LC55-14A AMD Schematics

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 Ceremic, 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

Properties

DY	***DUMMY, NOT ASM, not assemble***
DDP/ SDP	***Memory down BOM Control***
DDR4_CTRL	***Memory down setting (SDP / DDP)***
MEM_IDx_x	***Memory ID for SW Team (BOM Control)***
PCB_ID	***PCB ID for SW Team (PCB version)***
SKU_ID	***SKU ID for SW Team (Model ID)***
HDT	***Debug Connector***
PSL/ Non PSL	***Support / Non Support KBC Power Switched Logic***
AOU/NON_AOU	***Support / Non Support Always On USB***
EMMC	***Embedded Multi Media Card***
MS	***Modern stand by***
SHARE_ROM NON_SHARE	***SPI ROM BOM Control***
7718	***thermal sensor select***
PTC	***Positive Temperature Coefficient circuit***
WOV	***Wake On Voice***

BOM1

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Date: Wednesday, March 04, 2020
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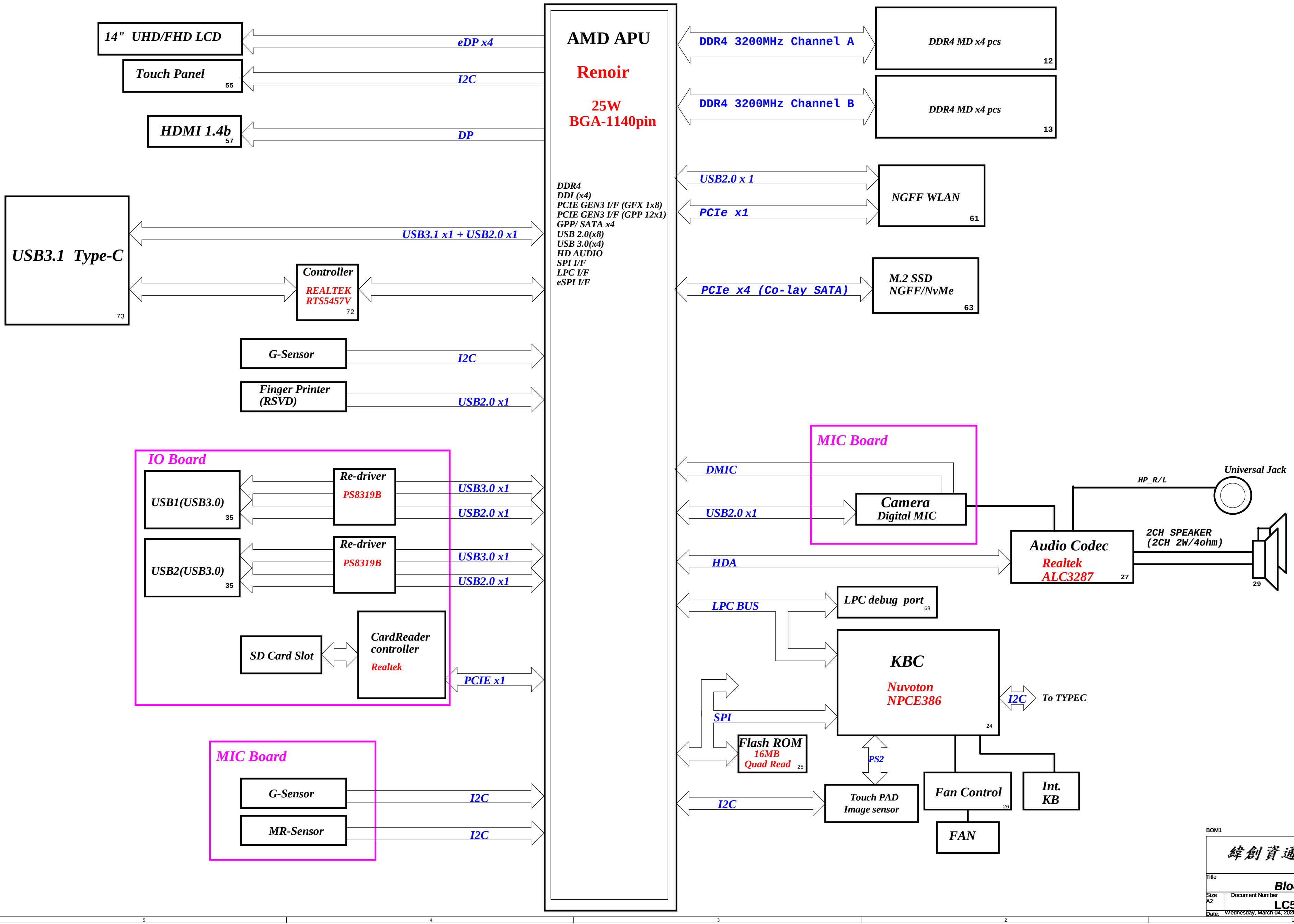
Project code: 4PD0K101A001
PCB P/N: 19793
Revision: -1

LC55 AMD Block Diagram

IO/Sensor BD



PCB Layer Stackup

L1 : Signal
L2: GND\POWER
L3: Signal
L4: Signal
L5: GND\POWER
L6: Signal
L7: GND\POWER
L8: Signal

Battery Charger/Selector BQ25700ARSNR 44	
19V_AD_JK	19V_DCBATOUT BT+
System DC/DC TPS51395PRJER 45	
19V_DCBATOUT	5V_S5 5V_AUX_S5
System DC/DC TPS51393PRJER 45	
19V_DCBATOUT	3D3V_S5 3D3V_AUX_S5
CPU_VCORE RT3663BMGQW 46	
DC/DC VCCCPUCORE RT3663BMGQW 47	
19V_DCBATOUT	1V_CPU_CORE
DC/DC VCCCPUCORE RT3663BMGQW 48	
19V_DCBATOUT	1V_VDDCR_SOC
DC/DC 1D2V_S3 RT8231CGQW 51	
19V_DCBATOUT	1D2V_S3
DC/DC 0D6V_VREF_S0 RT8231AGQW 51	
1D2V_S3	0D6V_VREF_S0
DC/DC 2D5V_S5 APL5934KAI-TRG 51	
3D3V_S5	2D5V_S3
DC/DC 0D75V_S5 RT5797ALGQW 52	
3D3V_S5	0D75V_S5
DC/DC 0D75V_S0 RT5797ALGQW 52	
3D3V_S5	0D75V_S0

BOM1

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Title
Block Diagram

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SSID = PCH

SSD1 M.2 (PCIE)

63	SSD_PCIE_RX_P0
63	SSD_PCIE_RX_N0
63	SSD_PCIE_RX_P1
63	SSD_PCIE_RX_N1
63	SSD_PCIE_RX_P2
63	SSD_PCIE_RX_N2
63	SSD_SATA_RX_P3
63	SSD_SATA_RX_N3
63	SSD_PCIE_TX_CON_P0
63	SSD_PCIE_TX_CON_N0
63	SSD_PCIE_TX_CON_P1
63	SSD_PCIE_TX_CON_N1
63	SSD_PCIE_TX_CON_P2
63	SSD_PCIE_TX_CON_N2
63	SSD_SATA_TX_CON_P3
63	SSD_SATA_TX_CON_N3

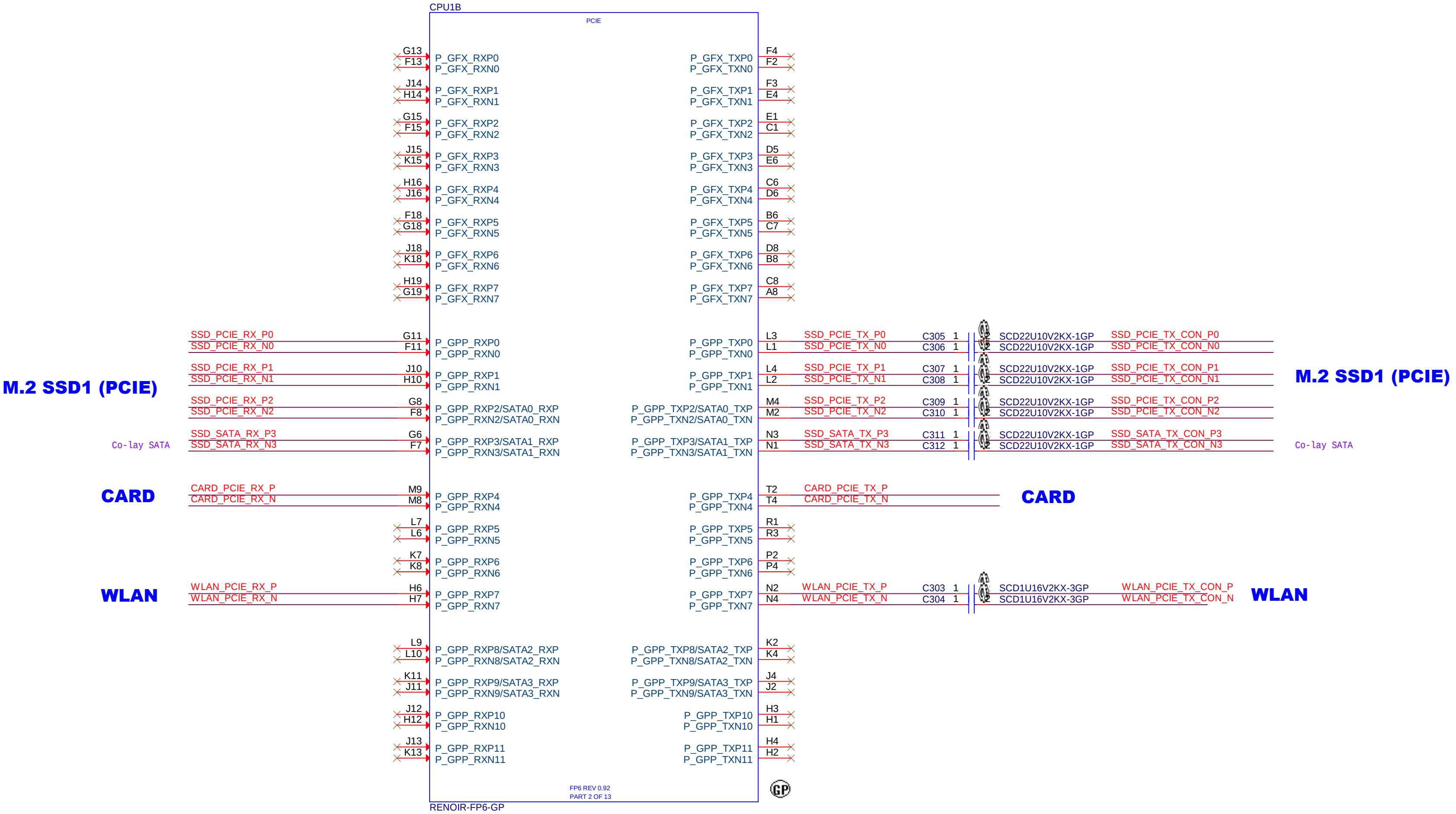
CARD

66	CARD_PCIE_RX_N
66	CARD_PCIE_RX_P
66	CARD_PCIE_TX_N
66	CARD_PCIE_TX_P

WLAN

61	WLAN_PCIE_RX_N
61	WLAN_PCIE_RX_P
61	WLAN_PCIE_TX_CON_N
61	WLAN_PCIE_TX_CON_P

GFX & GPP, 85Ω



ZZ.00CPU.421

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CPU (PCIE/SATA)

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D

C

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B

A

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Title
CPU (RSVD)

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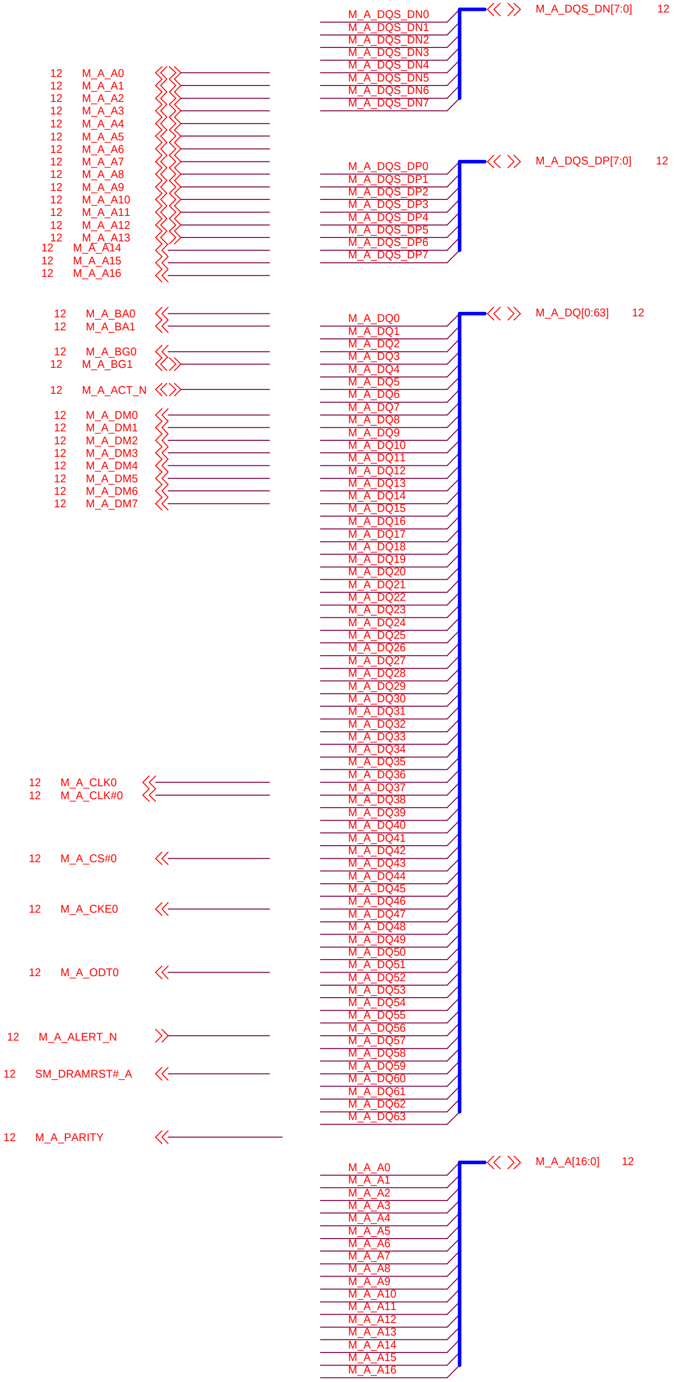
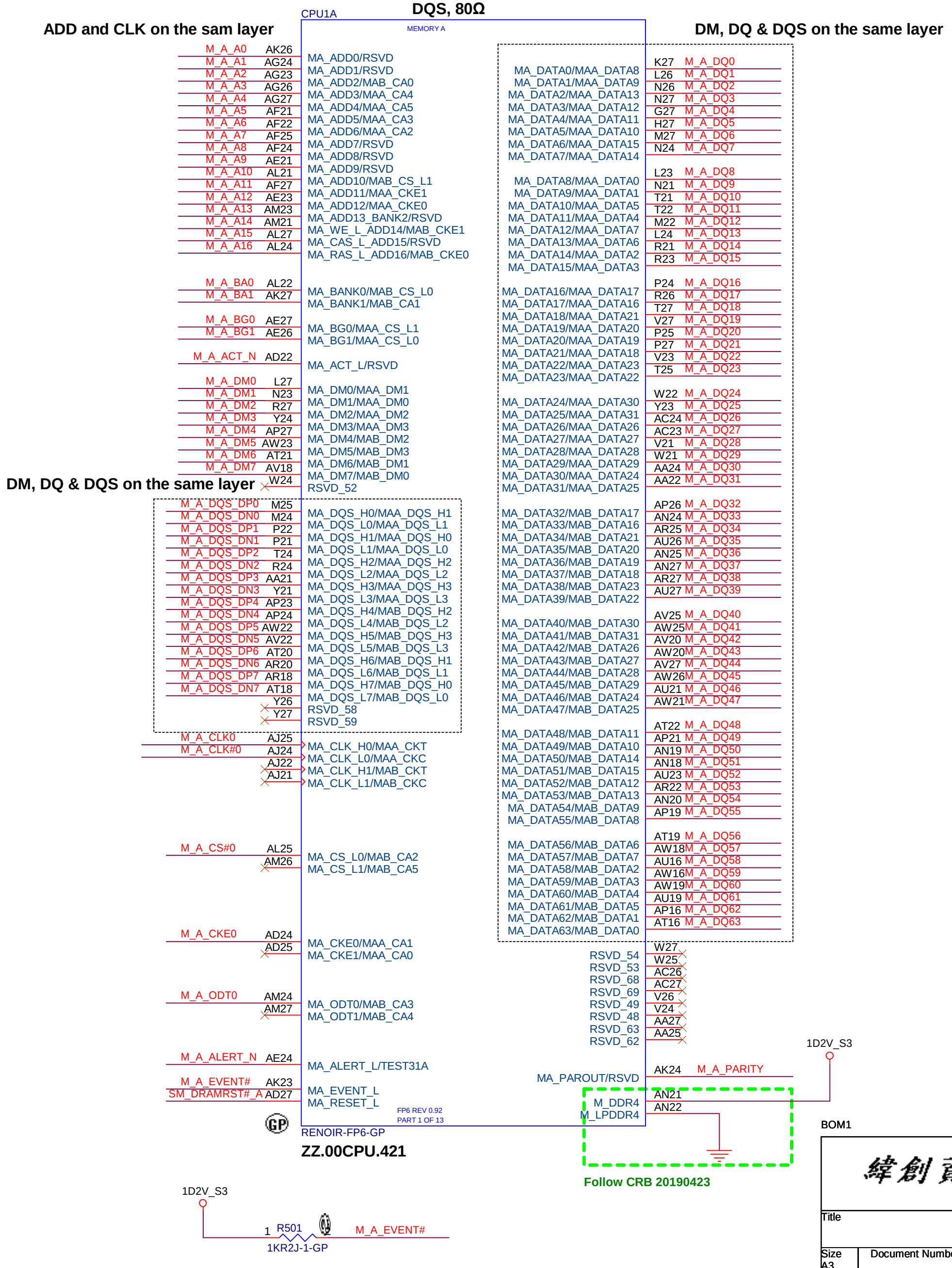
SSID = CPU



APU Type 2 does not support Channel A

ADD, CMD, CTL, 40Ω
DATA CHECK, 50Ω
Misc. 40~60Ω
DDR CLK, 72Ω
DQS, 80Ω



BOM1

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Title		
	CPU (DDR4_CHA)	
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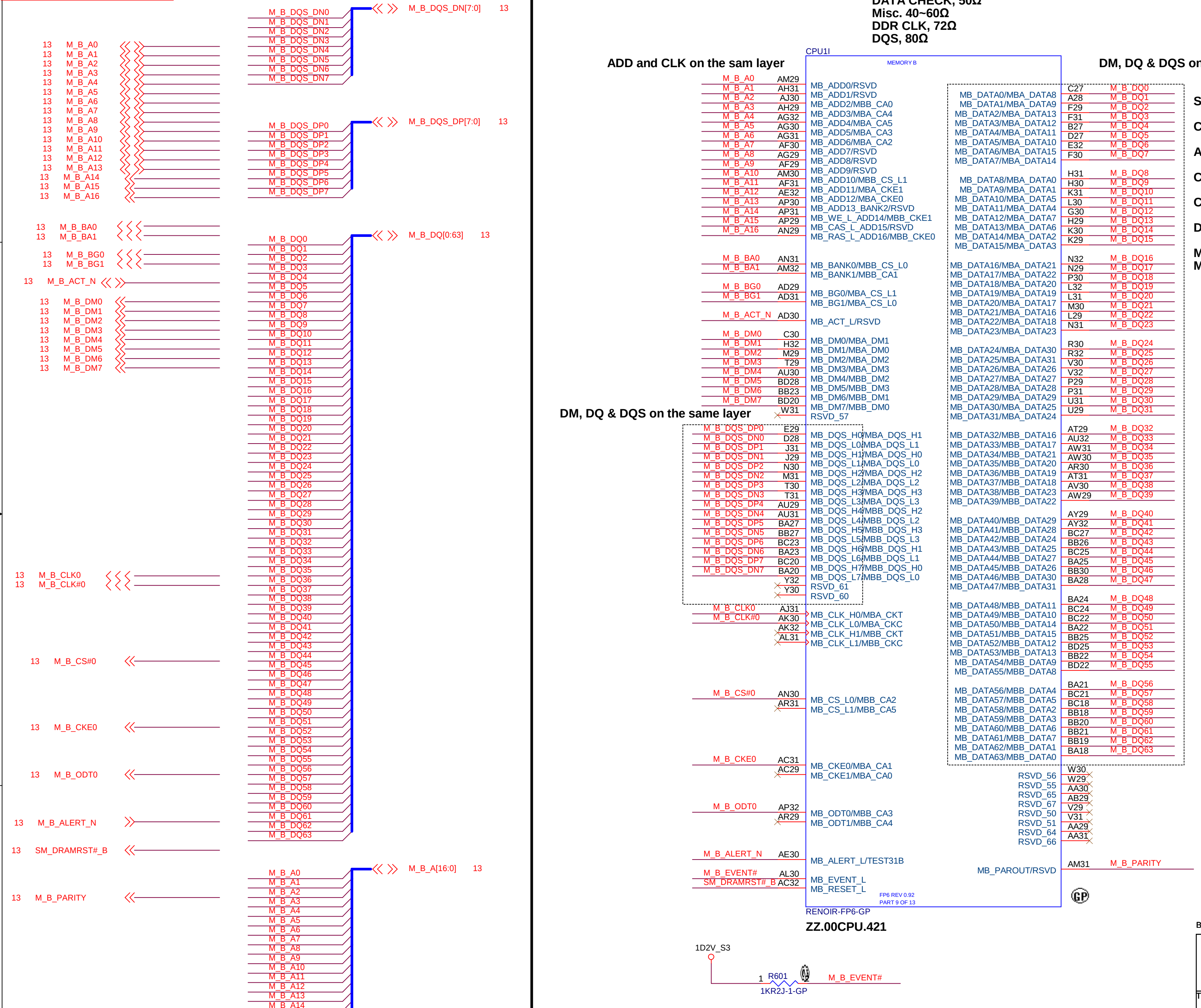
SSID = CPU

ADD, CMD, CTL, 40Ω
DATA CHECK, 50Ω
Misc. 40~60Ω
DDR CLK, 72Ω
DQS, 80Ω

ADD and CLK on the sam layer

DM, DQ & DQS on the same layer



Signal GRP	Signal			
Clocks	CLK			
Address	ADD	BANK	BG	
Command	RAS_L	CAS_L	WE_L	ACT
Control	CKE	ODT	CS_L	
Data	Data	DM	DQS	
Misc. M_PAROUT	M_RESET_L	M_EVENT_L	M_ALERT	

BOM1

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Title
CPU (DDR4_CHB)

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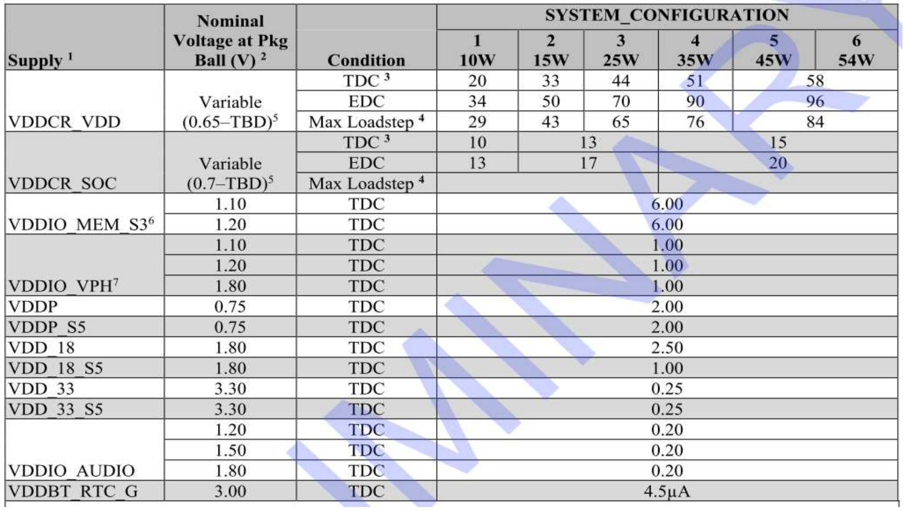
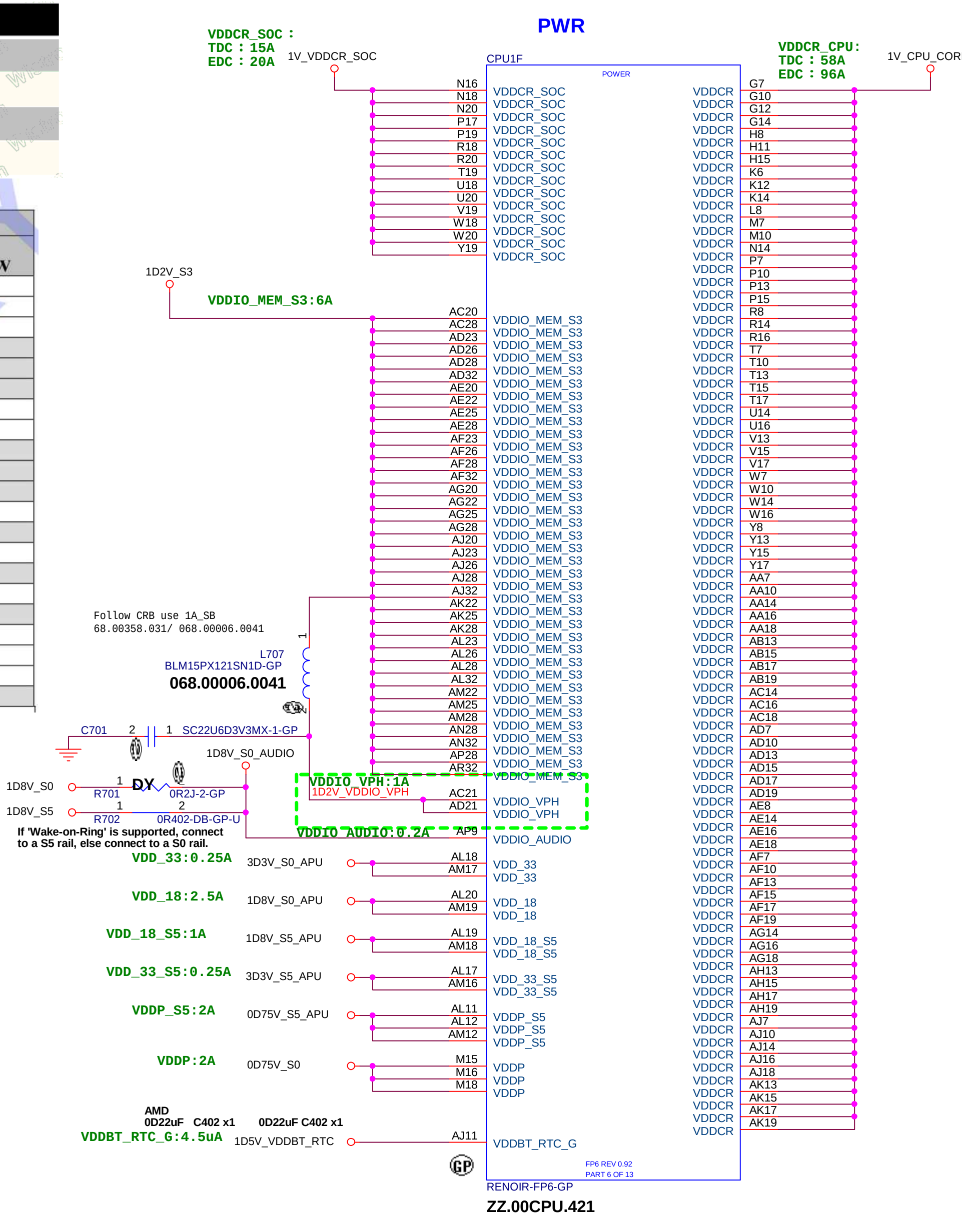
SVI	FP4 – Bristol Ridge	FP5 – Raven Ridge
Supply 1	VDDCR_CPU – x86 Cores	VDDCR_VDD – x86 Cores, GPU
Supply 2	VDDCR_NB – Rest Of Chip	VDDCR_SOC – Rest Of Chip
Supply 3	VDDCR_GFX – GPU	N/A
Sum@15W	TDC: 56A, EDC: 87A	TDC: 45A, EDC: 58A

Table 5. FP6 Processor Voltage Supply Currents



Supply [1]	Nominal Voltage at Pkg Ball (V) [2]	Condition	SYSTEM_CONFIGURATION					
			1 10W	2 15W	3 25W	4 35W	5 45W	6 54W
VDDCR_VDD	Variable (0.65–TBD)[5]	TDC [3]	20	33	44	51	58	
		EDC	34	50	70	90	96	
		Max Loadstep [4]	29	43	65	76	84	
VDDCR_SOC	Variable (0.7–TBD)[5]	TDC [3]	10	13		15		
		EDC	13	17		20		
		Max Loadstep [4]						
VDDIO_MEM_S3[6]	1.10	TDC	6.00					
	1.20	TDC	6.00					
VDDIO_VPH[7]	1.10	TDC	1.00					
	1.20	TDC	1.00					
	1.80	TDC	1.00					
VDDP	0.75	TDC	2.00					
VDDP_S5	0.75	TDC	2.00					
VDD_18	1.80	TDC	2.50					
VDD_18_S5	1.80	TDC	1.00					
VDD_33	3.30	TDC	0.25					
VDD_33_S5	3.30	TDC	0.25					
VDDIO_AUDIO	1.20	TDC	0.20					
	1.50	TDC	0.20					
	1.80	TDC	0.20					
VDDBT_RTC_G	3.00	TDC	4.5µA					



BOM1

15.3.5 VDDIO _ VPH Power Delivery and Decoupling

VDDIO _ VPH is the dedicated supply voltage for DisplayPort 0 and PCIe phys . When DisplayPort 0 is used for eDP , the source of VDDIO _ VPH can be the same source as VDDIO _ MEM _ S 3. This allows lower power and better battery life . When DisplayPort 0 is used for DP or TMDS , the source of VDDIO _ VPH can be the same source as VDD _18.

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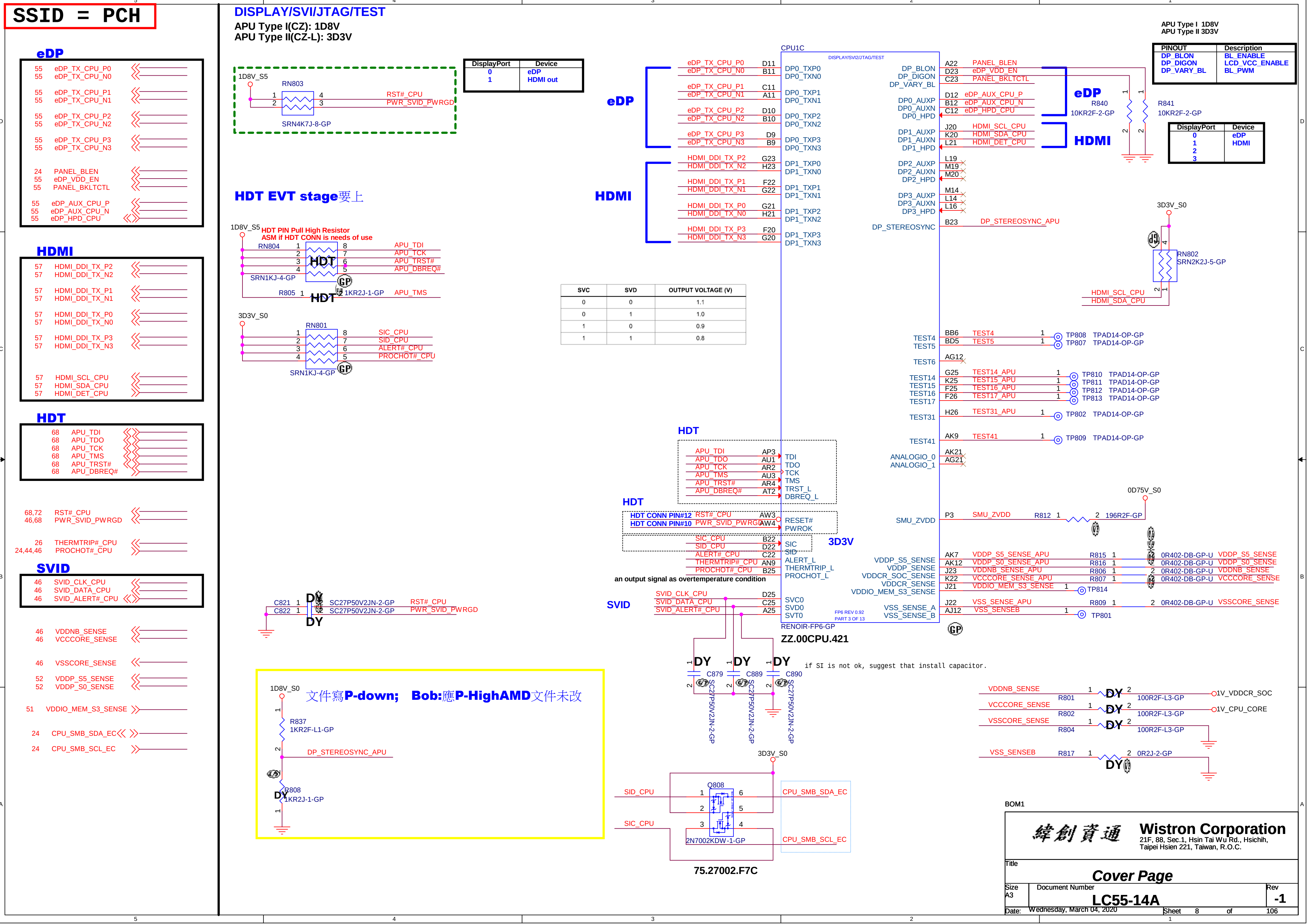

APU Type I 1D8V
APU Type II 3D3V

PINOUT	Description
DP_BLON	BL_ENABLE
DP_DIGON	LCD_VCC_ENABLE
DP_VARY_BL	BL_PWM

DisplayPort	Device
0	eDP
1	HDMI out

DisplayPort	Device
0	eDP
1	HDMI
2	
3	

SVC	SVD	OUTPUT VOLTAGE (V)
0	0	1.1
0	1	1.0
1	0	0.9
1	1	0.8

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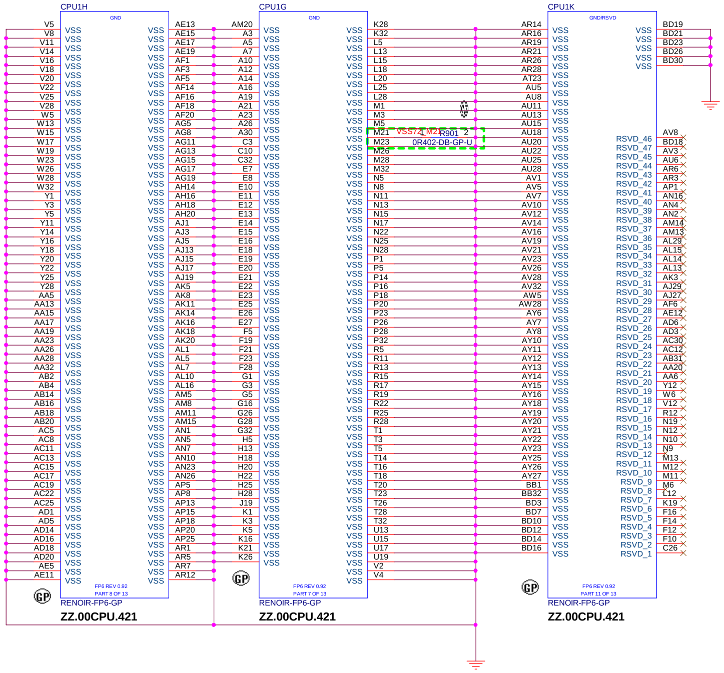
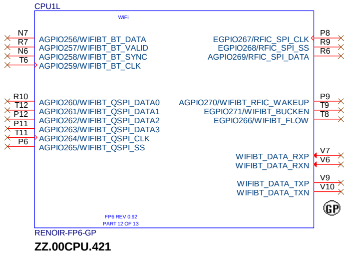
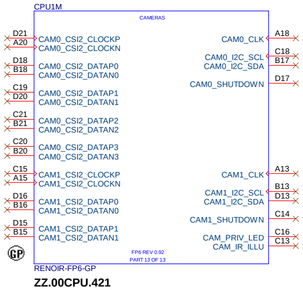
VSS







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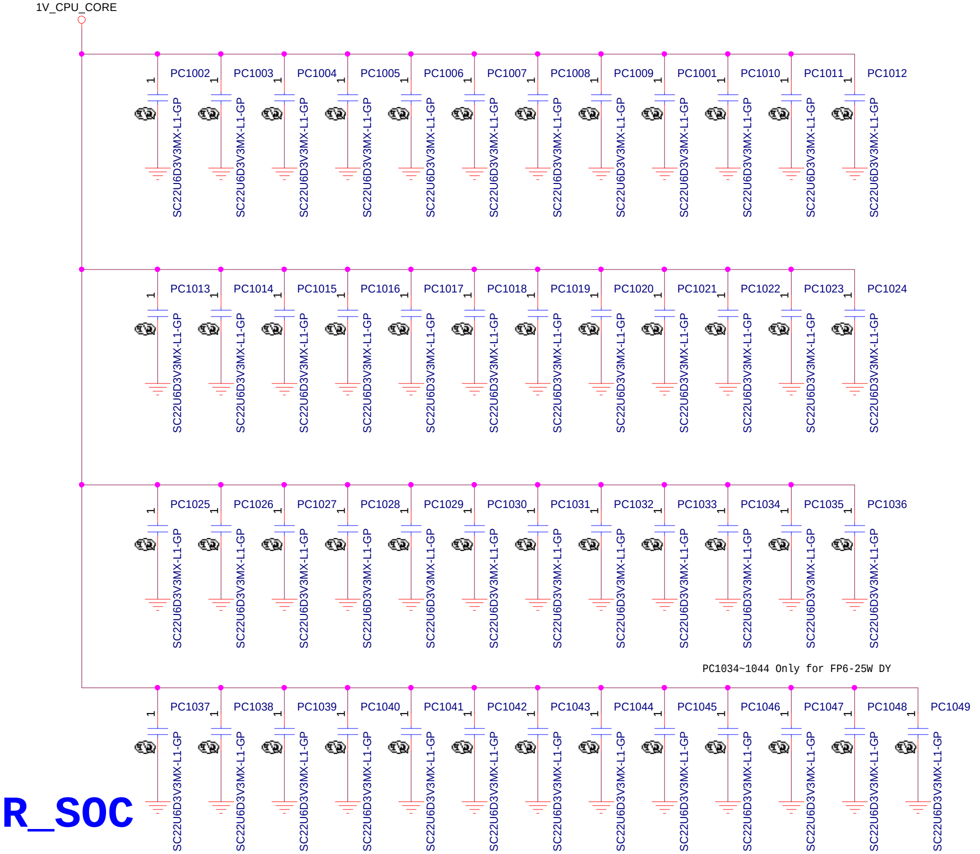
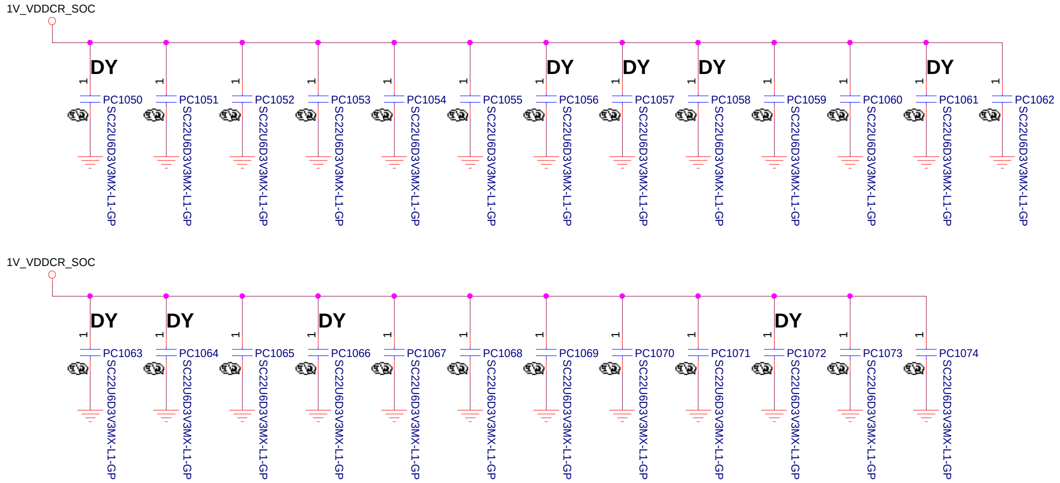
Main Func = CPU

1V_VDDCORE AMD_FP6_35W



PC1034~1044 Only for FP6-25W DY

1V_VDDCR_SOC



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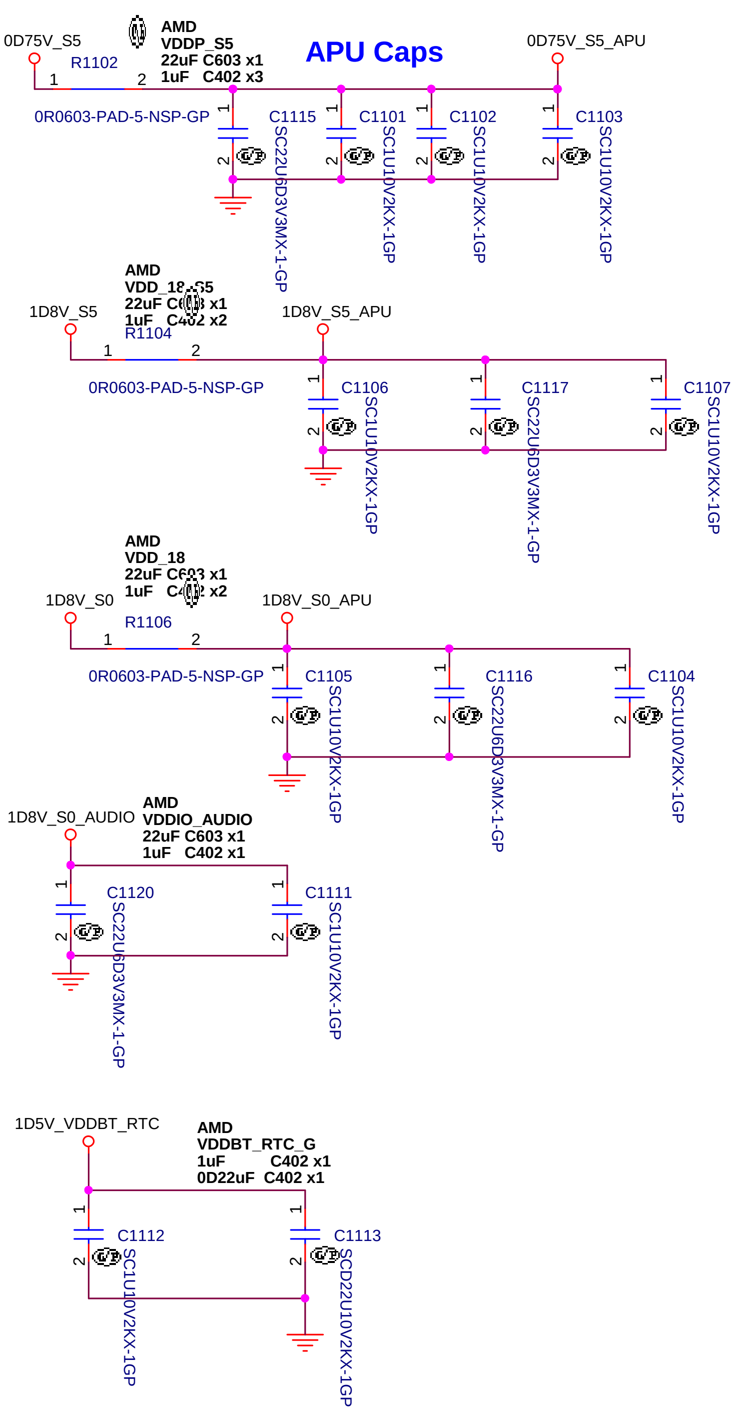
APU Caps



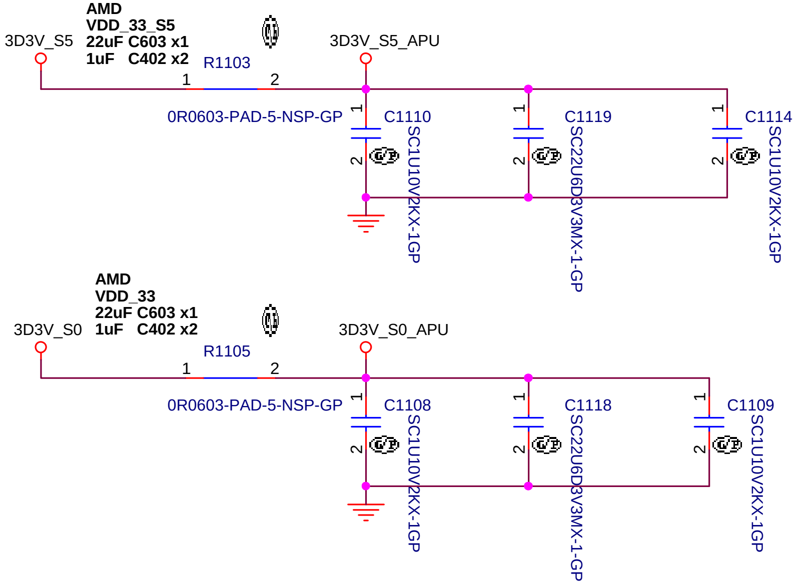
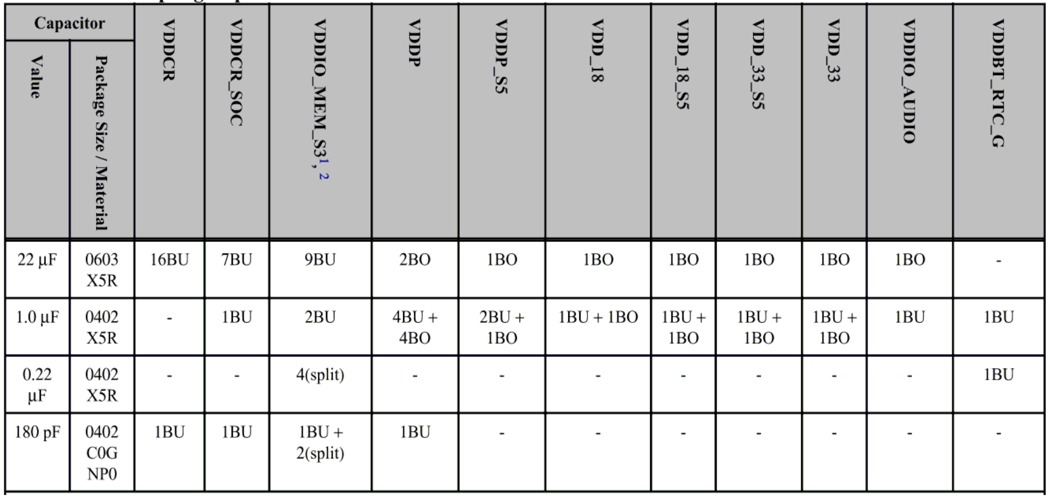


Table 110. Decoupling Capacitors for Processor Power



Capacitor		VDDCR	VDDCR_SOC	VDDIO_MEM_S3[1, 2]	VDDP	VDDP_S5	VDD_18	VDD_18_S5	VDD_33_S5	VDD_33	VDDIO_AUDIO	VDDBT_RTC_G
Value	Package Size / Material											
22 µF	0603 X5R	16BU	7BU	9BU	2BO	1BO	1BO	1BO	1BO	1BO	1BO	-
1.0 µF	0402 X5R	-	1BU	2BU	4BU + 4BO	2BU + 1BO	1BU + 1BO	1BU + 1BO	1BU + 1BO	1BU + 1BO	1BU	1BU
0.22 µF	0402 X5R	-	-	4(split)	-	-	-	-	-	-	-	1BU
180 pF	0402 C0G NP0	1BU	1BU	1BU + 2(split)	1BU	-	-	-	-	-	-	-

BOM1

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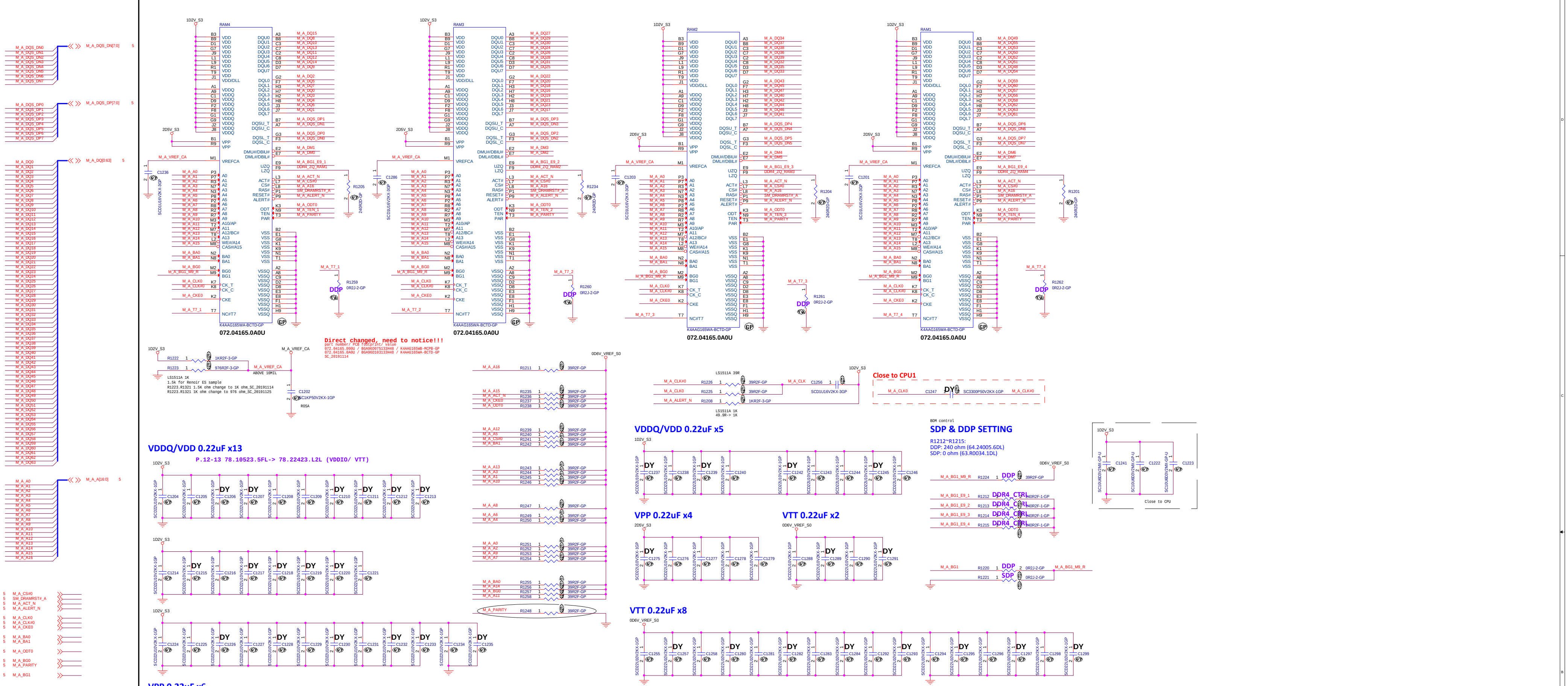
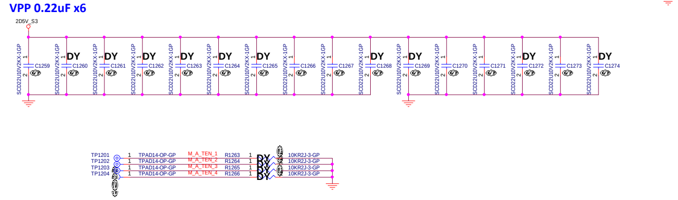
Main Func = DIMM1





SDP and DDP BOM Control Table

		SDPx16 8Gb	SDPx16 16Gb	SDPx16 8Gb	SDPx16 8Gb	SDPx16 16Gb	DDPx16 16Gb
		SM30N76502 Samsung K4A8G165WC-BCTD	SM30N76568 Samsung K4AAG165WA-BCTD	SM30N76518 SK Hynix H5AN8G6NCJR-VKC	SM30N76570 Micron MT40A512M16TB-062E	SM30N76604 Micron MT40A1G16RC-062E:B	SM30N76546 SK Hynix H5AN8G6NCJR-VKC
DDR4_CTRL	R1212 R1213 R1214 R1215	0R 0R 0R 0R	0R 0R 0R 0R	0R 0R 0R 0R	0R 0R 0R 0R	0R 0R 0R 0R	240R 1% 240R 1% 240R 1% 240R 1%
SDP	R1221	ASM	ASM	ASM	ASM	ASM	DY
DDP	R1224 R1220	DY DY	DY DY	DY DY	DY DY	DY DY	ASM ASM

SDP and DDP BOM Control Table

		SDPx16 8Gb	SDPx16 16Gb	SDPx16 8Gb	SDPx16 8Gb	SDPx16 16Gb	DDPx16 16Gb
		SM30N76502 SM30N76632 Samsung K4A8G165WC-BCTD	SM30N76568 SM30N76633 Samsung K4AAG165WA-BCTD	SM30N76518 SM30N76639 SK Hynix H5AN8G6NCJR-VKC	SM30N76570 Micron MT40A512M16TB-062E	SM30N76604 ~~SM30N76641~~ Micron MT40A1G16RC-062E:B	SM30N76546 SM30N76640 SK Hynix H5AN8G6NCJR-VKC
DDR4_CTRL	R1212 R1213 R1214 R1215	0R 0R 0R 0R	0R 0R 0R 0R	0R 0R 0R 0R	0R 0R 0R 0R	0R 0R 0R 0R	240R 1% 240R 1% 240R 1% 240R 1%
SDP	R1221	ASM	ASM	ASM	ASM	ASM	DY
DDP	R1224 R1220	DY DY	DY DY	DY DY	DY DY	DY DY	ASM ASM

BOM1

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Title: **DDR (DDR4-CHA)**

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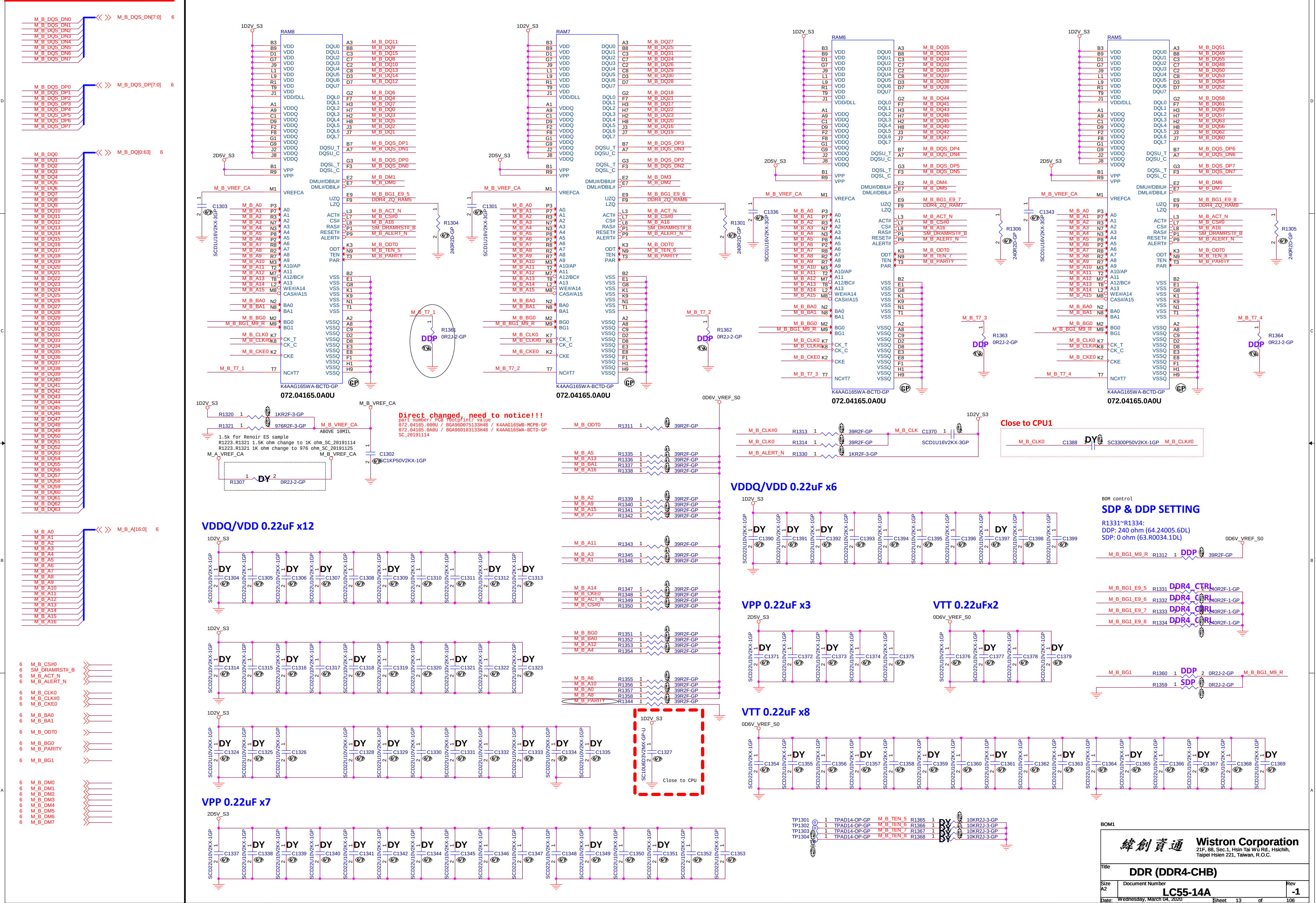
Main Func = DIMM2



Direct changed, need to notice!!!
part number/ PCB footprint/ value
072.04165.000U / BGA96D075133H48 / K4AAG165WB-MCPB-GP
072.04165.0A0U / BGA96D103133H48 / K4AAG165WA-BCTD-GP
SC_20191114

1.5k for Renoir ES sample
R1223.R1321 1.5K ohm change to 1K ohm_SC_20191114
R1223.R1321 1K ohm change to 976 ohm_SC_20191125

Close to CPU1

VDDQ/VDD 0.22uF x12

VPP 0.22uF x7

VDDQ/VDD 0.22uF x6

VPP 0.22uF x3

VTT 0.22uFx2

VTT 0.22uF x8

BOM control

SDP & DDP SETTING

R1331~R1334:
DDP: 240 ohm (64.24005.6DL)
SDP: 0 ohm (63.R0034.1DL)

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Title
DDR (DDR4-CHB)

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BOM1

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BOM1

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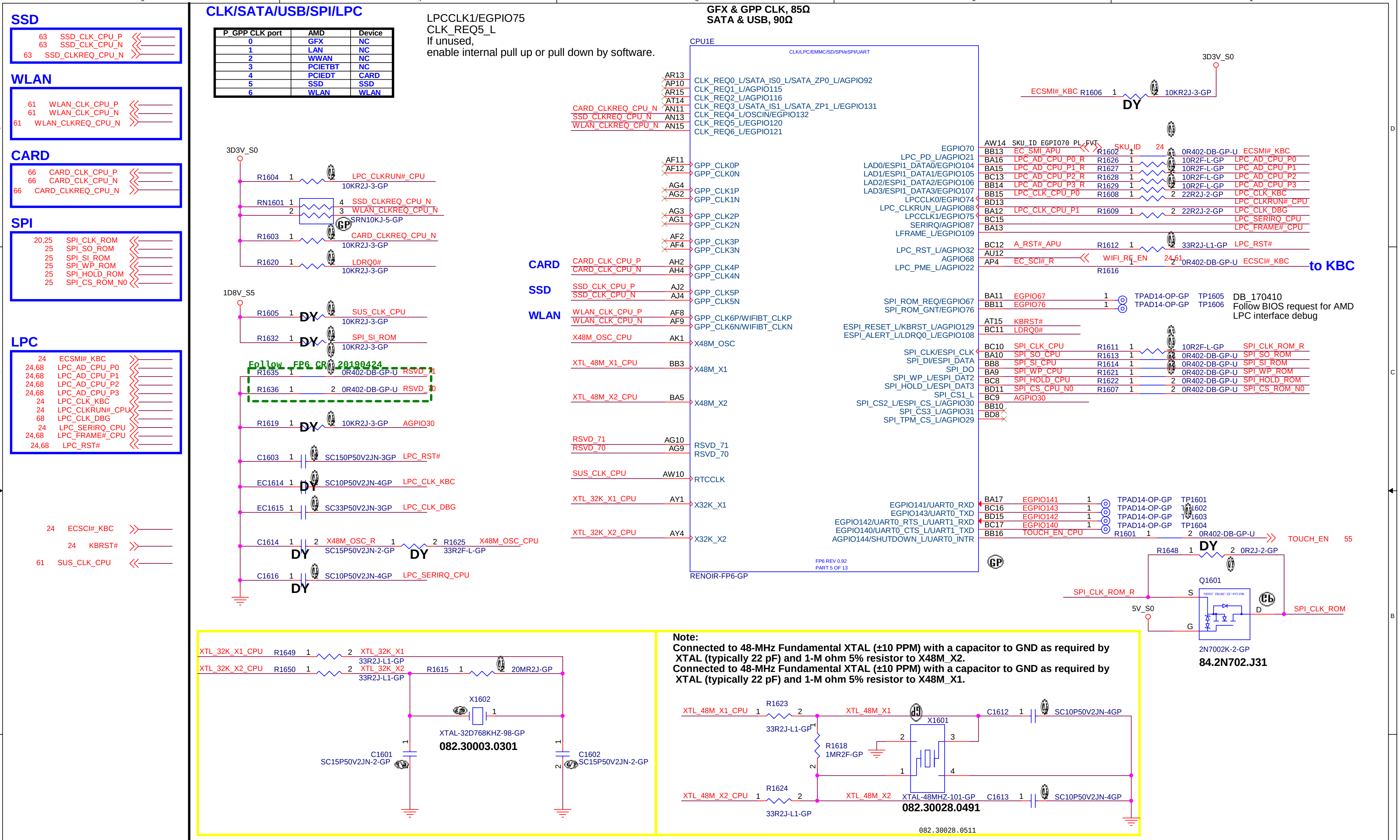
CLK/SATA/USB/SPI/LPC



P_GPP CLK port	AMD	Device
0	GFX	NC
1	LAN	NC
2	WWAN	NC
3	PCIETBT	NC
4	PCIEDT	CARD
5	SSD	SSD
6	WLAN	WLAN

LPCCLK1/EGPIO75
CLK_REQ5_L
If unused,
enable internal pull up or pull down by software.

GFX & GPP CLK, 85Ω
SATA & USB, 90Ω

DB_170410
Follow BIOS request for AMD
LPC interface debug

Note:
Connected to 48-MHz Fundamental XTAL (±10 PPM) with a capacitor to GND as required by XTAL (typically 22 pF) and 1-M ohm 5% resistor to X48M_X2.
Connected to 48-MHz Fundamental XTAL (±10 PPM) with a capacitor to GND as required by XTAL (typically 22 pF) and 1-M ohm 5% resistor to X48M_X1.

	C1601	C1602
SEIKO 082.30003.0301	15pF	15pF
EPSON 082.30003.0191	15pF	15pF
NDK 082.30003.0221		
TXC 082.30003.0231		

HARMONY
82.30026.371->
HOSONIC
082.30028.0491
Need 10ppm

	C1612	C1613
HOSONIC 082.30028.0491	10pF	10pF
HOSONIC 082.30028.0511		

BOM1

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

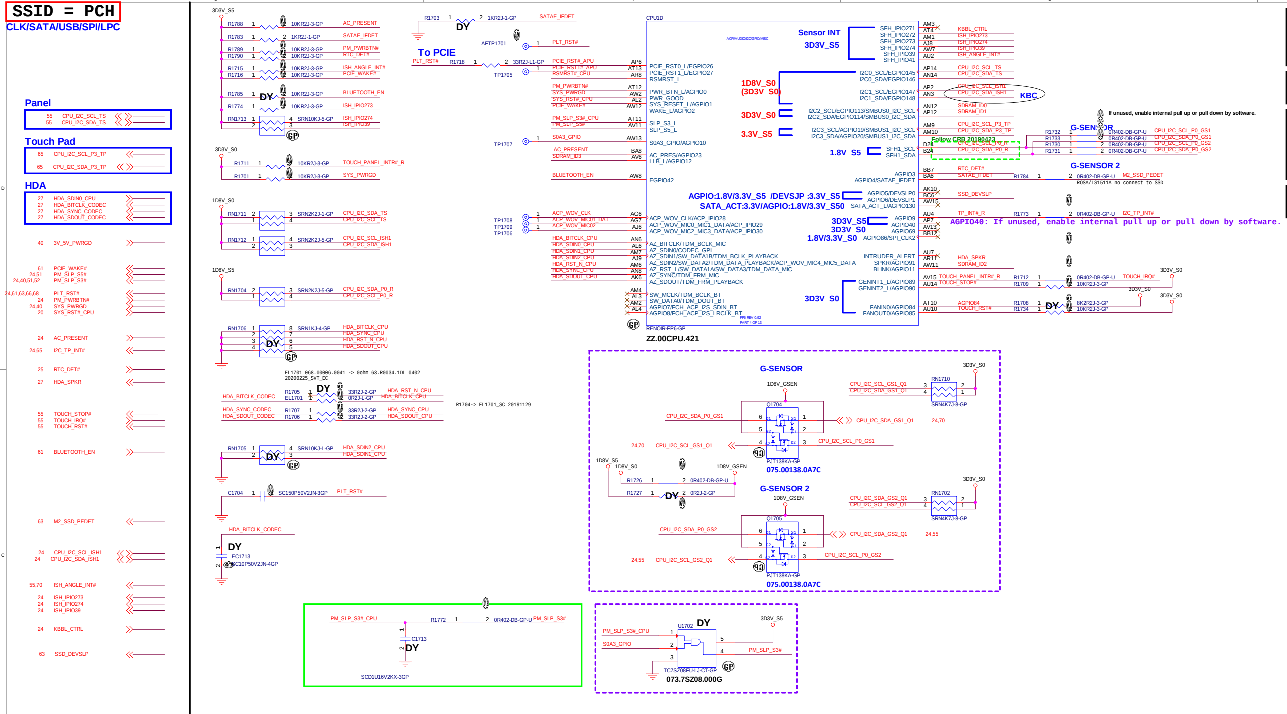
Title
FCH (CLK/LPC/SPI/EMMC/SD/UA)

Size A3 | Document Number **LC55-14A** | Rev **-1**

Date: Wednesday, March 04, 2020 | Sheet 16 of 106

SSID = PCH

CLK/SATA/USB/SPI/LPC



Straps

Straps	LFRAME_L LPCCLK0/EGPIO74 LPCCLK1/EGPIO75 RTCCLK SYS_RESET_L/AGPIO1 BLINK/USB_OC7_L/AGPIO11 AGPIO3

S5 PWR Rail	AGPIO0 - EGPIO42
S0 PWR Rail	AGPIO64 - EGPIO148

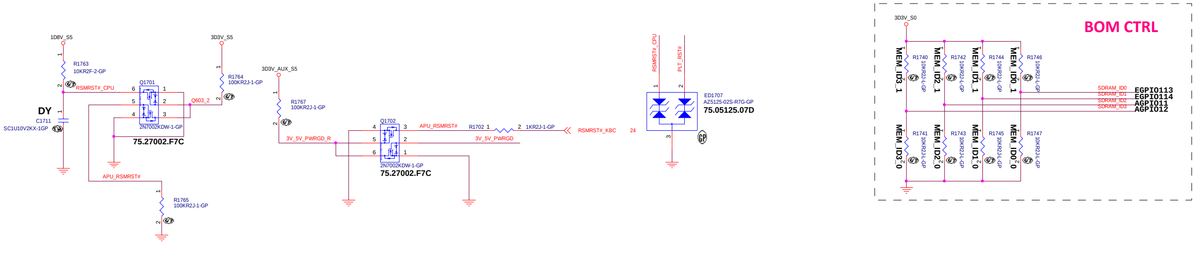
SMB0, 3D3V_S0	DIMM
SMB1, 3D3V_S5	KBC 3D3V_S5 Thermal 3D3V_S0 GSENSOR for HDD Protect

APU Type I only	AGPIO8 AGPIO40
APU type II only	

PCIE_RST1_L/EGPIO27
AGPIO40
LPC_PD_L/SD_CMD/AGPIO21
If unused,
enable internal pull up or pull down by software.

INTERNAL DEBUG PURPOSE ONLY

TEST2	TEST1	TEST0	Description
0	0	0	FCH TAP accessible from APU when TAPEN is asserted FCH JTAG pins are overloaded for multiple functions, in this configuration the FCH JTAG are used as non-JTAG pins
0	0	1	Reserved
0	1	X	Reserved
1	TMS	0	FCH JTAG multi-function pins are configured as JTAG pins, in this configuration the FCH TAP can be accessed from FCH JTAG pins
1	TMS	1	Use on ATE only Yuba JTAG enabled



EVT/FVT/SIT/SVT:

Memory Configuration

00: 4GB
01: 8GB
10: 16GB
11: (Reserve)

Memory Supplier

00: Samsung
01: Micron
10: SK Hynix
11: (Reserve)

AGPIO12	AGPIO11	EGPIO114	EGPIO113											
SDRAM_ID3	SDRAM_ID2	SDRAM_ID1	SDRAM_ID0	Memory ID	Supplier	Density	PN			EVT	FVT	FVT-2	SIT	SVT
0	0	0	0	0	SAMSUNG	4GB	SM30N76632	SDPx16 8Gb	3200	SKU4-1	SKU1			SKU1
0	1	0	0	4	SAMSUNG	4GB+4GB	SM30N76632	SDPx16 8Gb	3200		SKU4	SKU1	SKU2.5	SKU2
1	0	0	0	8	SAMSUNG	8GB+8GB	SM30N76633	SDPx16 16Gb	3200		SKU6		SKU6	SKU6
1	1	0	0	12 5	SAMSUNG									
0	0	0	1	1	MICRON	4GB	SM30N76570	SDPx16 8Gb	3200					
0	1	0	1		MICRON	4GB+4GB	SM30N76570	SDPx16 8Gb	3200	SKU4.5.6.6-1	SKU3	SKU2		SKU5
1	0	0	1	9	MICRON	8GB+8GB	SM30N76641	SDPx16 16Gb	3200					
1	1	0	1	13	MICRON									
0	0	1	0	2	SK HYNIX	4GB	SM30N76639	SDPx16 8Gb	3200				SKU1	
0	1	1	0	6	SK HYNIX	4GB+4GB	SM30N76639	SDPx16 8Gb	3200	SKU4-2	SKU2.5		SKU3	SKU3.4
1	0	1	0	10	SK HYNIX	8GB+8GB	SM30N76640	DDPx16 16Gb	3200			SKU3	SKU4	
1	0	1	0	14	SK HYNIX									

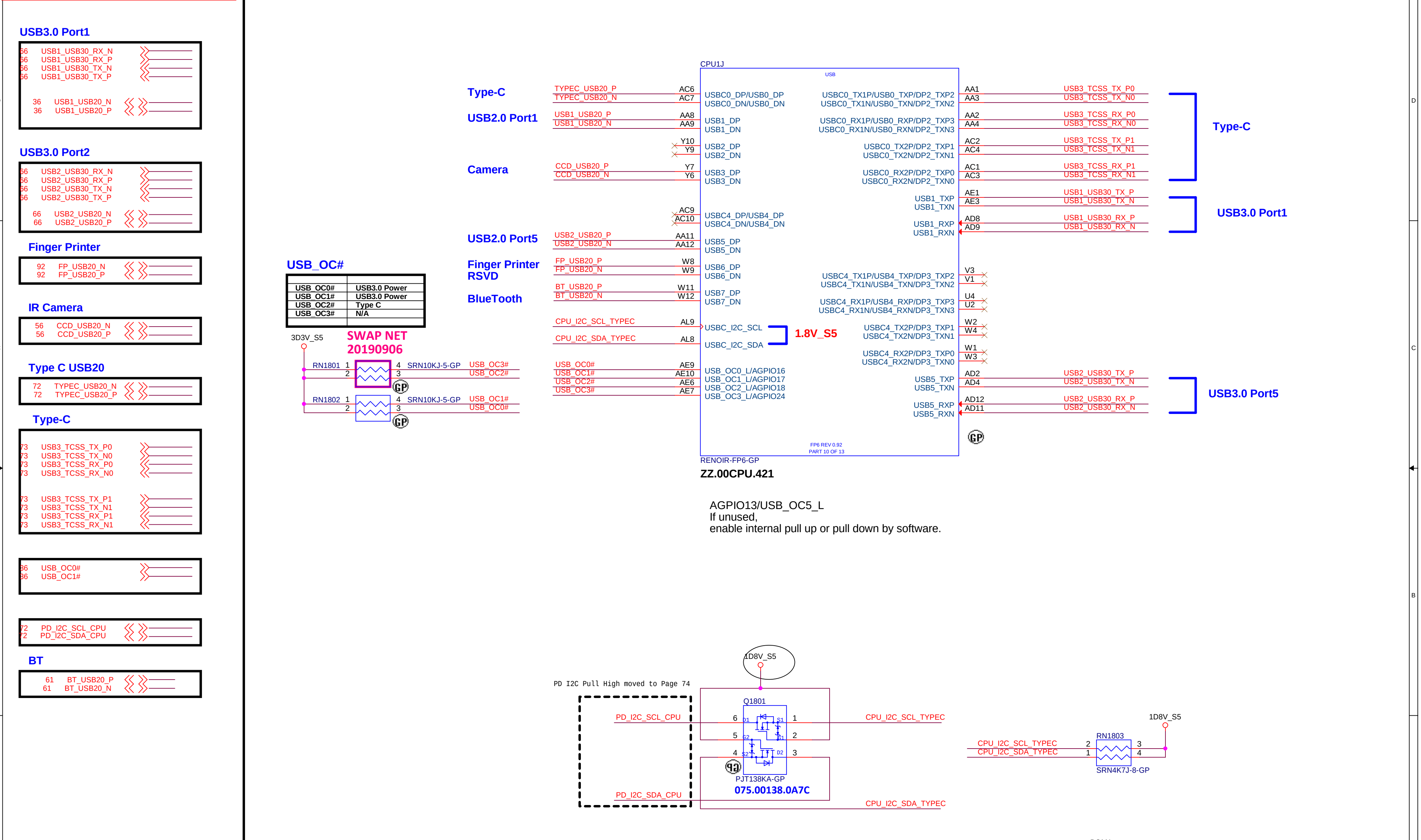
0=L, 1=H

BOM1

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

Title	FCH (AZ/I2C/GPIO/RTC/SMBS/M)	
Size A1	Document Number LC55-14A	Rev -1
Date: Wednesday, March 04, 2020	Sheet 17 of 106	

Main Func = USB



USB_OC0#	USB3.0 Power
USB_OC1#	USB3.0 Power
USB_OC2#	Type C
USB_OC3#	N/A

AGPIO13/USB_OC5_L
If unused,
enable internal pull up or pull down by software.

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

Title
FCH (USB/Camera/RSVD)

Size A3
Document Number LC55-14A
Rev -1

Date: Wednesday, March 04, 2020
Sheet 18 of 106

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BOM1

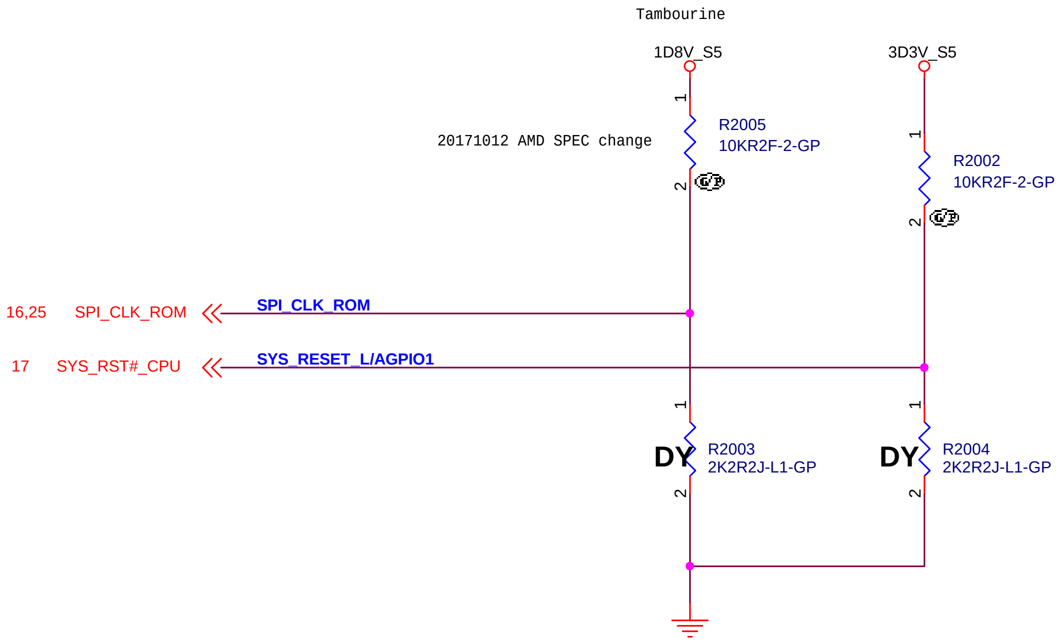
緯創資通 **Wistron Corporation**
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title
FCH (RSVD)

Size A4
Document Number **LC55-14A**
Rev **-1**

Date: Wednesday, March 04, 2020

STRAP PINS



	PIN SPI_CLK NET SPI_CLK_ROM	PIN SYS_RESET_L//AGPIO1 NET SYS_RST#_CPU
PULL HIGH	**Configured for internal clock-generator 10kΩ(± 5%) pull-up resistor to VDD_18** (DEFAULT)	Normal powerup / reset timing 10KΩ(± 5%) pull-up resistor to VDD_33_S5 (DEFAULT)
PULL LOW	**Reserved**	**Reserved**

BOM1

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

Title
FCH (Strap)

Size A4
Document Number **LC55-14A**
Rev **-1**

Date: Wednesday, March 04, 2020
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BOM1

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

Title	***FCH (RSVD)***	
Size A4	Document Number **LC55-14A**	Rev **-1**
Date:	Wednesday, March 04, 2020	Sheet 21 of 106

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BOM1

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

Title
FCH (RSVD)

Size A4
Document Number **LC55-14A**
Rev **-1**

Date: Wednesday, March 04, 2020

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BOM1

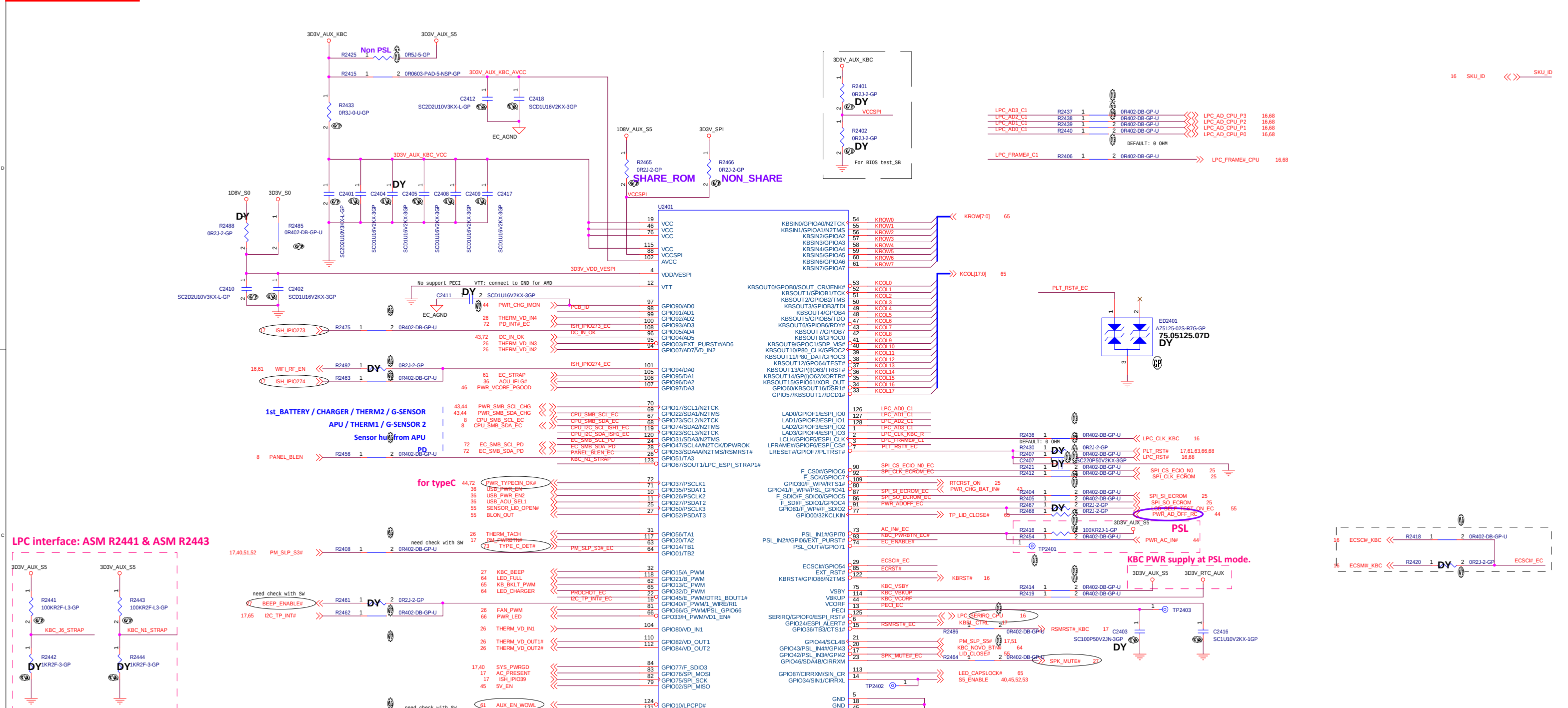
緯創資通 **Wistron Corporation**
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title
FCH (RSVD)

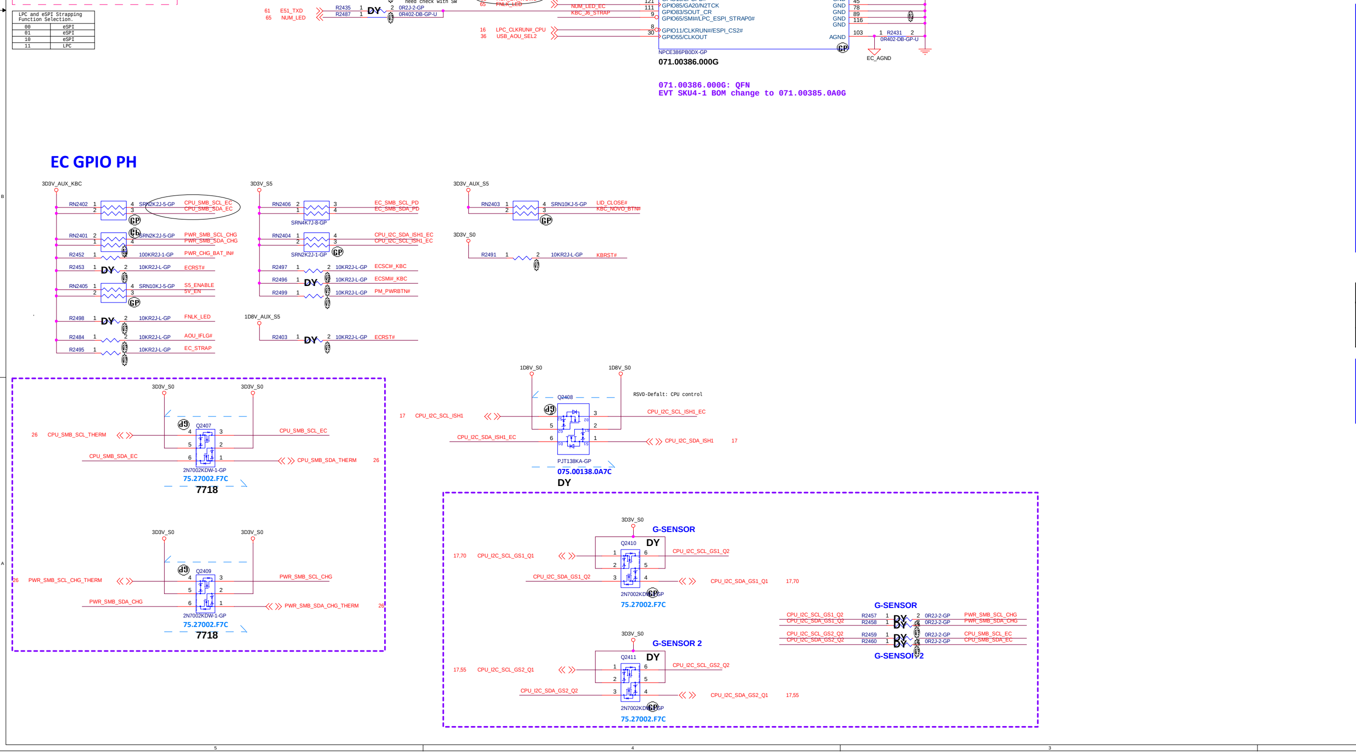
Size A4
Document Number **LC55-14A**
Rev **-1**

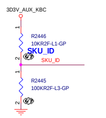
Date: Wednesday, March 04, 2020
Sheet 23 of 106

SSID = KBC



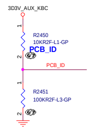
00	eSPI
01	eSPI
10	eSPI
11	LPC





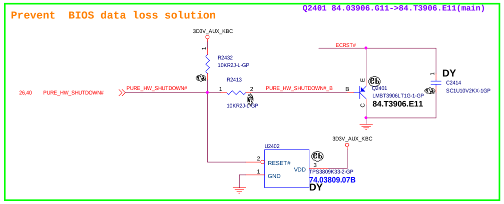
SKU_ID_BOM Ctrl

PCB VERSION A/D(PIN98)	PULL-LOW RESISTOR	PULL-HIGH RESISTOR	VOLTAGE
LC55-14A	100.0K	10.0K 64.10025.L0L	3.0V
NA	100.0K	20.0K 64.20025.L0L	2.75V
NA	100.0K	33.0K 64.33025.L0L	2.48V
NA	100.0K	47.0K 64.47025.6DL	2.24V
NA	100.0K	64.9K 64.64925.6DL	2.0V
NA	100.0K	76.8K 64.76825.6DL	1.87V
NA	100.0K	215.0K 64.21535.6DL	1.048V



PCB VERSION

PCB VERSION A/D(PIN98)	PULL-LOW RESISTOR	PULL-HIGH RESISTOR	VOLTAGE
SA	100.0K	10.0K	3.0V
SB	100.0K	20.0K	2.75V
SC	100.0K	33.0K	2.48V
SD	100.0K	47.0K	2.24V
-1	100.0K	64.9K	2.0V
-1M	100.0K	76.8K	1.87V
Reserved	100.0K	100.0K	1.65V



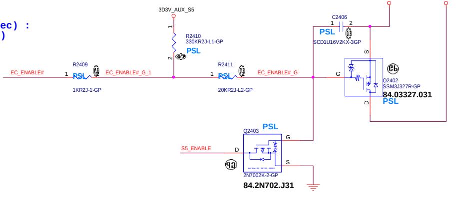
Nuvoton KBC PSL Power Switched Logic

1.Enter PSL mode (Entry S5 after 10sec) :
 3D3V_AUX_KBC : OFF (KBC PWR supply)

2.At PSL mode (SPEC: S5<10mW)

PSL mode(AC or DC):		
EC_ENABLE#_G	S5_ENABLE	3D3V_AUX_KBC
Hi	Low	OFF

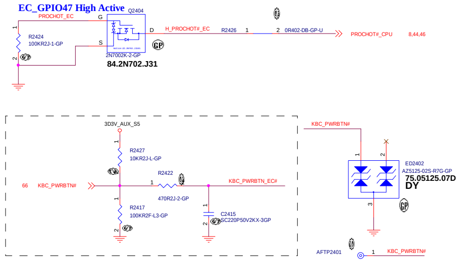
PSL Wake(AC or DC):		
EC_ENABLE#_G	S5_ENABLE	3D3V_AUX_KBC
Low	Hi	ON



NOVO button Fun define: one key to recover OS.

NOVO button wake KBC at PSL mode.		
KBC_NOVO_BTN#	KBC_PWRBTN_EC#	
Low	Low	

KBC_PWRBTN_EC#:Low
(1) 4sec: PWR
Button shut down
(2) 8sec: KBC reset



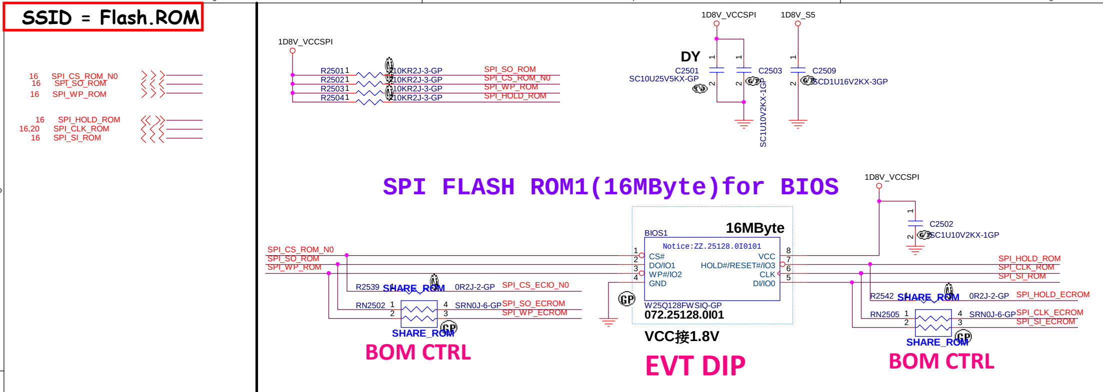
LC40

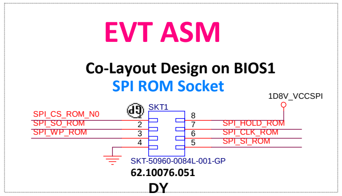
緯創資通 **Wistron Corporation**
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title
ECIO (NUVOTON_NPCE386)

Size	Document Number	Rev
A1	LC55-14A	-1

Date: Wednesday, March 04, 2020 | Sheet 24 of 106





SOP 8 package only

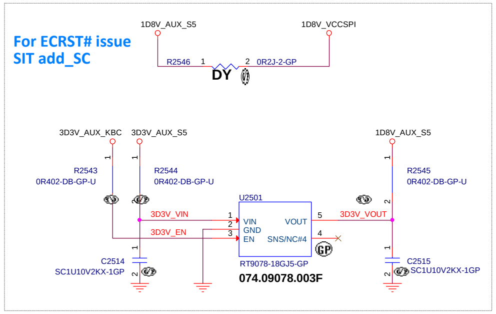


TABLE of SPI BIOS1		
VENDOR	P/N	Wistron P/N
WINBOND	W25Q128FWSIQ / W25Q128FWSIQT	~~072.25128.0I01~~
MXIC	MX25U12873FM2I-10G	072.25128.0Y01
GD	GD25LB128DSIGR	072.25128.0B0D

3.4
1
2

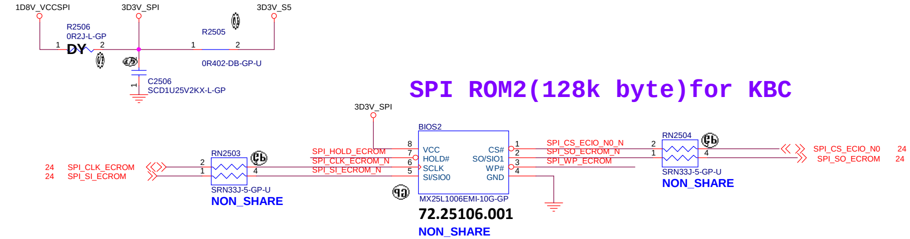
(072.25128.0AF1 W25Q128JWSIQ)

MXIC 1.8V No support RPMC

Co-Layout Design on BIOS2

FEROM Socket

remove BIOS2 socket
BIOS1.BIOS2 size is not same



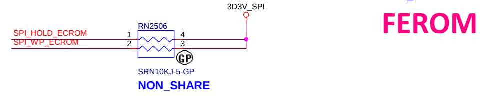
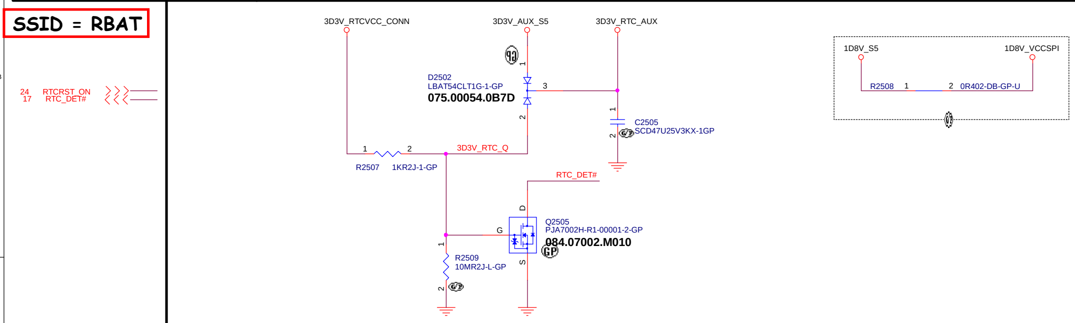
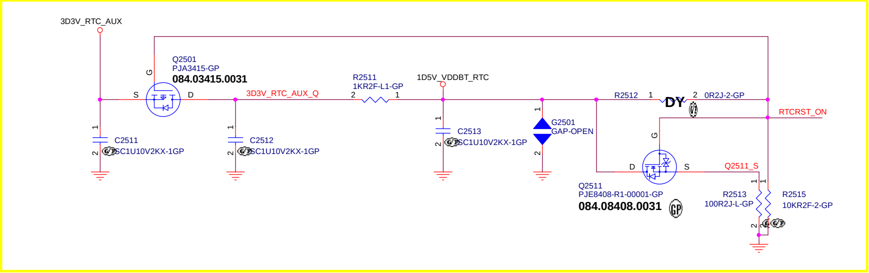


TABLE of SPI BIOS2		
VENDOR	P/N	Wistron P/N
MXIC	MX25L1006EMI-10G	72.25106.001
WINBOND	W25X10CLSNIG	72.02510.001
Giga Device	GD25D10CTIGR	072.25D10.0B0D

RSVD



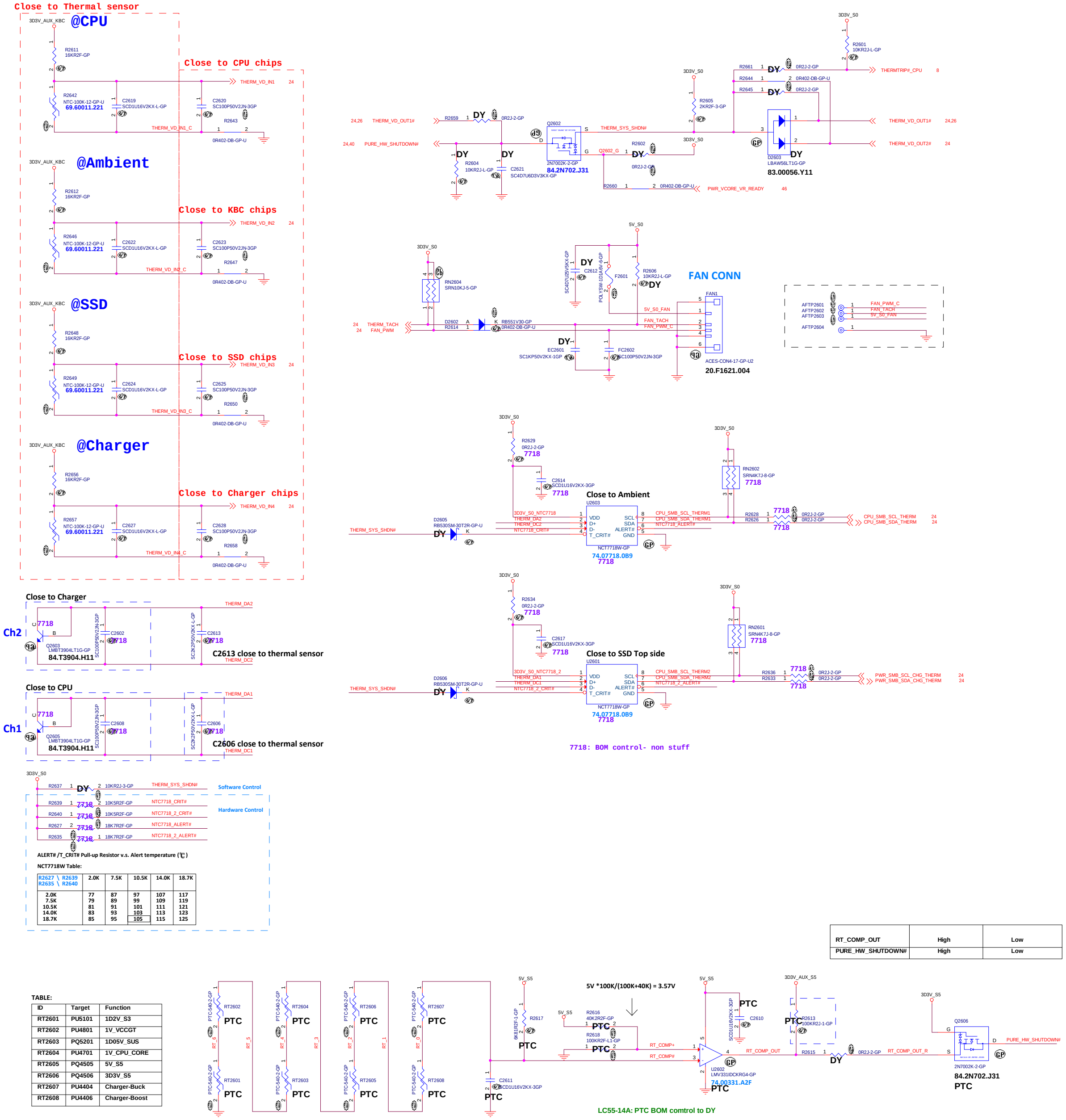


BOM1

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

Title	*Flash/RTC*	
Size A2	Document Number **LC55-14A**	Rev **-1**
Date: Wednesday, March 04, 2020	Sheet 25 of 106	

Main Func = Thermal Sensor



ALERT# /T_CRIT# Pull-up Resistor v.s. Alert temperature (℃)

NCT7718W Table:

R2627 \ R2639 R2635 \ R2640	2.0K	7.5K	10.5K	14.0K	18.7K
2.0K	77	87	97	107	117
7.5K	79	89	99	109	119
10.5K	81	91	101	111	121
14.0K	83	93	103	113	123
18.7K	85	95	105	115	125

RT_COMP_OUT	High	Low
PURE_HW_SHUTDOWN#	High	Low

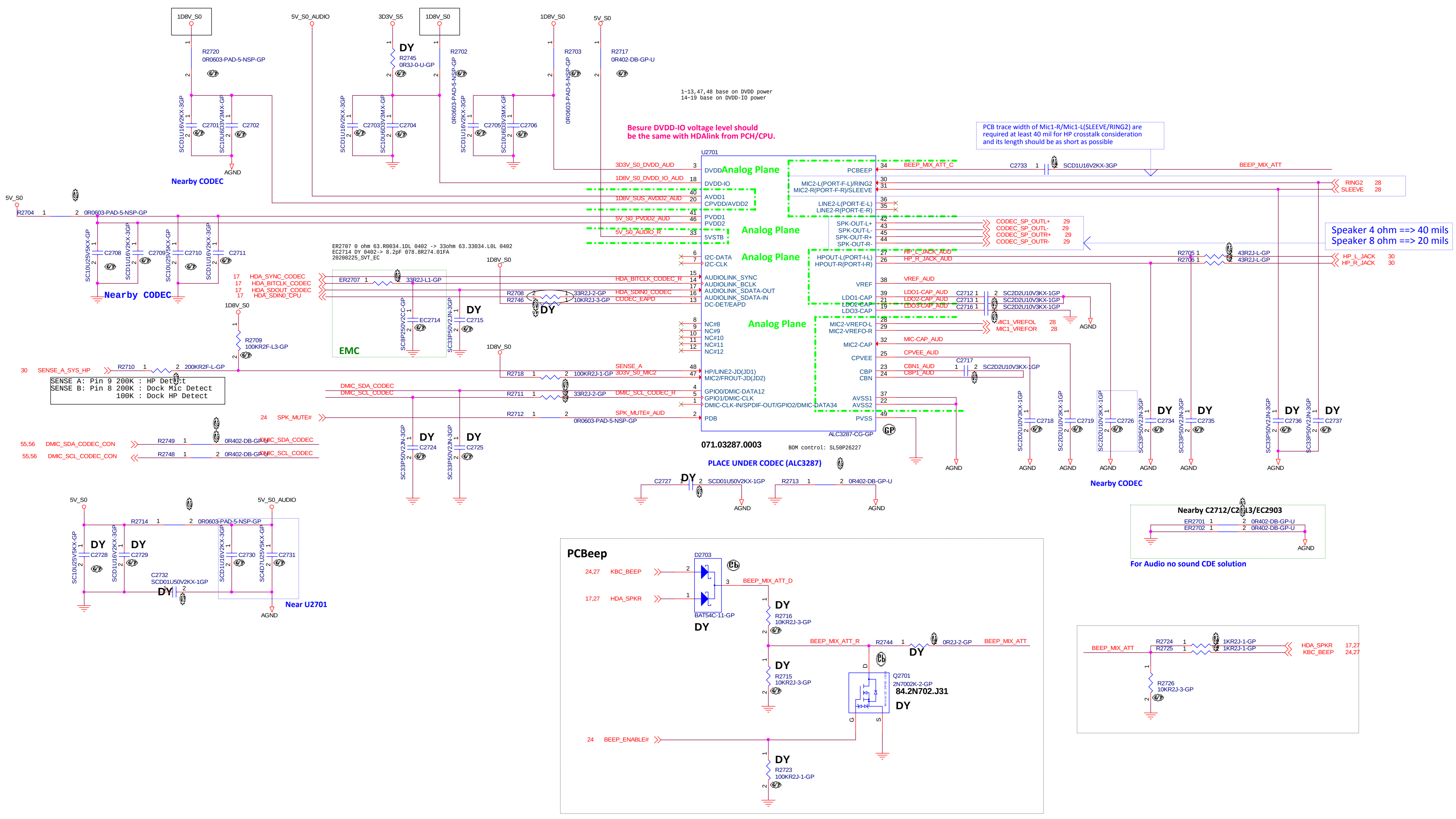
TABLE:

ID	Target	Function
RT2601	PU5101	1D2V_S3
RT2602	PU4801	1V_VCCGT
RT2603	PQ5201	1D05V_SUS
RT2604	PU4701	1V_CPU_CORE
RT2605	PQ4505	5V_S5
RT2606	PQ4506	3D3V_S5
RT2607	PU4404	Charger-Buck
RT2608	PU4406	Charger-Boost

LBB-1

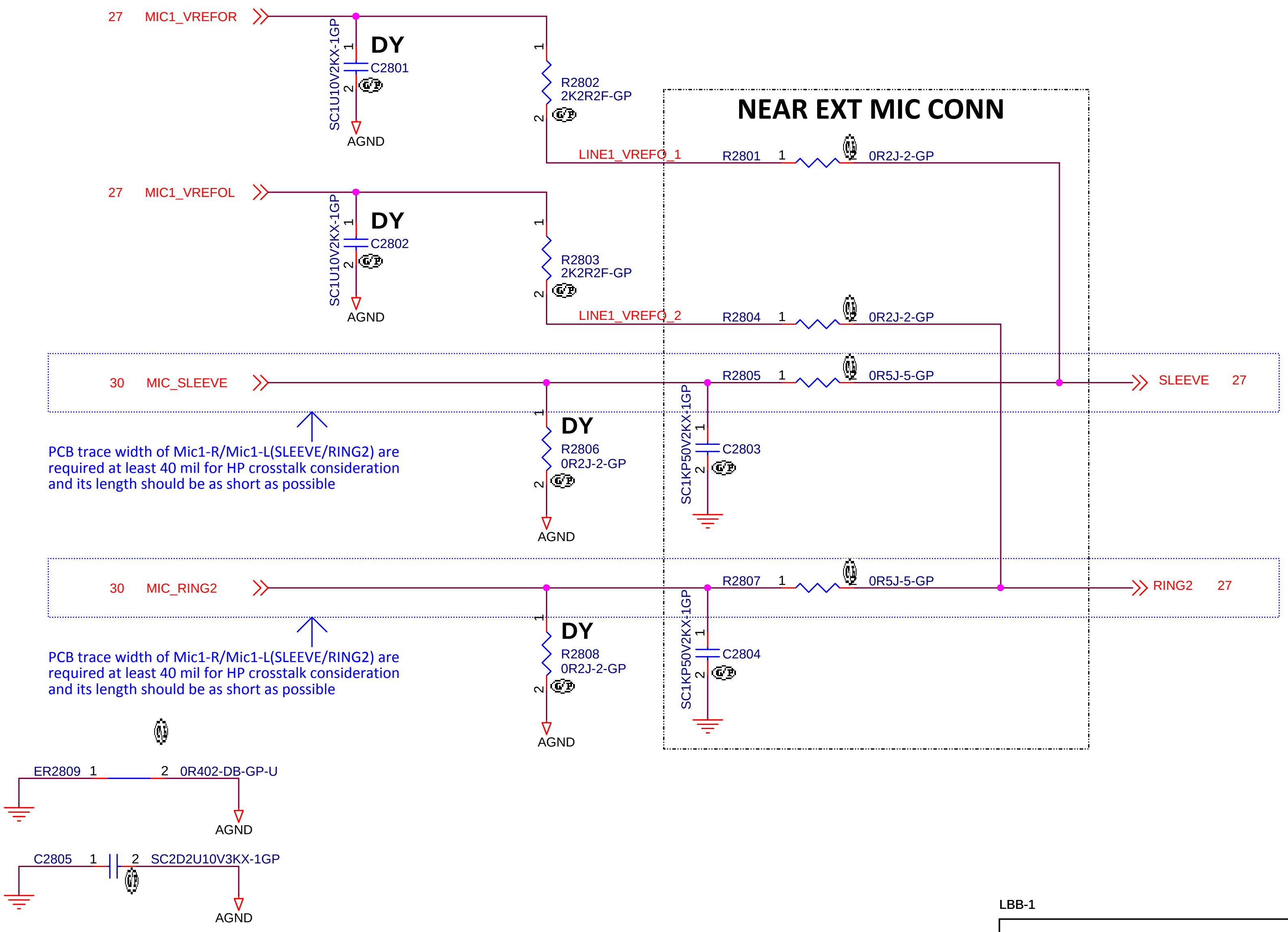
緯創資通 **Wistron Corporation**
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title **INT IO (THERMAL/FAN)**
Size A1
Document Number **LC55-14A**
Rev -1
Date: Wednesday, March 04, 2020
Sheet 26 of 99



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

Title		
AUDIO (CODEC ALC3287)		
Size Custom	Document Number LC55-14A	Rev -1
Date: Wednesday, March 04, 2020	Sheet 27 of 99	



PCB trace width of Mic1-R/Mic1-L(SLEEVE/RING2) are required at least 40 mil for HP crosstalk consideration and its length should be as short as possible

PCB trace width of Mic1-R/Mic1-L(SLEEVE/RING2) are required at least 40 mil for HP crosstalk consideration and its length should be as short as possible

LBB-1

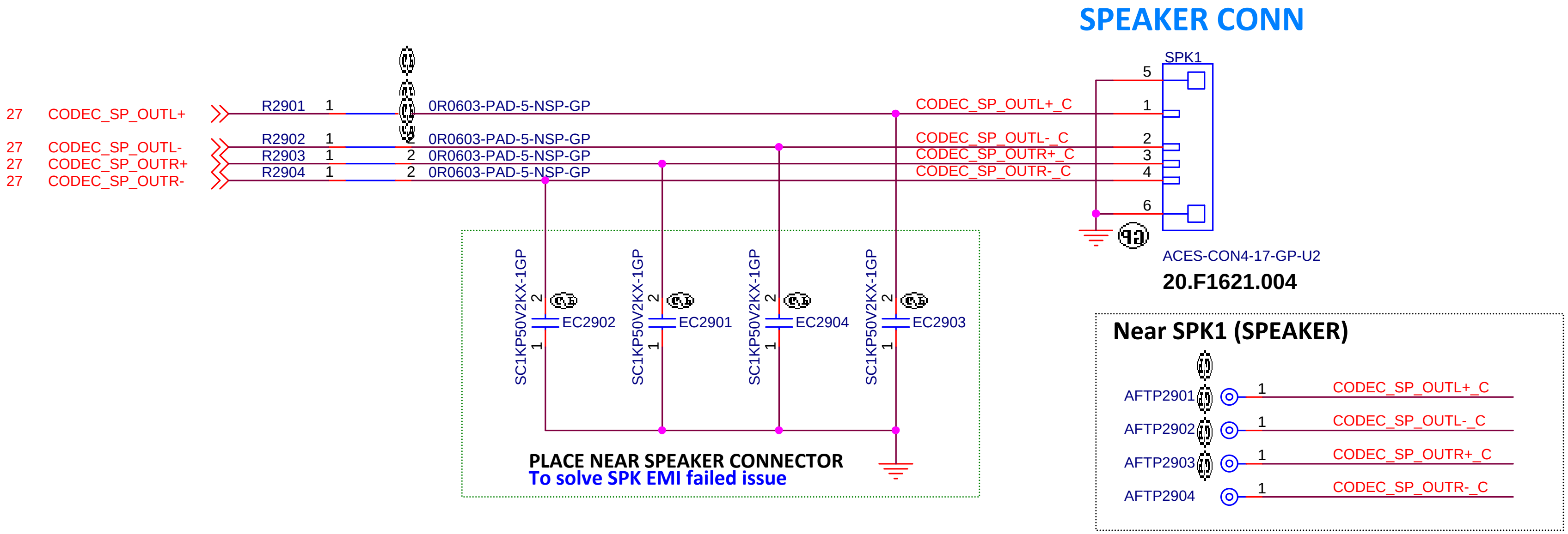
緯創資通 **Wistron Corporation**
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title
AUDIO (MIC I/F)

Size	Document Number	Rev
A4	**LC55-14A**	**-1**

Date: Wednesday, March 04, 2020 Sheet 28 of 99

Main Func = AUDIO



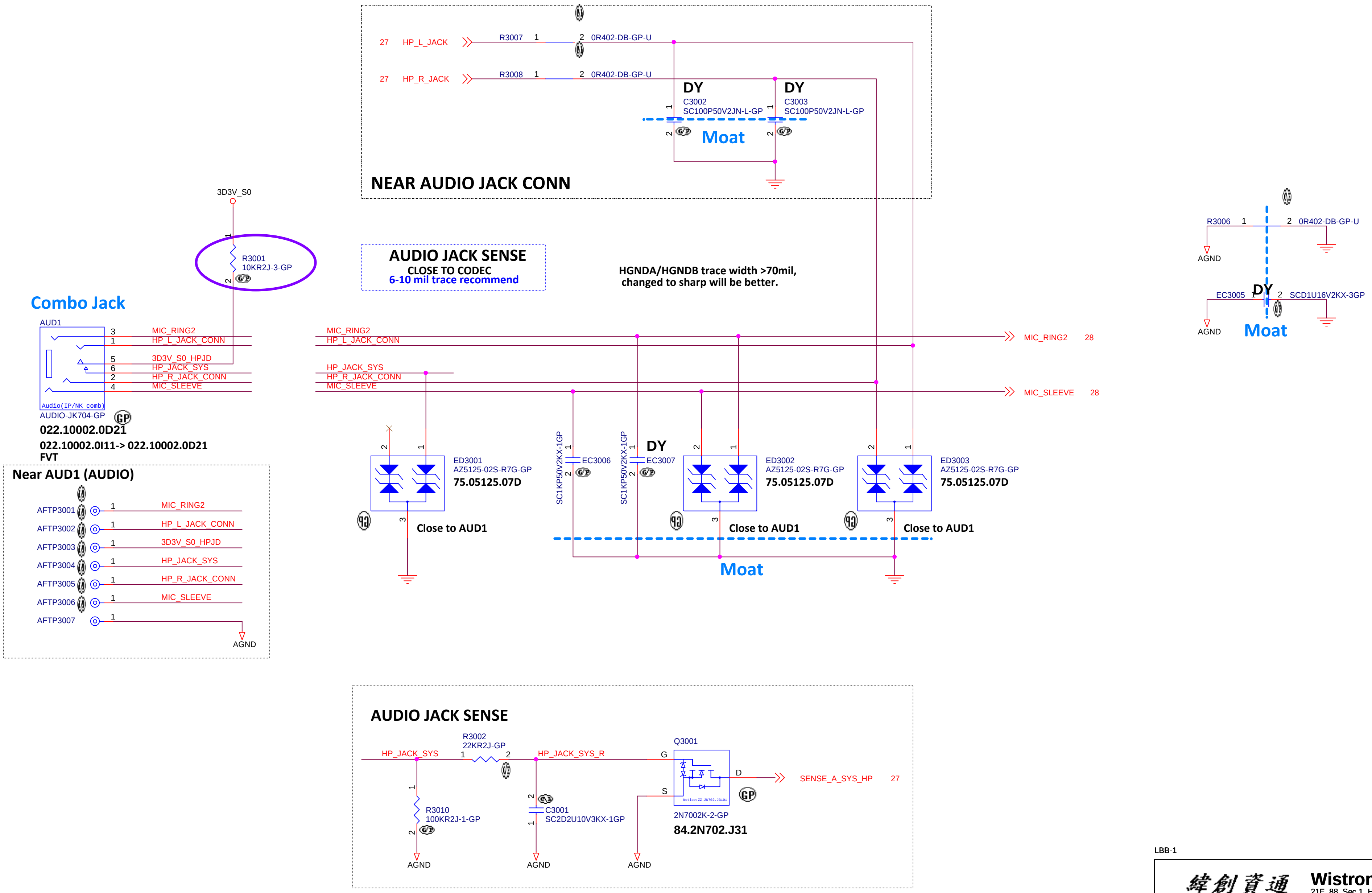
LBB-1

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 A4
Document Number **LC55-14A**
Rev **-1**

Date: Wednesday, March 04, 2020
Sheet 29 of 99



HGNDA/HGNDB trace width >70mil,
changed to sharp will be better.

LBB-1

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

Title
AUDIO (AUDIO JACK)

Size	Document Number	Rev
A3	LC55-14A	-1

Date: Wednesday, March 04, 2020 Sheet 30 of 99

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BOM1

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

Title
LAN (RSVD)

Size
A4
Document Number
LC55-14A
Rev
-1

Date: Wednesday, March 04, 2020
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BOM1

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

Title
LAN (RSVD) (RJ45+Transfor)

Size A4
Document Number **LC55-14A**
Rev **-1**

Date: Wednesday, March 04, 2020
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LBB-1

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

Title
CARD READER (RSVD)(SDIO/CONN)

Size A4
Document Number **LC55-14A**
Rev **-1**

Date: Wednesday, March 04, 2020
Sheet 33 of 106

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BOM1

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

Title
USB (RSVD) (USB2.0 CONN)

Size A4
Document Number **LC55-14A**
Rev **-1**

Date: Wednesday, March 04, 2020
Sheet 34 of 106

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BOM1

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

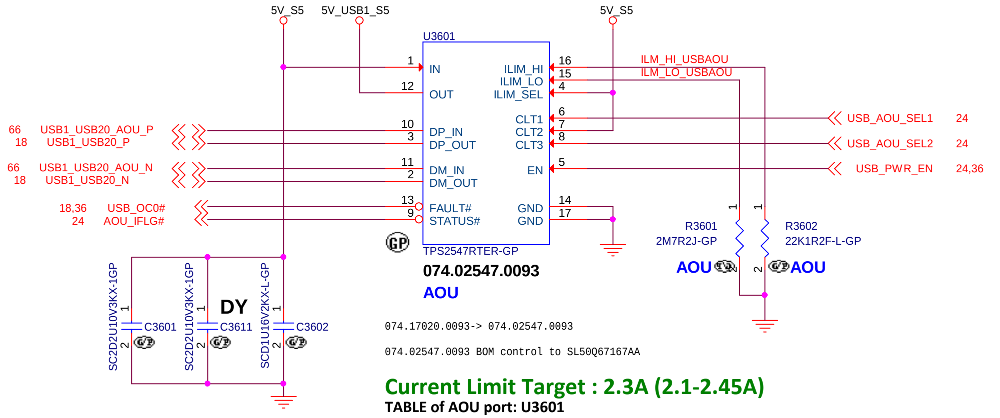
Title
USB (RSVD)(USB3.0 Conn)

Size
A4
Document Number
LC55-14A
Rev
-1

Date: Wednesday, March 04, 2020

Main Func = USB Charger

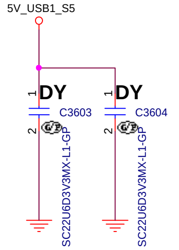
For USB3.0 System Port1 (For AOU)

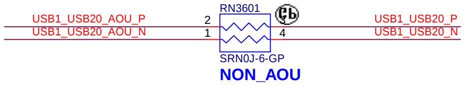


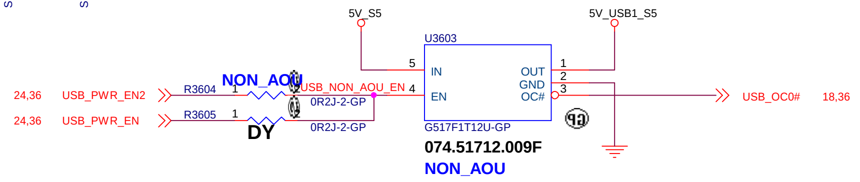
074.17020.0093-> 074.02547.0093

074.02547.0093 BOM control to SL50Q67167AA

Layout Note: Close 5V_USB1_S5







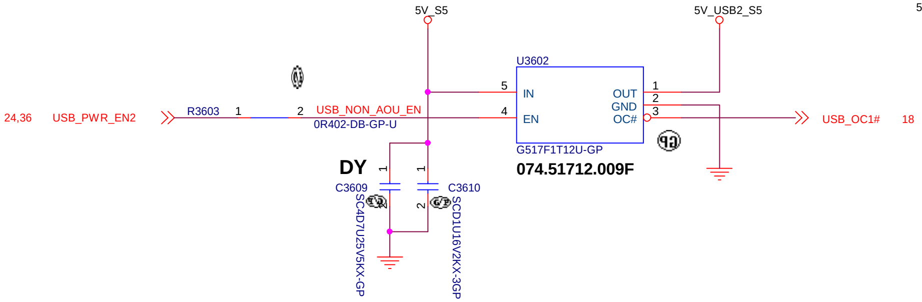
Current Limit Target : 2.3A (2.1-2.45A)

TABLE of AOU port: U3601

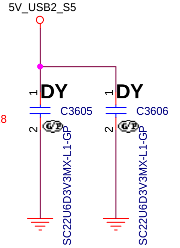
	Vendor	Vendor P/N	Wistron P/N
1st	TI	SN1702001RTER	SL50Q67167AA
2nd	TI	TPS2547RTER	074.02547.0093

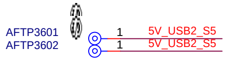
SN1702001RTER is not equivalent device of TPS2546RTER

For USB3.0 System Port2



Layout Note: Close 5V_USB2_S5





BOM1

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

Title: *USB(USB Charger)*

Size: A3
Document Number: LC55-14A
Rev: -1

Date: Wednesday, March 04, 2020
Sheet 36 of 106

D C B A

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BOM1

D

C

(Blanking)

B

A

BOM1

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

Title
USB (RSVD)(USB Redriver/Hub)

Size
A4
Document Number
LC55-14A
Rev
-1

Date: Wednesday, March 04, 2020
Sheet 38 of 106

(Blanking)

BOM1

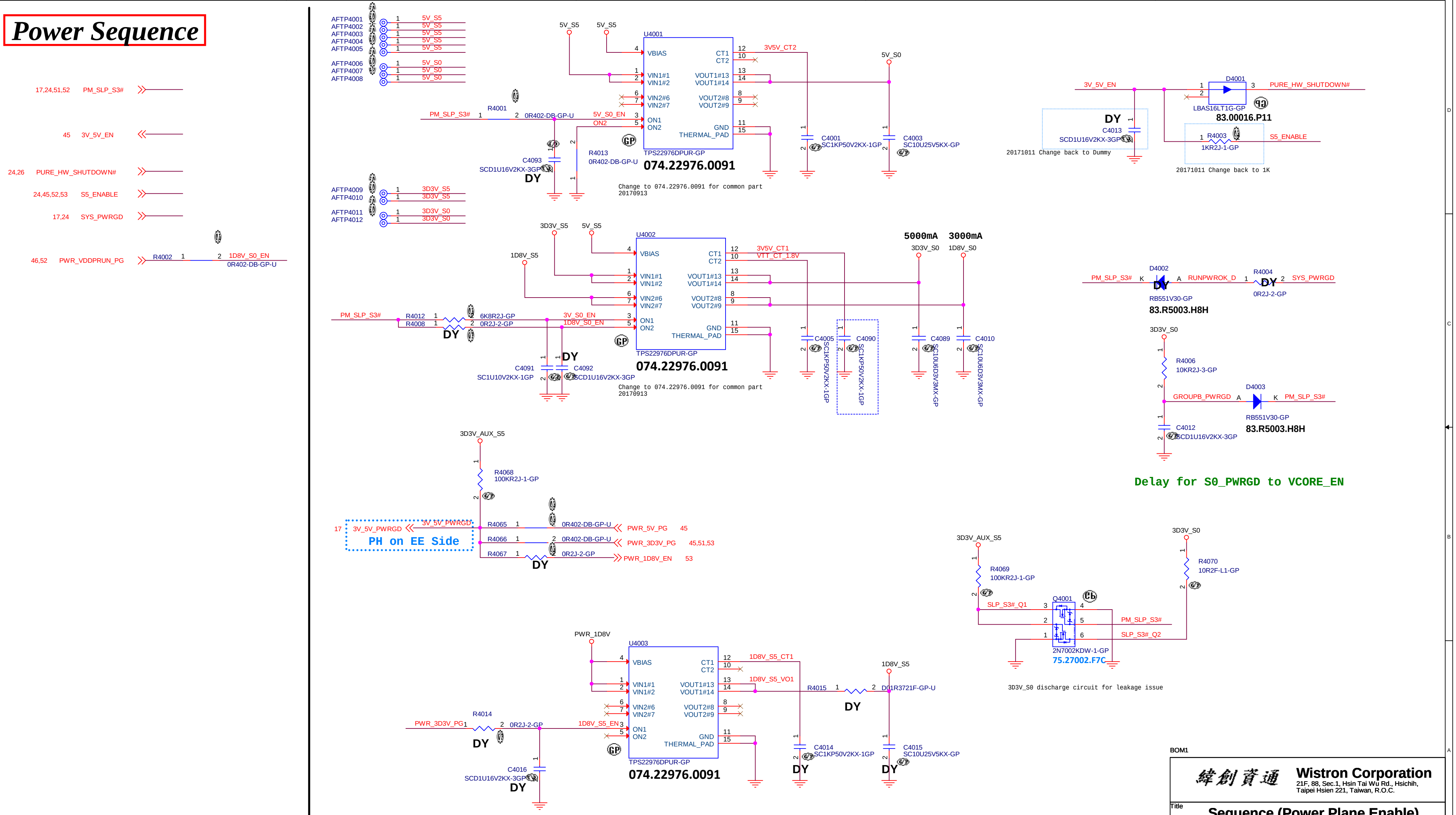
緯創資通 **Wistron Corporation**
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title **Sequence (RSVD)**

Size A4
Document Number **LC55-14A**
Rev **-1**

Date: Wednesday, March 04, 2020
Sheet 39 of 106

Power Sequence



Change to 074.22976.0091 for common part
20170913

20171011 Change back to Dummy

20171011 Change back to 1K

Delay for S0_PWRGD to VCORE_EN

3D3V_S0 discharge circuit for leakage issue

BOM1

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

Title	Sequence (Power Plane Enable)	
Size Custom	Document Number LC55-14A	Rev -1
Date: Wednesday, March 04, 2020	Sheet 40 of 106	

D

C

(Blanking)

B

A

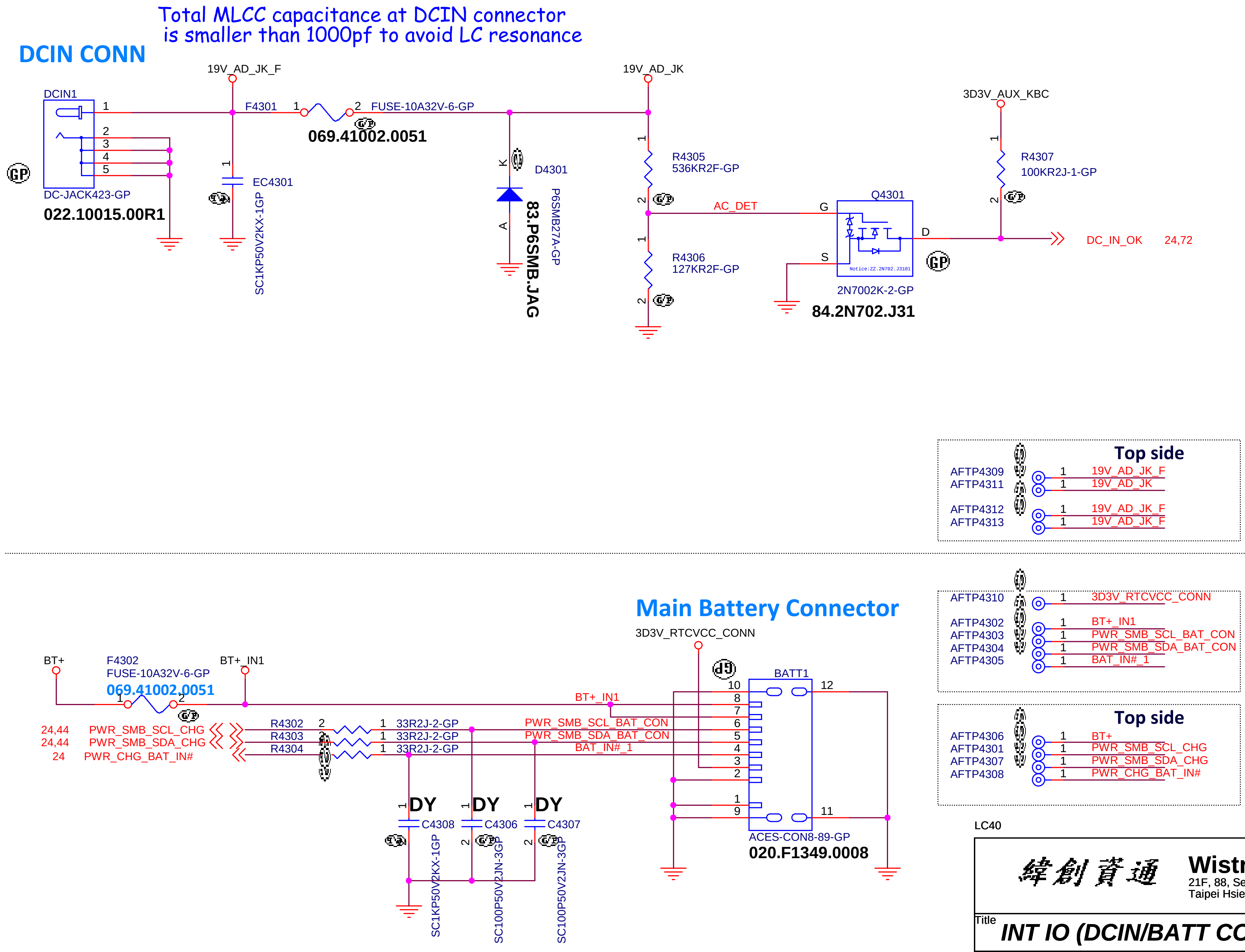
BOM1

(Blanking)

BOM1

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

Title	*INT IO (RSVD)(TYPEC DC-DC)*	
Size A4	Document Number **LC55-14A**	Rev **-1**
Date: Wednesday, March 04, 2020	Sheet 42 of 106	



緯創資通

Wistron Corporation

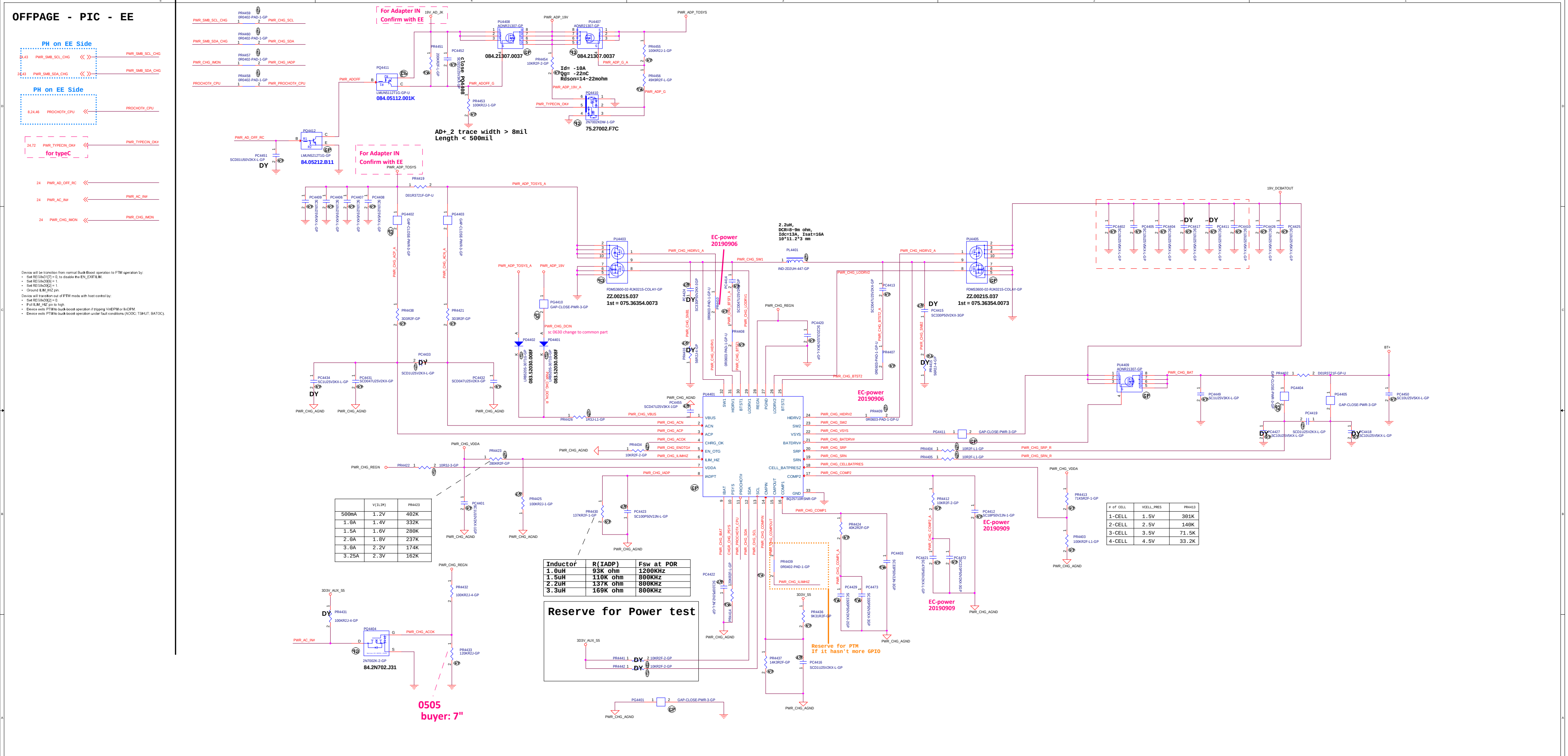
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title
INT IO (DCIN/BATT CONN)

Size	Document Number	Rev
A4	LC55-14A	-1

Date: Wednesday, March 04, 2020 Sheet 43 of 106

OFFPAGE - PIC - EE



Device will be transition from normal Buck-Boost operation to PTM operation by:

- Set REG0x31[7] = 0, to disable the EN_EXITILIM.
- Set REG0x30[8] = 1.
- Set REG0x30[2] = 1.
- Ground ILIM_HIZ pin.

Device will transition out of PTM mode with host control by:

- Set REG0x30[2] = 0.
- Pull ILIM_HIZ pin to high.
- Device exits PTM to buck-boost operation if tripping VinDPM or IinDPM.
- Device exits PTM to buck-boost operation under fault conditions (ACOC; TSHUT; BATOC).

	V(ILIM)	PR4423
500mA	1.2V	402K
1.0A	1.4V	332K
1.5A	1.6V	280K
2.0A	1.8V	237K
3.0A	2.2V	174K
3.25A	2.3V	162K

Inductor	R(IADP)	Fsw at POR
1.0uH	93K ohm	1200KHz
1.5uH	110K ohm	800KHz
2.2uH	137K ohm	800KHz
3.3uH	169K ohm	800KHz

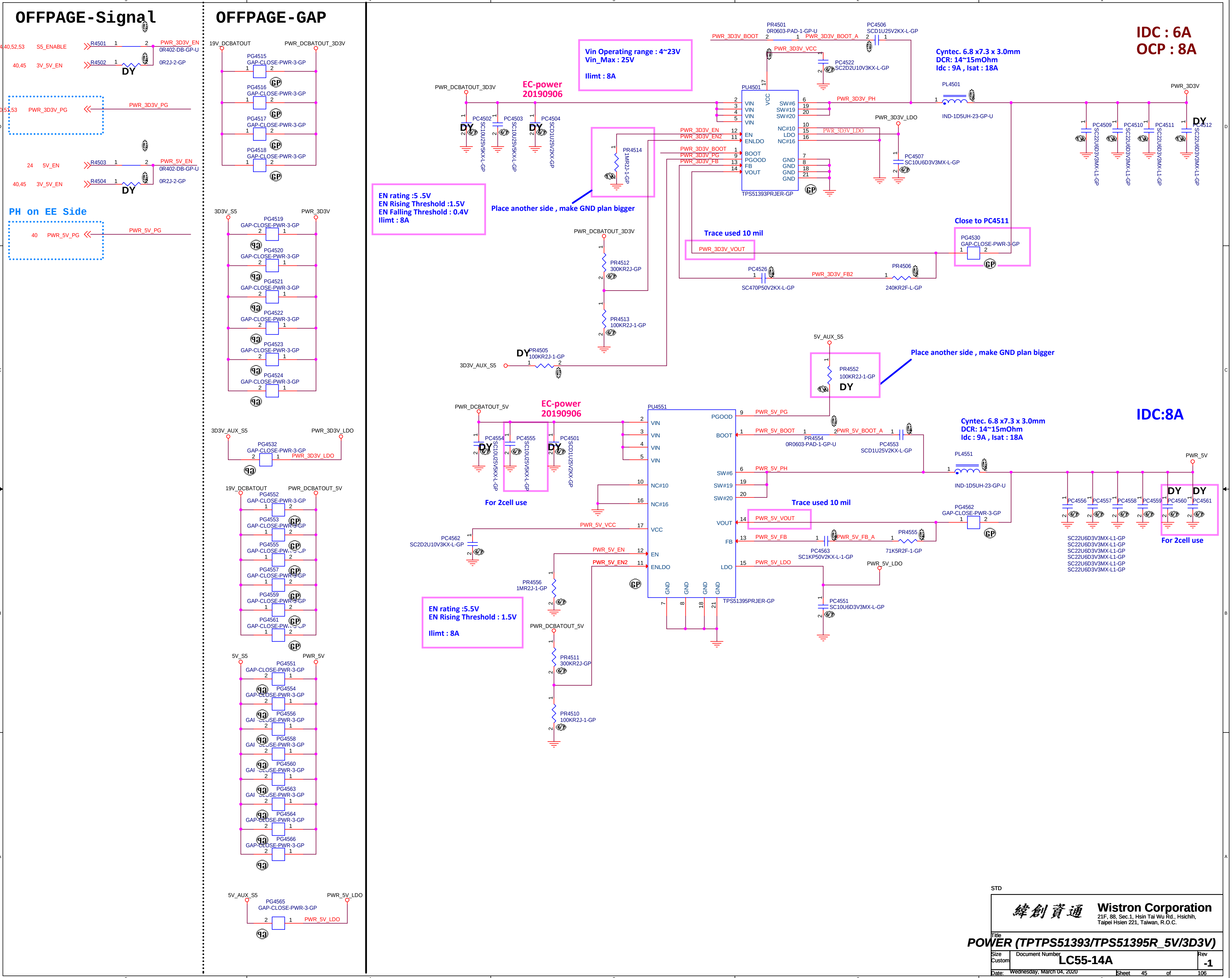
Reserve for Power test

# of CELL	VCELL_PRES	PR4413
1-CELL	1.5V	301K
2-CELL	2.5V	140K
3-CELL	3.5V	71.5K
4-CELL	4.5V	33.2K

STD

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

Title **POWER (CHARGER_BQ25710R)**
Size Custom
Document Number **LC55-14A**
Rev **-1**
Date: Wednesday, March 04, 2020
Sheet 44 of 106



Vin Operating range : 4~23V
Vin_Max : 25V

Ilimt : 8A

EN rating :5 .5V
EN Rising Threshold :1.5V
EN Falling Threshold : 0.4V
Ilimt : 8A

Place another side , make GND plan bigger

Trace used 10 mil

Place another side , make GND plan bigger

Trace used 10 mil

EN rating :5.5V
EN Rising Threshold : 1.5V

Ilimt : 8A

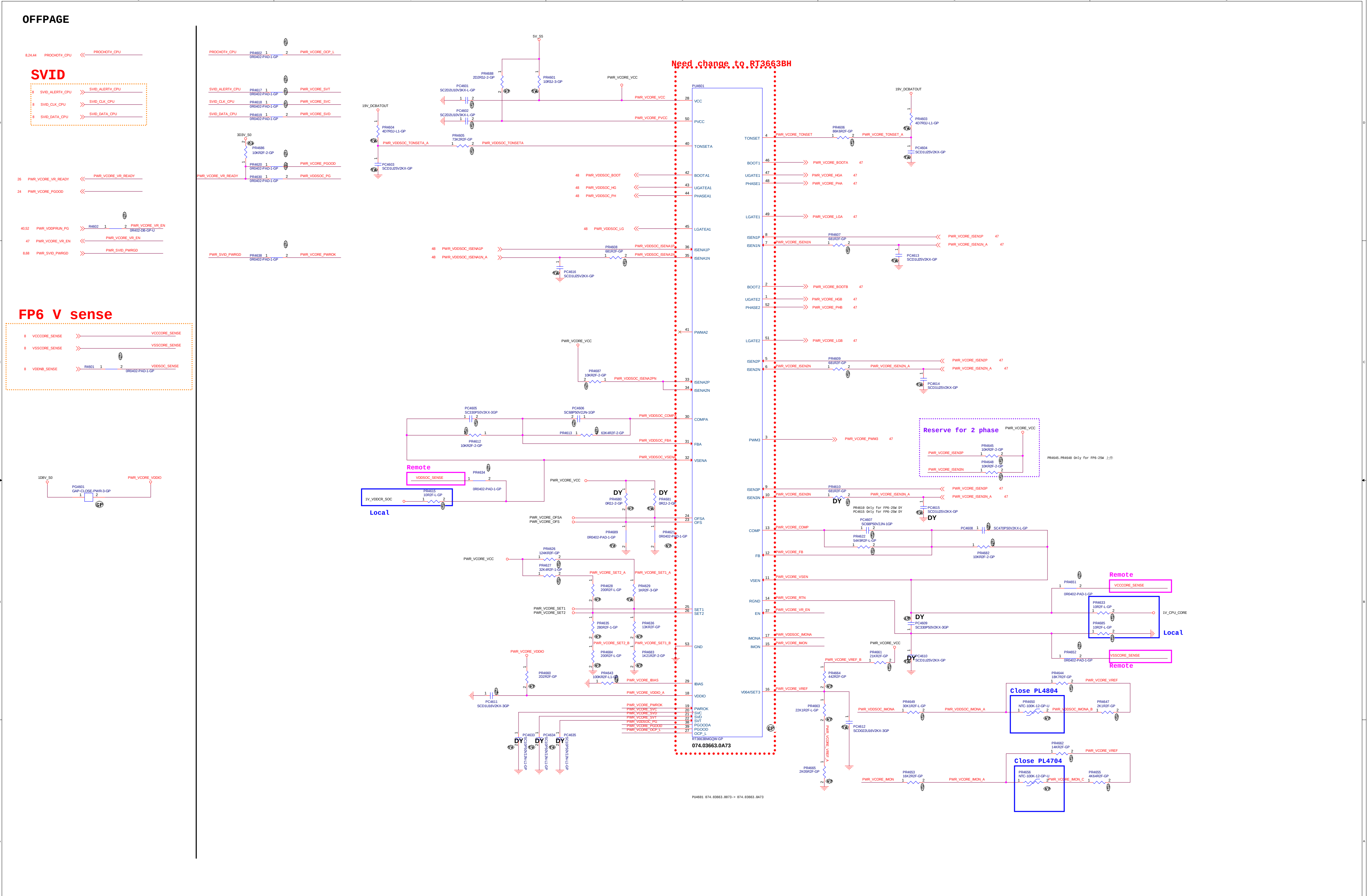
STD

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

Title
POWER (TPTPS51393/TPS51395R_5V/3D3V)

Size	Document Number	Rev
Custom	LC55-14A	-1

Date: Wednesday, March 04, 2020 Sheet 45 of 106



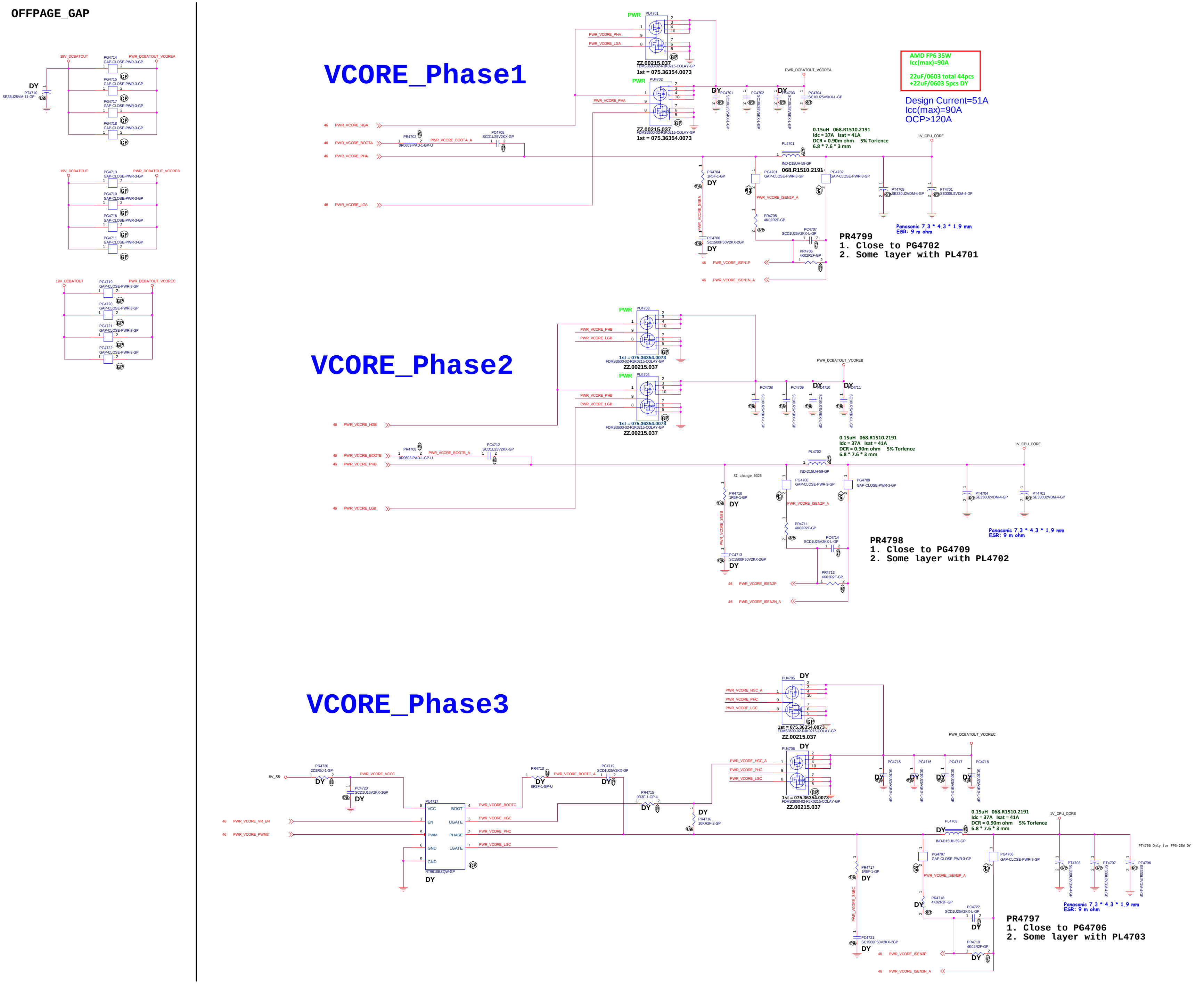
STD

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

Title **POWER_RT3663BC_CPUCORE(1/3)**

Size A1
Document Number **LC55-14A**
Rev -1

Date: Wednesday, March 04, 2020
Sheet 46 of 106



STD

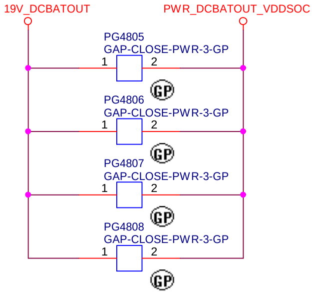
緯創資通 **Wistron Corporation**
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title **POWER_RT3663BC_CPUCORE(2/3)**

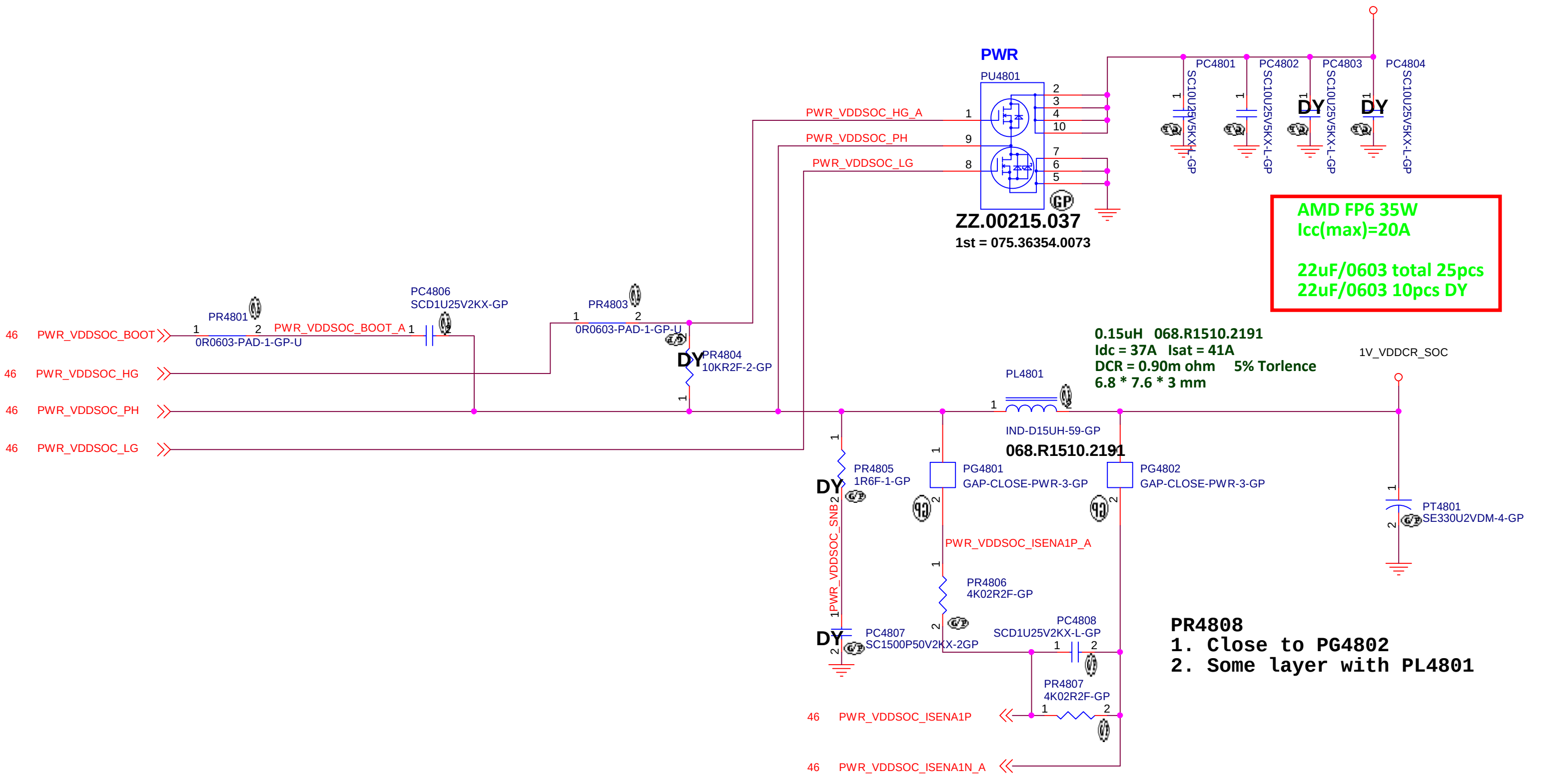
Size	Document Number	Rev
A1	LC55-14A	-1

Date: Wednesday, March 04, 2020 Sheet 47 of 106

OFFPAGE_GAP



VDDSOC_Phase1



AMD FP6 35W
Icc(max)=20A

22uF/0603 total 25pcs
22uF/0603 10pcs DY

PR4808
1. Close to PG4802
2. Some layer with PL4801

STD

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

Title **POWER_RT3663BC_CPUCORE(3/3)**

Size A3 | Document Number **LC55-14A** | Rev **-1**

Date: Wednesday, March 04, 2020 | Sheet 48 of 106

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BOM1

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

Title	***Power (RSVD)***	
Size A4	Document Number **LC55-14A**	Rev **-1**
Date: Wednesday, March 04, 2020	Sheet 49 of 106	

D

C

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B

A

BOM1

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

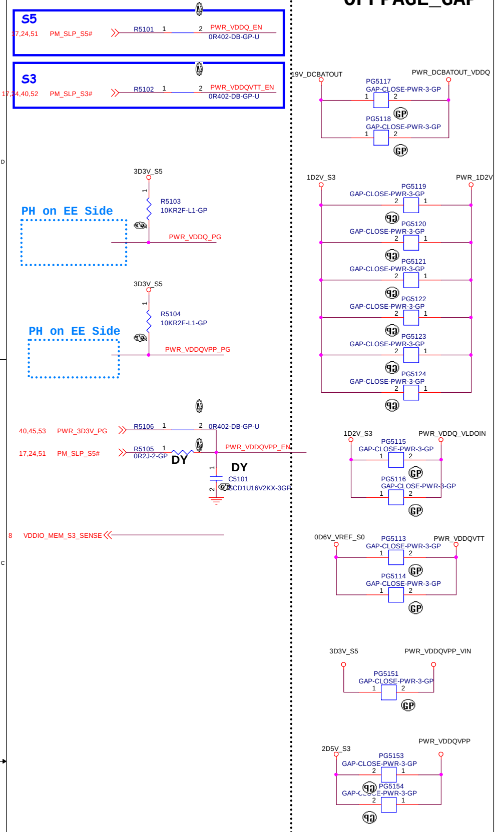
Title
Power (RSVD)

Size A4
Document Number **LC55-14A**
Rev **-1**

Date: Wednesday, March 04, 2020
Sheet 50 of 106

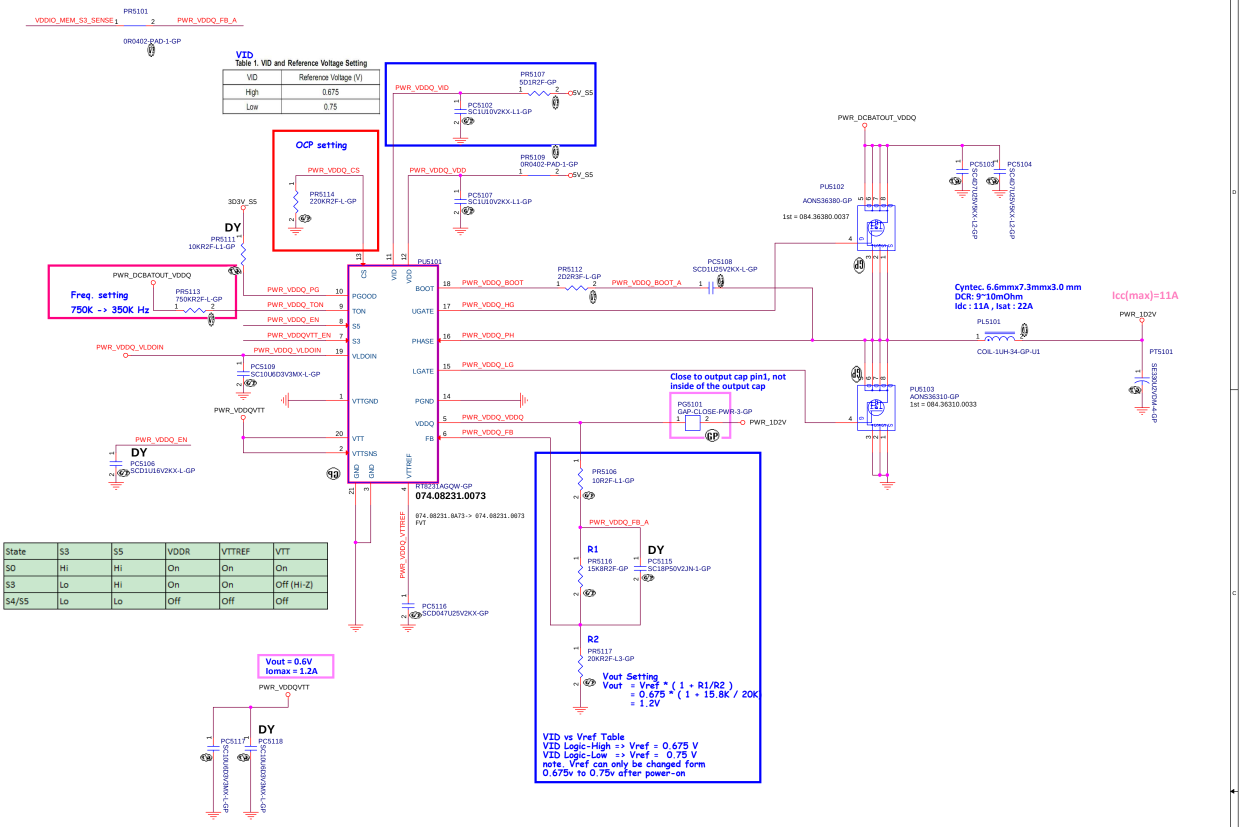
OFFPAGE

OFFPAGE_GAP



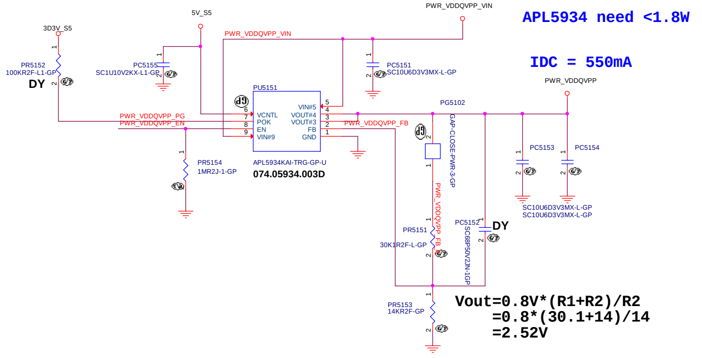
VID
Table 1. VID and Reference Voltage Setting

VID	Reference Voltage (V)
High	0.675
Low	0.75



State	S3	S5	VDDR	VTTREF	VTT
S0	Hi	Hi	On	On	On
S3	Lo	Hi	On	On	Off (Hi-Z)
S4/S5	Lo	Lo	Off	Off	Off

APL5934 for 2D5V



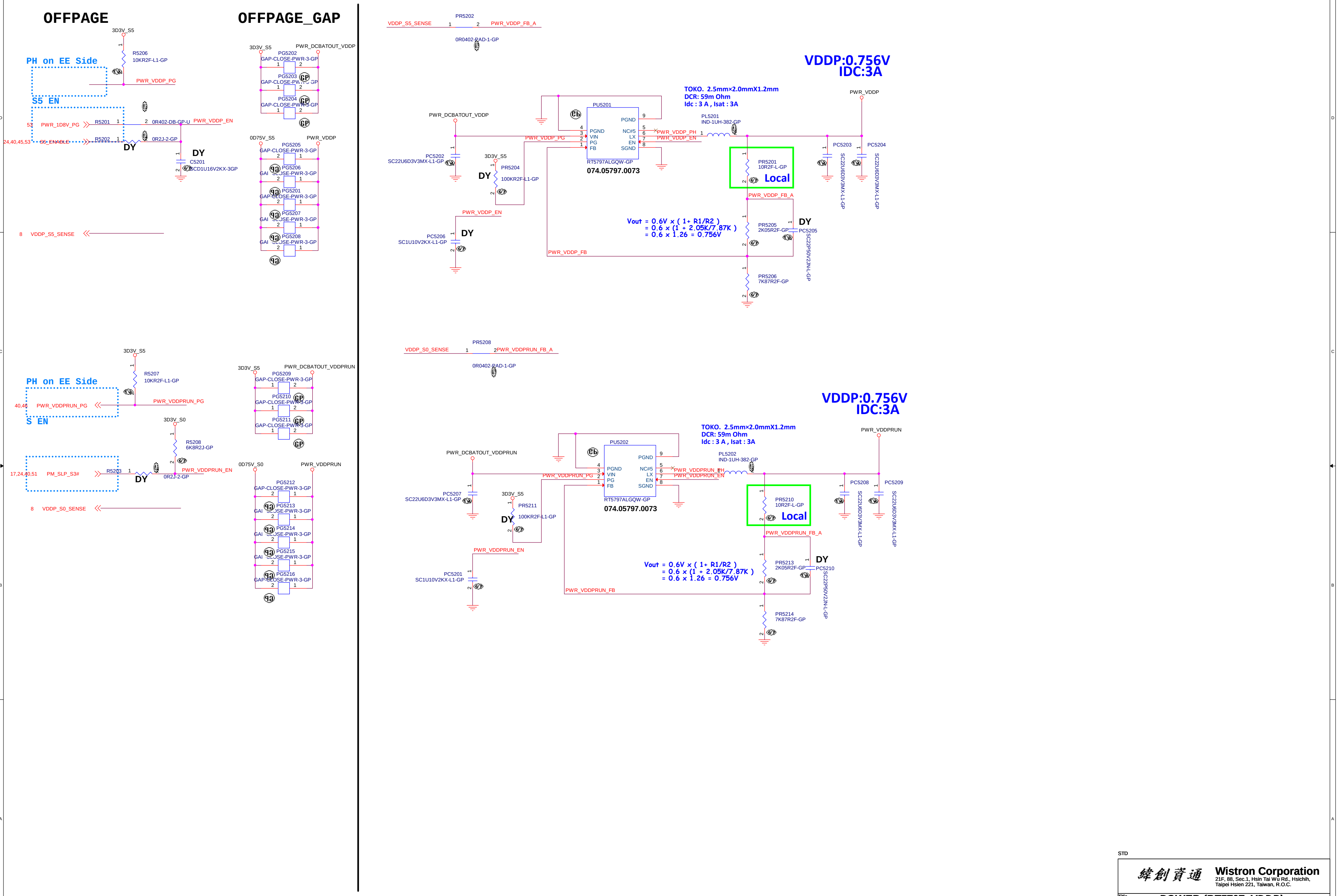
STD

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

Title
POWER (RT8231/APL5934_VDDQ/VPP)

Size Custom
Document Number **LC55-14A**
Rev **-1**

Date: Wednesday, March 04, 2020
Sheet 51 of 106



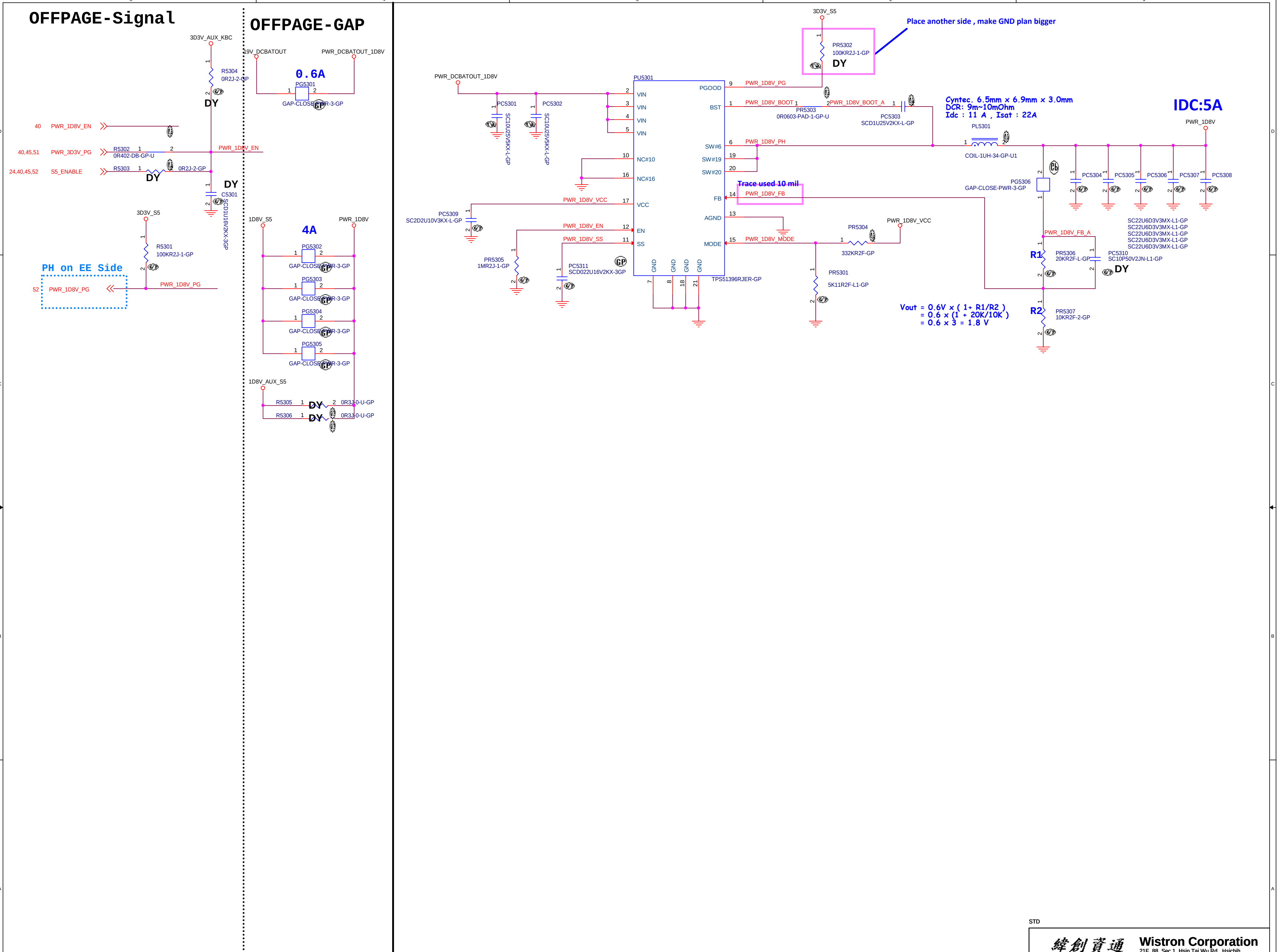
STD

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

Title **POWER (RT5797_VDDP)**

Size	Document Number	Rev
A2	LC55-14A	-1

Date: Wednesday, March 04, 2020 Sheet 52 of 106



STD

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

Title	POWER (TPS51396_1D8V)	
Size Custom	Document Number LC55-14A	Rev -1
Date: Wednesday, March 04, 2020	Sheet 53 of 106	

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BOM1

緯創資通

Wistron Corporation

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

Title

Power (RSVD)

Size
A4

Document Number

LC55-14A

Rev

-1

Date: Wednesday, March 04, 2020

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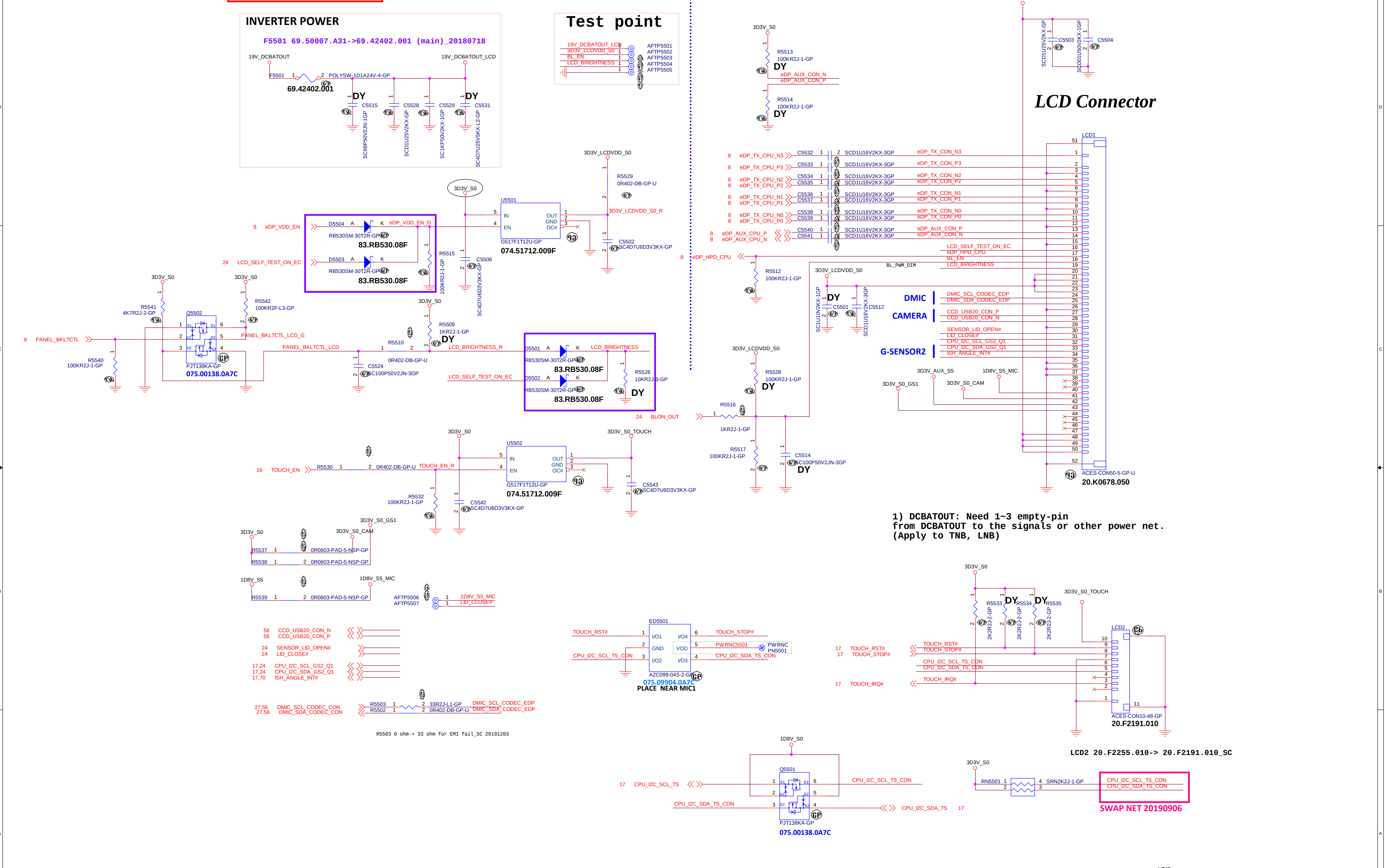
Main Func = LCD



1) DCBATOUT: Need 1~3 empty-pin
from DCBATOUT to the signals or other power net.
(Apply to TNB, LNB)

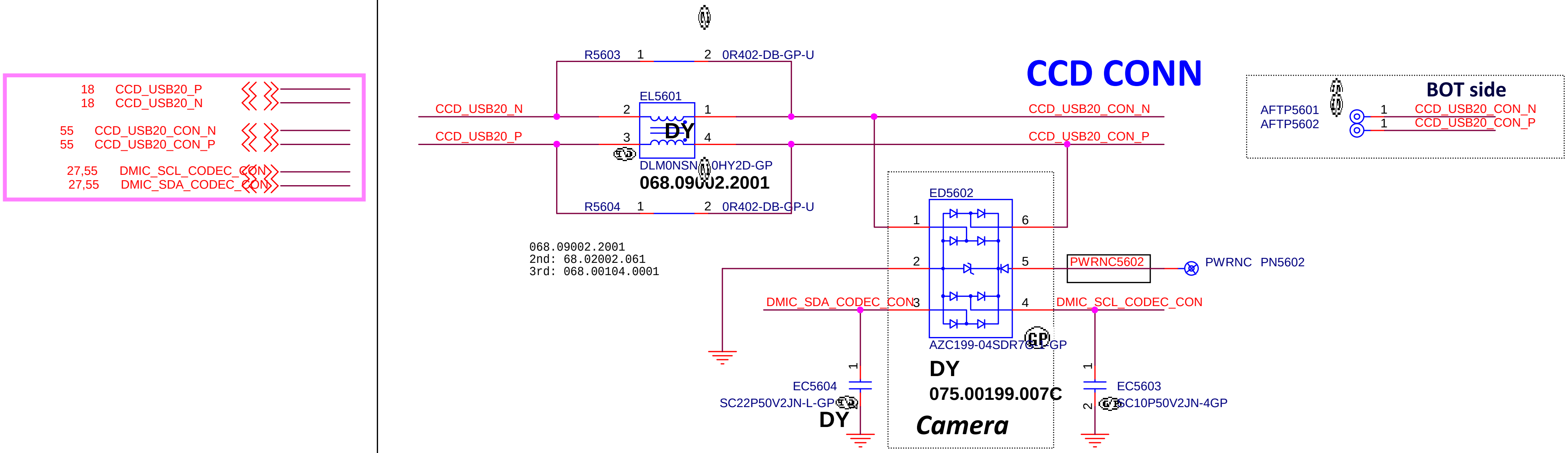
LC40

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

Title **DISPLAY (LCD/TOUCH)**

Size A2 | Document Number **LC55-14A** | Rev **-1**

Date: Wednesday, March 04, 2020 | Sheet 55 of 106



```
068.09002.2001
2nd: 68.02002.061
3rd: 068.00104.0001
```

```
EC5603 22P DY-> 10P ASM for EMI fail_SC 20191203
```

BOM1

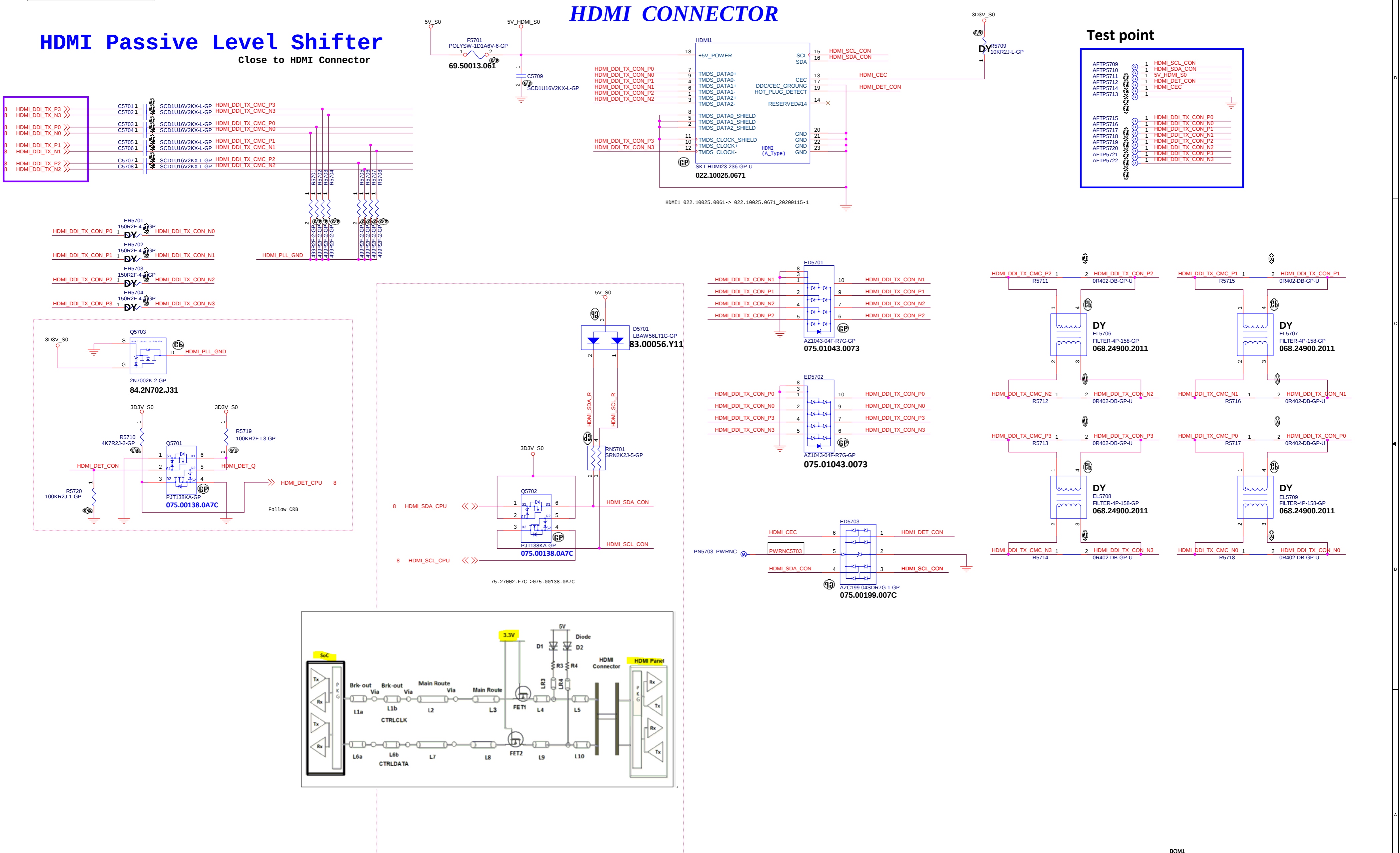
緯創資通 **Wistron Corporation**
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title
Display (CRT/IR Camera)

Size A4 | Document Number **LC55-14A** | Rev **-1**

Date: Wednesday, March 04, 2020 Sheet 56 of 106

HDMI



BOM1

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

Title **Display (HDMI Conn/Retimer)**

Size A2 Document Number **LC55-14A** Rev **-1**

Date: Wednesday, March 04, 2020 Sheet 57 of 106

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BOM1

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

Title
Display (RSVD) DP / DVI

Size
A4
Document Number
LC55-14A
Rev
-1

Date: Wednesday, March 04, 2020
Sheet 58 of 106

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BOM1

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

Title
Display (RSVD)

Size
A4
Document Number
LC55-14A
Rev
-1

Date: Wednesday, March 04, 2020
Sheet 59 of 106

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BOM1

緯創資通

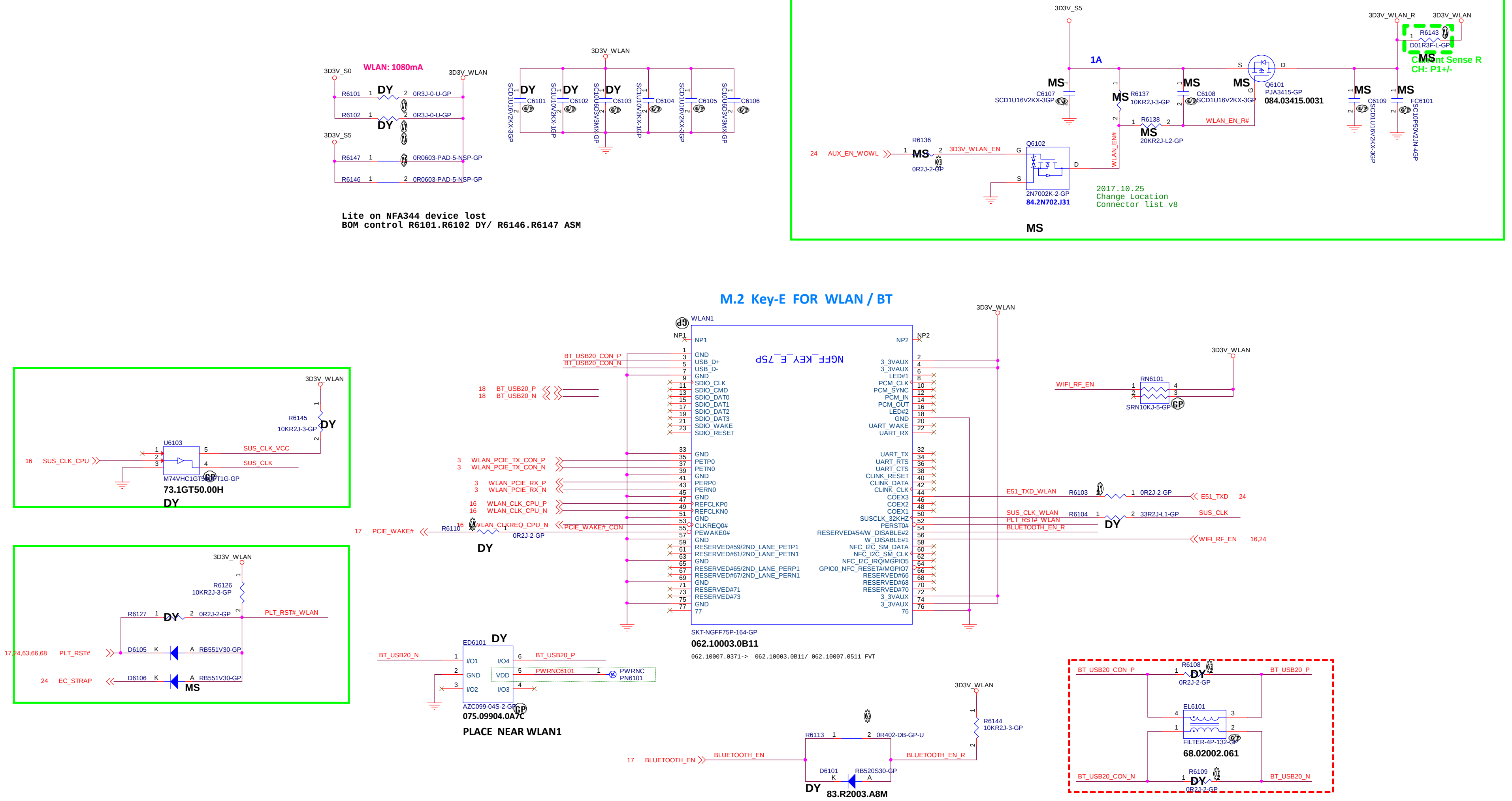
Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title
INT IO (RSVD)(HDD/ODD)

Size A4
Document Number **LC55-14A**
Rev **-1**

Date: Wednesday, March 04, 2020
Sheet 60 of 106

WLAN



Lite on NFA344 device lost
BOM control R6101.R6102 DY/ R6146.R6147 ASM

<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
INT IO (WLAN M.2)

Size A2 | Document Number **LC55-14A** | Rev **-1**

Date: Wednesday, March 04, 2020 | Sheet 61 of 106

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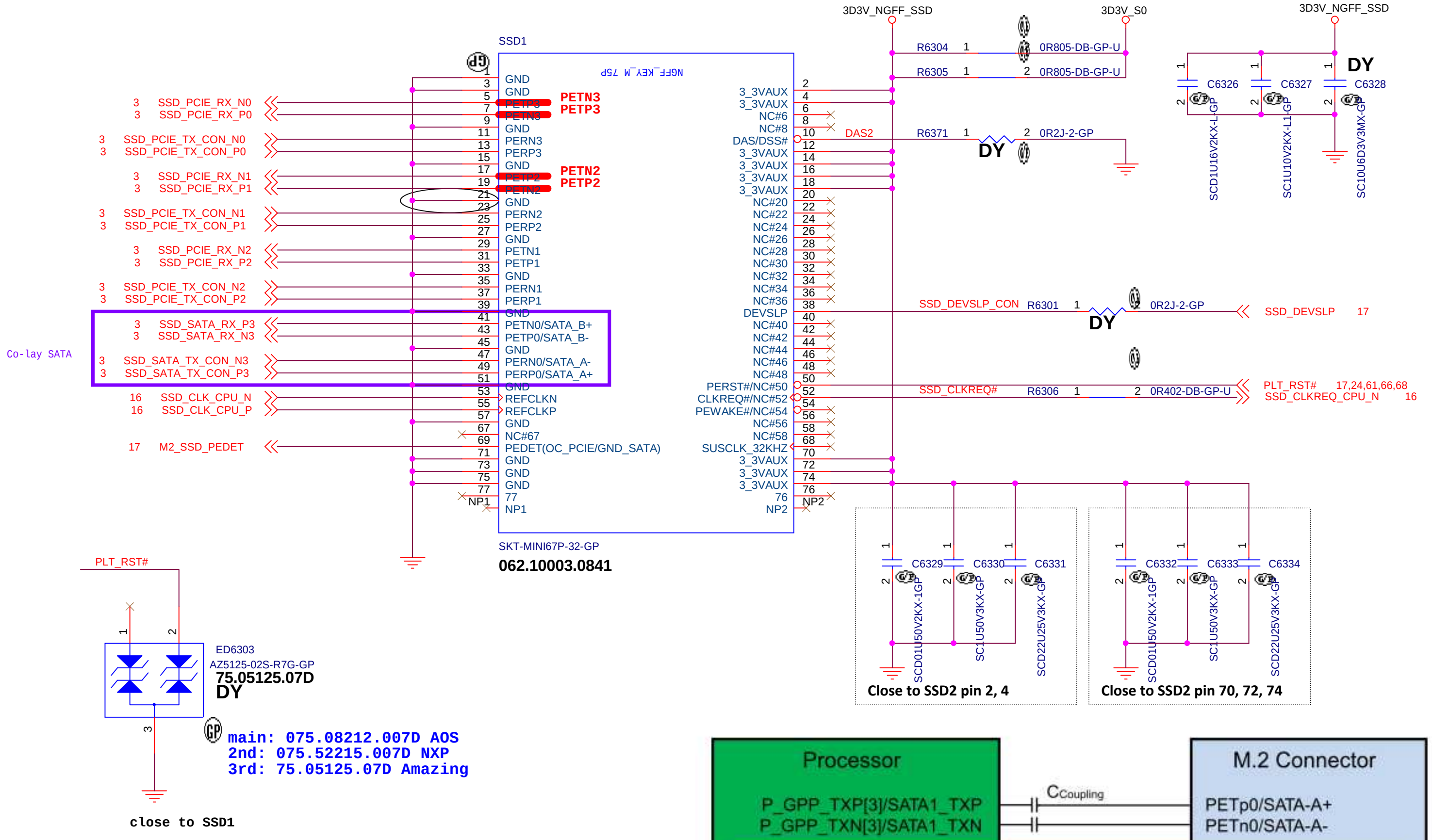
BOM1

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

Title	***INT IO (RSVD)(WWAN)***	
Size A4	Document Number **LC55-14A**	Rev **-1**
Date: Wednesday, March 04, 2020	Sheet 62 of 106	

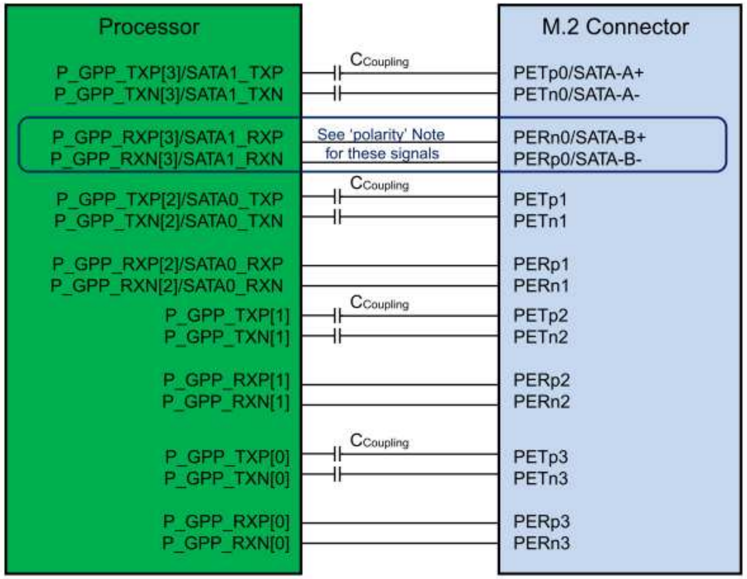
Main Func = SSD

TYPE-M NGFF CARD FOR PCIE SSD/Optane



main: 075.08212.007D AOS
2nd: 075.52215.007D NXP
3rd: 75.05125.07D Amazing

close to SSD1



BOM1

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

Title *INT IO (SSD M.2/ eMMC)*

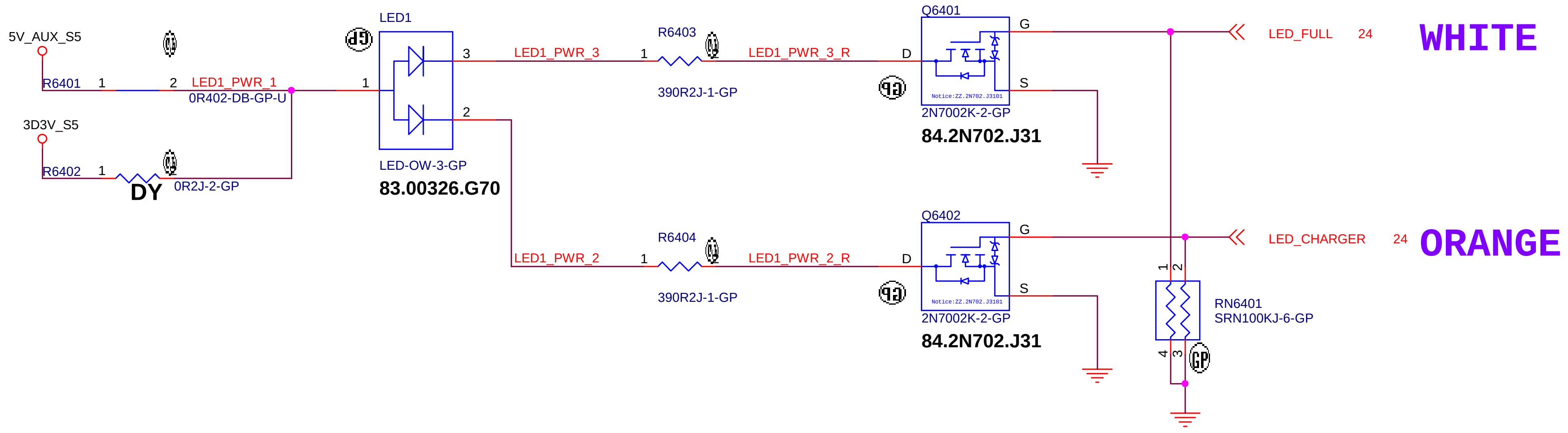
Size	Document Number	Rev
A3	LC55-14A	-1

Date: Wednesday, March 04, 2020 Sheet 63 of 106

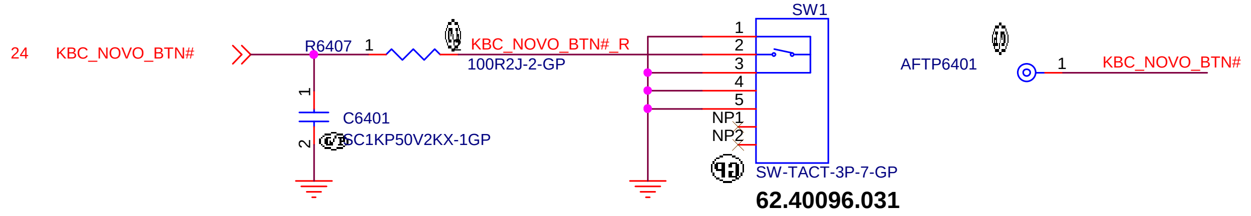
LED

DC-IN

Charger LED



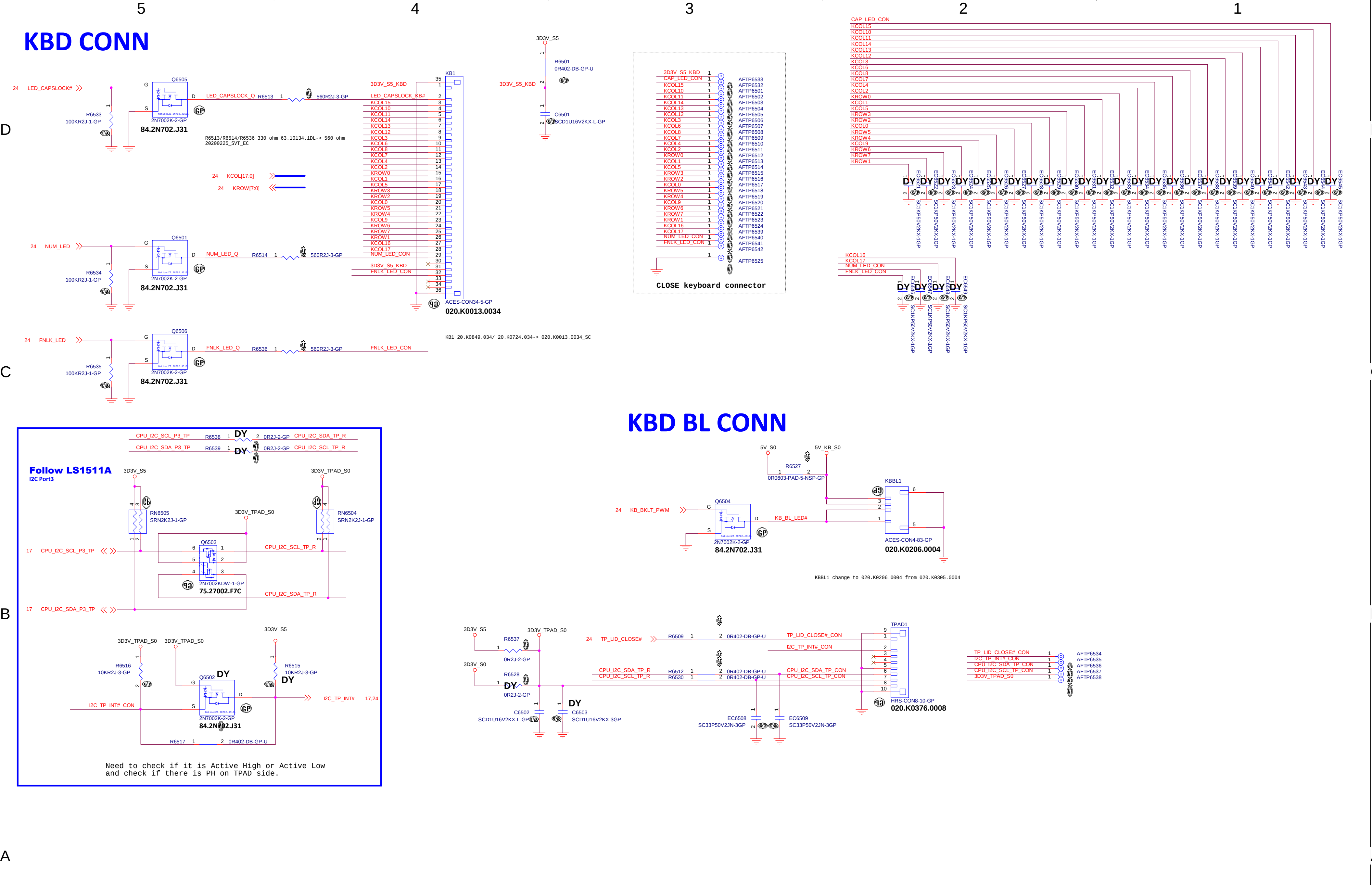
NOVO BUTTON



BOM1

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

Title	*LED / Button / Power Button*	
Size A4	Document Number **LC55-14A**	Rev **-1**
Date: Wednesday, March 04, 2020	Sheet 64 of 106	



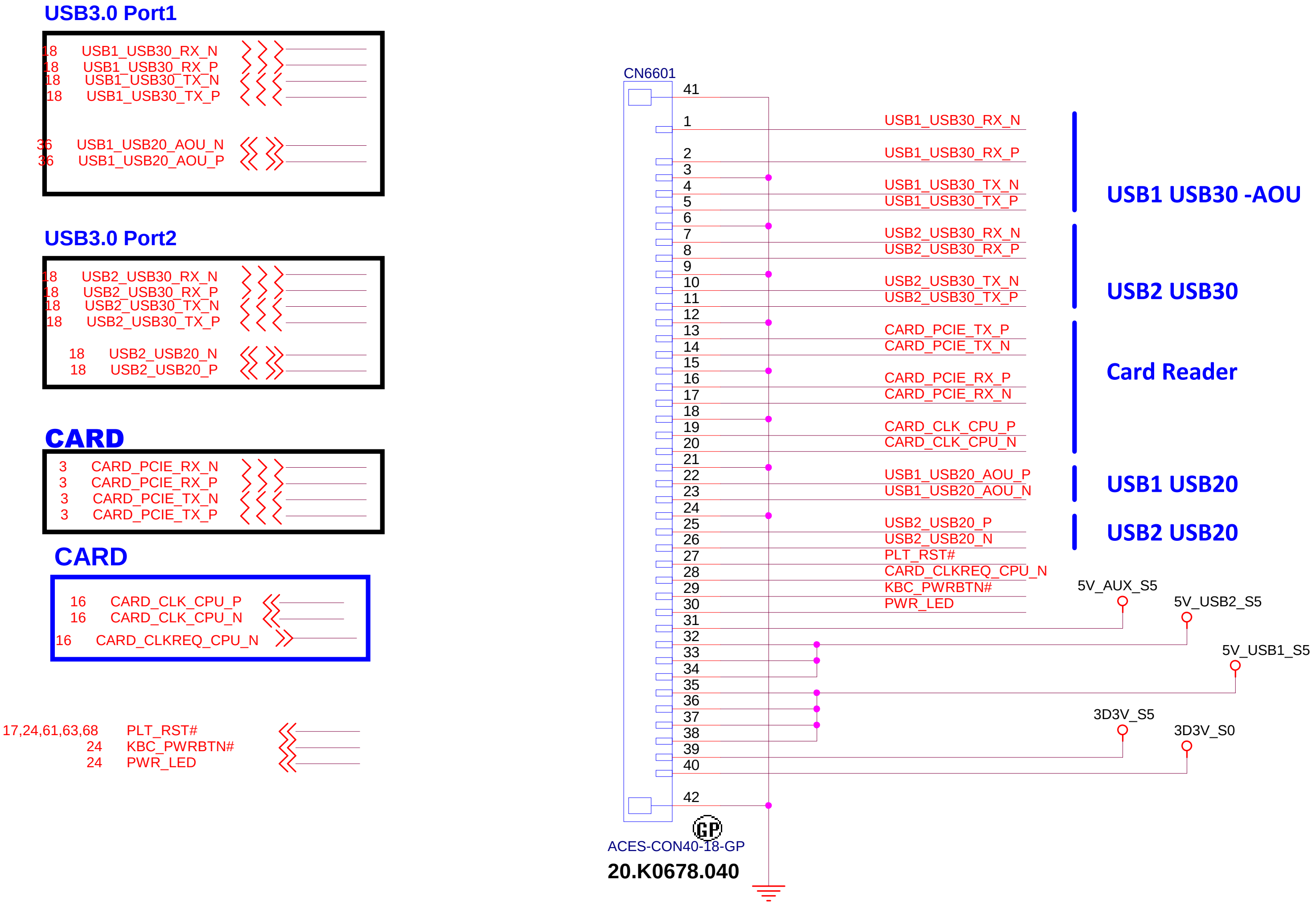
LC40

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

Title
INT IO (KB/TP)

Size	Document Number	Rev
A2	LC55-14A	-1

Date: Wednesday, March 04, 2020 Sheet 65 of 106



LC40

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

Title
IO BOARD CONN

Size	Document Number	Rev
A4	**LC55-14A**	**-1**

Date: Wednesday, March 04, 2020 Sheet 66 of 106

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LC40

緯創資通

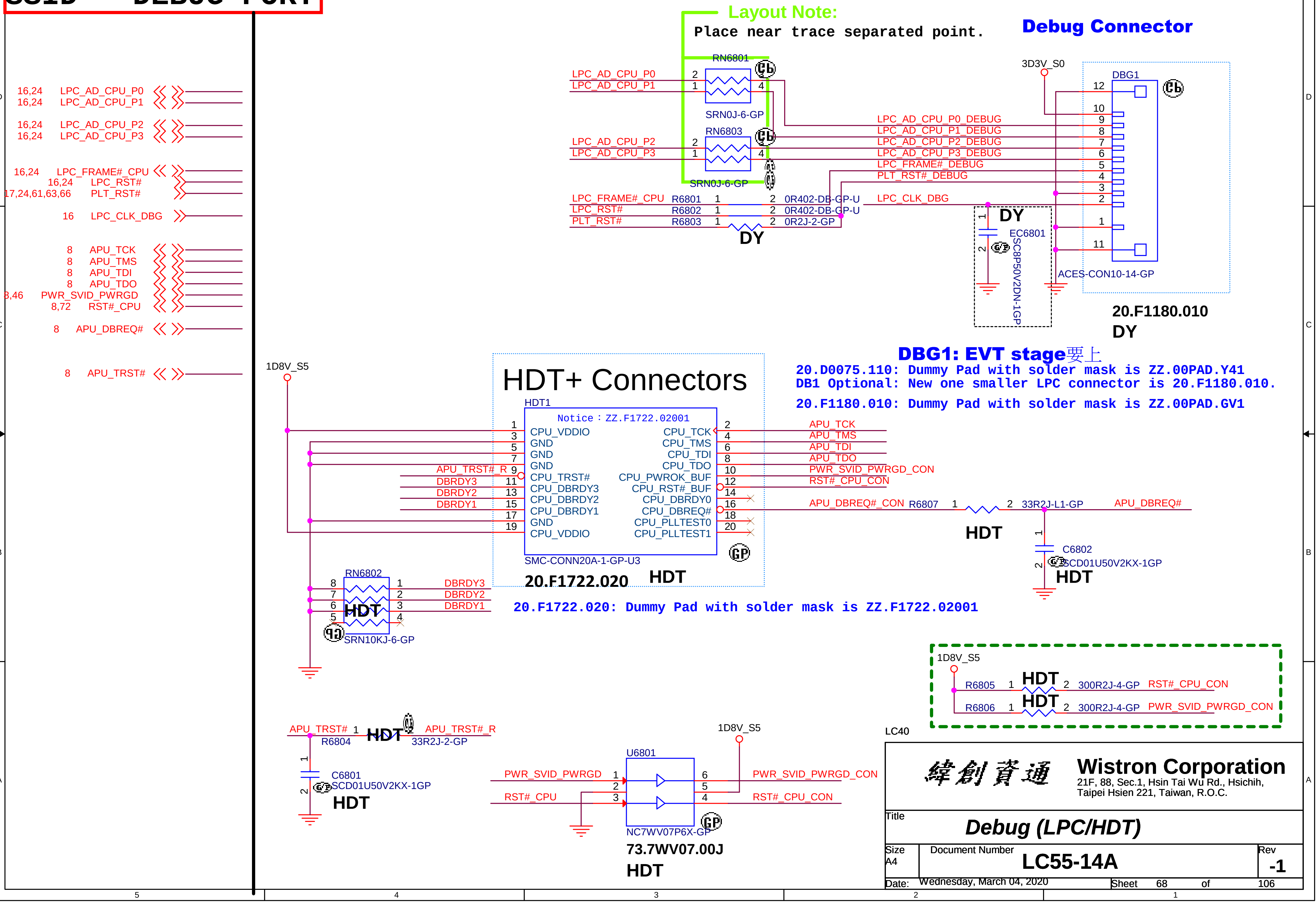
Wistron Corporation
21F, 88, Sec.1, Hsin Tai Wu Rd., Hsichih,
Taipei Hsien 221, Taiwan, R.O.C.

Title
SENSOR (RSVD)(HALL-SENSOR)

Size A4
Document Number **LC55-14A**
Rev **-1**

Date: Wednesday, March 04, 2020
Sheet 67 of 106

SSID = DEBUG PORT



緯創資通

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

Title: **Debug (LPC/HDT)**

Size	Document Number	Rev
A4	LC55-14A	-1

Date: Wednesday, March 04, 2020 Sheet 68 of 106

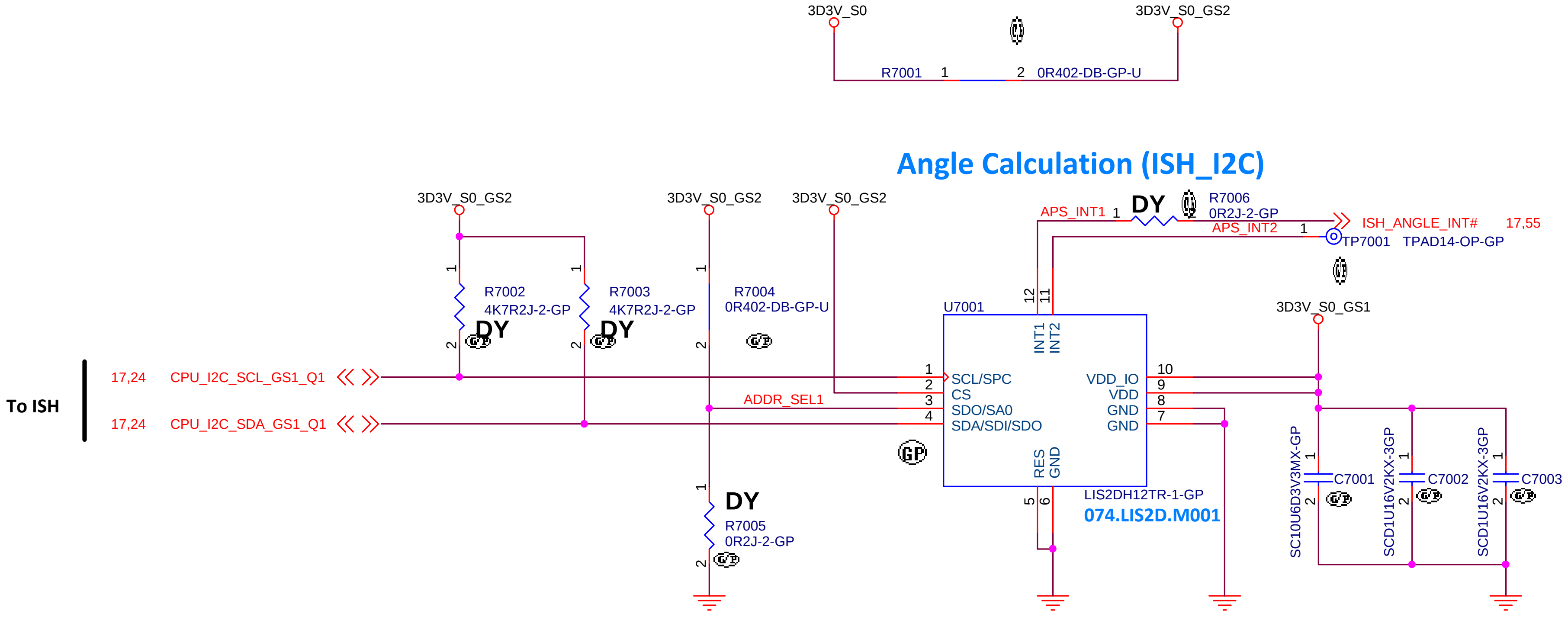
(Blanking)

BOM1

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

Title ***Sensor (RSVD) (GYROSCOPE/PRESSUE/***

Size A4	Document Number **LC55-14A**	Rev **-1**
Date: Wednesday, March 04, 2020		Sheet 69 of 106



074.LIS2D.M001 BOM control to SL80R44823AA

TABLE

CS	Mode Selection
H	I2C Mode
L	SPI Mode

← **Logic**

TABLE for Angle Detection (U7001): Tri-axis Digital Accelerometer

P/N	ADDR_SEL1	Address
LIS2DH12TR	H L	32h(W) & 33h(R) 30h(W) & 31h(R)
▨	▨	▨

← **Logic**

TABLE of G-Sensor (U7001)

Vendor	P/N	Wistron P/N
ST	LIS2DH12TR	074.LIS2D.M001
▨	▨	▨

BOM1

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

Title
Sensor (G-sensor)

Size A4
Document Number **LC55-14A**
Rev **-1**

Date: Wednesday, March 04, 2020
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BOM1

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

Title
EXT IO (TBT Re-Timer-1 RSVD)

Size A4
Document Number **LC55-14A**
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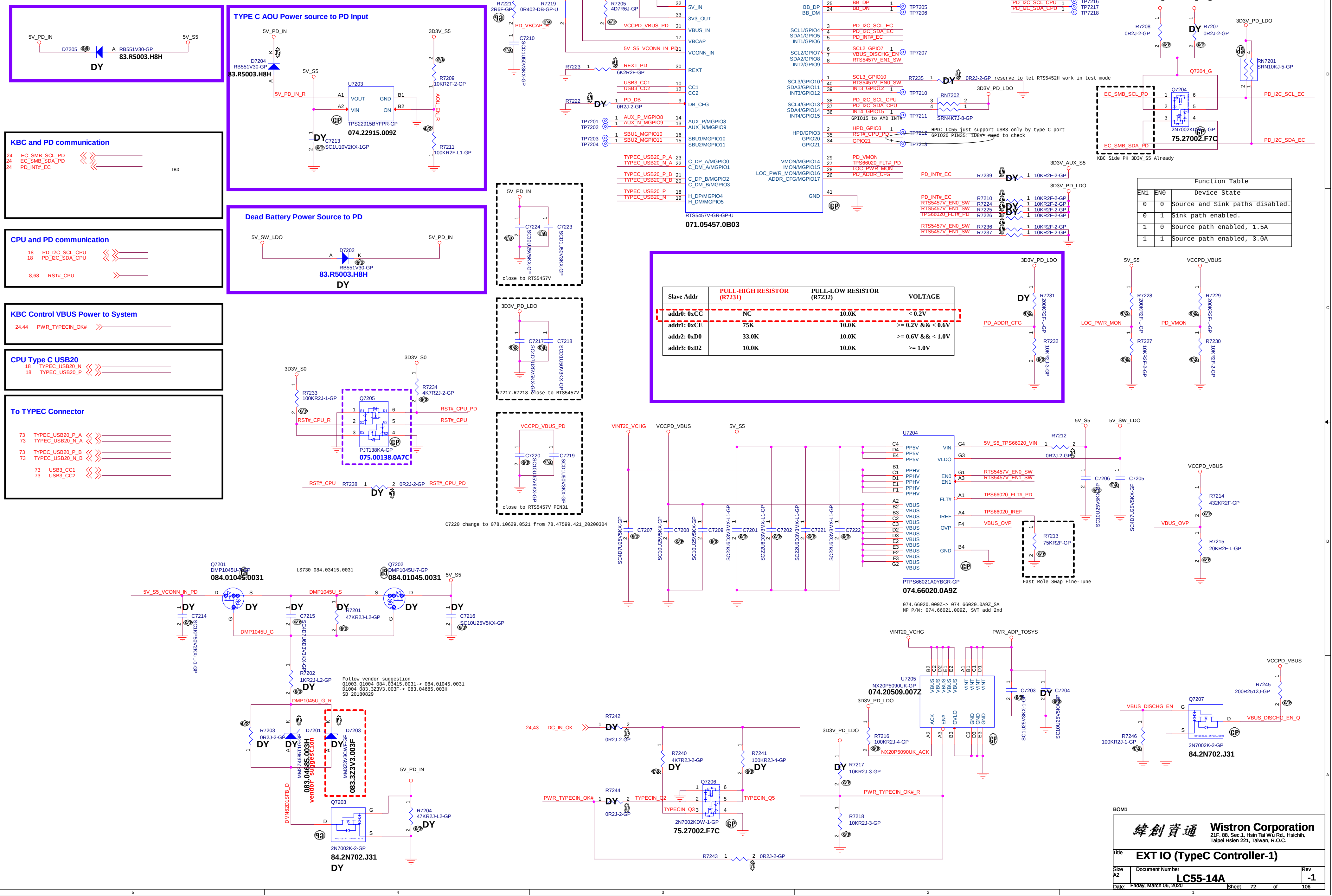
USB Port3, Type C_USB3.0, PD



Slave Addr	PULL-HIGH RESISTOR (R7231)	PULL-LOW RESISTOR (R7232)	VOLTAGE
addr0: 0xCC	NC	10.0K	< 0.2V
addr1: 0xCE	75K	10.0K	>= 0.2V && < 0.6V
addr2: 0xD0	33.0K	10.0K	>= 0.6V && < 1.0V
addr3: 0xD2	10.0K	10.0K	>= 1.0V

Function Table

EN1	EN0	Device State
0	0	Source and Sink paths disabled.
0	1	Sink path enabled.
1	0	Source path enabled, 1.5A
1	1	Source path enabled, 3.0A

BOM1

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

Title **EXT IO (TypeC Controller-1)**

Size A2
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Date: Friday, March 06, 2020
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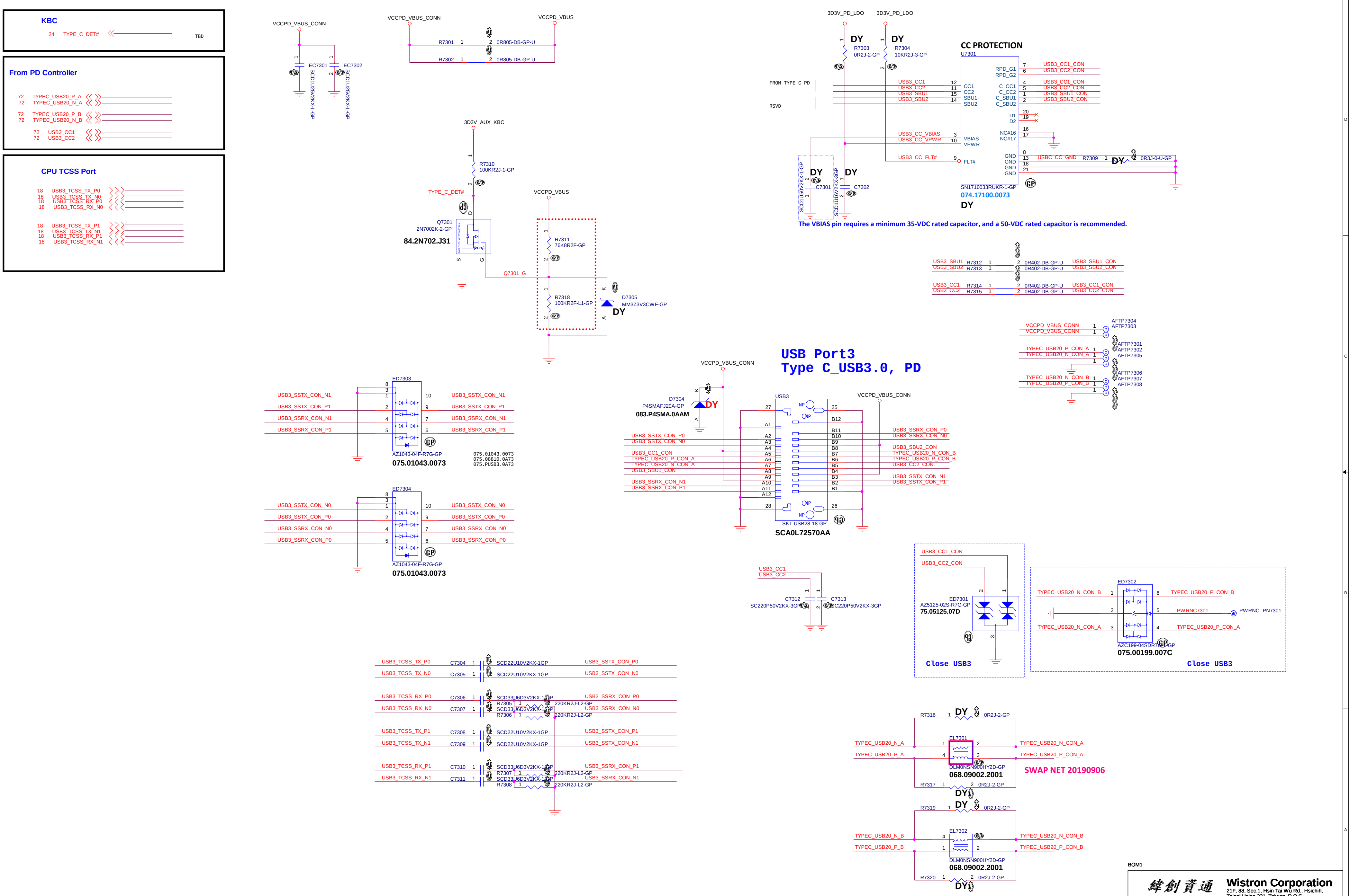

BOM1

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

Title	EXT IO (TypeC Conn/Protect)
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BOM1

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

Title	*EXT IO (TBT Re-Timer-2 RSVD)*	
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BOM1

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

Title **EXT IO (TypeC Controller-2 RSVD)**

Size A4 Document Number **LC55-14A** Rev **-1**

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BOM1

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

Title *GPU (RSVD) (PEG 1/5)*

Size A4 Document Number **LC55-14A** Rev **-1**

Date: Wednesday, March 04, 2020 Sheet 76 of 106

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BOM1

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

Title	*GPU (RSVD) (DIGITAL 2/5)*	
Size A4	Document Number LC55-14A	Rev -1
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BOM1

緯創資通 **Wistron Corporation**

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

Title
GPU (RSVD) (VRAM 3/5)

Size
A4
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BOM1

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

Title: *GPU (RSVD) (GPIO 4/5)*

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BOM1

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

Title
GPU (RSVD) (PWR/GND 5/5)

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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	*GPU (RSVD)*		
Size A1	Document Number **LC55-14A**		Rev **-1**
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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	***GPU (RSVD)***	
Size A1	Document Number **LC55-14A**	Rev **-1**
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BOM1

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

Title **GPU (RSVD)**

Size A1
Document Number **LC55-14A**
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BOM1

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

Title
GPU (RSVD)

Size A1
Document Number **LC55-14A**
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BOM1

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

Title
GPU (RSVD) (Power_VGA_CORE)

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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
GPU (RSVD) (Power_others)

Size
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Date: Wednesday, March 04, 2020
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BOM1

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

Title
GPU (RSVD) (EE_Power)

Size
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BOM1

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

Title	***GPU (RSVD) (Discharge/Sequence)***
Size A4	Document Number **LC55-14A**
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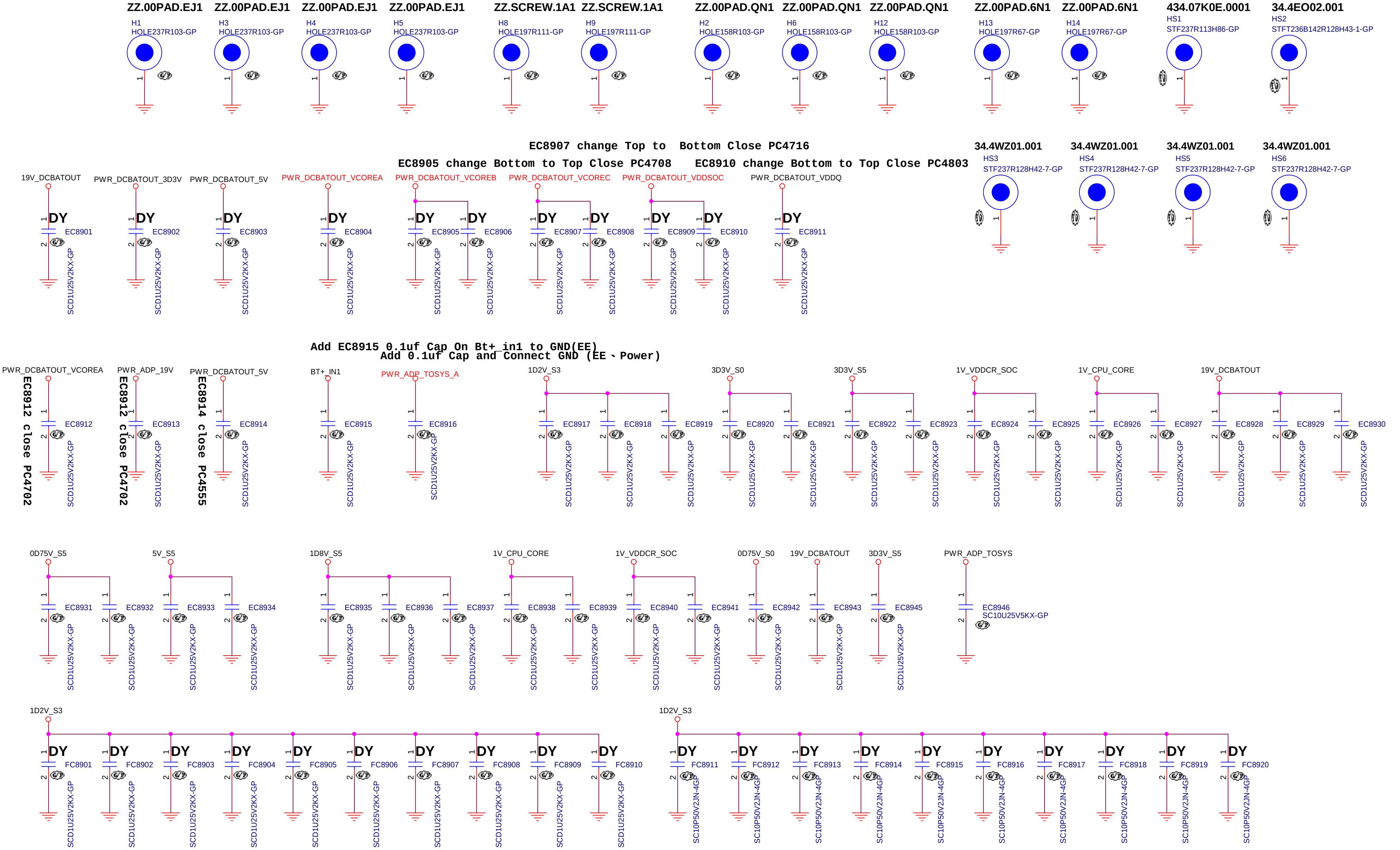

BOM1

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

Title
UNUSED PARTS (RF/EMI Capacitors)

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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
(RESERVED)

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BOM1

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

Title **(RESERVED)**

Size A4 Document Number **LC55-14A** Rev **-1**

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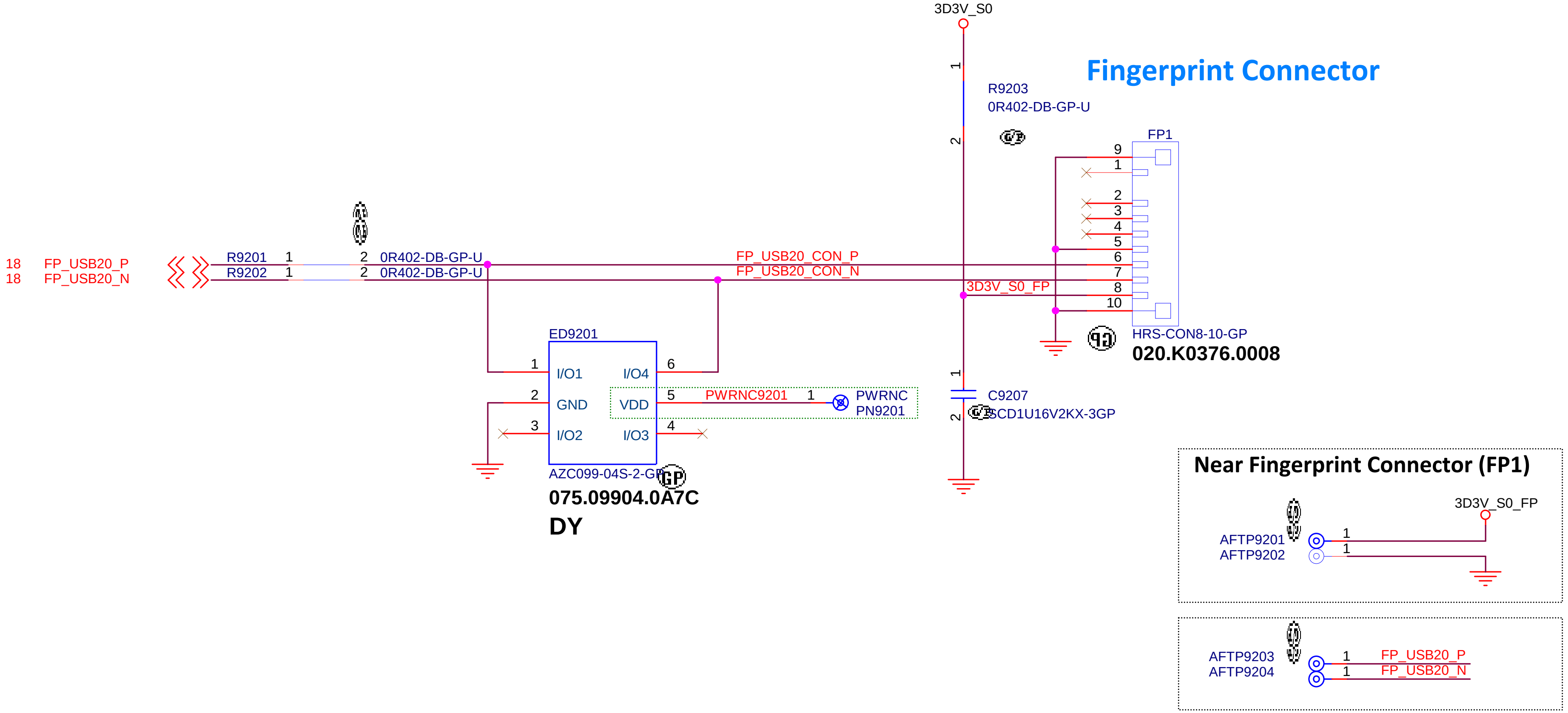

LC40

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

Title
INT IO (FP)

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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
TYPEC_DP_RTS5455

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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
TYPEC_PD_Controller

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BOM1

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

Title	***Reserved***	
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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.

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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
Debug (RSVD)(XDP debug)

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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
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BOM1

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

Title	***Change History***	
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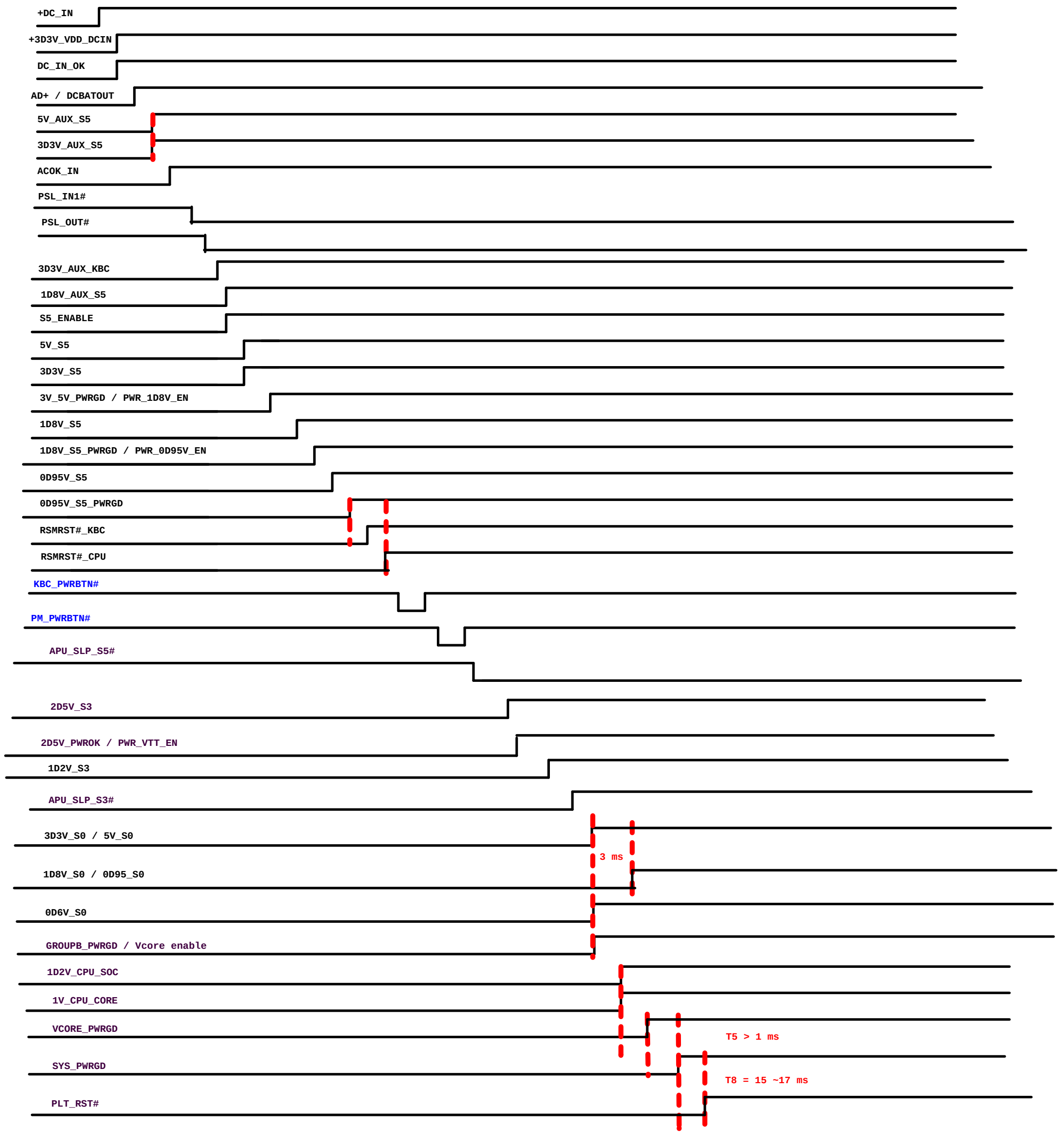
AC mode



TBD

BOM1

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

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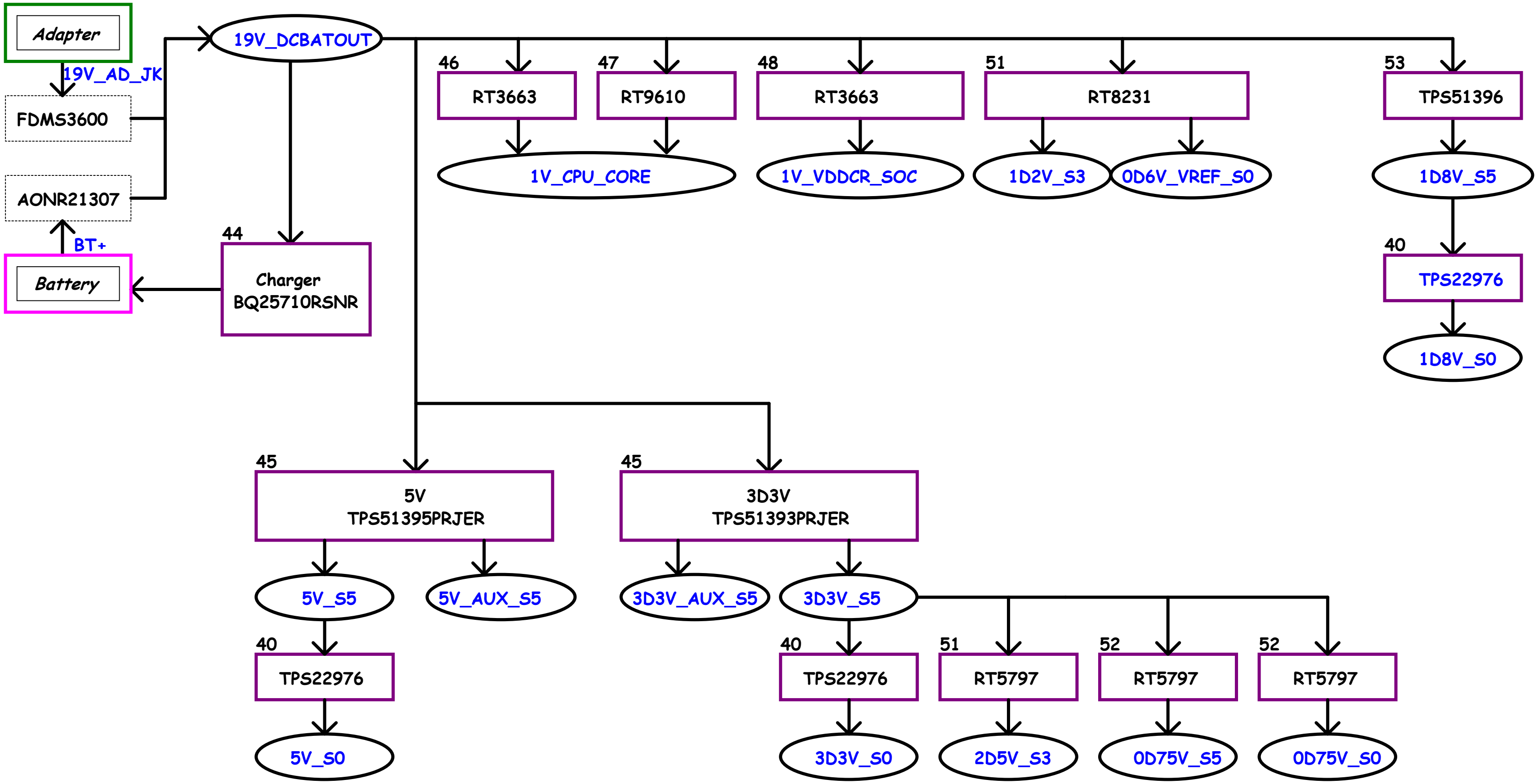

BOM1

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

Title
Power Block Diagram

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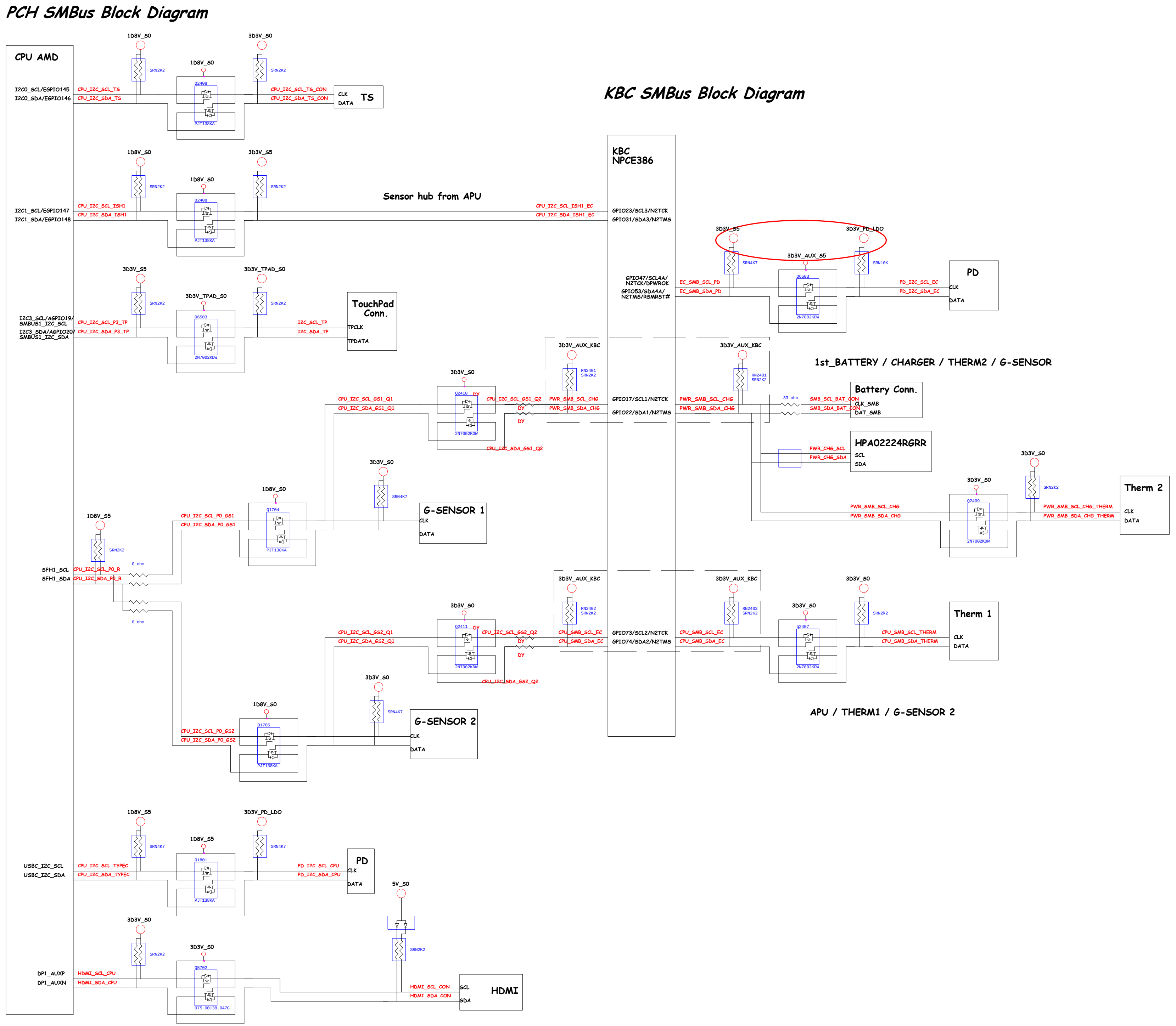

BOM1

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

Title
SMBUS/I2C BLOCK DIAGRAM

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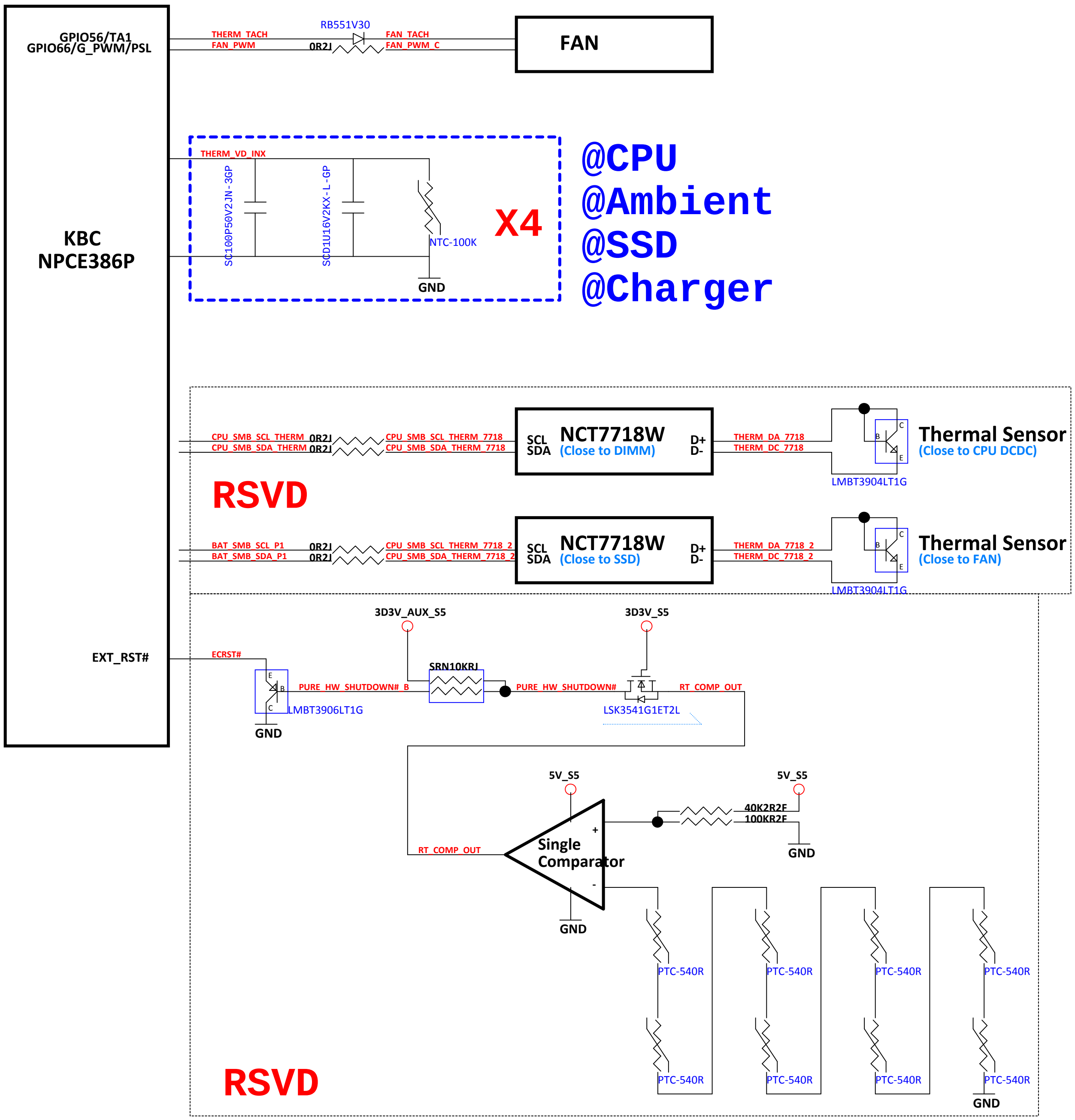
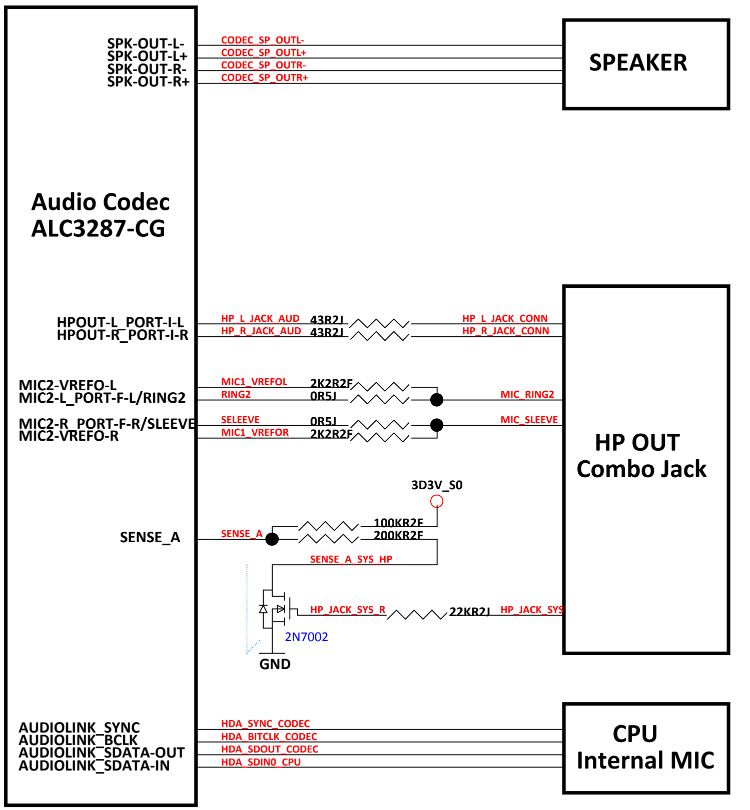
Thermal Block Diagram



Audio Block Diagram



BOM1

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

Title
THERMAL/AUDIO BLOCK DIAGRAM

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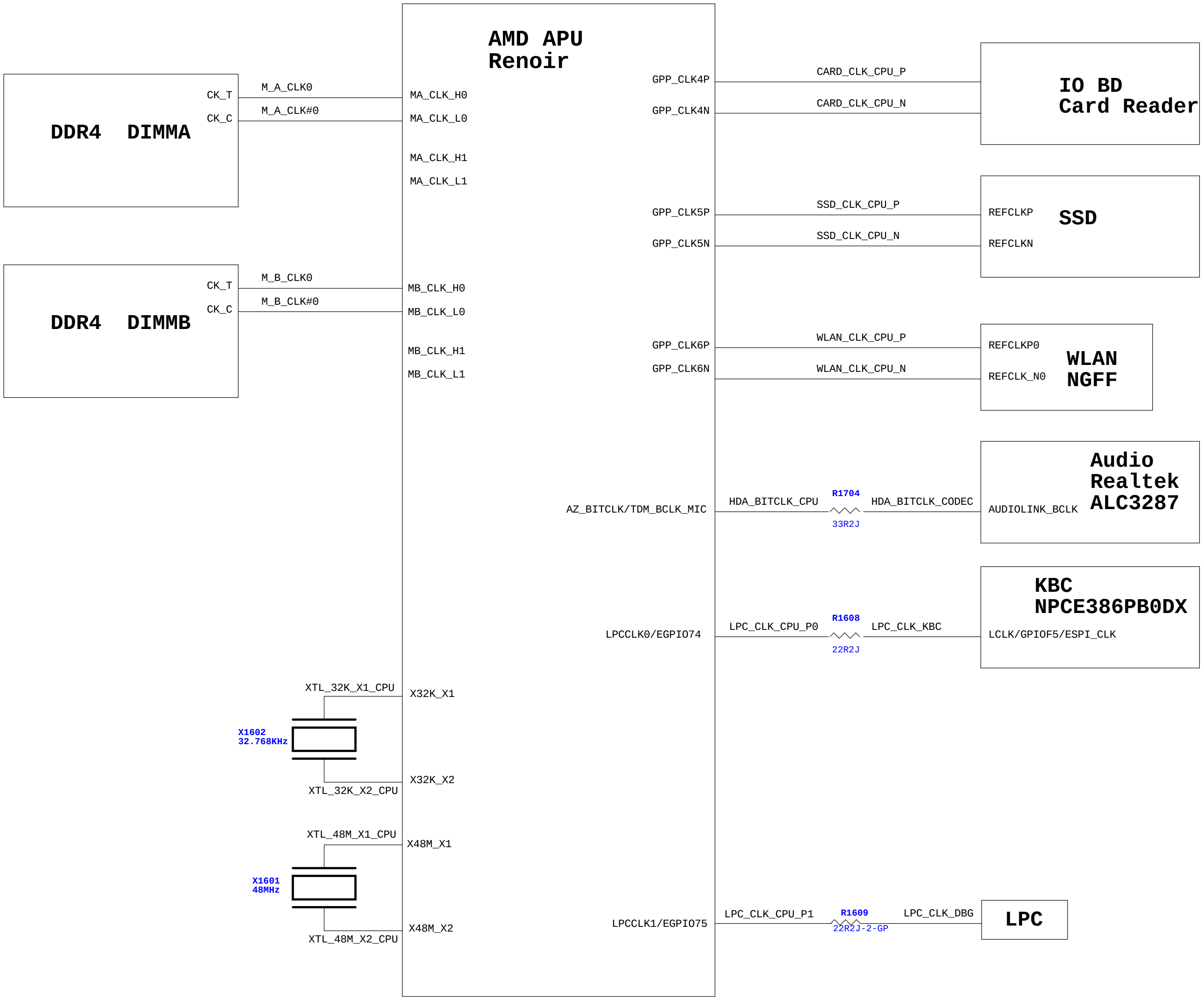
CLK Block Diagram



BOM1

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

Title
CLK Block

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