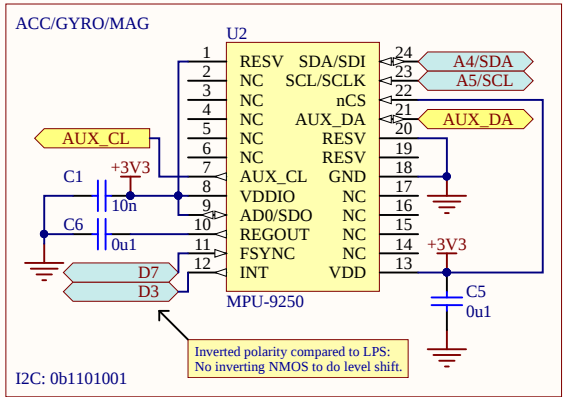
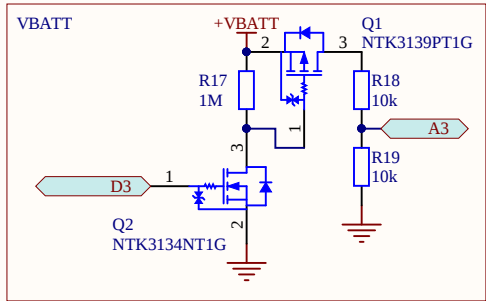
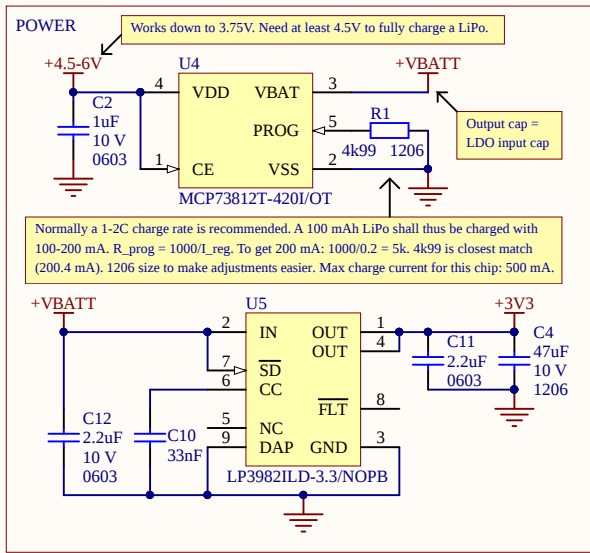
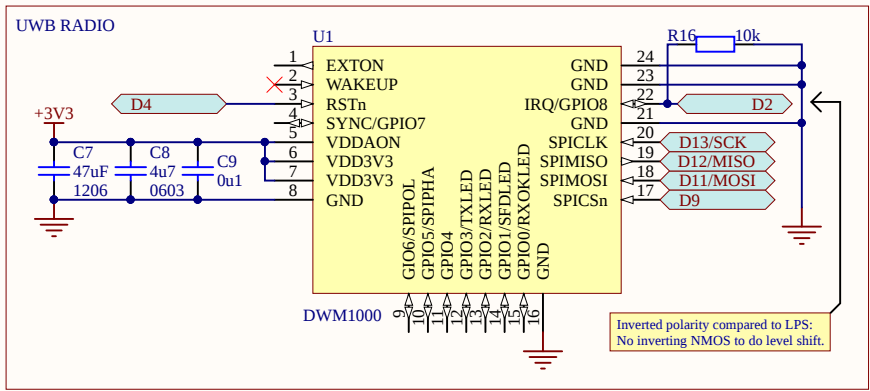
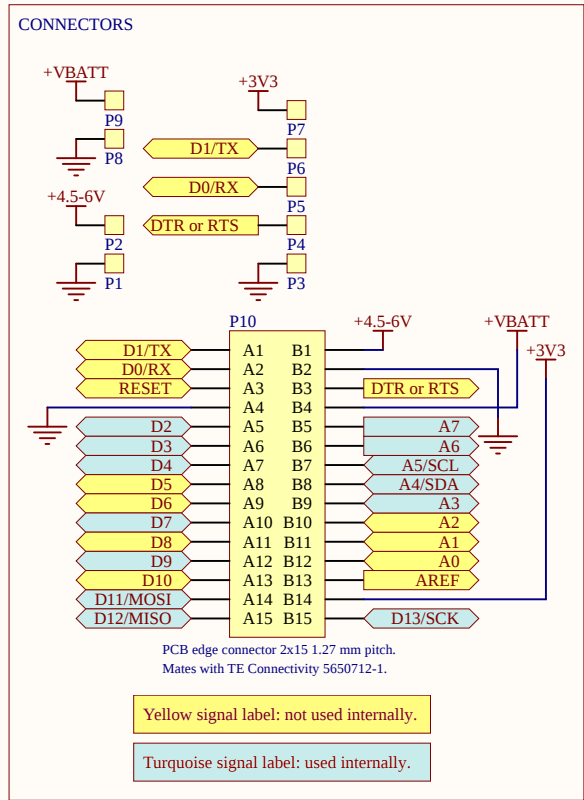
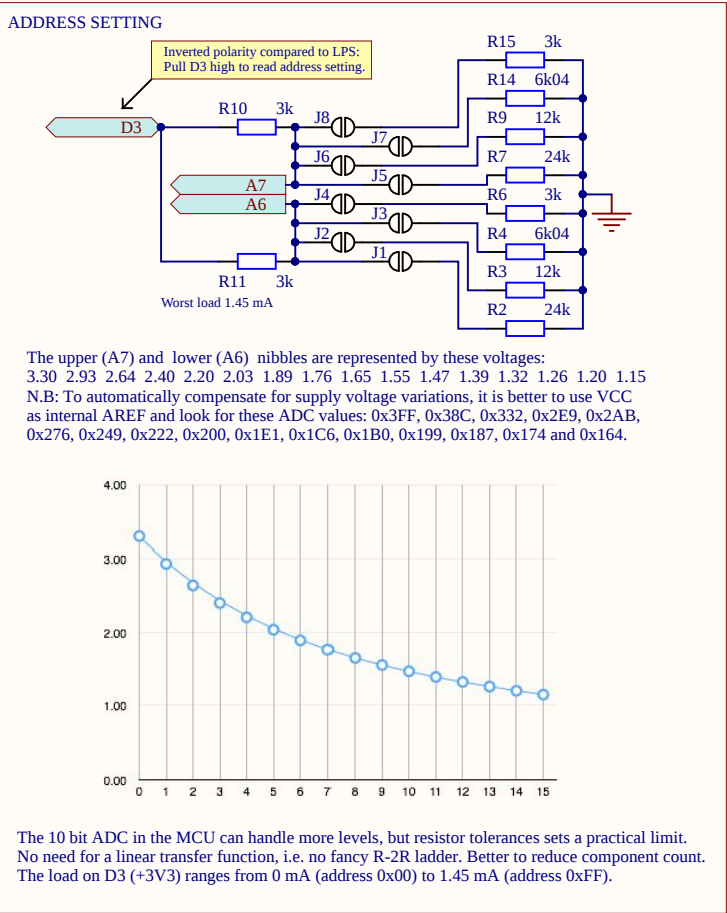
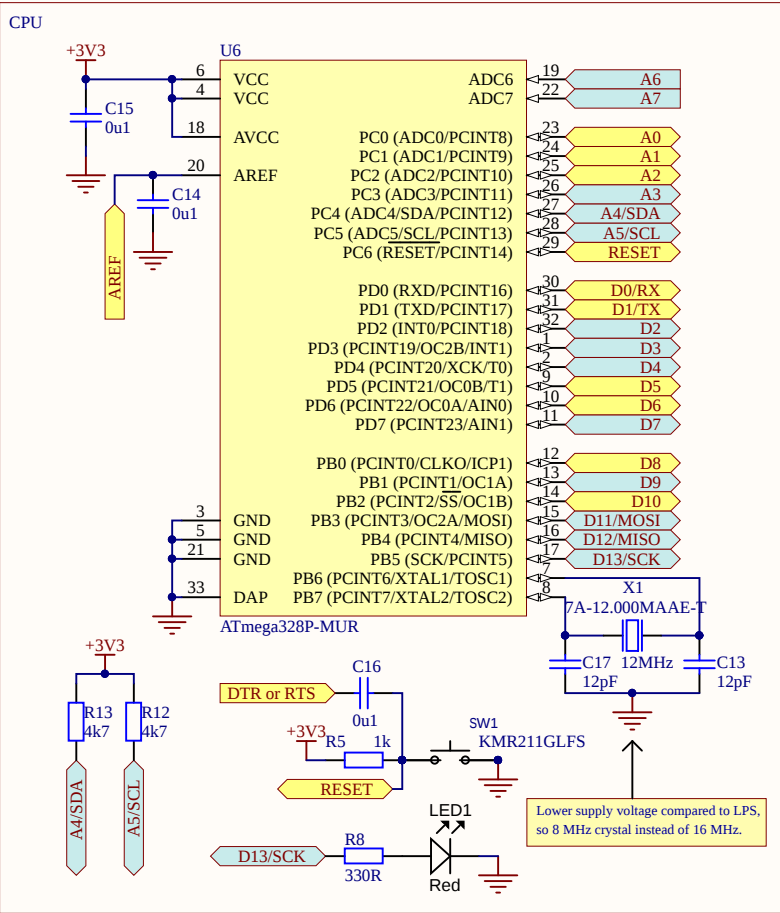
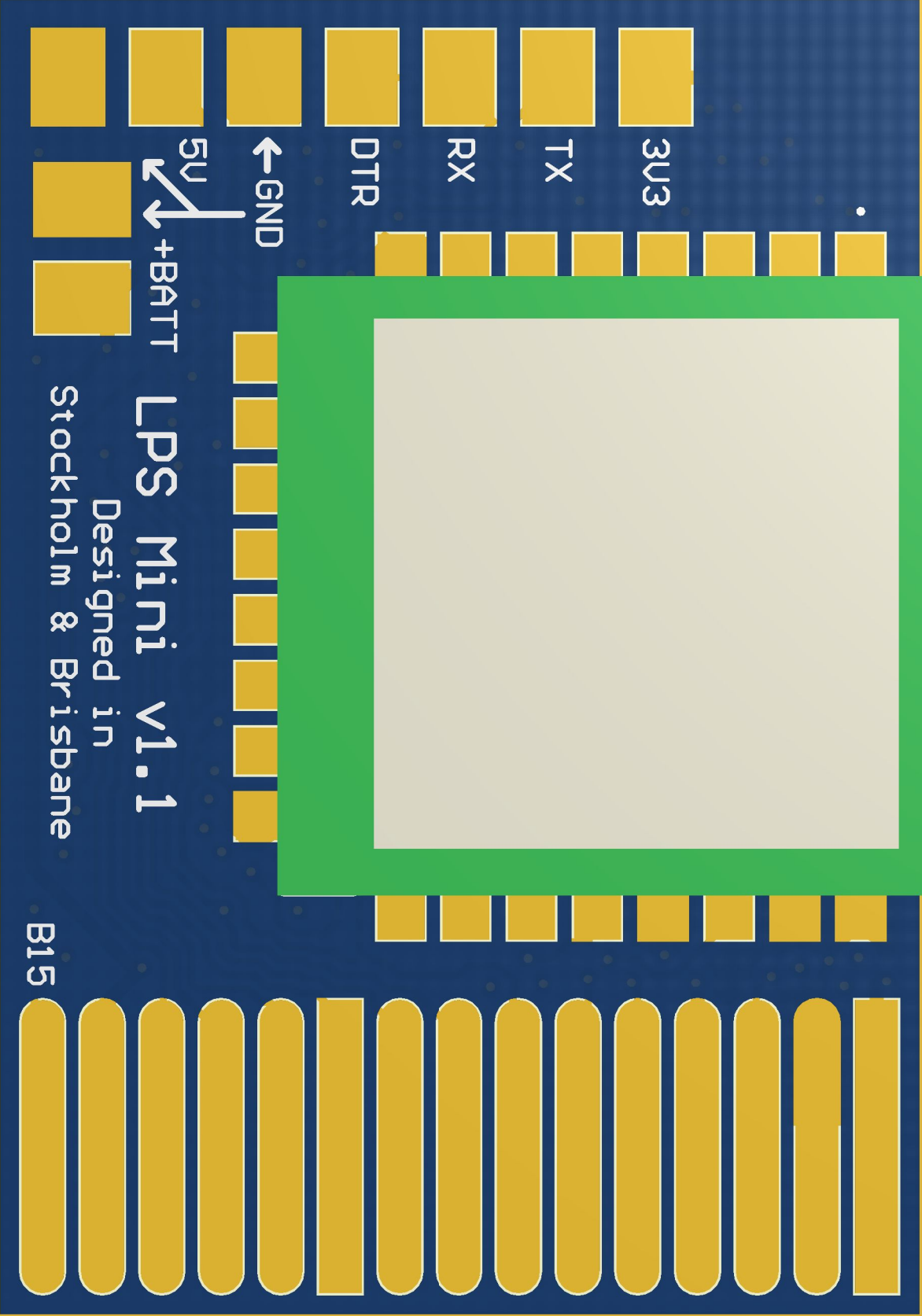
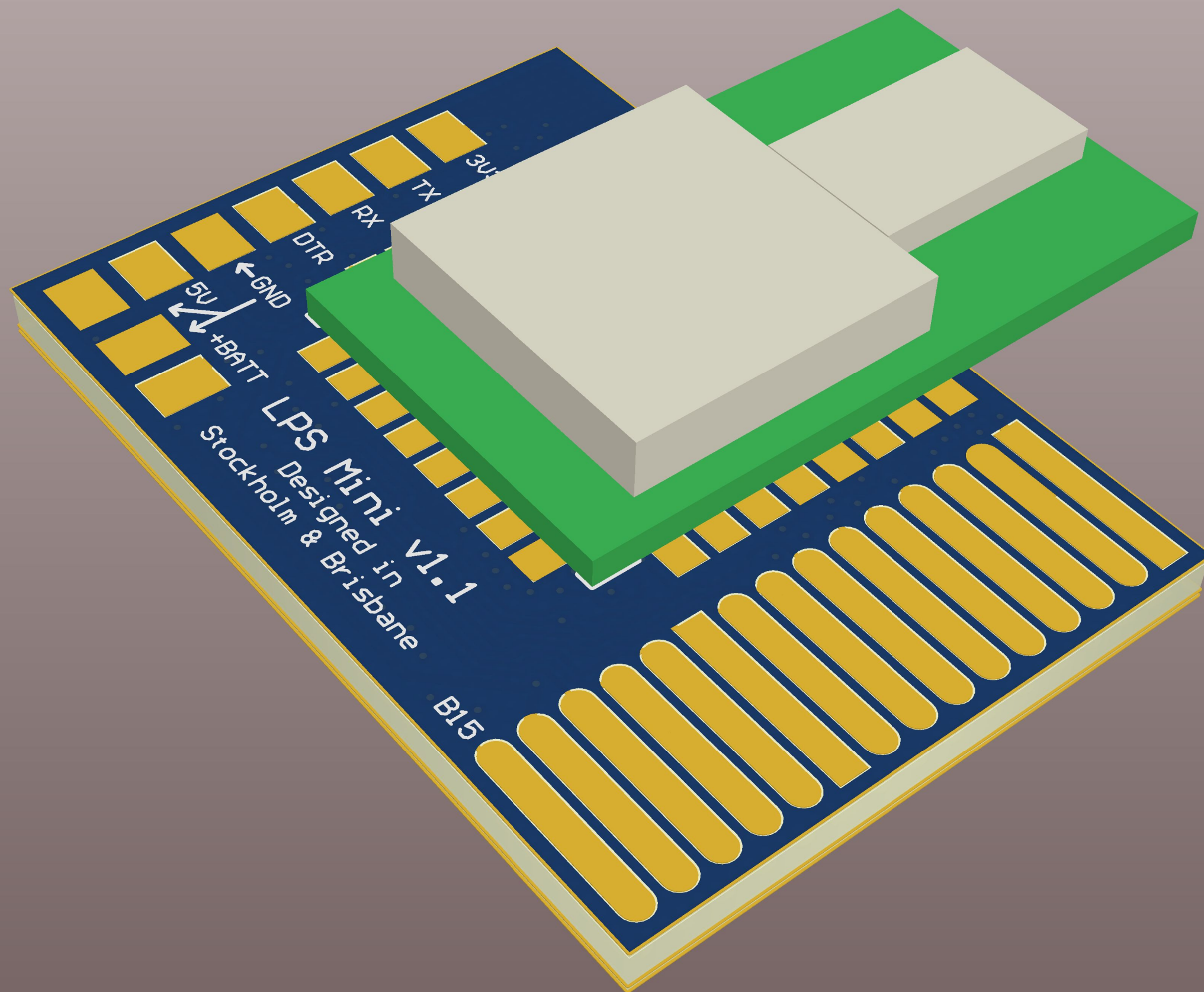


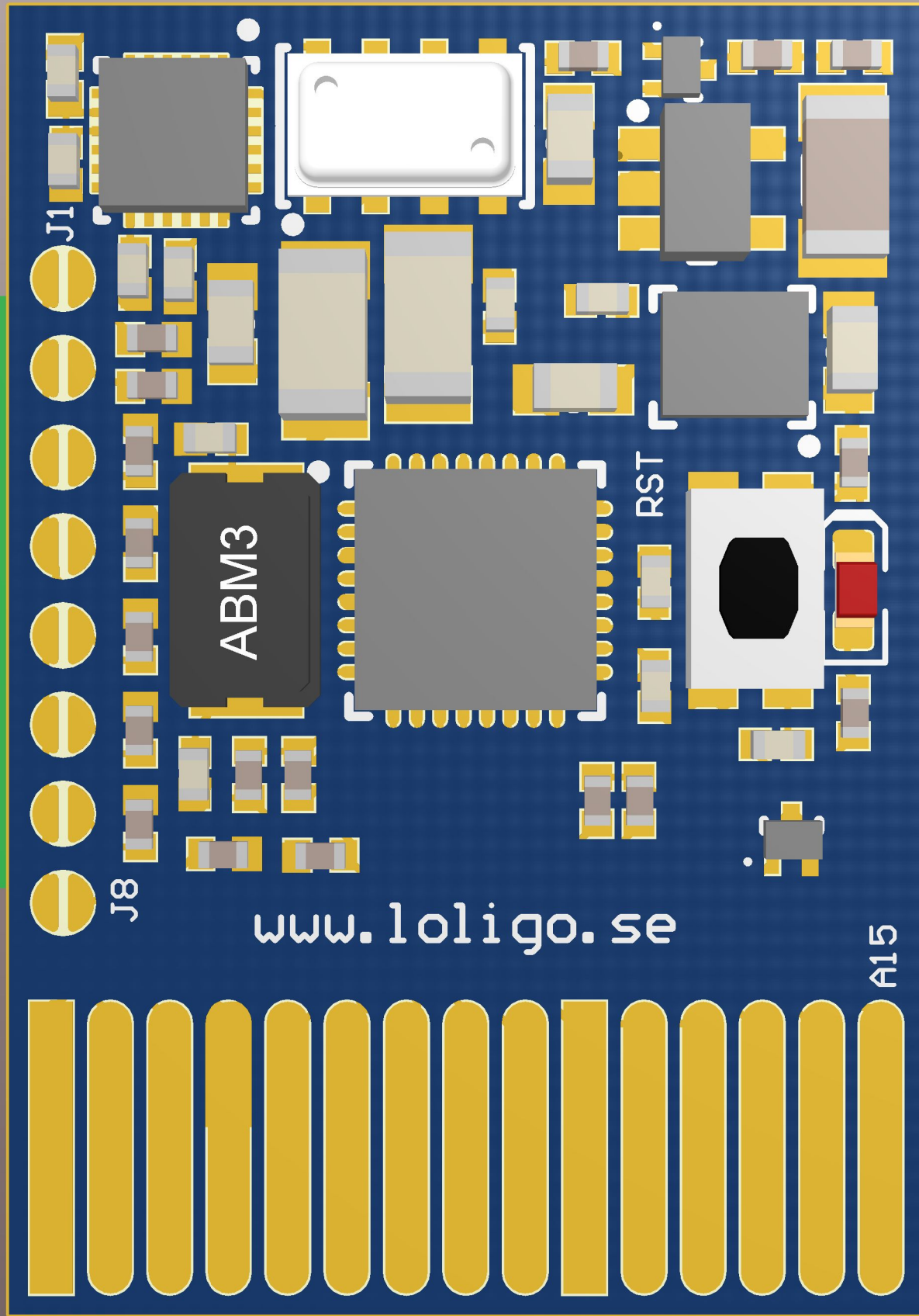
Title LPS mini - Local Positioning System in tiny format

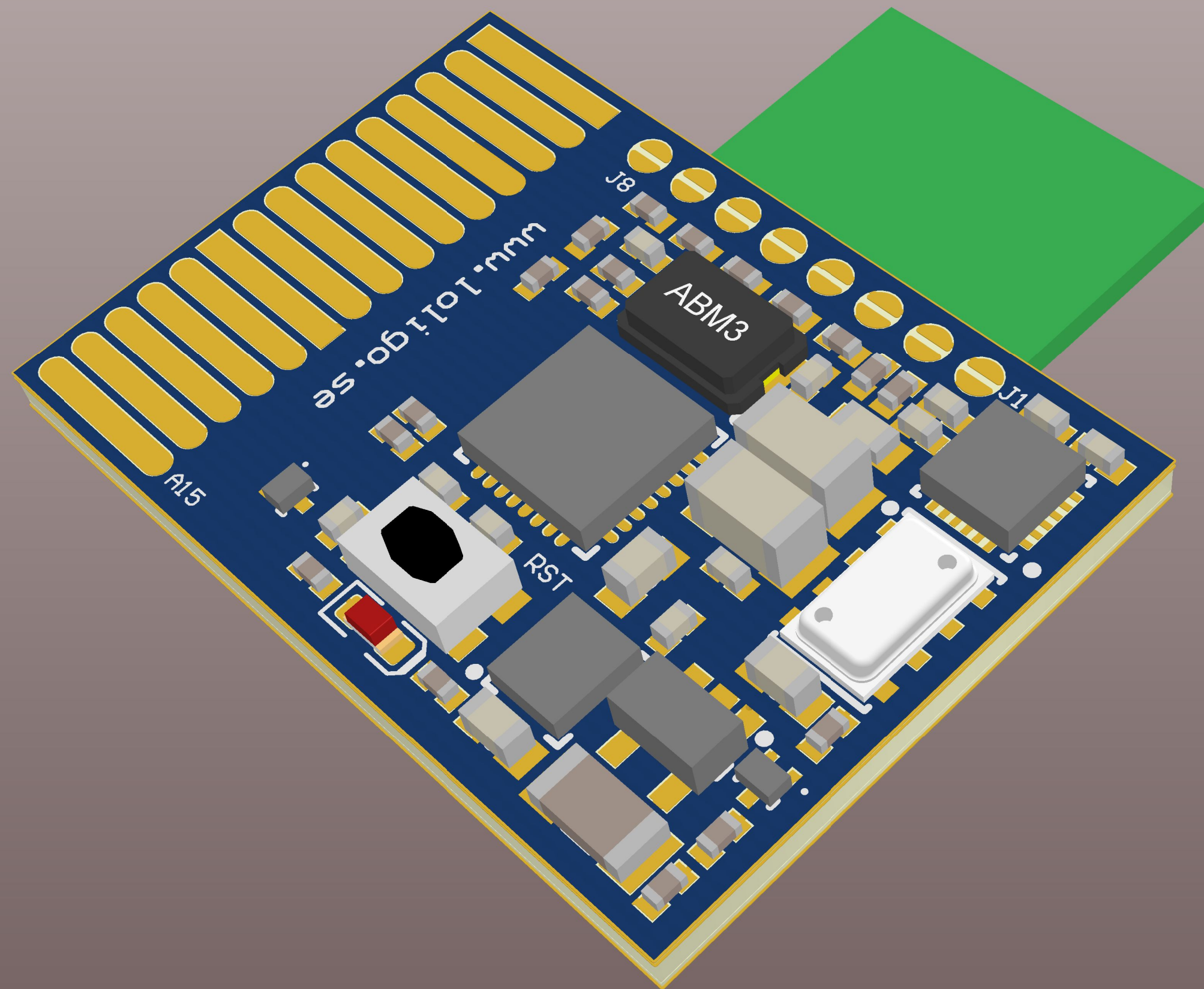
Size A3 Number Revision 1.1

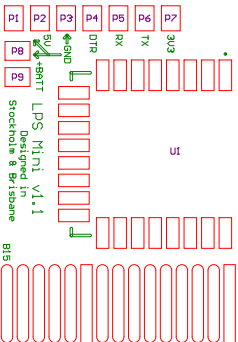
Date: 2/14/2016 Sheet 1 of 1
File: Z:\Kunder\...\LPS_mini.SchDoc Drawn By: gn@loligo.se





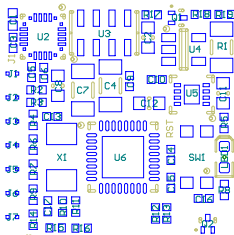




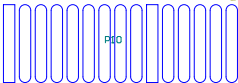


LPS Mini v1.1
Designed in
Stockholm & Brisbane

B15



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P10

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Board Stack Report

Stack Up

Layer Stack

Layer	Board Layer Stack	Name	Material	Thickness	Constant
1	Height : 1.600mm	Top Paste			
2		Top Overlay			
3		Top Solder	Solder Resist	0.010mm	3.5
4		Component Side	Copper	0.035mm	
5		Dielectric 1	7628-45	0.180mm	4.2
6		Ground Plane	Copper	0.035mm	
7		Dielectric 3	FR-4	1.080mm	4.2
8		Signal Layer 1	Copper	0.035mm	
9		Dielectric 5	7628-45	0.180mm	4.2
10		Solder Side	Copper	0.035mm	
11		Bottom Solder	Solder Resist	0.010mm	3.5
12		Bottom Overlay			
13		Bottom Paste			
	Height : 1.600mm				

Comment	Description	Designator	Footprint	LibRef	Quantity
CAP 10nF 10V 0402(1005)	CAP 10nF 10V ±10% 0402 (1005 Metric) Thickness 0.6mm SMD	C1	CAPC0402(1005)60_M	CMP-1034-01871-1	1
CAP 1uF 10V 0603(1608)	CAP 1uF 10V ±10% 0603 (1608 Metric) Thickness 1mm SMD	C2	CAPC0603(1608)100_N	CMP-1035-02733-1	1
CAP 100nF 10V 0402(1005)	CAP 100nF 10V ±5% 0402 (1005 Metric) Thickness 0.6mm SMD	C3, C5, C6, C9, C14, C15, C16	CAPC0402(1005)60_N	CMP-1034-02064-1	7
CAP 47uF 10V 1206(3216)	CAP 47uF 10V ±20% 1206 (3216 Metric) Thickness 1.9mm SMD	C4, C7	CAPC1206(3216)190_N	CMP-1037-05002-1	2
CAP 4.7uF 10V 0603(1608)	CAP 4.7uF 10V ±10% 0603 (1608 Metric) Thickness 0.55mm SMD	C8	CAPC0603(1608)55_N	CMP-1035-02784-1	1
CAP 33nF 10V 0402(1005)	CAP 33nF 10V ±10% 0402 (1005 Metric) Thickness 0.6mm SMD	C10	CAPC0402(1005)60_N	CMP-1034-01980-1	1
CAP 2.2uF 10V 0603(1608)	CAP 2.2uF 10V ±10% 0603 (1608 Metric) Thickness 1mm SMD	C11, C12	CAPC0603(1608)100_N	CMP-1035-02758-1	2
CAP 12pF 10V 0402(1005)	CAP 12pF 10V ±1% 0402 (1005 Metric) Thickness 0.6mm SMD	C13, C17	CAPC0402(1005)60_N	CMP-1034-00749-1	2
Red	LED 0603 SMD Hyper Red 630nm 220mcd 20mA	LED1	LED-0603-RED	LED_SMD_Red_0603_22 0mcd	1
Edge connector 15X2	Edge connector, 15-Pin, Dual row	P10	Edge Connector 30 poles	Edge connector 15X2	1
NTK3139PT1G	Power MOSFET, -20 V, -780 mA, Single P-Channel with ESD Protection, 3-Pin SOT-723, Pb-Free, Tape and Reel	Q1	ONSC-SOT-723-3-631AA-01_V	CMP-1058-00840-1	1
NTK3134NT1G	Power MOSFET, 20 V, 890 mA, Single N-Channel with ESD Protection, 3-Pin SOT-723, Pb-Free, Tape and Reel	Q2	ONSC-SOT-723-3-631AA-01_V	CMP-1058-00838-1	1
4K99 1% 1206(3216)	4K99 0.25W 1% 1206 (3216 Metric) SMD	R1	RESC1206(3216)_N	CMP-1014-00589-1	1
24K 1% 0402(1005)	24K 0.063W 1% 0402 (1005 Metric) SMD	R2, R7	RESC0402(1005)_N	CMP-1011-00664-1	2
12K 1% 0402(1005)	12K 0.063W 1% 0402 (1005 Metric) SMD	R3, R9	RESC0402(1005)_N	CMP-1011-00631-1	2
6K04 1% 0402(1005)	6K04 0.063W 1% 0402 (1005 Metric) SMD	R4, R14	RESC0402(1005)_N	CMP-1011-00598-1	2
1K 1% 0402(1005)	1K 0.063W 1% 0402 (1005 Metric) SMD	R5	RESC0402(1005)_N	CMP-1011-00510-1	1
3K 1% 0402(1005)	3K 0.063W 1% 0402 (1005 Metric) SMD	R6, R10, R11, R15	RESC0402(1005)_N	CMP-1011-00562-1	4
330R 1% 0402(1005)	330R 0.063W 1% 0402 (1005 Metric) SMD	R8	RESC0402(1005)_N	CMP-1011-00454-1	1
4K7 1% 0402(1005)	4K7 0.063W 1% 0402 (1005 Metric) SMD	R12, R13	RESC0402(1005)_N	CMP-1011-00586-1	2
10K 1% 0402(1005)	10K 0.063W 1% 0402 (1005 Metric) SMD	R16, R18, R19	RESC0402(1005)_N	CMP-1011-00623-1	3
1M 1% 0402(1005)	1M 0.063W 1% 0402 (1005 Metric) SMD	R17	RESC0402(1005)_N	CMP-1011-00849-1	1
KMR211GLFS		SW1	KMR2	KMR2	1
DWM1000	UWB Transciever	U1	DWM1000	DWM1000	1
MPU-9250	Nine-Axis (Gyro + Accelerometer + Compass) MEMS MotionTracking Device	U2	QFN40P300X300X105_HS-25N	MPU-9250	1
MS5611-01BA03	Barometric Pressure Sensor, with stainless steel cap	U3	QFN125P300X500X105_HS-9N	MS5611-01BA03	1
MCP73812T-420I/OT	Simple, Miniature Single-Cell, Fully Integrated Li-Ion/Li-Polymer Charge Management Controlller, 4.2V, 5-Pin SOT-23, Industrial Temperature, Tape and Reel	U4	SOT-23-OT5_N	CMP-0133-00141-1	1
LP3982ILD-3.3/NOPB	Micropower, Ultra Low-Dropout, Low-Noise, 300mA CMOS Regulator, 8-pin LLP, Pb-Free	U5	LDA08C	CMP-0062-01284-2	1
ATmega328P-MUR	8-bit AVR Microcontroller, 32KB Flash, 1KB EEPROM, 2KB SRAM, 32-pin MLF, Industrial Grade (-40°C to 85°C), Reel	U6	32M1-A_N	CMP-0095-00090-2	1
12MHz	XTAL SMD 5032, 12MHz,	X1	XTAL_5032	XTAL_TSX-5032	1