									Su	Su I ppl	Su ppl	Ma nuf act	n.r						
Designator	Description	Comment	Footprint	Quantity	nuf act ure r	No te	Su S ppl p ier i 1	iu Si opl p er ic ? 3	pl Par t Nu mb	2 r Par t Nu o mb	3 Par t Nu mb er	ure r Par t Nu mb er	Lab Part Num ber	Value	Center- X(mm)	Center- Y(mm)	Layer	Assembly Technology	Rotation
C1	capacitor	LoRa Modul 22 pF	LoRA CAP_0603I_1608m - N	-					T	Τ					73.51 90.369	30.811 21.535	Bottom		180
C2 C3	capacitor	22 pF 100nF	CAP_0603i_1608m - N CAP_0603i_1608m -	-	L				ļ	-	L				93.8 126.3	18.682	Top Top		270
C4	capacitor	100nF	N CAP_0603I_1608m - N	,	F				t	t					94.226	13.684	Тор		0
C5 C6	capacitor	Capacitor_0805	10uF_0805_Chip2Pi nSM127P600-8N CAP_0805i_2012m -	1	H			+	+	ŀ	H	Ц			131.35 80.2	56.691 59.882	Тор Тор		270 90
C7	Сарасно	Capacitor_0603	N C_0603_Chip2PinS M127P600-8N	1					t						111.35	64.35	Тор		180
C8 C9	capacitor	1 uF Capacitor_0603	CAP_0805i_2012m - N C_0603_Chip2PinS	1	L			+	Ŧ	ļ	L	Ц			70.9 118.2	60.103 56.7	Top Top		270 90
C10		Capacitor_0603	M127P600-8N C_0603_Chip2PinS M127P600-8N	-	H				t		H				59	47.585	Тор		180
C11 C12		Capacitor_0603 Capacitor_0603	C_0603_Chip2PinS M127P600-8N C_0603_Chip2PinS	-	L				ļ	-	L				119.9	56.7 56.691	Тор Тор		90 90
C13		Capacitor_0603	M127P600-8N C_0603_Chip2PinS M127P600-8N	,	t			+	t	t	H	Н			121.55	56.7	Тор		90
C14 C15	capacitor	100nF 10 uF	CAP_0603i_1608m - L CAP_0805i_2012m -	-	L				ļ	-	L				58.558 55.568	54.86 61.238	Тор		180 270
C16	capacitor	100nF	N CAP_0603i_1608m - L	,	H			t	t	t	H	H			51.653	61.238 58.8	Тор Тор		270
C17 C18	capacitor	22 pF 0.1 uF	CAP_0603i_1608m - N CAP_0603i_1608m -	1	L			_	ļ	L	L				82.362 81.583	36.166 31.445	Top Top		90 270
C19	capacitor	0.1uF	N CAP_0603i_1608m - N	,	H	Н	H	Ť	t	t	H	Н			70.42	46.456	Тор		180
C20	capacitor	22 pF 0.1 uF	CAP_0603I_1608m - N CAP_0603I_1608m -	-	L		Ц	_	ļ	ļ	L				78.658 70	31.453 25.306	Top Top		90
C22	capacitor	0.1uF	N CAP_0603I_1608m - N	,	F				t	ŀ					51.653	28.756	Тор		90
C23 C24	capacitor	0.1uF 0.1uF	CAP_0603i_1608m - N CAP_0603i_1608m -	,					ļ	-					59 79.63	45.85 39.112	Тор Тор		180
C25	capacitor	0.1uF	N CAP_0603I_1608m - N	,	H			t	t	t	H				78	40.624	Тор		180
C26	capacitor	0.1uF	CAP_0603I_1608m - N CAP_0805I_2012m -	-	L			1	I	L	L				78	42.306	Тор		0
C27	capacitor	10 uF STM32F103C8T6	N LQFP-48	,	F			+	t	t	F	Н	-	STM32F 103C8T	86.908 103.582	49.15 16.044	Top Top		180
D1	LED; SMD; 0603; grün; 35mcd; 1.6x0.8x0.55mm; 130Å*; 2Ä-2.V; 20mA	Grün	*0603	1					Ì					6	120.963	2.6	Тор		90
D2	LED; SMID; 0603; orange; 45-90mcd; 1.6x0.8x0.55mm;	Orange	*0603	1					t						118.882	2.6	Тор		90
D3	130Å*; 2Ä-2.4V; 20mA LED; SMD; 0603; grün; 35mcd; 1.6x0.8x0.55mm;	Grün	*0603	1											80.2	67.704	Тор		270
D4	130Å*; 2Ä 2.V; 20mA	BATS4T1G	BAT54T1G_SODFL3		L	Ц	Ц	1	1	ļ	L	Ц			105.985	61.975			180
D5	LED; SMD; 0603; grün; 35mcd; 1.6x0.8x0.55mm;	BATS4T1G Grün	70x135-2N *0603	1					l						51.051	66.882	Тор		270
D6	130Å*; 2Ä-2.V; 20mA LED; SMD; 0603; orange; 45-90mcd; 1.6x0.8x0.55mm;	Orange	*0603	1	F				\dagger		F				53.178	66.882	Тор		270
D7	130Å*; 2Ä-2.4V; 20mA	1N4148	1N4148_SODFL127P		H	Ц	Н	4	+	+	H	Ц			127.35	56.691	Тор		90
D8		1N4148 1N4148	600-8N 1N4148_SODFL127P 600-8N	,	H				t	H	H				125.35	56.691	Тор		270
D9	LED; SMID; 0603; grün; 35mcd; 1.6x0.8x0.55mm; 130Å*; 2Ä-2.V; 20mA	Grün	*0603	1											24.07	14.9	Тор		270
F1	USB-to-UART 1-CH	Fuse	FUSE-3586KTR	-	F			Ŧ	ŧ	ŧ	F	H			19.02	8.95	Тор		0
IC1	256byte FIFO SV 28- Pin SSOP Tube Mini AB, USB 2.0, 1 A,	FT232RL-TUBE	*SSOP28-LD *CUI UJ2-MABH-4	1	H		H	+	+	╀	H	Н			50.678	50.193	Тор		0
J1	Right Angle, Surface Mount _SMT USB Receptacle	UJ2-MABH-4-SMT	SMT_UI2-MABH-4- SMT(Primary)	1											129.3	5.16	Тор		0
12	Mini AB, USB 2.0, 1 A, Right Angle, Surface Mount _SMT_, USB	UJ2-MABH-4-SMT	*CUI_UJ2-MABH-4- SMT_UJ2-MABH-4- SMT(Primary)	,					I						63.48	64.87	Тор		180
13 14	Receptacle	Joystick Joystick	Joystick Joystick	-	F				ŧ	F	H				21.99 128.01	39.004 39	Top Top		0 180
L1 L2	Inductor	Inductor_0805 Inductor	0805_INDC2012X12 N Murata Inductor	1	H			+	+	╀	H	Н			103.35 79.923	64.975 46.85	Top Top		270 90
P1 P2	Header, 4-Pin Header, 5-Pin	Header 4 SWIM	2900 sch HDR1X4 HDR1X5	- 1	E				ŧ	Ė	E				114.421 102.042	21.533 32.254	Top Top		180
P3 P6	Header, 5-Pin Single Pad or Testpoint	SWD ON-OFF	HDR1X5 MotConnector	1					t						122.582 14.8	15.895	Top Top		0
P7	Connector; IDC, Male Header, Thru-Hole; 20 Position; Vertical; Pitch 2.54 mm; B Single Pad or Testpoint	IDC-20	IDC-20	1											24.7 26.07	62.96 2.9	Тор		0
P8		Batterie	MotConnector	- 1	ш					+	Н	П					Тор		90
R1	Resistor	1000	RES_0603i_1608m - N	1	Ė				İ	╀	Н		_		120.963	6.6			
R1 R2	Resistor Resistor	1000		1					ļ		Ė				118.882	6.6	Тор		270
R1	Resistor Resistor Resistor Resistor	1000 1000 100K	RES_0603I_1608m - N RES_0603I_1608m - N RES_0603I_1608m - N N RES_0603I_1608m - N N	1 1 1 1											118.882 96.9 98.576	6.6 10.4 10.374	Top Top		
R1 R2 R3	Resistor Resistor Resistor	1000 1000 100K	RES_0603i_1608m - N RES_0603i_1608m - N RES_0603i_1608m - N	1 1 1 1 1 1 1											118.882 96.9	6.6	Тор		270 270
R1 R2 R3 R4 R5 R6 R7	Resistor Resistor Resistor Resistor Resistor Resistor Resistor Resistor	1000 1000 100K 100K 390 10K	RES_0603I_1608m - N RES_0603I_1608m - N RES_0603I_1608m - N RES_0603I_1608m - N RES_0603I_1608m - N	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1											118.882 96.9 98.576 90.369 102.218	6.6 10.4 10.374 15.657 34.59 8.454	Top Top Top Top Top Top		270 270 90 0 90
R1 R2 R3 R4 R5	Resistor Resistor Resistor Resistor Resistor Resistor	1000 1000 100K 100K 390 10K	RES_0603L_1608m-N	11 11 11 11 11 11 11 11 11 11 11 11 11											118.882 96.9 98.576 90.369 102.218	6.6 10.4 10.374 15.667 34.59	Top Top Top Top Top		270 270 90 0
R1 R2 R3 R4 R5 R6 R7 R8 R9 R10	Resistor	1000 1000 1000 1000 1000 1000 100 100 1	RES_0603L_1608m-N	11 11 11 11 11 11 11 11 11 11 11 11 11											118.882 96.9 98.576 90.369 102.218 104.332 94.226 101.888	6.6 10.4 10.374 15.667 34.59 8.454 15.397 24.814	Top		270 270 90 0 90 180 270
R1 R2 R3 R4 R5 R6 R7 R8 R9 R10 R11 R12	Resistor Resistor Resistor Resistor Resistor Resistor Resistor Resistor Resistor	1000 1000 100K 100K 390 10K 10K 220 220 220	RES_0603L_1608m-N	11 11 11 11 11 11 11 11 11 11 11 11 11											118.882 96.9 98.576 90.369 102.218 104.332 94.226 101.888 104.83 99.463 114.453	6.6 10.4 10.374 15.657 34.59 8.454 15.397 24.814 24.814 28.544 13.355	Top Top Top Top Top Top Top Top Top		270 270 90 0 0 90 180 270 270
R1 R2 R3 R4 R5 R6 R7 R8 R10 R11 R11 R12 R13	Resistor	1000 1000 100K 100K 390 10K 10K 220 220	RES_0603I_1608m-N	11 11 11 11 11 11 11 11 11 11 11 11 11											118.882 96.9 98.576 90.369 102.218 104.332 94.226 101.888 104.83 99.463 114.453 101.888	6.6 10.4 10.374 15.667 34.59 8.454 15.397 24.814 24.814 28.544 13.355 28.564	Top		270 270 90 0 0 180 270 270 270 270 270
R1 R2 R3 R4 R5 R6 R7 R8 R9 R10 R11 R12 R13 R14 R15	Recision	1000 1000 1000 1000 1000 1000 1000 100	#15,0603,1609n. #15,0603,1609n. #15,0603,1609n. #15,0603,1609n. #15,0603,1609n. #15,0603,1609n. #15,0603,1609n. #16,0603,1609n.	11 11 11 11 11 11 11 11 11 11 11 11 11											118.882 96.9 98.576 90.369 102.218 104.332 94.226 101.888 104.83 99.463 114.453 101.888 104.776 118.103	6.6 10.4 10.374 15.657 34.59 8.454 15.397 24.814 28.544 13.355 28.564 28.56 13.355	Top		270 270 90 0 0 90 90 180 270 270 270 270 270
R1 R2 R3 R4 R5 R6 R7 R8 R9 R10 R11 R12 R13 R14	Resistor	1000 1000 1000 1000 1000 1000 1000 100	815,0603,1608m-1, 155,0603,1608m-1, 155,0603,160	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1											118.882 96.9 98.576 90.369 102.218 104.332 94.226 101.888 104.83 99.463 114.453 101.888 104.776	6.6 10.4 10.374 15.657 34.59 8.454 15.397 24.814 24.814 28.544 13.355 28.564 29.56	Top		270 270 50 0 0 90 180 270 270 270 270 270 270
R1 R2 R3 R4 R5 R6 R7 R8 R8 R7 R1 R11 R12 R13 R14 R15 R16 R17 R18 R17 R18	Recision	500 500 500 500 500 500 500 500 500 500	HES, DROSS, 140000-14000												118.882 96.9 98.576 90.369 102.218 104.332 94.226 101.888 104.83 99.463 114.453 101.888 104.776 118.103 118.103 118.103 80.2	6.6 10.4 10.374 15.667 34.59 8.454 15.397 34.814 28.544 13.355 28.564 28.56 13.355 15.895 18.435 61.742	Top		270 270 90 0 0 90 90 90 90 90 180 270 270 270 270 270 270
R1 R2 R3 R4 R5 R6 R7 R8 R9 R10 R11 R12 R13 R14 R15 R16 R17	Recision	5000 5000 5000 5000 5000 5000 5000 500	HS 5,0003,1409m1 HS 5,0												118.882 96.9 96.576 90.369 102.218 104.332 94.226 101.888 104.83 104.83 101.888 104.776 118.103 118.103 118.103	6.6 10.4 10.374 10.374 15.467 34.59 8.454 15.397 24.814 28.544 13.355 28.564 28.56 13.355 15.895 18.435	Top		270 270 90 0 0 180 270 270 270 270 270 280 280 280 280 280 280 280 280 280 28
81 82 83 84 84 85 86 87 88 88 89 810 811 1 812 813 814 815 815 815 815 815 815 815 815 815 815	Resistor	000 000 000 000 000 000 000 000 000 00	85, 5603, 1409m. 815, 5603, 1409m. 91, 913, 914, 914, 914, 914, 914, 914, 914, 914												118.882 76. 9 76. 57 76. 2369 702.218 104.332 94.226 101.888 104.83 104.63 114.63 118.00 1	6.6 6 10.2 4 10.3374 15.667 34.9 9 8.454 15.397 24.814 24.815 25.54 25.55 15.395 10.355 15.395 10.455 15.395 10.455 10.355 10.45	Top		270 270 70 90 90 90 91 180 270 270 270 270 270 180 180 180 90 90 91
R1 R2 R3 R4	Residenter	2000 2000 2000 2000 2000 2000 2000 200	\$3,5003,1409m. \$15,5003,1409m. \$15,5003,1409m. \$1,5003,1409m. \$1,5												118.882 96.9 98.576 90.369 102.218 104.332 94.226 101.888 104.83 199.463 114.453 114.453 118.103 118.103 118.103 118.103 118.103 118.103 118.103	6.6 10.4 10.374 15.667 34.59 8.454 15.397 24.814 28.544 13.355 15.895 18.435 15.895 18.435 65.925	Top		270 270 90 90 90 90 90 90 90 1100 270 270 270 1100 270 1100 1100 11
22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Resistator	000 000 000 000 000 000 000 000 000 00	15, 2003, 1409m. 161, 5003, 14												118.882 96.9 9 95.76 90.369 90.576 102.218 102.218 104.322 94.226 101.888 104.83 99.463 114.453 101.01.76 118.103 118.103 118.103 118.103 118.103 40.2 111.35 111.3	6.6 10.14 10.374 15.607 34.59 16.65 17.34.59 24.814 12.854 11.355 18.654 11.355 18.654 12.254 11.355 18.654 12.25 18.654 18.655	Top		270 270 0 0 0 0 190 270 270 270 270 270 270 270 270 180 180 0 180 190 0 180 190 0 270 270 270 270 270 270 270 270 270
22 2 2 3 3 4 4 4 5 5 5 6 5 6 7 7 7 8 8 8 8 7 7 8 8 8 8 7 7 8 7 8 7	Resistor	900 900 900 900 900 900 900 900 900 900	#\$ 5,000,1,600m, 100m, 1												118.882 76.9 98.576 90.2576 90.2576 90.2576 90.2576 90.2578 90.2578 90.4332 90.453 90.463 90.	6.6 10.14 10.3374 15.667 31.59 8.654 15.397 328.544 328.56 11.355 5.895 34.15 6.675 5.285 6.675 5.285 42.852 42.851 1	Top		270 270 40 0 0 0 10 110 270 270 270 270 270 270 110 110 110 110 110 110 110 110 110 1
81 82 83 84 85 86 86 87 88 88 89 89 81 81 81 81 81 81 81 81 81 81 81 81 81	Residator	000 000 000 000 000 000 000 000 000 00	15, 2602, 1,6009-1,6009-1, 1,6009-1,600												118.802 96.576 96.576 97.576 9	6.6 10.1 10.1 10.1 10.1 10.1 10.1 10.1 1	10p		270 270 0 0 0 1100 270 270 270 270 1100 270 1100 270 1100 0 0 1100 0 0 0 0 0 0 0 0 0 0 0 0
81	Recision /	000 000 000 000 000 000 000 000 000 00	85, 5003, 1409n 815, 5003, 1409n 915, 50												118.882 96.9 96.576 05.369 105.218 105.218 105.218 105.433 105.888 1054.75 105.888 1054.75 105.888 1054.75 118.503 118.503 118.503 118.503 105.505 15	6.6 10.4 10.374 15.607 16.607	Top		270 270 270 0 0 0 0 1100 270 270 270 270 270 270 270 270 270 2
81	Residence Reside	000 000 000 000 000 000 000 000 000 00	15, 2602, 1,6009, 1,60												118.882 (6.59 kg of 5.59 kg of 5.	6.6 4 10.3 14			270 270 0 0 0 100 1100 270 1100 270 1100 270 1100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
81	Resistor	500 500 500 500 500 500 500 500 500 500	85, 5003, 1409n 815, 5003, 1409n 915, 50												118.802 96.9 96.576 96.576 97.	6.6 10.4 10.3 14 10.3 14 10.3 14 10.3 14 10.3 14 10.3 14 10.3 14 10.3 15 10.5 10.5 10.5 10.5 10.5 10.5 10.5 1	100 100		270 270 100 0 100 1100 270 270 270 270 270 270 270 270 270 2
81 12 2 3 3 4 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Residence Reside	000 000 000 000 000 000 000 000 000 00	#\$ 5,000,1,600m. #\$ 6,000,1,600m. #\$ 6,000,1,600m. #\$ 5,000,1,600m. #\$ 5,000,1,600m. #\$ 5,000,1,600m. #\$ 6,000,1,600m. \$ 6,000,1,600m. #\$ 6,000,1,600m. #\$ 6,000.1,600m. #\$ 6,000.1,600m. #\$ 6,000.1,600m. #\$ 6,000.1,600m. #\$												118.882 06.9 0 0.9 0 0.9 0 0.0 0.0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0	6.4 (10.4 (10.324 (10.	Top		270 270 0 0 0 10 10 270 270 270 270 10 10 270 10 10 0 0 10 0 0 0 0 0 0 0 0 0 0 0 0
81 12 12 13 13 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15	Recision Recisi	000 000 000 000 000 000 000 000 000 00	85, 5003, 14090-1 815, 5003, 14090-1												118.802 66.9 69.9 69.9 69.0 69.0 69.0 69.0 69.0	6.6 10.4 10.4 10.1 10.1 10.1 10.1 10.1 10.1	Teap		270 270 100 100 100 100 100 270 270 270 270 270 270 100 100 100 100 100 100 100 100 100 1
11 10 10 10 10 10 10 10 10 10 10 10 10 1	Residence Reside	500 500 500 500 500 500 500 500 500 500	## S. AGO. 1, 1609-1												118.882 (8.9 %) 40.576 (8.3 %) 40.57	1.0 4 10.174 (5.677 13.199 13.191 13.	Top		270 270 0 0 0 10 10 270 270 270 270 110 270 110 0 0 0 110 0 0 0 0 0 0 0 0 0 0 0 0
11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Recision Recision Recis	500 500 500 500 500 500 500 500 500 500	85, 5003, 1409n 815, 5003, 1409n 915, 50												118.882 (8.59 e. 9.50	6.8 (20 A) (20 A	Top		270 270 0 0 0 140 270 270 270 270 270 270 140 270 270 270 270 270 270 270 270 270 27
R1 102 102 103 103 103 103 103 103 103 103 103 103	Residence Reside	500 500 500 500 500 500 500 500 500 500	15, 2602, 1,6009, 1,60											Vafue	118.002 (0.9 %) (0.9 %) (0.9 %) (0.9 %) (0.2 218 %) (0	6.8 (20.4 (2	Top Top		270 270 100 100 100 100 100 100 100 100 100 1
10 12 12 12 12 12 12 12 12 12 12 12 12 12	Resistor Res	500 500 500 500 500 500 500 500 500 500	15, 1602, 1609 161, 1609 1											Value	118.802 (6.9 %) (7.0 %	6.8 10.4 10.374 10.657 10.374 10.657 10.374 10.657 10.376 10.377 10.4814 10.376	Top		270 270 100 100 100 100 100 100 100 100 100 1
R1 102 102 103 103 103 103 103 103 103 103 103 103	Recision Recision Recis	000 000 000 000 000 000 000 000 000 00	15, 500.1, 16000-1 15, 500.0, 16											Value	118.802 (6.9 %) (7.0 %	6.8 10.4 10.374 10.657 10.374 10.657 10.374 10.657 10.376	Top Top		270 270 100 100 100 100 100 100 100 100 100 1
R1	Residator Resida	500 500 500 500 500 500 500 500 500 500	15.5, 16021, 16090-1 15.5, 160											Value	118.882	6.6 (12.374 (12.375 (1	Top		270 270 0 0 0 1100 270 1100 270 1100 270 1100 110

Assembly Technology	Comment LoRa Modul	Description	Designator	Footprint LoRA	LibRef LoRa Modul	Quantity	SMS-Lab Part Number	Supplier 1 Part Number	Supplier 2 Part Number	Supplier 3 Part Number	Manufacturer	Manufacturer Part Number	Supplier 1	Supplier 2	Supplier 3
	22 pF	capacitor	C1	CAP_0603i_1 608m -N	Сар	1									
	22 pF 100nF	capacitor	C2	CAP_0603i_1 608m -N CAP_0603i_1	Сар	1									
	100nF	capacitor capacitor	C3 C4	CAP_0603i_1 608m -N CAP_0603i_1 608m -N	Сар	1									-
	Capacitor_0805		cs	10uF_0805_0 hip2Pin5M12	Capacitor_0805	1									
	1 uF	capacitor	C6	7P600-8N CAP_0805i_2 012m -N	Сар	1									
	Capacitor_0603		C7	C_0603_Chip 2PinSM127P	Capacitor_0603	1									
	1uF	capacitor	C8	600-8N CAP_0805i_2 012m -N	Сар	- 1									
	Capacitor_0603		C9	C_0603_Chip 2PinSM127P 600-8N	Capacitor_0603	1									
	Capacitor_0603		C10	C_0603_Chip 2PinSM127P	Capacitor_0603	1									
	Capacitor_9603		C11	600-8N C_0603_Chip 2PinSM127P	Capacitor_0603	-									
			C12	600-8N C_0603_Chip											-
	Capacitor_0603			2PinSM127P 600-8N C_0603_Chip	Capacitor_0603	<u>'</u>									-
	Capacitor_0603		C13	C_0603_Chip 2Pin5M127P 600-8N CAP_0603i_1	Capacitor_0603	1									
	100nF	capacitor capacitor	C14 C15	CAP_0805i_2	Cap	-									1
	100nF	capacitor	C16	012m -N CAP_0603i_1 608m -L	Сар	1									
	22 pF	capacitor	C17	CAP_0603i_1	Сар	- 1									
	0.1uF 0.1uF	capacitor capacitor	C18 C19	CAP_0603i_1 608m -N CAP_0603i_1	Cap	1									
	22 pF	capacitor	C20	608m -N CAP_0603i_1 608m -N	Сар	1									
	0.1uF	capacitor	C21	CAP_0603i_1 608m -N	Сар	- 1									
	0.1uF	capacitor	C22	CAP_0603i_1 608m -N CAP_0603i_1	Сар	1									
	0.1 uF 0.1 uF	capacitor capacitor	C23 C24	608m -N CAP 0603i 1	Cap	1									-
	0.1uF	capacitor	C25	608m -N CAP_0603i_1 608m -N	Сар	1									
	0.1uF	capacitor	C26	CAP_0603i_1 608m -N	Сар	1									
	10 uF STM32F103C8T6	capacitor	C27 CR1	CAP_0805i_2 012m -N LQFP-48	Cap STM32F103C8T6	1									-
		LED: SMD: 0603: grün:	D1	*0603	TEL CION										
	Grün	35mcd; 1.6x0.8x0.55mm; 130Å*; 2Ä-2.V; 20mA	D1	*0603	LTST-C191KGKT	L '									
		LED; SMD; 0603; orange; 45													
	Orange	90mcd: 1.6x0.8x0.55mm 130Å*: 2Ä-2.4V: 20mA	D2	*0603	LTST-C191KFKT	1									
												 			
	Grün	LED; SMD; 0603; grün; 35mcd; 1.6x0.8x0.55mm; 130Å*; 2Ä-2.V; 20mA	D3	*0603	LTST-C191KGKT	1									
			<u> </u>	BAT54T1G_S ODFL371X13											\vdash
	BATS4T1G		D4	ODFL371X13 5-2N	BATS4T1G	<u> </u>									$\vdash \vdash$
	Grün	LED; SMD; 0603; grün; 35mcd; 1.6x0.8x0.55mm; 130Å*; 2Ä-2.V; 20mA	D5	*0603	LTST-C191KGKT	1									
		130A*; 2Ā-2.V; 20mA	<u> </u>												igwdown
	Orange	LED; SMD; 0603; orange; 45 90mcd; 1.6x0.8x0.55mm;	D6	*0603	LTST-C191KFKT										
	Crange	130Å*; 2Ä-2-4V; 20mA			LIJI-CI FIRIKI										
	1N4148		D7	1N4148_SOD FL127P600-	1N4148	1									
	194148		D8	8N 1N4148_SOD FL127P600-	1N4148	Η.									
	184140		Dis .	BN BN	104140	<u> </u>									
	Grün	LED; SMD; 0603; grün; 35mcd; 1.6x0.8x0.55mm; 130Å*; 2Ä-2.V; 20mA	D9	*0603	LTST-C191KGKT	1									
	Fuse	130A ; 2A/2 V; 2010A	E1	FUSE-	Fuse										
	FT232RL-TUBE	USB-to-LIART 1-CH 256byte	101	3586KTR *SSOP28-LD	FT232RL-TUBE										
	FIZZARL-TUBE	FIFO 5V 28-Pin SSOP Tube	10.1	*CUI_UI2-	F12SURL-TUBE	·									
	UI2-MABH-4-SMT	Mini AB, USB 2.0, 1 A, Right Angle, Surface Mount _SMT_, USB	л	MABH-4-	UI2-MABH-4- SMT	1									
		Receptacle		MABH-4- SMT(Primary)	SMI										
		Mini AR USB 2.0.1A		*CUI_UI2- MARH.4.											
		Disht fasts Cufees		MABH-4-											
	UI2-MABH-4-SMT	Mini AB, USB 2:0, 1 A, Right Angle, Surface Mount _SMT_, USB Receptacle	12	MABH-4- SMT_UI2- MABH-4- SMT(Primary	UI2-MABH-4- SMT	1									
	Joystick.	Right Angle, Surface Mount _SMT USB Receptacle	12 13	SMT_UI2- MABH-4- SMT(Primary) Joystick	SMT Joystick	1									
		Right Angle, Surface Mount _SMT_, USB Receptacle	12 13 14 L1	SMT_UI2- MABH-4- SMT(Primary) loystick loystick 0805_INDC20 12X12N	LII2-MABH-4- SMT Joystick Joystick Inductor_0805	1									
	loystick loystick	Right Angle, Surface Mount SMT_USB Receptacle	13 14 1.1	SMT_UI2- MABH-4- SMT(Primary) Joystick Joystick 0805_INDC20 12X12N Murata Inductor 2800-yrb	SMT Joystick Joystick	1									
	Joystick Joystick Industror_6805 Industror Ind	secoptade	P1 P2	SMT_UI2- MABH-4- SMT(Primary) Joystick Joystick 0805_INDC20 12X12N Murata Inductor 2900 sch HDR1X4 HDR1X5	SMT Joystick Joystick Inductor_0805 Inductor Header 4 Header 5	1									
	Joystick Joystick Inductor_0805	Inductor Heador, 4-Pin Heador, 5-Pin Single Pad or Testpoint	P1 P2	SMT_UI2- MABH-4- SMT(Primary) Joystick Joystick 0805_INDC20 12K12N Murata Inductor	SMT Joystick Joystick Inductor_0805 Inductor Header 4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									
	Joyalda Joyalda Inductor (2005 Inductor Headed 4 SWAR SWAR	Inductor Heador, 4-Pin Heador, 5-Pin Heador, 5-Pin Heador, 5-Pin Single Pad or Testpoint Connector; IDC, Male	P1 P2	SMT_UI2- IMABH-4- SMT(Primary)) Joystick Joystick 0805_IINDC20 12X12N Murata Inductor 2900 sch HDR1X4 HDR1X5 HDR1X5 HDR1X5 MotConnect or	Joystick Joystick Inductor_0805 Inductor Header 4 Header 5 Header 5 Pad, double	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									
	loyydda Myydda Mydda (Madachor Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madach	Inductor Heador, 4-Pin Heador, 5-Pin Heador, 5-Pin Single Pad or Testpoint Connector; IDC, Male Heador, The Holic; 20 Position; Vertical; Pitch 2-5-4mm; B	P1 P2	SMT_UI2- MABH-4- SMT[Primary] Joystick Joystick 0805_INDC20 IAU Murata Inductor 2900 sch HDR1X4 HDR1X5 HDR1X5 HDR1X5	SMT Joystick Joystick Inductor_0805 Inductor Header 4 Header 5 Header 5 Pad, double IDC-20	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									
	oyyddisk oyyddisk olyddisg (1985) Indarctor Neddisg 4 1990d 1990 1990 1990 1990 1990 1990 199	inductor Header, 4 Pin Header, 5 Pin Header, 5 Pin Header, 5 Pin Single Pad or Testpoint Connector IDI, Male Pad New York Pin Single Pad or Testpoint Connector IDI, Male Single Pad or Testpoint Single Pad or Testpoint Single Pad or Testpoint	P1 P2 P3 P6 P7 P8	SMT_UI2- MABH-4- SMT[Primary]) asystick asystick 20935_IMDC20 0835_IMDC20 122(12N Murata Inductor 2000 sch HDRTNS	Joystick Joystick Inductor_0805 Inductor Header 4 Header 5 Header 5 Pad, double	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									
	loyydda Myydda Mydda (Madachor Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madacho Madach	Inductor Heador, 4-Pin Heador, 5-Pin Heador, 5-Pin Single Pad or Testpoint Connector; IDC, Male Heador, The Holic; 20 Position; Vertical; Pitch 2-5-4mm; B	P1 P2 P3 P6 P7 P8 R1 P2	SMT_UID: MABH 4-1 MAB	SMT Joystick Joystick Inductor_0805 Inductor Header 4 Header 5 Header 5 Pad, double IDC-20	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									
	Sportins	Inductor Header, 4Pin Header, 5Pin Header, 5Pin Header, 5Pin Header, 5Pin Header, 5Pin The	P1 P2 P3 P6 P7 P8 R1 P2	SMT_UIZ- MABH-4- SMT[Primary] Josephick Joseph	SMT Boystick Loystick Inductor (8805 Inductor (880	1 1 1 1 1 1 1 1 1									
	Specific	Inductor Header, 4 Pin Header, 5 Pin Header, 5 Pin Header, 5 Pin Header, 6 Pin Header,	P1 P2 P3 P6 P7 P8 R1 R2 R3 R4	SMT_UIZ- MABH-4- SMT[Primary] Joystick Soystick HORITS HO	SMT Soystick Loystick Loystick Inductor Header 4 Header 5 Header 5 Header 5 Pad, double IDC-20 Pad, double Ross Ross	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									
	Sportins	Inductor Header, 4Pin Header, 5Pin Header, 5Pin Header, 5Pin Header, 5Pin Header, 5Pin The	P1 P2 P3 P6 P7 P8 R1 S2 R3 R4	SMT_UID- MABH-4. SMT[Primary J. Naght-1. SMT[Primary J	SMT Boystick Loystick Inductor (8805 Inductor (880	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									
	Sportina Spo	Inductor AFIN Houser	P1 P2 P3 P6 P7 P8 R1 R2 R3 R4 R5 R7	SMT_UIZ- MABH-4- SMT[Philmary]) Systik: Saystik: Saystik	SMT Joystick Joystick Joystick Inductor_G805 Inductor_G805 Inductor_Header 4 Neader 5 Neader 5 Pad, double IDC-20 Pad, double Bes Bes Bes Bes Bes	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									
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