

Compal Confidential

S550

UMA M/B Schematic Document

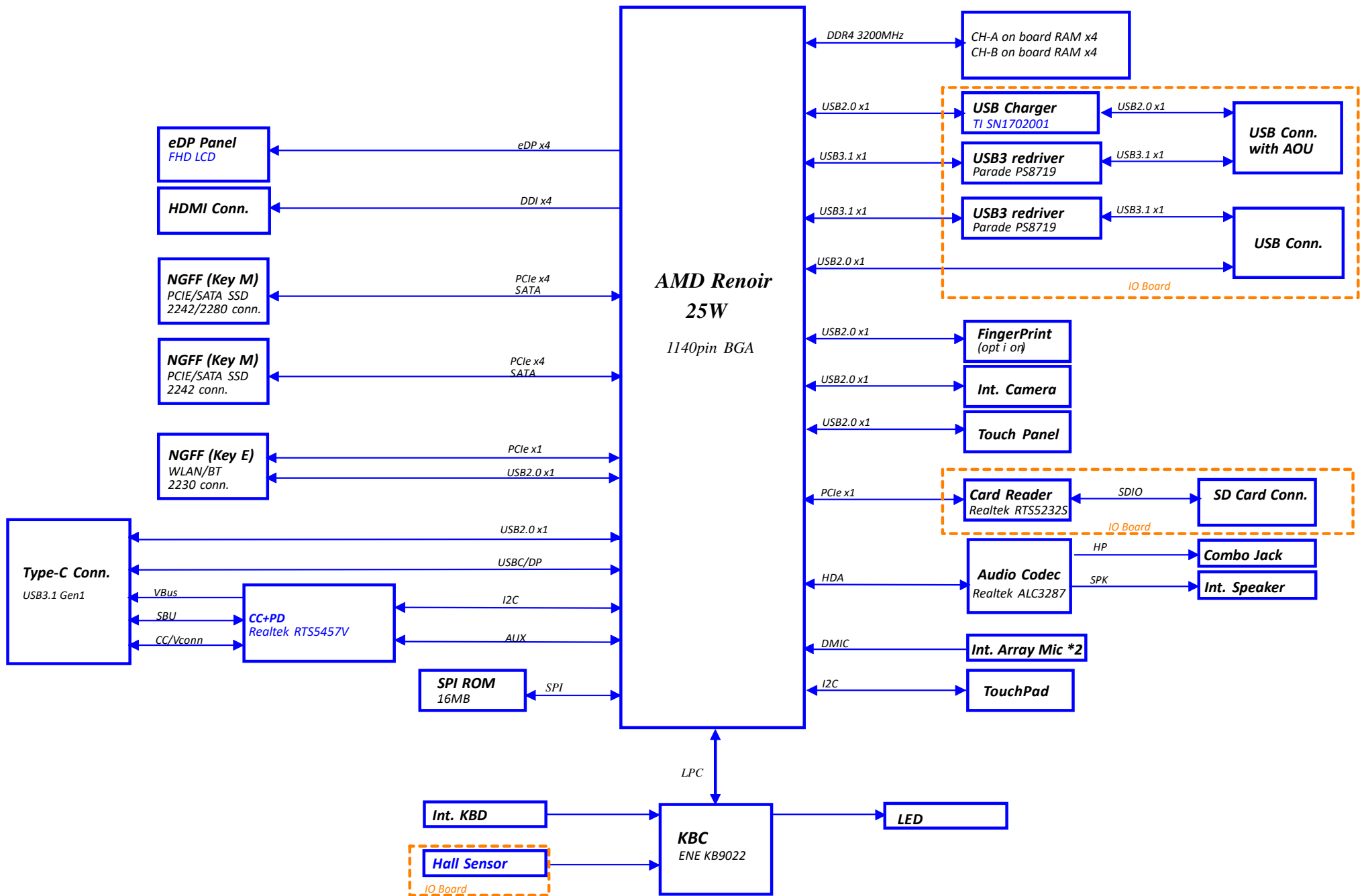
AMD Renoir Processor with DDR4 Memory Down

2020-01-10

LA-J701P

REV : 1 . 0

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		2020/01/10	Deciphered Date	Title	
			2022/01/10	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.				Size	Document Number
				Custom	LA-J701P
				Date:	Friday, January 10, 2020
				Sheet	1 of 39
				Rev	1.0



Voltage Rails

State \ power plane				
S0	O	O	O	O
S3	O	O	O	X
S5 S4/AC	O	O	X	X
S5 S4/ Battery only	O	X	X	X
S5 S4/AC & Battery don't exist	X	X	X	X

BOM Structure Table

Item	BOM Structure
Memory Down - SDP Package	SDP@ SDP_CHB@
Memory Down - DDP Package	DDP@ DDP_CHB@
Channel B Memory Down	CHB@
EMI pop	EMI@
EMI un-pop	@EMI@
ESD pop	ESD@
ESD un-pop	@ESD@
RF pop	RF@
RF un-pop	@RF@
Debug	HDT@
Keyboard BackLight	KBL@
Normal FP	FP@
SLIM_FP	SLIM_FP@
CAMERA POWER CIRCUIT	CAM@
Modern standby	MS@ NON_MS@
DP Power Switch	DPS1155@ DPS1113@

USB 2.0 Port Table

Port	External USB Port
0	USB2/3 Port (Type-C)
1	USB2/3 Port (IO - 1)
2	Camera
3	Touch Screen
4	
5	USB2/3 Port (IO - 2)
6	Fingrt Print
7	NGFF BT

DDI Port Table

Port	Lane
0	eDP
1	HDMI
2	TYPE C (PD + CC)
3	

USB 3.0 Port Table

Port	
0	USB2/3 Port (Type-C)
1	USB2/3 Port (IO - 1)
4	
5	USB2/3 Port (IO - 2)

GPP Port Table

Port	Lane	
0	0	SSD1
1	1	
2	2	
3	3	
4	4	CardReader
5	5	
6	6	
7	7	NGFF WLAN
8	8	SSD2
9	9	
10	10	
11	11	

EC SM Bus1 address EC SM Bus2 address

Device	Address	Device	Address
Smart Battery	0001 011x 16h	Thermal Sensor (F75305M)	1001_101xb 9Ah
Charger (ISL88739A)	0001 001x 12h		

PCH SM Bus address

Device	Address	Device	Address
Touch pad			

SMBUS Control Table

	SOURCE	APU	BATT	CHARGER	KB9022	PD IC	Thermal Sensor
EC_SMB_CK1	KB9022	X	V	V	V	V	X
EC_SMB_DA1	+3VL		+3VALW	+19V_VIN			
EC_SMB_CK2	KB9022	V	X	X	V	X	V
EC_SMB_DA2	+3VS	+3VS			+3VS		+3VS

STATE \ SIGNAL	SLP_S1#	SLP_S3#	SLP_S4#	SLP_S5#	+VALW	+V	+VS	Clock
Full ON	HIGH	HIGH	HIGH	HIGH	ON	ON	ON	ON
S1 (Power On Suspend)	LOW	HIGH	HIGH	HIGH	ON	ON	ON	LOW
S3 (Suspend to RAM)	LOW	LOW	HIGH	HIGH	ON	ON	OFF	OFF
S4 (Suspend to Disk)	LOW	LOW	LOW	HIGH	ON	OFF	OFF	OFF
S5 (Soft OFF)	LOW	LOW	LOW	LOW	ON	OFF	OFF	OFF

Renoir APU ES



Renoir APU IP



ON BOARD RAM X76



PCB PN



X4E



Power Sequence

Boot

Shut
Down

EC Pin 110 Input

EC Pin 112 Output

AC Plug

EC Pin 114 Input

EC Pin 100 Output

EC Pin 122 Output

EC Pin 123 Input

EC Pin 6 Input

EC Pin 95 Output

EC Pin 116 Output

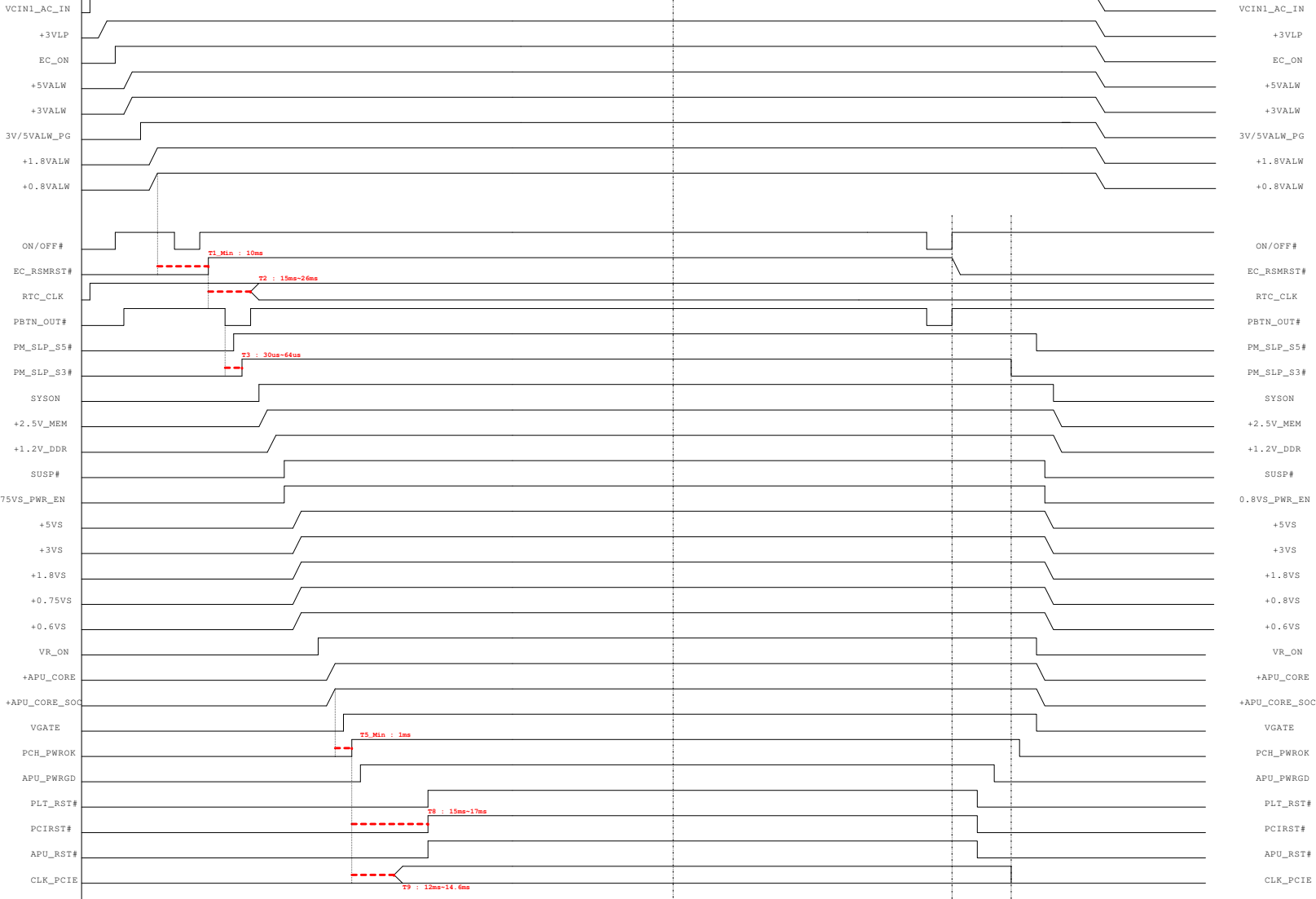
EC Pin 99 Output

EC Pin 121 Output

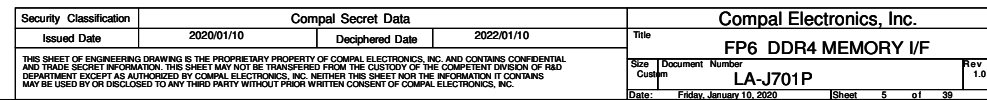
EC Pin 36 Input

EC Pin 32 Output

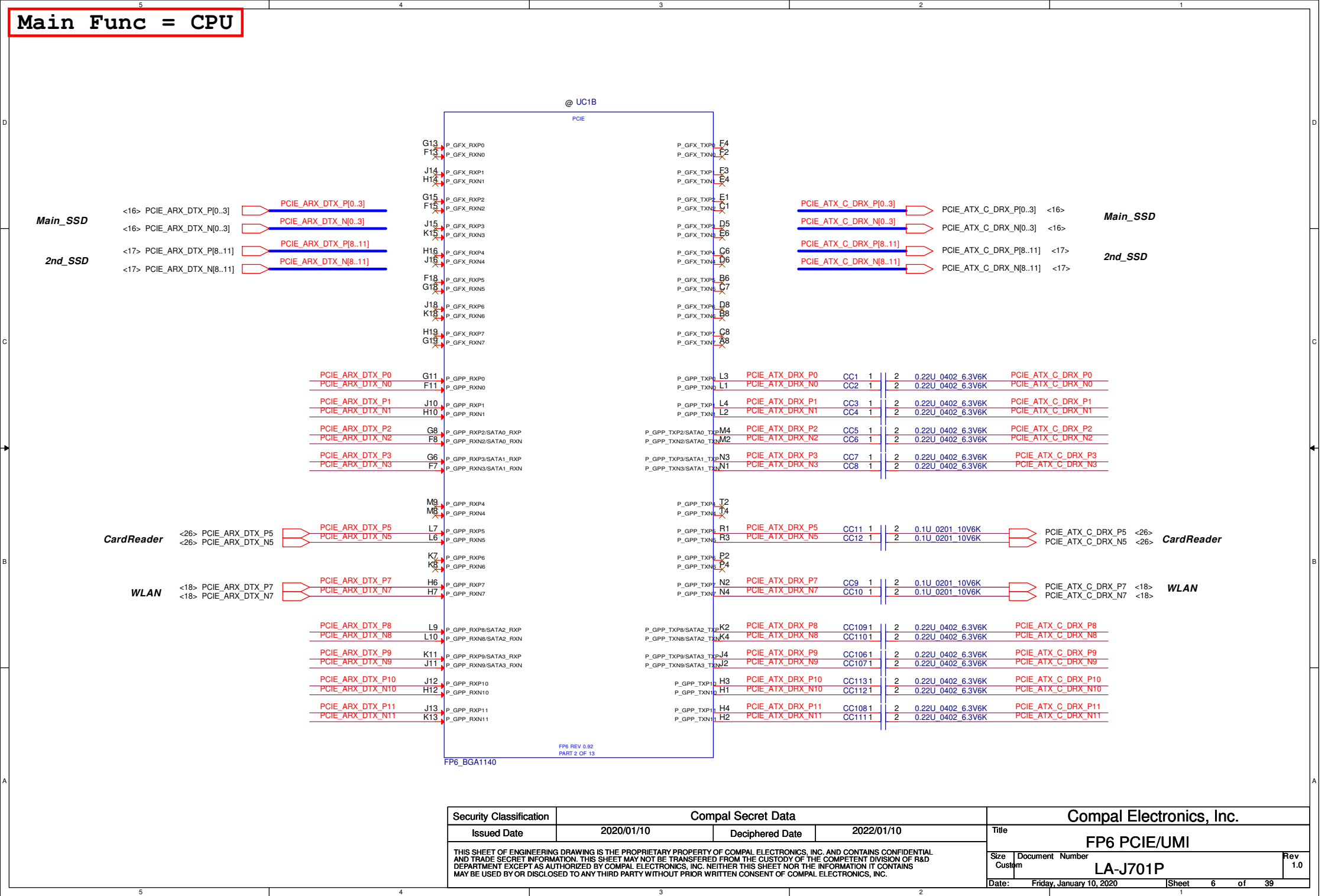
EC Pin 13 Input



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		Title	
2020/01/10		2022/01/10		Power Sequence	
Size		Document Number		Rev	
C		LA-J701P		1.0	
Date: Friday, January 10, 2020		Sheet 4 of 39			

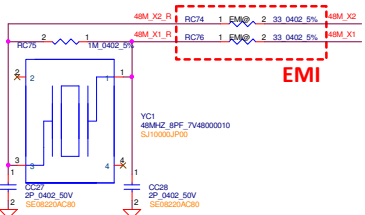


Main Func = CPU

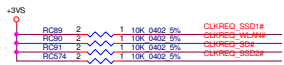
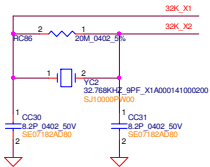


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/01/10	Deciphered Date	2022/01/10	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				FP6 PCIE/UMI	
				Size Custom	Document Number LA-J701P
				Date:	Friday, January 10, 2020
				Sheet	6 of 39

48MHz CRYSTAL

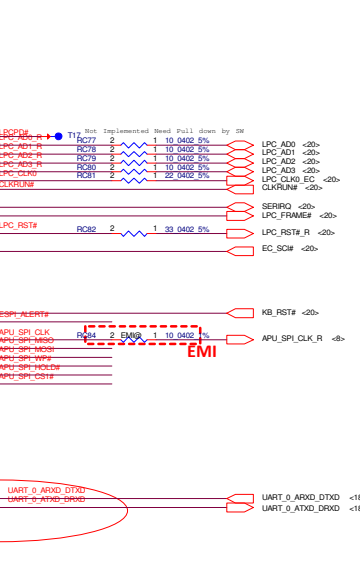
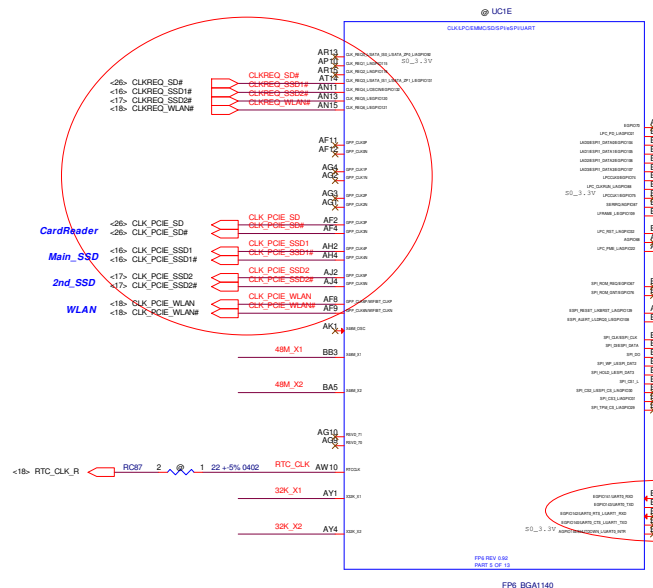
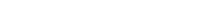
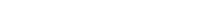
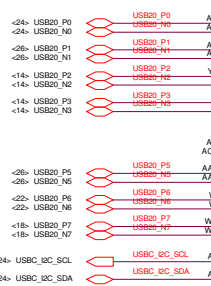


32.768KHz CRYSTAL



- USB3.1 Type-C
- USB3.1 Type-A Port 1
- Camera
- Touch Screen

- USB3.1 Type-A Port 2
- Finger Print
- NGFF_BT



FP6_BGA140

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

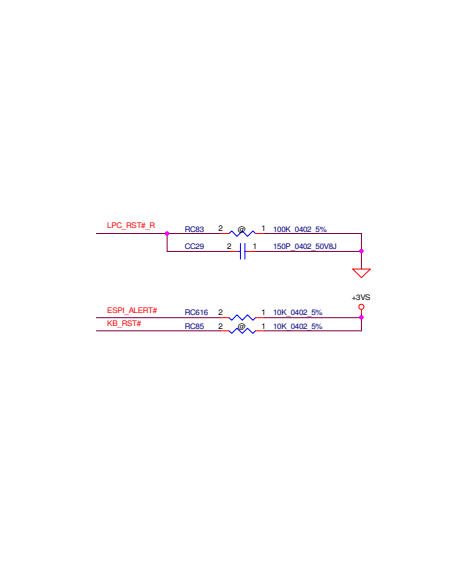
FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02



FP6_BGA140

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

FP6_REV 0.02

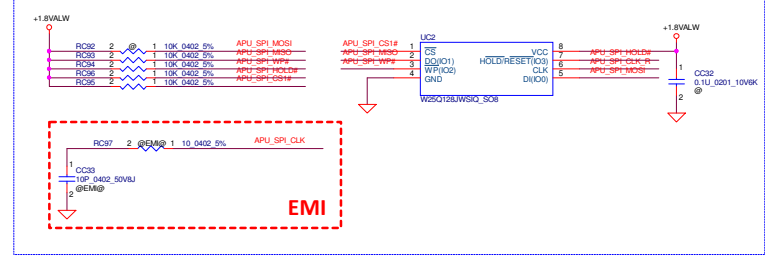
FP6_REV 0.02

FP6_REV 0.02

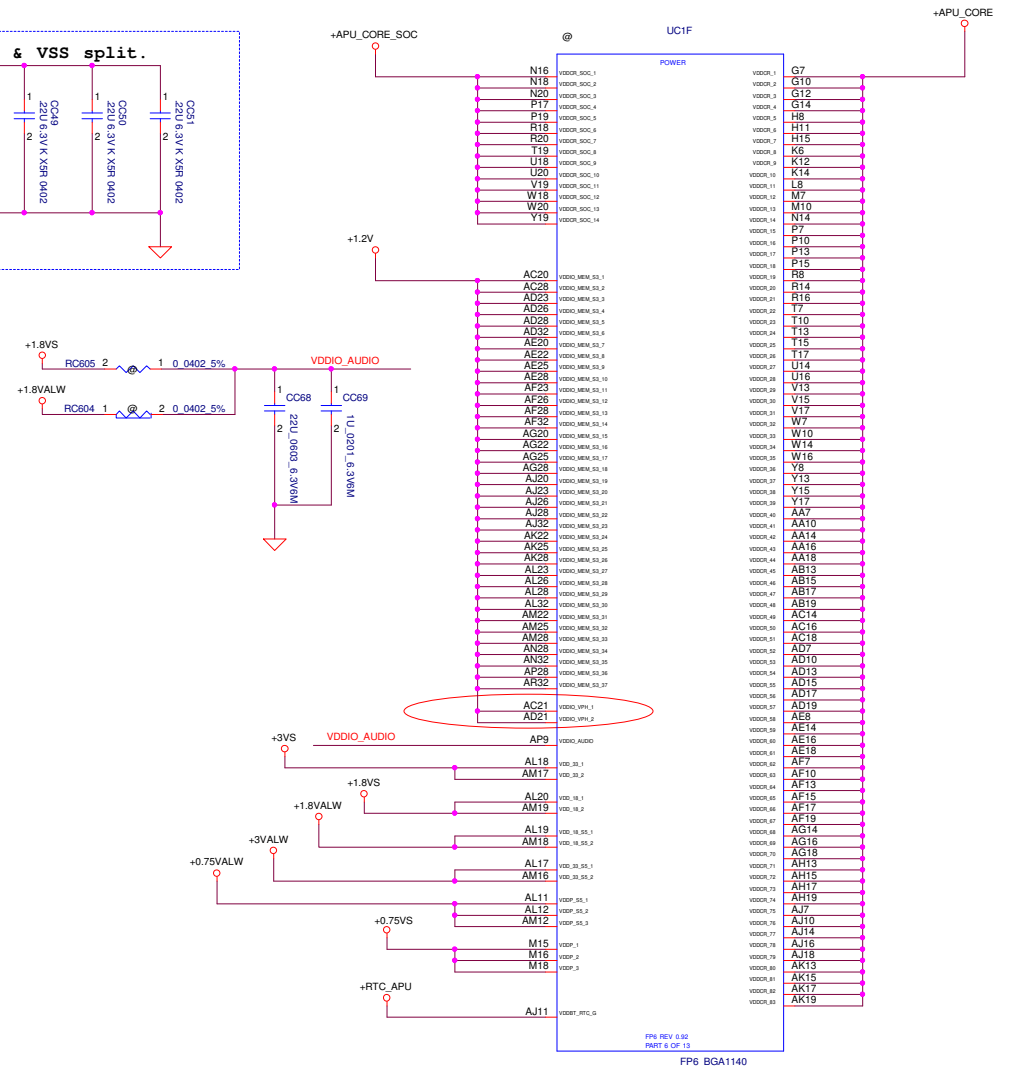
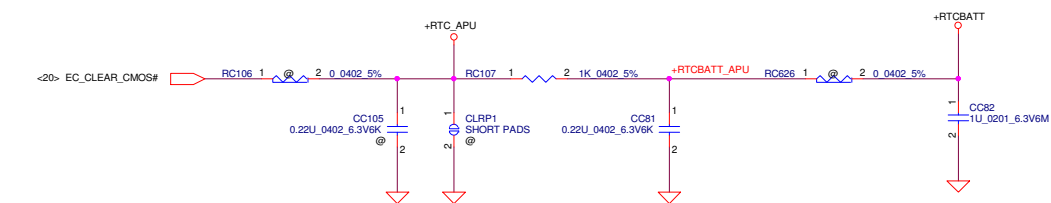
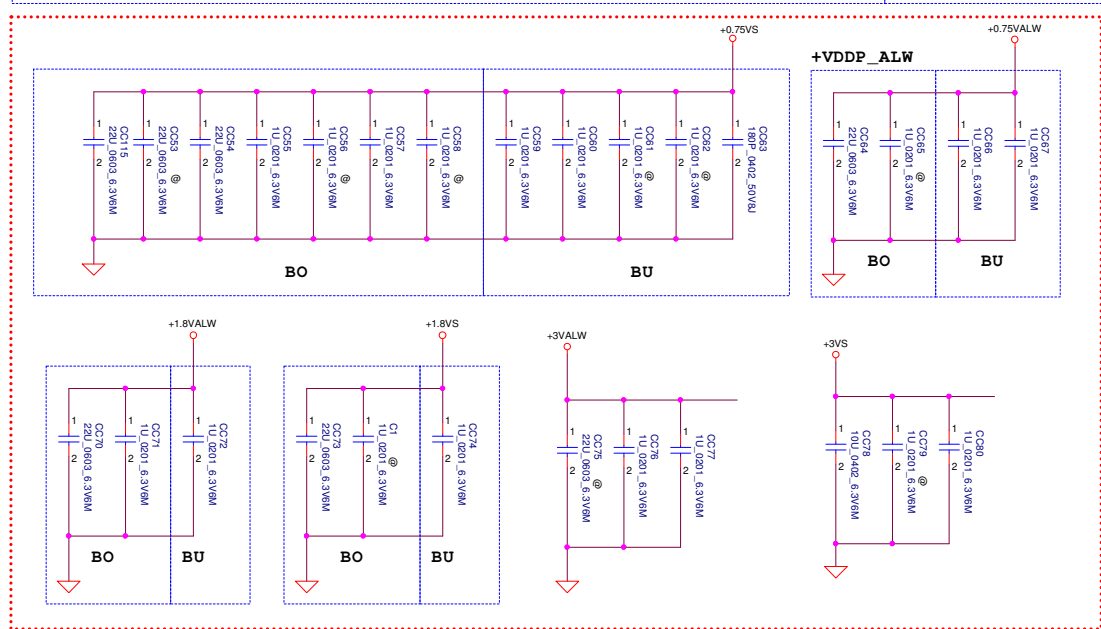
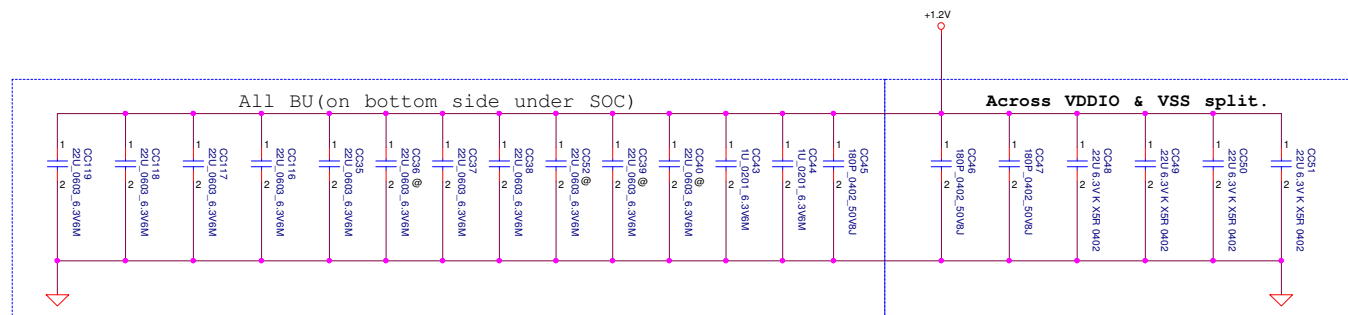
FP6_REV 0.02

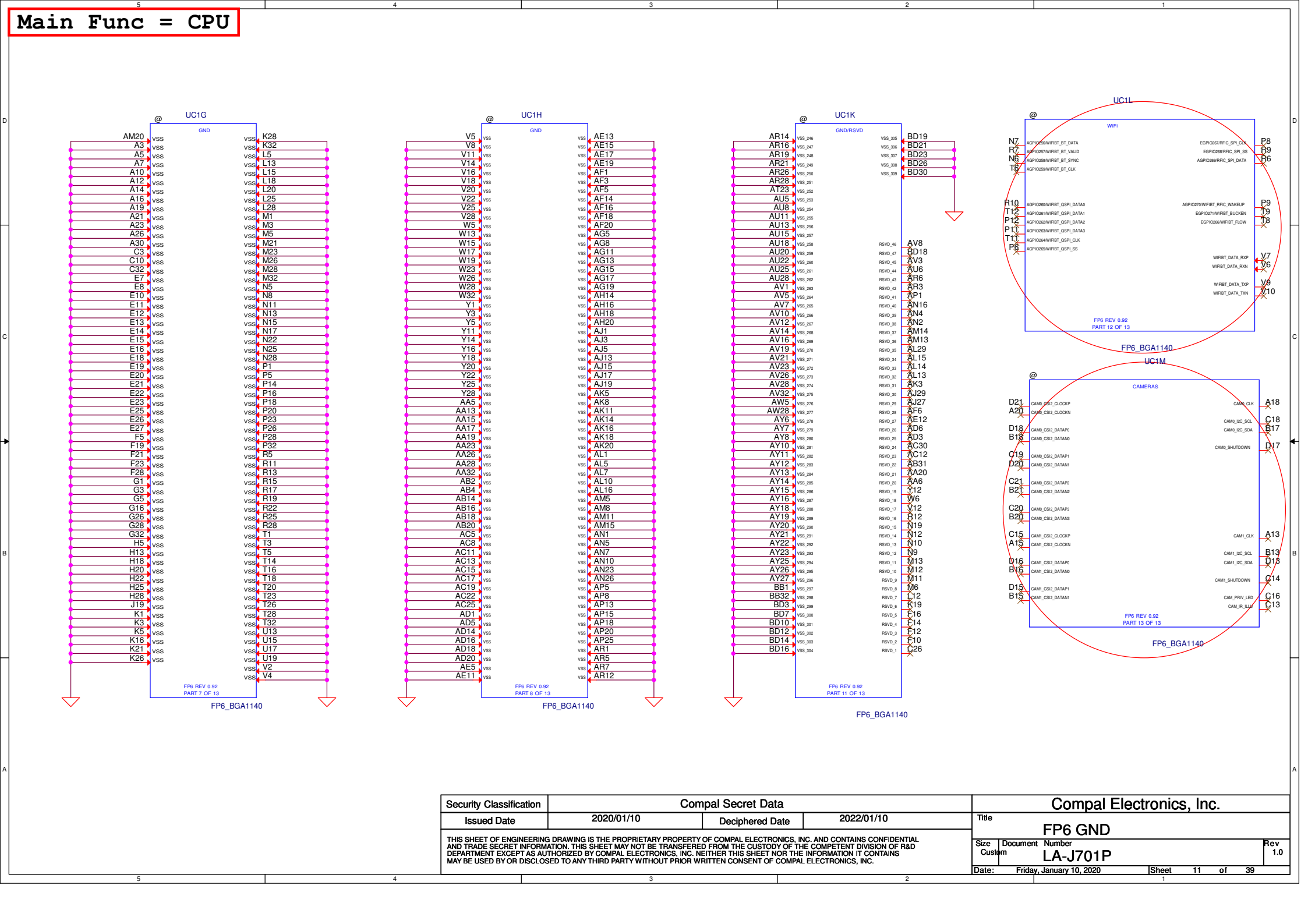
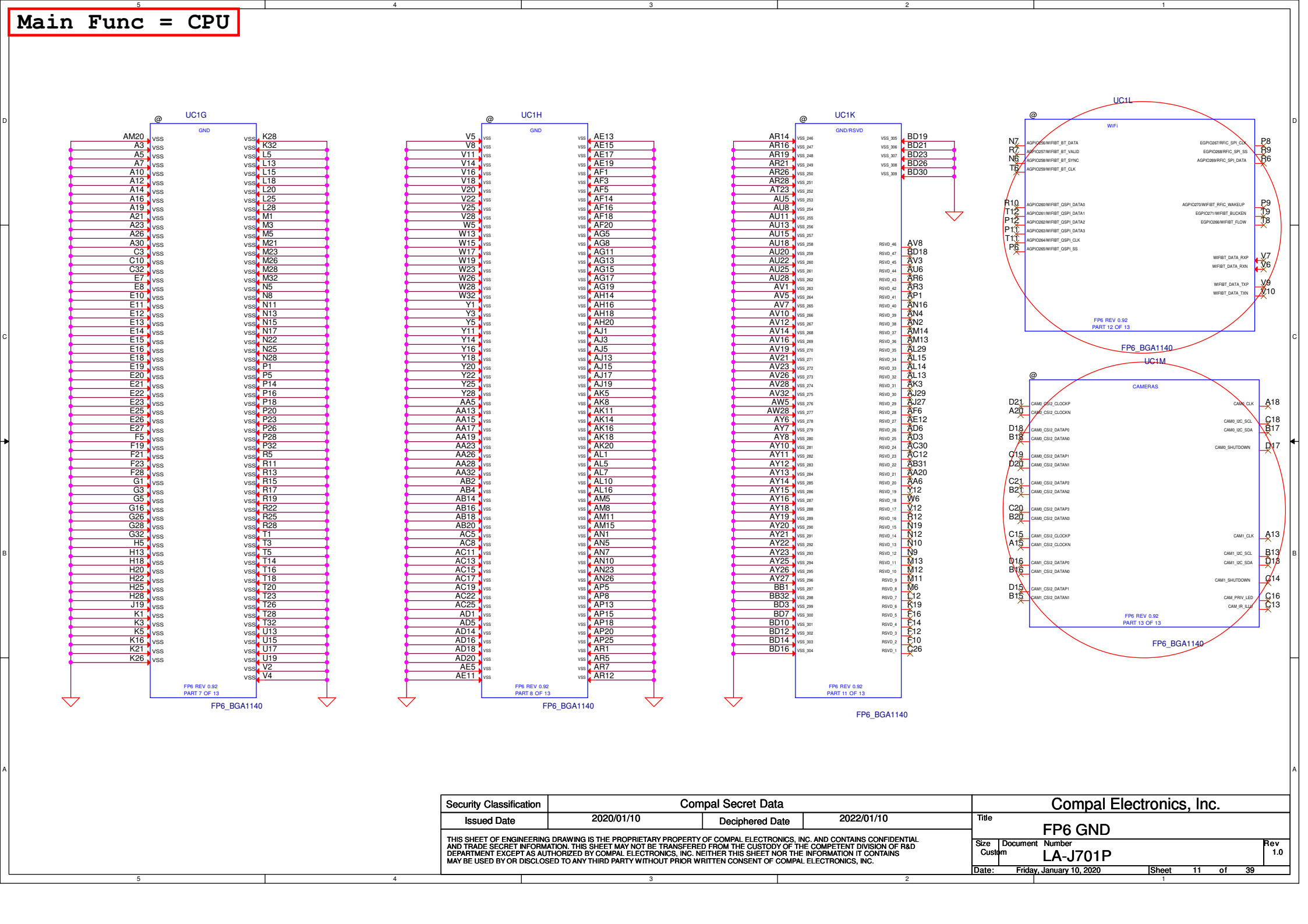
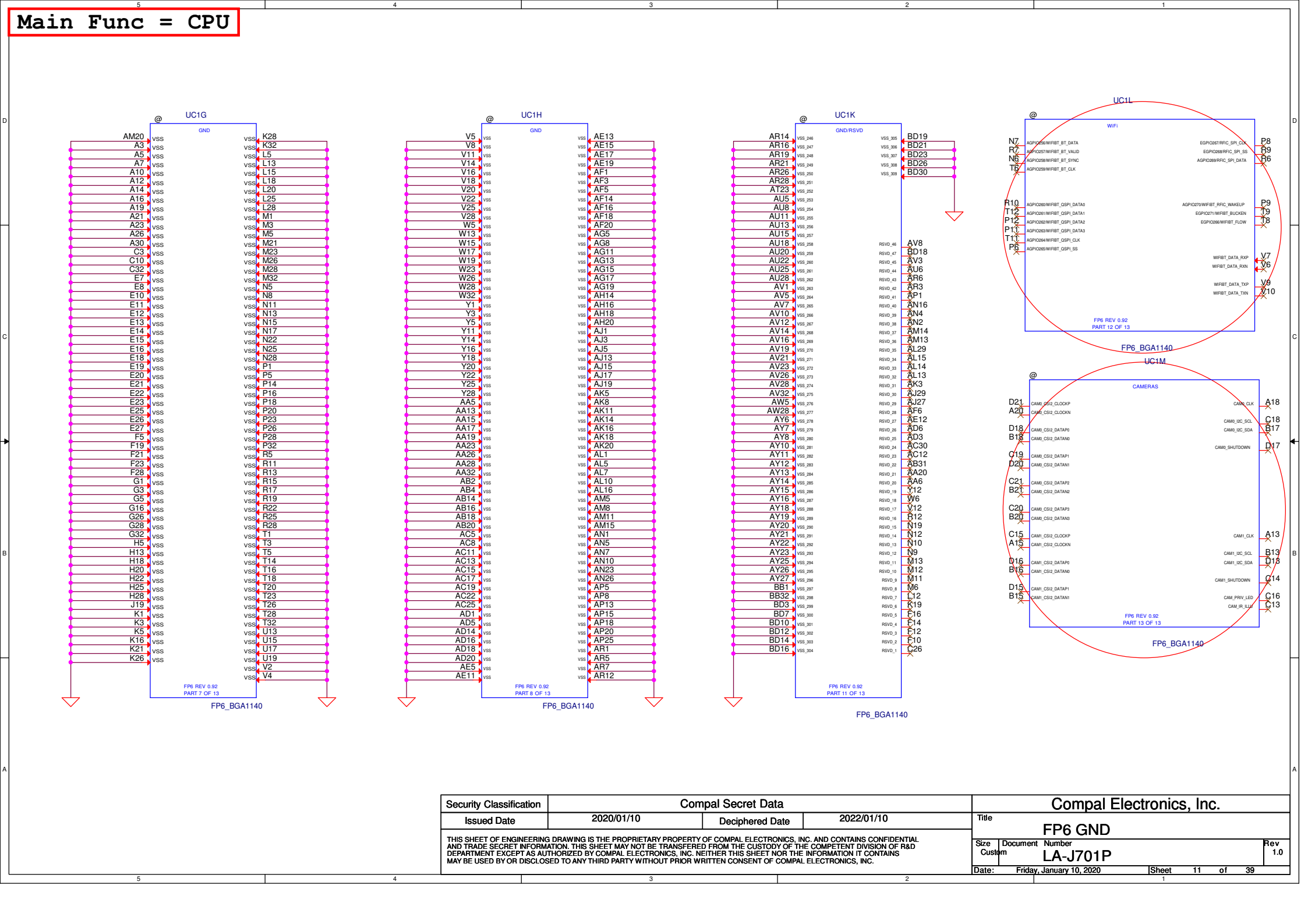
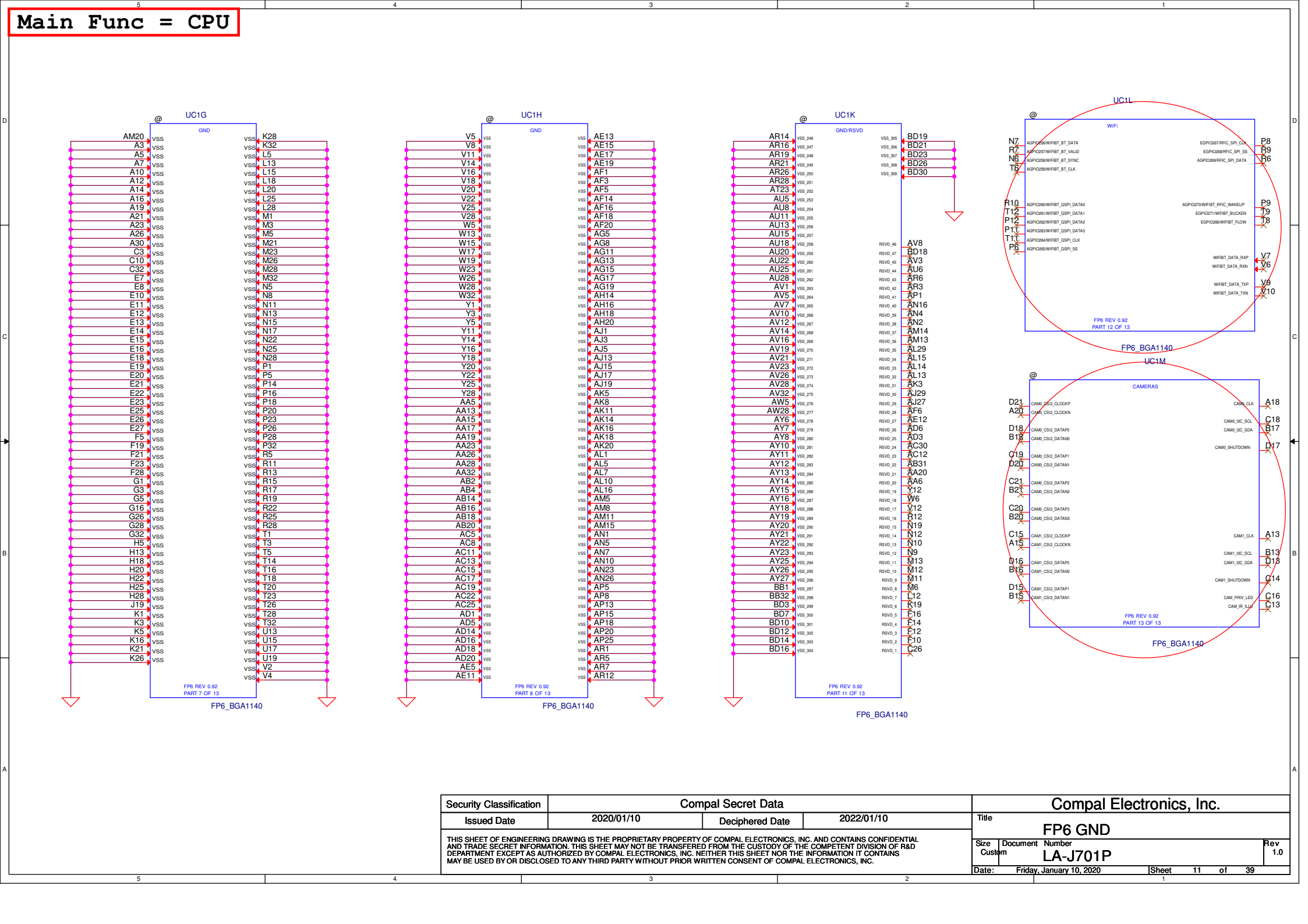
FP6_REV 0.02

SPI ROM (Winbond)

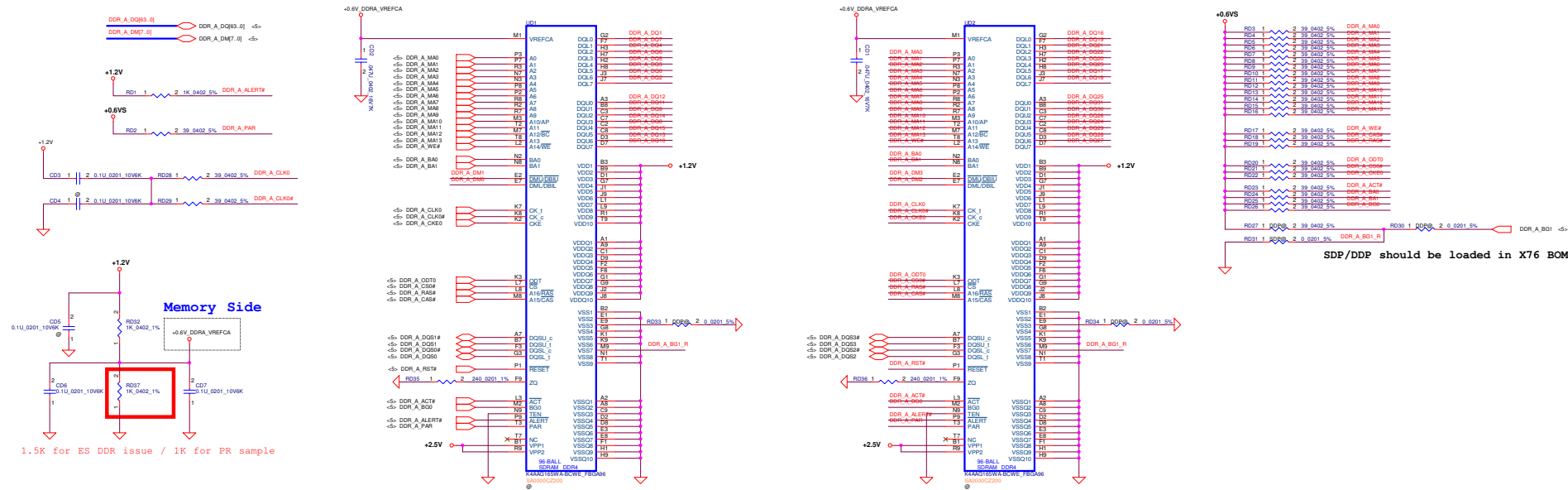


Security Classification	Compal Secret Data	2022/01/10	Title
Issued Date	Deciphered Date	2022/01/10	FP6 SATA/CLK/USB/SPI
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF COMPAL ELECTRONICS, INC.			Rev 1.0
Date: Wednesday, January 11, 2023			Sheet 9 of 39

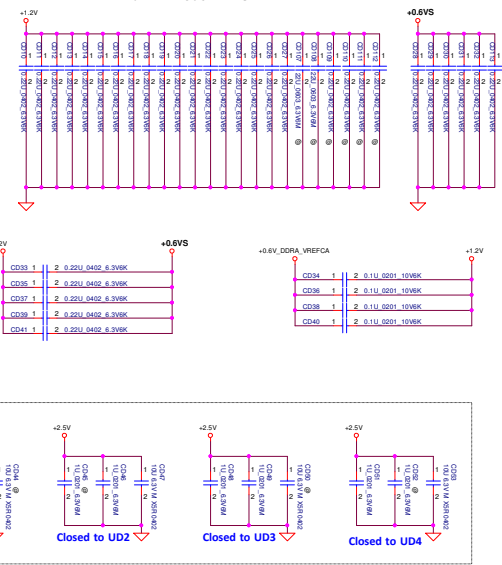




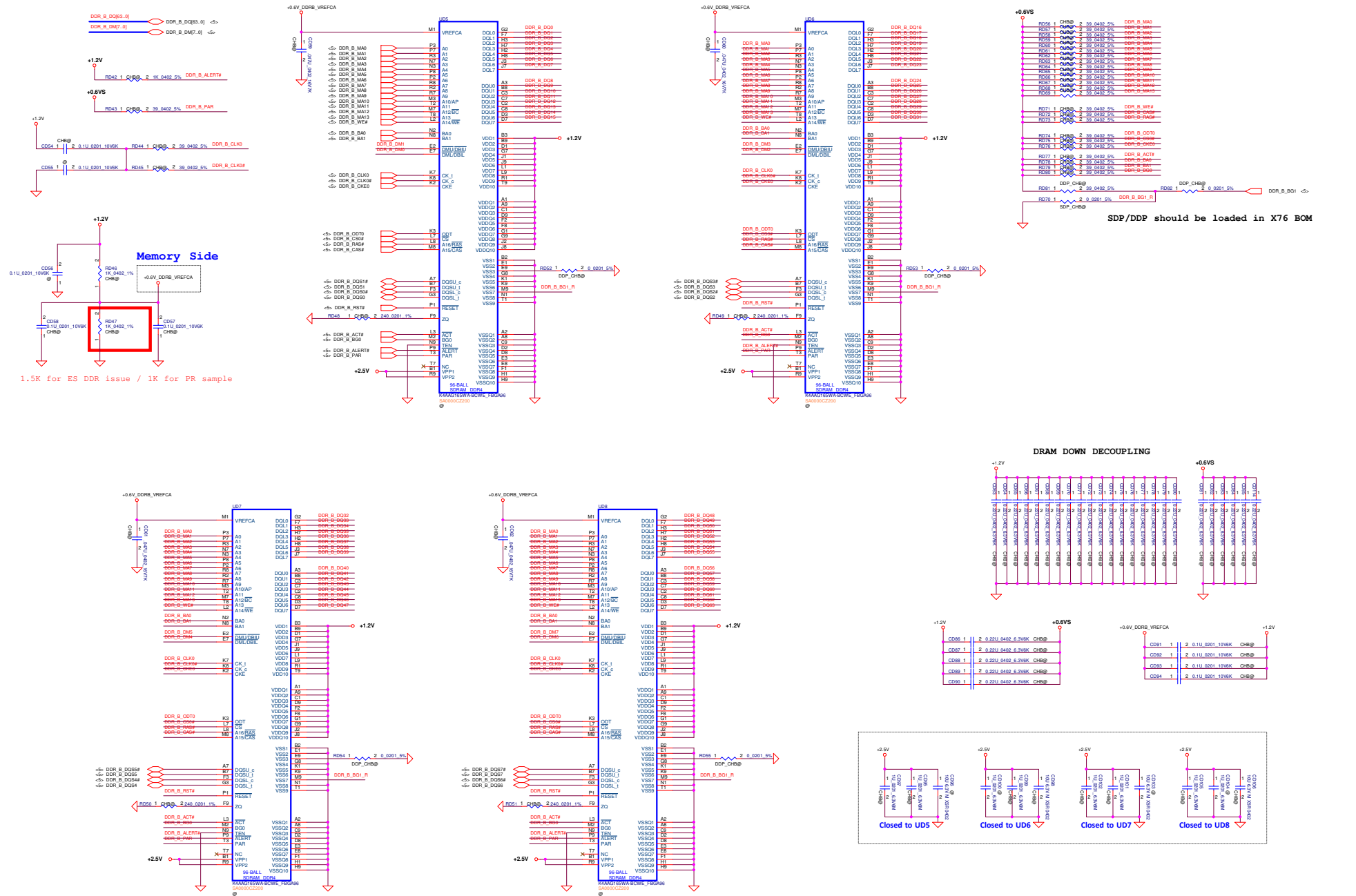
DDR4 - MEMORY DOWN (MEMORY CHANNEL A, x16 x4 PCS)



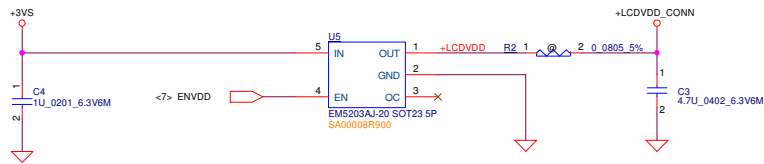
DRAM DOWN DECOUPLING



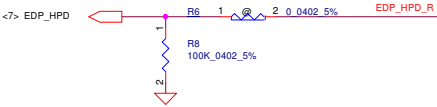
DDR4 - MEMORY DOWN (MEMORY CHANNEL B, x16 x4 PCS)



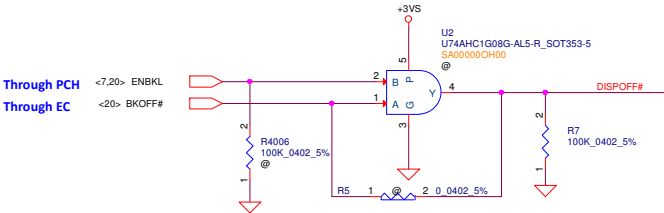
LCD POWER SWITCH



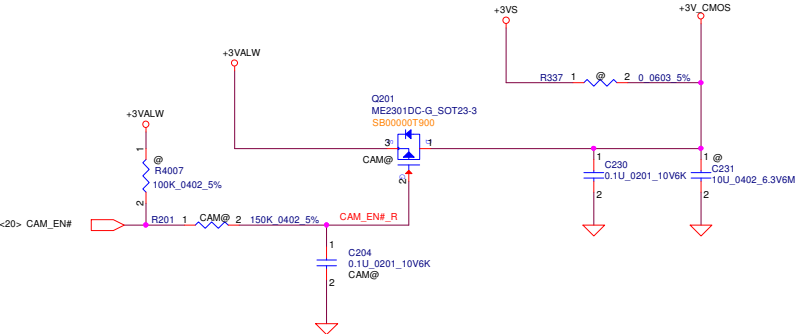
HOT PLUG DETECT



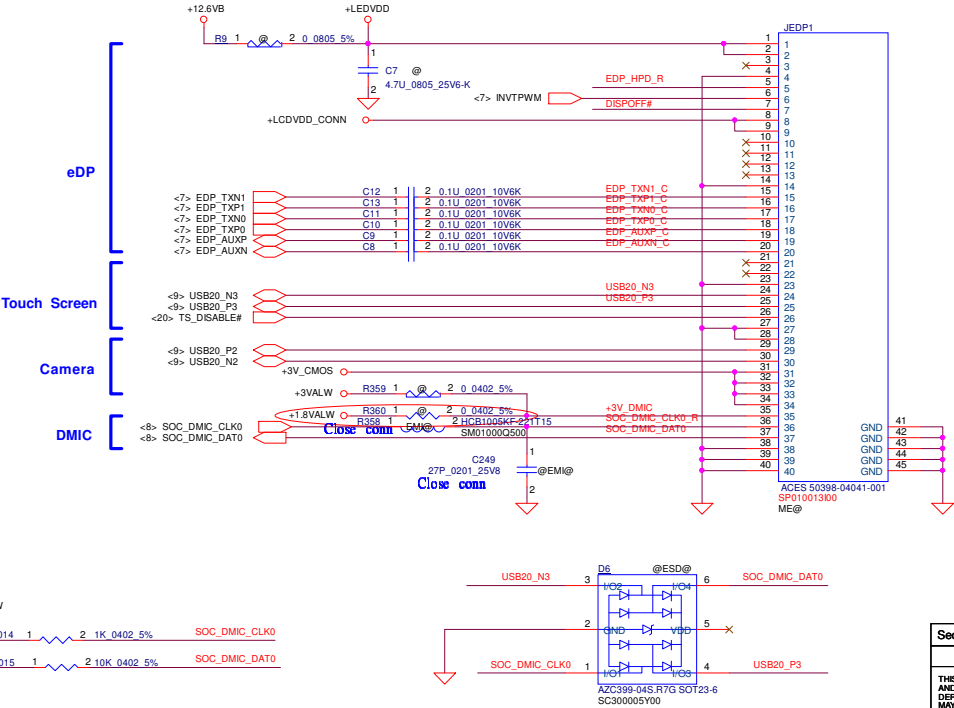
DISPLAY OFF



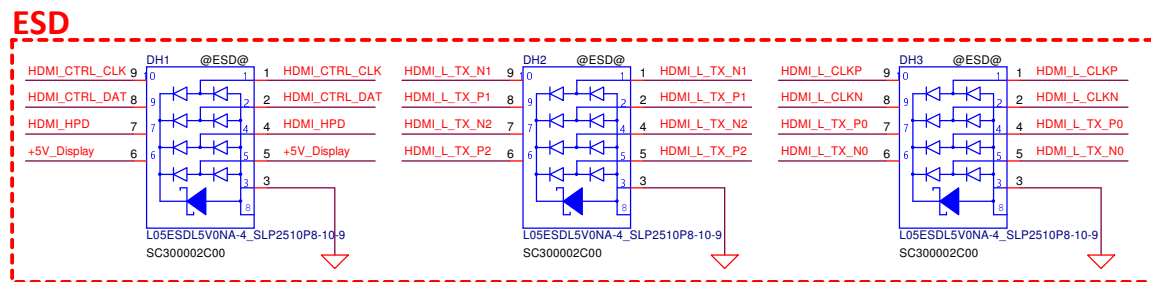
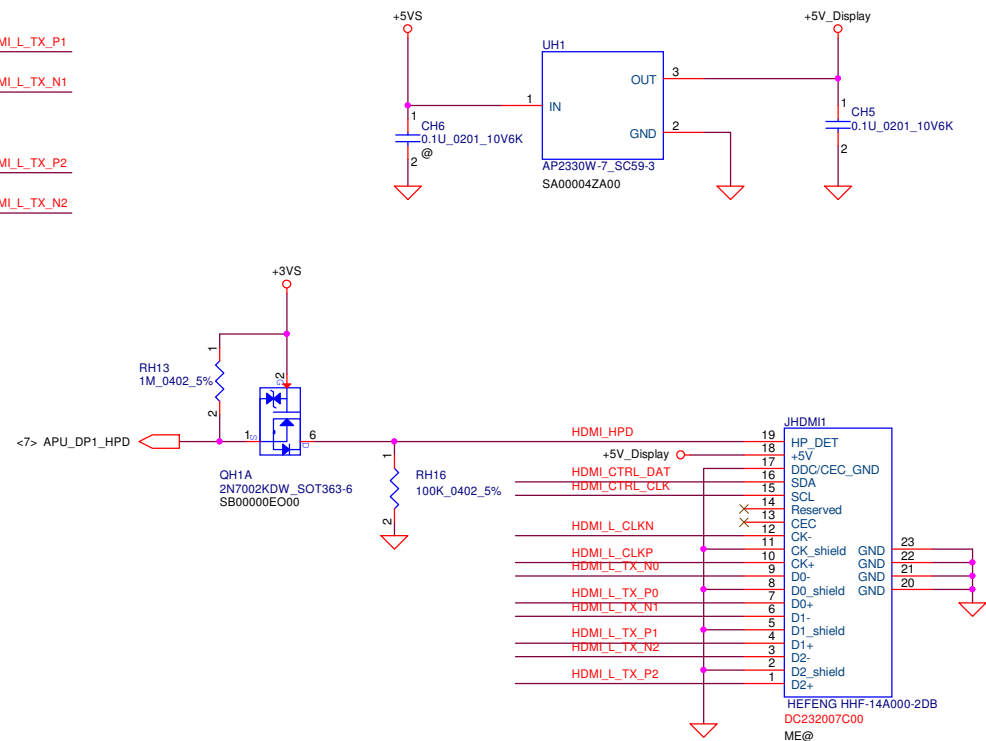
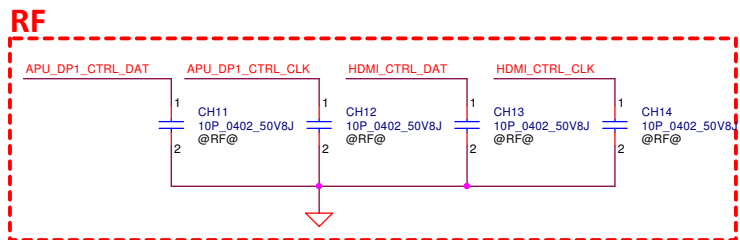
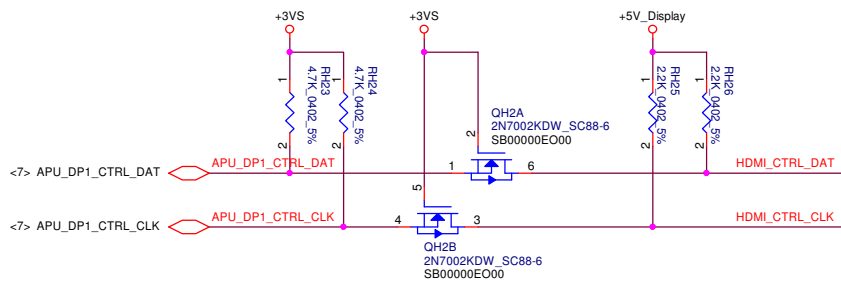
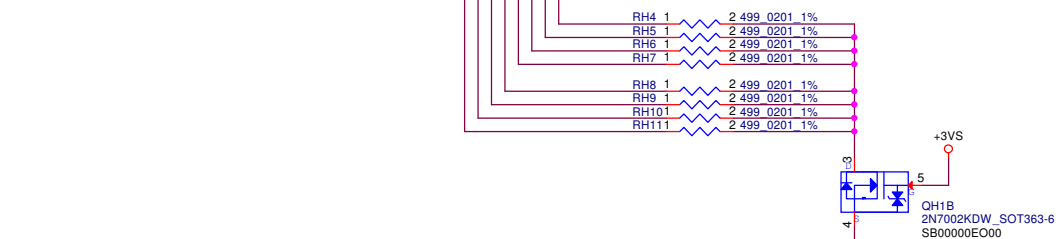
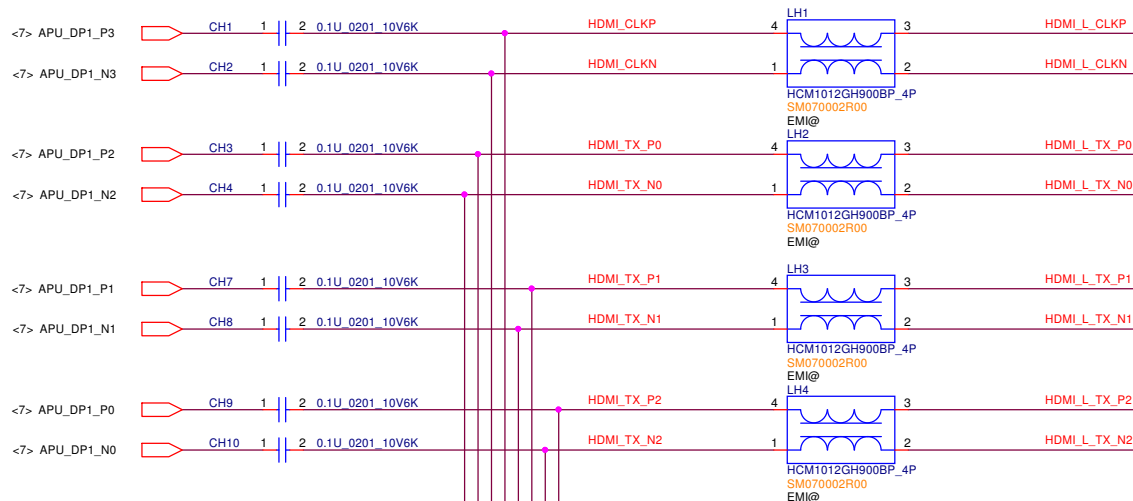
CAMERA POWER CIRCUIT



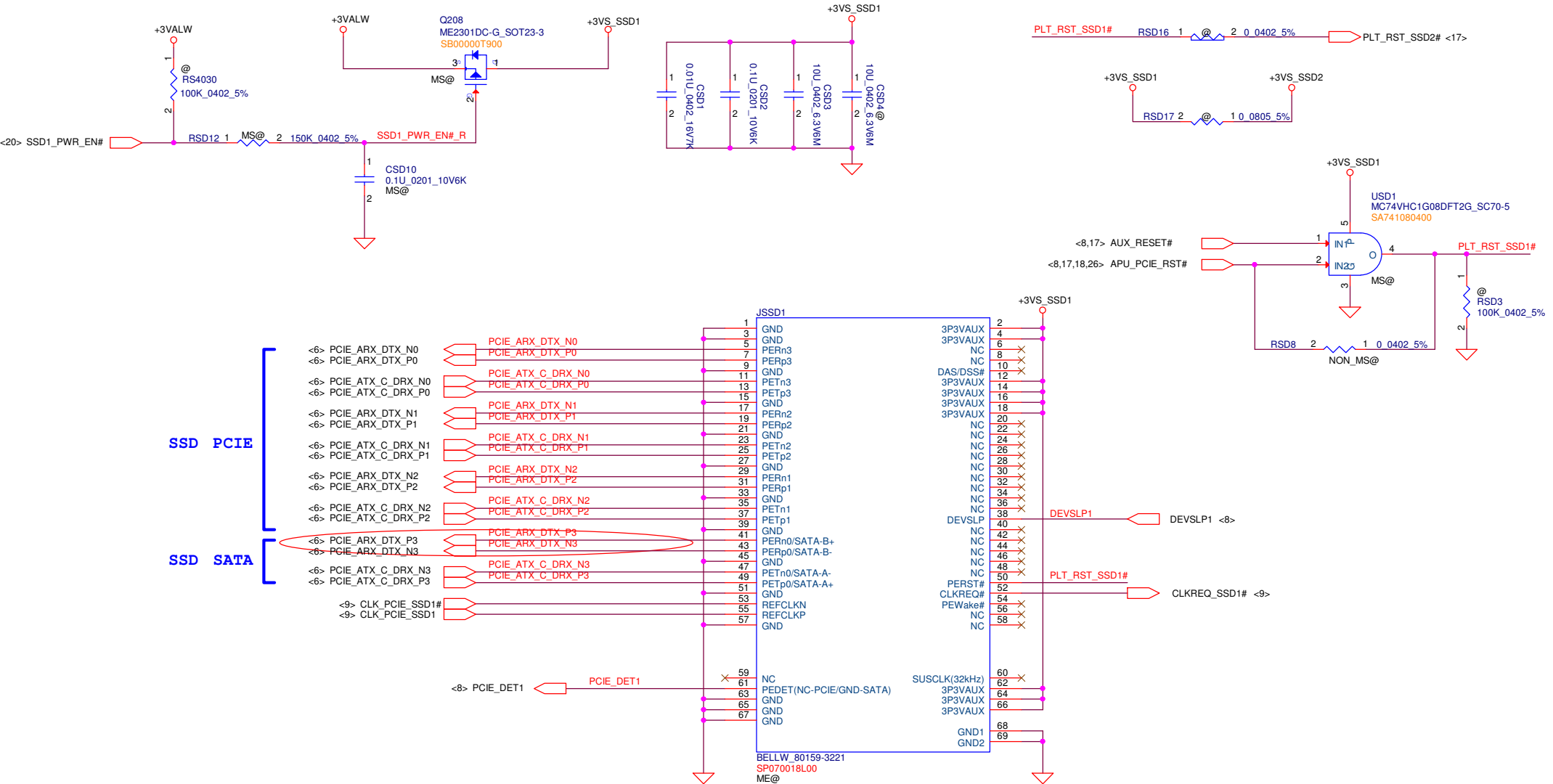
eDP CONNECTOR



Security Classification	Compal Secret Data			Title	
Issued Date	2020/01/10	Deciphered Date	2022/01/10	eDP / Camera / 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	Rev
				Document Number	1.0
				LA-J701P	
				Date: Wednesday, January 15, 2020	Sheet 14 of 39

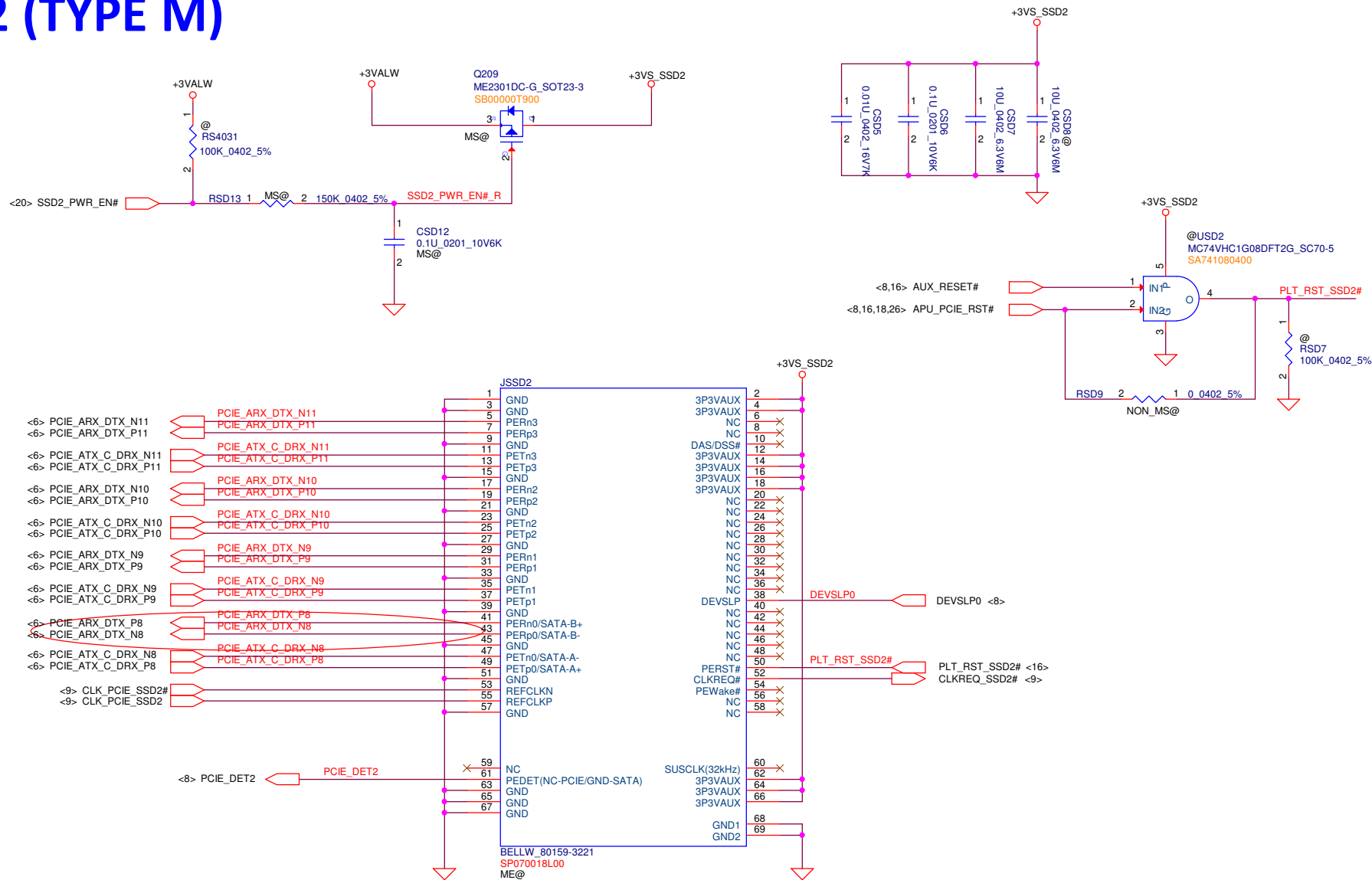


SSD_2280 (TYPE M)



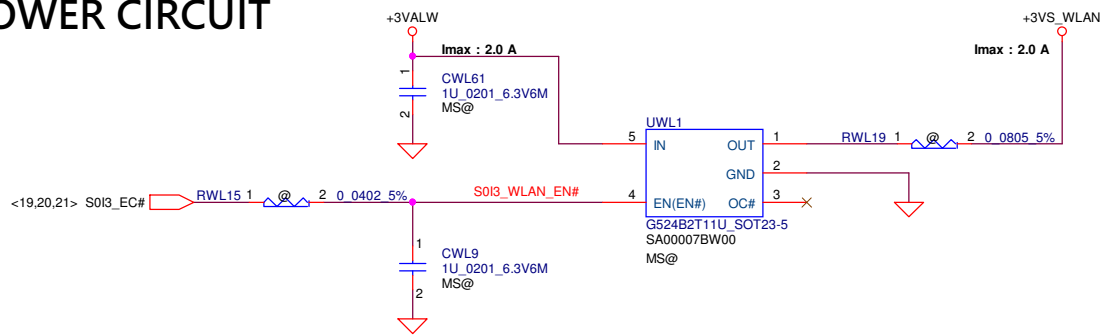
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/01/10	Deciphered Date	2022/01/10	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				NGFF SSD	
Size		Document Number		Rev	
		LA-J701P		1.0	
Date:		Wednesday, January 15, 2020		Sheet 16 of 39	

SSD_2242 (TYPE M)

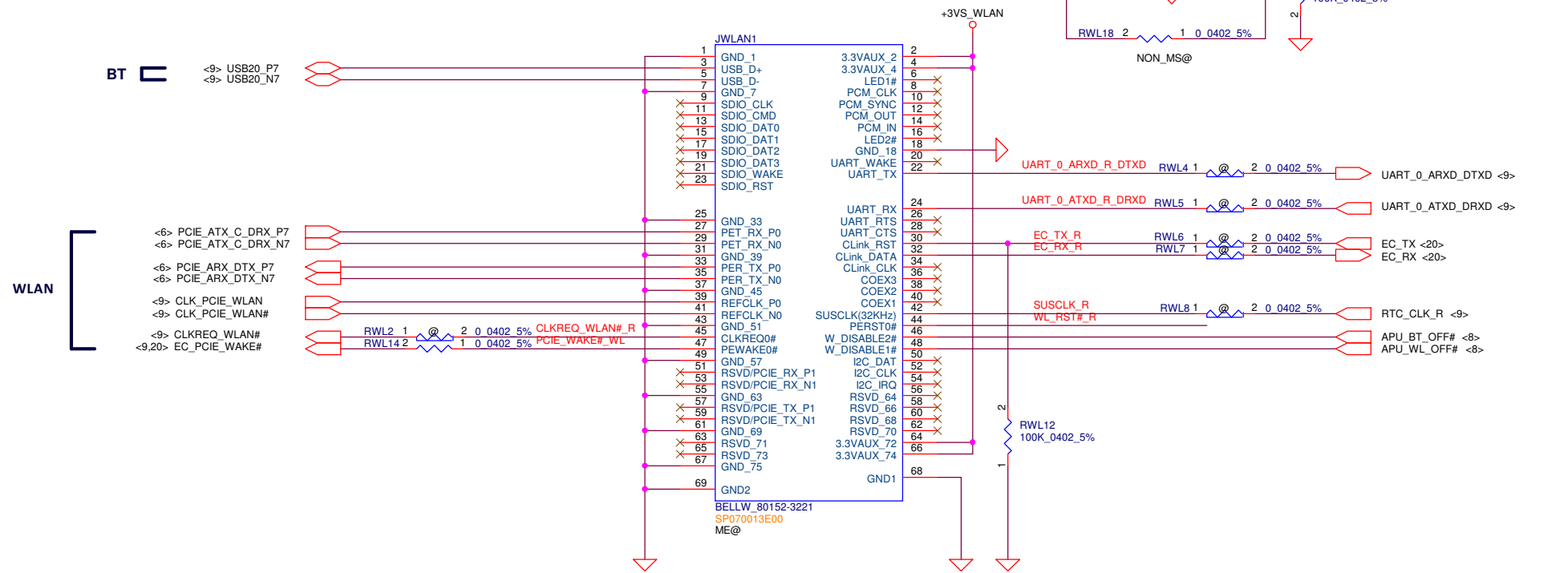


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/01/10	Deciphered Date	2022/01/10	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				NGFF SSD	
Size		Document Number		Rev	
		LA-J701P		1.0	
Date:		Wednesday, January 15, 2020		Sheet 17 of 39	

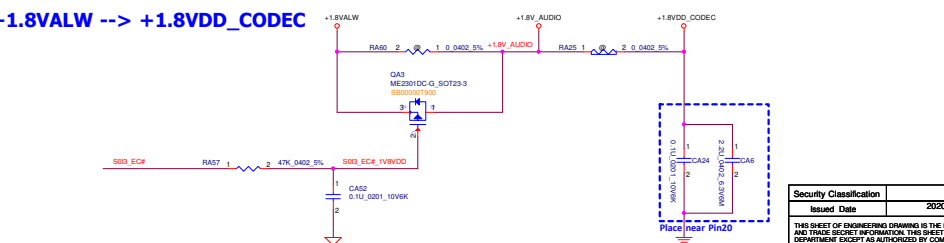
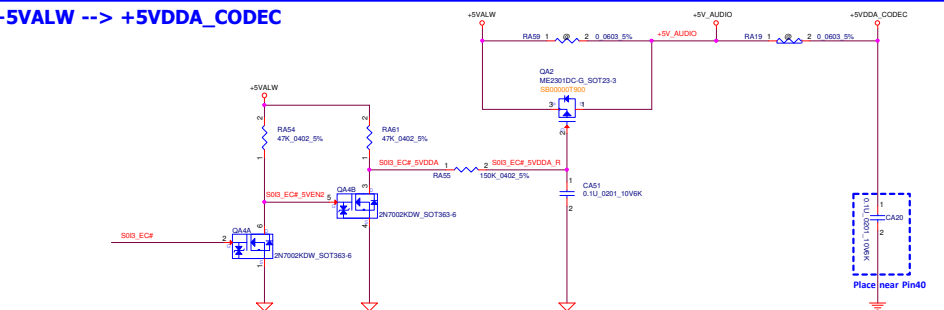
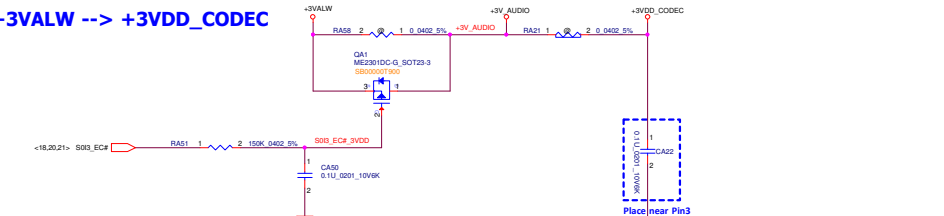
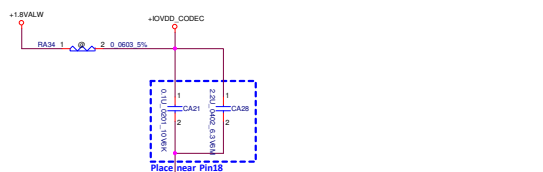
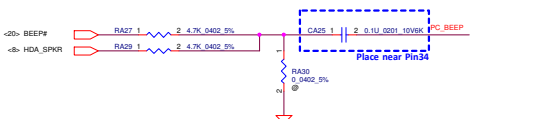
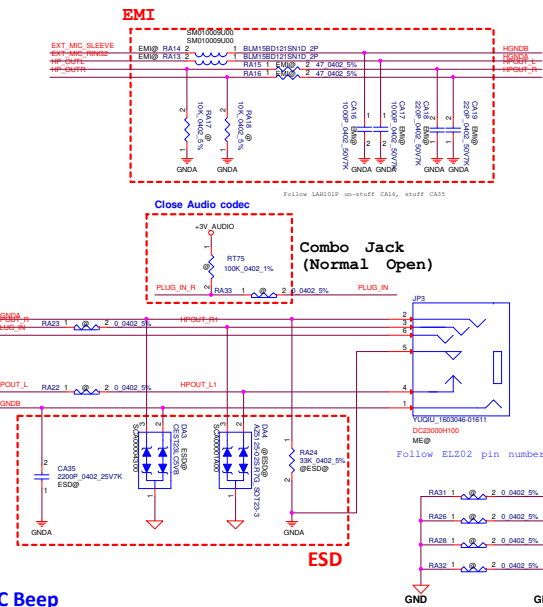
WLAN POWER CIRCUIT



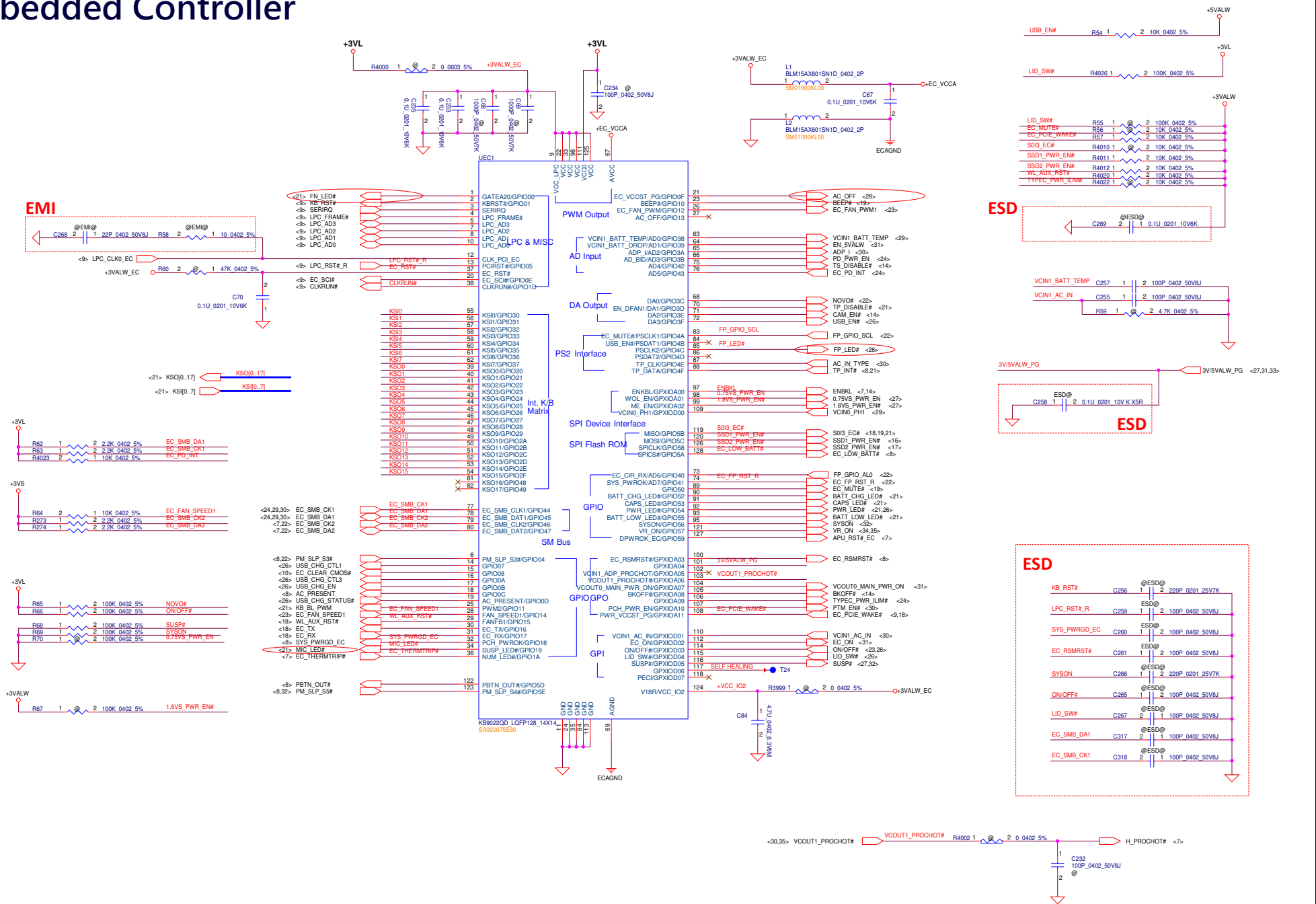
NGFF - WLAN / BT CONNECTOR (KEY-E)



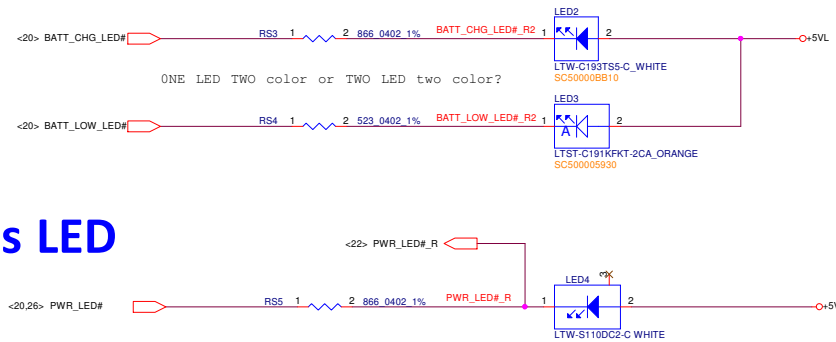
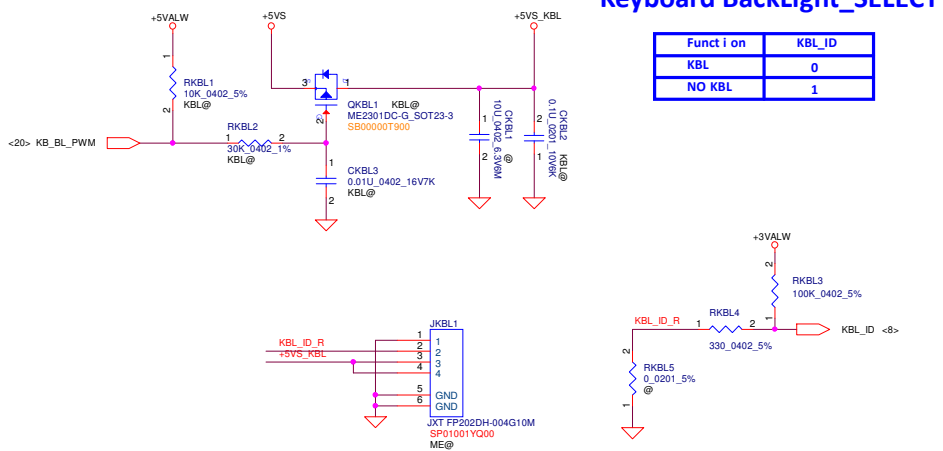
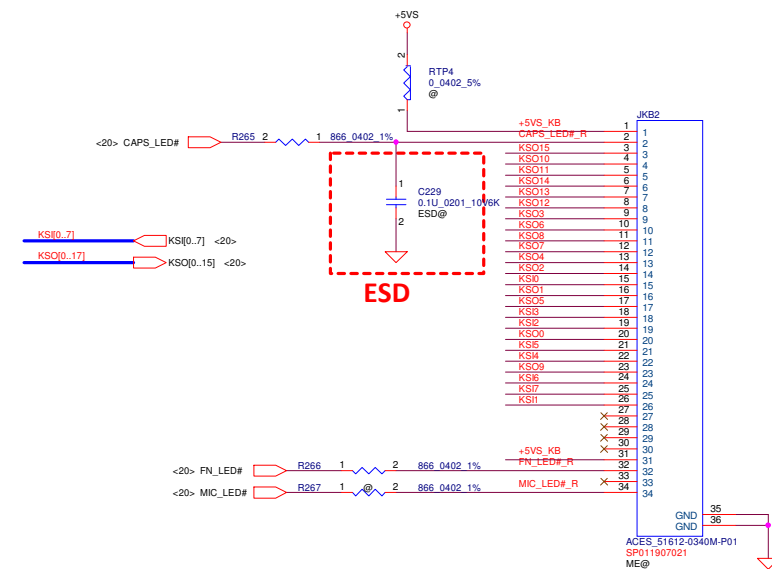
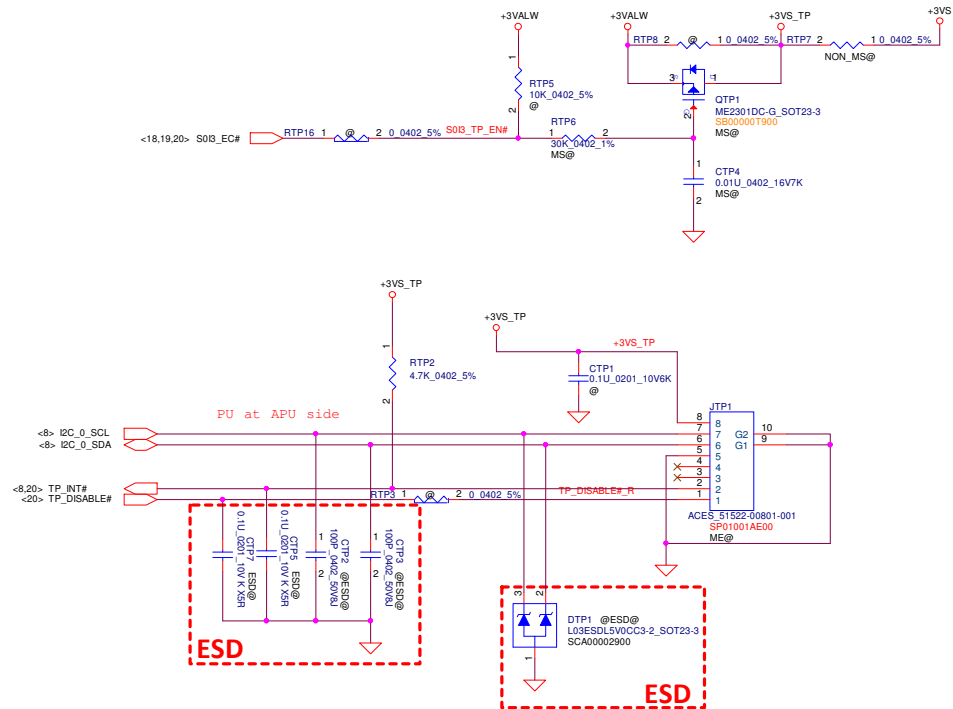
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/01/10	Deciphered Date	2022/01/10	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				WLAN/BT	
				Size	Document Number
				LA-J701P	
Date:		Wednesday, January 15, 2020		Sheet	18 of 39



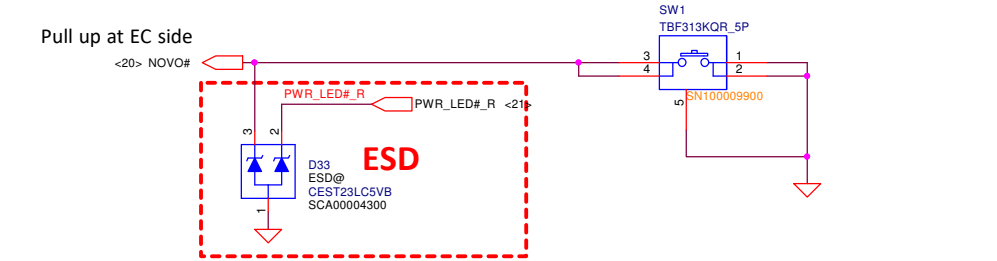
Embedded Controller



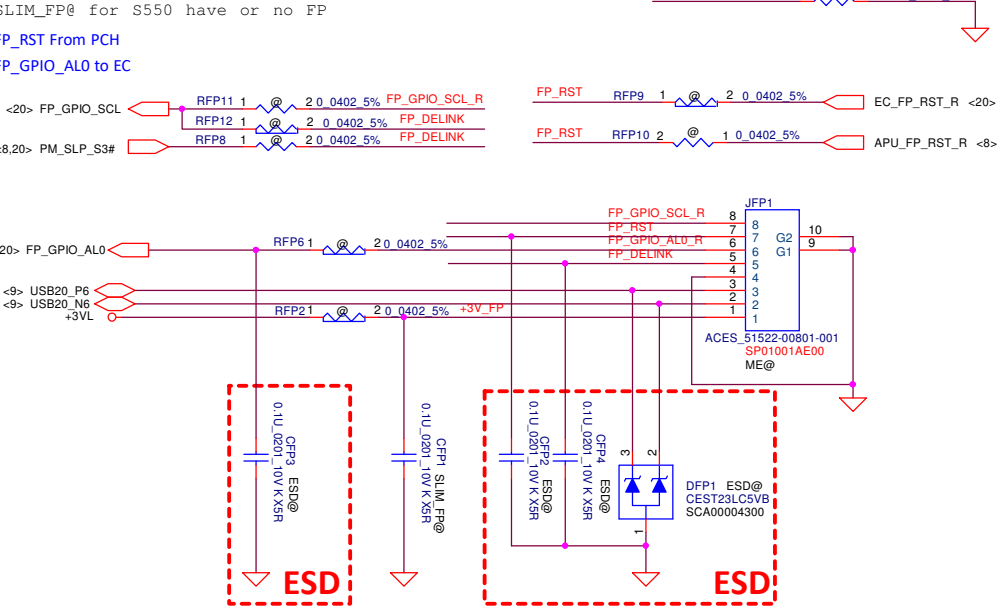
Security Classification		Compal Secret Data		Title		Compal Electronics, Inc.	
Issued Date	2020/01/10	Deciphered Date	2022/01/10	EC ENE KB9022		Rev 1.0	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS 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.				Size C	Document Number	LA-J701P	
				Date:	Wednesday, January 15, 2020	Sheet	20 of 39



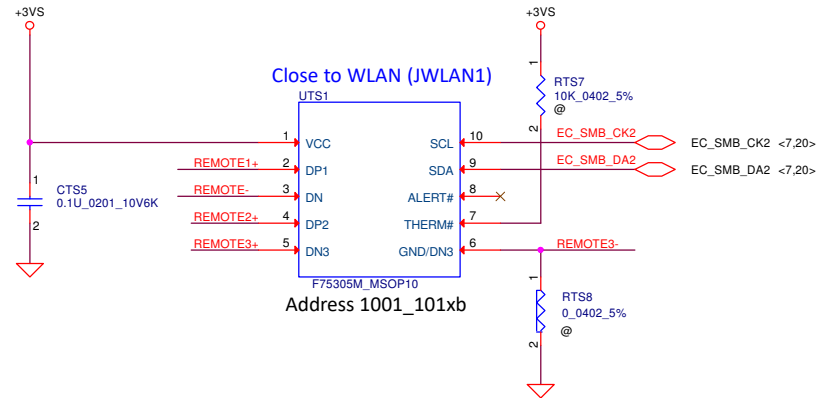
NOVO Button



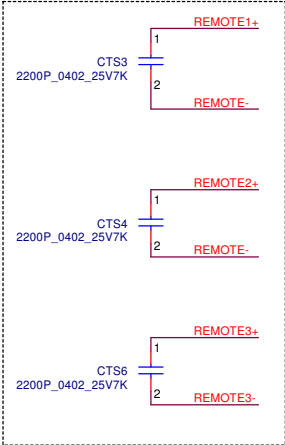
Finger Printer



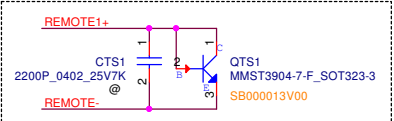
Thermal Sensor



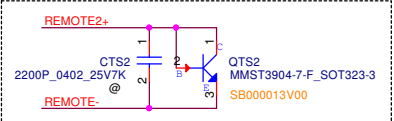
Close to UTS1



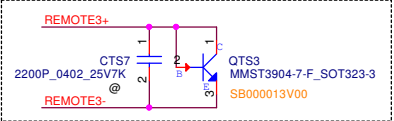
Close to BATT Charger (JBATT1)



Close to SSD



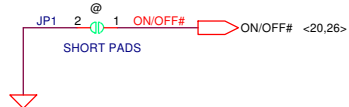
Close to APU Chip (UC1)



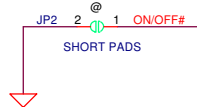
REMOTE1,2,3 (+/-) :
Trace width/space:10/10 mil
Trace length:<8"

ON/OFF# SHORT PAD

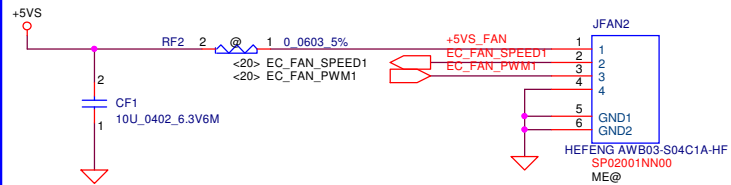
TOP side



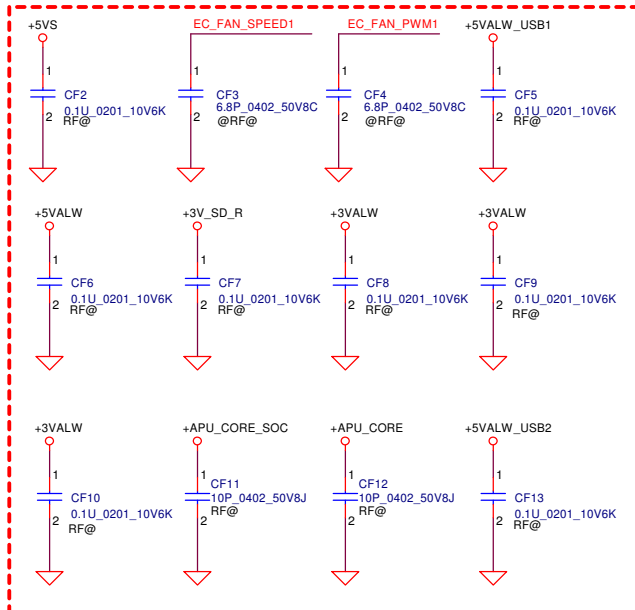
BOTT side



+5V FAN



RF - BY PASS / CROSS MOAT CAPS

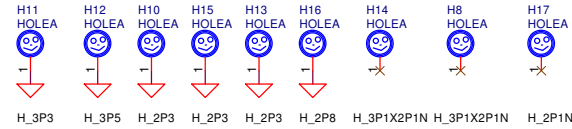
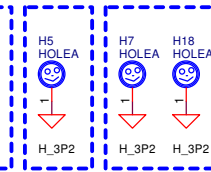


SCREW

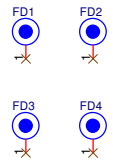
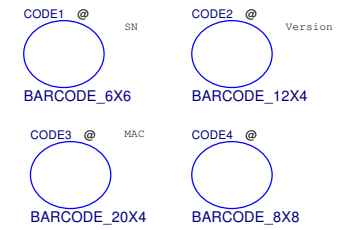
CPU



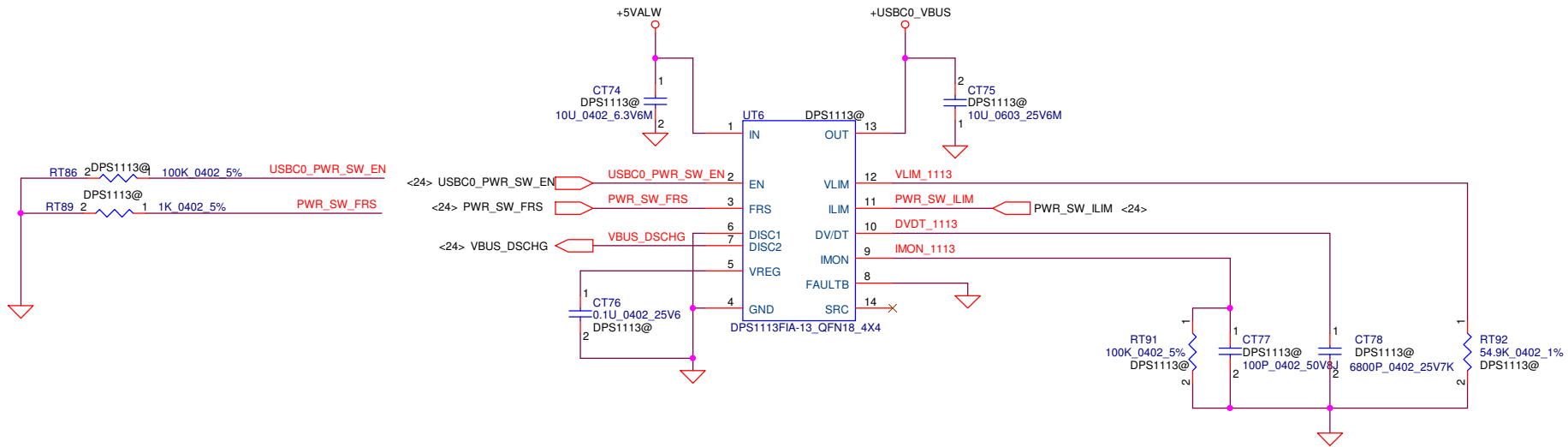
WLAN SSD



LASER BARCODE

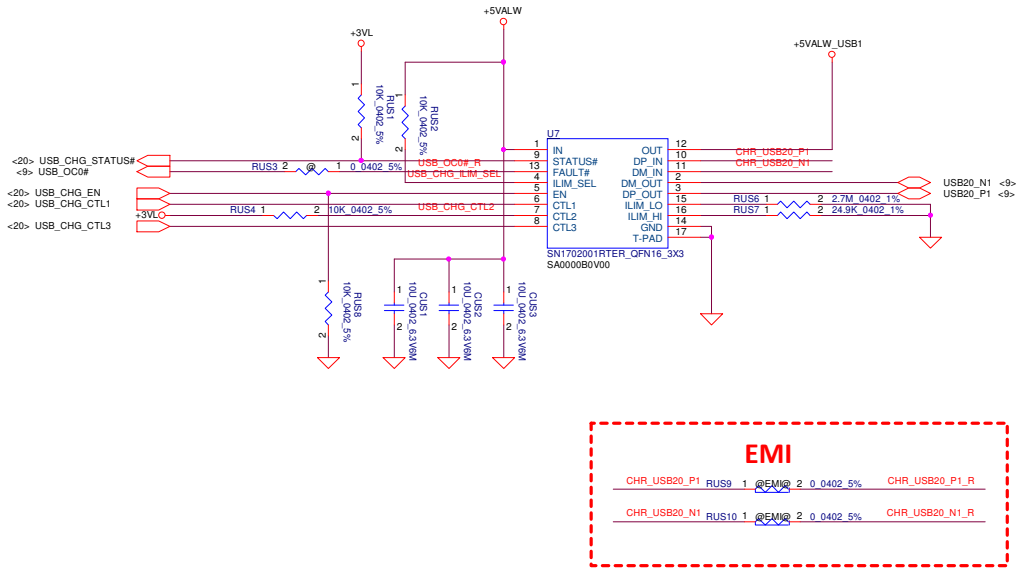


Security Classification				Compal Secret Data				Compal Electronics, Inc.			
Issued Date				2020/01/10				Deciphered Date			
2022/01/10				2022/01/10				Title			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. 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.				PCB PN / SCREW / FAN				Rev 1.0			
Date: Friday, January 10, 2020				Sheet 23 of 39				Size Document Number			
LA-J701P				Custom				Rev 1.0			

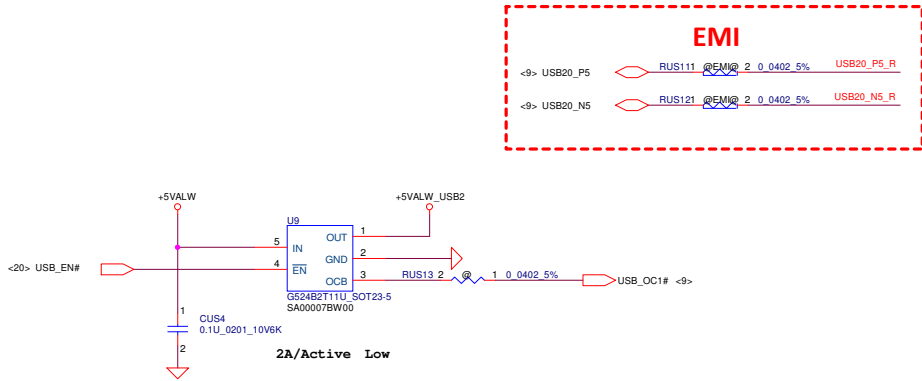


Security Classification		Compal Secret Data		Compal Electronics, Inc. ower Switch DSP1113	
Issued Date	2020/01/10	Deciphered Date	2022/01/10		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY 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 LA-J701P	Rev 1.0
				Date: Friday, January 10, 2020	Sheet 25 of 39

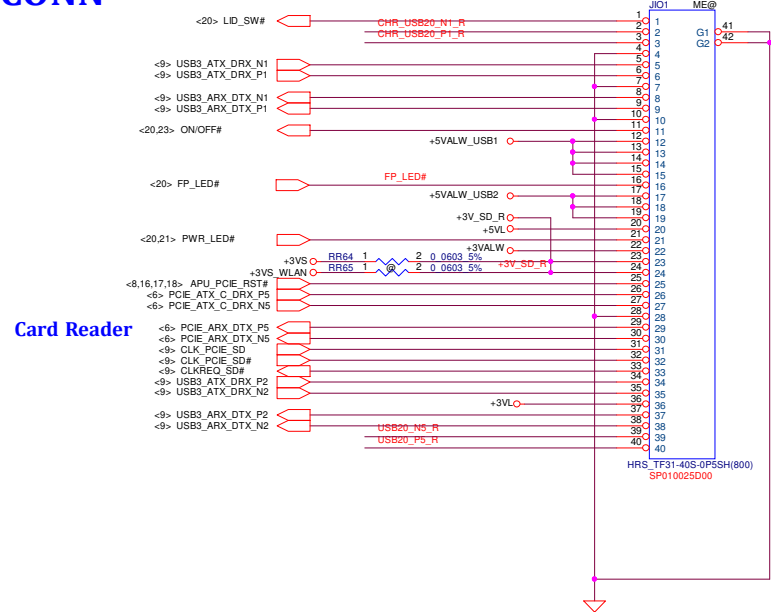
USB3.0_Port (AOU_Port)



USB3.0_Port (Non-AOU_Port)



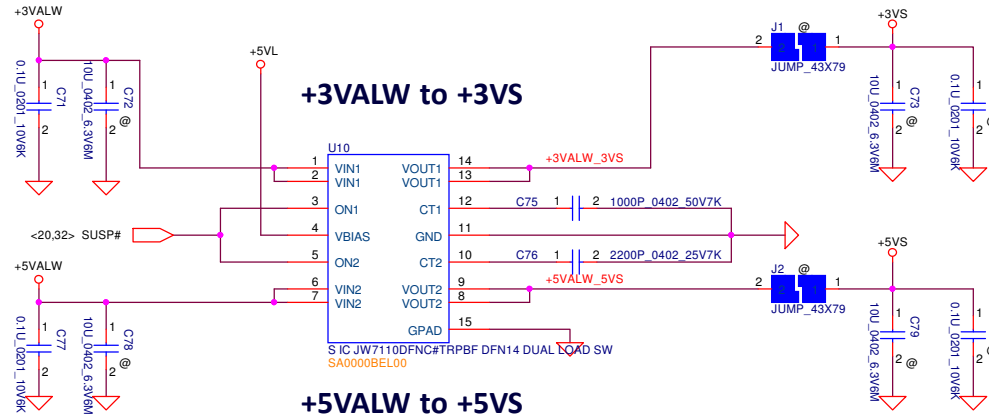
I/O CONN



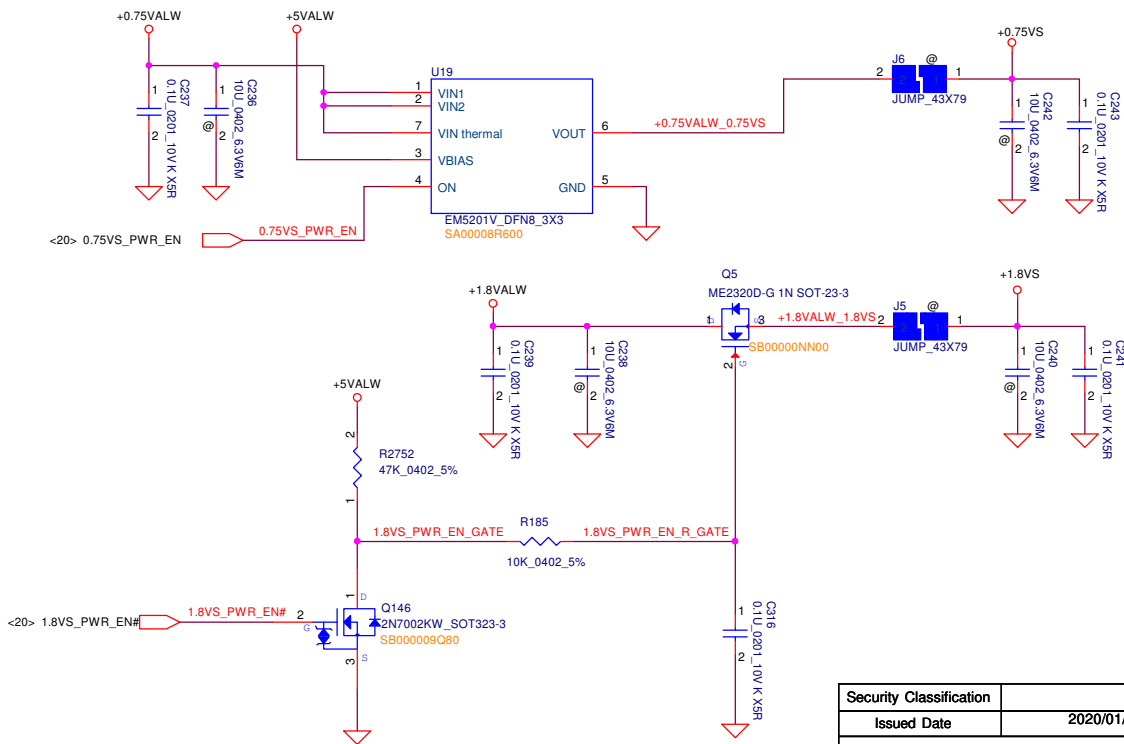
Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2020/01/10	Deciphered Date	2022/01/10	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				USB3 / IO board Conn.	
Date: Wednesday, January 15, 2020				Size	Rev
				Document Number	1.0
				Custom	
				LA-I701P	
				Sheet	26 of 39

DC to DC

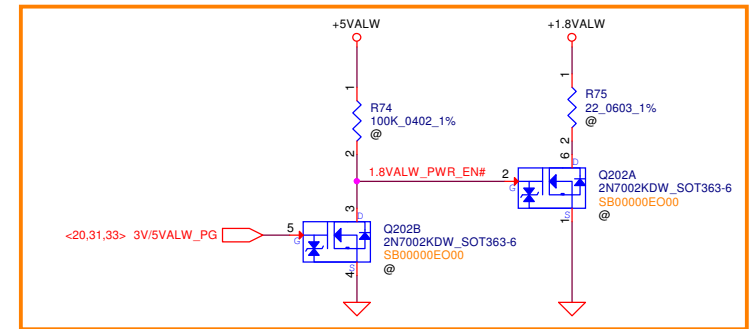
+3VALW to +3VS / +5VALW to +5VS



+1.8VALW to +1.8VS / +0.75VALW to +0.75VS

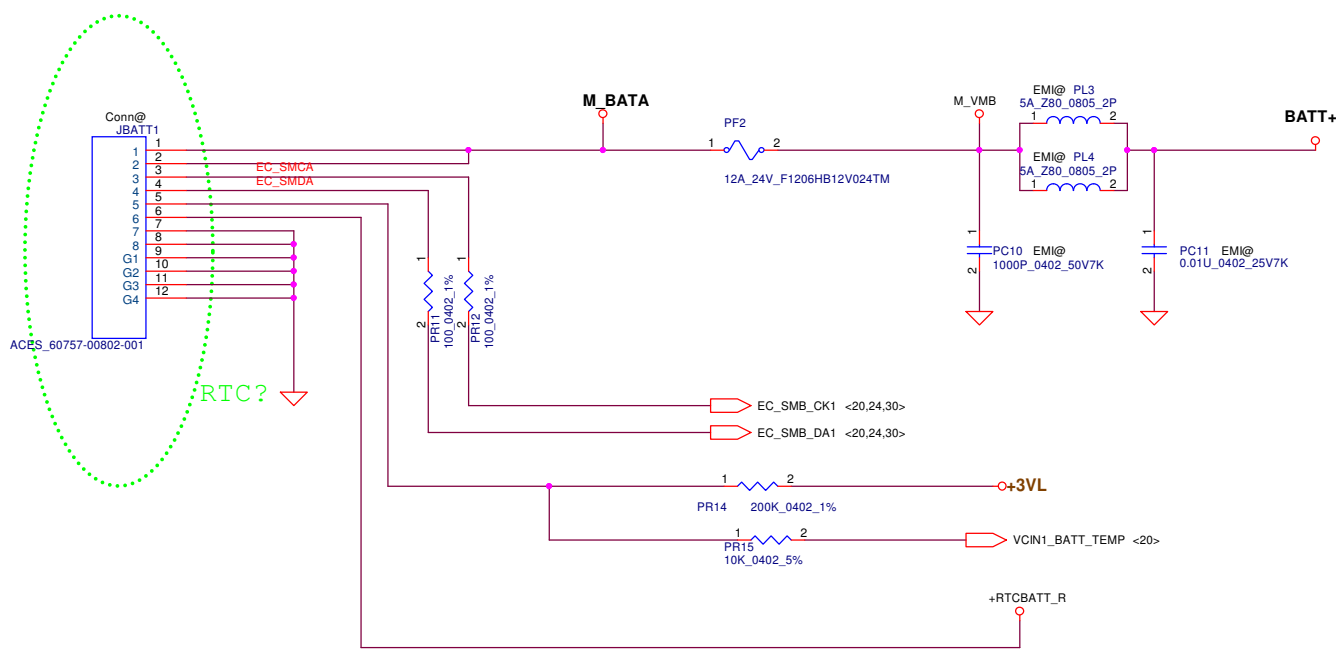


DISCHARGE CIRCUIT

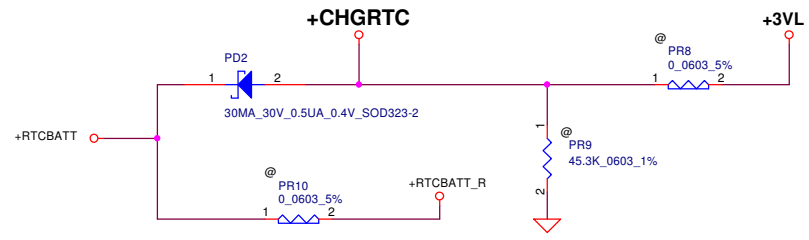
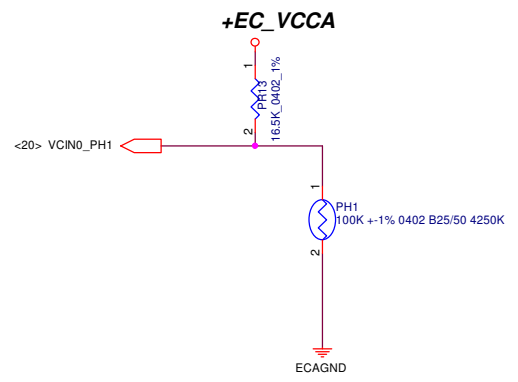


+1.8VALW Discharge Circuit (Reserved)

Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/01/10	Deciphered Date	2022/01/10	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 to DC
Size	Custom	Document Number	LA-J701P	Rev 1.0
Date:	Friday, January 10, 2020	Sheet	27 of 39	



PH201 under CPU botten side :
CPU thermal protection at 93 +-3 degree C
Recovery at 56 +-3 degree C



SIT_EC002_DCDC
SIT_EC006_DCDC
SVT_EC002_DCDC

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		2020/01/10	Deciphered Date	2022/01/10	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- BATTERY CONN/OTP/RTC			Rev
		Size	Document Number	LA-J701PR01	
		Custom	1.0		
Date:		Friday, January 10, 2020		Sheet	29 of 39

SIT_EC002_DCDC

Check pull up resistor of SP0K at HW side

Fsw : 600K Hz
EN1 and EN2 don't be floating.
EN :H>1V ; L<0.4V

2 Cell battery : Cin=10uF*2pcs
3 Cell - 4 Cell battery : Cin=10uF*1pcs

EN1 and EN2 don't be floating.
EN :H>0.8V ; L<0.4V

Fsw : 600K Hz

EN1 and EN2 don't be floating.
EN :H>0.8V ; L<0.4V

Fsw : 600K Hz

keep short pad,
snubber is for EMI only.

Use 7x7x3 size when the layout space is enough.

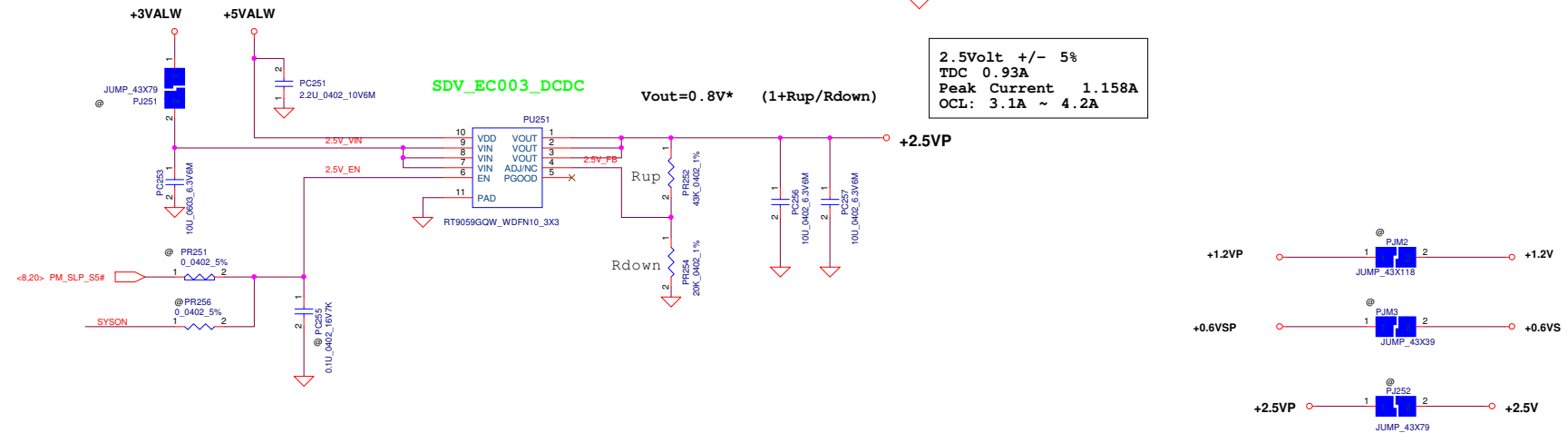
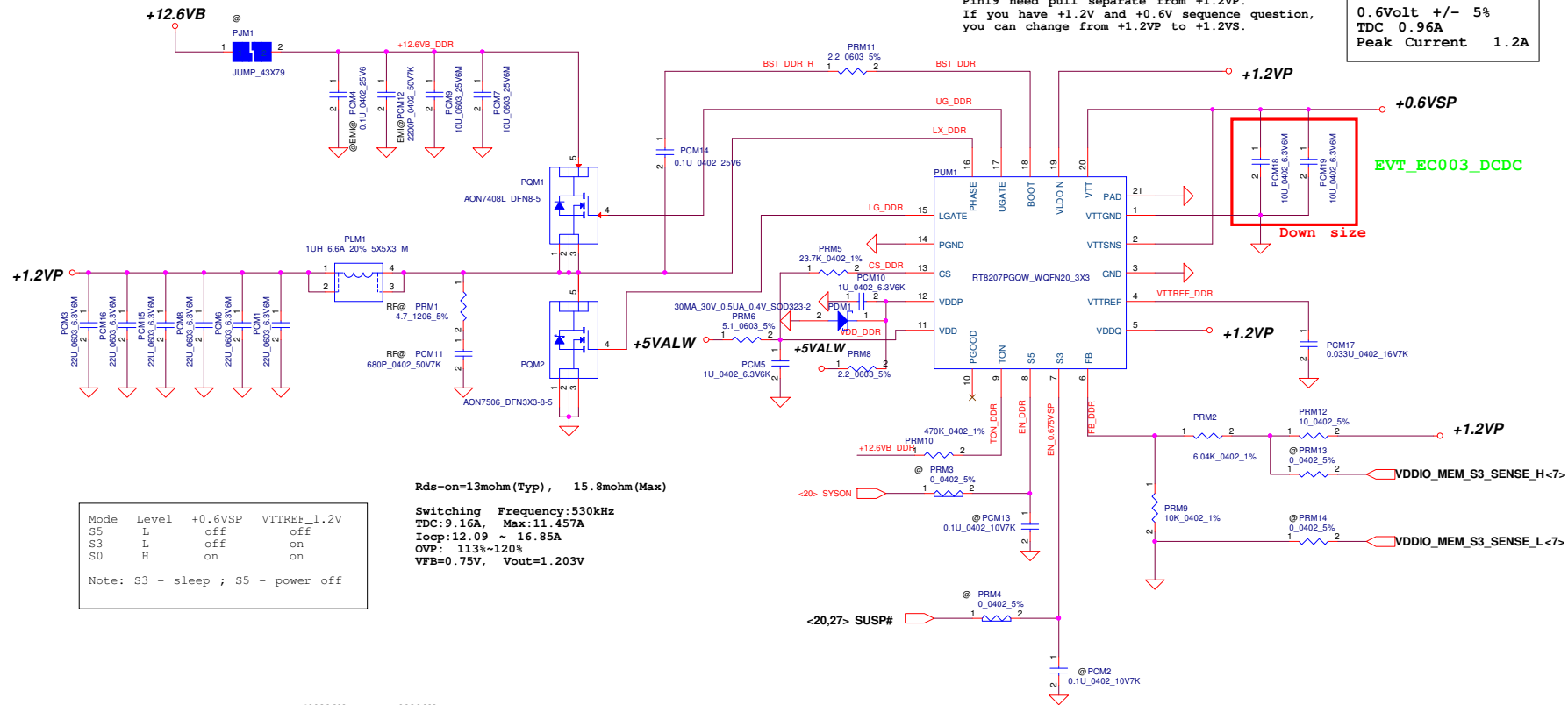
Vout is 3.234V~3.366V
TDC: 7A, Max =8.73A Iocp=10A

keep short pad,
snubber is for EMI only.

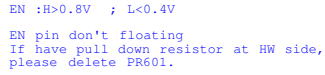
Vout is 4.998V~5.202V

TDC=7.2A, Max: 9A Iocp=10A

Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2020/01/10	Deciphered Date	2022/01/10	Title	PWR- 3/5VALWP	
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	LA-J701PR01	1.0
				Date:	Friday, January 10, 2020	Sheet 31 of 39

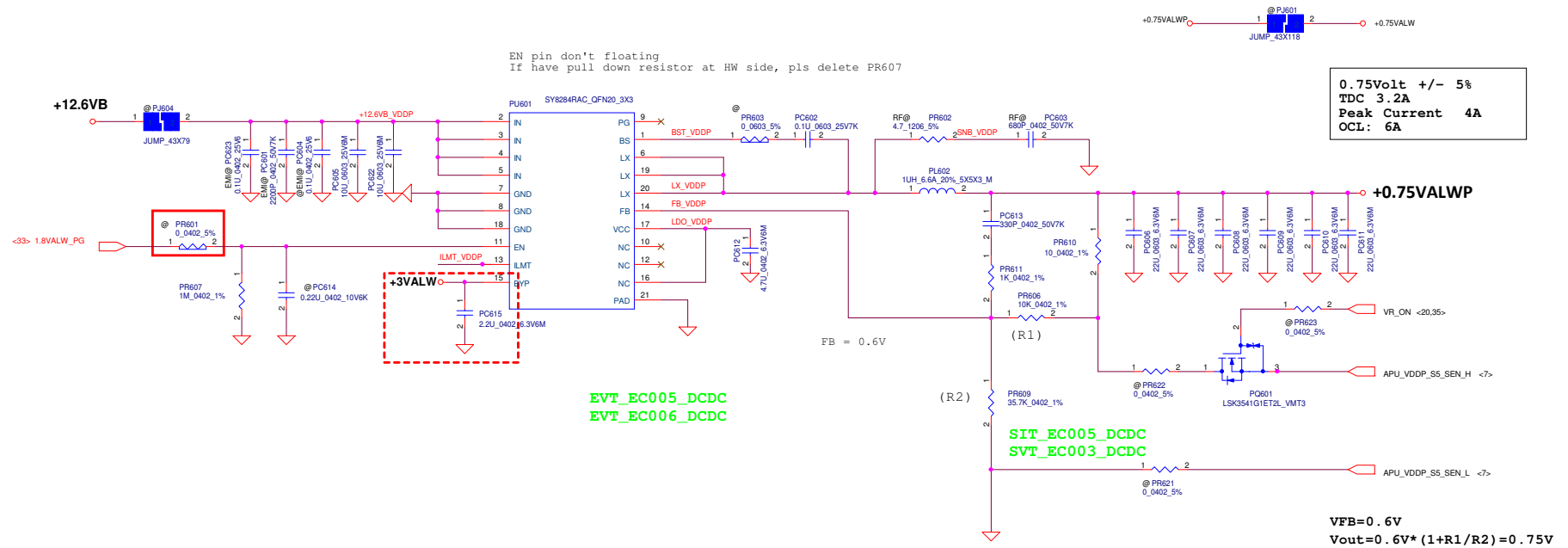


EVT_EC002_DCDC



The current limit is set to 6A, 8A or 10A when this pin is pull low, floating or pull high.

Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2020/01/10	Deciphered Date	2022/01/10	Title	PWR- 1.8VALWP	
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
				LA-J701PR01		1.0
				Date:	Friday, January 10, 2020	Sheet



EVT_EC001_DCDC
EVT_EC004_DCDC
SIV_EC004_DCDC
SIT_EC002_DCDC

SDV_EC004_DCDC

APU_Core
TDC 44A
EDC 70A
OCP current 98A
Load line -0.7mV/A
FSW=430kHz
DCR 0.7mohm
H/S Rds (on) : 6.8mohm, 8.6mohm
L/S Rds (on) : 2mohm, 2.5mohm

EVT_EC009_DCDC

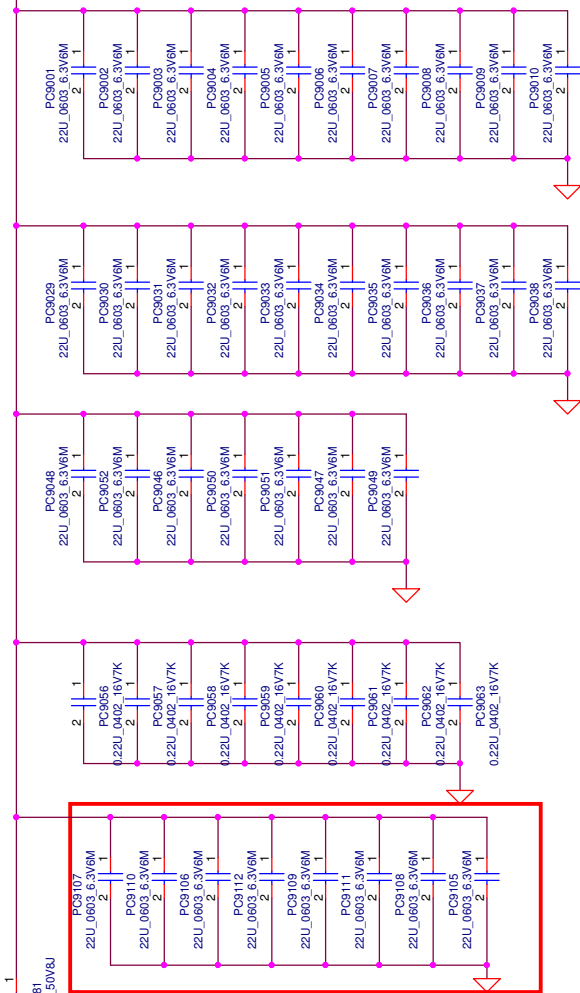
+APU_CORE_SOC

TDC 13A
EDC 17A
OCP current 24A
Load line -2.1mV/A
FSW=400kHz
DCR 1.19mohm
H/S Rds (on) : 6.8mohm, 8.6mohm
L/S Rds (on) : 2mohm, 2.5mohm

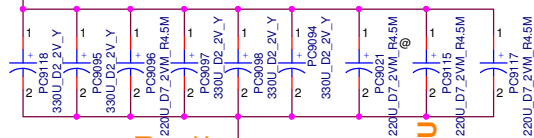
Security Classification		Control Secret Data		Compel Electronics, Inc.	
Issued Date	2025/01/10	Declassified Date	2025/01/10	Title	+APU_CORE
THIS SHEET OF INFORMATION CONTAINS THE PROPRIETARY PROPERTY OF COMPEL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET AND ANY INFORMATION HEREON SHALL BE KEPT IN THE STRICTEST CONFIDENTIALITY AND MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPEL ELECTRONICS, INC.				Doc#	1.0
				Date	2025/01/10
				Page	35 of 38

+APU_CORE

+APU_CORE



+APU_CORE



SIV_EC002_DCDC
SIV_EC003_DCDC
SIV_EC007_DCDC

Under CPU

Bot

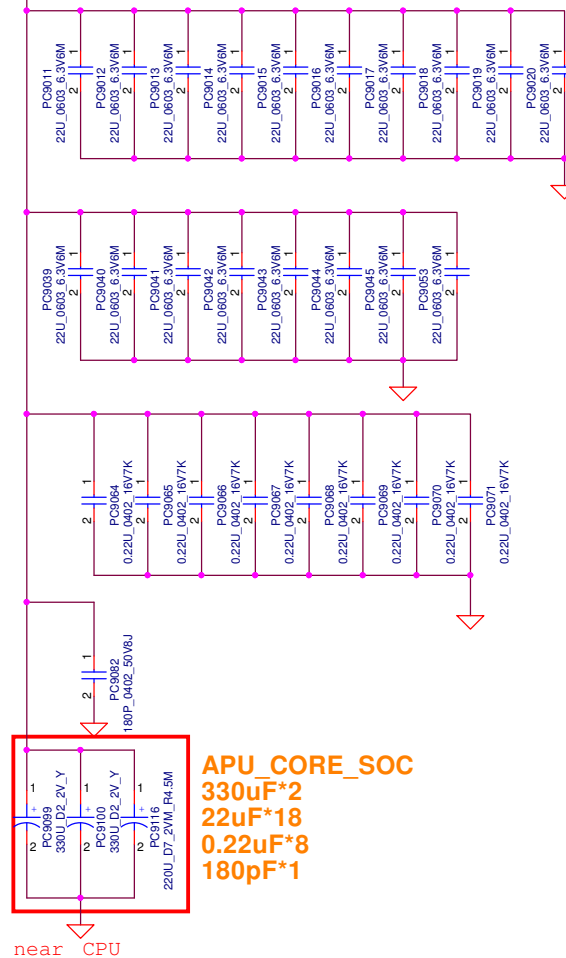
Under CPU

330u is common part SGA00009S00

APU_CORE
330uF*5 220uF *2
22uF*27
0.22uF*8
180pF*1

+APU_CORE_SOC

+APU_CORE_SOC



near CPU

330u is common part SGA00009S00

APU_CORE_SOC
330uF*2
22uF*18
0.22uF*8
180pF*1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/01/10	Deciphered Date	2022/01/10	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.				+APU_CORE Cap	
Size	Document Number	Rev		1.0	
Custom	LA-J701PR01				
Date:	Friday, January 10, 2020	Sheet	36	of	39