

- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic

**SAMSUNG PROPRIETARY**  
 THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION AND IS THE PROPERTY OF SAMSUNG ELECTRONICS CO.'S PROPERTY. DO NOT DISCLOSE TO OR DUPLICATE FOR OTHERS EXCEPT AS AUTHORIZED BY SAMSUNG.

# ISTANBUL

CPU : Intel PENRYN  
 Chip Set : Intel CANTIGA PM + ICH9M  
 Remarks : Montevina Platform (NB9M)

Model Name : ISTANBUL  
 PBA Name : MAIN  
 PCB Code : TPT : BA41-00919A  
 : GCE : BA41-00920A  
 : NAN : BA41-00921A  
 Dev. Step : PV  
 Revision : 00  
 T.R. Date : 2008.07.18

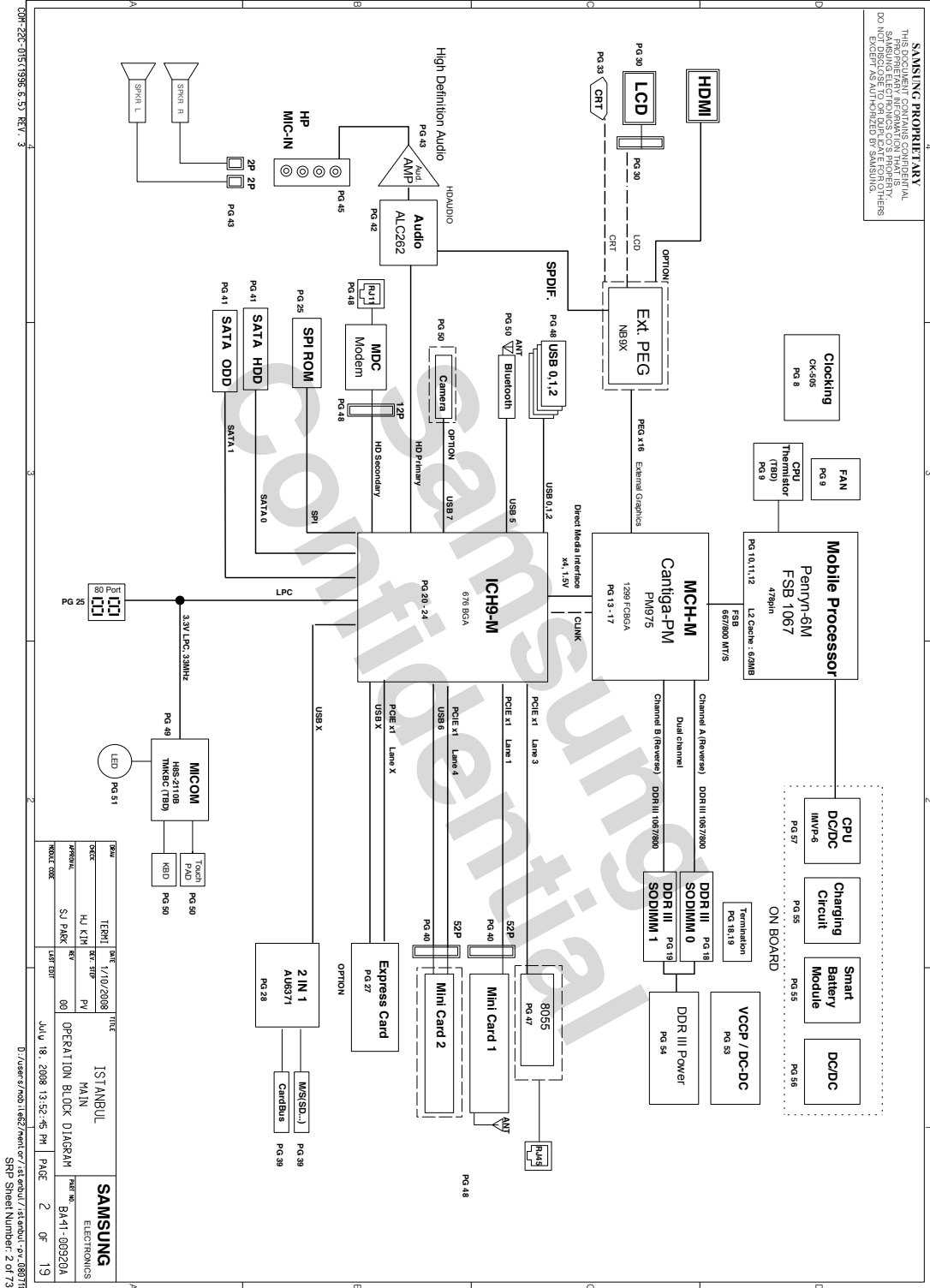
DRAW	CHECK	APPROVAL

Owner : SEC Mobile R & D Signature : X

REV	DATE	TITLE	APP'D
001	1/10/2008	ISTANBUL COVER	
002	06/30/08		
003	07/18/08		

- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



## 8. Block Diagram and Schematic

THIS DOCUMENT CONTAINS CONFIDENTIAL SAMSUNG ELECTRONICS CO.'S PROPERTY. DO NOT DISCLOSE OR REPRODUCE ANY PARTS WITHOUT EXPRESS AUTHORIZATION BY SAMSUNG.

### BOARD INFORMATION

#### SCHEMATIC ANNOTATIONS AND BOARD INFORMATION

PCI Devices	IDSEL#	RED/GNT#	Interrupts
Chassis	AD25	3	A, B, C
USB	AD28(Internal)	-	USB2.0 #1 (USB#1), A USB2.0 #2 (USB#1), B USB2.0 #3 (USB#1), C USB2.0 #4 (EHCI), D USB2.0 #5 (EHCI), E
(HID to PCI) L1 to USB1/2/3/4/5/6/7/8/9/10/11/12 Internal MAC ACT Link GLAN	AD28(Internal) AD28(Internal)	- -	B E F

#### Voltage Rails

Power, DC reference power supply (7 to 21V)  
VDC\_CORE Core Voltage for CPU  
VDC\_VAUX Core Voltage for GPU & CHASSIS  
GFX\_CORE Core Voltage for GPU  
P1.5V 1.5V always power rail (for CPU)  
P3.3V 3.3V always power rail (for MIOCN)  
P3.3V\_WMCN 3.3V always power rail (for MIOCN)  
P1.8V 1.8V switched power rail (off in S3/S5)  
P1.5V 1.5V power rail for DDR (off in S4/S5)  
P1.8V\_AUX 1.8V power rail for DDR (off in S4/S5)  
P3.3V 3.3V always power rail (for MIOCN)  
P3.3V 3.3V switched on power rail (off in S3/S5)  
P3.3V\_AUX 3.3V switched on power rail (off in S3/S5)  
P5.0V 5.0V always power rail  
P5.0V\_AUX 5.0V switched on power rail (off in S4/S5)  
P5.0V\_2AUX 5.0V always power rail

USB PORT Assign	PCI Express Assign		
PORT #	ASSIGNED TO	PORT #	ASSIGNED TO
0	SYSTEM PORT1	0	NC
1	SYSTEM PORT2	1	Card 1 (MIOCN)
2	SYSTEM PORT3	2	NC
3	SYSTEM PORT4	3	MIOCN
4	NC	4	Card 2 (Robson or DBG-7)
5	BluePort Express 2	5	NC
6	BluePort Express 1		
7	Camera		
8	NC		

Crystal / Oscillator	FREQUENCY	DEVICE	USAGE
Crystal	32.768KHz	ICH8M	Real Time Clock
Crystal	14.1915MHz	CLKOC	CLKLOCK Generator
Crystal	25MHz	LAN	Intel LAN

LCD Pannel Detect (TS0)	Resolution	PANNEL_DETECT_0
Devices	Resolution	

I C / SMB Address	Master Address	Slave Address	Bus
ICH8M	0114 101x	7Ah	SMBUS Master
CPM Thermal Sensor	0114 101x	7Ah	Thermal Sensor
SCHDMMI	0114 101x	4Ah	
SCHDMMI	1010 010x	8Ah	
Thermal Sensor on SCHDMMI	0011 001x	3Ah	
SCHDMMI	1014 001x	D2h	
CK-SDOH (Clock Generator)	1104 001x		Clock, Unused Clock Output Disable

#### REVISION HISTORY

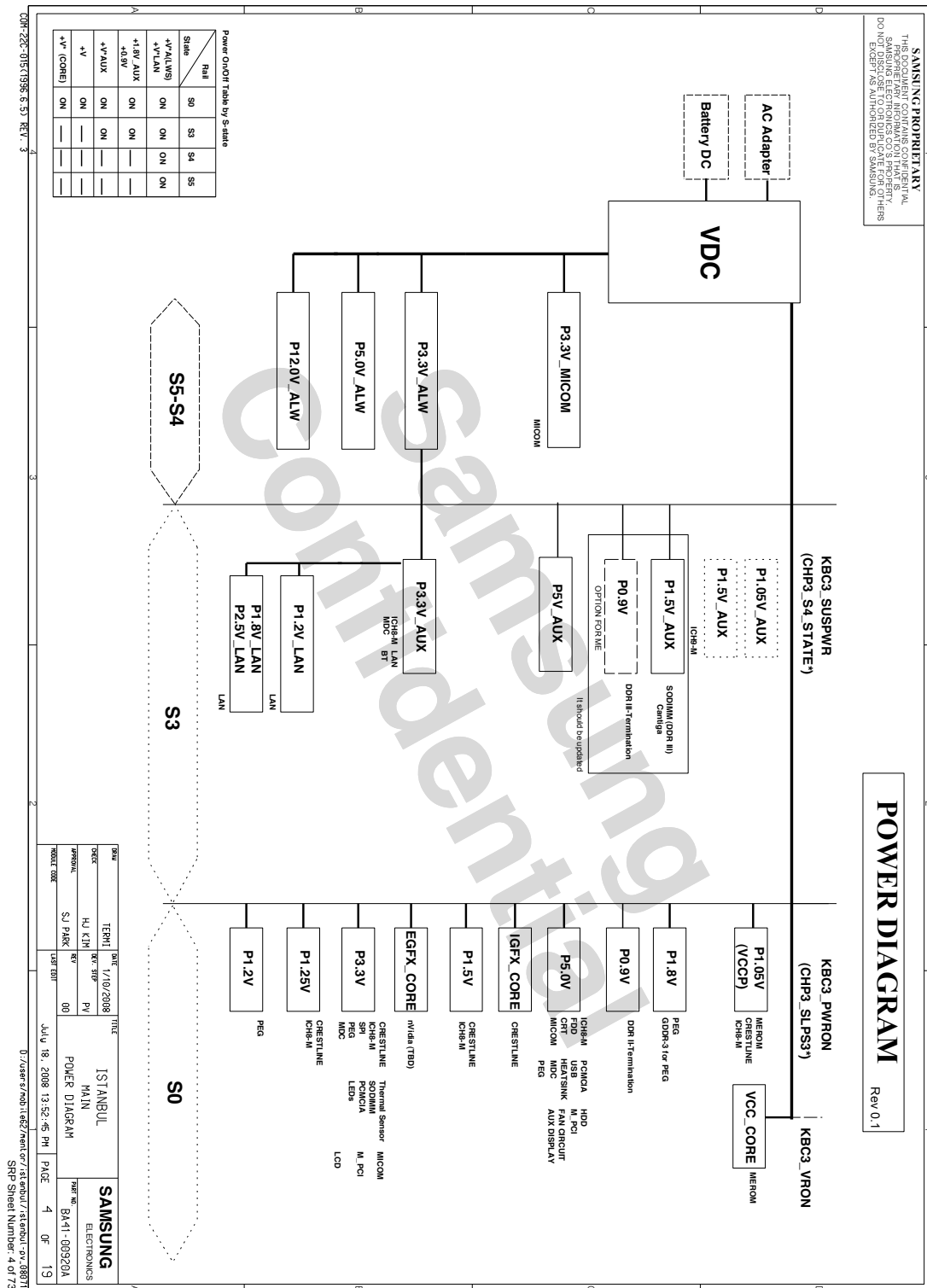
See rev notes for more information.

REVISION	DATE	BY	CHKD	TTITLE
000	17/10/2008	TERHJ	TKJ	ISTANBUL
001	18/07/2008	HJ KJM	TKJ	CHIPSET POWER
002		SJ PARK	TKJ	UNDEFINED

DATE: July 18, 2008 13:52:45 PM PAGE 3 OF 19  
SRP Street Number: 3 of 73

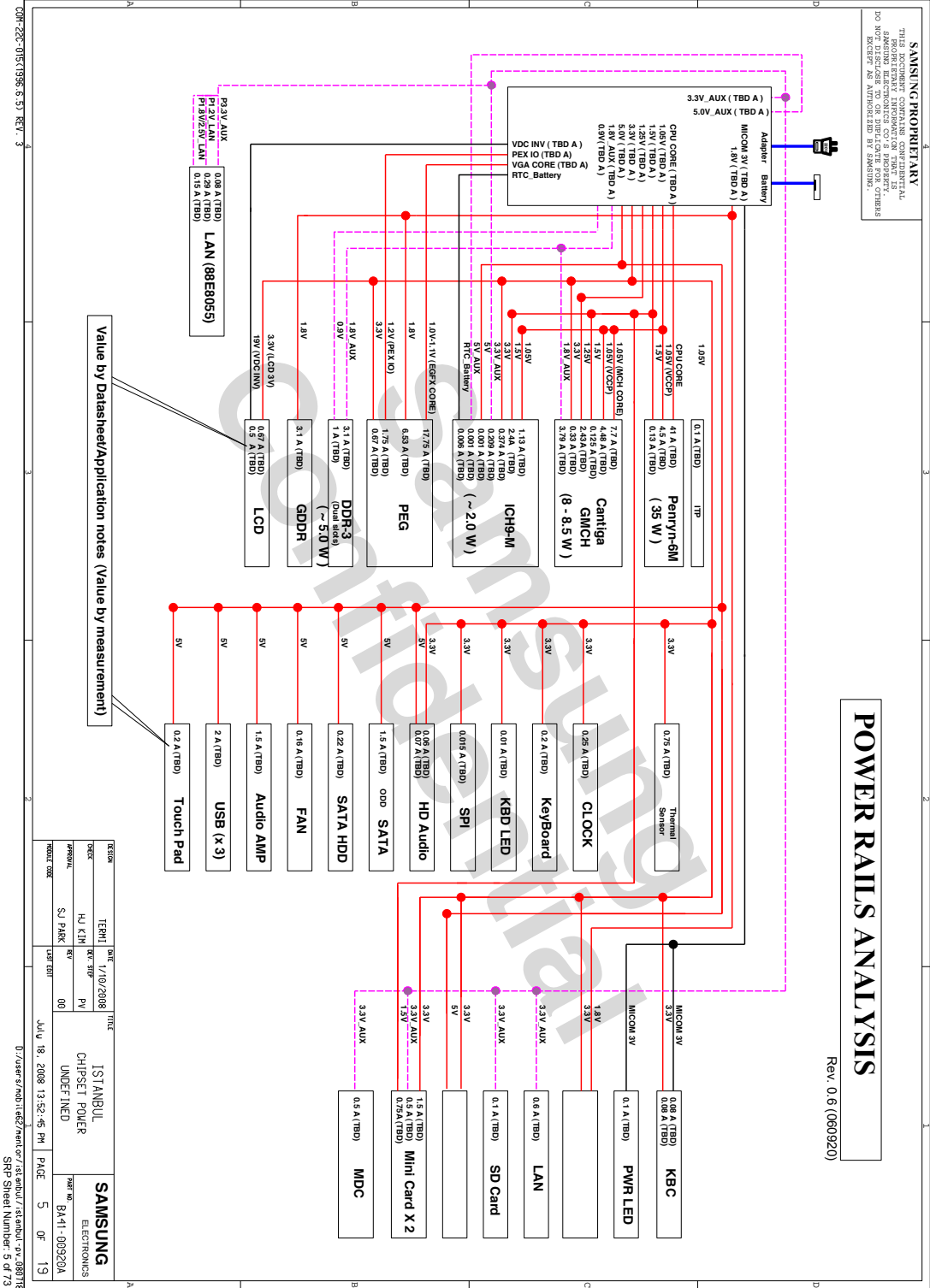
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



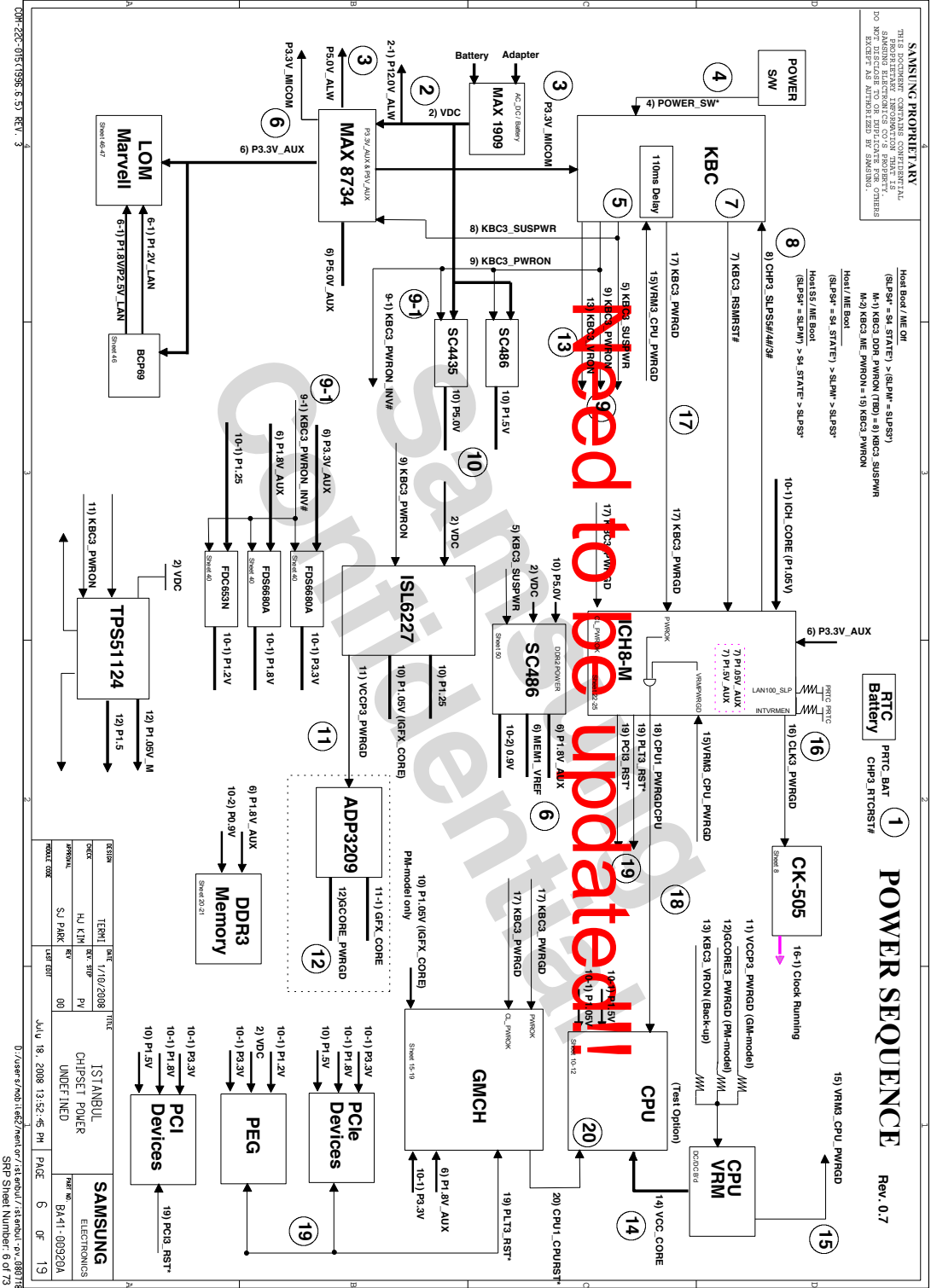
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

# 8. Block Diagram and Schematic



- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic

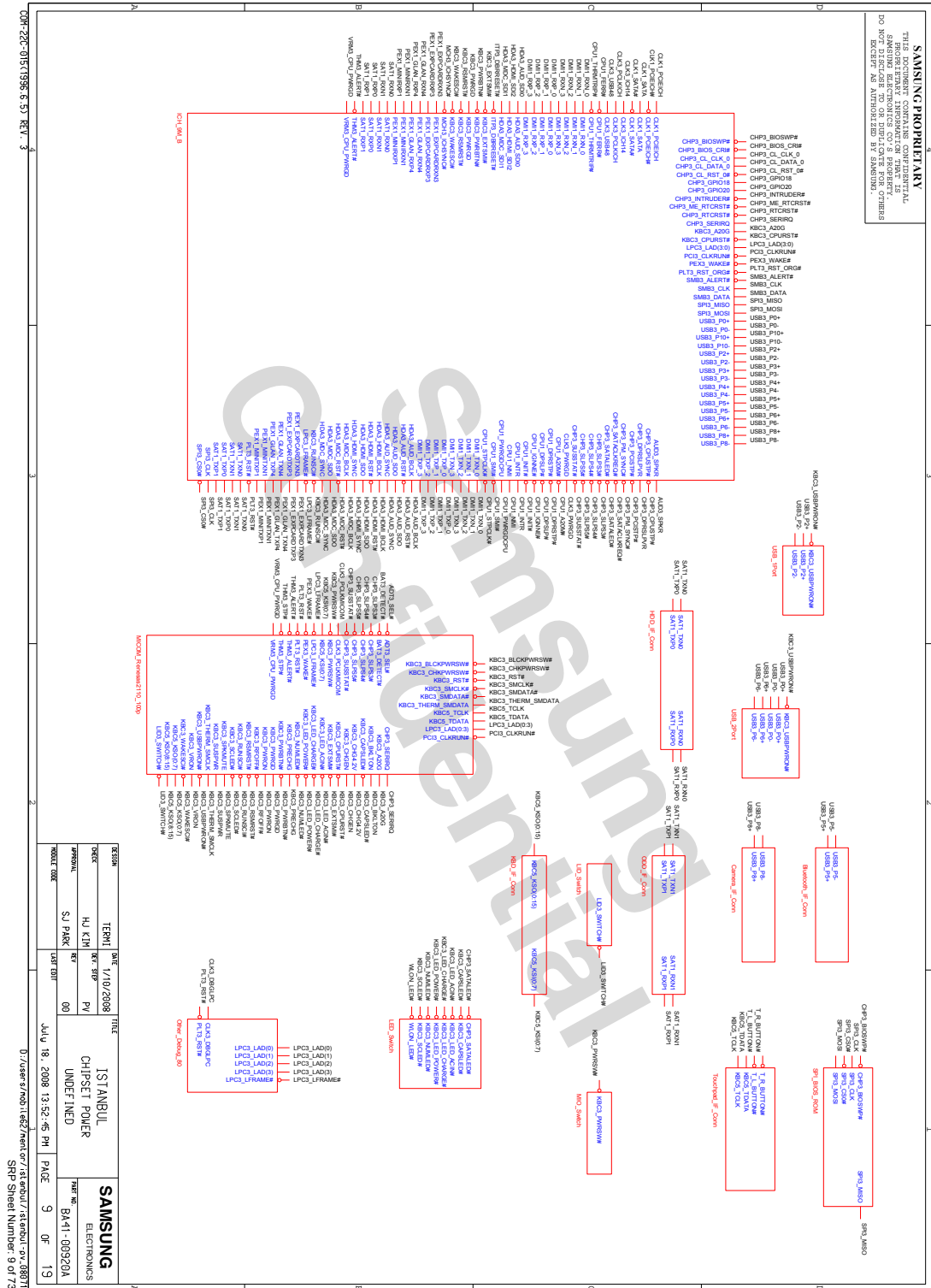








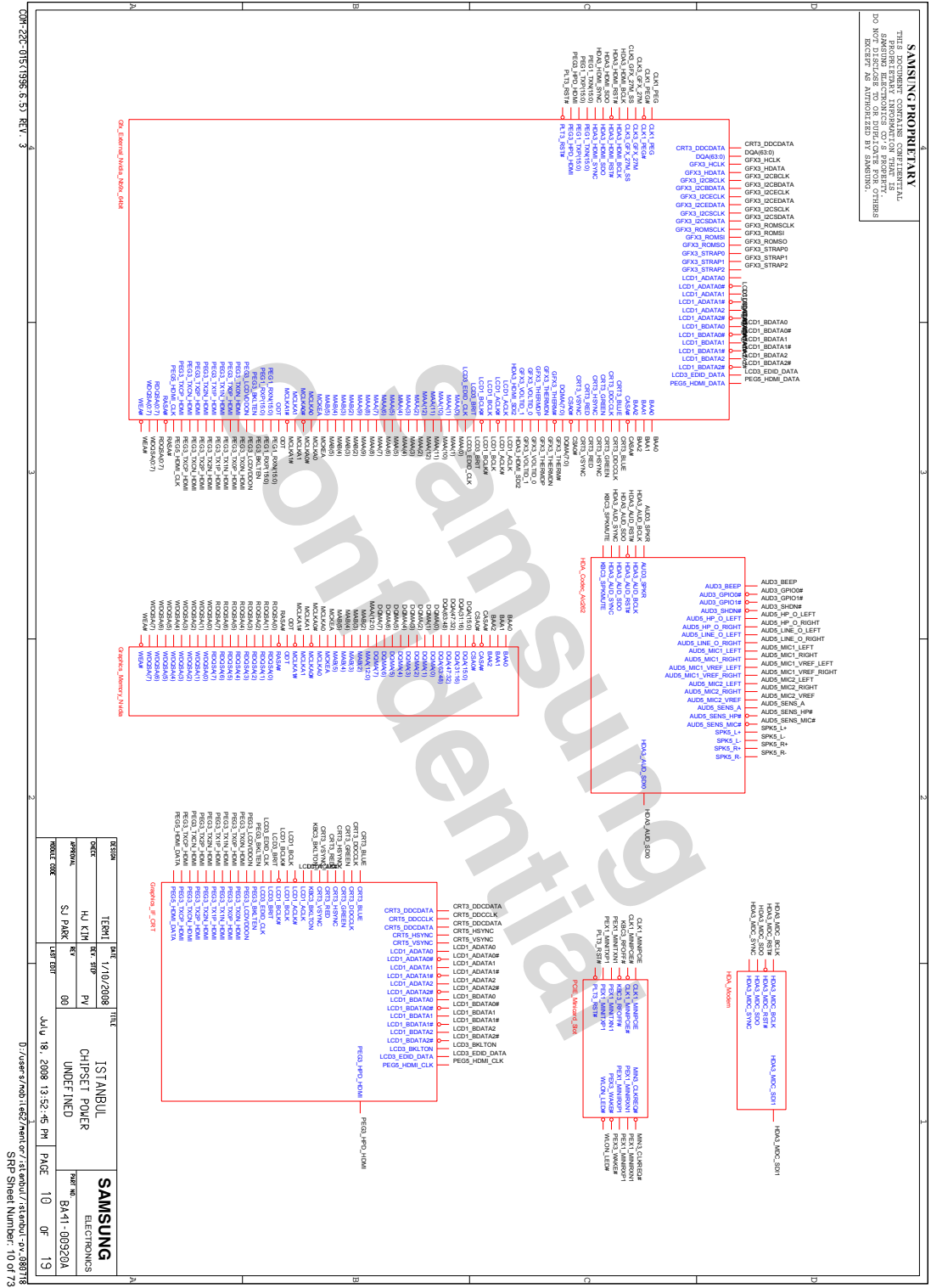
# 8. Block Diagram and Schematic



REV	DATE	BY	CHK	APP	DESCRIPTION
01	17/10/2008	TEPHI	TEPHI	PI	ISTANBUL
02	18/12/2008	HJ KIM	TEPHI	PI	CHIPSET POWER
03	18/12/2008	SJ PARK	TEPHI	PI	UNDEFINED

D:\users\moh1\se2\proj\ot\st\anbu\st\anbu\p\c\080718  
 July 18, 2008 13:52:45 PM PAGE 9 OF 19  
 SRP Sheet Number: 9 of 73

# 8. Block Diagram and Schematic



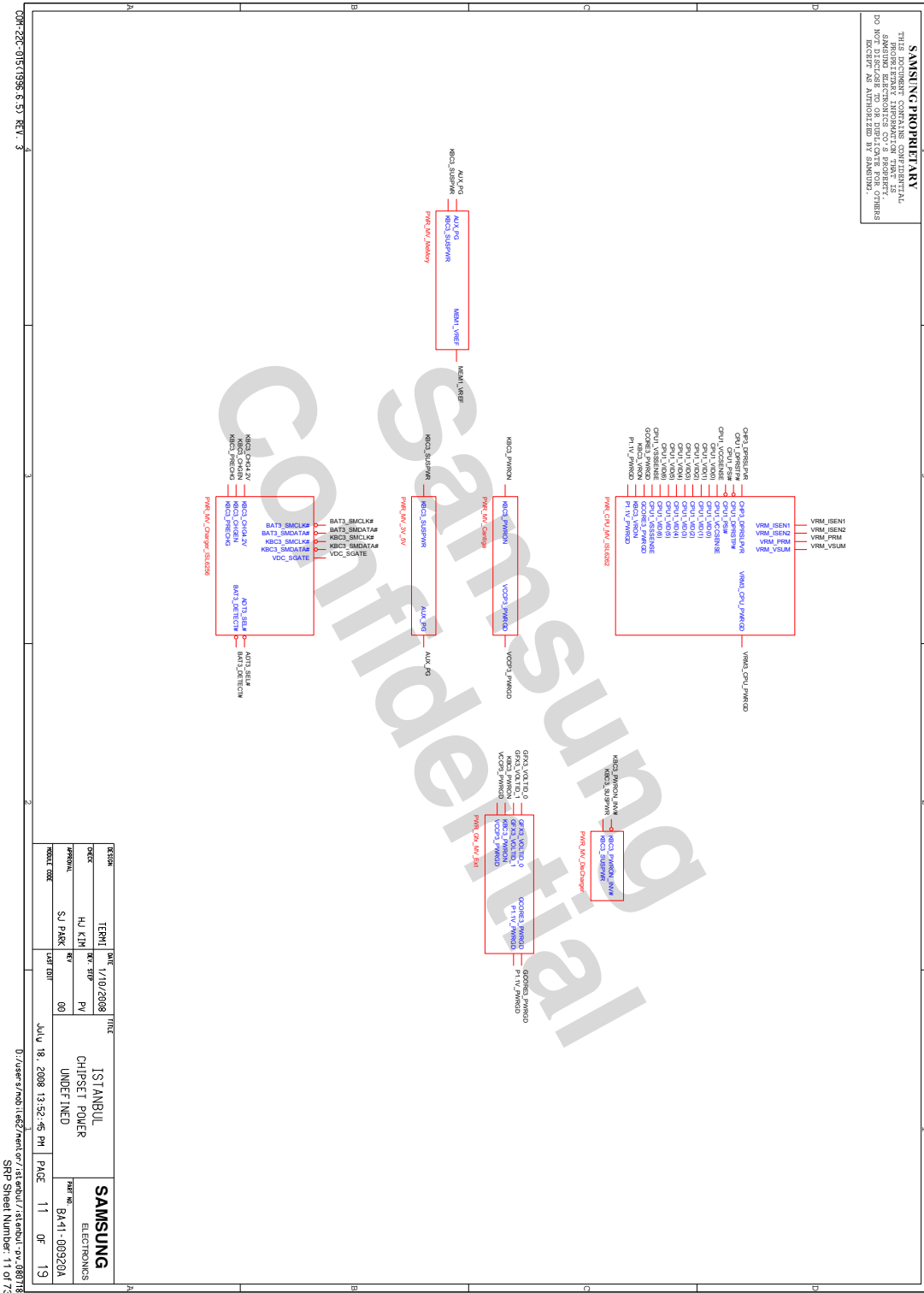
**SAMSUNG PROPRIETARY**  
 THIS DOCUMENT CONTAINS CONFIDENTIAL  
 SAMSUNG ELECTRONICS CO.'S PROPERTY.  
 DO NOT REPRODUCE OR TRANSMIT, IN ANY  
 MANNER, WITHOUT THE EXPRESS WRITTEN  
 PERMISSION OF SAMSUNG ELECTRONICS CO.

DESIGN	DATE	TITLE
1T8H1	1/19/2008	ISTANBUL
CHG	REV	CHIPSET POWER
HJ KIM	00	UNDEF INED
APPROVAL	REV	DATE
SJ PARK	00	July 18, 2008 13:52:45 PM
MODEL CODE	DATE	PAGE
		10 OF 19

**SAMSUNG**  
 ELECTRONICS  
 PART NO. BA11-00920A  
 SRP Sheet Number: 10 of 73

- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

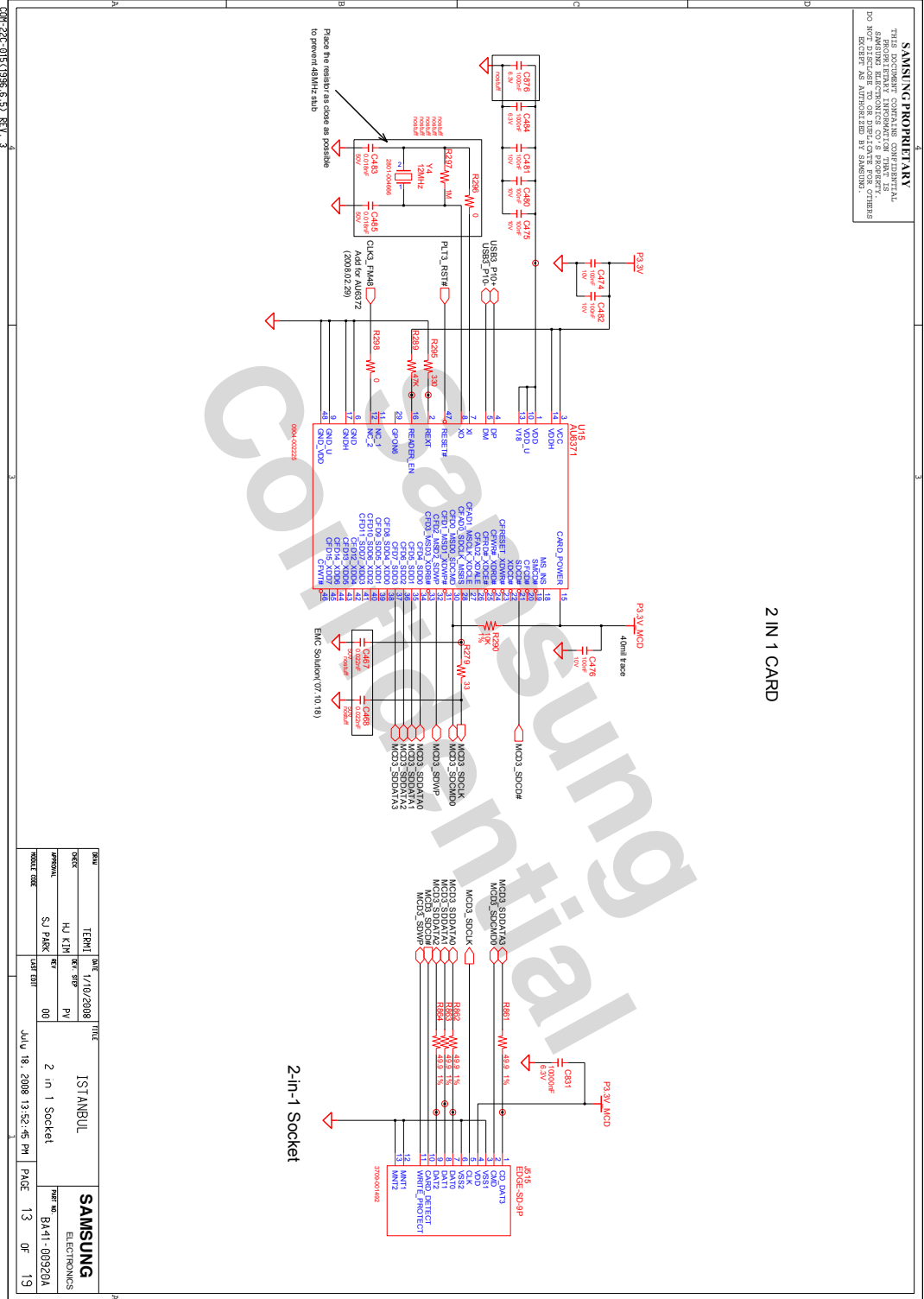
# 8. Block Diagram and Schematic





- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

# 8. Block Diagram and Schematic

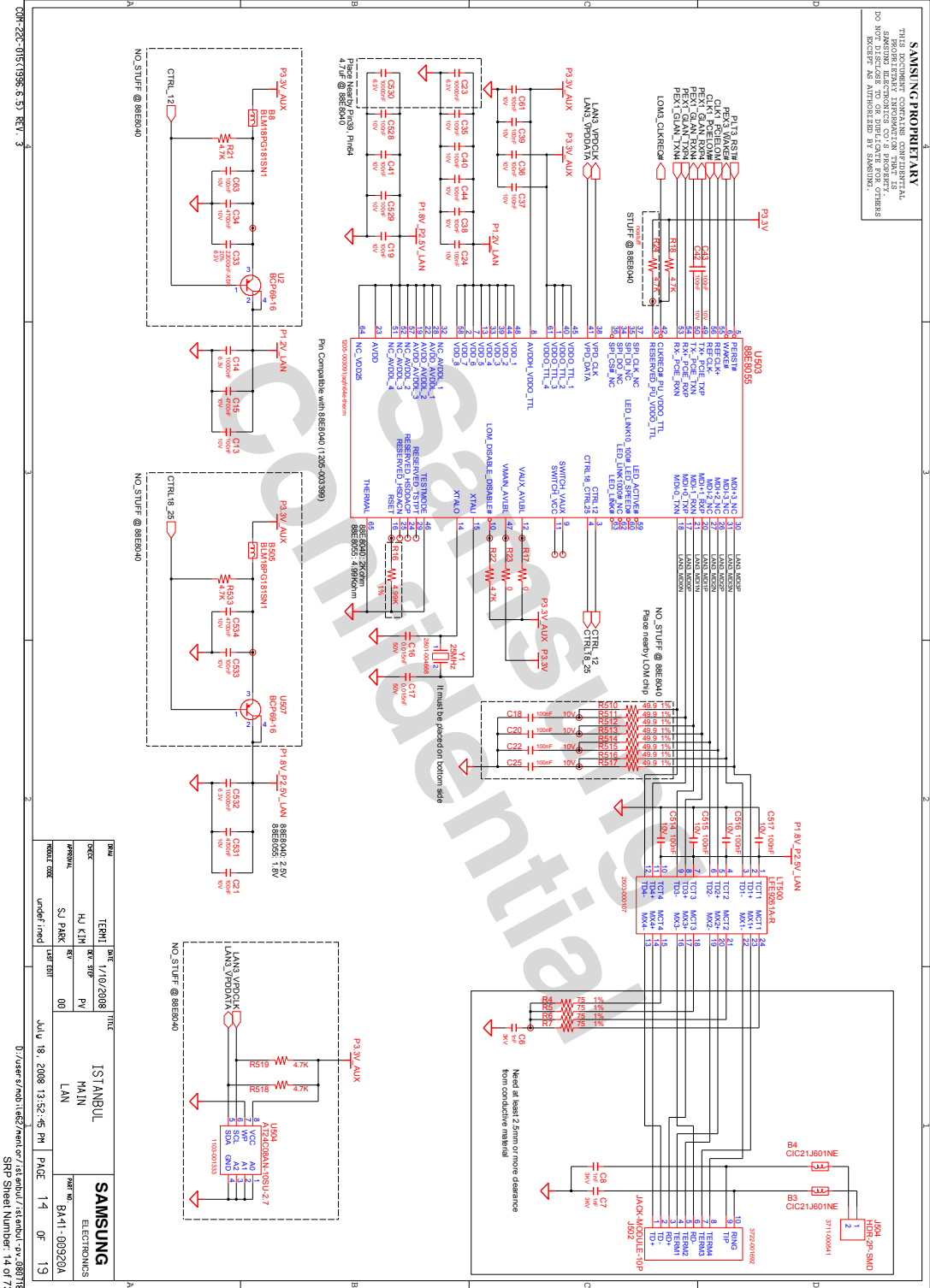


**SAMSUNG PROPRIETARY**

THIS DOCUMENT CONTAINS CONFIDENTIAL  
SAMSUNG INFORMATION AND IS THE PROPERTY OF  
SAMSUNG ELECTRONICS CO., LTD. ANY  
DISCLOSURE OF THIS INFORMATION TO OTHERS  
WITHOUT THE WRITTEN PERMISSION OF  
SAMSUNG ELECTRONICS CO., LTD. IS PROHIBITED.

- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

# 8. Block Diagram and Schematic







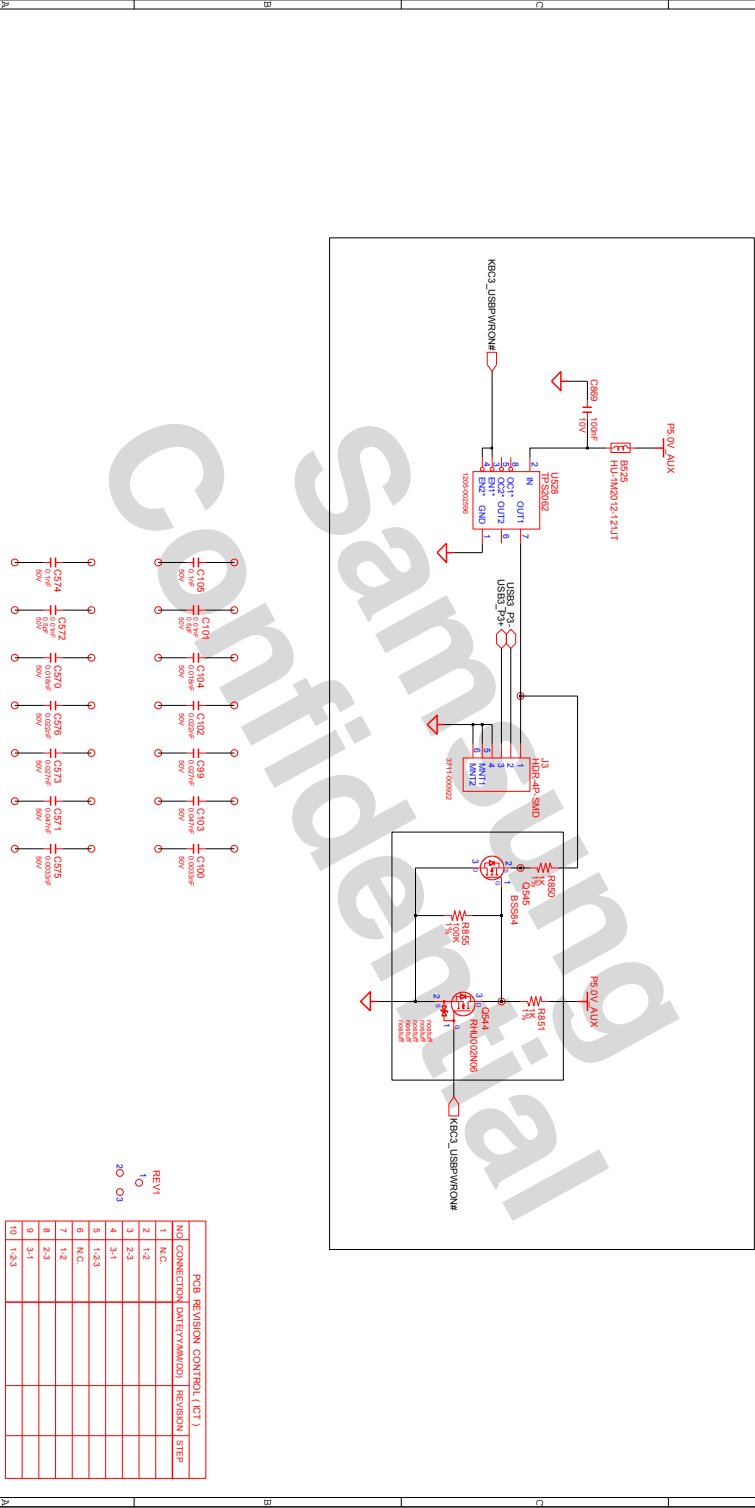


- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic

**SAMSUNG PROPRIETARY**  
 THIS DOCUMENT CONTAINS CONFIDENTIAL INFORMATION AND IS THE PROPERTY OF SAMSUNG ELECTRONICS CO., LTD. ALL RIGHTS ARE RESERVED. NO REPRODUCTION OR TRANSMISSION IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF SAMSUNG, IS ALLOWED.

### Sub Board Connector (Istanbul Only)



REV	DATE	BY	CHK	APP	TEST
01	17/10/2008	TEHNI	REV	SHIP	TP
02		HJ KIM	REV	SHIP	TP
03		SJ PARK	REV	SHIP	TP
04		SJ PARK	REV	SHIP	TP

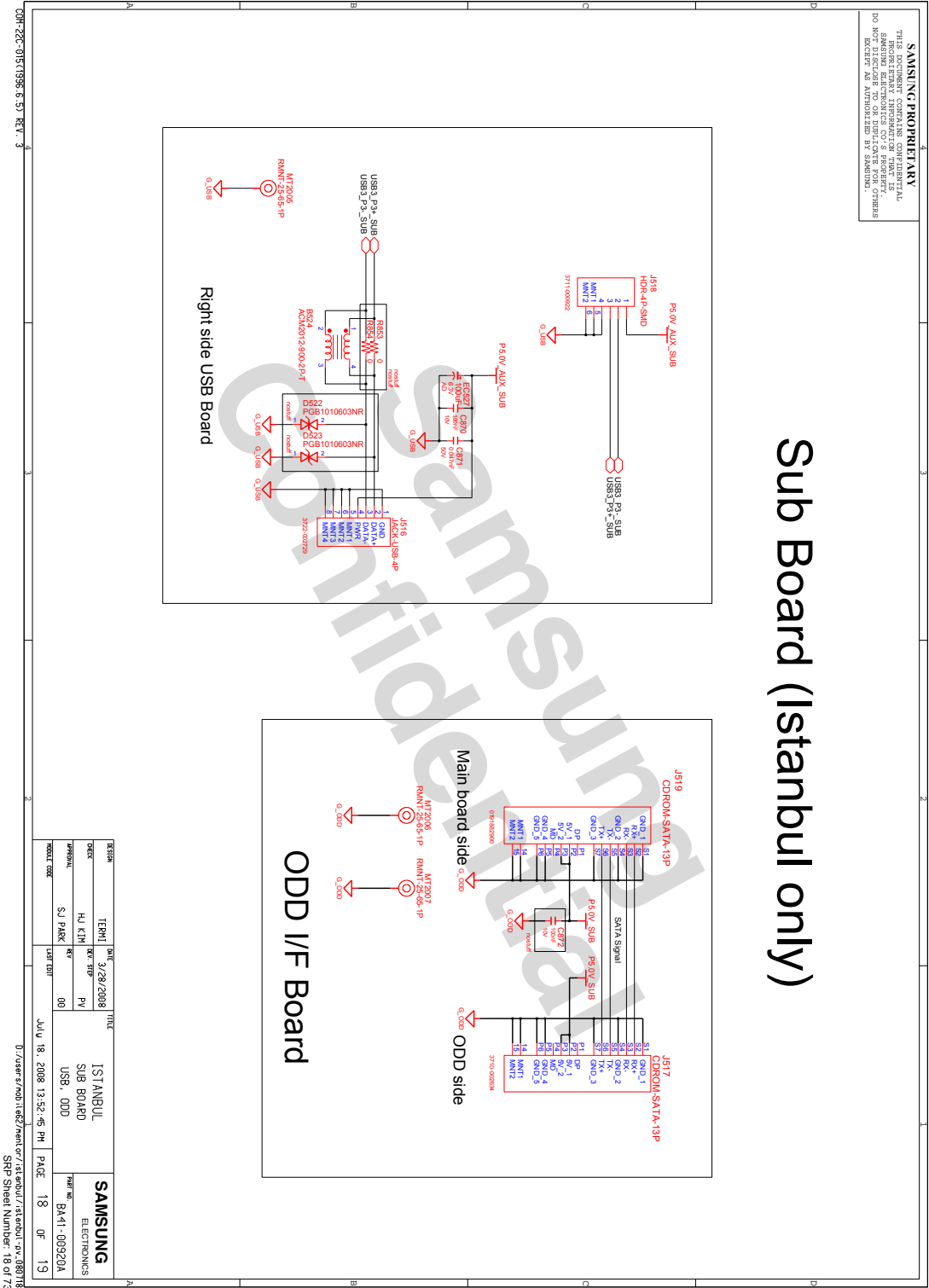
  

MODEL CODE	UNIT CODE	DATE	TIME	PAGE	OF
undef/med		July 18, 2008 13:52:45 PM		17	19

D:/users/mob1/se2/panel/or/istambul/istambul\_pvc\_080718  
 SRP Street Number: 17 of 73

- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

# 8. Block Diagram and Schematic

**SAMSUNG PROPRIETARY**  
 THIS DOCUMENT CONTAINS CONFIDENTIAL  
 SAMSUNG ELECTRONICS CO., LTD. PROPERTY.  
 IT IS NOT TO BE REPRODUCED OR  
 EXCEPT AS AUTHORIZED BY SAMSUNG.

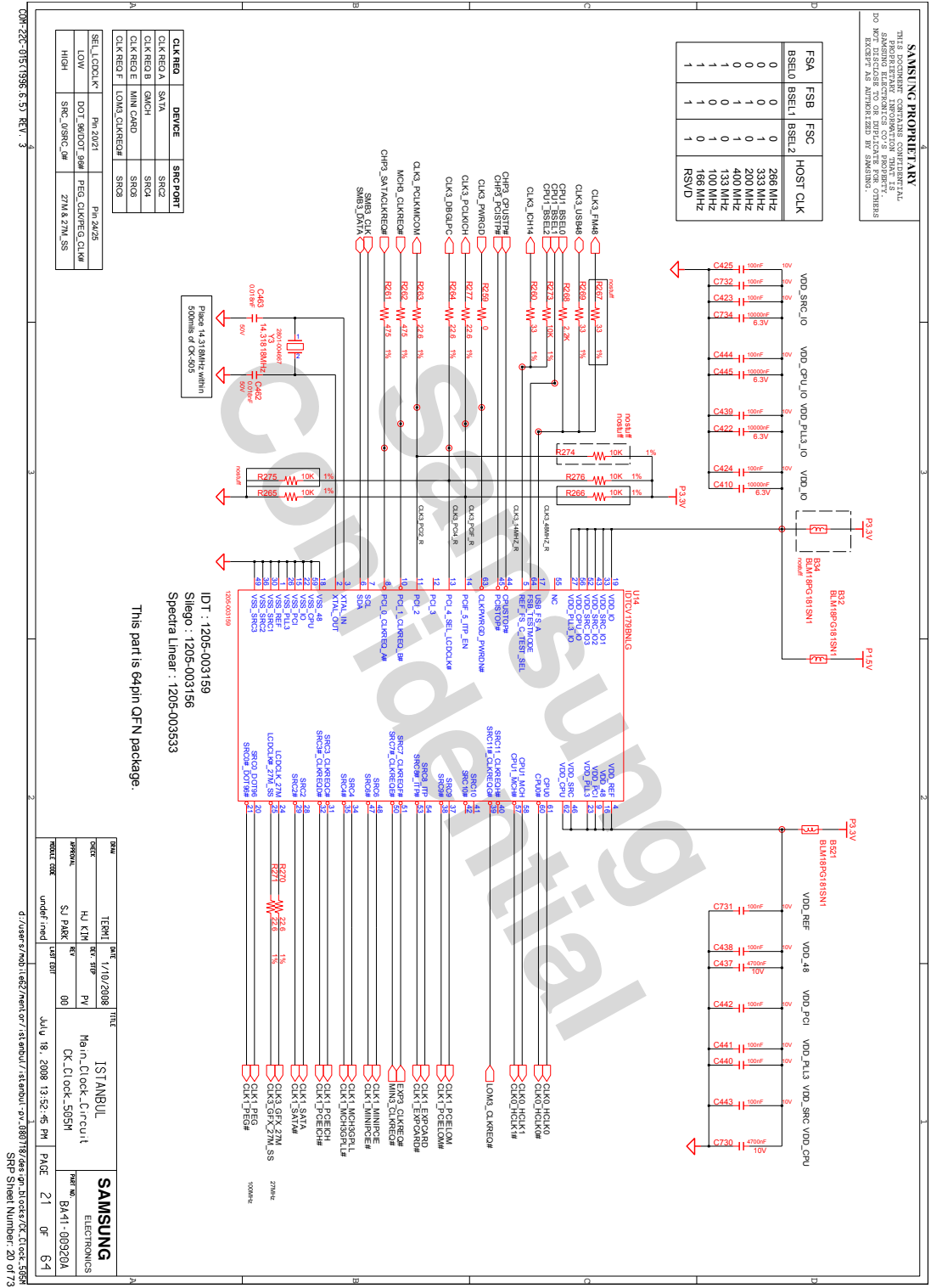
- A10K\_P05
- A10K\_P12
- A10K\_P13
- A10K\_P14
- A10K\_P15
- A10K\_P16
- A10K\_P17
- A10K\_P18
- A10K\_P19
- A10K\_P20
- A10K\_P21
- A10K\_P22
- A10K\_P23
- A10K\_P24
- A10K\_P25
- A10K\_P26
- A10K\_P27
- A10K\_P28
- A10K\_P29
- A10K\_P30
- A10K\_P31
- A10K\_P32
- A10K\_P33
- A10K\_P34
- A10K\_P35
- A10K\_P36
- A10K\_P37
- A10K\_P38
- A10K\_P39
- A10K\_P40
- A10K\_P41
- A10K\_P42
- A10K\_P43
- A10K\_P44
- A10K\_P45
- A10K\_P46
- A10K\_P47
- A10K\_P48
- A10K\_P49
- A10K\_P50
- A10K\_P51
- A10K\_P52
- A10K\_P53
- A10K\_P54
- A10K\_P55
- A10K\_P56
- A10K\_P57
- A10K\_P58
- A10K\_P59
- A10K\_P60
- A10K\_P61
- A10K\_P62
- A10K\_P63
- A10K\_P64
- A10K\_P65
- A10K\_P66
- A10K\_P67
- A10K\_P68
- A10K\_P69
- A10K\_P70
- A10K\_P71
- A10K\_P72
- A10K\_P73
- A10K\_P74
- A10K\_P75
- A10K\_P76
- A10K\_P77
- A10K\_P78
- A10K\_P79
- A10K\_P80
- A10K\_P81
- A10K\_P82
- A10K\_P83
- A10K\_P84
- A10K\_P85
- A10K\_P86
- A10K\_P87
- A10K\_P88
- A10K\_P89
- A10K\_P90
- A10K\_P91
- A10K\_P92
- A10K\_P93
- A10K\_P94
- A10K\_P95
- A10K\_P96
- A10K\_P97
- A10K\_P98
- A10K\_P99
- A10K\_P100
- A10K\_P101
- A10K\_P102
- A10K\_P103
- A10K\_P104
- A10K\_P105
- A10K\_P106
- A10K\_P107
- A10K\_P108
- A10K\_P109
- A10K\_P110
- A10K\_P111
- A10K\_P112
- A10K\_P113
- A10K\_P114
- A10K\_P115
- A10K\_P116
- A10K\_P117
- A10K\_P118
- A10K\_P119
- A10K\_P120
- A10K\_P121
- A10K\_P122
- A10K\_P123
- A10K\_P124
- A10K\_P125
- A10K\_P126
- A10K\_P127
- A10K\_P128
- A10K\_P129
- A10K\_P130
- A10K\_P131
- A10K\_P132
- A10K\_P133
- A10K\_P134
- A10K\_P135
- A10K\_P136
- A10K\_P137
- A10K\_P138
- A10K\_P139
- A10K\_P140
- A10K\_P141
- A10K\_P142
- A10K\_P143
- A10K\_P144
- A10K\_P145
- A10K\_P146
- A10K\_P147
- A10K\_P148
- A10K\_P149
- A10K\_P150
- A10K\_P151
- A10K\_P152
- A10K\_P153
- A10K\_P154
- A10K\_P155
- A10K\_P156
- A10K\_P157
- A10K\_P158
- A10K\_P159
- A10K\_P160
- A10K\_P161
- A10K\_P162
- A10K\_P163
- A10K\_P164
- A10K\_P165
- A10K\_P166
- A10K\_P167
- A10K\_P168
- A10K\_P169
- A10K\_P170
- A10K\_P171
- A10K\_P172
- A10K\_P173
- A10K\_P174
- A10K\_P175
- A10K\_P176
- A10K\_P177
- A10K\_P178
- A10K\_P179
- A10K\_P180
- A10K\_P181
- A10K\_P182
- A10K\_P183
- A10K\_P184
- A10K\_P185
- A10K\_P186
- A10K\_P187
- A10K\_P188
- A10K\_P189
- A10K\_P190
- A10K\_P191
- A10K\_P192
- A10K\_P193
- A10K\_P194
- A10K\_P195
- A10K\_P196
- A10K\_P197
- A10K\_P198
- A10K\_P199
- A10K\_P200

REV	DATE	TIME	DESCRIPTION
1	1/10/2008		ISTANBUL TP
2	1/10/2008		TP
3	1/10/2008		TP
4	1/10/2008		TP
5	1/10/2008		TP
6	1/10/2008		TP
7	1/10/2008		TP
8	1/10/2008		TP
9	1/10/2008		TP
10	1/10/2008		TP
11	1/10/2008		TP
12	1/10/2008		TP
13	1/10/2008		TP
14	1/10/2008		TP
15	1/10/2008		TP
16	1/10/2008		TP
17	1/10/2008		TP
18	1/10/2008		TP
19	1/10/2008		TP
20	1/10/2008		TP
21	1/10/2008		TP
22	1/10/2008		TP
23	1/10/2008		TP
24	1/10/2008		TP
25	1/10/2008		TP
26	1/10/2008		TP
27	1/10/2008		TP
28	1/10/2008		TP
29	1/10/2008		TP
30	1/10/2008		TP
31	1/10/2008		TP
32	1/10/2008		TP
33	1/10/2008		TP
34	1/10/2008		TP
35	1/10/2008		TP
36	1/10/2008		TP
37	1/10/2008		TP
38	1/10/2008		TP
39	1/10/2008		TP
40	1/10/2008		TP
41	1/10/2008		TP
42	1/10/2008		TP
43	1/10/2008		TP
44	1/10/2008		TP
45	1/10/2008		TP
46	1/10/2008		TP
47	1/10/2008		TP
48	1/10/2008		TP
49	1/10/2008		TP
50	1/10/2008		TP
51	1/10/2008		TP
52	1/10/2008		TP
53	1/10/2008		TP
54	1/10/2008		TP
55	1/10/2008		TP
56	1/10/2008		TP
57	1/10/2008		TP
58	1/10/2008		TP
59	1/10/2008		TP
60	1/10/2008		TP
61	1/10/2008		TP
62	1/10/2008		TP
63	1/10/2008		TP
64	1/10/2008		TP
65	1/10/2008		TP
66	1/10/2008		TP
67	1/10/2008		TP
68	1/10/2008		TP
69	1/10/2008		TP
70	1/10/2008		TP
71	1/10/2008		TP
72	1/10/2008		TP
73	1/10/2008		TP
74	1/10/2008		TP
75	1/10/2008		TP
76	1/10/2008		TP
77	1/10/2008		TP
78	1/10/2008		TP
79	1/10/2008		TP
80	1/10/2008		TP
81	1/10/2008		TP
82	1/10/2008		TP
83	1/10/2008		TP
84	1/10/2008		TP
85	1/10/2008		TP
86	1/10/2008		TP
87	1/10/2008		TP
88	1/10/2008		TP
89	1/10/2008		TP
90	1/10/2008		TP
91	1/10/2008		TP
92	1/10/2008		TP
93	1/10/2008		TP
94	1/10/2008		TP
95	1/10/2008		TP
96	1/10/2008		TP
97	1/10/2008		TP
98	1/10/2008		TP
99	1/10/2008		TP
100	1/10/2008		TP

D:\user\z\mobi\tbl\mobi\19\_00920A\19\_00920A.dwg  
 SRP Sheet Number: 19 of 73

- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

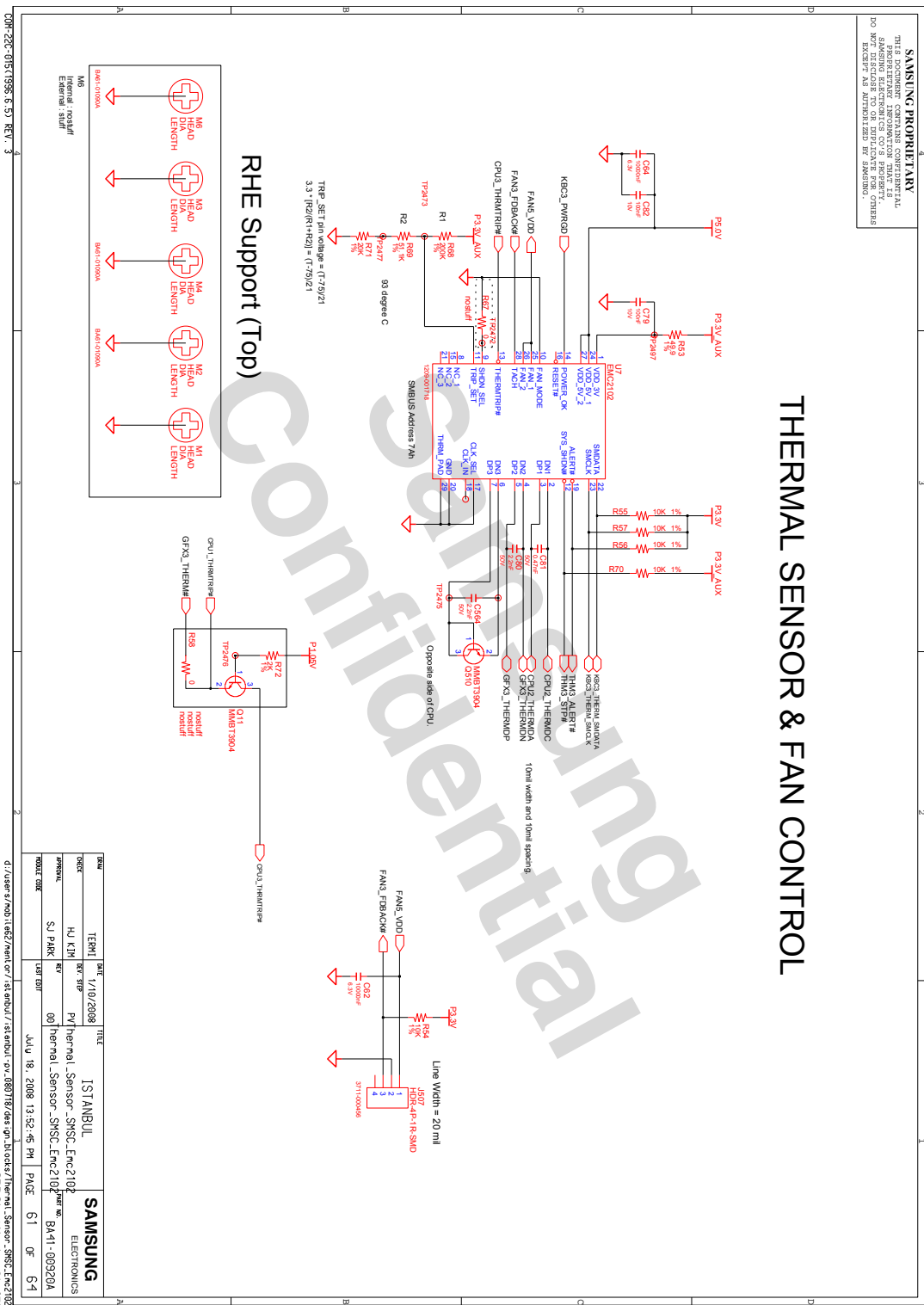
# 8. Block Diagram and Schematic



- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

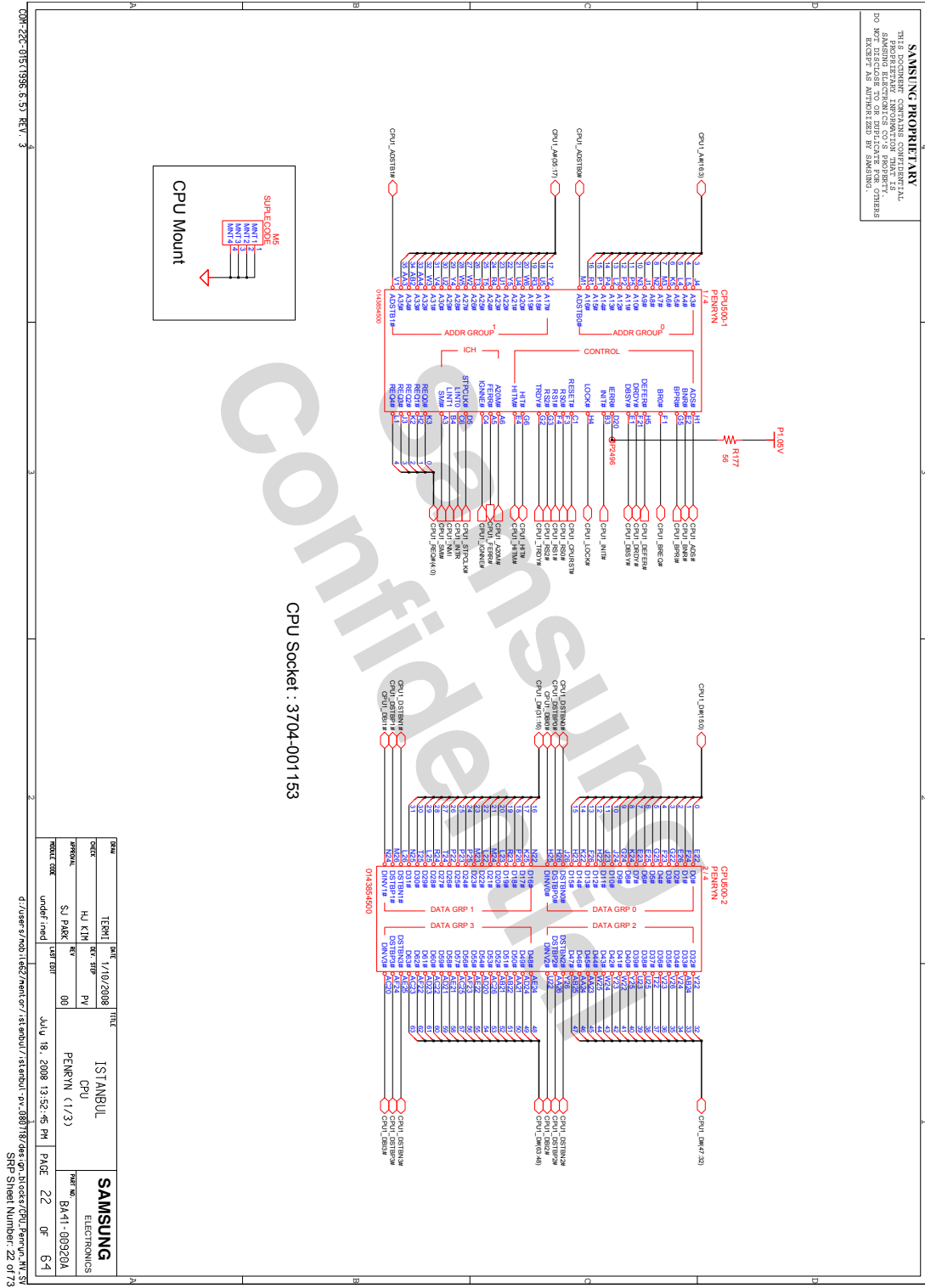
# 8. Block Diagram and Schematic

## THERMAL SENSOR & FAN CONTROL

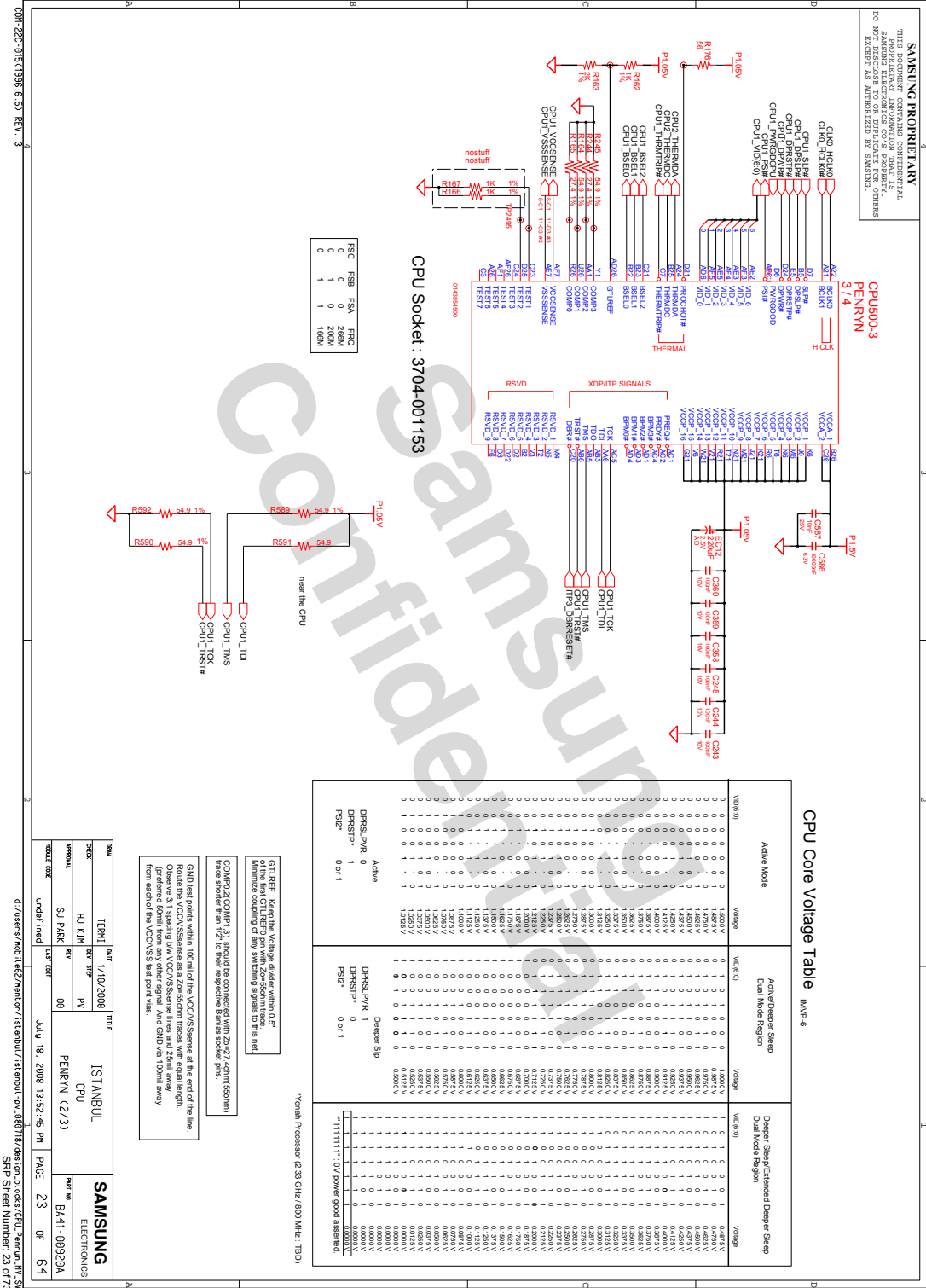


- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic

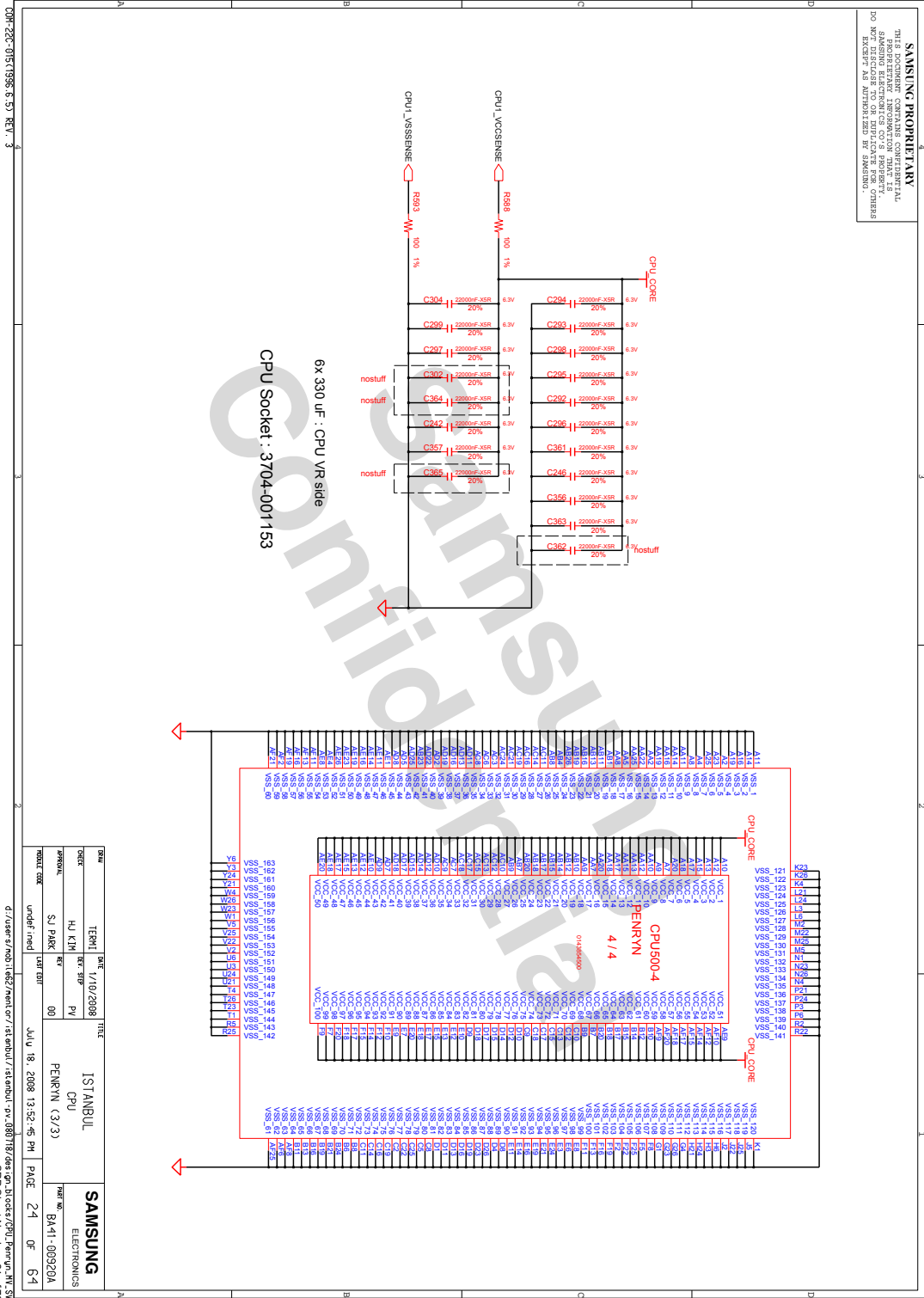


## 8. Block Diagram and Schematic



- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



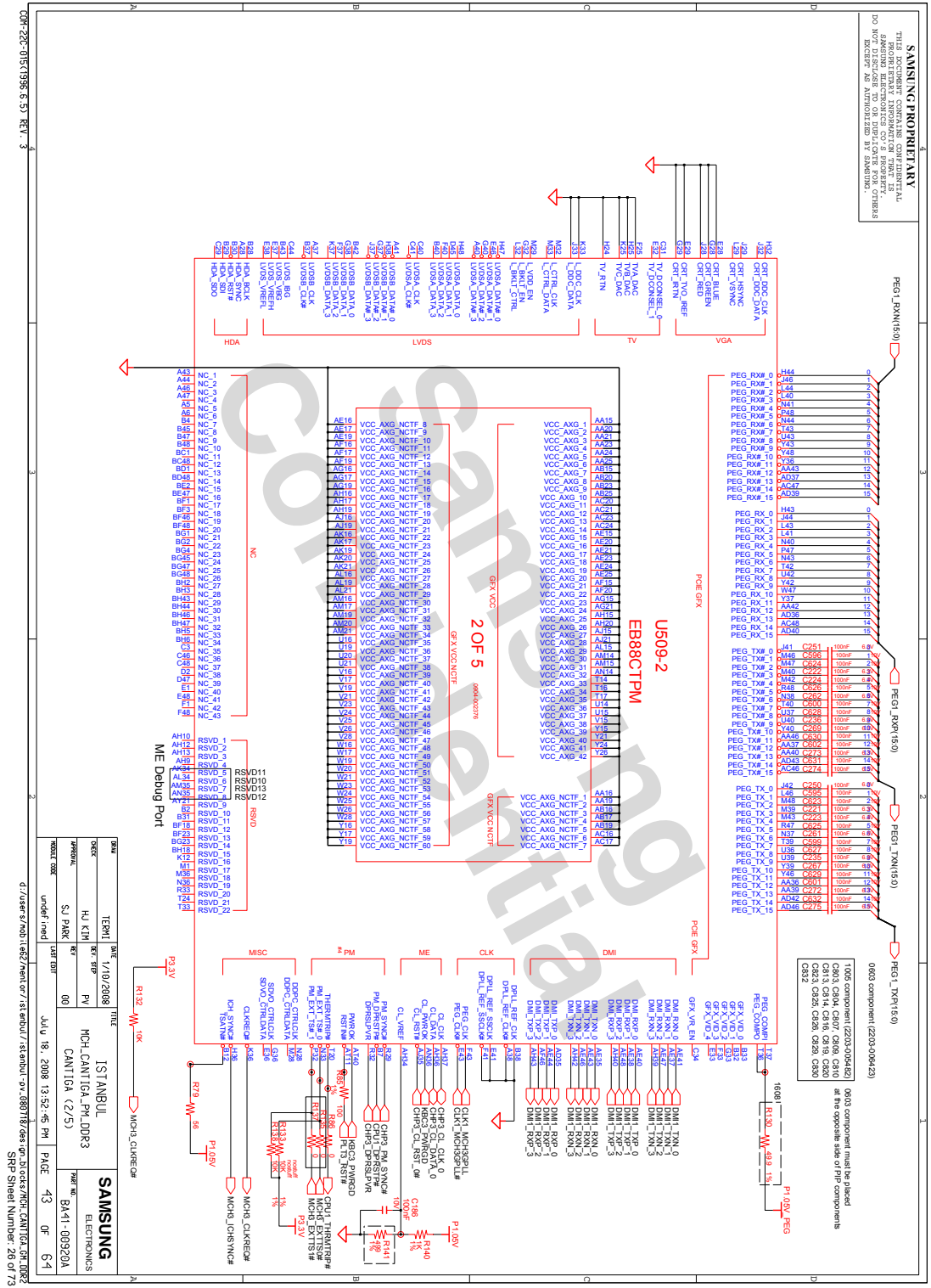
REV	DATE	THICK	SAMSUNG
001	1/10/2008		ELECTRONICS
002		ISTANBUL	
003		CPU	
004		PERNRVN (3/3)	
005			
006			
007			
008			
009			
010			
011			
012			
013			
014			
015			
016			
017			
018			
019			
020			
021			
022			
023			
024			
025			
026			
027			
028			
029			
030			
031			
032			
033			
034			
035			
036			
037			
038			
039			
040			
041			
042			
043			
044			
045			
046			
047			
048			
049			
050			





- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

# 8. Block Diagram and Schematic



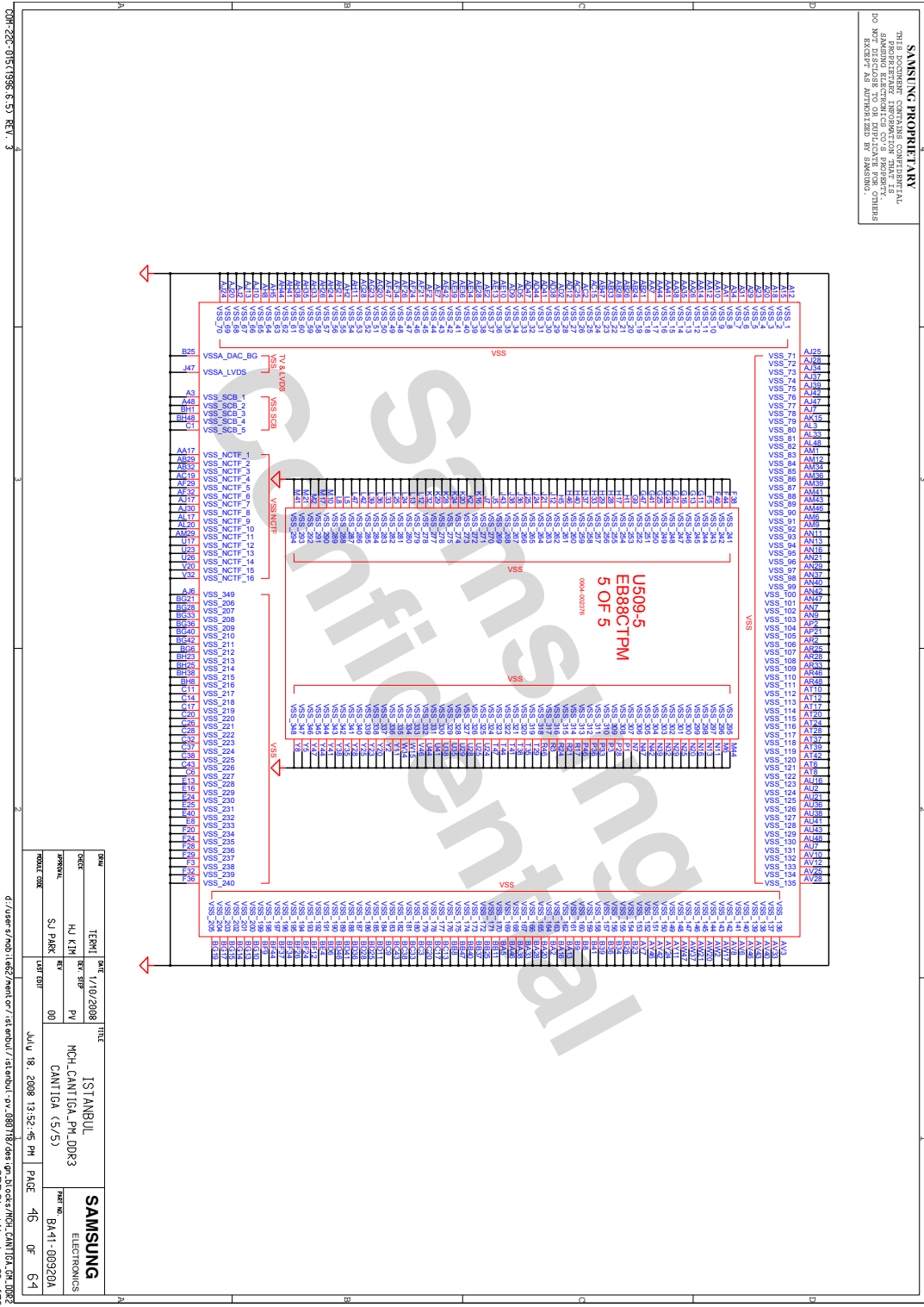




- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

# 8. Block Diagram and Schematic

**SAMSUNG PROPRIETARY**  
 THIS DOCUMENT CONTAINS CONFIDENTIAL  
 INFORMATION AND IS THE PROPERTY OF  
 SAMSUNG ELECTRONICS CO., LTD.  
 ALL RIGHTS ARE RESERVED.  
 EXCEPT AS AUTHORIZED BY SAMSUNG.



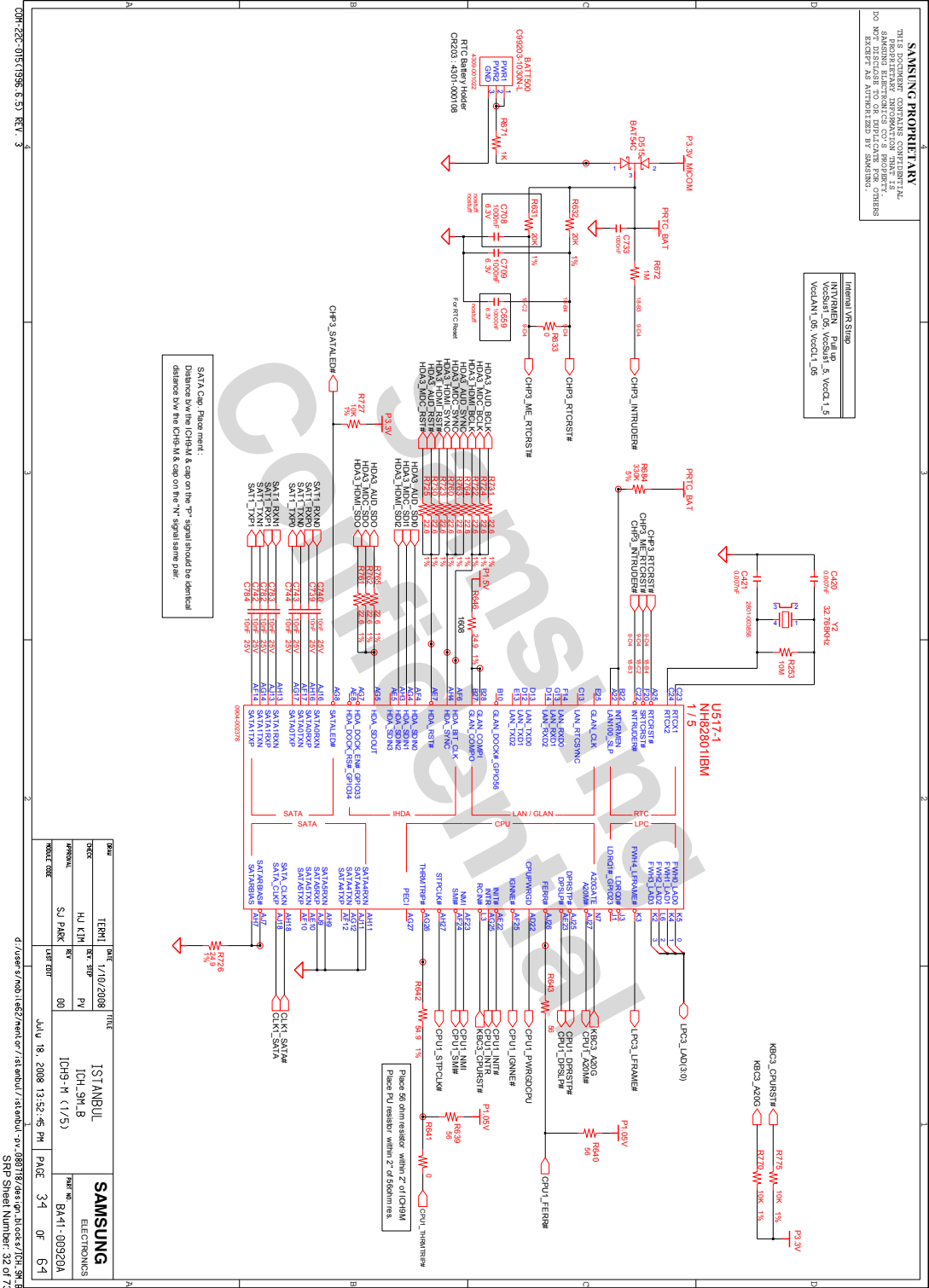
REV	DATE	THICK	SAMSUNG
1	1/10/2008	ISTANBUL	ELECTRONICS
DESIGN	REV	PC	BA11-00920A
HL KIM	00	PI	
APPROVAL	REV	SJ PARK	
MODEL CODE	DATE	July 18, 2008 13:52:46 PM	PAGE 46 OF 64
D:\user\s\mch1\627\meat\or\st\output\st\output_088018\dcs\qr_baoceq\mch_cant1ca_5r_0082			
SRP Sheet Number : 29 of 73			





- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

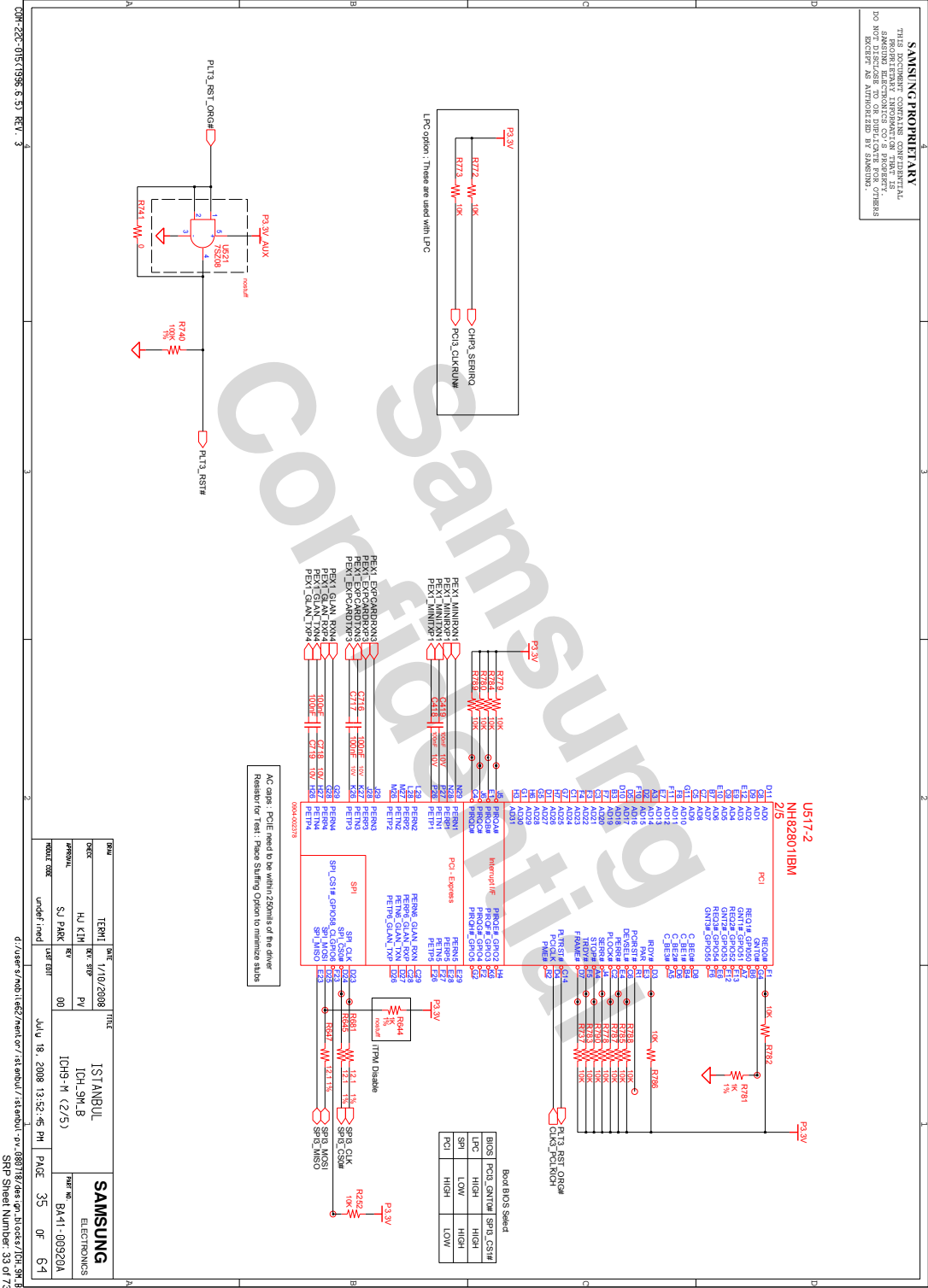
# 8. Block Diagram and Schematic





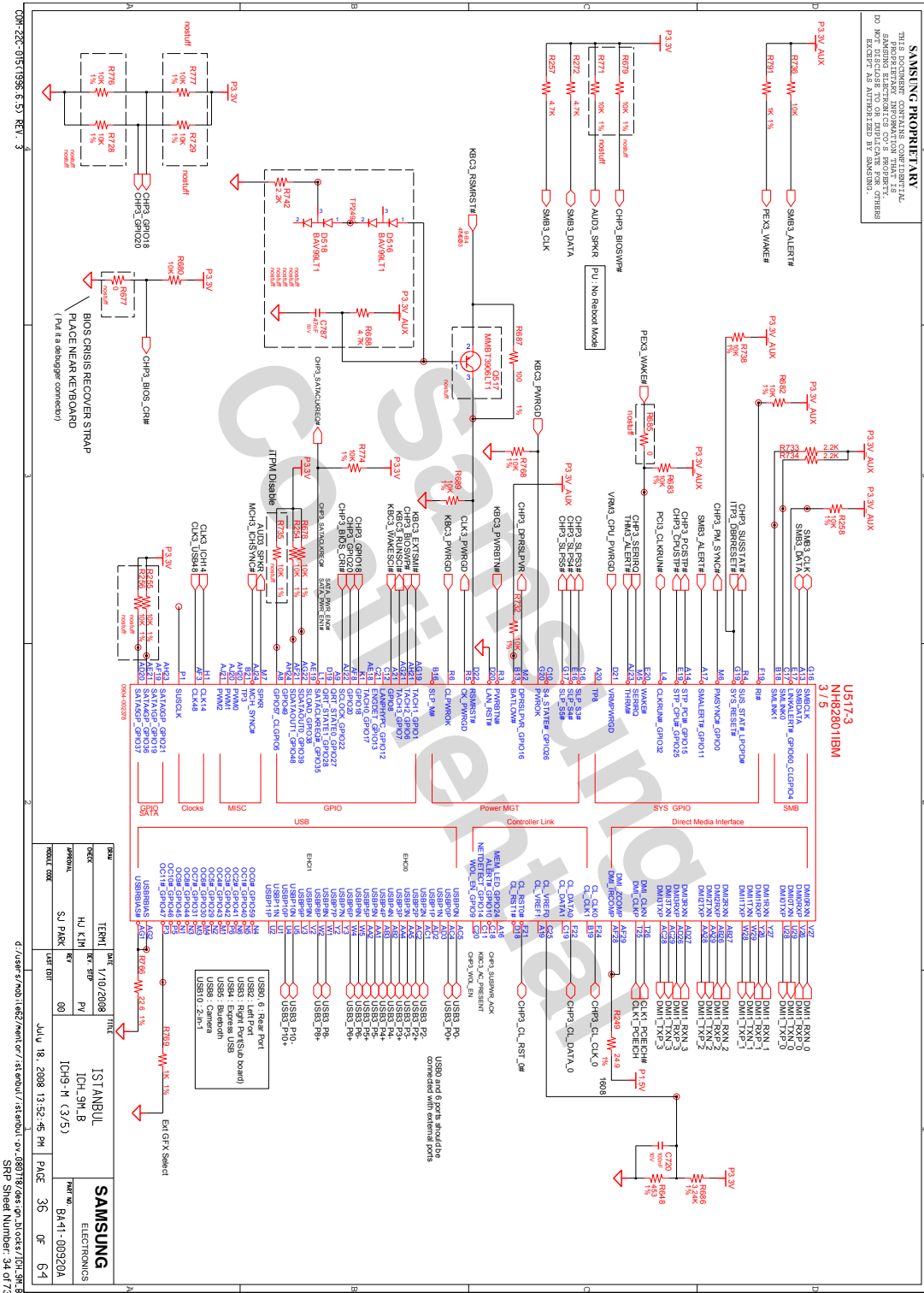
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



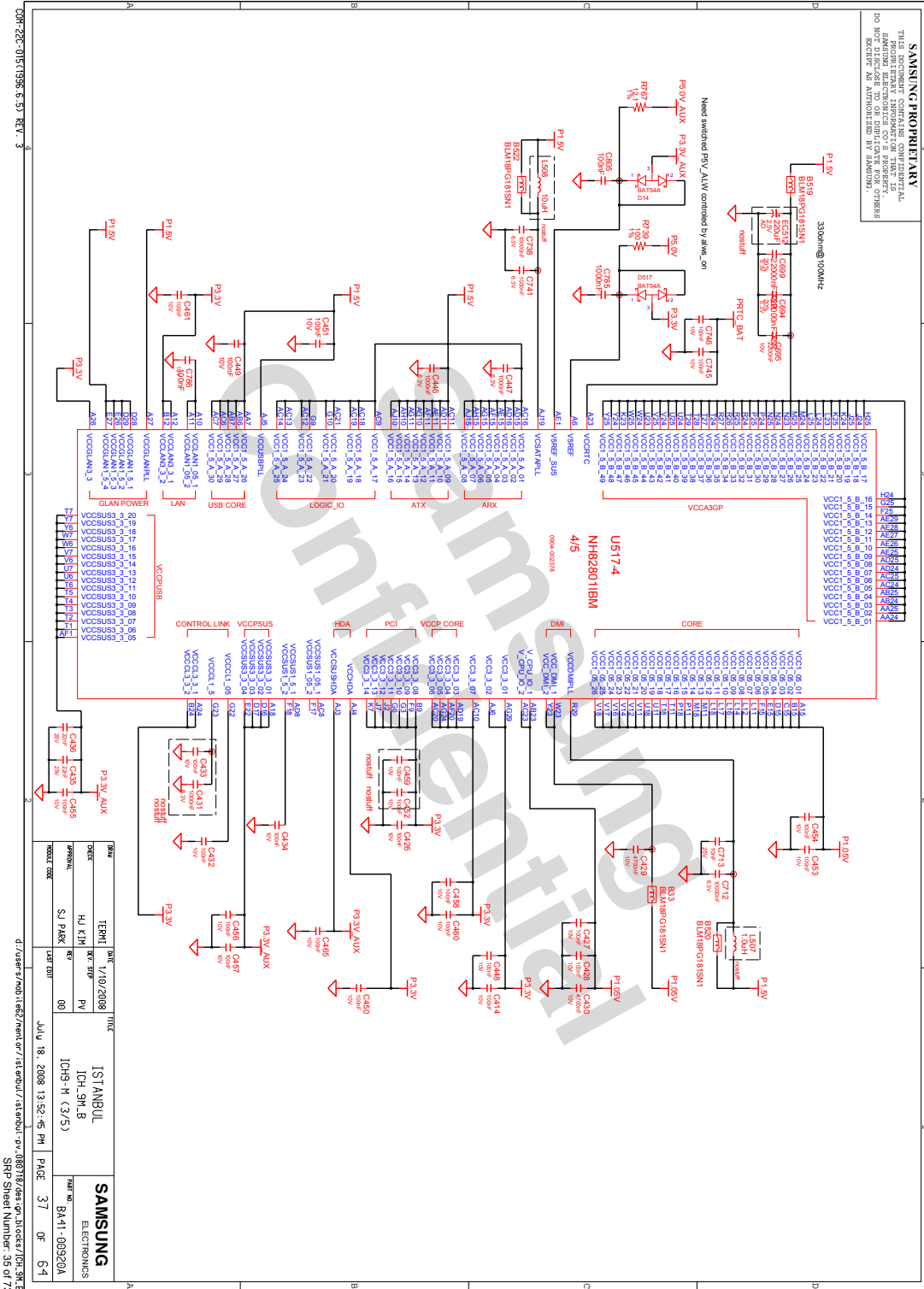
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

# 8. Block Diagram and Schematic



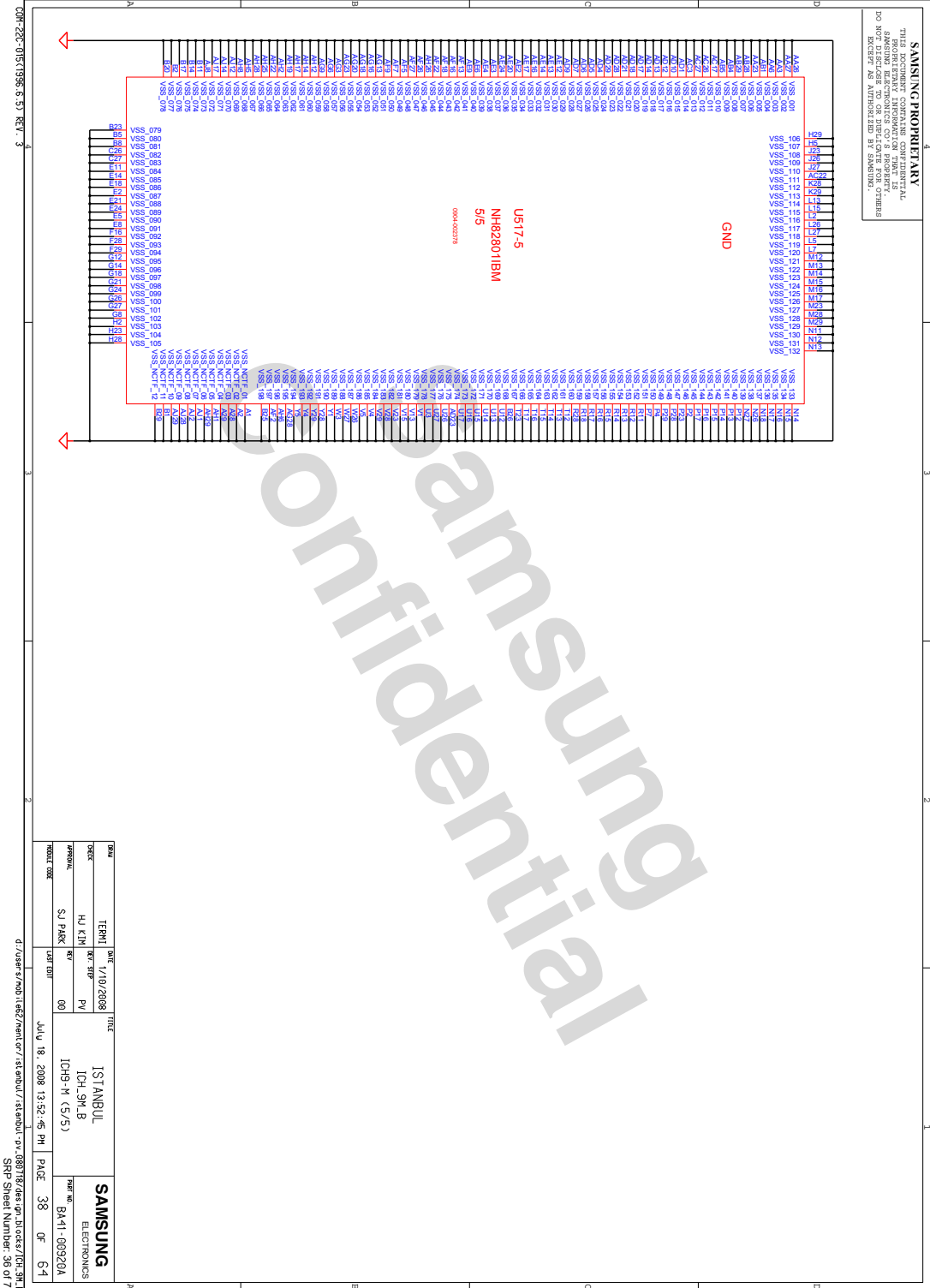
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

# 8. Block Diagram and Schematic



- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

# 8. Block Diagram and Schematic

SAMSUNG PROPRIETARY  
 THIS DOCUMENT CONTAINS CONFIDENTIAL  
 INFORMATION AND IS THE PROPERTY OF  
 SAMSUNG ELECTRONICS CO., LTD.  
 REPRODUCTION OR DISTRIBUTION,  
 EITHER WHOLLY OR IN PART,  
 WITHOUT THE WRITTEN PERMISSION OF  
 SAMSUNG ELECTRONICS CO., LTD. IS  
 STRICTLY PROHIBITED.

**- SPI ROM LIST -**

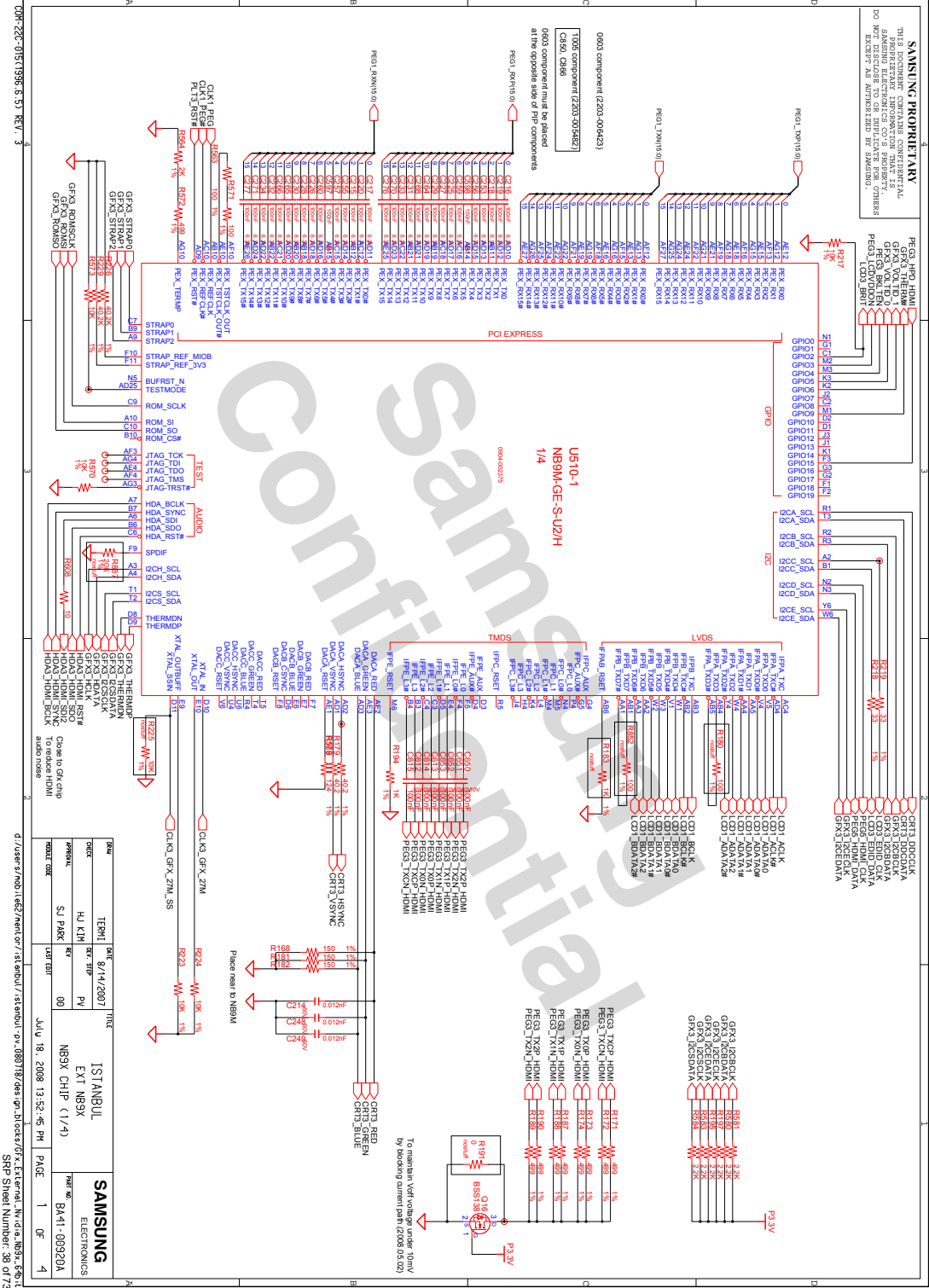
<p>02 VERIFY REAL MODE</p> <p>03 DISABLE NMI</p> <p>04 GET CPU TYPE</p> <p>06 INIT. SYSTEM HW</p> <p>08 INIT. CHIPSET REG.</p> <p>09 SET IN POST FLAG</p> <p>0A INIT CPU REG.</p> <p>0B CPU CACHE ON</p> <p>0C INIT CACHE TO POST</p> <p>0E INIT. IO VALUE</p> <p>0F ENABLE THE L-BUS IDE</p> <p>10 INIT. POWER MANAGER</p> <p>11 LOAD/ALTERNATE REG.</p> <p>13 PCI BUS MASTER RESET WITH INITIAL POST VALUE</p> <p>14 INIT. KEYBOARD CONTROLLER</p> <p>16 CHECK CHECKSUM</p> <p>18 8254 TIMER INIT.</p> <p>1A 8237 DMA CONTROLLER INIT.</p> <p>1C RESET INTERRUPT CONTROLLER</p> <p>20 TEST DRAM REFRESH</p> <p>22 TEST 8742 KEYBOARD CONTROLLER</p> <p>24 SET ES SEGMENT REG. TO 4GB</p> <p>26 ENABLE A20</p> <p>28 AUTO SIZING DRAM</p> <p>32 COMPUTE THE CPU SPEED</p> <p>34 TEST CMOS RAM</p> <p>38 SHADOW SYSTEM BIOS ROM</p> <p>3A AUTO SIZING CACHE</p> <p>3C CONFIGURE ADVANCED CHIPSET REG.</p> <p>3D LOAD ALTER REG. WITH CMOS VALUE</p> <p>42 INIT. INTERRUPT VECTOR</p> <p>44 INIT. BIOS INTERRUPT</p> <p>46 CHECK ROM COP RIGHT NOTICE</p> <p>47 INIT. I20 SUPPORT IF INSTALLED</p> <p>48 CHECK VIDEO CONFIGURE AGAINST CMOS</p> <p>49 INIT. PCI BUS AND DEVICE</p> <p>4A INIT. ALL VIDEO BIOS ROM</p> <p>4C SHADOW VIDEO BIOS ROM</p> <p>50 TEST KEYBOARD</p> <p>52 TEST KEYBOARD</p> <p>54 SET KEYCLICK IF ENABLED</p> <p>56 ENABLE KEYPBOARD</p> <p>58 TEST FOR UNEXPECTED INTERRUPTS</p> <p>5A DISPLAY "PRESS .... SETUP"</p> <p>5C TEST RAM GETWEEN 512K AND 640K</p> <p>60 TEST EXTENDED MEMORY</p> <p>62 TEST EXTENDED MEMORY ADDRESS LINE</p> <p>64 JUMP TO USER PATCH 1</p>	<p>66 CONFIGURE ADVANCE CACHE REG.</p> <p>6A DISPLAY EXTERNAL CACHE SIZE</p> <p>6C DISPLAY SHADOW MESSAGE</p> <p>6E DISPLAY NON-DISPOSABLE SEGMENT</p> <p>70 DISPLAY ERROR MESSAGE</p> <p>72 CHECK FOR CONFIGURATION ERROR</p> <p>74 TEST REAL-TIME CLOCK</p> <p>76 CHECK FOR KEYBOARD ERROR</p> <p>7E SETUP HARDWARE INTERRUPT VECTOR</p> <p>7F TEST CORPROCESSOR IF PRESENT</p> <p>80 DISABLE ON-BOARD I/O PORT</p> <p>82 DETECT AND INSTALL EXT RS232C</p> <p>84 RE-INIT. ON-BOARD I/O PORT</p> <p>86 RE-INIT. ON-BOARD I/O PORT</p> <p>88 INIT.. BIOS DATA ROM</p> <p>8A INIT. EXTENDED BIOS DATA AREA</p> <p>8C INIT. FDD CONTROLLER</p> <p>9A SHADOW OPTION ROMS</p> <p>9C SETUP POWER MANAGEMENT</p> <p>9E ENABLE HW INTERRUPT</p> <p>A0 SET TIME OF DAY</p> <p>A4 INIT. TYPEMATIC RATE</p> <p>A8 ERASE F2 PROMPT</p> <p>AA SCAN FOR F2 KEY STROKE</p> <p>AC ENTER SETUP</p> <p>AE CLEAR IN POST FLAG</p> <p>B0 CHECK FOR ERRORS</p> <p>B2 POST DONE- PREPARE TO BOOT OS</p> <p>B4 ONE BEEP</p> <p>B6 CHECK PASSWORD (OPTION)</p> <p>B7 ACPI INIT</p> <p>BA DIMM INIT</p> <p>BE CLEAR SCREEN</p> <p>C0 TRY BOOT WITH INT19</p> <p>C2 INTERRUPT HANDLER ERROR</p> <p>D0 UNKNOWN INTERRUPT ERROR</p> <p>D2 PENDING INTERRUPT ERROR</p> <p>D4 SHUTDOWN 5</p> <p>D6 SHUTDOWN ERROR</p> <p>DA EXTENDED BLOCK MOVE</p> <p>DC SHUTDOWN 10</p> <p>D8 SHUTDOWN 10</p> <p>89 ENABLE NMI</p> <p>90 INIT. HDD CONTROLLER</p> <p>91 INIT. LOCAL BUSHDD CONTROLLER</p> <p>92 JUMP TO USER PATCH 2</p> <p>94 DISABLE A20 ADDRESS LINE</p> <p>96 CLEAR HUGE ES SEGMENT REG.</p> <p>98 SEARCH FOR OPTION ROMS</p>
--	---

REV	DATE	TITLE	
000	1/10/2008	ISTANBUL	SAMSUNG ELECTRONICS
DESIGNER	CHK'D	APP'D	
HJ KIM	SK SHIP	PV	
APPROVAL	REV		
SJ PARK	00		

d:\user\y\mb\1\6827\main\or\1\stanbul\1\stanbul\_00\888187.dwg, sp: 0, c: 2, 7, 9, 1, BIOS\_ROM  
 SRP Street Number: 37 of 73

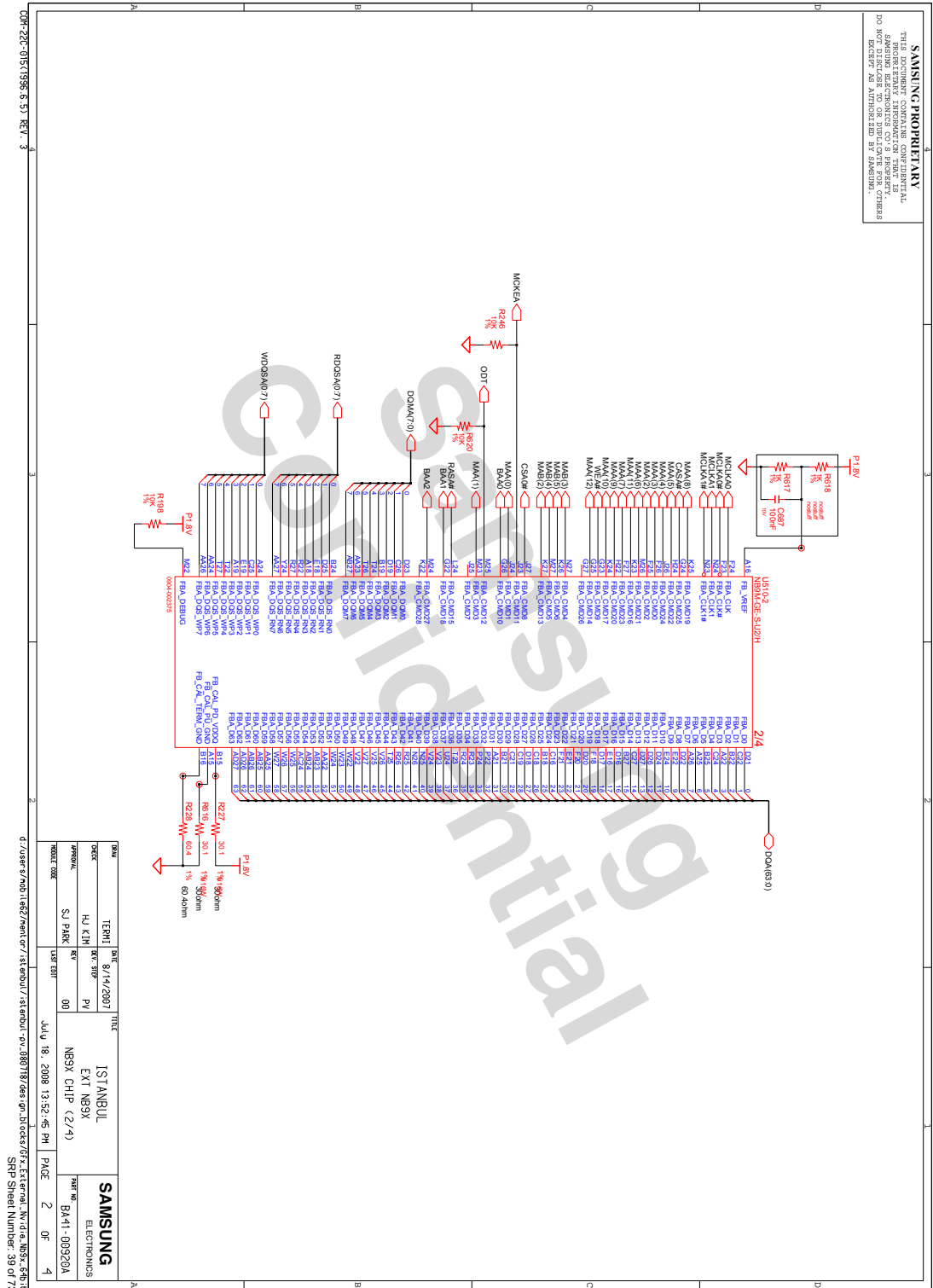
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

# 8. Block Diagram and Schematic



- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



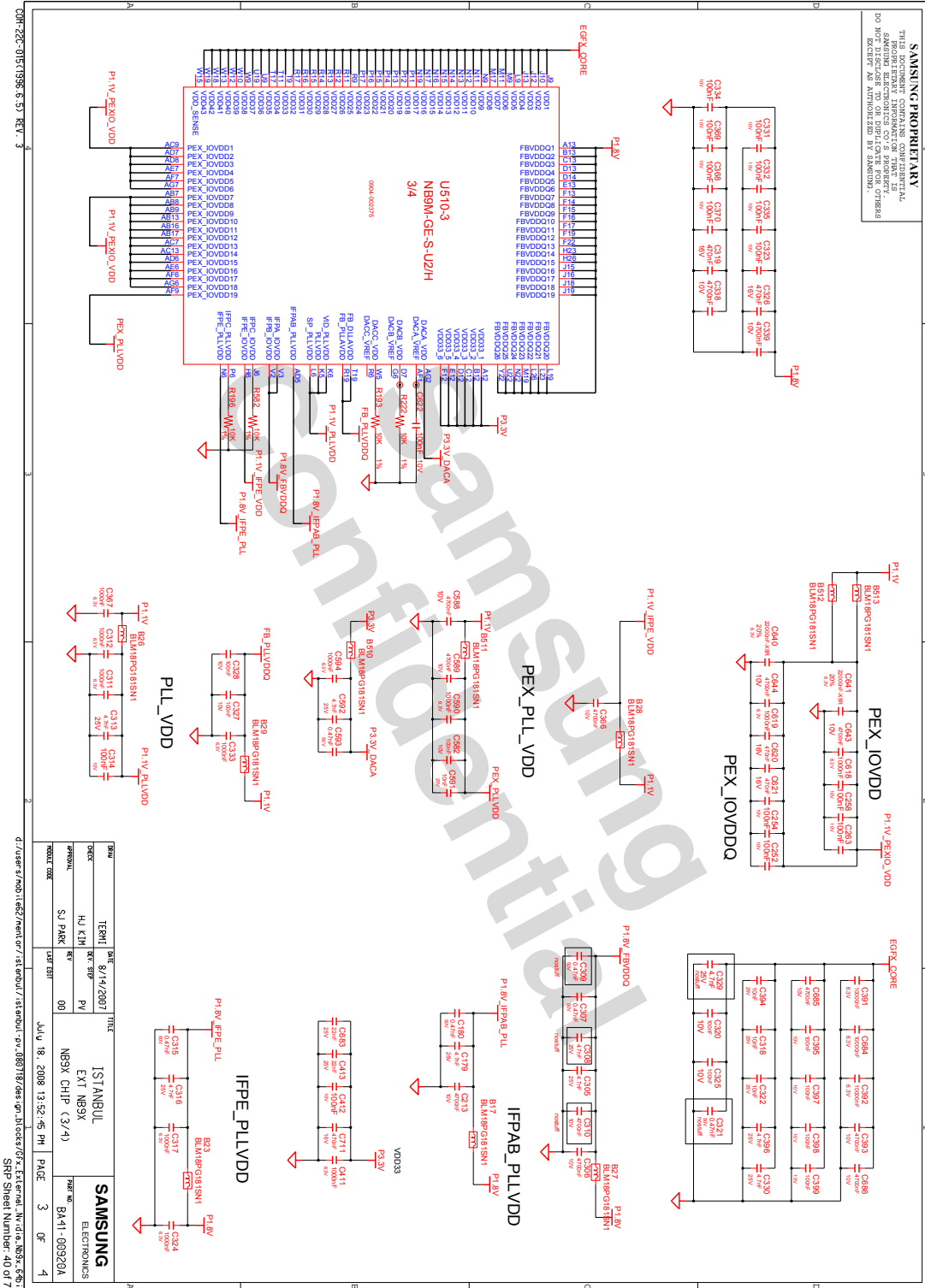
REV	DATE	BY	CHK	DATE	FILE
00	00	SJ PARK			ISTANBUL EXTI NS9X NS9X CHIP (2/4)

REV	DATE	BY	CHK	DATE	FILE
00	00	SJ PARK			ISTANBUL EXTI NS9X NS9X CHIP (2/4)

July 18, 2008 13:52:45 PM PAGE 2 OF 4  
 SRP Street Number: 39 of 73

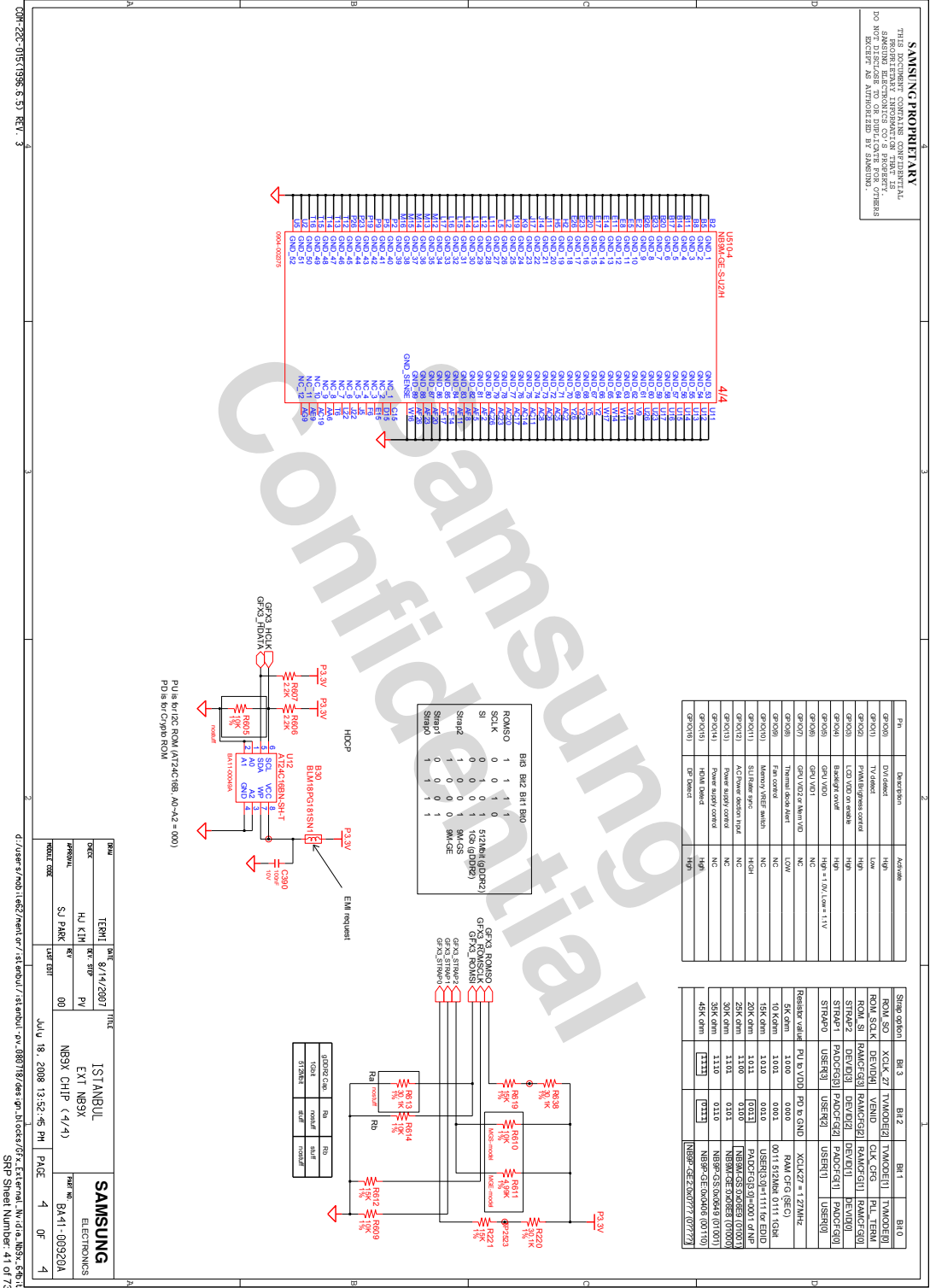
# 8. Block Diagram and Schematic





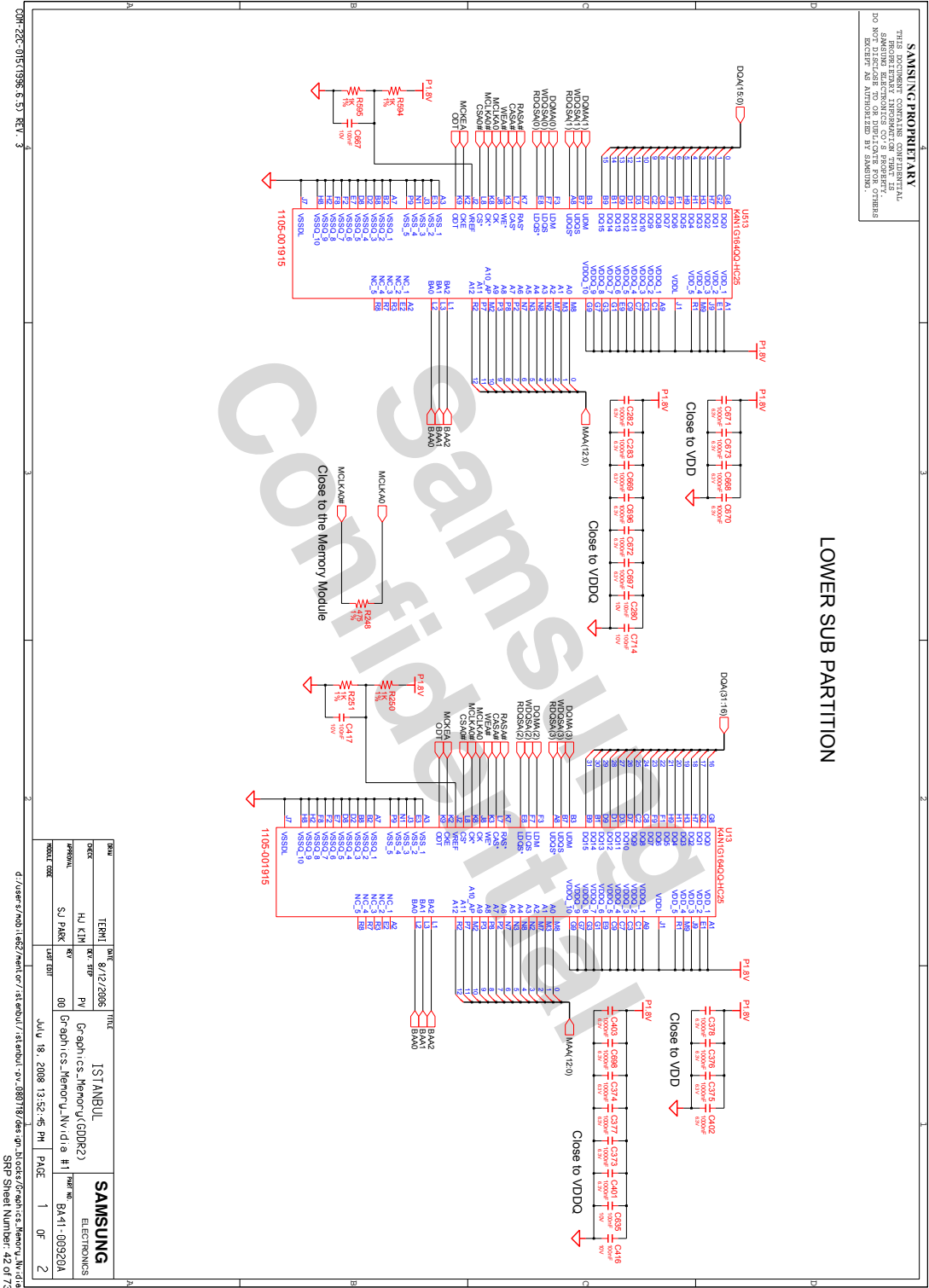
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

# 8. Block Diagram and Schematic



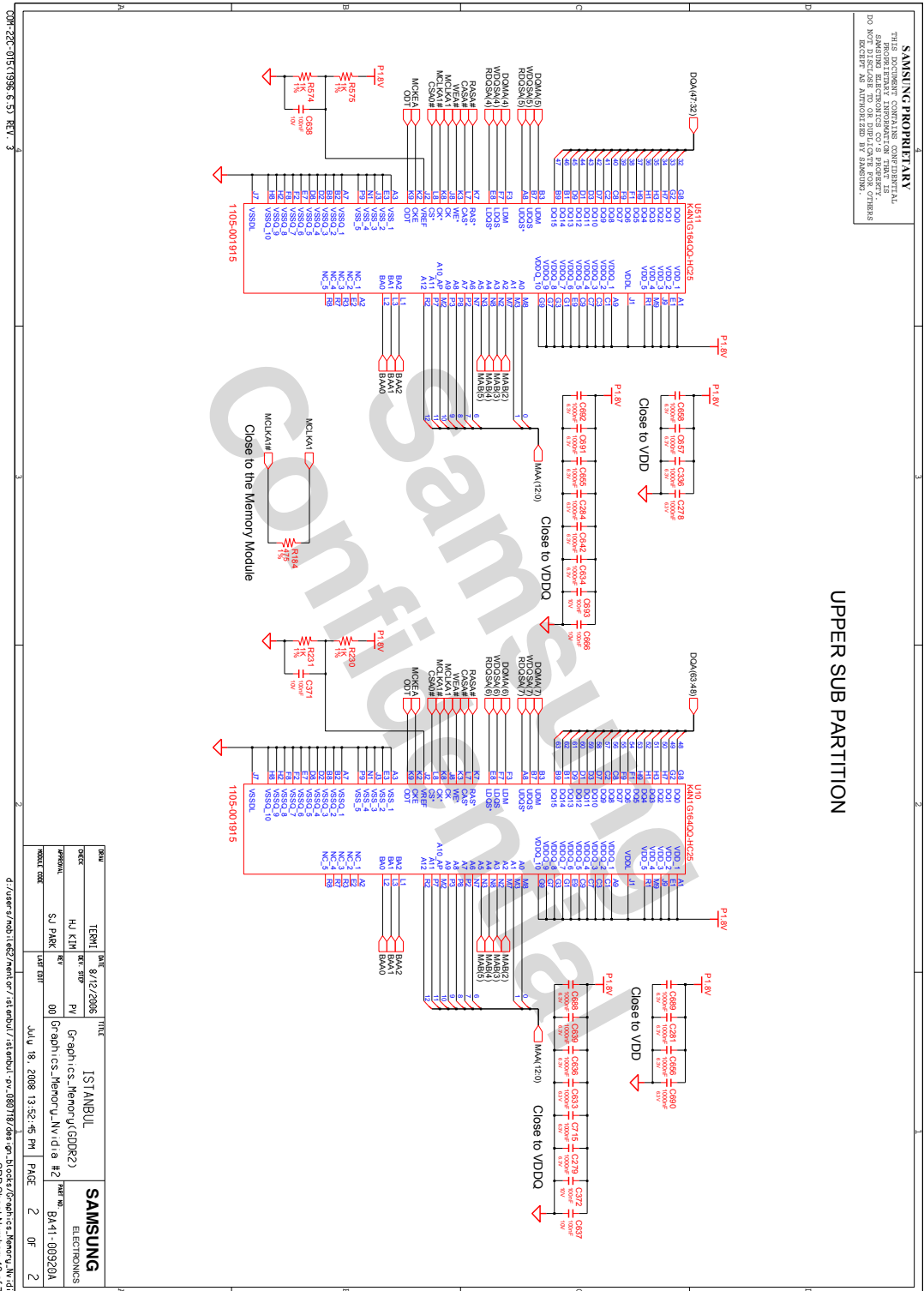
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



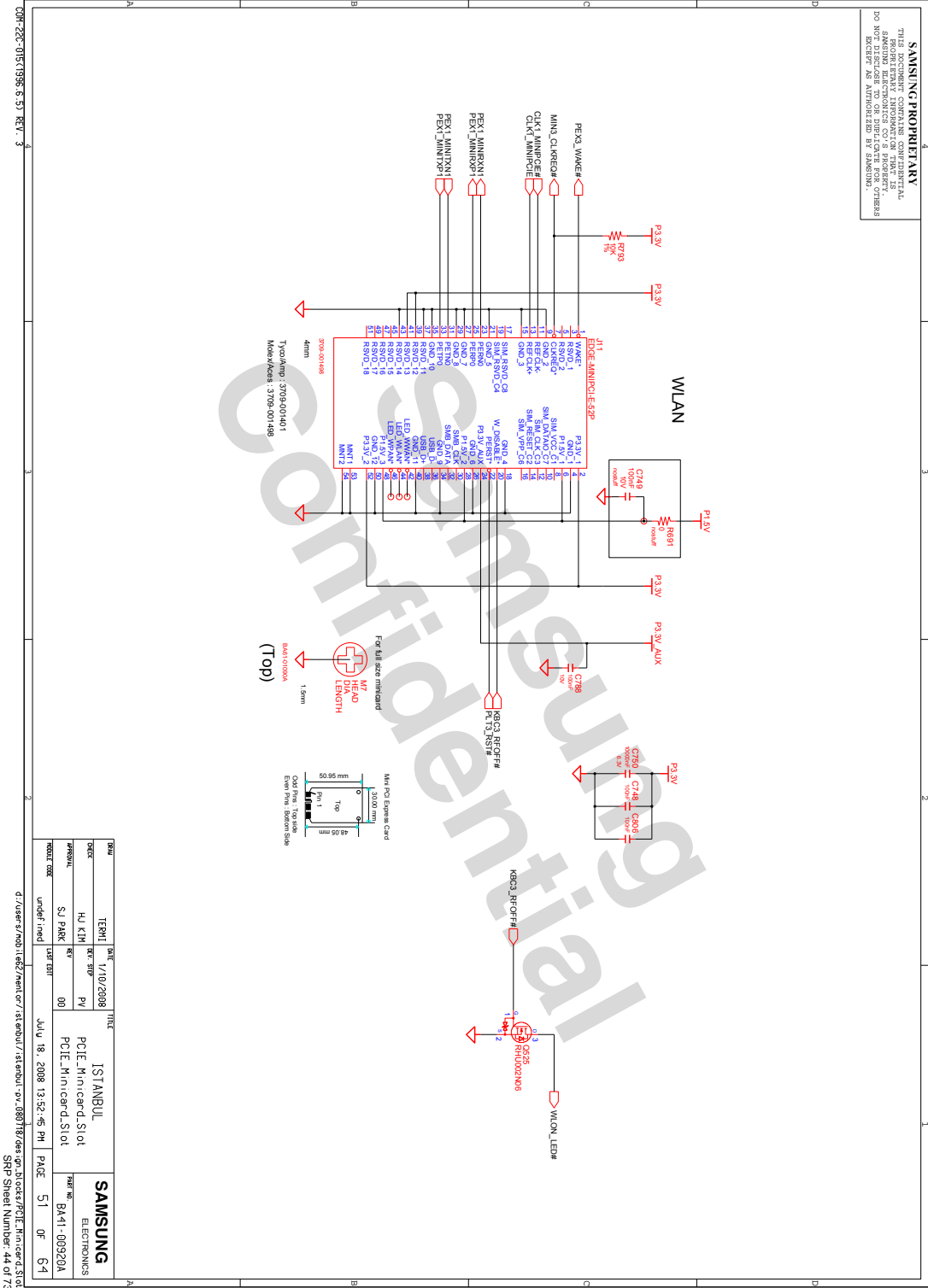
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

# 8. Block Diagram and Schematic



- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

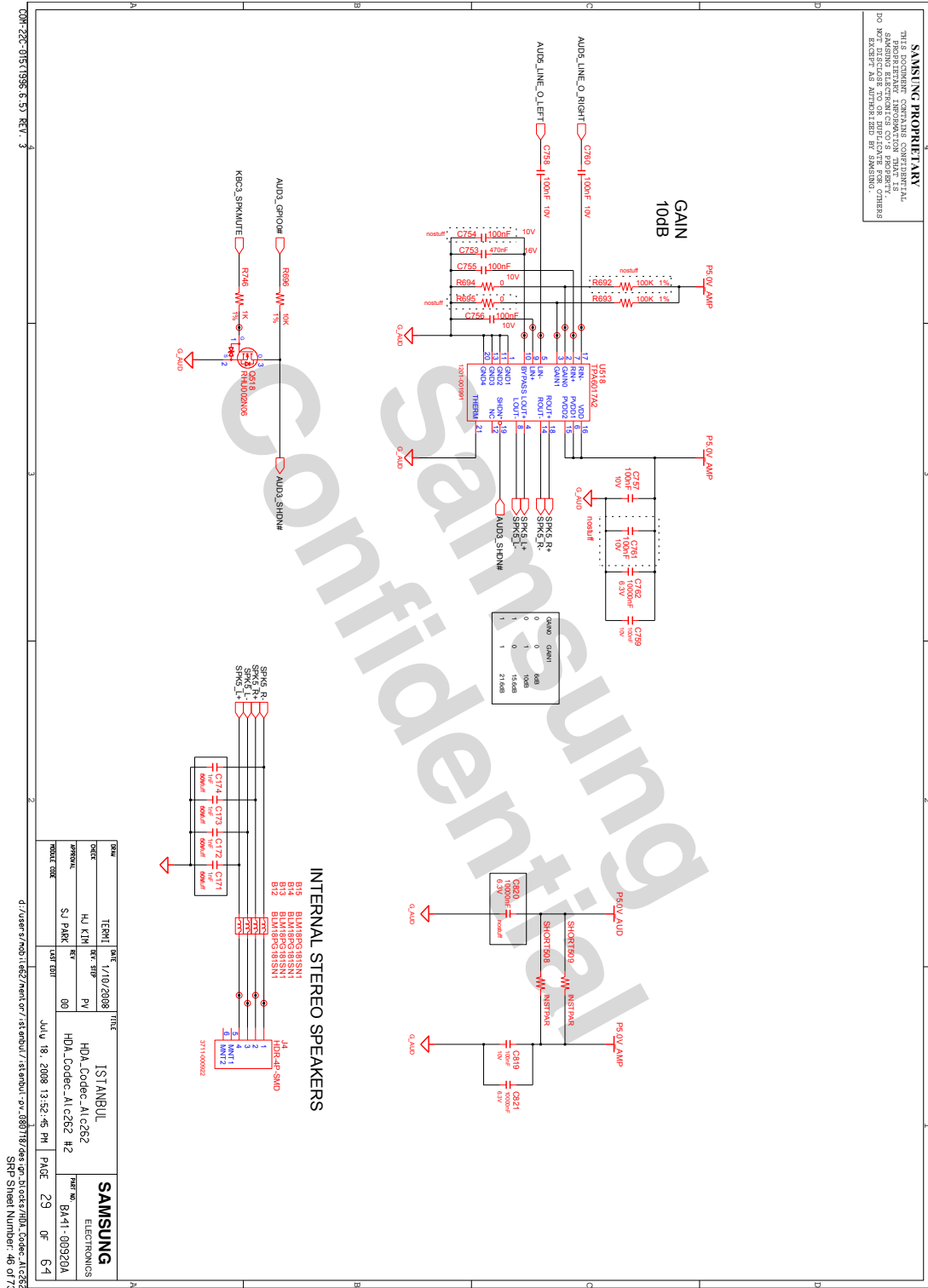
## 8. Block Diagram and Schematic





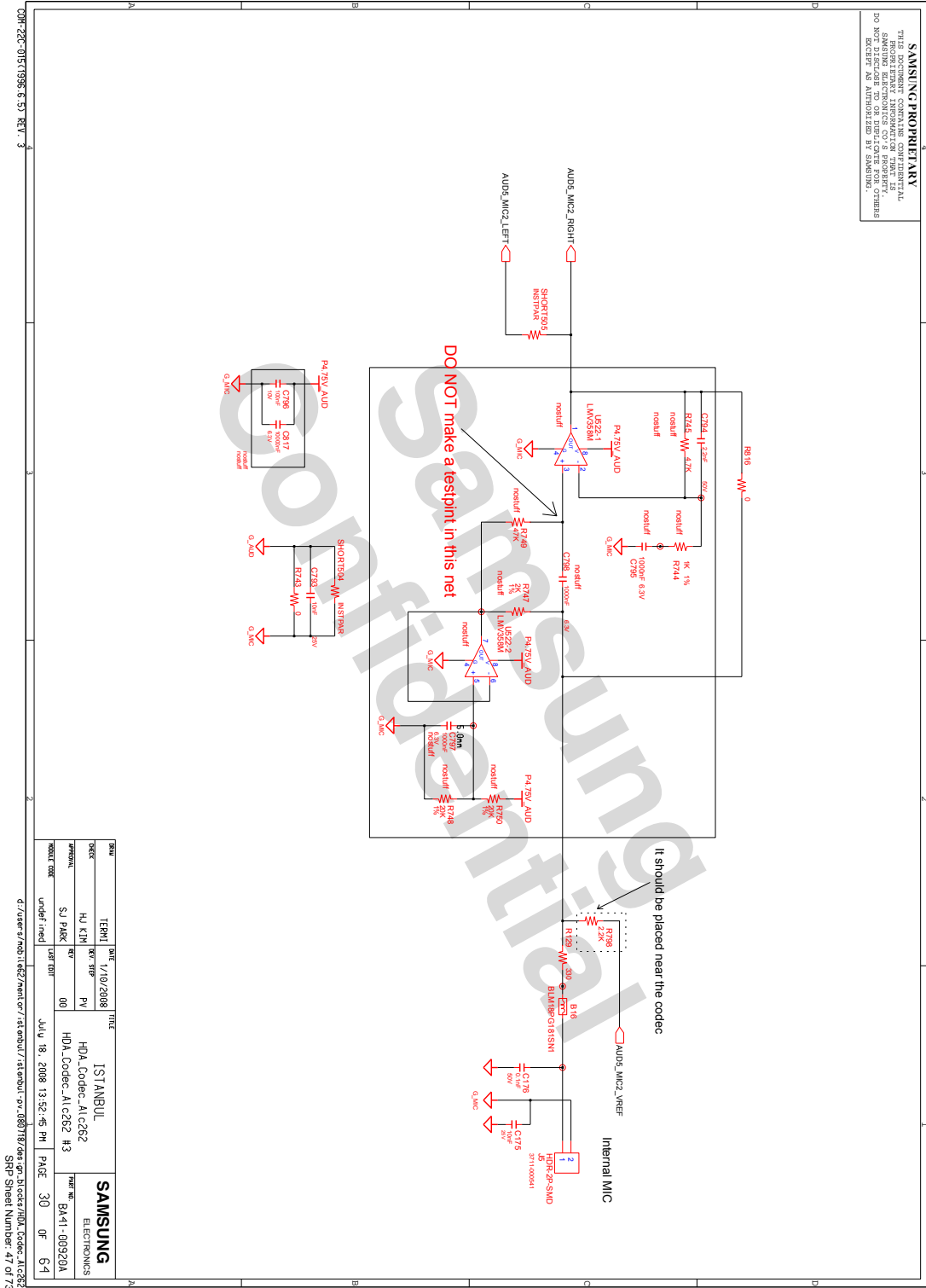
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



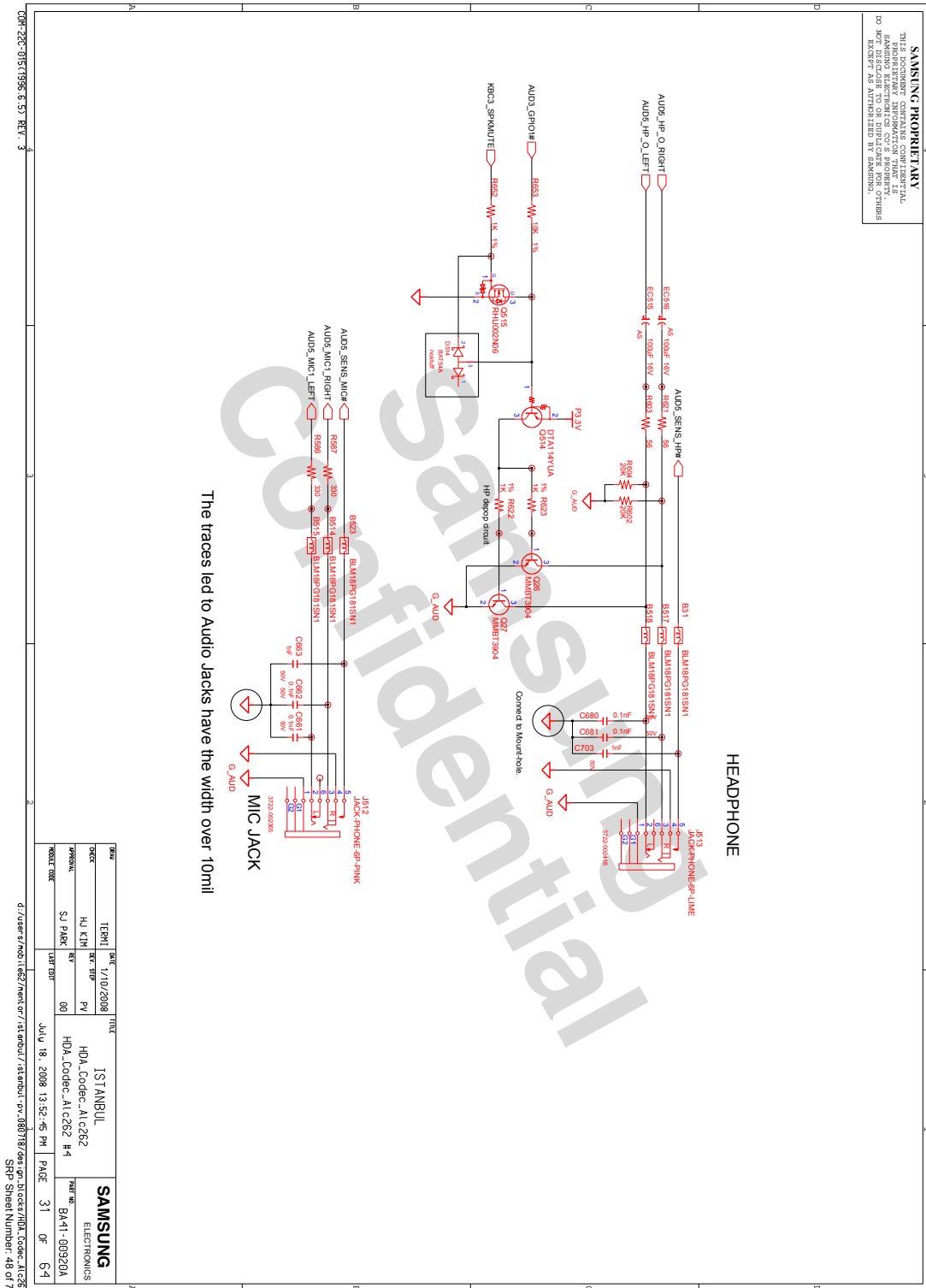
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

# 8. Block Diagram and Schematic



- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

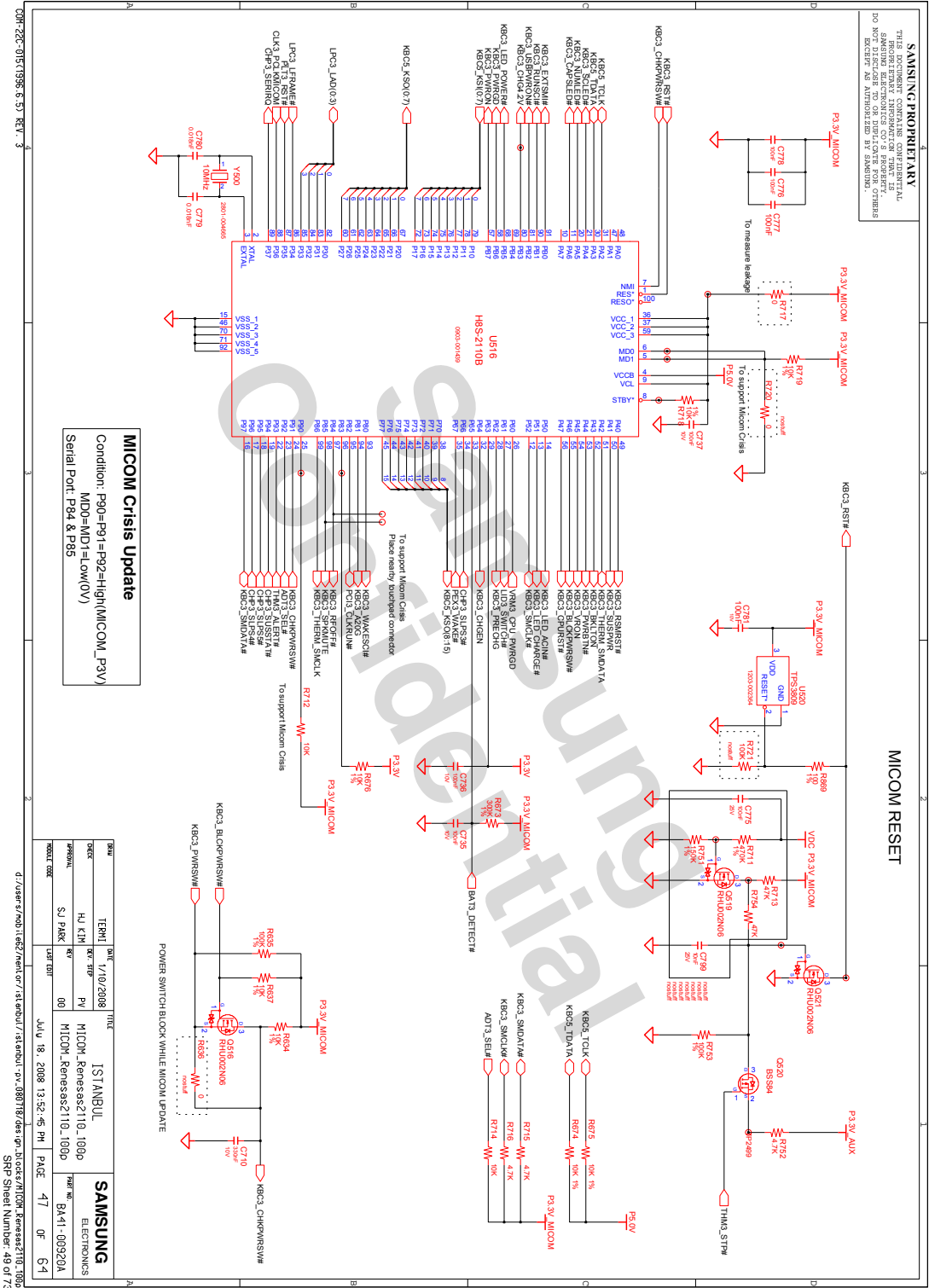
## 8. Block Diagram and Schematic





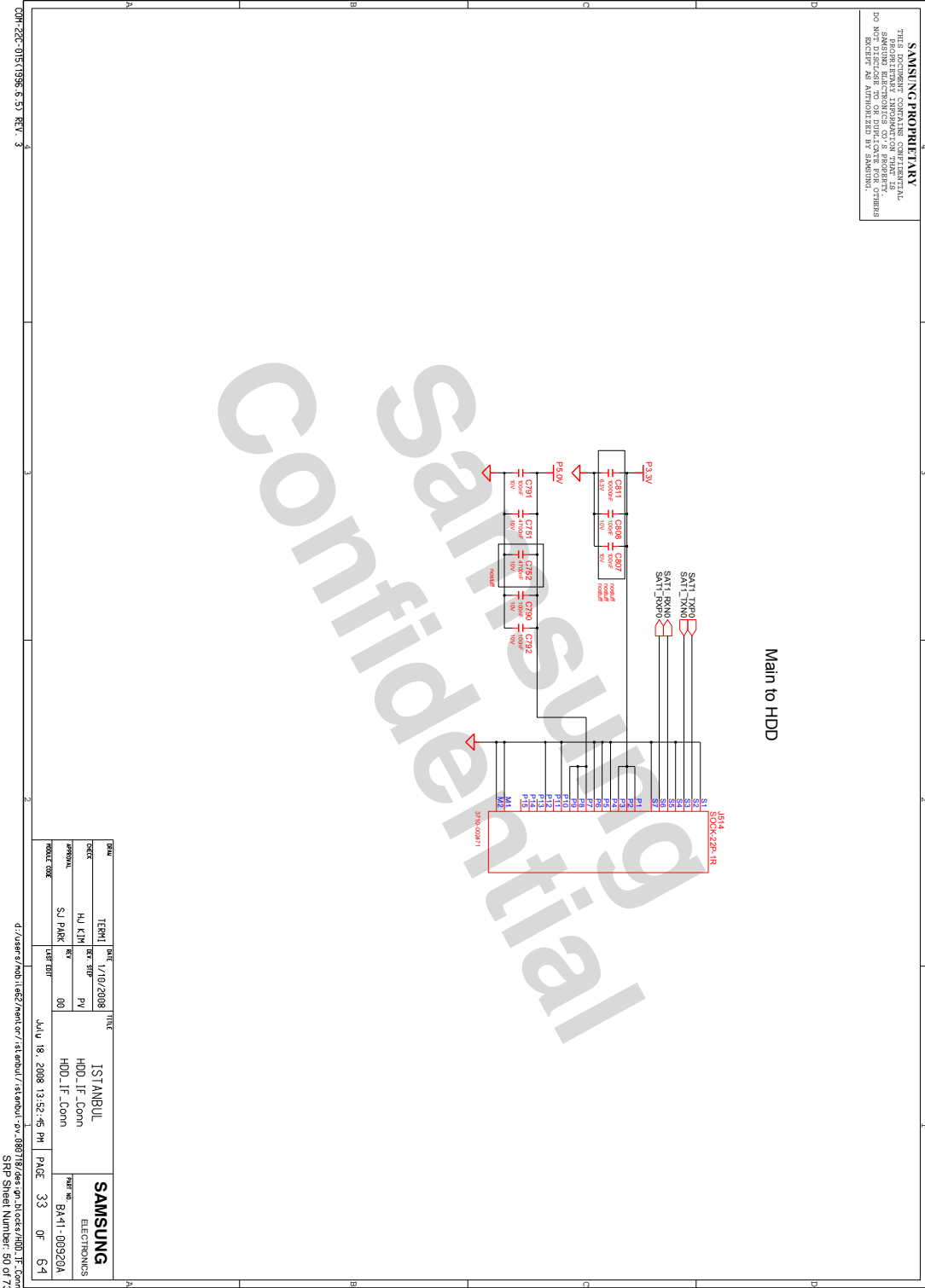
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

# 8. Block Diagram and Schematic



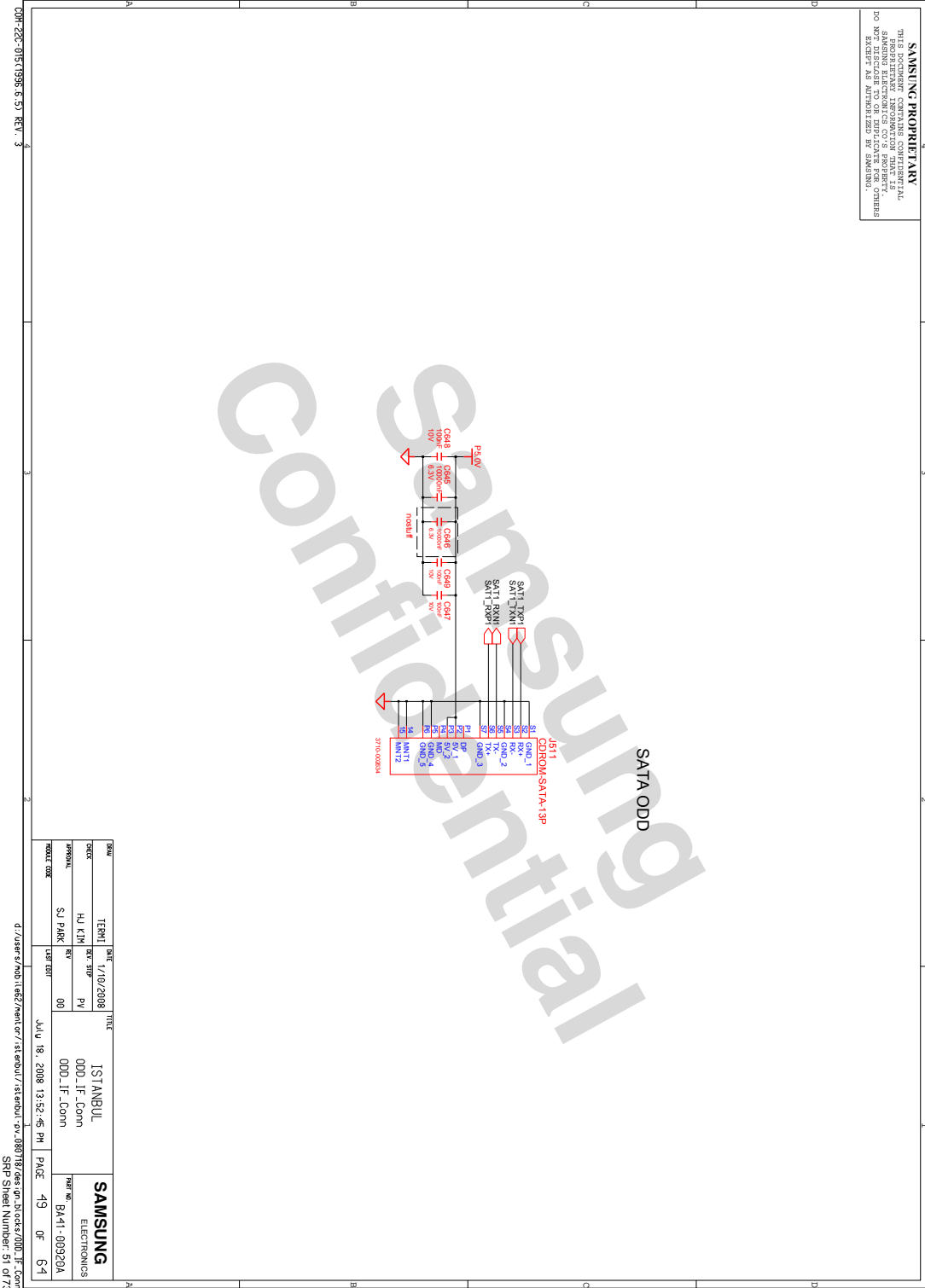
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



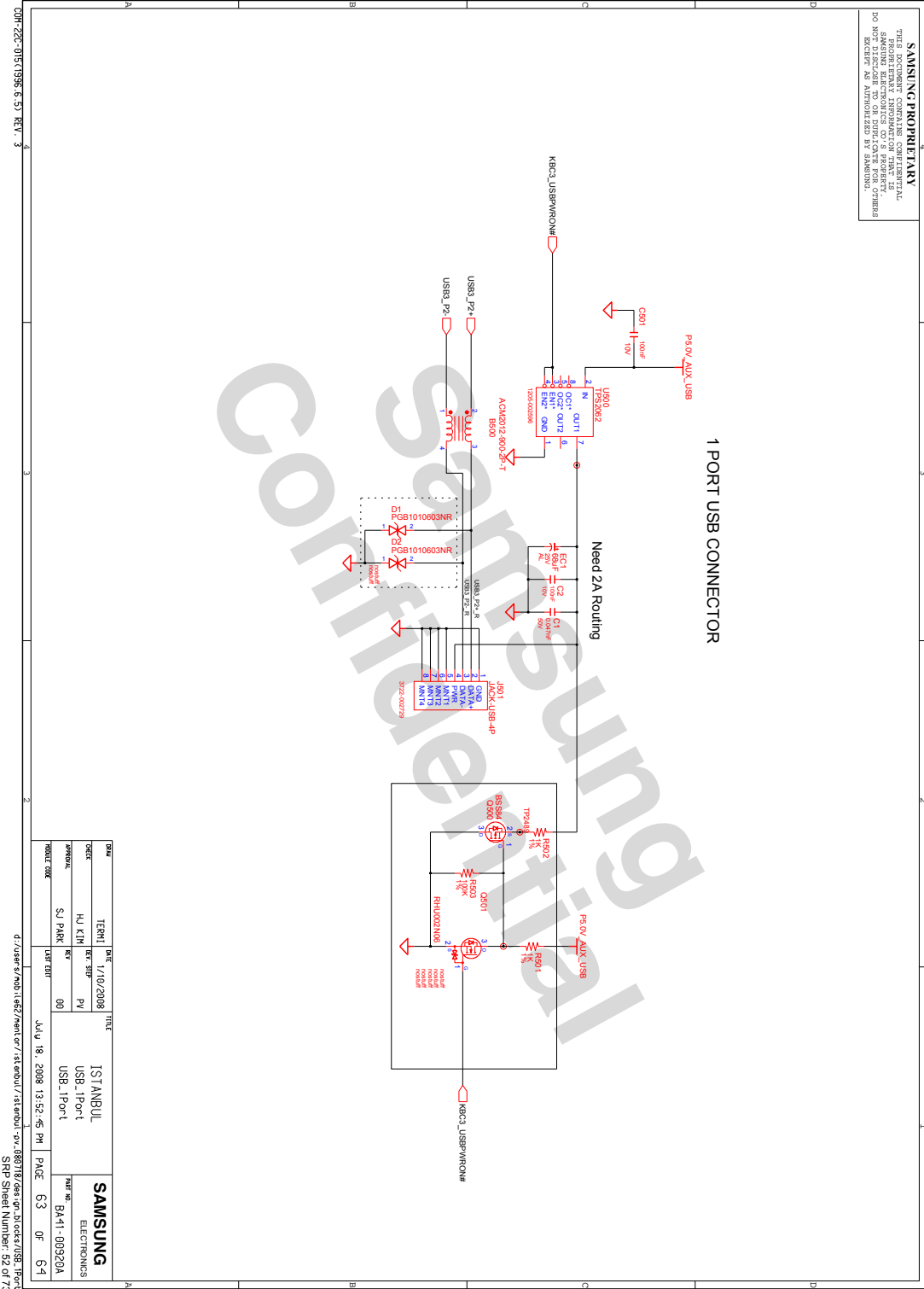
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



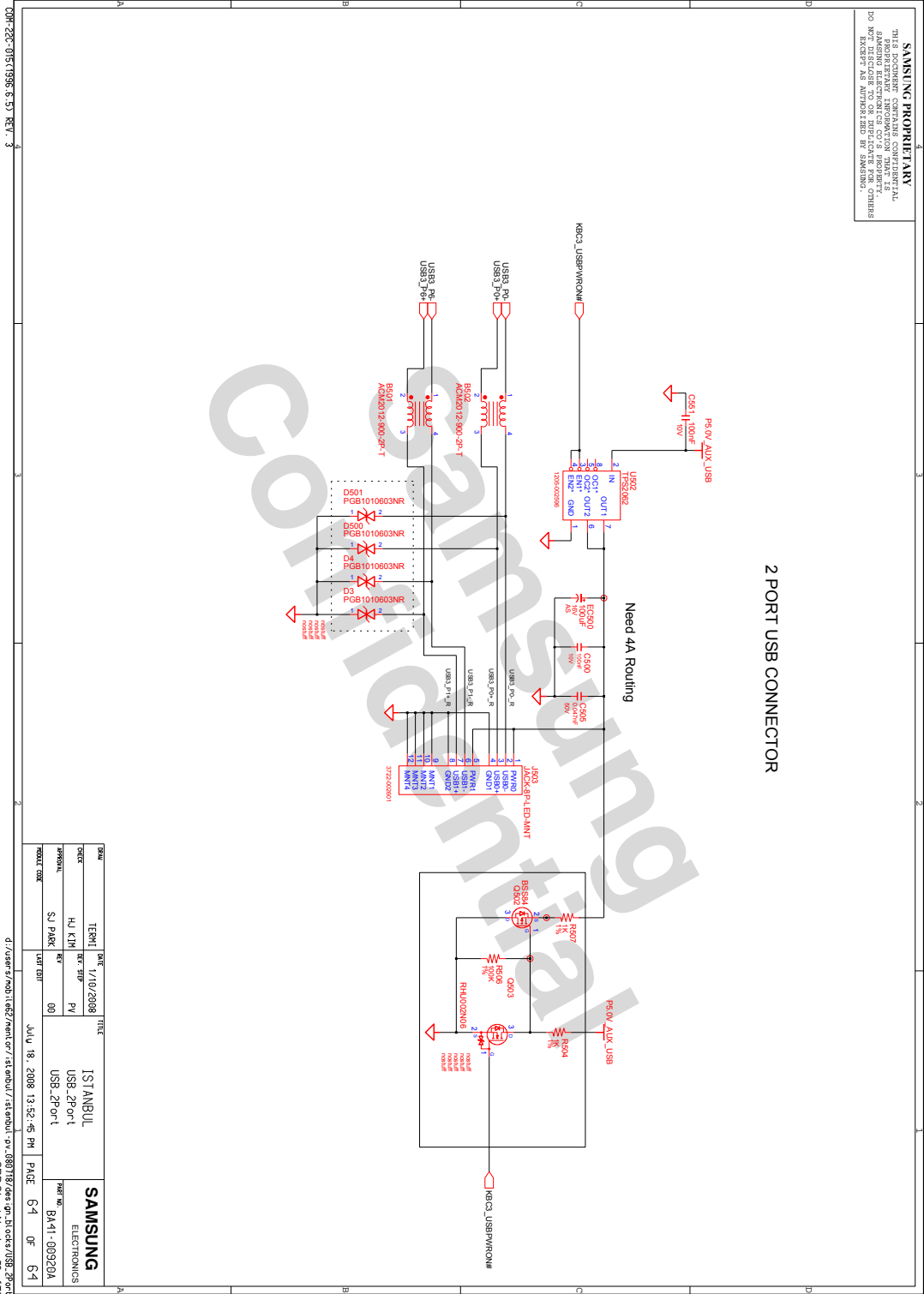
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



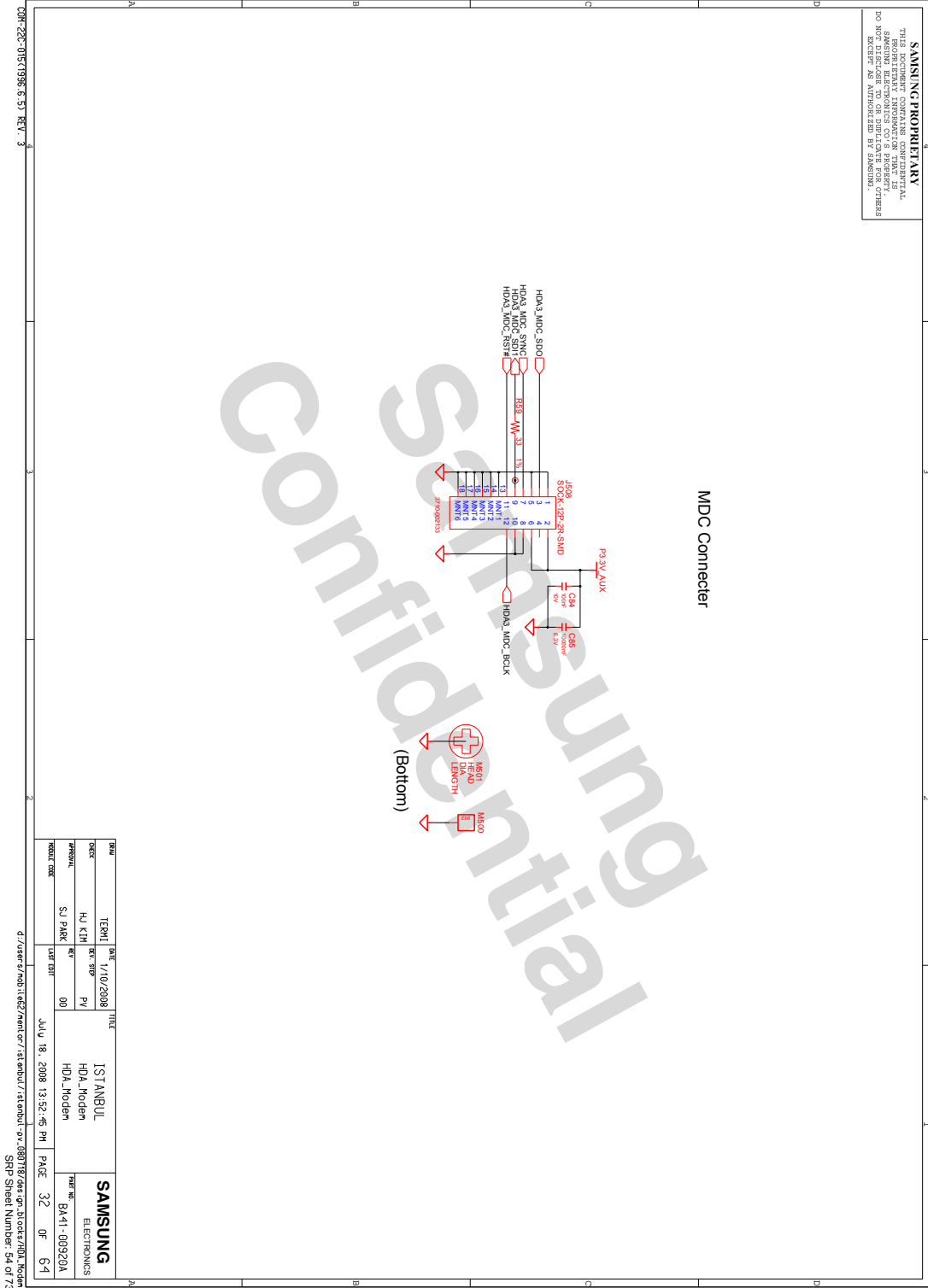
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

# 8. Block Diagram and Schematic



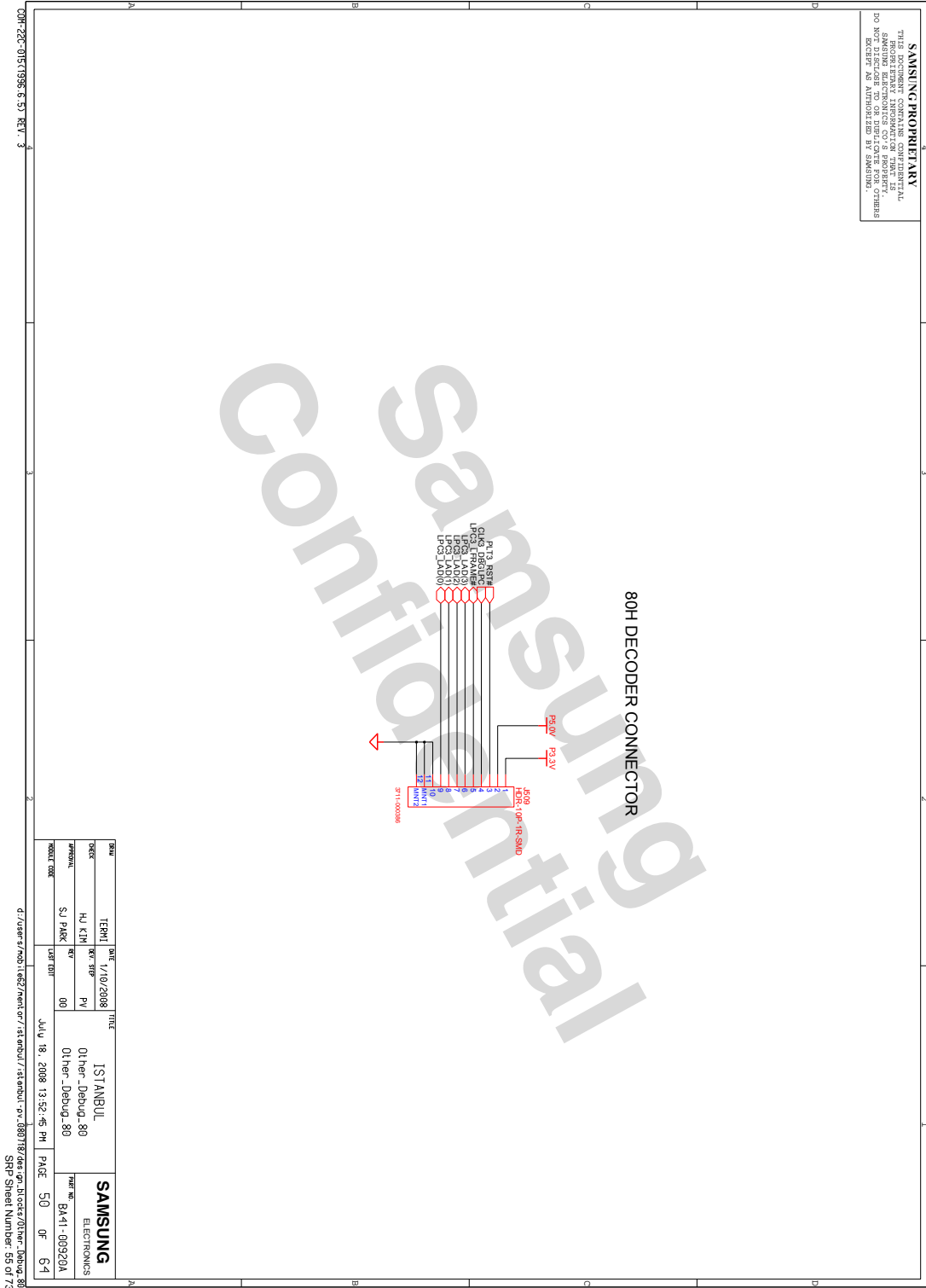
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



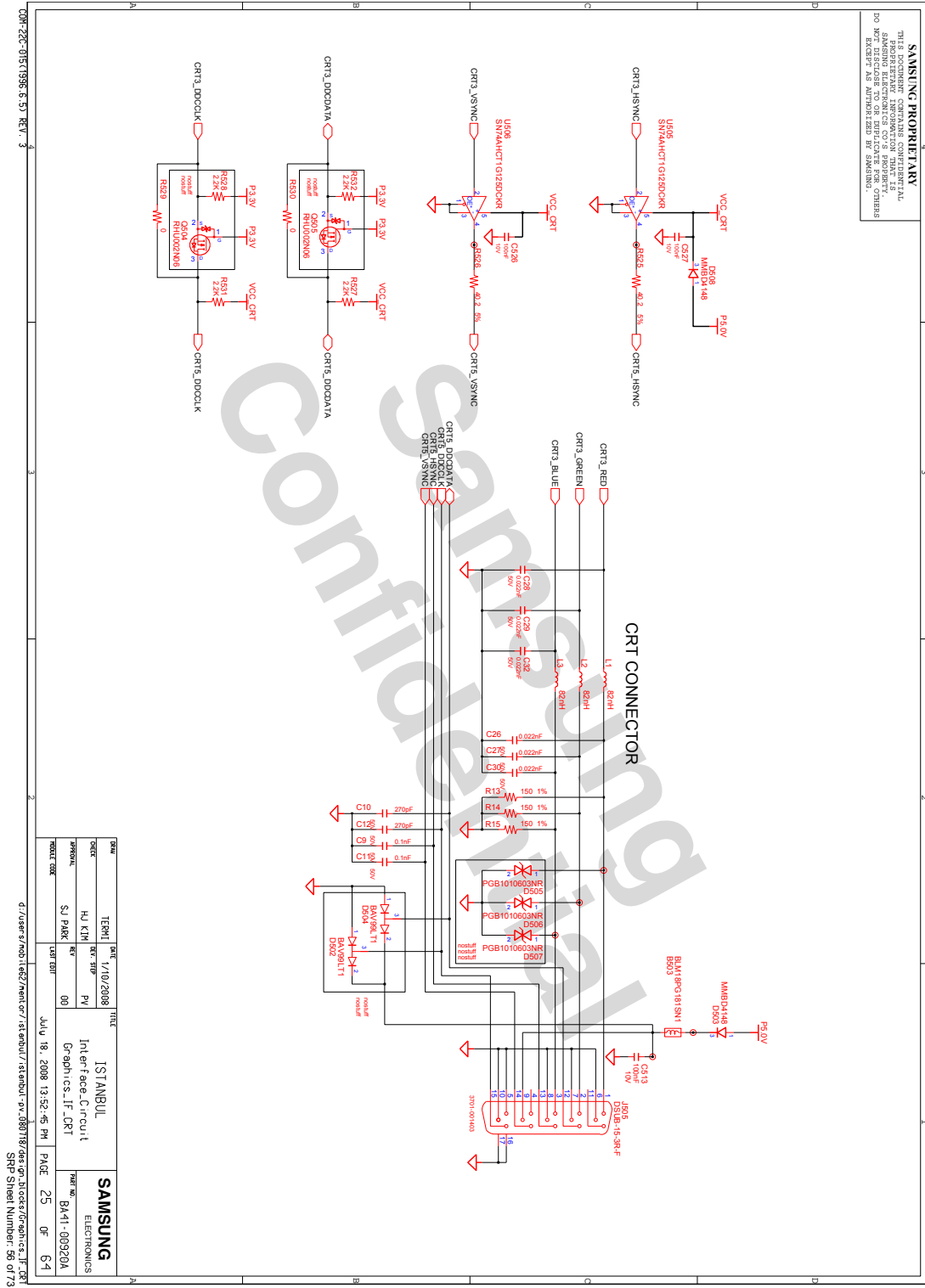
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

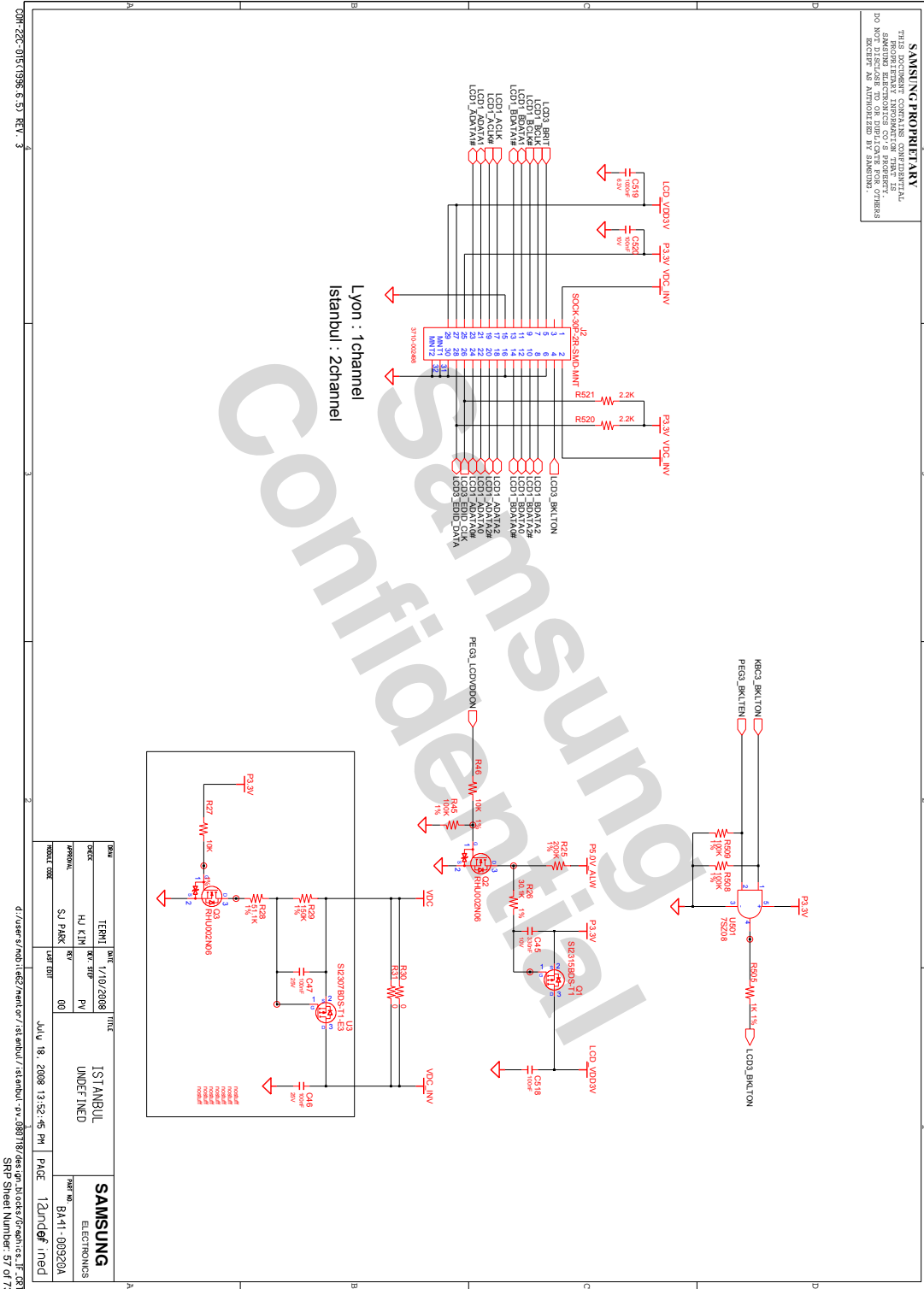
## 8. Block Diagram and Schematic





- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

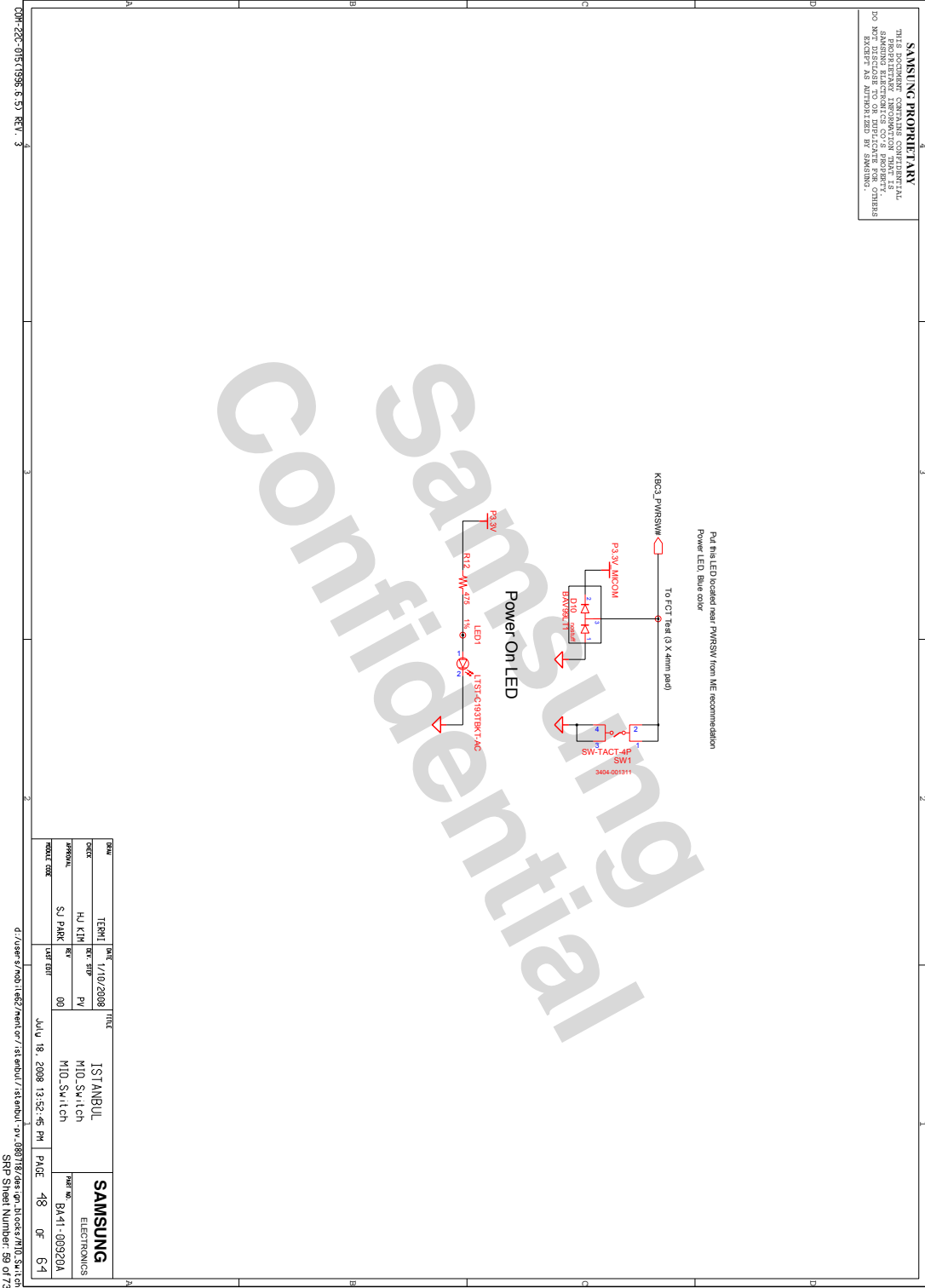
## 8. Block Diagram and Schematic





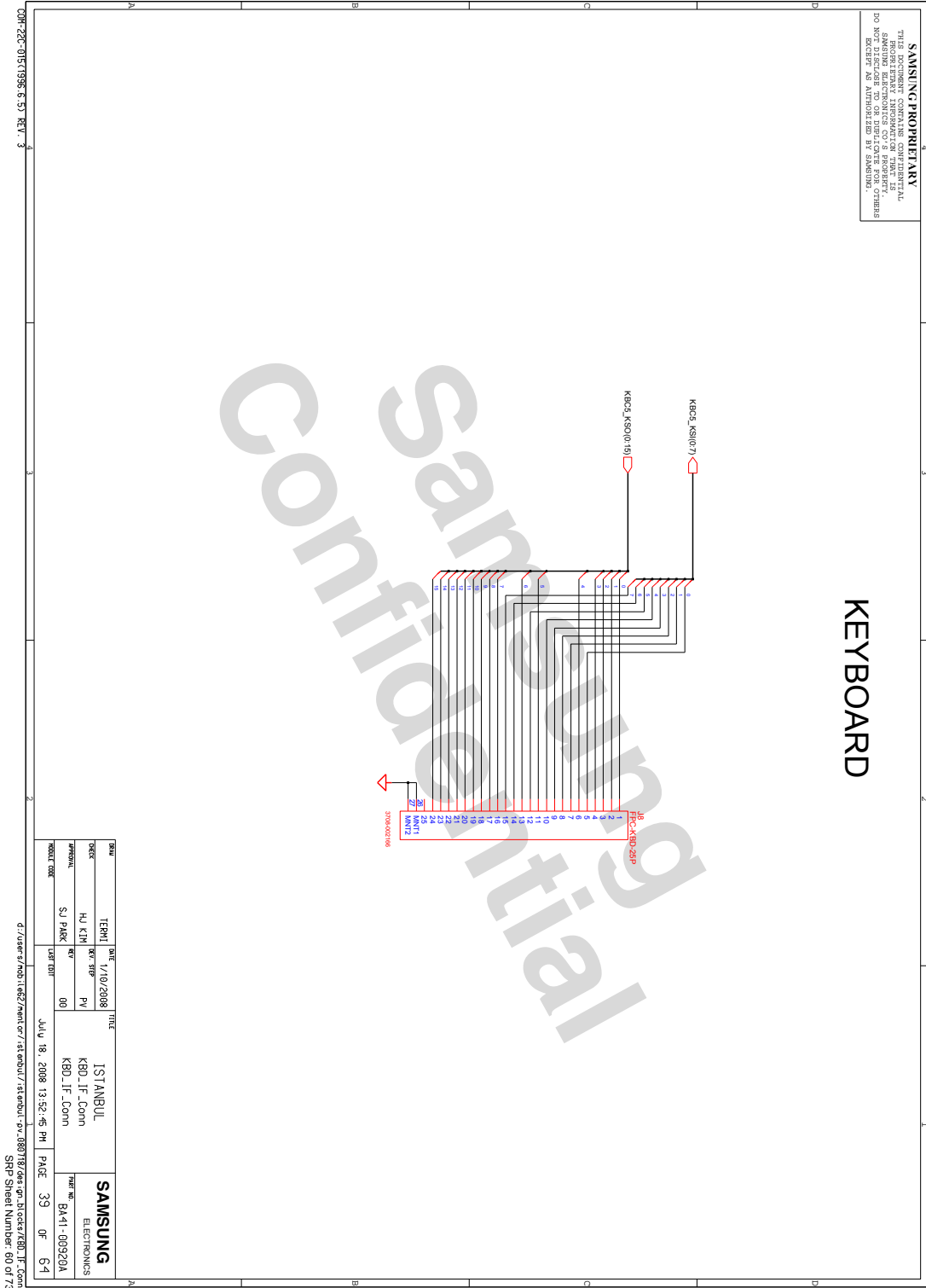
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

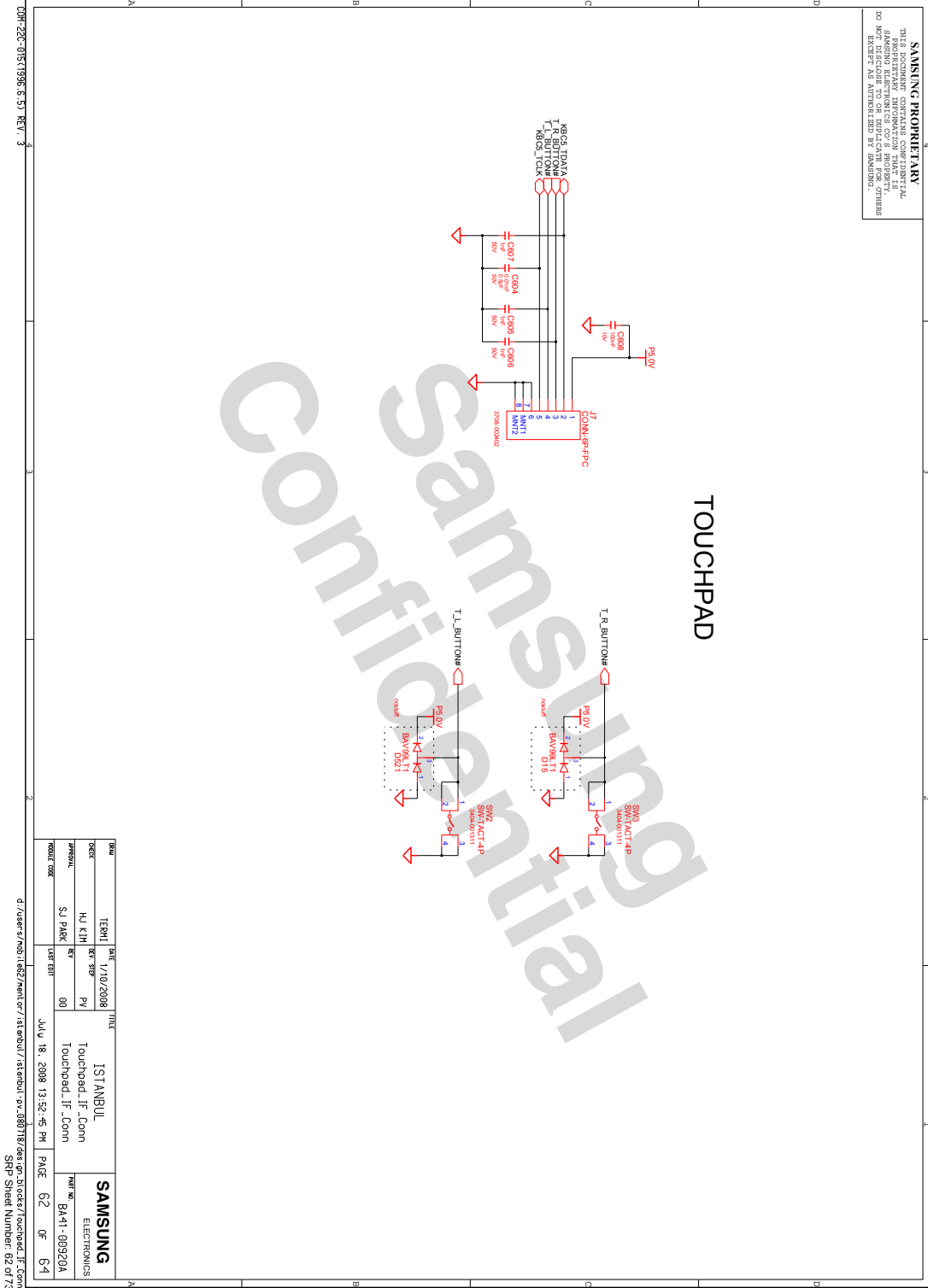
## 8. Block Diagram and Schematic





- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

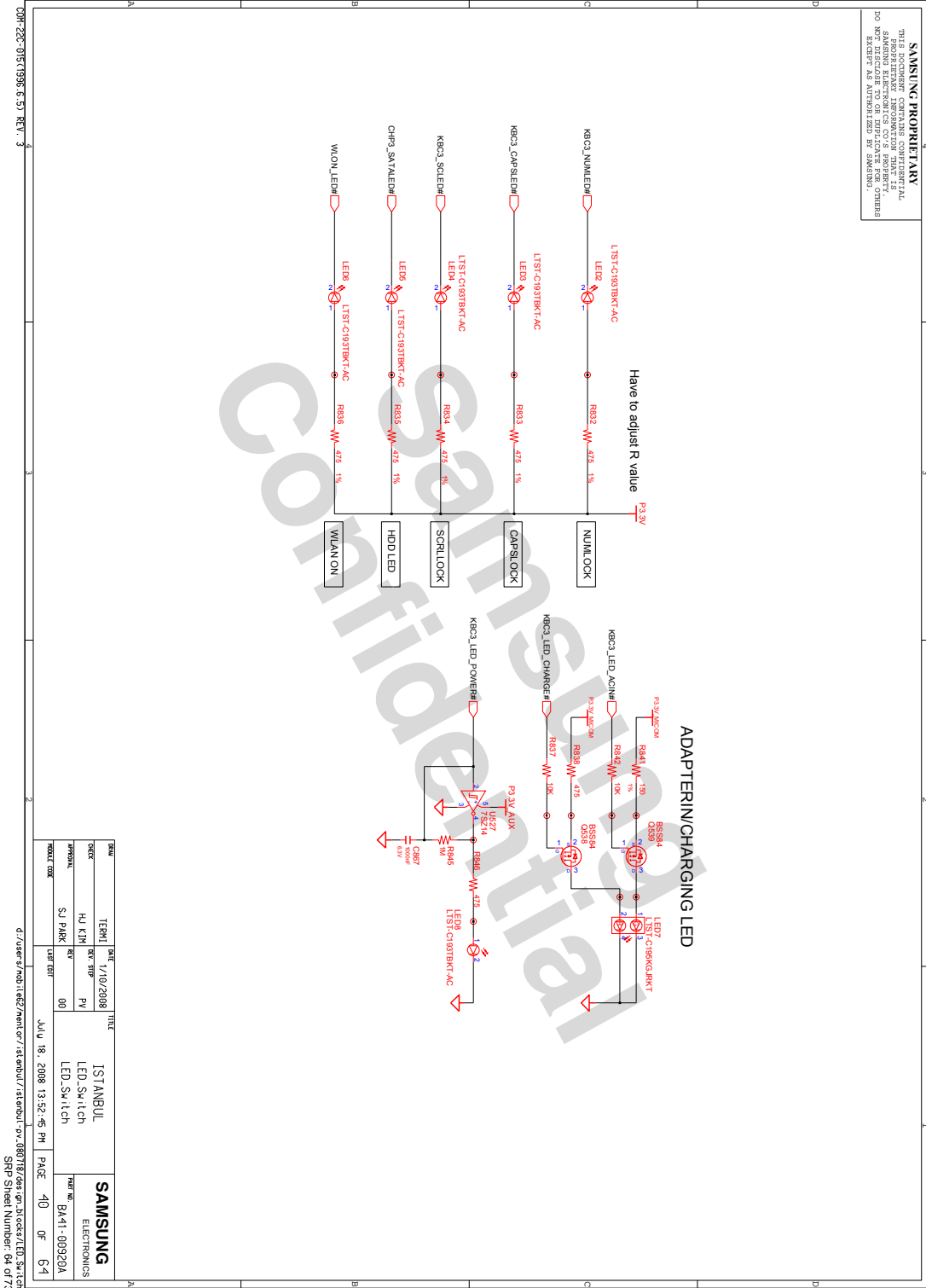
## 8. Block Diagram and Schematic





- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

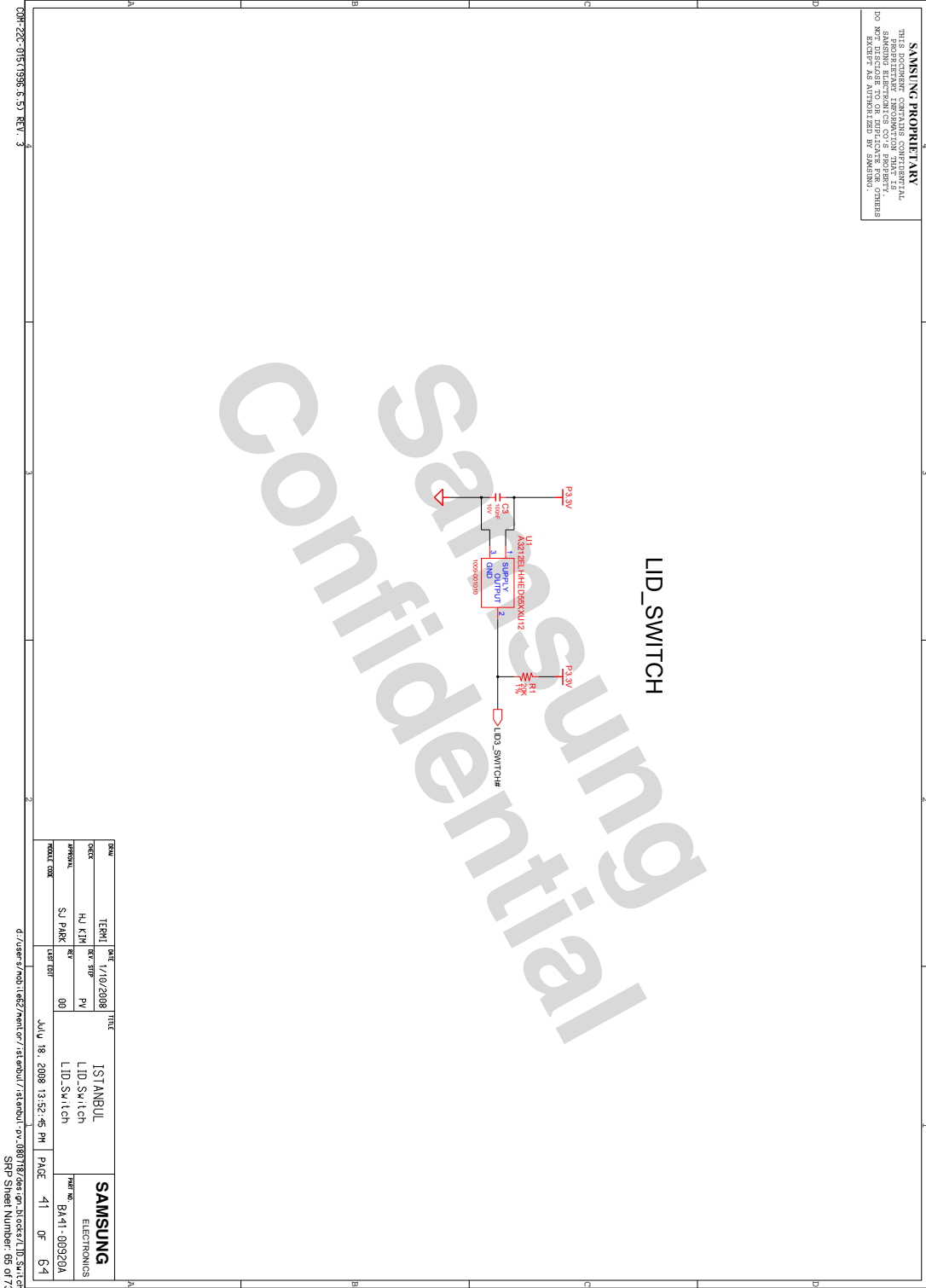
## 8. Block Diagram and Schematic





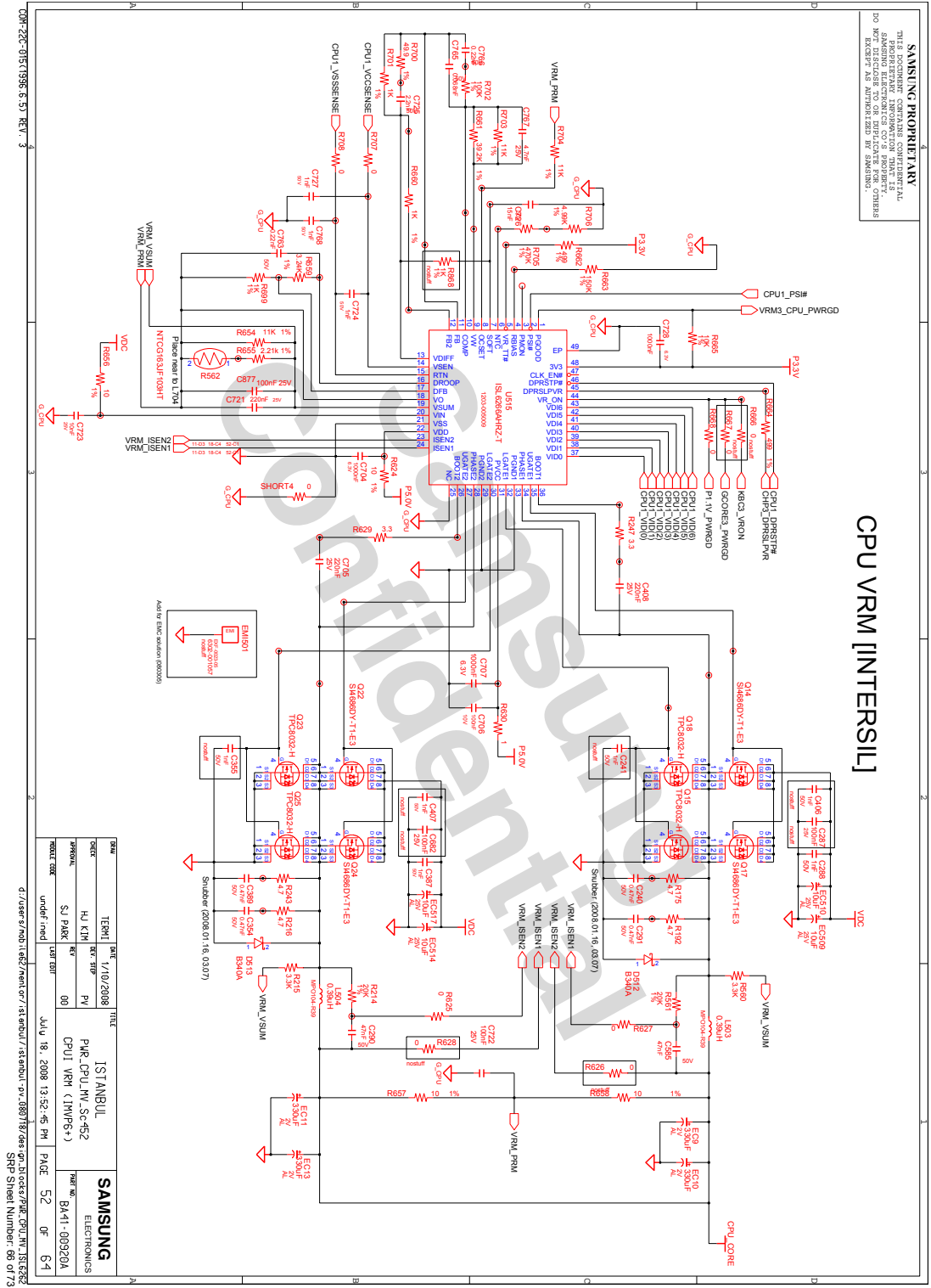
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

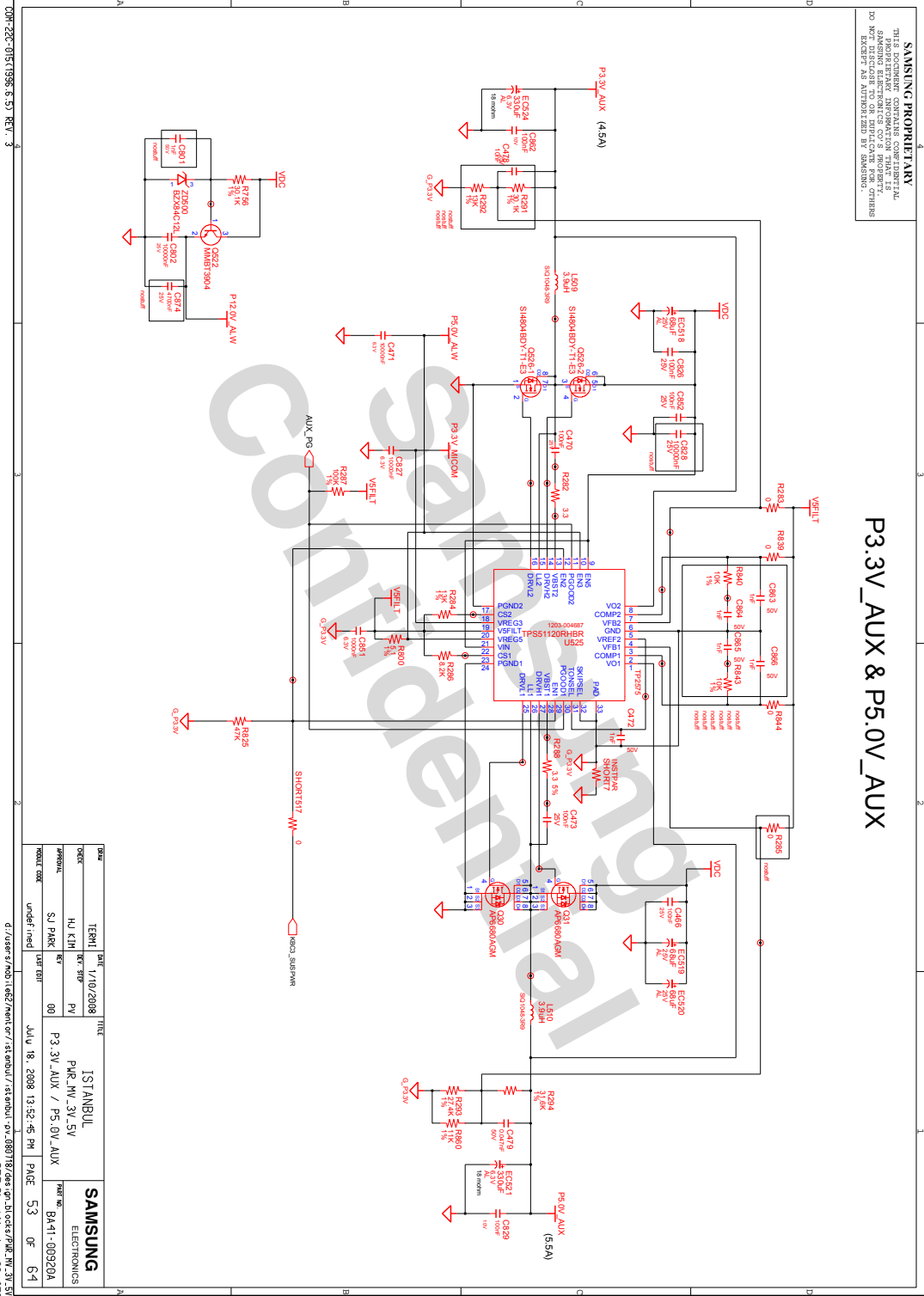
# 8. Block Diagram and Schematic





- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



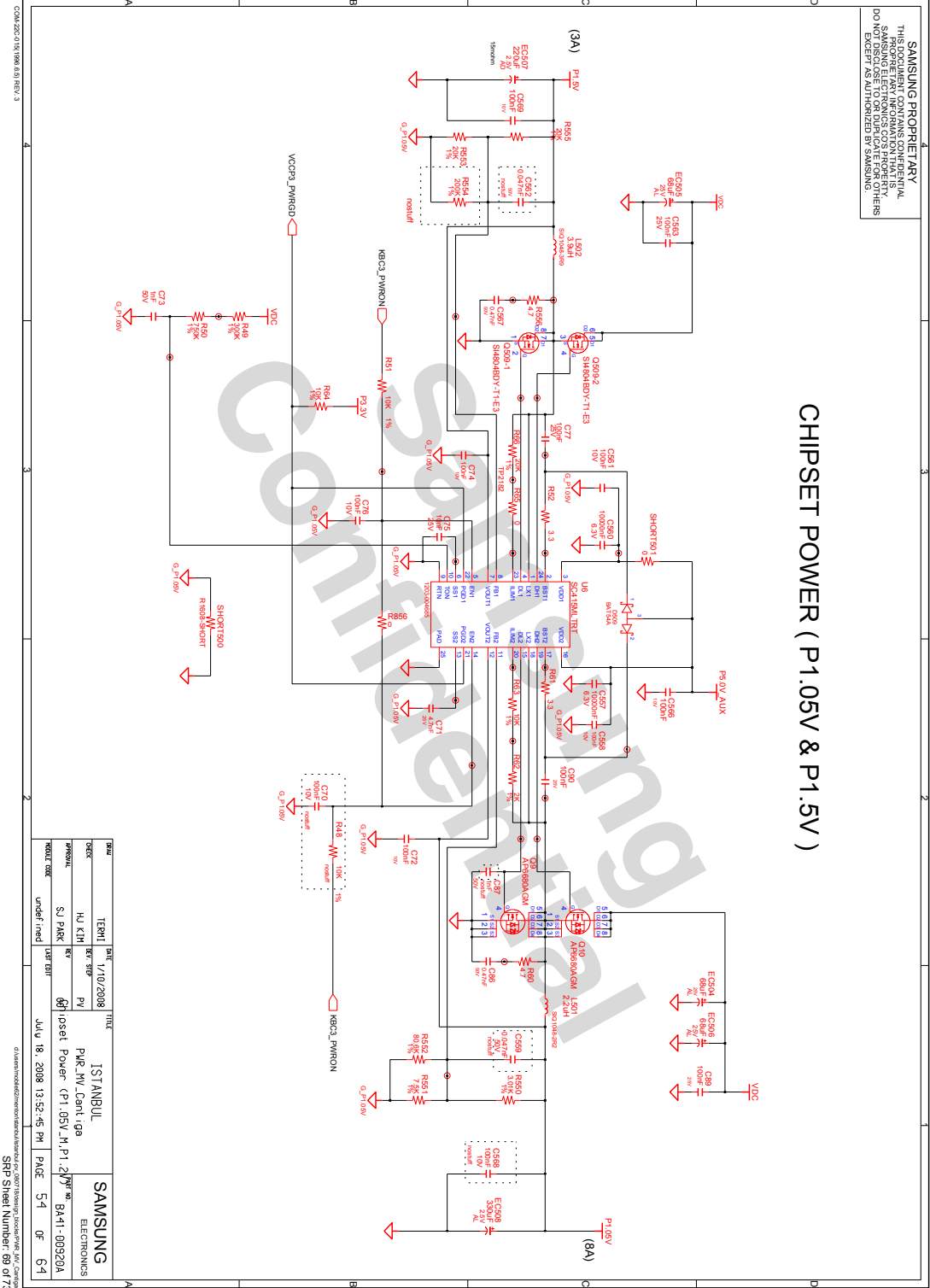
REV	DATE	TIME
001	17/10/2008	ISTANBUL
002	18/11/2008	PUR.MV_3V_5V
003	20/11/2008	PV
004	00	P3.3V_AUX / P5.0V_AUX

MODEL CODE	UNIT / REV	DATE REV
BA411-00920A	00	July 18, 2008 13:52:45 PM

SRP Sheet Number: 08 of 73

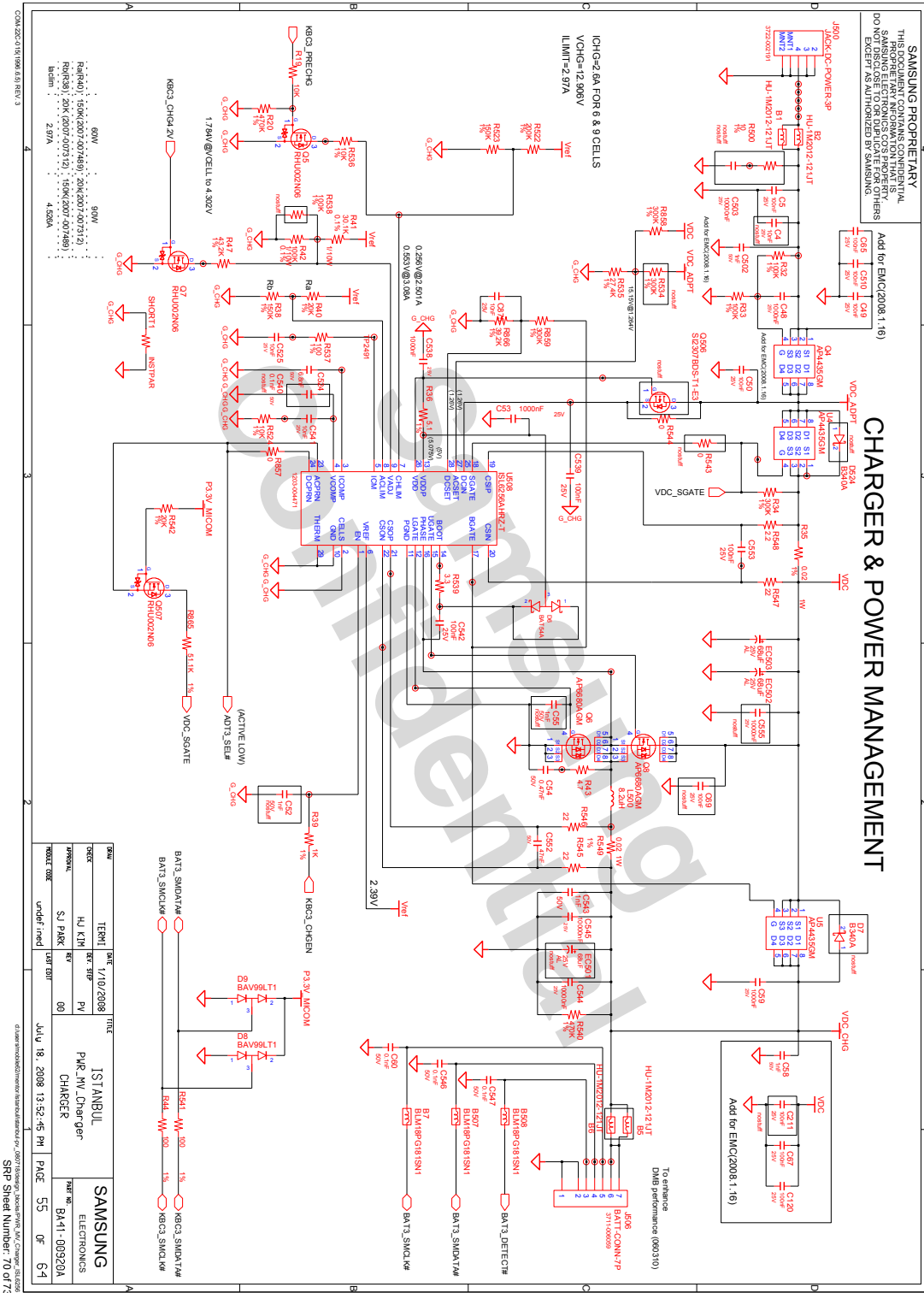
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



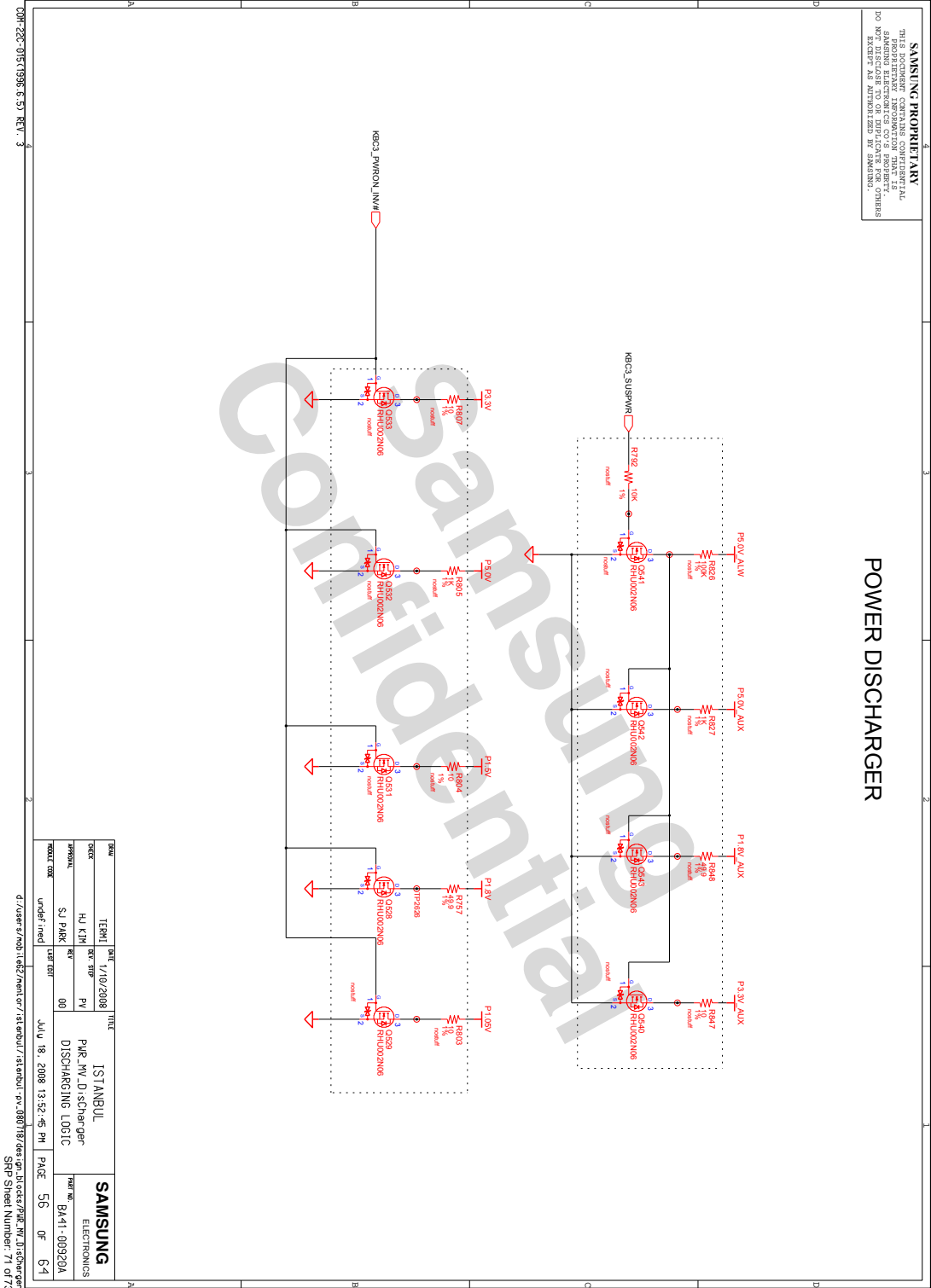
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -  
 - This Document can not be used without Samsung's authorization -

# 8. Block Diagram and Schematic



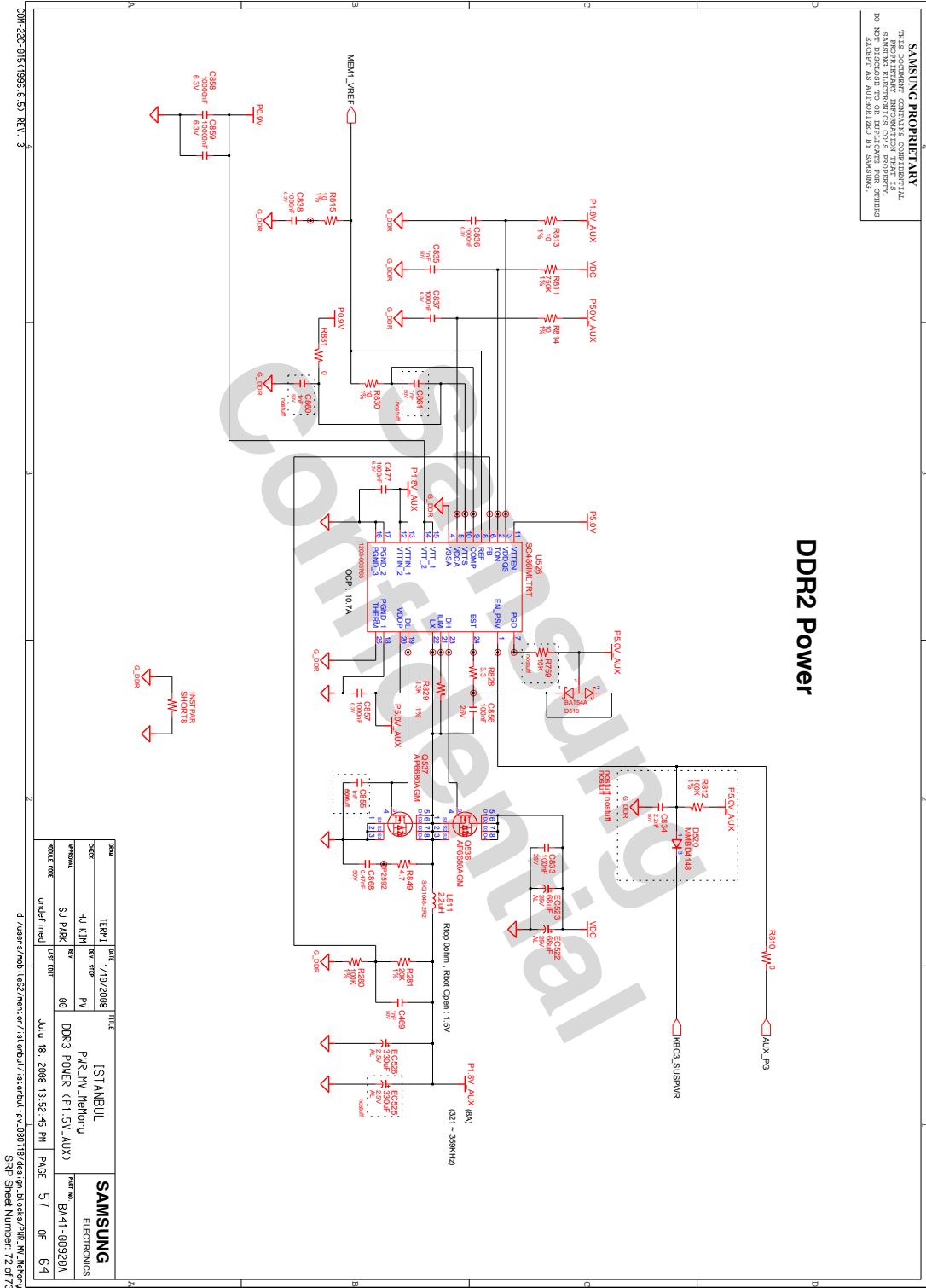
- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

## 8. Block Diagram and Schematic



- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

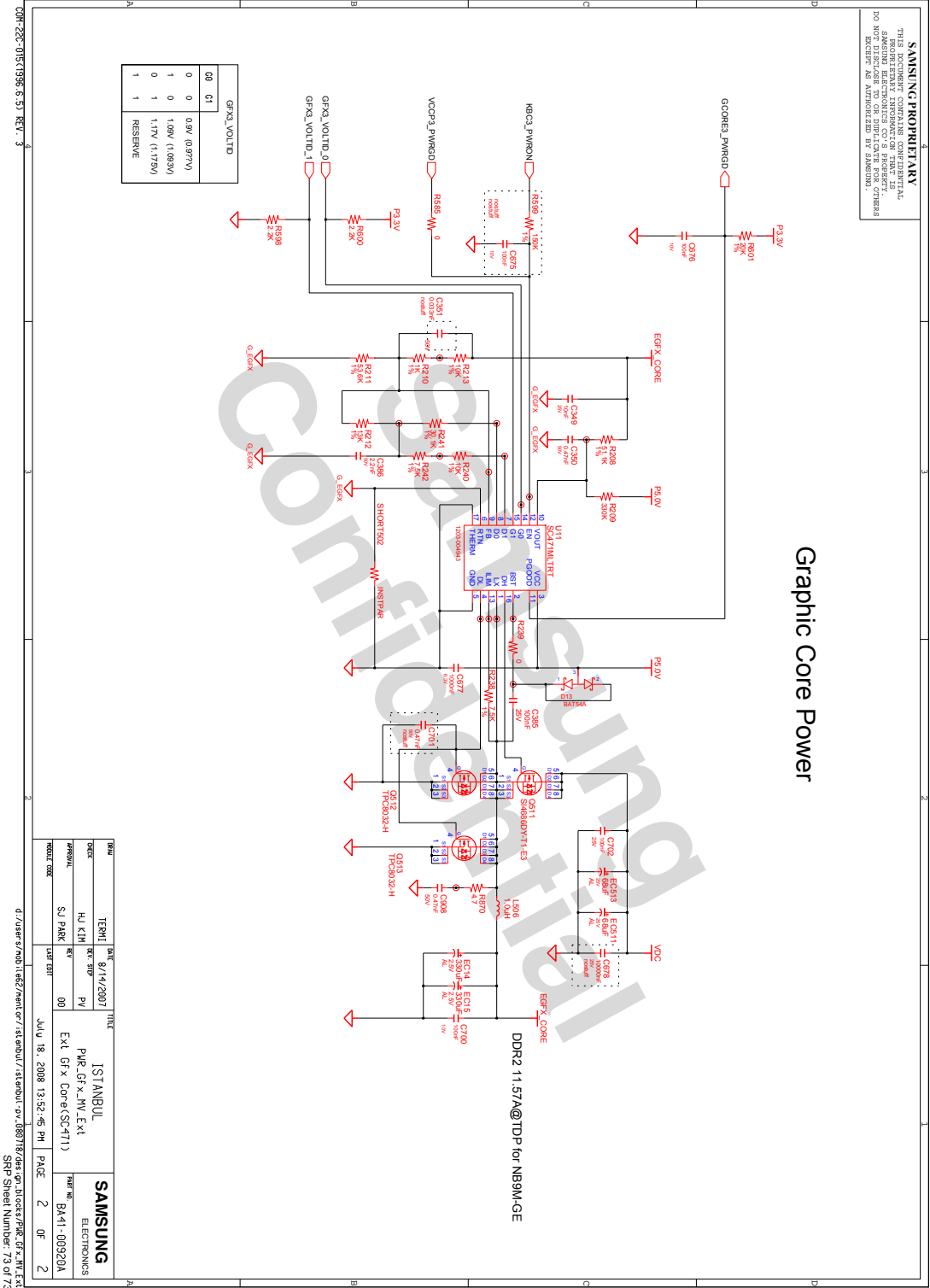
## 8. Block Diagram and Schematic





- 이 문서는 삼성전자의 기술 자산으로 승인자만이 사용할 수 있습니다 -
- This Document can not be used without Samsung's authorization -

# 8. Block Diagram and Schematic



## 8. Block Diagram and Schematic

07/18/108  
18:39:04

Index Page

1

Sheet1	----- Rootf[sheet1]
Sheet2	----- Rootf[sheet2]
Sheet3	----- Rootf[sheet3]
Sheet4	----- Rootf[sheet4]
Sheet5	----- Rootf[sheet5]
Sheet6	----- Rootf[sheet6]
Sheet7	----- Rootf[sheet7]
Sheet8	----- Rootf[sheet8]
Sheet9	----- Rootf[sheet9]
Sheet10	----- Rootf[sheet10]
Sheet11	----- Rootf[sheet11]
Sheet12	----- Rootf[sheet12]
Sheet13	----- Rootf[sheet13]
Sheet14	----- Rootf[sheet14]
Sheet15	----- Rootf[sheet15]
Sheet16	----- Rootf[sheet16]
Sheet17	----- Rootf[sheet17]
Sheet18	----- Rootf[sheet18]
Sheet19	----- Rootf[sheet19]
Sheet20	----- CK_Clock_505M[sheet1]
Sheet21	----- Thermal_Sensor_SMSC_Emc2102[sheet1]
Sheet22	----- CPU_Penryn_MV_SV[sheet1]
Sheet23	----- CPU_Penryn_MV_SV[sheet2]
Sheet24	----- CPU_Penryn_MV_SV[sheet3]
Sheet25	----- MCH_CANTIGA_GM_DDR2[sheet1]
Sheet26	----- MCH_CANTIGA_GM_DDR2[sheet2]
Sheet27	----- MCH_CANTIGA_GM_DDR2[sheet3]
Sheet28	----- MCH_CANTIGA_GM_DDR2[sheet4]
Sheet29	----- MCH_CANTIGA_GM_DDR2[sheet5]
Sheet30	----- SODIMM_DDR2[sheet1]
Sheet31	----- SODIMM_DDR2[sheet2]
Sheet32	----- ICH_9M_B[sheet1]
Sheet33	----- ICH_9M_B[sheet2]
Sheet34	----- ICH_9M_B[sheet3]
Sheet35	----- ICH_9M_B[sheet4]
Sheet36	----- ICH_9M_B[sheet5]
Sheet37	----- SPL_BIOS_ROM[sheet1]
Sheet38	----- Gfx_External_Nvidia_Nb9x_64bit[sheet1]
Sheet39	----- Gfx_External_Nvidia_Nb9x_64bit[sheet2]
Sheet40	----- Gfx_External_Nvidia_Nb9x_64bit[sheet3]
Sheet41	----- Gfx_External_Nvidia_Nb9x_64bit[sheet4]
Sheet42	----- Graphics_Memory_Nvidia[sheet1]
Sheet43	----- Graphics_Memory_Nvidia[sheet2]
Sheet44	----- PCIE_Minicard_Slot[sheet1]
Sheet45	----- HDA_Codec_Alc262[sheet1]
Sheet46	----- HDA_Codec_Alc262[sheet2]
Sheet47	----- HDA_Codec_Alc262[sheet3]
Sheet48	----- HDA_Codec_Alc262[sheet4]
Sheet49	----- MICOM_Renasas2110_100p[sheet1]
Sheet50	----- HDD_IF_Conn[sheet1]

Sheet51	----- ODD_IF_Conn[sheet1]
Sheet52	----- USB_1Portf[sheet1]
Sheet53	----- USB_2Portf[sheet1]
Sheet54	----- HDA_Modem[sheet1]
Sheet55	----- Other_Debug_80[sheet1]
Sheet56	----- Graphics_IF_CRT[sheet1]
Sheet57	----- Graphics_IF_CRT[sheet2]
Sheet58	----- Graphics_IF_CRT[sheet3]
Sheet59	----- MIO_Switch[sheet1]
Sheet60	----- KBD_IF_Conn[sheet1]
Sheet61	----- Bluetooth_IF_Conn[sheet1]
Sheet62	----- Touchpad_IF_Conn[sheet1]
Sheet63	----- Camera_IF_Conn[sheet1]
Sheet64	----- LED_Switch[sheet1]
Sheet65	----- LID_Switch[sheet1]
Sheet66	----- PWR_CPU_MV_ISL6262[sheet1]
Sheet67	----- PWR_Gfx_MV_Ext[sheet1]
Sheet68	----- PWR_MV_3V_5V[sheet1]
Sheet69	----- PWR_MV_Cantiga[sheet1]
Sheet70	----- PWR_MV_Charger_ISL6256[sheet1]
Sheet71	----- PWR_MV_DisCharger[sheet1]
Sheet72	----- PWR_MV_Memory[sheet1]
Sheet73	----- PWR_Gfx_MV_Ext[sheet2]