PMP7100D3G_QUAD

Technical
Service Manual

Product Model	PMP7100D3G_QUAD
Photo	

System Physical Standard Configuration:		
Type	**Details**	**Descriptions**
Chipset	Chipset	Rockchips RK3188
CPU	Type	Quad Core ARM Cortex A9
	Number of cores	Quad
	Frequency	Up to 1.6GHz
GPU	Renderer	Mali 400 MP(Quad core)
	Number of cores	Quad
	Frequency	400MHz
	OPENGL	OPENGL ES 1.1/2.0
	Video Accelerator	yes
	3D Accelerometer	yes
LCD	Type	MVA
	Screen Size	10.1-inch
	Colors	262K
	Brightness	300cdm
	Screen Resolution	1280x800
TP	Type	Capacitive Multi-Touch (10 Dots)
	Process	Etching under printing
RAM	Capacity	1GB DDR3
ROM Flash	Capacity	16GB EMMC
Battery	Type	Lithium-ion Polymer Battery
	Capacity	3.7V/6400mAh
	Video playback Time	5~6 hours
	Audio playback Time	9 hours
	Standby Time	240 hours
Multi-media (Hardware encoding/decoding)	Phote Viewer	BMP, JPG, GIF, PNG
	Video Format	MPG, VOB, TS,AVI, MKV, MP4, MOV, 3GP, FLV,WEBM,WMV
	Audio Format	MP2, MP3,WMA,WAV,APE,OGG, FLAC,AAC, M4A
Camera	Front Camera	2MP
	Rear Camera	2MP
	Autofocus	N/A
	Rear Flash Light	N/A
Speaker	Size	Built-in 8Ω/0.7W speaker x 2
G-Sensor	Built-in	3-directions
Gyro Sensor	Built-in	N/A
GPS	Built-in	N/A
	A-GPS	N/A
Compass	Built-in	N/A
Proximity Sensor	Built-in	N/A
Light Sensor	Built-in	Yes
Hall Switch Sensor	Built-in	Yes
Voltmeter	Built-in	Yes

Network Connections:		
Type	**Details**	**Descriptions**
2G	GPRS	Yes
	EDGE	Yes
3G	WCDMA	900/2100MHz
	HSDPA	HSDPA 14.4Mbp/s
	HSDA+	N/A
LTE	LTE FDD	N/A
Speed	Download speed	14.4Mbp/s
	Upload speed	5.76Mbp/s
Phone features	Phone calls & messaging support	N/A
Radio	FM Radio	N/A
	FM Transmitter	N/A
WI-FI	WI-FI Module	WIFI 802.11b/g/n
	Cryptographic Algorithms	WEP (40-bit、64-bit、128-bit), WPA (TKIP 128-bit), WPA2 (AES 128-bit)
	Max range of wireless connection	30m
	Wi-Fi Direct	Yes
	Version	V4.0(HS)

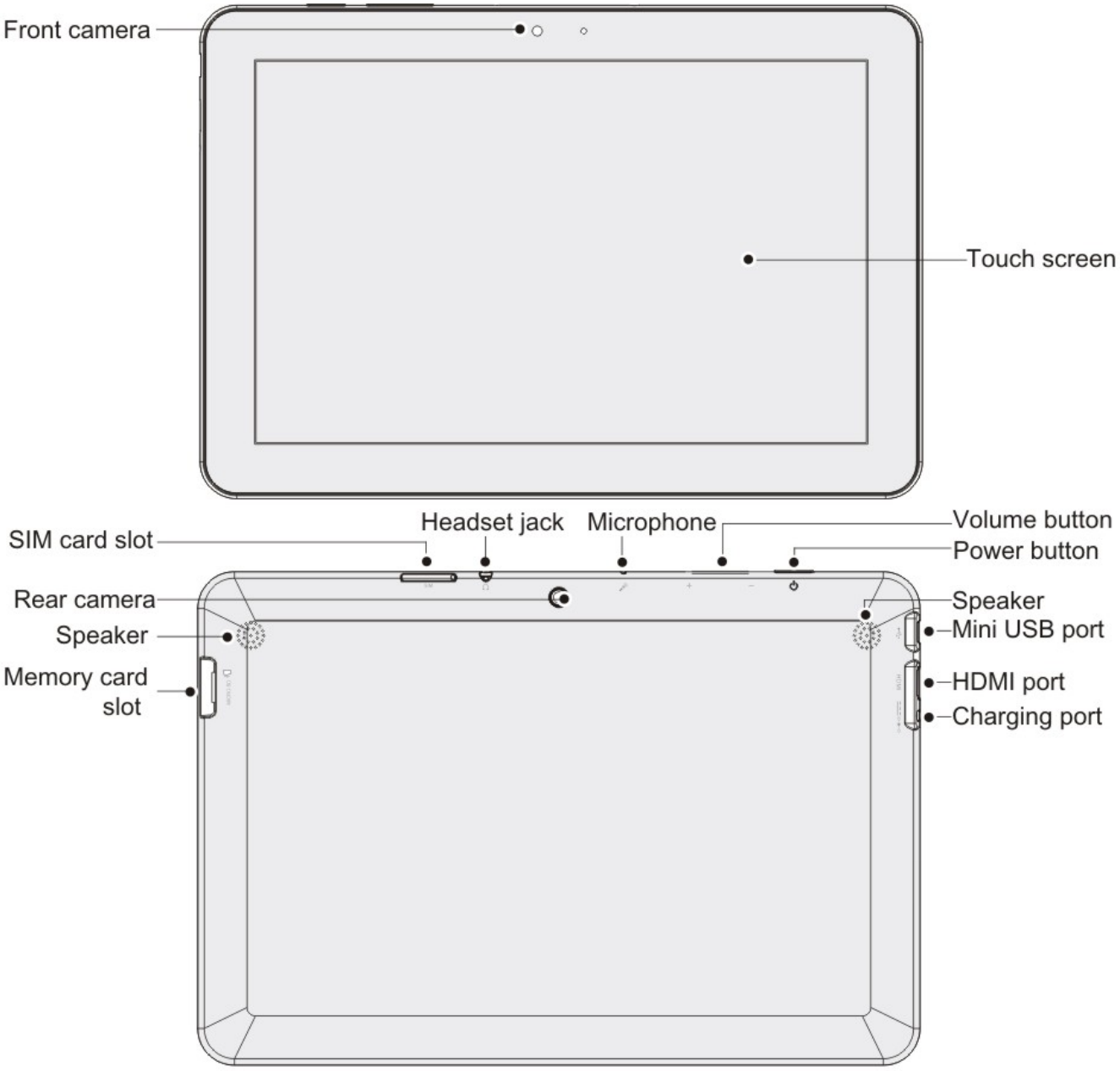
Bluetooth	Cryptographic algorithms	N/A
	Max range of wireless connection	5m
Interface Configuration:		
Type	**Details**	**Descriptions**
SIM Card Slot	SIM Card Slot	Yes
Memory card socket	External Memory	Support micro-SDHC/SDXC,up tp 32GB
USB	Data Transfer	Mini USB 5pin * 1
Charge	Charge Connecter	2.5mm DC in, 5V/2A
Headset Jack	Music Output	3.5mm standard headphone jack
HDMI interface	Video Output	Mini HDMI * 1
Software Configuration:		
Type	**Details**	**Descriptions**
Operating System	OS Version	Android 4.2
	Language	Multi-language support
Preintsalled Applications	Firmware	Android 4.2.2
	Flash	
	RU Folder Flash	
	Other System Software	
Look & Feel		
Material	Display Material	ABS+PC
	Body Material	PC
Color	Device Color	black fuffy coating
Package and shipping information		
Package contents	Prestigio MultiPad	1 pc
	QSG	1 pcs (consigned part)
	Legal and Safety Notices	1 pcs (consigned part)
	Warranty card	1 pcs (consigned part)
	OTG Cable	1 pcs (consigned part)
	USB Calbe	1 pcs (consigned part)
	Unswitchable adaptor	1 pcs (consigned part)
	EU plug	1 pcs (consigned part)
	UK plug	1 pcs (consigned part)
	Stickers for after-service	3 pcs
	Protective pouch	1 pcs (consigned part)
	Pouch Type	Sleeve Style
	Pouch Technology	Leather
	Stylus	N/A
Shipping information	Device size (mm)	256.8*175.4*10.5
	Device wight (g)	about 660g
	Gift Box Dimension(mm)	
	Carton Size(mm)	
	Qty Per Carton(pcs)	
	G.W Per Carton (kg)	
	Layers Per Pallet	
	Cartons Per Layer	
	Weight Per Pallet(kg)	
EAN	EAN code	

PMP7100D3G_QUAD SM BOM

NO.	Material number	Name	Specification	Parameter	Usage	Unit	Remark
2	0414080000018	USB connecting cables	USB A-female-right angle=Mini USB-公[right angle,150mm,without circular,black]		1	PCS	
3	0414080000021	USB connecting cables	USB A-male-right angle=Mini USB-公[right angle,1m,without circular,black]&D4854180		1	PCS	
4	0414130020012	USB power supply connecting cables	USB A-male-right angle=DC2507[right angle,1.0m,without circular,black]/USB AM TO DC2507 M L=1M black/鑫宇欣	2A,5V+-5%	1	PCS	
5	0437000020031	holster	SMBD1013,MID holster,PU+velvet,Black imitation sheepskin grain,带东欧商标/深圳奥其		1	PCS	
6	1005000020043	Warranty card	Prestigio,Warranty card,V3.1		1	PCS	
7	1016000020086	Quick guide	Prestigio,PMP7100D3G_QUAD,Quick guide,V1.0	NR	1	PCS	
8	1019000020001	Legal manual	Prestigio_MULTIPAD,Legal And Safety Notices,V3.2		1	PCS	
9	0990030020395	Virtual component package	SMB-D1013,HW201307073 PMP7100D3G_QUAD package (shipping)		1	PCS	
10	0101010299999	Ordinary PE bags	110*180mm,NA,NA	NR	1	PCS	Manual packing bags
11	0101010399998	Self-styled PE bags	40*60mm,0国,NA	NR	1	PCS	SIM card thimble bags
12	0101050099988	Shrinkable film packaging bags	325*445mm,NA	NR	1	PCS	Heat shrinkable with color box
13	0104020020199	Color inner box	Prestigio,PMP7100D3G_QUAD,V1.0	Gift packaging, g	1	PCS	
14	0105070020022	The cardboard sheet	260*260mm,Single B w,Double sided cow card		0.2	PCS	Cushion and outer box nailing side
15	0105070020023	The cardboard sheet	295*260mm,Single B w,Double sided cow card		0.4	PCS	Mat in carton
16	0107020020002	Other tray	1200*1000*150mm(自带一片PP卡板),3000Kg,Black half a new PP m	Field type, insula	0.0024	PCS	Tray customer has designated manufacturers, with 420 PCS/air, pallet after good overall size：1200*1000*2075mm
17	0108020020245	Carton printing	Prestigio,PMP7100D3G_QUAD,V1.0	Carton size: 310	0.2	PCS	Carton 5 sets
18	0109000020001	Paper Angle protector	920*60*60*5mm		0.0096	PCS	Each tray with four pillars, card on the top of the tray, so as not to take the box was bad
19	0109000099962	Paper Angle protector	1840*60*60*5mm		0.0096	PCS	Each tray with four, and for the sides of the tray
20	0990010020646	Identification [Virtual Components]	SMB-D1013,HW201307073,PMP7100D3G_DUAD Identification(packaging)		1	PCS	
21	1013010320018	Bond paper stickers	Lithium battery label,120*110mm,Coated paper stickers	NR	0.2	PCS	Stick carton (5 sets) each pallet (225 sets of air each pallet) posted outside four; Encoding rules according to the customers'
22	1013120000001	Blank stickers	T01,30*8mm,Coated paper stickers		3	PCS	Triple SN stickers, bags as accessories in the manual inside. Encoding rules according to customer requirements
23	1013120020000	Blank stickers	BS033A,70*100mm,Coated paper stickers		0.4	PCS	Sticker Carton (5 sets of equipment) encoding rules according to customer
24	1013120020067	Blank stickers	SMBD1013-T01,45*40mm,Coated paper stickers		1	PCS	Paste color box placeholder
25	0422010020068	Outsourcing - AC adapter	HKA01105021-XE,英标&欧标,可换脚,Prestigio,USB,NR,NR,black/航嘉	Direct plug-in,10.	1	PCS	
26	0227000000243	loudspeaker	101-2014-13012-j,0.7W,8R,L20*W14*H5.5,带线20mm红黑	20Hz~20KHz	2	PCS	
27	0802020000114	With the flat surface	0.5mm,10P,35mm,-40C~+80C,no broken line	L3_L3;L4-L0_L4-	1	PCS	SD card connector
28	7001070120019	[semi-finished product]-keyboard plate	8227C		1	PCS	
29	0226020100192	Irregular flexible circuit board	8227C,V3.0,2012.09.07		1	PCS	
30	7001180100028	[semi-finished product]-Output board	7981C		1	PCS	
31	0226020100113	Irregular flexible circuit board	7981C,V1.2,2012.02.23		1	PCS	
32	7001190100016	[semi-finished product]-tablet	8209C		1	PCS	
33	0226010002331	PCB Circuit board	8209C,V2.0,2012.09.06	FR4,2layer,0.8m	1	PCS	
34	0990010020647	Identification component[Virtual Components]	SMB-D1013,HW201307073,PMP7100D3G_DUADIdentification component(package)		1	PCS	
35	0301020120046	Heteromorphism PET protective film	SMBC1006-H03,Screen protection film0.05PET(印刷多色,带3G,东欧 Prestigio PMP7100D3G_QUAD)		1	PCS	Paste machine screen
36	1004000000012	The warranty seal	东欧Prestigio,PMP5570C,V1.0		1	PCS	Sticker on the circuit board screws suitable position
37	1013010200067	Plain paper stickers	SMB-C7016,T04,东欧Prestigio,PMP5570C,水损贴纸		1	PCS	Stickers circuit board suitable
38	1013120020055	Blank stickers	AU101DP11V8,10*5mm,铜版纸不干胶		1	PCS	Hardware Version stickers
39	0990040020479	Structural component[Virtual Components]	SMB-D1013,201307073东欧结构件(带3G,without flash)		1	PCS	
40	0309010020014	Rules of the cushions	170*60*0.8mm,单面背胶,普通胶,black	middle	1	PCS	Affixed between the battery and the back cover
41	0311010099896	Rules of the insulation	10*5*0.3mm,Single ordinary glue back,black	PC	1	PCS	Affixed to the back of the headphone jack
42	0601000000084	P+R	SMBB1013-RE03,Power key,electroplate,silver		1	PCS	
43	0601000000085	P+R	SMBB1013-RE04,Volume key,electroplate,silver		1	PCS	
44	0602020000080	Regular Poron	5*3.5*1mm,ES,Single ordinary glue back,black		1	PCS	Affixed to the front camera after the shell at the corresponding
45	0606020099845	Irregular silica gel	PGB94315-H01,MIC硅胶套，硬度60°,NR，black	No conversion	1	PCS	
46	0610020100030	Nickel plated metal teeth screw	M1.6*2CMHNI(K=0.5 D=3 耐落)		2	PCS	SIM card board and magnesium aluminum box fixed
47	0610020100031	Nickel plated metal teeth screw	M1.6*2.5CMHNI(K=0.5 D=3 耐落)		13	PCS	Battery and magnesium aluminum frame fixed (10) headphones clamp and magnesium aluminum alloy box (2) the mainboard and magnesium aluminum alloy frame
48	0610040100023	Nickel plating self-tapping screws	M1.7*3CBHNI,K=0.5,D=3.0		4	PCS	Motherboard and the fixed frame (2) TF card board and the fixed
49	0615010000068	Irregular double-sided adhesive	7986C,3M9448胶,PCB板背胶		1	PCS	
50	0615010020004	Irregular double-sided adhesive	SMBC1006-H07,3M9448,摄像头支架双面胶		1	PCS	Affixed to the rear camera stent
51	0616130000170	Assembling components	SMBB1013-RE08,SIM Card cover,喷涂,黑色绒毛漆	PC,94HB	1	PCS	
52	0616130099857	Cover plastic	SMBB1013-RE08,SIM Card cover,NR,黑色素材	ABS,94HB	1	PCS	
53	0616170100138	Die cutting lens plastic parts	SMBB1013-RE07,The rear camera镜片,3M9448,丝印,black	PMMA,94HB	1	PCS	
54	0616201020236	the plastic back cover shell	SMBC1006-RE02,SMB-D1013后壳(带SIM卡孔,without flash hole),喷涂丝印(HW201307073-V1.0),黑色绒毛漆	PC,94V0	1	PCS	
55	0616350000224	Plastic stent	SMBB1013-RE06,The rear camera支架,真空镀,silver	ABS,94HB	1	PCS	
56	0617230000073	Clamp hardware	SMBB1013-PT02,耳机压板,0.3电锌板		1	PCS	
57	0617280000031	Decoration hardware	SMBC1006-PT02,SIM卡顶针,不锈钢,NR,ecru		1	PCS	
58	0991160020109	Camera function components	SMB-D1013，带前置200万后置200万(U-C1013-2035-2035-V1.0)摄像头 configuration		1	PCS	
59	0606020000217	Irregular silica gel	SMBC1006-H05,摄像头硅胶套,硬度60度,双面背普通胶,black		1	PCS	
60	0715000000091	PC camera	U-C1013-2035-2035-V1.0,CMOS,200万像素&200万像素,NR,YUV		1	PCS	
61	0991130020041	Battery functional components	SMB-D1013,battery configuration(BT-B0BD,3574108)		1	PCS	
62	0705010000102	Casing battery pack	BT-B0BD,3574108(锂聚合物-万众-NR),6400mAh,3.7V,NR	2.8V,4.28V,4A,IIC fuel	1	PCS	
63	0991120020050	WIFI+BT Functional components	SMB-D1013,带WIFI+BT functional configuration		1	PCS	
64	0224010020144	Built-in passive antenna	N12-1562-R0A,FPC,2400MHz~2500MHz,引线D0.81*L21/南斗星	2dB,50R	1	PCS	
65	0991010320152	WCDMA3G Functional components	SMB-D1013,3G functional configuration		1	PCS	
66	0224010020140	Built-in passive antenna	N18-0331-R0A,FPC,824MHz~2170798MHz,引线I-PEX D0.81*L29/南斗星	1dB,50R	1	PCS	3G Antenna
67	7001190100015	semi-finished product]-tablet	8229C		1	PCS	
68	0226020100200	Irregular flexible circuit board	8229C,V2.0,2012.11.06		1	PCS	
69	0991150020126	EMI Countermeasures for the functional components	SMB-D1013,conduct EMI functional configuration		1	PCS	
70	0303010020045	Rules of conductive cloth	plaid,Double-sided conductive,The single side of gum,Lamination conductive,6*5*0.25mm,鸿富诚/6*5*0.25mm		4	PCS	Aluminum frame attached to the corresponding position in the United States and see the process documents
71	0303010099855	Rules of conductive cloth	plaid,Double-sided conductive,The single side of gum,Lamination conductive,20*8mm,NR(无卤)		2	PCS	Attached to the aluminum frame HDIM interfaces US position 1 and position of a MINI USB interface
72	7001230120045	[semi-finished product]-pinboard	8230C,With light		1	PCS	

73	0226020100193	Irregular flexible circuit board	8230C,V2.0,2012.09.07		1	PCS	
74	0991540020004	Wire type of functional components	SMB-D1013,线材 functional		1	PCS	
75	0226020100171	Irregular flexible circuit board	8218C,V1.0,2012.06.27		1	PCS	LCD cable
76	0802020020037	With the flat surface	0.5mm,8P,124mm ,-40C~+80C,有折线/0.5mm,8P,124mm ,有折线/精莱	L2_L2,L3-L0_L3-	1	PCS	TP cable
77	SMBD101320004	[semi-finished product]-LCD and touch screen	SMB-D1013,LCD&touch screen AU101DP17V1自制,配8642C mainboard A1WAN06,电容式,10.1" 201307073东欧结构件(带3G,不带闪光灯)		1	PCS	
78	0991090020109	LCD screen functional components	SMB-D1013,LCD configuration(AU101DP17V1)配8642C mainboard		1	PCS	
79	7008010120105	[semi-finished product]-The LCD panel	AU101DP17V1	A101EVN01,with TCON,ZM10101	1	PCS	
80	0310020020004	Special metal foil	单面导电铝箔,INN101DP16V1-H02,The single side of gum,Lamination conductive,L12*W10mm,MALATA/澳普林特		1	PCS	
81	0719000000056	LCD glass	A101EVN01,AU,10.1"&16:10 number		1	PCS	
82	0725000020035	The LCD panel component	ZM10101A,背光模组/兆纪光电		1	PCS	
83	7001170120016	[semi-finished product]-Driver board	8426C,other client GAMMA		1	PCS	
84	0991100020078	Touch screen functional components	SMB-D1013,touch screen(A1WAN06,capacitive,10.1)configuration		1	PCS	
85	0703010020001	Touch screen panel	A1WAN06,电容式,10.1"&16:10,No lamination	NR,0.5mm,8P,Double contact	1	PCS	
86	0990040020409	structural component [virtual component]	SMB-D1013,液晶屏结构件(带3G)		1	PCS	
87	0602010020047	Irregular Poron	SMBD1004-H01,touch screen PORON,日东SCF400P,Single ordinary glue back,black		1	PCS	
88	0610020199945	Nickel plated metal teeth screw	M2*2CMHNI,耐落		3	PCS	LCD screen lock
89	0615010000050	Irregular double-sided adhesive	SMBB1013-H03,圣戈班V2020,touch screen,Double-sided adhesive		1	PCS	
90	0723000020457	Assembling components	SMBD1013-RE01,镁铝合金中框塑料成型,NR,black		1	PCS	
91	0619010320002	Magnesium die casting aluminum alloy shell	SMBB1013-PT01-04,镁铝合金中框,NR,ecru		1	PCS	
94	0228000020013	Electret receiver	OB40203-403G-XQGC01-00-0,D4*H2.0,接线/OB40203-403G-XQGC01-00-0/创达	1V~10V,2.2K,-40	1	PCS	Welded to the MIC + and -
96	0305010000018	The silicone gasket of thermal conductivity	硅胶导热垫片THERM-A-GAP G579,L15.0*W15.0*T0.5,No lamination	Soft silicone,3.0W/m.K@ASTMD5470,大于	1	PCS	Post U1 CPU devices
97	0311020020023	Special insulation	SMBD1013-H02,SMB-D1013 The power shield Insulation mat,Single ordinary glue back,ecru	PET,0.05	1	PCS	Posted on the SMB-D1013 Power shield cover
98	0311020020024	Special insulation	SMBD1013-H01,SMB-D1013 The mainboard shield,Insulation mat,Single ordinary glue back,ecru	PET,0.05	1	PCS	Stickers SMB-D1013 motherboard shield cover
99	0617160020065	Shield hardware	SMBD1013-PT02,SMB-D1013 The power shield,0.2 btinplate		1	PCS	
100	0617160020066	Shield hardware	SMBD1013-PT01,SMB-D1013 The mainboard shield,0.2 tinplate		1	PCS	
102	0991140020009	Circuit board functional components	SMB-D1013,8642C V2.0 SMD共用料		1	PCS	
103	0226010020363	PCB Circuit board	8642C,V2.0,2013.09.11	FR4,6layer,1.0m	1	PCS	

Overview


Front camera
Touch screen
SIM card slot
Headset jack
Microphone
Volume button
Power button
Rear camera
Speaker
Speaker
Mini USB port
Memory card slot
HDMI port
Charging port

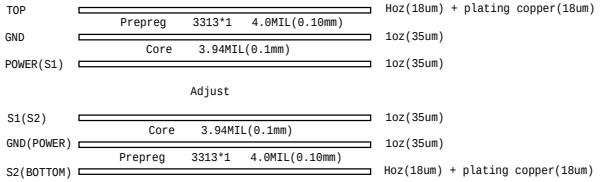
CONTENT INDEXING

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17.Modify note

PCB POWER WIRE WIDTH INDICATE

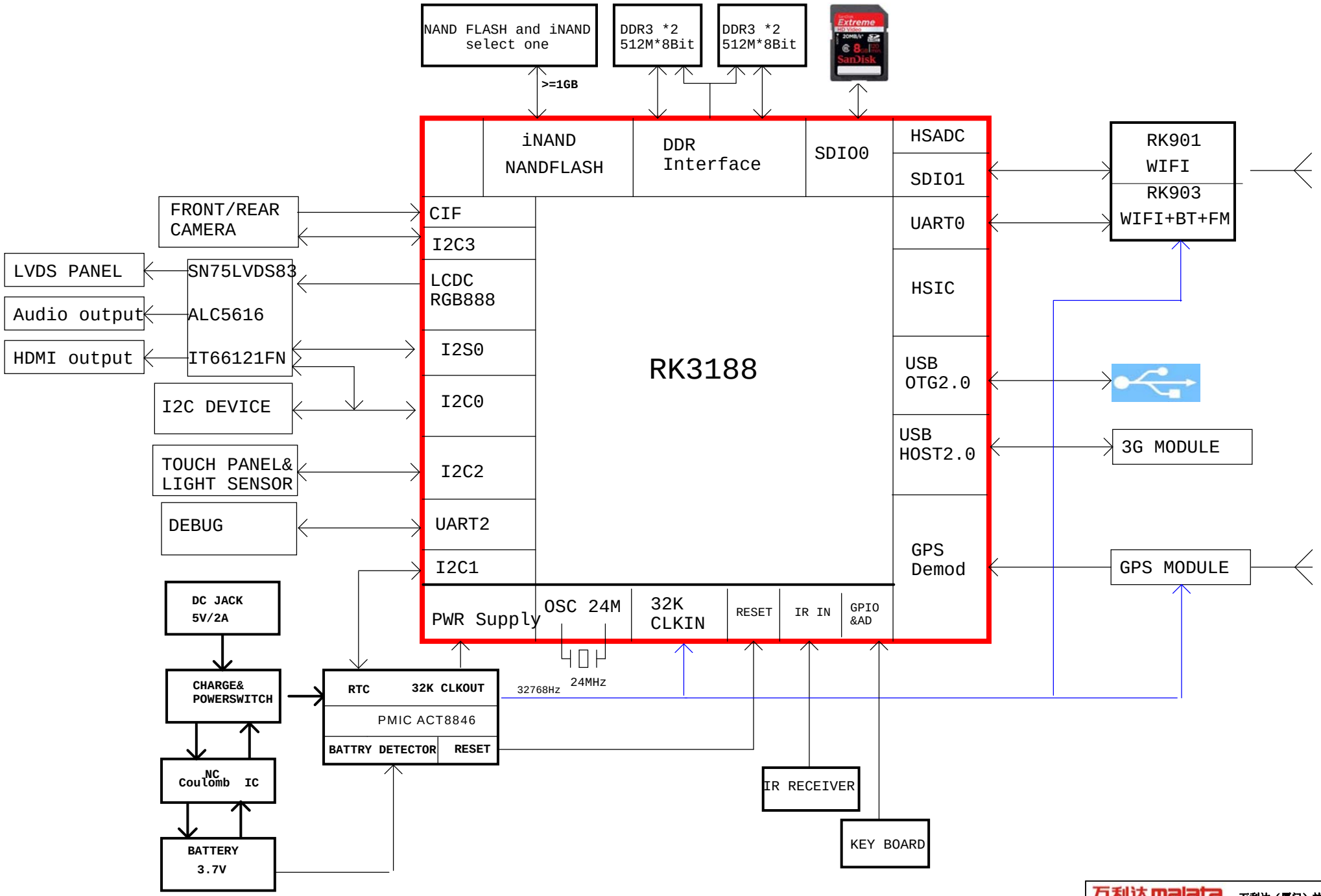
	above 80 miles
	above 50 miles
	above 30 miles
	above 16 miles
No indicate	Under needs

6 LAYERS PCB STACK



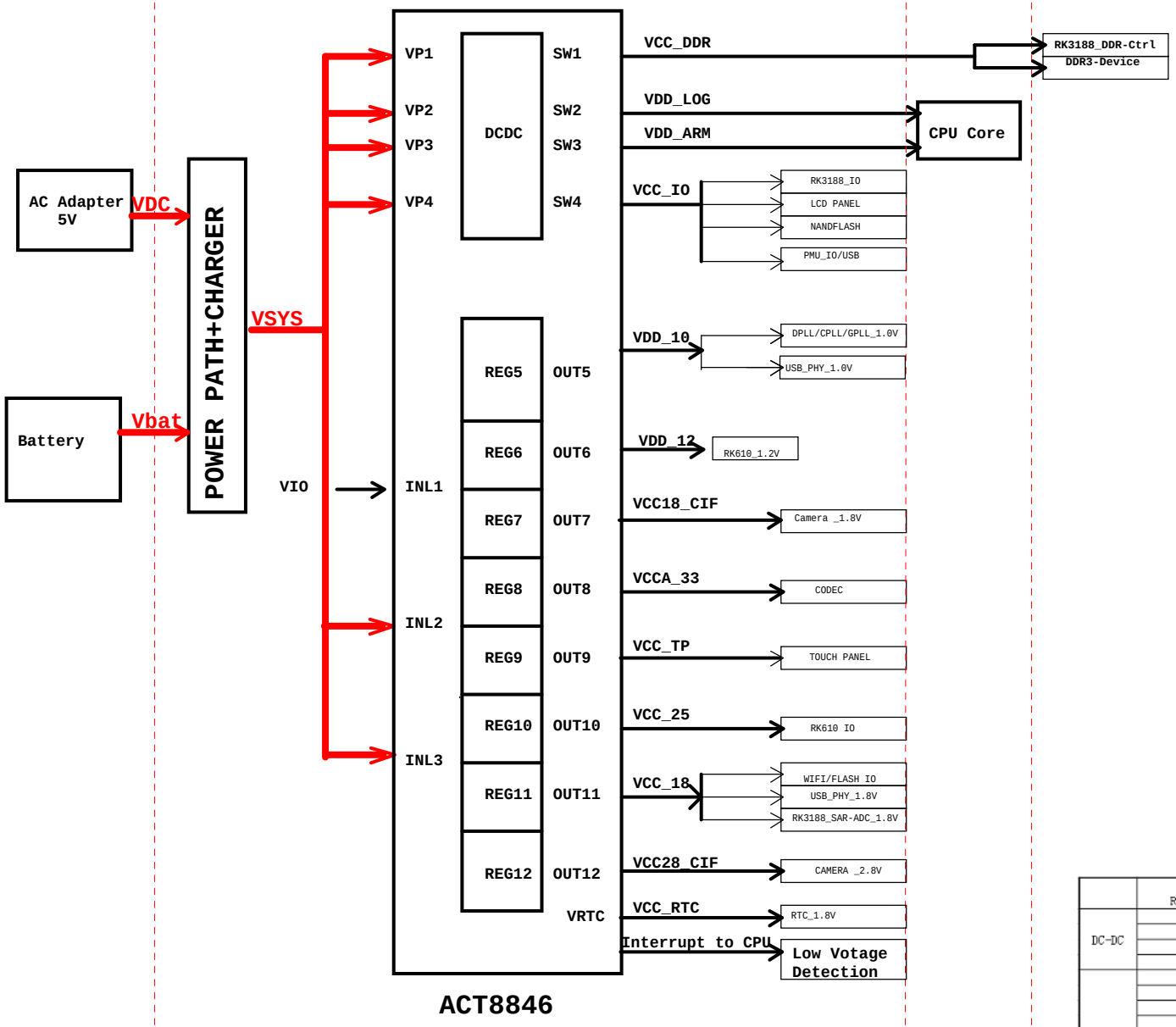
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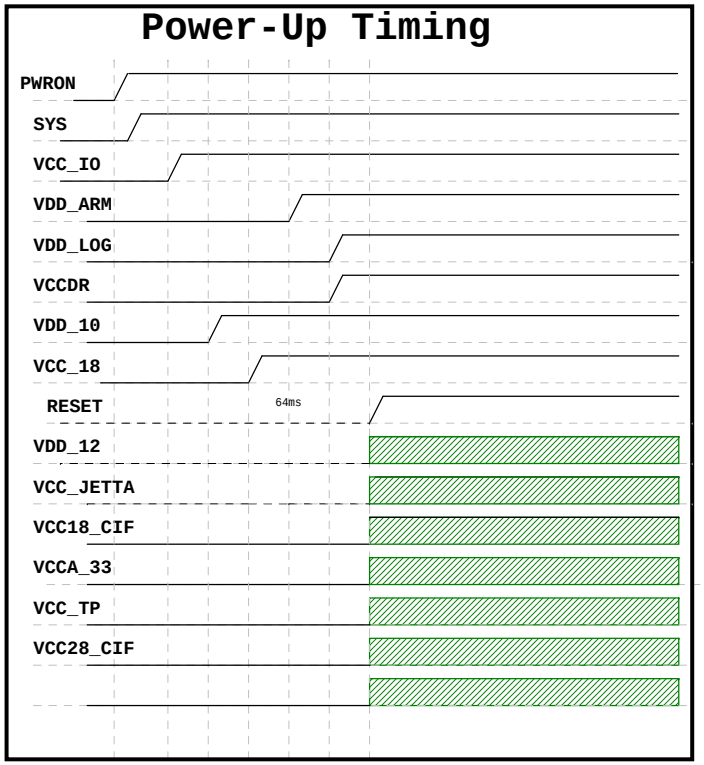
Project: SMB-D1013		Document Number: 8642Y	
Size: A3	Title: Index	Designer: sunhanzhong	Rev: 2.0
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Project: SMB-D1013		Document Number: 8642Y	
Size: A3	Title: Block Diagram	Designer: sunhanzhong	Rev: 2.0
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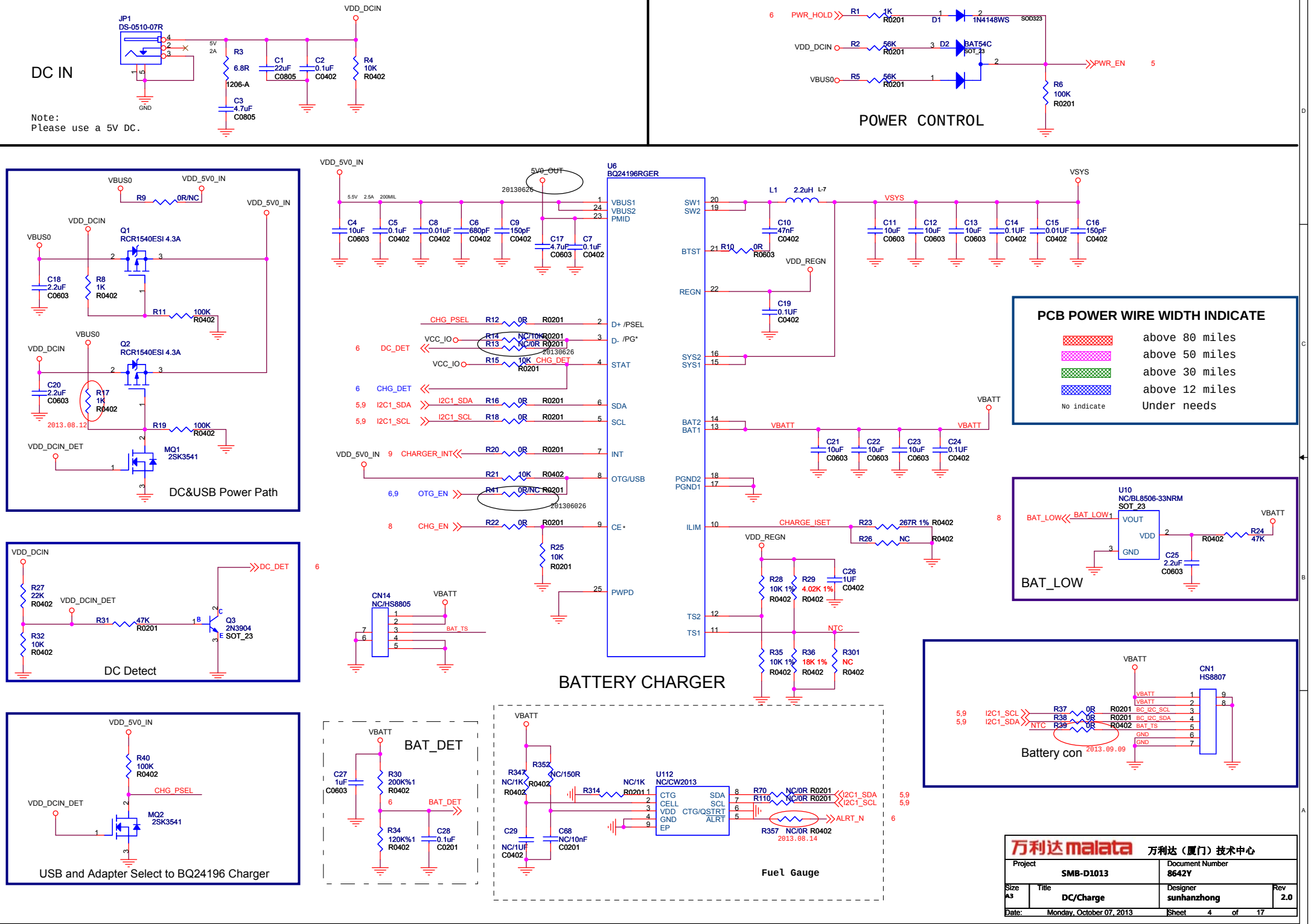


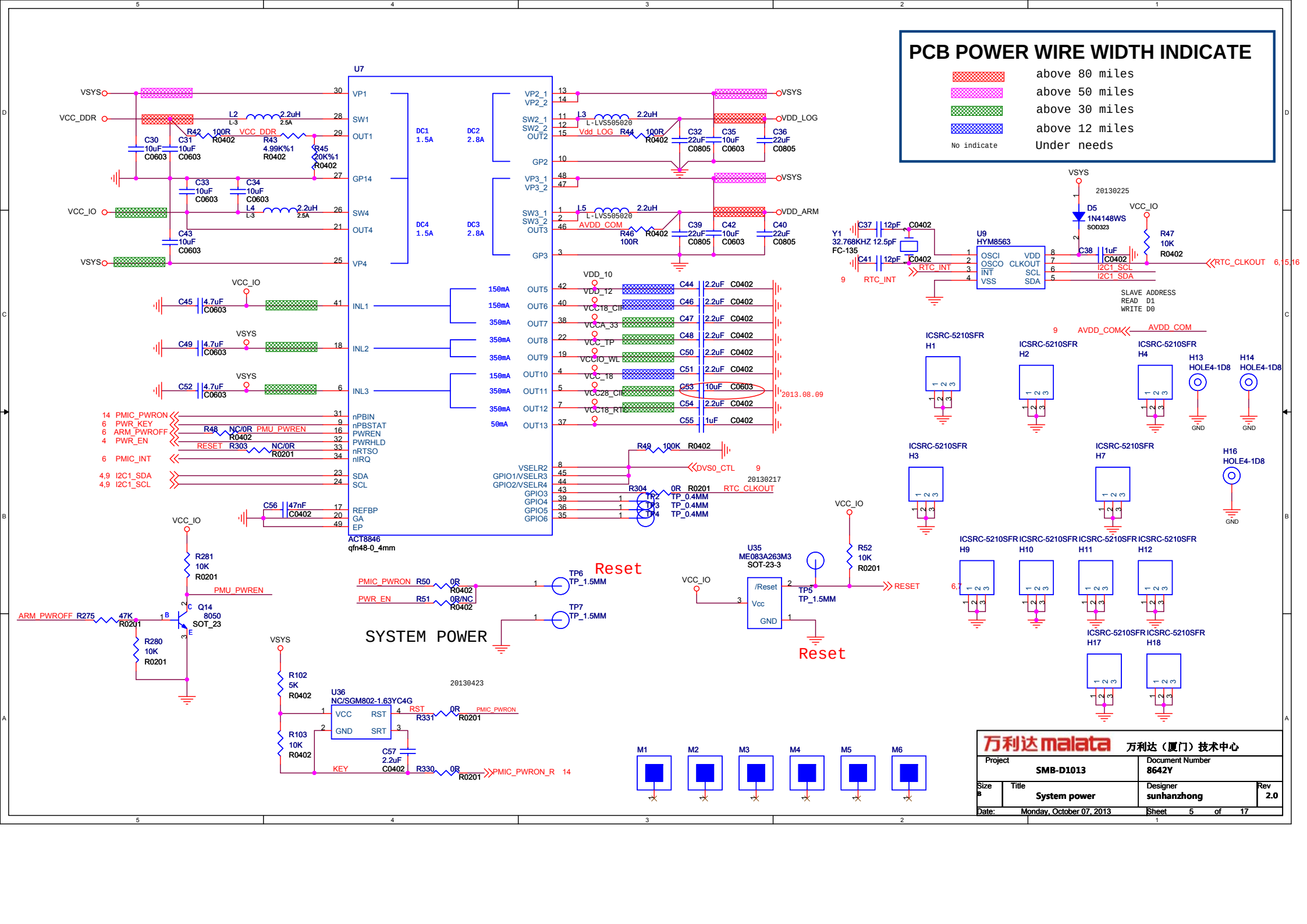
	ACT8846 REGULATOR	RK3188 POWER	MAX CURRENT	DEFAULT VOLTAGE	POWER UP ORDER	ON/OFF@SLEEP	备注
DC-DC	REG1	Vcc_DDR	1.5A	1.2V/ON	5		DDR
	REG2	Vdd_LOG	2.8A	1.0V/ON	5		LOGIC
	REG3	Vdd_ARM	2.8A	1.0V/ON	4	ARM OFF	ARM
	REG4	Vcc_IO	1.5A	3.0V/ON	1		I/O
LDO	REG5	Vdd_10	150mA	1.0V/ON	2		PLL, PMU
	REG6	VDD_12	150mA	1.2V/OFF			JETTA
	REG7	Vcc18_CIF	350mA	1.8V/OFF			CAMERA
	REG8	VccA_33	350mA	3.3V/OFF			CODEC
	REG9	Vcc_TOUCH	350mA	3.3V/OFF			TP
	REG10	VCC_JETTA	150mA	3.3V/OFF			JETTA
	REG11	Vcc_18	350mA	1.8V/ON	3		USB, ADC, FALSH IO/WIFI I/O
	REG12	Vcc28_CIF	350mA	2.8V/OFF			CAMERA
	REG13	VRTC	50mA	1.8V/ ALWAYS ON			

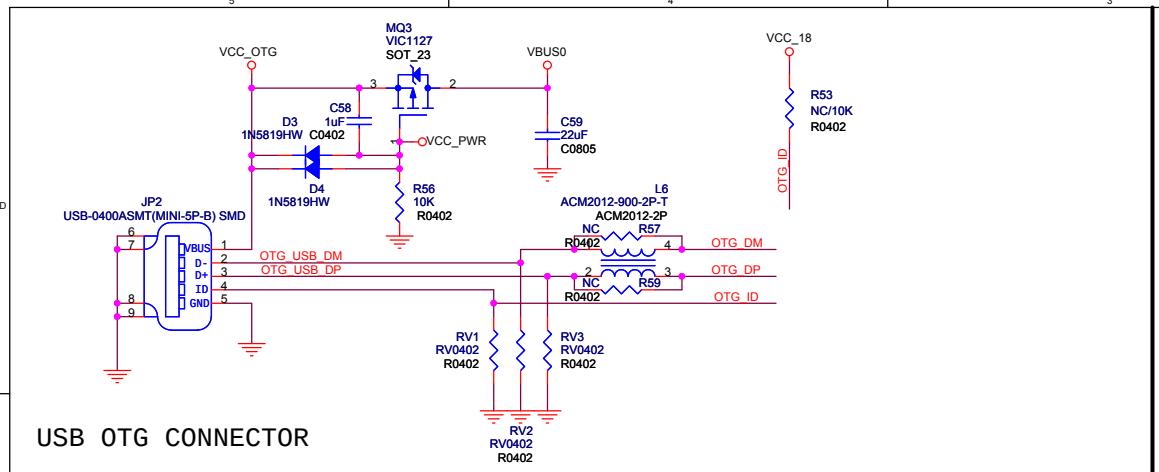
POWER DIAGRAM

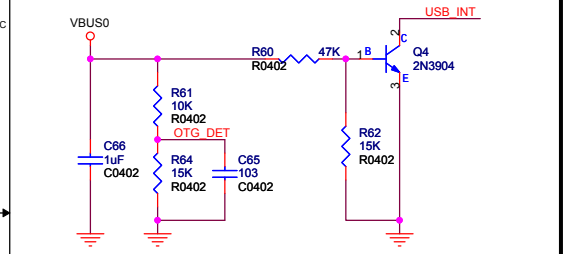
万利达 malata 万利达（厦门）技术中心

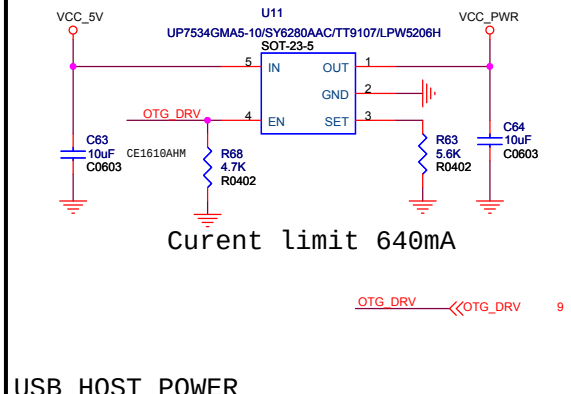
Project: SMB-D1013		Document Number: 8642Y	
Size: A3	Title: System power diagram	Designer: sunhanzhong	Rev: 2.0
Date: Monday, October 07, 2013		Sheet 3 of 17	

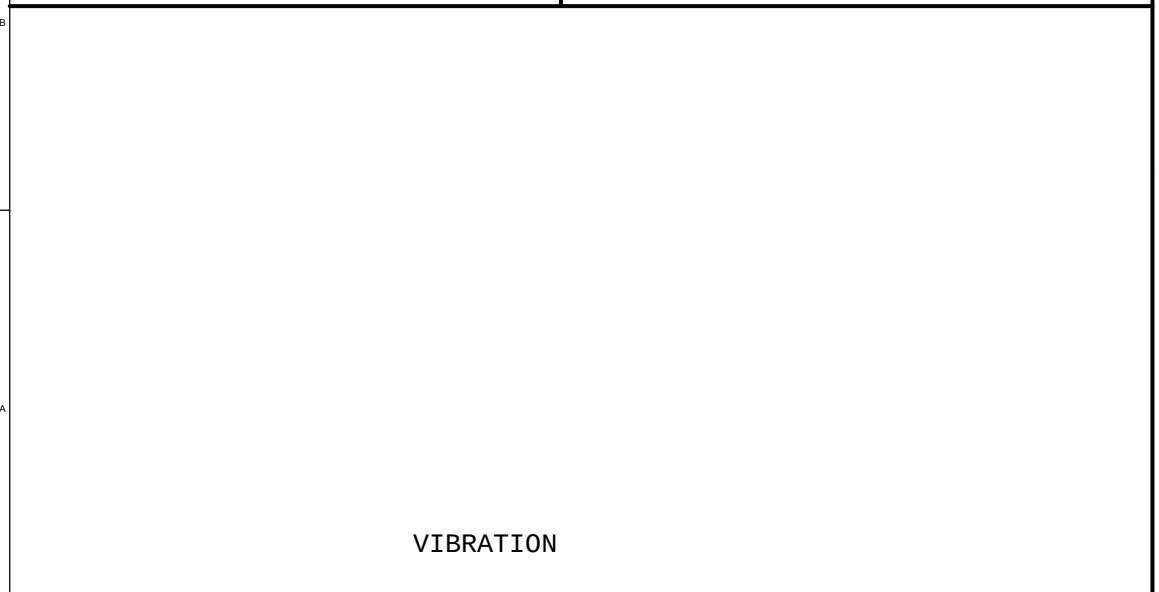

DC IN
Note:
Please use a 5V DC.
JP1
DS-0510-07R
VDD_DCIN
R3
6.8R
1206-A
C1
22uF
C0805
C2
0.1uF
C0402
C3
4.7uF
C0805
R4
10K
R0402
GND
POWER CONTROL
PWR_HOLD
R1
1K
R0201
D1
1N4148WS
SOD323
VDD_DCIN
R2
56K
R0201
D2
BAT54C
SOT_23
VBUS0
R5
56K
R0201
PWR_EN
R6
100K
R0201
DC&USB Power Path
Q1
RCR1540ESI 4.3A
Q2
RCR1540ESI 4.3A
R9
0R/NC
R8
1K
R0402
R11
100K
R0402
R17
1K
R0402
R19
100K
R0402
C18
2.2uF
C0603
C20
2.2uF
C0603
MQ1
2SK3541
VDD_DCIN_DET
2013.08.12
DC Detect
R27
22K
R0402
R32
10K
R0402
R31
47K
R0201
Q3
2N3904
SOT_23
DC_DET
USB and Adapter Select to BQ24196 Charger
R40
100K
R0402
CHG_PSEL
MQ2
2SK3541
U6
BQ24196RGER
VDD_5V0_IN
5V0_OUT
20130626
VBUS1
VBUS2
PMID
SW1
SW2
BTST
REGN
SYS2
SYS1
BAT2
BAT1
PGND2
PGND1
ILIM
TS2
TS1
D+ /PSEL
D- /PG*
STAT
SDA
SCL
INT
OTG/USB
CE*
PWPD
L1
2.2uH
L-7
VSYS
VBATT
VDD_REGN
CHARGE_ISET
267R 1% R0402
NC
R0402
NTC
CN14
NC/HS8805
BAT_TS
BATTERY CHARGER
U10
NC/BL8506-33NRM
SOT_23
VOUT
VDD
GND
BAT_LOW
BAT_DET
R30
200K%1
R0402
R34
120K%1
R0402
C27
1uF
C0603
C28
0.1uF
C0201
Fuel Gauge
U112
NC/CW2013
CTG
CELL
VDD
GND
EP
SDA
SCL
CTG/QSTRT
ALRT
R352
NC/150R
R347
NC/1K
R314
NC/1K
R70
R110
NC/0R R0201
R357
NC/0R R0402
2013.08.14
C29
NC/1UF
C0402
C68
NC/10nF
C0201
ALRT_N
CN1
HS8807
Battery con
2013.09.09
PCB POWER WIRE WIDTH INDICATE
above 80 miles
above 50 miles
above 30 miles
above 12 miles
No indicate
Under needs
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Project
SMB-D1013
Document Number
8642Y
Size
A3
Title
DC/Charge
Designer
sunhanzhong
Rev
2.0
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17

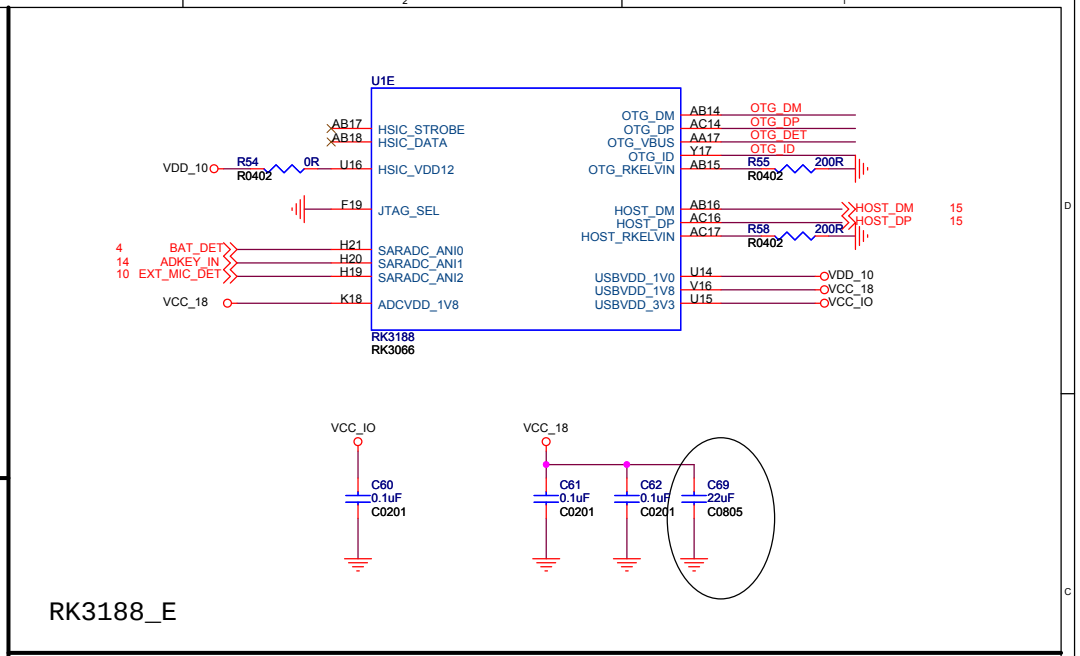

PCB POWER WIRE WIDTH INDICATE
above 80 miles
above 50 miles
above 30 miles
above 12 miles
No indicate
Under needs
U7
ACT8846
qfn48-0_4mm
SYSTEM POWER
Reset
Reset
U9
HYM8563
U35
ME083A263M3
SOT-23-3
U36
NC/SGM802-1.63YC4G
Q14
8050
SOT_23
万利达 malata
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Project
SMB-D1013
Document Number
8642Y
Size
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Title
System power
Designer
sunhanzhong
Rev
2.0
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17

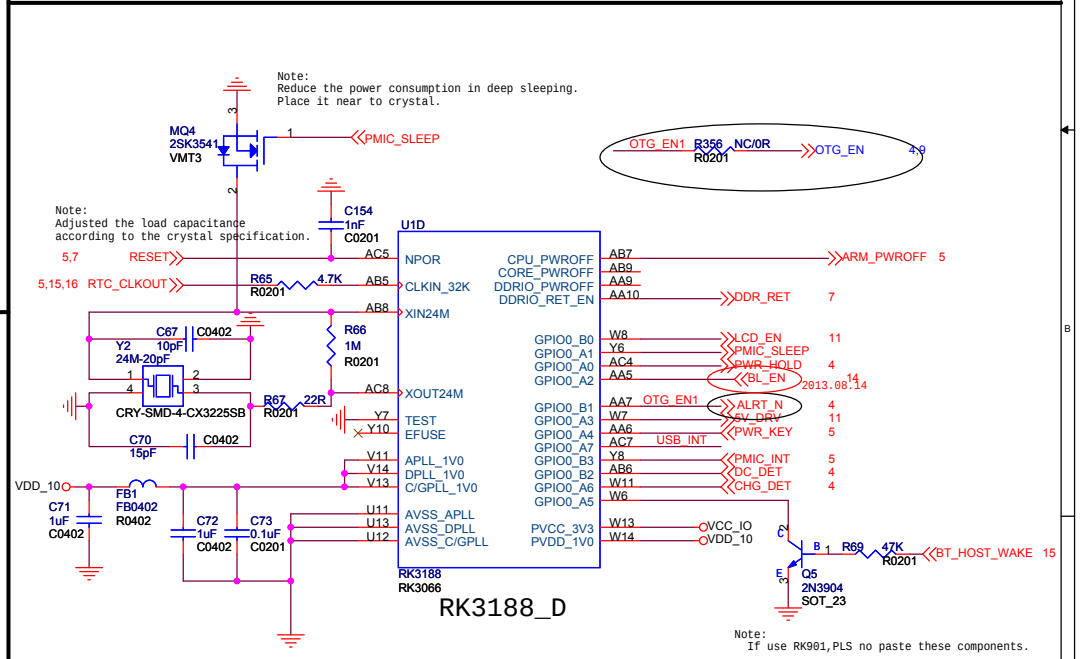






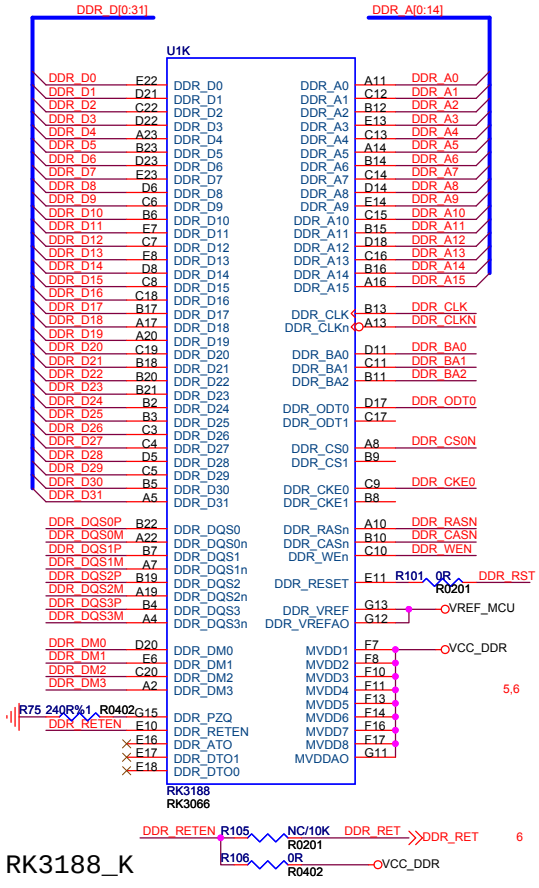


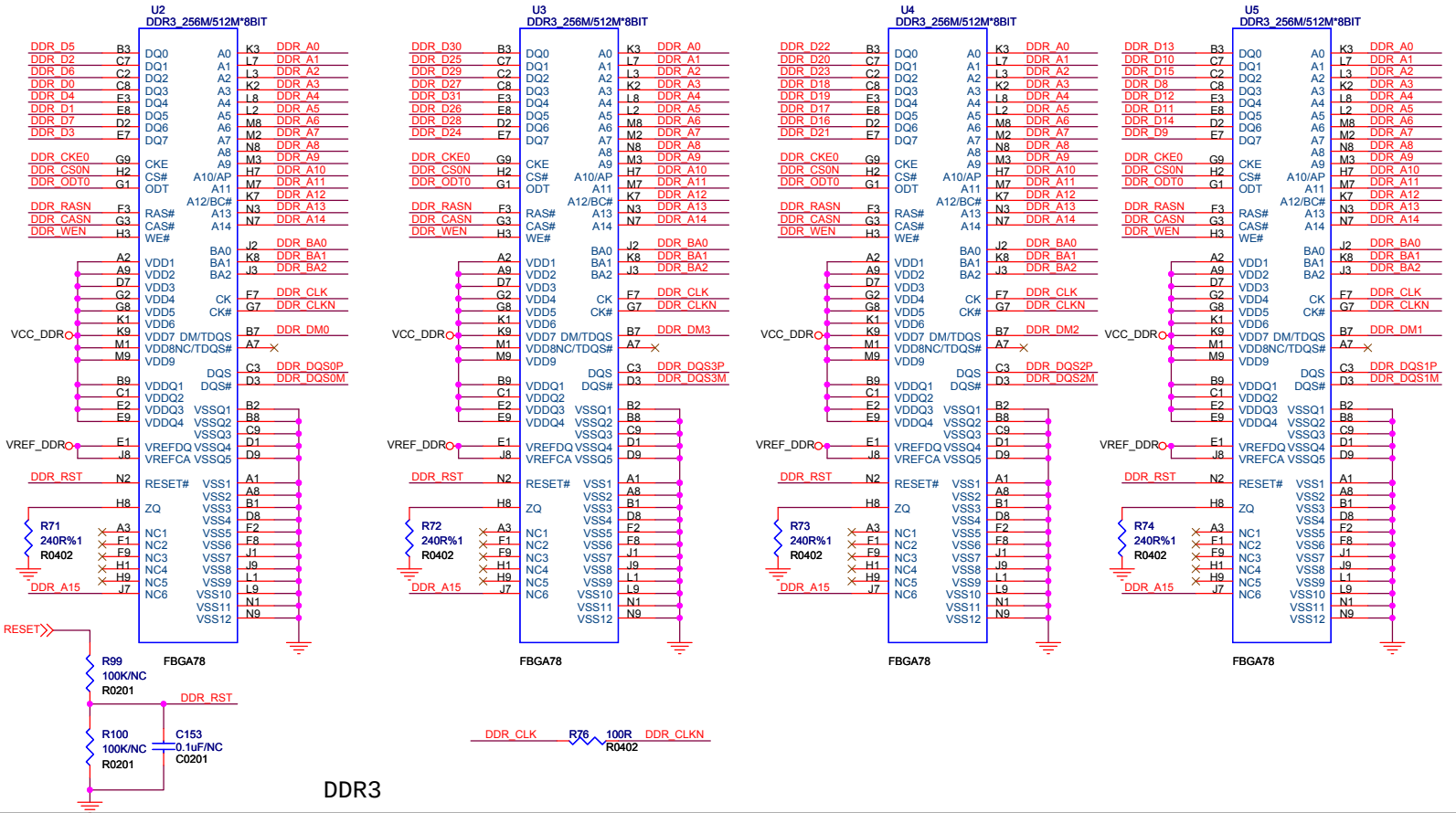


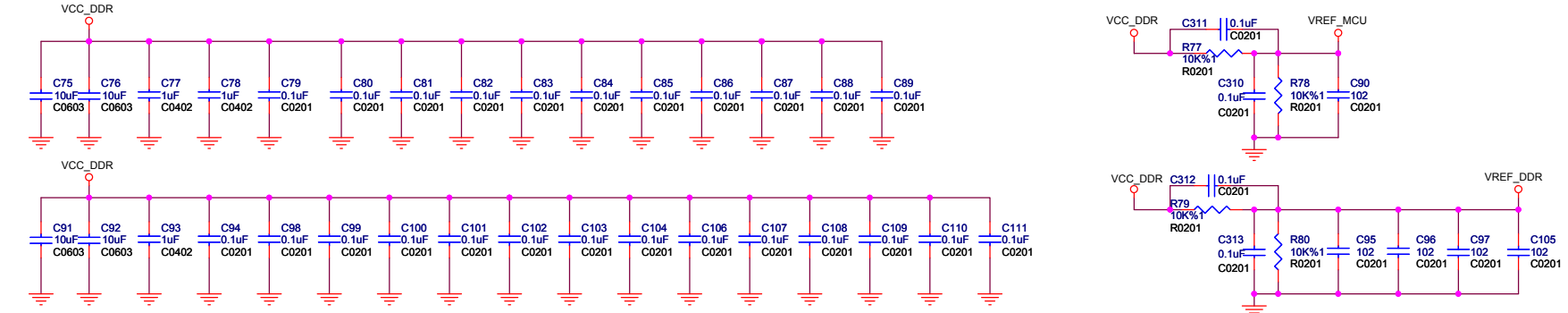


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Size: A3	Title: USB OTG/VIB/HALL	Designer: sunhanzhong	Rev: 2.0
Date: Monday, October 07, 2013		Sheet 6 of 17	



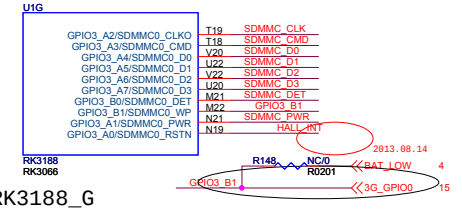




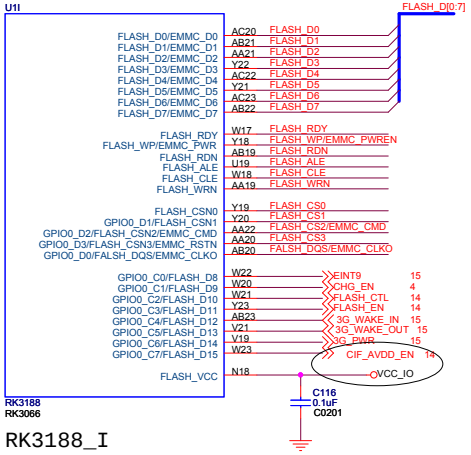
DDR FILTER

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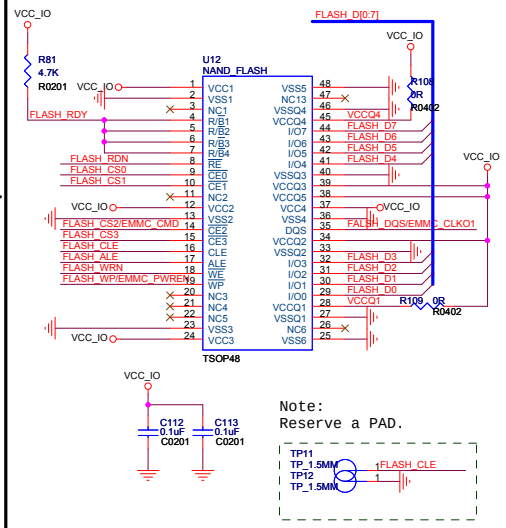
Project: SMB-D1013		Document Number: 8642Y	
Size: A3	Title: DDR3	Designer: sunhanzhong	Rev: 2.0
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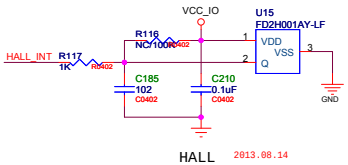
RK3188_G

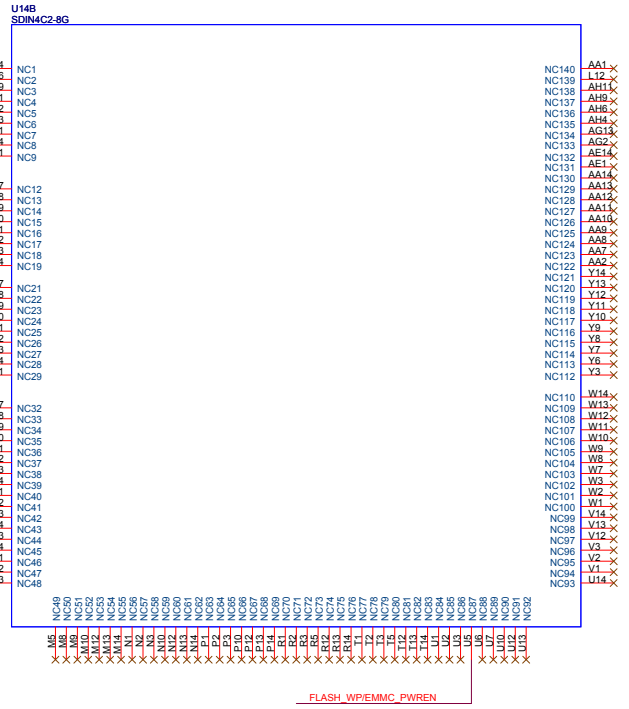


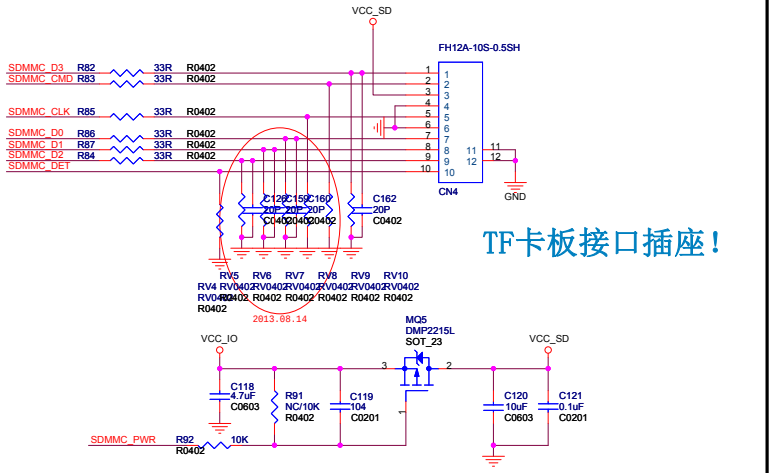
RK3188_I

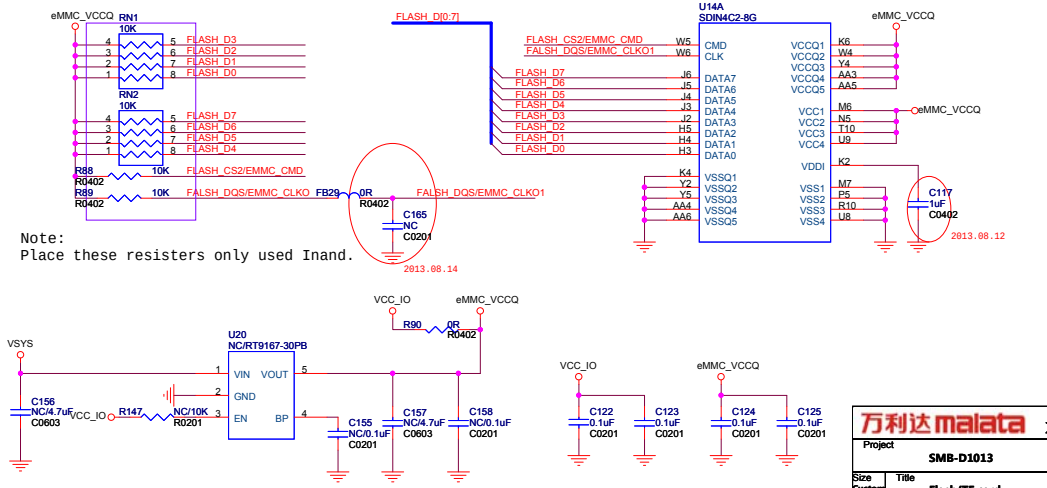


NAND FLASH(OPTION1)



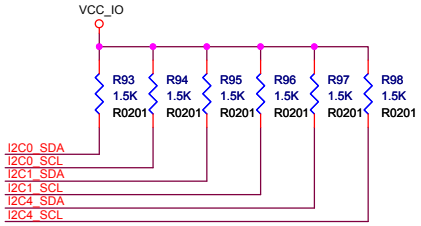


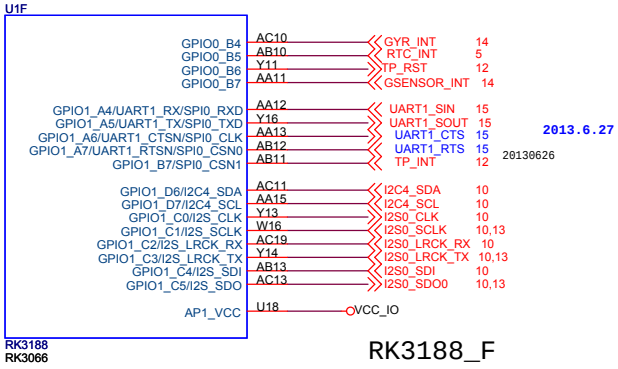




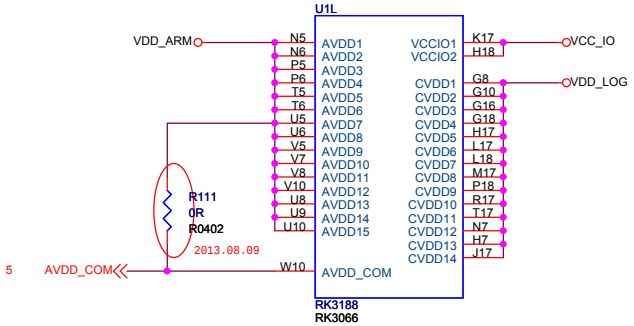
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Project: SMB-D1013	Document Number: 8642Y	
Size: Custom	Title: Flash/TF card	Designer: sunhanzhong
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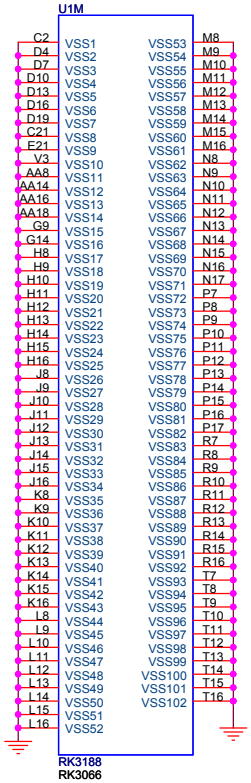


RK3188_F

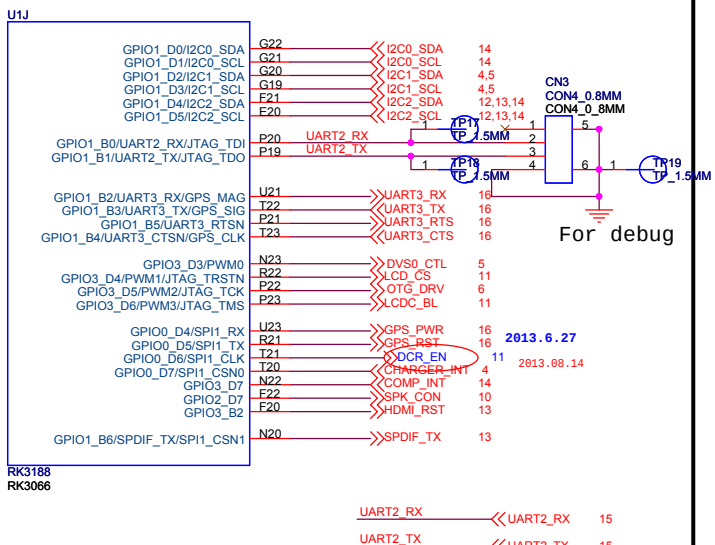


RK3188_L

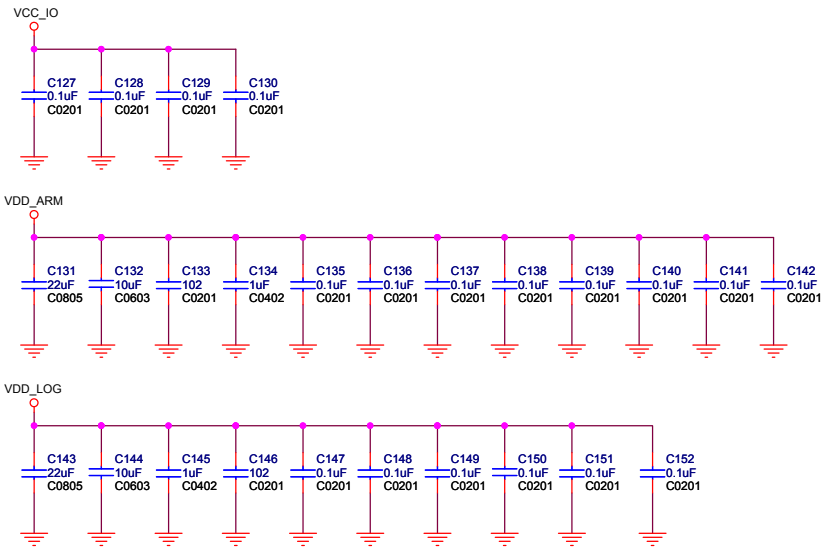
Note:
Place these filter capacitors under CPU.



RK3188_M



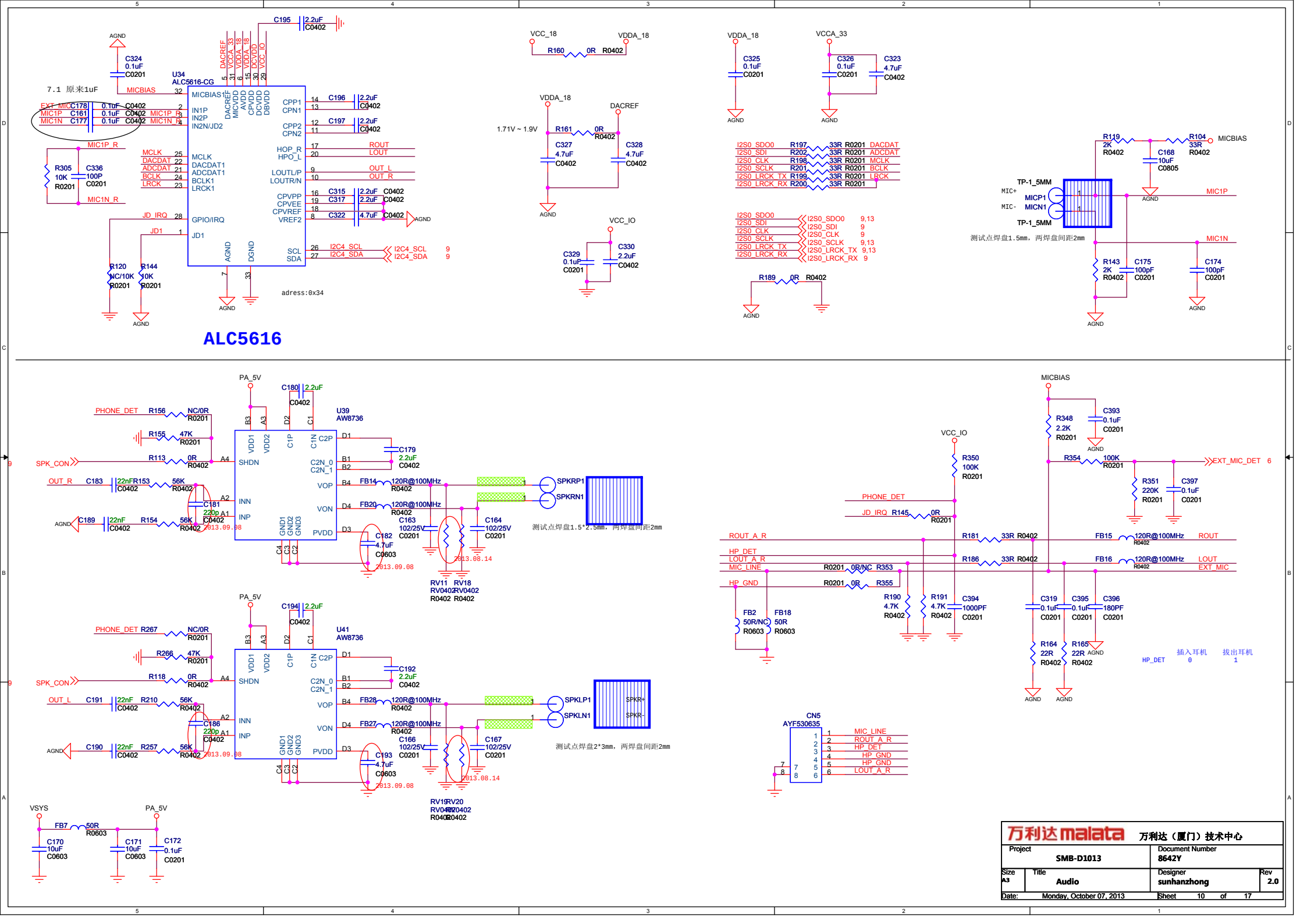
RK3188_J

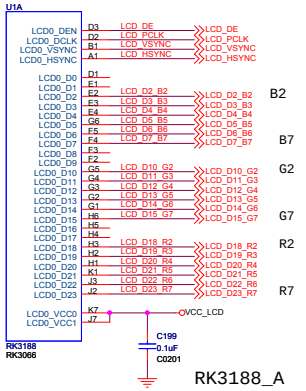


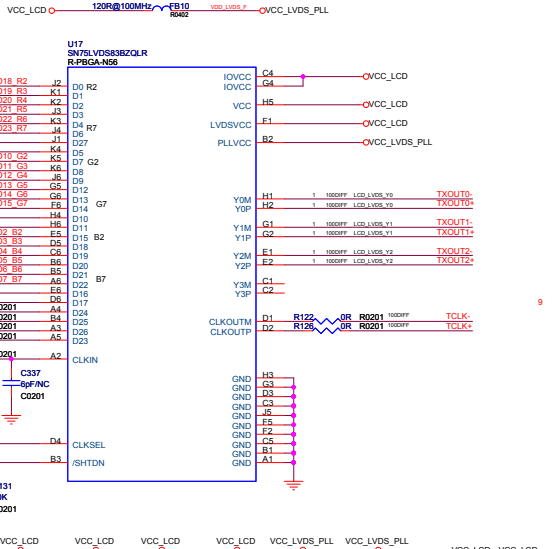
RK3188 CORE POWER FILTER

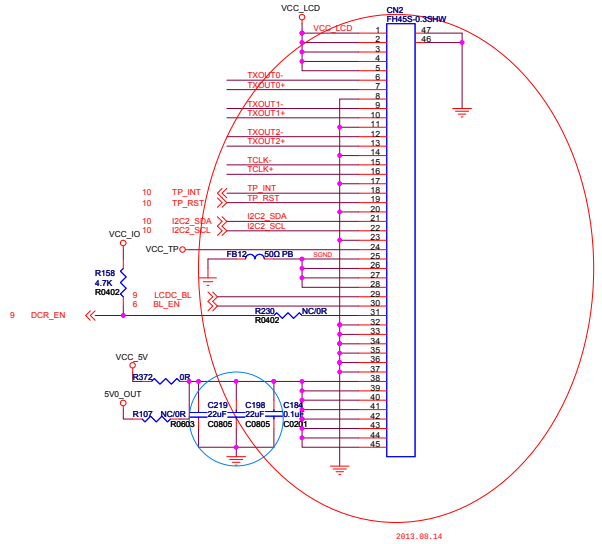
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Project	SMB-D1013	Document Number	8642Y
Size A3	Title GPIO	Designer sunhanzhong	Rev 2.0
Date: Monday, October 07, 2013		Sheet 9 of 17	

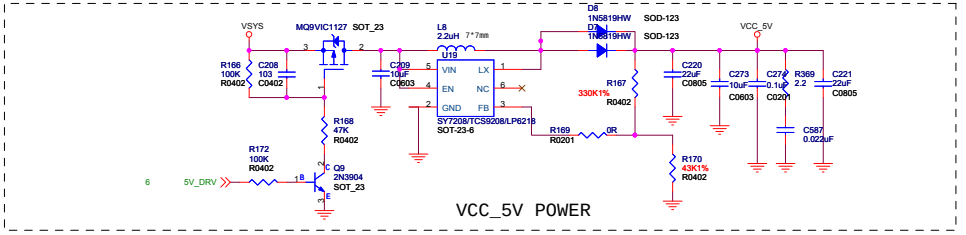

ALC5616
U34
ALC5616-CG
7.1 原来1uF
MICBIAS
adress:0x34
U39
AW8736
U41
AW8736
PA_5V
VSYS
SPK_CON
SPKRP1
SPKRN1
SPKLP1
SPKLN1
测试点焊盘1.5*2.5mm，两焊盘间距2mm
测试点焊盘2*3mm，两焊盘间距2mm
TP-1_5MM
测试点焊盘1.5mm，两焊盘间距2mm
CN5
AYF530635
MIC_LINE
ROUT_A_R
HP_DET
HP_GND
LOUT_A_R
插入耳机
拔出耳机
万利达 malata
万利达（厦门）技术中心
Project
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Document Number
8642Y
Size
A3
Title
Audio
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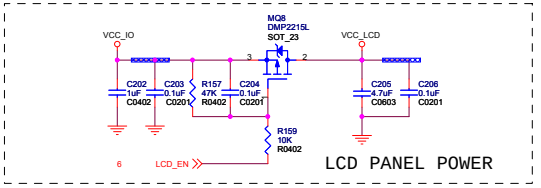






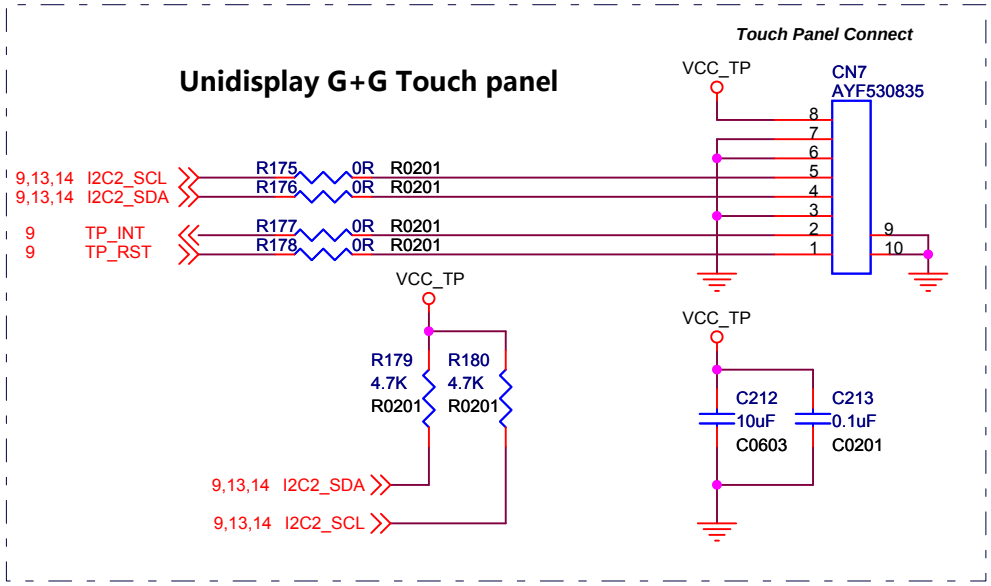
Correspondence between LCDC DATA and RGB			
LCDC_D0	B0	LCDC_D12	G4
LCDC_D1	B1	LCDC_D13	G5
LCDC_D2	B2	LCDC_D14	G6
LCDC_D3	B3	LCDC_D15	G7
LCDC_D4	B4	LCDC_D16	R0
LCDC_D5	B5	LCDC_D17	R1
LCDC_D6	B6	LCDC_D18	R2
LCDC_D7	B7	LCDC_D19	R3
LCDC_D8	G0	LCDC_D20	R4
LCDC_D9	G1	LCDC_D21	R5
LCDC_D10	G2	LCDC_D22	R6
LCDC_D11	G3	LCDC_D23	R7





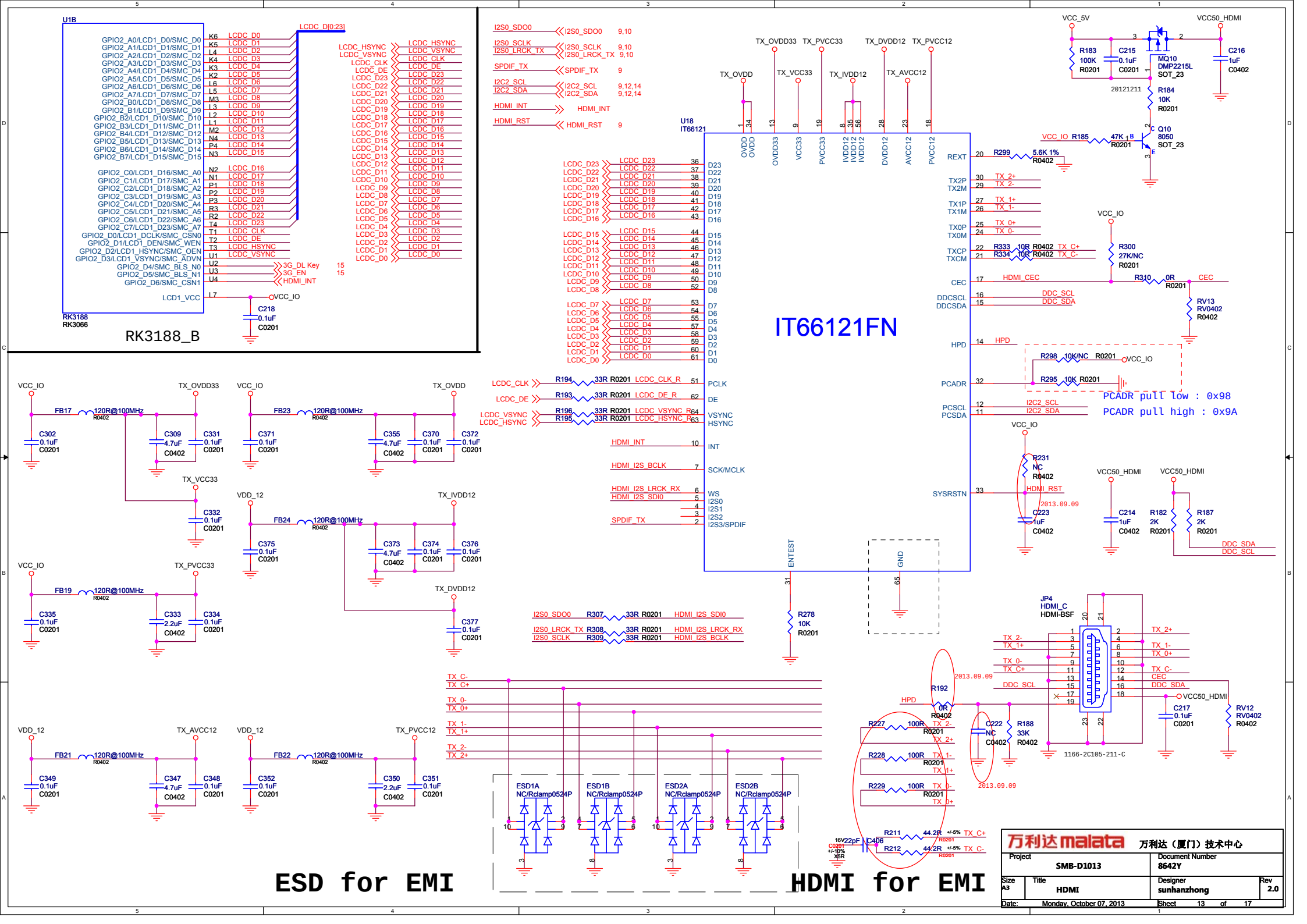
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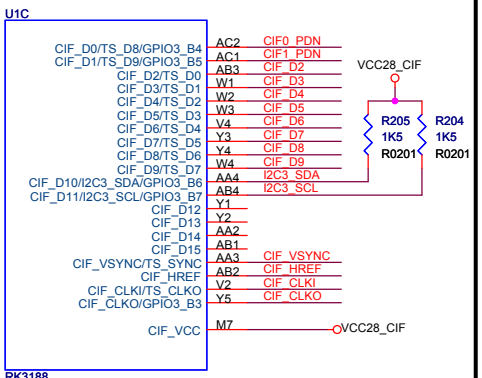
Project	SMB-D1013	Document Number	8642Y
Size A2	Title LCD panel	Designer	sunhanzhong
			Rev 2.0
Date:	Monday, October 07, 2013	Sheet	11 of 17



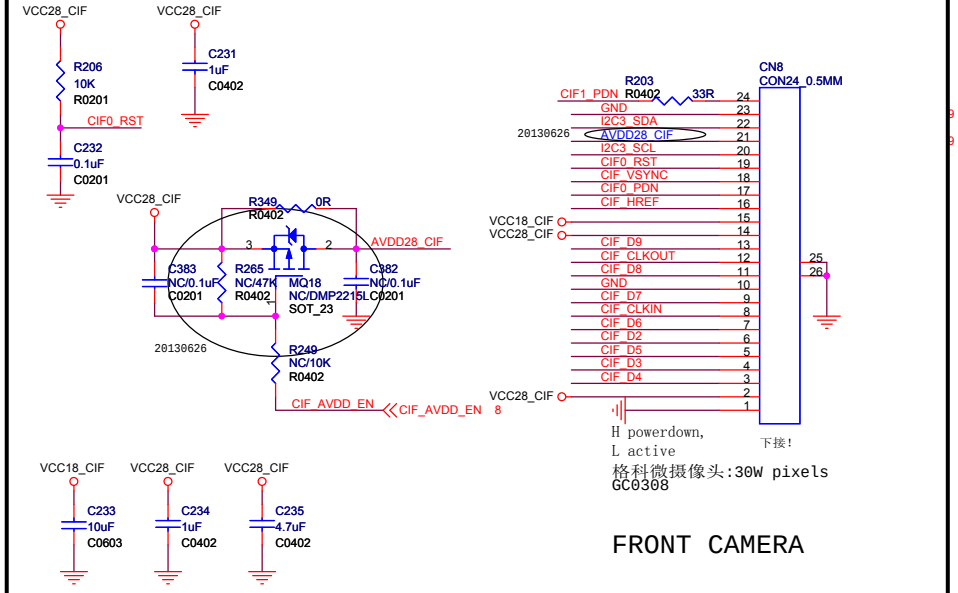
TOUCH PANEL CONNECTOR

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Project: SMB-D1013		Document Number: 8642Y	
Size: A4	Title: Touch panel	Designer: sunhanzhong	Rev: 2.0
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RK3188_B
IT66121FN
ESD for EMI
HDMI for EMI
PCADR pull low : 0x98
PCADR pull high : 0x9A
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Project
SMB-D1013
Document Number
8642Y
Size
A3
Title
HDMI
Designer
sunhanzhong
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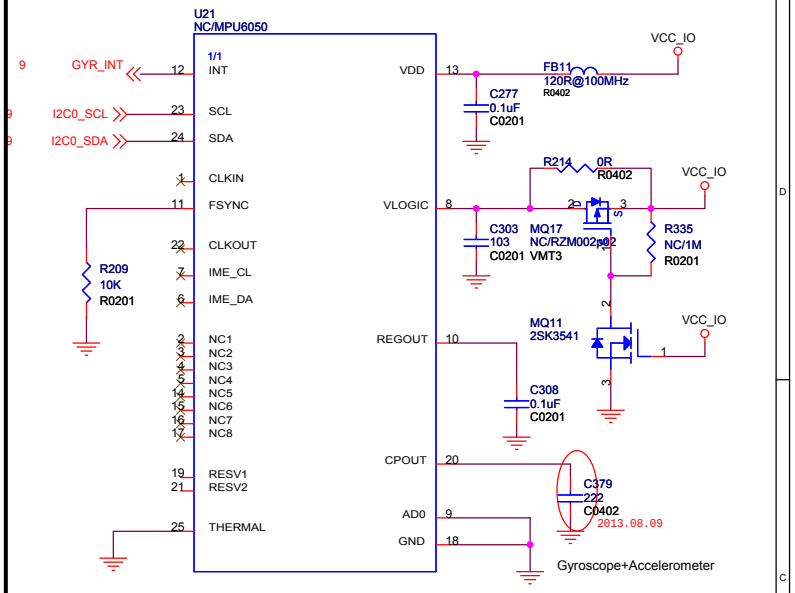


RK3188_C

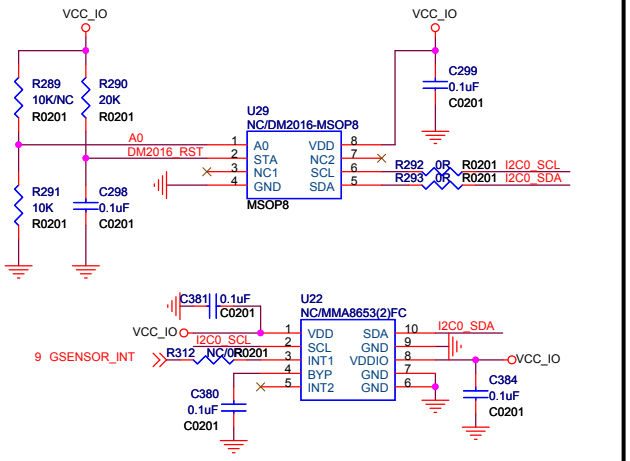


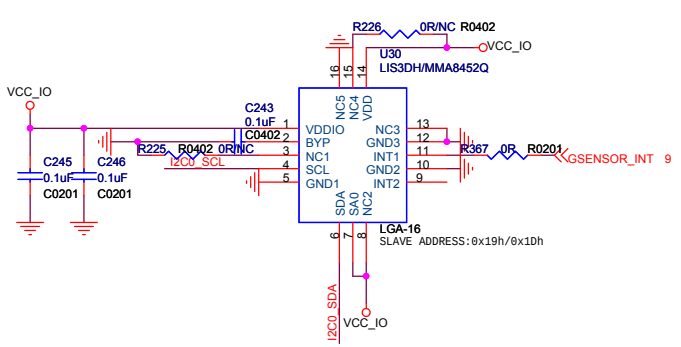
格科微摄像头:30W pixels
GC0308

FRONT CAMERA



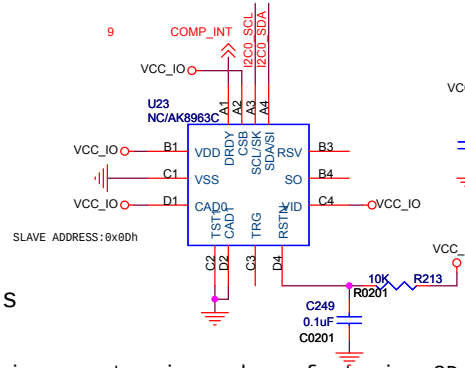
Gyroscope+Accelerometer





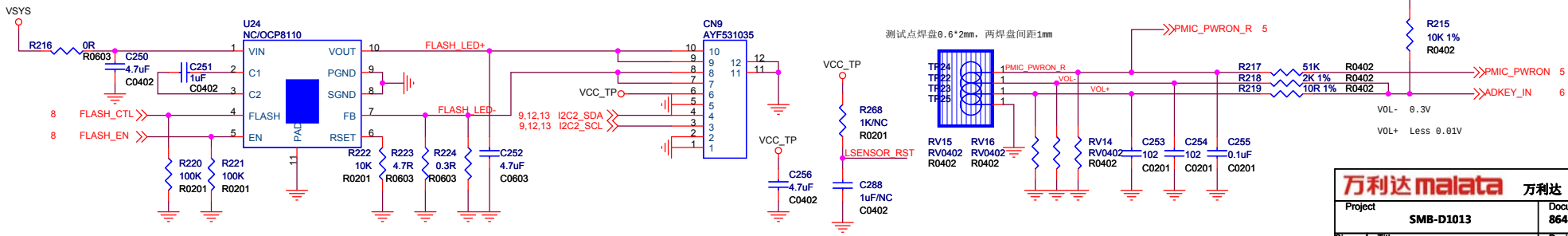
Note:
The first pin of G-sensor must be
place on the lower left corner of PCB.

3D G-Sensor



Compass

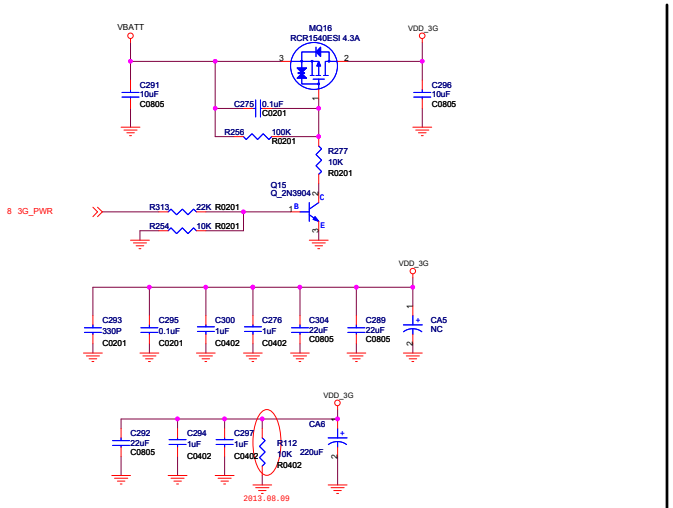
Note1:
LSM303D is a system-in-package featuring 3D
G-sensor and 3D compass,so if use LSM303D,
AK8963C should be NC.
Note2:
The first pin of AK8963C must be
place on the lower left corner of PCB.

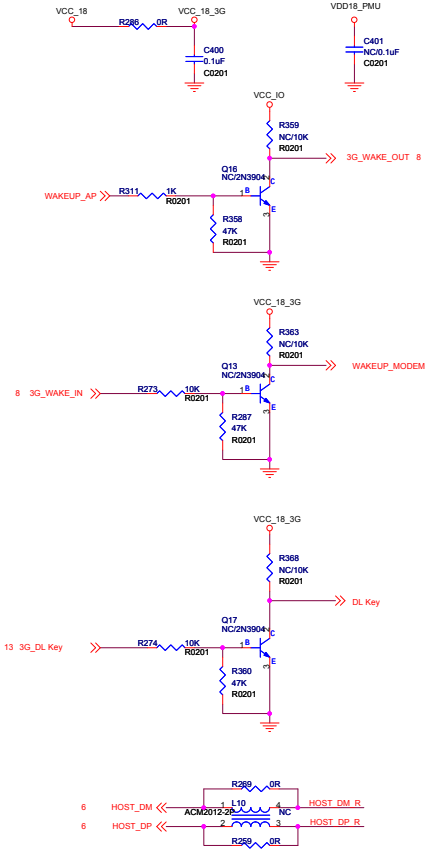


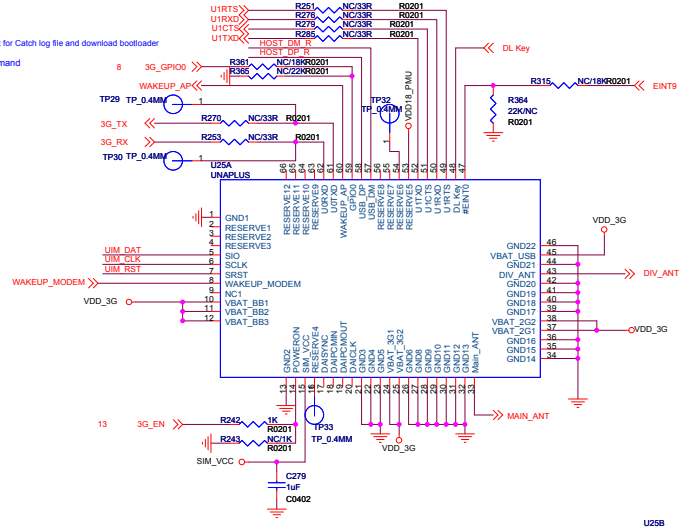
KEY BAORD When the system power on, the Adkey_in level is 0V, RK31 enter into recovery mode.

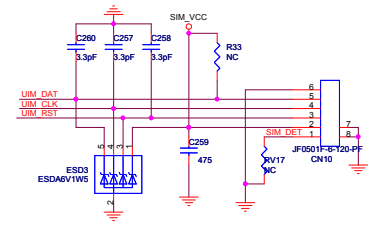
万利达 malata 万利达（厦门）技术中心

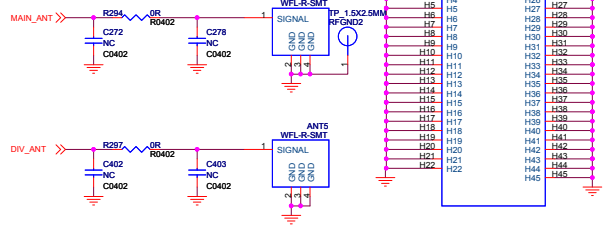
Project	SMB-D1013	Document Number	8642Y
Size A3	Title Camera/G_Sensor/Key/COMP/IR	Designer	sunhanzhong
Rev	2.0		
Date:	Monday, October 07, 2013	Sheet	14 of 17



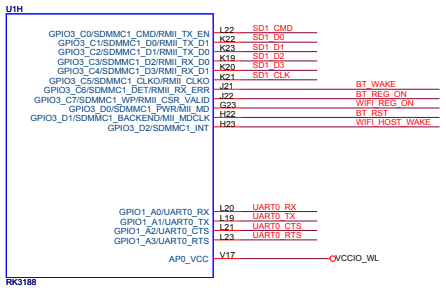




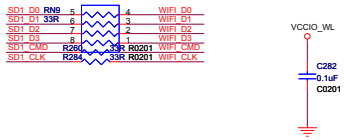




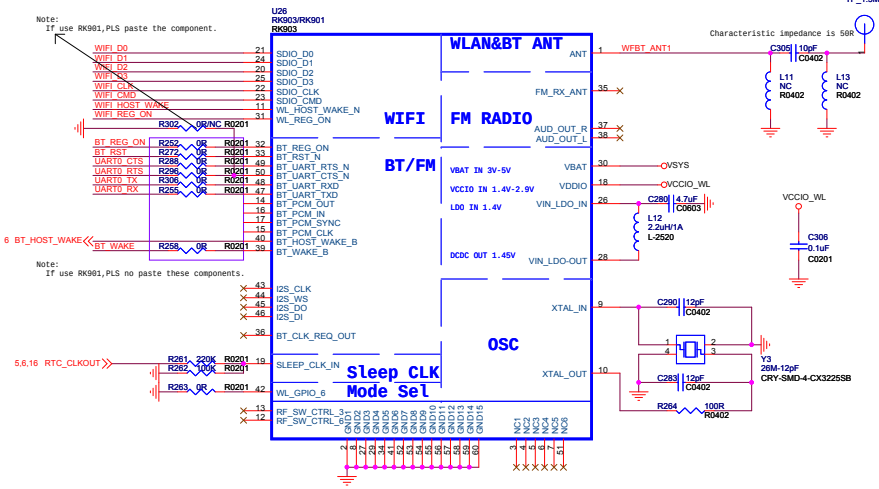
3G MODULE USI UNA



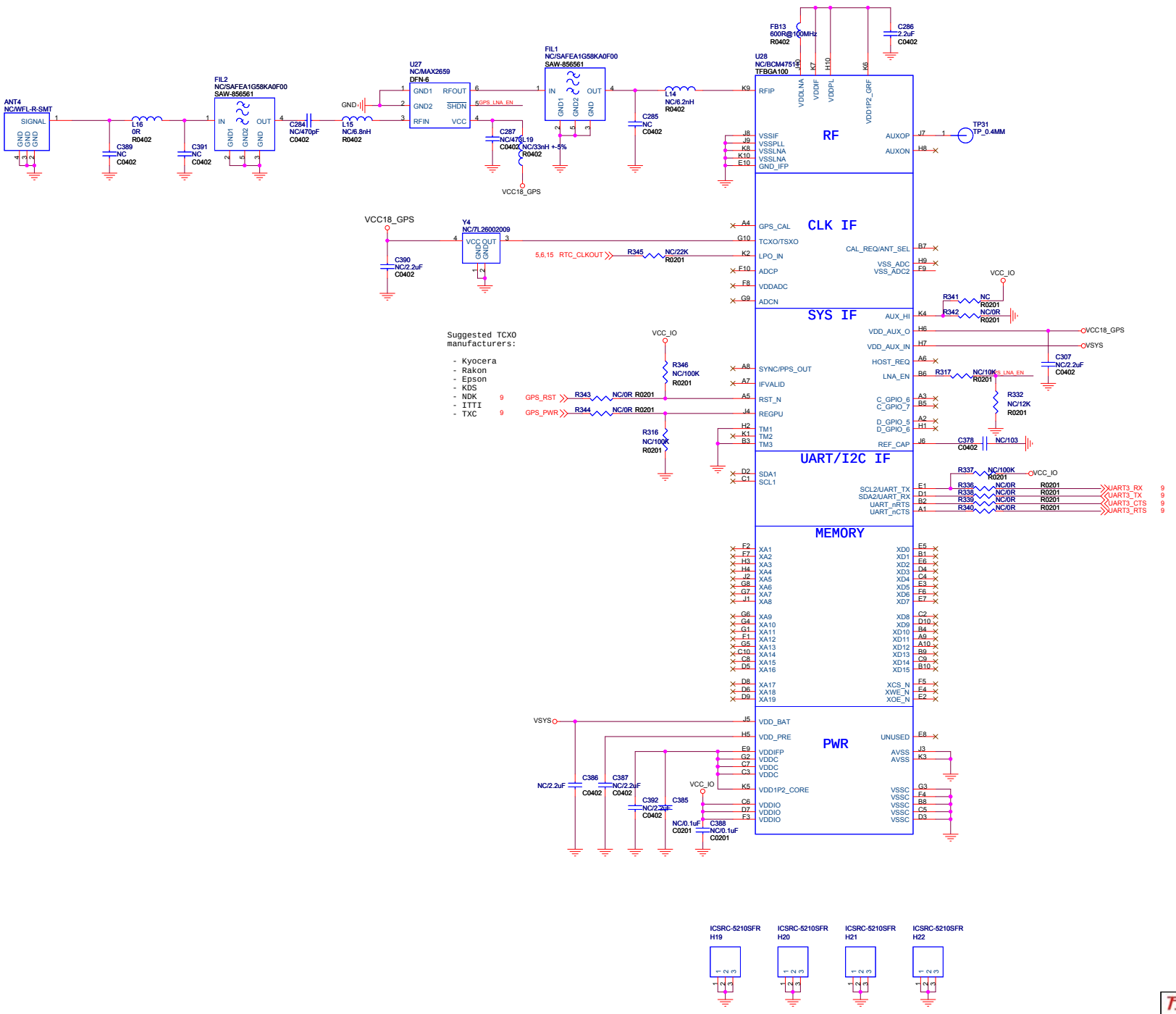
RK3188_H



Note :PLS design the RF under RK RF LAYOUT guide;
For more suggestions, please refer to the SPEC
of the wireless IC



万利达 malata	万利达（厦门）技术中心		
Project	SMB-D1013	Document Number	8642Y
Size A2	Title WIFI&3G	Designer sunhanzhong	Rev 2.0
Date: Monday, October 07, 2013		Sheet 15 of 17	



万利达 malata 万利达（厦门）技术中心

Project	SMB-D1013	Document Number	8642Y
Size C	Title GPS	Designer sunhanzhong	Rev 2.0
Date: Monday, October 07, 2013		Sheet 16 of 17	

CONTENT INDEXING

	标题/描述	页码
1	INDEX	1
2	Block Diagram	2
3	Key board	3
4	Change list	4

万利达 malata 万利达（厦门）技术中心

Project: SMB-D1013		Document Number: 8227Y	
Size: A3	Title: Index	Designer: Kevin	Rev: 3.0
Date: Wednesday, August 07, 2013		Sheet 1 of 4	



万利达 malata 万利达（厦门）技术中心			
Project: SMB-D1013		Document Number: 8227Y	
Size: A3	Title: Block Diagram	Designer: Kevin	Rev: 3.0
Date: Wednesday, August 07, 2013		Sheet 2 of 4	



万利达 malata 万利达（厦门）技术中心			
Project: SMB-D1013		Document Number: 8227Y	
Size: C	Title: Key board	Designer: Kevin	Rev: 3.0
Date: Wednesday, August 07, 2013		Sheet 3 of 4	

版本	标题	更改原因	更改内容
V1.0		First edictor	
V2.0		金手指难焊接	工艺改进。
V3.0		金手指难焊接	工艺改进。

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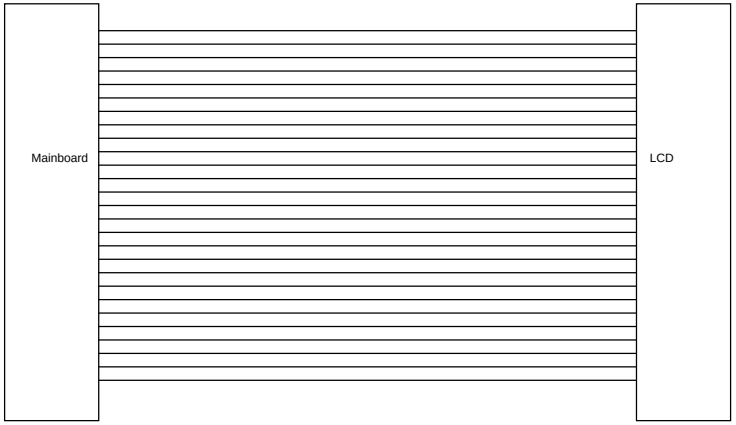
Project: SMB-D1013		Document Number: 8227Y	
Size: A3	Title: Change list	Designer: Kevin	Rev: 3.0
Date: Wednesday, August 07, 2013		Sheet 4 of 4	

CONTENT INDEXING

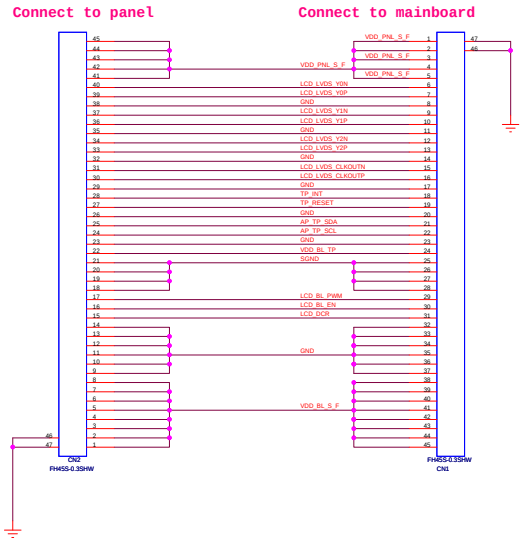
	标题/描述	页码
1	INDEX	1
2	Block Diagram	2
3	LCD FPC	3
4	Change list	4

万利达 malata 万利达（厦门）技术中心

Project: SMB-C1006		Document Number: 8218Y	
Size: A3	Title: Index	Designer: Kevin	Rev: 1.0
Date: Thursday, June 28, 2012		Sheet 1 of 4	



万利达 malata 万利达（厦门）技术中心			
Project: SMB-C1006		Document Number: 8218Y	
Size: A3	Title: Block Diagram	Designer: Kevin	Rev: 1.0
Date: Thursday, June 28, 2012		Sheet 2 of 4	

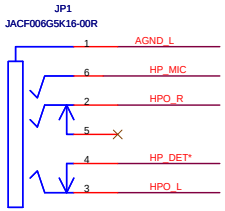


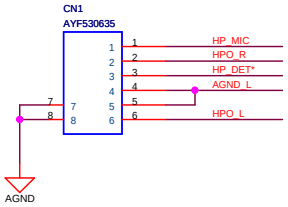
万利达 malata 万利达（厦门）技术中心			
Project: SMB-C1006		Document Number: 8218Y	
Size: C	Title: LCD FPC	Designer: Kevin	Rev: 1.0
Date: Thursday, June 28, 2012		Sheet 3 of 4	

版本	标题	更改原因	更改内容
V1.0		First edictor	

万利达 malata 万利达（厦门）技术中心

Project: SMB-C1006		Document Number: 8214Y	
Size: A3	Title: Change list	Designer: Kevin	Rev: 1.0
Date: Thursday, June 28, 2012		Sheet 4 of 4	





2、按键板 柔性线路板 7980C
3、输出板1 柔性线路板 (耳机接口) 7981C
4、输出板2 柔性线路板 (dock接口) 7982C
5、输出板3 柔性线路板 (液晶屏接口) -->SIM 7983C
6、输出板4 柔性线路板 (喇叭接口1) 7984C
7、输出板5 柔性线路板 (喇叭接口2) 7985C
8、输出板6 柔性线路板 (闪光灯板) 7986C
9、输出板7 柔性线路板 (麦克风板) 7987C NC

MALATA GROUP CO. LTD		
Title1	SMB-B1013: HEADPHONE	
Size B	Document Number 7981Y V1.2	Rev V1.2
Date: Wednesday, August 07, 2013	Sheet 1 of 1	

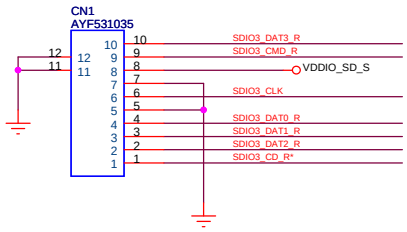
CONTENT INDEXING

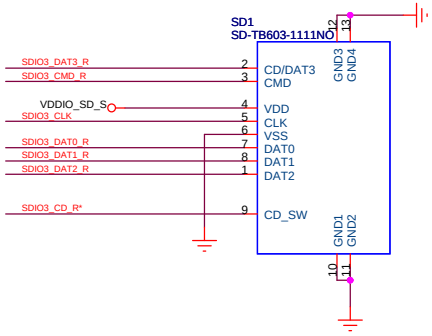
	标题/描述	页码
1	封面	1
2	MicroSD	2
3	更改记录	3

万利达 malata 万利达（厦门）技术中心

Project: SMB-D1013		Document Number: 8209Y	
Size: A	Title: 封面	Designer: ChenBin	Rev: 2.0
Date: Wednesday, August 07, 2013		Sheet 1 of 3	

MicroSD





万利达 malata 万利达（厦门）技术中心			
Project: SMB-D1013		Document Number: 8209Y	
Size: Custom	Title: MicroSD	Designer: ChenBin	Rev: 2.0
Date: Wednesday, August 07, 2013		Sheet 2 of 3	

版本	标题	更改原因	更改内容

万利达 malata 万利达（厦门）技术中心

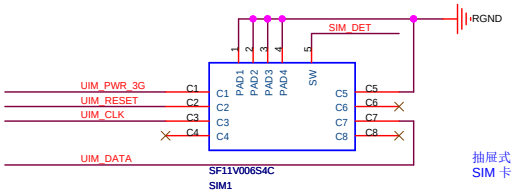
Project	Document Number	
SMB-D1013	8209Y	
Size: A	Title: 更改记录	Designer: ChenBin / Rev: 2.0
Date: Wednesday, August 07, 2013	Sheet 3 of 3	

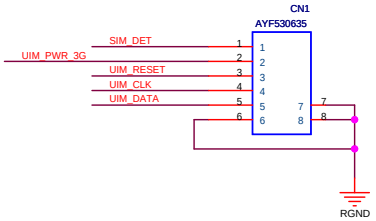
CONTENT INDEXING

	标题/描述	页码
1	封面	1
2	SIM Card	2
3	更改记录	3

万利达 malata 万利达（厦门）技术中心

Project: SMB-D1013		Document Number: 8229Y	
Size: A	Title: 封面	Designer: ChenBin	Rev: 2.0
Date: Wednesday, August 07, 2013		Sheet 1 of 3	





万利达 malata 万利达（厦门）技术中心

Project: SMB-D1013		Document Number: 8229Y	
Size: B	Title: SIM Card	Designer: ChenBin	Rev: 2.0
Date: Wednesday, August 07, 2013		Sheet 2 of 3	

版本	标题	更改原因	更改内容
V1.0		First edictor	
V2.0		原理图不变更	

万利达 malata 万利达（厦门）技术中心

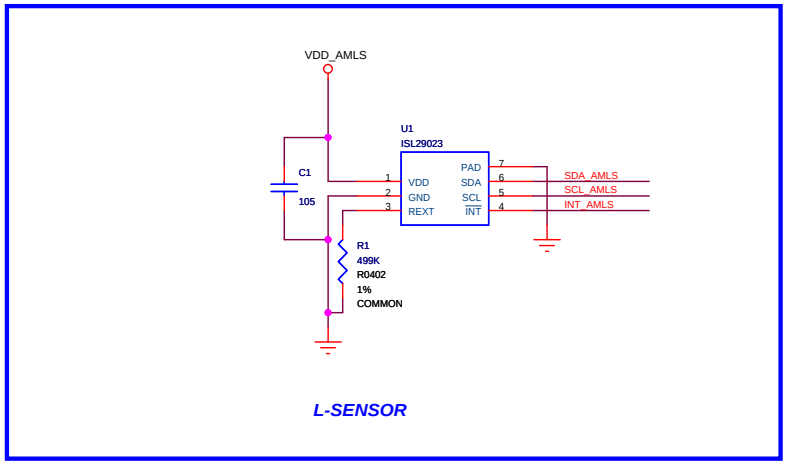
Project	Document Number	
SMB-D1013	8229Y	
Size: A	Title: 更改记录	Designer: ChenBin / Rev: 2.0
Date: Wednesday, August 07, 2013	Sheet 3 of 3	

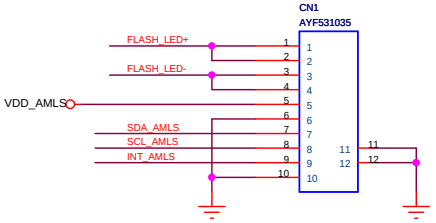
CONTENT INDEXING

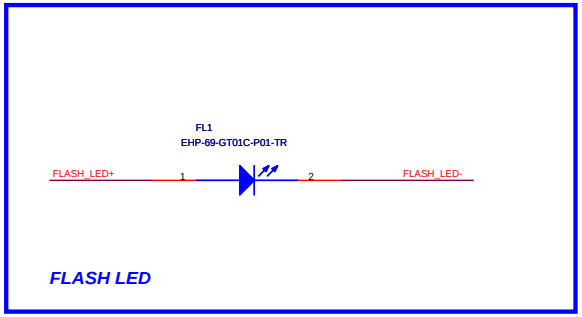
	标题/描述	页码
1	封面	1
2	Flash Light &Light Sensor	2
3	更改记录	3

万利达malata 万利达（厦门）技术中心

Project: SMB-D1013		Document Number: 8230Y	
Size: A	Title: 封面	Designer: ChenBin	Rev: 2.0
Date: Wednesday, August 07, 2013		Sheet 1 of 3	





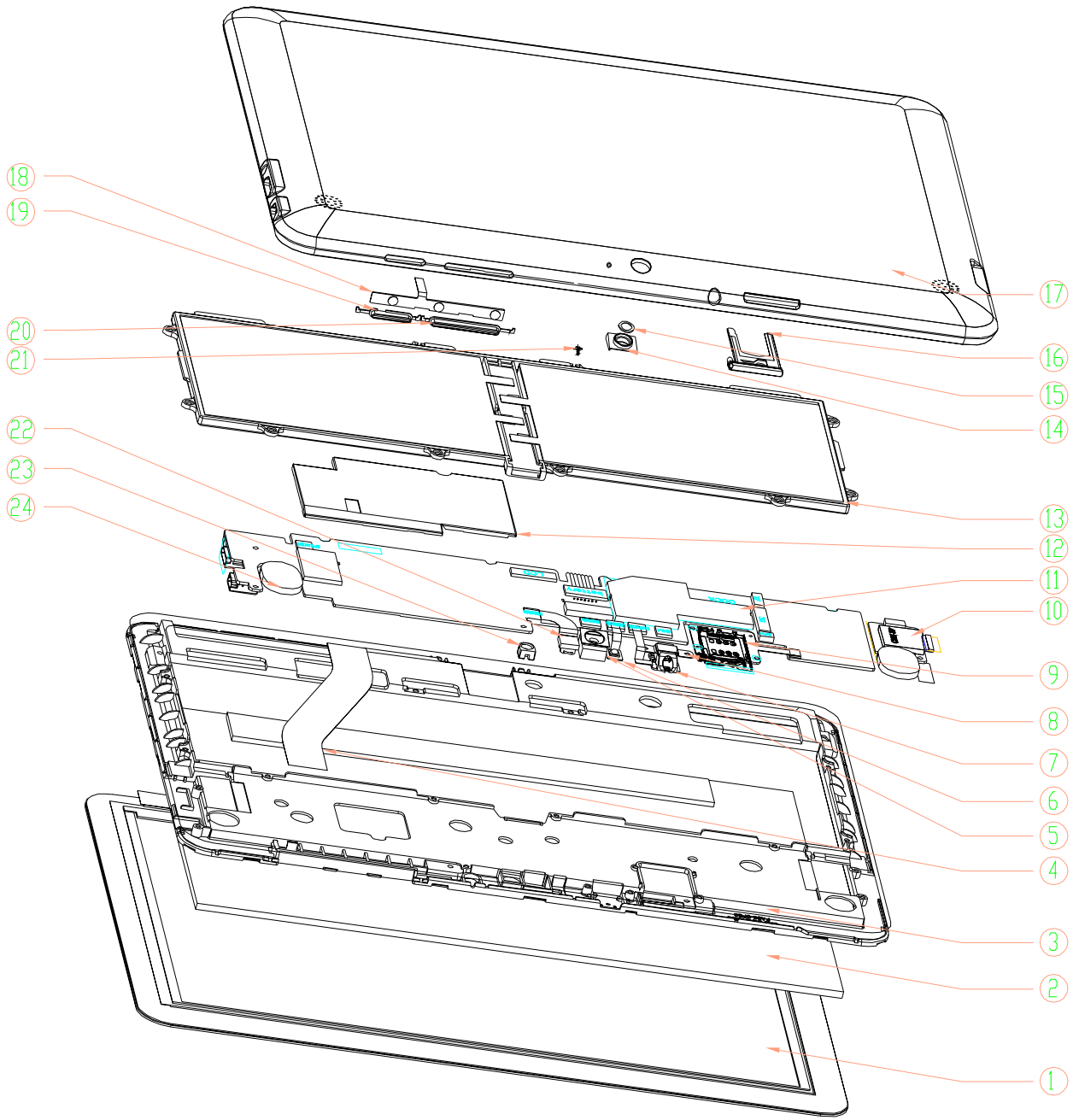


万利达 malata 万利达（厦门）技术中心			
Project: SMB-D1013		Document Number: 8230Y	
Size: B	Title: Flash Light &Light Sensor	Designer: ChenBin	Rev: 2.0
Date: Wednesday, August 07, 2013		Sheet 2 of 3	

版本	标题	更改原因	更改内容
V1.0		First edictor	
V2.0	1	解决光感无功能问题	增加C1电容，及改进FPC工艺

万利达malata 万利达（厦门）技术中心

Project	Document Number	
SMB-D1013	8230Y	
Size: A	Title: 更改记录	Designer: ChenBin / Rev: 2.0
Date: Wednesday, August 07, 2013	Sheet 3 of 3	



Item	SPECIFICATION	Qty	Parts No.	Material
27				
26				
25				
24	铆钉	2		
23	MIC硅胶套	1	PCB-94315-FR1	硅胶
22	前置摄像头	1		
21	螺丝	18		
20	音量键	1	SMB-D1013-KB04	ABS
19	电源键	1	SMB-D1013-KB03	ABS
18	按键板	1		
17	后壳	1	SMB-C1006-KB02	PC
16	SIM卡座	1	SMB-D1013-KB08	PC
15	后置摄像头镜片	1	SMB-D1013-KB07	PMMA
14	后置摄像头支架	1	SMB-D1013-KB06	ABS
13	电池	1		
12	主屏盖罩	1	SMB-C1006-PT01	
11	主板	1		
10	TF卡座板	1		
9	SIM卡座板	1		
8	耳机压板	1	SMB-D1013-PT02	电铁板
7	耳机	1		
6	light sensor	1		
5	后置摄像头	1		
4	液晶屏连接线	1		
3	铁铝合金中板	1	SMB-D1013-PT01 SMB-D1013-KB05	铝合金 PMMA+SUSP
2	液晶显示屏	1		
1	电容触摸屏	1		

? ? ? ? ?							? ?	SMB-C1006	
??/??							SMB-D1013	? ?	
XX	±0.10	±0.15	±0.50	±1.00	±2.00		爆炸图	???	
XX.x	±0.05	±0.10	±0.20	±0.50	±1.00			? ?	
XX.xx	±0.02	±0.05	±0.10	±0.20	±0.50	? ?		? ?	1:1
??/??						? ?		? ?	?/??
XX	±1°					? ?		? ?	? ? ? ?
XX.x	±0.5°						? ? ? ? ? ? ? ? ?		
XX.xx	±0.2°						WANLIDA GROUP CO. LTD		

Common Troubleshooting

Q.: When the device will not start up what are the basic detection steps?

Answer:

1. If the device can start up via adaptor powering, it means the battery power is low.
2. Ensure the adaptor works normally.

Q. : What to do if water accidentally runs into the device?

Answer:

1. It is strictly forbidden to boot the device which may result in more serious damage to the tablet computer.
2. Wipe dry the device surface, and then take it to a professional service center for repairing immediately.

Q.: How to restore the default settings?

Answer: Open the " Settings " > " backup and reset " > " restore the default settings " > reset the computer. Save your data before restoring default settings.

Q.: How to prolong the use time of the battery?

Answer:

1. Adjust LCD screen brightness to a proper value.
2. Adjust to appropriate volume.
3. Adjust to proper screen timeout time.

Q.: Although having a normal network connection, Internet is still slow, what to do?

Answer: It is recommended to clear your browser cache, for specific operations please refer to the " browser " part.

Q.: The device hangs, what to do?

Answer: Hold the power button to shut down the device.

Common Corrective Maintenance

Bug 1) Starting up fails, screen doesn’t show the self-testing picture.

1. Check if the battery is low, if it is, connect the power adaptor to charge the device. Then press the Power button to start up after charging it for 10 minites (caused by low battery).
2. Check whether power socket of mainboard is plugged alright.
3. Check whether the adapter is 5V2A, otherwise check if there is short circuit or leakage.
4. Check whether the mainboard has a scorching smell caused by integrated heating or line short circuit.

Bug 2) When pressing the power button the voltage is not normal, there may be two situations:

1. Firmware or software bug: programme the firmware again.
2. Hardware bug: first check by hand whether the mainboard is heated, the connecting line is well connected, try to find out which part is malfunctioning by replacing by turns the mainboard and the LCD and launching the device.

Bug 3) Starting up crash at the stage of starting up picture.

Malfunction can indicate problems of two aspects:

1. Firmware of software: caused by a loss of the document package or too much software installed, the suggestion is to reinstall the firmware.
2. Hardware malfunction: a) check whether the voltage is too low, the adaptor is well connected, usually caused by low battery or a failure of the battery. b) Motherboard's damaged, replace the motherboard.

Bug 4) The battery can't be charged after starting up.

1. Check whether the battery lines are in good condition and the battery doesn't have a leakage.
2. Check whether the power supply VCC+3.5v~4.2V of battery is functioning.

Bug 5) USB port, HDMI port, SD card port don't function.

1. The three connections lead to motherboard directly, so first check if there are any bad contacts or broken connection.
2. Check if the external device is compatible with the original device.
3. Due to the frequent inserting and pullting out, the solder between the connector and the motherboard might not be in good condition, re-solder it or renew the connector.

Bug 6) The camera doesn't work.

1. Check if the camera is activated or there is dust in the lens.
2. Check the hardware, check whether sensor is connected well to the motherboard, replace the sensor to see if it's broken, otherwise it is the motherboard bug.

Bug 7) WIFI does not work.

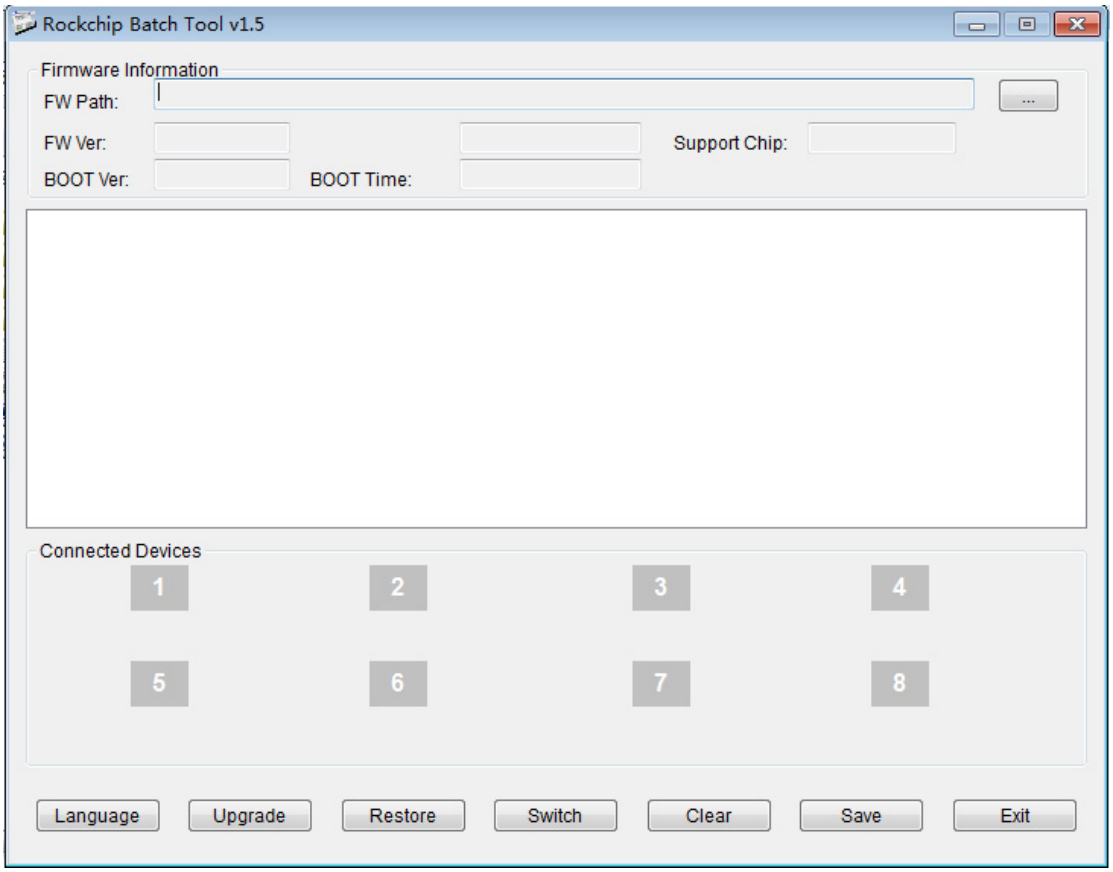
1. Check whether WIFI can be started, please refer to the instruction to get details.
2. Check the hardware, whether the WIFI board and antenna are well connected, check voltage of WIFI board, crystal oscillator.

Bug 8) 3G does not work.

1. Check whether there is 3G module, whether 3G function is activated, whether SIM card works well, and whether the service provider related has been connected
2. Check the hardware: whether the 3G module is in good contacts, whether the mainboard port is of dry welding.

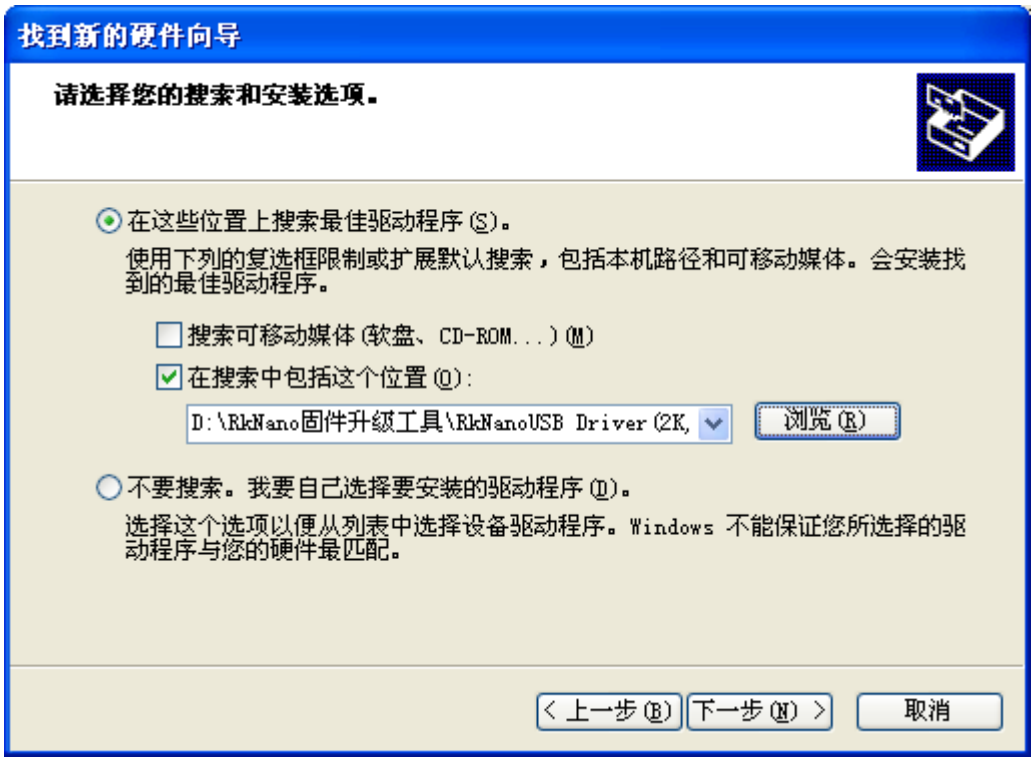
Firmware Update Guide (USB Burning)

1. Open RKBatchTool.exe



2. Power down the device and connect to the computer. Hold on the VOL+ and the Power key. You must install the driver at first time.


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这个向导帮助您安装软件:
rockusb Device
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自动安装软件(推荐)(I)
从列表或指定位置安装(高级)(S)
要继续，请单击“下一步”。
< 上一步(B)
下一步(N) >
取消

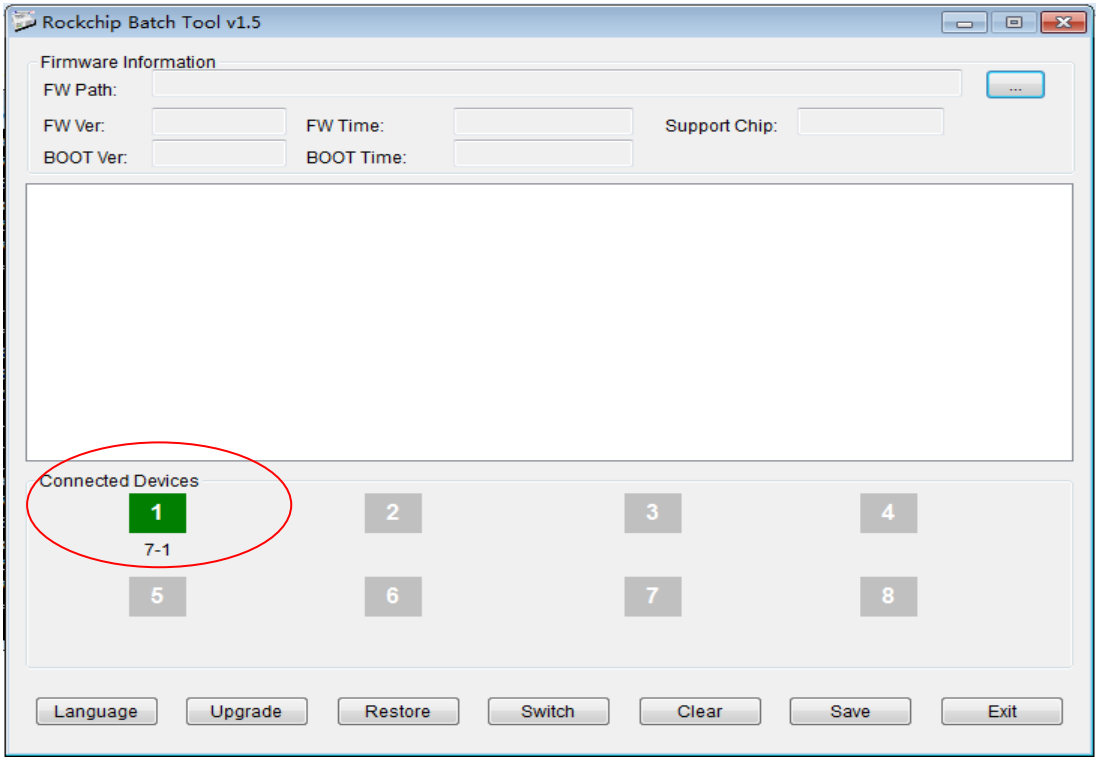

找到新的硬件向导
请选择您的搜索和安装选项。
在这些位置上搜索最佳驱动程序(S)。
使用下列的复选框限制或扩展默认搜索，包括本机路径和可移动媒体。会安装找到的最佳驱动程序。
搜索可移动媒体(软盘、CD-ROM...)(M)
在搜索中包括这个位置(O):
D:\RkNano固件升级工具\RkNanoUSB Driver(2K,
浏览(R)
不要搜索。我要自己选择要安装的驱动程序(D)。
选择这个选项以便从列表中选择设备驱动程序。Windows 不能保证您所选择的驱动程序与您的硬件最匹配。
< 上一步(B)
下一步(N) >
取消

Choose the path for the driver.

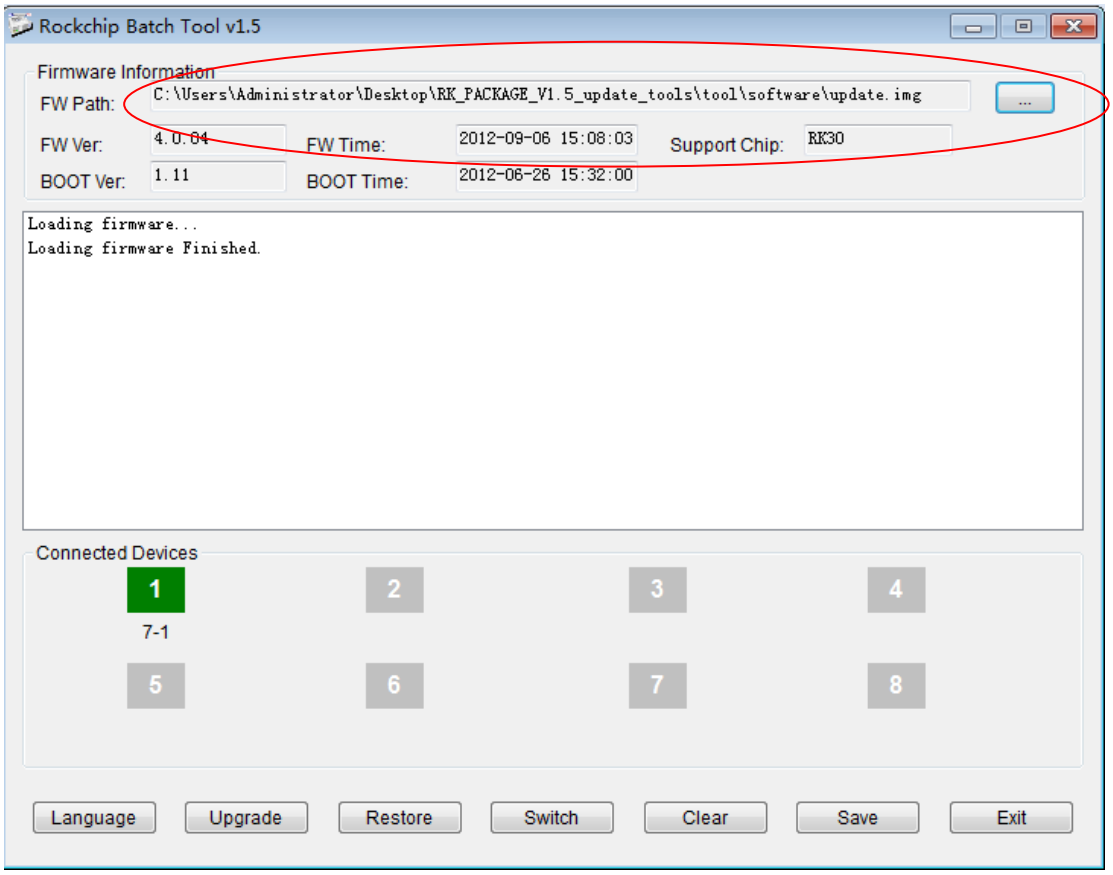




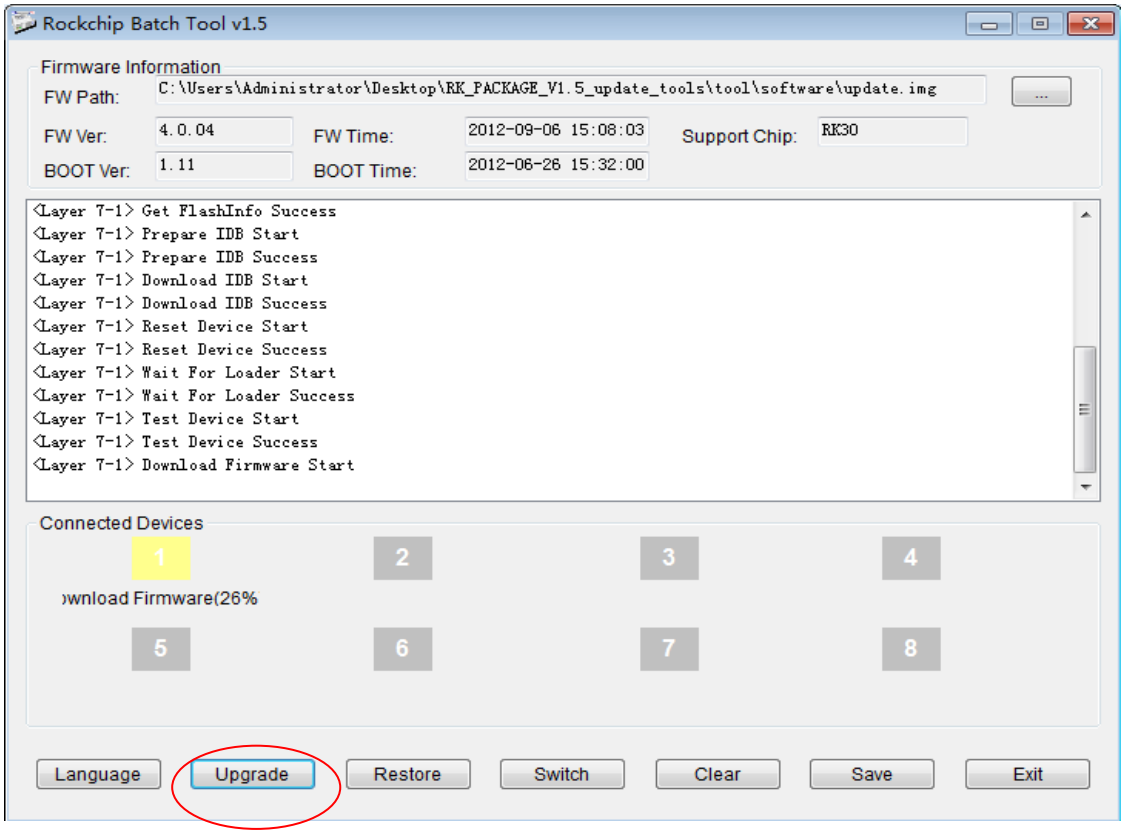
Then the device can be found in the batch tool.



3. Select update.img in FW PATH;(the FW is named “update.img”in the zip file.)



4. Click update.



5. Update successes.

