

SLS-SPIE-RQMT-020 AMENDMENT

SPACECRAFT PAYLOAD INTEGRATION AND EVOLUTION OFFICE SECONDARY PAYLOAD DEPLOYMENT SYSTEM AVIONICS REQUIREMENTS

Additional/Attached Data

This information is to provide additional data that was not included in the documentation at the time of its baseline. The information shall be incorporated in the next revision of that document.

Connector Interface

The Avionics Box (sequencer/battery) has a number of electrical interfaces in order to accomplish the following tasks:

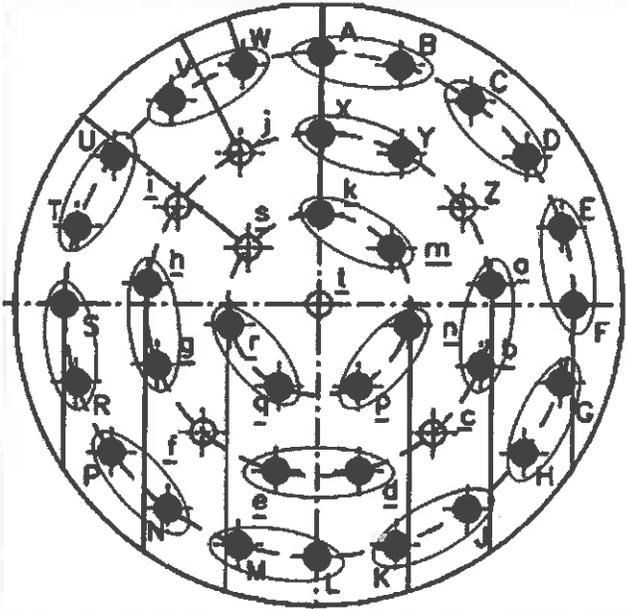
- Battery charging and thermal monitoring of the battery.
- Loading of mission skits and receiving confirmation of proper loading.
- Wake-up/activation discretes.
- Payload deployment discretes.

The following table identifies the connector interface and pin-outs for each above mentioned function. National Aeronautics and Space Administration (NASA) will consider other connector option(s) for the payload deployment discrete connector. The Contractor shall include any option(s) in their proposal.

The connector interfaces were not available at the time of the SLS-SPIE-RQMT-020 Secondary Payloads Deployment System Avionics Requirements Document baseline, and shall be incorporated into the next revision.

Secondary Payload Deployment System Avionics Box Connector / Pin-Outs				
Sequ./Batt. Connector ID	Connector Function	Connector Type	Pin	Pin Function
J04	Charge Power	D38999/24FC8PN		
Charging and temperature monitoring of batteries during ground charging.			B	PWR_IN+
			C	PWR_IN-
			E	VDC_MON+
			F	VDC_MON-
			A	SPARE
			D	SPARE
			G	SPARE
			H	SPARE
J05	Skit Load	D38999/24FA35PN		
RS422 circuit for loading sequencer skits and getting confirmation of proper skit loading.			1	SKIT_TX+
			5	SKIT_TX-
			3	SKIT_RX+
			2	SKIT_RX-
			4	SPARE
			6	SPARE
J02	Wake Up Discrete A	D38999/24FB98PN		
ICPS activation discrete to connect battery to sequencer, initiating sequencer counting and eventual payload deployment. This is the primary discrete.			F	WAKE_IN+
			A	WAKE_IN-
			B	SPARE
			C	SPARE

			D	SPARE
			E	SPARE
J03	Wake Up Discrete B	D38999/24FB98PA		
ICPS activation discrete to connect battery to sequencer, initiating sequencer counting and eventual payload deployment. This is the redundant discrete.			F	WAKE_IN+
			A	WAKE_IN-
			B	SPARE
			C	SPARE
			D	SPARE
			E	SPARE
J01	Payload Dispenser	D38999/24FG41SN		
Sequencer discrete to dispensers to release payloads by opening the dispenser door. Connector option(s) may be accepted from the vendor concerning this interface.			A	PL1_REL+
			B	PL1_REL-
			C	PL2_REL+
			D	PL2_REL-
			E	PL3_REL+
			F	PL3_REL-
			G	PL4_REL+
			H	PL4_REL-
			J	PL5_REL+
			K	PL5_REL-
			L	PL6_REL+
			M	PL6_REL-
			N	PL7_REL+
			P	PL7_REL-
R	PL8_REL+			
S	PL8_REL-			
T	PL9_REL+			
U	PL9_REL-			
V	PL10_REL+			
W	PL10_REL-			
X	PL11_REL+			
Y	PL11_REL-			
Z	Spare			
a	PL12_REL+			
b	PL12_REL-			
c	Spare			
d	PL13_REL+			
e	PL13_REL-			
f	Spare			
g	PL14_REL+			



	h	PL14_REL-
	i	Spare
	j	Spare
	k	PL15_REL+
	m	PL15_REL-
	n	PL16_REL+
	p	PL16_REL-
	q	PL17_REL+
	r	PL17_REL-
	s	Spare
	t	Spare