

Compal Confidential

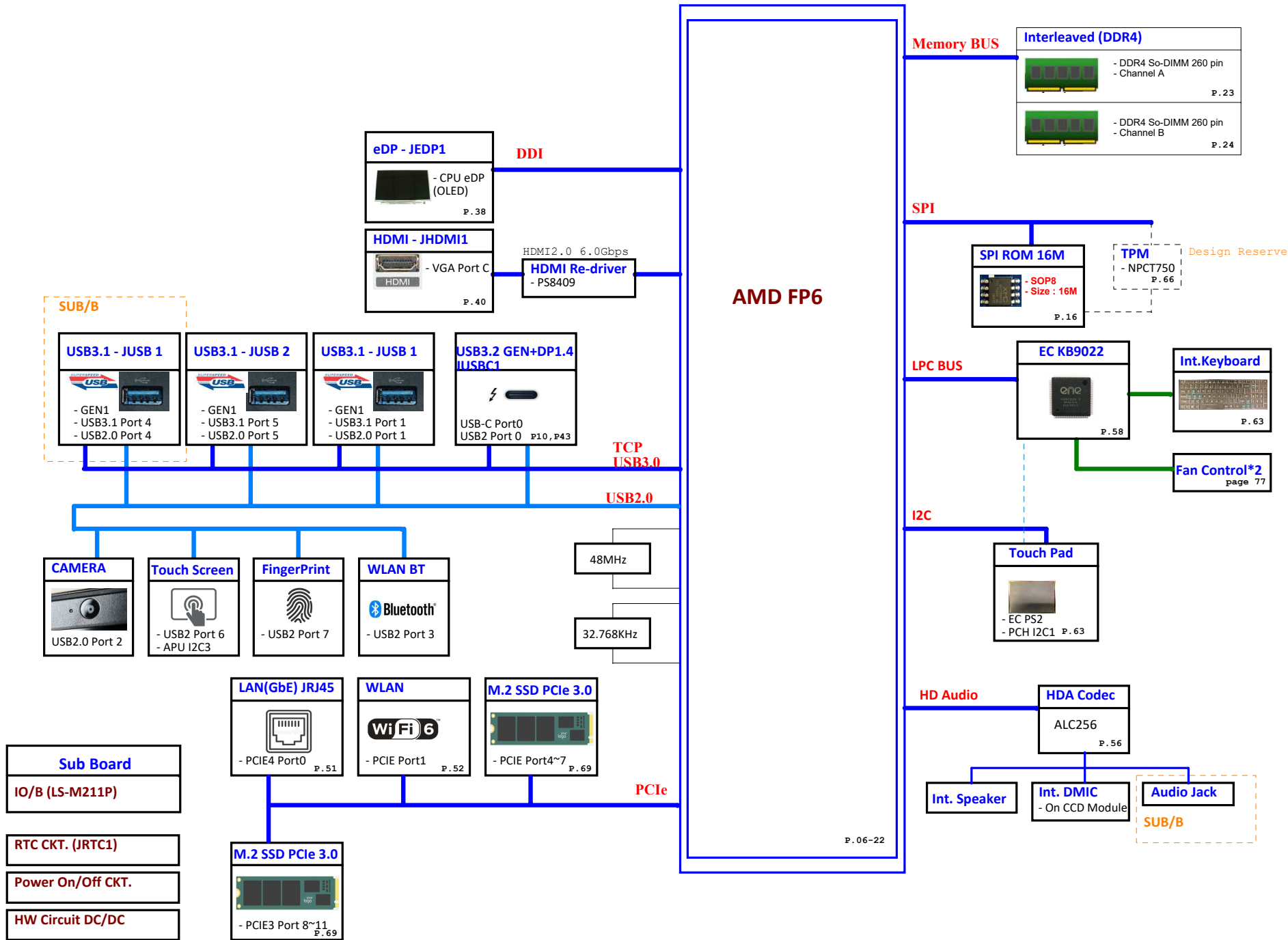
JH5JL Schematics Document

AMD FP6 Lucienne Platform

LA-M214P REV:1.0

2023-08-22

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title COVER PAGE	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC. Shared with Compal				Size	Document Number
				Date: Tuesday, August 22, 2023	JH5JL LA-M214P
				Sheet 1 of 121	Rev 1.0



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		2021/08/05	Deciphered Date		2022/08/05
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Title	
				Block Diagrams	
				Size	Document Number
				Custom	JH5JL LA-M214P
					Row 1.0
				Date:	Tuesday, August 22, 2023
				Sheet	2 of 121

Power Plane	Description	S0	S3	S5
+19V_VIN	Adapter power supply (19V)	ON	ON	ON
+19VB	AC or battery power rail for power circuit.	ON	ON	ON
+APU_CORE	Core voltage for APU	ON	OFF	OFF
+APU_CORE_SOC	Voltage for On-die VGA of APU	ON	OFF	OFF
+0.75VALW	0.75V always on power rail	ON	ON	OFF
+0.75VS	0.75V switched power rail	ON	OFF	OFF
+1.8VALW	1.8V always on power rail	ON	ON	OFF
+1.8VS	1.8V switched power rail	ON	OFF	OFF
+2.5V	2.5V power rail for DDR4	ON	ON	OFF
+1.2V_VDDQ	1.2V power rail for APU and DDR	ON	ON	OFF
+0.6VS_VTT	0.6V switched power rail for DDR4	ON	OFF	OFF
+3VALW	3.3V always on power rail	ON	ON	OFF
+3VS	3.3V switched power rail	ON	OFF	OFF
+5VALW	5V always on power rail	ON	ON	AC-ON DC-OFF
+5VS	5V switched power rail	ON	OFF	OFF
+RTC_APU	RTC power	ON	ON	ON
+LCDVDD	3.3V panel logic power	ON	OFF	OFF
+5VS_BL	5V Keyboard Backlight power	ON	OFF	OFF
+USB3_VCCA	USB Type-A Conn. power	ON	OFF	OFF
+VBUS_CONN	USB Type-C Conn. power	ON	OFF	OFF

Power Plane	Description	S0	S0i3	S5
+TP_VCC	3.3V Touch Pad power	ON	ON	OFF
+TS_PWR	3.3V Touch Screen Power	ON	OFF	OFF
+FP_VCC	3.3V Finger Print power	ON	ON	OFF
+3V_SSD	3.3V PCIE/SATA SSD	ON	OFF	OFF
+3V_WLAN	3.3V WLAN power	ON	ON	ON
+VDDA	5V Audio Codec power	ON	ON	ON
+3V_CAM	3.3V Camera power	ON	ON	OFF
+DMIC_VCC	1.8V DMIC power	ON	ON	ON
+VDDIO_AUDIO	1.8V APU Audio power	ON	ON	ON
BT_ON	Follow SYSON	ON	ON	OFF
WL_OFF#	Follow SYSON	ON	ON	OFF

Master	Device	Address[7:1]	Address [7:0]	
			Write	Read
I2C Port 0 (+1.8VS)				
I2C Port 1 (+1.8VS)	G-Sensor (Reserver)	0001 1000b 18h	0011 0000b 30h	0011 0001b 31h
I2C Port 2 (+3VS)				
SBMus Port 0 (+3VS)	JDIMM1	0101 0000b 50h	1010 0000b A0h	1010 0001b A1h
	JDIMM2	0101 0001b 51h	1010 0010b A2h	1010 0011b A3h
I2C Port 3 (+3VALW)				
SMBus Port 1 (+3VALW)	PTP (ELAN)	0001 1111b 15h	0011 1110b 3Eh	0011 1111b 3Fh

Board ID	PCB Revision
0	EVT
1	PVT
2	MP
10	INV_LCN

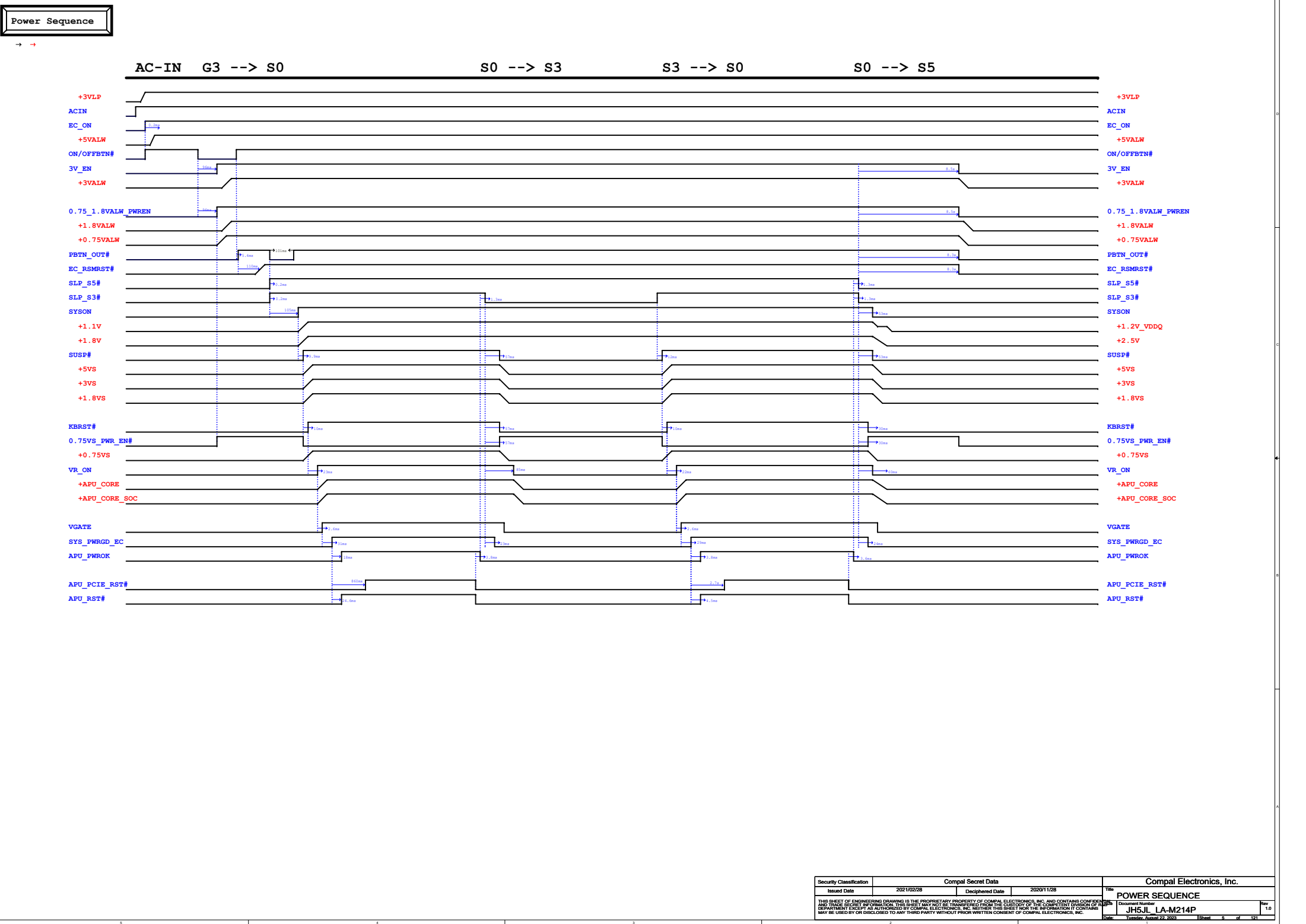
[illegible]

Vcc	3.3V				
Ra	100K +/- 1%				
Board ID	Rb	V min	V typ	V max	EC AD
0	0		0.000V	0.300V	0x00 - 0x0B
1	12K +/- 1%	0.347V	0.354V	0.360V	0x0C - 0x1C
2	15K +/- 1%	0.423V	0.430V	0.438V	0x1D - 0x26
3	20K +/- 1%	0.541V	0.550V	0.559V	0x27 - 0x30
4	27K +/- 1%	0.691V	0.702V	0.713V	0x31 - 0x3B
5	33K +/- 1%	0.807V	0.819V	0.831V	0x3C - 0x46
6	43K +/- 1%	0.978V	0.992V	1.006V	0x47 - 0x54
7	56K +/- 1%	1.169V	1.185V	1.200V	0x55 - 0x64
8	75K +/- 1%	1.398V	1.414V	1.430V	0x65 - 0x76
9	100K +/- 1%	1.634V	1.650V	1.667V	0x77 - 0x87
10	130K +/- 1%	1.849V	1.865V	1.881V	0x88 - 0x96
11	160K +/- 1%	2.015V	2.031V	2.046V	0x97 - 0xA3
12	200K +/- 1%	2.185V	2.200V	2.215V	0xA4 - 0xAD
13	240K +/- 1%	2.316V	2.329V	2.343V	0xAE - 0xB7
14	270K +/- 1%	2.395V	2.408V	2.421V	0xB8 - 0xC0
15	330K +/- 1%	2.521V	2.533V	2.544V	0xC1 - 0xC9
16	430K +/- 1%	2.667V	2.677V	2.687V	0xCA - 0xD3
17	560K +/- 1%	2.791V	2.800V	2.808V	0xD4 - 0xDC
18	750K +/- 1%	2.905V	2.912V	2.919V	0xDD - 0xE6
19	NC	3.000V	3.300V		0xEF - 0xFF

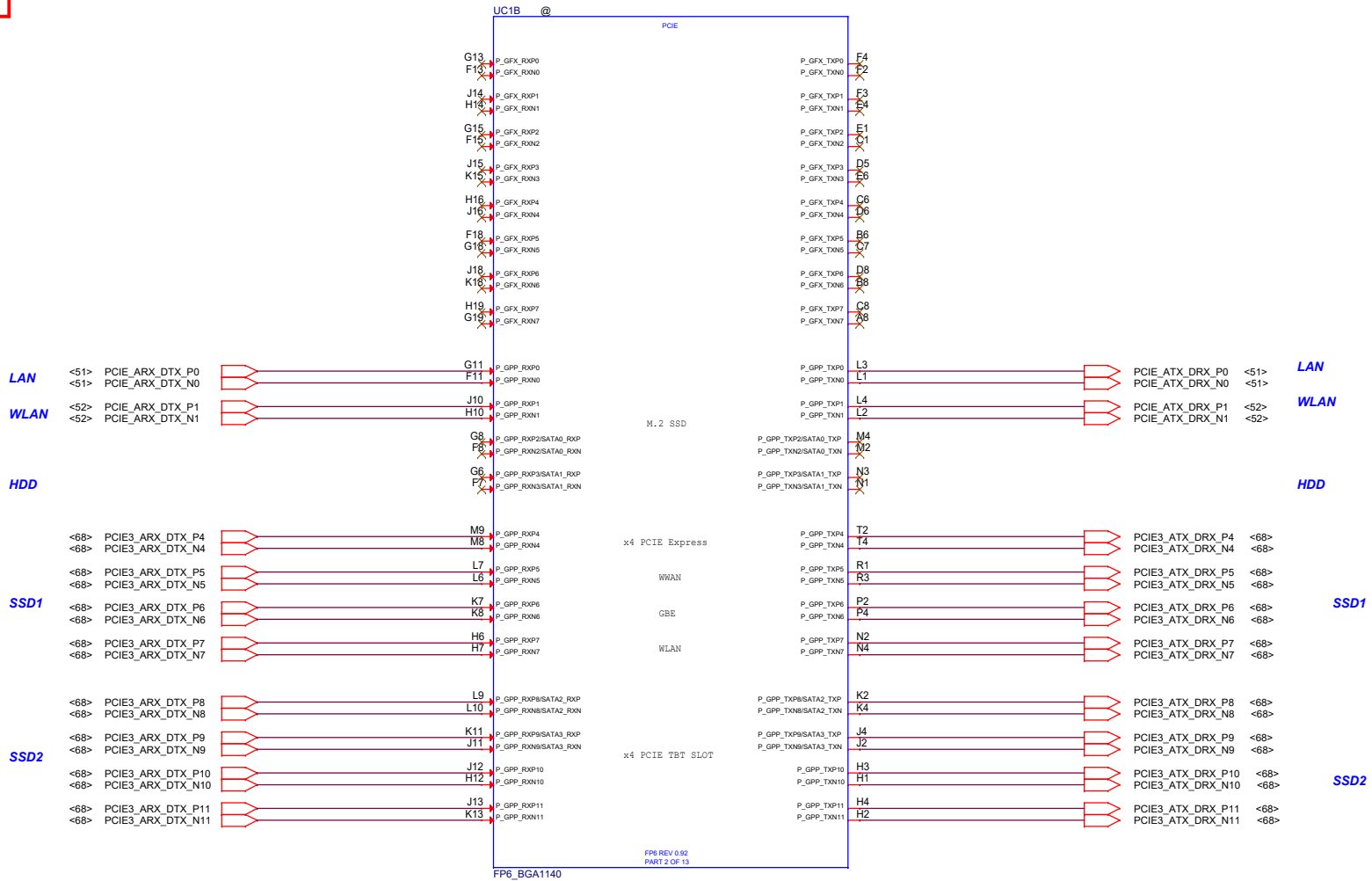
Group	Signal	Level
G-A	+RTCBATT	High
	EC_ON	High
	+5VALW	High
G-B	3V_EN	High
	+3VALW	High
	0.75_1.8VALW_PWREN	High
	+1.8VALW/+0.75VALW	High
G-C	SYSON	High
	+1.1V/+1.8V	High
	SUSP#	High
	+5VS/+3VS/+1.8VS/+MEM_VDDQ	High
	0.75VS_PWR_EN#	High
	+0.75VS	High
G-D	VR_ON	High
	+APU_CORE	High
	+APU_CORE_SOC	High

SMBus Port 1 (+3VALW)	Smart Battery	0x16		
	Charger IC	0x12		
SMBus Port 2 (+EC_VCC)	APU Temp.	0100 1100b 4Ch	1001 1000b 98h	1001 1001b 99h
	PD	0x40		
	Thermal Sensor (G788-1P81U)	0x9A		
	Thermal Sensor (G753T11U)	0x90		

PD Host				
	TypeC Retimer PS8818A		0X50~55	












Main Func = CPU



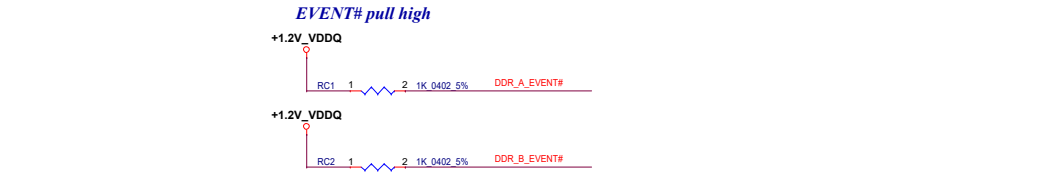
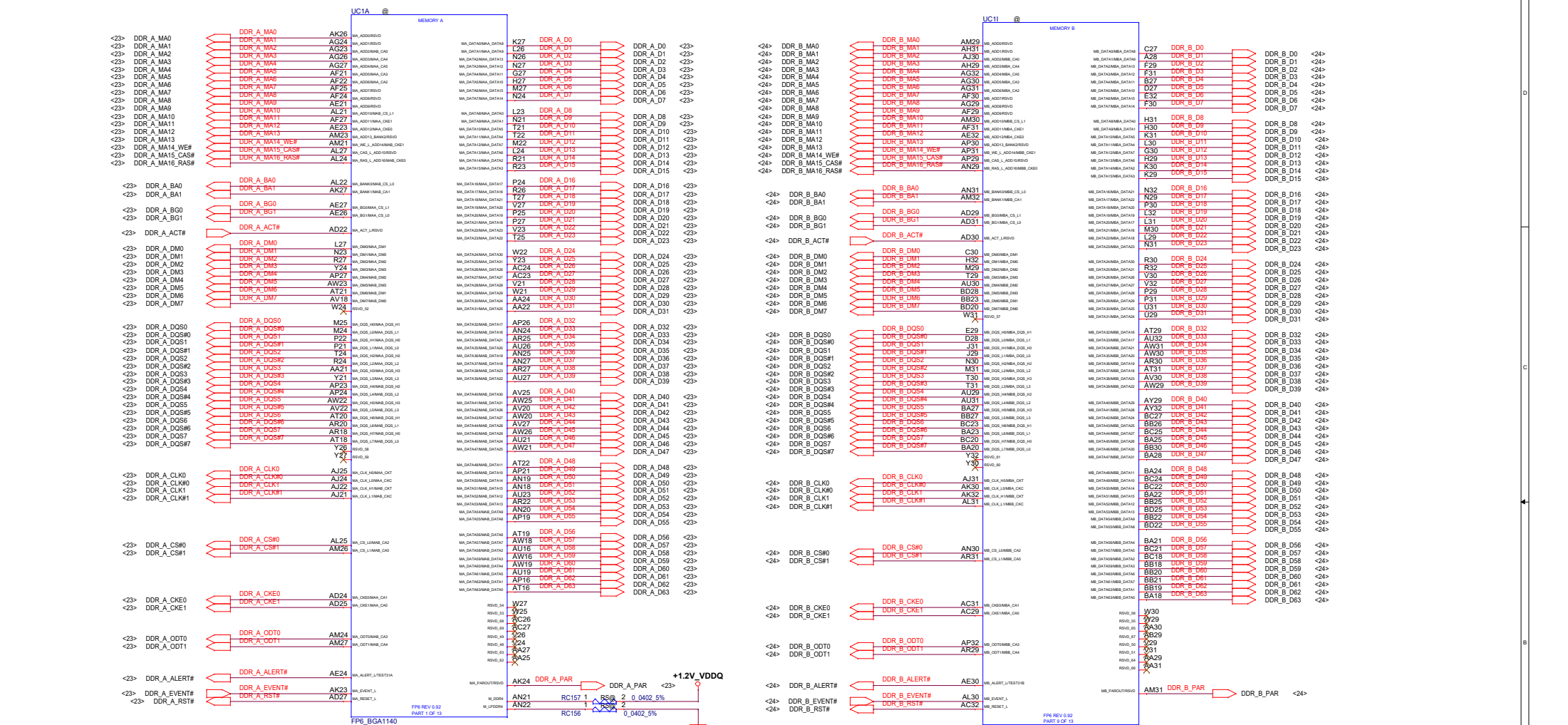
777 PCB@
DAZ3YG00200
PCB HH5AB LA-M214P LS-M211P

APU PN Table

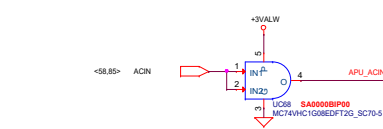
APU Platform	Customer PN	Customer PN	Customer PN	Customer PN	Customer PN	Customer PN
Barcelo_U	 100-000000586 R3_Barcelo_U_R1@ SA0000EX740 S IC RYZEN3 100-000000586 2.7G BGA APU	 100-000000586 R3_Barcelo_U_R3@ SA0000EX780 S IC RYZEN3 100-000000586 2.7G BGA 1140 APU ABO !	 100-000000583 R5_Barcelo_U_R1@ SA0000EX040 S IC RYZEN5 100-000000583 2.3G BGA APU	 100-000000583 R5_Barcelo_U_R3@ SA0000EX060 S IC RYZEN5 100-000000583 2.3G APU ABO !	 100-000000580 R7_Barcelo_U_R1@ SA0000EVZ40 S IC RYZEN7 100-000000580 2G BGA1140 APU	 100-000000580 R7_Barcelo_U_R3@ SA0000EVZ60 S IC RYZEN7 100-000000580 2G APU ABO !
	 100-000000376 R3LCN_U_PC@ SA0000DWZAO S IC RYZEN 100-000000376-40 2.6G APU S	 100-000000375 R5LCN_U_PC@ SA0000DWYAO S IC RYZEN 100-000000375-40 2.1G BGA S	 100-000000371 R7LCN_U_PC@ SA0000DWWAO S IC RYZEN 100-000000371-40 1.8G APU S			

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	FP6 (1/7) PEG/PCIE/SATA
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				JH5JL LA-M214P	
				Date	Tuesday, August 22, 2023
				Sheet	6 of 121
				Rev	1.0

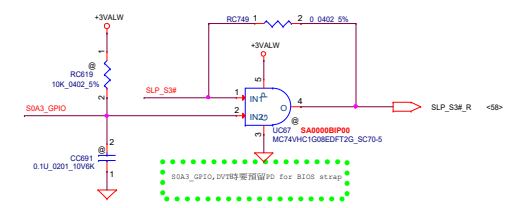
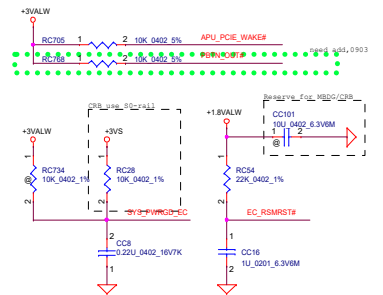
Main Func = CPU



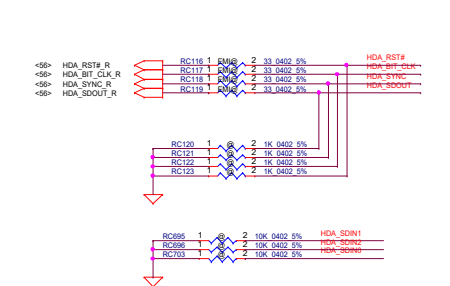
ACIN to APU



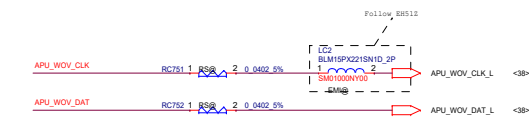
ACPI



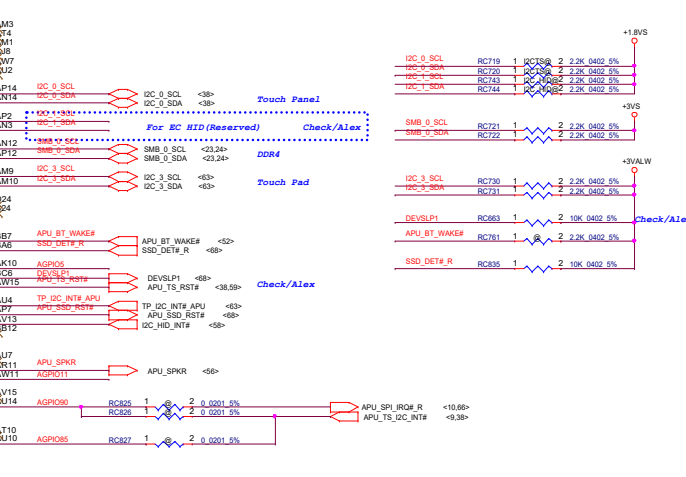
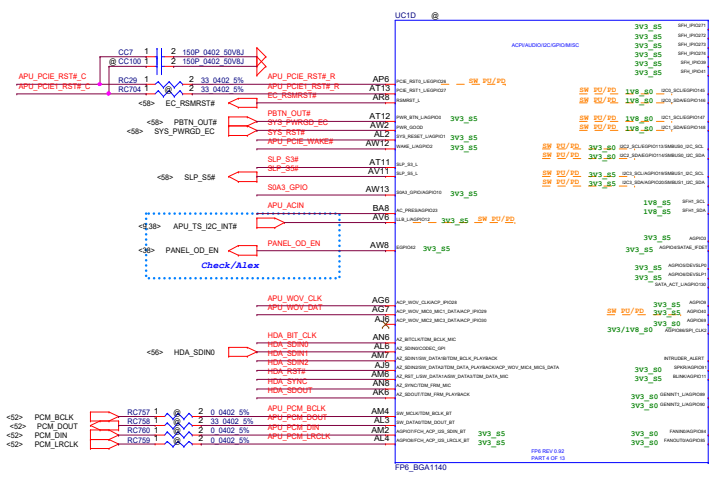
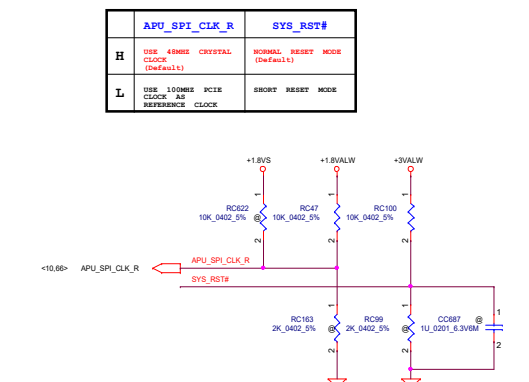
HDA



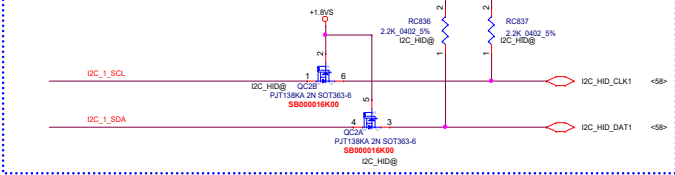
APU WOV



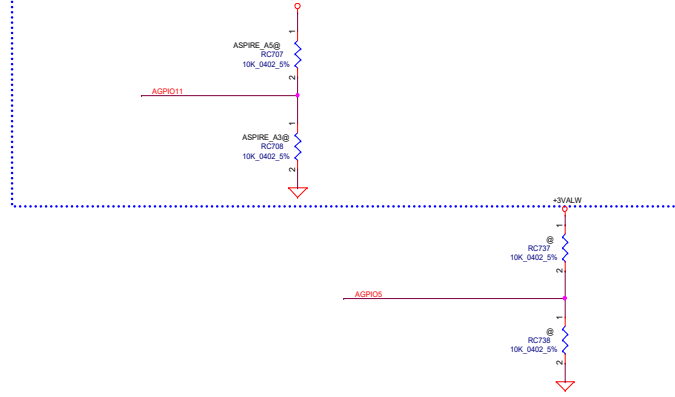
Strap Pin



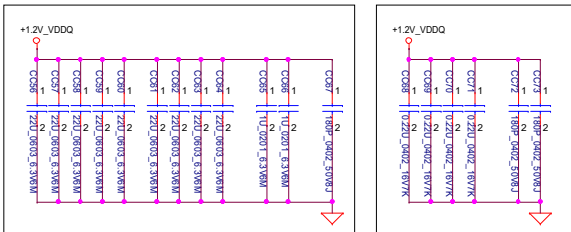
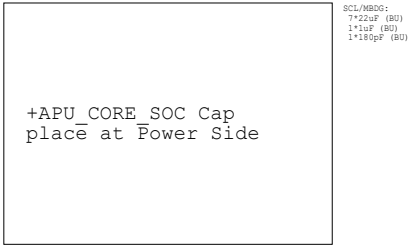
For EC HID (Reserved) (unpop)



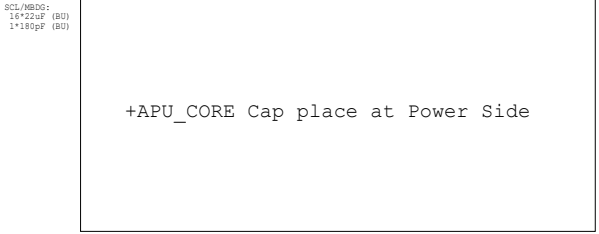
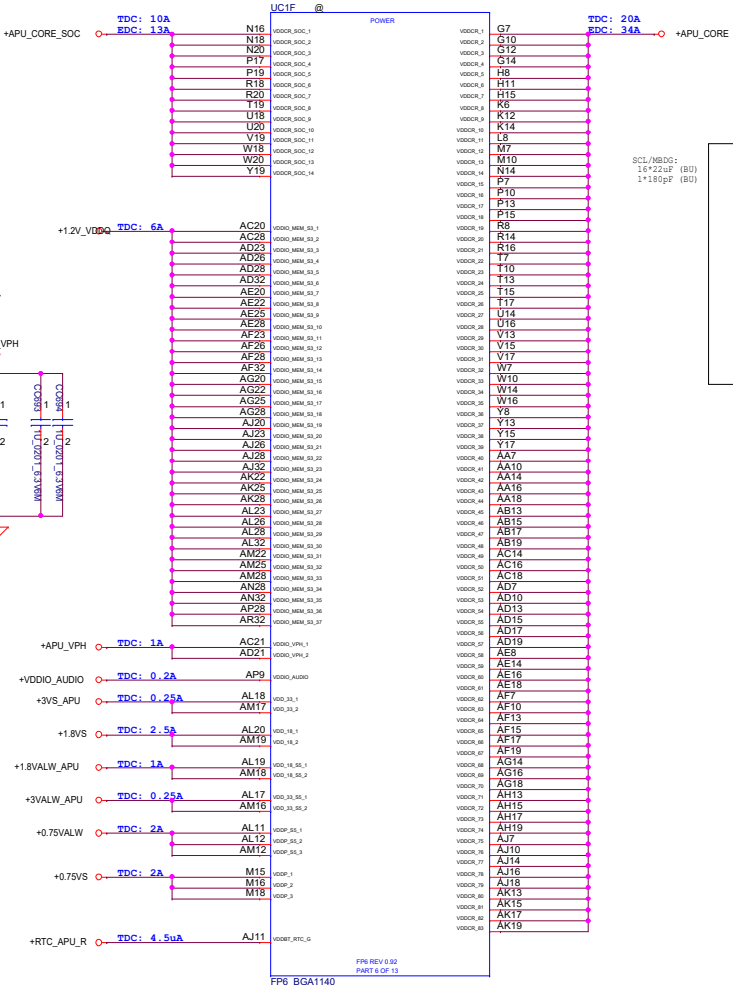
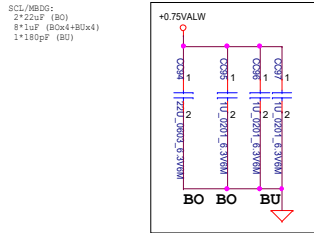
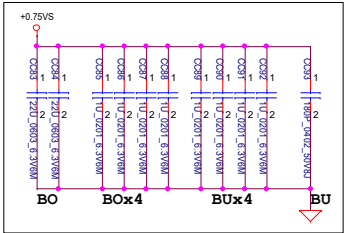
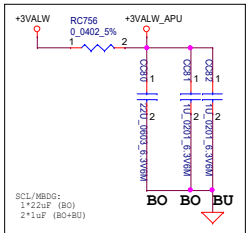
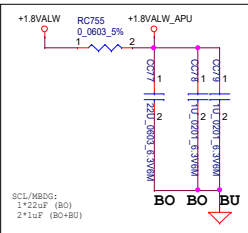
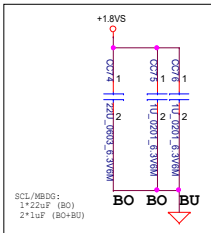
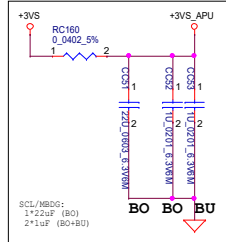
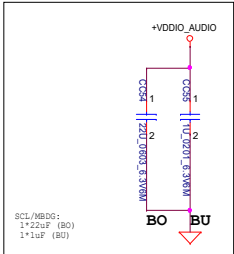
For A3/A5



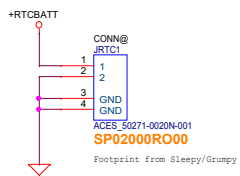
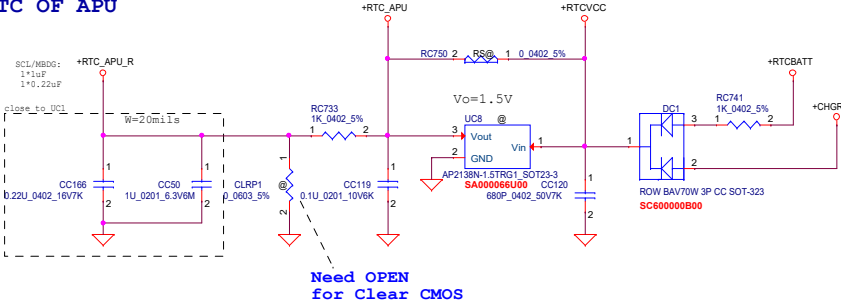
Main Func = CPU



All BU(on bottom side under SOC) ACROSS VDDIO AND VSS SPLIT

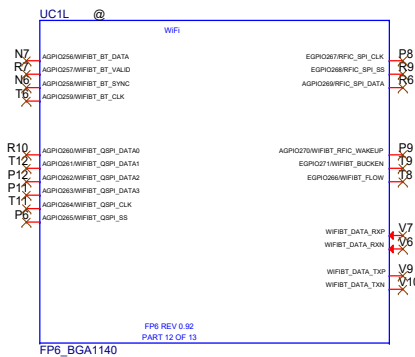
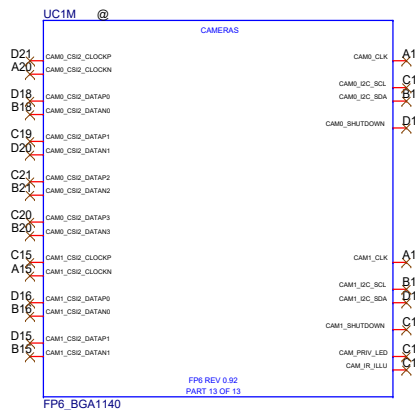
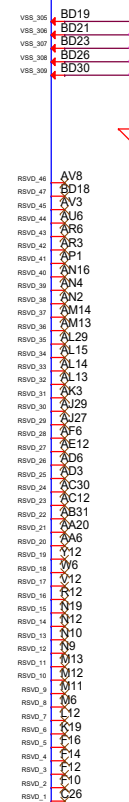
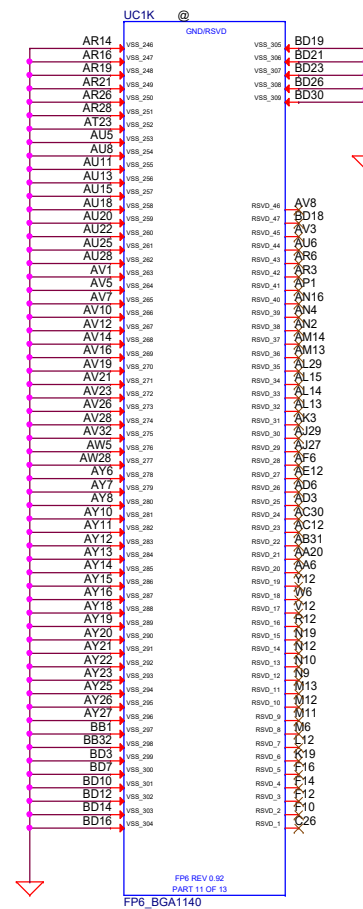
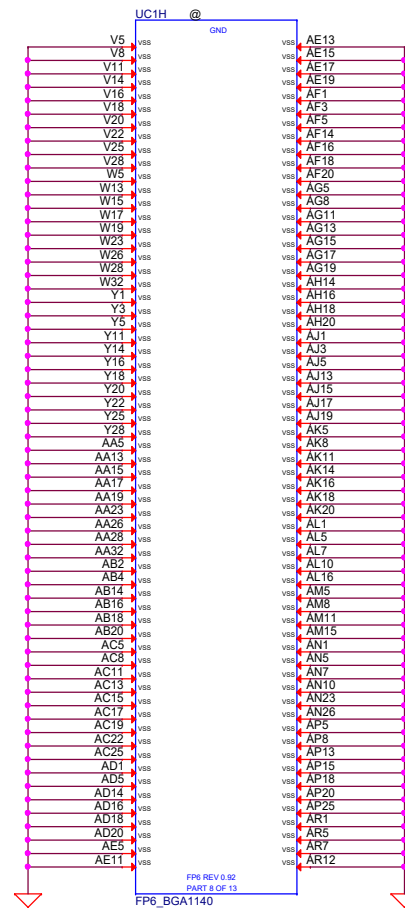
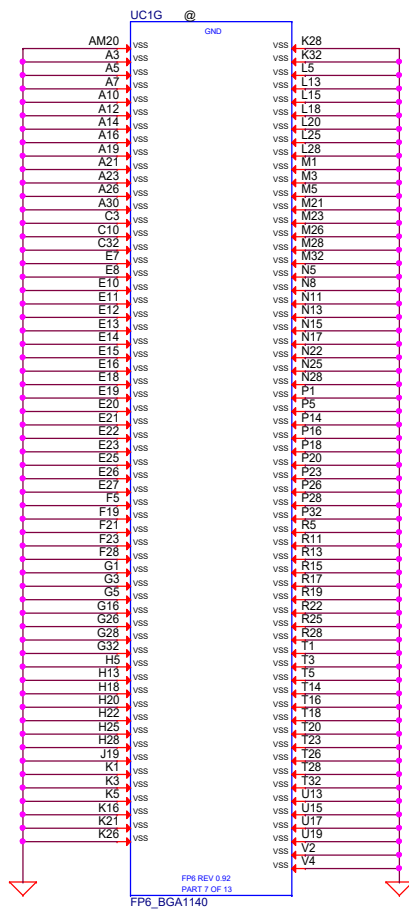


RTC OF APU



Security Classification		Compal Secret Data		Title	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	FP6 (6/7) PWR	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				JH5JL LA-M214P	
				Date:	Tuesday, August 22, 2023
				Sheet	11 of 121

Main Func = CPU



Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title FP6 (7/7) GND/RSVD/CSI		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number	Rev
				JH5JL LA-M214P		1.0
				Date:	Tuesday, August 22, 2023	Sheet 12 of 121

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	13 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date:	Tuesday, August 22, 2023
				Sheet	14 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	15 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date:	Tuesday, August 22, 2023
				Sheet	16 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	17 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date		2021/02/28	Deciphered Date		2020/11/28	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Title		
				Reserve		
				Size	Document Number	Rev
					JH5JL LA-M214P	1.0
Date:				Tuesday, August 22, 2023		
Sheet				18 of 121		

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date:	Tuesday, August 22, 2023
				Sheet	19 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title Reserve	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Document Number JH5JL LA-M214P	Rev 1.0
Date: Tuesday, August 22, 2023		Sheet 20 of 121			

Reserve Page

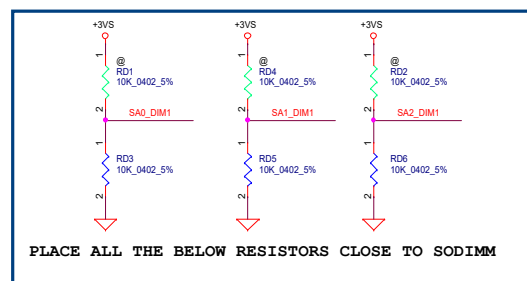
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title Reserve	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Document Number JH5JL LA-M214P	Rev 1.0
Date: Tuesday, August 22, 2023		Sheet 21 of 121			

Reserve Page

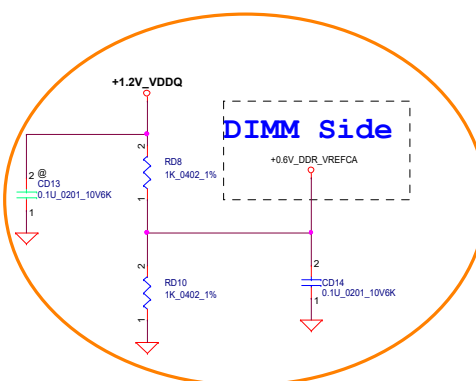
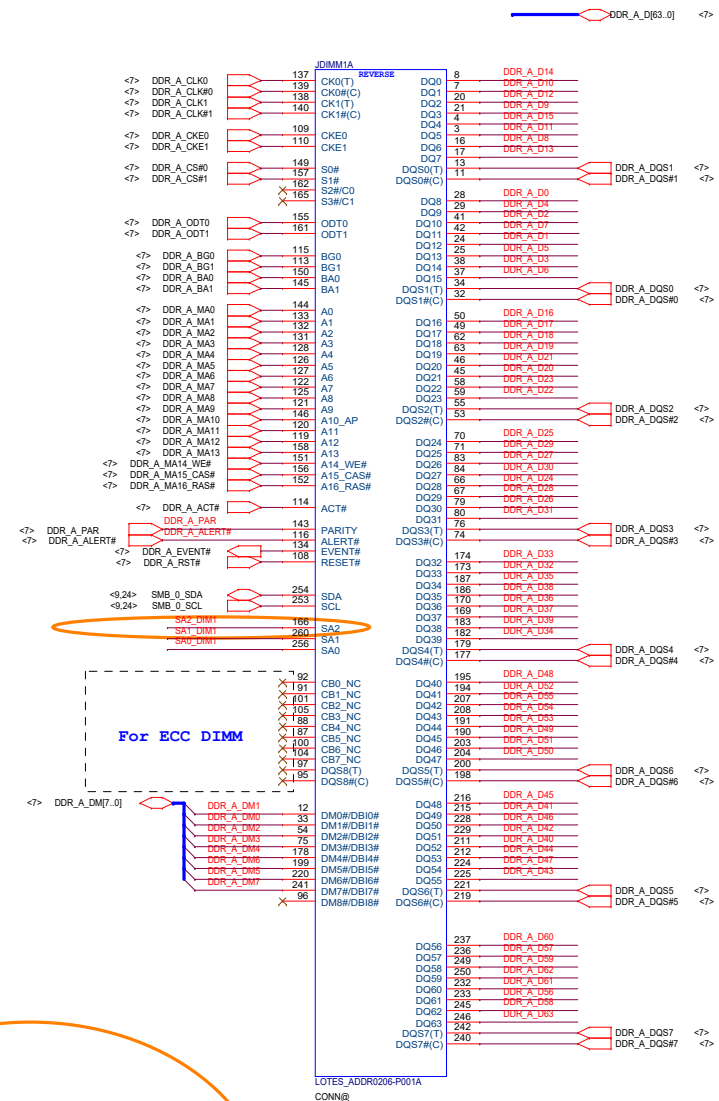
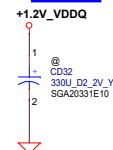
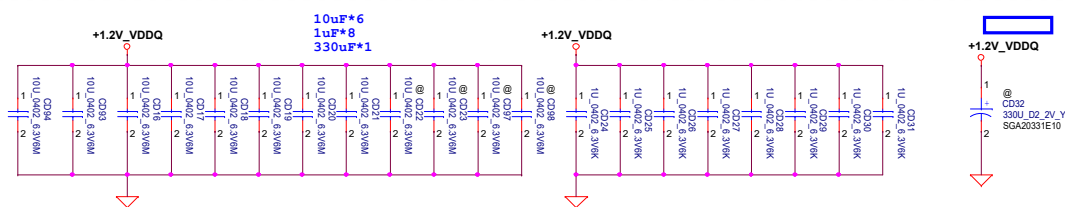
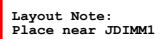
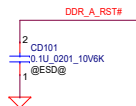
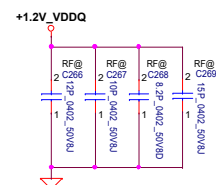
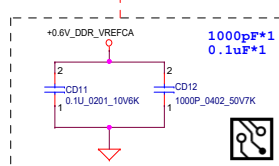
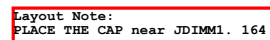
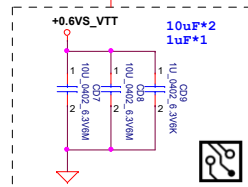
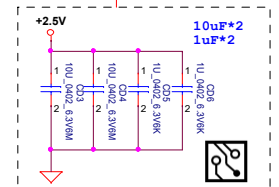
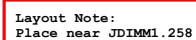
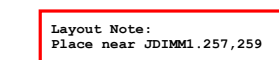
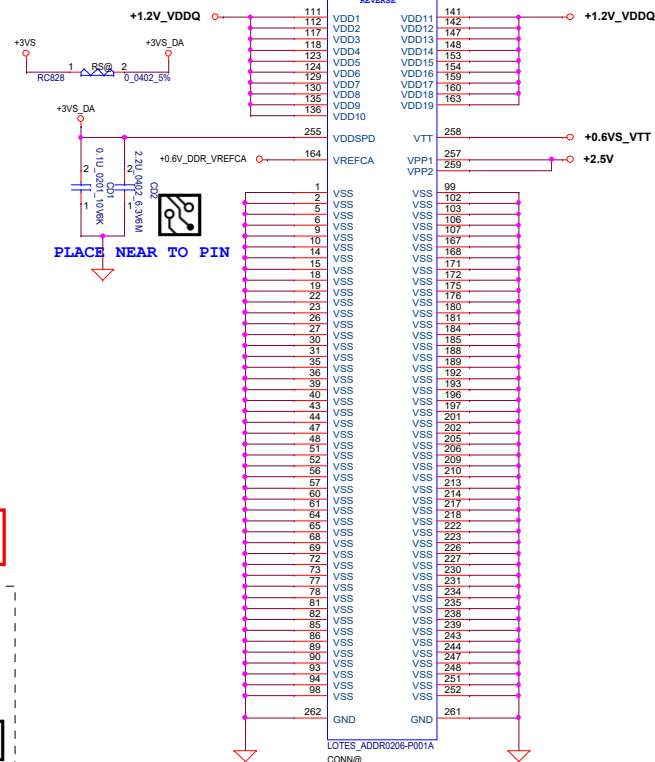
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	22 of 121
				Rev	1.0

Bristol CH-A REVERSE TYPE
JDIMM1 Address : 40

Address : A0

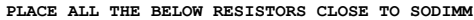


SPD ADDRESS FOR CHANNEL A :
SA0 = 0; SA1 = 0; SA2 = 0.



Security Classification		Compal Secret Data		Compal Electronics, Inc DDR4 CHA: DIMMI	
Issued Date		Deciphered Date		Title JH5JL LA-M214P	
2017/09/14		2020/3/23		Size Document Number 1.0	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Date: Tuesday, August 22, 2023	
2				Sheet 23 of 121	

Address : A2


$$SA0 = 1; SA1 = 0; SA2 = 0.$$

Layout Note:
Place near JDIMM2.257,259

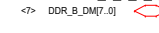
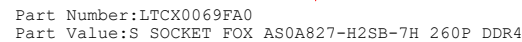
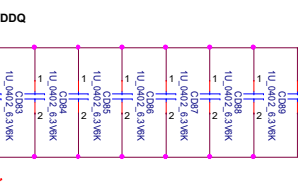
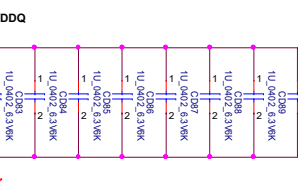
Layout Note:
Place near JDIMM2.258



PLACE THE CAP WITHIN 200 MILS
FROM THE JDIMM2



Layout Note:
Place near JDIMM2



For ECC DIMM



VREF traces should be at least 20 mils wide with 20 mils spacing to other signals

Security Classification		Compal Secret Data		Compal Electronics, Inc Title DDR4 CHB: DIMM2 Size Document Number JH5JL LA-M214P	
Issued Date	2017/09/14	Deciphered Date	2020/3/23	Rev	1.0
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Date:	Tuesday, August 22, 2023
				Sheet	24 of 121

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	25 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date:	Tuesday, August 22, 2023
				Sheet	26 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date		2021/02/28	Deciphered Date		2020/11/28	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Title		
				Reserve		
				Size	Document Number	Rev
				JH5JL LA-M214P		1.0
				Date: Tuesday, August 22, 2023		

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	28 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	29 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date:	Tuesday, August 22, 2023
				Sheet	30 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date:	Tuesday, August 22, 2023
				Sheet	31 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	32 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	33 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date:	Tuesday, August 22, 2023
				Sheet	34 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	35 of 121
				Rev	1.0

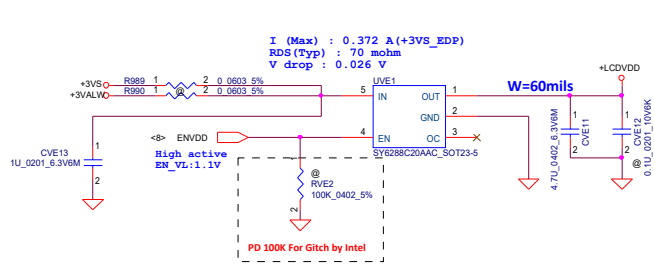
Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	36 of 121
				Rev	1.0

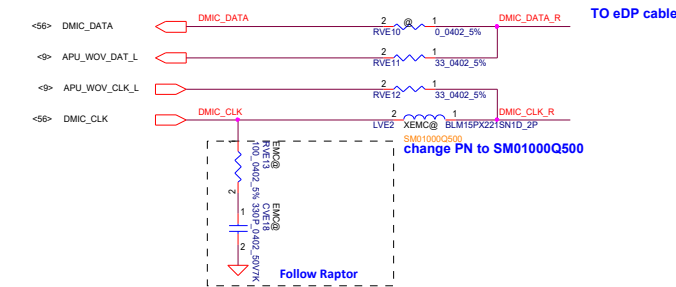
Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	37 of 121
				Rev	1.0

LCD POWER CIRCUIT

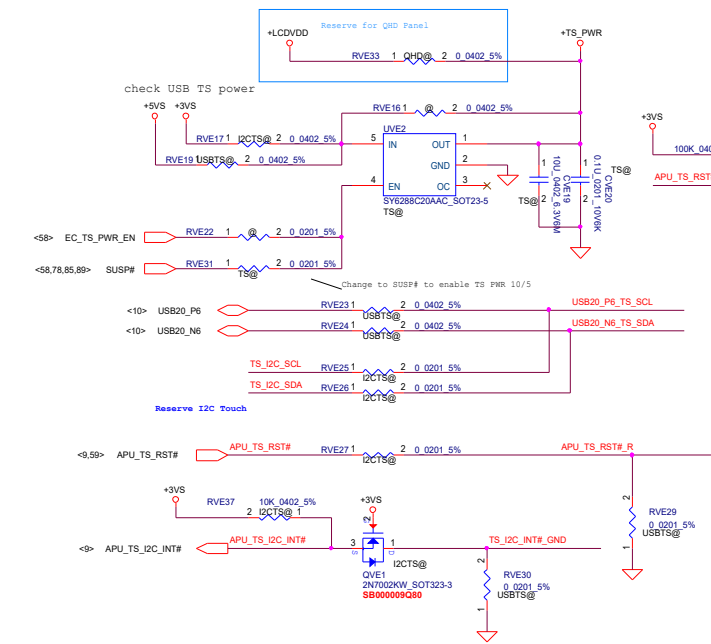


DMIC

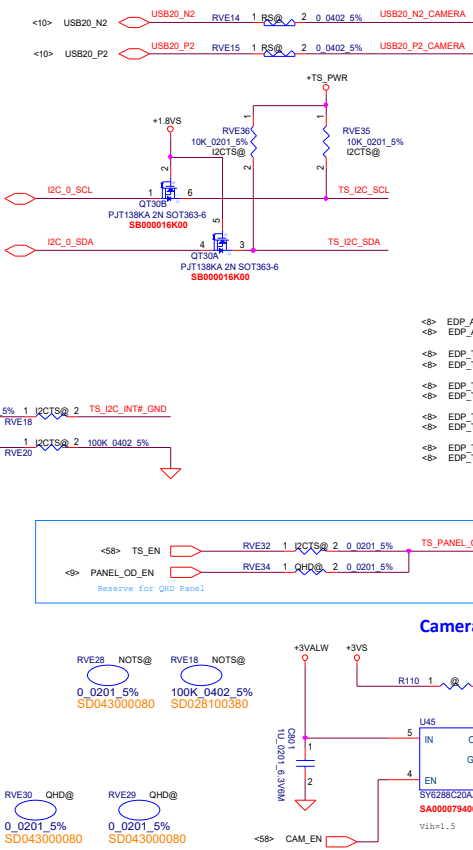


DVT
Change to 1.8V Level ,due to
VDDA/CSS change to 1.8V Level port 2021/9/13

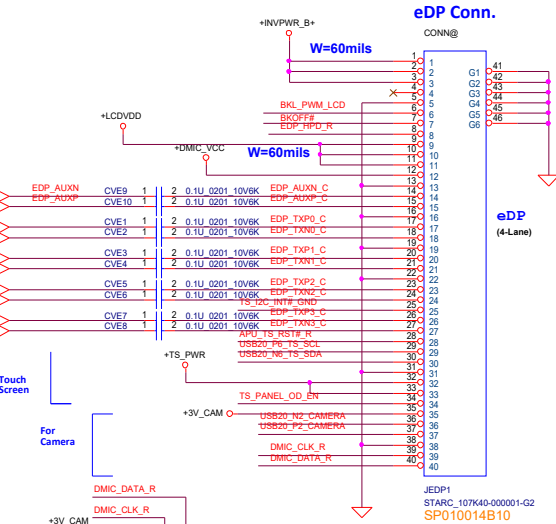
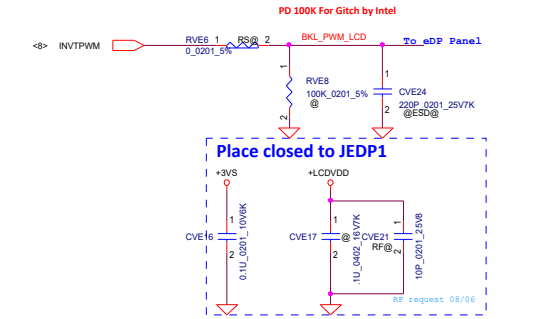
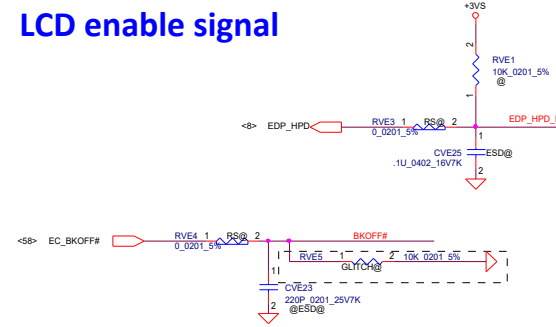
USB/I2C Touch Screen Co-Lay



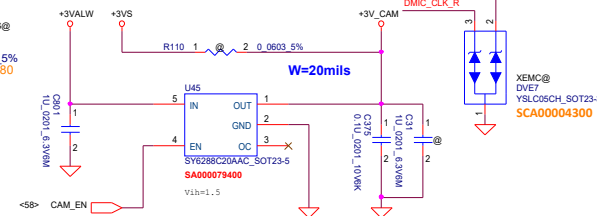
Camera



LCD enable signal



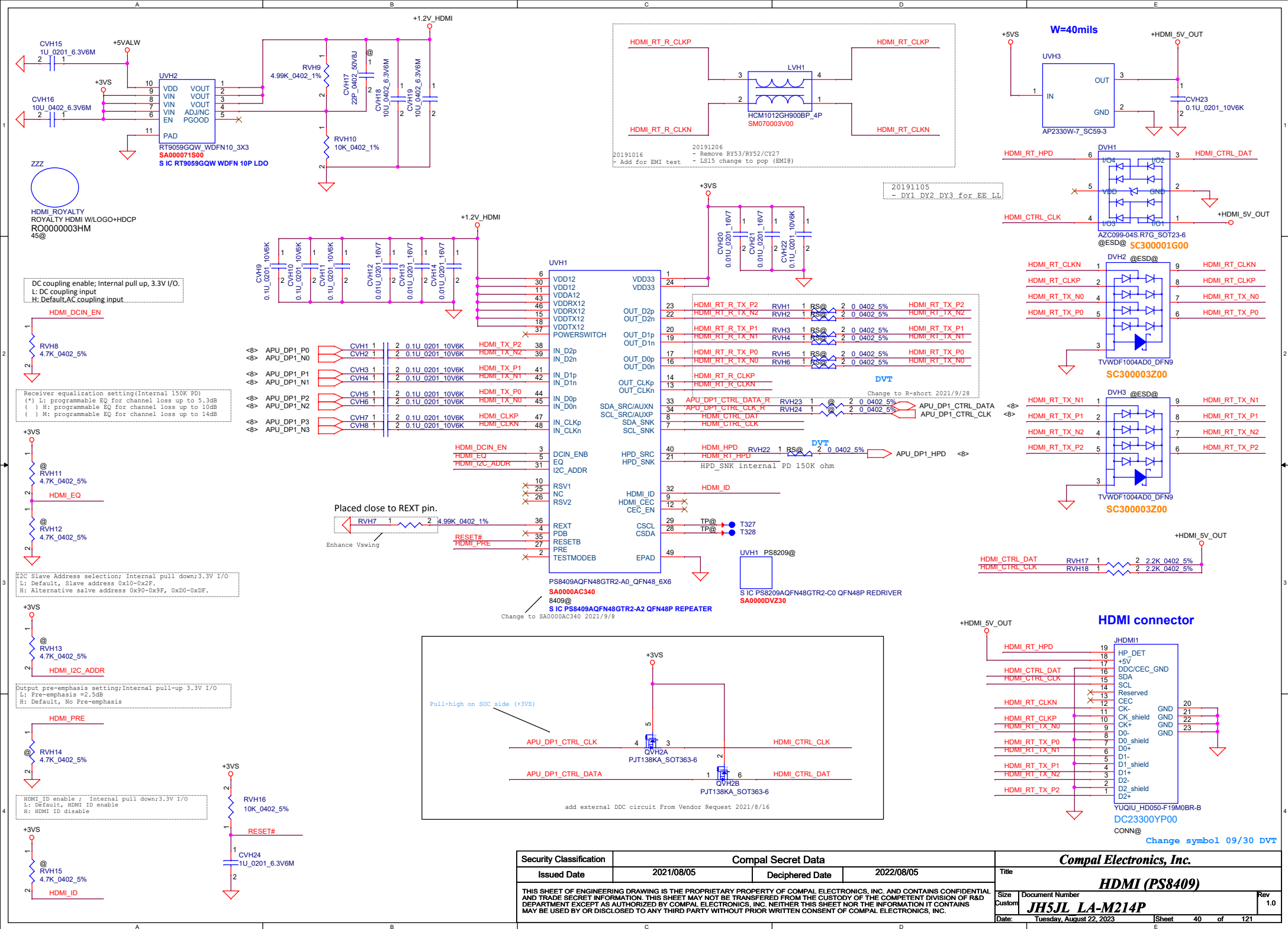
Camera



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/08/05	Deciphered Date	2022/08/05	Title	eDP/DMIC/Touch
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	38 of 121

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title Reserve	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Document Number JH5JL LA-M214P	Rev 1.0
Date: Tuesday, August 22, 2023		Sheet 39 of 121			

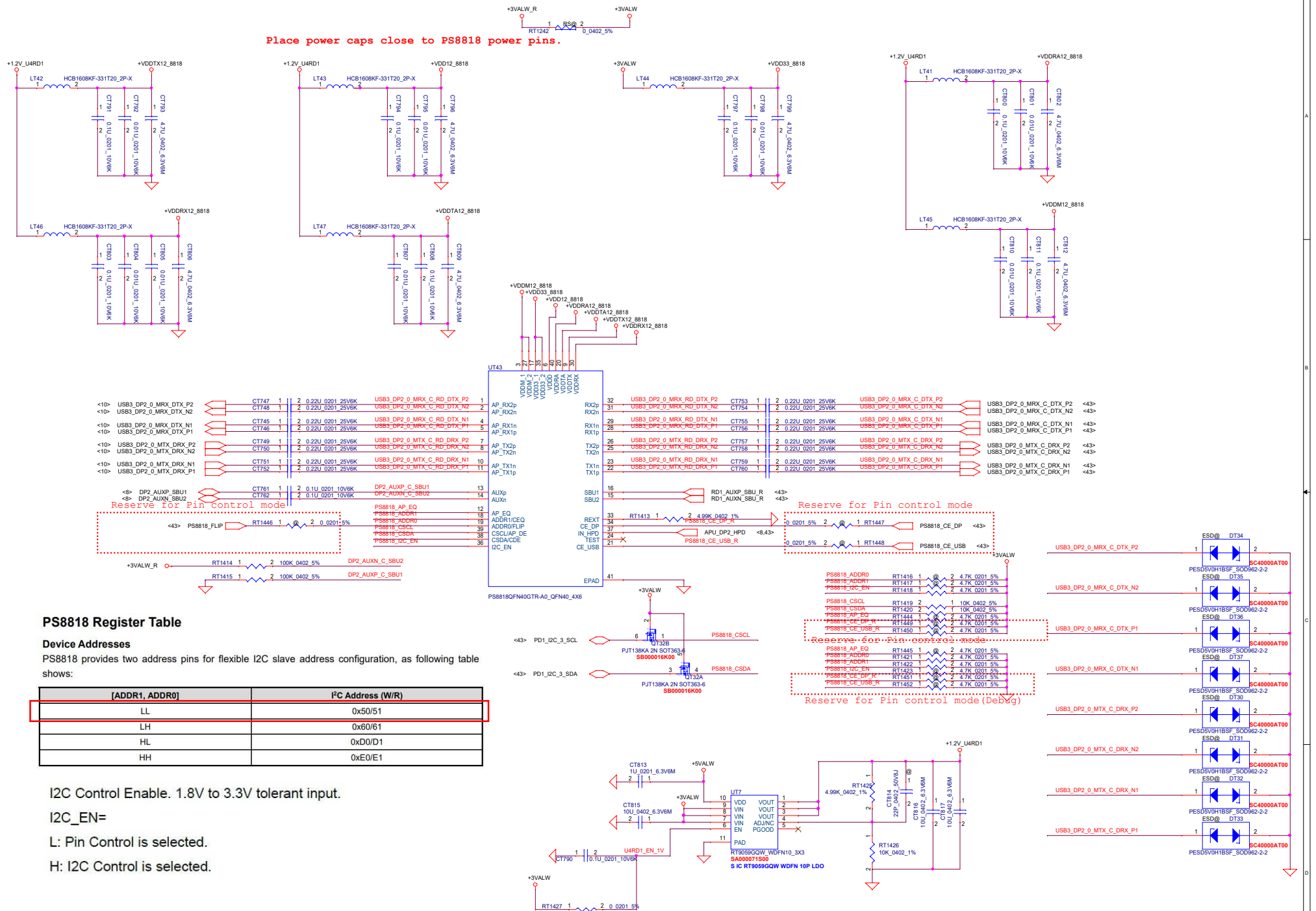


Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date	2021/08/05	Deciphered Date	2022/08/05	Title HDMI (PS8409)		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number	Rev
				Custmr	JHSJL L4-M214P	1.0
				Date:	Tuesday, August 22, 2023	Sheet 40 of 121

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date:	Tuesday, August 22, 2023
				Sheet	41 of 121
				Rev	1.0

Place power caps close to PS8818 power pins.



Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	44 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date:	Tuesday, August 22, 2023
				Sheet	45 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title Reserve	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Document Number JH5JL LA-M214P	Rev 1.0
Date: Tuesday, August 22, 2023		Sheet 46 of 121			

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date:	Tuesday, August 22, 2023
				Sheet	47 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	48 of 121
				Rev	1.0

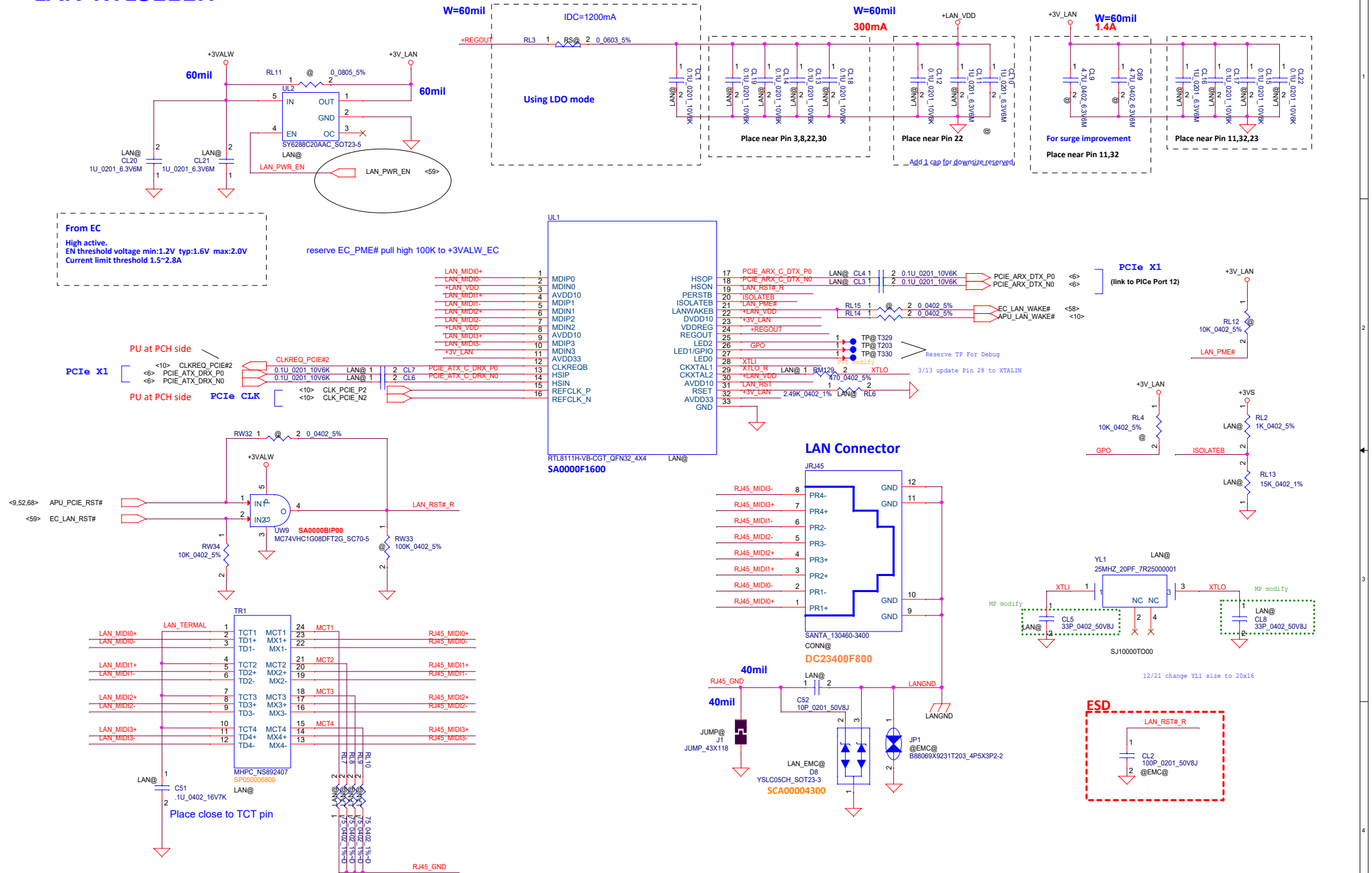
Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title Reserve	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Document Number JH5JL LA-M214P	Rev 1.0
Date: Tuesday, August 22, 2023		Sheet 49 of 121			

Reserve Page

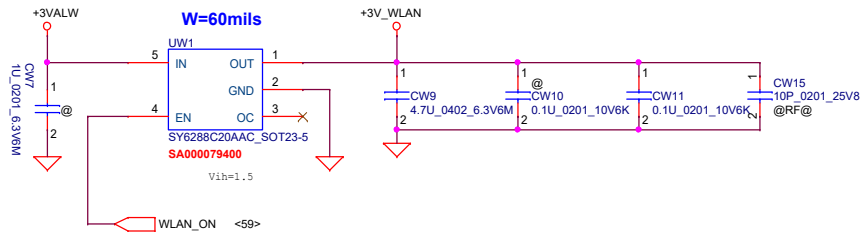
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title Reserve	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Document Number JH5JL LA-M214P	Rev 1.0
Date: Tuesday, August 22, 2023		Sheet 50 of 121			

LAN-RTL8111H



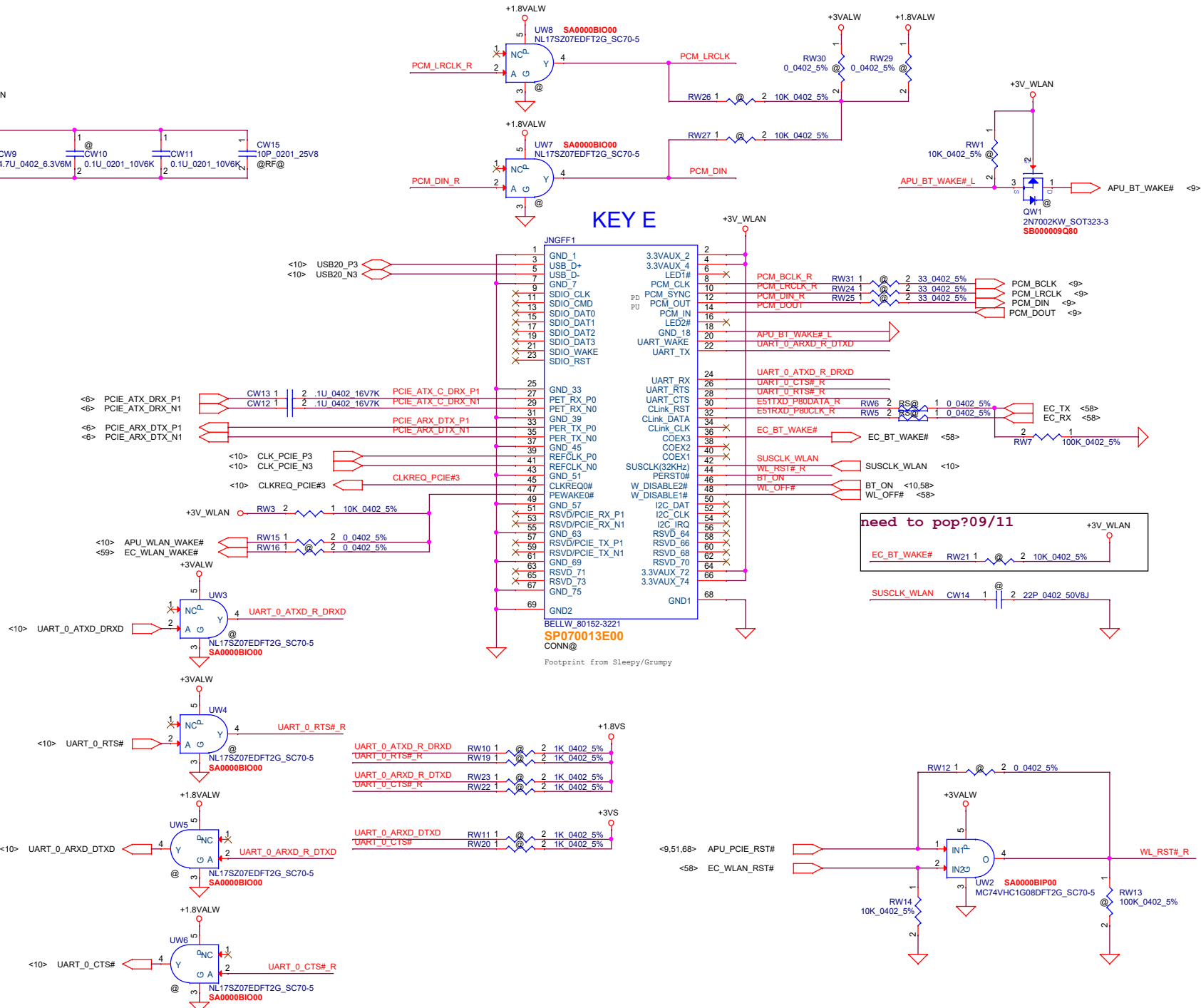
Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date	2021/08/05	Deciphered Date	2022/08/05	Title	LAN RTL8111H-CG	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number	Rev
				JHSJL LA-M214P		1.0
Date:				Tuesday, August 22, 2023	Sheet	51 of 121

Wireless LAN



NGFF WL+BT (KEY E)

74	1.0	GND	75
72	1.0	RESERVED/REFCLK1	73
70	UM_Power_SBC_GPIO(PVWakeUp)	RESERVED/REFCLK1	71
68	UM_Power_SNN_CLKQCLKP	GND	69
66	UM_SW_PERRST1	Reserved/PERP1	67
64	RESERVED	Reserved/PERP1	65
62	ALERT# (IO(0.3))	GND	61
60	QC CLK (O(0.3))	Reserved/PETn1	61
58	QC DATA (IO(0.3))	Reserved/PETp1	59
56	VL_DISABLE1 (O(0.3/V))	GND	57
54	Reserved/V_DISABLE2 (O(0.3/V))	PVWakeUp (IO(0.3/V))	55
52	PERST0 (IO(0.3/V))	CLKREQ0 (IO(0.3/V))	53
50	SUSC1(32MHz) (O(0.3/V))	GND	51
48	CODE1 (I/O(0.1/V))	REFCLK0	49
46	CODE2 (I/O(0.1/V))	REFCLK0	47
44	CODE3 (I/O(0.1/V))	GND	45
42	VENDOR DEFINED	PERn0	43
40	VENDOR DEFINED	PERp0	41
38	VENDOR DEFINED	GND	39
36	UART RTS (IO(0.1/V))	PETn0	37
34	UART CTS (IO(0.1/V))	PETp0	35
32	UART Tx (IO(0.1/V))	GND	33
30	UART Rx (IO(0.1/V))	GND	31
28	UART Wake# (IO(0.3/V))	SDIO Wake# (O(0.1/V))	29
26	GND	SDIO Wake# (IO(0.1/V))	21
24	LED2 (I/O(0))	SDIO DATA7 (IO(0.1/V))	19
16	PCM_OUT/ISS_DS_OUT (O(0.1/V))	SDIO DATA7 (IO(0.1/V))	17
12	PCM_IN/ISS_DS_IN (IO(0.1/V))	SDIO DATA7 (IO(0.1/V))	13
10	PCM_SYNC/ISS_WS (IO(0.1/V))	SDIO CMD(0)(IO(0.1/V))	11
8	PCM_CLK/ISS_SCK (IO(0.1/V))	SDIO CLK (IO(0.1/V))	9
6	LED1 (I/O(0))	GND	7
4	1.0	USB_D-	5
2	1.0	USB_D+	3
		GND	4



Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	M.2 KEY-E (WLAN)	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number	Rev
				JH5JL LA-M214P		1.0
				Date:	Tuesday, August 22, 2023	Sheet

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date:	Tuesday, August 22, 2023
				Sheet	53 of 121
				Rev	1.0

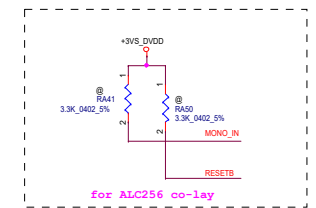
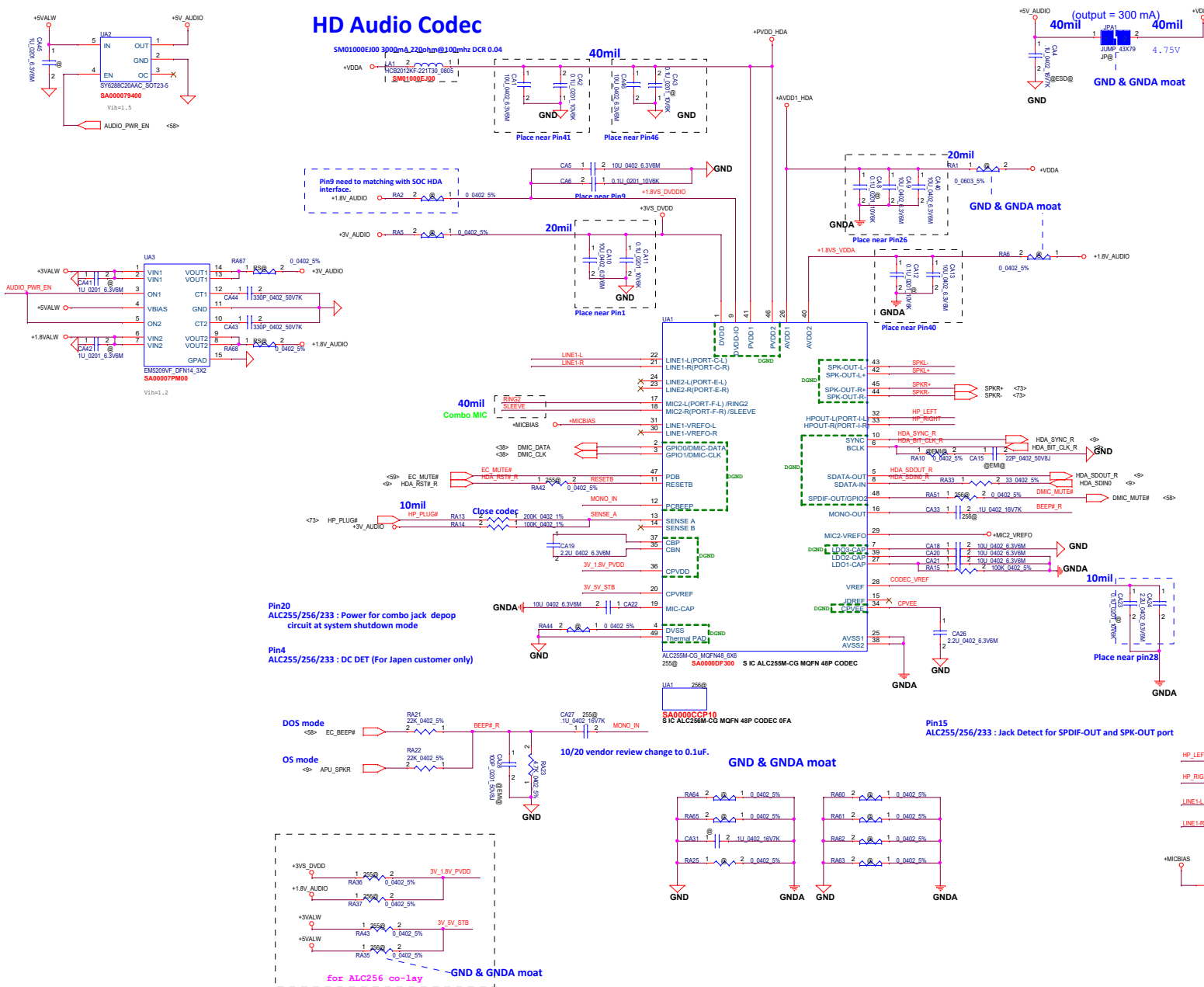
Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title Reserve	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Document Number JH5JL LA-M214P	Rev 1.0
Date: Tuesday, August 22, 2023		Sheet 54 of 121			

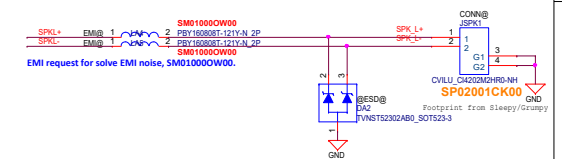
Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date:	Tuesday, August 22, 2023
				Sheet	55 of 121
				Rev	1.0

HD Audio Codec



Int. Speaker Conn.



Headphone Out



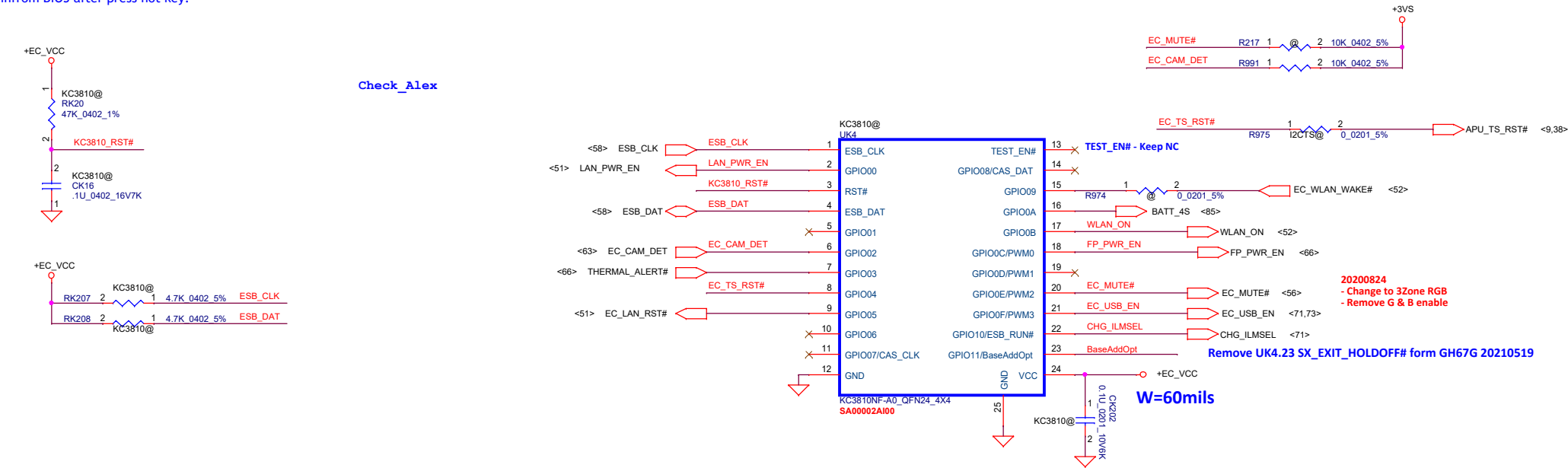
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	HDA CODEC (ALC255/256)
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL_LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	56 of 121

Reserve Page

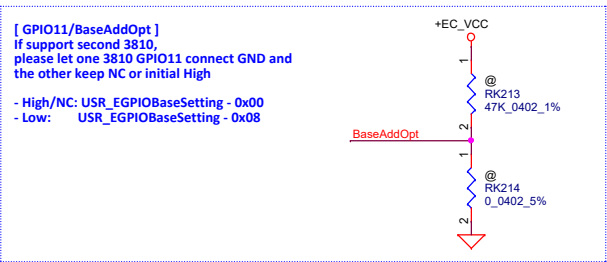
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	57 of 121
				Rev	1.0

OMEN New ESB CLK&DAT for Extend I/O

*NMI_DBG#: is a debug pin for EC to
inform BIOS after press hot key.



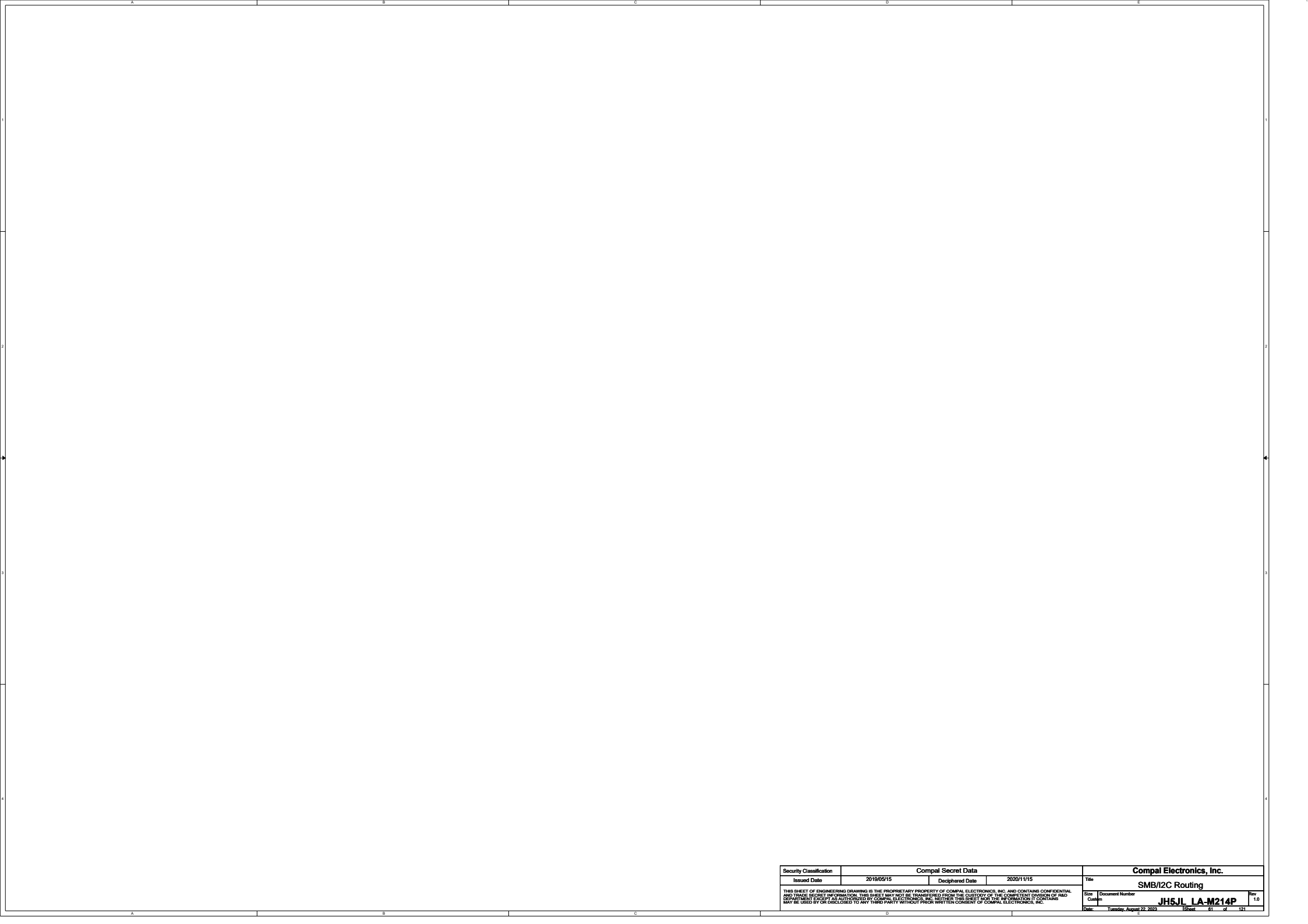
Need EC confirm



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/08/05	Deciphered Date	2022/08/05	Title	Extend I/O KC3810
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				Date	Tuesday, August 22, 2023
				Sheet	59 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date		2021/02/28	Deciphered Date		2020/11/28	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Title		
				Reserve		
				Size	Document Number	Rev
				JH5JL LA-M214P		
				1.0		
Date:		Tuesday, August 22, 2023		Sheet	60 of 121	



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		Title	
2019/05/15		2020/11/15		SMB/I2C Routing	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				Custom	JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	81 of 121

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	62 of 121
				Rev	1.0

KB Conn. 32pin

ON/OFF BTN

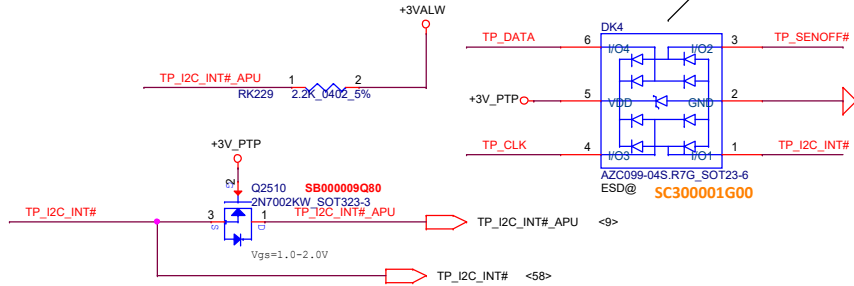
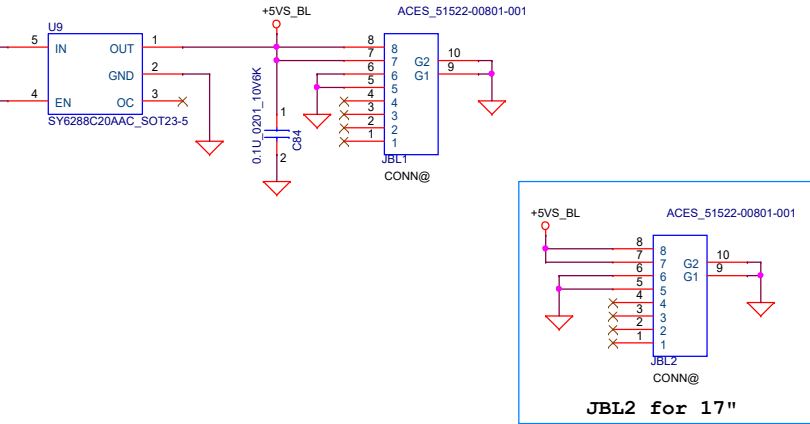
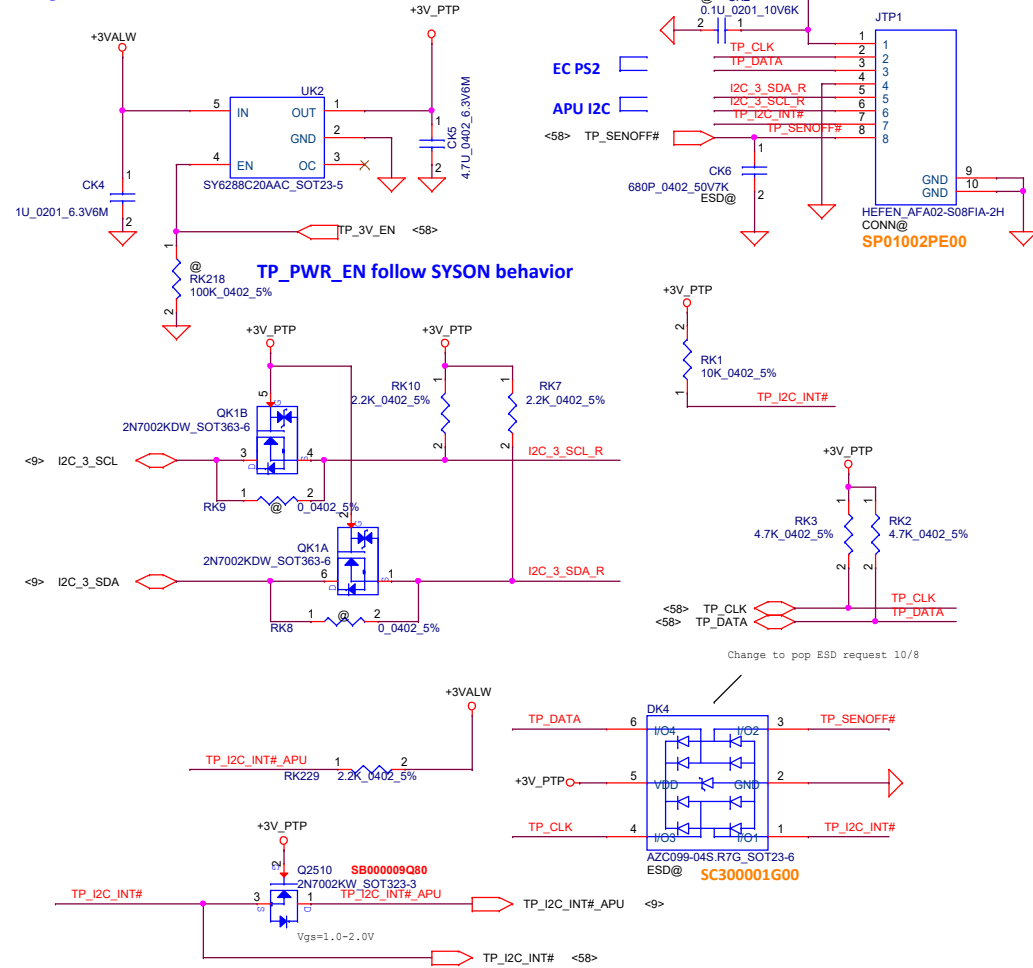
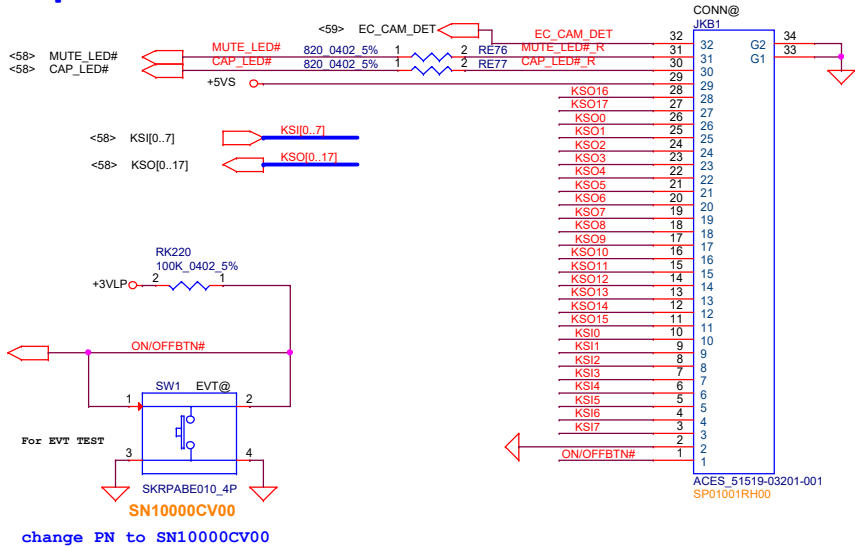
KB BackLight

Hall sensor

TP/B Conn.

Battery LED

Move to SUB/B



Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/08/05	Deciphered Date	2022/08/05	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				KB/TP/LED/LID
Size	Custom	Document Number	JH5JL LA-M214P	Rev 1.0
Date:	Tuesday, August 22, 2023	Sheet	63	of 121

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	64 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date		2021/02/28	Deciphered Date		2020/11/28	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Title		
				Reserve		
				Size	Document Number	Rev
				JH5JL LA-M214P		1.0
				Date: Tuesday, August 22, 2023		

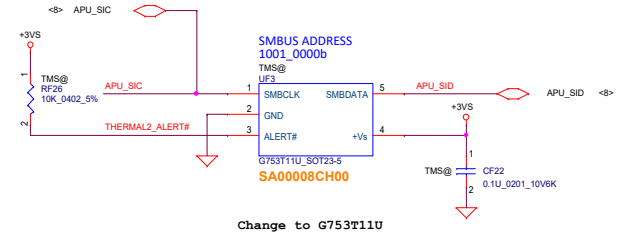
20200717
- Remove G-Sensor

THERMAL SENSOR

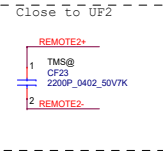
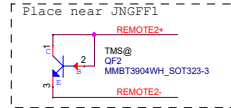
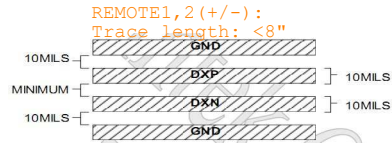
20200810
- Check address

THERMAL SENSOR

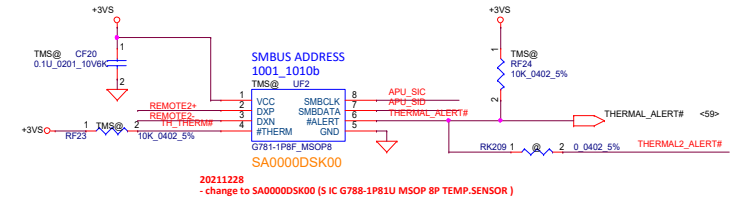
Close to Thermal SKIN



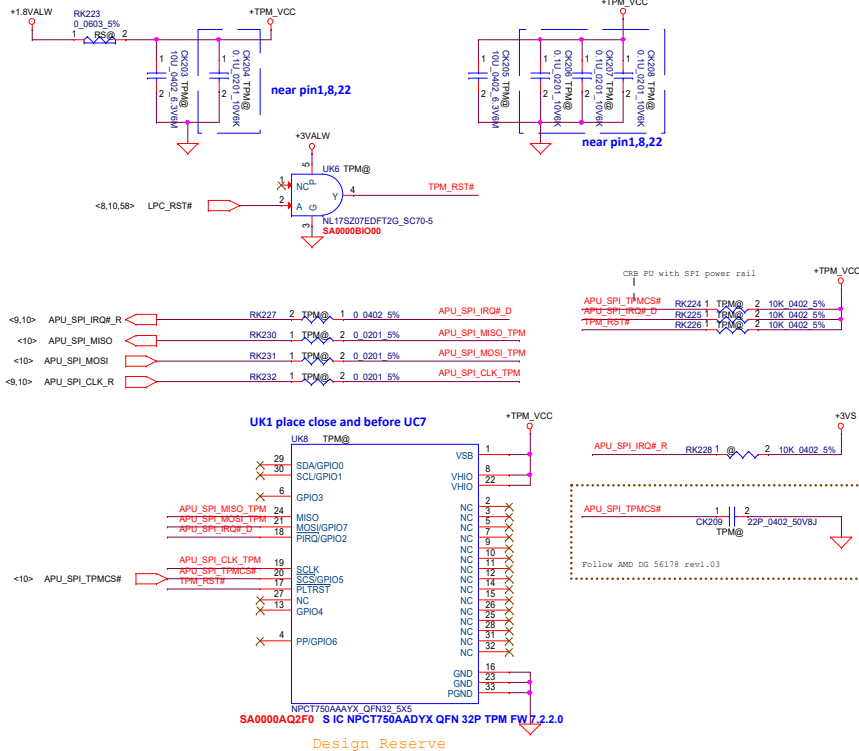
20211228
- Add 3rd thermal sensor



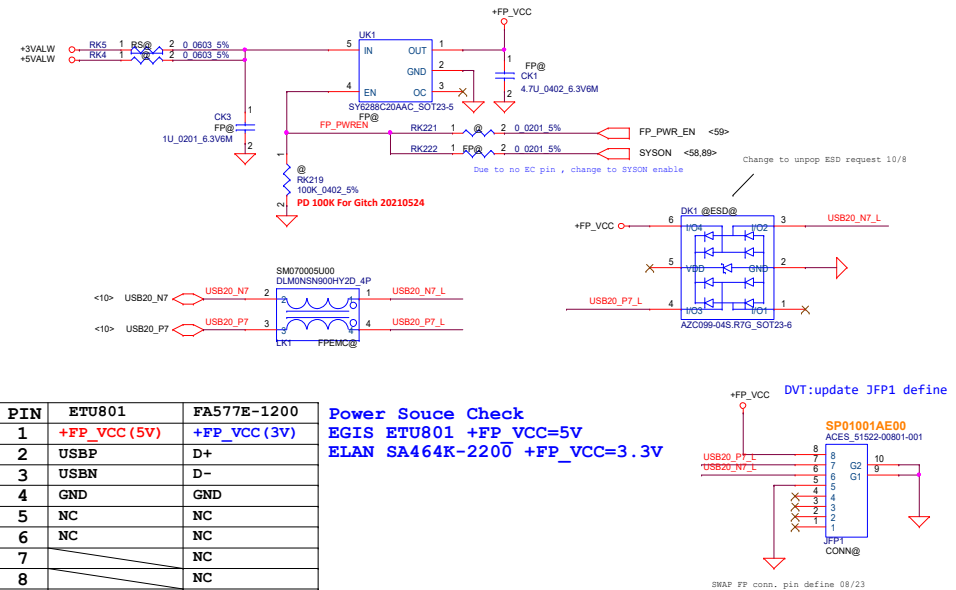
Close to SO-DIMM



TPM

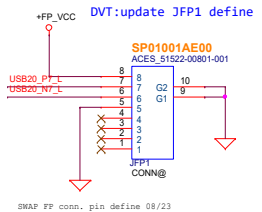


Finger print



PIN	ETU801	FA577E-1200
1	+FP_VCC(5V)	+FP_VCC(3V)
2	USBP	D+
3	USBN	D-
4	GND	GND
5	NC	NC
6	NC	NC
7	NC	NC
8	NC	NC

Power Source Check
EGIS ETU801 +FP_VCC=5V
ELAN SA464K-2200 +FP_VCC=3.3V

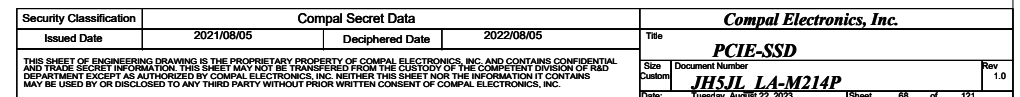


Reserve Page

TEST#	MODE	Supported Application	Supported Power Mode
0	x	Active mode only (For any application)	-Active only
1	0	SATA3	-Active -Slumber -No RxDet
1	1	PCIe3	-Active mode -Slumber mode -Unplug mode

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/08/05	Deciphered Date	2022/08/05	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number JH5JL LA-M214P
				Date: Tuesday, August 22, 2023	Rev 1.0
				Sheet 67 of 121	

```
Place CS101 close UM2 pin 1&2
Place CS102 close UM2 pin 6&7
```



Reserve Page

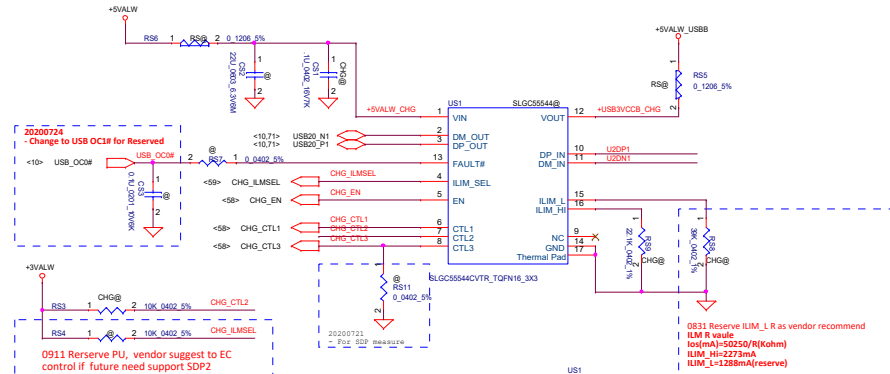
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	69 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title Reserve	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Document Number JH5JL LA-M214P	Rev 1.0
Date: Tuesday, August 22, 2023		Sheet 70 of 121			

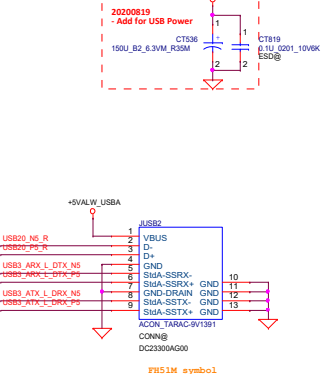
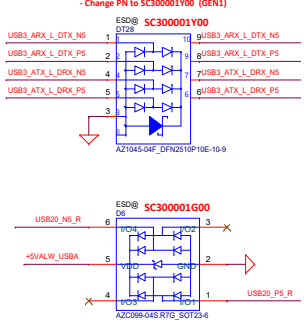
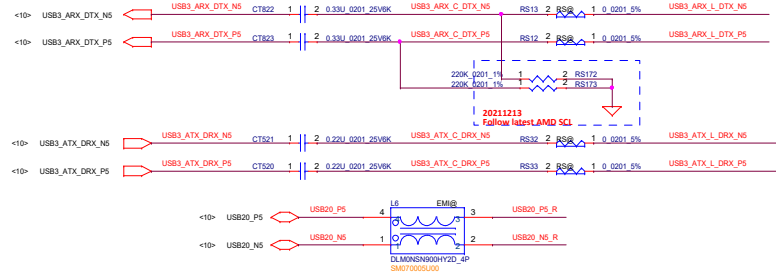
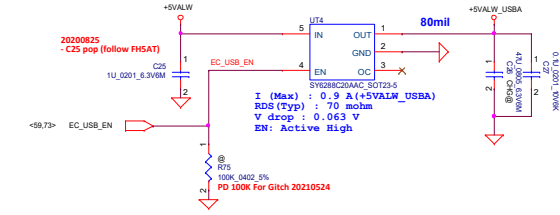
MB_USB3 GEN1 Type-A Conn.

USB Host Charger



USB Host Charger Truth Table

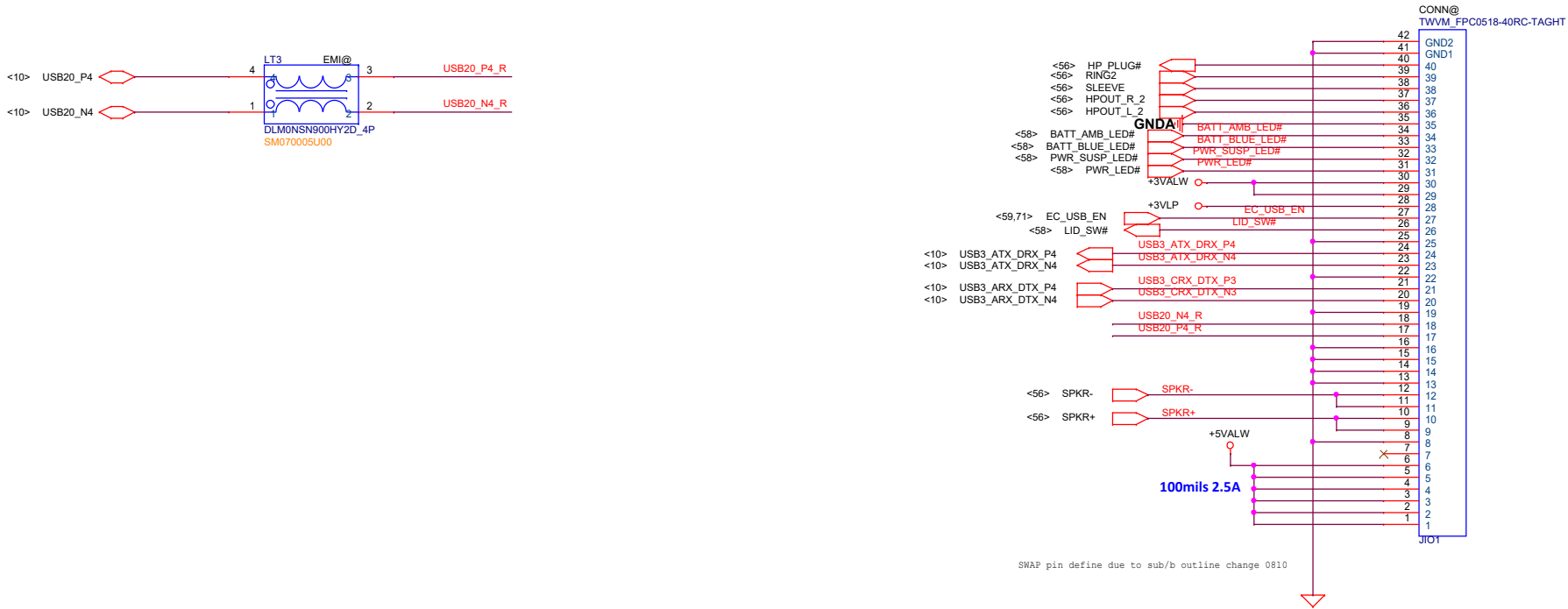
CHG_EN	CTL1	CTL2	CTL3	ILIM_SEL	MODE	Current Limit Setting	Note
0	0	1	0	1	SDP1-OFF	ILIM_H	Port power off
1	0	1	0	1	SDP1	ILIM_H	Data Lines Connected
1	0	1	1	1	DCP Auto	ILIM_H	Data Lines Disconnected
1	1	1	1	1	CDP	ILIM_H	Data Lines Connected



Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	72 of 121
				Rev	1.0

IO/B CONN



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/08/05	Deciphered Date	2022/08/05	Title	IO/B
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number
				Date	Tuesday, August 22, 2023
				Sheet	73 of 121
				Rev	1.0
				JH5JL LA-M214P	

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date	Tuesday, August 22, 2023
				Sheet	74 of 121
				Rev	1.0

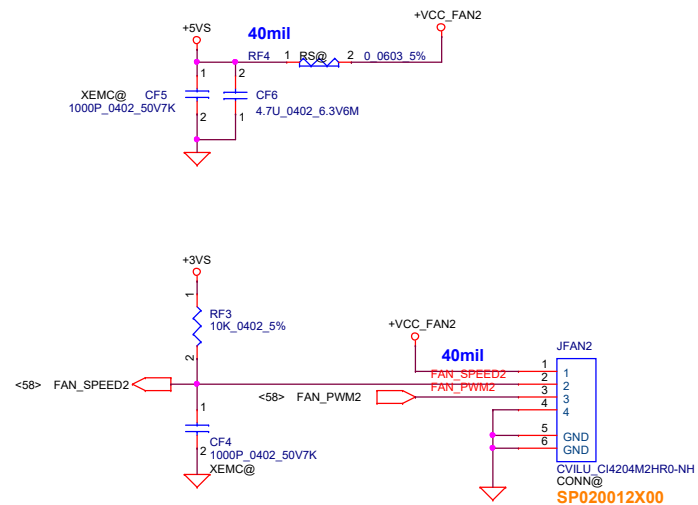
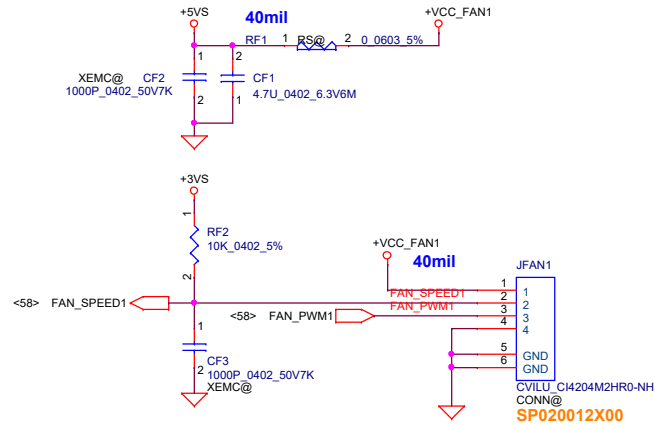
Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title Reserve	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Document Number JH5JL LA-M214P	Rev 1.0
Date: Tuesday, August 22, 2023		Sheet 75 of 121			

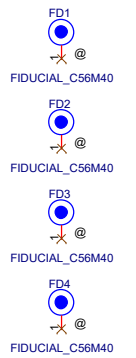
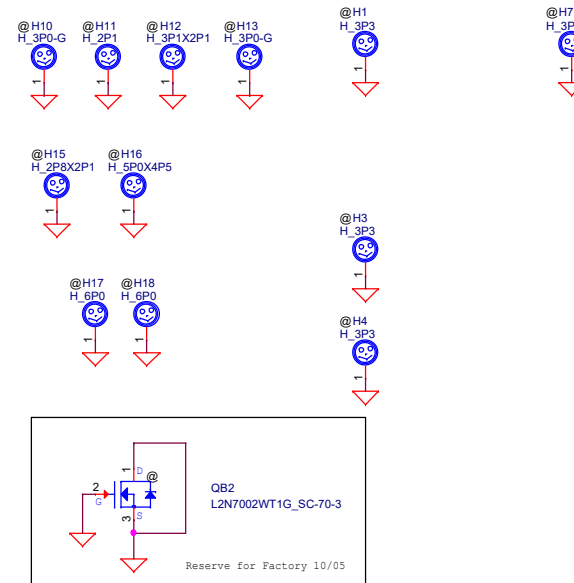
Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title Reserve	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Document Number JH5JL LA-M214P	Rev 1.0
Date: Tuesday, August 22, 2023		Sheet 76 of 121			

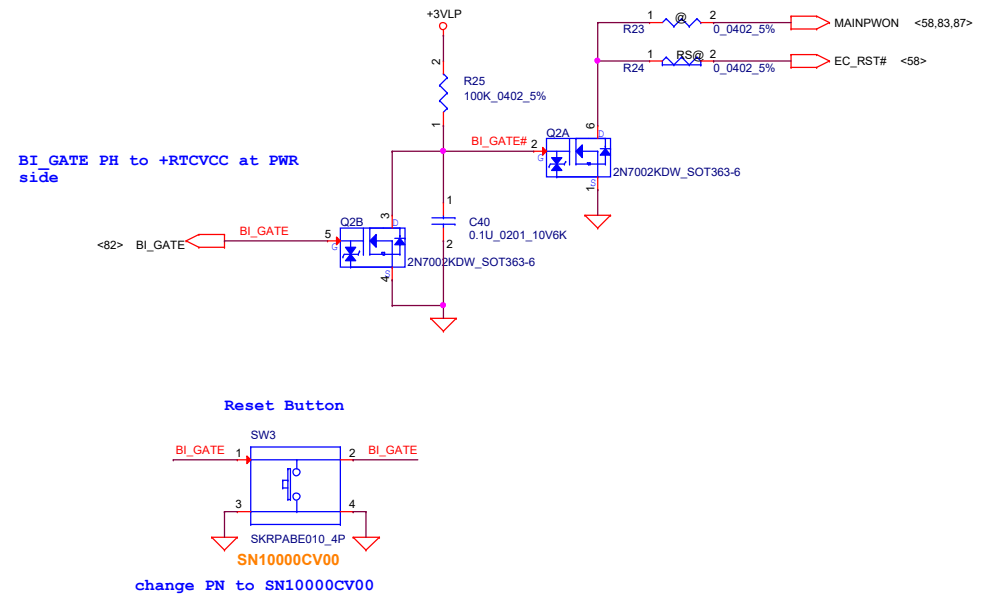
FAN2 Conn



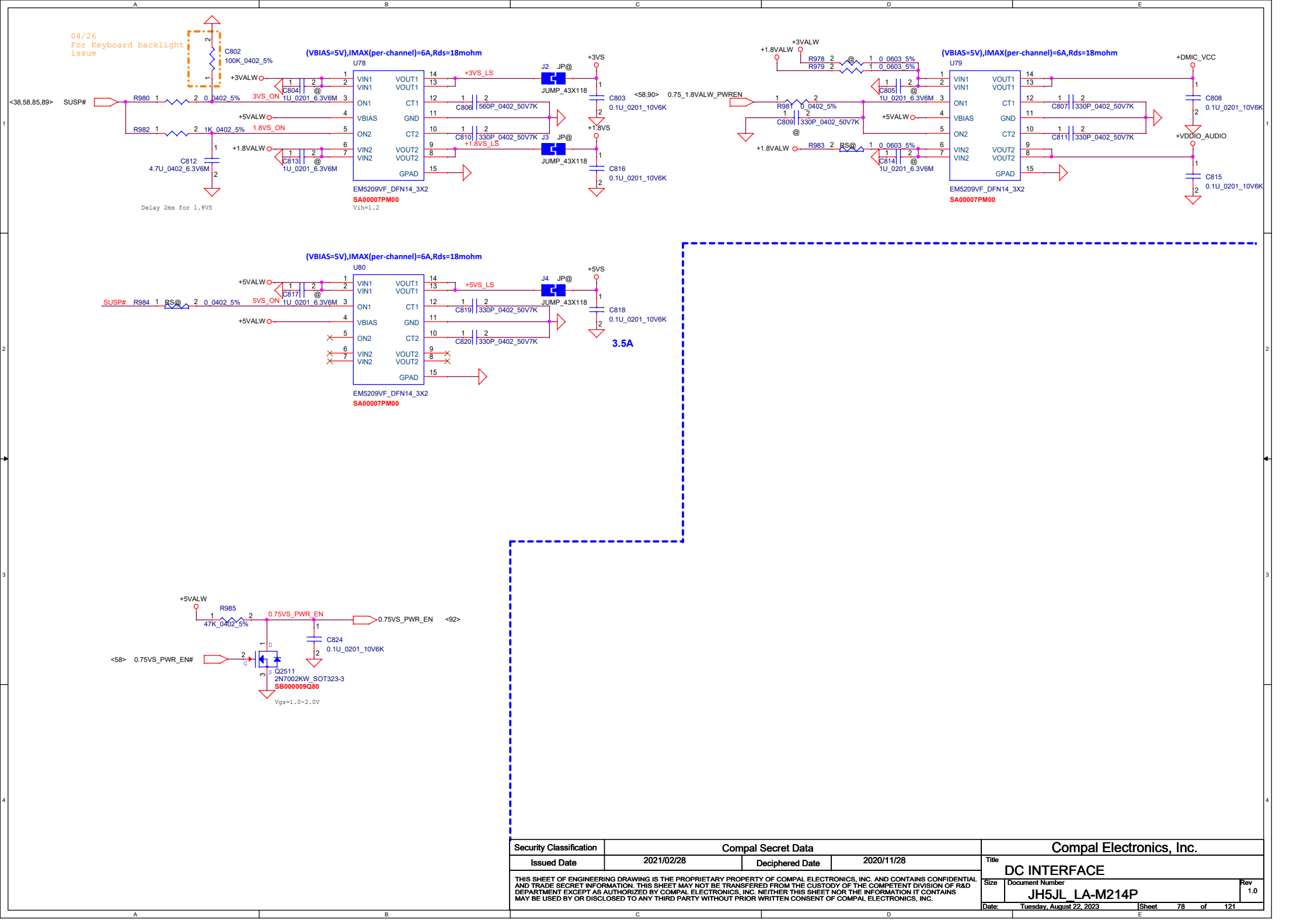
Stand OFF



Reset Circuit



Security Classification		Compal Secret Data				Compal Electronics, Inc.					
Issued Date		2021/08/05		Deciphered Date		2022/08/05		Title			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.								FAN & Screw Hole/Reset/TB			
								Doc Number		Rev	
								JH5JL LA-M214P		1.0	
								Date: Tuesday, August 22, 2023		Sheet 77 of 121	



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				DC INTERFACE	
Size		Document Number			Rev
		JH5JL LA-M214P			1.0
Date		Tuesday, August 22, 2023		Sheet	78 of 121



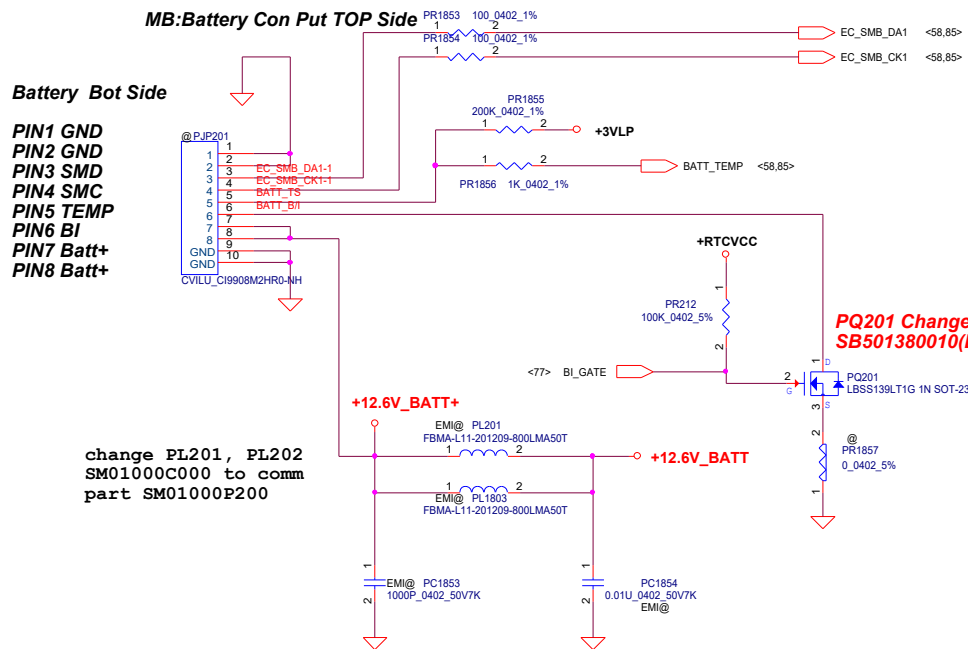
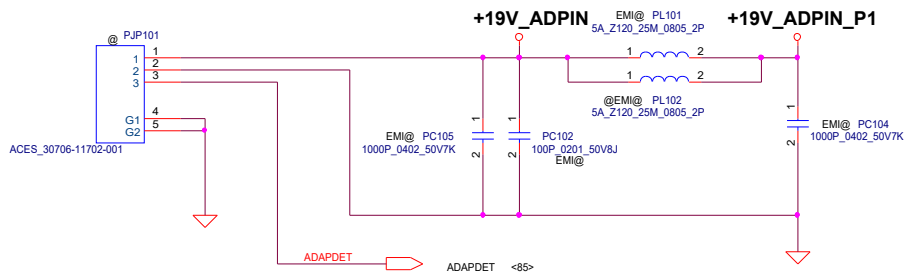
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title	ME KB BKT
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				Date	Tuesday, August 22, 2023
				Sheet	79 of 121
				Rev	1.0
				JH5JL LA-M214P	

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2021/02/28	Deciphered Date	2020/11/28	Title Reserve	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Document Number JH5JL LA-M214P	Rev 1.0
Date: Tuesday, August 22, 2023		Sheet 80 of 121			

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2019/09/20	Deciphered Date	2020/09/20	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				Date:	Tuesday, August 22, 2023
				Sheet	81 of 121
				Rev	1.0
				JH5JL LA-M214P	



change PL201, PL202
SM01000C000 to comm
part SM01000P200

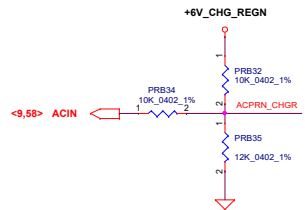
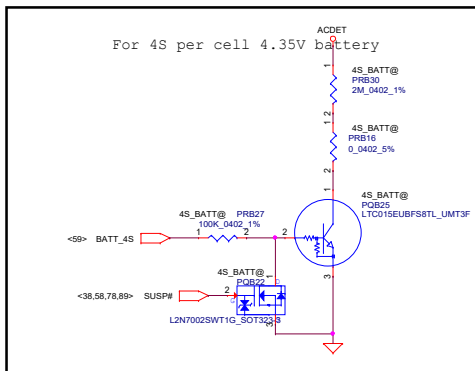
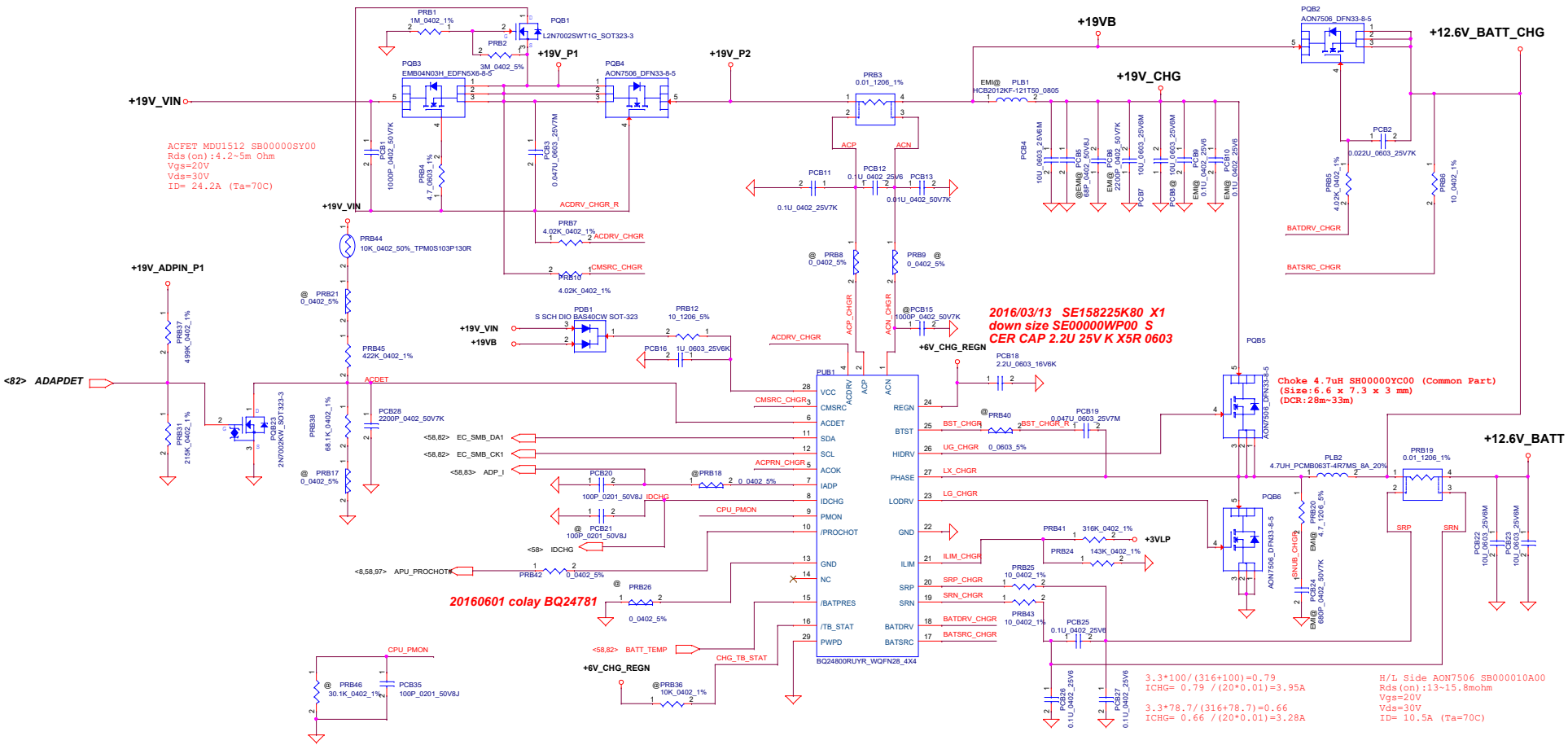
PQ201 Change to SB00000Q000,
SB501380010(BSS138LT1G Del)

2013/06/07
Add for ENE9022 Battery Voltage drop detection.
Connect to ENE9022 pin64 AD1.

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2016/11/03	Deciphered Date	2017/06/14	Title	DCIN
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number
				Date:	JH5JL LA-M214P
				Sheet	82 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2017/11/23	Deciphered Date	2017/12/31	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date:	Tuesday, August 22, 2023
				Sheet	84 of 121
				Rev	1.0

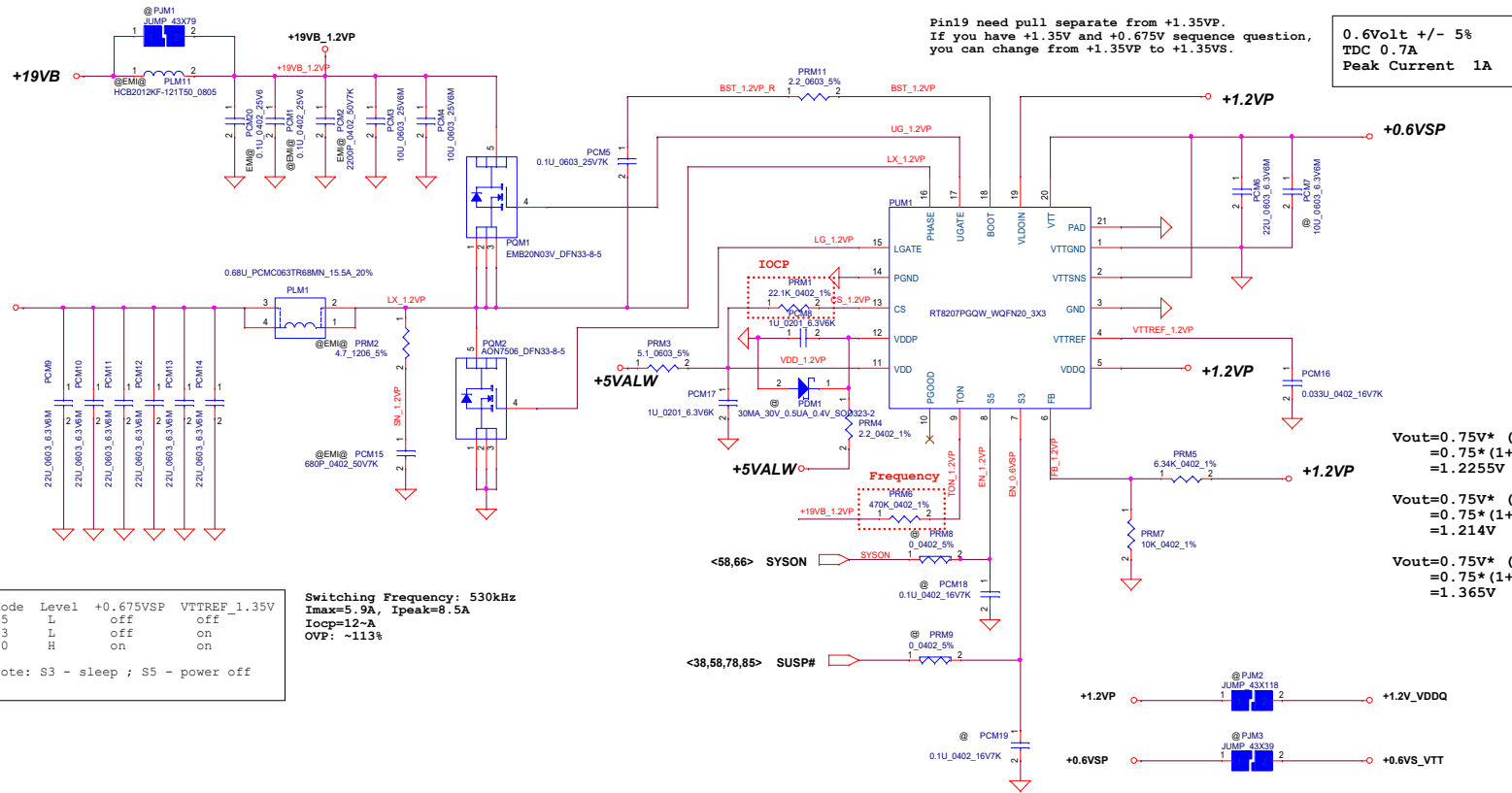


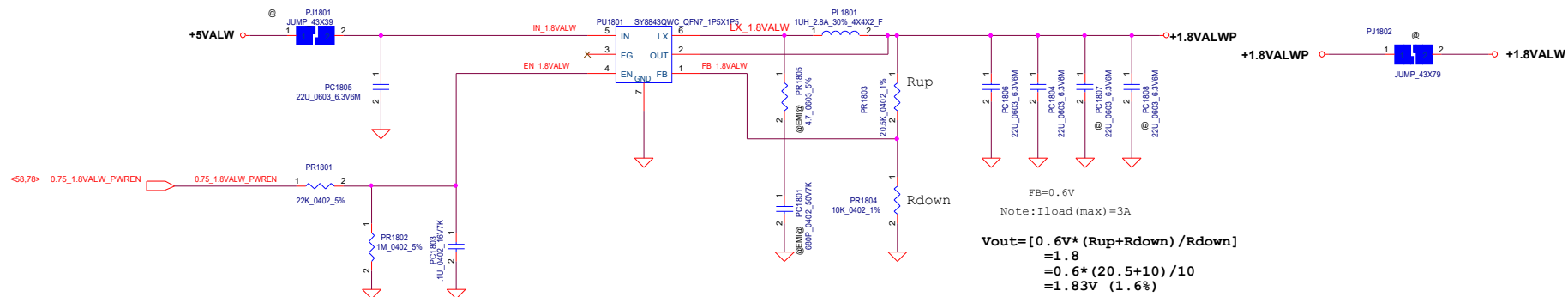
Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2017/11/23	Deciphered Date	2017/12/31	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				Date:	Tuesday, August 22, 2023
				Sheet	86 of 121
				Rev	1.0
				JH5JL LA-M214P	

Reserve Page

Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2016/11/03	Deciphered Date	2017/06/14	Title	DDR4	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number	Rev
				Custom	JHSJL_LA-M214P	1.0
				Date:	Tuesday, August 22, 2023	Sheet 88 of 121





Security Classification		Compal Secret Data		Compal Electronics, Inc.				
Issued Date		2020/08/28	Deciphered Date	2020/08/28	Title			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.					1.8VALW			
					Size	Document Number		Rev
					Customer	JH5JL LA-M214P		1.0
					Date:	Tuesday, August 22, 2023	Sheet	90 of 121

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2017/11/23	Deciphered Date	2017/12/31	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				Date:	Tuesday, August 22, 2023
				Sheet	91 of 121
				Rev	1.0
				JH5JL LA-M214P	

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2017/11/23	Deciphered Date	2017/12/31	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date:	Tuesday, August 22, 2023
				Sheet	93 of 121
				Rev	1.0

Reserve Page

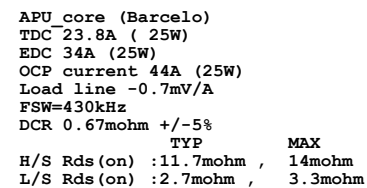
Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2016/11/03	Deciphered Date	2017/06/14	Title	JH5JL_LA-M214P	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number	Rev
				C	1.0VS_VCCIO	1.0
				Date:	Tuesday, August 22, 2023	Sheet 94 of 121

Reserve Page

Security Classification		Compal Secret Data				<i>Compal Electronics, Inc.</i>									
Issued Date		2017/11/23		Deciphered Date		2017/12/31		Title							
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.								<i>Reserve</i>							
								Size	Document Number						Rev
								<i>JH5JL LA-M214P</i>							
								Date: Tuesday, August 22, 2023							
								Sheet 95 of 121							

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2017/11/23	Deciphered Date	2017/12/31	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				Date:	Tuesday, August 22, 2023
				Sheet	96 of 121
				Rev	1.0
				JH5JL LA-M214P	

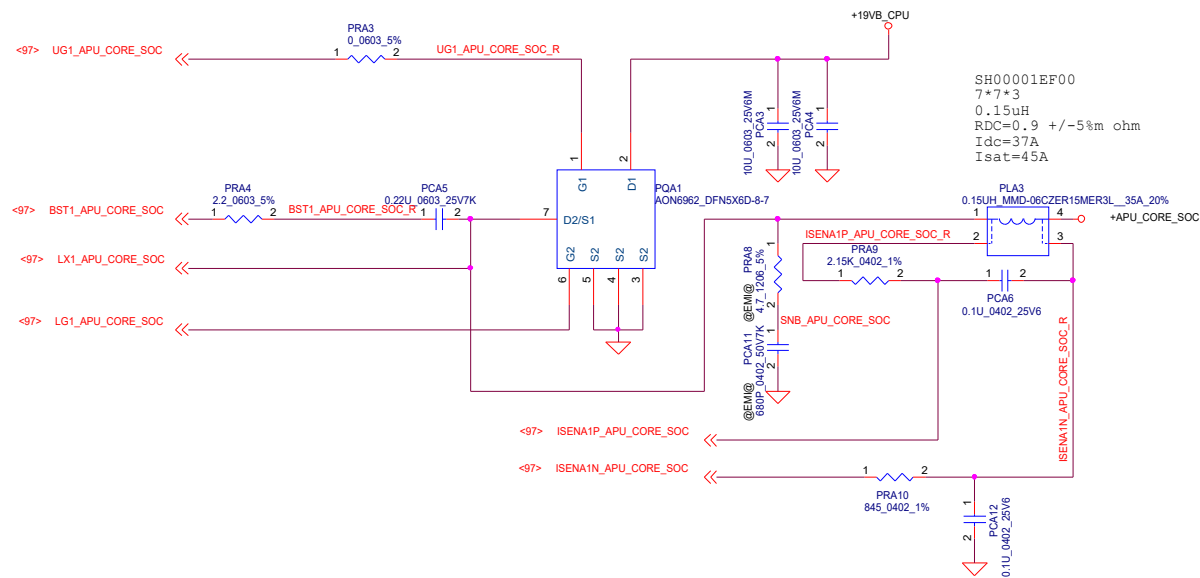


Compal Electronics, Inc.

Reserve Page

Document Number
IHS II LA-M214P

Tuesday, August 22, 2023 | Sheet 98 of 121



+APU CORE SOC
TDC 9.1A (15W & 25W)
EDC 13A (15W & 25W)
OCP current 16.9A (15W & 25W)
Load line -2.1mV/A
FSW=400kHz
DCR 0.67m ohm +/-5%
H/S Rds (on) :11.7mohm , 14mohm
L/S Rds (on) :2.7mohm , 3.3mohm

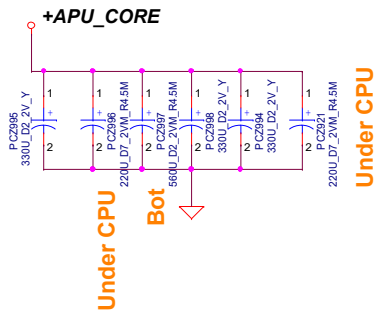
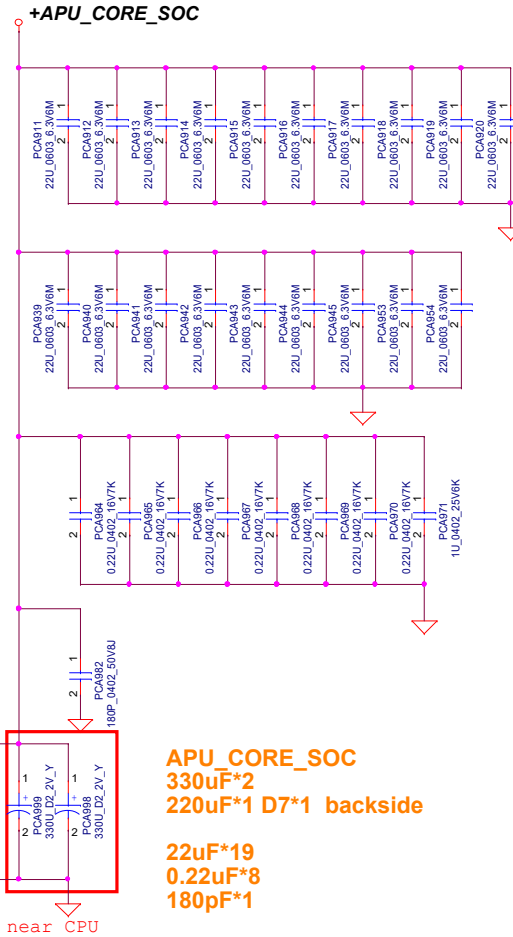
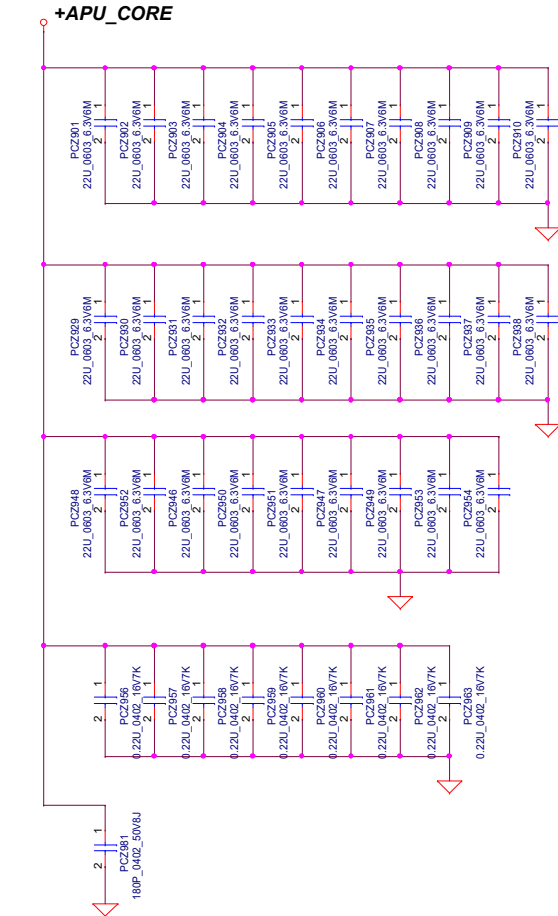
Security Classification				Compal Secret Data				Compal Electronics, Inc.			
Issued Date				2020/08/28		Deciphered Date		2020/08/28		Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size		Document Number		Rev		Date:	
						JH5JL LA-M214P		1.0		Tuesday, August 22, 2023	
										Sheet 99 of 121	

Reserve Page

Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2020/08/28	Deciphered Date	2020/08/28	Title	Reserve Page	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number	Rev
					JH5JL LA-M214P	1.0
				Date:	Tuesday, August 22, 2023	Sheet 100 of 121

+APU_CORE

+APU_CORE_SOC



APU_CORE
330uF D2*3
560uF D2
220uF D7*2 backside
22uF*29
0.22uF*8
180pF*1
330u is common part SGA00009S00

330u is common part SGA00009S00

Security Classification				Compal Secret Data				Compal Electronics, Inc.			
Issued Date				2020/08/28		Deciphered Date		+APU_CORE Cap			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				2020/08/28		2020/08/28		Title			
								Size			
								Document Number			
								JH5JL_LA-M214P			
								Rev			
								1.0			
								Date: Tuesday, August 22, 2023			
								Sheet 101 of 121			

Reserve Page

Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2016/11/03	Deciphered Date	2017/06/14	Title	JH5JL_LA-M214P	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number	Rev
				C	1.0VS_VCCIO	1.0
				Date:	Tuesday, August 22, 2023	Sheet 102 of 121

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2019/09/20	Deciphered Date	2020/09/20	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date:	Tuesday, August 22, 2023
				Sheet	103 of 121

Reserve Page

Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2016/01/06	Deciphered Date	2017/01/06	Title	PWR +NVVDD1	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number	Rev
					JHSJL LA-M214P	1.0
				Date:	Tuesday, August 22, 2023	Sheet 104 of 121

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2016/01/06	Deciphered Date	2017/01/06	Title	PWR +NVVDD1
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				JHSJL LA-M214P	
Date: Tuesday, August 22, 2023				Sheet	105 of 121

Reserve Page

Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2016/01/06	Deciphered Date	2017/01/06	Title	PWR +NVVDD1	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number	Rev
					JHSJL LA-M214P	1.0
				Date:	Tuesday, August 22, 2023	Sheet 106 of 121

Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2019/08/30	Deciphered Date	2020/08/30	Title		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				PWR VGA DECOUPLING		
				Size	Document Number	Rev
				JH5JL LA-M214P 1.0		
Date: Tuesday, August 22, 2023				Sheet	107	of 121



Security Classification		Compal Secret Data		Compal Electronics, Inc.							
Issued Date		Deciphered Date		2017/12/31		Title					
2016/02/01						PWR +1.SVRAM					
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.						Size	Document Number	Rev			
						HHS5B_LA-M214P					
						Date: Tuesday, August 22, 2023					
						Sheet 108 of 121					

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2016/11/03	Deciphered Date	2017/06/14	Title	PIR
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number JH5JL LA-M214P
				Date: Tuesday, August 22, 2023	Rev 1.0
				Sheet 109 of 121	

A		B		C		D		E	
1									
2									
3									
4									

Reserve Page

Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2019/08/30	Deciphered Date	2020/08/30	Title	+12V FAN	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number	Rev
					JH5JL LA-M214P	1.0
				Date:	Tuesday, August 22, 2023	Sheet 111 of 121

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2019/09/20	Deciphered Date	2020/09/20	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
					JH5JL LA-M214P
				Date:	Tuesday, August 22, 2023
				Sheet	112 of 121
				Rev	1.0

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2019/09/20	Deciphered Date	2020/09/20	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				Date:	Tuesday, August 22, 2023
				Sheet	113 of 121
				Rev	1.0
				JH5JL LA-M214P	

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2017/11/23	Deciphered Date	2017/12/31	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				Date:	Tuesday, August 22, 2023
				Sheet	114 of 121
				Rev	1.0
				JH5JL LA-M214P	

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2019/09/20	Deciphered Date	2020/09/20	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				Date:	Tuesday, August 22, 2023
				Sheet	115 of 121
				Rev	1.0
				JH5JL LA-M214P	

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2017/11/23	Deciphered Date	2017/12/31	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				Date:	Tuesday, August 22, 2023
				Sheet	116 of 121
				Rev	1.0
				JH5JL LA-M214P	

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2017/11/23	Deciphered Date	2017/12/31	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				Date:	Tuesday, August 22, 2023
				Sheet	117 of 121
				Rev	1.0
				JHSJL LA-M214P	

Reserve Page

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2017/11/23	Deciphered Date	2017/12/31	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				Date:	Tuesday, August 22, 2023
				Sheet	118 of 121
				Rev	1.0
				JH5JL LA-M214P	

Item	Fixed Issue	Reason for change	PG#	Modify List	Date	Phase
01	1. CPU 45W and 28W IMON and Iccmax change to right value	1. CPU transient tuning for 45W and 28W 2. Lack of PCZ109, PCZ130, PCZ116	P.97	CPU 28W 1.PRZ106 change to 38.3k /PRZ121 change to 432 ohm for GT frequency. 2.PRZ104 change to 332k for Core frequency 3.PRZ111 change to 7.5k/PRZ118 change to 4.3k for for ICC MAX GT=55A/Core=112A 4.PRZ138 change to 33 ohm/ PRZ139 change to 5.9k/ PRZ140 change to 10.5k for GT=55A IMON 5.PRZ151 change to 18.7k for GT=55A_LL 6. PCZ118,PCZ119,PCZ120,PCZ121,PCZ122,PCZ123,PCZ126,PCZ127,PCZ128,PCZ129 change to SE00000G880 CPU 45W 1.PRZ106 change to 38.3k /PRZ121 change to 432 ohm for GT frequency. 2.PRZ104 change to 332k for Core frequency 3.PRZ118 change to 3.16k for for ICC MAX GT=55A 4.PRZ138 change to 33 ohm/ PRZ139 change to 5.9k/ PRZ140 change to 10.5k for GT=55A IMON 5.PRZ151 change to 18.7k for GT=55A_LL 6.PRZ137 change to 182 ohm for shortage of 187 ohm 7.add PRZ165 for PWM4 BOM control 8.PCZ118,PCZ119,PCZ120,PCZ121,PCZ122,PCZ123,PCZ124,PCZ125,PCZ126,PCZ127,PCZ128,PCZ129 change to SE00000G880 all PCZ109 change to SE071820J80 S CER CAP 82P 50V J NPO 0402 PCZ130 change to SE095224K00 S CER CAP 0.22U 10V K X5R 0402 PCZ116 change to SE00000WA00 S CER CAP 0.47U 25V K X5R 0402	21/10/13	DVT
02	shortage of the TP551486	Lack of the TP551486 DDR solution	P.89	1. PUM1 DDR solution add G6020MC1D for 2nd source (X76 BOM)	21/10/13	DVT
03	shortage of the resistor	Lack of the PRA16 and PRA13	P.95	1. PRA16 change from 255k to 261k for shortage of 255k value. 2. PRA13 change from 0 0805 1% to 0 ohm 0805 5%	21/10/13	DVT
04	Buyer suggest	Cost saving for 1uF_0201 MLCC	P.101	1.PCZ205,PCZ206,PCZ209,PCZ212,PCZ218,PCZ219,PCZ220,PCZ222,PCZ230 change from SE00001HM00 to SE00000UC00	21/10/13	DVT
05	Height limitation	Change PCZ258 to A3 Slim type BOM	P.98	1. PCZ258 change to BOM control for A3 slim type NB	21/10/13	DVT
06	UMA EC code limitation	Pop on PR207 for EC issue	P.83	1. PR207 change to pop on for SMT EC issue(VRAM temp trigger) at UMA SKU	21/10/28	DVT
07	VRAM voltage	NV concern VRAM voltage by chip side	P.97	1. PRW25 change to 137k ohm for VRAM voltage (P0:1.21V, P8:1.259V). NV recommended	21/10/28	DVT
08	Cost saving	PCZ104,PCZ114,PCZ115 change to lower cost part	P.97	1. PCZ104,PCZ114,PCZ115 change to "S CER CAP 0.1U 10V +-10% X7R 0402" SE102104K00 for lower cost action	21/10/28	DVT

Security Classification	Compal Secret Data		Title		Compal Electronics, Inc.	
Issued Date	2019/09/20	Deciphered Date	2020/09/20	Size	Document Number	Rev
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Custom	JH5JL_LA-M214P	1.0
				Date:	Tuesday, August 22, 2023	Sheet

Page 1 of 1 for
PWR[illegible]

HW Schematic chang list (P.I.R)

[illegible]

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2016/11/04	Deciphered Date	2018/11/04	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF RAD SYSTEMS, INC. TO ANY OTHER PERSON OR ENTITY WITHOUT THE WRITTEN CONSENT OF RAD SYSTEMS, INC. THIS SHEET AND THE INFORMATION CONTAINED HEREIN MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	HW-P I R page1
				Document Number	JH5JL LA-M214P
				Rev	