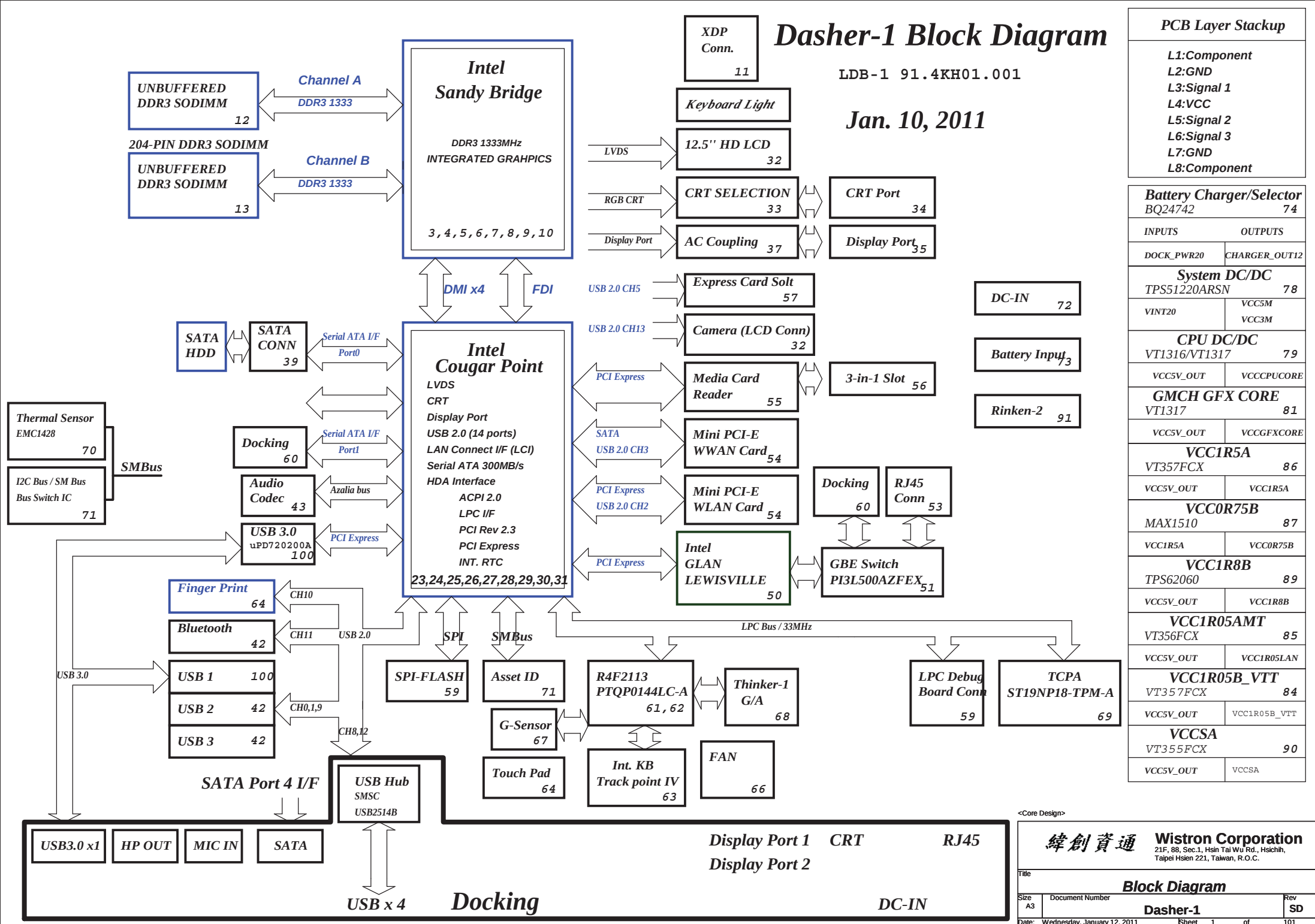




RESISTOR

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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Title	Author	Date	Page	Page	Page	Page	Page	Page	Page
Title	Author	Date	Page	Page	Page	Page	Page	Page	Page

Reference

Size

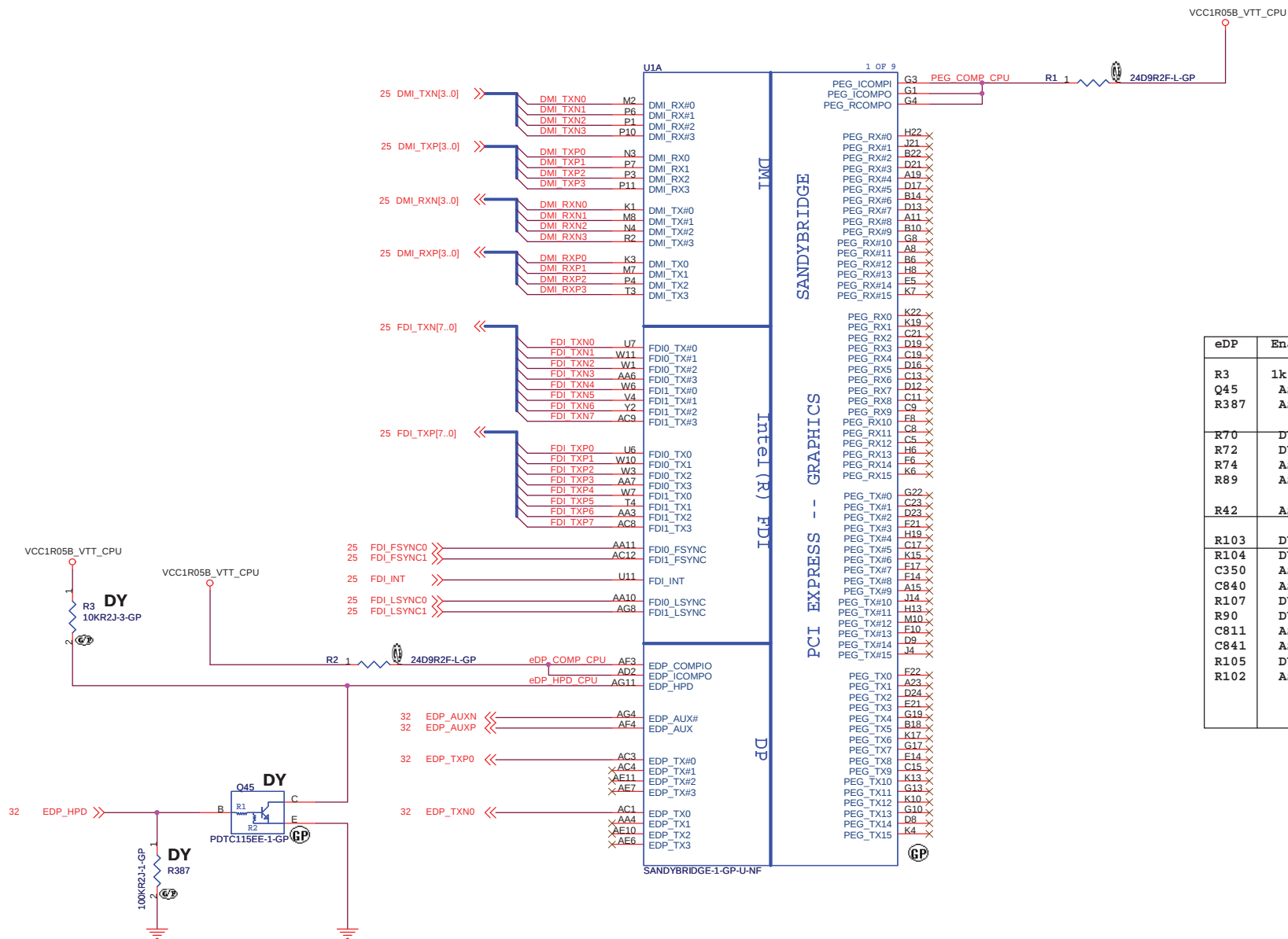
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References

Rev

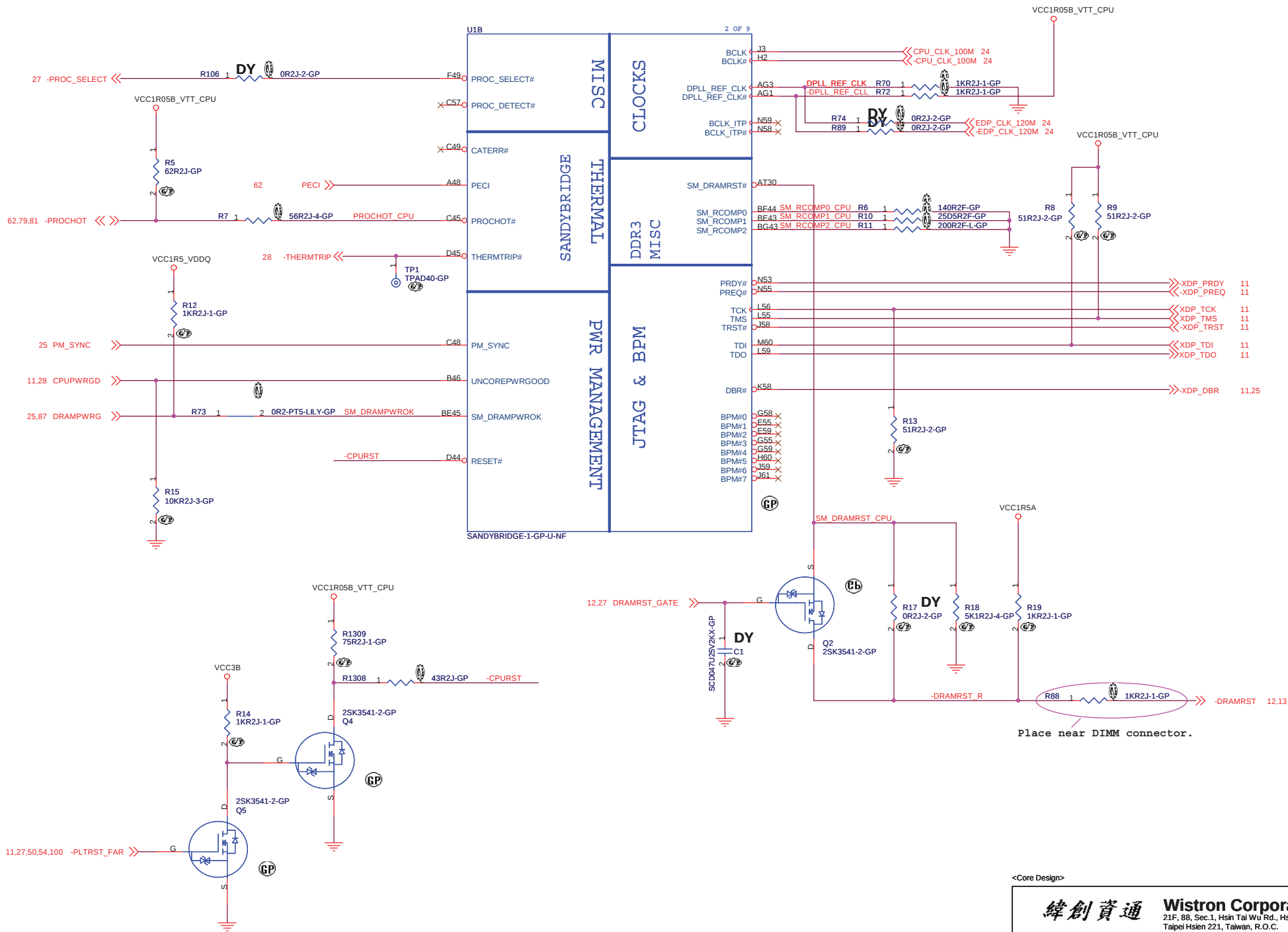
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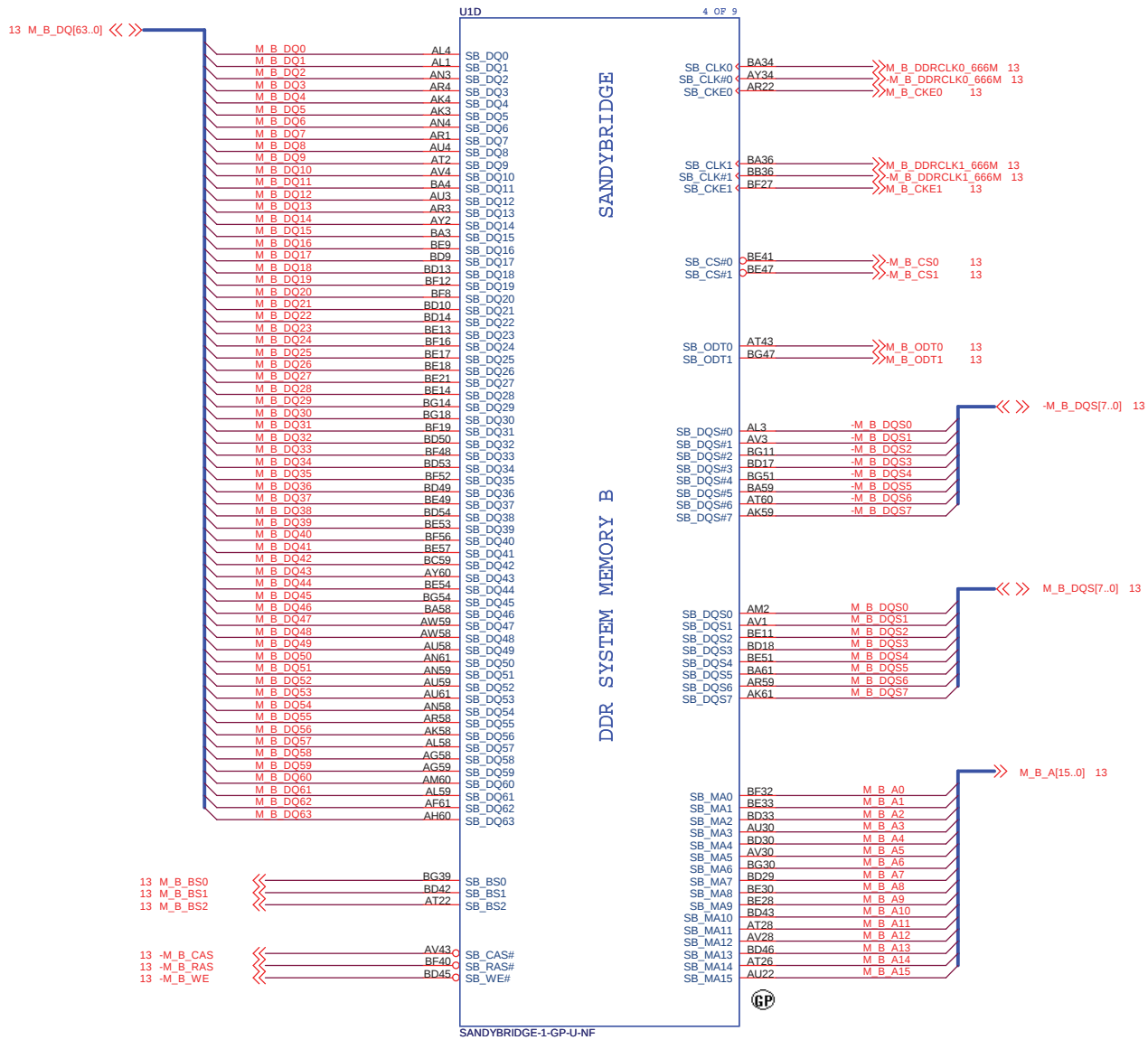
Sheet 2 of 101

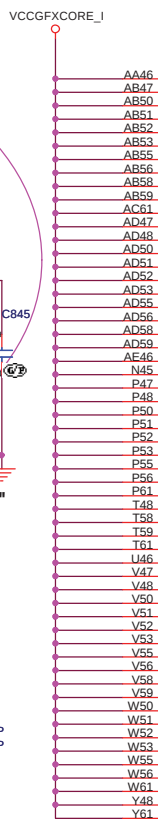
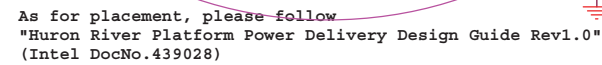


Logic

eDP	Enable	Disable
R3 Q45 R387	1k-ohm ASM ASM	10k-ohm DY DY
R70 R72 R74 R89	DY DY ASM ASM	ASM ASM DY DY
R42	ASM	DY
R103 R104 C350 C840 R107 R90 C811 C841 R105 R102	DY DY ASM ASM DY DY ASM ASM DY ASM	ASM ASM DY ASM DY DY ASM DY

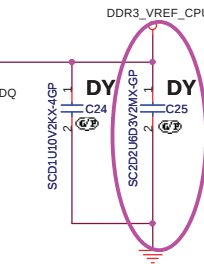
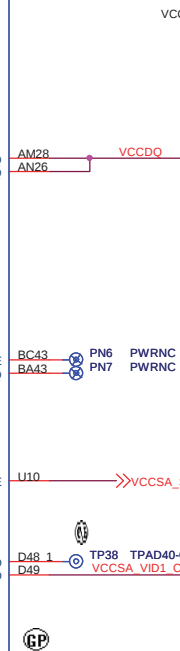
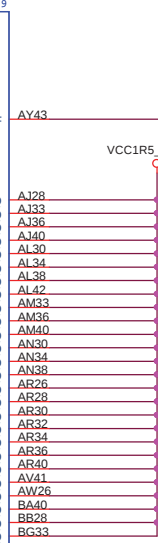




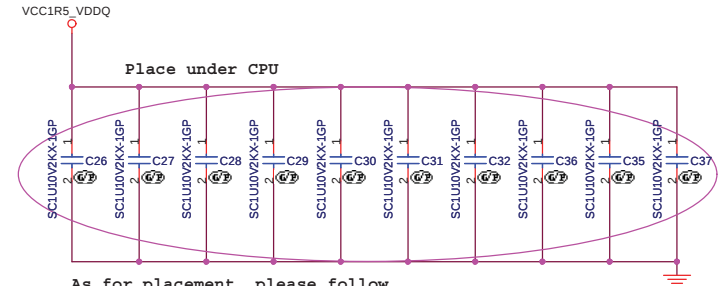


POWER

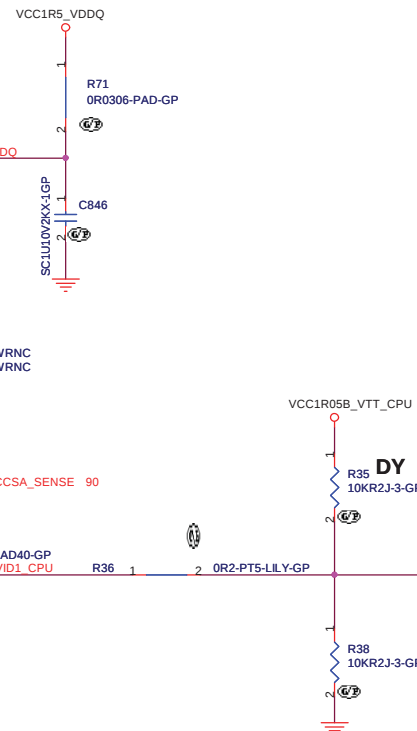
DDR3 - 1.5V RAILS



NEED SC2D2U4V2MX-1GP
78.22510.5FL



As for placement, please follow
"Huron River Platform Power Delivery Design Guide Rev1.0"
(Intel DocNo.439028)



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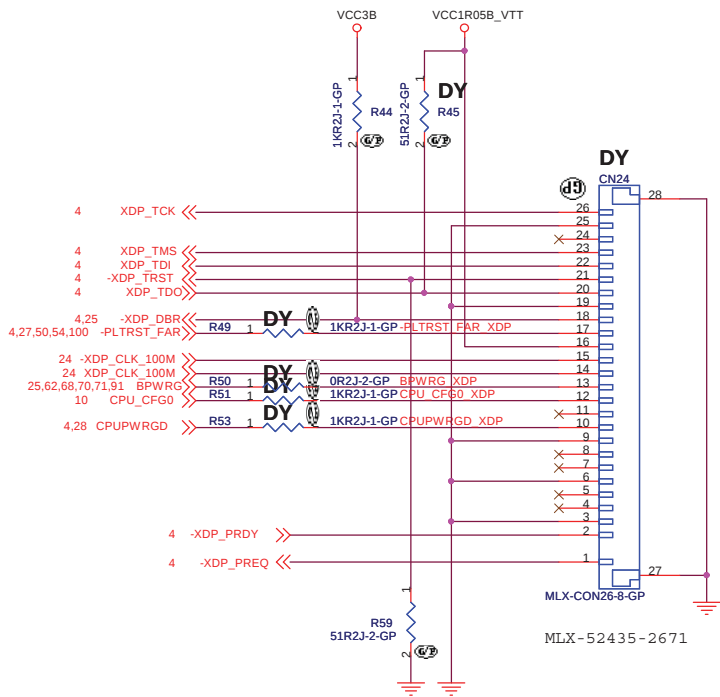
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Size A3	Document Number Dasher-1	Rev SD
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Date: Monday, January 10, 2011 Sheet 8 of 101



Date: Monday, January 10, 2011 Sheet 9 of 101

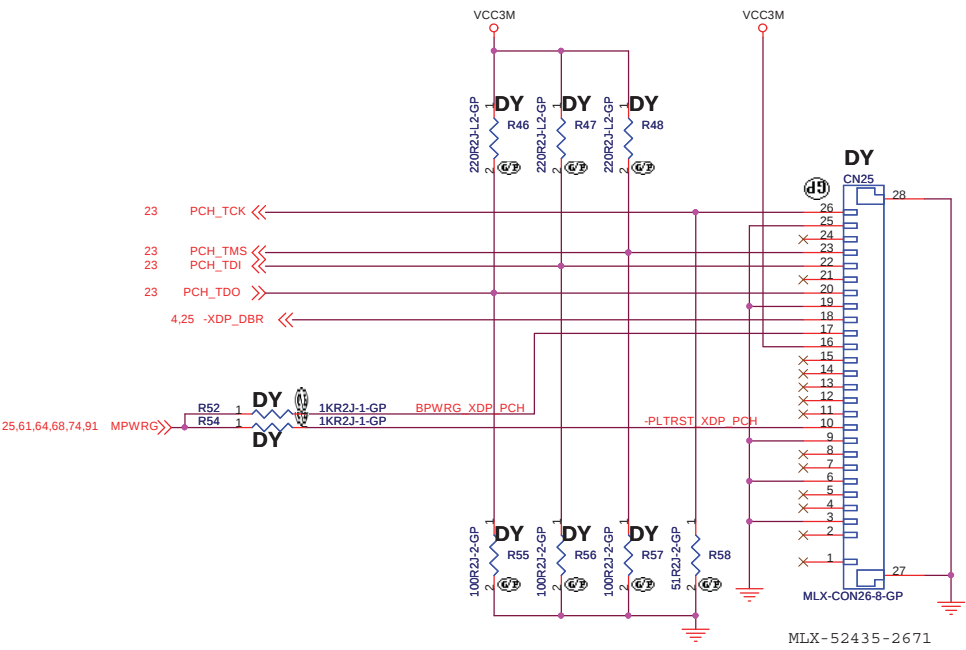


DEBUG Interface for Processor.

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



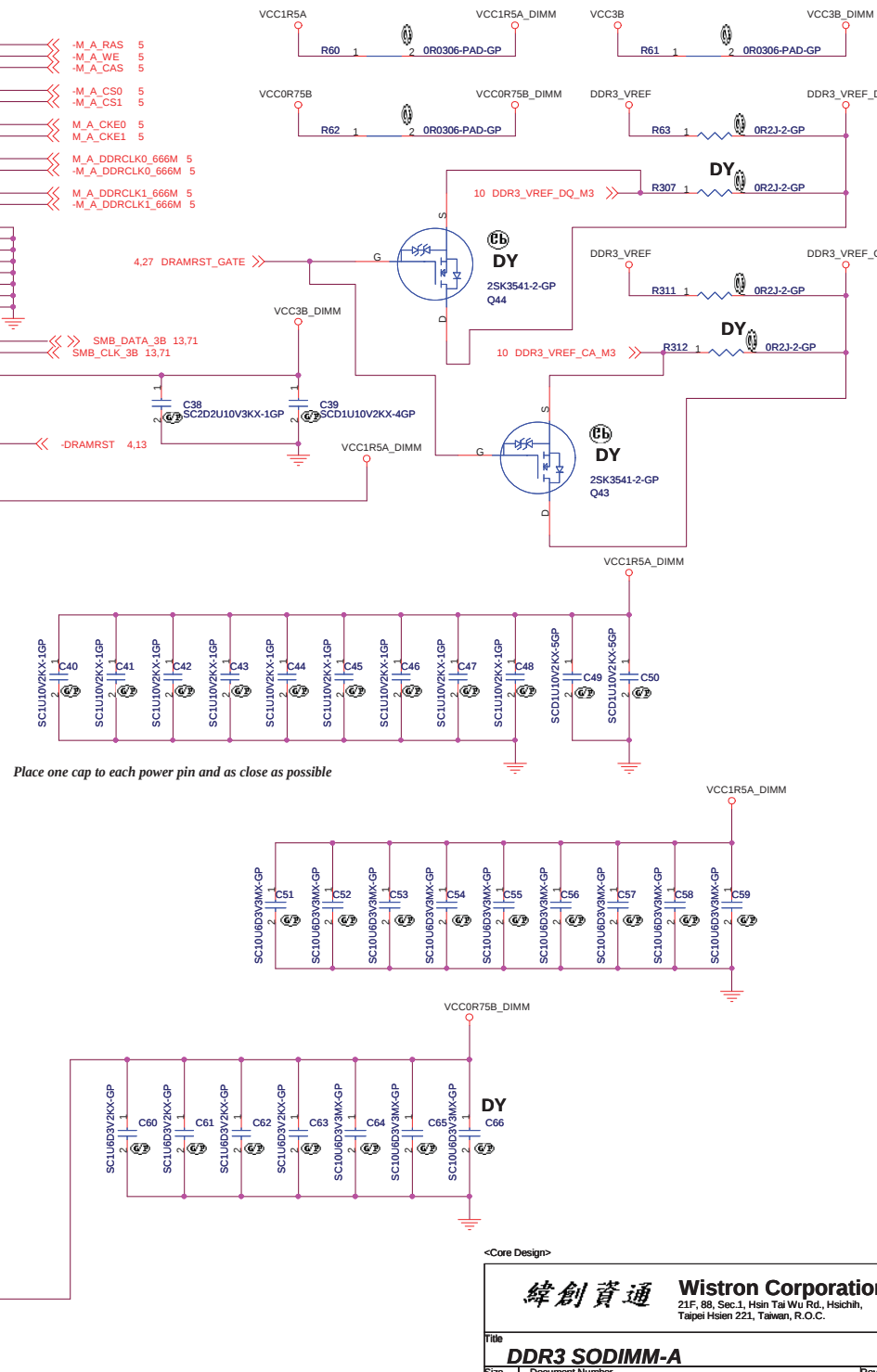
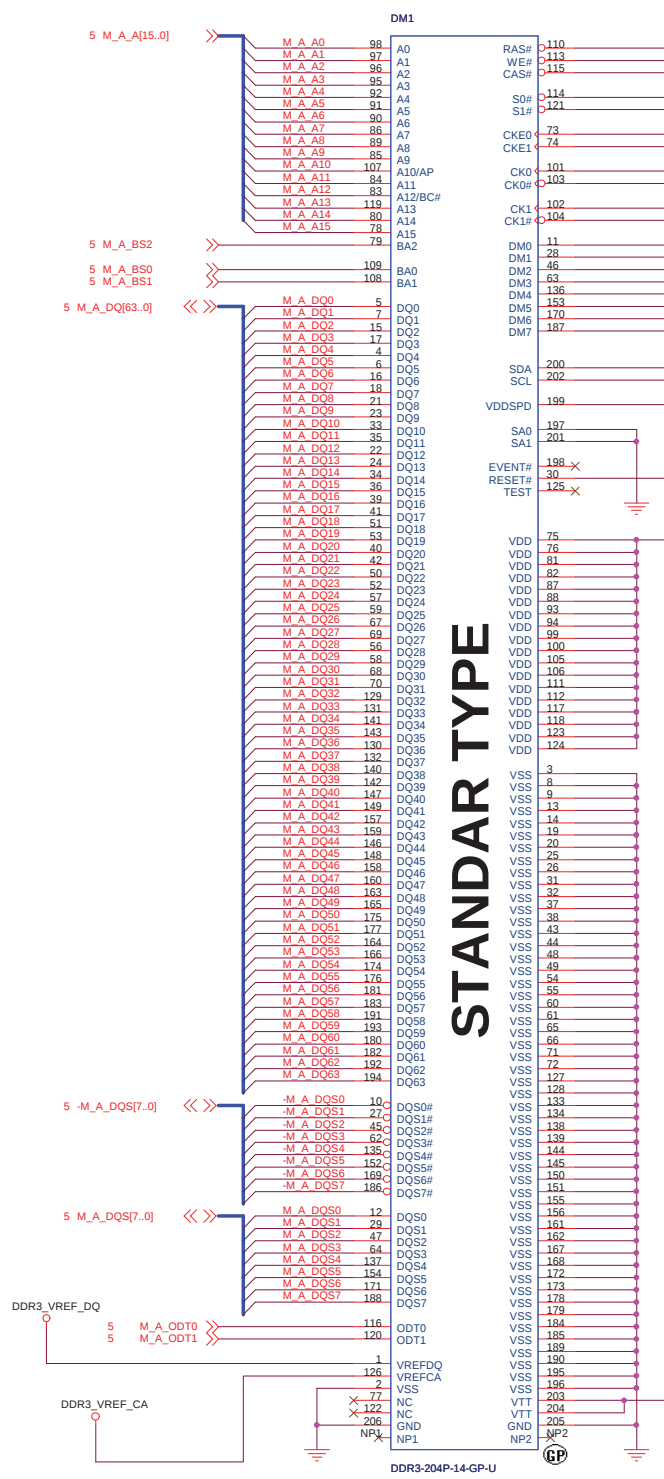
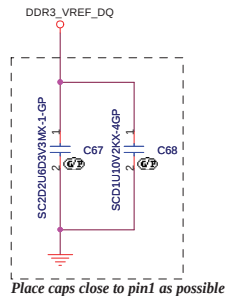
DEBUG Interface for PCH.

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

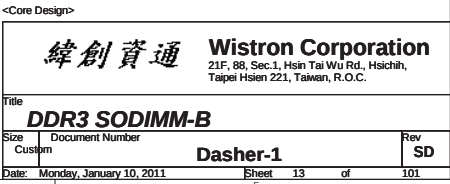
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Place one cap to each power pin and as close as possible

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Title DDR3 SODIMM-A			
Size Custom	Document Number Dasher-1	Rev SD	
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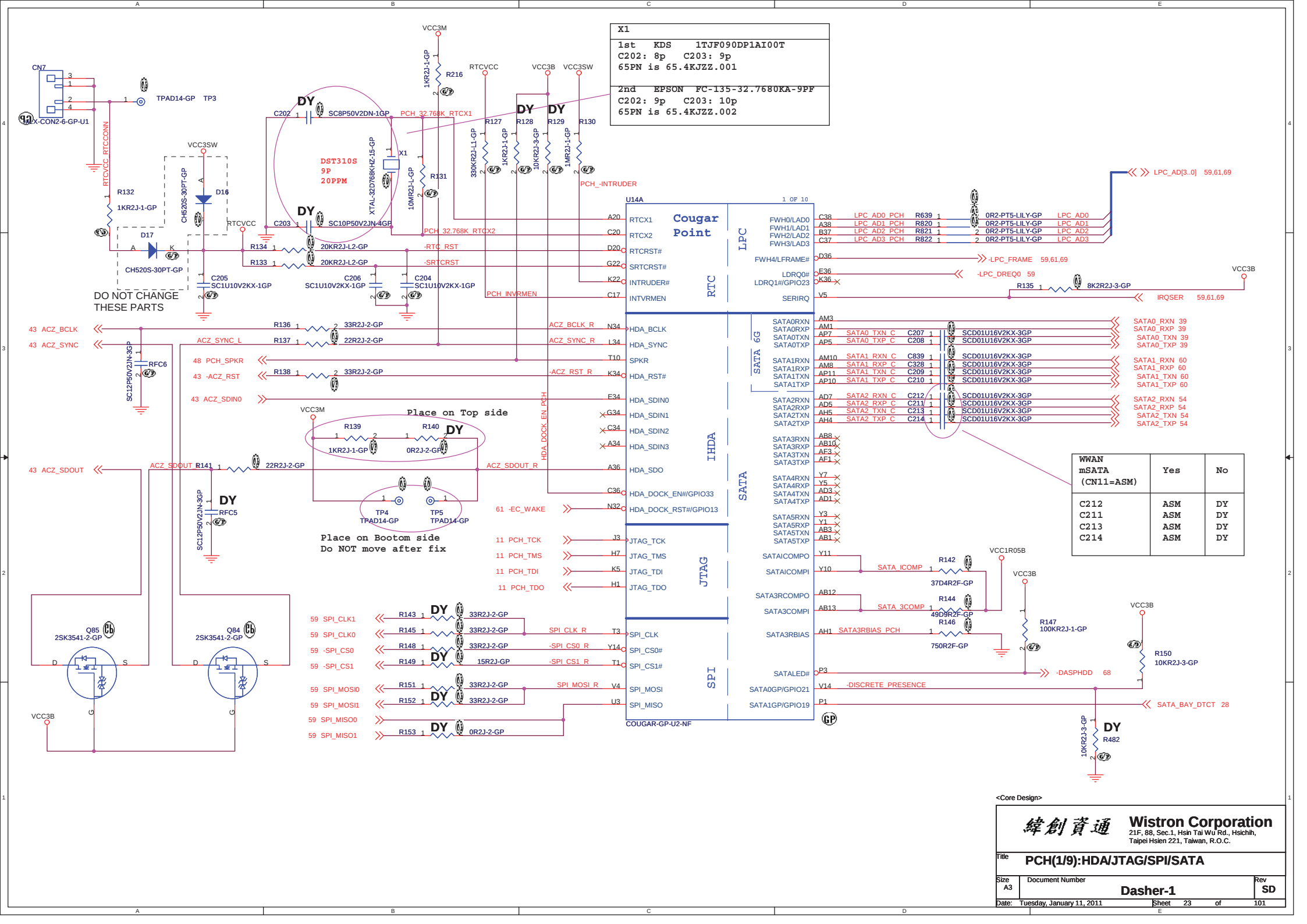
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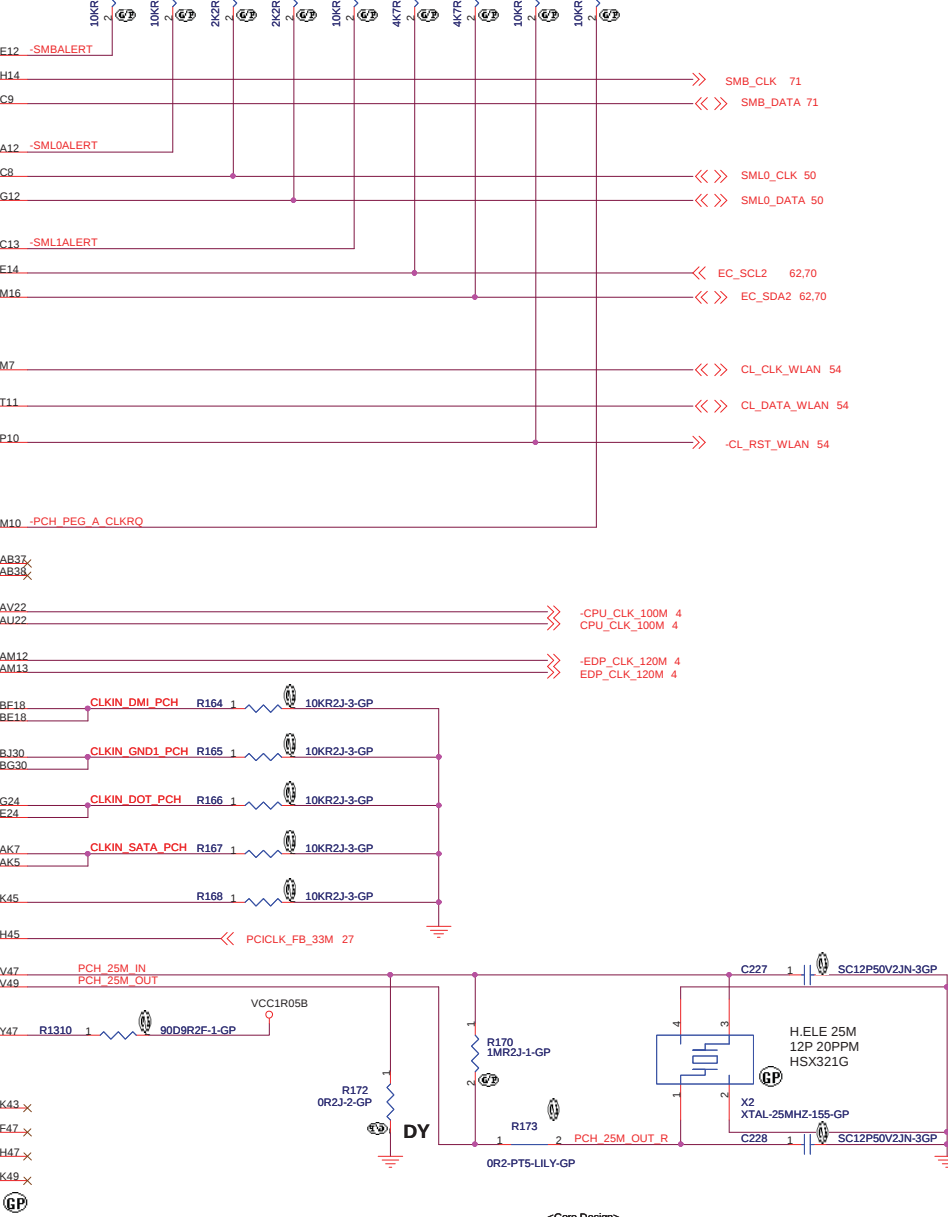
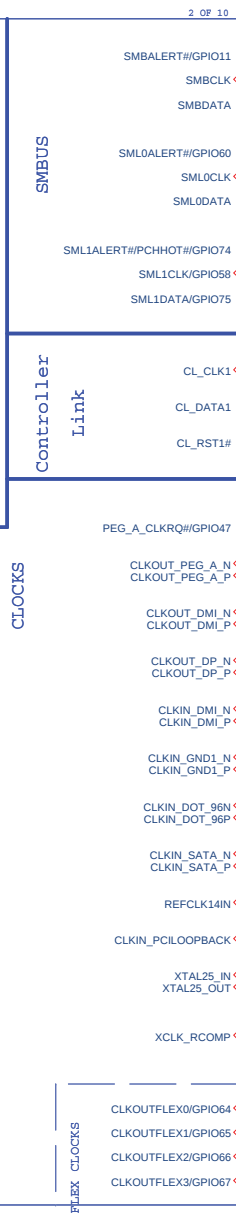
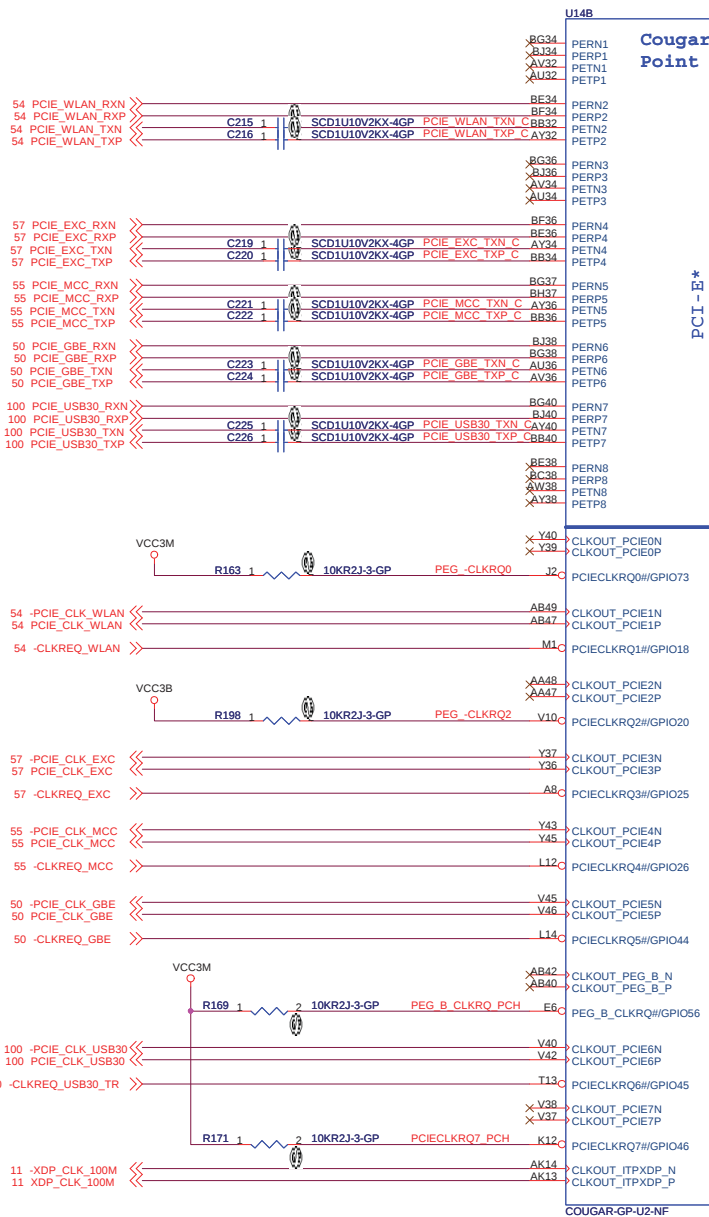
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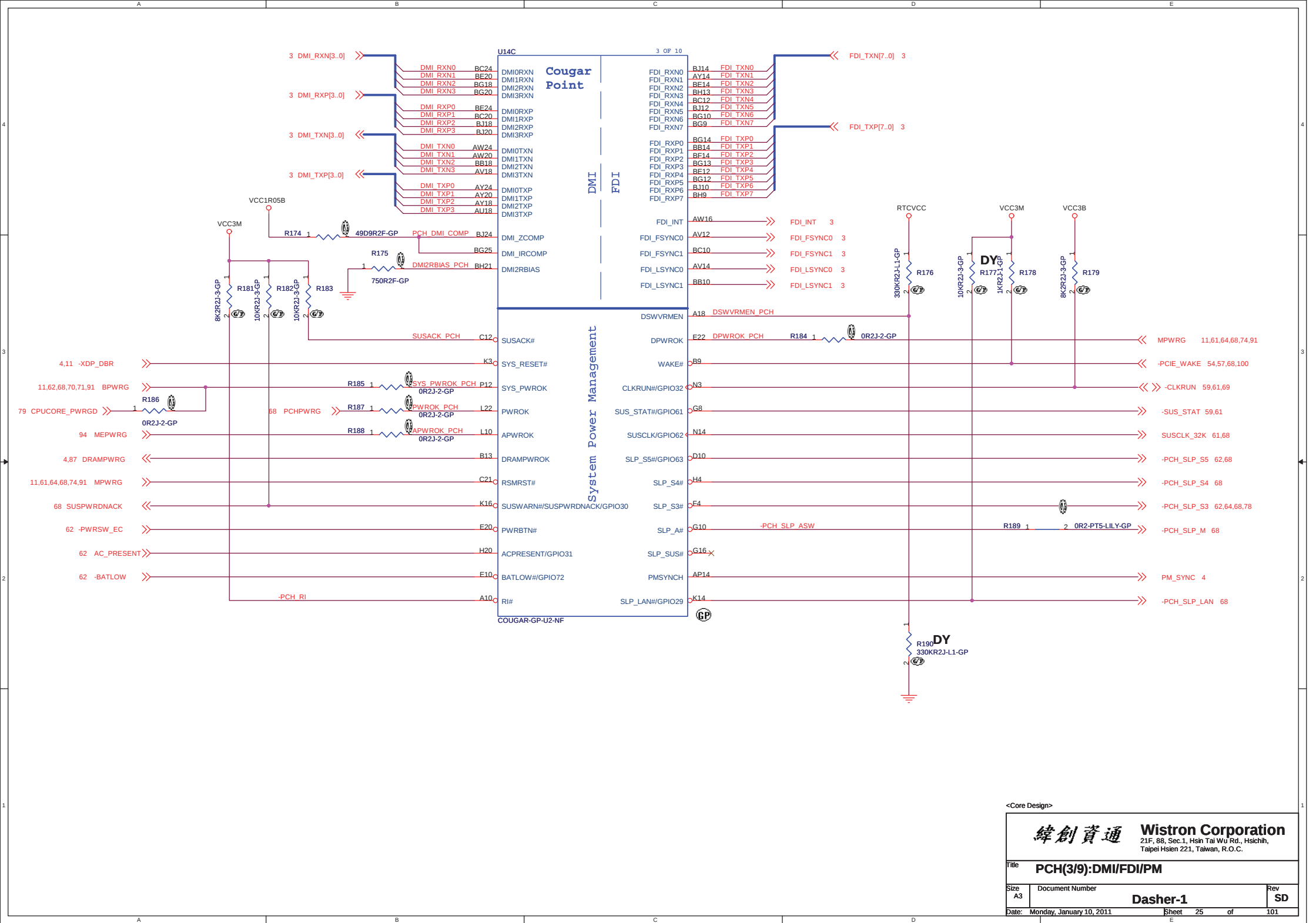


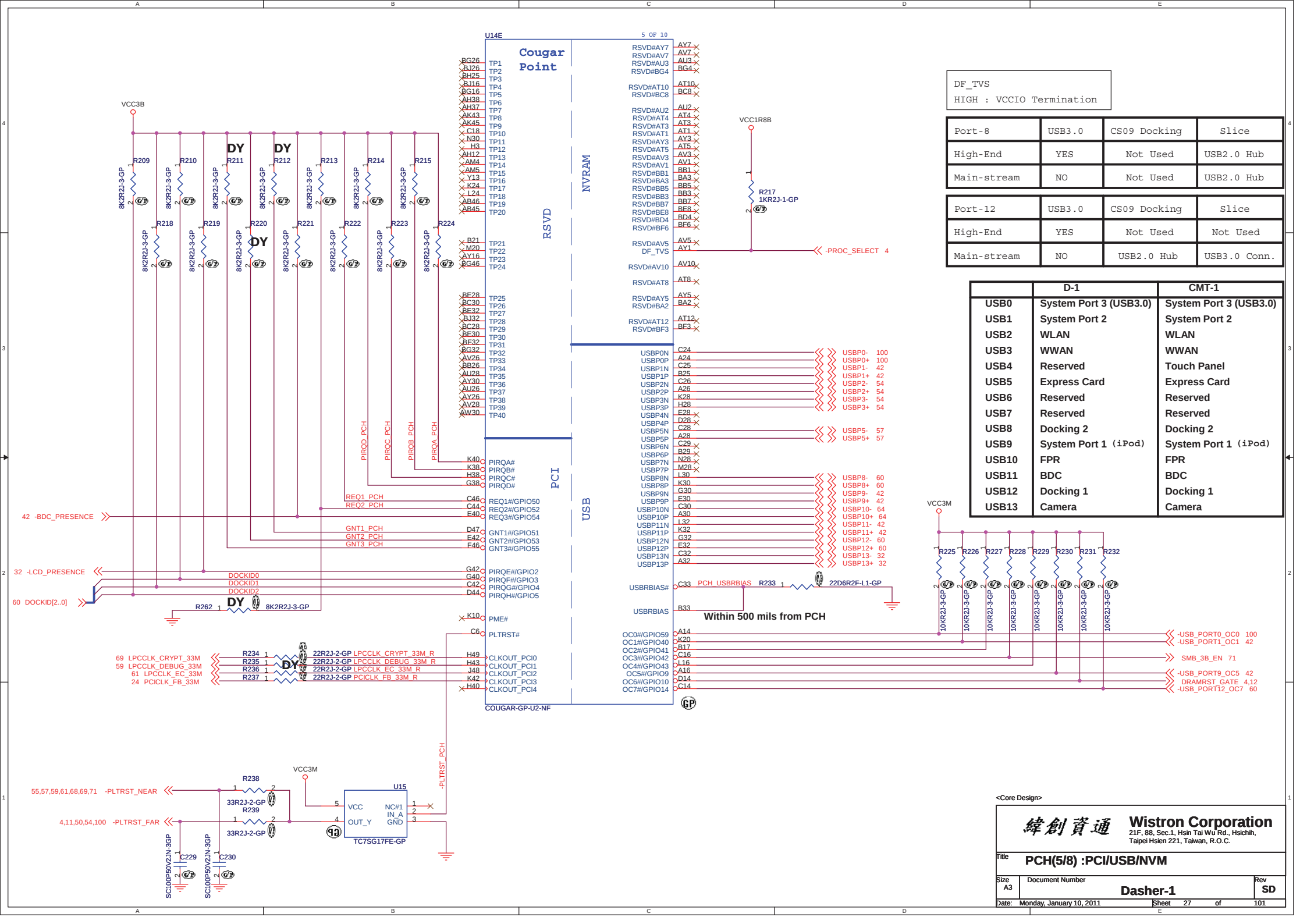
X1			
1st	KDS	1TJF090DP1AI00T	
C202:	8p	C203: 9p	
65PN	is	65.4KJZZ.001	
2nd EPSON FC-135-32.7680KA-9PF			
C202:	9p	C203: 10p	
65PN	is	65.4KJZZ.002	



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Title PCH(2/9):PCI-E/SMBUS/CLK	
Size Custom	Document Number Dasher-1
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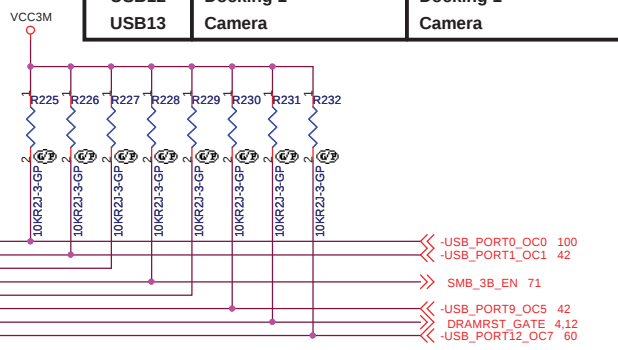


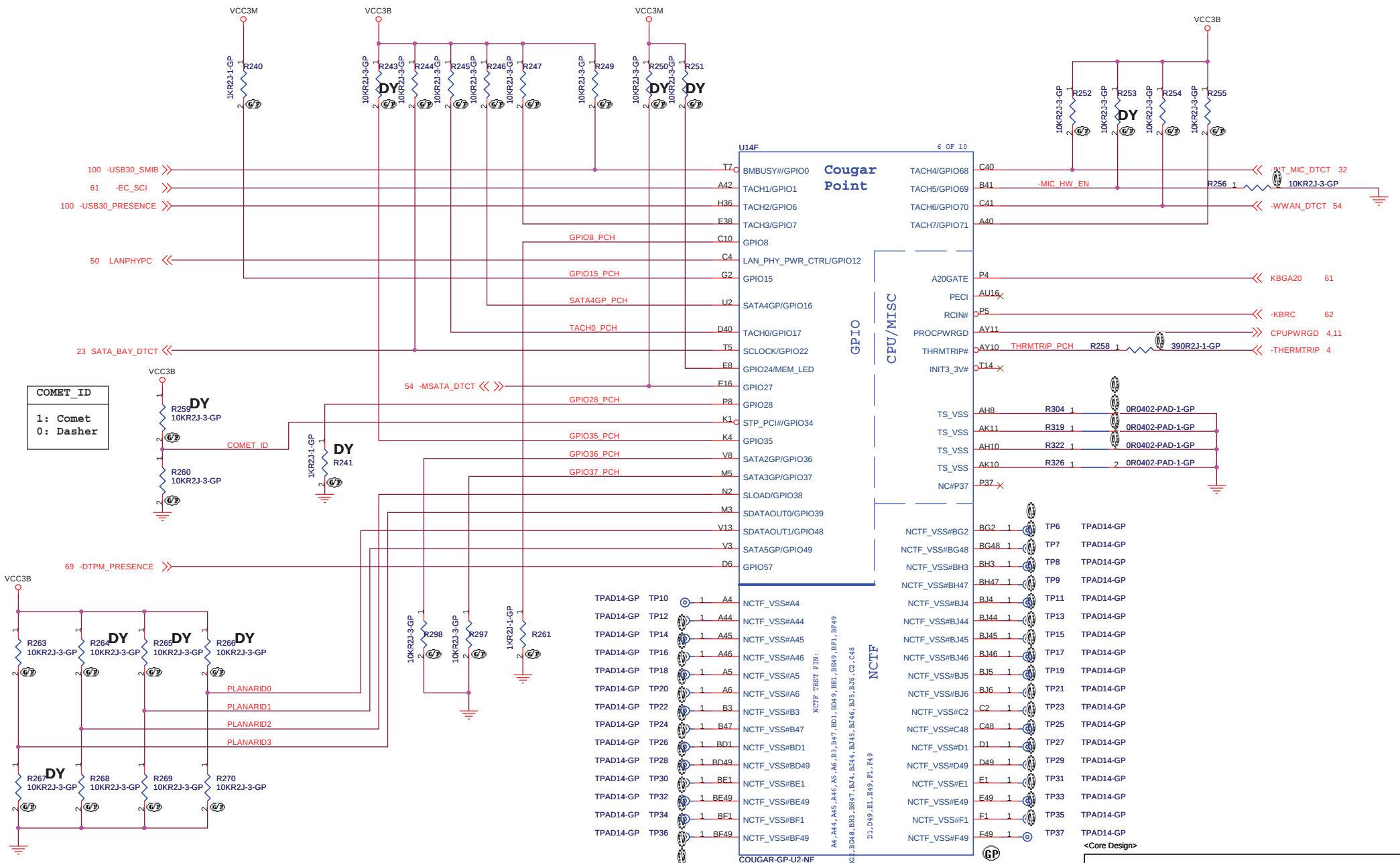
DF_TVS
HIGH : VCCIO Termination

Port-8	USB3.0	CS09 Docking	Slice
High-End	YES	Not Used	USB2.0 Hub
Main-stream	NO	Not Used	USB2.0 Hub

Port-12	USB3.0	CS09 Docking	Slice
High-End	YES	Not Used	Not Used
Main-stream	NO	USB2.0 Hub	USB3.0 Conn.

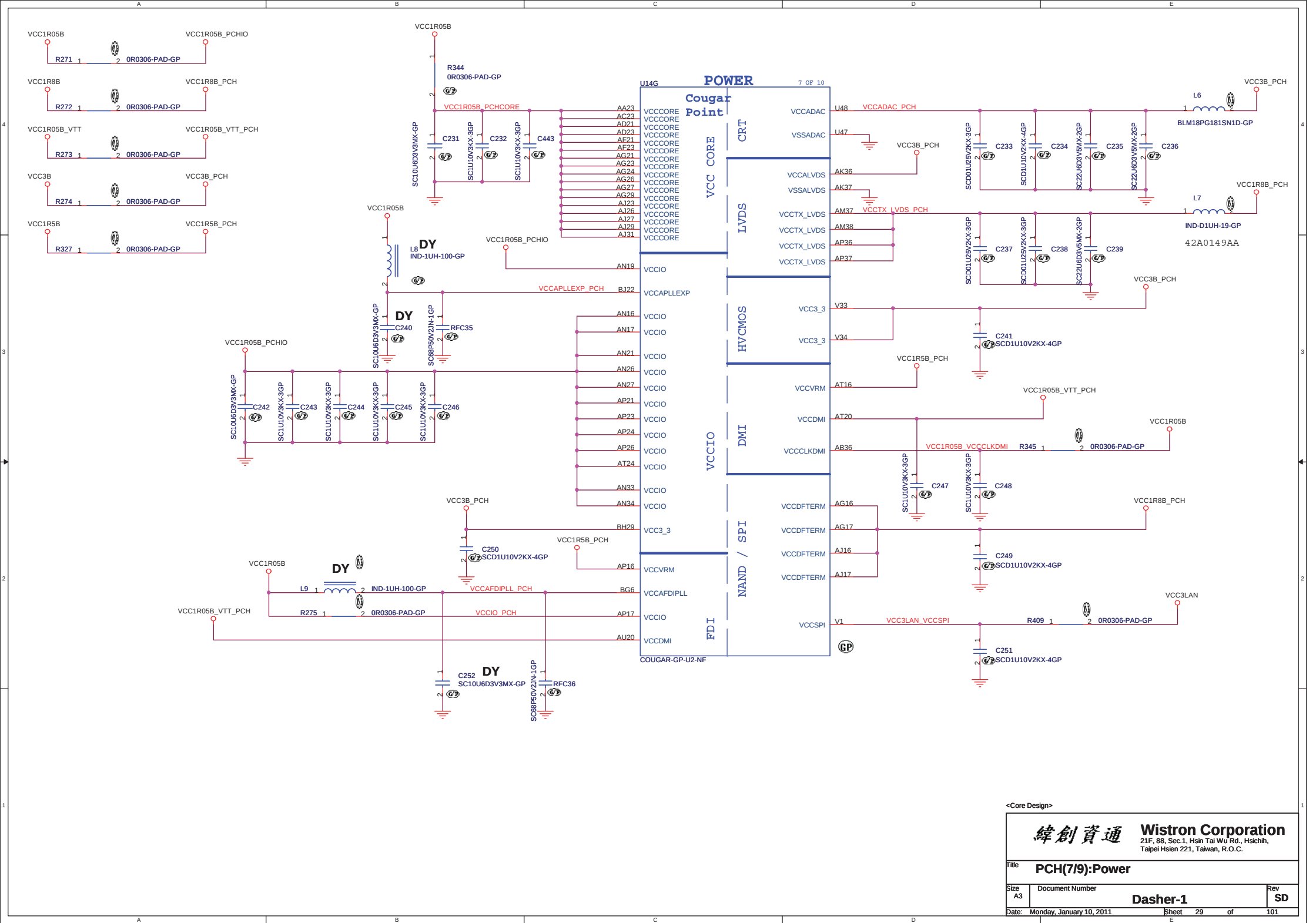
	D-1	CMT-1
USB0	System Port 3 (USB3.0)	System Port 3 (USB3.0)
USB1	System Port 2	System Port 2
USB2	WLAN	WLAN
USB3	WWAN	WWAN
USB4	Reserved	Touch Panel
USB5	Express Card	Express Card
USB6	Reserved	Reserved
USB7	Reserved	Reserved
USB8	Docking 2	Docking 2
USB9	System Port 1 (iPod)	System Port 1 (iPod)
USB10	FPR	FPR
USB11	BDC	BDC
USB12	Docking 1	Docking 1
USB13	Camera	Camera

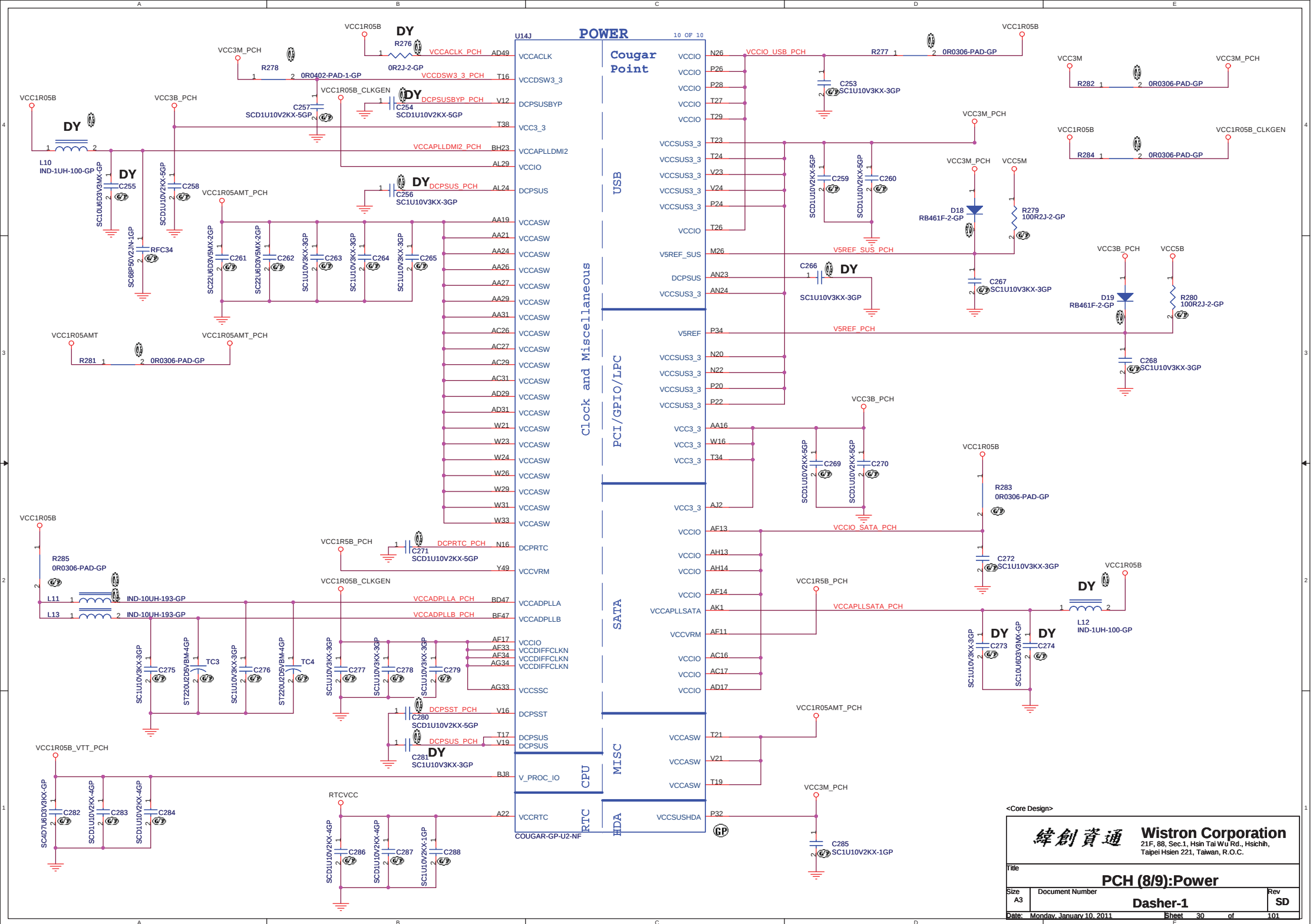


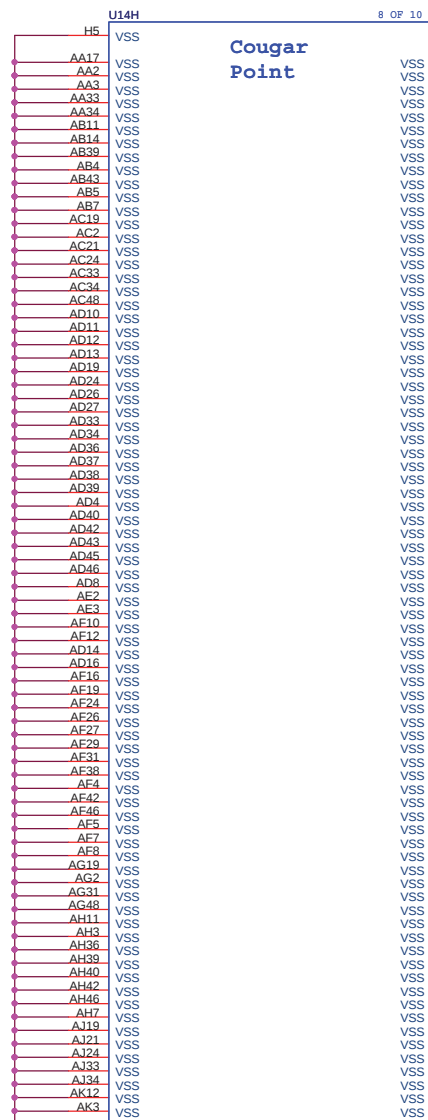


PLANAR ID: 1000 for SVT

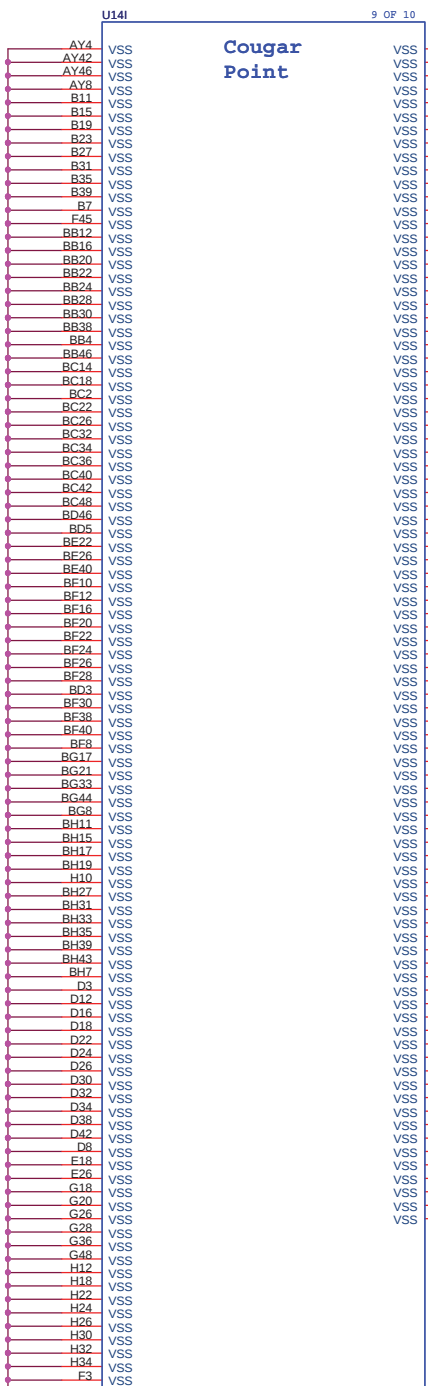
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21F, 88, Sec.1., Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.			
Title PCH(6/9):GPIO/NCTF/RSVD			
Size A3	Document Number	Darsher-1	Rev SD
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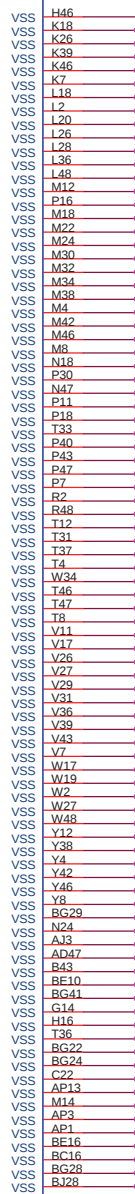




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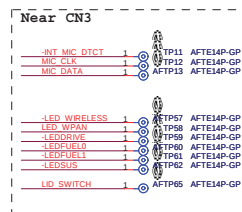
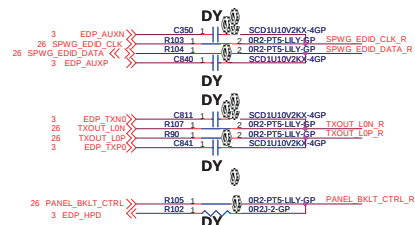


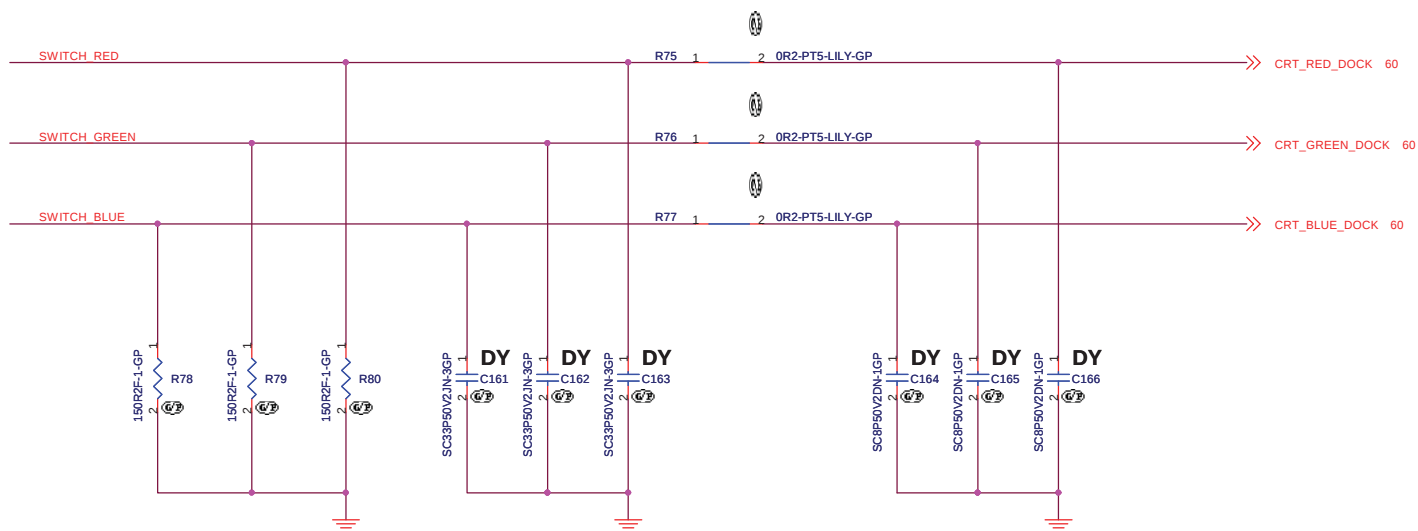
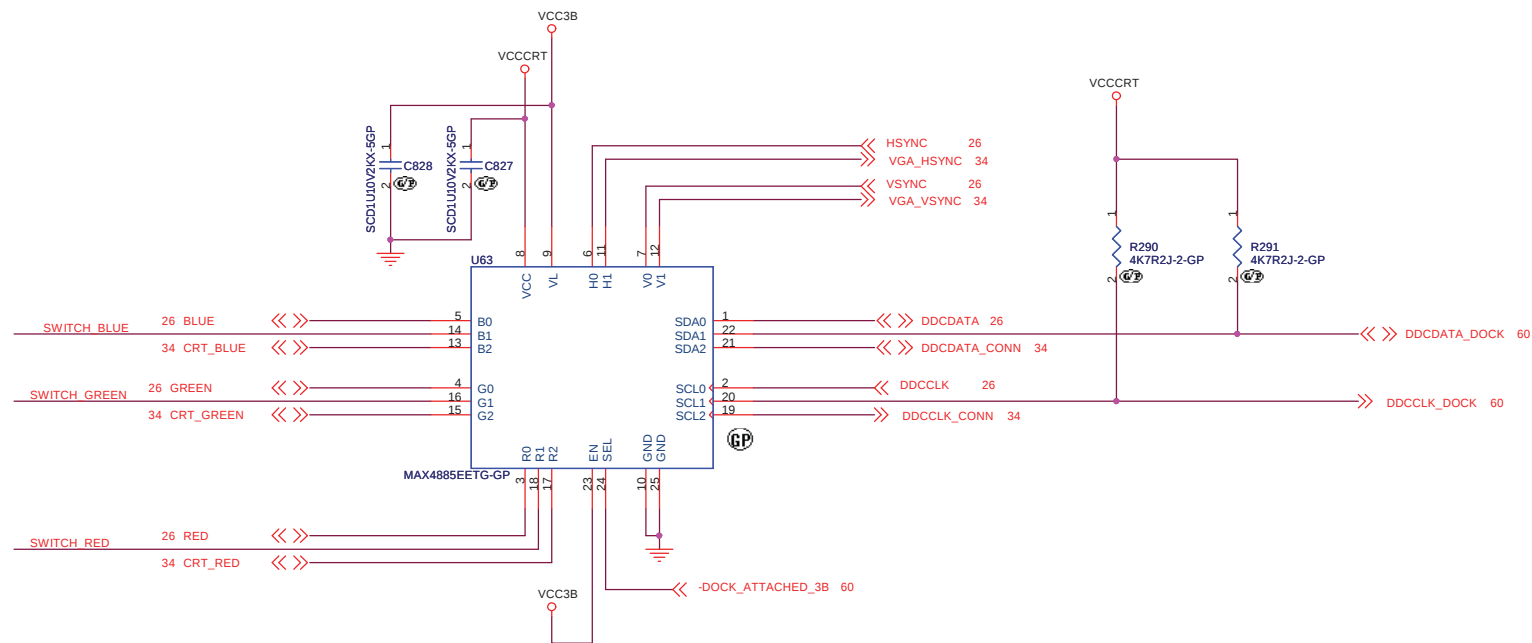
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PCH (9/9):GND			
Size	Document Number	Rev	SD
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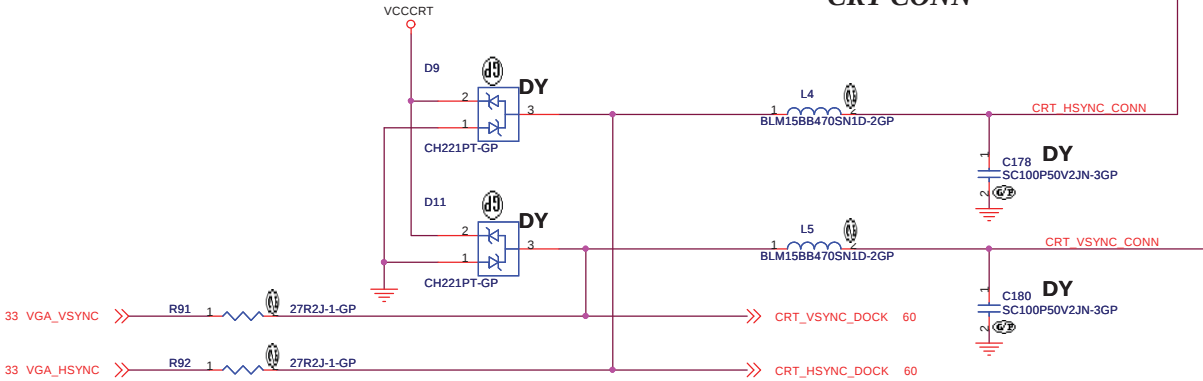
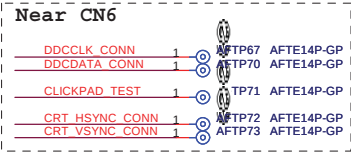
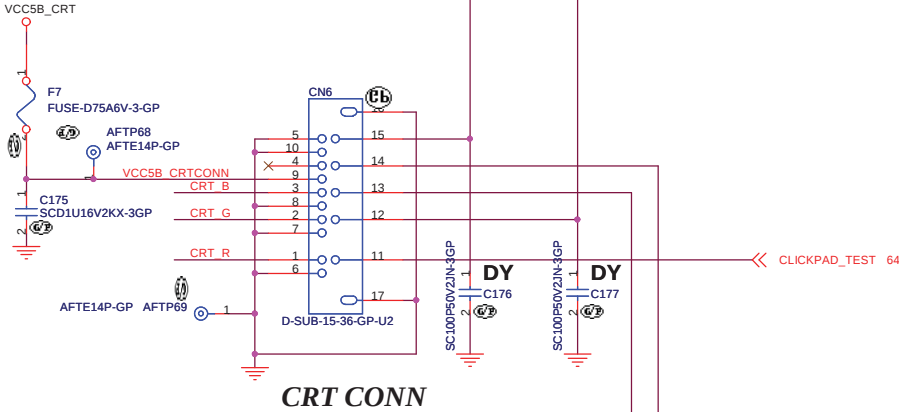
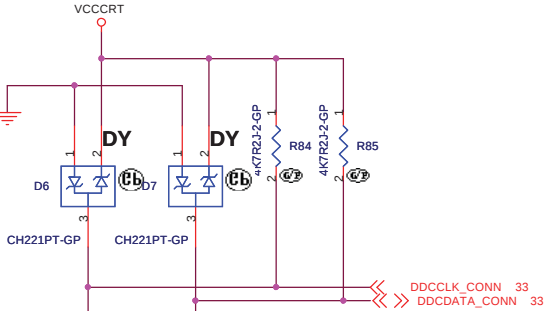
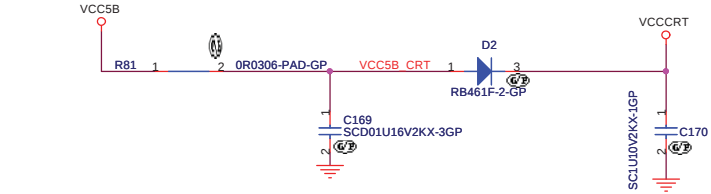
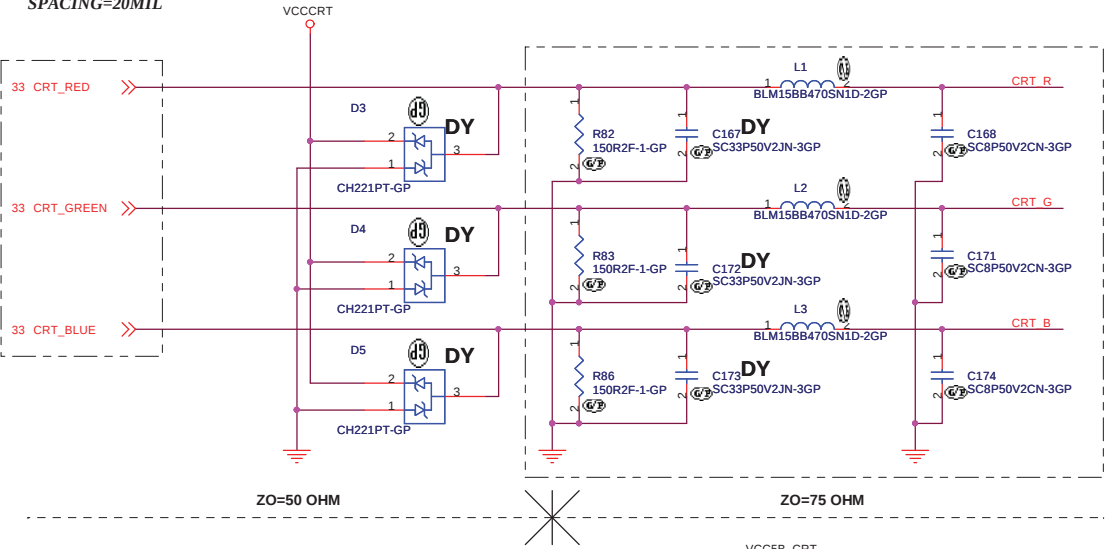


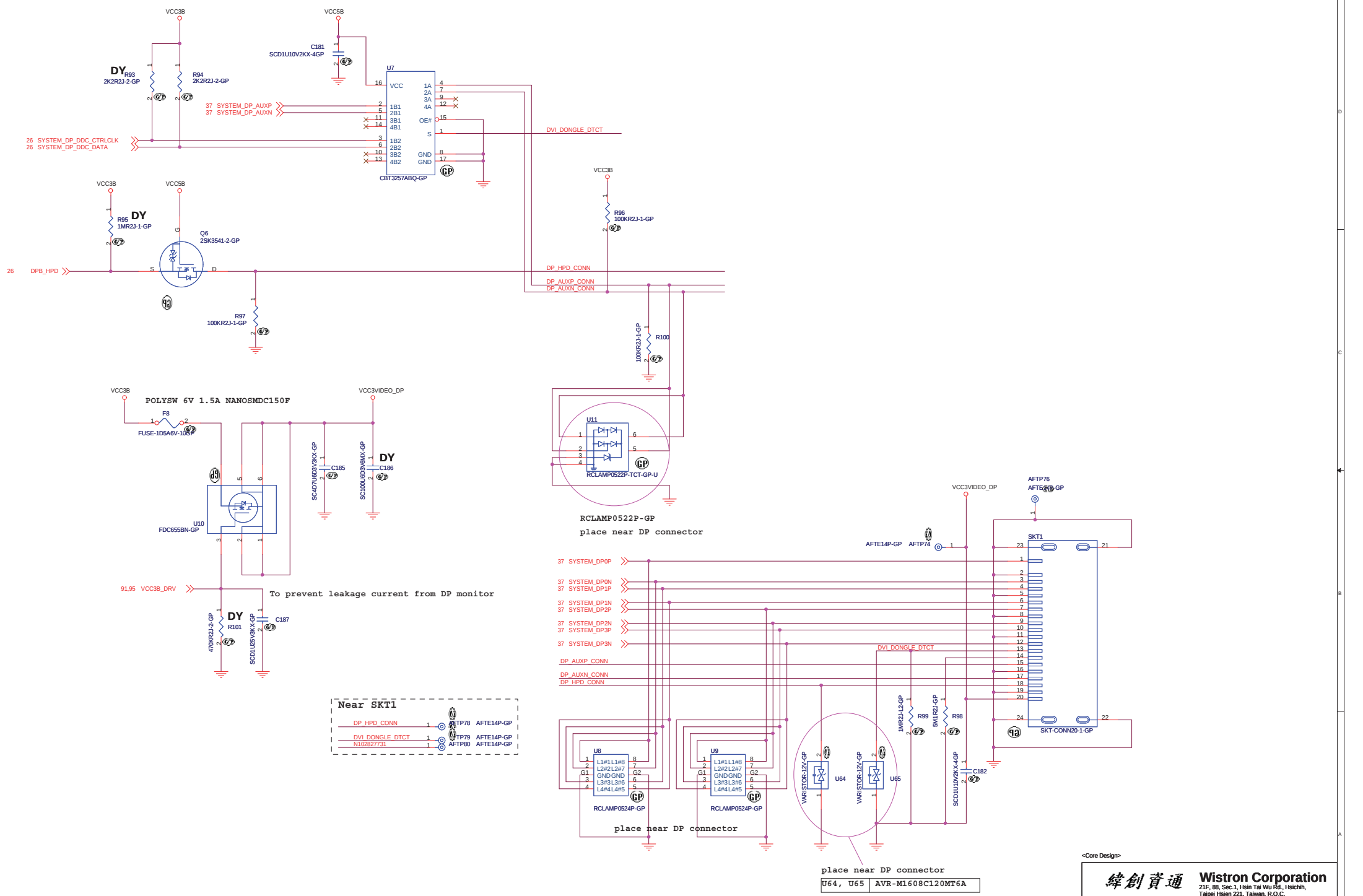
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Title		
CRT SELECTOR		
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GND GUARDING
EACH SIGNAL WIDTH DEPENDS ON ZO(TRACE IMPEDANCE)
SPACING=20MIL





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Size

A3

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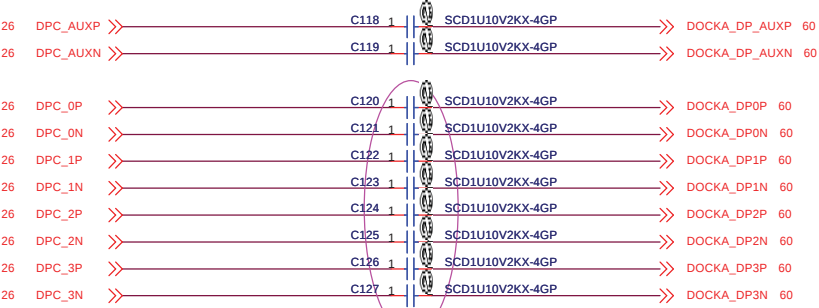
of

101

System DP Connector



Docking DP Connector A



Place Near Docking Connector

Docking DP Connector B



Place Near Docking Connector

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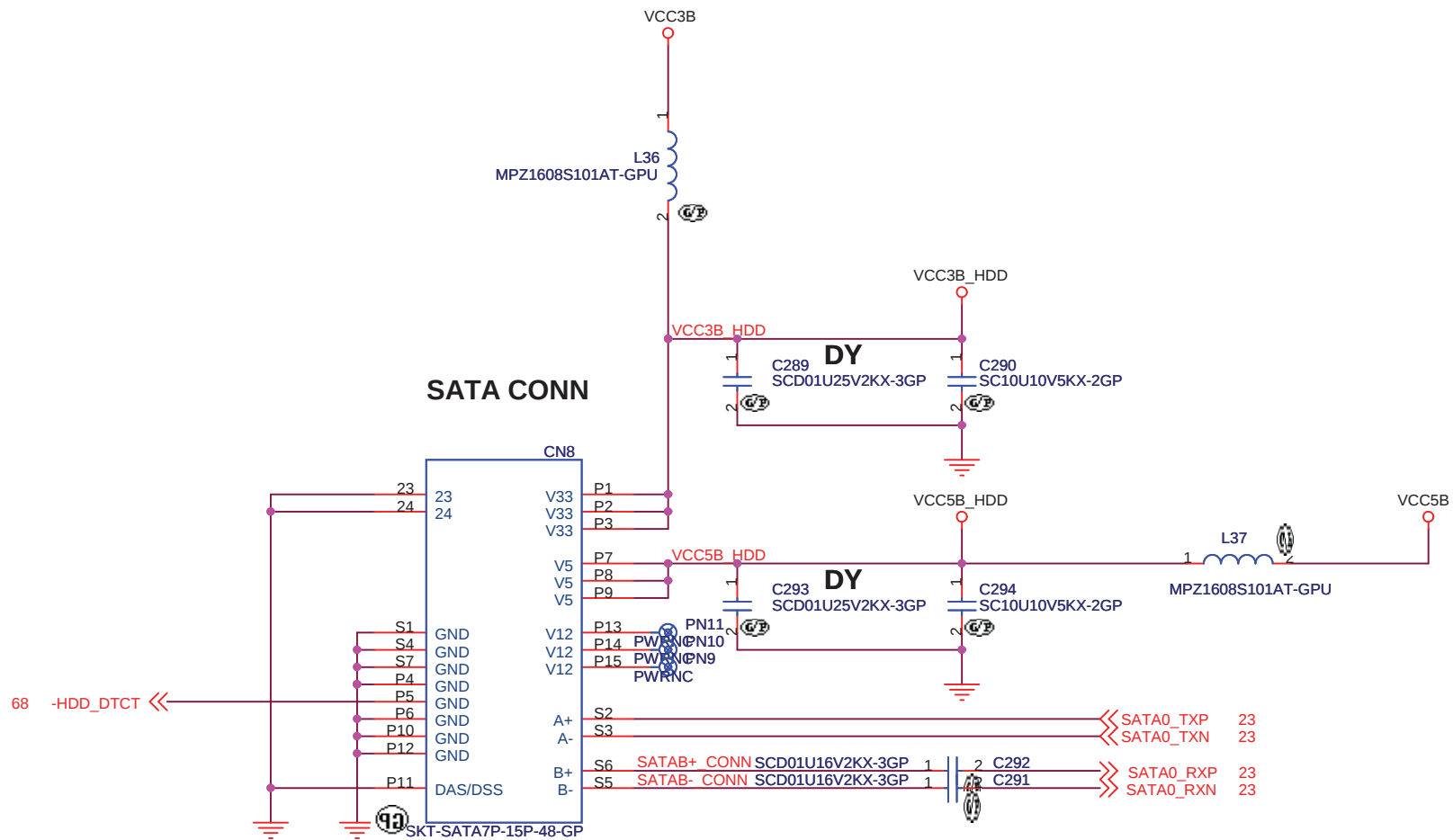
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Title

SATA Connector

Size
A4

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Date:	Monday, January 10, 2011	Sheet 40 of	101

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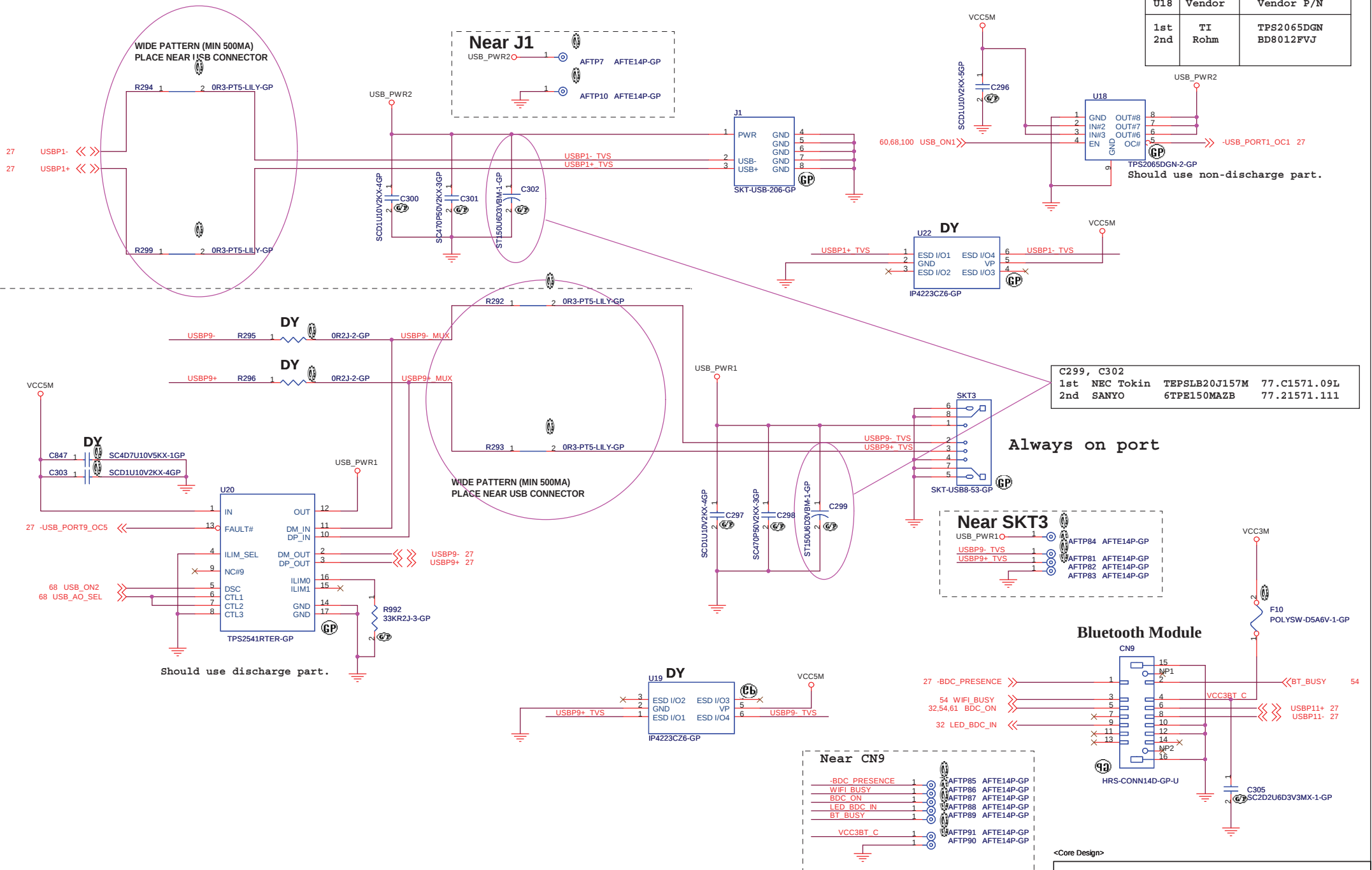
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SD

Date: Monday, January 10, 2011

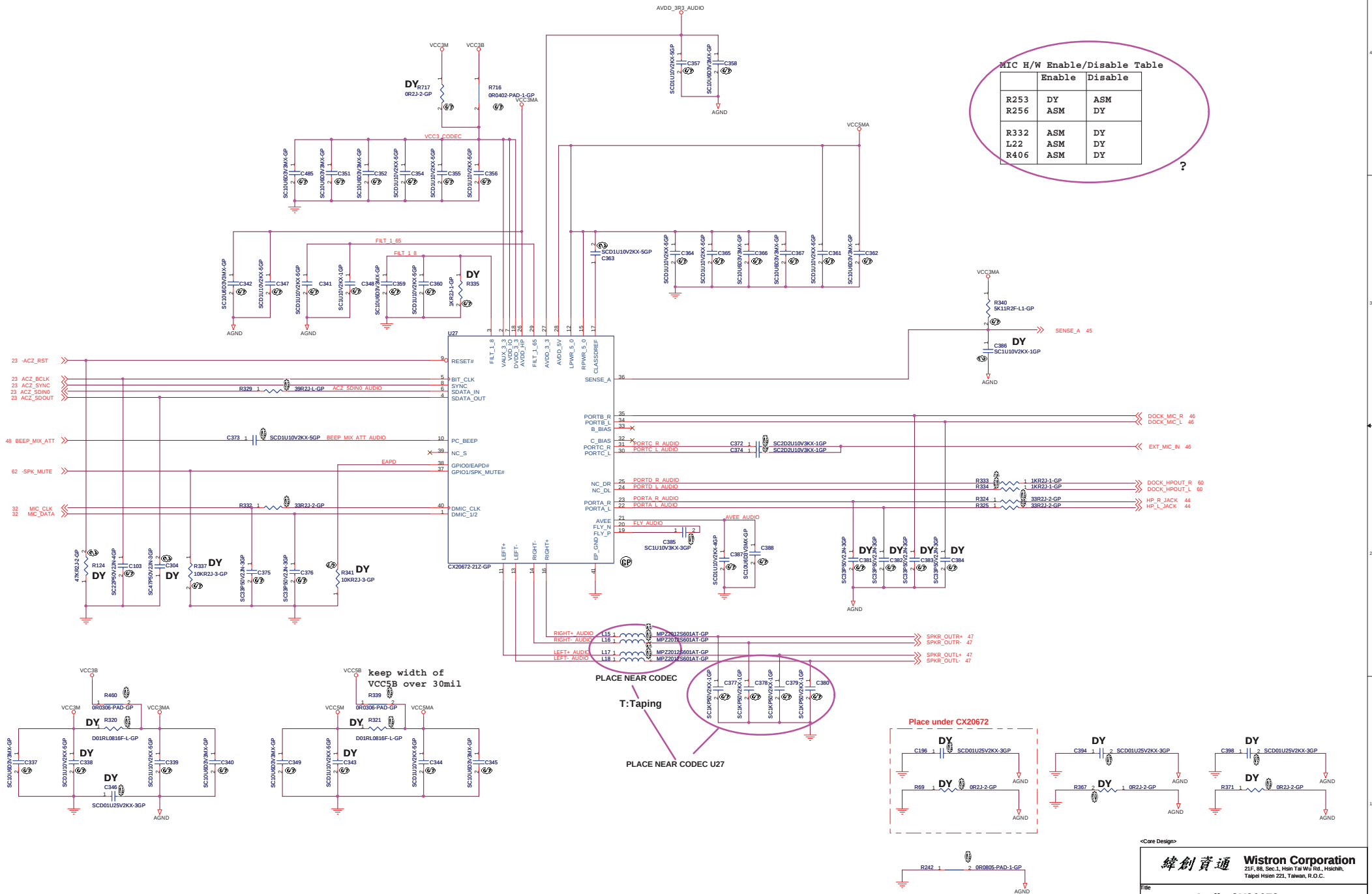
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U18	Vendor	Vendor P/N
1st	TI	TPS2065DGN
2nd	Rohm	BD8012FVJ



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緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
USB Connector	
Title Size A3 Date: Monday, January 10, 2011	Document Number Dasher-1 Sheet 42 of 101
Rev SD	

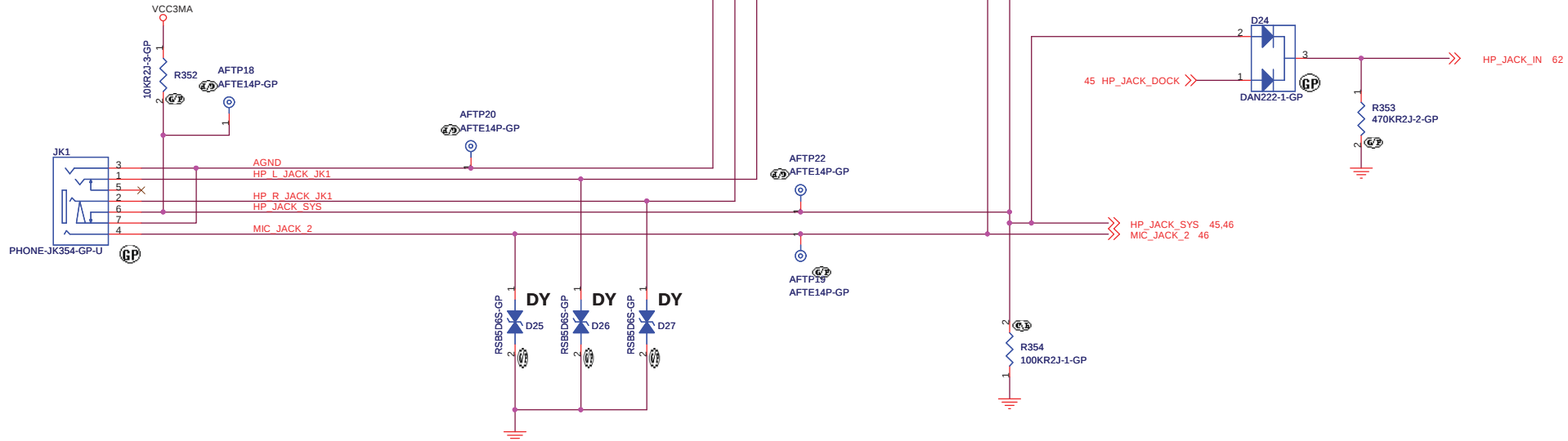


<Core Design>

NEAR HEADPHONE CONN

WIDE PATTERN

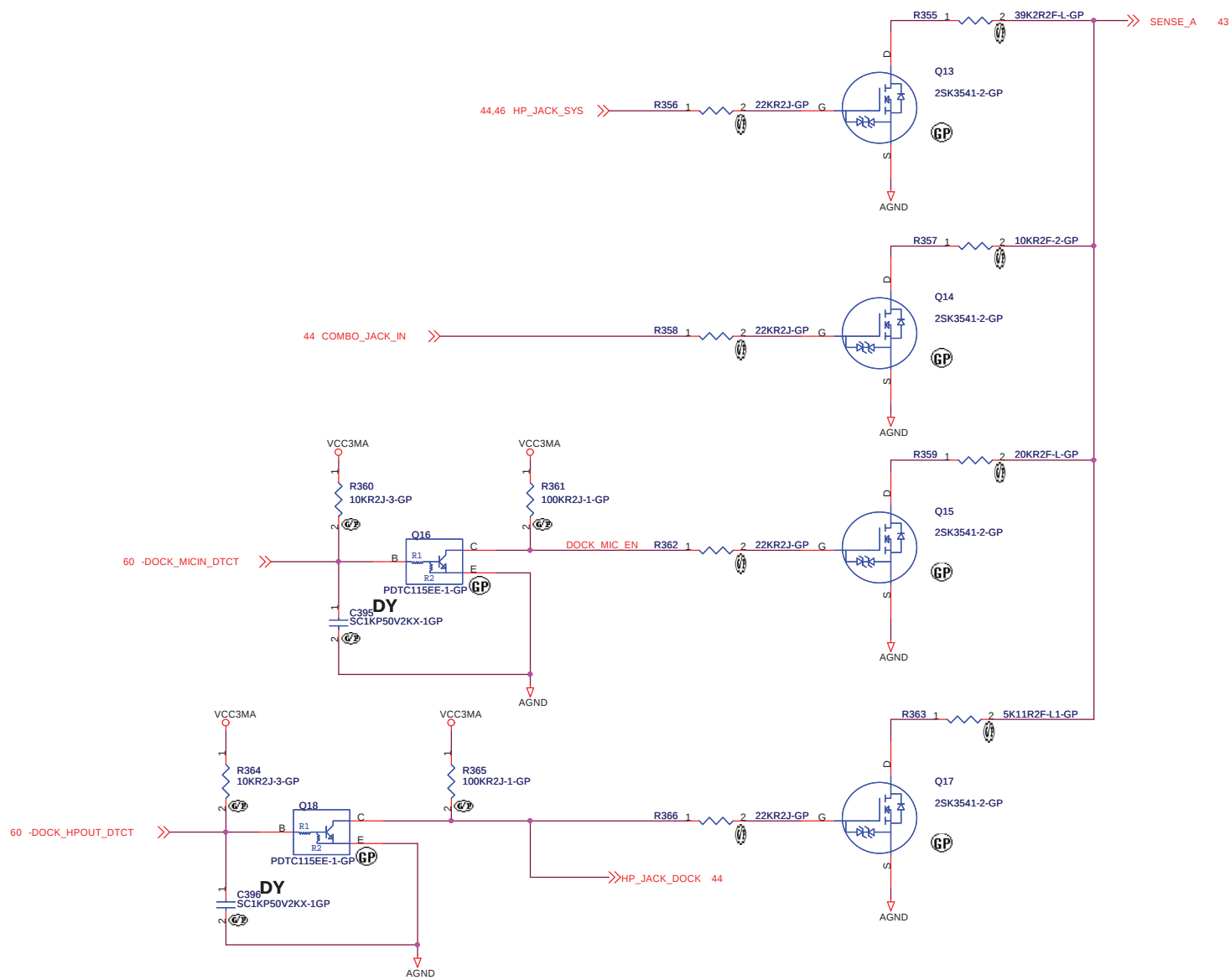
WIDE AND SHORT PATTERN



<Core Design>

緯創資通 Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title		
Audio Connector		
Size A3	Document Number Dasher-1	Rev SD
Date: Monday, January 10, 2011	Sheet 44 of 101	



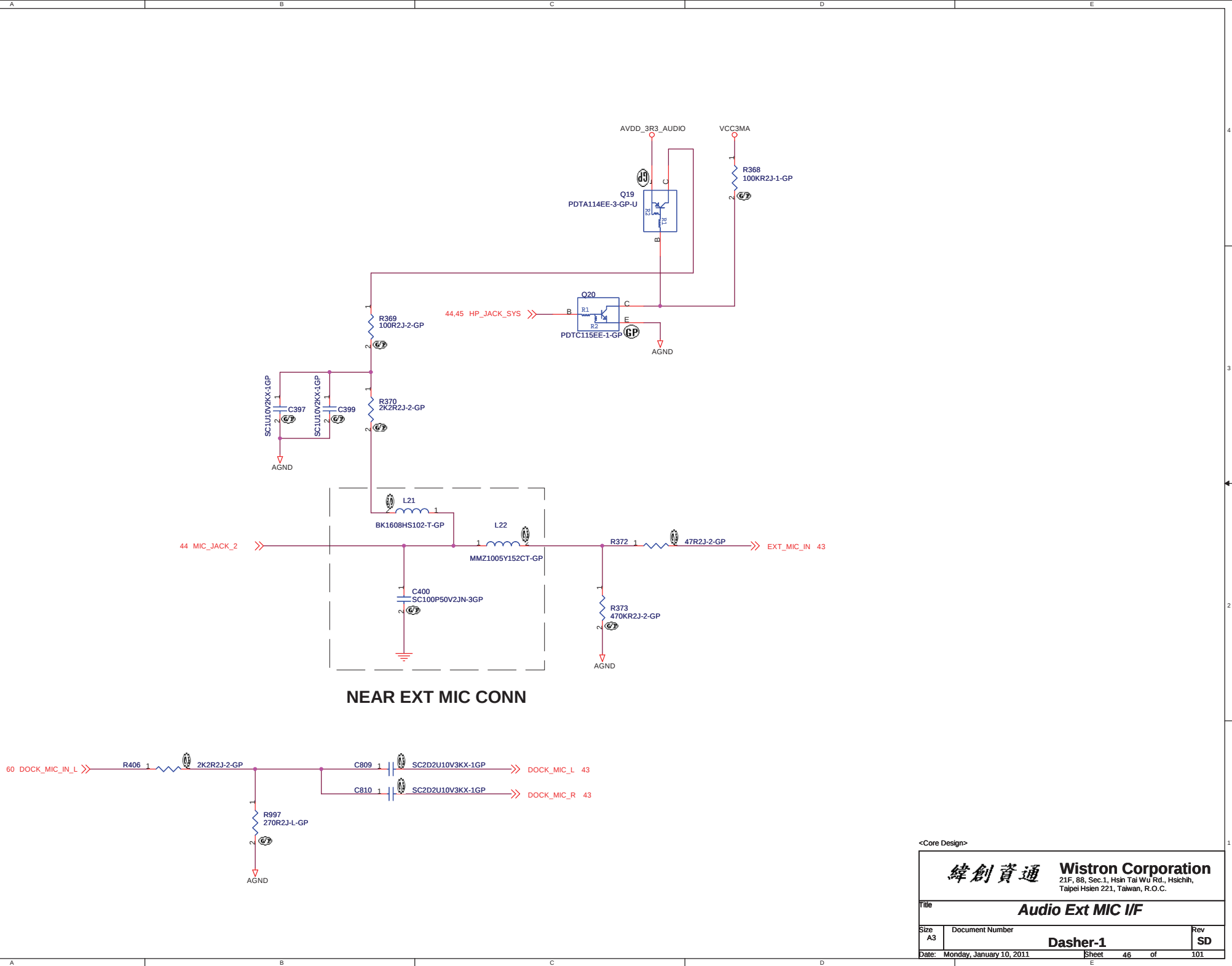
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緯創資通 Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title **Audio Jack Sense**

Size A3 Document Number **Dasher-1** Rev SD

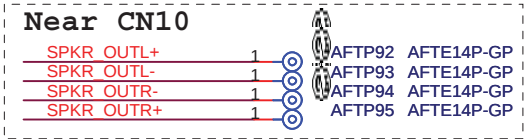
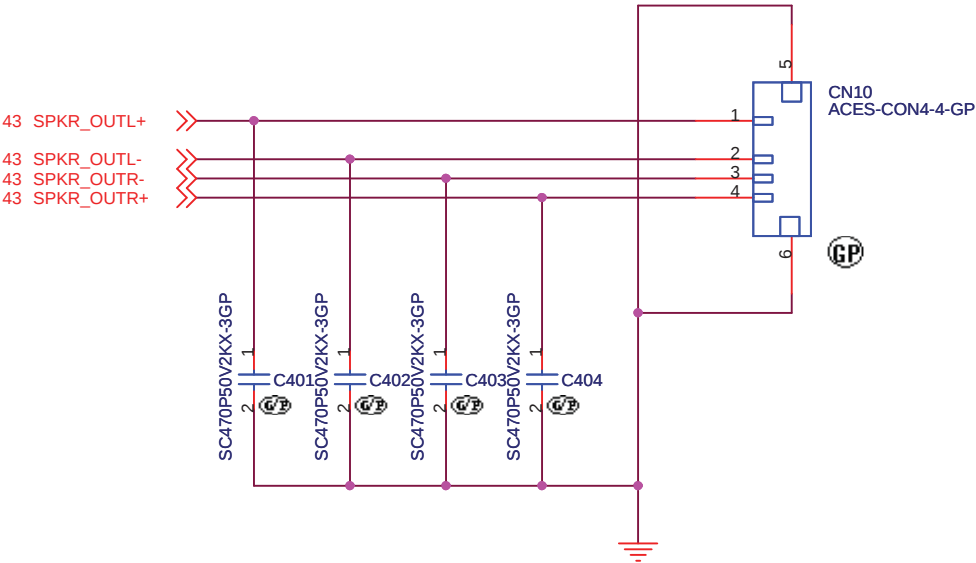
Date: Monday, January 10, 2011 Sheet 45 of 101



緯創資通 Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

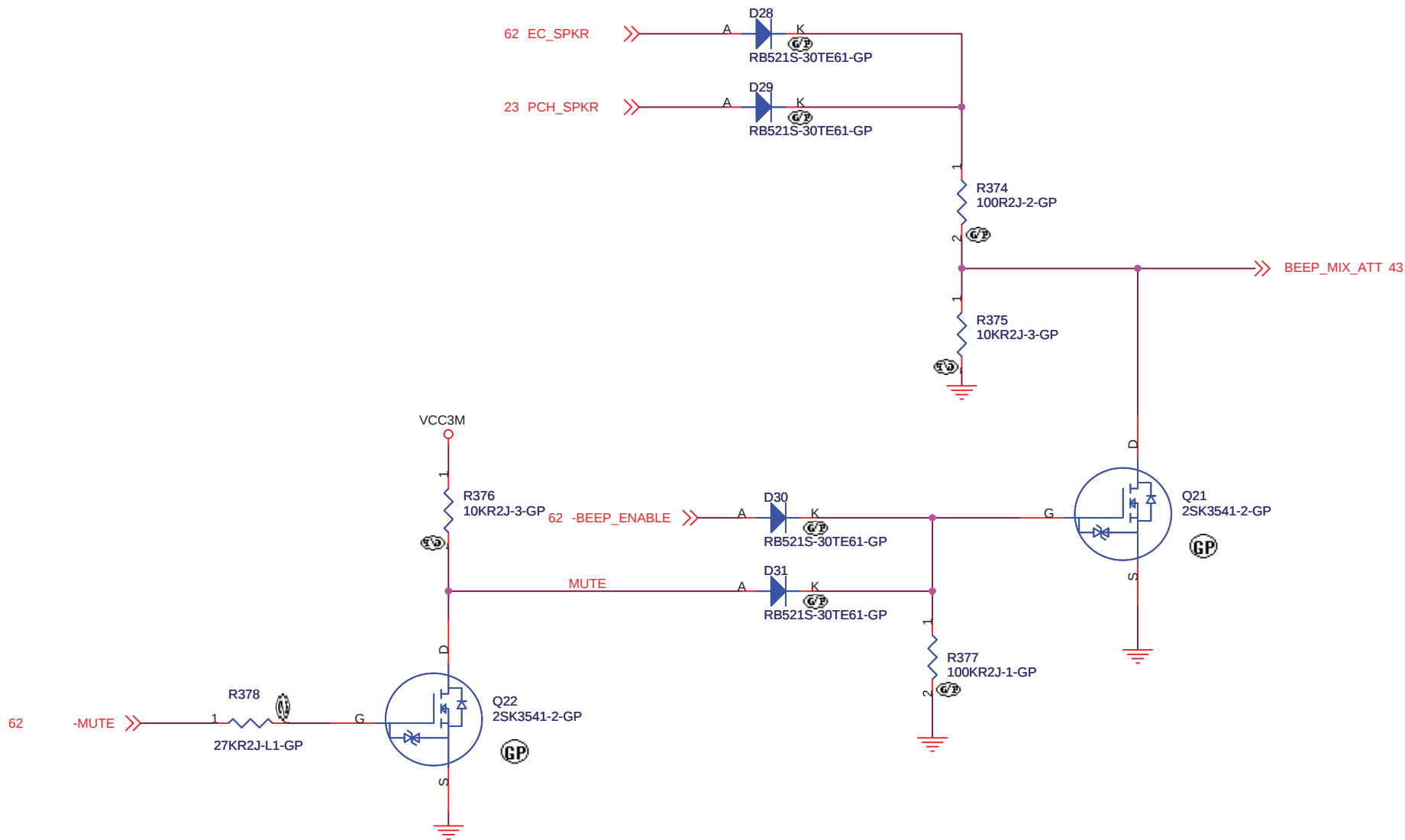
Audio Ext MIC I/F

Size A3 Document Number Dasher-1 Rev SD
Date: Monday, January 10, 2011 Sheet 46 of 101



<Core Design>

緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		Title		AUDIO SPEAKER	
Size	Document Number	Rev			
A4		Dasher-1			SD
Date:	Monday, January 10, 2011	Sheet	47	of	101



<Core Design>

緯創資通

Wistron Corporation

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

Title

Audio BEEP

Size
A4

Document Number

Dasher-1

Rev
SD

Date: Monday, January 10, 2011

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<Core Design>

緯創資通

Wistron Corporation

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

Title

BLANK

Size
A3

Document Number

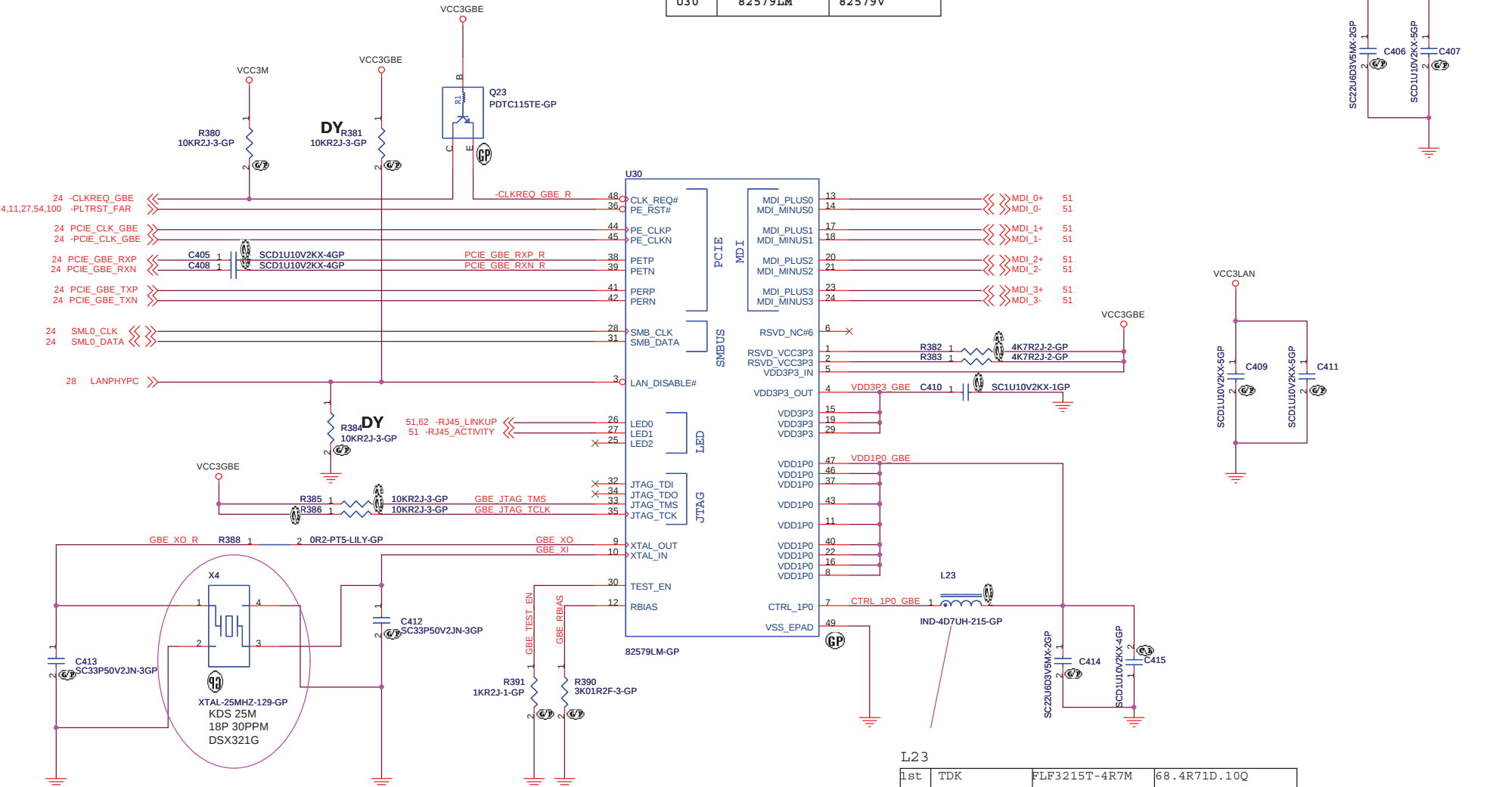
Dasher-1

Rev
SD

Date: Monday, January 10, 2011

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AMT	YES	NO
U30	82579LM	82579V

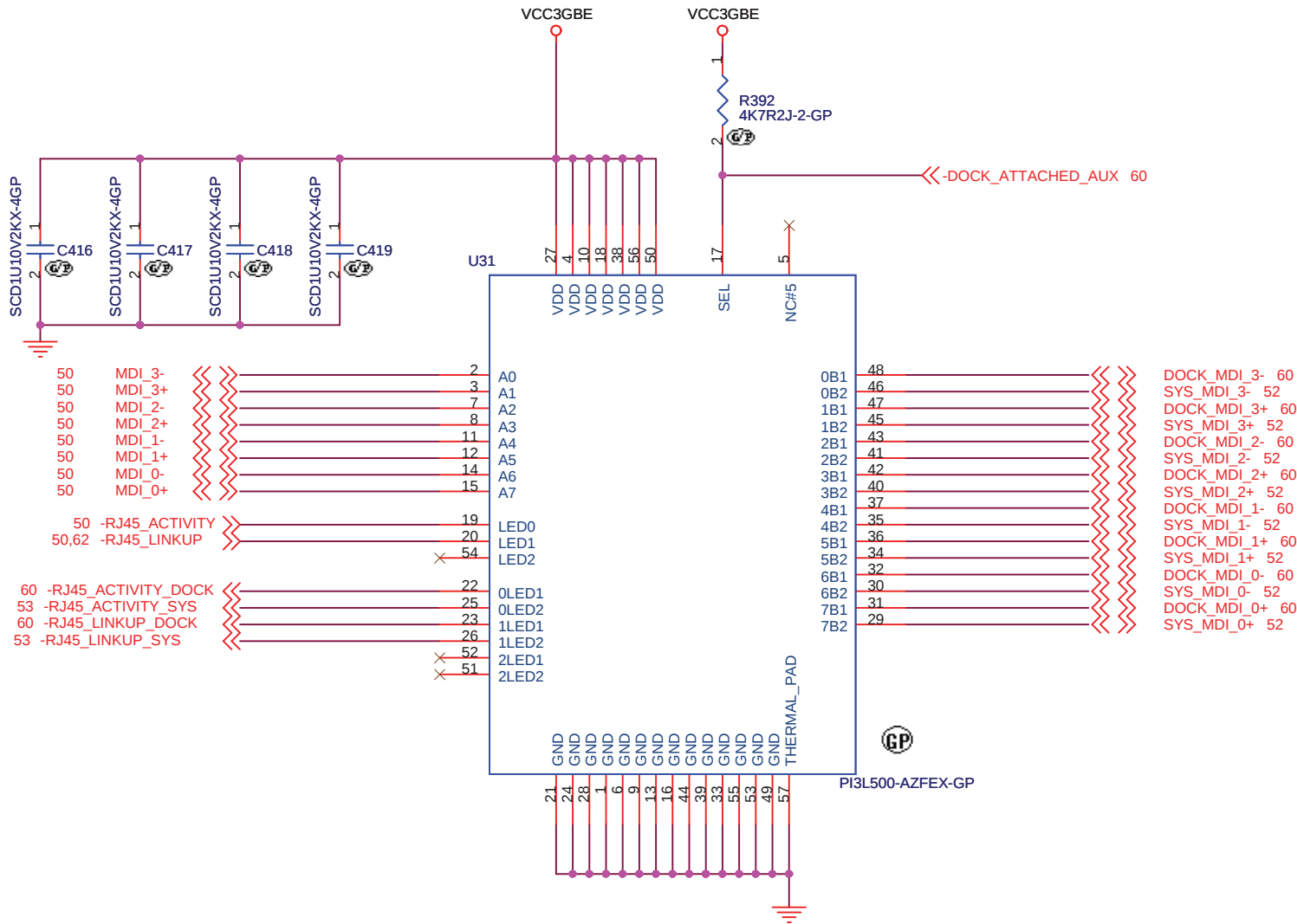


X4			
1st	KDS	DSX321G 25M 18P 30PPM	82.30020.B11
2nd	H.ELE	HSX321S 25M 18P 30PPM	82.30020.B21
3rd	TXC	7V25020001 25M 18P 30PPM	41U6141AA

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

<Core Design>

Title		Wistron Corporation	
Size		Document Number	
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Rev		SD	



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

<Core Design>

緯創資通

Wistron Corporation

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

Title

GBE LAN Switch

Size
A4

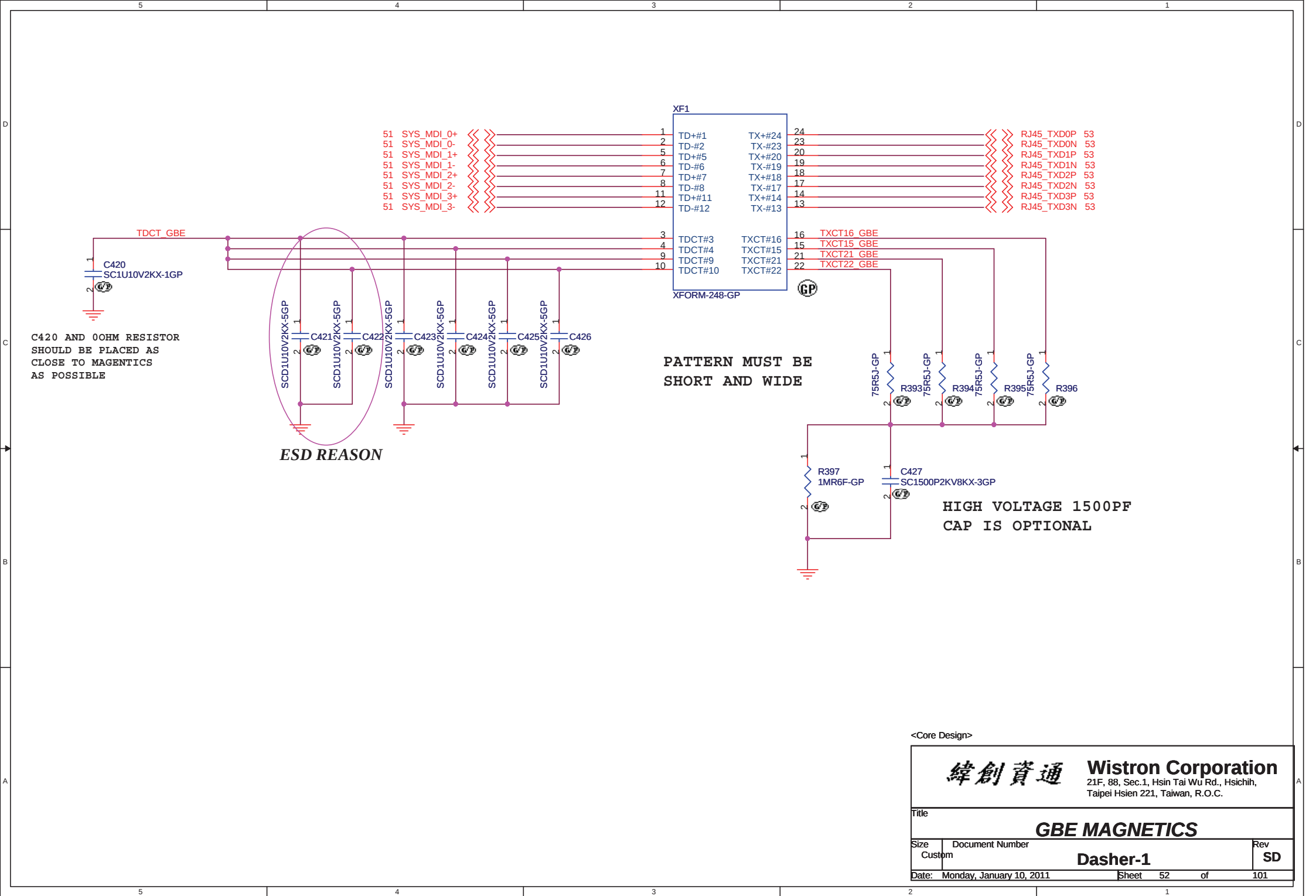
Document Number
Dasher-1

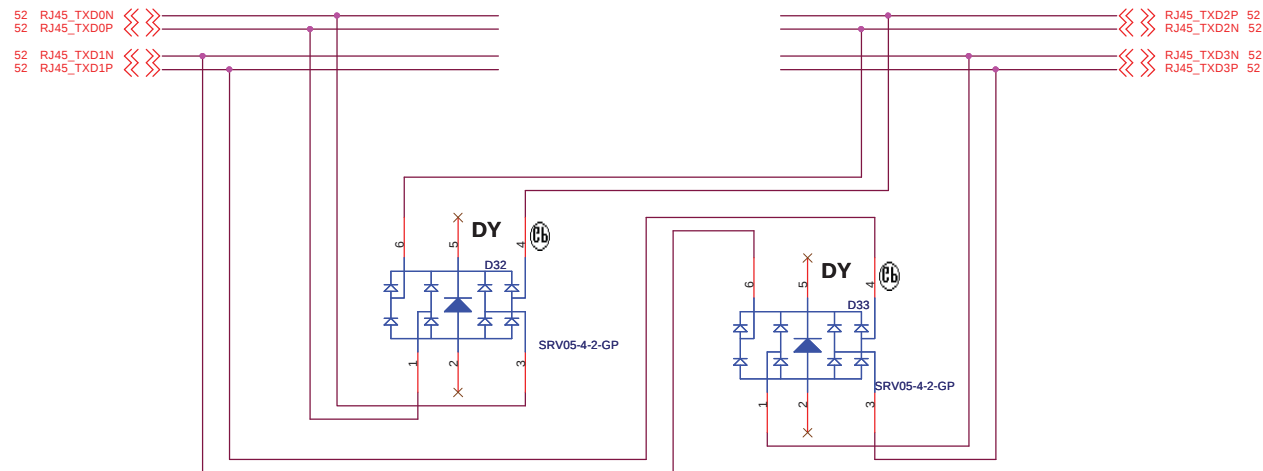
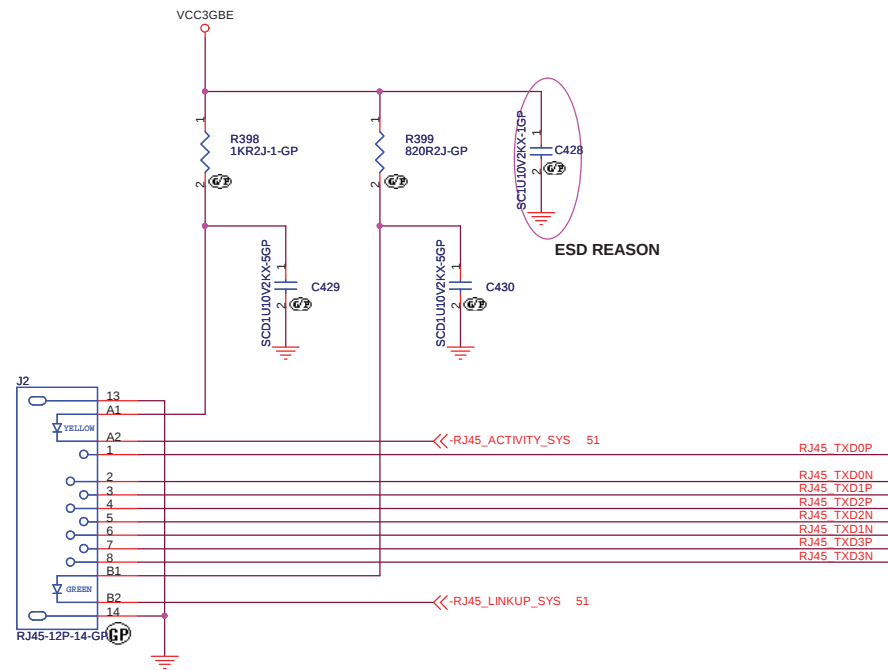
Rev
SD

Date
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101



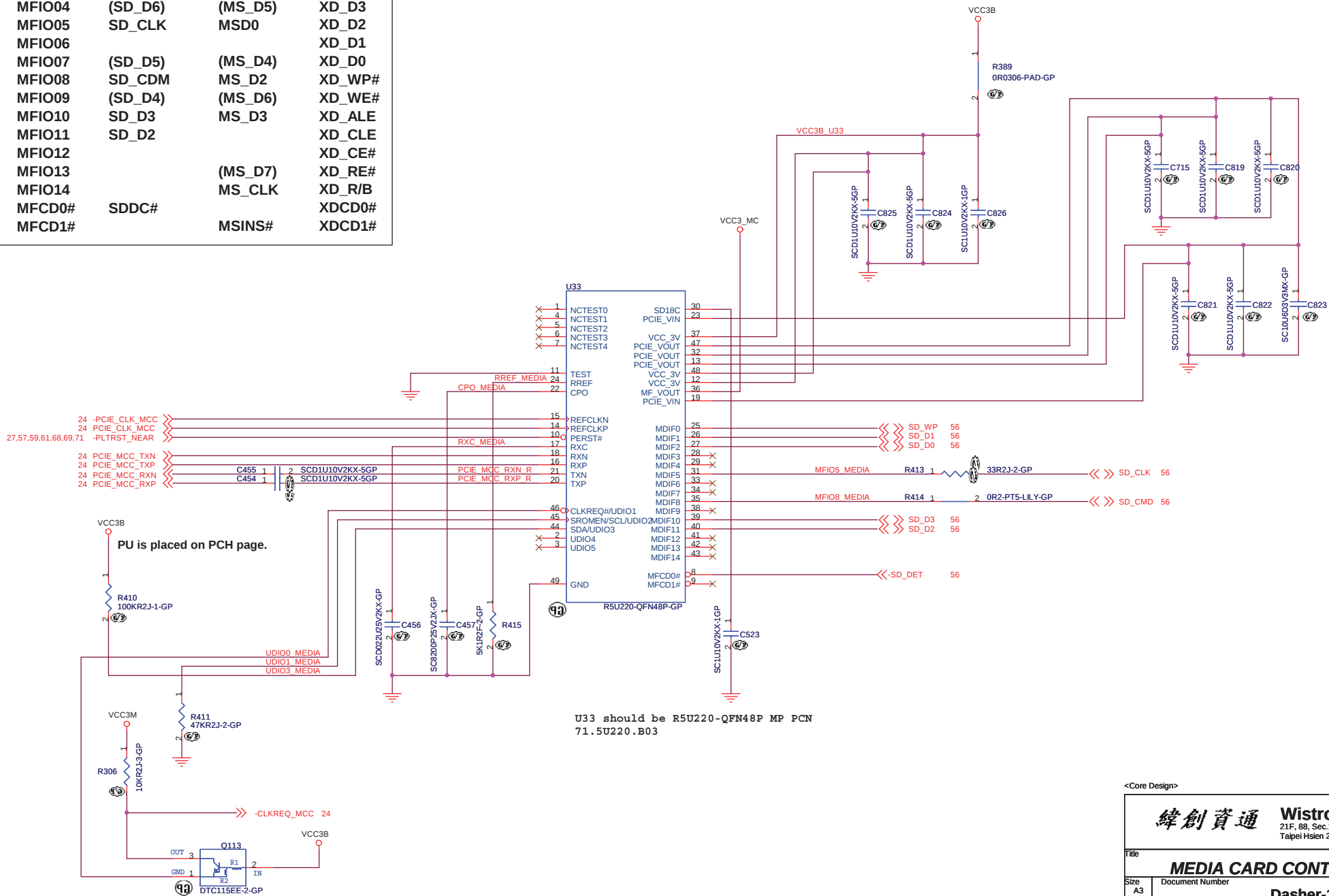


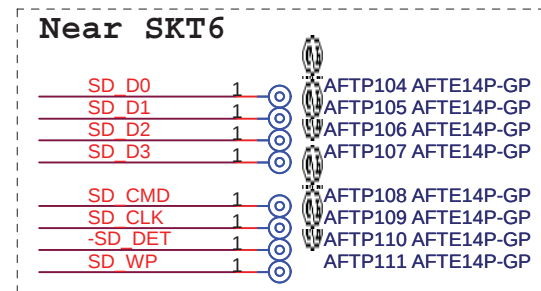
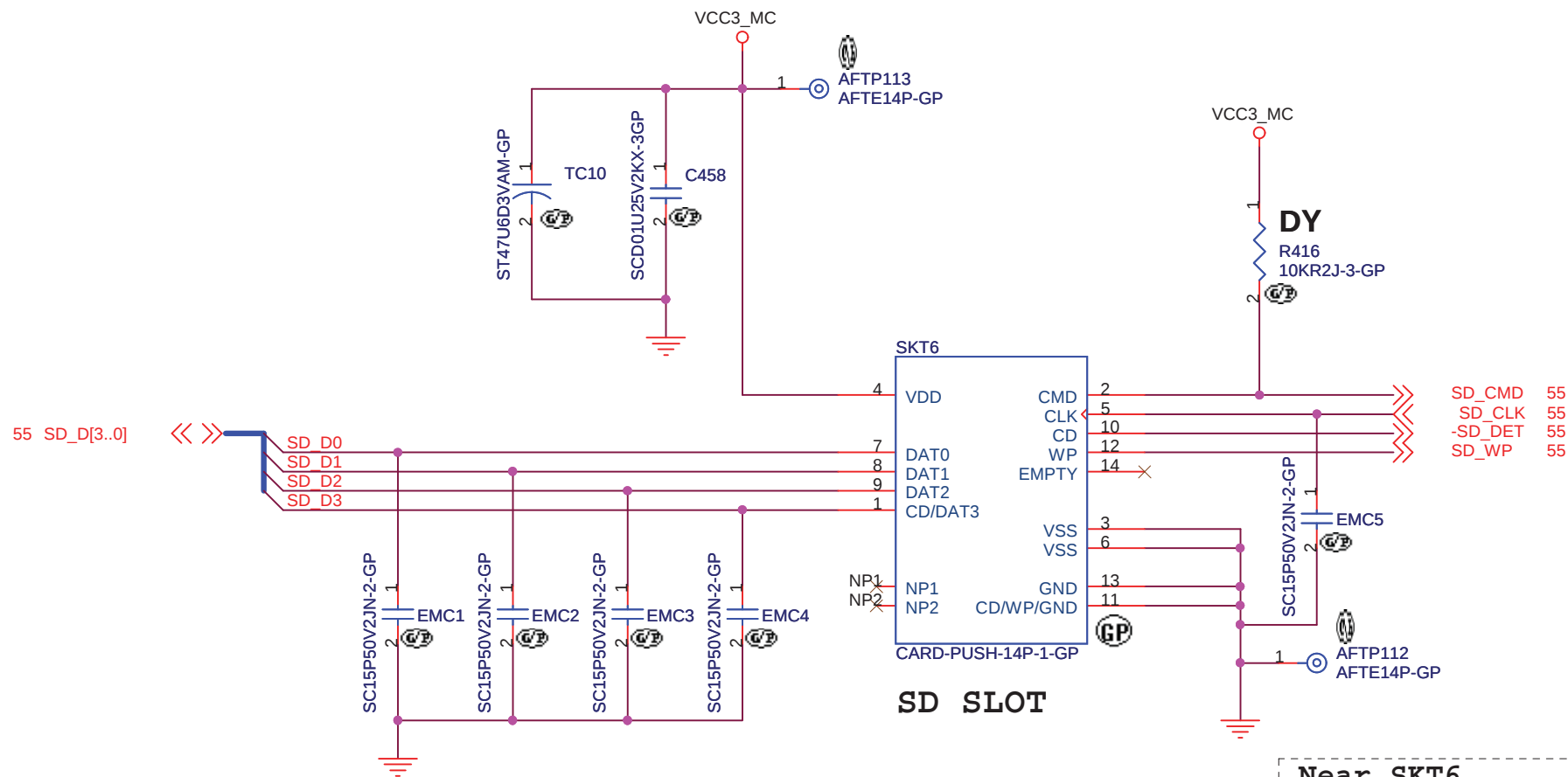
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緯創資通 Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title			
RJ45 CONNECTOR			
Size	Document Number	Rev	
A3	Dasher-1	SD	
Date: Monday, January 10, 2011 Sheet 53 of 101			

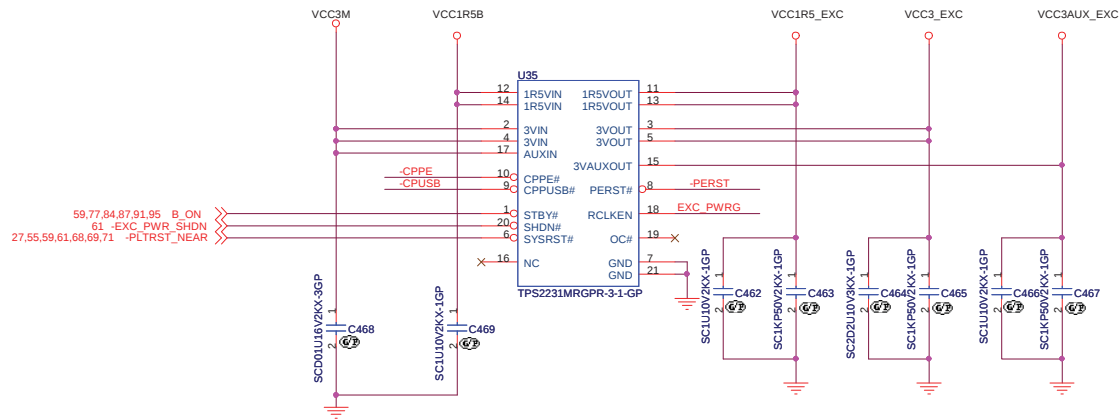
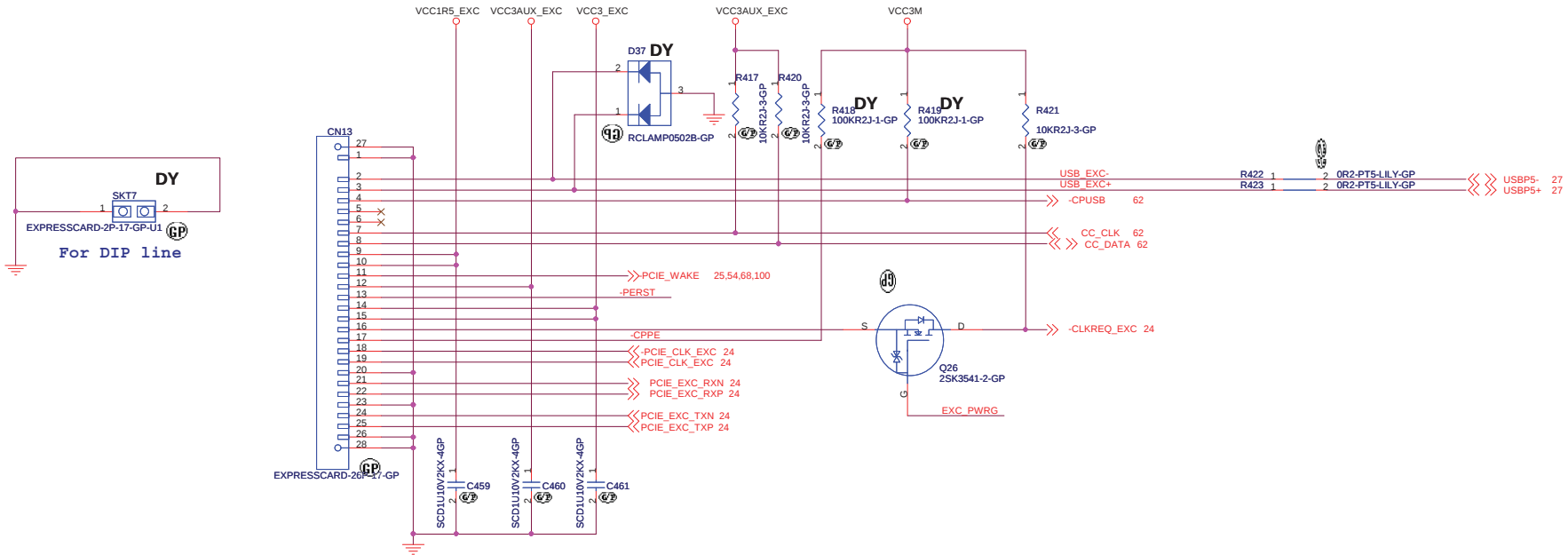
MEDIA I/F	SD/MMC	MEMORYSTICK	XD
MFIO00	SDWP#	MSBS	XD_D7
MFIO01	SD_D1		XD_D6
MFIO02	SD_D0	MS_D1	XD_D5
MFIO03	(SD_D7)		XD_D4
MFIO04	(SD_D6)	(MS_D5)	XD_D3
MFIO05	SD_CLK	MSD0	XD_D2
MFIO06			XD_D1
MFIO07	(SD_D5)	(MS_D4)	XD_D0
MFIO08	SD_CDM	MS_D2	XD_WP#
MFIO09	(SD_D4)	(MS_D6)	XD_WE#
MFIO10	SD_D3	MS_D3	XD_ALE
MFIO11	SD_D2		XD_CLE
MFIO12			XD_CE#
MFIO13		(MS_D7)	XD_RE#
MFIO14		MS_CLK	XD_R/B
MFCD0#	SDDC#		XDCD0#
MFCD1#		MSINS#	XDCD1#





<Core Design>

緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
Title		
Media Card Slot		
Size A	Document Number Dasher-1	Rev SD
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U35	TI	TPS2231MRGP-3	45K0234BA
	Rohm	BD4156MUV-E2	74.04156.07T
	Rohm	BD4157MUV-E2	74.04157.073

<Core Design>

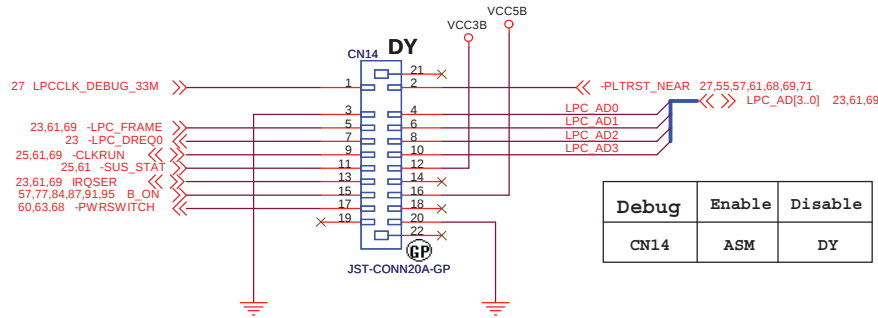
緯創資通		Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
Express Card Connector			
Size	Document Number	Rev	
Custom	Dasher-1	SD	
Date:	Monday, January 10, 2011	Sheet	57 of 101

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<Core Design>

緯創資通		Wistron Corporation	
		21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.	
Title			
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Size A	Document Number		Rev
	Dasher-1		SD
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Debug card connector

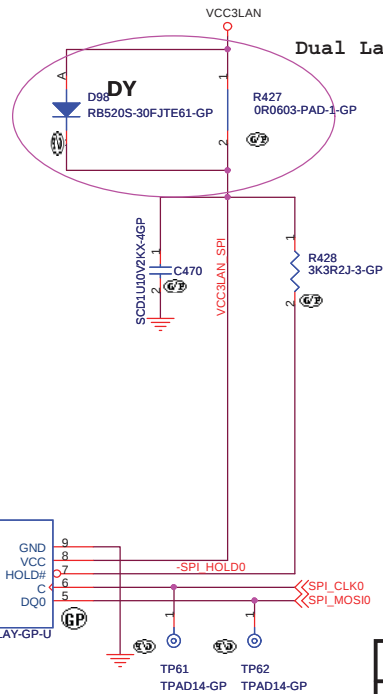


Put "easy-to -access" place

64Mbit SPI FLASH (for vPRO model)

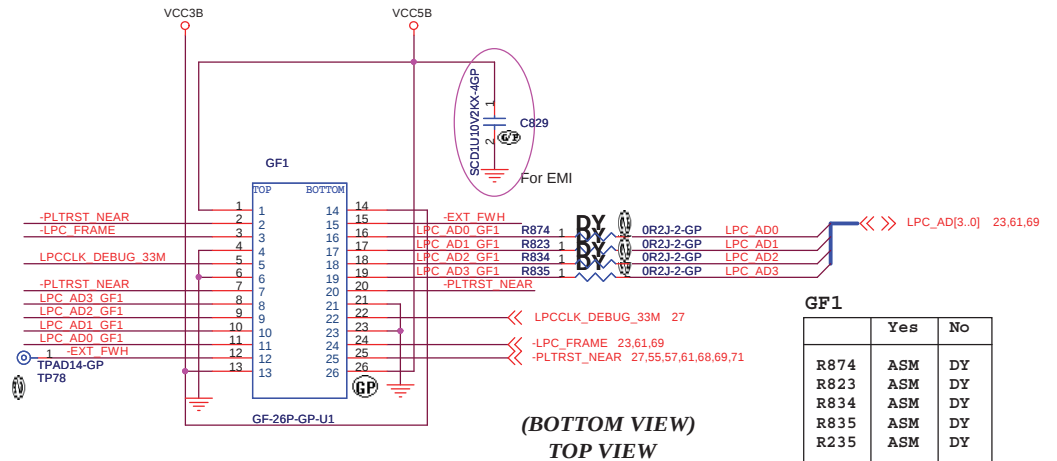
SO8		
Marconix	MX25L6436EM2I-10G	72.25643.001
Marconix	MX25L6406EM2I-10G	
Winbond	W25Q64CVSSIG	72.25Q64.B01
Atmel	AT25DF641 or 641A	72.25641.003
MLP8		
Numonyx	M25PX64-VMD6TG	72.25P64.E01

Part Number wait confirm



SO8 and WSON8 are both supported!

Golden Finger for Debug Board

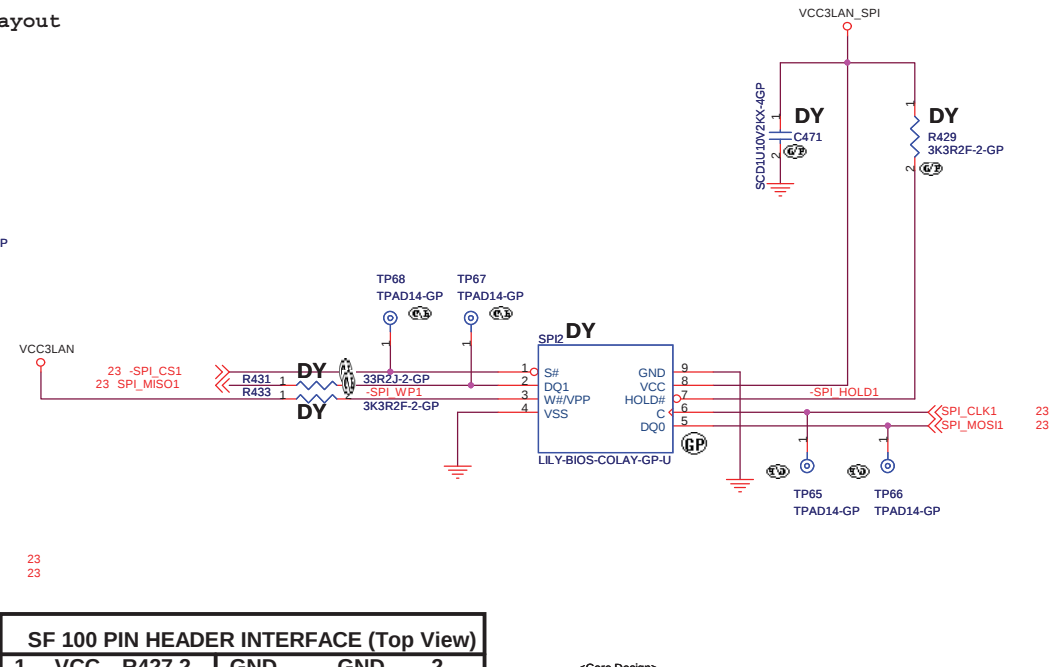


(BOTTOM VIEW)
TOP VIEW

(26) (25)....(15) (14)
13 12 2 1

GF1	Yes	No
R874	ASM	DY
R823	ASM	DY
R834	ASM	DY
R835	ASM	DY
R235	ASM	DY

SVT Logic

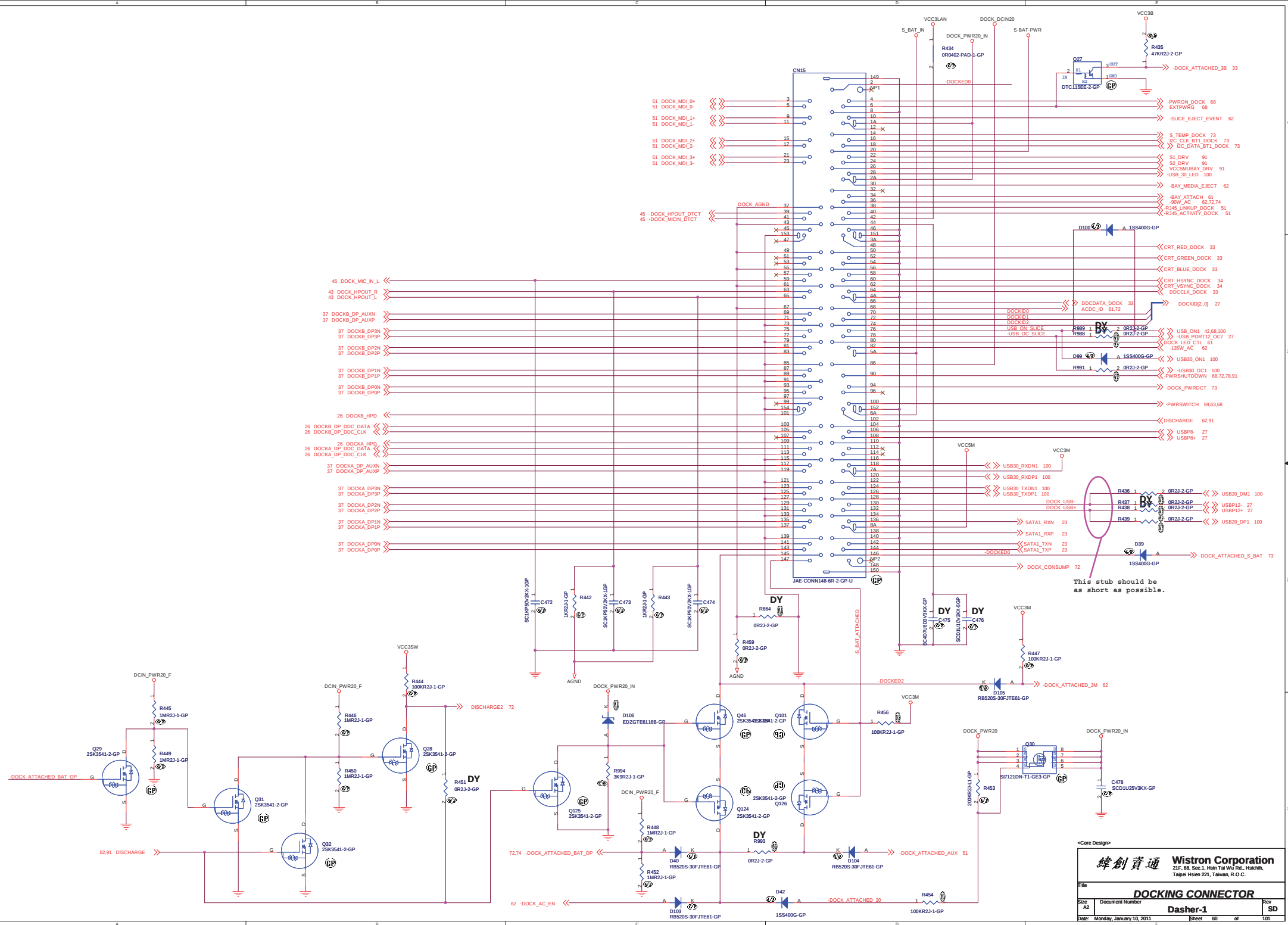


SF 100 PIN HEADER INTERFACE (Top View)

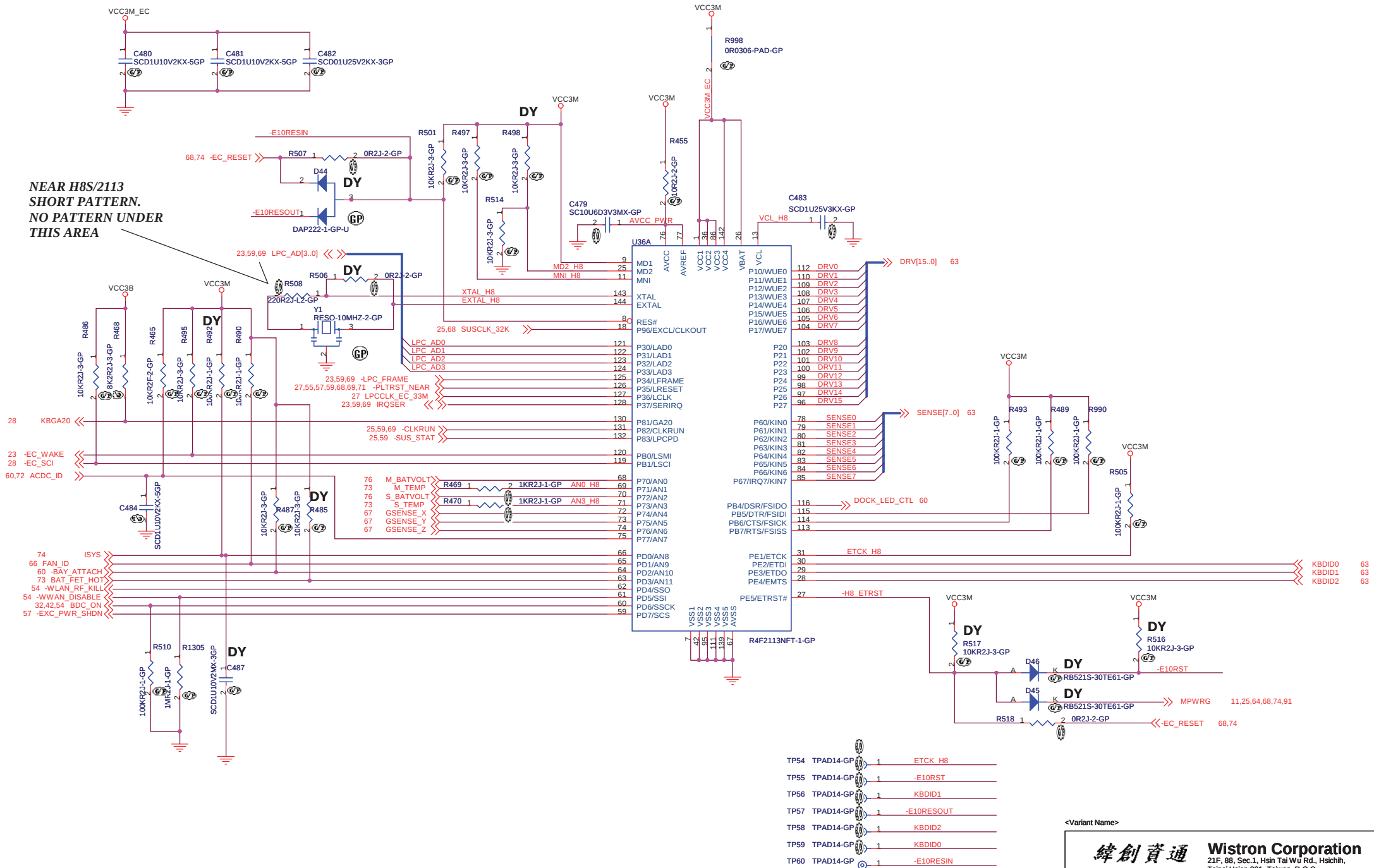
1	VCC	R427.2	GND	GND	2
3	CS#	R148.1	R145.1	CLK	4
5	MISO	R430.2	R151.1	MOSI	6
7	(KEY)	N/A	N/A	(RESET)	8

<Core Design>

緯創資通		Wistron Corporation	
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.			
Title		SPI&LPC debug card	
Size	Document Number	Rev	SD
A3		Dasher-1	
Date: Monday, January 10, 2011	Sheet	59	of 101



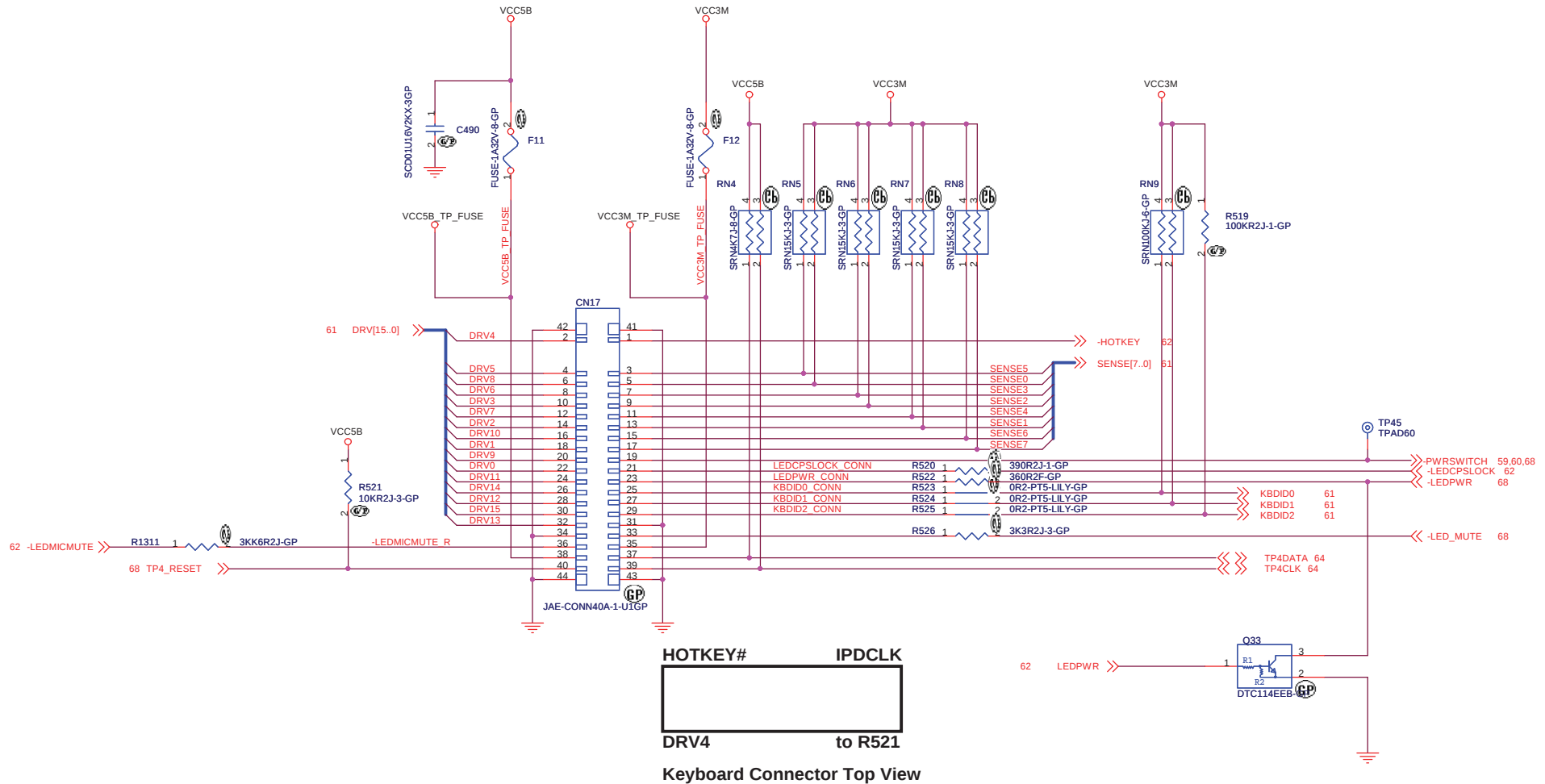
NEAR H8S/2113
SHORT PATTERN.
NO PATTERN UNDER
THIS AREA



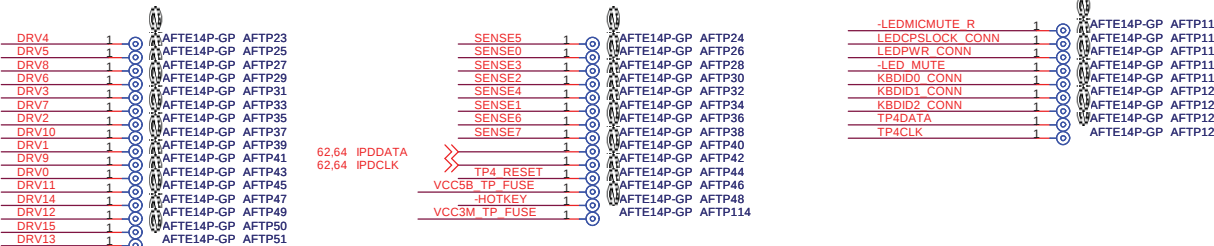
<Variant Name>

緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
Title		
H8S/2113 (1/2)		
Size	Document Number	Rev
Custom	Dasher-1	SD
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Keyboard Connector



Near CN17

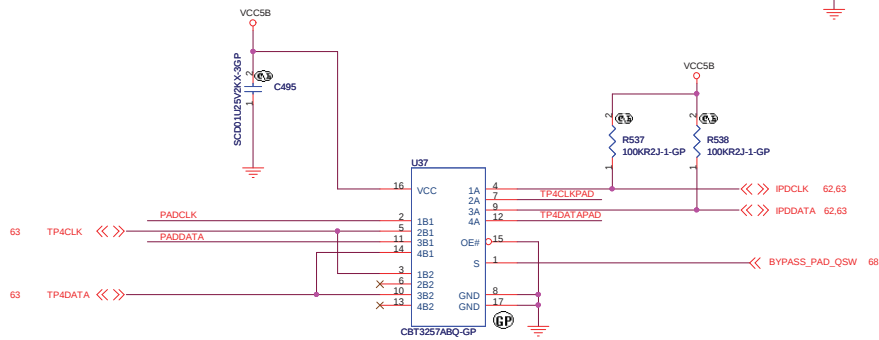
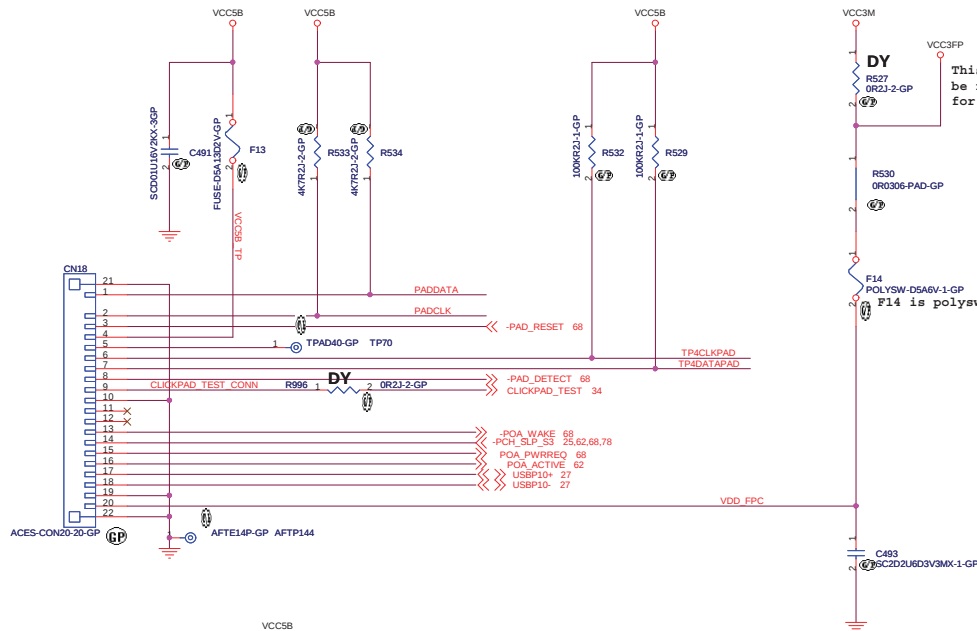


<Core Design>

緯創資通 Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichin,
Taipei Hsien 221, Taiwan, R.O.C.

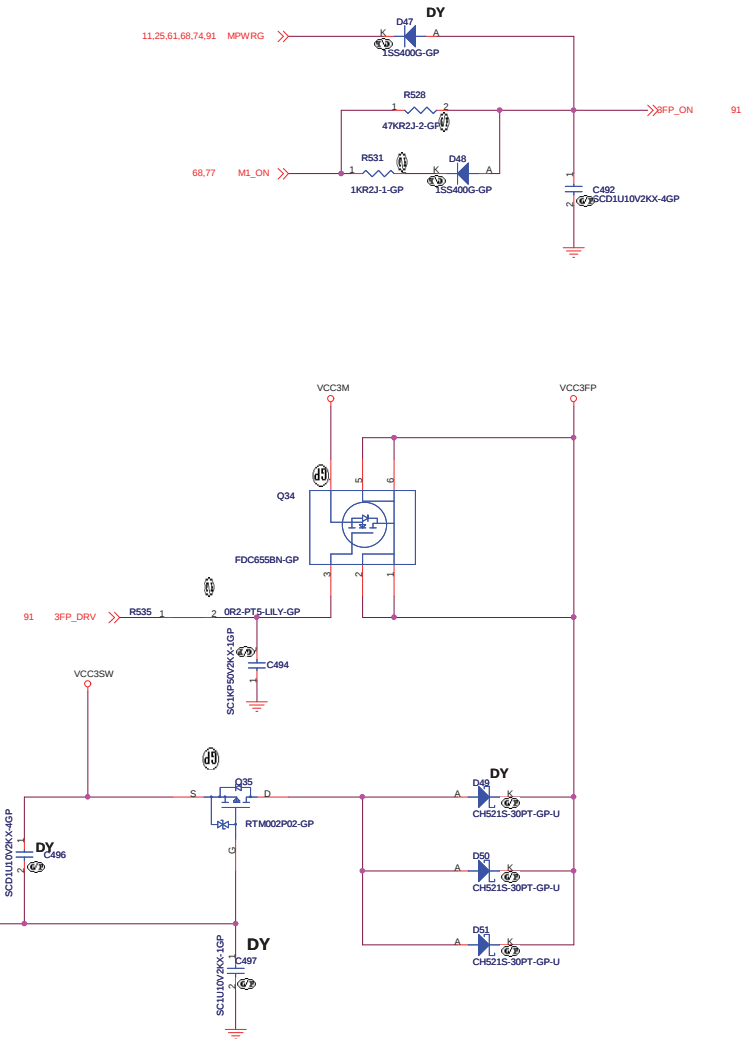
Title			
KEYBOARD CONNECTOR			
Size A3	Document Number Dasher-1	Rev SD	
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Fingerprint Reader / Touch PAD



Near CN18

PADDATA	1	AFT14P-GP	AFTP124
PADCLK	2	AFT14P-GP	AFTP125
-PAD_RESET	3	AFT14P-GP	AFTP126
VCC5B_TP	4	AFT14P-GP	AFTP127
TP4CLKPAD	5	AFT14P-GP	AFTP128
TP4DATAAPAD	6	AFT14P-GP	AFTP129
-PAD_DETECT	7	AFT14P-GP	AFTP130
CLICKPAD TEST CONN	8	AFT14P-GP	AFTP131
-POA_WAKE	9	AFT14P-GP	AFTP132
-PCH_SLP_S3	10	AFT14P-GP	AFTP133
POA_PWRREQ	11	AFT14P-GP	AFTP134
POA_ACTIVE	12	AFT14P-GP	AFTP135
VDD_FPC	13	AFT14P-GP	AFTP136



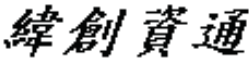
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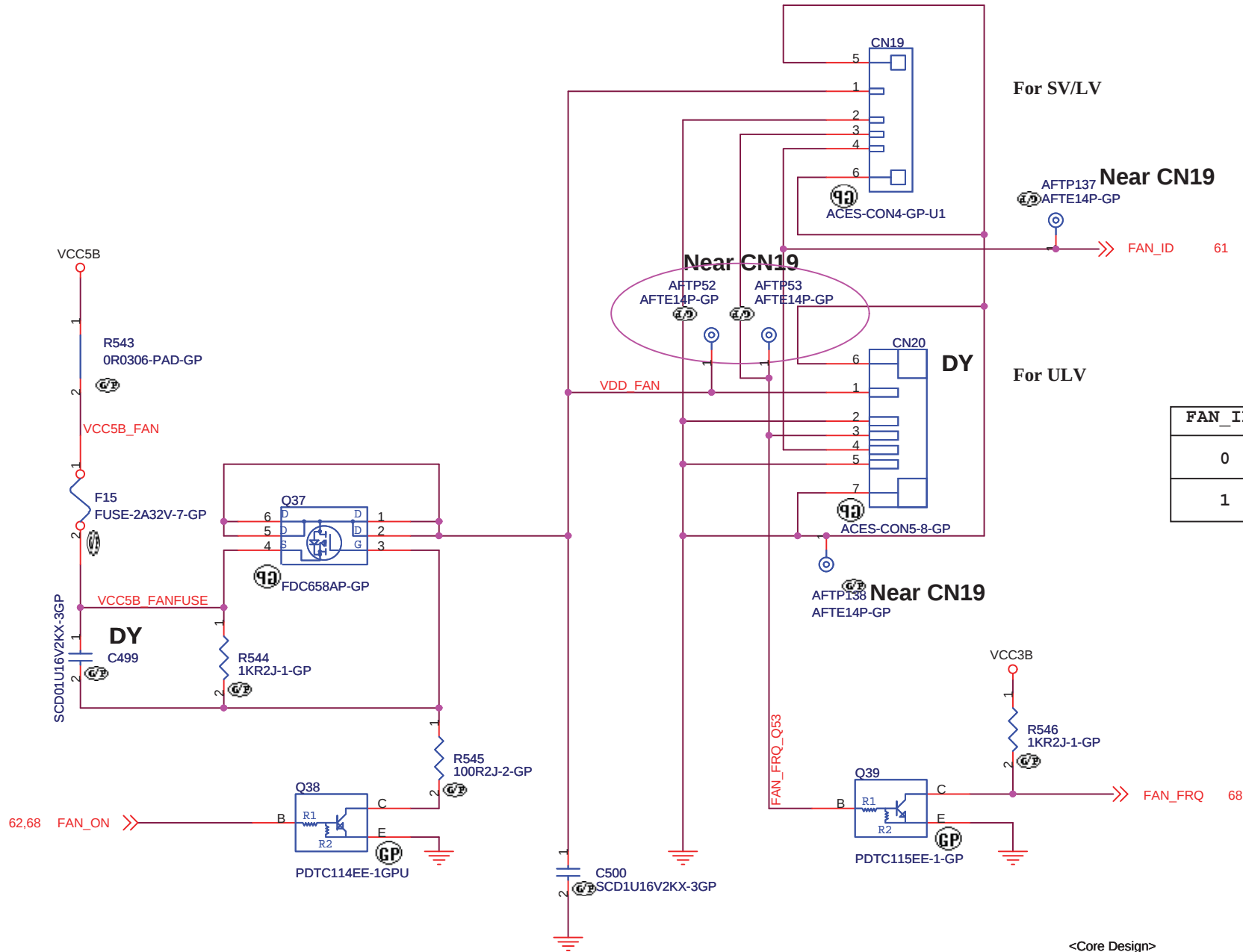
緯創資通 Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title		TOUCH PAD CONNECTOR	
Size	Document Number	Dasher-1	Rev
Custom			SD
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Title BLANK			
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For SV/LV

Near CN19

AFTP137
AFTE14P-GP

FAN_ID 61

Near CN19

AFTP52
AFTE14P-GP

AFTP53
AFTE14P-GP

DY

For ULV

FAN_ID	Thermal module
0	THT
1	AVC or DELTA

<Core Design>

緯創資通

Wistron Corporation

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

Title

FAN Control

Size
A4

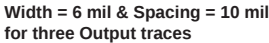
Document Number

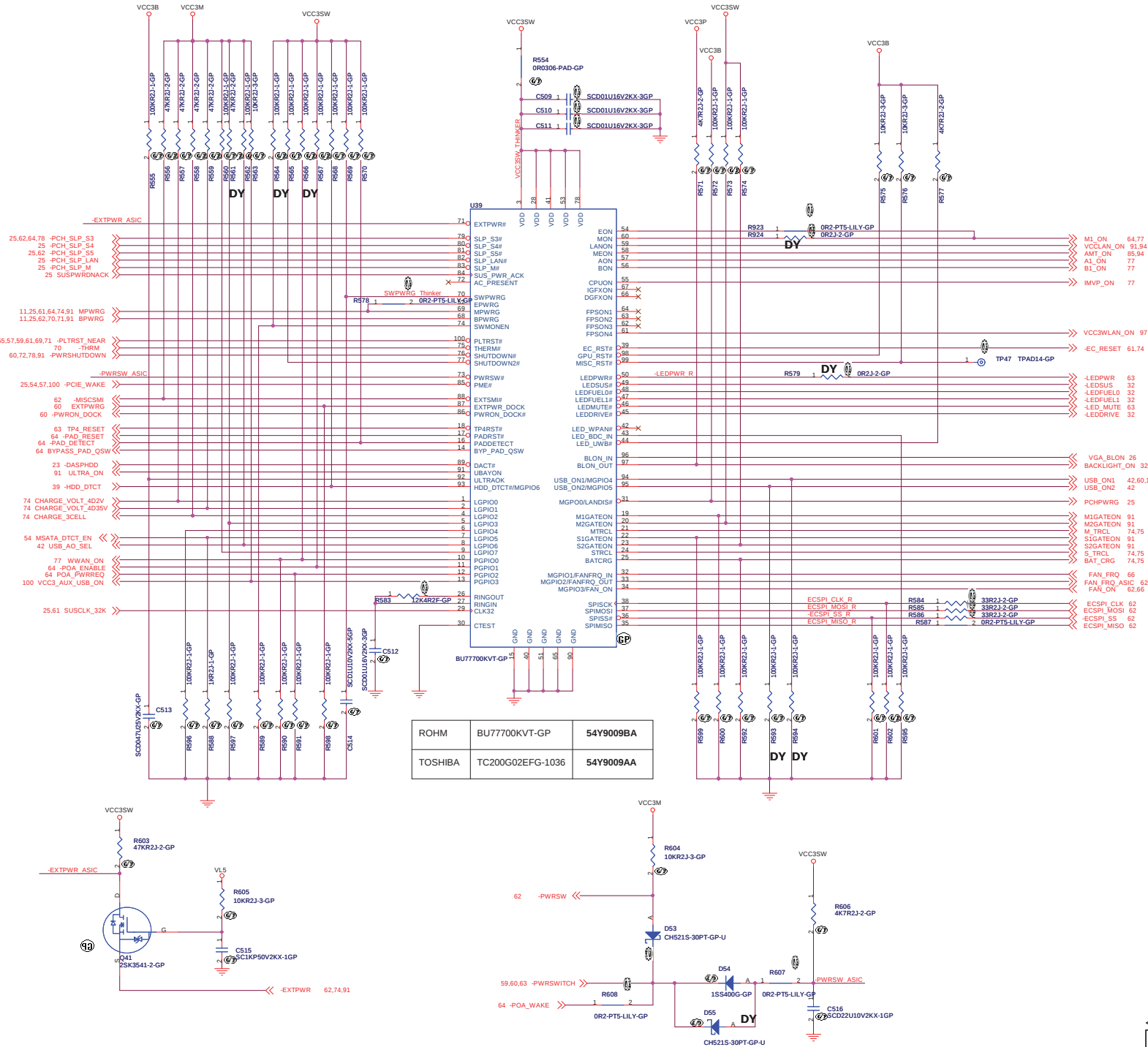
Dasher-1

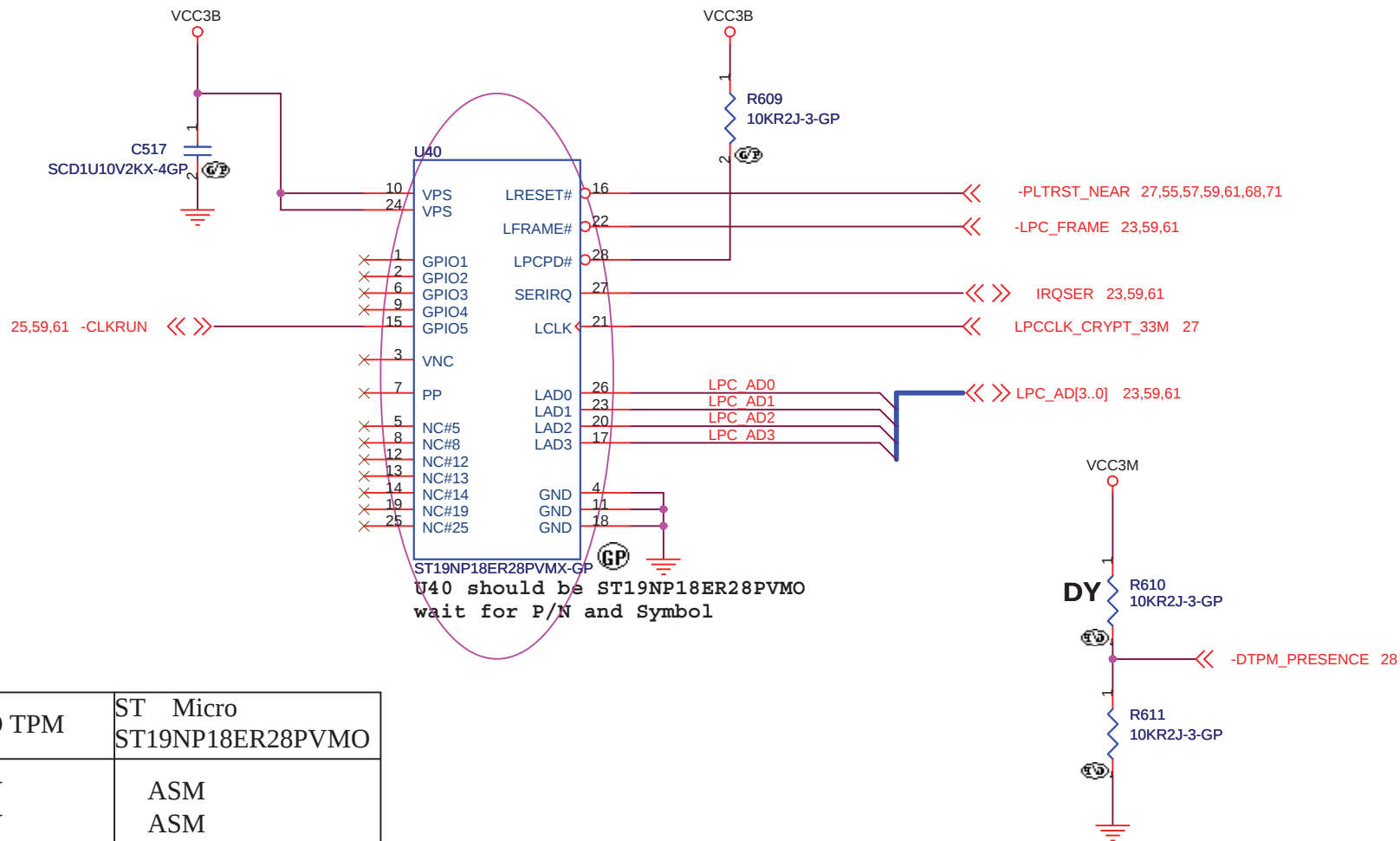
Rev
SD

Date: Monday, January 10, 2011

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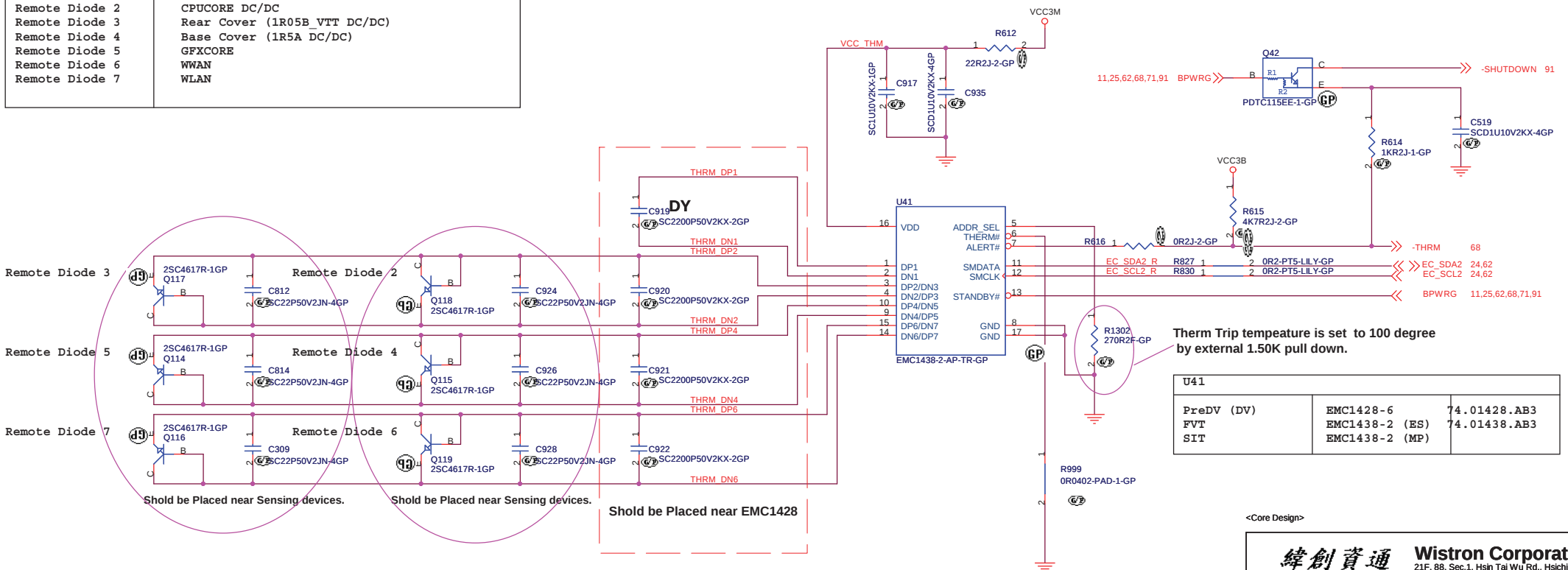
	NO TPM	ST Micro ST19NP18ER28PVM0
U40	DY	ASM
C517	DY	ASM
R609	DY	ASM
R610	ASM	DY
R611	DY	ASM

<Core Design>

緯創資通 Wistron Corporation 21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih, Taipei Hsien 221, Taiwan, R.O.C.		
Title		
TPM		
Size A4	Document Number	Rev
	Dasher-1	SD
Date:	Monday, January 10, 2011	Sheet 69 of 101

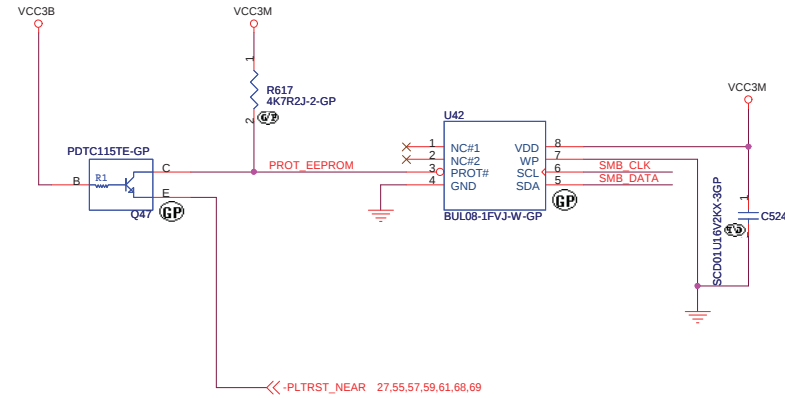


Channel	Location
Local	MEMORY
Remote Diode 2	CPUCORE DC/DC
Remote Diode 3	Rear Cover (1R05B VTT DC/DC)
Remote Diode 4	Base Cover (1R5A DC/DC)
Remote Diode 5	GFXCORE
Remote Diode 6	WWAN
Remote Diode 7	WLAN



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

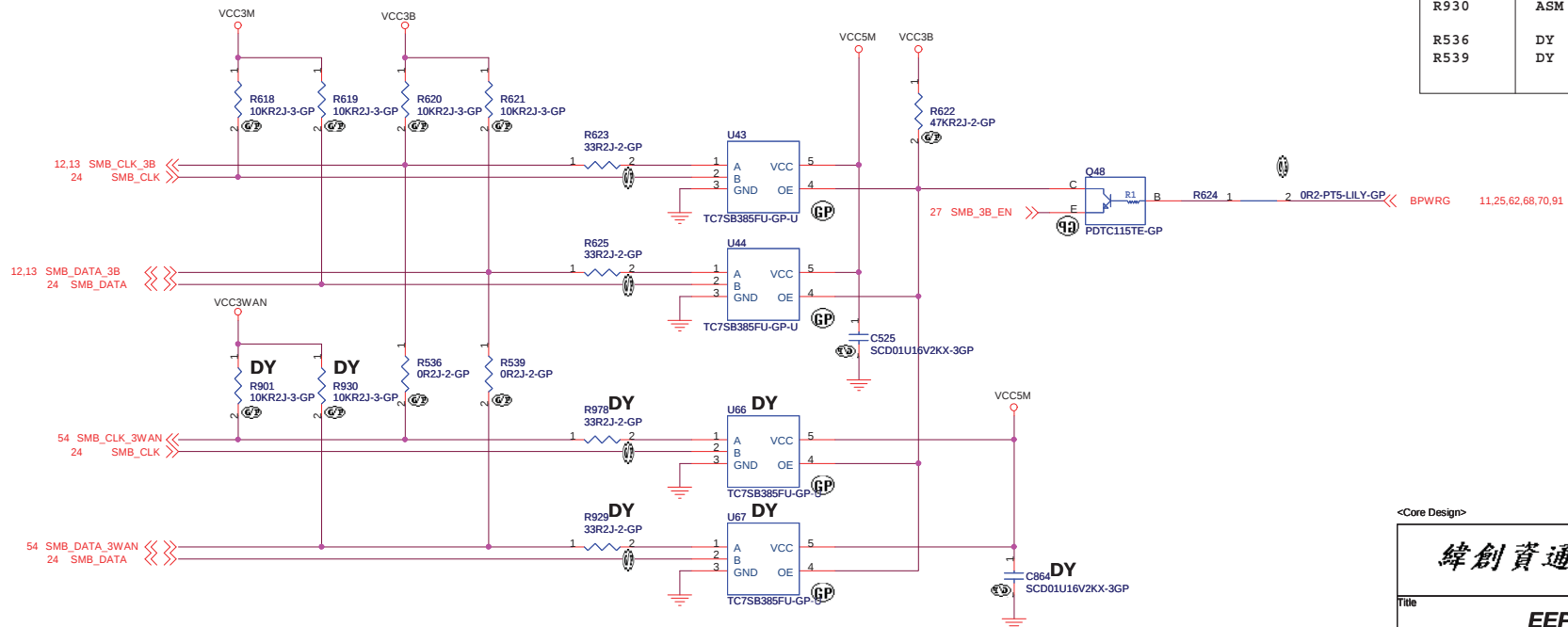
EEPROM



	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

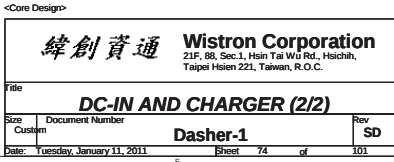
Logic

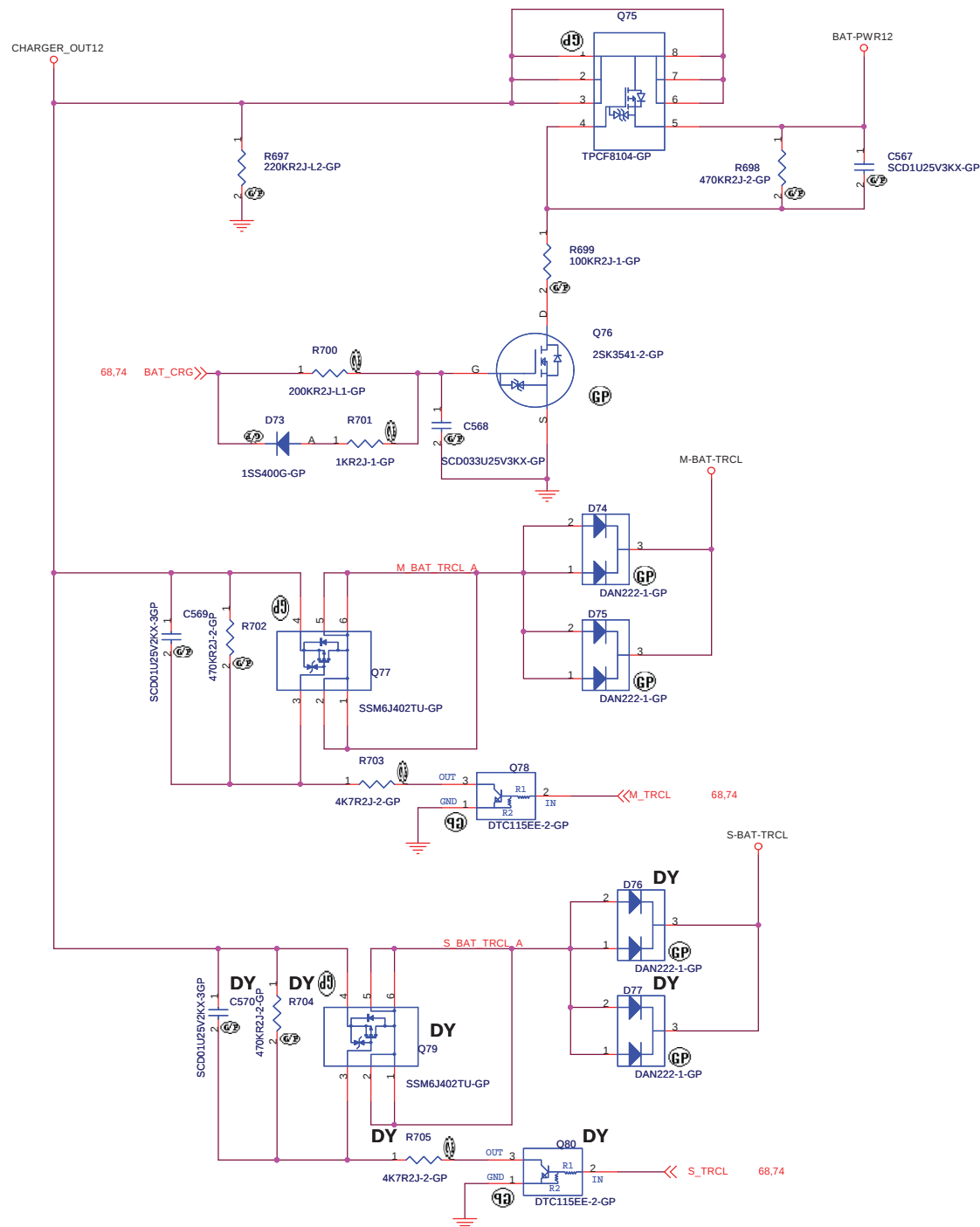


<Core Design>

緯創資通 **Wistron Corporation**
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title			
EEPROM/SMBUS SW			
Size	Document Number	Rev	
Custom		SD	
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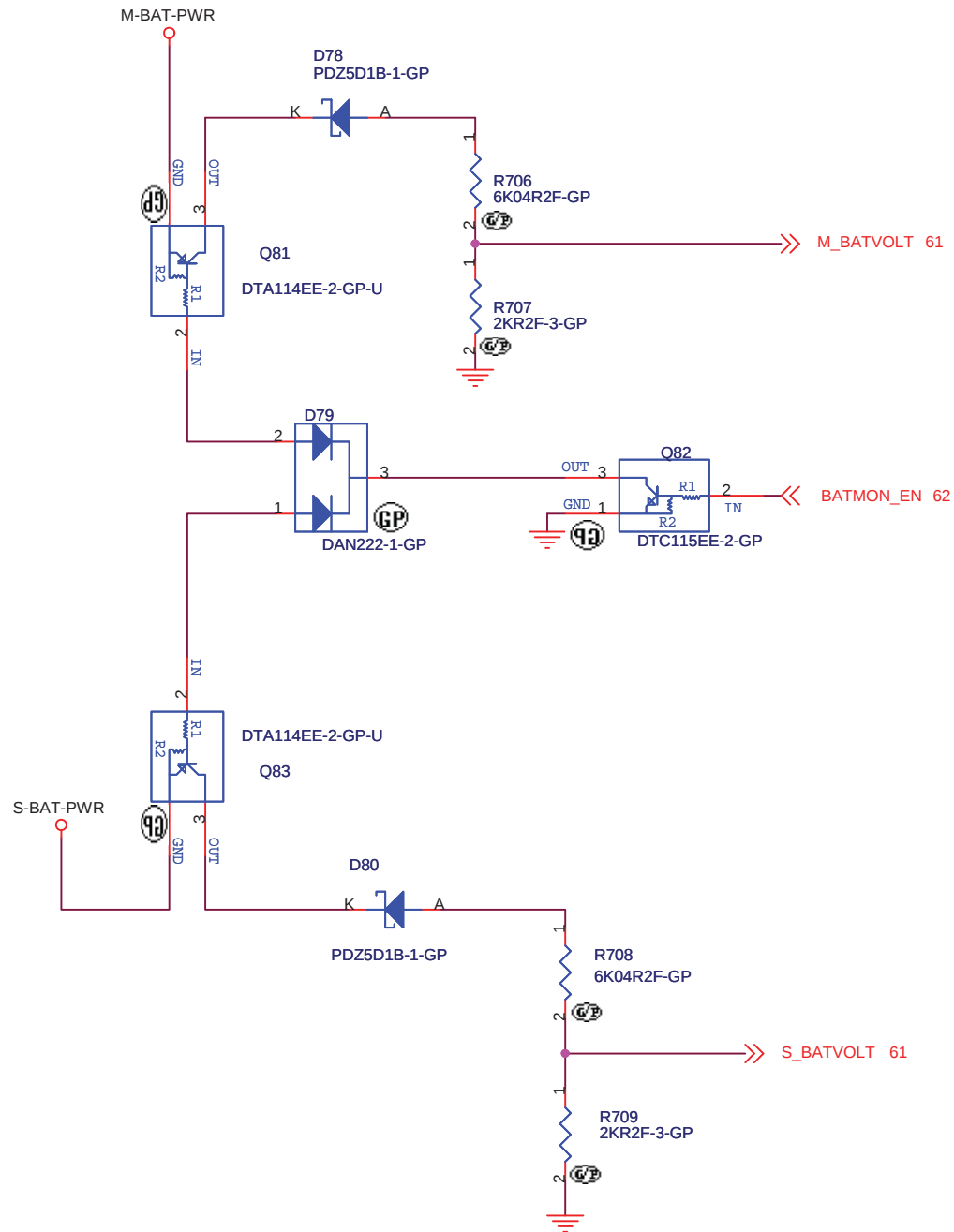


<Core Design>

緯創資通 Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title		
CHARGER SELECT		
Size A3	Document Number Dasher-1	Rev SD
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$V_{OUT} = 0.249 (V_{BAT} - 5)$



<Core Design>

緯創資通

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

Title

BATTERY MONITOR

Size
A4

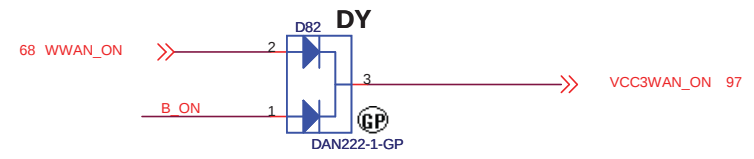
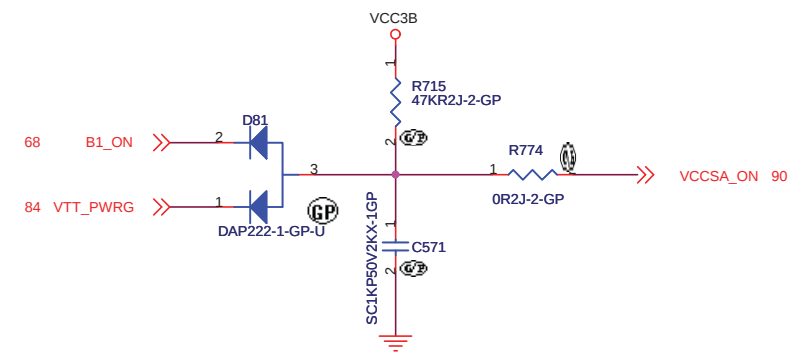
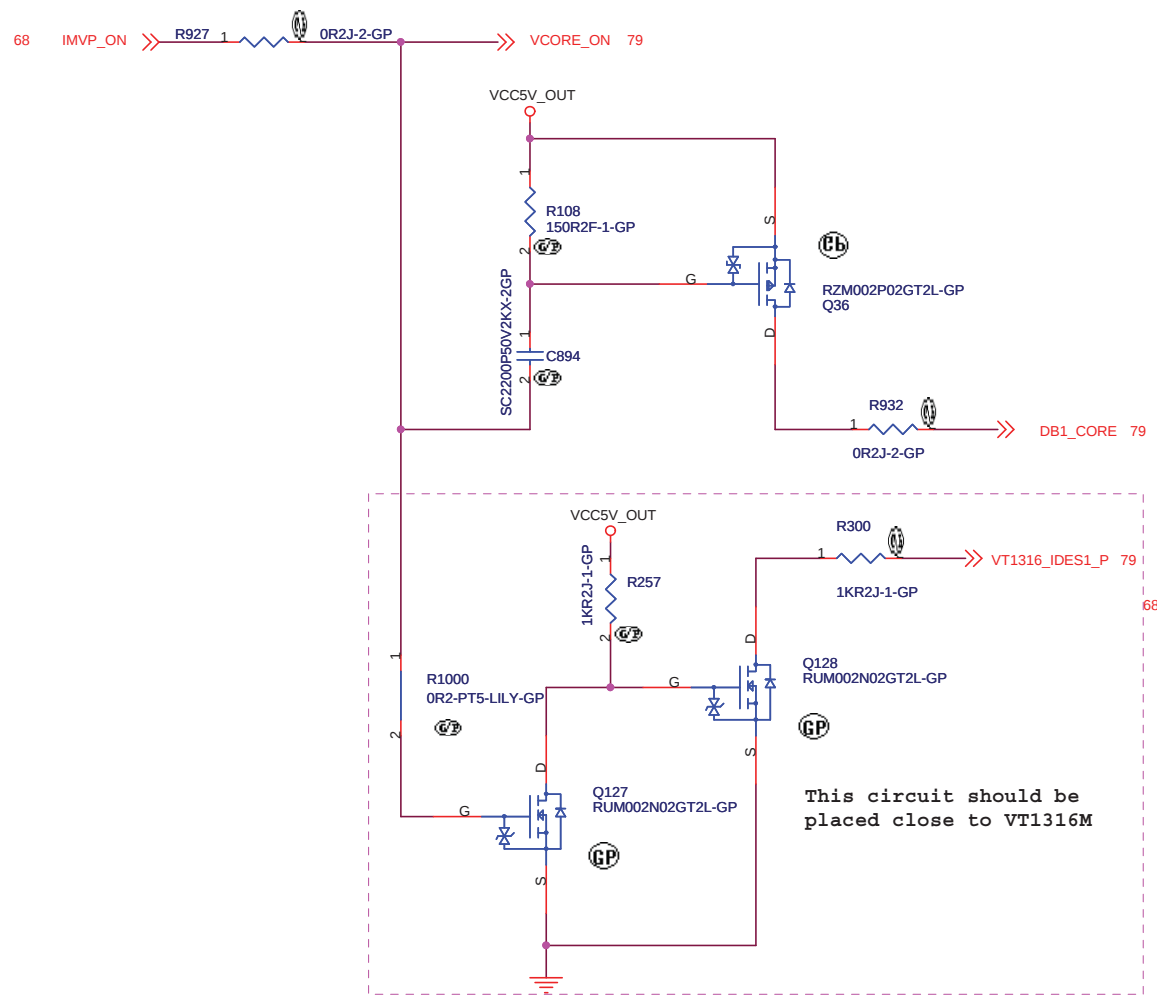
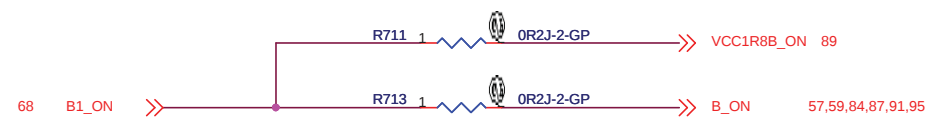
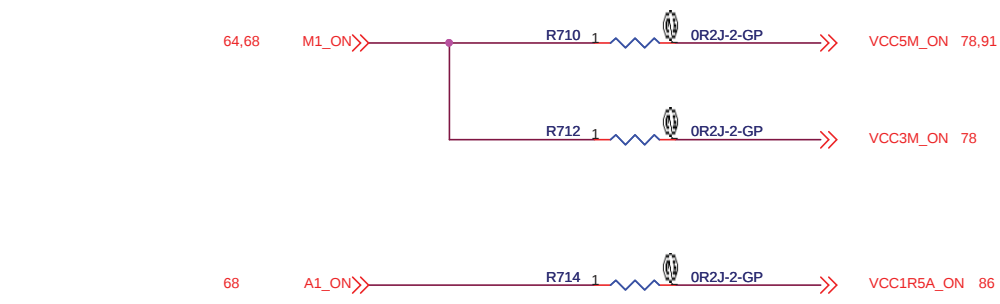
Document Number

Dasher-1

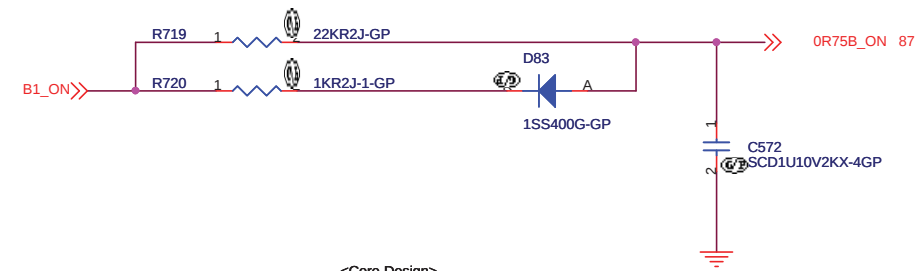
Rev
SD

Date: Monday, January 10, 2011

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CONSTANT CONTNECT	YES	NO
D82	ASM	NO-ASM



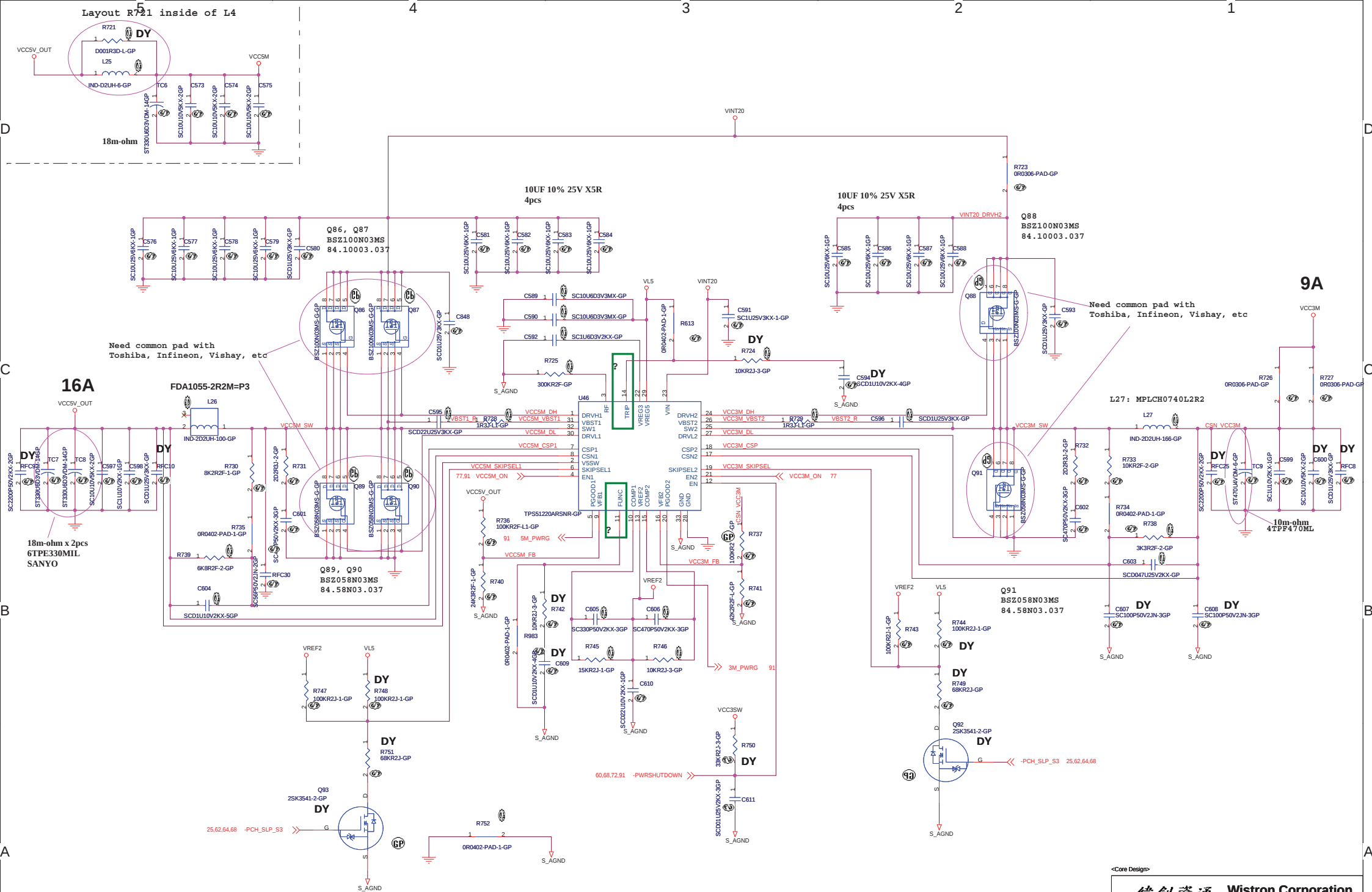
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緯創資通

Wistron Corporation

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

Title		
POWER SEQUENCE		
Size	Document Number	Rev
Custom	Dasher-1	SD
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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
R866 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	1000pF	1000pF	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	CIN
C636	10uF	10uF	10uF	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	2.2uF	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 CPU side
C21	10uF	10uF	10uF	10uF	
C22	10uF	22uF	22uF	22uF	
C23	10uF	22uF	22uF	22uF	
C933	10uF	22uF	22uF	22uF	
C934	10uF	10uF	10uF	10uF	

B
L
A
N
K

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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DC-DC GFXCORE

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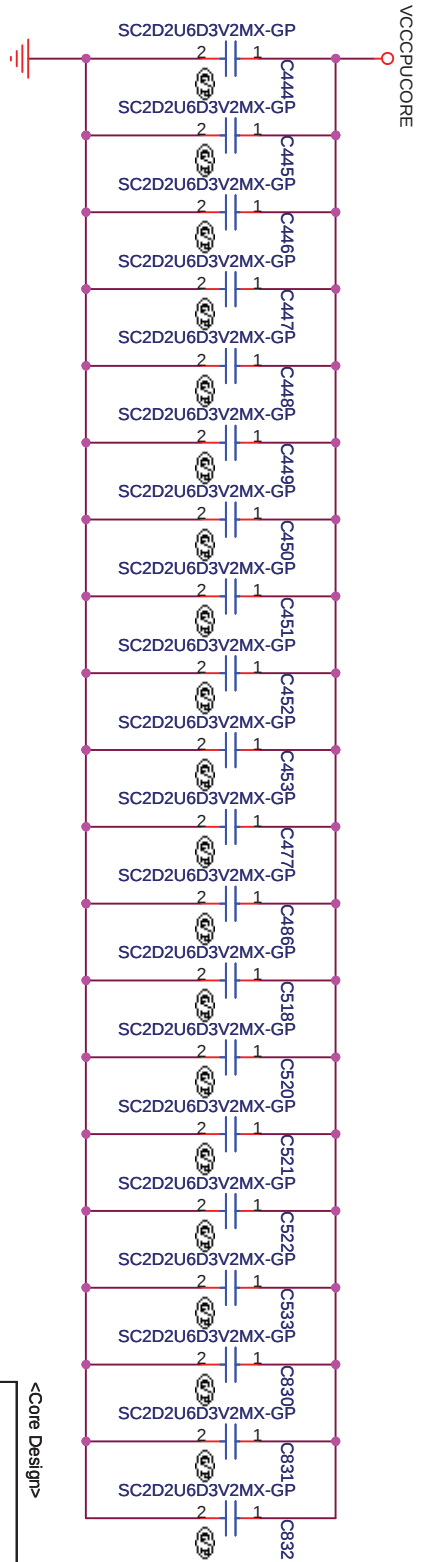
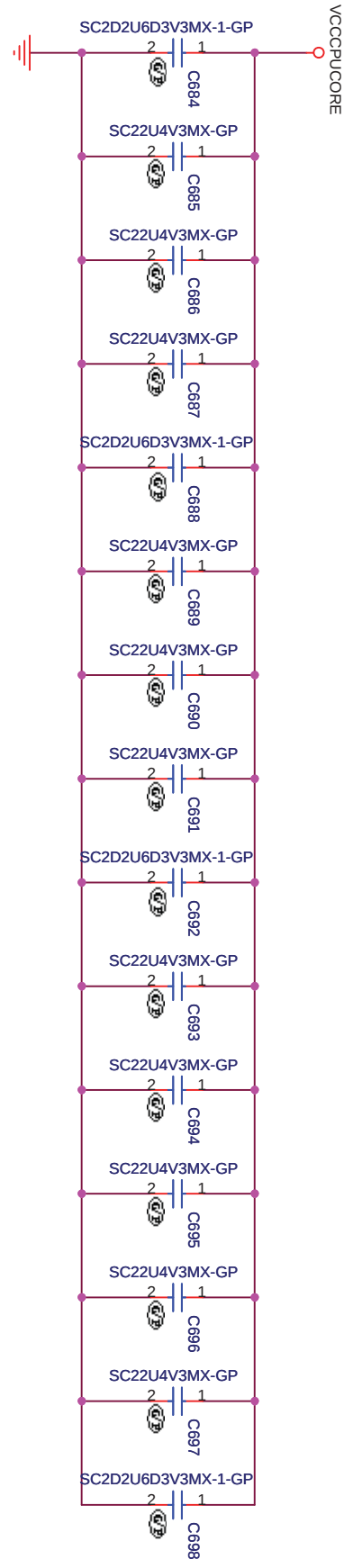
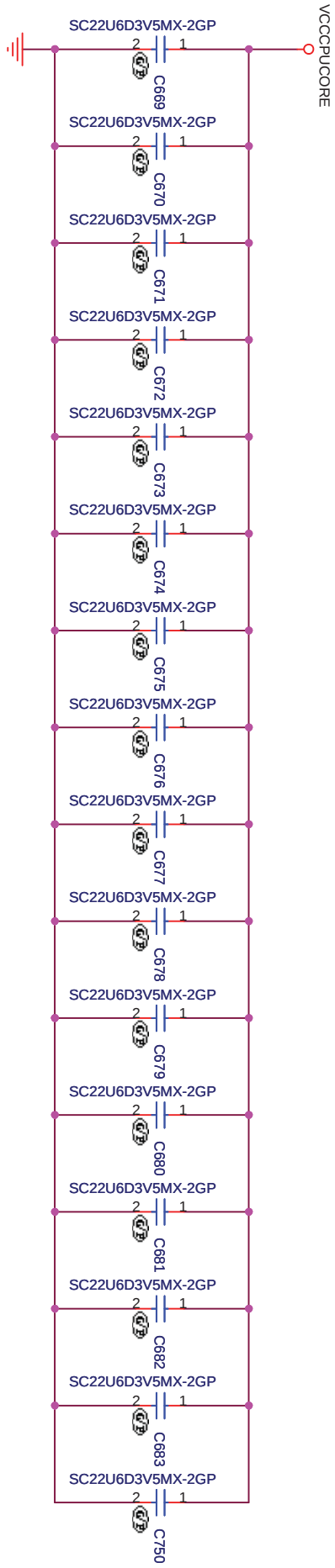
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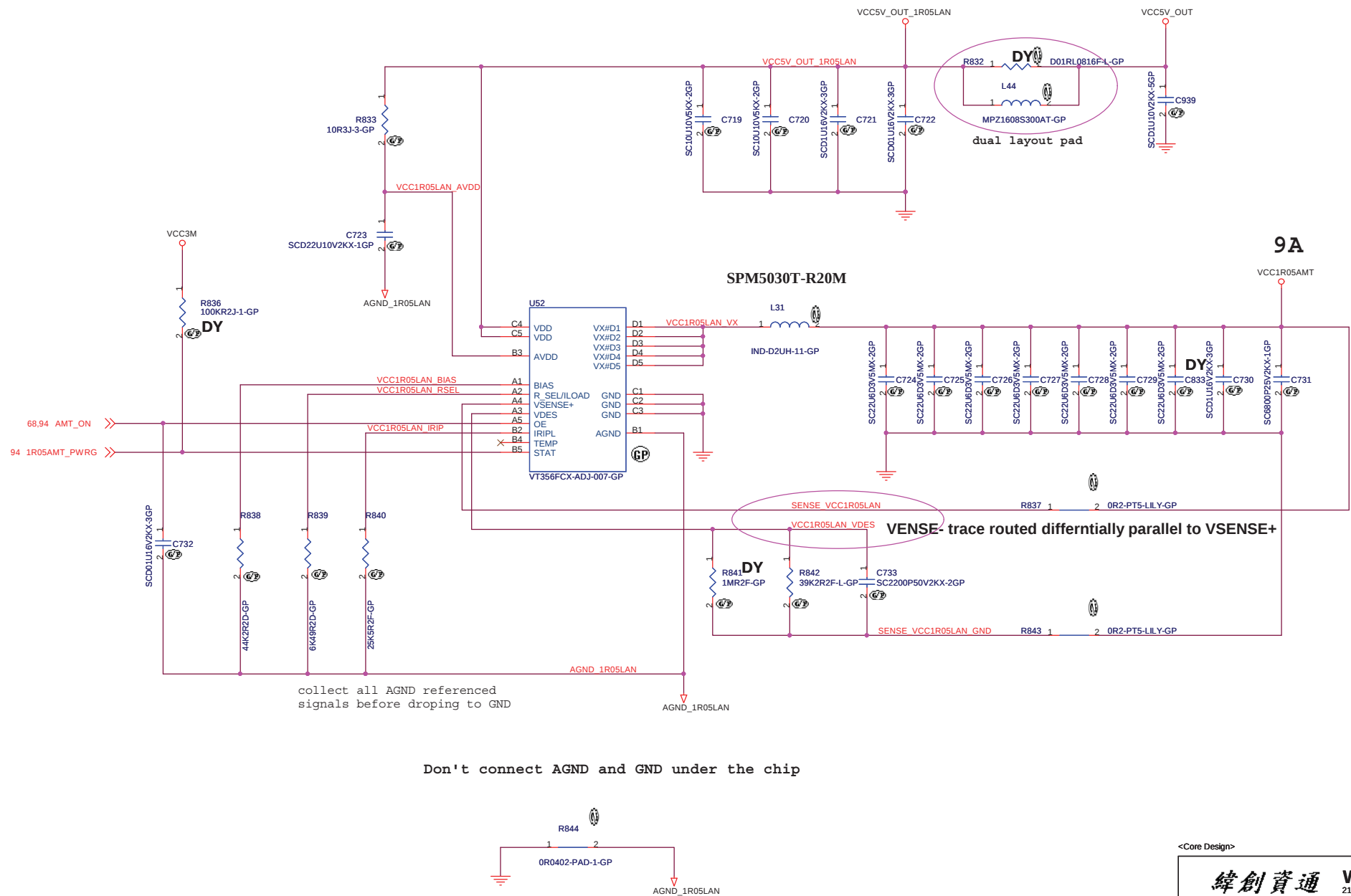


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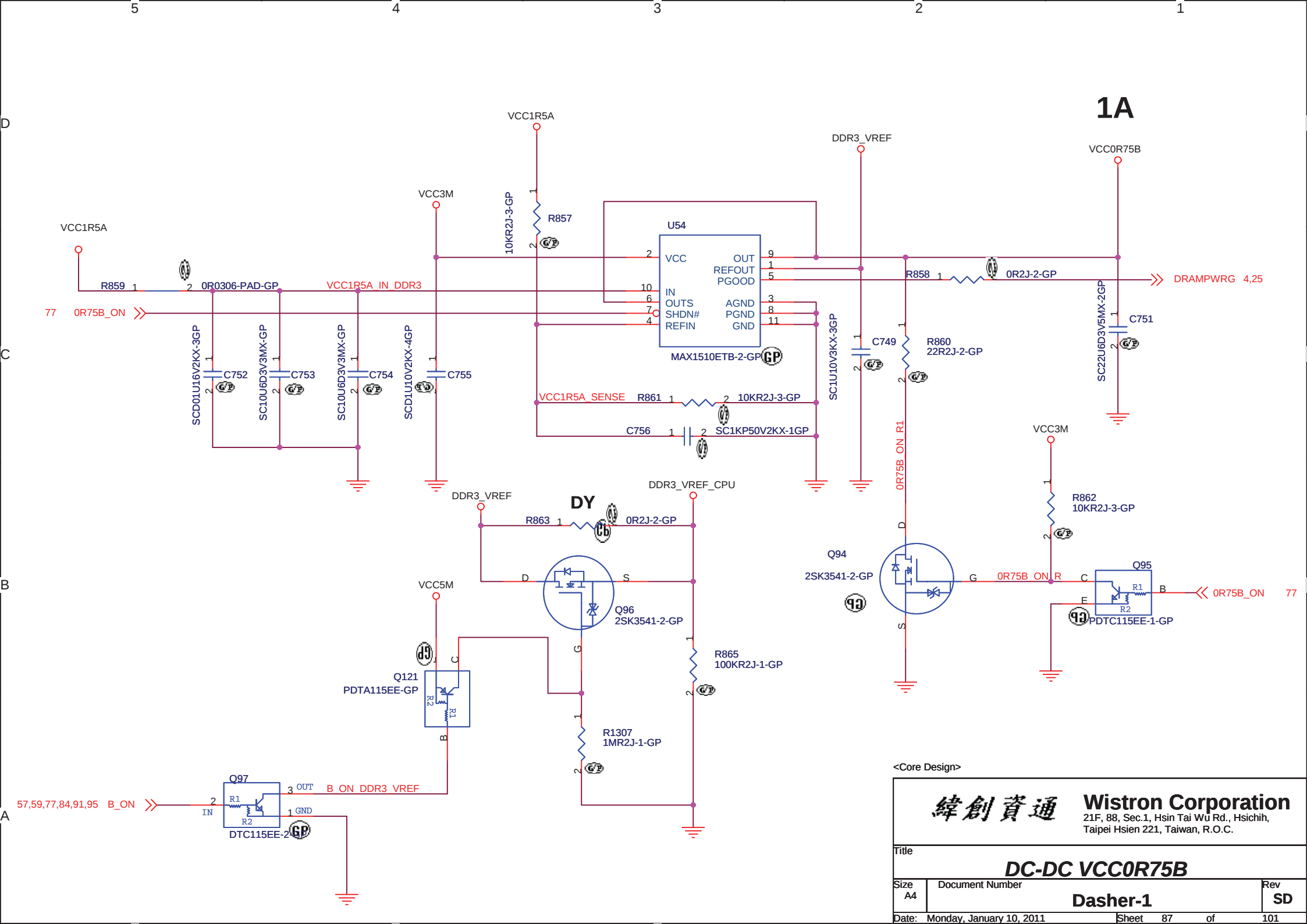


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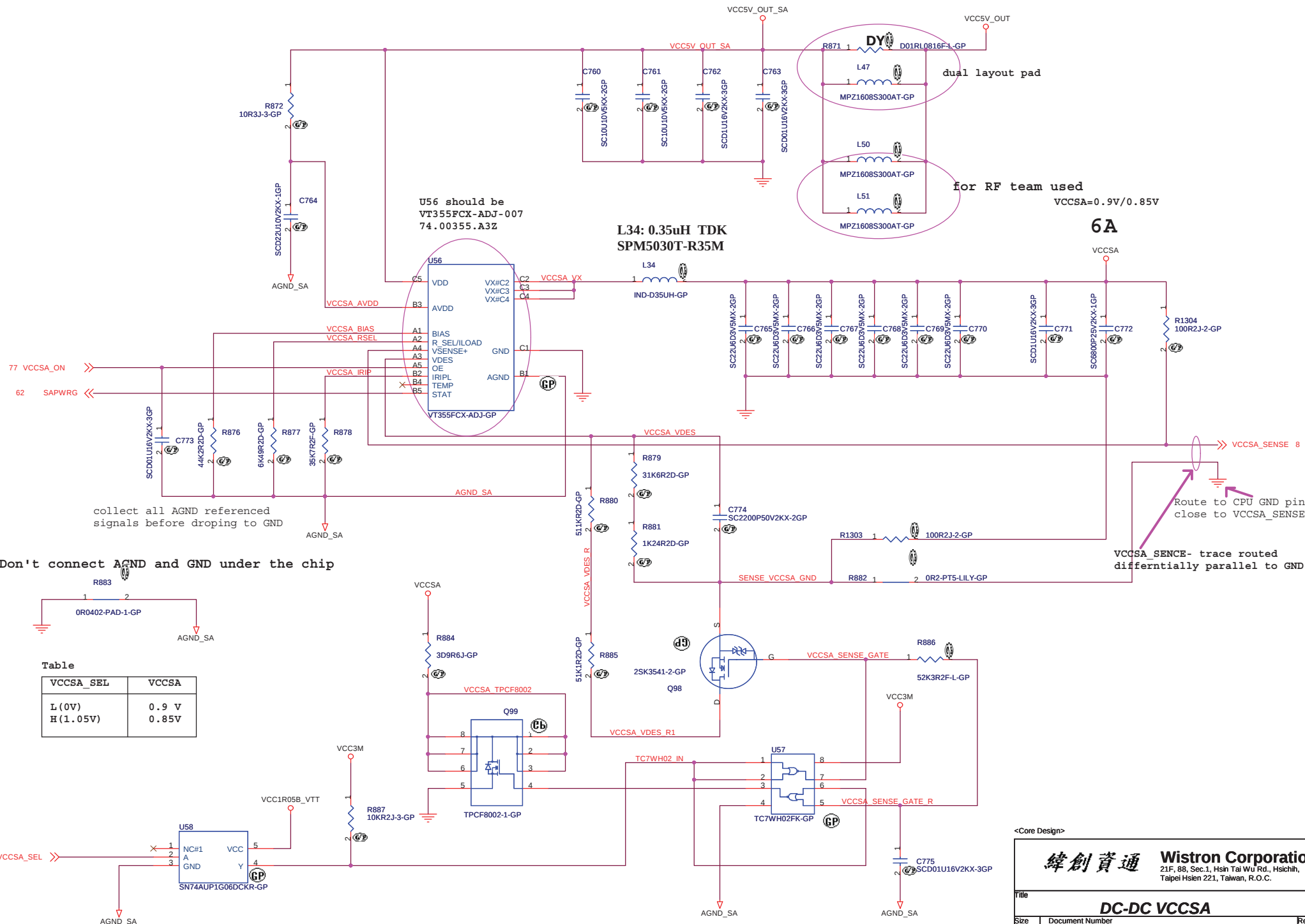
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collect all AGND referenced signals before dropping to GND

Don't connect AGND and GND under the chip

Table

VCCSA_SEL	VCCSA
L (0V)	0.9 V
H (1.05V)	0.85V

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DC-DC VCCSA

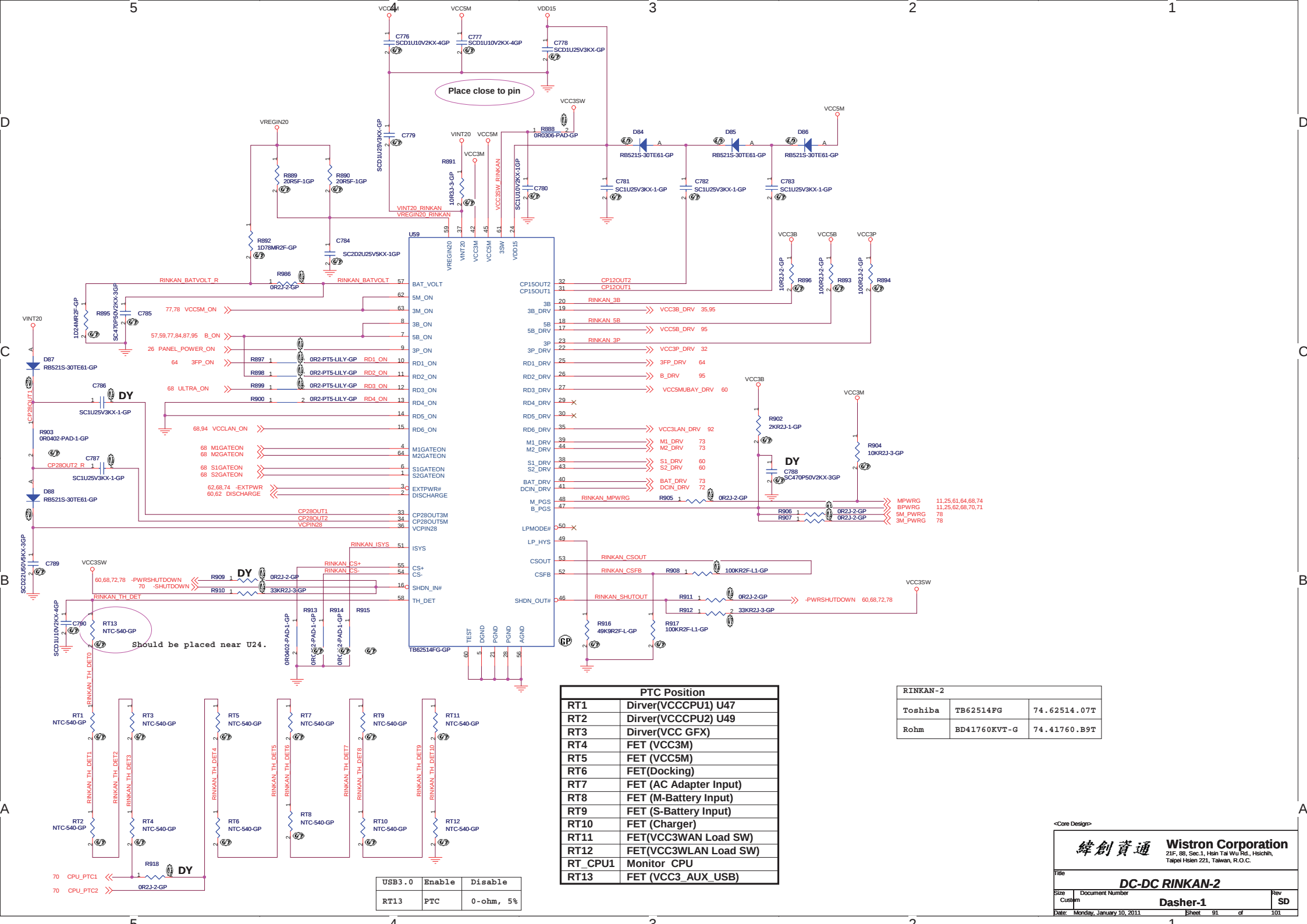
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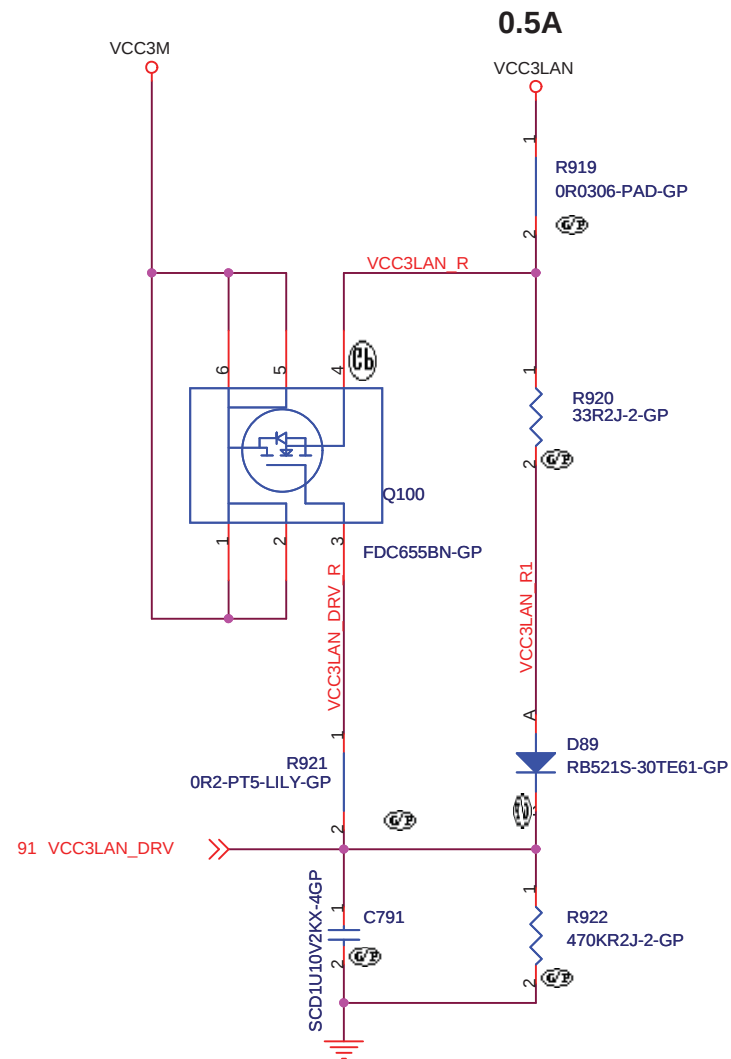
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PTC Position	
RT1	Dirver(VCCCPU1) U47
RT2	Dirver(VCCCPU2) U49
RT3	Dirver(VCC GFX)
RT4	FET (VCC3M)
RT5	FET (VCC5M)
RT6	FET(Docking)
RT7	FET (AC Adapter Input)
RT8	FET (M-Battery Input)
RT9	FET (S-Battery Input)
RT10	FET (Charger)
RT11	FET(VCC3WAN Load 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.B9T

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



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Size
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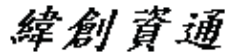
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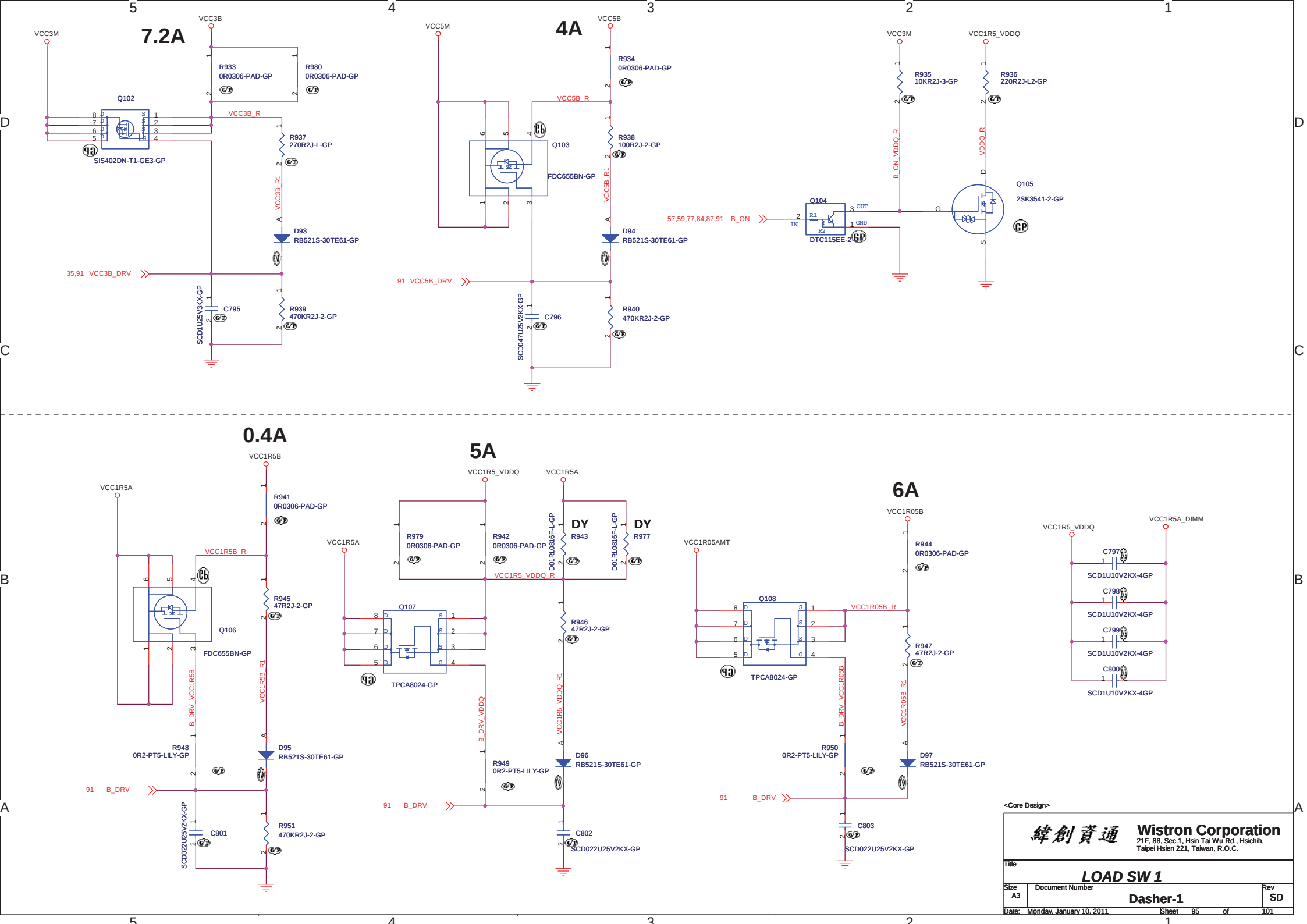
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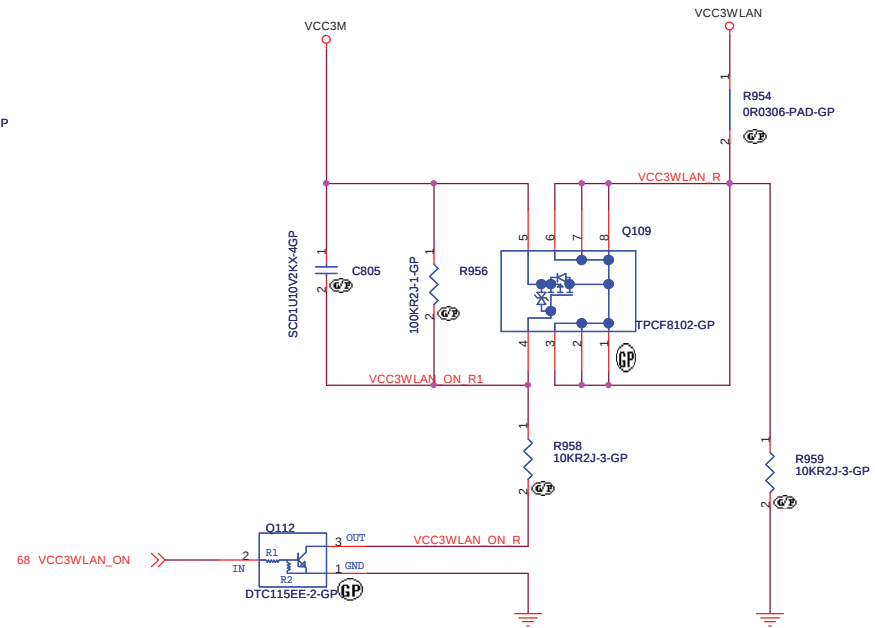
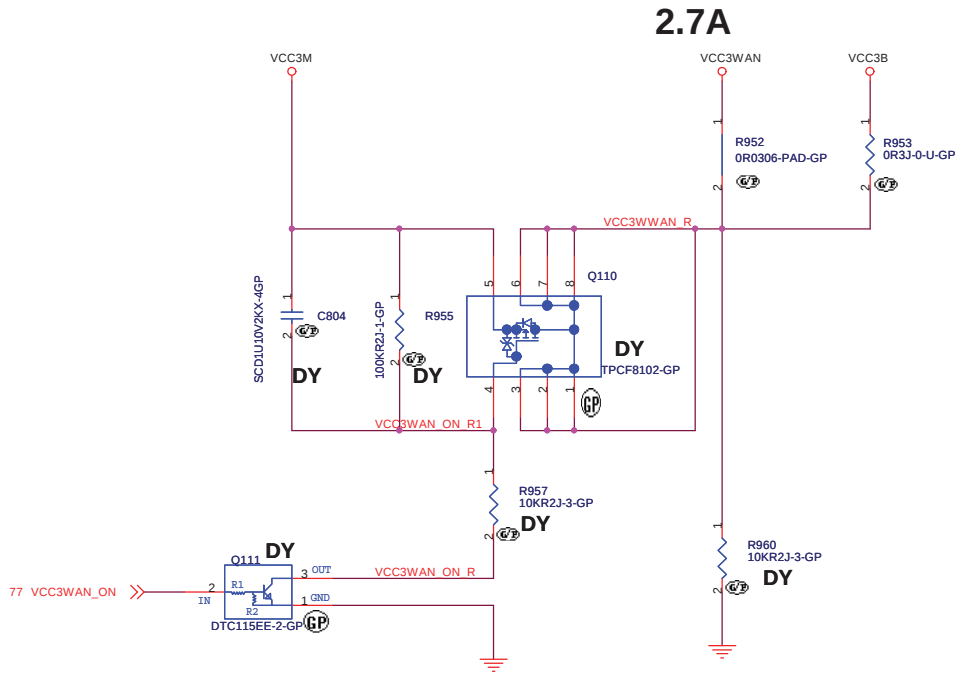
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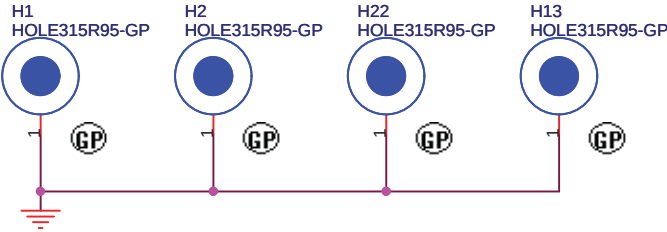


Constant Secure	YES	NO
R953	DY	ASM
C804		
R955		
Q110		
R957	ASM	DY
Q111		
R960		
R952	ASM	ASM

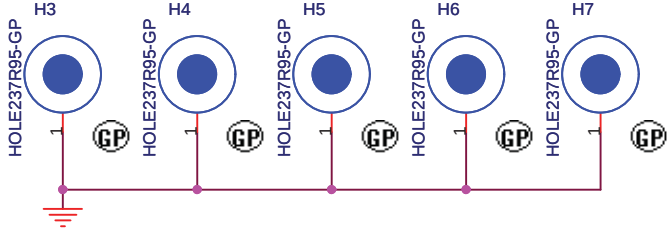
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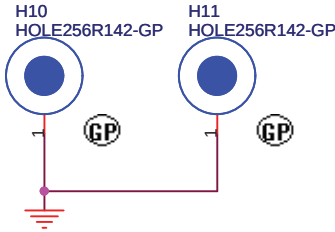
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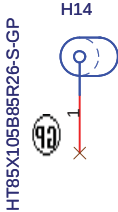
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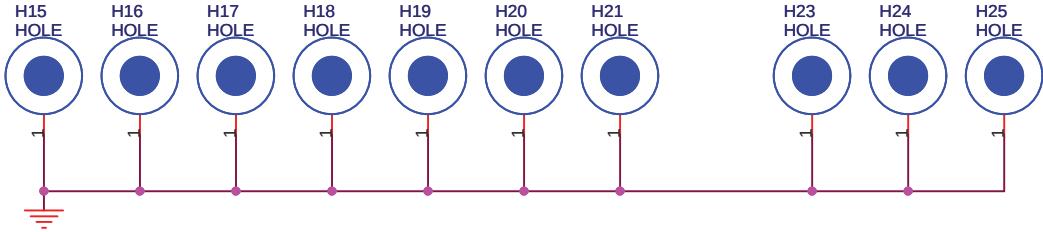
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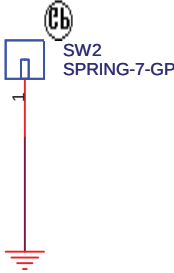
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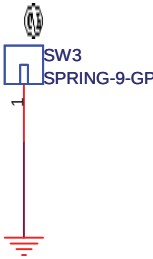
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34.49U26.001
GND pad for docking connector



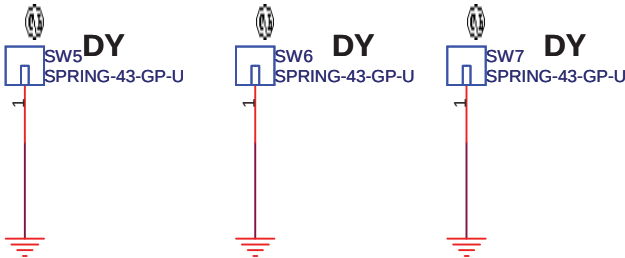
34.49U23.001
GND pad for docking connector



34.15J03.001
spring for EMI



34.15J03.001
spring for RF (SW5~SW7)



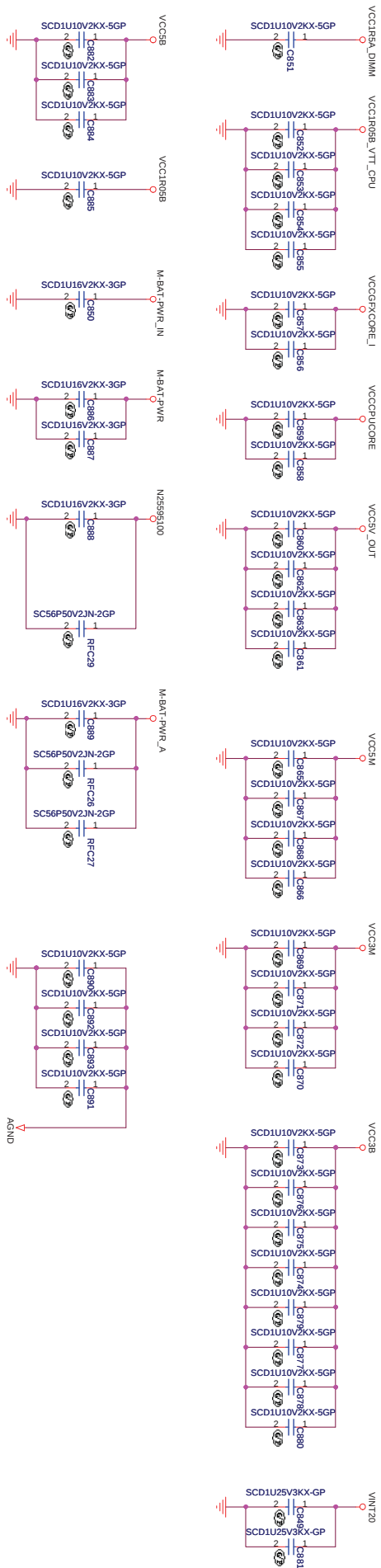
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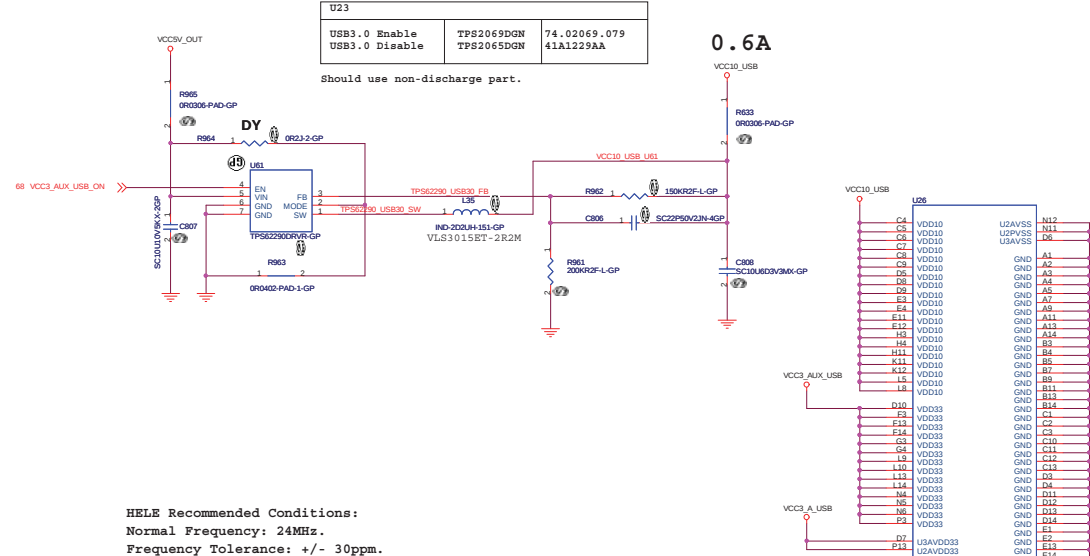
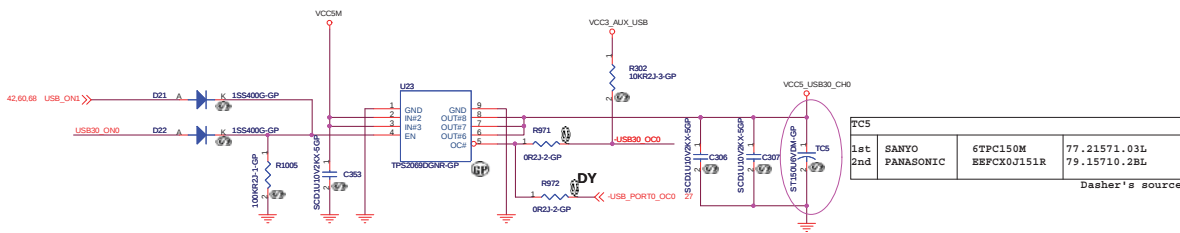
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HOLES/GND/PADS			
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RF decoupling caps

named as RFCxxx

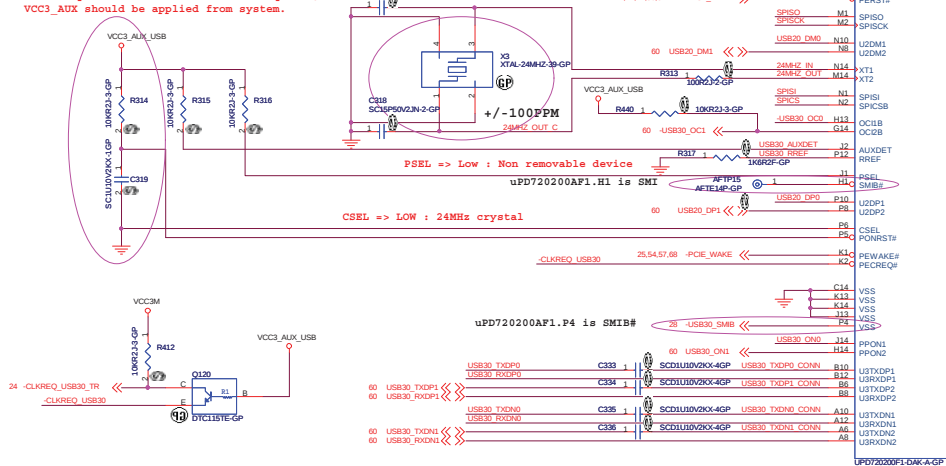
Long power trace EMI decoupling caps



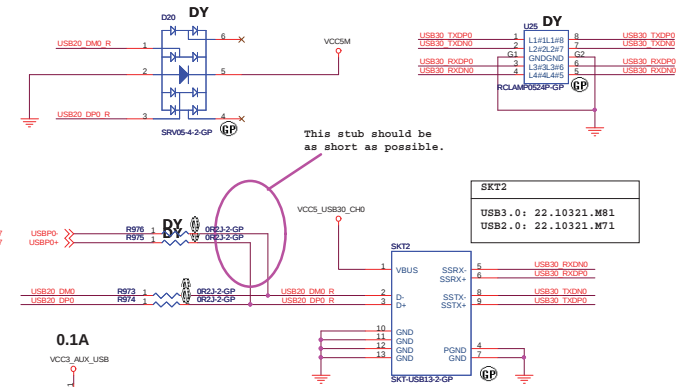


HELE Recommended Conditions:
Normal Frequency: 24MHz.
Frequency Tolerance: +/- 30ppm.
Load Frequency: 12pF.
Effective Series Resistance: 50-ohm.
Effective Shunt Capacitance: 2pF.

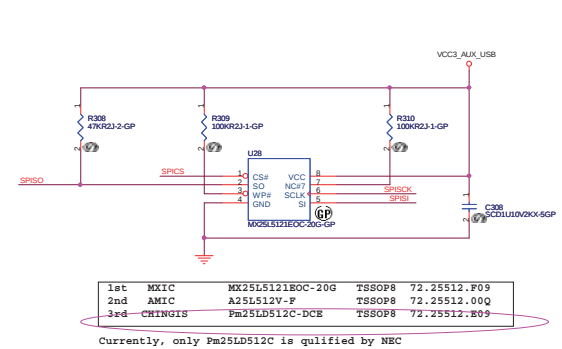
If Wakeup function from D3 cold is required,
VCC3_AUX should be applied from system.



U26 should be uPD720200AF1
71.72020.D00

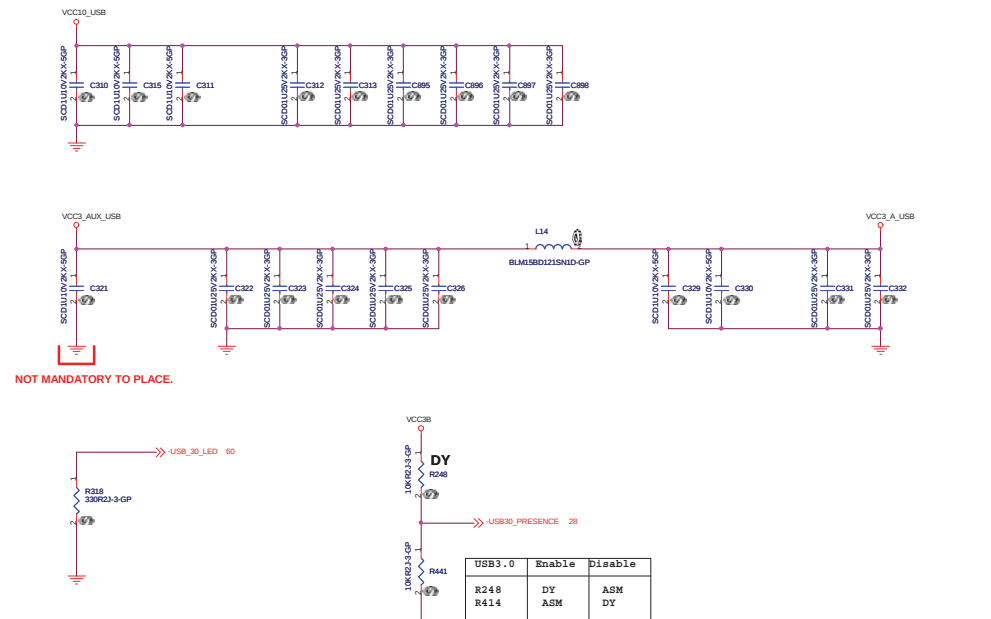


USB3.0 CONNECTOR



1st MXIC MX25L5121B0C-20G TSSOP8 72.25512.F09
2nd AMIC A25L512V-F TSSOP8 72.25512.00Q
3rd CHINGIS Fm25LD512C-DCE TSSOP8 72.25512.B09

Currently, only Fm25LD512C is qualified by NEC



NOT MANDATORY TO PLACE.

USB3.0	Enable	Disable
R248	DY	ASH
R414	ASH	DY

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	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
C330	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

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