

### Let's learn about satellites!

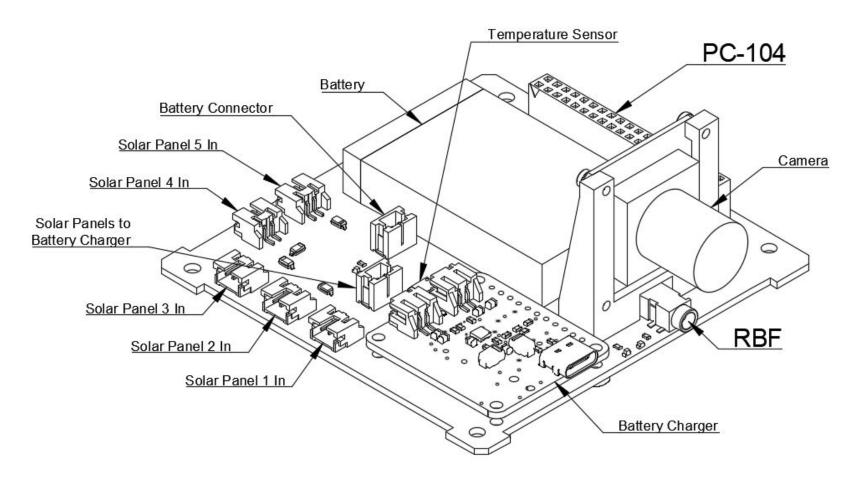
Space mission and satellite design course

2NDSpace

Electrical Layout

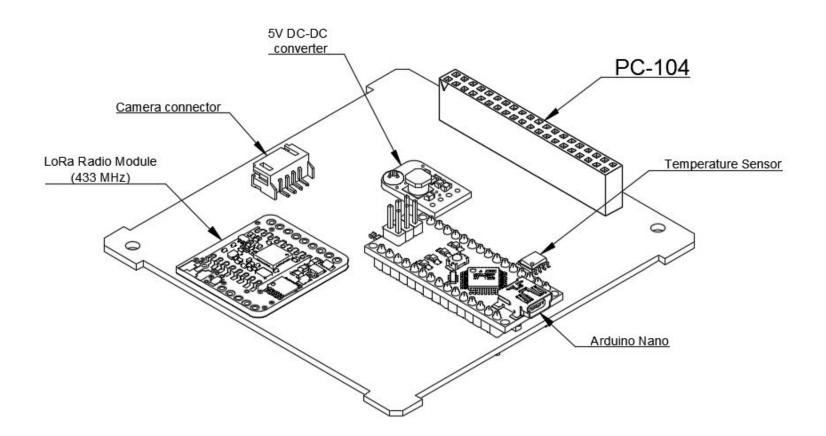


### **EPS Electrical Layout**



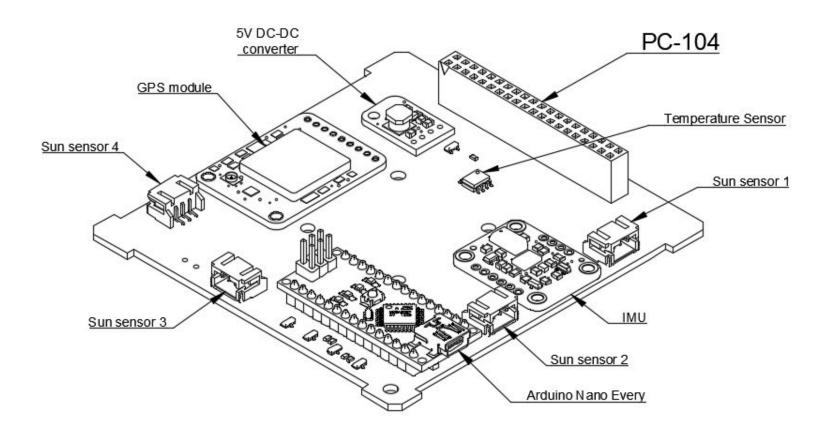


### **OBC Electrical Layout**



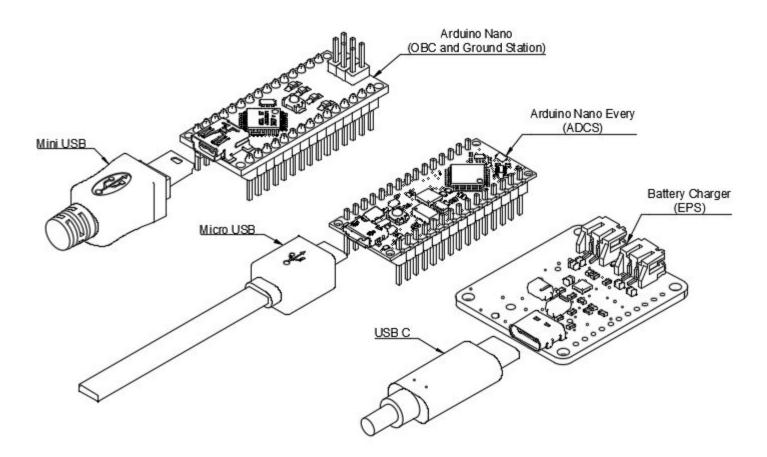


### **ADCS Electrical Layout**



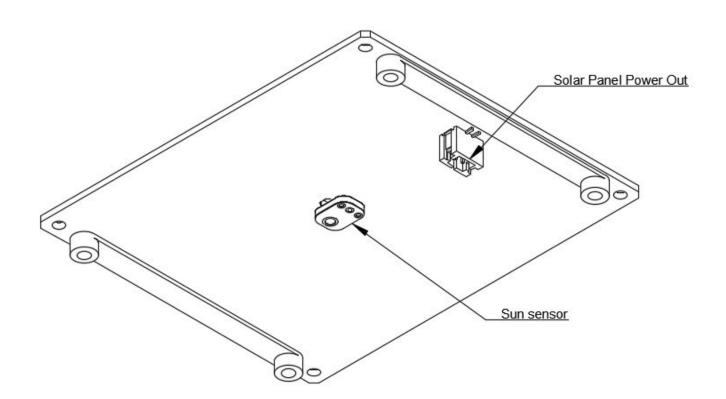


#### **USB CONNECTIONS**



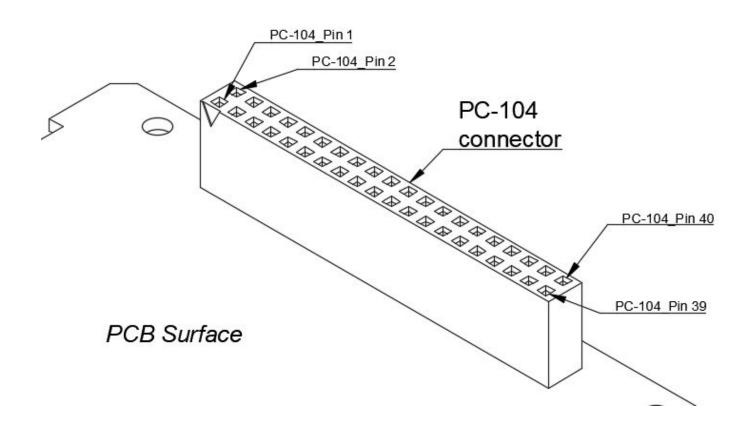


### **Solar Panel Electrical Layout**





#### **PC-104 Pinout Scheme**





#### **PC-104 Connections**

	Connections						
NOTES	EPS	OBC	ADCS	Pin Assignment	PC-104		Pin Assignment
Ground	1	1	1	GND	1	2	NC
OUT of the solar charger	<b>√</b>	1	✓	VBUS	3	4	NC
Ground	1	1	1	GND	5	6	NC
				NC	7	8	NC
				NC	9	10	NC
+5V bus from the OBC DC-DC converter	Х	✓	Х	OBC_5V	11	12	NC
			1	NC	13	14	NC
Battery Voltage (do not use it for power)	<b>&gt;</b>	<b>√</b>	Х	VBAT	15	16	NC
				NC	17	18	NC
ADCS reset signal from the OBC	Х	<b>√</b>	✓	ADCS_RESET	19	20	NC
				NC	21	22	NC
Temperature sensor on ADCS board	Х	<b>√</b>	<b>√</b>	ADCS_TEMP	23	24	NC
Temperature sensor on EPS board	<b>✓</b>	<b>√</b>	Х	EPS_TEMP	25	26	NC
		_		NC	27	28	NC
ADCS +5V DC-DC ENABLE	Х	1	1	ADCS_EN	29	30	NC
ADCS - OBC Serial port	Х	1	1	RX_ADCS_TX_OBC	31	32	NC
ADCS - OBC Serial port	Х	<b>√</b>	✓	TX_ADCS_RX_OBC	33	34	NC
Ground	<b>✓</b>	<b>✓</b>	1	GND	35	36	NC
OUT of the solar charger	<b>√</b>	✓	<b>√</b>	VBUS	37	38	NC
Ground	1	1	1	GND	39	40	NC