



Documentation folder

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Project number 1901615

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Photographs **KAIFA MA120**



MA120 ($I_b = 10$ A) – Housing



MA120 ($I_b = 5$ A) – Housing



Photographs **KAIFA MA120**



MA120 ($I_b = 10\text{ A}$) - without terminal covers



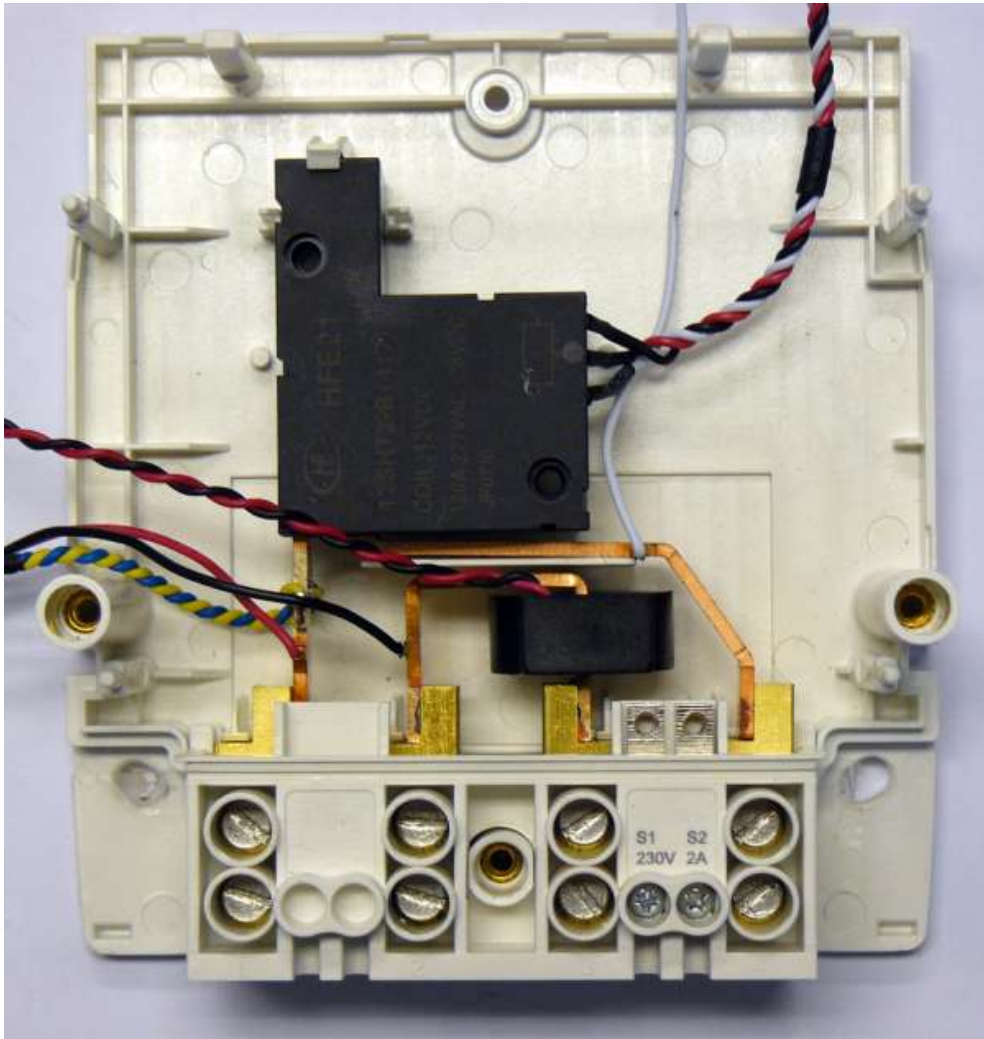
MA120 ($I_b = 5\text{ A}$) - without terminal covers





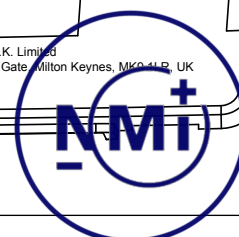
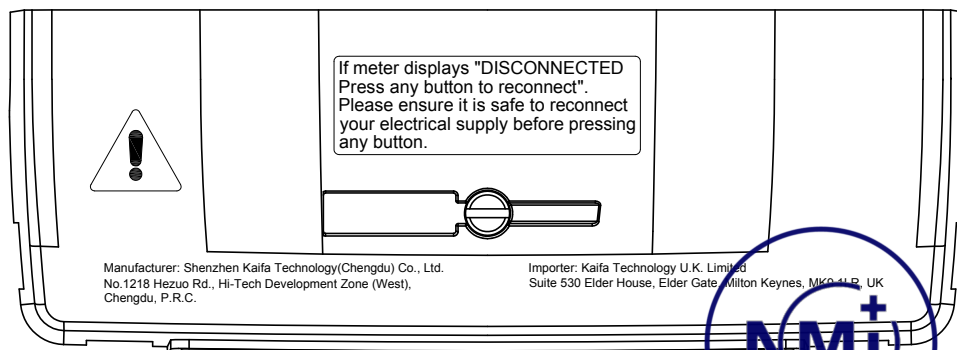
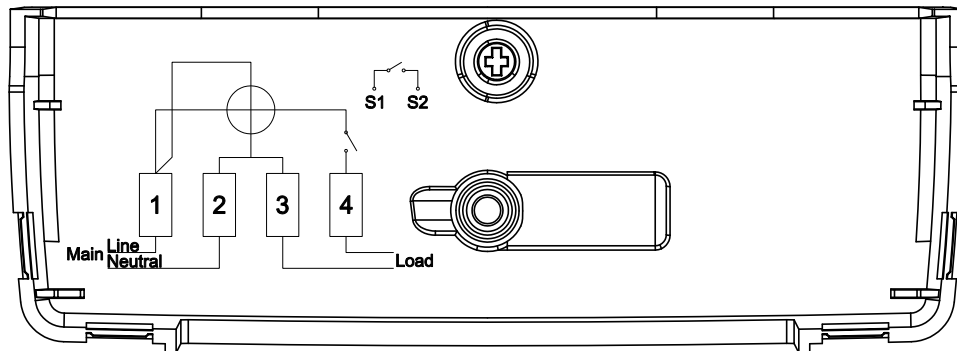
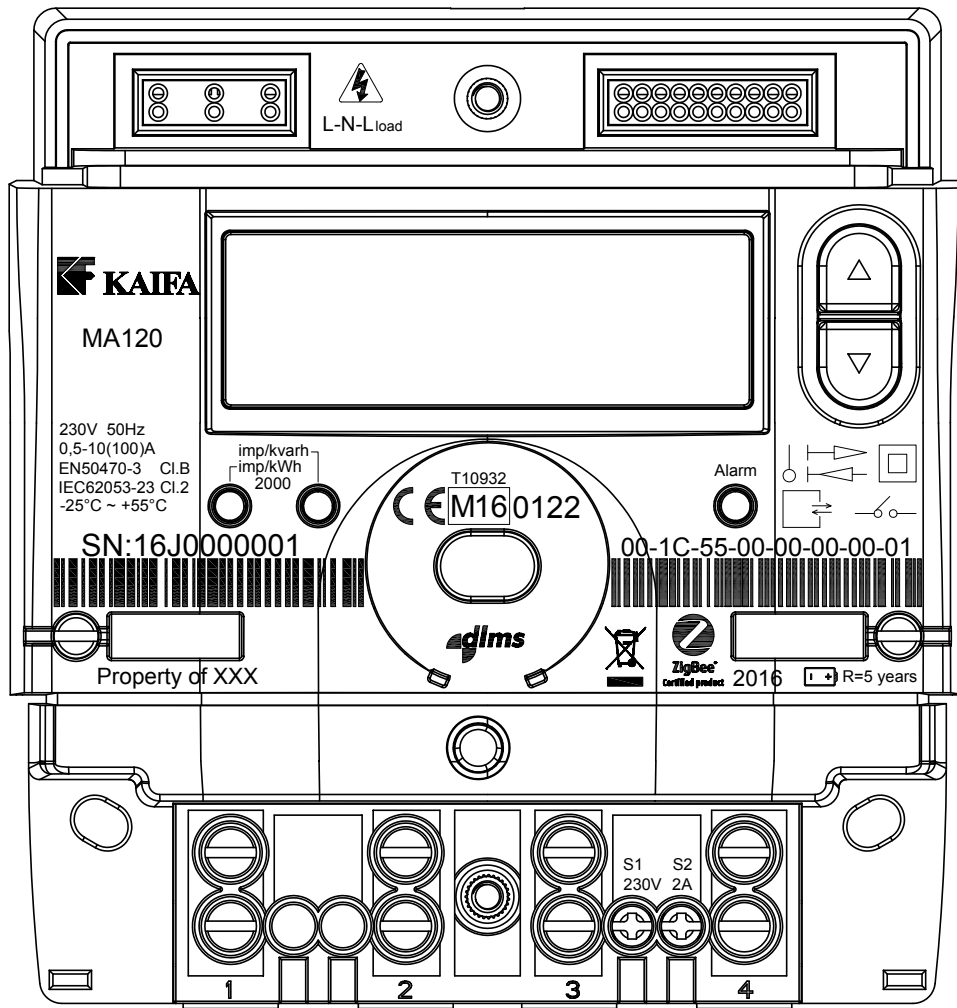
Inside

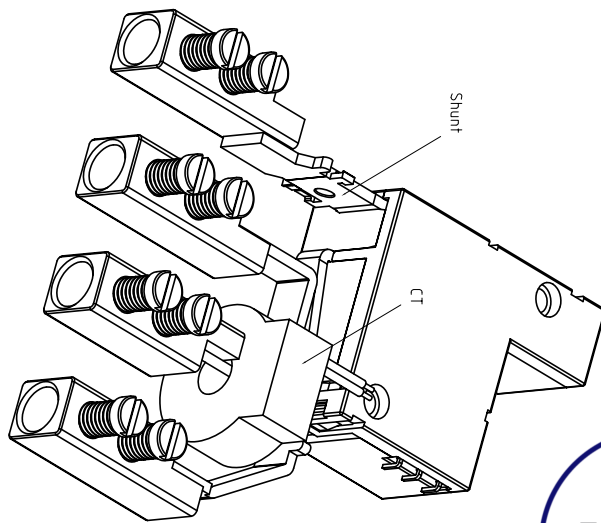
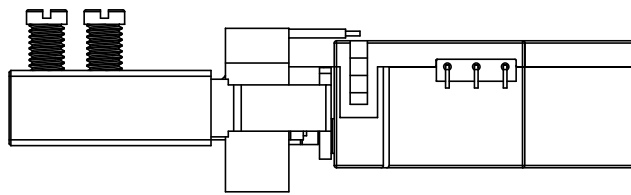
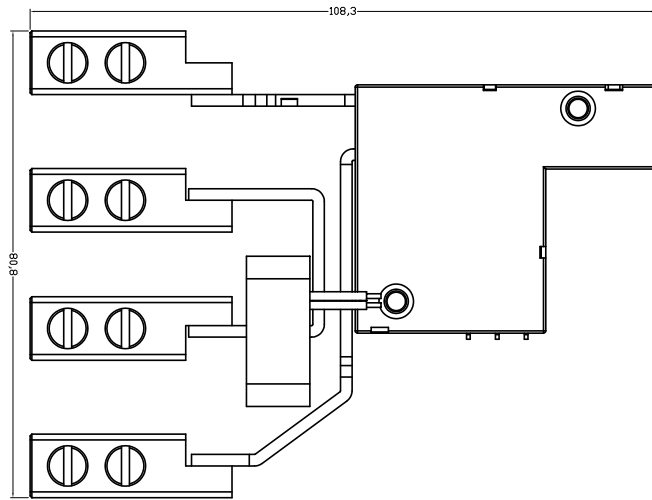
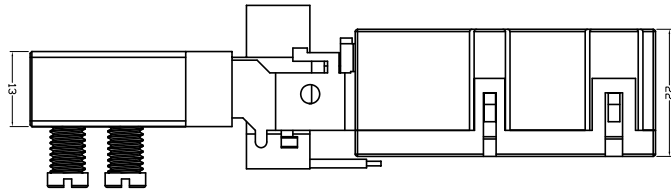




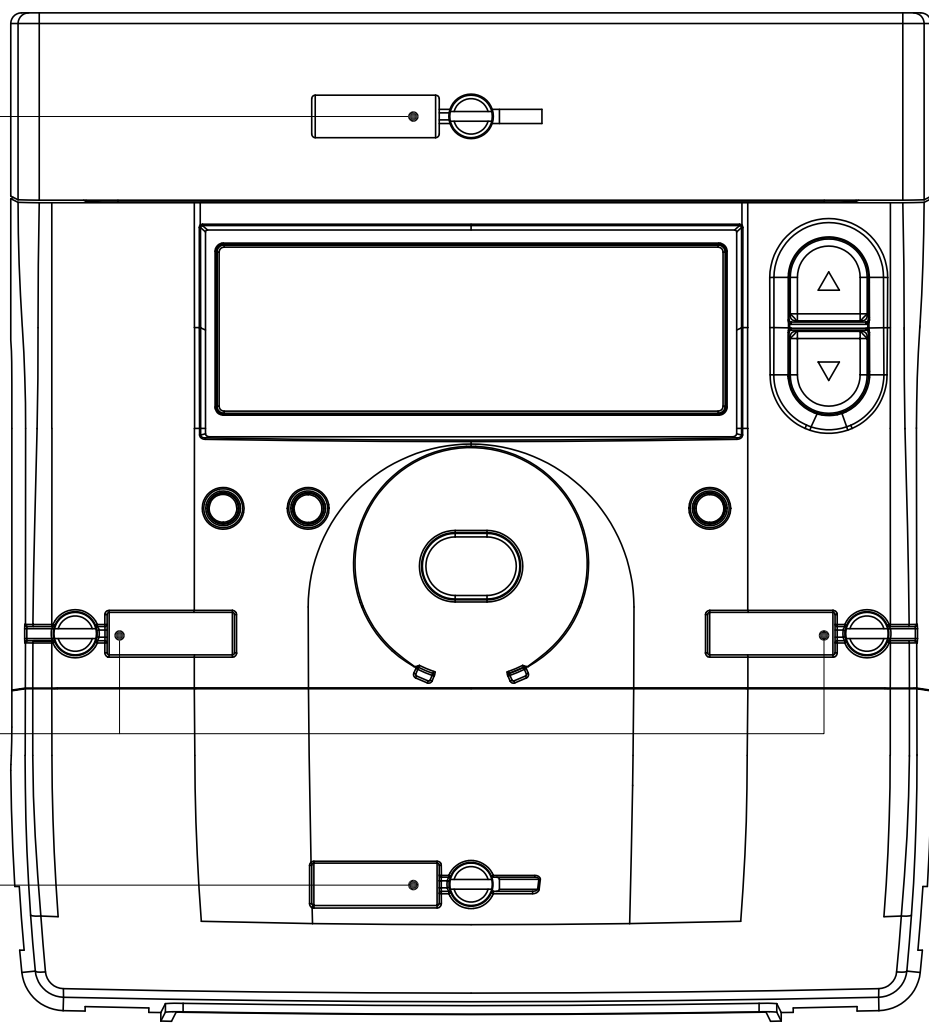
Inside – without main board







HUB Sealing



Meter Cover
Sealing

Terminal Cover
Sealing



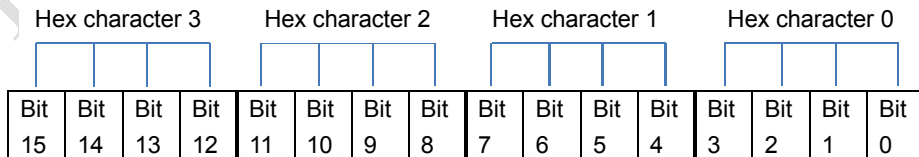
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Annexure IV Meter State Word

The internal state of error, OBIS code: F.F.0
When one of these bits is set, the alarm icon will display.

Bits No.	Description	Remark	Set Condition	Reset Condition
Bit0	Watchdog reset	When the meter power on, it will check if the meter is reset by watch dog.	Watchdog is reset	By state word resetting command
Bit1	RAM error	Checksum is used to protect the integrity of critical data in RAM	The checksum of critical data is wrong.	By state word resetting command
Bit2	EEPROM error	Checksum is used to protect the integrity of critical data in EEPROM.	The checksum of EEPROM data is wrong.	By state word resetting command
Bit3	Code flash error	A digest of code flash has been calculated. Every time the meter is power on or every month, the meter recalculate the digest to check if the digest is right.	The digest of code flash is wrong.	By state word resetting command
Bit4	Data flash error	Checksum is used to protect the integrity of critical data in data flash.	The checksum of critical data is wrong.	By state word resetting command
Bit5	Metrology abnormality	The meter will check measure chip every second.	Metrology circuit abnormality	By state word resetting command
Bit6	RTC abnormality	The meter will check RTC chip every second.	Detect RTC failure	Clock is reprogrammed.
Bit7	RTC over drift	RTC Synchronization fail due to over drift		Clock is reprogrammed.
Bit8-15	reserved			

The state word is displayed as hex with 4 characters in the LCD. The display rule is shown as below:



Hex character 3 is displayed in the leftmost.

If an error event is detected, the corresponding event bit will be set to 1

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There are three examples to explain the above display rule:

- 1) If only RTC abnormality happens, then bit0 will be set from 0 to 1.

Hex character 3: 0 Hex character 2: 0 Hex character 1: 4 Hex character 0: 0

Bit 15	Bit 14	Bit 13	Bit 12	Bit 11	Bit 10	Bit 9	Bit 8	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0

The corresponding binary data will be 0000 0000 0100 0000, the state word will be hex 0040.

- 2) If only metrology abnormality happens, then bit1 will be set from 0 to 1.

Hex character 3: 0 Hex character 2: 0 Hex character 1: 2 Hex character 0: 0

Bit 15	Bit 14	Bit 13	Bit 12	Bit 11	Bit 10	Bit 9	Bit 8	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0

The corresponding binary data is 0000 0000 0010 0000, the state word will be hex 0020.

- 3) If both RTC abnormality and metrology abnormality happen, then both bit5 and bit6 will be set from 0 to 1.

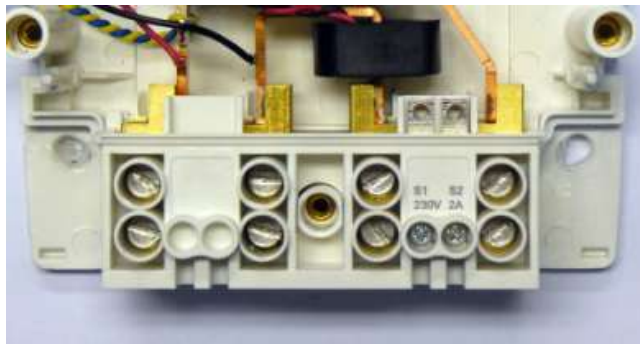
Hex character 3: 0 Hex character 2: 0 Hex character 1: 6 Hex character 0: 0

Bit 15	Bit 14	Bit 13	Bit 12	Bit 11	Bit 10	Bit 9	Bit 8	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0

The corresponding binary data is 0000 0000 0110 0000, the state word will be hex 0060.



Terminals of **KAIFA MA120**



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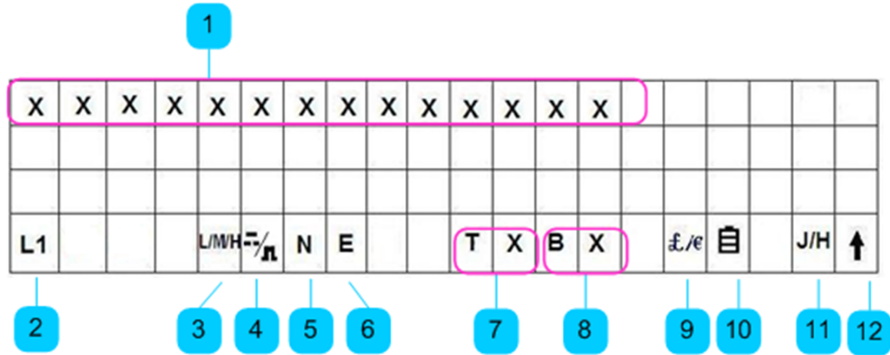
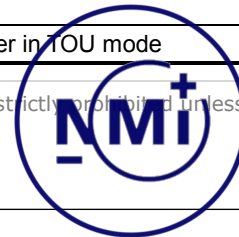


Figure 8.1 LCD layout in normal display item


Table 8-1 display icon description

Icon No.	Description	Action	Function
1	Display information identifier	-	Information of displaying objects
2	Phase indicator	L1: On	Normal Voltage
		L1: Blink	Current reversal
		L1: Off	Voltage missing -The threshold is configurable
3	Energy consumption level indicator	L: Display	Low energy consumption
		M: Display	Middle energy consumption
		H: Display	High energy consumption
4	Relay indicator	⏏ On	Disconnect
		⏏ Blink	Ready for connect
		⏏ On	Connect
5	NDC period indicator	N: Display	Non-disconnect calendar mode
		Off	Normal mode
6	Emergency credit indicator	E: Blink	Emergency credit is available.
		E: Display	Emergency credit is in use
7	Tariff indicator	-	Current energy tariff
8	Block indicator	Display with corresponding data	The meter in TOU with block mode, and indicate current tariff block
		Off	The meter in TOU mode

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9	Currency unit	£: Display	The currency unit is pounds.
		€: Display	The currency unit is Euro.
10	Battery indicator	Blink	Low battery
		Off	Normal
11	Join HAN indicator	Off	The meter has not joined HAN yet.
		J: Blink	The meter is joining HAN.
		H: Blink	The meter has joined HAN before, but can't communication with Hub
		H: On	The meter joined HAN successfully, and can communication with Hub
12	Energy quadrant indicator 	Display corresponding icon	-Indicate quadrant of energy -When no load, the meter will not display any icon of energy quadrant

8.2 Display Mode

The meter supports auto scroll mode and alternate mode.

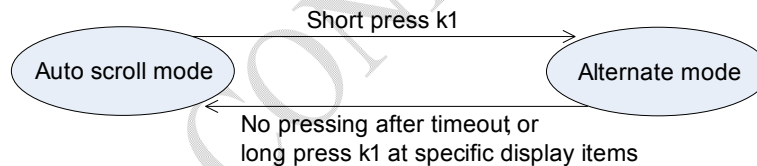


Figure 8.2 Transfer flow between auto scroll mode and alternate mode

8.2.1 Auto Scroll Mode

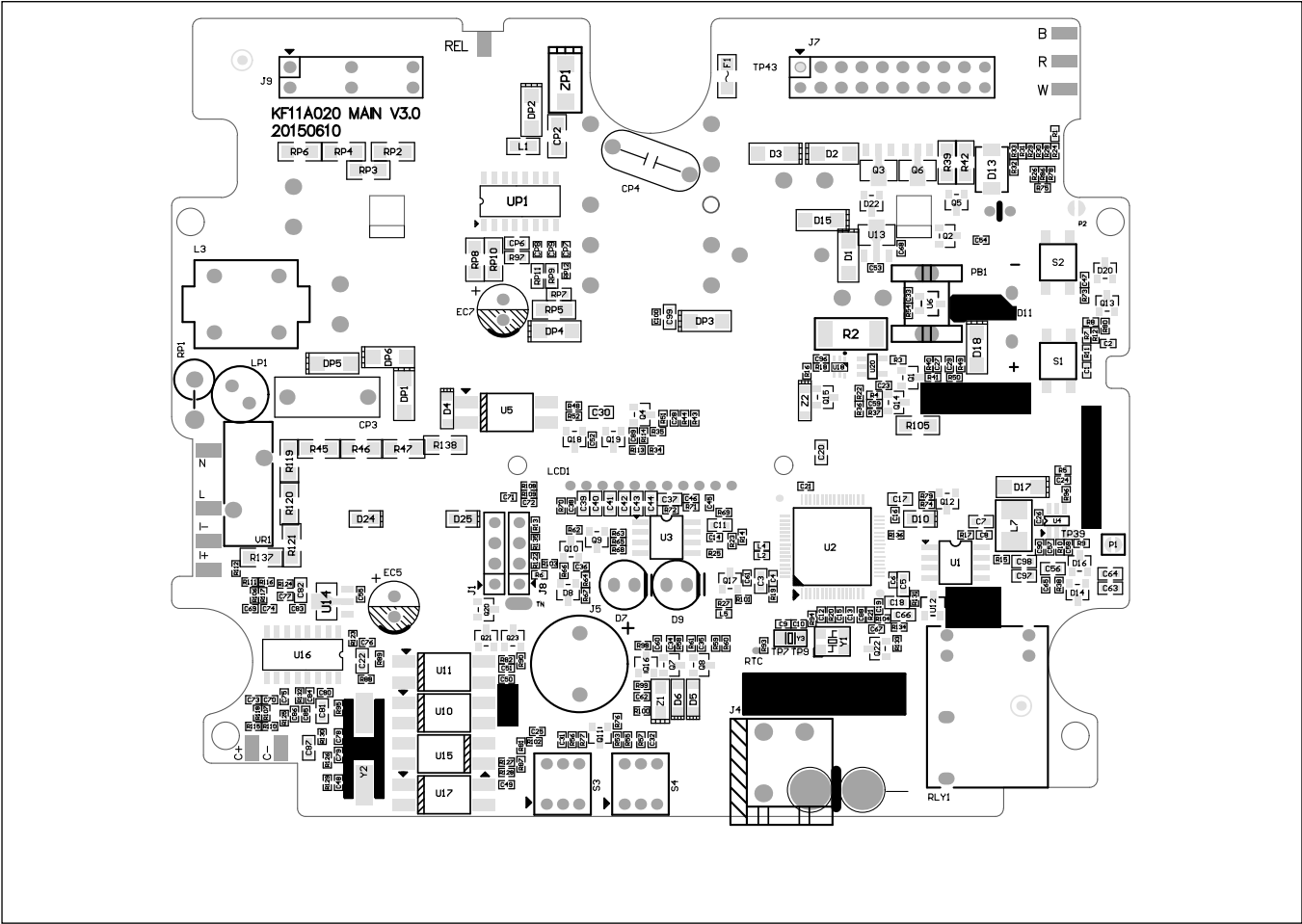
In this mode, the measured parameters are displayed with 10 seconds interval time. It includes normal display items and alarm items. When there is no alarm, the meter displays normal items. Otherwise, the meter only display alarm items instead.

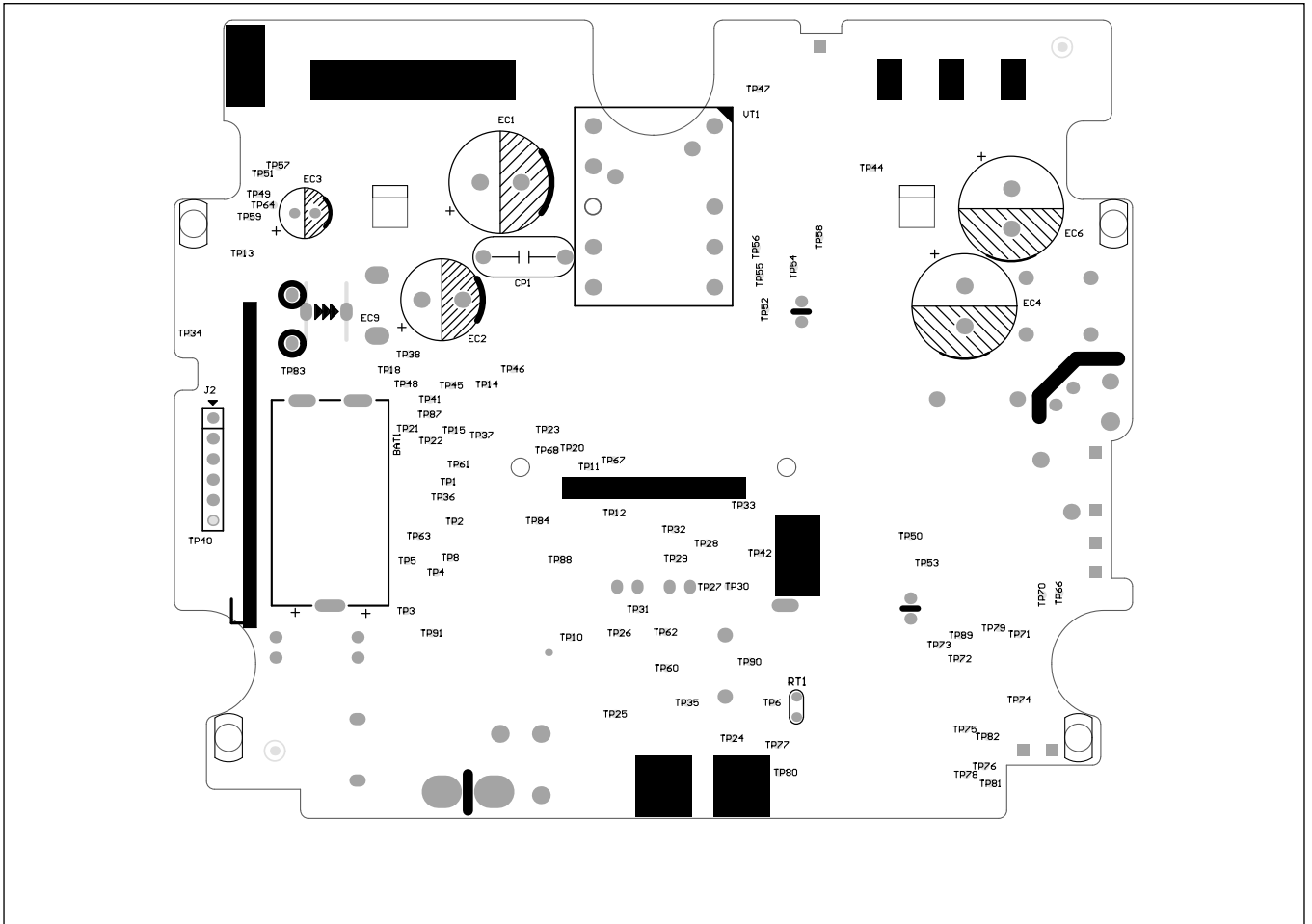
8.2.1.1 Normal display

User can configure up to 30 display items to the auto scroll display list (refer to Annexure I).

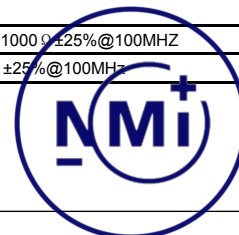
When the meter is power on, the default display mode is auto scroll mode as follows:







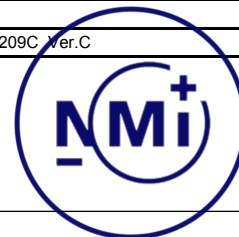
No.	Stratum	Designator	Description_in_english	Quantity
Main board				
1	DIP	BAT1	BATT;LI ROHS&REACH CR14250SE-HR10	1
2	DIP	CP1, CP4	CAP;CER ROHS&REACH CT7-2F4-400VAC-102M	2
3	DIP	D11	LED;BLB ROHS&REACH HZU3459A-10	1
4	DIP	EC1,EC2	ECAP;ALU ROHS&REACH ERS108M1EG20TCXXP	2
5	DIP	EC4, EC6	ECAP;ALU ROHS&REACH KSH226M400T145L20K	2
6	DIP	EC5	ECAP;ALU ROHS&REACH KSY477M016T1A5G11K	1
7	DIP	EC7	ECAP;ALU ROHS&REACH KSY476M035T2A5E11K	1
8	DIP	EC9	SUPER CAP;SUPER CAP ROHS&REACH EEC50HD 224(V)	1
9	DIP	J4	SOCKET;FEMALE ROHS&REACH 1*FFKDS/V1-5.08+1*FFKDSA1/V1-7.62	1
10	DIP	J5	BUZZER;Electro-Magnetic ROHS BL-PBZ12095D23036YB	1
11	DIP	J7	SOCKET;ROHS S001400198	1
12	DIP	J9	SOCKET;FEMALE ROHS&REACH KF-141112-01	1
13	DIP	LCD1	LCD;LCM ROHS&REACH HR-MS793DFEGS	1
14	DIP	LP1	INDUCTOR;PEAK ROHS&REACH JCI-2590-5mH-1	1
15	DIP	RP1	RES;WWR ROHS&REACH RES-AXLP15.5-B-M 5mH _ 100mA	1
16	DIP	RT1	THERM RES;THERM RES ROHS&REACH RT-MF52E-103F3950FA-M MF52E-103J3950GA	1
17	DIP	VR1	RES;VAR ROHS&REACH RES-461K-F15.5-M B72214S2461K302	1
18	DIP	VT1	TRANSFORMER; TM ROHS&REACH EP17-JBC5528-M JBC-5812-EP17	1
19	DIP	RLY1	RELAY;LATCHING ROHS&REACH RLY-HFE7-12-1HT-L2-M HFE7/12-1HT-L2	1
20	DIP	RLY2	RELAY;LATCHING ROHS&REACH RLY-HFE21-12SHT2-R(417)	1
21	SMT	C1, C2, C28, C31, C32, C34, C35, C46, C47, C71, C72, C88	CAP;CER ROHS&REACH 0402-M 0.01 μ F _ X7R _ 25V	12
22	SMT	C3, C5, C7, C11, C17, C18, C20, C22, C30, C56, C63, C64, C81, C82, C87, C88	CAP;CER ROHS&REACH 0402-M 10 μ F _ X5R _ 6.3V	16
23	SMT	C4, C6, C8, C14, C16, C19, C21, C23, C24, C26, C27, C29, C33, C38, C52, C53, C54, C55, C57, C59, C60, C61, C62, C68, C76, C80, C83, C86, C89, C90, C96, C100	CAP;CER ROHS&REACH 0402-M 0.1 μ F _ X5R _ 25V	32
24	SMT	C9, C10	CAP;CER ROHS&REACH 0402-M 8PF _ NPO _ 50V	2
25	SMT	C12, C15, C58	CAP;CER ROHS&REACH 0402-M 30pF _ NPO _ 50V	3
26	SMT	C25, C36	CAP;CER ROHS&REACH 0402-M 220pF _ X7R _ 50V	2
27	SMT	C37, C39, C40, C41, C42, C43, C44, C66, C99	CAP;CER ROHS&REACH 0402-M 1 μ F _ X5R _ 25V	9
28	SMT	C48, C49, C50, C51	CAP;CER ROHS&REACH 0402-M 100pF _ X7R _ 50V	4
29	SMT	C67, CP7	CAP;CER ROHS 0402-M 0.47 μ F _ X5R _ 10V	2
30	SMT	C69, C70, C73, C74, C75, C77	CAP;CER ROHS&REACH 0402-M 33nF _ X7R _ 16V	6
31	SMT	C78, C79	CAP;CER ROHS&REACH 0402-M 18pF _ NPO _ 50V	2
32	SMT	C84, C85	CAP;CER ROHS&REACH 0402-M 10pF _ NPO _ 25V	2
33	SMT	CP3	CAP;MPP ROHS&REACH CAP400-W-M 0.022 μ F _ 275VAC	1
34	SMT	CP6	CAP;CER ROHS&REACH 0603-M 0.1 μ F _ X7R _ 50V	1
35	SMT	CP8	CAP;CER ROHS&REACH 0402-M 4.7nF _ X7R _ 16V	1
36	SMT	CP9	CAP;CER ROHS&REACH 0402-M 1000pF _ X7R _ 50V	1
37	SMT	D1, D2, D3	DIODE;REC DIODE-SMA-M 1N4004	3
38	SMT	D4, D5, D6	DIODE;SWITCH ROHS&REACH DIODE-SOD123-M 1N4148W _ 0.15A _ 100V	3
39	SMT	D7	TRAN;ILL ROHS&REACH IRRX2.54x5-M PT334-6B-52	1
40	SMT	D8	DIODE;SWITCH ROHS&REACH SOT23-M LBAV99LT1G _ 215mA _ 70V	1
41	SMT	D9	DIODE;ILL ROHS&REACH IRTX2.54x5-M IR333C-A	1
42	SMT	D10, D24, D25	LED;LED ROHS LED-0805-M 17-21SURC/S530-A3/TR8	3
43	SMT	D13	DIODE;TVS ROHS&REACH TVS-SMB-M SMBJ12CA _ 13.3-14.7V _ 600W	1
44	SMT	D14, D16, D20	DIODE;SB ROHS&REACH SOT23-M BAT54A-7-F _ 200mA _ 30V	3
45	SMT	D15, D17, D18,	DIODE;SB ROHS&REACH DIODE-SMA-M STPS1150A _ 1A _ 150V	3
46	SMT	D22	DIODE;SB ROHS&REACH SOT23-M BAT54C _ 200mA _ 30V	1
47	SMT	DP1, DP5, DP6	DIODE;REC ROHS&REACH DIODE-SMA-M M20 _ 1A	3
48	SMT	DP2, DP3, DP4	S-DIODE;FR ROHS&REACH DIODE-SMA-M RS1M _ 1A _ 1000V	3
49	SMT	F1	FUSE;FUSE ROHS&REACH 1206L075TH	1
50	SMT	L1	MAGNETIC BALL;ROHS&REACH 0805-M 1000 Ω \pm 25%@100MHZ	1
51	SMT	L2, L4, L5	MBALL;CB ROHS&REACH 0402-M 1000 Ω \pm 25%@100MHZ	3



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52	SMT	L3	INDUCTOR;CHOKE ROHS&REACH L720\280-DIP4-M ≥18mH _ 0.1A	1
53	SMT	L7	INDUCTOR;CWW ROHS L-CD43-M 2.2 μ H _ 2.04A	1
54	SMT	Q1, Q17	FET;P-MOSFET ROHS&REACH SOT23-M IRLML9301TRPbF	2
55	SMT	Q2, Q4, Q5, Q7, Q8, Q10, Q11, Q12, Q13, Q15, Q16, Q18, Q19, Q20, Q21, Q22, Q23	TRAN;TRAN ROHS&REACH SOT23-M BC847B(1F)	17
56	SMT	Q3, Q6	TRAN;TRAN ROHS&REACH SOT-89-M PBSS4330X	2
57	SMT	Q9, Q14	TRAN;TRAN ROHS&REACH SOT23-M BC857B	2
58	SMT	R1	RES;SMT ROHS&REACH 0402-M 6.8 Ω _ ±5%	1
59	SMT	R2	RES;SMT ROHS&REACH 2512-M 0.1 Ω _ ±1%	1
60	SMT	R3, R22, R34, R35, R41, R50, R52, R60, R61, R66, R96, R101, R134	RES;SMT ROHS&REACH R0402-M 47K Ω _ ±5%	13
61	SMT	R4, R23, R25, R27, R40, R49, R58, R59, R62, R63, R76, R79, R80, R99, R113, R114, R131, R133	RES;SMT ROHS&REACH 0402-M 4.7K Ω _ ±5%	18
62	SMT	R5, R7, R8, R53, R55	RES;SMT ROHS&REACH 0402-M 100K Ω _ ±5%	5
63	SMT	R6, R13, R14, R15, R17, R18, R26, R44, R48, R54, R75, R78, R86, R93, R98, R100, R102, R103, R104, R136	RES;SMT ROHS&REACH 0402-M 10k Ω _ ±5%	20
64	SMT	R9	RES;ROHS 0402-M 16K Ω _ ±1%	1
65	SMT	R10	RES;SMT ROHS 0402-M 56K Ω _ ±1%	1
66	SMT	R11, R12, R43, R56, R57, R67, R68, R106, R107, R117, R118	RES;SMT ROHS&REACH 0402-M 1K Ω _ ±5%	11
67	SMT	RP12	RES;SMT ROHS&REACH 0402-M 8.2K Ω _ ±5%	1
68	SMT	R19, R71, R95, R135	RES;SMT ROHS&REACH 0402-M 0 Ω _ ±5%	4
69	SMT	R20, R74, R88, R89, R108, R109, R127, R129	RES;SMT ROHS&REACH 0402-M 330 Ω _ ±5%	8
70	SMT	R24, R28, R29, R30, R31, R33	RES;SMT ROHS&REACH 0402-M 33 Ω _ ±5%	6
71	SMT	R36, R69, R87, R90, R126, R128	RES;SMT ROHS&REACH 0402-M 2k Ω _ ±5%	6
72	SMT	R38	RES;SMT ROHS&REACH 0402-M 10M Ω _ ±5%	1
73	SMT	R39, R42	RES;SMT ROHS&REACH 1206-M 510 Ω _ ±5%	2
74	SMT	R45, R46, R47, R138	RES;SMT ROHS&REACH 1206-M 150k Ω _ ±5%	4
75	SMT	R64	RES;SMT ROHS&REACH 0402-M 510 Ω _ ±5%	1
76	SMT	R65, R70, R73, R81, R82	RES;SMT ROHS&REACH 0402-M 100 Ω _ ±5%	5
77	SMT	R77, R110, R115, R123, R130, R132	RES;SMT ROHS&REACH 0402-M 10 Ω _ ±5%	6
78	SMT	R94	RES;SMT ROHS&REACH 0402-M 270K Ω _ ±5%	1
79	SMT	R105	RES;SMT ROHS&REACH 1206-M 100 Ω _ ±5%	1
80	SMT	R111, R116	RES;SMT ROHS&REACH 0402-M 4.7 Ω _ ±5%	2
81	SMT	R112	RES;SMT ROHS&REACH 0402-M 1M Ω _ ±5%	1
82	SMT	R119, R120, R121, R137	RES;SMT ROHS&REACH 1206-M 330k Ω _ ±5%	4
83	SMT	R124, R125	RES;SMT ROHS 0402-M 820 Ω _ ±5%	2
84	SMT	RP2, RP3, RP4, RP6	RES;SMT ROHS&REACH 1206-M 2.2M Ω _ ±5%	4
85	SMT	RP5	RES;SMT ROHS&REACH 1206 10 Ω ±5%	1
86	SMT	RP7	RES;SMT ROHS&REACH 0603-M 22K Ω _ ±1%	1
87	SMT	RP8	RES;SMT ROHS 1206-M 2.2 Ω _ ±5%	1
88	SMT	RP9	RES;CHIP;SMT ROHS&REACH 0603 4.7K Ω ±1%	1
89	SMT	RP10	RES;SMT ROHS&REACH 1206-M 4.7 Ω _ ±5%	1
90	SMT	RP11	RES;RES ROHS&REACH 0603 24k Ω ±1%	1
91	SMT	S1, S2	SWITCH;PUSH ROHS&REACH KEY-SMD180-180-M 1574550161102002 _ 12VDC50mA	2
92	SMT	S3, S4	SWITCH; PUSH ROHS SWITCH2x7x7-M 30VDC0.1A	2
93	SMT	U1	IC;ROHS SOP8W-M MX25L1606E	1
94	SMT	U2	IC;CPU ROHS&REACH LQFP64M-M STM32L151RDT6TR	1
95	SMT	U3	IC;EEPROM ROHS&REACH SOP8W-M M24512-RMN6TP	1
96	SMT	U4	IC;DC/DC CONVERTER ROHS SOT23-6-M MP2451DT-LF-Z	1
97	SMT	U5, U10, U11, U15, U17	OPT;PHOTOCOUPLER ROHS&REACH OSP-SMD4-M EL817S1(C)(TA)-V	5
98	SMT	U6	HALL SENSOR;HALL SENSOR ROHS&REACH SC59-3-M AH180-WG-7	1
99	SMT	U12	IC; VOLTAGE DETECT ROHS SOT23-3-M PT7M6130NLTA3EX	1
100	SMT	U13	IC;LDO ROHS&REACH SOT-89-M HT7533-1	1
101	SMT	U14	IC;REG ROHS&REACH SOT-89-M 78L05	1
102	SMT	U16	IC;METRO ROHS&REACH SOP16-M RN8209C Ver.C	1



103	SMT	U20	IC;Current detect ROHS&REACH SOT23-5-M TSC101AILT	1
104	SMT	UP1	IC;PWM ROHS&REACH SOP16-M ALTAIR04-900TR	1
105	SMT	Y1	CRYSTAL;CRY ROHS CRY-3225-P 12MHz _ ±30PPM	1
106	SMT	Y2	CRYSTAL;CRY ROHS&REACH XTAL2-SMD-M 3.579545MHz _ ±20PPM	1
107	SMT	Y3	CRYSTAL;CRY ROHS&REACH XTAL2B-SMD-M 32.768kHz _ ±20ppm	1
108	SMT	Z1	DIODE;ZENER ROHS&REACH DIODE-SOD80-M ZMM5239B 9.1V _ 500mW	1
109	SMT	Z2	DIODE;ZENER ROHS&REACH DIODE-SOD123-M MMSZ5231B 5.1V _ 500mW	1
110	SMT	ZP1	DIODE;TVS ROHS&REACH TVS-SMB-A-M SMBJ170A _ 189-209V _ 600W	1

Zigbee board

No.	Stratum	Designator	Description_in_english	Quantity
1	DIP	J3	SOCKET;PIN ROHS SIP2.54x8x6.8-C-M Line pin _ 2.54mm	1
2	SMT	C91, C93	CAP;CER ROHS&REACH 0603-M 10 µ F _ X5R _ 6.3V	2
3	SMT	C92, C94, C95	CAP;CER ROHS&REACH 0402-M 0.1 µ F _ X5R _ 25V	3
4	SMT	D12	DIODE;SB ROHS DIODE-SOD323-M NSR0320MW2T1G _ 1A _ 20V	1
5	SMT	L6	MBALL;CB ROHS&REACH 0603-M 1000 Ω ±25%@100MHz	1
6	SMT	R83, R84, R91, R92	RES;SMT ROHS&REACH 0402-M 10K Ω _ ±5%	4
7	SMT	U7	RF MODULE;2.4G Hz ZigBee ROHS&REACH DS-REX3SP-CHYS-M REX3SP57	1
8	SMT	U8	IC;FLASH ROHS&REACH SOP8-M MX25V8006EM1I-13G(TAPE&REEL)	1
9	SMT	U9	IC;EEPROM ROHS&REACH SOP8-M M95M01-RMN6TP	1

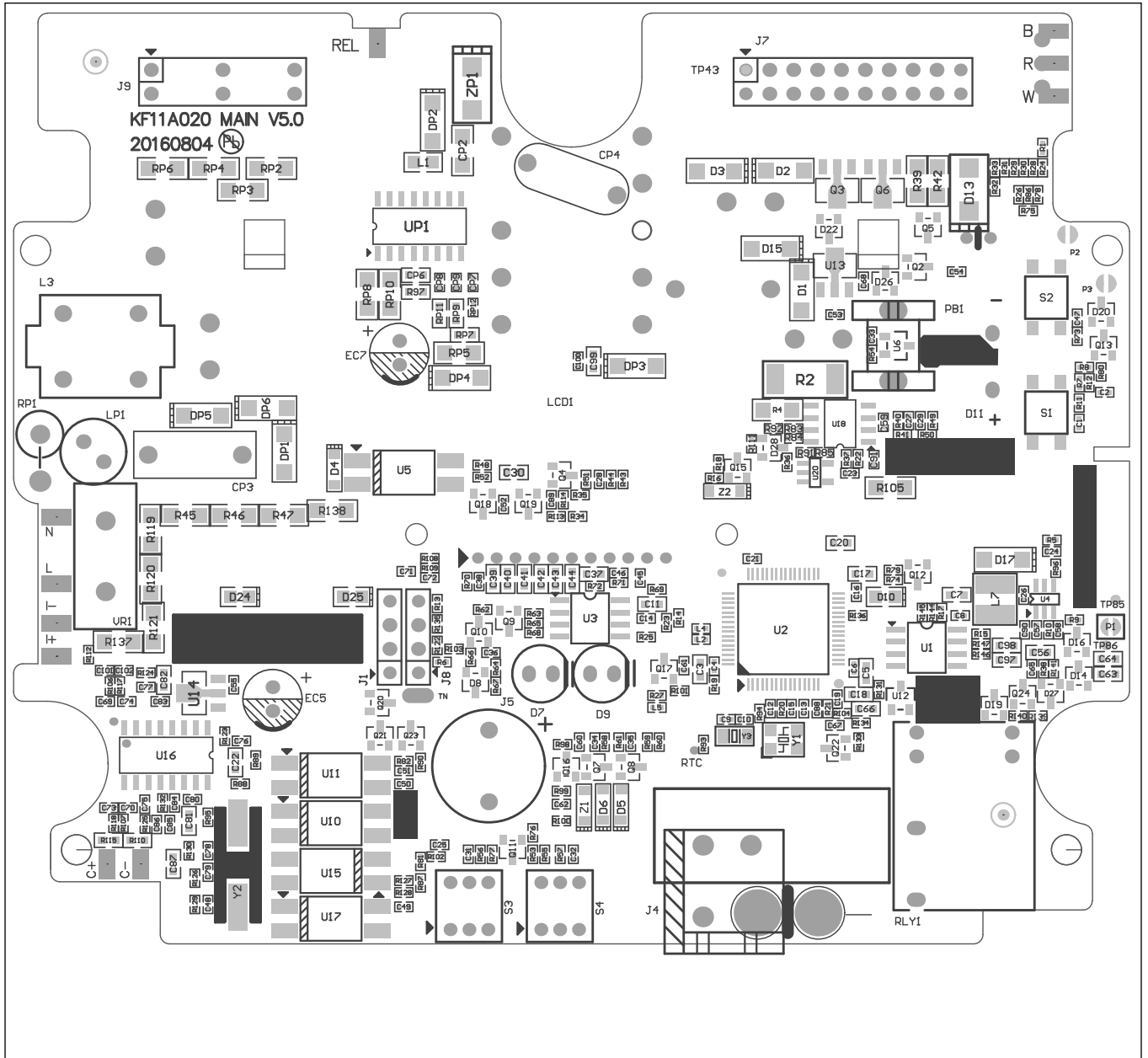


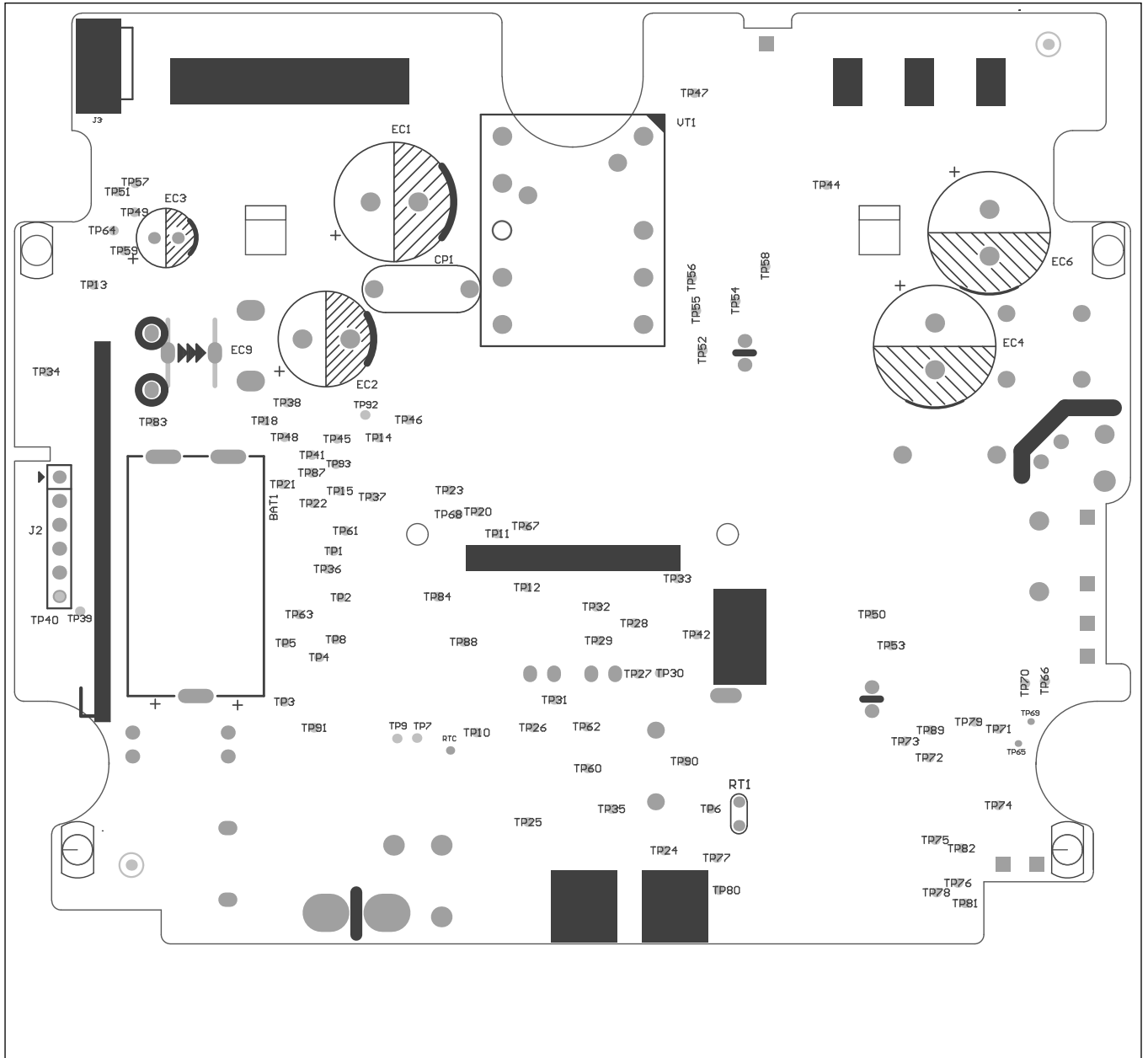
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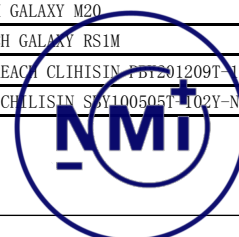
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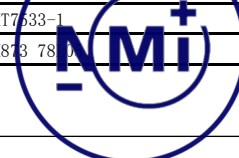




No.	stratum	designator	description in English	quantity
Main board				
1	DIP	VT1	TRANSFORMER; TM ROHS<(>&<)>REACH JINGQUANLI JBC-5812-EP17-	1
2	DIP	BAT1	LI BATT;ROHS<(>&<)>REACH Tekcell SB-AA02 3P	1
3	DIP	CP1	CAP;CER ROHS<(>&<)>REACH TDK CD70ZU2GA102MYNKA	1
4	DIP	EC1, EC2	ECAP;ALU ROHS&REACH SAMXON ERS108M1EG20TCXXP	2
5	DIP	EC4, EC6	ECAP;ALU ROHS<(>&<)>REACH TEAPO KSH226M400T145L20K	2
6	DIP	EC9	CAP;SUPP ROHS<(>&<)>REACH RDLΦ10.5×H11.5×P5.0 0.22F ±30	1
7	DIP	RT1	THERM RES;THERM RES ROHS<(>&<)>REACH AMPRON MF52E-103J39500	1
8	DIP	D11	LED;BLB ROHS<(>&<)>REACH HONGZHI HZU3459A-10	1
9	DIP	LCD1	LCD;LCM ROHS<(>&<)>REACH HUARI HR-MS816DFEGS	1
10	DIP	TN	Spring;Spring;Carbon steel RoHS&REACH KF11A020 Xinling	1
11	DIP	CP4	CAP;CER ROHS<(>&<)>REACH TDK CD70ZU2GA102MYNKA	1
12	DIP	EC7	ECAP;ALU ROHS<(>&<)>REACH TEAPO KSY476M035T2A5E11K	1
13	DIP	J5	BUZZER;Electro-Magnetic ROHS&REACH SH12D03YB SHENHUI	1
14	DIP	J7	SOCKET;FEMALE ROHS&REACH DEREN KF100817-	1
15	DIP	J9	SOCKET;FEMALE ROHS<(>&<)>REACH DEREN KF-141112-01	1
16	DIP	LP1	INDUCTOR;PEAK ROHS&REACH DELI RL0608-502K-0.1A-LF	1
17	DIP	RP1	RES;WWR ROHS<(>&<)>REACH YAGEO KNP3WSJT-73H33R	1
18	DIP	VR1	RES;VAR ROHS<(>&<)>REACH EPCOS B72214S2461K302	1
19	DIP	RLY1	RELAY;LATCHING ROHS&REACH HONGFA HFE7/12	1
20	DIP	EC5	ECAP;ALU ROHS<(>&<)>REACH SAMWHA WF1C227M6L011PCXX0	1
21	SMT	C1, C2, C28, C31, C32, C34, C35, C46, C47, C71, C72, C88, C101, C102	CAP;CER ROHS<(>&<)>REACH SAMSUNG CL05B103KA5NNNC	14
22	SMT	C3, C5, C7, C11, C17, C18, C20, C30, C56, C63, C64, C97	CAP;CER ROHS<(>&<)>REACH YAGEO CC0603MRX5R5BB106	12
23	SMT	C22, C81, C82, C87	CAP;ROHS<(>&<)>REACH YAGEO CC0603MRX5R8BB106	4
24	SMT	C4, C6, C8, C14, C16, C19, C21, C23, C24, C26, C27, C29, C33, C38, C52, C53, C54, C55, C57, C59, C60, C61, C62, C68, C76, C80, C83, C86, C89, C90, C96, C100	CAP;Chip Multilayer Ceramic Dielectric;ROHS<(>&<)>REACH SAM	32
25	SMT	C9, C10	CAP;CER ROHS&REACH SAMSUNG CL05C080DB5NN	2
26	SMT	C12, C15, C58	CAP;CER ROHS<(>&<)>REACH YAGEO CC0402JRNFP09BN300	3
27	SMT	C25, C36	CAP;CER ROHS<(>&<)>REACH SAMSUNG CL05B221KB5NNNC	2
28	SMT	C37, C39, C40, C41, C42, C43, C44, C66, C99	CAP;CER ROHS<(>&<)>REACH YAGEO CC0603KRX5R8BB105	9
29	SMT	C48, C49, C50, C51, C91	CAP;CER ROHS<(>&<)>REACH YAGEO CC0402KRX7R9BB101	5
30	SMT	C67, CP7	CAP;CER ROHS<(>&<)>REACH SAMSUNG CL05A474KP5NNNC	2
31	SMT	C69, C70, C73, C74, C75, C77	CAP;CER ROHS<(>&<)>REACH YAGEO CC0402KRX7R7BB333	6
32	SMT	C78, C79	CAP;CER ROHS<(>&<)>REACH SAMSUNG CL05C180JB5NNC	2
33	SMT	C84, C85	CAP;CER ROHS&REACH SAMSUNG CL05C100JB5NN	2
34	SMT	CP2	CAP;CER ROHS<(>&<)>REACH YAGEO CC1206KKX7RCBB221	1
35	SMT	CP3	CAP;MPP ROHS<(>&<)>REACH EPCOS B32921C3223K000	1
36	SMT	CP6	CAP;CER ROHS<(>&<)>REACH 0603 0.1μF ±10% 50V X7R SAMSUNG	1
37	SMT	CP8	CAP;CER ROHS&REACH SAMSUNG CL05B472KB5NNNC	1
38	SMT	CP9	Cap;MLCC;ROHS<(>&<)>REACH 0402 1nF ±10% 50V X7R Samsung CL	1
39	SMT	D1, D2, D3	DIODE;REC ROHS<(>&<)>REACH GALAXY M4	3
40	SMT	D4, D5, D6	DIODE;SWITCH ROHS<(>&<)>REACH LRC LIN4148WT1G	3
41	SMT	D8	DIODE;SWITCH ROHS<(>&<)>REACH LRC LBAV99LT1G	1
42	SMT	D10, D24, D25	Light-emitting Diode;Diode ROHS&REACH 0805 RED LITE-ONLTST	3
43	SMT	D13	DIODE;TVS ROHS<(>&<)>REACH LITTELFUSE SMBJ15CA	1
44	SMT	D14, D16, D20	DIODE;SB ROHS<(>&<)>REACH DIODES BAT54A-7-F	3
45	SMT	D15, D17	DIODE;SB ROHS<(>&<)>REACH LRC SM1150A	2
46	SMT	D19, D22, D27	DIODE;SB ROHS<(>&<)>REACH LRC LBAV54CLT1G	3
47	SMT	DP1, DP5, DP6	DIODE;REC ROHS<(>&<)>REACH GALAXY M20	3
48	SMT	DP2, DP3, DP4	S-DIODE;FR ROHS<(>&<)>REACH GALAXY RS1M	3
49	SMT	L1	MAGNETIC BALL;ROHS<(>&<)>REACH CLHISIN SBY100505T-102Y-N	1
50	SMT	L2, L4, L5	MBALL;CB ROHS<(>&<)>REACH CHLISIN SBY100505T-102Y-N	3



51	SMT	L3	INDUCTOR;CHOKE ROHS<(>&<)>REACH JINGQUANLI JLF-1566-UU9.8	1
52	SMT	L7	INDUCTOR;CWW ROHS JINGQUANLI SCDS4D28T-2R2M-N	1
53	SMT	Q17	FET;P-MOSFET ROHS&REACH DIODES DMP3098	1
54	SMT	Q2, Q4, Q5, Q7, Q8, Q10, Q11, Q12, Q13, Q15, Q16, Q18, Q19, Q20, Q21, Q22, Q23	TRAN;TRAN ROHS<(>&<)>REACH LRC LBC847BLT1G	17
55	SMT	Q3, Q6	TRAN;TRAN ROHS&REACH NXP PBSS4330X	2
56	SMT	Q9	TRAN;TRAN ROHS<(>&<)>REACH LRC LBC857BLT1G	1
57	SMT	R1	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-076R8L	1
58	SMT	R2	RES;SMT ROHS<(>&<)>REACH YAGEO RL2512FK-070R1L	1
59	SMT	R22, R34, R35, R41, R50, R52, R60, R61, R66, R83, R84, R91, R101, R134, R140	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-0747KL	15
60	SMT	R96	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-0730KL	1
61	SMT	R11, R12, R23, R25, R27, R37, R40, R49, R56, R57, R58, R59, R62, R63, R69, R76, R79, R80, R99, R113, R114, R131, R133, R144, R145, R146, R147	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-074K7L	27
62	SMT	R5, R7, R8, R53, R55	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-07100KL	5
63	SMT	R6, R13, R14, R15, R17, R18, R26, R44, R48, R54, R75, R78, R86, R93, R98, R100, R102, R103, R104, R136	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-7D10KL	20
64	SMT	R9	RES;ROHS&REACH YAGEO RC0402FR-0716KL	1
65	SMT	R10	RES;SMT ROHS&REACH YAGEO RC0402FR-0756KL	1
66	SMT	R43, R67, R68, R106, R107, R117, R118	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-7D1KL	7
67	SMT	RP12	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-078K2L	1
68	SMT	R19, R71, R94, R95, R135	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-7D0RL	5
69	SMT	R141	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-072ML	1
70	SMT	R20, R74, R108, R109, R127	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-07330RL	5
71	SMT	R24, R28, R29, R30, R31, R33	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-7D33RL	6
72	SMT	R36, R87, R90, R126, R128	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-072KL	5
73	SMT	R38	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-0710ML	1
74	SMT	R39, R42	RES;SMT ROHS<(>&<)>REACH YAGEO RC1206JR-07510RL	2
75	SMT	R45, R46, R47, R138	RES;SMT ROHS<(>&<)>REACH YAGEO RC1206FR-07150KL	4
76	SMT	R88, R89, R129	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-07510RL	3
77	SMT	R64	RES;SMT ROHS&REACH YAGEO RC0402JR-07180R	1
78	SMT	R65, R70, R73, R81, R82	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-07100RL	5
79	SMT	R77, R123, R130, R132	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-0710RL	4
80	SMT	R110, R115	RES;THIN FILM ROHS<(>&<)>REACH Vishay MCT06030C5108FP500	2
81	SMT	R105	RES;SMT ROHS&REACH YAGEO RC1206JR-07200RL	1
82	SMT	R112	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-071ML	1
83	SMT	R119, R120, R121, R137	RES;SMT ROHS<(>&<)>REACH YAGEO RC1206JR-07330KL	4
84	SMT	R124, R125	RES;SMT ROHS YAGEO RC0402JR-07820RL	2
85	SMT	RP2, RP3, RP4, RP6	RES;SMT ROHS<(>&<)>REACH YAGEO RC1206JR-072M2L	4
86	SMT	RP5	RES;SMT ROHS<(>&<)>REACH YAGEO RC1206JR-0710RL	1
87	SMT	RP7	RES;Rated power≤20W;SMT ROHS<(>&<)>REACH 0603 22k Ω ±1% 3	1
88	SMT	RP8	RES;SMT ROHS&REACH YAGEO RC1206JR-072R2L	1
89	SMT	RP9	RES;CHIP;SMT ROHS<(>&<)>REACH 0603 4.7k Ω ±1% 50V 1/10W ±	1
90	SMT	RP10	RES;SMT ROHS<(>&<)>REACH 1206 4.7 Ω ±5% 200V 1/4W ±200ppt	1
91	SMT	RP11	RES;RES ROHS<(>&<)>REACH 0603 24k Ω ±1% 50V 1/10W ±100ppt	1
92	SMT	S1, S2	SWITCH;PUSH ROHS&REACH TRANTEK 157455016	2
93	SMT	S3, S4	开关;按钮 ROHS 6DIP7×7×16 正牌 PB-22E37	2
94	SMT	U1	IC;ROHS&REACH MAIC MX25L1606E M2I-12G-T(Tape)	1
95	SMT	U2	IC;MCU ROHS<(>&<)>REACH ST STM32L151RET6	1
96	SMT	U3	IC;EEPROM ROHS<(>&<)>REACH ST M24512-RMN6TP	1
97	SMT	U4	IC;DC/DC CONVERTER ROHS<(>&<)>REACH MPS MP2451DT-LF-Z	1
98	SMT	U5, U10, U11, U15, U17	OPT;PHOTOCOUPLER ROHS<(>&<)>REACH EVERLIGHT EL817S1(C)(TA)	5
99	SMT	U6	集成电路;霍尔传感器 ROHS SOT23 DIODES AH180-WG-A	1
100	SMT	U12	IC; VOLTAGE DETECT ROHS&REACH Pericom PT7M0130NLTA3EX	1
101	SMT	U13	IC;LDO ROHS&REACH HOLTEK HT7633-1	1
102	SMT	U14	IC;REG ROHS<(>&<)>REACH ZH873 78	1



103	SMT	U16	IC;METRO SOP16L Ver.C RENERGY RN8209C	1
104	SMT	U20	IC;Current detect ROHS<(>&<)>REACH ST TSC101A1LT	1
105	SMT	UP1	IC;PWM ROHS&REACH ST ALTAIR04-900TR	1
106	SMT	Y1	CRYSTAL;CRY ROHS&REACH INTERQUIP 5YAA12000203KFA0Q3	1
107	SMT	Y2	CRYSTAL;CRY ROHS<(>&<)>REACH HLX HLX-M-F-3. 579545M-16-2030	1
108	SMT	Y3	CRYSTAL;CRY ROHS<(>&<)>REACH SEIKO SC-32S 7pF	1
109	SMT	Z1	DIODE;ZENER ROHS GALAXY MMSZ5239B	1
110	SMT	ZP1	DIODE;TVS ROHS<(>&<)>REACH Galaxy SMBJ170A	1
111	SMT	R16	RES;Rated power≤20W;SMT ROHS<(>&<)>REACH 0402 6.2KΩ ±5%	1
112	SMT	Q24	IC;FET ROHS<(>&<)>REACH IR IRLML6402TRPBF	1
113	SMT	R85	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-07510KL	1
114	SMT	U18	IC;IC ROHS<(>&<)>REACH TI TPS25921ADR	1
No.	stratum	designator	description in English	quantity
ZigBee board				
1	DIP	J3	CONN;PIN ROHS&REACH DEREN KF-160123-01	1
2	SMT	C91, C93	CAP;CER ROHS<(>&<)>REACH YAGEO CC0603MRX5R5BB106	2
3	SMT	C92, C94, C95	CAP;Chip Multilayer Ceramic Dielectric;ROHS<(>&<)>REACH SA	3
4	SMT	D12	DIODE;SB ROHS<(>&<)>REACH ONSEMI NSR0320MW2T1G	1
5	SMT	L6	MBALL;CB ROHS<(>&<)>REACH SUNLORD GZ1608U102CTF	1
6	SMT	U7	RF MODULE;2.4G Hz ZigBee ROHS<(>&<)>REACH REXENSE REX3SP57	1
7	SMT	R83, R84, R91, R92	RES;SMT ROHS<(>&<)>REACH YAGEO RC0402JR-7D10KL	4
8	SMT	U8	IC;FLASH memory ROHS&REACH MXIC MX25L800	1
9	SMT	U9	IC;EEPROM ROHS<(>&<)>REACH ST M24256-BWMN6TP	1

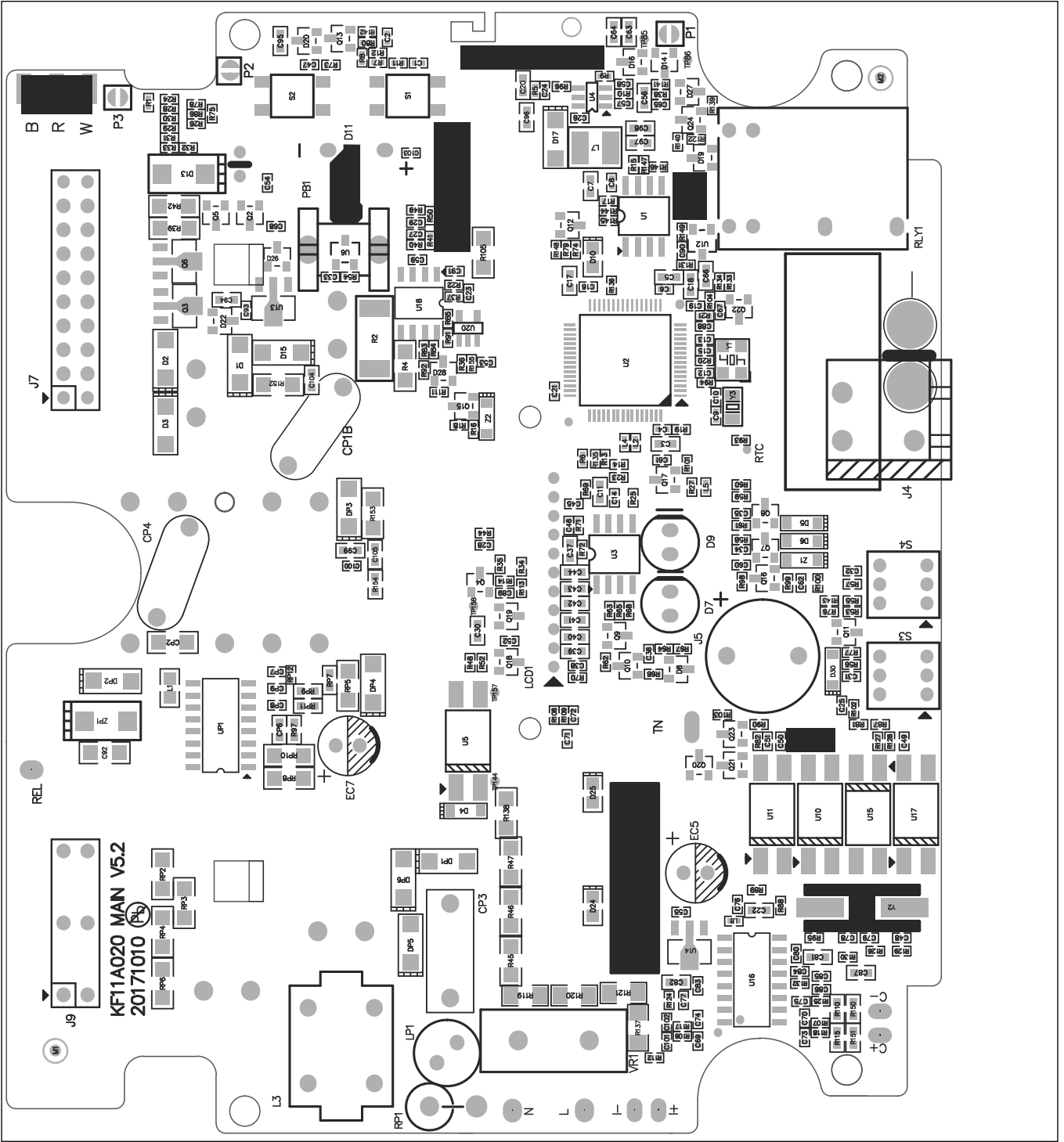


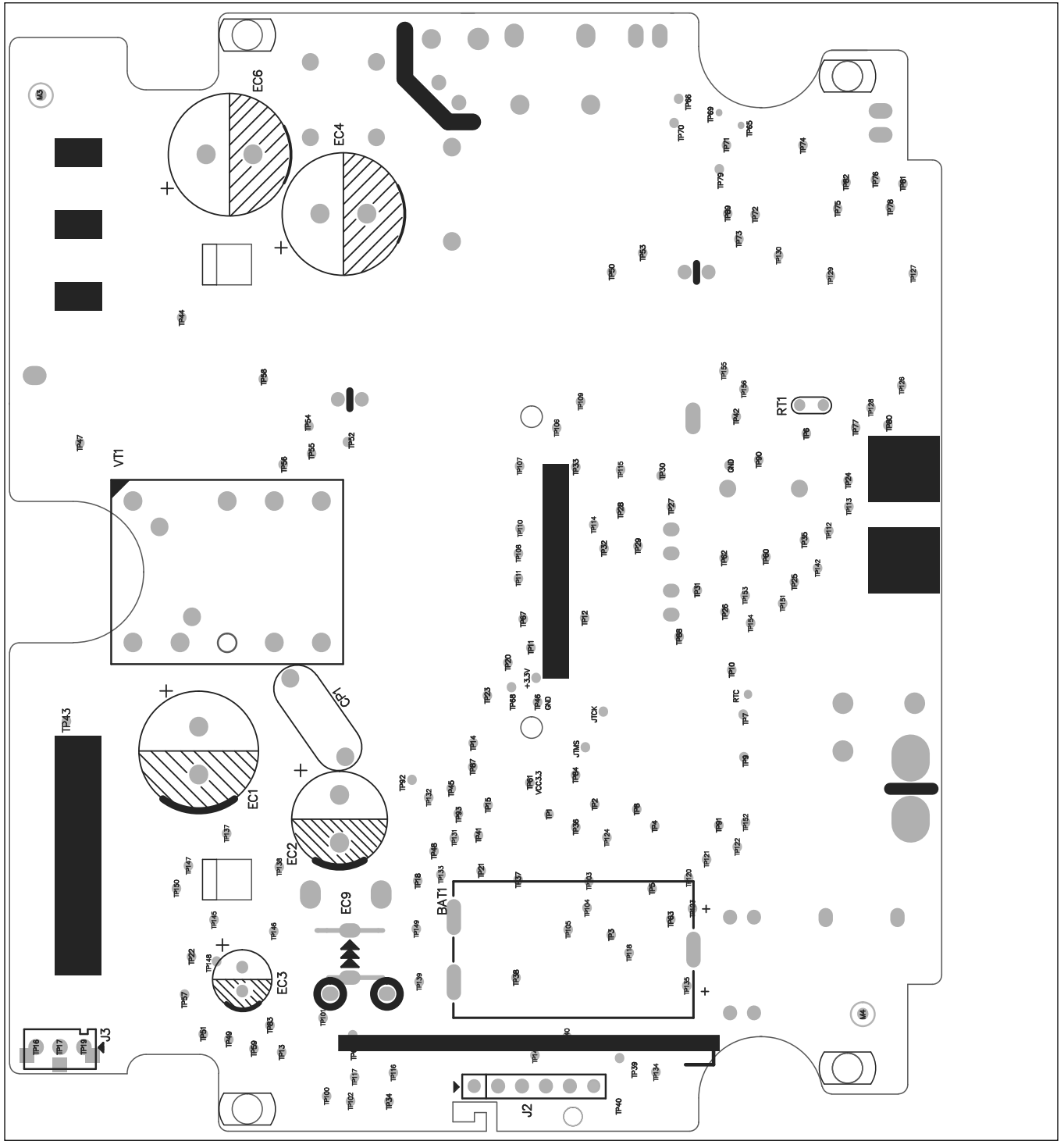
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No.	stratum	designator	description in English	quantity
Main board				
1	DIP	EC1,EC2	ECAP;ALU ROHS&REACH SAMXON ERS108M1EG20TCXXP	2
2	DIP	EC4,EC6	ECAP;ALU ROHS&REACH TEAPO KSH226M400T145L20H	2
3	DIP	CP1	CAP;CER ROHS&REACH TDK CD70ZU2GA102MYNKAC	1
4	DIP	EC9	SUPER CAP;SUPER CAP ROHS&REACH PANASONIC EEC50HD 224(V)	1
5	DIP	BAT1	Battery;ROHS&REACH FDK Eternacell ER14250 3PR-7.5	1
6	DIP	D11	LED;BLB ROHS&REACH HONGZHI HZU3459A-10	1
7	DIP	LCD1	LCD;LCM ROHS&REACH JVARITRONIX COG-VLSZ2030-02	1
8	DIP	VT1	TRANSFORMER; TM ROHS&REACH JINGQUANLI JBC-5812-EP17-4	1
9	DIP	TN	Spring;Spring;Carbon steel RoHS&REACH KF11A020 Xinling	1
10	DIP	EC7	ECAP;ALU ROHS&REACH TEAPO KSY476M035T2G5E11H	1
11	DIP	EC5	ECAP;ALU ROHS&REACH SAMXON ERL227M1CE11TUXXP	1
12	DIP	CP4	CAP;CER ROHS&REACH TDK CD70ZU2GA102MYNKAC	1
13	DIP	CP3	CAP;MPP ROHS&REACH EPCOS B32921C3223K003	1
14	DIP	VR1	RES;VAR ROHS&REACH EPCOS B72214S2461K302	1
15	DIP	RP1	RES;WWR ROHS&REACH YAGEO KNP3WSJT-73H33R	1
16	DIP	D7	TRAN;ILL ROHS&REACH EVERLIGHT PT334-6B-52/TR1(R)	1
17	DIP	D9	DIODE;ILL ROHS&REACH EVERLIGHT IR333C-A/TR1(R)	1
18	DIP	LP1	INDUCTOR;PEAK ROHS&REACH DELI RL0608-502K-0.1A-LF	1
19	DIP	L3	INDUCTOR;CHOKE ROHS&REACH JINGQUANLI JLF-1566-UU9.8	1
20	DIP	S3,S4	SWITCH; PUSH ROHS&REACH LupFung PBS-22E07	2
21	DIP	J7	SOCKET;FEMALE ROHS&REACH DEREN KF100817-02	1
22	DIP	J9	SOCKET;FEMALE ROHS&REACH DEREN KF-141112-01	1
23	DIP	RLY1	RELAY;LATCHING ROHS&REACH HONGFA HFE7/12-1HT-L2	1
24	DIP	J5	BUZZER;Electro-Magnetic ROHS&REACH SH12D03YB SHENHUI	1
25	SMT	C9,C10	CAP;CER ROHS&REACH SAMSUNG CL05C080DB5NNNC	2
26	SMT	C84,C85	CAP;CER ROHS&REACH SAMSUNG CL05C100JB5NNNC	2
27	SMT	C78,C79	CAP;CER ROHS&REACH SAMSUNG CL05C180JB5NNNC	2
28	SMT	C12,C15,C58	CAP;CER ROHS&REACH YAGEO CC0402JRN09BN300	3
29	SMT	C48,C49,C50,C51,C91	CAP;CER ROHS&REACH YAGEO CC0402KRX7R9BB101	5
30	SMT	C25,C36	CAP;CER ROHS&REACH SAMSUNG CL05B221KB5NNNC	2
31	SMT	CP9	Cap;MLCC;ROHS 0402 1nF ±10% 50V X7R Samsung CL05B102KB5NNNC	1
32	SMT	CP8	CAP;CER ROHS&REACH SAMSUNG CL05B472KB5NNNC	1
33	SMT	C1,C2,C28,C31,C32,C34,C35,C46,C47,C71,C72,C88,C101,C102	CAP;CER ROHS&REACH SAMSUNG CL05B103KA5NNNC	14
34	SMT	C69,C70,C73,C74,C75,C77	CAP;CER ROHS&REACH YAGEO CC0402KRX7R7BB333	6
35	SMT	C4,C6,C8,C14,C16,C19,C21,C23,C24,C26,C27,C29,C33,C38,C52,C53,C54,C55,C57,C59,C60,C61,C62,C68,C76,C80,C83,C86,C89,C90,C93,C100,C103	CAP;CER ROHS&REACH YAGEO CC0402KRX5R8BB104	33
36	SMT	C67,CP7	CAP;CER ROHS&REACH SAMSUNG CL05A474KP5NNNC	2
37	SMT	CP6	CAP;CER ROHS&REACH 0603 0.1µF ±10% 50V X7R SAMSUNG CL10B104KB8NN NC	1
38	SMT	C37,C39,C40,C41,C42,C43,C44,C66,C99	CAP;CER ROHS&REACH YAGEO CC0603KRX5R8BB105	9
39	SMT	C3,C5,C7,C11,C17,C18,C20,C30,C56,C63,C64,C97	CAP;CER ROHS&REACH SAMSUNG CL10A106MQ8NNNC	12
40	SMT	C22,C81,C82,C87,C94,C95,C96	CAP;ROHS&REACH YAGEO CC0603MRX5R8BB106	7
41	SMT	C104,C105	CAP;CER ROHS&REACH YAGEO CC0603KRX7R0BB102	2
42	SMT	R19,R71,R94,R95,R135	RES;SMT ROHS&REACH YAGEO RC0402JR-7D0RL	5
43	SMT	R1	RES;SMT ROHS&REACH YAGEO RC0402JR-076R8L	1

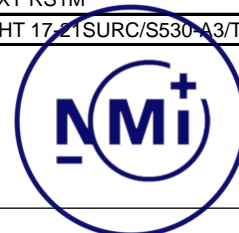


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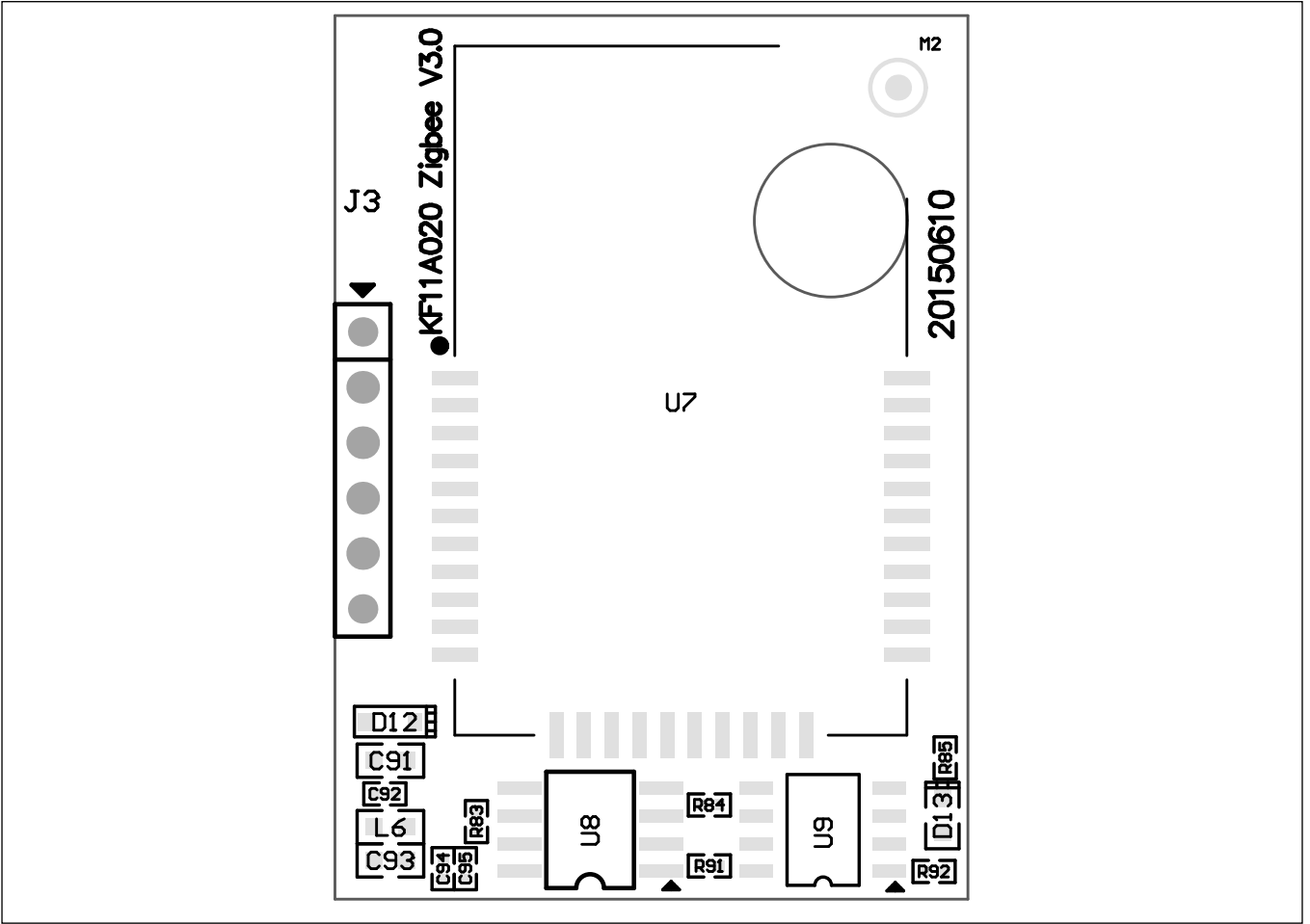
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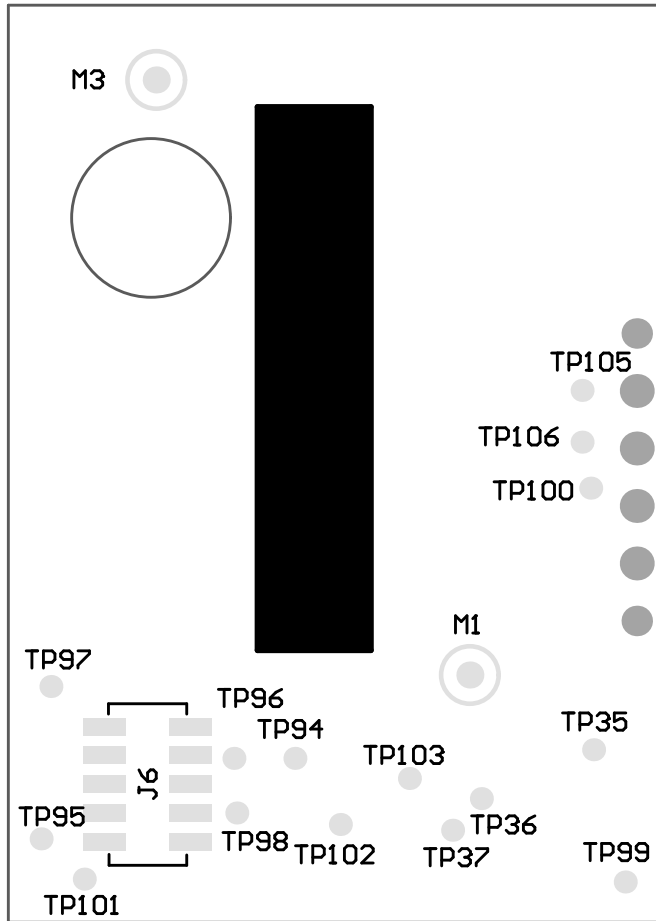
44	SMT	R77,R130,R132	RES;SMT ROHS&REACH YAGEO RC0402JR-0710RL	3
45	SMT	R24,R28,R29,R30,R31,R33	RES;SMT ROHS&REACH YAGEO RC0402JR-7D33RL	6
46	SMT	R65,R70,R73,R81,R82	RES;SMT ROHS&REACH YAGEO RC0402JR-07100RL	5
47	SMT	R64	RES;SMT ROHS&REACH YAGEO RC0402JR-07180RL	1
48	SMT	R20,R74,R108,R109,R127	RES;SMT ROHS&REACH YAGEO RC0402JR-07330RL	5
49	SMT	R88,R89,R129	RES;SMT ROHS&REACH YAGEO RC0402JR-07510RL	3
50	SMT	R124,R125,R149	RES;SMT ROHS&REACH YAGEO RC0402FR-071KL	3
51	SMT	R67,R68,R106,R107,R117,R118	RES;SMT ROHS&REACH YAGEO RC0402JR-7D1KL	6
52	SMT	R36,R87,R90,R126,R128	RES;SMT ROHS&REACH YAGEO RC0402JR-072KL	5
53	SMT	R11,R12,R23,R25,R27,R37,R40,R49,R56,R57,R58,R59,R62,R63,R69,R76,R79,R80,R99,R113,R114,R122,R133,R144,R145,R146,R147	RES;SMT ROHS&REACH YAGEO RC0402JR-074K7L	27
54	SMT	R16	RES;SMT ROHS&REACH YAGEO RC0402JR-076K2L	1
55	SMT	RP12	RES;SMT ROHS&REACH YAGEO RC0402JR-078K2L	1
56	SMT	R6,R13,R14,R15,R17,R18,R26,R44,R48,R54,R75,R78,R86,R93,R98,R100,R102,R103,R104,R131,R136	RES;SMT ROHS&REACH YAGEO RC0402JR-7D10KL	21
57	SMT	R9	RES;ROHS&REACH YAGEO RC0402FR-0716KL	1
58	SMT	R96	RES;SMT ROHS&REACH YAGEO RC0402JR-0730KL	1
59	SMT	R22,R34,R35,R41,R50,R52,R60,R61,R66,R83,R84,R91,R134,R140,R142,R143,R148	RES;SMT ROHS&REACH YAGEO RC0402JR-0747KL	17
60	SMT	R10	RES;SMT ROHS&REACH YAGEO RC0402FR-0756KL	1
61	SMT	R5,R7,R8,R53,R55	RES;SMT ROHS&REACH YAGEO RC0402JR-07100KL	5
62	SMT	R85	RES;SMT ROHS&REACH YAGEO RC0402JR-07510KL	1
63	SMT	R112	RES;SMT ROHS&REACH YAGEO RC0402JR-071ML	1
64	SMT	R141	RES;SMT ROHS&REACH YAGEO RC0402JR-072ML	1
65	SMT	R38	RES;SMT ROHS&REACH YAGEO RC0402JR-0710ML	1
66	SMT	R110,R115	RES;THIN FILM ROHS&REACH Vishay MCT06030C5108FP500	2
67	SMT	R97,R154,RP9	RES;SMT ROHS&REACH YAGEO RC0603FR-0710KL	3
68	SMT	RP7	RES;SMT ROHS&REACH YAGEO RC0603FR-0730KL	1
69	SMT	RP11	RES;SMT ROHS YAGEO RC0603FR-0712KL	1
70	SMT	RP8,RP10	RES;SMT ROHS&REACH YAGEO RC1206JR-072R2L	2
71	SMT	R152,R153,RP5	RES;SMT ROHS&REACH YAGEO RC1206JR-0710RL	3
72	SMT	R105	RES;SMT ROHS&REACH YAGEO RC1206JR-07200RL	1
73	SMT	R39,R42	RES;SMT ROHS&REACH YAGEO RC1206JR-07510RL	2
74	SMT	R119,R120,R121,R137	RES;SMT ROHS&REACH Vishay MMA02040C3903FB300	4
75	SMT	R45,R46,R47,R138	RES;SMT ROHS&REACH YAGEO RC1206FR-07150KL	4
76	SMT	RP2,RP3,RP4,RP6	RES;SMT ROHS&REACH YAGEO RC1206JR-072M2L	4
77	SMT	R2	RES;SMT ROHS&REACH YAGEO RL2512FK-070R1L	1
78	SMT	D4,D5,D6,D30	DIODE;SWITCH ROHS&REACH LRC L1N4148WT1G	4
79	SMT	D8	DIODE;SWITCH ROHS&REACH LRC LBAV99LT1G	1
80	SMT	D13	DIODE;TVS ROHS&REACH LITTELFUSE SMBJ15CA	1
81	SMT	ZP1	DIODE;TVS ROHS&REACH Littelfuse SMBJ170A	1
82	SMT	D14,D16,D20	DIODE;SB ROHS&REACH DIODES BAT54A-7-F	3
83	SMT	D15,D17,DP3	DIODE;SB ROHS&REACH LRC SM1150A	3
84	SMT	D15,D17,DP3	DIODE;SB ROHS&REACH GALAXY SS1150	3
85	SMT	D19,D22,D26,D27	DIODE;SB ROHS&REACH LRC LBAT54CLT1G	4
86	SMT	DP1,DP5,DP6	DIODE;REC ROHS&REACH GALAXY M20	3
87	SMT	D1,D2,D3	DIODE;REC ROHS&REACH GALAXY M4	3
88	SMT	Z1	DIODE;ZENER ROHS GALAXY MMSZ5239B	1
89	SMT	DP2,DP4	S-DIODE;FR ROHS&REACH GALAXY RS1M	2
90	SMT	D10,D24,D25	LED;LED ROHS&REACH EVERLIGHT 17-Z1SURC/S530-A3/TR8	3

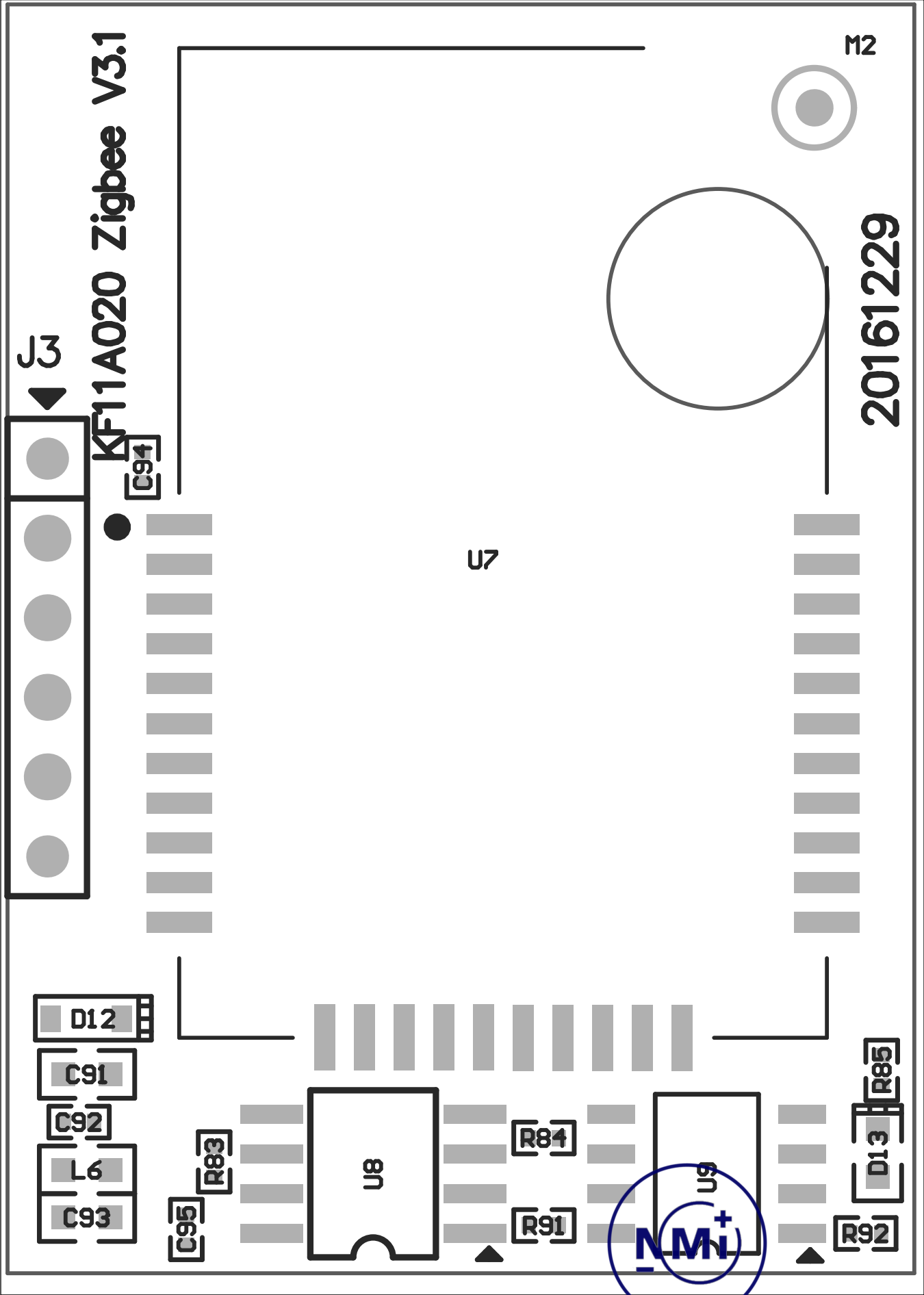


91	SMT	Q2,Q4,Q5,Q7,Q8,Q10,Q11,Q12,Q13,Q15,Q16,Q18,Q19,Q20,Q21,Q22,Q23	TRAN;TRAN ROHS&REACH LRC LBC847BLT1G	17
92	SMT	Q3,Q6	TRAN;TRAN ROHS&REACH NXP PBSS4330X	2
93	SMT	Q9	TRAN;TRAN ROHS&REACH LRC LBC857BLT1G	1
94	SMT	Q17	FET;P-MOSFET ROHS&REACH DIODES DMP3098L-7	1
95	SMT	Q24	IC;FET ROHS IR IRLML6402TRPBF	1
96	SMT	U5,U10,U11,U15,U17	OPT;PHOTOCOUPLER ROHS&REACH EVERLIGHT EL817S1©(TA)-V	5
97	SMT	L1	MAGNETIC BALL;ROHS&REACH CLIHISIN PBY201209T-102Y-N	1
98	SMT	L2,L4,L5,L8	MBALL;CB ROHS&REACH MURATA BLM15BD102SN1D	4
99	SMT	L7	INDUCTOR;CWW ROHS JINGQUANLI SCDS4D28T-2R2M-N	1
100	SMT	Y1	CRYSTAL;CRY ROHS&REACH INTERQUIP 5YAA12000203KFA0Q3	1
101	SMT	Y2	CRYSTAL;CRY ROHS&REACH HLX HLX-M-F-3.579545M-16-2030-4085	1
102	SMT	Y3	CRYSTAL;ROHS&REACH EPSON Q13FC13500002	1
103	SMT	U6	HALL SENSOR;HALL SENSOR ROHS&REACH DIODES AH180-WG-7	1
104	SMT	U4	IC;DC/DC CONVERTER ROHS&REACH MPS MP2451DT-LF-Z	1
105	SMT	U12	IC; VOLTAGE DETECT ROHS&REACH Pericom PT7M6130NLTA3EX	1
106	SMT	U20	IC;Current detect ROHS&REACH ST TSC101AILT	1
107	SMT	U18	IC;IC ROHS&REACH TI TPS25921ADR	1
108	SMT	U13	IC;LDO ROHS&REACH HOLTEK HT7533-1	1
109	SMT	U14	IC;REG ROHS&REACH ZH873 78L05	1
110	SMT	UP1	IC;PWM ROHS&REACH ST ALTAIR04-900TR	1
111	SMT	U2	IC;MCU ROHS&REACH ST STM32L151RET6	1
112	SMT	U3	IC;EEPROM ROHS&REACH ST M24512-RMN6TP	1
113	SMT	U1	IC;NOR FLASH ROHS&REACH MXIC MX25L3236FM2I-08G	1
114	SMT	U16	IC;METRO ROHS&REACH SOP16L(KFCD) RENERGY RN8209C(I)	1
115	SMT	S1,S2	SWITCH;PUSH ROHS&REACH TRANTEK 1574550161102002	2
No.	stratum	designator	description in English	quantity
ZigBee board				
1	DIP	J3	CONN;PIN ROHS&REACH DEREN KF-160123-01	1
2	SMT	C91,C93	CAP;CER ROHS&REACH YAGEO CC0603MRX5R5BB106	2
3	SMT	C92,C94,C95	CAP;Chip Multilayer Ceramic Dielectric;ROHS&REACH SAMSUNG CL05A104 KA5NNNC	3
4	SMT	D12	DIODE;SB ROHS&REACH ONSEMI NSR0320MW2T1G	1
5	SMT	L6	MBALL;CB ROHS&REACH CHILISIN SBK160808T-102Y-N	1
6	SMT	U7	RF MODULE;2.4G Hz ZigBee ROHS&REACH REXENSE REX3SP585U-SMETS2	1
7	SMT	R83,R84,R91,R92	RES;SMT ROHS&REACH YAGEO RC0402JR-7D10KL	4

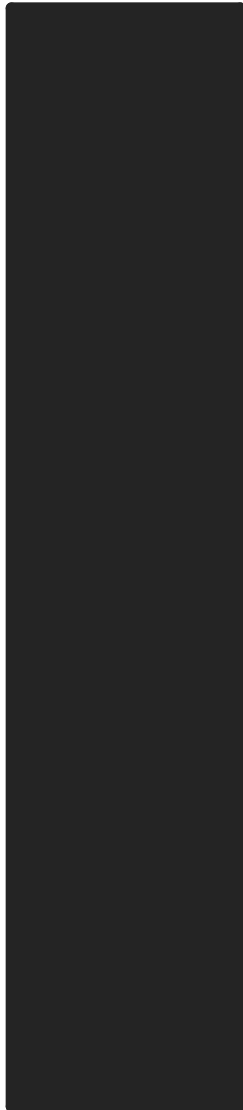
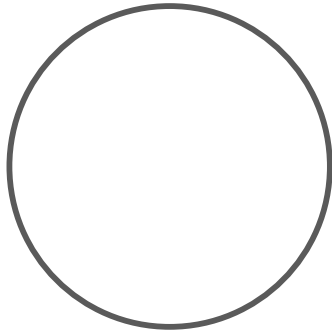








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M1



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TP101

J6

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