

FoxPlus-A Connectors & Cables

CONNECTORS							
Conn / Cable	ISIS / AMSAT Supplied	Manufacturer	Mfr Part No.	Connection	Male / Female	Interface	Notes
1	AMSAT	Samtec	MTSW-106-08-L-D-235	PSA to ISIS CSKB 12 pin	Male	PSA J1, J3	
2	AMSAT	Samtec	MTSW-107-08-L-D-235	PSA to ISIS CSKB 14 pin	Male	PSA J2, J4	
3	AMSAT	Samtec	QSH-030-01-L-D-A	QSH Stacking Connector	Female	PSA J5	
4	AMSAT	Harwin	M80-5301042	PSA to ISIS AntS (board)	Male	PSA J6	
5	AMSAT	Harwin	M80-5301042	PSA to ISIS Solar Panels (board)	Male	PSA J7	
6	AMSAT	Molex	5055651401	ABF Connector / plug – conn shell	Female	PIU J10 mate	This will be a plug for ABF. Do we need a cable here for testing? Female mating connector needs socket pins. These are crimp on and push in
7	AMSAT	Molex	5054311000	ABF Connector / plug – crimp pin socket	Female	PIU J10 mate	Same as J9 socket pins.
8	AMSAT			Separation Switch (PIU board)		PIU J8 mate	
Not Used	ISIS	Molex	505565-0681	CH3 I2C	Female	Not Used	Not used. Listed here for completeness. Same signals as on CSKB
CABLES							
UMB2	AMSAT	Molex	505431100	Umbilical PIU to External, PIU side – crimp pin socket	Female	PIU J9 mate	This cable goes from PIU J10 to the external connector which is TBD. Same as J10 socket pins.
	AMSAT	Molex	5055651501	Umbilical PIU to External, PIU side – connector shell	Female	PIU J9 mate	Female mating connector needs socket pins. These are crimp on and push in
	AMSAT	TBD		Umbilical PIU to External, ext side		Ext Umbilical	External connector not yet selected 11/18
UMB1	AMSAT	Molex	5055651401	Test Cable (if needed)	Female	PIU J10 mate	Same as above J10 mate connector to incl socket pins. Don't know at this time if this cable is needed. TBD
	AMSAT	TBD	TBD	Test box connector	Female	TBD	
SP_PWR	ISIS	ISIS?	A106268-001	Solar Panel Power, SP side	Female	Each Solar Panel	Power Connector on each of 5 solar panels
	AMSAT	Molex	504051-0801	Solar Panel Power, PIU side	Female	PIU J11	3 J11 connectors: CH0, CH1, CH2 so 2 solar panels each
SP_TMP	ISIS	ISIS?	A105383-001	Solar Panel Temp Sens, SP side	Female		Temperature sensors on solar panels. Panel sequence TBD
	AMSAT	Harwin	M80-4611042	Solar Panel Temp Sens, PSA side	Female	PSA S1	
	AMSAT	Harwin		Solar Panel Temp Sens, crimp pin socket	Female		
SEP_SW	AMSAT	Molex	505565-0601	Separation Switch I/F on PIU	Female	PIU J8 mate	
	AMSAT			Separation Switches on Frame			Solder to switches on frame? TBD
SEP_TST	AMSAT	Molex	505565-0601	Separation Switch Test (if needed)	Female	PIU J8 mate	J8 is the separation switch interface on the PIU
	AMSAT	TBD		Separation Switch Test (if needed)		Ext Test box?	
BATT	ISIS	Molex	505565-1501	Battery Connector, PIU side	Female	PIU J2 mate	This cable supplied by ISIS
	ISIS			Battery Connector, PBP side			Battery Side is supplied connected?
CONNECTOR TOOLS							
	AMSAT	Molex	2002180300	Hand crimp tool for Molex 1.25" Pitch			Available from Digikey
	AMSAT	Molex	638270800	Hand crimp tool for Molex 1.50" Pitch			
	AMSAT	Molex	638132700	Insertion / Extraction tool			
	AMSAT	Harwin	M22520/2-01	DMC Hand crimp tool for Harwin M80			