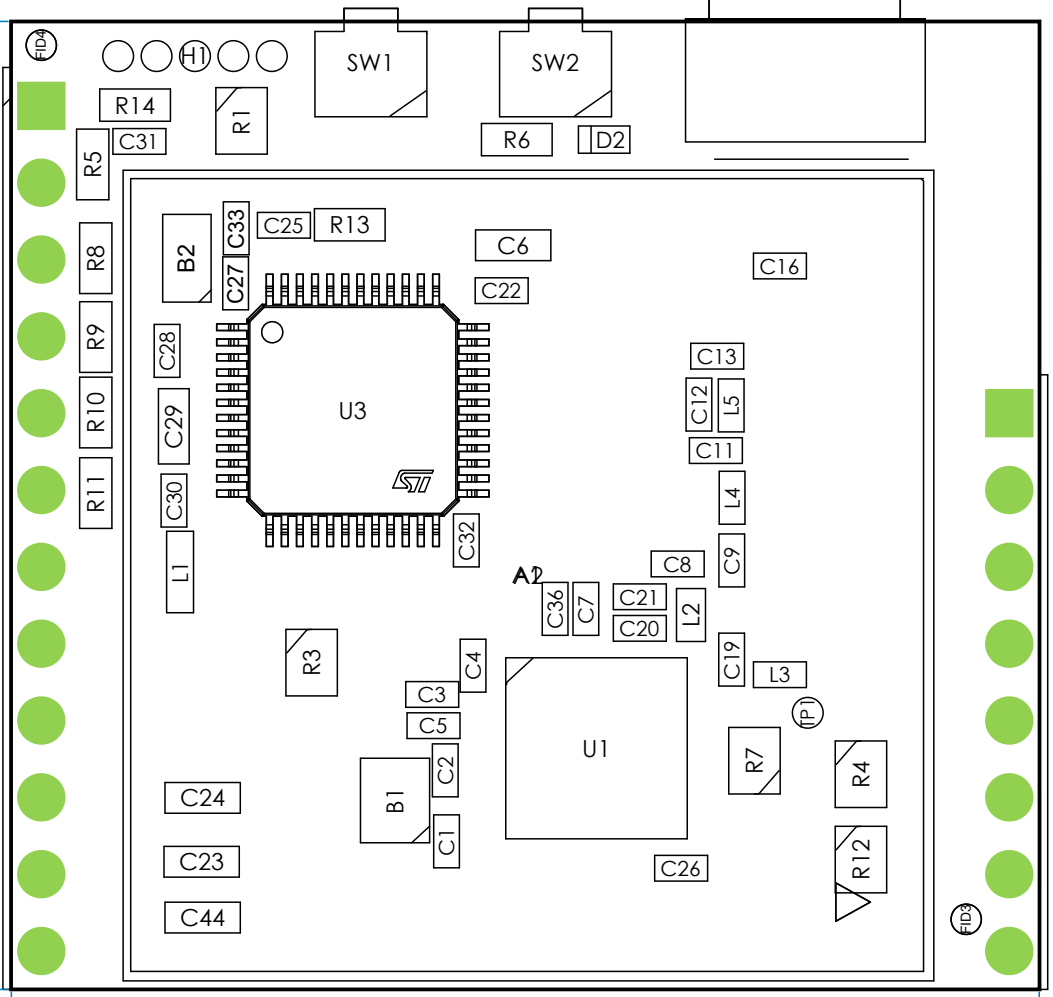
ANT_HF

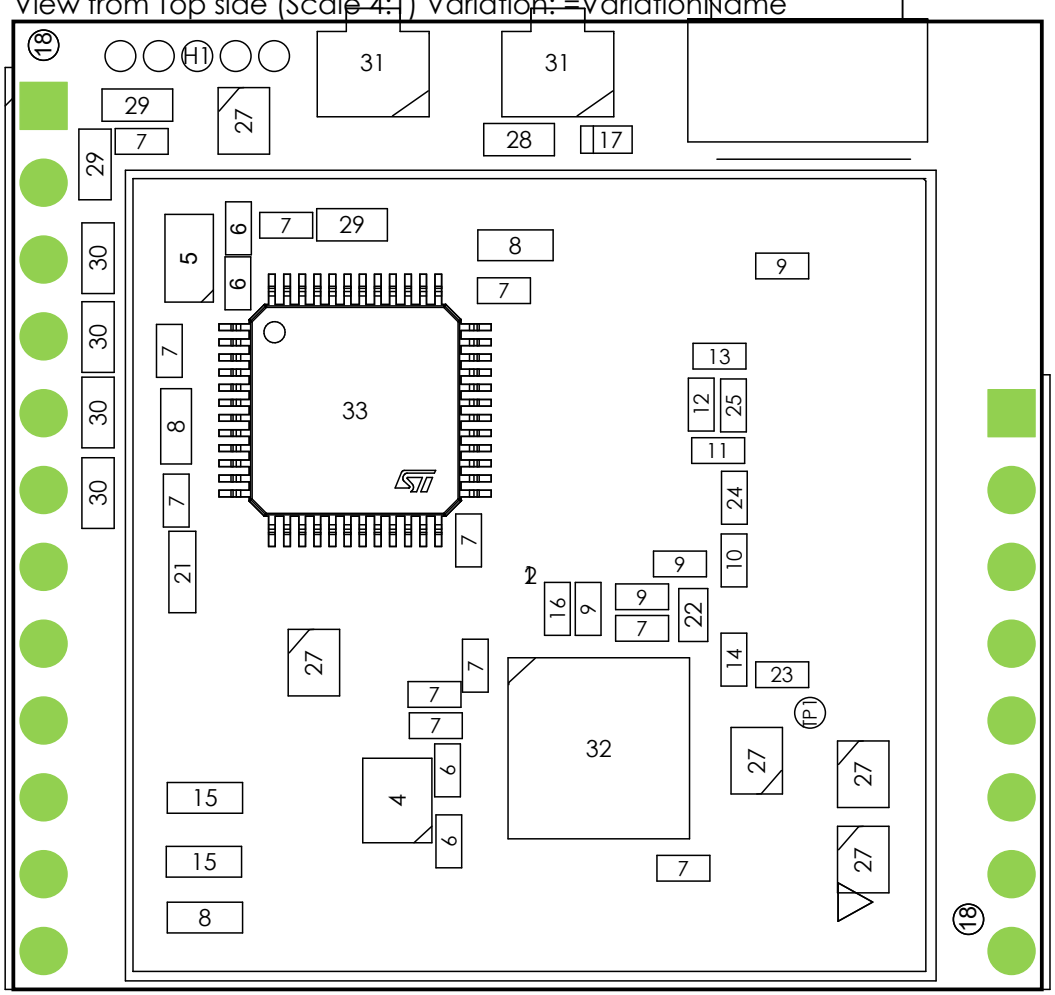
View from Top side (Scale 4:1) Variation: =VariationName



32.0mm

34.0mm

View from Top side (Scale 4:1) Variation: =VariationName



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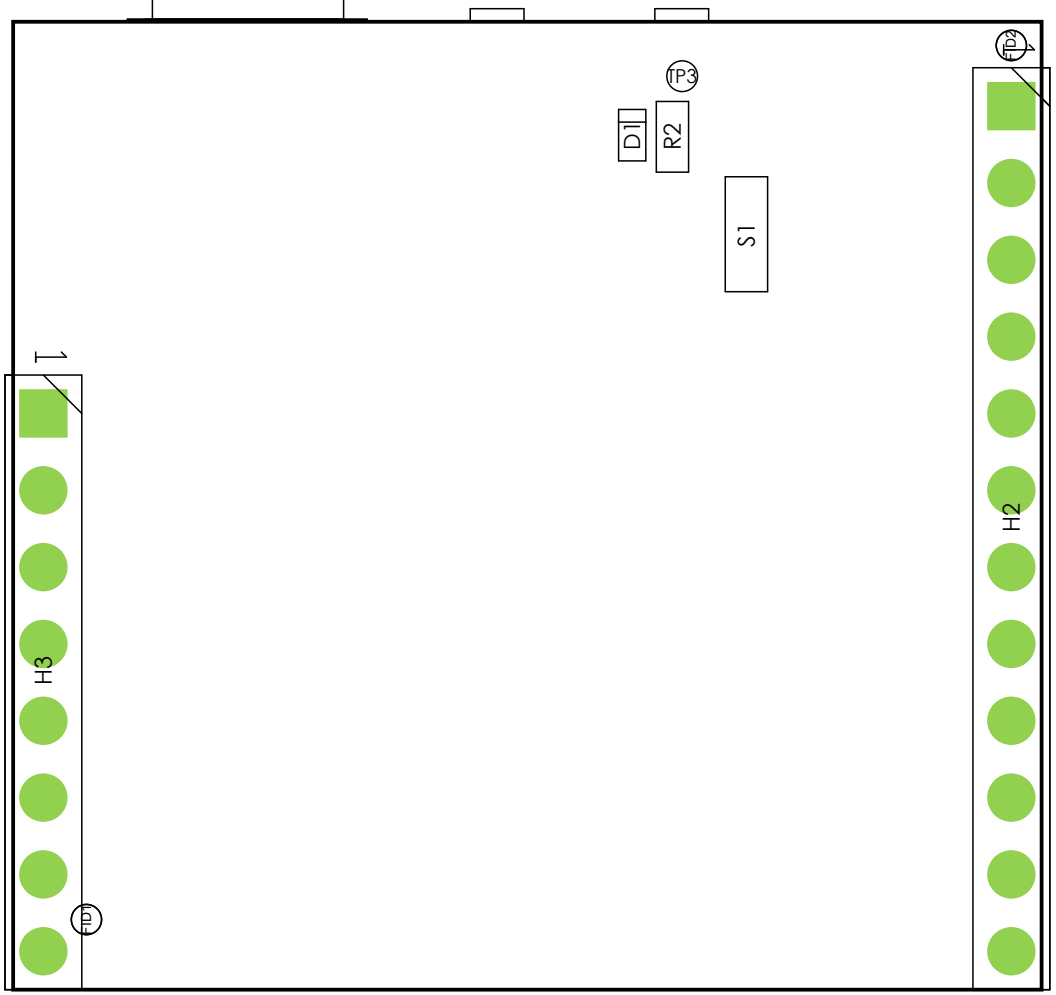
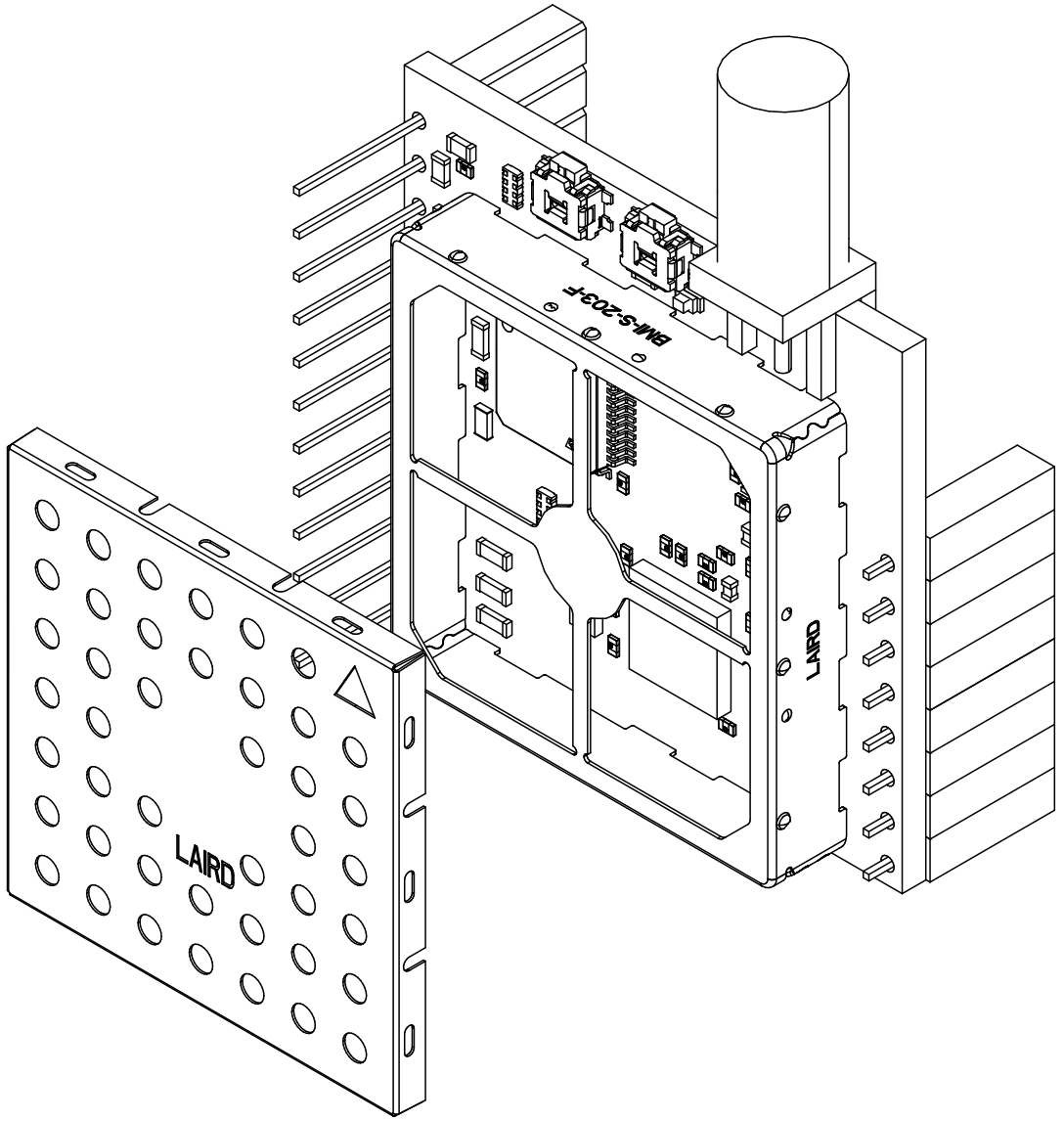
Univerzitni 8 306 14 Plzen Czech

Size: A4	Date: 5/28/2021	Title: mainBoard-LoTr_eval	TOP
Author: Jiri Cengery		Subtitle: LoRa transceiver	Variant: Final
Checked by: Jan Belohoubek		Nr: LoTr_210422	Revision: B 1
Type: Prototype			Sheet 1 of 4
Aprooved by: Silvan Pretl		File: LoRa transceiver.PCBDwf	

View from Bottom side (Scale 4:1)



View from Top side (Scale 2.8)



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Size: A4	Date: 5/28/2021	Title: mainBoard-LoTr_eval	BOT
Author: Jiri Cengery		Subtitle: LoRa transceiver	Variant: Final
Checked by: Jan Belohoubek		Nr: LoTr_210422	Revision: B 1
Type: Prototype			Sheet 2 of 4
Aprooved by: Silvan Pretl		File: LoRa transceiver.PCBDwf	

Bill Of Materials

Line #	Designator	Comment	Quantity	Footprint	Manuf Part Number
1	A1	BMI-S-203-F	1	sm_mch_shield_W261M_L261M_H51M	BMI-S-203-F
2	A2	BMI-S-203-C	1	sm_mch_ShieldCover_W267M_L267M_H20M	BMI-S-203-C
3	ANT_HF	RF2-145A-T-17-50-G-HDW	1	SM_CON_SMA_F_EDGE_RF2145AT1750G	RF2-145A-T-17-50-G-HDW
4	B1	32.00MHZ	1	sm_osc_402	Q22FA12800530 FA-128 32MHZ 10PF
5	B2	32,768kHz	1	sm_osc_ABS07	ABS07-32.768KHZ-T
6	C1, C2, C27, C33	15.0p	4	sm_cap_0402	CC0402JRNPO9BN150
7	C3, C4, C5, C20, C22, C25, C26, C28, C30, C31, C32	100n	11	sm_cap_0402	C1005X7R1E104K
8	C6, C29, C44	1.00u	3	sm_cap_0603	0603YC105MAT2A
9	C7, C8, C16, C21	47.0p	4	sm_cap_0402	GRM1555C1H470FA01D
10	C9	33.0p	1	sm_cap_0402	CC0402JRNPO9BN330
11	C11	4.70p	1	sm_cap_0402	CC0402CRNPO9BN4R7
12	C12	1.20p	1	sm_cap_0402	CC0402CRNPO9BN1R2
13	C13	1.80p	1	sm_cap_0402	CC0402CRNPO9BN1R8
14	C19	6.8p	1	sm_cap_0402	GCM1555C1H6R8DA16D
15	C23, C24	10.0u	2	sm_cap_0603	CL10X106MP8NRNC
16	C36	10.0n	1	sm_cap_0402	C1005X7R1E103K
17	D1, D2	KPTD-1608LVSECK-J3-PF	2	sm_opt_led0603_h37_opp	KPTD-1608LVSECK-J3-PF
18	FID1, FID2, FID3, FID4	Fiducial	4	SM_mch_FIDUCIAL_32	x
19	H2	SSQ-112-03-F-S	1	TH_CON_REC1x12_PIT100_L400	SSQ-112-03-F-S
20	H3	2212S-08SG-85	1	TH_CON_REC1x8_PIT100	2212S-08SG-85
21	L1	1000R	1	sm_emi_0603	742792664
22	L2	33.0n	1	sm_ind_0402_ LQW15AN	LQW15AN33NJ00D
23	L3	5.6n	1	sm_ind_0402	LQG15HS5N6S02D
24	L4	10n	1	sm_ind_0402	LQG15HS10NJ02D
25	L5	6.20n	1	sm_ind_0402	LQG15HS6N2S02D
26	L6, L12	0.00	2	sm_res_0402	ERJ-2GE0R00X
27	R1, R3, R4, R7, R12	100	5	sm_res_0804_ARRAY4	MCRE000213
28	R2, R6	750	2	sm_res_0603	ERJ3EKF7500V
29	R5, R13, R14	10.0k	3	sm_res_0603	ERJ3EKF1002V
30	R8, R9, R10, R11	100	4	sm_res_0603	ERJ3EKF1000V
31	SW1, SW2	EVQP7J01P	2	SM_SWI_EVQP7J	EVQP7J01P
32	U1	SX1276	1	SM_IO_QFN28N_pit26_w236	SX1276IMLTRT
33	U3	STM32L072CZT6TR	1	FP-LQFP48-5B-MFG	STM32L072CZT6TR

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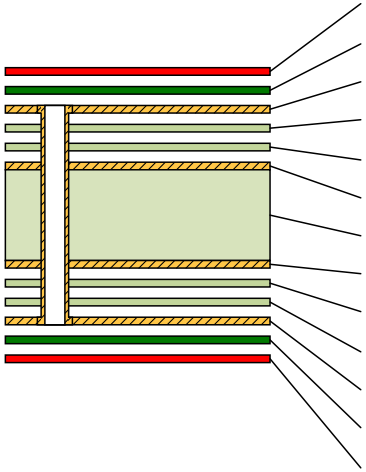
Checked by: Jan Belohoubek		Nr: LoTr_210422	Revision: B 1
Aprooved by: Silvan Pretl		Type: Prototype	Sheet 3 of 4
		File: LoRa transceiver.PCBDwf	

Layer Stack Legend



Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0.01016mm	Solder Resist	Solder Mask	GTS
Copper	Top Layer	0.04300mm		Signal	GTL
Prepreg		*0.06412mm*	*1080*	*Dielectric*	
Prepreg		*0.06412mm*	*1080*	*Dielectric*	
Copper	MidLayer1	0.03556mm		Signal	G1
Core		*1.20000mm*	*IS400*	*Dielectric*	
Copper	MidLayer2	0.03556mm		Signal	G2
Prepreg		*0.06412mm*	*1080*	*Dielectric*	
Prepreg		*0.06412mm*	*1080*	*Dielectric*	
Copper	Bottom Layer	0.04300mm		Signal	GBL
Surface Material	Bottom Solder	0.01016mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO

Total thickness: 1.63392mm

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