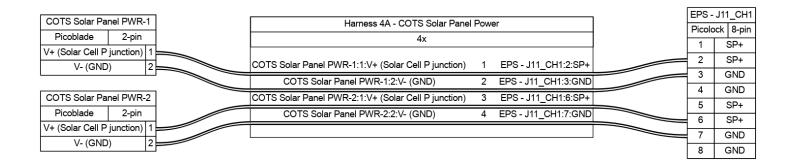
		Harness	s 1 - MP	12V Power			
OBC - J4 (MF	Pl Power)	4x		200.0 mm	EPS -	J10 VD	3 OBC[0]
Picoblade	4-pin	OBC - J4 (MPI Power):1:12V_MPI	1:VT	EPS - J10 VD3_OBC[0]:4:VD3_OBC(0)	Mic	rolock	4-pin
12V_MPI	1	OBC - J4 (MPI Power):2:12V_MPI	2:BK	EPS - J10 VD3_OBC[0]:3:VD3_OBC(0)	4		OBC(0)
12V_MPI GND	2	OBC -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

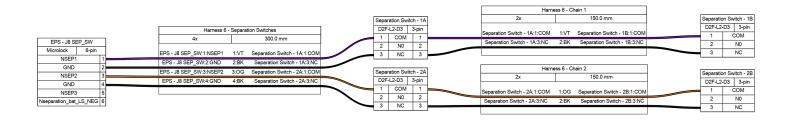


COTS Solar Panel PWR-1	Harrana AB, COTS Salar Banal	Davies	1	EPS -	J11_CH2
	Harness 4B - COTS Solar Panel	Power		Picolo	ock 8-pin
Picoblade 2-pin	4x			1	SP+
V+ (Solar Cell P junction) 1 V- (GND) 2	COTS Solar Panel PWR-1:1:V+ (Solar Cell P junction)	1 EPS - J11 CH2:2:SP+		2	SP+
V- (GND)	COTS Solar Panel PWR-1:2:V- (GND)	2 EPS - J11_CH2:3:GND		3	GND
COTS Solar Panel PWR-2	COTS Solar Panel PWR-2:1:V+ (Solar Cell P junction)	3 EPS - J11_CH2:6:SP+		5	GND SP+
Picoblade 2-pin	COTS Solar Panel PWR-2:2:V- (GND)	4 EPS - J11_CH2:7:GND		6	SP+
V+ (Solar Cell P junction) 1				7	GND
V- (GND) 2				8	GND

k 8-pin
<u> </u>
SP+
SP+
GND
GND
SP+
SP+
GND
GND

Hamada AD, COTO Calas Bassal D.		1	EPS	S - J403
Harness 4D - COTS Solar Panel Po	ower		Picolo	ock 8-pin
4x			4	
		1	1	SP+
COTS Solar Panel PWR-1:1:V+ (Solar Cell P junction)	1 EPS - J403:2:SP+		2	SP+
COTS Solar Panel PWP-1:2:\/- (GND)	2 EDS - M03:3:GND		3	GND
CO 15 Solai Fallei FWIK-1.2.V- (GND)	2 LF3 - 3405.5.GNL		4	GND
COTS Solar Panel PWR-2:1:V+ (Solar Cell P junction)	3 EPS - J403:6:SP+			SP+
COTS Solar Panel PWR-2:2:V- (GND)	4 EPS - J403:7:GND		_	
1 /			= 6	SP+
			7	GND
			8	GND
	4x COTS Solar Panel PWR-1:1:V+ (Solar Cell P junction) COTS Solar Panel PWR-1:2:V- (GND)	COTS Solar Panel PWR-1:1:V+ (Solar Cell P junction) 1 EPS - J403:2:SP+ COTS Solar Panel PWR-1:2:V- (GND) 2 EPS - J403:3:GND COTS Solar Panel PWR-2:1:V+ (Solar Cell P junction) 3 EPS - J403:6:SP+	4x COTS Solar Panel PWR-1:1:V+ (Solar Cell P junction) 1 EPS - J403:2:SP+ COTS Solar Panel PWR-1:2:V- (GND) 2 EPS - J403:3:GND COTS Solar Panel PWR-2:1:V+ (Solar Cell P junction) 3 EPS - J403:6:SP+	Harness 4D - COTS Solar Panel Power

EPS - J2 (Battery)				BP		
LEDS 12 (Pottoni)	7	15	ōχ		EPS - PBP - C	onnector 1
	→	EDG. 10 (D. 11.) 4 1/E4 EDG. 011	4.7	5D0 DDD 0 / 14	Picolock	8-pin
Microlock 15-pin		EPS - J2 (Battery):1:HEATERS_ON	1:VT	EPS - PBP - Connector 1:1	1	· ·
HEATERS_ON 1		EPS - J2 (Battery):2:VBAT_NEG	2:BK	EPS - PBP - Connector 1:2	2	
VBAT_NEG 2		EPS - J2 (Battery):3:TH_R_BATT(1)	3:OG	EPS - PBP - Connector 1:3	3	
TH_R_BATT(1) 3		EPS - J2 (Battery):4:TH_R_BATT(0)	4:YE	EPS - PBP - Connector 1:4	4	
TH_R_BATT(0) 4		EPS - J2 (Battery):5:VBAT_NEG	5:GN	EPS - PBP - Connector 1:5	5	
VBAT_NEG 5	⊣	EPS - J2 (Battery):6:VBAT_NEG	6:BU	EPS - PBP - Connector 1:6	6	
VBAT_NEG 6		EPS - J2 (Battery):7:VBAT_POS	7:RD	EPS - PBP - Connector 1:7	7	
VBAT_POS 7		EPS - J2 (Battery):8:VBAT POS	8:PK	EPS - PBP - Connector 1:8	8	
VBAT_POS 8	_	EPS - J2 (Battery):9:VBAT POS	9:TQ	EPS - PBP - Connector 2:1		
VBAT_POS 9		EPS - J2 (Battery):10:VBAT POS	10:RD	EPS - PBP - Connector 2:2	EPS - PBP - C	onnector 2
VBAT_POS 10		EPS - J2 (Battery):11:VBAT_NEG	11:BU	EPS - PBP - Connector 2:3	Picolock	7-pin
VBAT_NEG 11		` '' =			1	
VBAT_NEG 12		EPS - J2 (Battery):12:VBAT_NEG	12:BG	EPS - PBP - Connector 2:4	2	
VBAT_NEG 13	3	EPS - J2 (Battery):13:VBAT_NEG	13:SR	EPS - PBP - Connector 2:5	3	
VBAT_NEG 14		EPS - J2 (Battery):14:VBAT_NEG	14:IV	EPS - PBP - Connector 2:6	4	
NC 15		EPS - J2 (Battery):15:NC	15:OL	EPS - PBP - Connector 2:7	5	
					6	
					7	

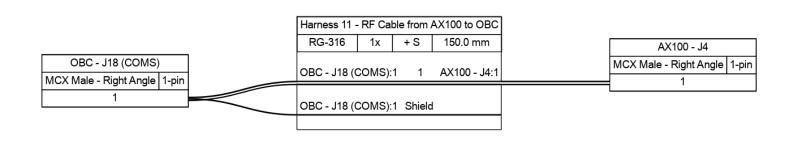


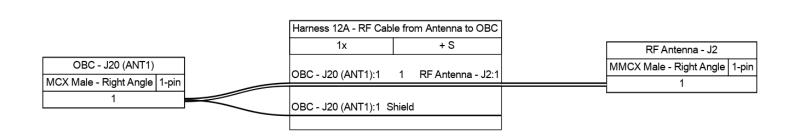
			Harness 7	- GN	SS Connector]			
OBC - J3 ((GPS)	7		8x			[·	GNSS via DI	MC3 P1
Picoblade	8-pin		OBC - J3 (GPS):1:NC	1	GNSS via DMC3 P1:1:NC			Picoblade	8-pin
NC	1		OBC - J3 (GPS):2:NC	2	GNSS via DMC3 P1:2:NC		— [1	NC	;
NC	2	2	OBC - J3 (GPS):3:MOSI_USART3_TX	3	GNSS via DMC3 P1:4:UART1 TX (MOSI)		= 2	NC NC	
MOSI_USAR		4	OBC - J3 (GPS):4:MISO_USART3_RX	4	GNSS via DMC3 P1:3:UART1 RX (MISO)		= 3	UART1 RX	, ,
MISO_USAR			OBC - J3 (GPS):5:NC	5	GNSS via DMC3 P1:5:AUX 1		<u></u>	UART1 TX	`
NC NC		3	OBC - J3 (GPS):6:NC	6	GNSS via DMC3 P1:6:AUX 2		<u>ٿ</u>	AUX	
GPS PF		7	OBC - J3 (GPS):7:GPS_PPS	7	GNSS via DMC3 P1:7:AUX 3 (PPS)		<u> </u>	AUX 3 (
NC	8	3	OBC - J3 (GPS):8:NC	8	GNSS via DMC3 P1:8:AUX 4		8	AUX	` /
	-	_						1	

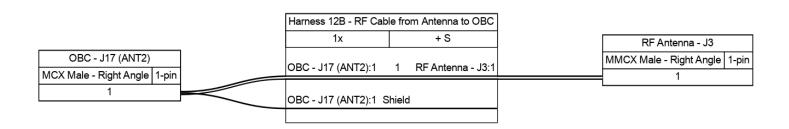
			Harness 8 -	MPI Cor	nector			
OBC - J10 (M	IPI)			9x			MPI	Connector
Picoblade 10	-pin	oin OBC - J10 (MPI):1:12V_MPI 1:VT MPI Connector:10:		MPI Connector:10:12V_MPI	Picoblad		lade 10-pin	
12V_MPI	1		OBC - J10 (MPI):2:12V_MPI	2:BK	MPI Connector:9:12V_MPI		10	12V_MPI
12V_MPI	2		OBC - J10 (MPI):3:GND	3:OG	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 MOSI TX P	5		OBC - J10 (MPI):6:MOSI_TX_P	6:BU	MPI Connector:3:RI		5	DO
MOSI_TX_P			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 NC	10						1	NC

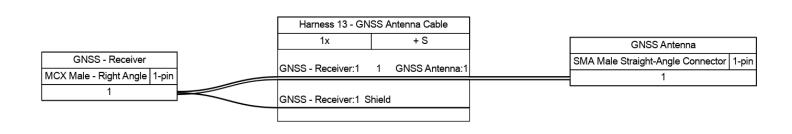
		Harness 9 -	Camera Co	onnector			
OBC - J7 (Camera)	6x		250.0) mm	С	amera
Picoblade 6-pir	ı 1	OBC - J7 (Camera):1:3V3_CAM 1:VT Camera:1:VDD		Picob	lade 6-pin		
3V3_CAM	1=	OBC - J7 (Camera):2:CAM	_EN	2:BK	Camera:2:ON	1	VDD
CAM_EN	2=	OBC - J7 (Camera):3:MOSI_UA	3:OG	Camera:3:RXD	2	ON	
MOSI_UART4_TX MISO UART4 RX	_	OBC - J7 (Camera):4:MISO_UA	RT4_RX	4:YE	Camera:4:TXD	3	RXD TXD
NC	5 =	OBC - J7 (Camera):5:N	0	5:GN	Camera:5:FLASH	5	FLASH
GND	6 =	OBC - J7 (Camera):6:GN	ID	6:BU	Camera:6:GND	6	GND
			·				

			Harness 10 - Antenr					
OBC - J13 (Antenna)		1	9x		250.0 mm		UHF	Antenna
Picoblade 10-	pin		OBC - J13 (Antenna):1:3V3_ANT_DE	DBC - J13 (Antenna):1:3V3_ANT_DEPLOY 1:BK UHF Antenna:1:VCC		Omnetics A	28000-009 9-pin	
3V3_ANT_DEPLO	1		OBC - J13 (Antenna):2:12C2_SD)A 2:E	3N	UHF Antenna:2:SDA_A	1	VCC
12C2_SDA	2		OBC - J13 (Antenna):3:GND	3:F	RD.	UHF Antenna:3:GND	2	SDA_A
GND	3		OBC - J13 (Antenna):4:12C3 SD	, ,		UHF Antenna:4:SDA B	3	GND
12C3_SDA	4		OBC - J13 (Antenna):5:GND	5:\		UHF Antenna:5:GND	4	SDA_B
GND	5		OBC - J13 (Antenna):6:3V3_ANT_DE			UHF Antenna:6:VCC	5	GND
3V3_ANT_DEPLOY	′ 6		, ,				6	VCC
12C2_SCL	7		OBC - J13 (Antenna):7:12C2_SC	CL 7:E	3U	UHF Antenna:7:SCL_A	7	SCL_A
12C3_SCL	8		OBC - J13 (Antenna):8:12C3_SC	CL 8:\	/T	UHF Antenna:8:SCL_B	8	SCL_B
GND	9		OBC - J13 (Antenna):9:GND	9:0	ΞY	UHF Antenna:9:GND	9	GND
NC	10							

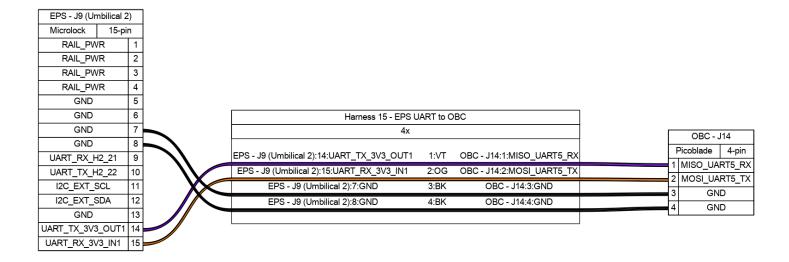


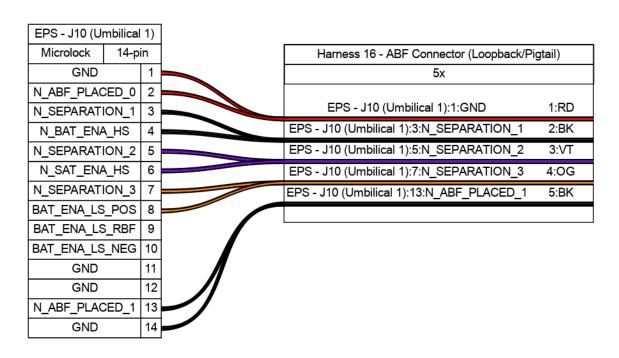


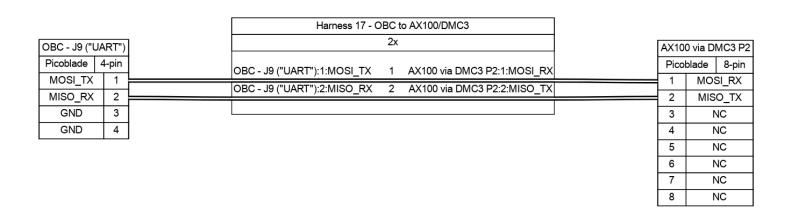


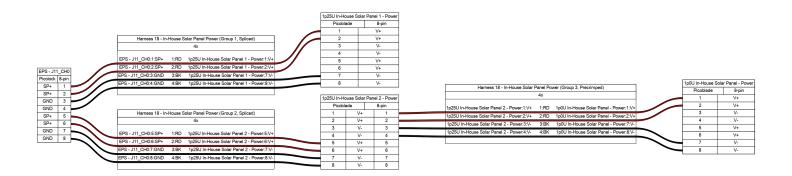


			Н	arness 14 - Solar Panel RBF		
OBC - J15 (RBF	ו			4x	1U In-House S	olar Panel - LED/RBF Connector
4-pin		OBC - J15 (RBF):1:RBF_1	1:VT	1U In-House Solar Panel - LED/RBF Connector:1:COM_RBF_1		4-pin
RBF_1 1		OBC - J15 (RBF):2:DEBUG_LED	2:OG	1U In-House Solar Panel - LED/RBF Connector:3:LED_1_POSITIVE	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-House Solar Panel - LED/RBF Connector:4:LED_1_NEGATIVE	3	LED_1_POSITIVE LED 1 NEGATIVE
GND 4					4	LED_I_NEGATIVE

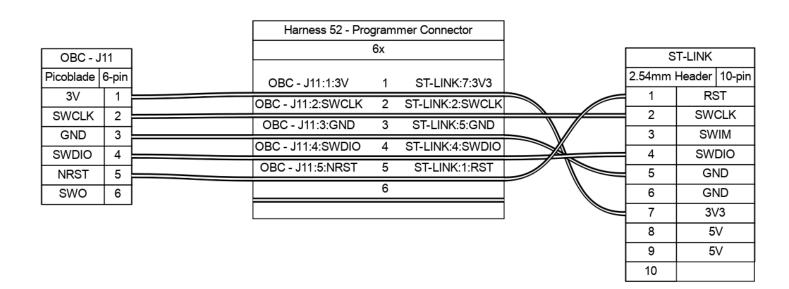


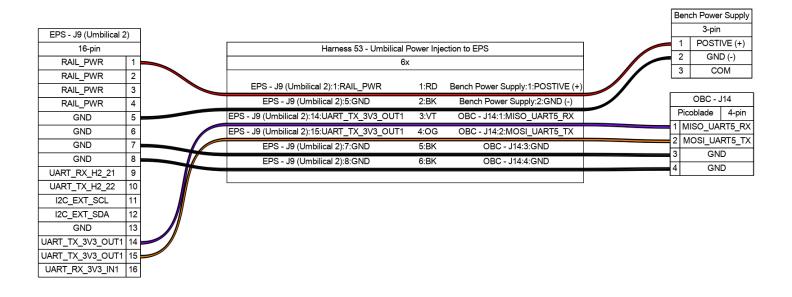






OBC - J12								
Picoblade 10-pin		Harness 51 - Umbilical						
V_BAT	10-рі	1	5x					SB-to-UART
GND		2	OBC - J12:3:MISO_LPUART1_RX	1	USB-to-UART:1:MOSI_TX			5-pin
MISO_LPUART		3	OBC - J12:4:MOSI_LPUART_TX	2	USB-to-UART:2:MISO_RX		1	MOSI_TX
MOSI_LPUAR	T_TX	4	OBC - J12:5:GND	3	USB-to-UART:3:GND		12	MISO_RX
GND		5	OBC - J12:6:3V3	4	USB-to-UART:4:5V		3	GND
3V3		6	OBC - J12:7:5V	5	USB-to-UART:5:3V3		14	5V
5V		/					Ľ	3∨3
GND		8						
GND		9						
GND		10						





	Harness 54 - EPS Separation Switch Cable				
Separation Switches	4x	Г	EPS - J8		
3-pin		\vdash	Microlock	6-pin	
COM 1	Separation Switches:3:NC 1 EPS - J8:1:NSEP1	┛╸	NSE		
2	Separation Switches:1:COM 2 EPS - J8:2:GND	<u>`</u>		GND	
NC 3	3	7			
	4	- 1	3 NSEP2		
	<u> </u>	4	GND		
		5	NSEP3		
		6	Nseparation_b	at_LS_NEG	

		_	Harness 55 - EPS Solar Panel Charging Cable with 10 Ohm Resisto	or		
EPS - J11_CH0, J11_C	CH1, J11_CH2, J303		2x		Bon	ch Power Supply
Picolock	8-pin				Bell	
SP+	1		EPS - J11_CH0, J11_CH1, J11_CH2, J303:1:SP+ 1 Bench Power Supply:	1:POSTIVE (+)		3-pin
	'			. ,	⊨ 1	POSTIVE (+)
SP+	2		EPS - J11_CH0, J11_CH1, J11_CH2, J303:3:GND 2 Bench Power Supp	ly:2:GND (-)		GND (-)
GND	3				7	``'
GND	4	1				COM
SP+	5					
SP+	6					
GND	7	1				

GND

8

		Harness 56 - New Programmer Connector		
OBC - J11		6x	ST-LINK	
Picoblade	6-pin	OBC - J11:1:3V 1 ST-LINK:7:3V3	2.54mm l	Header 10-pin
3V	1	OBC - J11:2:SWCLK 2 ST-LINK:2:SWCLK	1	RST
SWCLK	2	OBC - J11:3:GND 3 ST-LINK:5:GND	2	SWCLK
GND	3		3	SWIM
SWDIO	4	OBC - J11:4:SWDIO 4 ST-LINK:4:SWDIO	4	SWDIO
NRST	5	OBC - J11:5:NRST 5 ST-LINK:1:RST	5	GND
swo	6	6	6	GND
			7	3V3
			8	5V
			9	5V
			10	