Realistic View

VIN +4V GSM BT TSI NSI

2V8

GND

Quectel M66
eBoard V1.0
github.com/aKaReZa75

GND mRX mTX

POWER

GND uTX uRX

Top Layer (Scale 2:1)

View from Top side (Scale 2:1)

MC1

P1

C24

R16 R17 R2 R1
R4 Q2 R3 Q1
R6 R5
R9
R8
R7

C17
C16
C15 C1
C13
C12
C11

C22 C20 C18 C5 R14 C7 R13 C6 R12
C23 C21 C19

MK1

L1

P2

J3

C2
C3
C4

C9 C14 C8 R18
U1
R20 C10
R19
JP3

R10 R11 Q3

S1

J4 JP1 JP2

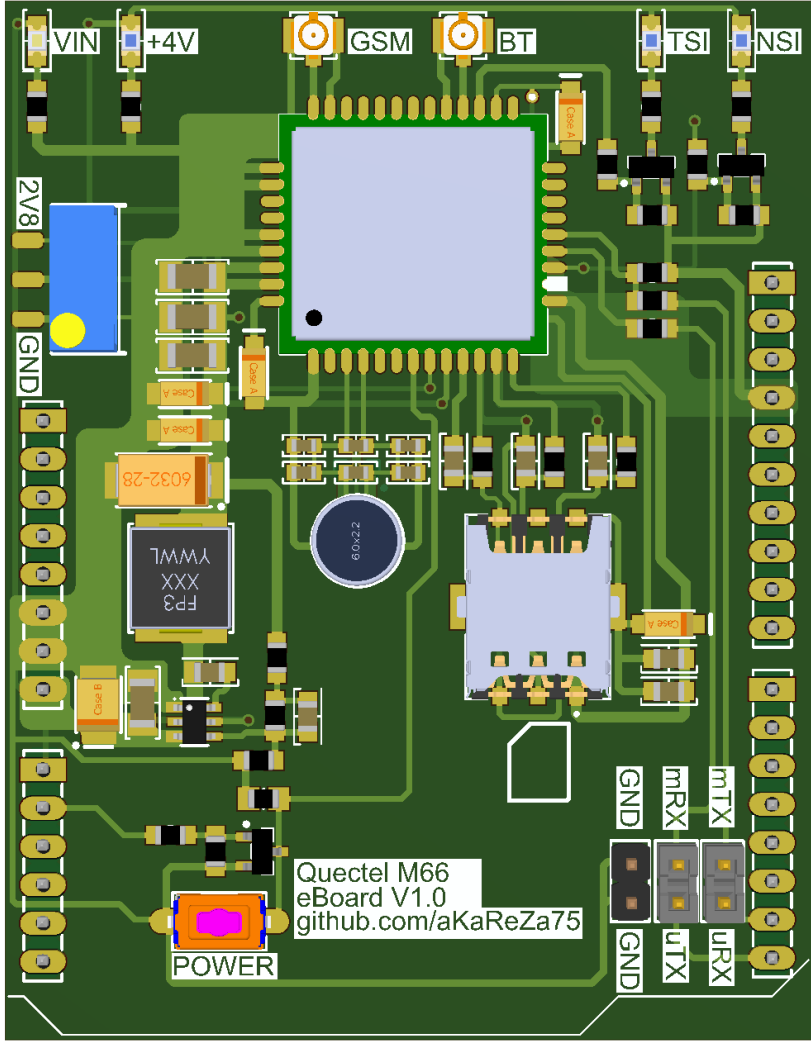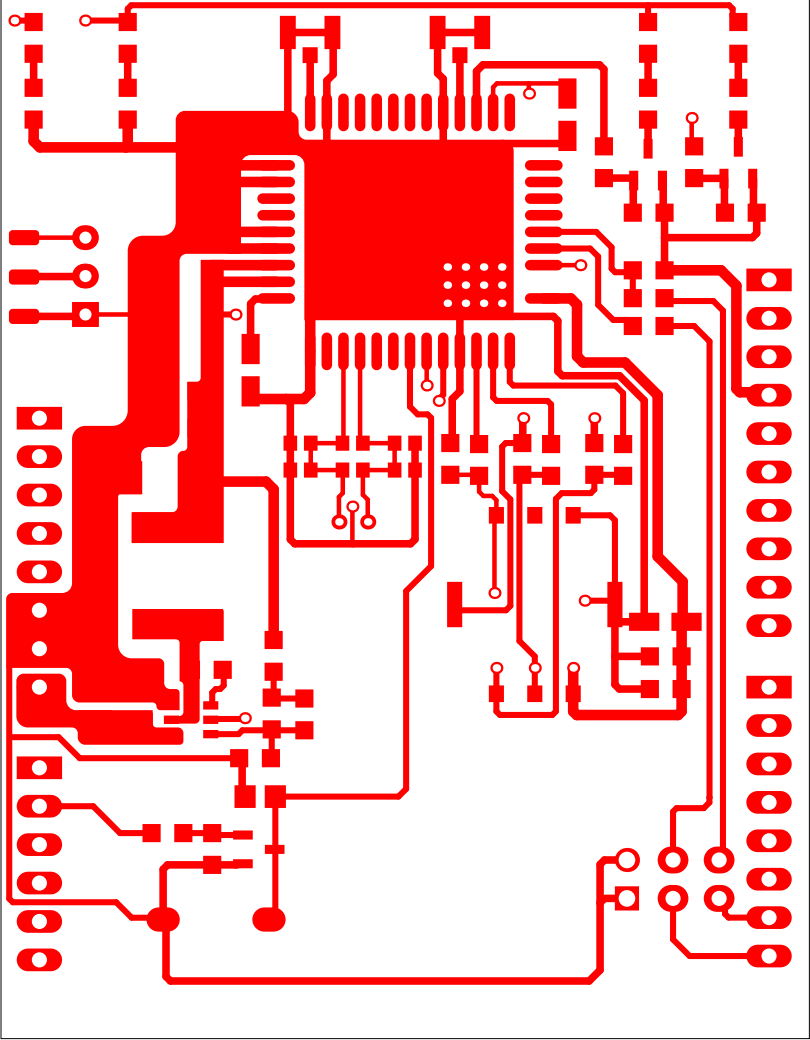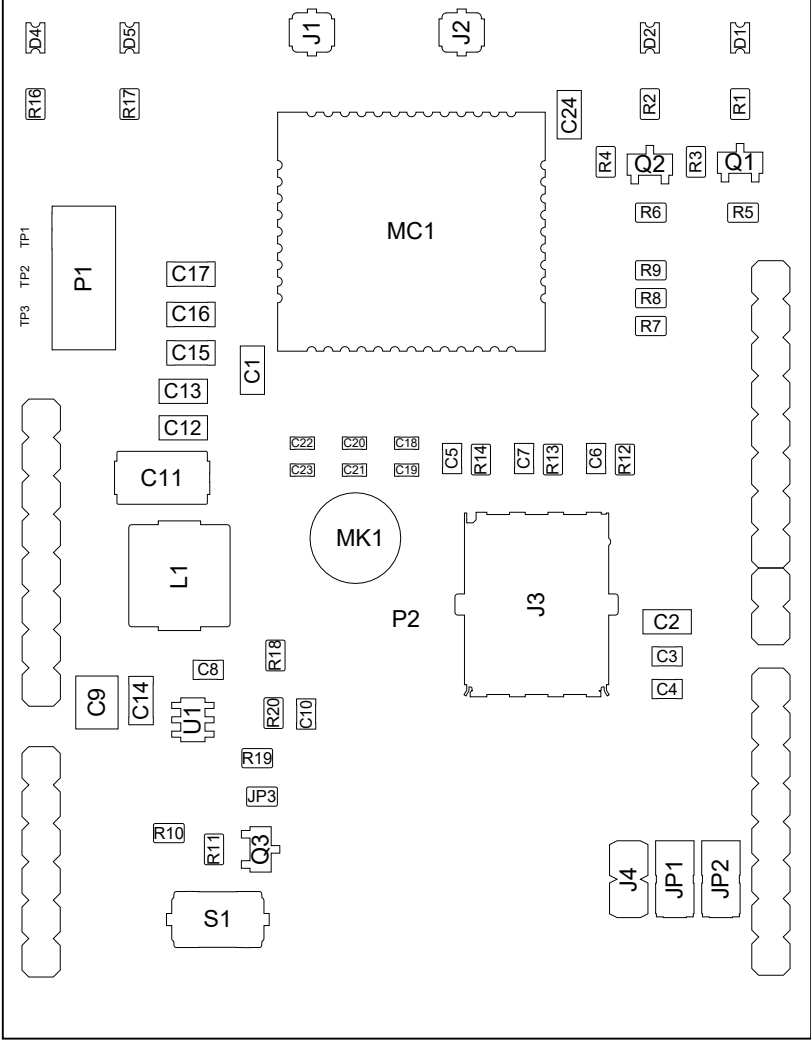| Title:	**TOP View**	Drawn by:	**Hossein Bagheri**
Project:	**Quectel M66**	Revision: **1.0**	**aKaReZa**
Company:	**github.com/aKaReZa75**	Sheet **1** of **7**	

Realistic View
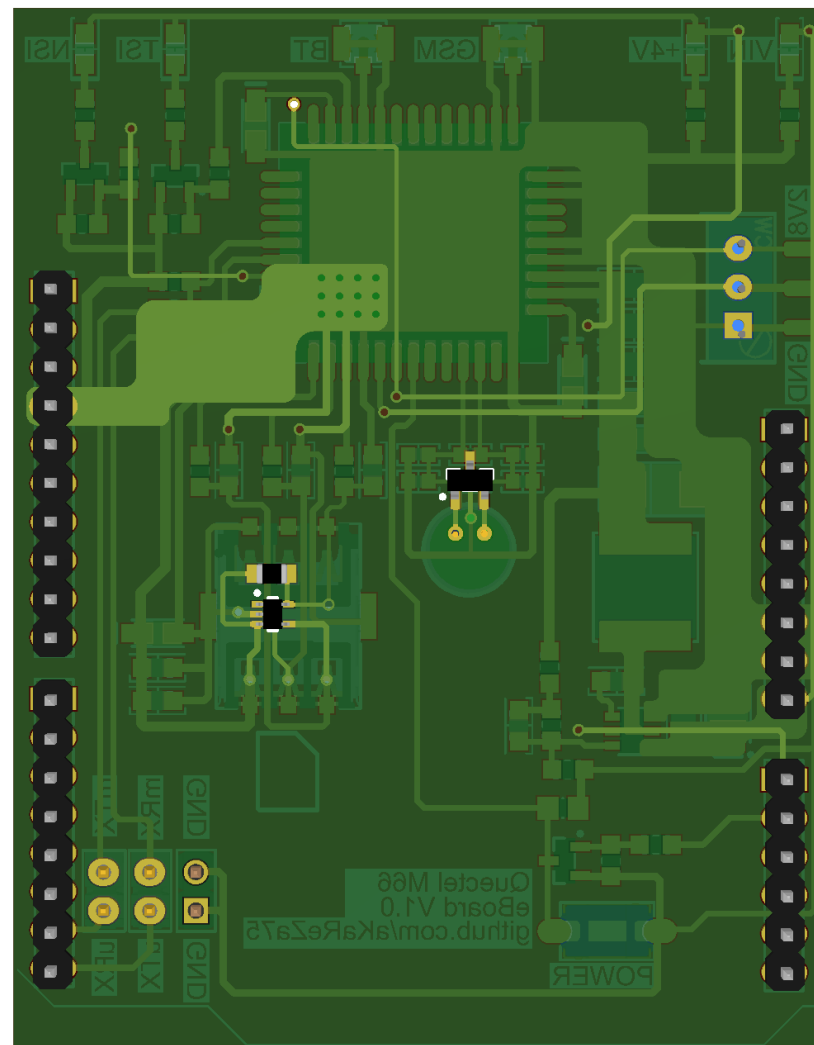
Bottom Layer (Scale 2:1)

View from Bottom side (Scale 2:1)

D6

R15
D3

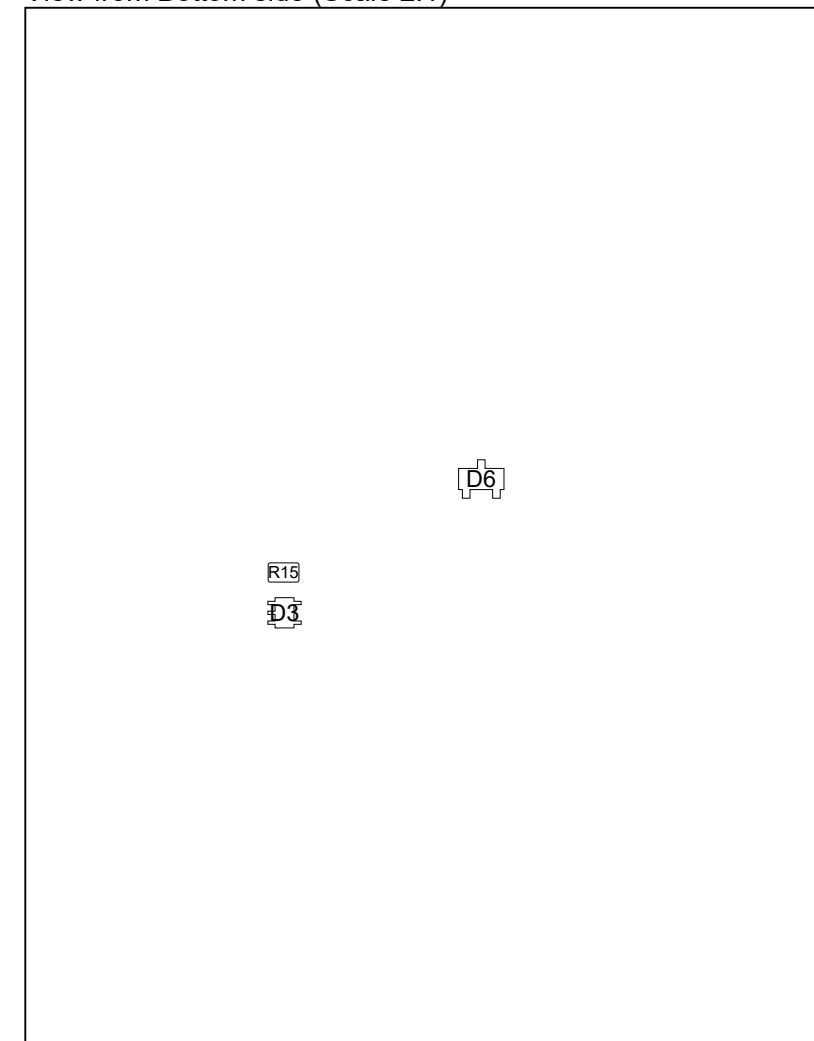| Title: **Bottom View**	Drawn by:	**Hossein Bagheri**
Project: **Quectel M66**	Revision: **1.0**	aKaReZa
Company: **github.com/aKaReZa75**	Sheet **2** of **7**	

Drill Drawing View (Scale 2.99446494464945:1)

View from Top side (Scale 5:2)

Drill Table

Symbol	Count	Hole Size	Plated	Hole Tolerance
�	31	0mm	Plated	
□	3	1mm	Plated	
○	36	1mm	Plated	
✛	2	1mm	Plated	
	72 Total			

Title: **Drill Drawing and Dimensions**	Drawn by:	**Hossein Bagheri**
Project: **Quectel M66**	Revision: **1.0**	**aKaReZa**
Company: **github.com/aKaReZa75**	Sheet **3** of **7**	

View from Left side (Scale 5:2)

CW
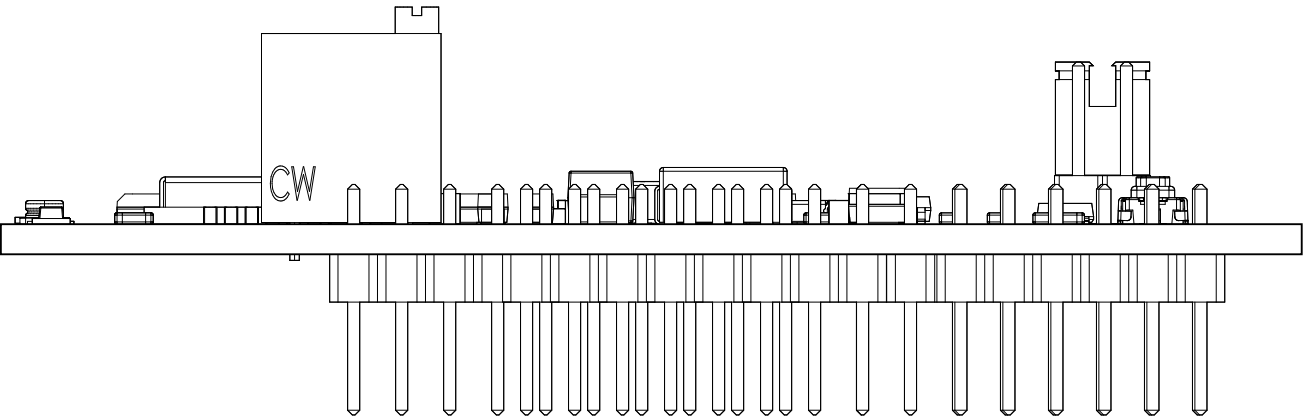
View from Back side (Scale 5:2)
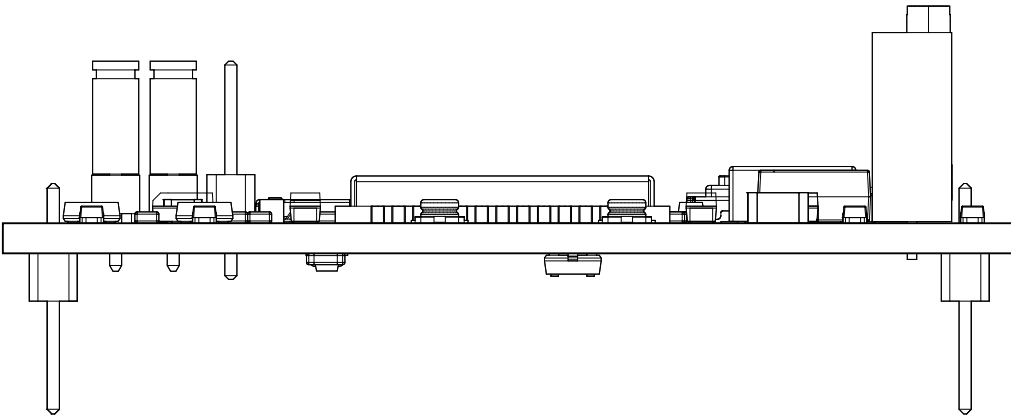
View from Right side (Scale 5:2)
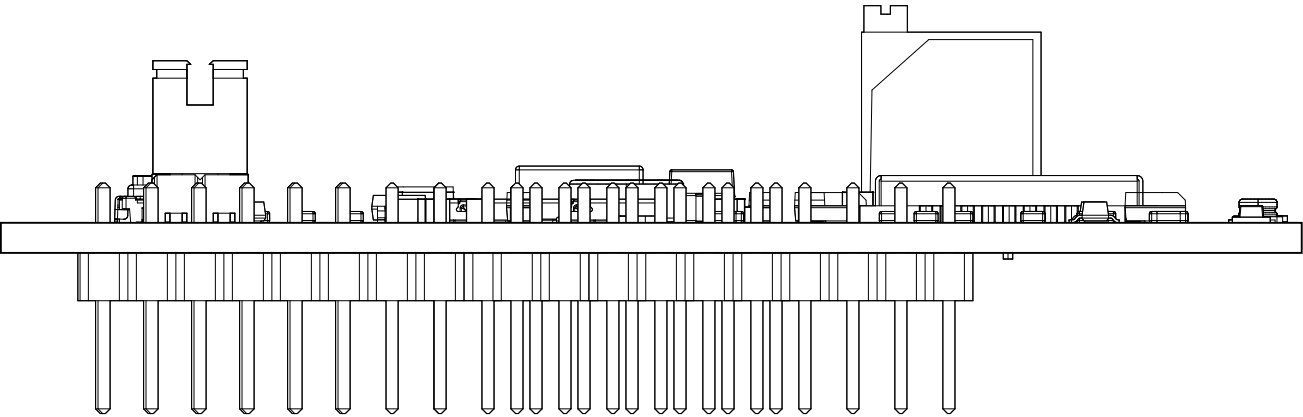
View from Front side (Scale 5:2)
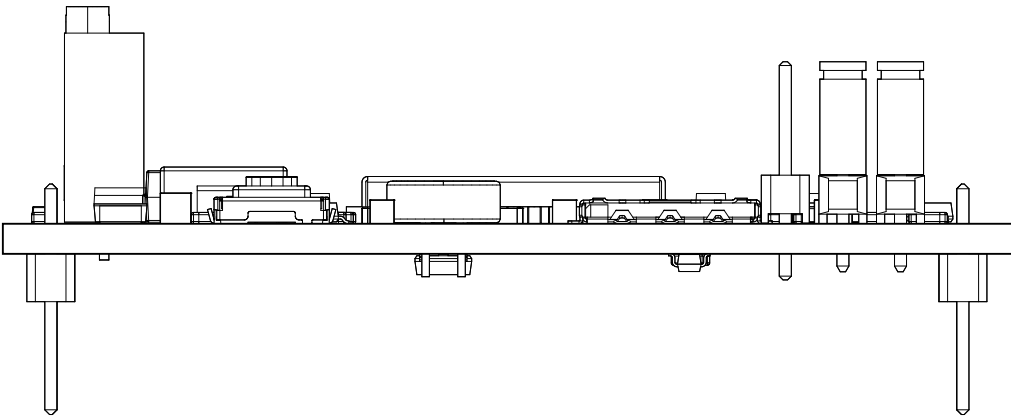
Layer Stack Legend

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0mm	Solder Resist	Solder Mask	GTS
Copper	**Top Layer**	**0mm**		**Signal**	**GTL**
		1mm	FR-4	Dielectric	
Copper	**Bottom Layer**	**0mm**		**Signal**	**GBL**
Surface Material	Bottom Solder	0mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO

Total thickness: 2mm

Title: Layer Stack and Side View	Drawn by:	Hossein Bagheri
Project: Quectel M66	Revision: 1.0	aKaReZa
Company: github.com/aKaReZa75	Sheet 4 of 7	

View from Top side (Scale 5:2)

View from Bottom side (Scale 5:2)

VIN +4V GSM BT TSI NSI

2V8 CW GND

Quectel M66
eBoard V1.0
github.com/aKaReZa75

POWER

GND mRX mTX

GND uTX uRX

P2
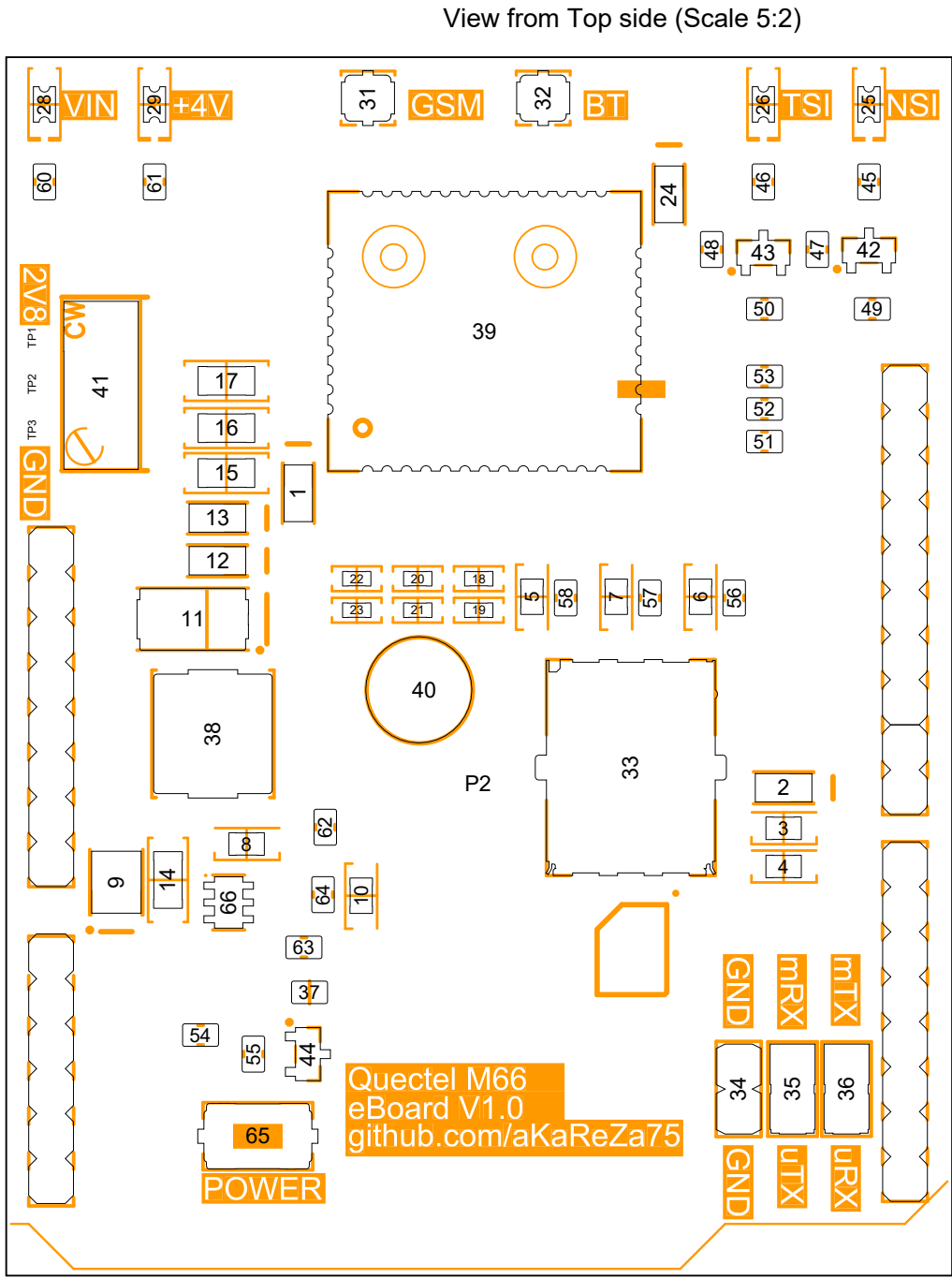
Title: **Component Positions View**	Drawn by:	**Hossein Bagheri**
Project: **Quectel M66**	Revision: **1.0**	aKaReZa
Company: **github.com/aKaReZa75**	Sheet **5** of **7**	

Bill Of Materials

Line #	Designator	Comment	Library Ref	Footprint	Package	Rating	Type	Value
1	C1	Value?	Cap_Tantalum	SMT_C_Tantalum_A	Package?	Rating?	Tantalum	Value?
2	C2	Value?	Cap_Tantalum	SMT_C_Tantalum_A	Package?	Rating?	Tantalum	Value?
3	C3	100n	Cap_Multi_SMD_100nF_0805	CAP 0805/2012	0805	50V	MultiLayer	100n
4	C4	Value?	Cap_Multi_SMD_0805	CAP 0805/2012	0805	Rating?	MultiLayer	Value?
5	C5	Value?	Cap_Multi_SMD_0805	CAP 0805/2012	0805	Rating?	MultiLayer	Value?
6	C6	Value?	Cap_Multi_SMD_0805	CAP 0805/2012	0805	Rating?	MultiLayer	Value?
7	C7	Value?	Cap_Multi_SMD_0805	CAP 0805/2012	0805	Rating?	MultiLayer	Value?
8	C8	100n	Cap_Multi_SMD_100nF_0805	CAP 0805/2012	0805	50V	MultiLayer	100n
9	C9	10u	Cap_Tantalum	SMT_C_Tantalum_B	Package?	25v	Tantalum	10u
10	C10	68p	Cap_Multi_SMD_0805	CAP 0805/2012	0805	Rating?	MultiLayer	68p
11	C11	100u	Cap_Tantalum	SMT_C_Tantalum_C	SMD-C	6.3V	Tantalum	100u
12	C12	10u	Cap_Tantalum	SMT_C_Tantalum_A	Package?	6.3v	Tantalum	10u
13	C13	1u	Cap_Tantalum	SMT_C_Tantalum_A	SMD-A	6.3V	Tantalum	1u
14	C14	100n	Cap_Multi_SMD_100nF_1206	CAP 1206/3216	1206	50V	MultiLayer	100n
15	C15	100n	Cap_Multi_SMD_100nF_1206	CAP 1206/3216	1206	50V	MultiLayer	100n
16	C16	33p	Cap_Multi_SMD_1206	CAP 1206/3216	1206	50V	MultiLayer	33p
17	C17	10p	Cap_Multi_SMD_1206	CAP 1206/3216	1206	50V	MultiLayer	10p
18	C18	Value?	Cap_Multi_SMD	CAP 0603/1608	Package?	Rating?	Type?	Value?
19	C19	Value?	Cap_Multi_SMD	CAP 0603/1608	Package?	Rating?	Type?	Value?
20	C20	Value?	Cap_Multi_SMD	CAP 0603/1608	Package?	Rating?	Type?	Value?
21	C21	Value?	Cap_Multi_SMD	CAP 0603/1608	Package?	Rating?	Type?	Value?
22	C22	Value?	Cap_Multi_SMD	CAP 0603/1608	Package?	Rating?	Type?	Value?
23	C23	Value?	Cap_Multi_SMD	CAP 0603/1608	Package?	Rating?	Type?	Value?
24	C24	Value?	Cap_Tantalum	SMT_C_Tantalum_A	Package?	Rating?	Tantalum	Value?
25	D1	Value?	Semi_LED_SMD	LED 0805/2012 BLUE	Package?	Rating?	LED	Value?
26	D2	Value?	Semi_LED_SMD	LED 0805/2012 BLUE	Package?	Rating?	LED	Value?
27	D3	SMF-05	Semi_Diod_TVS_SMF05	SC70-5_N	SC70-5	Rating?	TVS	SMF-05
28	D4	Yellow	Semi_LED_SMD	LED 0805/2012 YELLOW	Package?	Rating?	LED	Yellow
29	D5	Blue	Semi_LED_SMD	LED 0805/2012 BLUE	Package?	Rating?	LED	Blue
30	D6	SM712	Semi_Diod_TVS_SM712	SOT23_M	Package?	Rating?	Type?	SM712
31	J1	U.FL	Con_RF_U.FL	IPEX-3x3mm	SMD	Rating?	RF	U.FL
32	J2	U.FL	Con_RF_U.FL	IPEX-3x3mm	SMD	Rating?	RF	U.FL
33	J3	6'Pin	Con_Socket_SimCard_1	GCT_SIM8051_Plastik	SMD	Rating?	Nano	6'Pin
34	J4	2	Con_MPH_2x1_V_THT_2.54	HDR_THT_2M_2.54mm	Package?	Rating?	Type?	2
35	JP1	2'Pin	SW_Other_Jumper	Jumper Small - 2.54 - GRAY	Package?	Rating?	Type?	2'Pin
36	JP2	2'Pin	SW_Other_Jumper	Jumper Small - 2.54 - GRAY	Package?	Rating?	Type?	2'Pin
37	JP3	Jumper	Other_Elec_Jumper_0805	RESC2012M (0805)	0805	Rating?	Type?	Jumper
38	L1	10u	Ind_SMD	L_7	Package?	3.8A	Type?	10u
39	MC1	M66	ModSen_Com_M66	m66	Dip	Rating?	GSM-GPRS	M66
40	MK1	Mic	Other_Elec_Microphone	mic6	Package?	Rating?	Type?	Mic
41	P1	Value?	Res_Multi	Multi turn 01	Package?	Rating?	Type?	Value?
42	Q1	NPN	Semi_BJT_BC817	SOT23_N	Package?	Rating?	Type?	NPN
43	Q2	NPN	Semi_BJT_BC817	SOT23_N	Package?	Rating?	Type?	NPN
44	Q3	NPN	Semi_BJT_BC817	SOT23_N	Package?	Rating?	Type?	NPN
45	R1	Value?	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	10%	Value?
46	R2	Value?	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	10%	Value?
47	R3	Value?	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	10%	Value?
48	R4	Value?	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	10%	Value?
49	R5	Value?	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	10%	Value?
50	R6	Value?	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	10%	Value?

Title: **Bill of Materials**

Drawn by:

Hossein Bagheri

Project: **Quectel M66**

Revision: **1.0**

Company: **github.com/aKaReZa75**

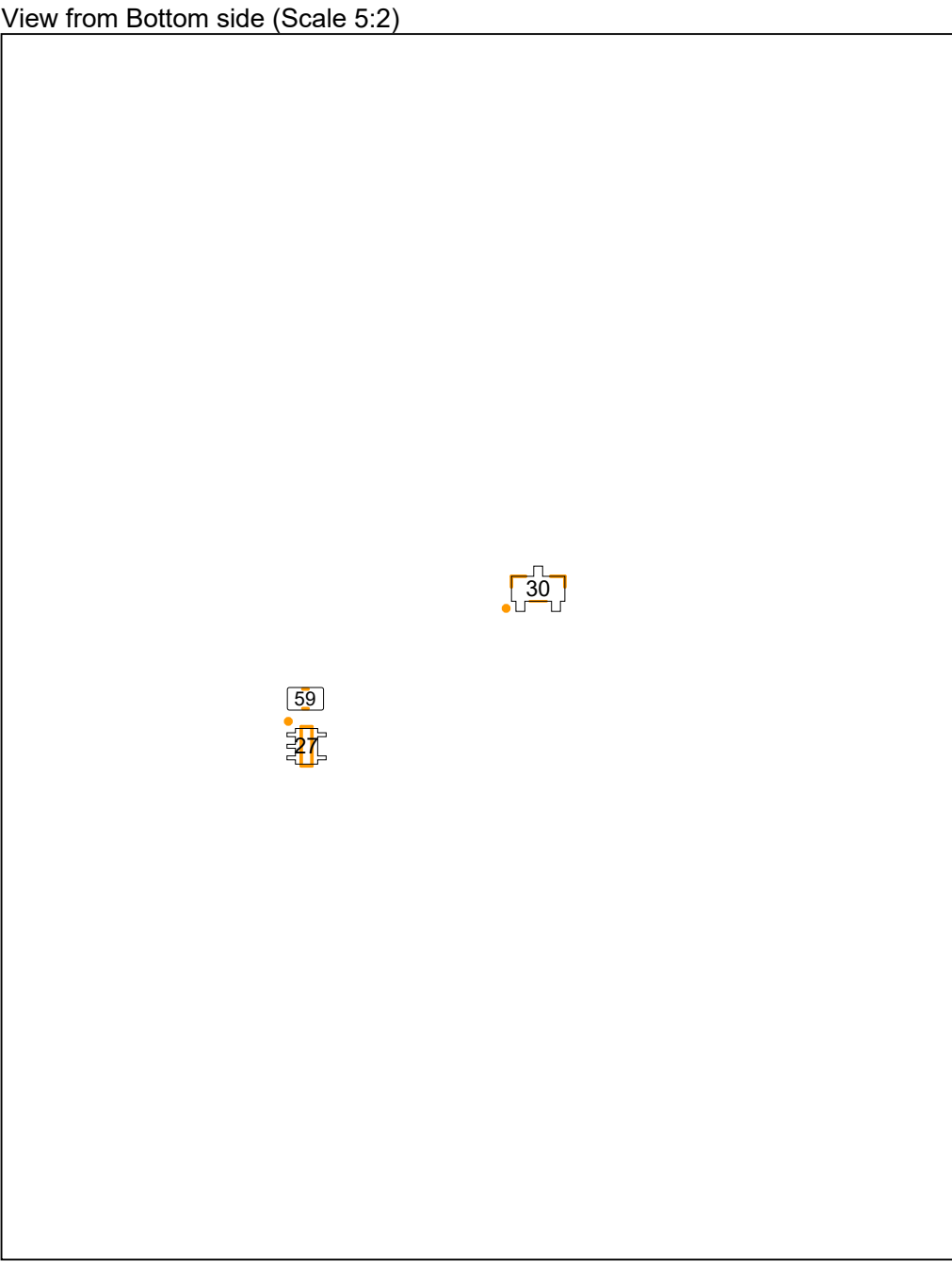Sheet **6** of **7**

aKaReZa

Bill Of Materials

Line #	Designator	Comment	Library Ref	Footprint	Package	Rating	Type	Value
51	R7	Value?	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	10%	Value?
52	R8	Value?	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	10%	Value?
53	R9	Value?	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	10%	Value?
54	R10	Value?	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	10%	Value?
55	R11	Value?	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	10%	Value?
56	R12	Value?	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	10%	Value?
57	R13	Value?	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	10%	Value?
58	R14	Value?	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	10%	Value?
59	R15	Value?	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	10%	Value?
60	R16	1.8K	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	10%	1.8K
61	R17	100b	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	10%	100b
62	R18	49.9b	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	1%	49.9b
63	R19	17.8K	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	1%	17.8K
64	R20	100K	Res_SMD_0805	RES 0805 (2012X06L)	0805	0.125W	1%	100K
65	S1	PB	SW_PushButton_2_SMD	SW_PB_SMD_2PIN_SPST_6X3X2	SMD	2b	Vertical	PB
66	U1	TPS54302	IC_Reg_TPS54302	TPS54302	SOT-23-6	S	Switching	TPS54302