

Dasher-1 Block Diagram

LDB-1 91.4KH01.001

Jan. 10, 2011

PCB Layer Stackup

L1:Component
L2:GND
L3:Signal 1
L4:VCC
L5:Signal 2
L6:Signal 3
L7:GND
L8:Component

Battery Charger/Selector

BQ24742 74
INPUTS OUTPUTS
DOCK_PWR20 CHARGER_OUT12

System DC/DC
TPS51220ARSN 78
VINT20 VCC5M
VCC3M

CPU DC/DC
VT1316/VT1317 79
VCC5V_OUT VCCCPUCORE

GMCH GFX CORE
VT1317 81
VCC5V_OUT VCCGFXCORE

VCC1R5A
VT357FCX 86
VCC5V_OUT VCC1R5A

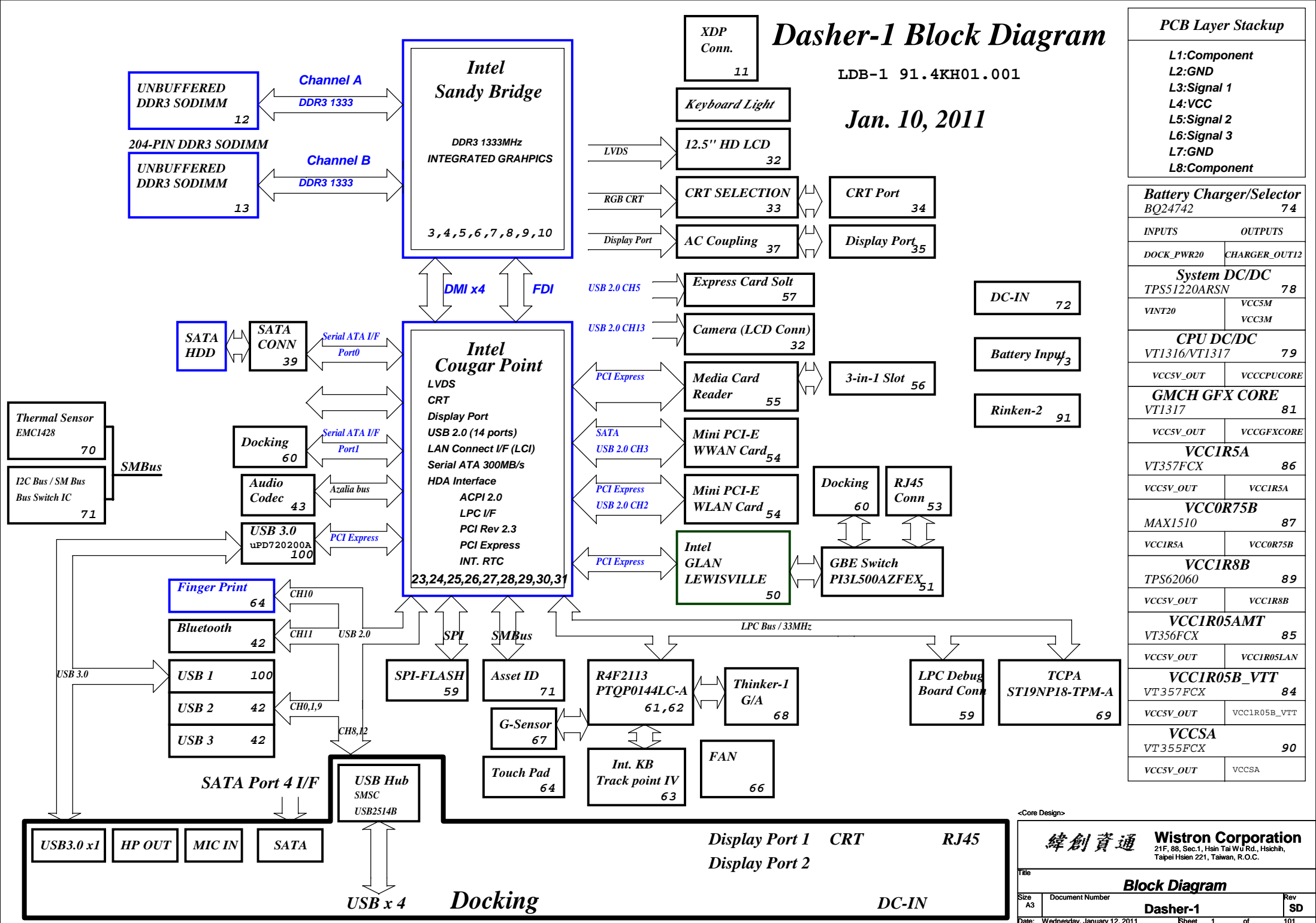
VCC0R75B
MAX1510 87
VCC1R5A VCC0R75B

VCC1R8B
TPS62060 89
VCC5V_OUT VCC1R8B

VCC1R05AMT
VT356FCX 85
VCC5V_OUT VCC1R05LAN

VCC1R05B_VTT
VT357FCX 84
VCC5V_OUT VCC1R05B_VTT

VCCSA
VT355FCX 90
VCC5V_OUT VCCSA



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Block Diagram

Dasher-1 Rev SD

RESISTOR

Symbol name	Value	Tolerance (J: 5%, F: 1%, D: 0.5%, B: 0.1 %)	Rating 0402=> 1/16W, 25V 0603 => 1/16W, 75V 0805 => 1/10W, 100V	Size 2=>0402, 3=>0603, 5=>0805, 6=>1206, 0=>1210
10KR3	10K Ohm	If no letter, it means J: 5%	1/16W, 75V	0603
33D3R5	33.3 Ohm	If no letter, it means J: 5%	1/10W, 100V	0805
1KR3F	1K Ohm	F: 1%	1/16W, 75V	0603

The naming rule is value + R + size + tolerance
 For the value, it can be read by the number before R. (R means resistor)
 For the tolerance, it can be read from the last letter.
 For the rating, we don't show on the symbol name.
 For the size, R2=>0402, R3=>0603, R5=>0805,....

CAPACITOR

Symbol name	Value	Tolerance (M: +/-20, K: +/-10, Z: +80/-20)	Rating	Size 2=>0402, 3=>0603, 5=>0805, 6=>1206, 0=>1210
SCD1U10V2MX-1	0.1uF	M/X5R	10V	0402
SC10U6D3V5MX	10uF	M/X5R	6.3V	0805
SC2D2U16V5ZY	2.2uF	Z/Y5V	16V	0805

The naming rule is
Capacitor type + value + rating + size + tolerance + material
SCD1U10V2MX-1
SC=> SMT Ceramic, TC=> POS cap or SP cap
D1U => 0.1uF
10V => the voltage rating is 10V
2=> 0402, 3=>0603, 5=>0805
M=>tolerance M, K, Z
X=> X7R/X5R, Y=> Y5V
-1 => symbol version, nonsense to EE characteristic

PLANAR_ID[3..0]

IBEXPEAK-M	39	38	48	49	Planar ID Version	Planar PCB Version
PLANAR_IDn	3	2	1	0		
	0	0	0	0		
	0	0	0	1		
	0	0	1	0	Dasher-1 Pre-DV	SA
	0	0	1	1	Dasher-1 SDV/UT	SB
	0	1	0	0	Dasher-1 MFVT	SC
	0	1	0	1	Dasher-1 FVT	SD
	0	1	1	0	Dasher-1 M-SIT	SE
	0	1	1	1	Dasher-1 SIT	SF
	1	0	0	0	Dasher-1 SVT	-1

EC HISTORY

[illegible]

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Reference

Size

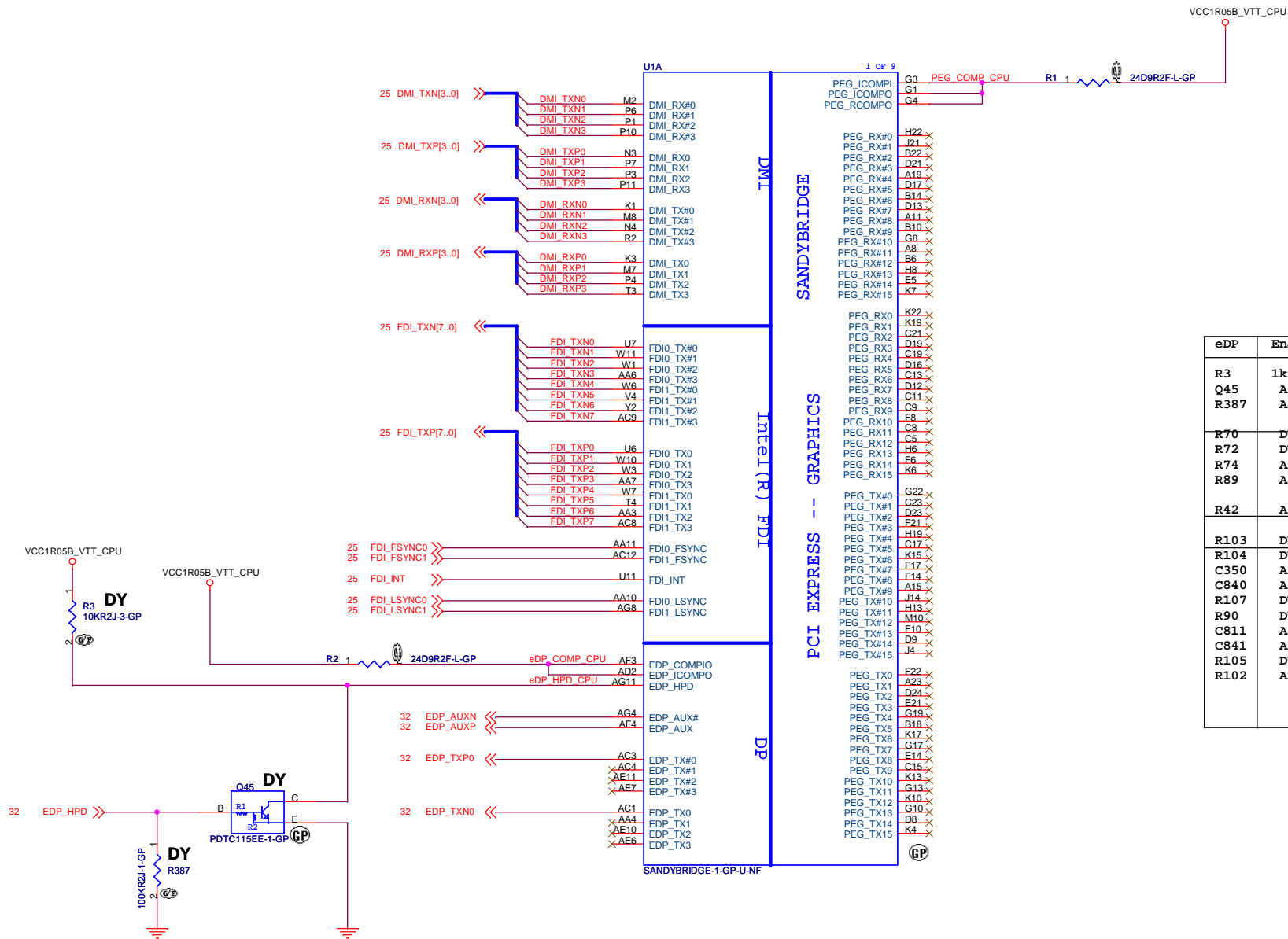
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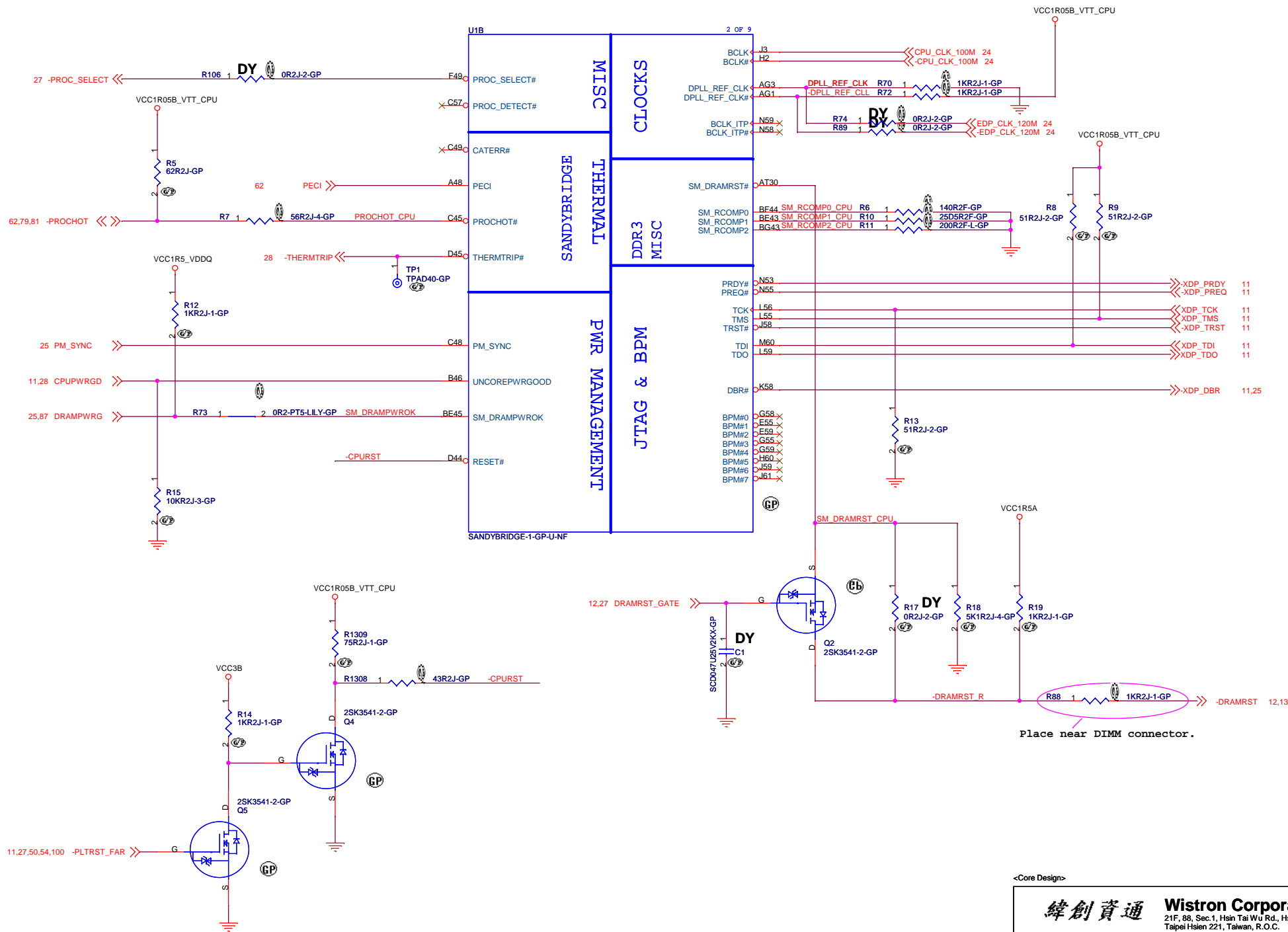
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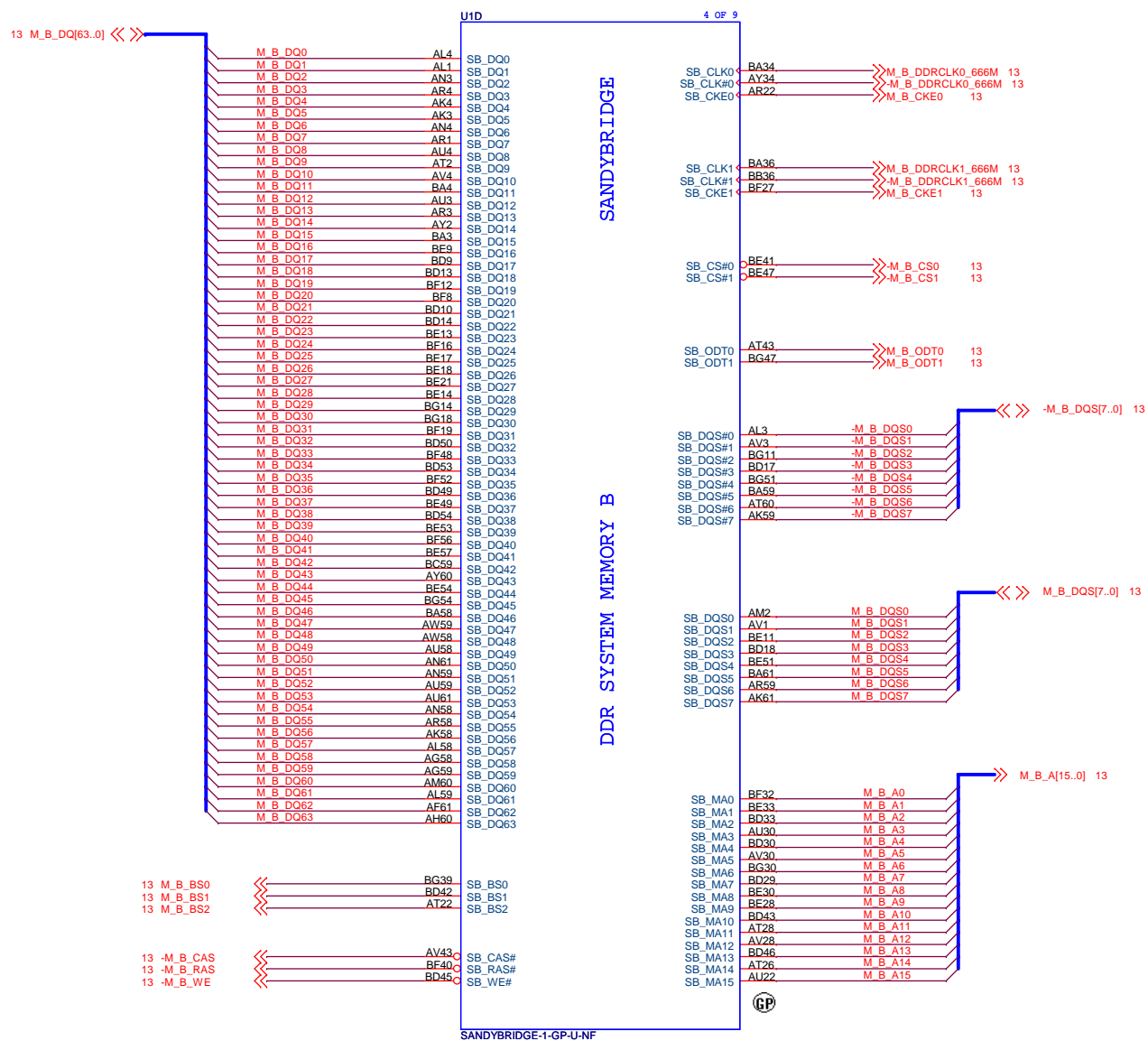
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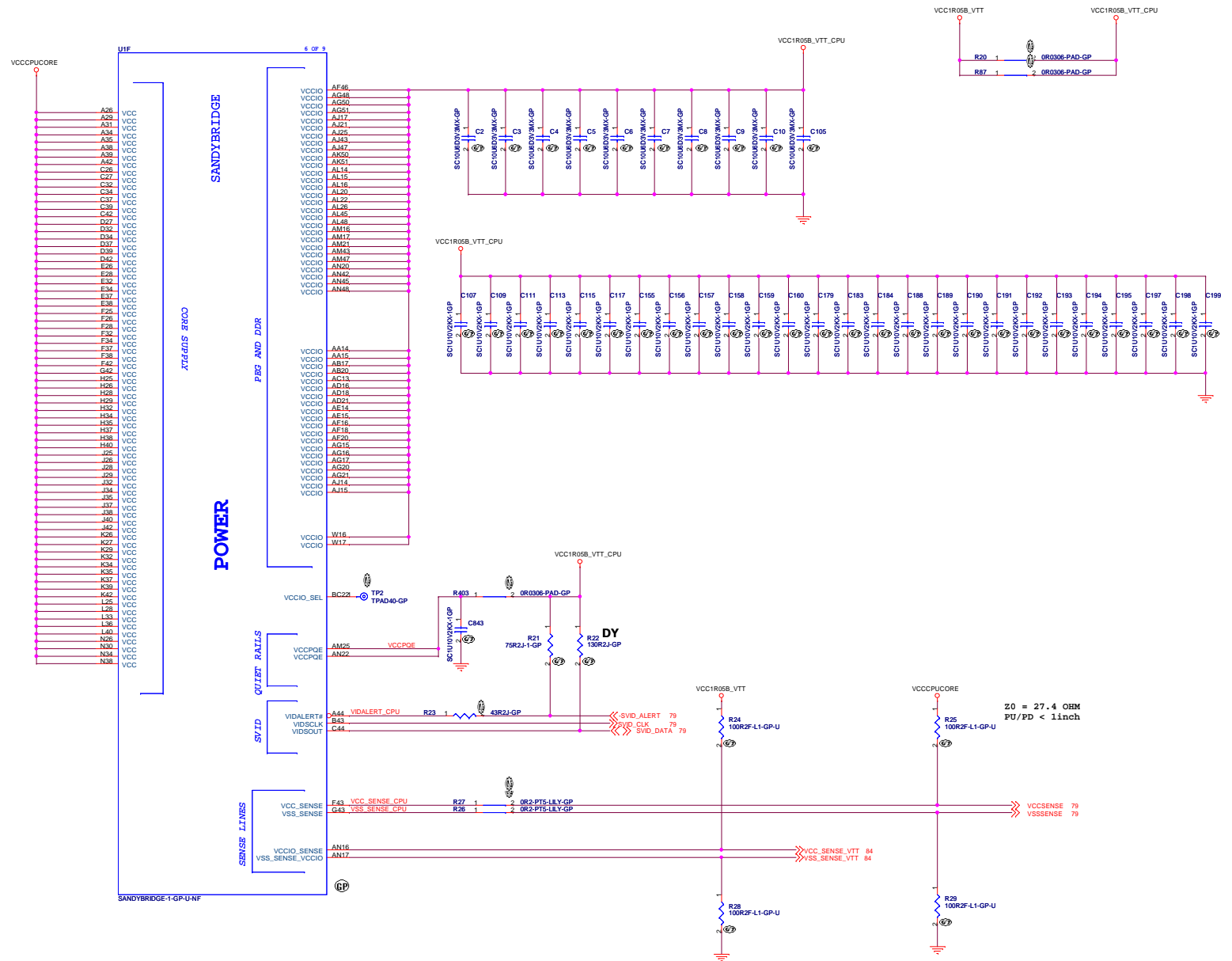
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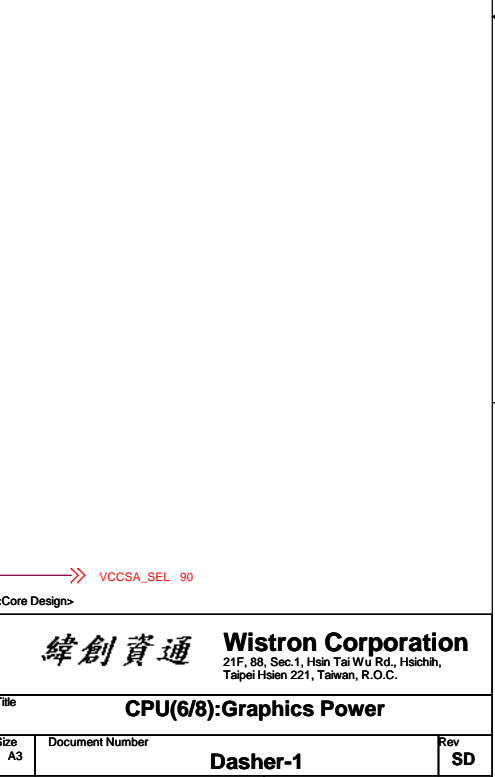
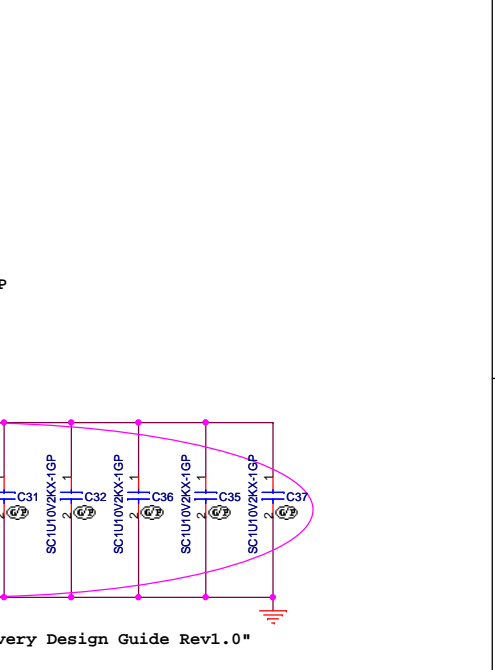
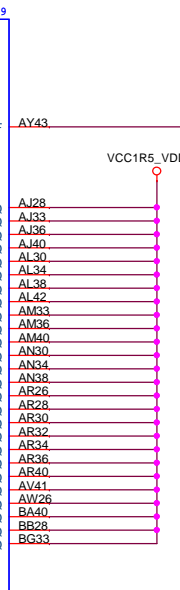
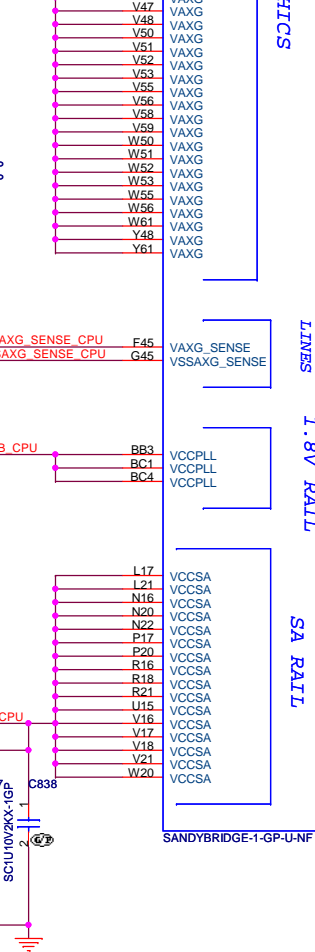
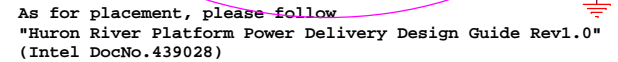
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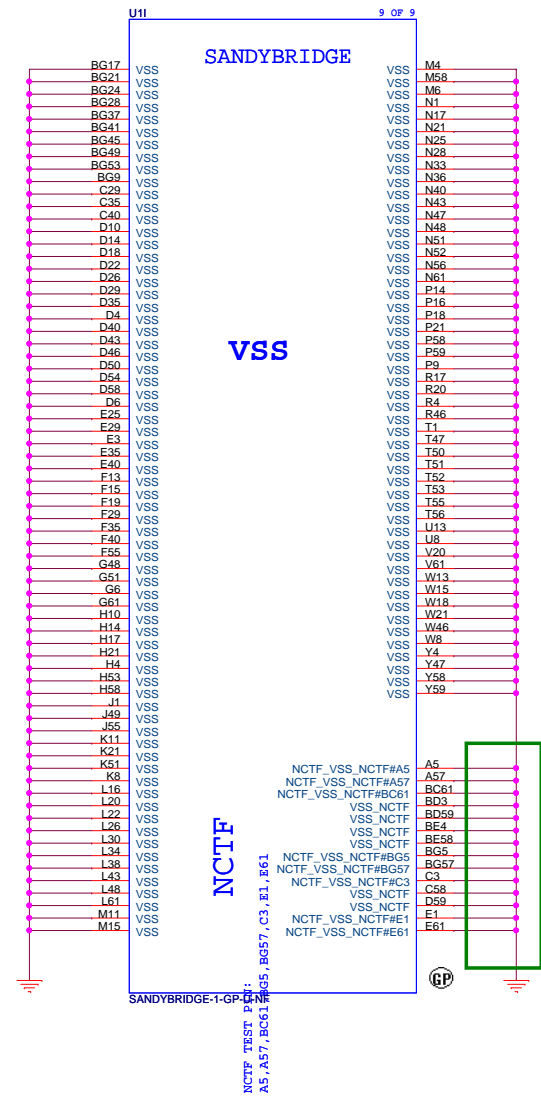
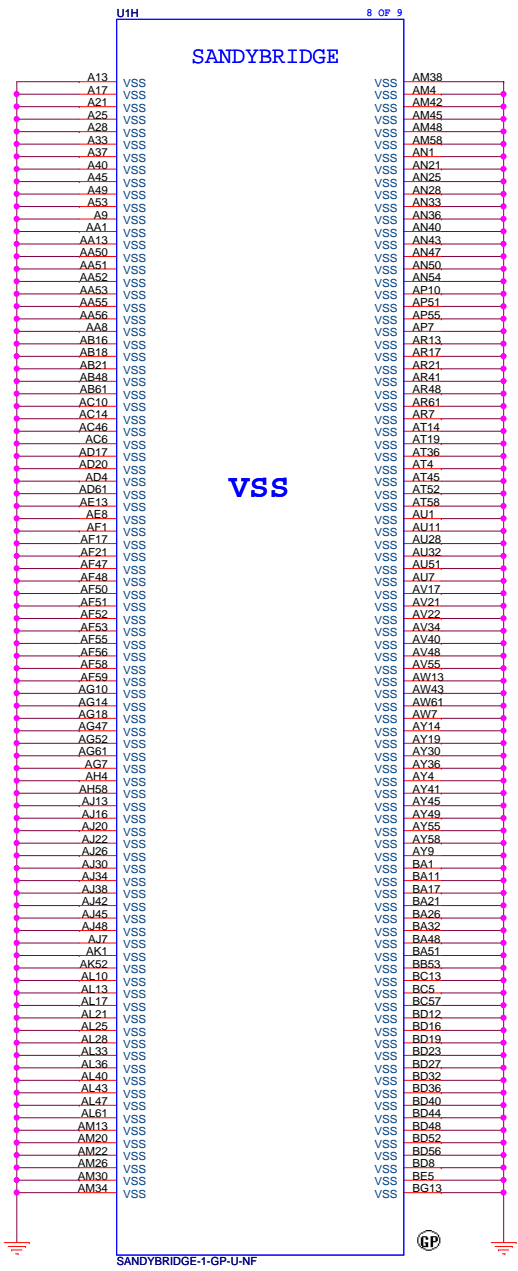
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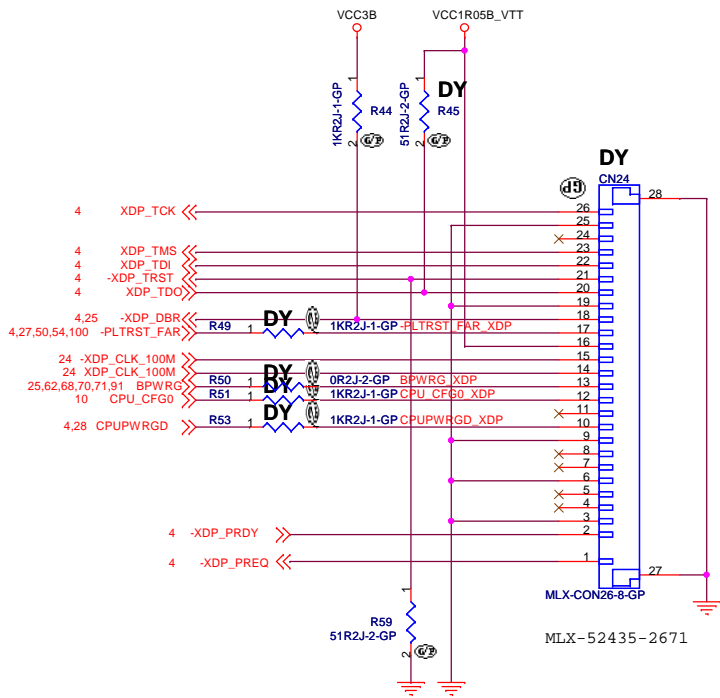






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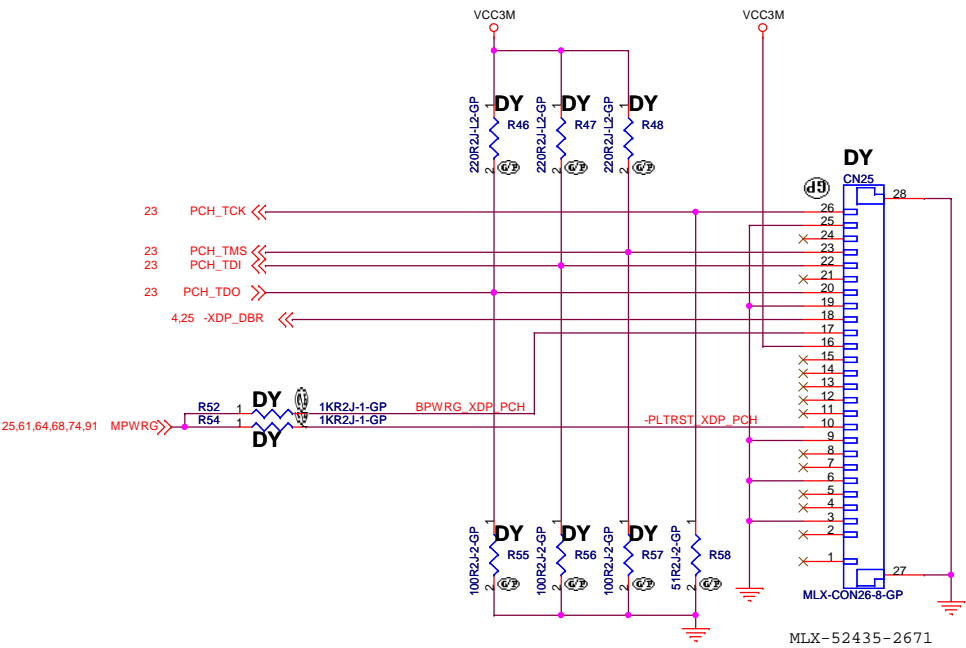


DEBUG Interface for Processor.

XDP1

		ENABLE	DISABLE
TDO	R45	ASM	DY
TRST#	R59	ASM	ASM
DBRST#	R44	ASM	ASM
RESET#	R49	ASM	DY
CFG0	R51	ASM	DY
PWRGD	R53	ASM	DY
BPWRG	R50	ASM	DY
	CN24	ASM	DY

SIT Logic

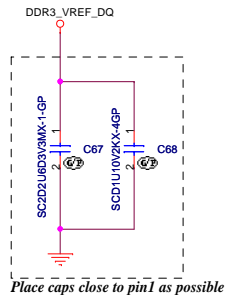
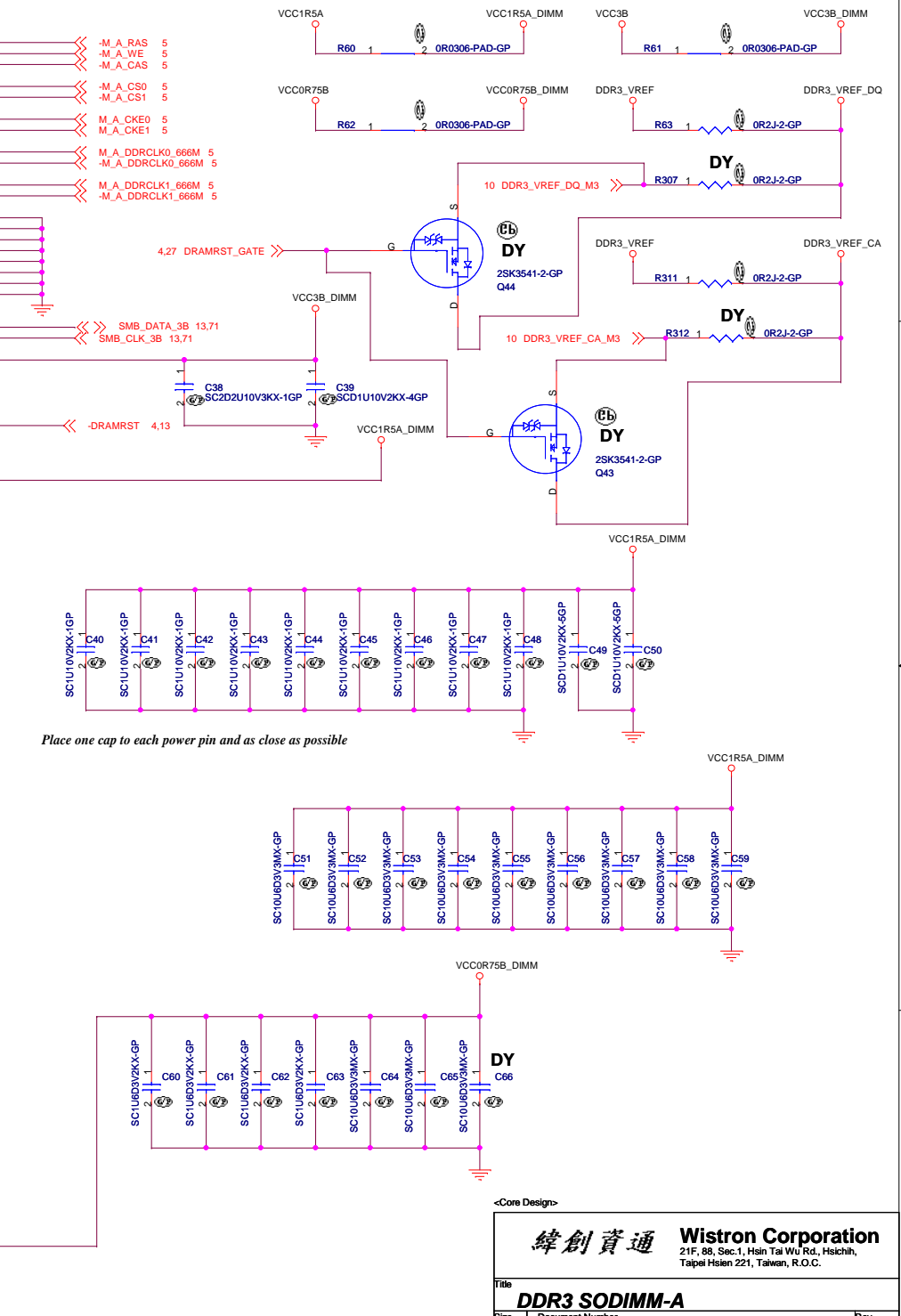
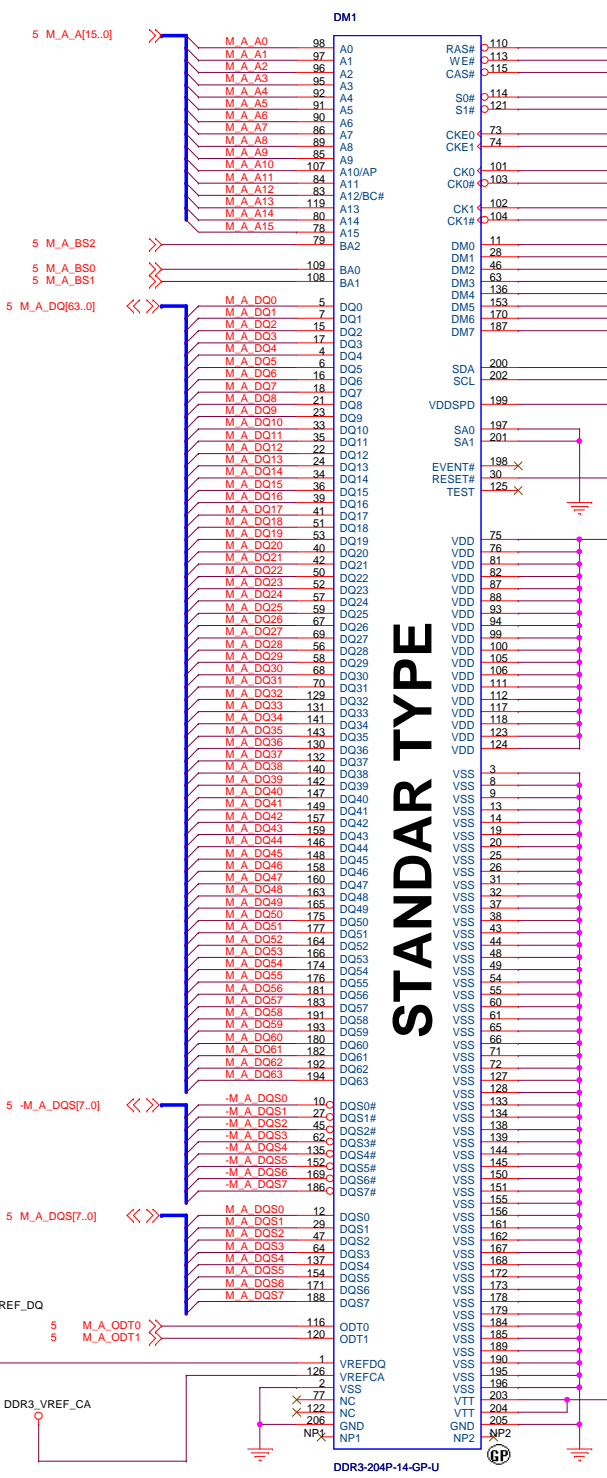


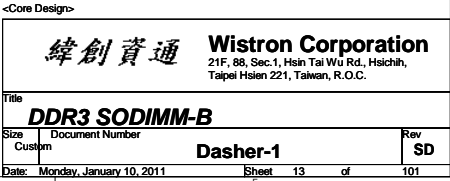
DEBUG Interface for PCH.

XDP2

		ENABLE	DISABLE
TDO	R46	220	DY
	R55	100	DY
TMS	R48	220	DY
	R57	100	DY
TDI	R47	220	DY
	R56	100	DY
TCK	R58	51	51
MPWRG	R52	ASM	DY
	R54	ASM	DY
	CN25	ASM	DY

SIT Logic





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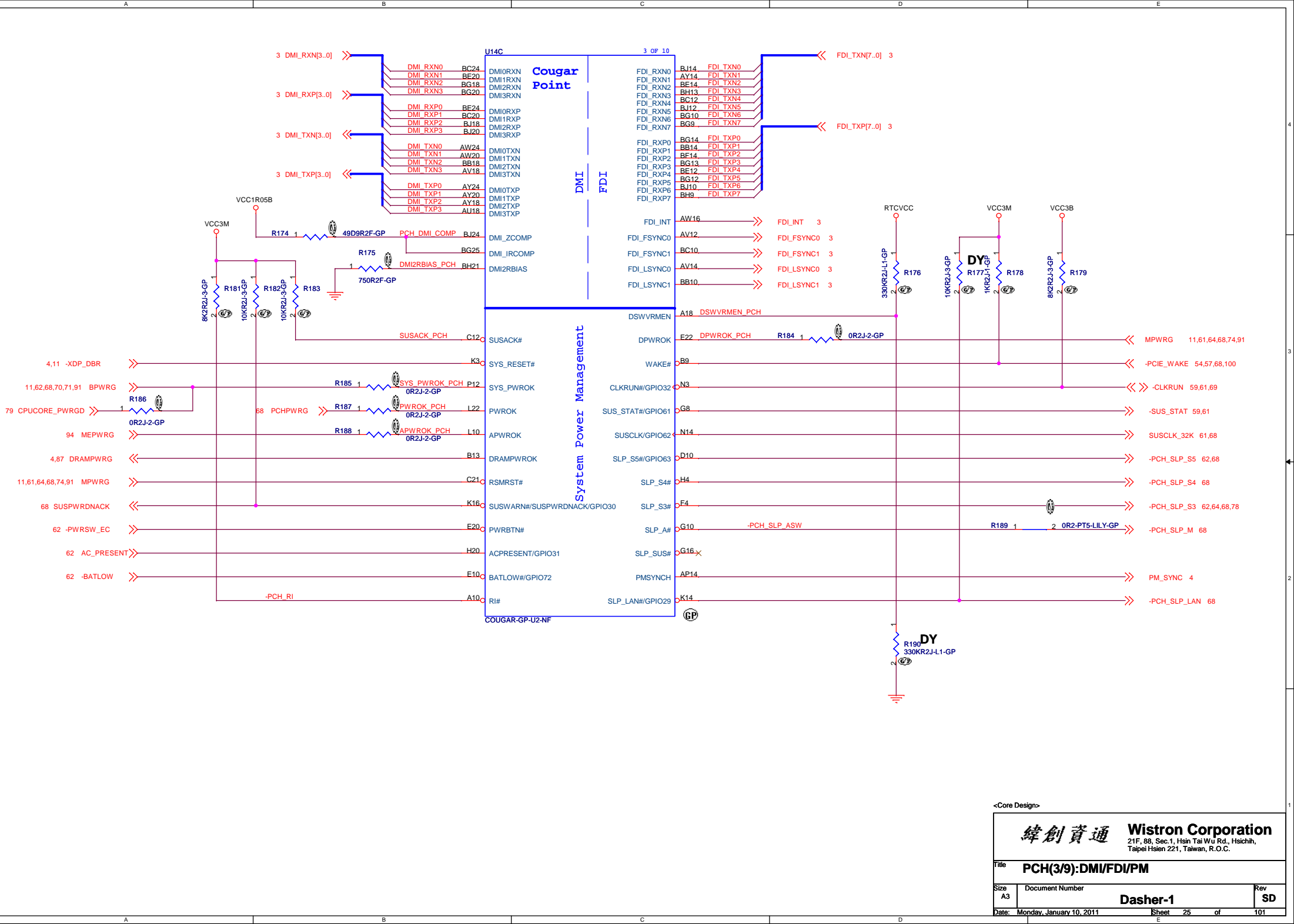
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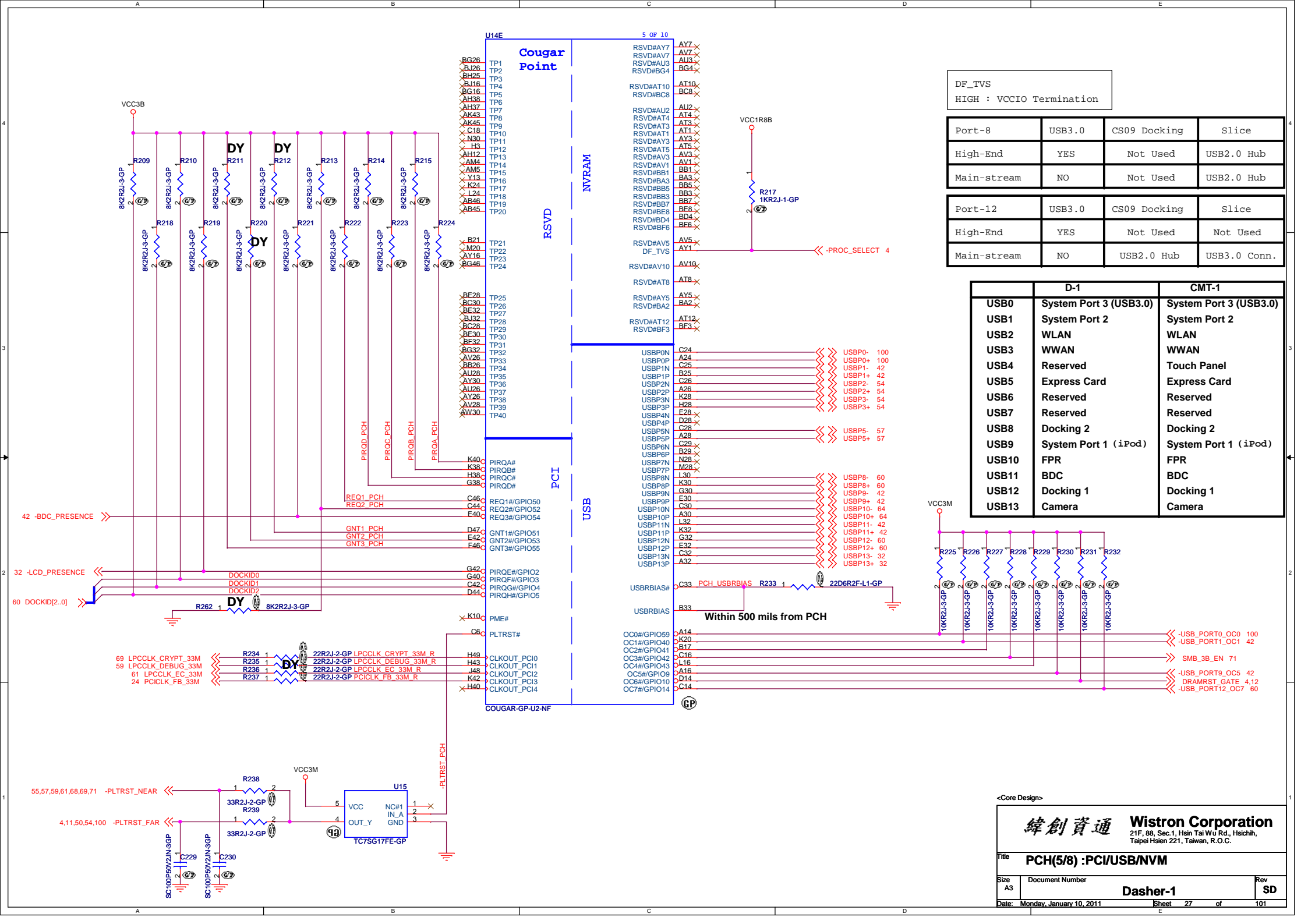
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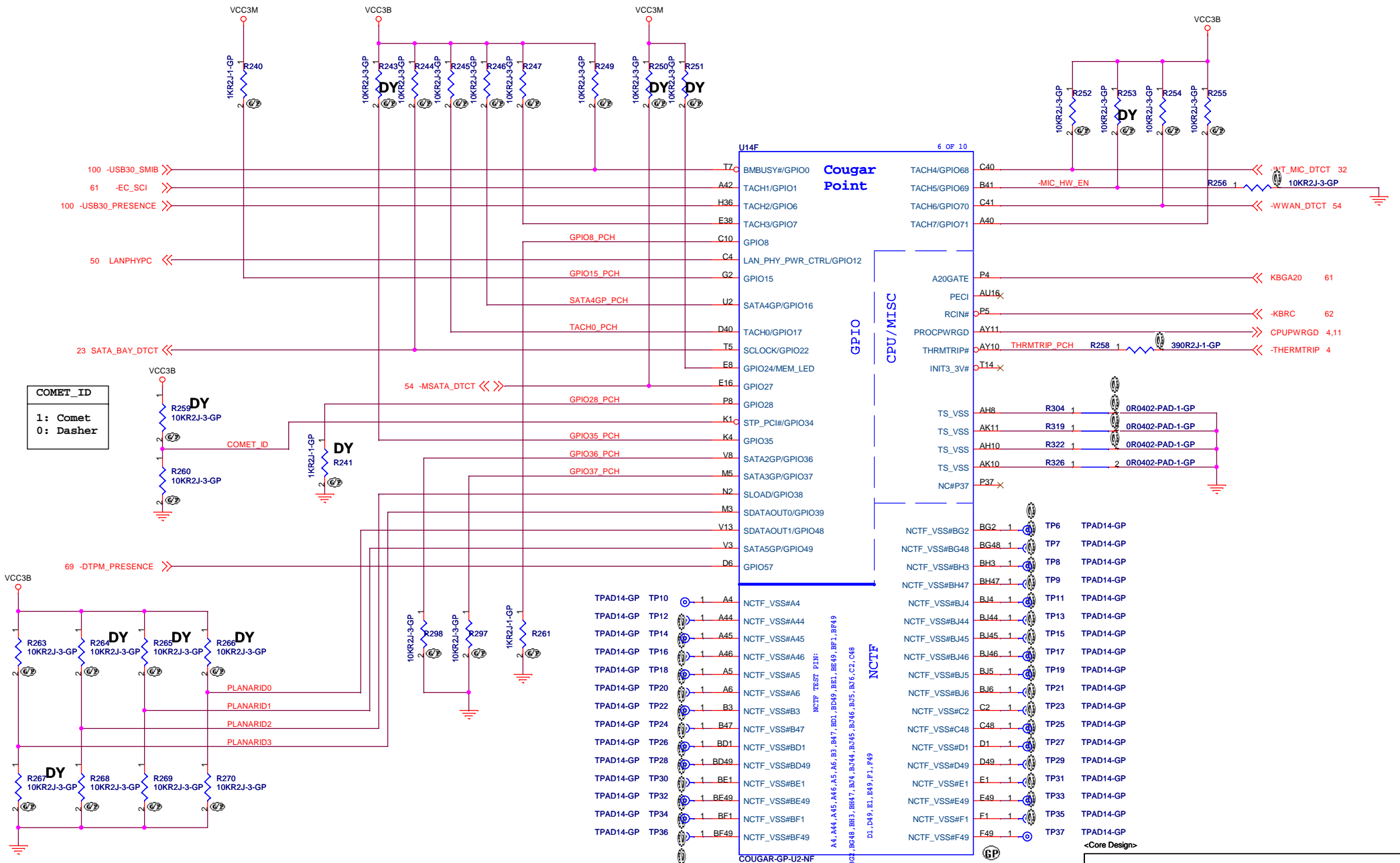
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PLANAR ID: 1000 for SVT

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PCH(6/9):GPIO/NCTF/RSVD

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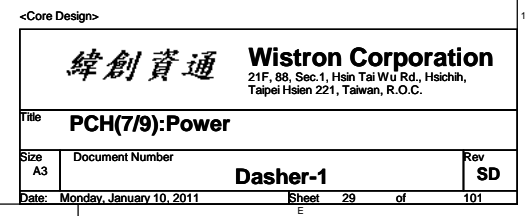
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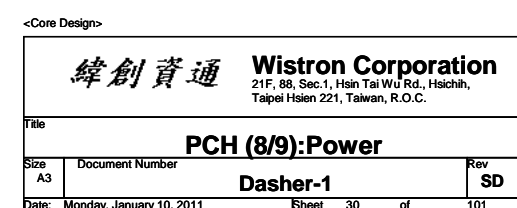
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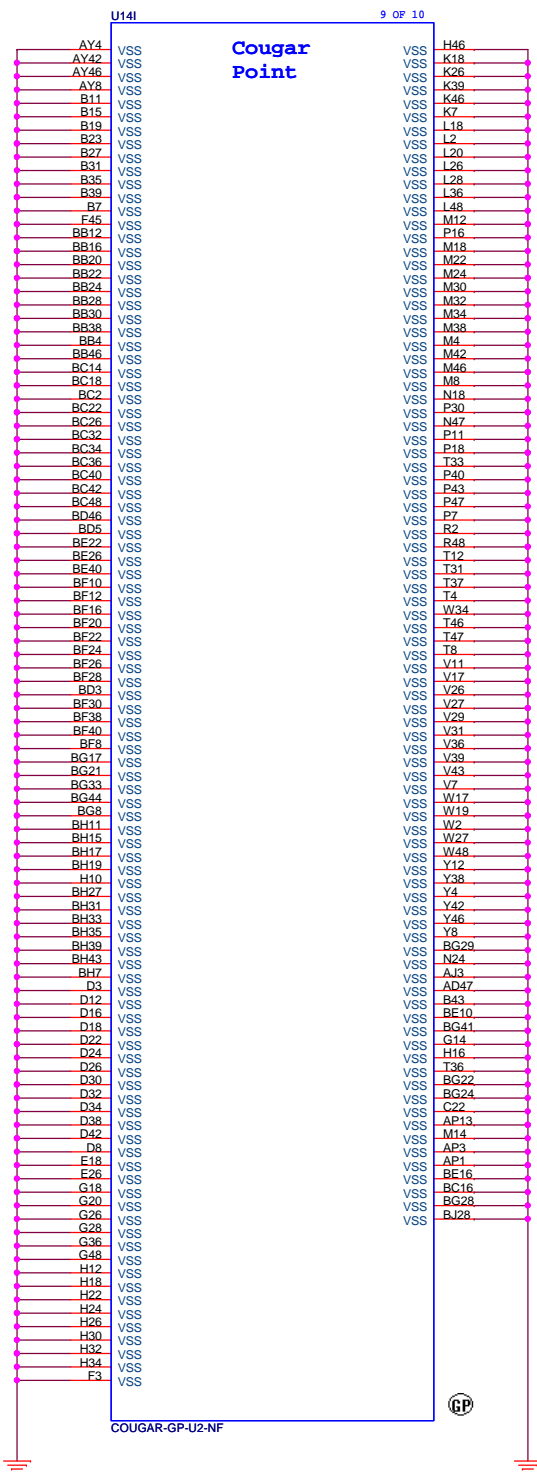
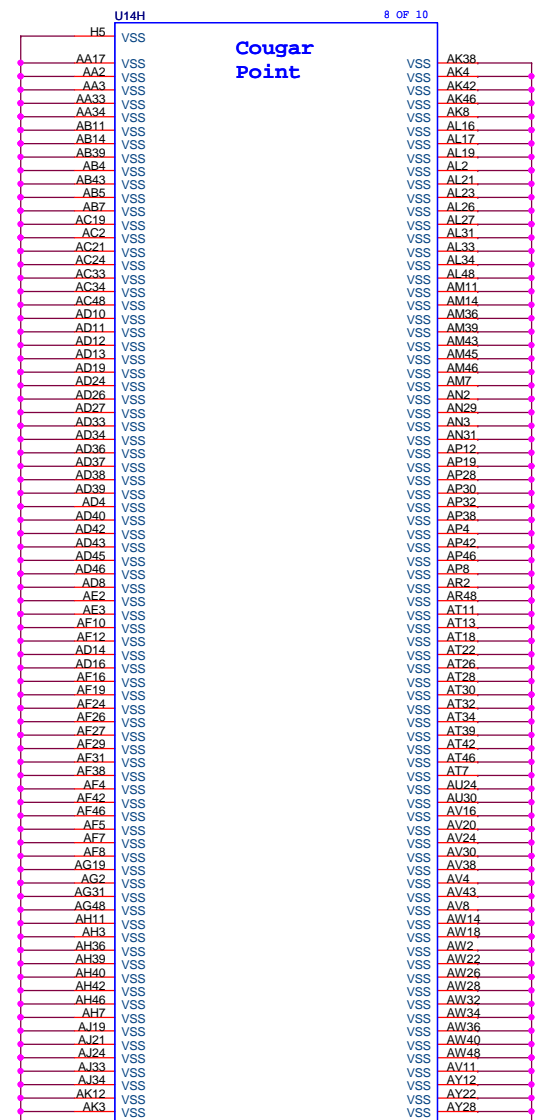
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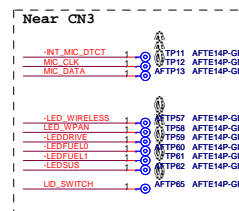
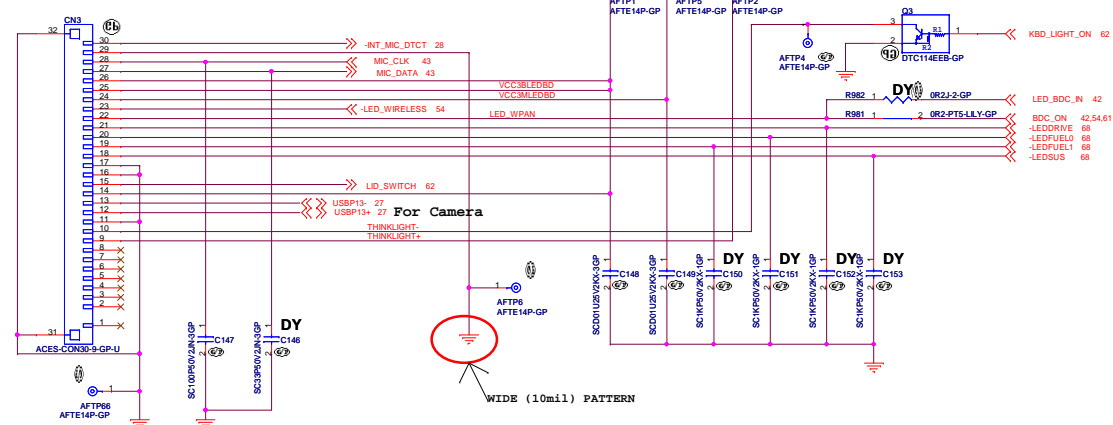
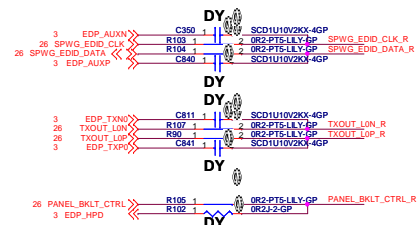
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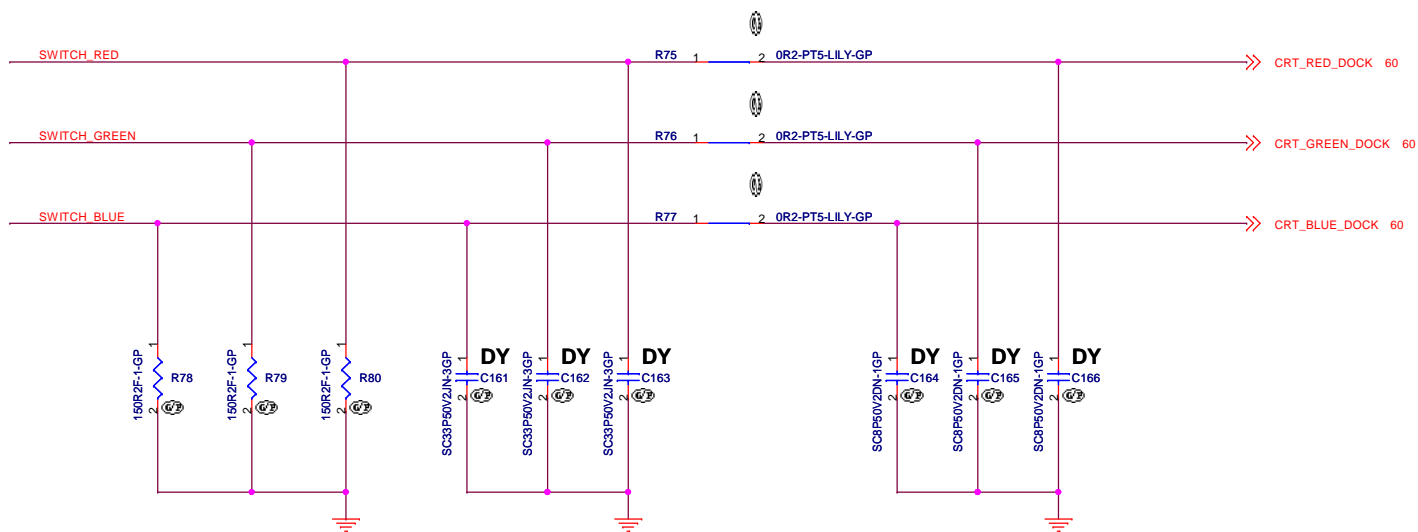
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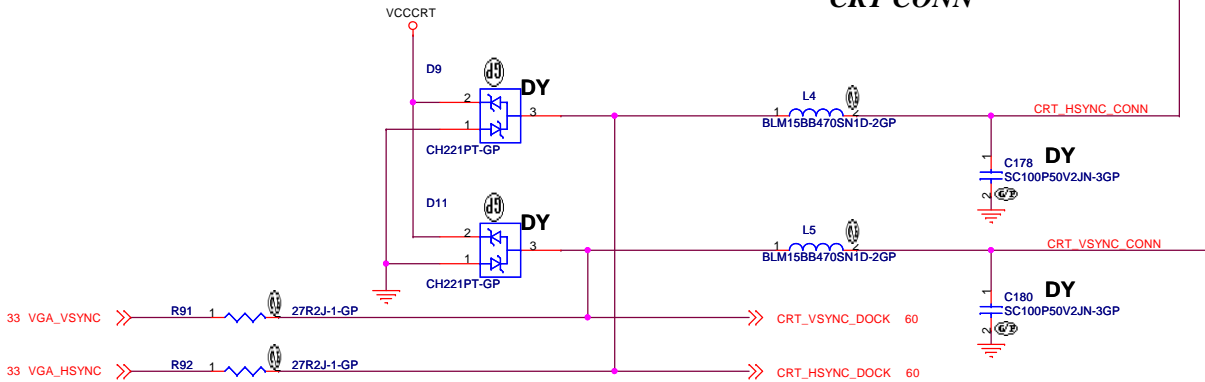
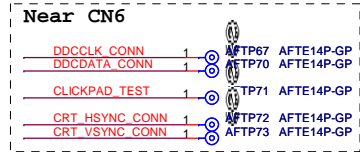
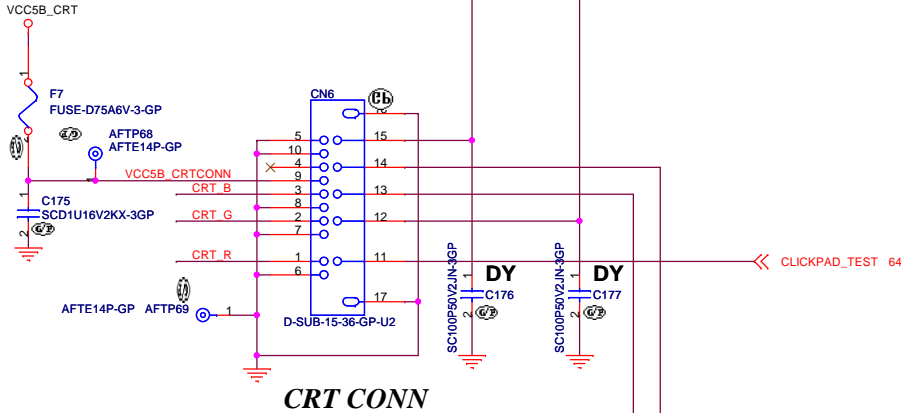
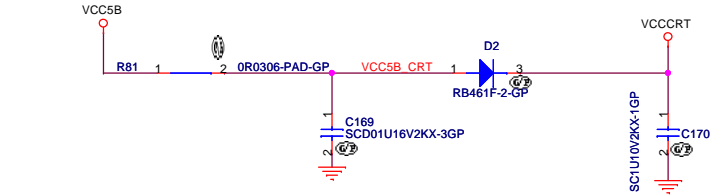
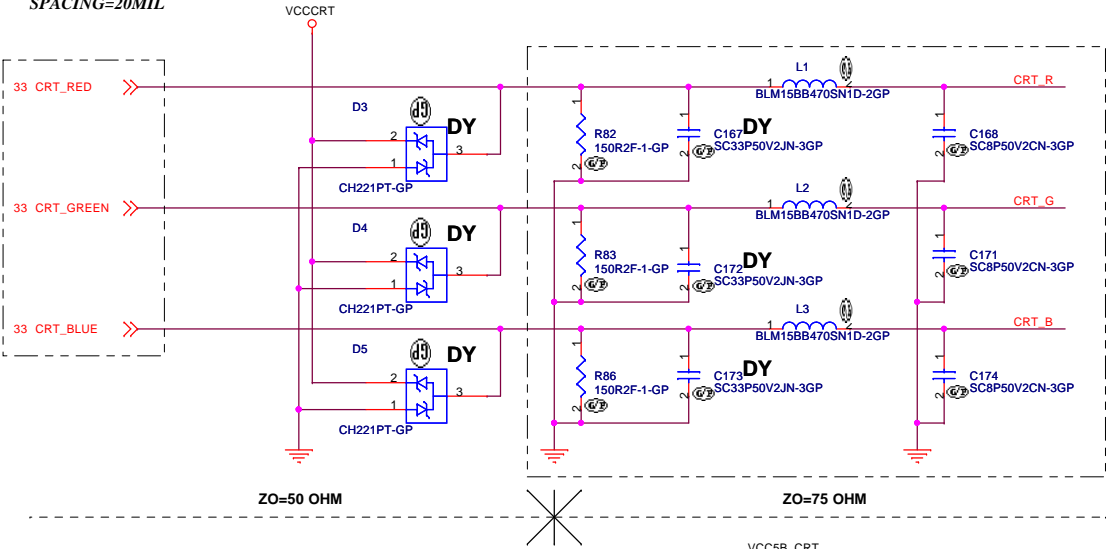






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CRT SELECTOR			
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GND GUARDING
EACH SIGNAL WIDTH DEPENDS ON ZO(TRACE IMPEDANCE)
SPACING=20MIL



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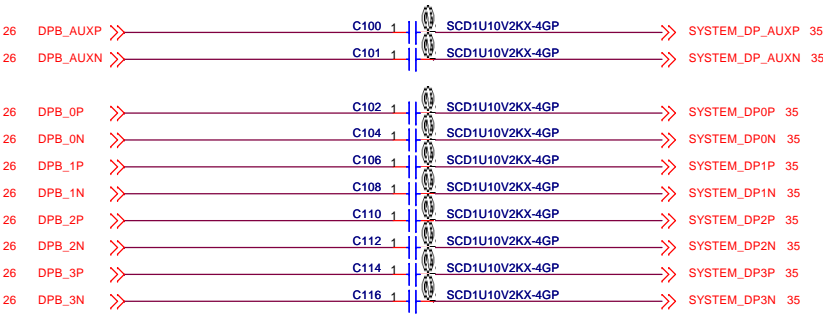
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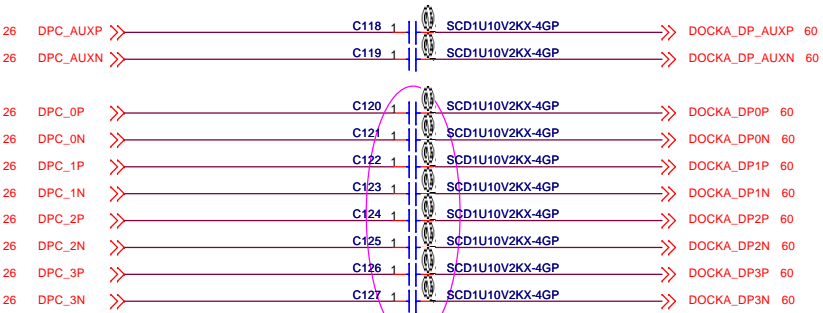
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System DP Connector

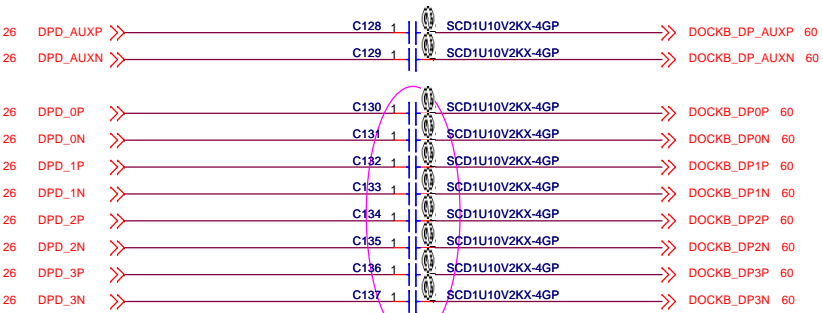


Docking DP Connector A



Place Near Docking Connector

Docking DP Connector B



Place Near Docking Connector

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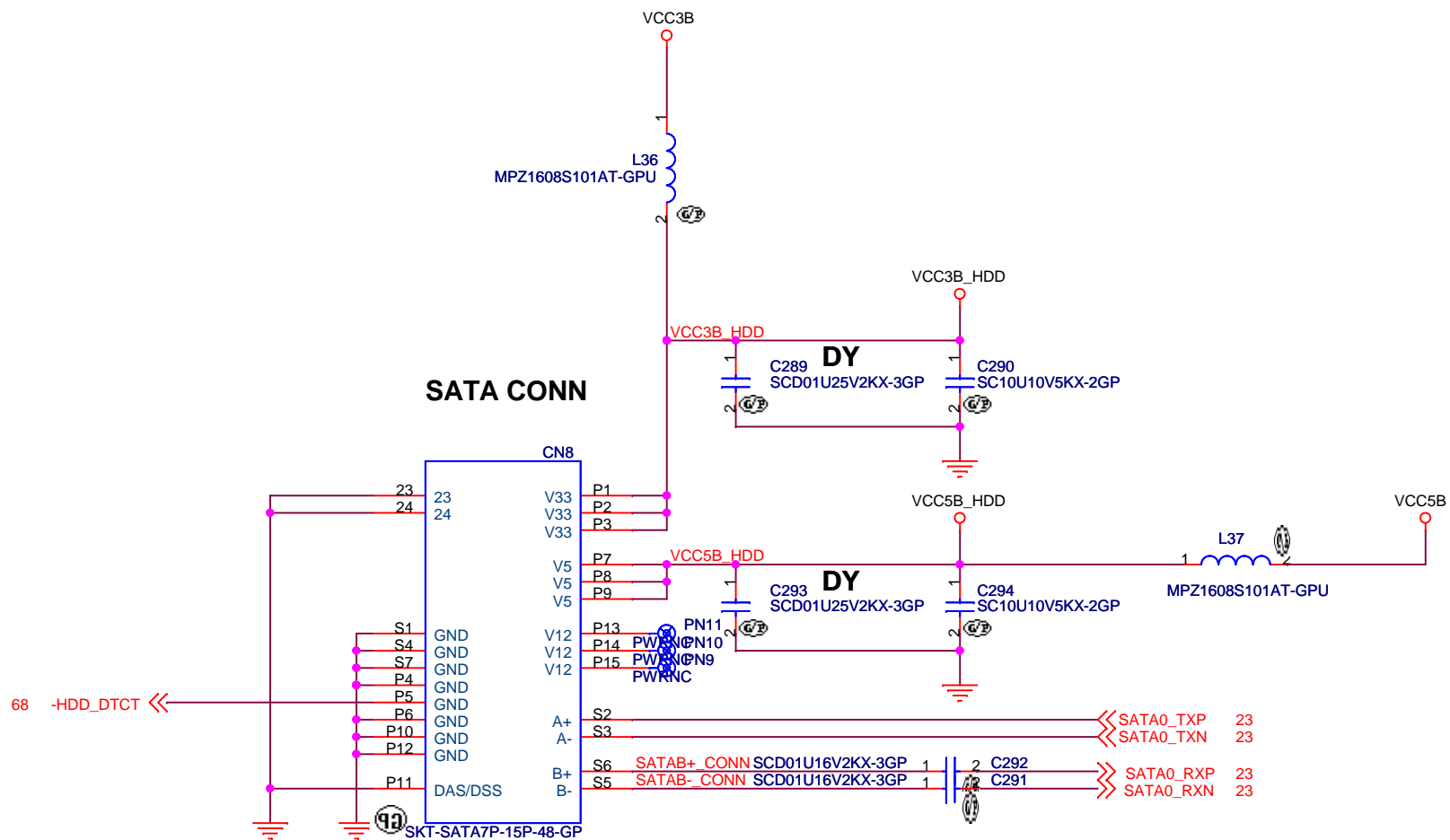
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SATA Connector

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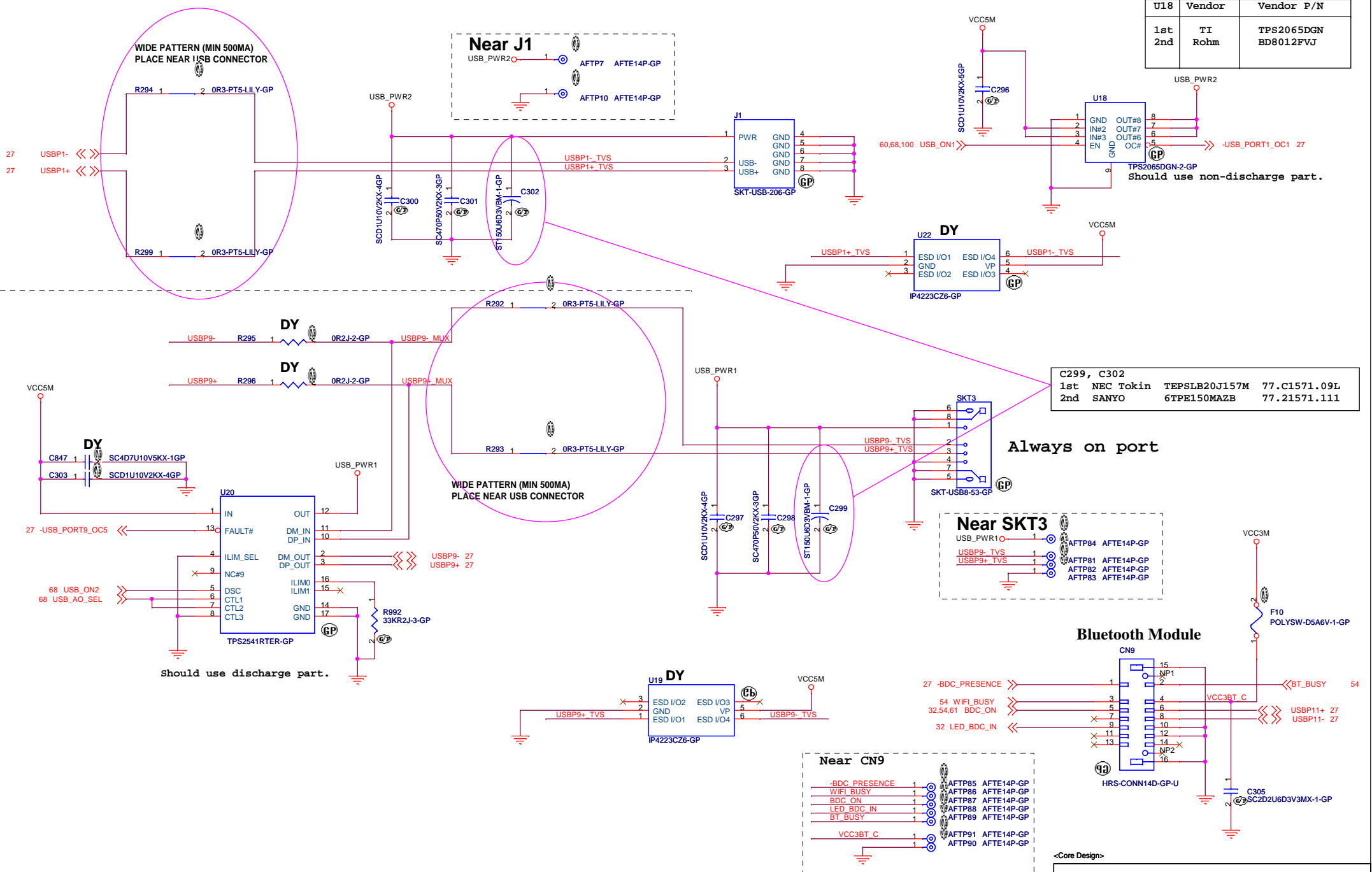
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U18	Vendor	Vendor P/N
1st	TI	TPS2065DGN
2nd	Rohm	BD8012FVJ



C299, C302			
1st	NEC Tokin	TEPSLB20J157M	77.C1571.09L
2nd	SANYO	6TPE150MAZB	77.21571.111

Always on port

Should use discharge part.

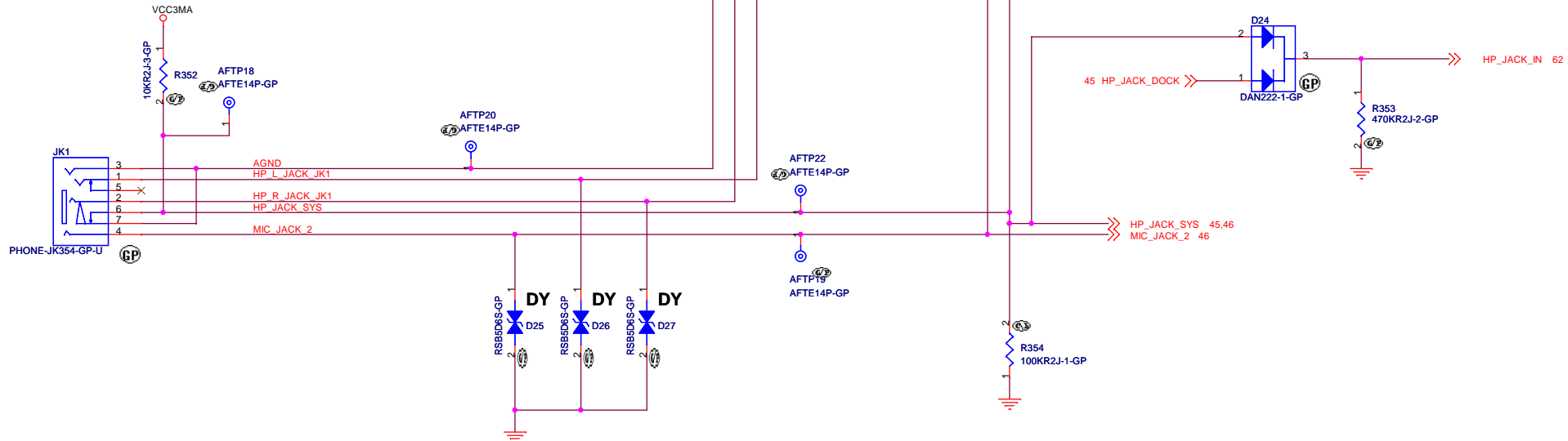
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USB Connector	
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NEAR HEADPHONE CONN

WIDE PATTERN

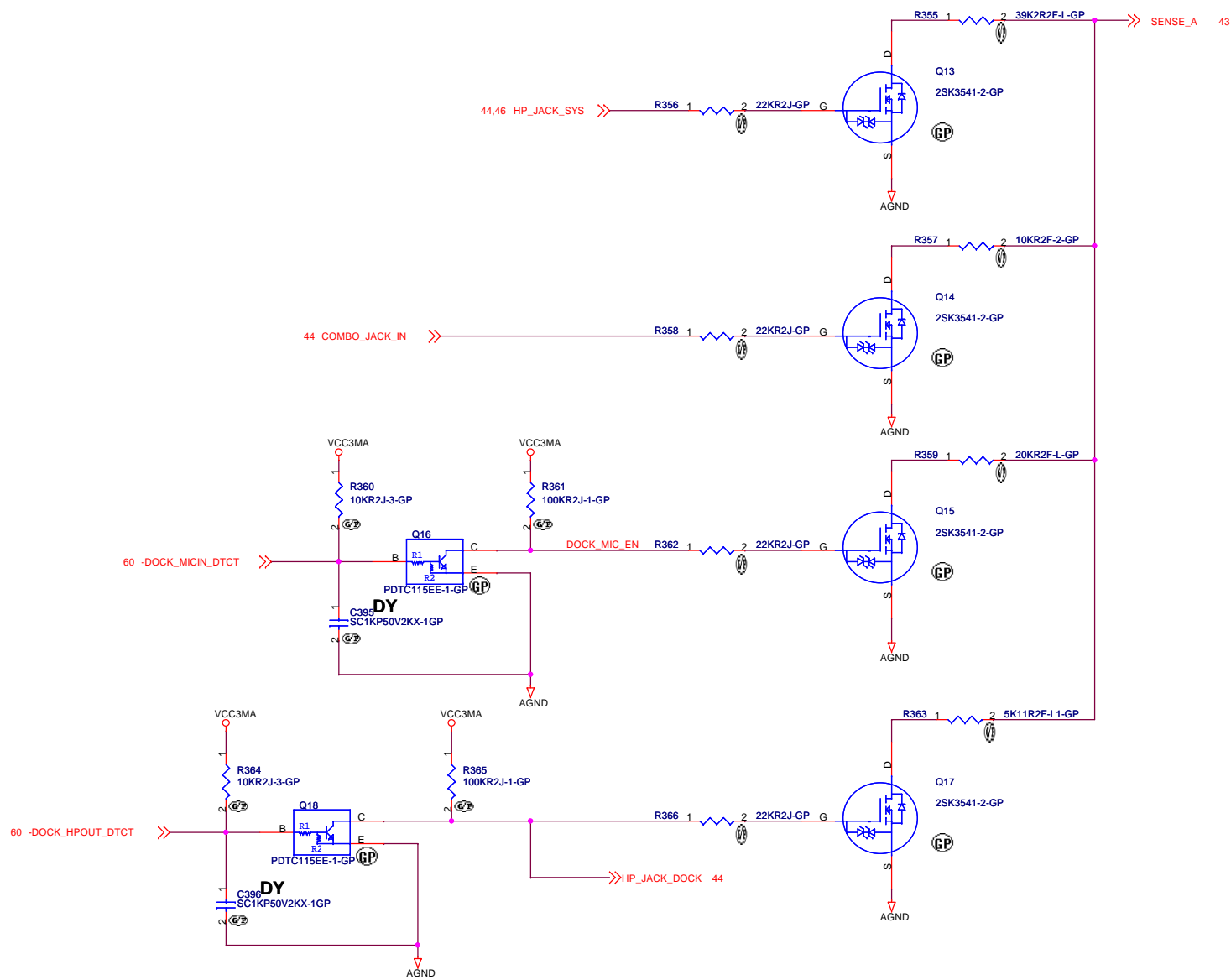
WIDE AND SHORT PATTERN



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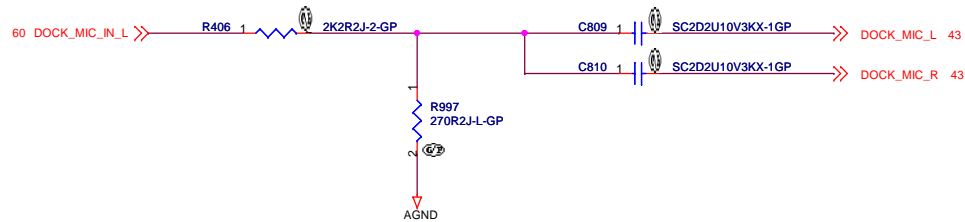
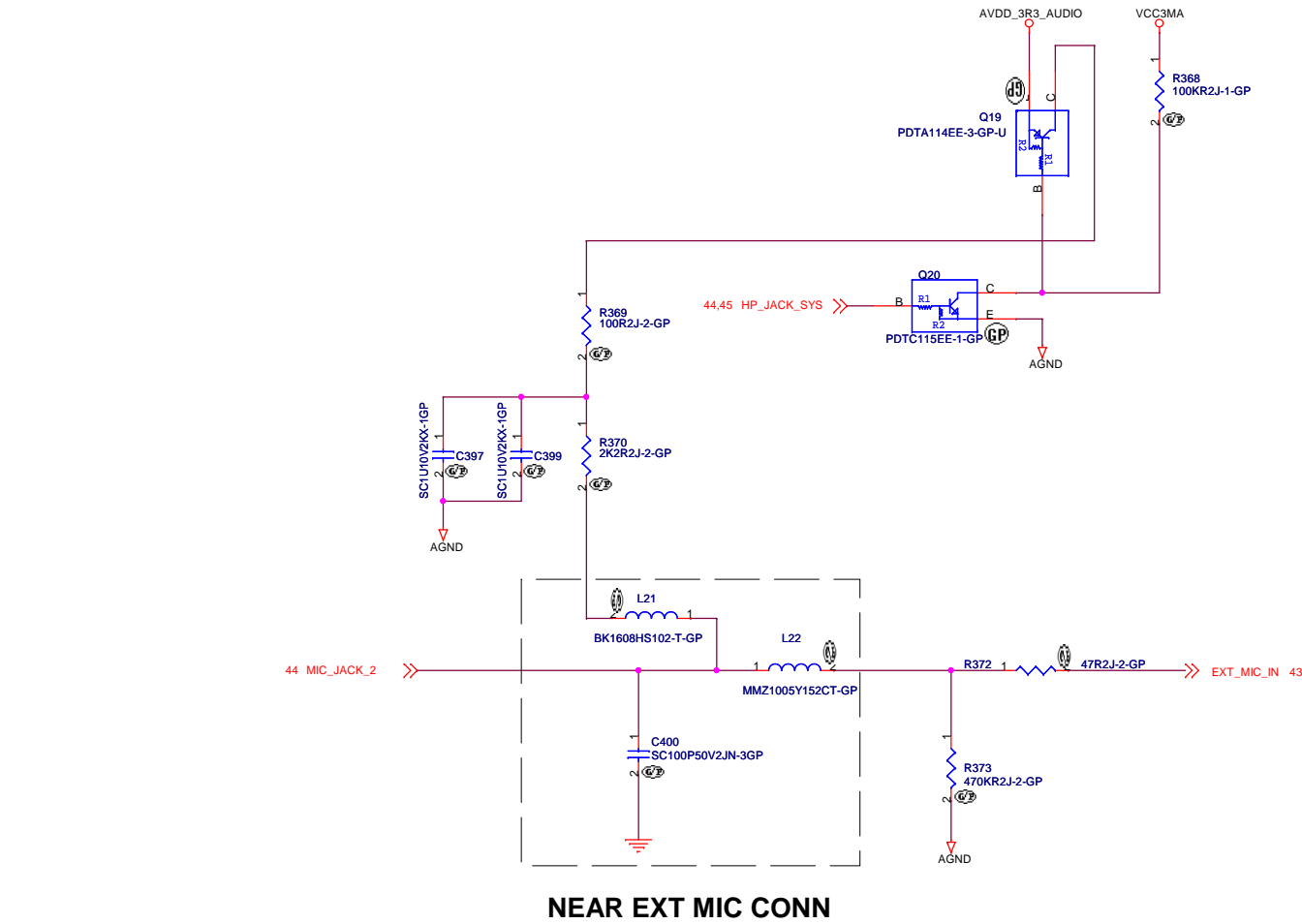
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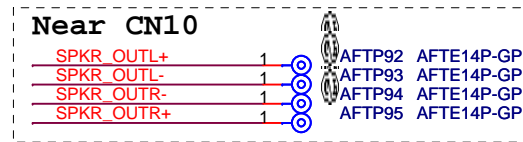
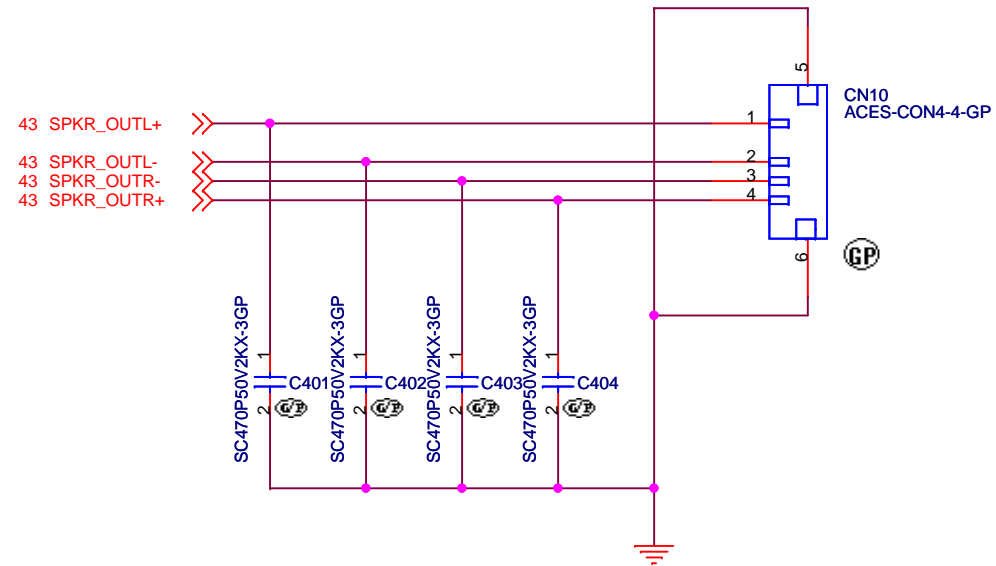
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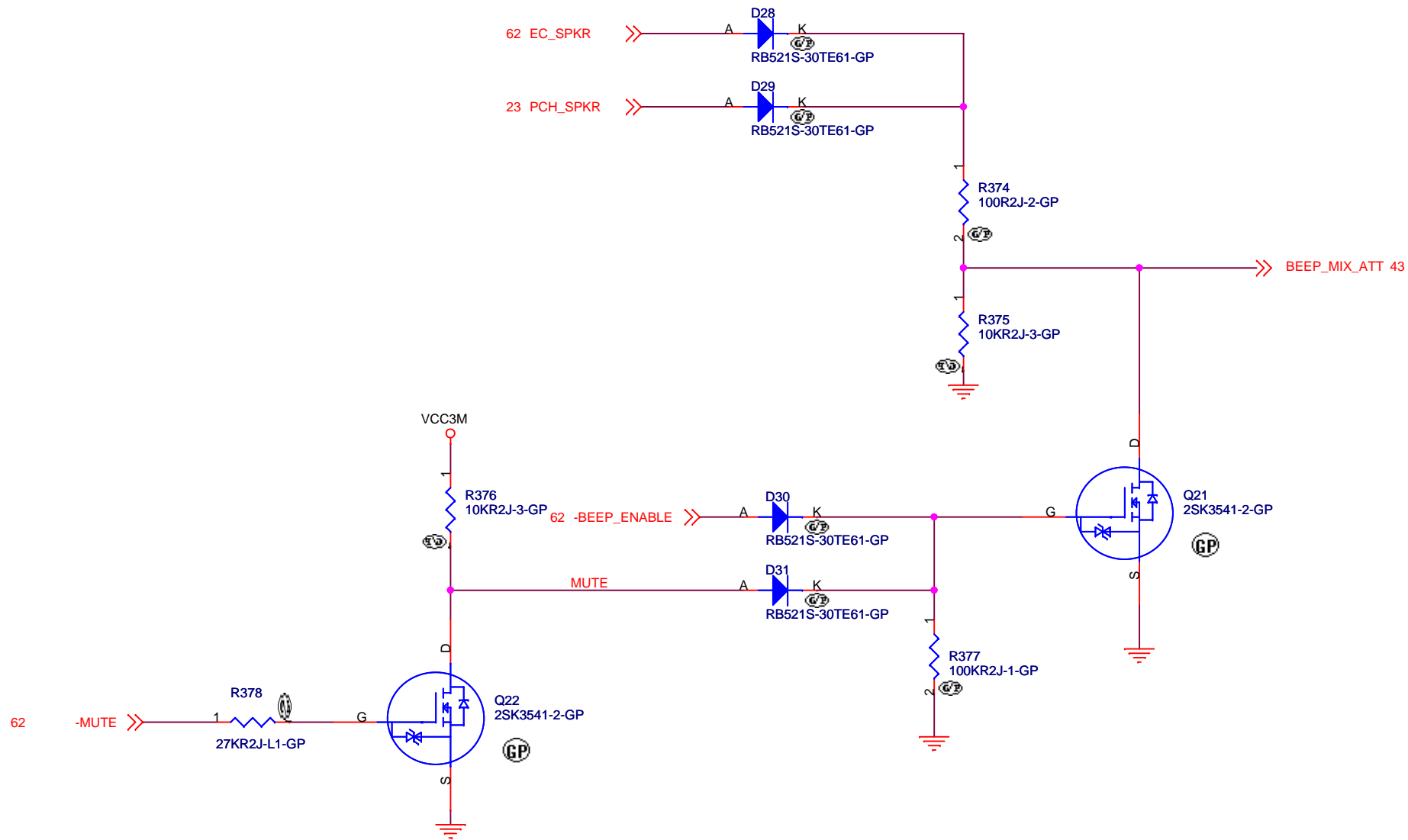
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Title

Audio BEEP

Size
A4

Document Number

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<Core Design>

緯創資通

Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
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Title

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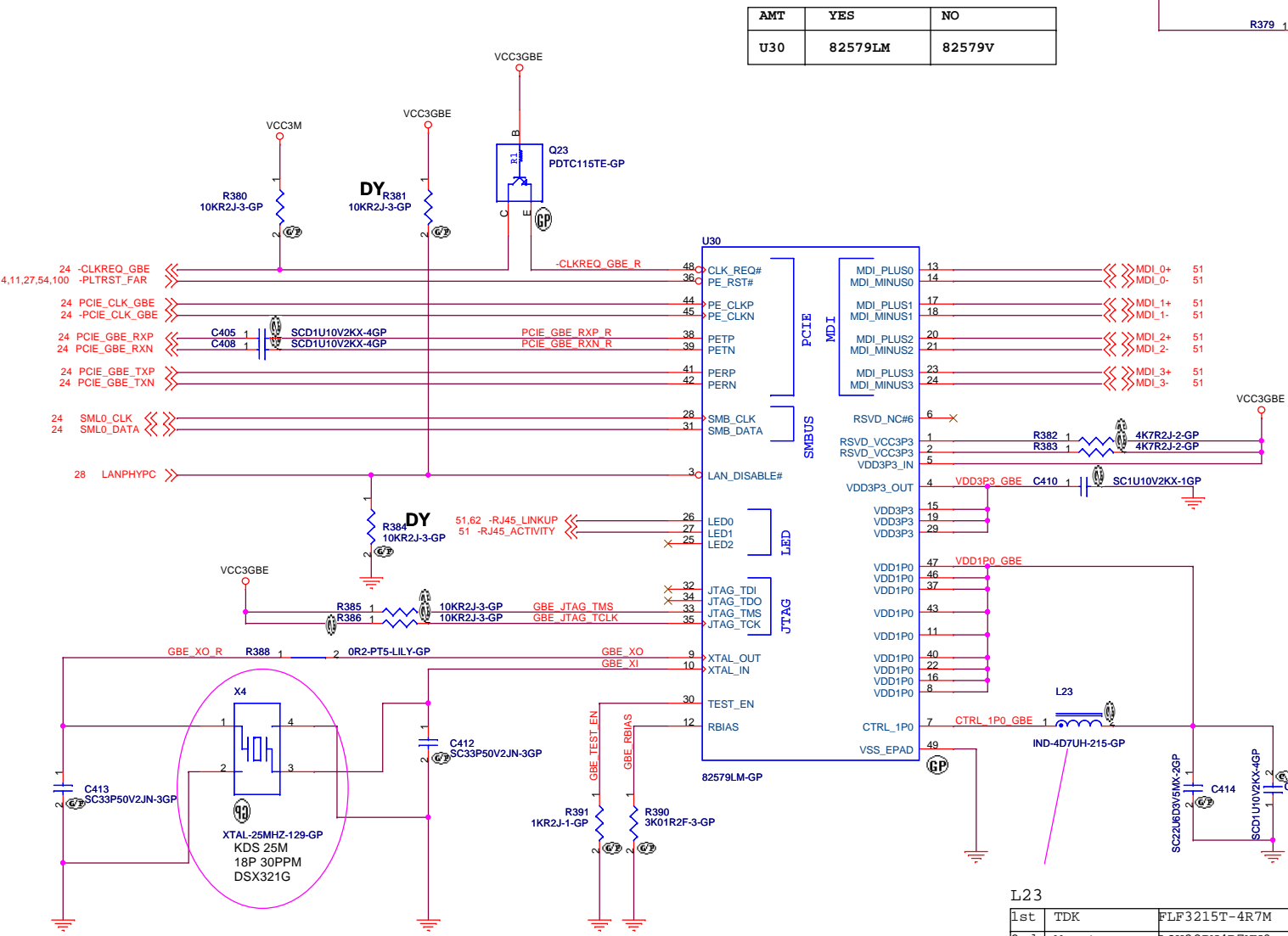
Size
A3

Document Number
Dasher-1

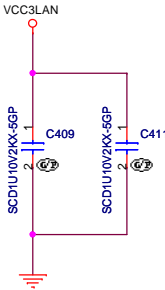
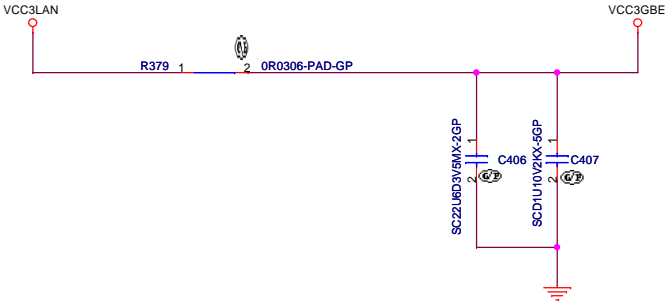
Rev
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AMT	YES	NO
U30	82579LM	82579V



X4			
1st	KDS	DSX321G 25M 18P 30PPM	82.30020.B11
2nd	H.ELE	HSX321S 25M 18P 30PPM	82.30020.B21
3rd	TXC	7V25020001 25M 18P 30PPM	41U6141AA

L23			
1st	TDK	FLF3215T-4R7M	68.4R71D.10Q
2nd	Murata	LQH32PN4R7NN0	68.4R750.20H
3rd	Taiyo Yuden	BRL3225T4R7M	68.4R71E.10I

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Title

GBE Lewisville

Size

A3

Document Number

Dasher-1

Rev

SD

Date

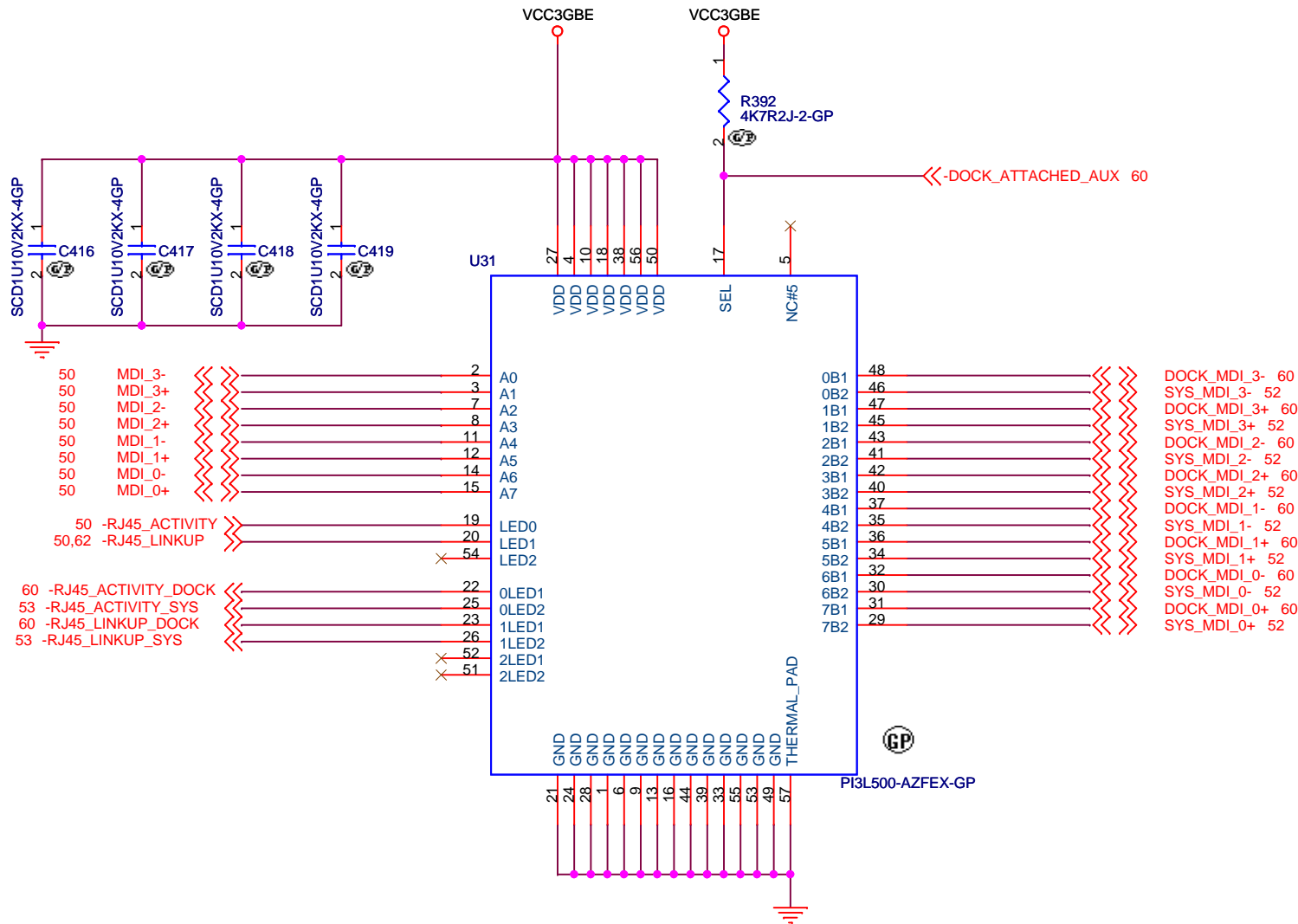
Monday, January 10, 2011

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		Vendor P/N	Wistron P/N
1st	Pericom	PI3L500AZFEX	73.3L500.003
2nd	TI	TS3L500AERHUR	73.3L500.A0V
3rd	OnSemi	NS3L500	73.03500.003

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Title

GBE LAN Switch

Size
A4

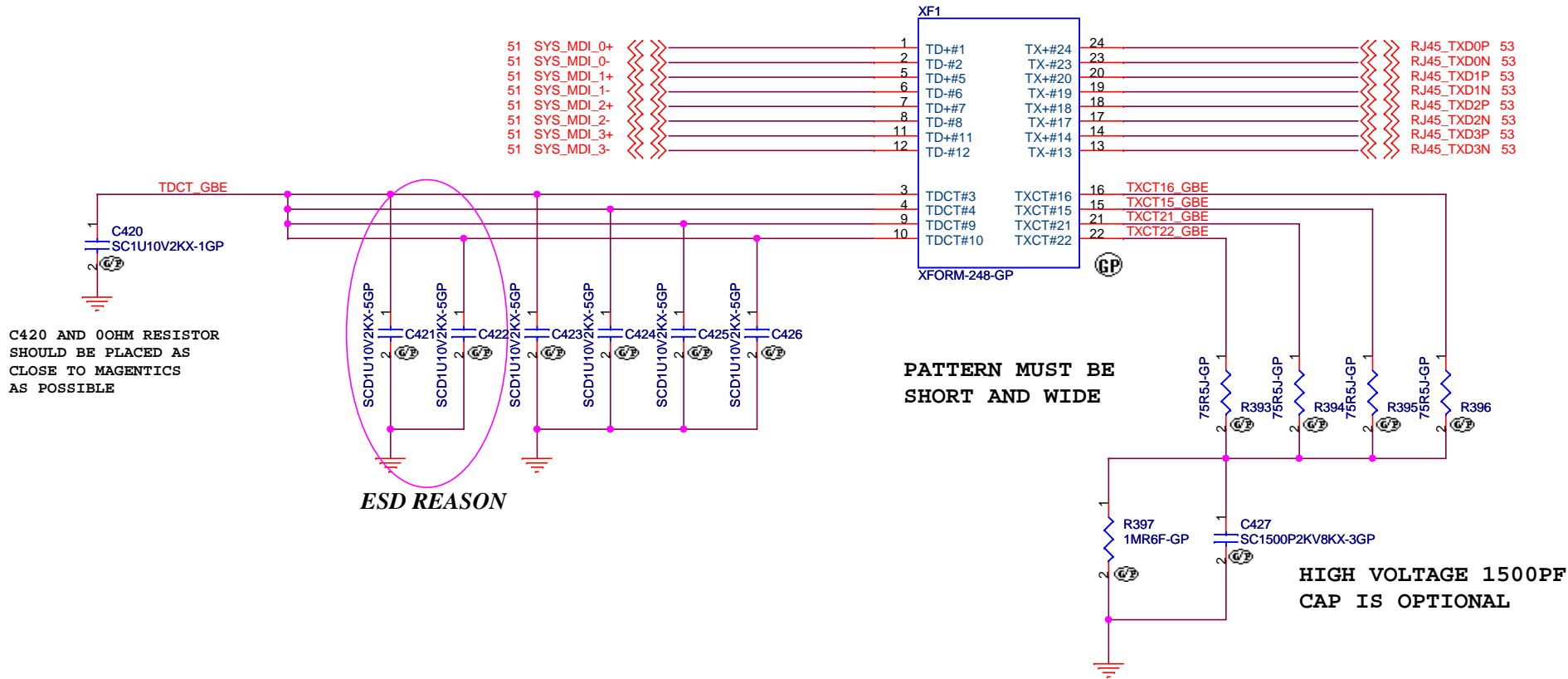
Document Number
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101



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Title

GBE MAGNETICS

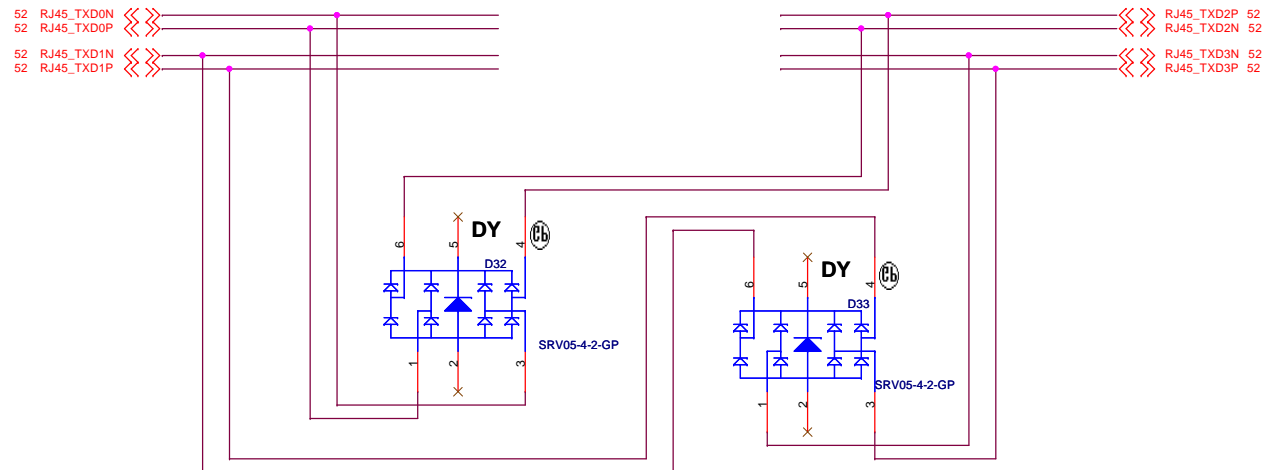
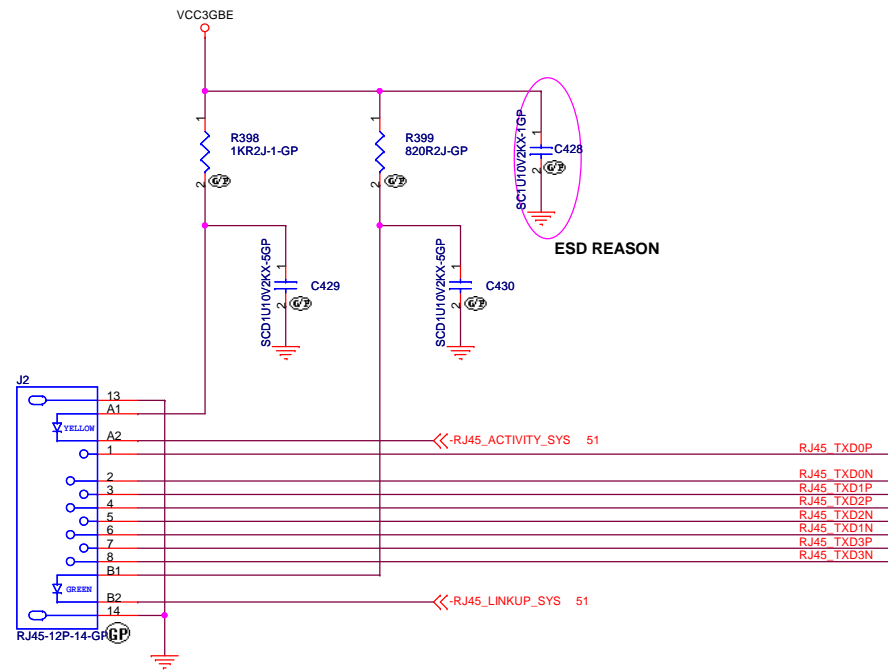
Size Document Number
Custom

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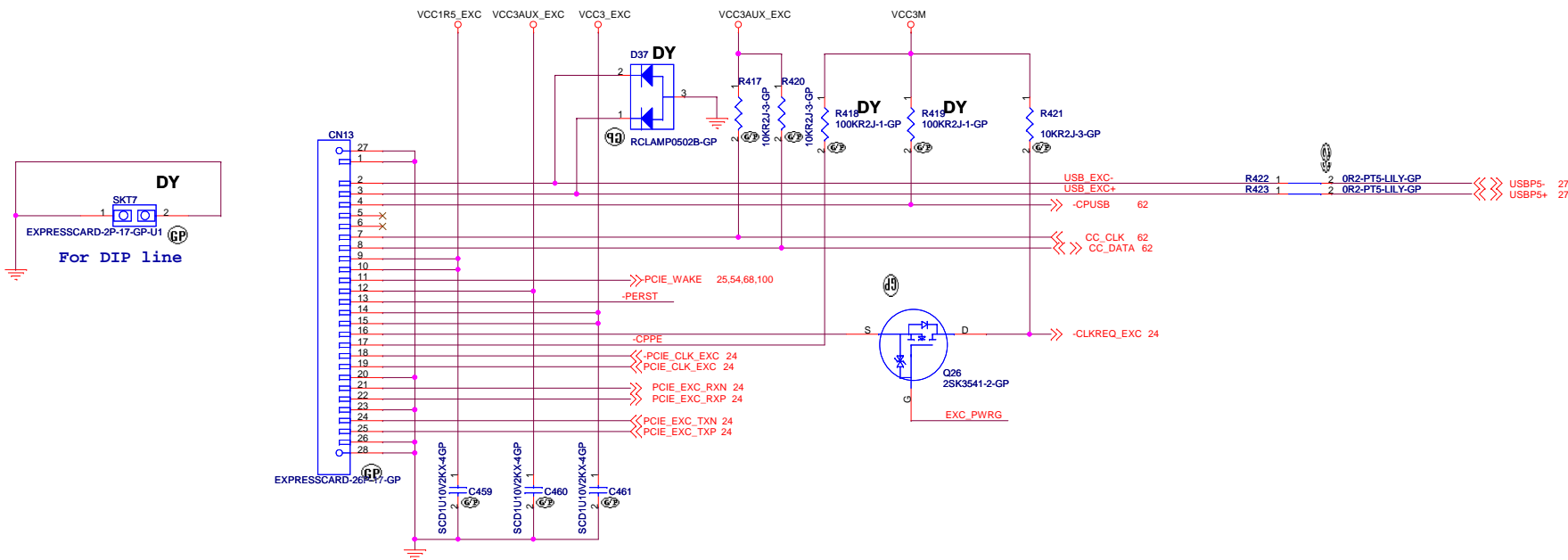


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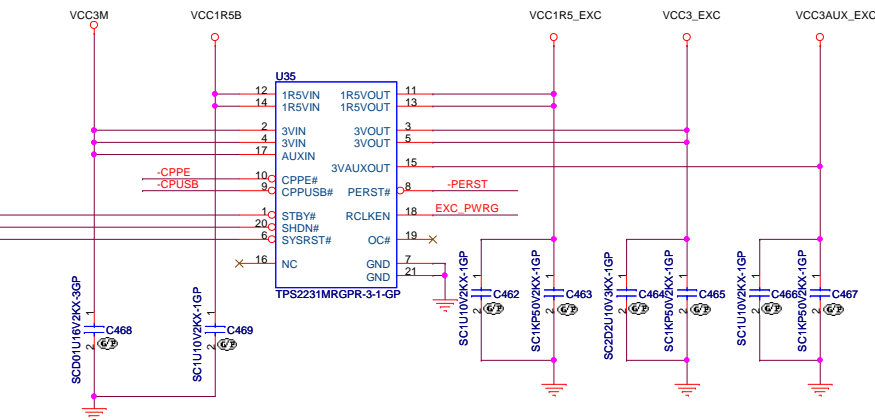
緯創資通

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Taipei Hsien 221, Taiwan, R.O.C.

Title			
RJ45 CONNECTOR			
Size A3	Document Number	Rev SD	
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59,77,84,87,91,95 B_ON
61 -EXC_PWR_SHDN
27,55,59,61,68,69,71 -PLTRST_NEAR



U35	TI	TPS2231MRGP-3	45K0234BA
	Rohm	BD4156MUV-E2	74.04156.07T
	Rohm	BD4157MUV-E2	74.04157.073

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21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title Express Card Connector

Size Custom Document Number Dasher-1 Rev SD

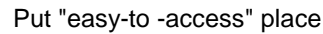
Date: Monday, January 10, 2011 Sheet 57 of 101

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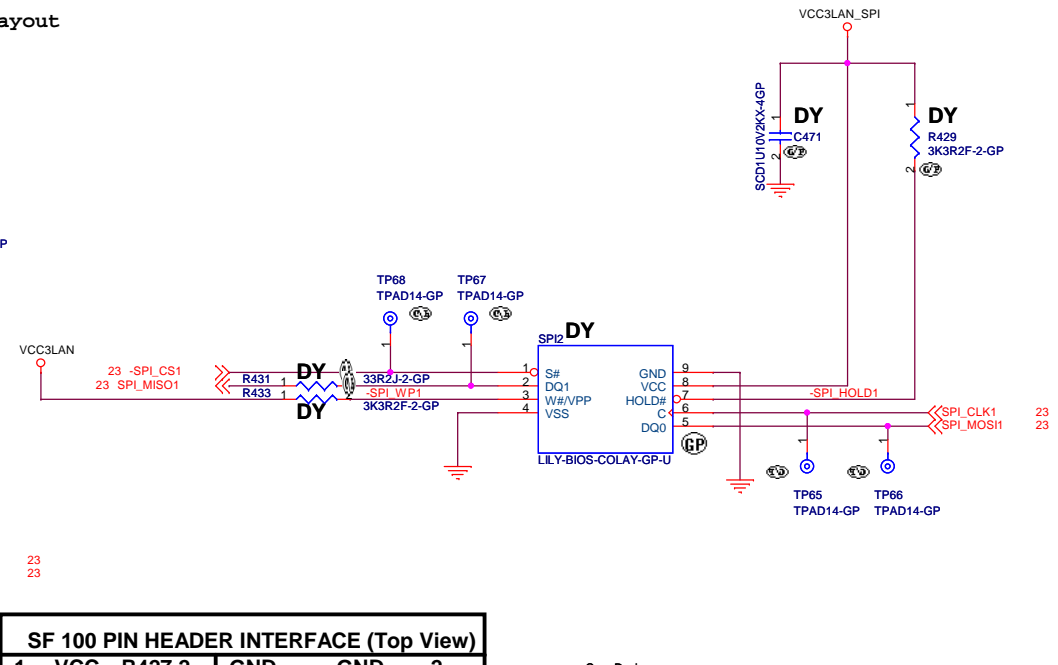
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Title			
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Size	Document Number		Rev
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Golden Finger for Debug Board



	Yes	No
R874	ASM	DY
R823	ASM	DY
R834	ASM	DY
R835	ASM	DY
R235	ASM	DY

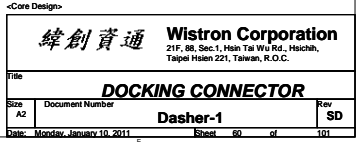
SVT Logic

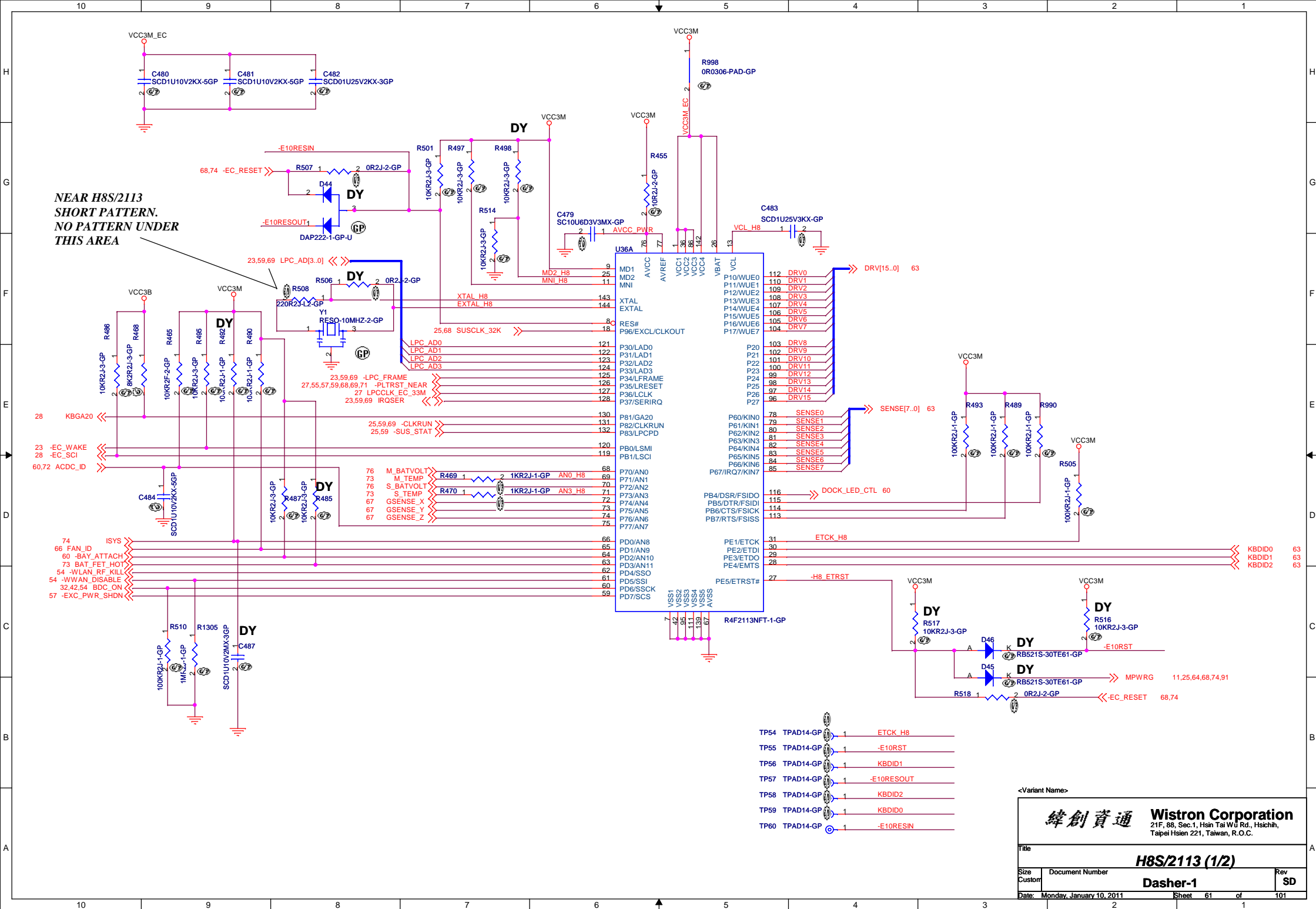
Part Number wait confirm

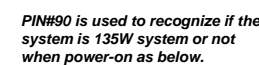
SF 100 PIN HEADER INTERFACE (Top View)					
1	VCC	R427.2	GND	GND	2
3	CS#	R148.1	R145.1	CLK	4
5	MISO	R430.2	R151.1	MOSI	6
7	(KEY)	N/A	N/A	(RESET)	8

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Title			
<i>SPI&LPC debug card</i>			
Size	Document Number		Rev
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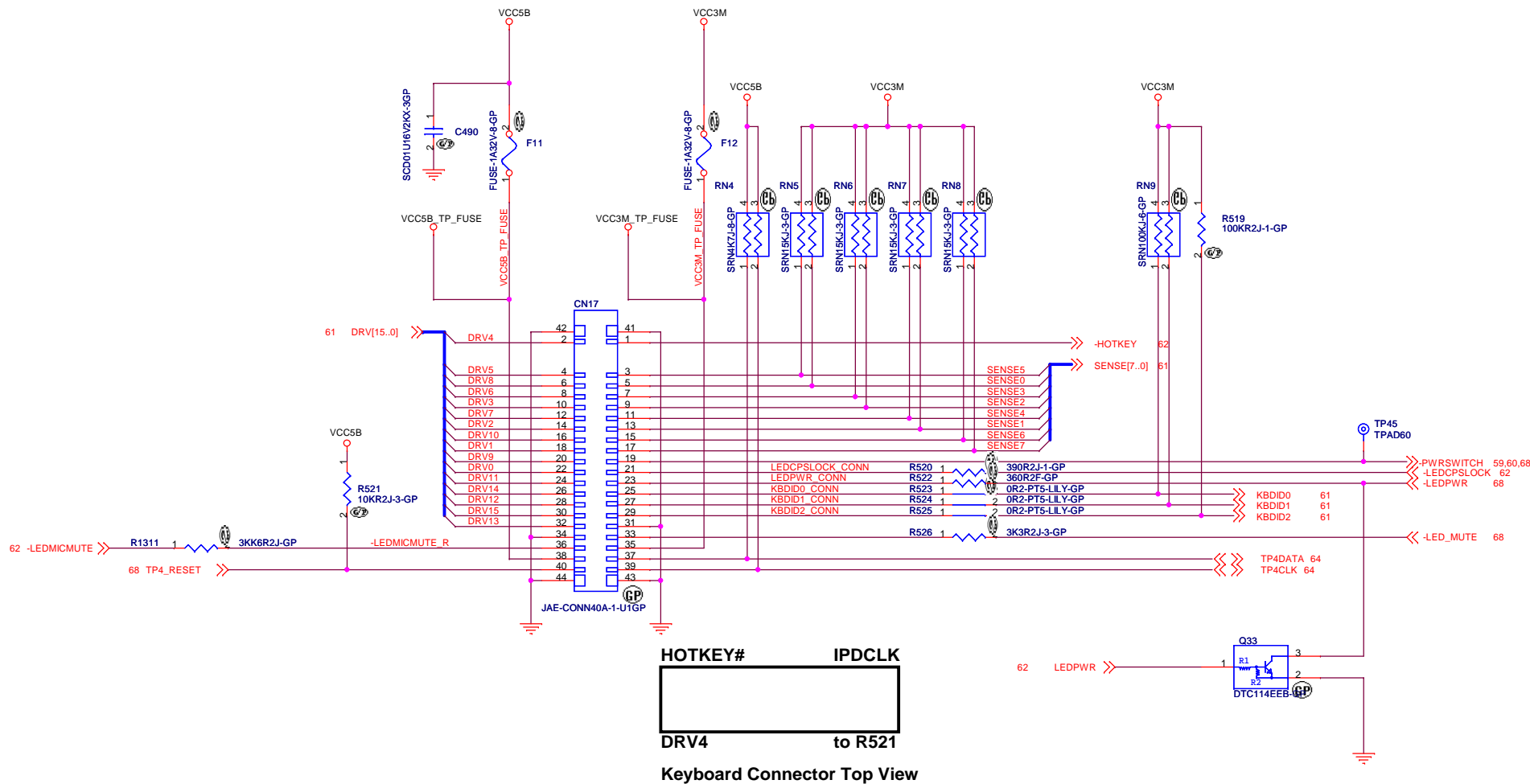




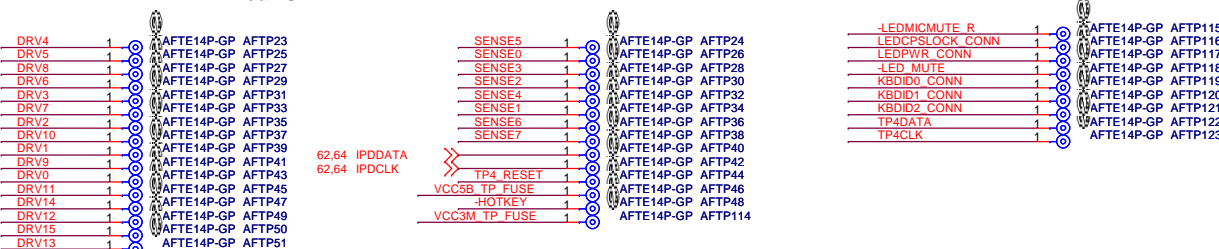


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		Wistron Corporation 21F, 88, Sec. 1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
File			
H85/2113(2/2)			
Size K2	Document Number	Rev SD	
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Keyboard Connector



Near CN17

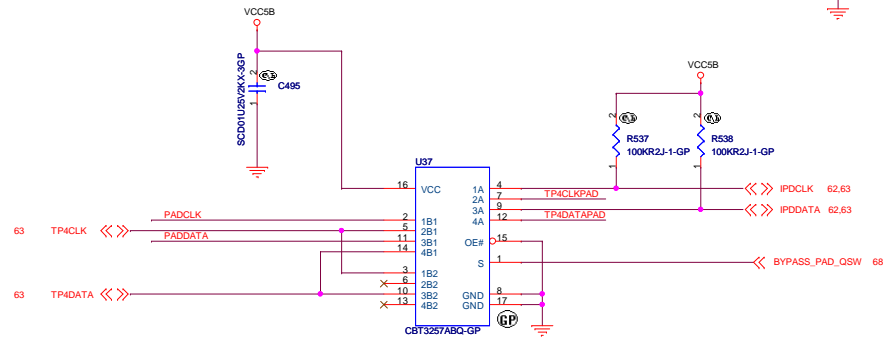
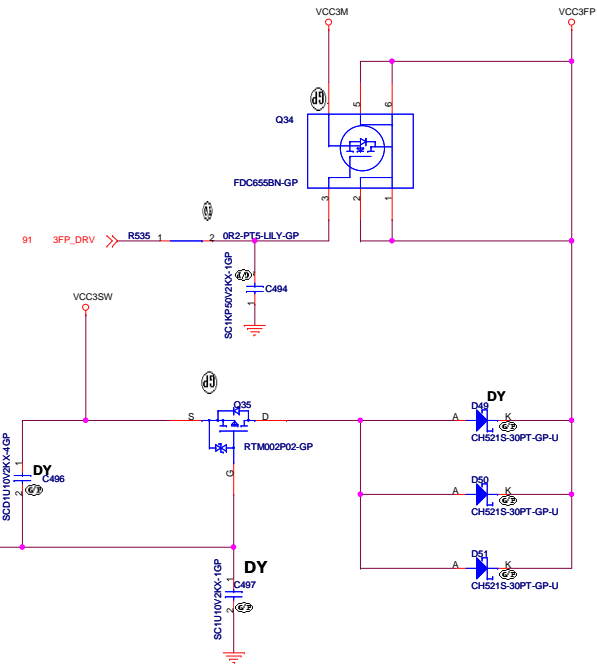
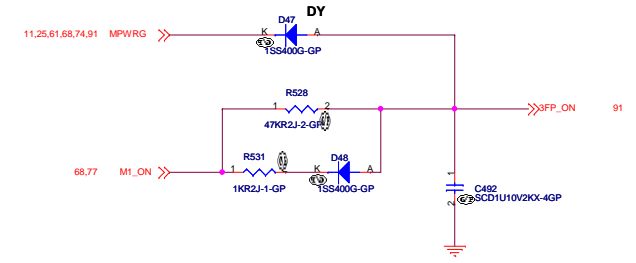
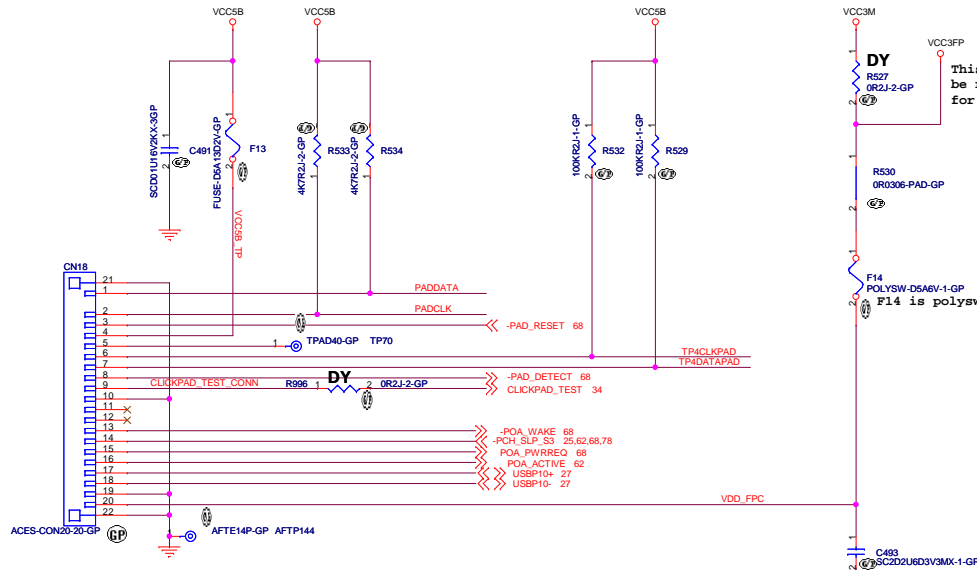


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KEYBOARD CONNECTOR			
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Fingerprint Reader / Touch PAD



Near CN18

PADDATA	1	AFT14P-GP	AFTP124
PADCLK	1	AFT14P-GP	AFTP125
-PAD_RESET	1	AFT14P-GP	AFTP126
VCC5B_TP	1	AFT14P-GP	AFTP127
TP4CLKPAD	1	AFT14P-GP	AFTP128
TP4DATAPAD	1	AFT14P-GP	AFTP129
-PAD_DETECT	1	AFT14P-GP	AFTP130
CLICKPAD_TEST_CONN	1	AFT14P-GP	AFTP131
-PAD_WAKE	1	AFT14P-GP	AFTP132
-POH_SLP_S3	1	AFT14P-GP	AFTP133
POA_PWRREQ	1	AFT14P-GP	AFTP134
POA_ACTIVE	1	AFT14P-GP	AFTP135
VDD_FPC	1	AFT14P-GP	AFTP136

<Core Design>

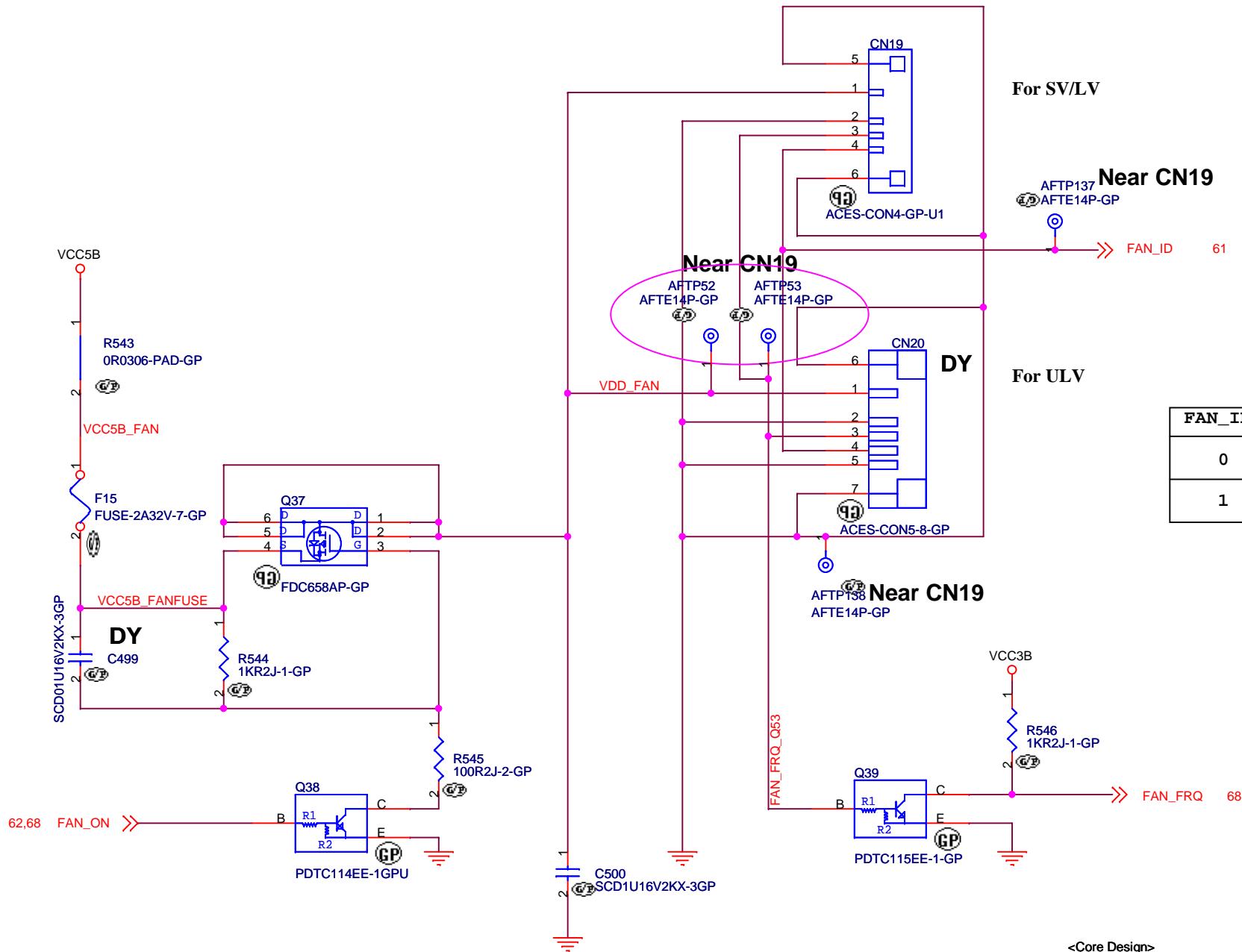
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Title	TOUCH PAD CONNECTOR		
Size	Document Number	Dasher-1	Rev SD
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Title BLANK			
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FAN_ID	Thermal module
0	THT
1	AVC or DELTA

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Title

FAN Control

Size
A4

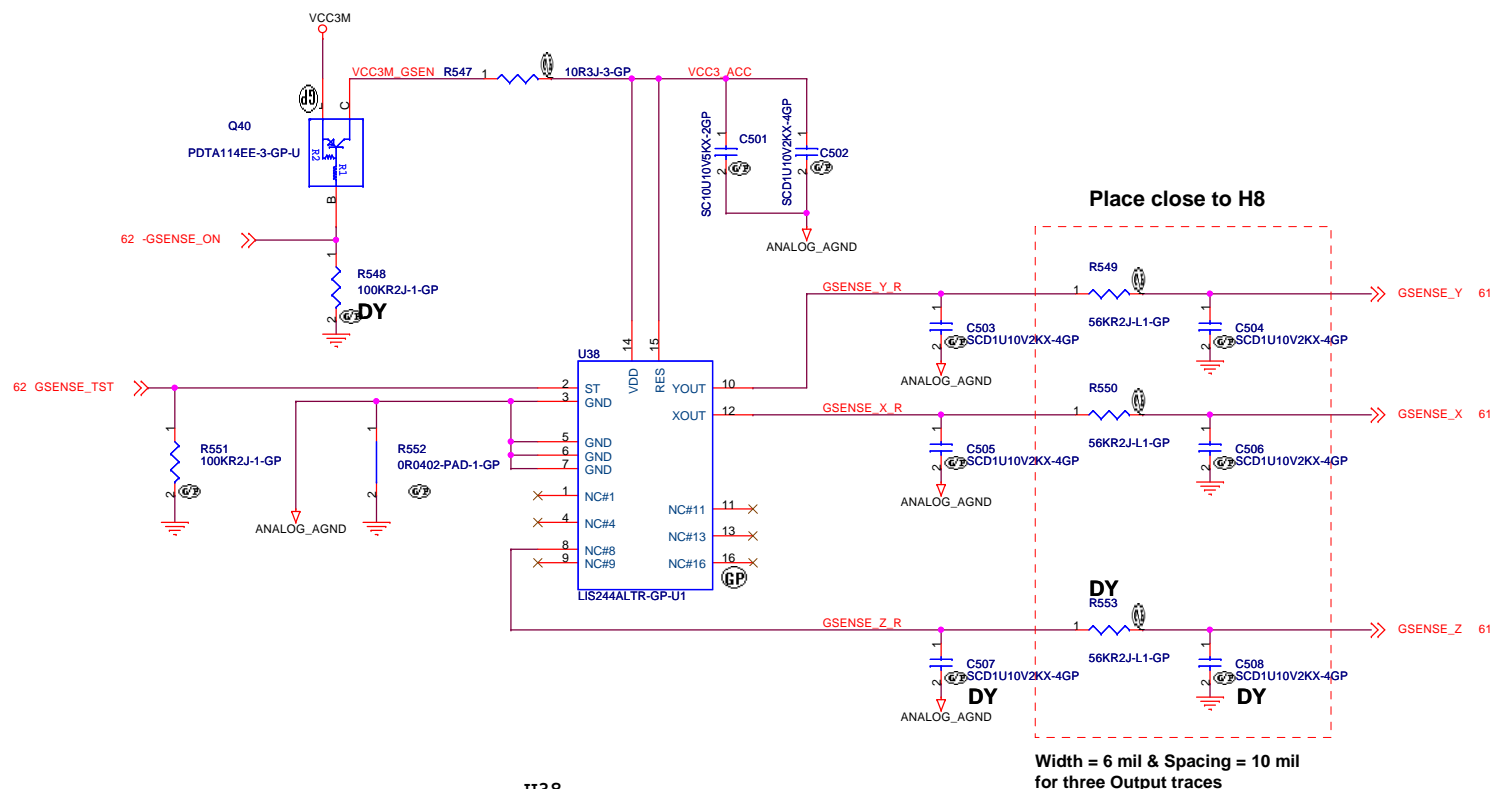
Document Number

Dasher-1

Rev
SD

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	LIS244AL LIS34AL	No Accel
R548	DY	ASM
R551	ASM	ASM
U38	ASM	DY
Q40	ASM	DY
R547	DY	DY
C501	ASM	DY
C502	ASM	DY
R552	ASM	DY
C503	ASM	DY
R549	ASM	DY
C504	ASM	DY
C505	ASM	DY
R550	ASM	DY
C506	ASM	DY
C507	DY	DY
R553		
C508		

U38

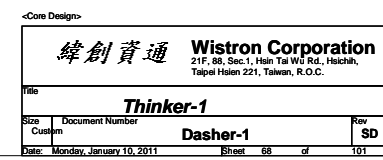
Primary	STMicro LIS244AL	74.00244.0BZ
Second	STMicro LIS34AL	74.00034.0BZ
Third	Kionix KXTC8-2850	74.KXTC8.0BZ

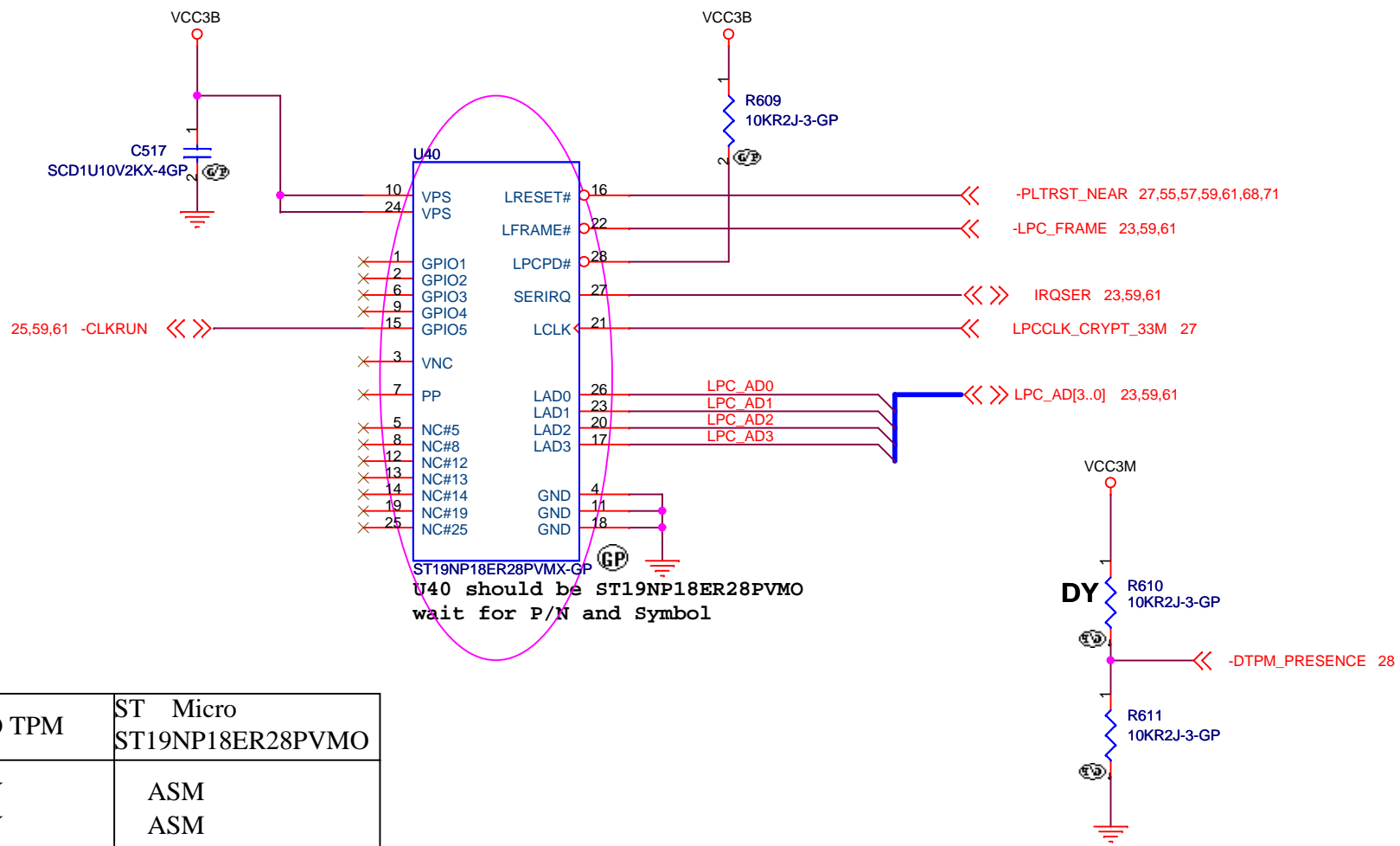
Layout Comment :

- (1) Place C475,C476,Q64,R572,R580 C464,C472,R564,R569 close to U26
- (2) Avoid routing under DCDC switching area.

<Core Design>

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Title		
G-SENSOR		
Size A3	Document Number	Rev SD
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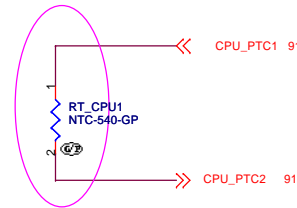


U40 should be ST19NP18ER28PVMO
wait for P/N and Symbol

	NO TPM	ST Micro ST19NP18ER28PVMO
U40	DY	ASM
C517	DY	ASM
R609	DY	ASM
R610	ASM	DY
R611	DY	ASM

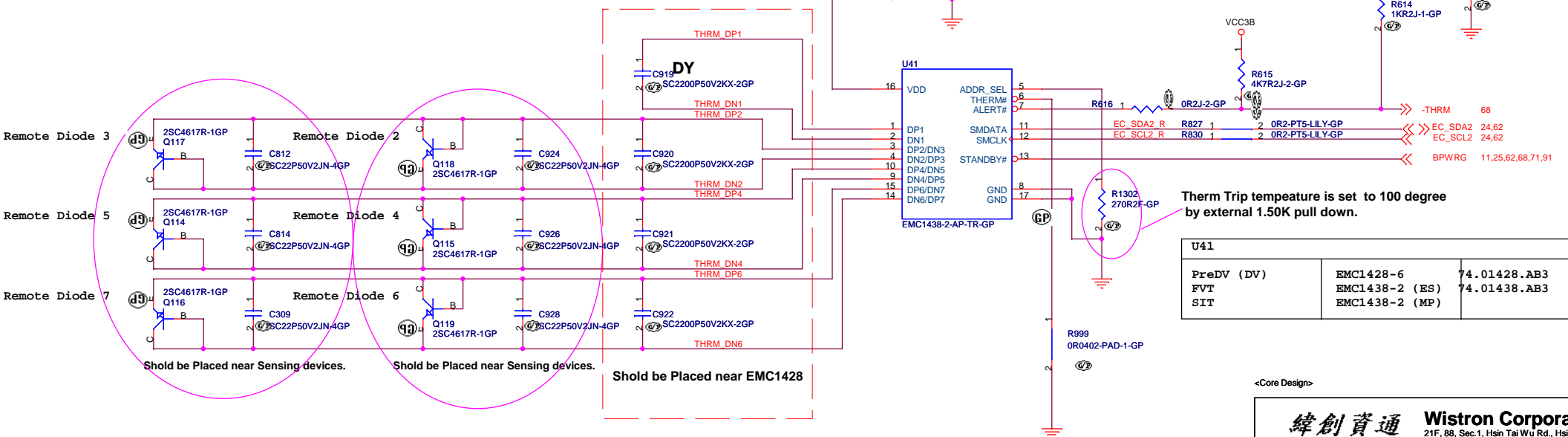
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Title TPM		
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It should be arranged near CPU instead of CPU thermal sensor

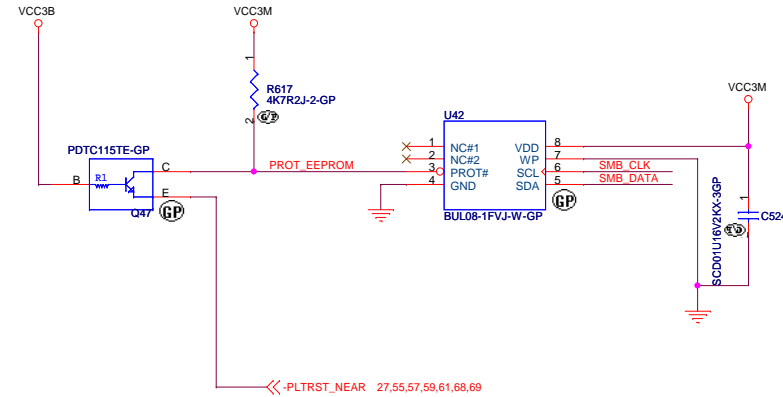
Channel	Location
Local	MEMORY
Remote Diode 2	CPUCORE DC/DC
Remote Diode 3	Rear Cover (1R05B_VTT DC/DC)
Remote Diode 4	Base Cover (1R5A DC/DC)
Remote Diode 5	GFXCORE
Remote Diode 6	WWAN
Remote Diode 7	WLAN



Therm Trip temperature is set to 100 degree by external 1.50K pull down.

U41		
PreDV (DV)	EMC1428-6	74.01428.AB3
FVT	EMC1438-2 (ES)	74.01438.AB3
SIT	EMC1438-2 (MP)	

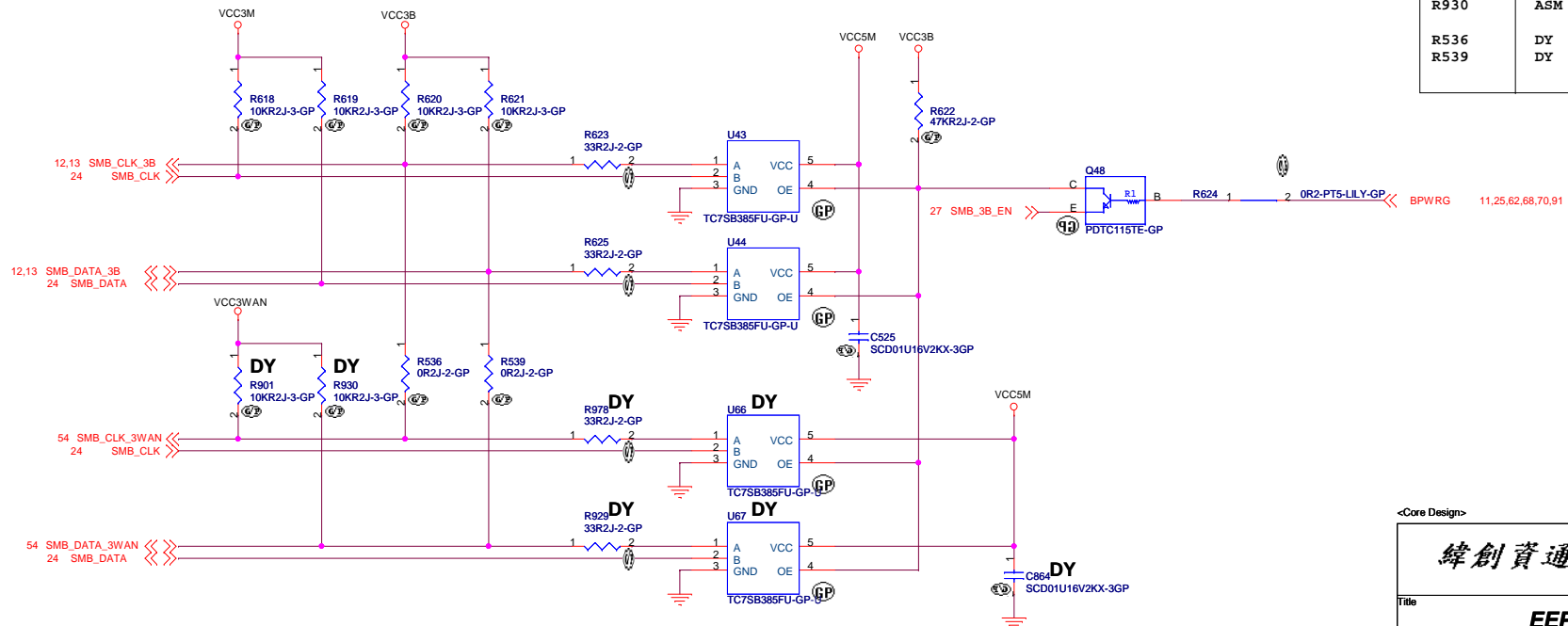
EEPROM



	Vendor	U42	Part Number
1st	ROHM	BUL08-1FVJ-W	72.BUL08.00Q
2nd	PHILIPS	PCA24S08ADP	72.24S08.A0Q
3rd	Sanyo	LE26CAP08TT	72.26C08.00R

CONSTANT SECURE	YES	NO
U66	ASM	DY
U67	ASM	DY
C864	ASM	DY
R978	ASM	DY
R929	ASM	DY
R901	ASM	DY
R930	ASM	DY
R536	DY	ASM
R539	DY	ASM

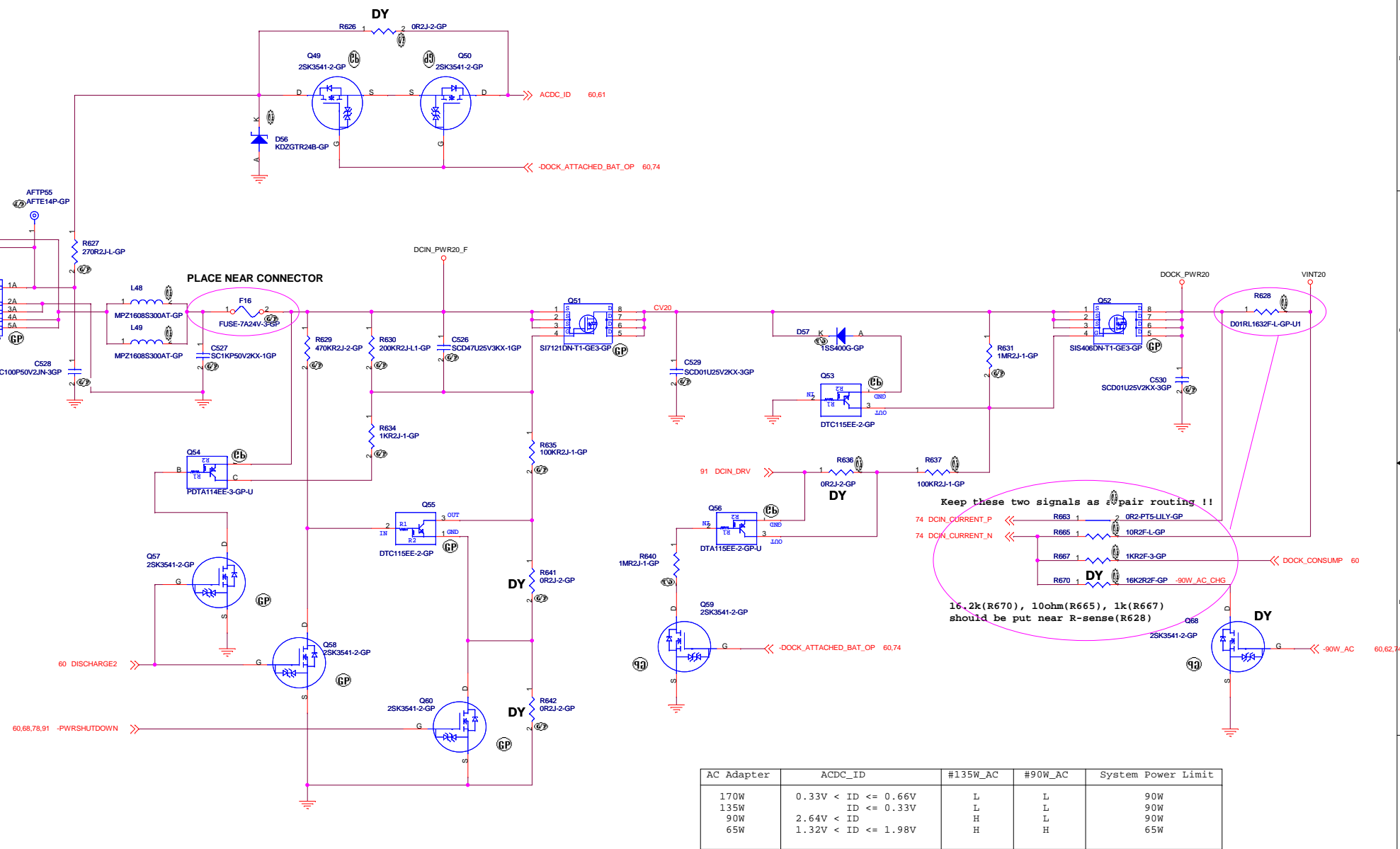
Logic



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Title	Document Number	Rev
EEPROM/SMBUS SW	Dasher-1	SD
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PEAK SHIFT	YES	NO
R641	NO-ASM	ASM
R629	ASM	NO-ASM
Q58	ASM	NO-ASM
Q55	ASM	NO-ASM

AC Adapter	ACDC_ID	#135W_AC	#90W_AC	System Power Limit
170W	0.33V < ID <= 0.66V	L	L	90W
135W	ID <= 0.33V	L	L	90W
90W	2.64V < ID	H	L	90W
65W	1.32V < ID <= 1.98V	H	H	65W

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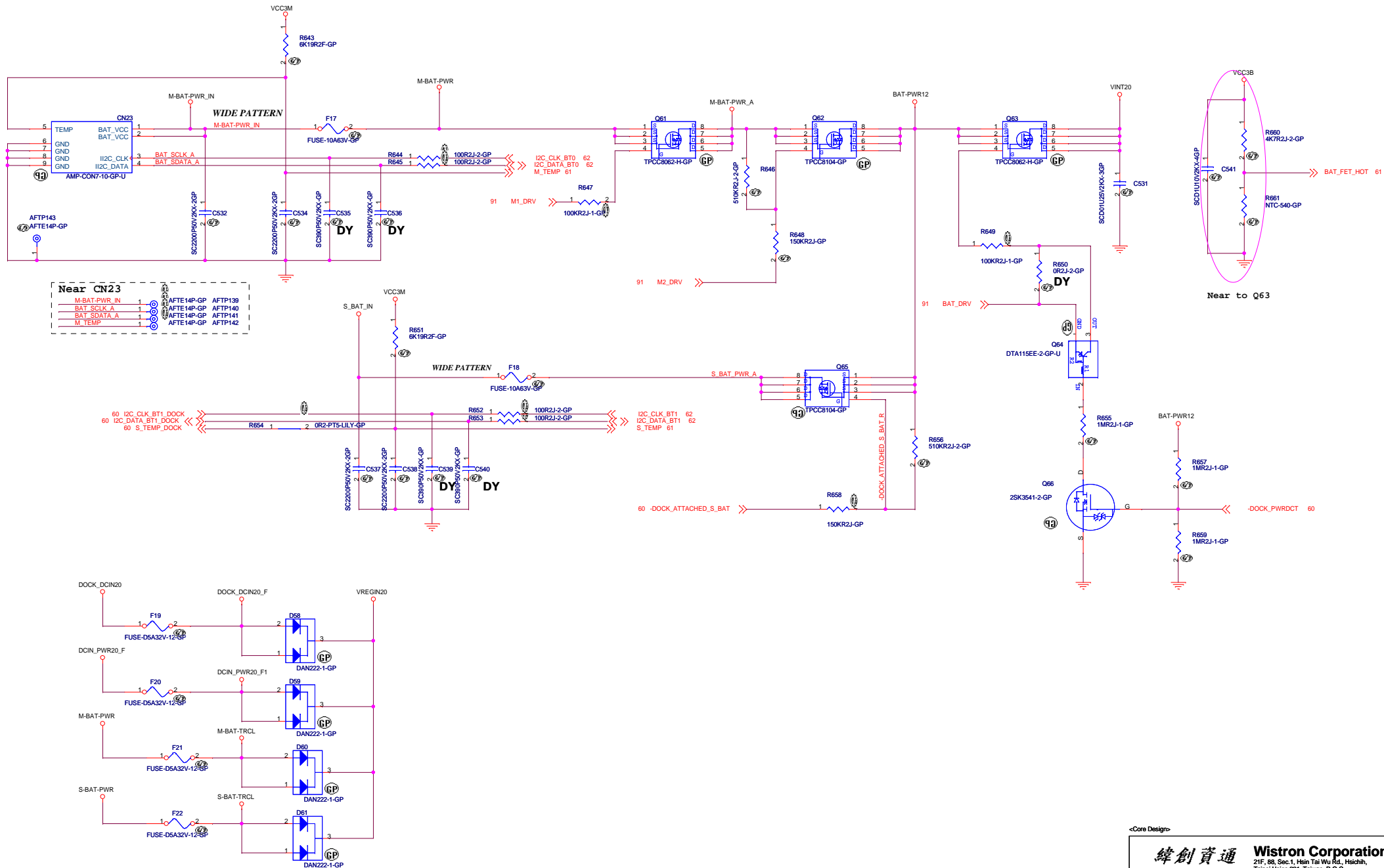
DC-IN

Dasher-1

SD

Monday, January 10, 2011

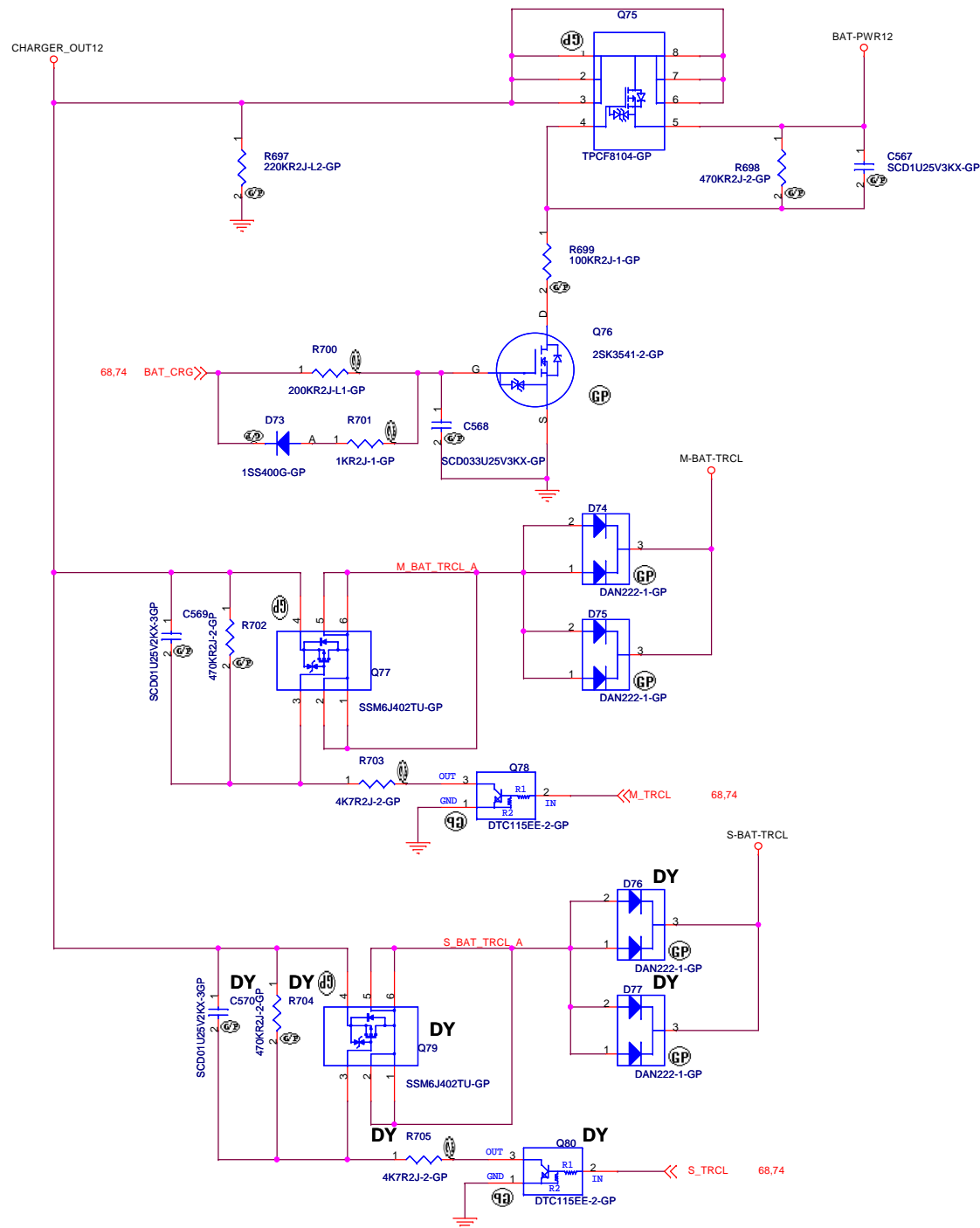
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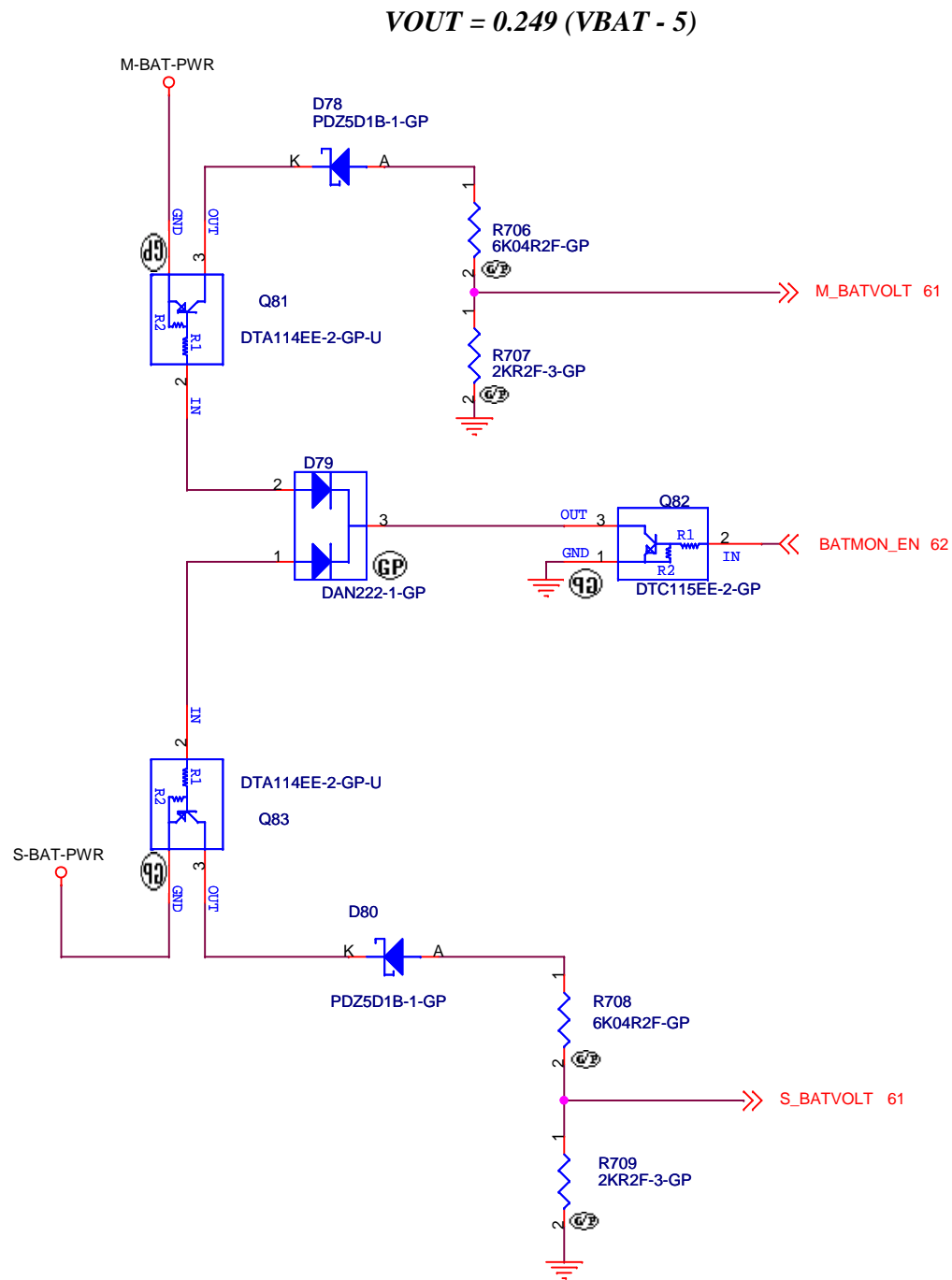
Title			
BATTERY INPUT			
Size	Document Number		Rev
Custom	Dasher-1		SD
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Title		
CHARGER SELECT		
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Title

BATTERY MONITOR

Size
A4

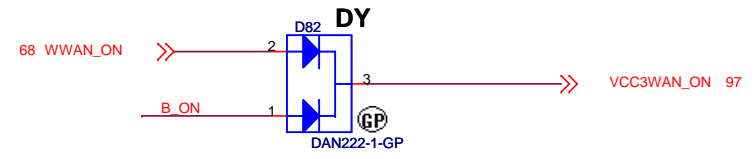
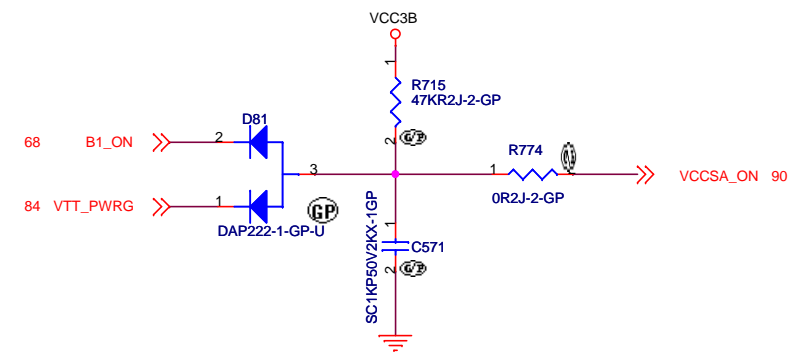
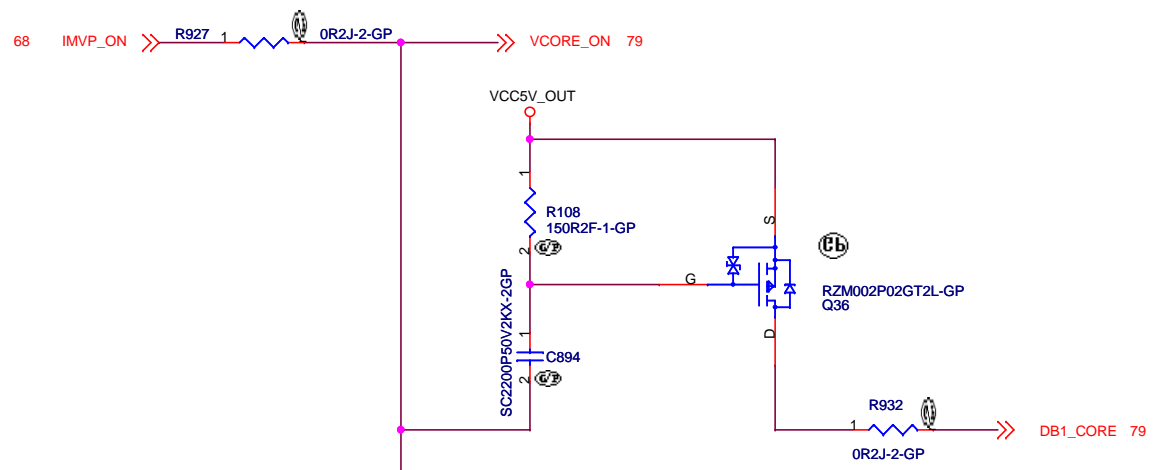
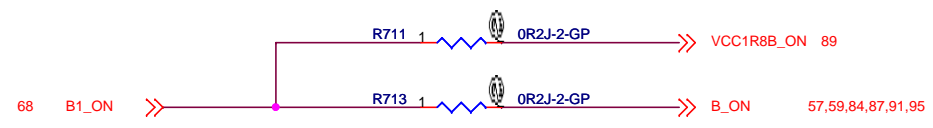
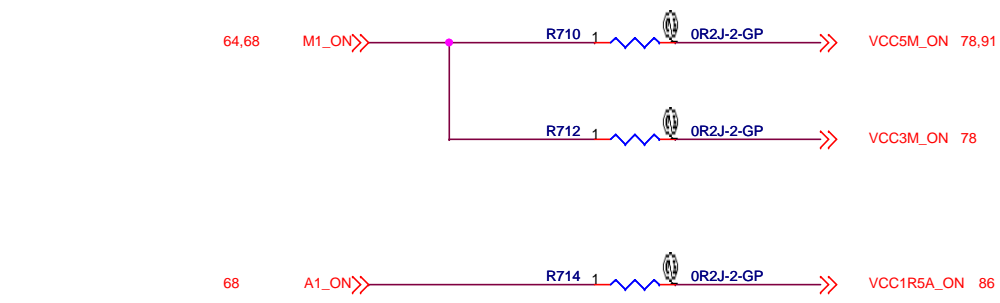
Document Number

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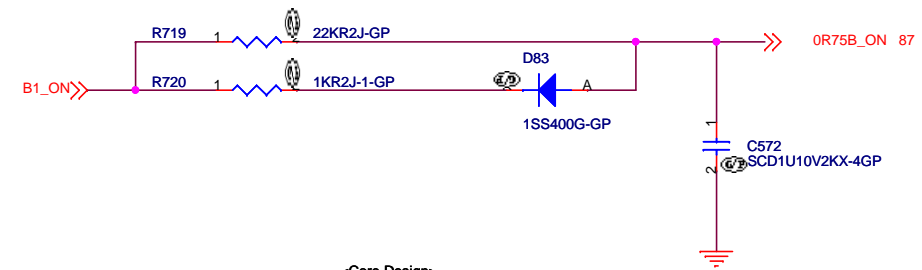
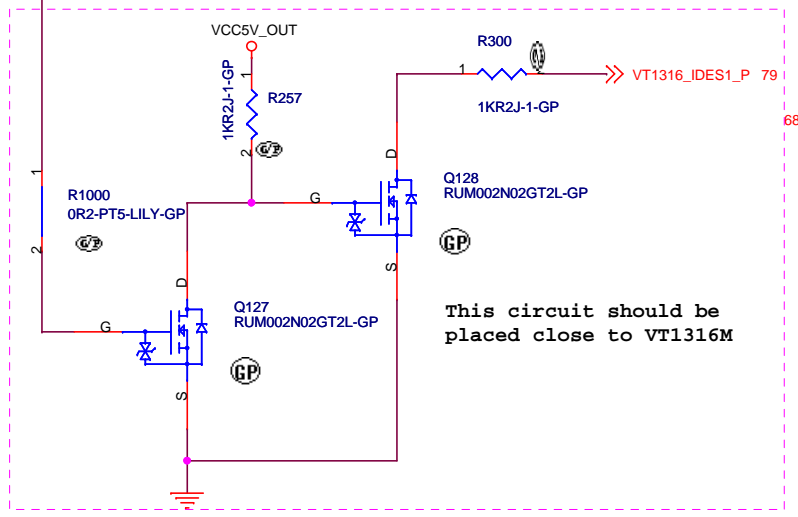
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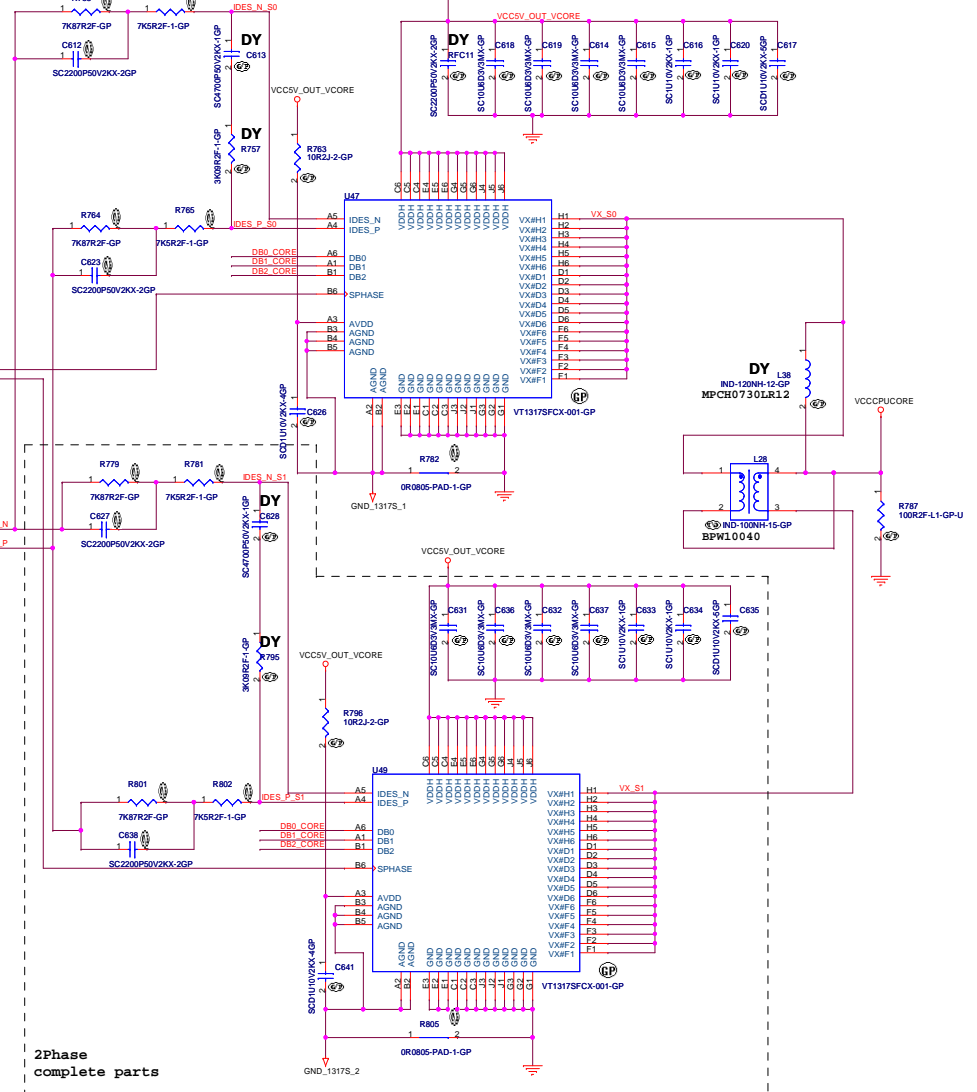


CONSTANT CONTNECT	YES	NO
D82	ASM	NO-ASM



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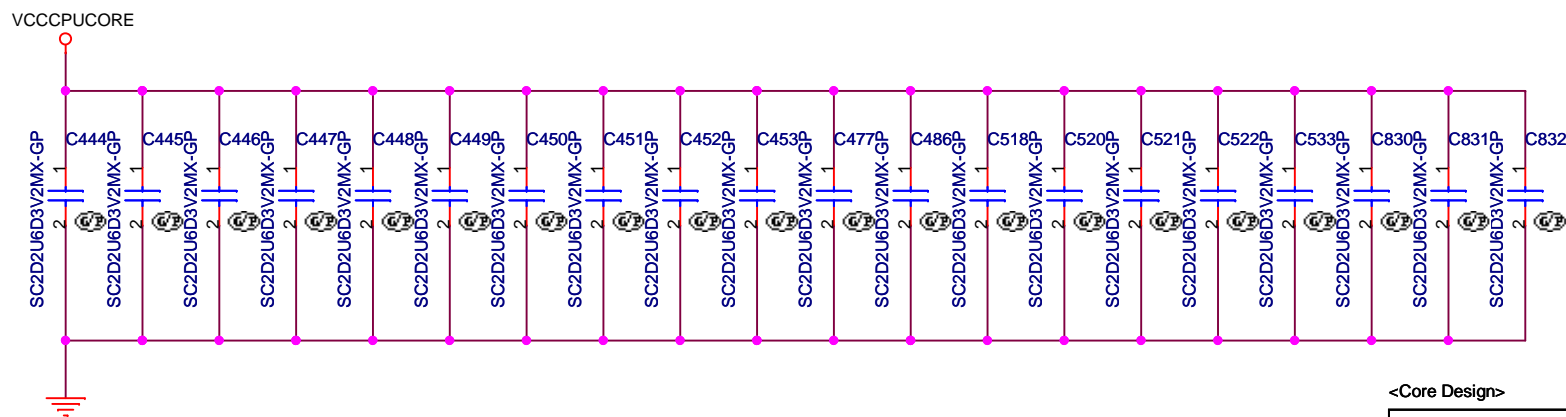
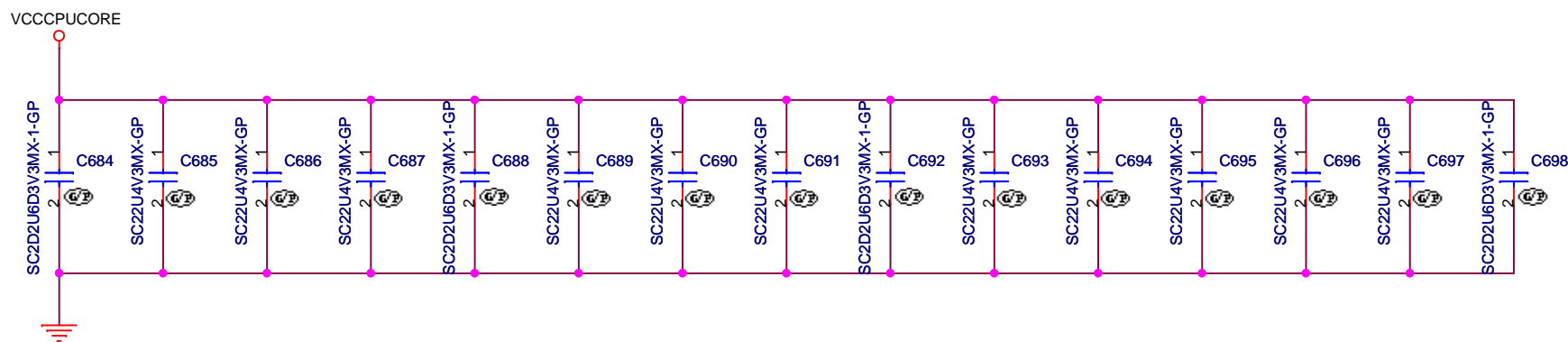
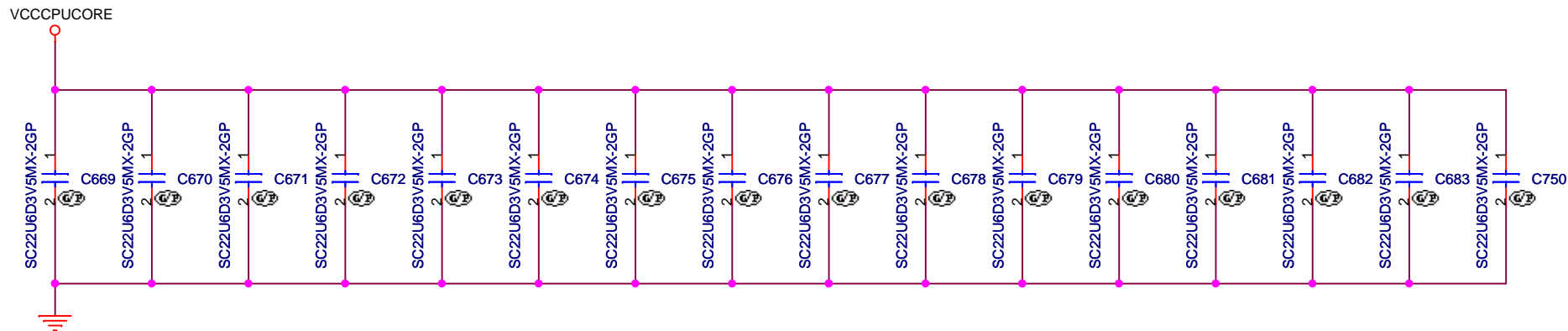
緯創資通 Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichin, Taipei Hsien 221, Taiwan, R.O.C.	
Title	
POWER SEQUENCE	
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```
2Phase
complete parts
```

CPU/GFXCORE Table					
CPU	SV 2Phase(53A)		LV 2Phase(43A)	ULV 1Phase(33A)	Remark
GFX	GT1(24A)	GT2(33A)	GT2(33A)	GT2(33A)	
U47 U49	VT1317S VT1317S	VT1317S VT1317S	VT1314S VT1314S	VT1317S NO_ASM	Slave IC
R966 R967	NO_ASM 0	NO_ASM 0	NO_ASM 0	0 NO_ASM	Phase
L28 L28	NO_ASM ASM	NO_ASM ASM	NO_ASM ASM	ASM NO_ASM	Inductor
R783	27.4k	27.4k	39.2k	20.8k	R_SEL0
R784	27.4k	27.4k	6.57k	27.4k	R_SEL1
R785	39.2k	39.2k	39.2k	39.2k	R_SEL2
R788	27.4k	32.4k	32.4k	32.4k	R_SEL3
R789	11.4k(0.5%)	23.7k(1%)	23.7k(1%)	23.7k(1%)	R_SEL4
R790	27.4k	27.4k	27.4k	27.4k	R_SEL5
R792	8.66k(0.5%)	8.66k(0.5%)	8.66k(0.5%)	8.66k(0.5%)	R_SEL6
R779	7.87k	7.87k	7.87k	NO_ASM	RDES #2
C627	1000pF	NO_ASM	1000pF	NO_ASM	
R781	7.68k	7.68k	7.68k	NO_ASM	
R801	7.87k	7.87k	7.87k	NO_ASM	
C638	1000pF	1000pF	1000pF	NO_ASM	
R802	7.68k	7.68k	7.68k	NO_ASM	
C628	4700pF	4700pF	4700pF	NO_ASM	
R795	3.09k	3.09k	3.09k	NO_ASM	
R772	8.25k	8.25k	10.5k	8.06k	IMON1
R775	191	191	165	383	
R773	8.87k	8.66k	8.66k	8.66k	IMON2
R776	178	294	294	294	
R798	140k	140k	255k	221k	DCMDR1
R803	1.69k	1.69k	3.57k	3.16k	
R797	52.3k	52.3k	110k	97.6k	
R800	316k	274k	274k	274k	DCMDR1(prs)
R804	4.99k	4.12k	4.12k	4.12k	(drrp)
R799	154k	127k	127k	127k	(ofs)
C631	10uF	10uF	10uF	NO_ASM	GIN
C636	10uF	1uF	1uF	NO_ASM	
C633	1uF	1uF	1uF	NO_ASM	
C634	1uF	1uF	1uF	NO_ASM	
C635	0.1uF	0.1uF	0.1uF	NO_ASM	
C632	10uF	10uF	10uF	NO_ASM	
C637	10uF	10uF	10uF	NO_ASM	
R796	10	10	10	NO_ASM	AVDD
C641	0.1uF	0.1uF	0.1uF	NO_ASM	
R805	0	0	0	NO_ASM	
C684	2.2uF	2.2uF	10uF	10uF	Coutput(1603)
C685	22uF	22uF	10uF	22uF	
C686	22uF	22uF	NO_ASM	22uF	
C687	22uF	22uF	NO_ASM	22uF	
C688	2.2uF	10uF	10uF	10uF	
C689	22uF	22uF	NO_ASM	22uF	
C690	22uF	22uF	10uF	22uF	
C691	22uF	22uF	NO_ASM	22uF	
C692	2.2uF	2.2uF	10uF	10uF	
C693	22uF	22uF	10uF	10uF	
C694	22uF	22uF	10uF	22uF	
C695	22uF	22uF	NO_ASM	22uF	
C696	22uF	22uF	10uF	22uF	
C697	22uF	22uF	10uF	22uF	
C698	2.2uF	2.2uF	10uF	10uF	
U50	VT1314S	VT1317S	VT1317S	VT1317S	Slave IC
R806	3.4k	3.16k	3.16k	3.16k	RDES G
C653	2700pF	2700pF	2700pF	2700pF	
R807	12.4k	11.5k	11.5k	11.5k	
R810	3.4k	3.16k	3.16k	3.16k	
C662	2700pF	2700pF	2700pF	2700pF	
R811	12.4k	11.5k	11.5k	11.5k	
C654	4700pF	4700pF	4700pF	4700pF	
R808	3.09k	3.09k	3.09k	3.09k	
C642	22uF	22uF	22uF	22uF	Coutput
C643	22uF	22uF	22uF	22uF	
C644	22uF	22uF	22uF	22uF	
C645	22uF	22uF	22uF	22uF	
C646	22uF	22uF	22uF	22uF	
C647	22uF	22uF	22uF	22uF	
C648	22uF	22uF	22uF	22uF	
C649	22uF	22uF	22uF	22uF	
C650	22uF	22uF	22uF	22uF	
C651	22uF	22uF	22uF	22uF	
C652	22uF	22uF	22uF	22uF	
C663	22uF	22uF	22uF	22uF	
C664	22uF	22uF	22uF	22uF	
C665	22uF	22uF	22uF	22uF	
C666	22uF	22uF	22uF	22uF	
C667	22uF	22uF	22uF	22uF	
C20	10uF	22uF	22uF	22uF	Coutput
C21	10uF	10uF	10uF	10uF	CPU side
C22	10uF	22uF	22uF	22uF	
C23	10uF	22uF	22uF	22uF	
C933	10uF	22uF	22uF	22uF	
C934	10uF	10uF	10uF	10uF	

CPU	SV 2Phase(53A)		LV 2Phase(43A)	ULV 1Phase(33A)	Remark
R754	7.5k	7.5k	7.5k	6.98k	IDES (CPU)
R765	7.5k	7.5k	7.5k	6.98k	
R781	7.5k	7.5k	7.5k	NO_ASM	
R802	7.5k	7.5k	7.5k	NO_ASM	
R806	3.16k	3.16k	3.16k	6.2k	IDES (GFX)
R810	3.16k	3.16k	3.16k	6.2k	
R807	11.3k	11.3k	11.3k	8.06k	
R811	11.3k	11.3k	11.3k	8.06k	
C654	4700pF	4700pF	4700pF	NO_ASM	
R808	3.09k	3.09k	3.09k	NO_ASM	



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Taipei Hsien 221, Taiwan, R.O.C.

Title

DC-DC VCCCPUCORE

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A4

Document Number

Dasher-1

Rev
SD

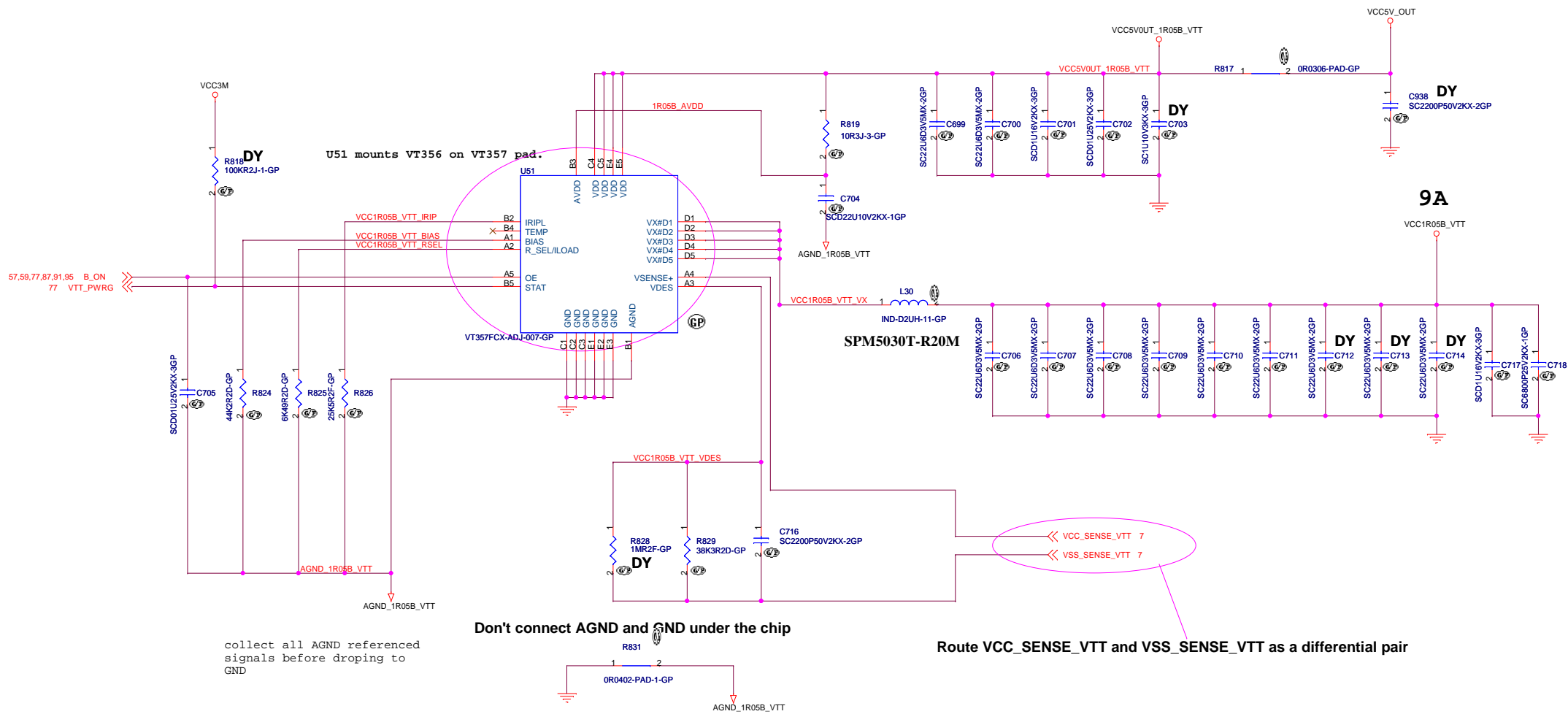
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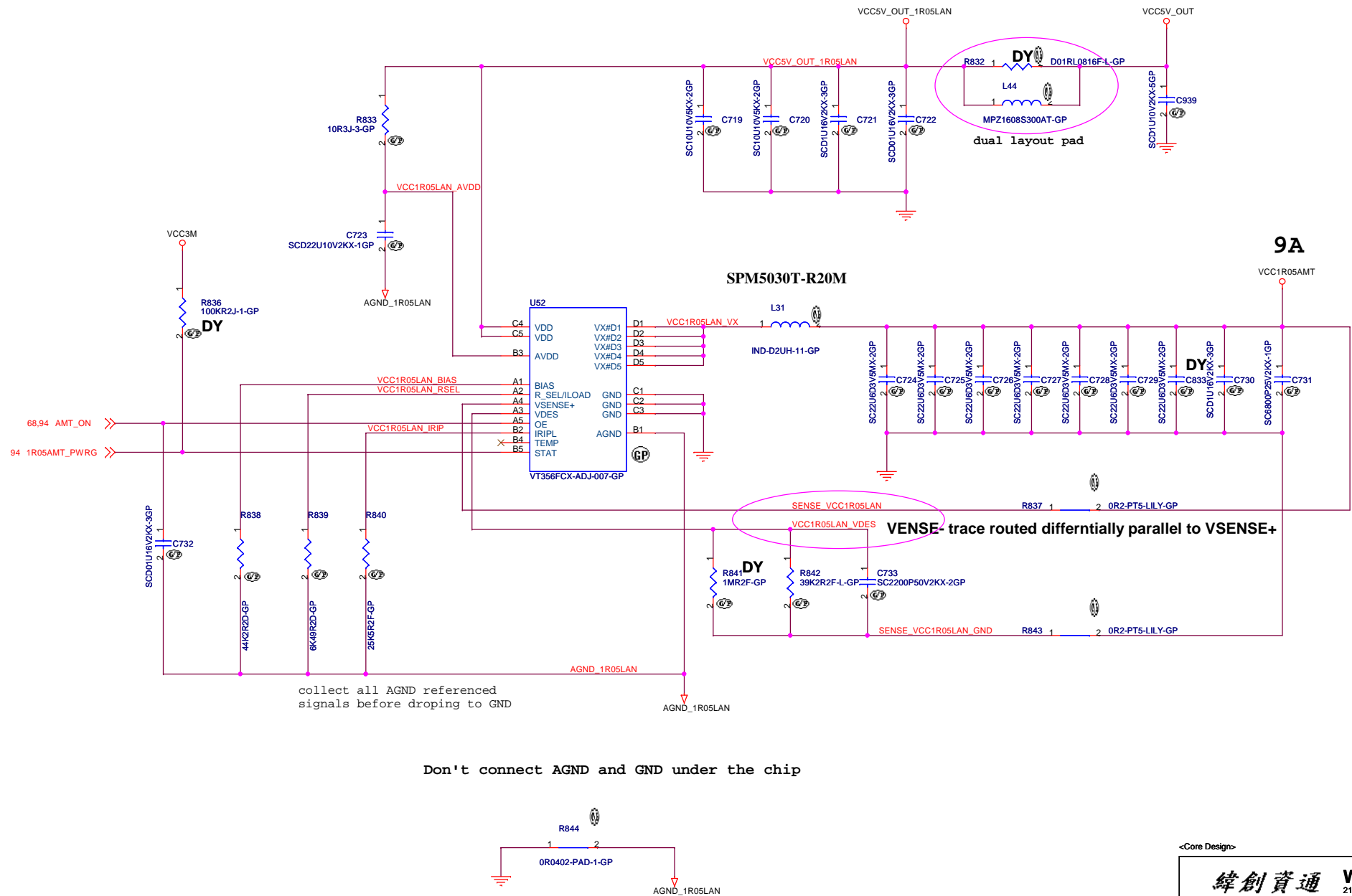
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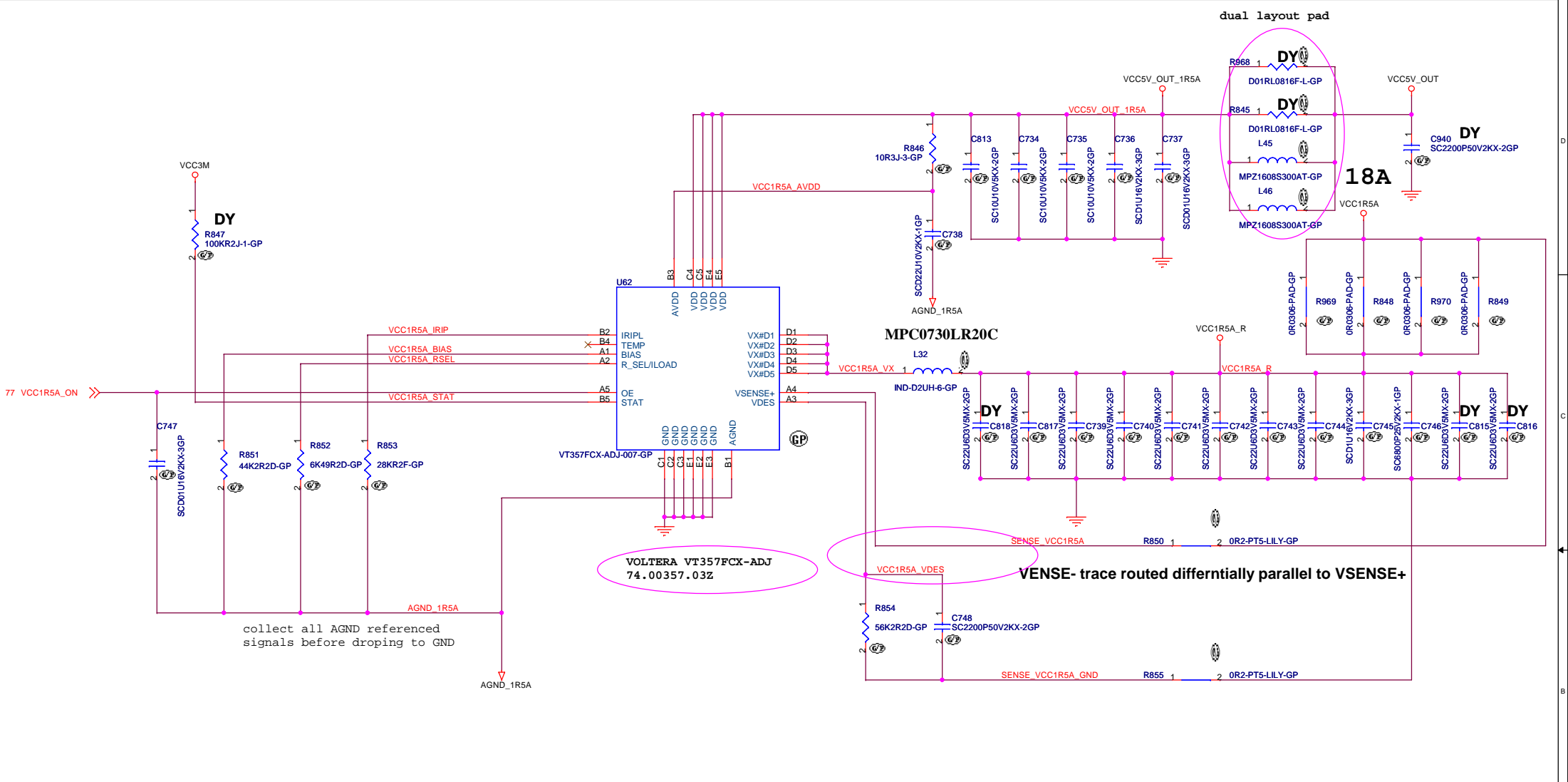
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Custom		SD	
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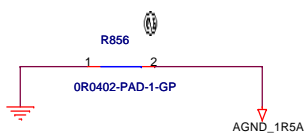
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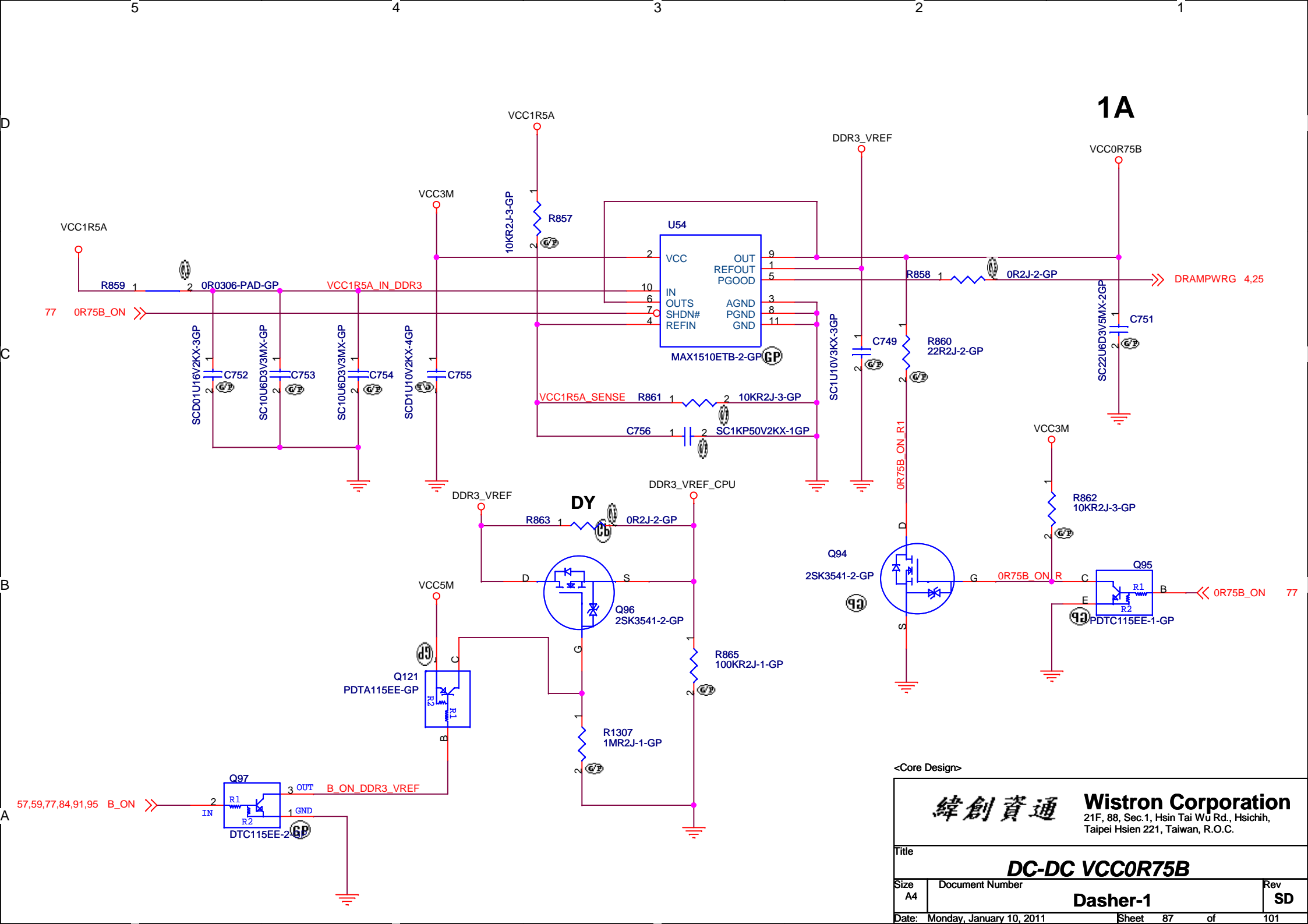
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Taipei Hsien 221, Taiwan, R.O.C.

Title			
DC-DC VCC1R05AMT			
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Don't connect AGND and GND under the chip

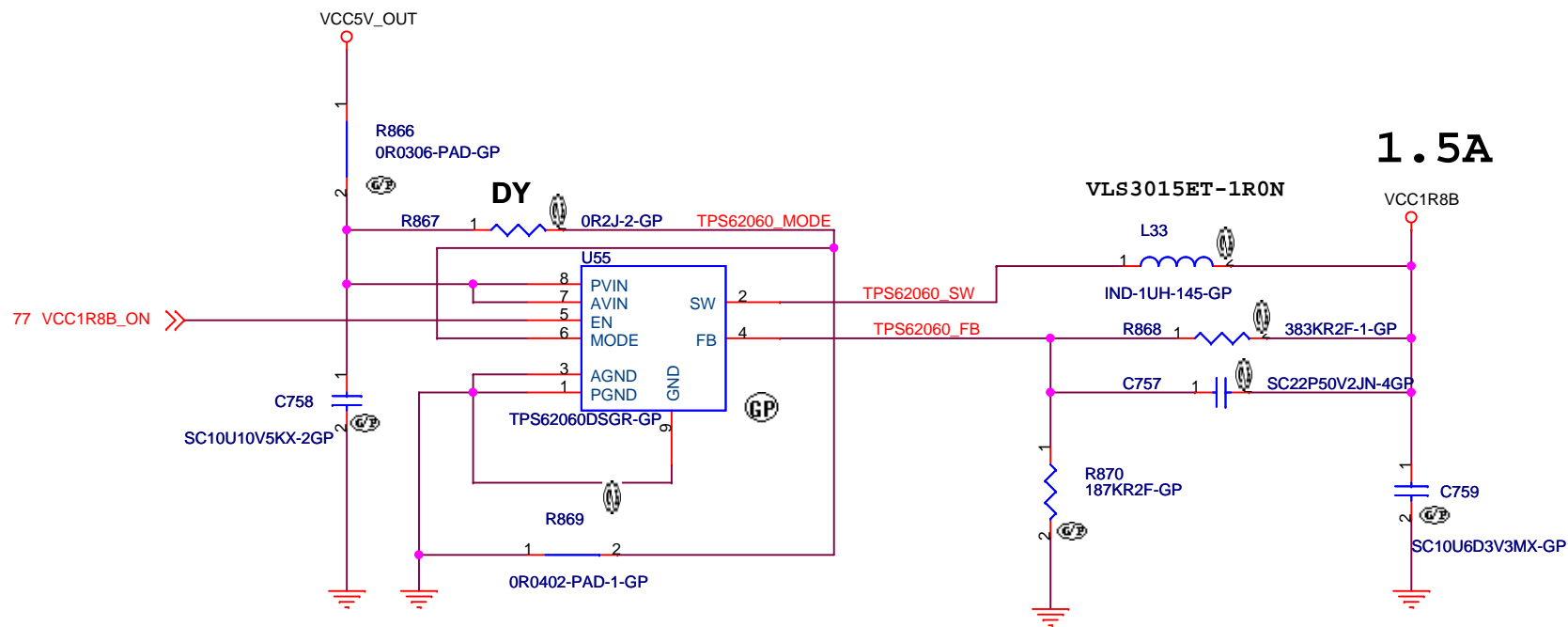




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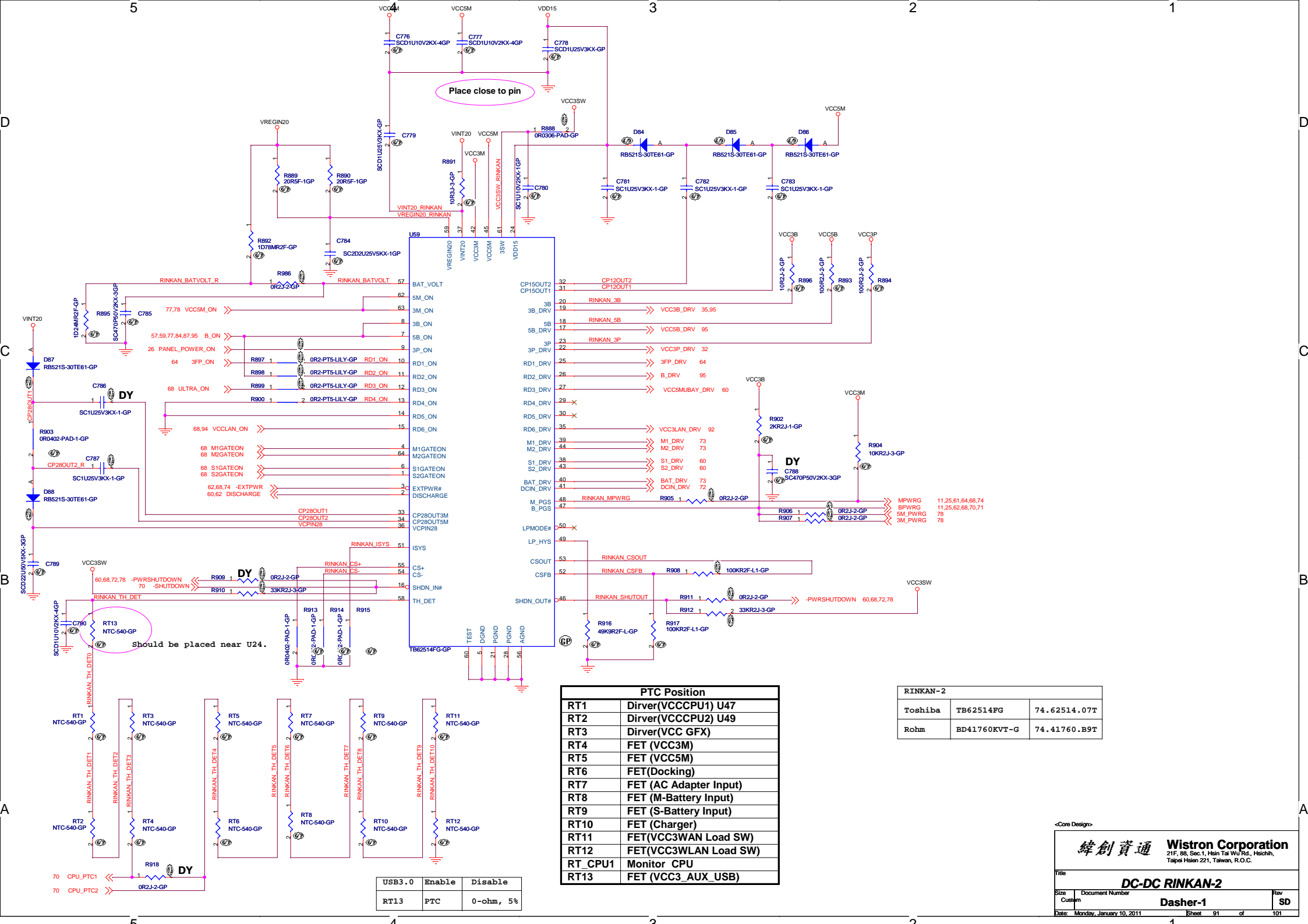
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Place close to pin

should be placed near U24.

PTC Position	
RT1	Dirver(VCCCPU1) U47
RT2	Dirver(VCCCPU2) U49
RT3	Dirver(VCC GFX)
RT4	FET (VCC3M)
RT5	FET (VCC5M)
RT6	FET(Docking)
RT7	FET (AC Adapter Input)
RT8	FET (M-Battery Input)
RT9	FET (S-Battery Input)
RT10	FET (Charger)
RT11	FET(VCC3WAN Load SW)
RT12	FET(VCC3WLAN Load SW)
RT CPU1	Monitor CPU
RT13	FET (VCC3_AUX_USB)

RINKAN-2		
Toshiba	TB62514FG	74.62514.07T
Rohm	BD41760KVT-G	74.41760.89T

USB3.0		
Enable	Disable	
RT13	PTC	0-ohm, 5%

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DC-DC RINKAN-2

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Document Number

Rev

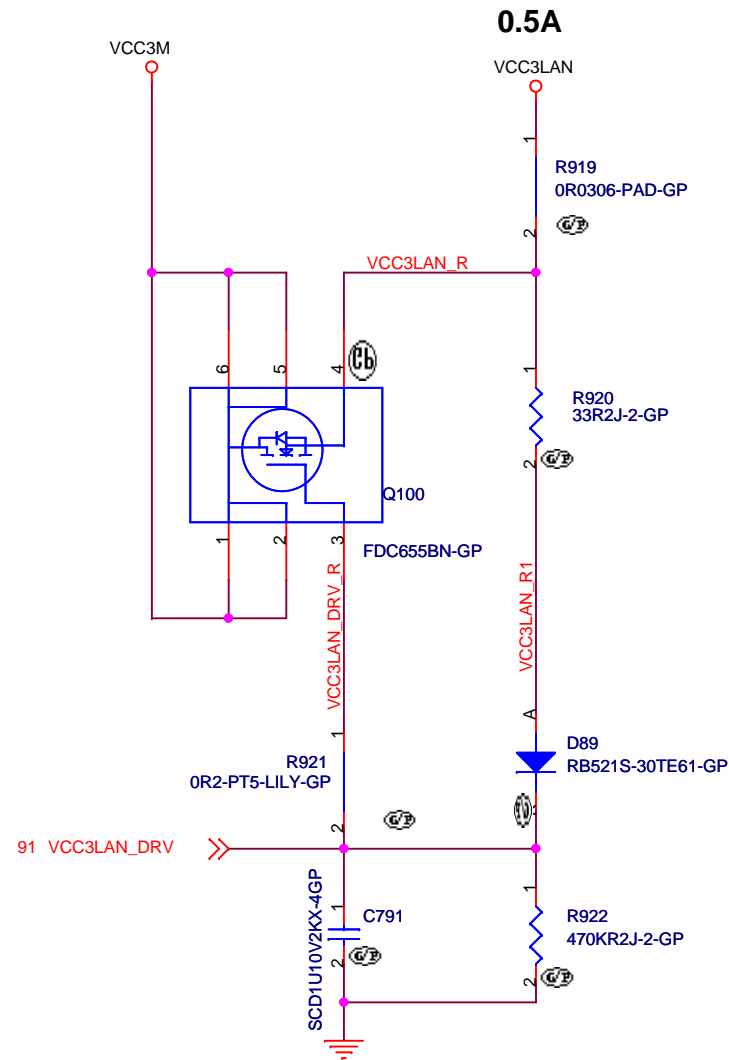
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LOAD SW 1

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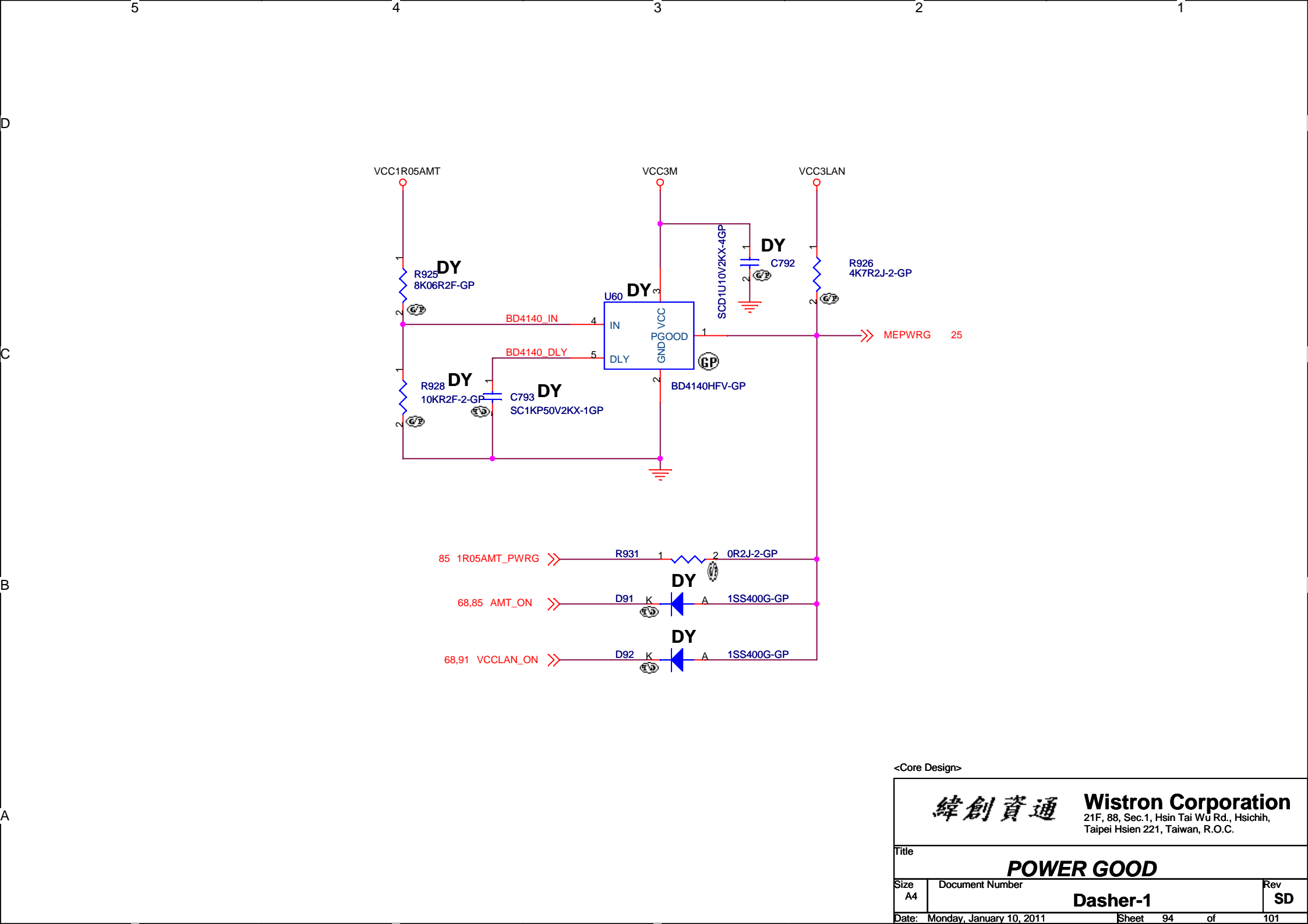
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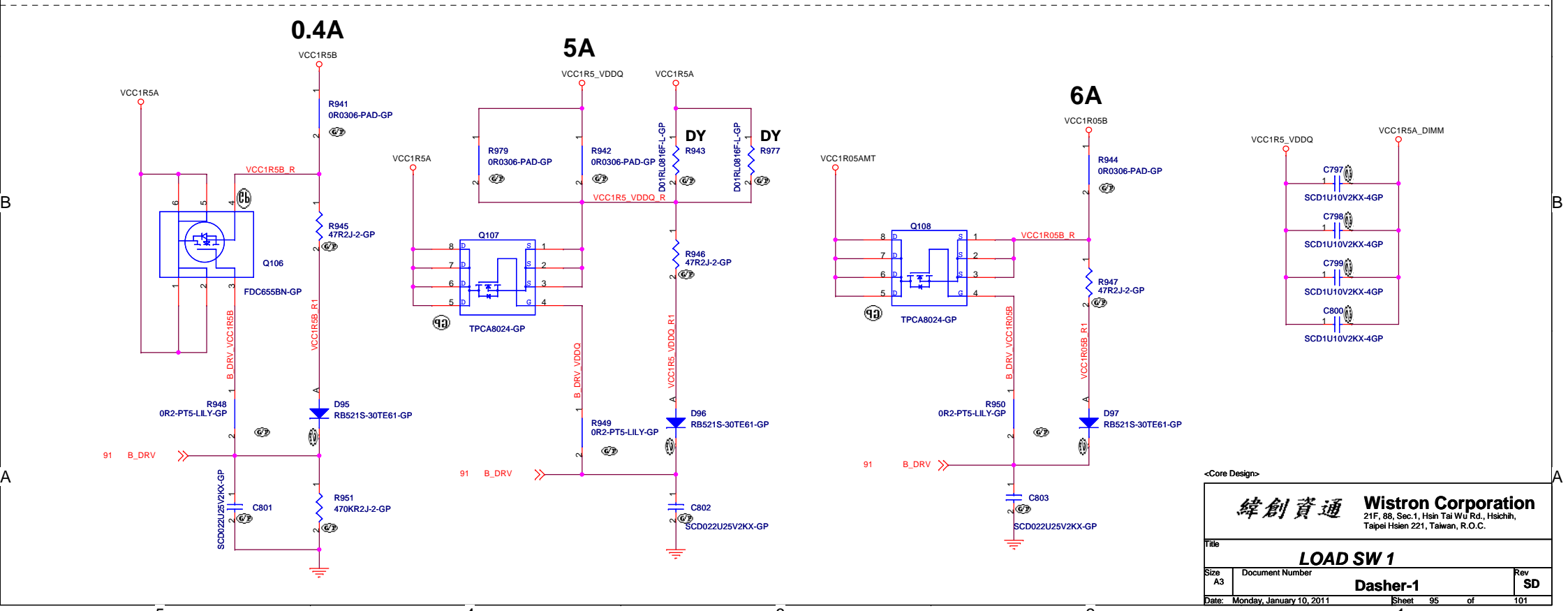
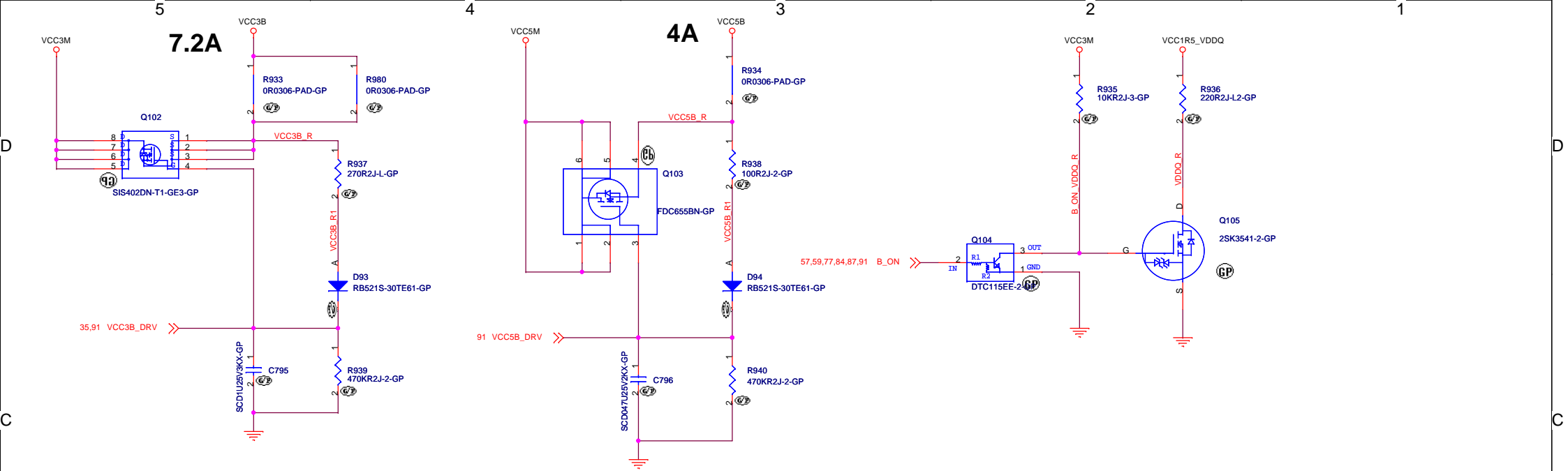
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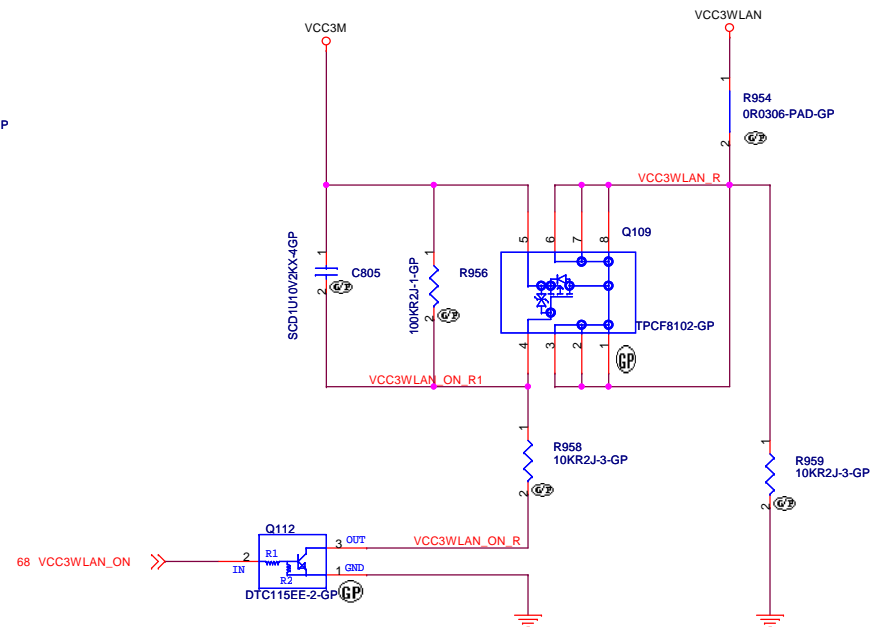
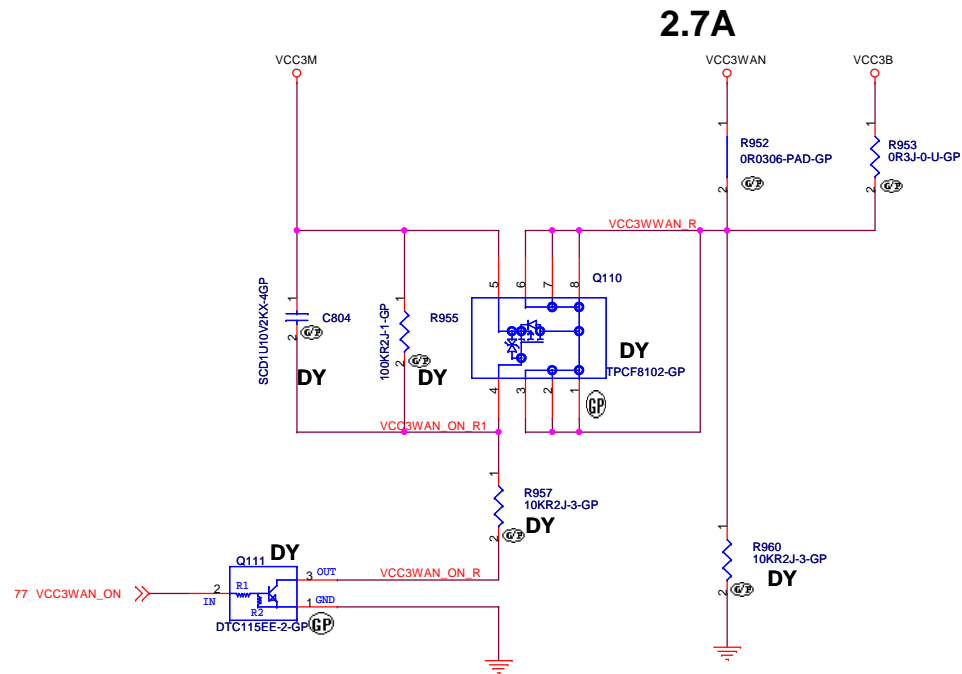
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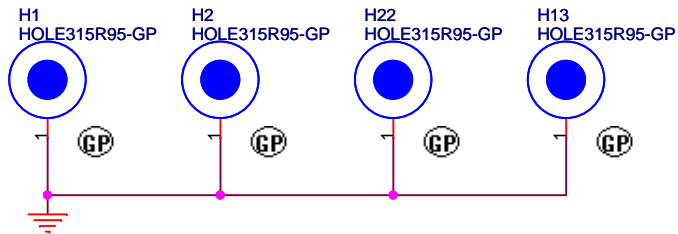


Constant Secure	YES	NO
R953	DY	ASM
C804 R955 Q110 R957 Q111 R960	ASM	DY
R952	ASM	ASM

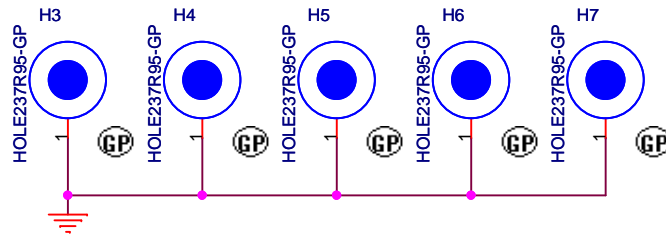
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Title Size A3	Document Number Dasher-1
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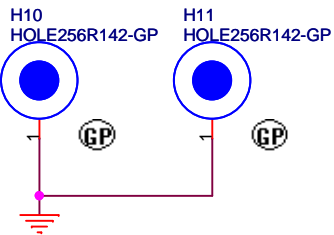
ZZ.00PAD.911



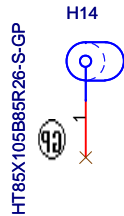
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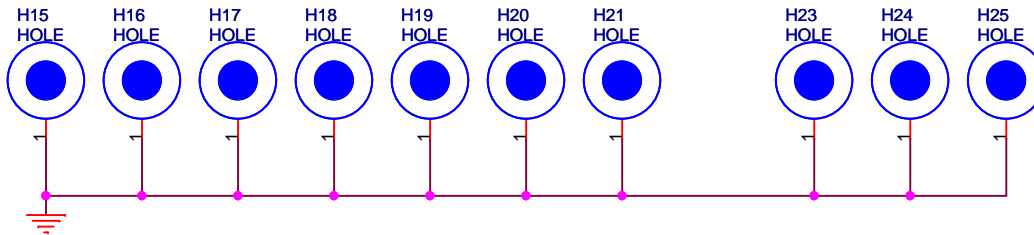
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ZZ.SCREW.191

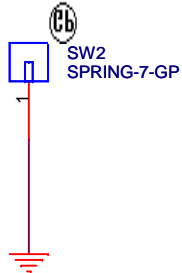


ZZ.0HOLE.XXX



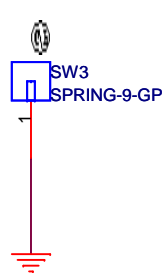
34.49U26.001

GND pad for docking connector



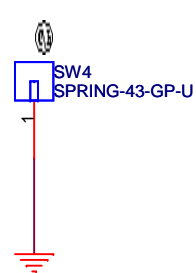
34.49U23.001

GND pad for docking connector



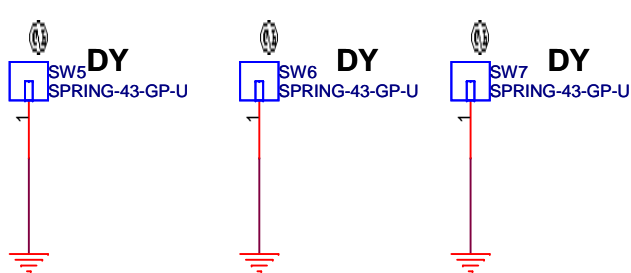
34.15J03.001

spring for EMI




34.15J03.001

spring for RF (SW5~SW7)



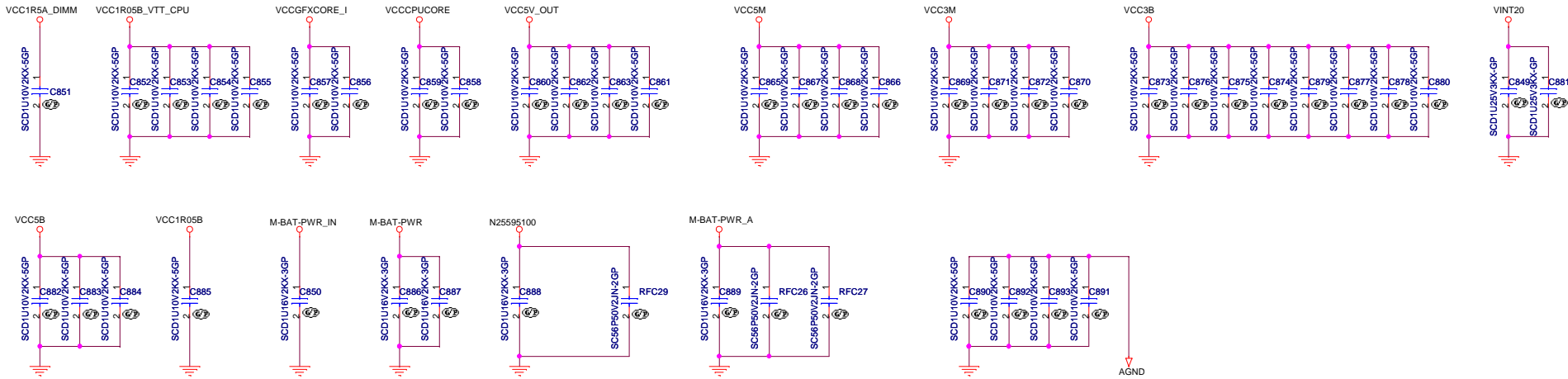
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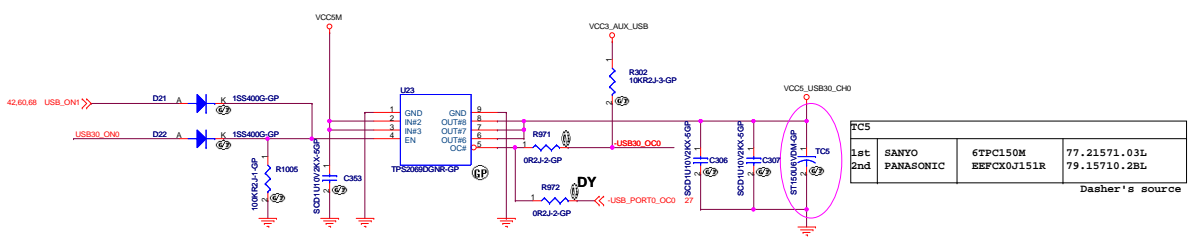
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Title			
HOLES/GND/PADS			
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RF decoupling caps

named as RFCxxx

Long power trace EMI decoupling caps





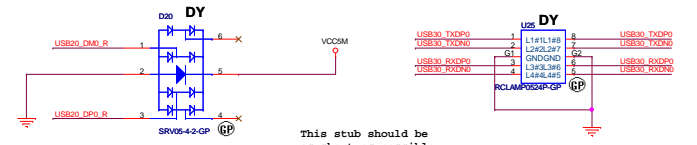
U23	USB3.0 Enable	TPS2069DGN	74.02069.079
	USB3.0 Disable	TPS2065DGN	41A1229AA

Should use non-discharge part.

0.6A

PC5	SANYO	6TPC150M	77.21571.03L
1st	PANASONIC	EEFCX0J151R	79.15710.2BL

Dasher's source



This stub should be as short as possible.

SKT2	USB3.0:	22.10321.M81
	USB2.0:	22.10321.M71

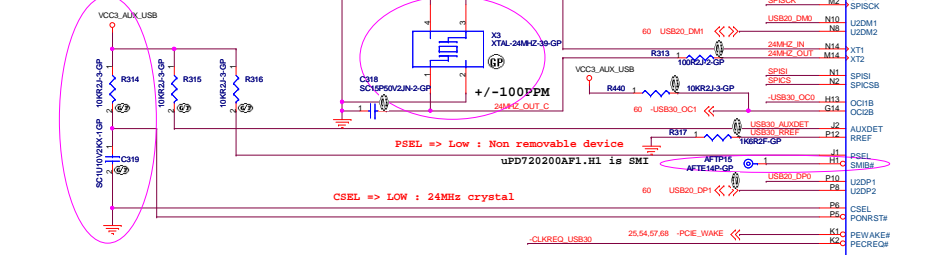
USB3.0 CONNECTOR

1st	MXIC	MX25L5121ECC-20G	TSSOP8	72.25512.F09
2nd	AMIC	A25L512V-F	TSSOP8	72.25512.00Q
3rd	CHINGIS	Pm25LD512C-DCE	TSSOP8	72.25512.B09

Currently, only Pm25LD512C is qualified by NEC

HELE Recommended Conditions:
Normal Frequency: 24MHz.
Frequency Tolerance: +/- 30ppm.
Load Frequency: 12pF.
Effective Series Resistance: 50-ohm.
Effective Shunt Capacitance: 2pF.

If Wakeup function from D3 cold is required, VCC3_AUX should be applied from system.



U26 should be uPD720200AF1 71.72020.D00

NOT MANDATORY TO PLACE.

USB3.0	Enable	Disable
R248	DY	ASH
R414	ASH	DY

	USB3.0 Enable	USB3.0 Disable
U23	TPS2069DGN	TPS2065DGN
D21	ASM	ASM
D22	ASM	DY
C353	ASM	ASM
R302	ASM	DY
R971	ASM	DY
R972	DY	ASM
C306	ASM	ASM
C307	ASM	ASM
TC5	ASM	ASM
U61	ASM	DY
R965	ASM	DY
R964	DY	DY
R963	ASM	DY
C807	ASM	DY
L35	ASM	DY
R961	ASM	DY
R962	ASM	DY
C806	ASM	DY
C808	ASM	DY
R633	ASM	DY
U26	ASM	DY
C314	ASM	DY
C316	ASM	DY
R313	ASM	DY
X3	ASM	DY
C317	ASM	DY
C318	ASM	DY
C319	ASM	DY
R440	ASM	DY
R314	ASM	DY
R315	ASM	DY
R316	ASM	DY
R317	ASM	DY
C310	ASM	DY
R412	ASM	ASM
Q120	ASM	DY
C333	ASM	DY
C334	ASM	DY
C335	ASM	DY
C336	ASM	DY
U28	ASM	DY
R308	ASM	DY
R309	ASM	DY
R310	ASM	DY
C308	ASM	DY
U24	ASM	DY
R638	ASM	DY
R303	ASM	DY
R305	ASM	DY
Q8	ASM	DY
SKT2	USB3.0 Conn.	USB2.0 Conn.
R973	ASM	DY
R974	ASM	DY
R975	DY	ASM
R976	DY	ASM
D20	DY	DY
D25	DY	DY
C310	ASM	DY
C311	ASM	DY
C312	ASM	DY
C313	ASM	DY
C315	ASM	DY
C320	ASM	DY
C321	ASM	DY
C322	ASM	DY
C323	ASM	DY
C324	ASM	DY
C325	ASM	DY
C326	ASM	DY
C327	ASM	DY
L14	ASM	DY
C329	ASM	DY
C329	ASM	DY
C331	ASM	DY
C332	ASM	DY
R318	ASM	DY
R248	DY	ASM
R441	ASM	DY

	USB3.0 Enable	USB3.0 Disable
R437	DY	ASM
R438	DY	ASM
R436	ASM	DY
R439	ASM	DY
D99	ASM	DY
D100	ASM	DY
R989	DY	ASM
R991	ASM	DY
R988	DY	ASM