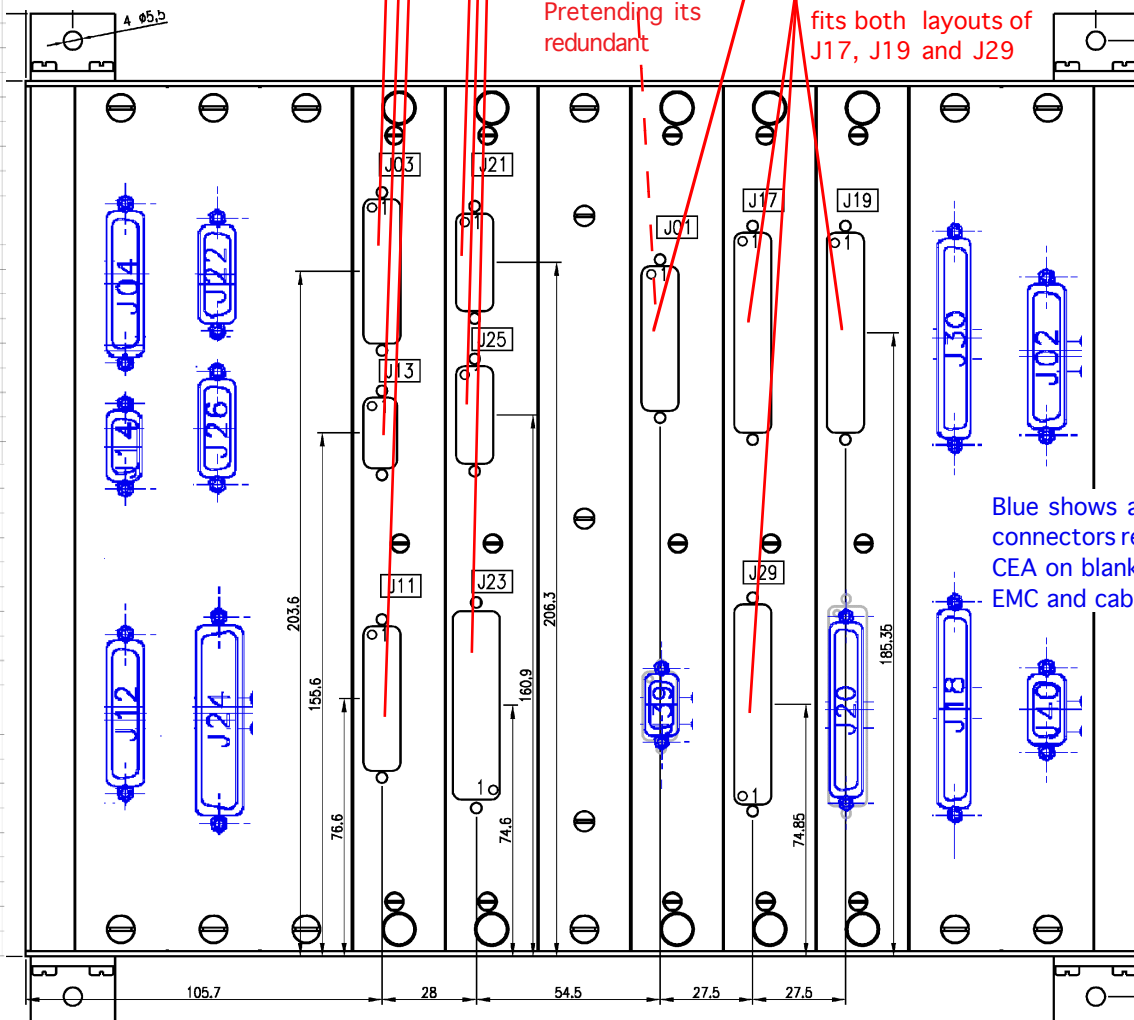
John



Let this bend cut corner and with lower height of unit check that J17 and J19 will reach across to QM posn.



IDENT	TYPE
J01	DBMA 25S
J02	DBMA 25S
J03	DBMA 25S
J04	DBMA 25S
J05	DEMA 9P
J06	DEMA 9P
J07	DBMA 25S
J08	DBMA 25S
J09	DBMA 25S
J10	DBMA 25S
J11	DBMA 25S
J12	DBMA 25S
J13	DEMA 9S
J14	DEMA 9S
J15	NA
J16	NA
J17	DCMA 37S
J18	DCMA 37S
J19	DCMA 37S
J20	DCMA 37S
J21	DAMA 15S
J22	DAMA 15S
J23	DDMA 50S
J24	DDMA 50S
J25	DAMA 15S
J26	DAMA 15S
J27	NA
J28	NA
J29	DCMA 37P
J30	DCMA 37P
J31	DBMA 25P
J32	DBMA 25P
J33	DAMA 15S
J34	DAMA 15S
J35	DAMA 15P
J36	DAMA 15P
J37	NA
J38	NA
J39	DEMA 9S
J40	DEMA 9S

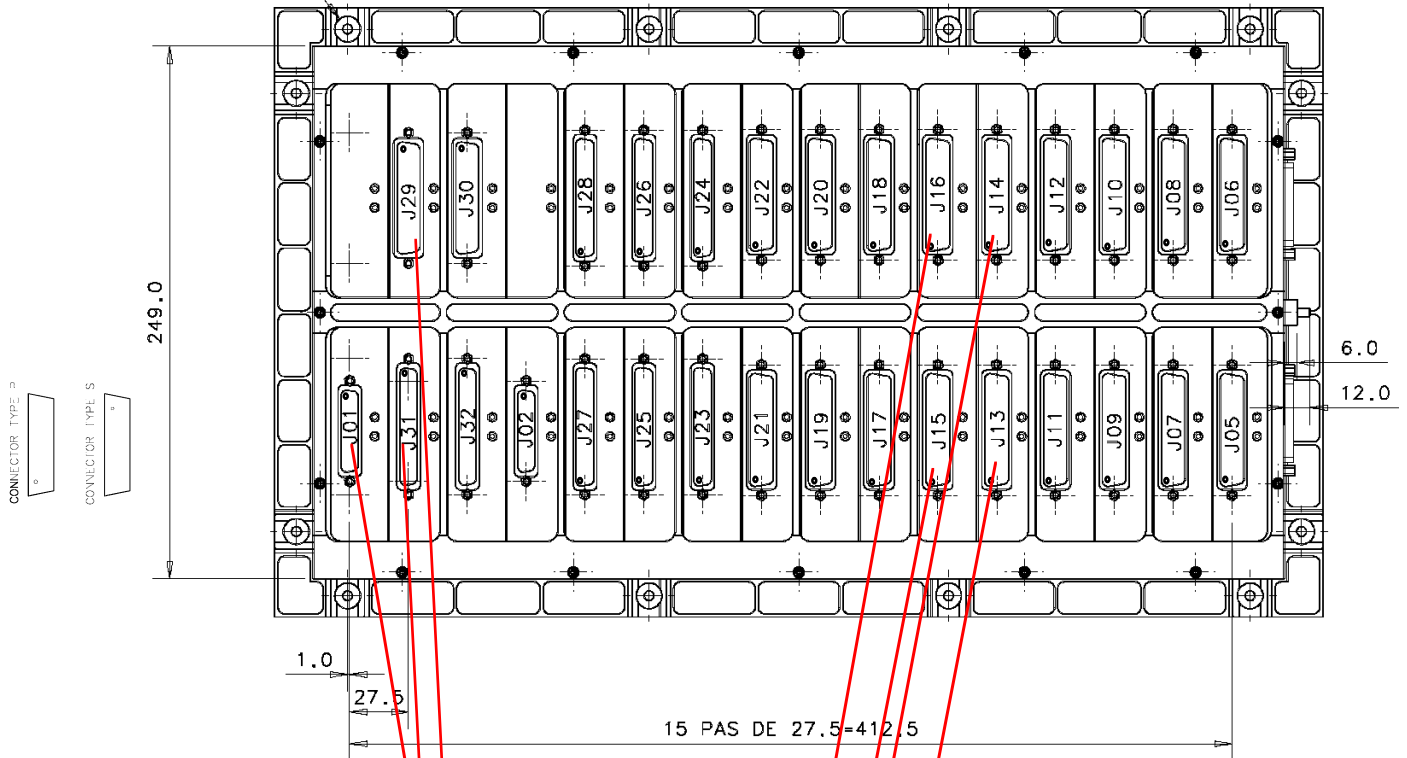


Pretending its redundant

Need to route FM harness so fits both layouts of J17, J19 and J29

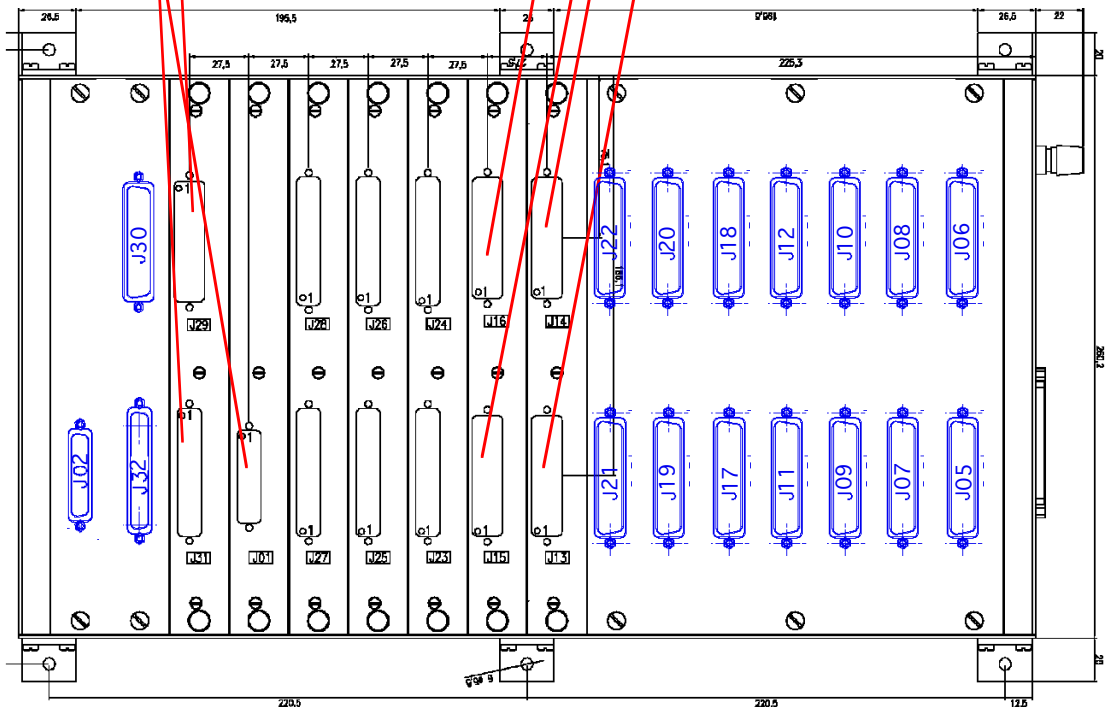
Blue shows additional connectors requested of CEA on blanking panels for EMC and cable storage.

lamages ø12 prof.0,5



FOR QM1, as FCU is non-redundant, we can MATE P30 to J29 and P32 to J31 if necessary.

IDENT	TYPE
J01	DBMA 25S
J02	DBMA 25S
J03	DBMA 25P
J04	DBMA 25P
J05	DDMA 50P
J06	DDMA 50P
J07	DDMA 50P
J08	DDMA 50P
J09	DDMA 50P
J10	DDMA 50P
J11	DDMA 50P
J12	DDMA 50P
J13	DDMA 50P
J14	DDMA 50P
J15	DDMA 50P
J16	DDMA 50P
J17	DDMA 50P
J18	DDMA 50P
J19	DDMA 50P
J20	DDMA 50P
J21	DDMA 50P
J22	DDMA 50P
J23	DCMA 37P
J24	DCMA 37P
J25	DCMA 37P
J26	DCMA 37P
J27	DCMA 37P
J28	DCMA 37P
J29	DDMA 78S
J30	DDMA 78S
J31	DCMA 37S
J32	DCMA 37S



Could also mate P02 into J01 and run as if redundant in DPU. (This swop could be done on DPU end alternatively.)

Blue shows additional connectors requested of CEA on blanking panels for EMC and cable storage.

CONCLUSION: AS FAR AS THE DCU IS CONCERNED, THE QM1 CAN USE THE SAME CABLES AS THE FM, PROVIDED SLIGHT SIDEWAYS SHIFT ON LINKS 13-16 IS OK.