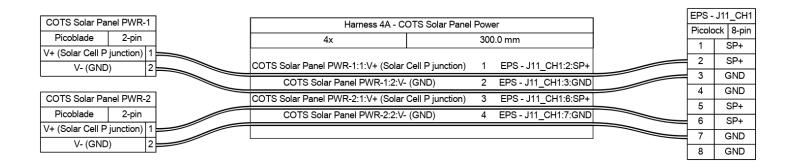
		Harness	s 1 - MP	12V Power				
OBC - J4 (MF	Pl Power)	4x	4x 200.0 mm			EPS -	J10 VD	3 OBC[0]
Picoblade	4-pin	OBC - J4 (MPI Power):1:12V_MPI	1:VT	EPS - J10 VD3_OBC[0]:4:VD3_OBC(0)		Mic	rolock	4-pin
12V_MPI	1	OBC - J4 (MPI Power):2:12V_MPI	2:BK	EPS - J10 VD3_OBC[0]:3:VD3_OBC(0)		4		OBC(0)
12V_MPI GND	2	OBC - J4 (MPI Power):3:GND	3:OG	EPS - J10 VD3_OBC[0]:2:GND		3		OBC(0)
GND	4	OBC - J4 (MPI Power):4:GND	4:YE	EPS - J10 VD3_OBC[0]:1:GND		1		SND
						<u> </u>		

		I	Harness 2	- Bo	om Burnwire Power			
Burnwire Po			5x	Т	300.0 mm	EDS	: \/D3	OBC[1]
Picoblade	6-pin					-		
VDC	1		Burnwire PCB - J2:1:VDC	1	EPS - VD3_OBC[1]:1:VD3_OBC(1)	Pic	colock	8-pin
VDC	2		Burnwire PCB - J2:2:VDC	2	EPS - VD3_OBC[1]:2:VD3_OBC(1)	1		OBC(1)
VDC	3		Burnwire PCB - J2:4:GND	3	EPS - VD3_OBC[1]:3:GND	2		OBC(1)
GND	4		Burnwire PCB - J2:5:GND	4	EPS - VD3_OBC[1]:5:GND	3		ND
GND	5			÷		4		ND
GND	6		Burnwire PCB - J2:6:GND	5	EPS - VD3_OBC[1]:7:GND	5	GI	ND
5.1.5						6	I2C_	SCL
						7	GI	ND
						8	I2C_	SDA

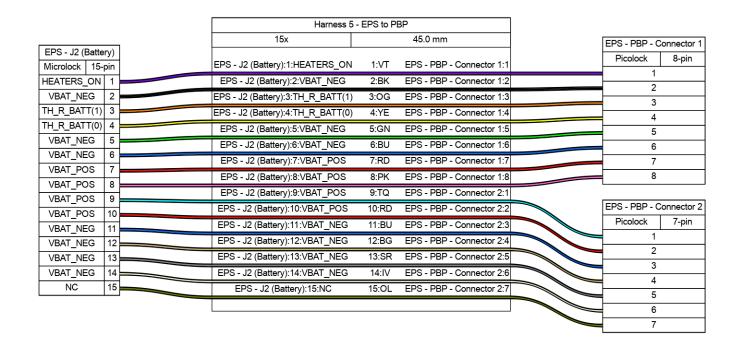
	Harness 3 - Bo	om E	Burn Wire to OBC]		
OBC - J8 (BW)	4x		300.0 mm		Burnwire PCB -	J1
Picoblade 4-pin	OBC - J8 (BW):1:BOOM_CTRL_1	1	Burnwire PCB - J1:3:BOOM_CTRL_1		Picoblade 4-r	oin
BOOM_CTRL_1 1	OBC - J8 (BW):2:GND	2	Burnwire PCB - J1:1:GND		1 GND 2 GND	-
BOOM CTRL 2 3	OBC - J8 (BW):3:BOOM_CTRL_2	3	Burnwire PCB - J1:4:BOOM_CTRL_2		3 BOOM CTRI	
GND 4	OBC - J8 (BW):4:GND	4	Burnwire PCB - J1:2:GND		4 BOOM_CTRI	_

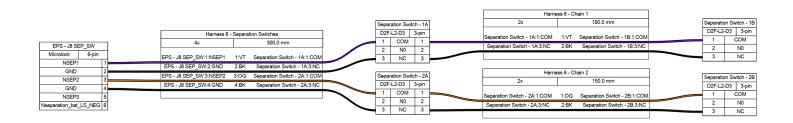


COTS Solar Panel PWR-1		TO 0 1 D 1D		1	EPS -	J11_CH2
CO 13 Solai Pallei PVVK-1	Harness 4B - CC	OTS Solar Panel Po	wer		Picolo	ock 8-pin
Picoblade 2-pin	4x	3	00.0 mm		1	SP+
V+ (Solar Cell P junction) 1					<u> </u>	
V- (GND) 2	COTS Solar Panel PWR-1:1:V+ (Solar	Cell P junction) 1	EPS - J11_CH2:2:SP+		12	SP+
	COTS Solar Panel PWR-1:2:V-	(GND) 2	P EPS - J11 CH2:3:GND		3	GND
	<u> </u>	· ,			4	GND
COTS Solar Panel PWR-2	COTS Solar Panel PWR-2:1:V+ (Solar	Cell P junction) 3	B EPS - J11_CH2:6:SP+		5	SP+
Picoblade 2-pin	COTS Solar Panel PWR-2:2:V-	(GND) 4	EPS - J11 CH2:7:GND		<u> </u>	
V+ (Solar Cell P junction) 1		· · ·			6	SP+
					7	GND
V- (GND) 2					8	GND

COTS Solar Panel PWR-1				EPS	S - J303
CO13 Solar Panel PWR-1	Harness 4C - Co	OTS Solar Panel Power		Picolo	ock 8-pin
Picoblade 2-pin	4x	300.0	mm	1	
V+ (Solar Cell P junction) 1					SP+
V- (GND) 2	COTS Solar Panel PWR-1:1:V+ (Sola	ar Cell P junction) 1	EPS - J303:2:SP+	2	SP+
(3.12)	COTS Solar Panel PWR-1:2:	V- (GND) 2	EPS - J303:3:GND	3	GND
		,	Li O 0000.0.011D	4	GND
COTS Solar Panel PWR-2	COTS Solar Panel PWR-2:1:V+ (Sola	ar Cell P junction) 3	EPS - J303:6:SP+	5	SP+
Picoblade 2-pin	COTS Solar Panel PWR-2:2:	V- (GND) 4	EPS - J303:7:GND	1	
V+ (Solar Cell P junction) 1				6	SP+
				7	GND
V- (GND) 2				8	GND
				لـــــــا	

COTS Solar Panel PWR-1		TO 0 1 D 1D		1	EP:	S - J403
	Harness 4D - Co	DTS Solar Panel Pow	/er		Picol	ock 8-pin
Picoblade 2-pin	4x	300	.0 mm		4	
V+ (Solar Cell P junction) 1				1	1	SP+
V- (GND) 2	COTS Solar Panel PWR-1:1:V+ (Sola	ar Cell P junction)	1 EPS - J403:2:SP+		2	SP+
(5/13)	COTC C-1 D I DIA/D 1-2-	/ (OND)	2 EDC 1403-3-0ND		≓ 3	GND
	COTS Solar Panel PWR-1:2:	V- (GND)	2 EPS - J403:3:GND		4	GND
COTS Solar Panel PWR-2	COTS Solar Panel PWR-2:1:V+ (Solar	ar Cell P junction)	3 EPS - J403:6:SP+		5	SP+
Picoblade 2-pin	COTS Solar Panel PWR-2:2:	V- (GND)	4 EPS - J403:7:GND		<u> </u>	
V+ (Solar Cell P junction) 1		()			∮ 6	SP+
					7	GND
V- (GND) 2					8	GND



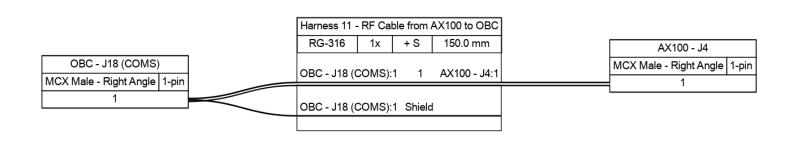


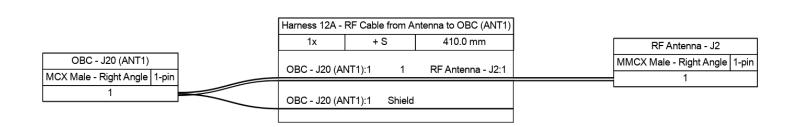
			Harness 7	- GN	SS Connector]			
OBC - J3 (CBS)	٦	8x		150.0 mm]	Г	GNSS via DI	MC2 D1
OBC - 33 (GPS)	_					Ľ	SINSS VIA DI	VIC3 PT
Picoblade	8-pin		OBC - J3 (GPS):1:NC	1	GNSS via DMC3 P1:1:NC			Picoblade	8-pin
NC	1		OBC - J3 (GPS):2:NC	2	GNSS via DMC3 P1:2:NC		<u>=</u> 1	NC	;
NC	2		OBC - J3 (GPS):3:MOSI_USART3_TX	3	GNSS via DMC3 P1:4:UART1 TX (MOSI)		- 2	. NC	
MOSI_USAR		4	OBC - J3 (GPS):4:MISO_USART3_RX	4	GNSS via DMC3 P1:3:UART1 RX (MISO)		= [³	UART1 RX	` '
MISO_USART		-1	OBC - J3 (GPS):5:NC	5	GNSS via DMC3 P1:5:AUX 1		= 4	UART1 TX	` ,
NC NC	5		OBC - J3 (GPS):6:NC	6	GNSS via DMC3 P1:6:AUX 2		<u> </u>	AUX	
GPS PP			OBC - J3 (GPS):7:GPS_PPS	7	GNSS via DMC3 P1:7:AUX 3 (PPS)		= ₽°	AUX	
NC	5 /		OBC - J3 (GPS):8:NC	8	GNSS via DMC3 P1:8:AUX 4		<u></u>	AUX 3 (` ′
								1 404	

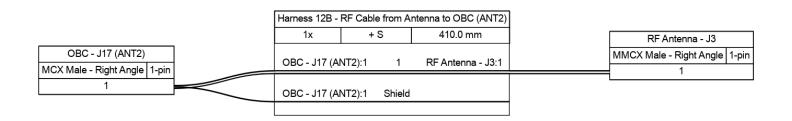
		Harness 8	- MPI Cor	nnector		
OBC - J10 (M	IPI)	9x		300.0 mm	MPI	Connector
Picoblade 10	-pin	OBC - J10 (MPI):1:12V_MPI	1:VT	MPI Connector:10:12V_MPI	Picob	lade 10-pin
12V_MPI	1	OBC - J10 (MPI):2:12V_MPI	2:BK	MPI Connector:9:12V_MPI	10	12V_MPI
12V_MPI	2	OBC - J10 (MPI):3:GND	3:OG	MPI Connector:8:GND	9	12V_MPI
GND	3	OBC - J10 (MPI):4:5V	4:YE	MPI Connector:7:5V	8	GND
5V	4	OBC - J10 (MPI):5:GND	5:GN	MPI Connector:6:GND	6	5V GND
GND	5	OBC - J10 (MPI):6:MOSI_TX_P	6:BU	MPI Connector:3:RI	5	DO
MOSI_TX_P MOSI_TX_N		OBC - J10 (MPI):7:MOSI_TX_N	7:RD	MPI Connector:2:RI*	4	DO*
MISO_RX_P		OBC - J10 (MPI):8:MISO_RX_P	8:PK	MPI Connector:5:DO	3	RI
MISO RX N		OBC - J10 (MPI):9:MISO_RX_N	9:TQ	MPI Connector:4:DO*	2	RI*
NC	10				1	NC

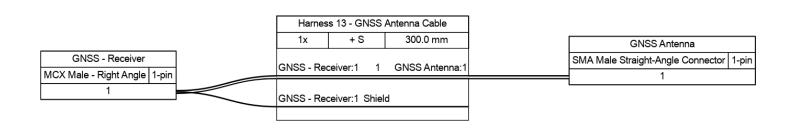
			Harness 9 -	Camera Co	nnector			
OBC - J7 (Camera	a)		6x		250.0) mm	С	amera
Picoblade 6-pir			OBC - J7 (Camera):1:3V3_CAM		// 1:VT Camera:1:VDI		Picob	lade 6-pin
3V3_CAM			OBC - J7 (Camera):2:CAM_EN			Camera:2:ON	1	VDD
CAM_EN	2		OBC - J7 (Camera):3:MOSI_UART4_TX			Camera:3:RXD	2	ON
MOSI_UART4_TX MISO_UART4_RX			OBC - J7 (Camera):4:MISO_UA	RT4_RX	4:YE	Camera:4:TXD	3	RXD TXD
NC	5		OBC - J7 (Camera):5:No	С	5:GN	Camera:5:FLASH	5	FLASH
GND	6		OBC - J7 (Camera):6:GND		6:BU Camera:6:GND		6	GND
	ш							

		Harness 10 - Antenna D	eployment Co	nnector		
OBC - J13 (Anten	na)	9x	25	50.0 mm	UHF	- Antenna
Picoblade 10	pin	OBC - J13 (Antenna):1:3V3_ANT_DEPL0	OY 1:BK	UHF Antenna:1:VCC	Omnetics A	28000-009 9-pin
3V3_ANT_DEPLO	Y 1	OBC - J13 (Antenna):2:12C2_SDA	2:BN	UHF Antenna:2:SDA_A	1	VCC
12C2_SDA	2	OBC - J13 (Antenna):3:GND	3:RD	UHF Antenna:3:GND	2	SDA_A
GND	3	OBC - J13 (Antenna):4:12C3_SDA	4:OG	UHF Antenna:4:SDA B	3	GND
12C3_SDA	4	OBC - J13 (Antenna):5:GND	5:YE	UHF Antenna:5:GND	4	SDA_B
GND	5	OBC - J13 (Antenna):6:3V3 ANT DEPLO		UHF Antenna:6:VCC	5	GND
3V3_ANT_DEPLO	/ 6	, , , = =			6	VCC
12C2_SCL	7	OBC - J13 (Antenna):7:12C2_SCL	7:BU	UHF Antenna:7:SCL_A	7	SCL_A
12C3_SCL	8	OBC - J13 (Antenna):8:12C3_SCL	8:VT	UHF Antenna:8:SCL_B	8	SCL_B
GND	9	OBC - J13 (Antenna):9:GND	9:GY	UHF Antenna:9:GND	9	GND
NC	10					

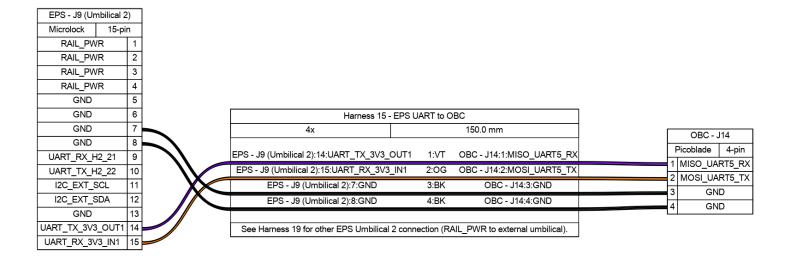


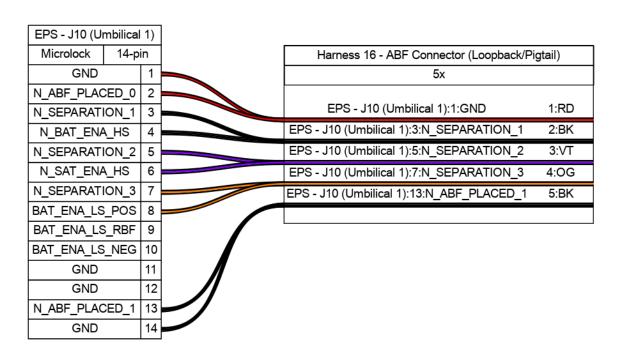


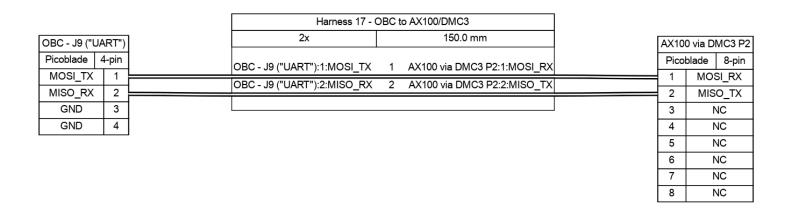


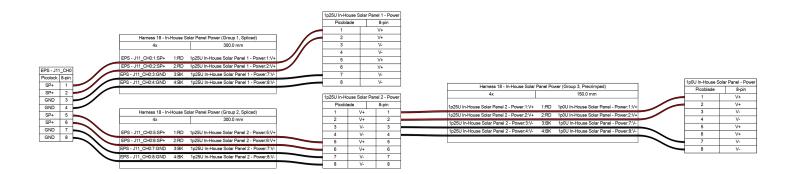


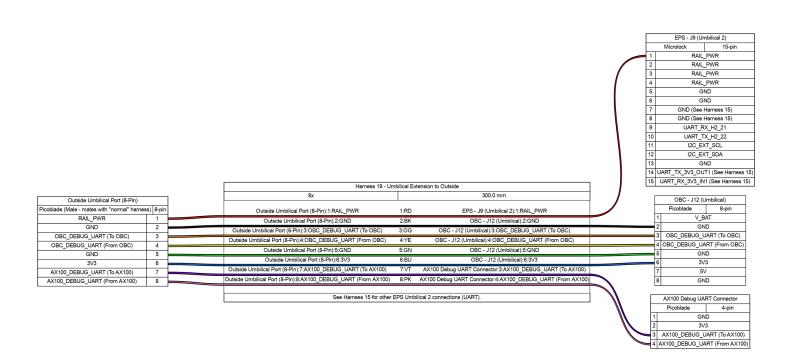
			Н	arness 14	4 - Solar Panel RBF			
OBC - J15 (RB	F)	4x			300.0 mm		1U In-House S	olar Panel - LED/RBF Connector
4-pin		OBC - J15 (RBF):1:RBF_1 1:VT 1U In-House Solar Panel - LED/RBF Connector:1:COM_RBF_1						4-pin
RBF_1	1	OBC - J15 (RBF):2:DEBUG_LED	2:OG	1U In-l	House Solar Panel - LED/RBF Connector:3:LED_1_POSITIVE		1	COM_RBF_1
DEBUG_LED	2	OBC - J15 (RBF):3:GND	3:BK	1U	In-House Solar Panel - LED/RBF Connector:2:NO_RBF_1		2	NO_RBF_1
GND	3	OBC - J15 (RBF):4:GND	4:BK	1U In-F	House Solar Panel - LED/RBF Connector:4:LED 1 NEGATIVE		3	LED_1_POSITIVE
GND	4						4	LED_1_NEGATIVE











			Harness 20 - OBC Prog	ramming Exter	nsion t	o Outside		
Outside OBC Program	nming Port (6-Pin)	1	6x		1	50.0 mm	ОВС	- J11 (SWD)
Picoblade (Male - mates with			Outside OBC Programming Port (6-Pin):	1:3V3 1:F	RD	OBC - J11 (SWD):1:3V3	Picok	plade 6-pin
3V3	1		Outside OBC Programming Port (6-Pin):2:	SWCLK 2:T	TQ	OBC - J11 (SWD):2:SWCLK	1	3V3
SWCLK	2		Outside OBC Programming Port (6-Pin):	3:GND 3:E	:BK	OBC - J11 (SWD):3:GND	2	SWCLK
GND	3		Outside OBC Programming Port (6-Pin):4:	SWDIO 4:C		OBC - J11 (SWD):4:SWDIO	3	GND
SWDIO	4		Outside OBC Programming Port (6-Pin):5			OBC - J11 (SWD):5:NRST	4	SWDIO
NRST	5		Outside OBC Programming Port (6-Pin):		GN	OBC - J11 (SWD):6:SWO	5	NRST
SWO	6		Outside OBC Frogramming Port (6-Pin):	5.3VV 6:0	GIN	OBC-311 (3VVD):0:3VVO	6	SWO

OBC - J12					1		
Picoblade 10-pin		Harness 51 - Umbilical					
V BAT	1	5x			USB-to-		SB-to-UART
GND	2	OBC - J12:3:MISO_LPUART1_RX	1	USB-to-UART:1:MOSI_TX			5-pin
MISO_LPUART1_RX	-	OBC - J12:4:MOSI_LPUART_TX	2	USB-to-UART:2:MISO_RX		1	MOSI_TX
MOSI_LPUART_TX	4	OBC - J12:5:GND	3	USB-to-UART:3:GND		12	MISO_RX
GND 3V3	5 6	OBC - J12:6:3V3	4	USB-to-UART:4:5V		3	GND 5V
5V	7	OBC - J12:7:5V	5	USB-to-UART:5:3V3		5	3V3
GND	8					_	
GND	9						
GND	10						

