

RICE

Regional Innovation Centre for Electrical
Univerzitni 8 306 14 Plzen Czech

Size: A4

Date: 11/9/2020

Title: KETCube

TOP

Author: Jiri Cengery

Subtitle: ASM view

Variant:
Final

Checked by: Jan Belohoubek

Nr: KETCube2

Revision: 0.2H

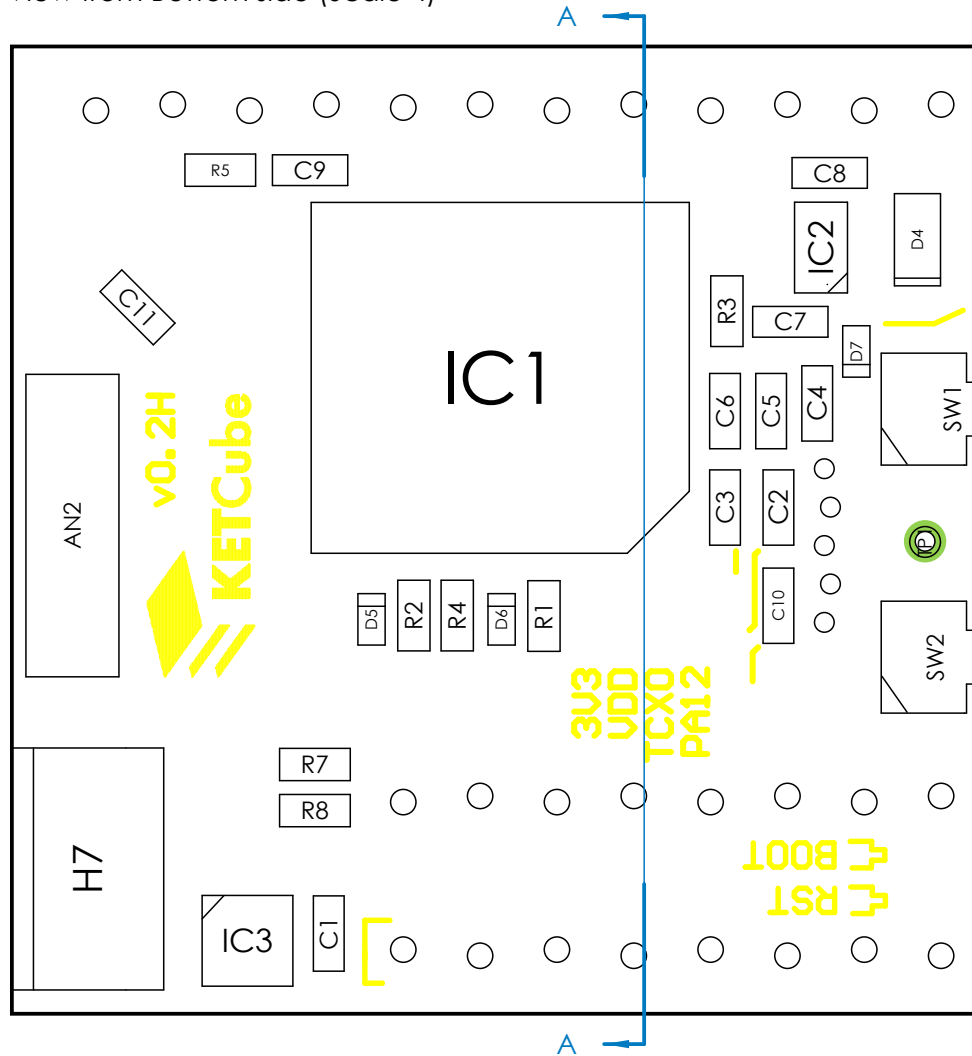
Aprooved by: Petr Kaspar

Type: Final

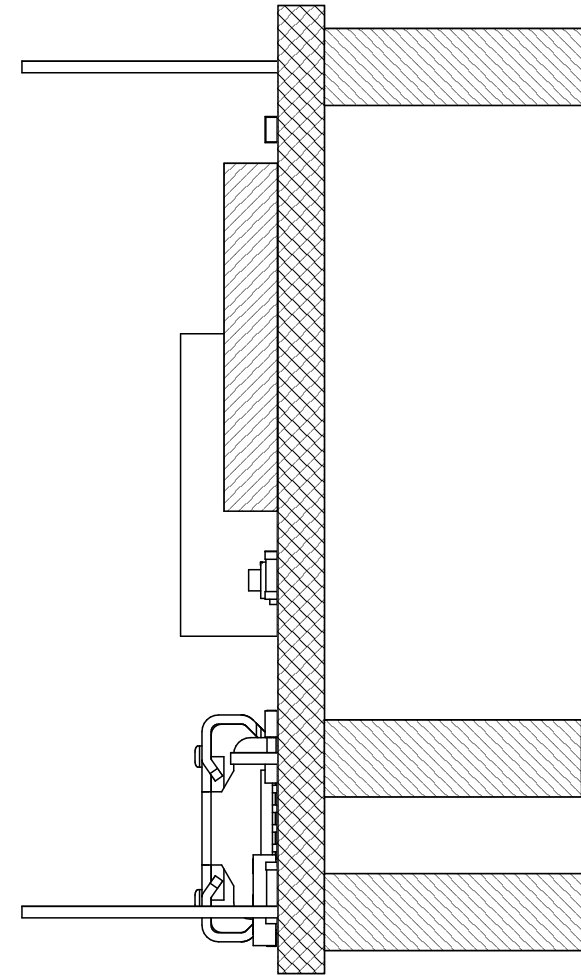
Sheet 1 of 6

File: KETCube_SMD.PCBDwf

View from Bottom side (Scale 4)



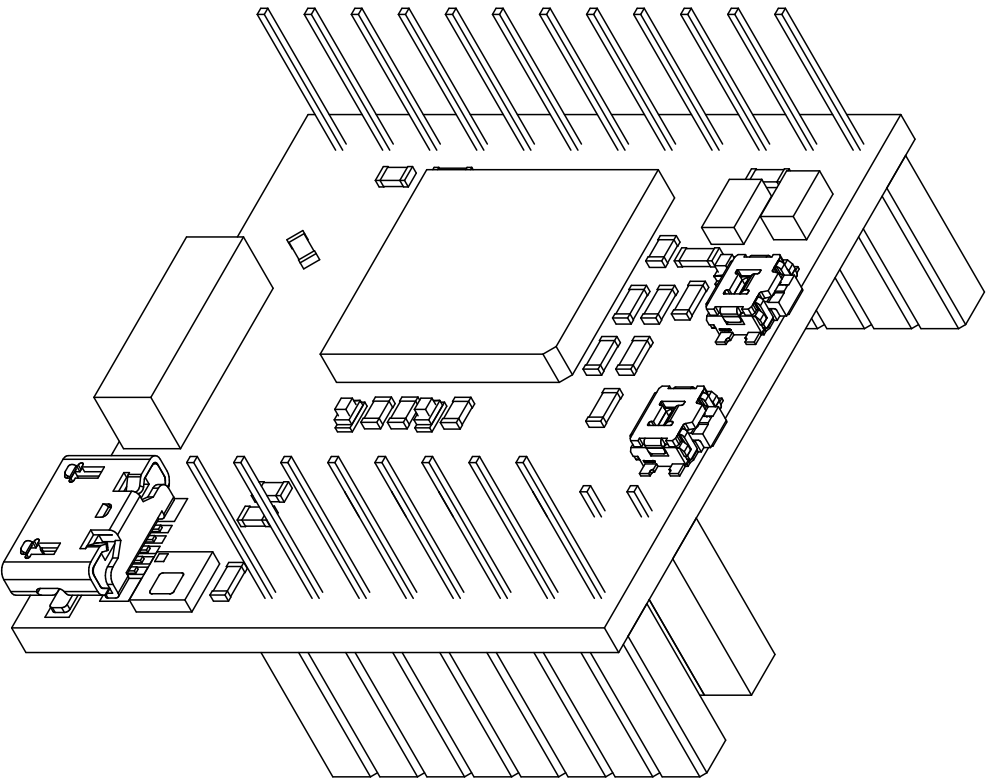
SECTION A-A (Scale 4)



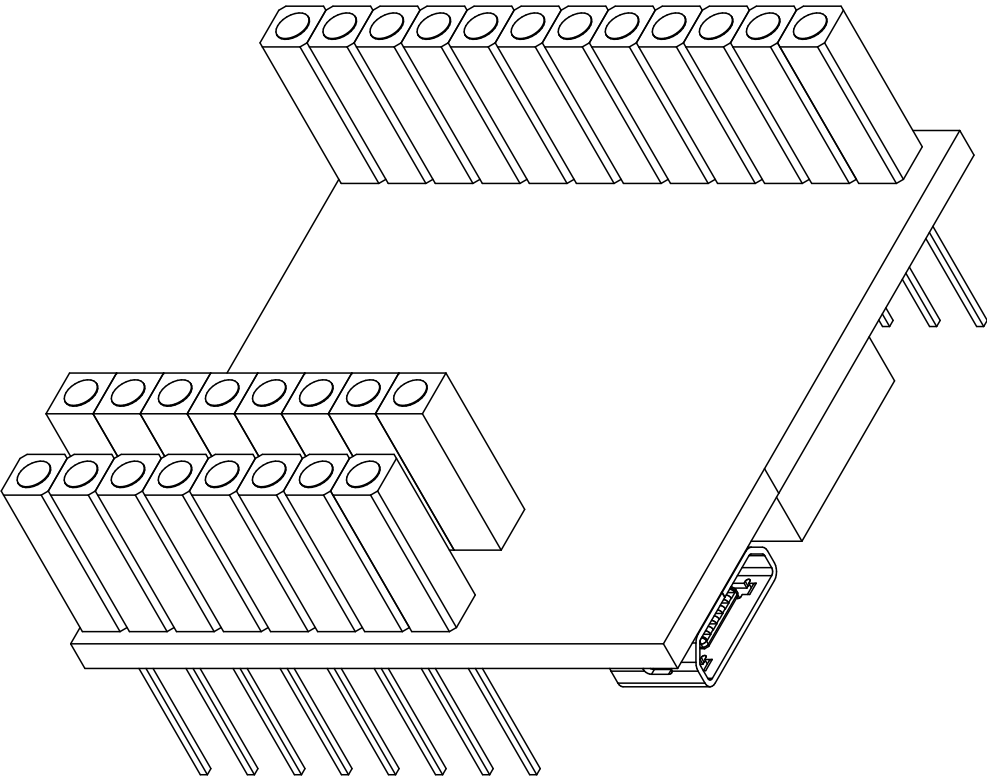
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View from Bottom side (Scale 3)



View from Top side (Scale 3)



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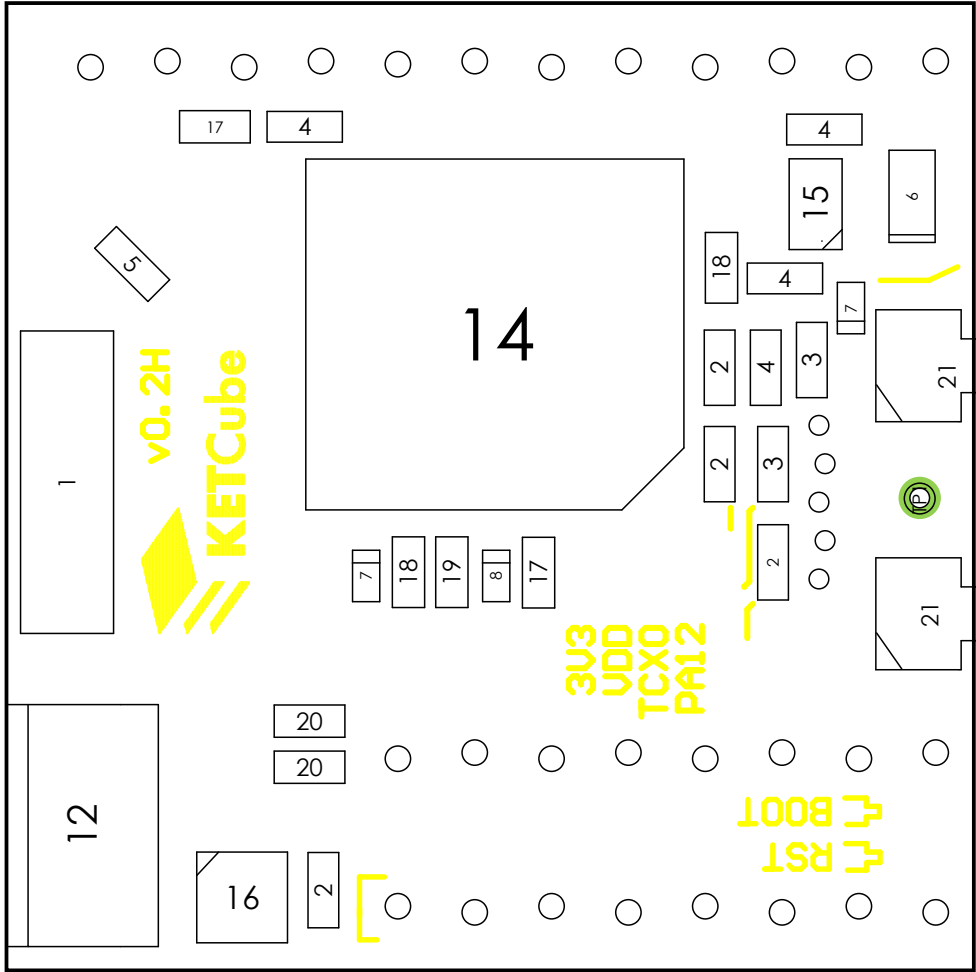
Aprooved by: Petr Kaspar

Type: Final

Sheet 3 of 6

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Bill Of Materials - TOP

Line #	Designator	Comment	Description	Footprint	Quantity
10	H4	SSQ-112-03-F-S	CON Receptacle 1x10 100 mils, leads length 10mm	TH_CON_REC1x12_PIT100_L400	1
11	H5	2212S-08SG-85	CON Receptacle 1x8 100 mils, hight 8.5mm	TH_CON_REC1x8_PIT100	1
13	H8	SSQ-108-03-F-S	CON Receptacle 1x8 100 mils, leads length 10mm	TH_CON_REC1x8_PIT100_L400	1

Bill Of Materials - BOT

Line #	Designator	Comment	Description	Footprint	Quantity
1	AN2	ant	MOD antenna CHIP 863-873 MHz, ISM, IoT, 10x3.2x5mm	SM_ANT_W3214	1
2	C1, C3, C6, C10	100n	CAP CER .10UF 50V X7R 10% 0603	sm_cap_0603	4
3	C2, C4	10u	CAP CER 10uF 6.3V X5R 10% 0603	sm_cap_0603	2
4	C5, C7, C8, C9	1.00u	CAP CER 1.0UF 16V X7R 10% 0603	sm_cap_0603	4
5	C11	10.0p	CAP CER 10.0p 50V C0G 5% 0603	sm_cap_0603	1
6	D4	MBR0520LT	DIO schottky 20V 0.5A SOD123	SM_DIO_SOD123	1
7	D5, D7	KPTD-1608LVSECK-J3-PF	OPT LED red 625nm 2mA 50mcd 1.8V 0603	sm_opt_led0603_h37_opp	2
8	D6	KPTD-1608LVZGCK	OPT LED green 525nm 2mA 220mcd 2.65V 0603	sm_opt_led0603_h37	1
12	H7	47346-1001	CON USB micro B, USB 2; 5 pins; righ angle, PCB mount SMT	SM_CON_USB_MICRO_B_FEMALE_47346_1001	1
14	IC1	CMWX1ZZABZ-078	Lora modul Murata (STM32L, 868 MHz, 915 MHz) 12 x 12 mm	TH_MOD_PIN48_LoRa_Murata	1
15	IC2	MCP1700T-3302E	ICS LDO regulator Vout=3.3V, 250mA, Vin=6V, SOT23-3, Vdrop = 200mV	sm_io_sot23_pin3	1
16	IC3	HDC1080	ICS Low Power, High Accuracy Digital Humidity Sensor with Temperature Sensor	SM_IO_WSON6_PIT40	1
17	R1, R5	10.0k	RES 0603 10.0k 1% 100ppm SMD thick film	sm_res_0603	2
18	R2, R3	750	RES 0603 750R 1% 100ppm SMD thick film	sm_res_0603	2
19	R4	330	RES 0603 330R 1% 100ppm SMD thick film	sm_res_0603	1
20	R7, R8	2.20k	RES 0603 2.20k 1% 100ppm SMD thick film	sm_res_0603	2
21	SW1, SW2	EVQ-P7J01P	SWITCH TACTILE SPST-NO 0.05A 12V	FP-EVQ-P7J01P-MFG	2



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Layer Stack Legend

	Material	Layer	Thickness	Dielectric Material	Type	Gerber
		Top Overlay			Legend	GTO
	Surface Material	Top Solder	0.010mm	Solder Resist	Solder Mask	GTS
	Copper	Top Layer	0.018mm		Signal	GTL
	Core		1.500mm	FR-4	Dielectric	
	Copper	Bottom Layer	0.018mm		Signal	GBL
	Surface Material	Bottom Solder	0.010mm	Solder Resist	Solder Mask	GBS
		Bottom Overlay			Legend	GBO
Total thickness: 1.556mm						



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