

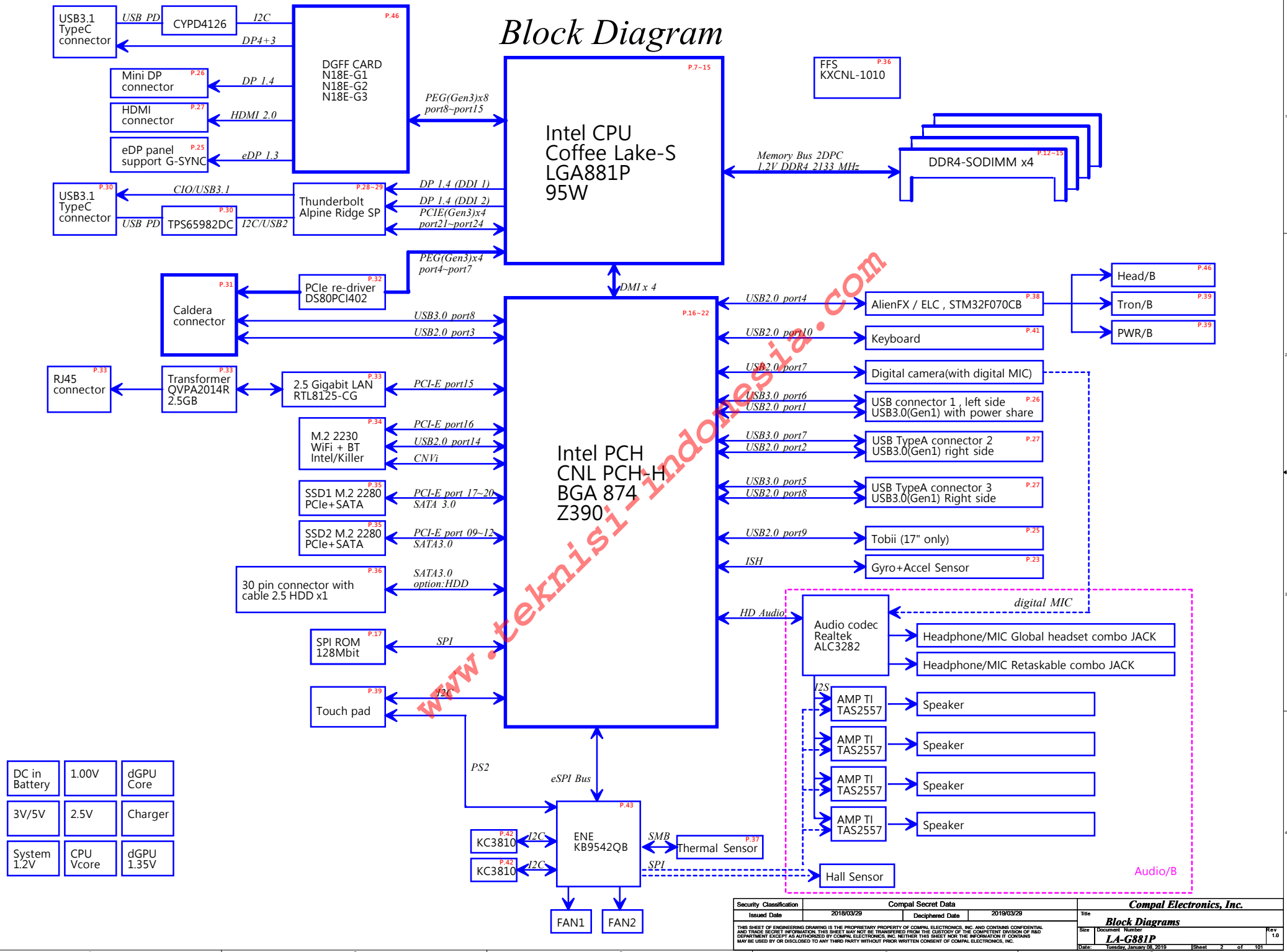
LA-G881P Coffee Lake-S 95W CNL PCH-H with nVIDIA N18E

REV : 1.0
2018.12.14

@ : Nopop Component
EMI@,ESD@,RF@ : EMI/ESD/RF part
CONN@ : Connector Component
@EMI@,@ESD@,@RF@ : Total debug Component
CNVI@:For WLAN
NOCP@/OCP@:For Hinge up OCP

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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
					LA-G881P
				Date:	Tuesday, January 08, 2019
				Sheet	1 of 101
				Rev	1.0

Block Diagram



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	Block Diagrams	
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 TRANSMITTED 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	Rev
				Tuesday, January 08, 2019	1.0
				Sheet	2 of 101

Voc	0.50 +/- 1%				
Ra	250K +/- 1%				
Lead In	Rb	Vas size	Vas size	Vas size	Vas size
		Min	Max	typ	Min
0	0	0.000V	0.000V	0.000V	0.000V
1	22K +/- 1%	0.347V	0.354V	0.085V	0.018
2	33K +/- 1%	0.423V	0.430V	0.085V	0.025
3	50K +/- 1%	0.541V	0.550V	0.085V	0.030
4	67K +/- 1%	0.691V	0.702V	0.083V	0.03A
5	82K +/- 1%	0.807V	0.819V	0.083V	0.045
6	100K +/- 1%	0.978V	0.992V	0.086V	0.054
7	150K +/- 1%	1.565V	1.581V	0.091V	0.064
8	220K +/- 1%	1.989V	2.014V	0.095V	0.075
9	300K +/- 1%	1.534V	1.650V	0.067V	0.087

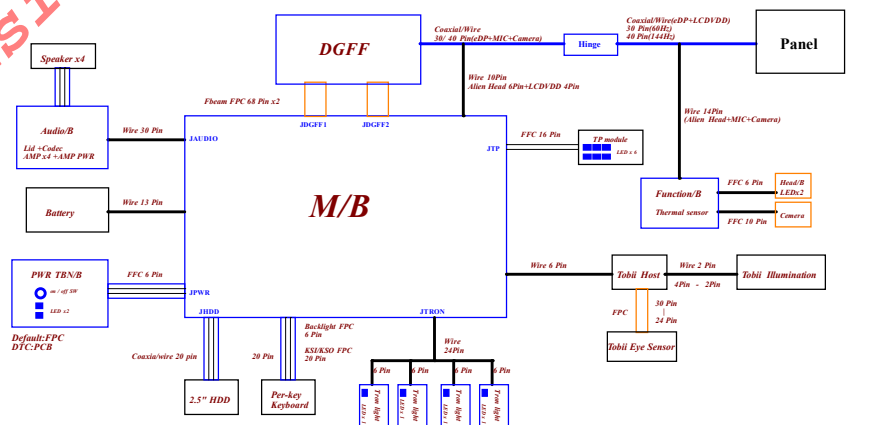
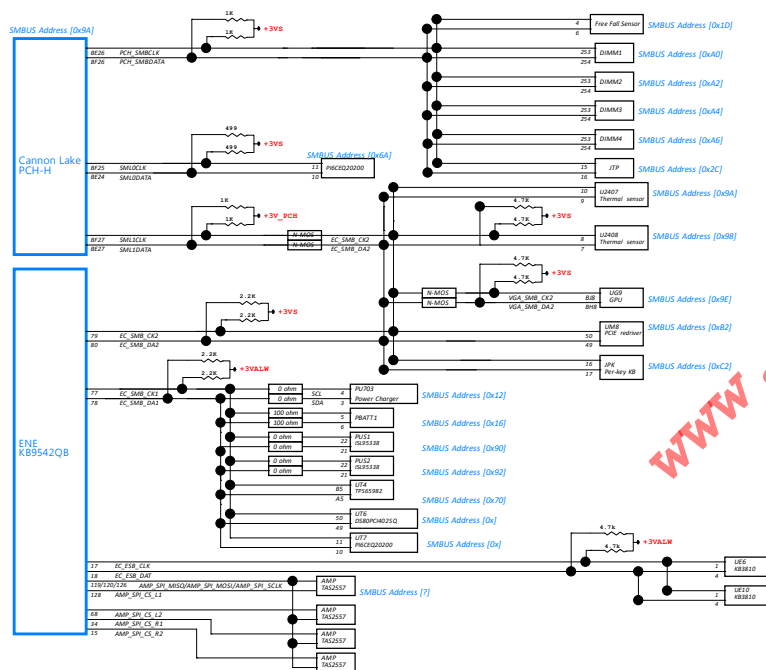
NV	PCB Revision
0	EVT
1	DVT-1
2	DVT-2
3	Pilot

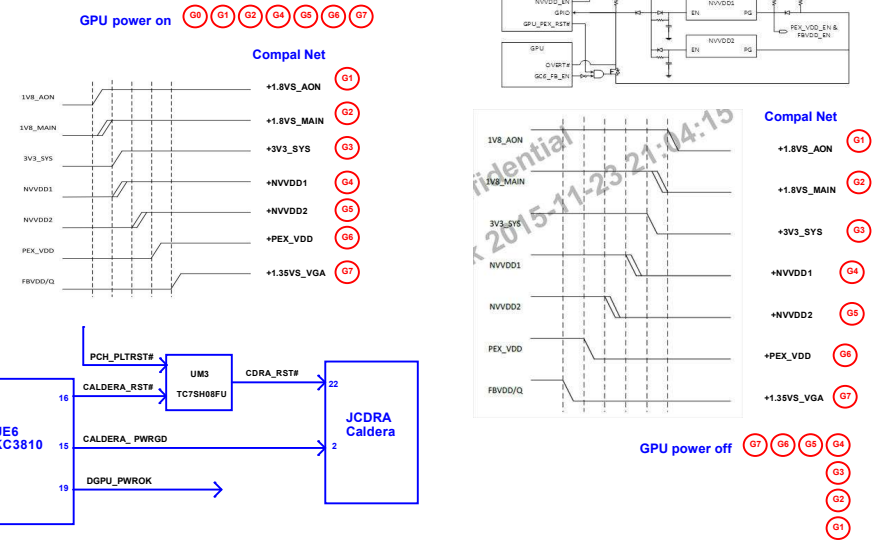
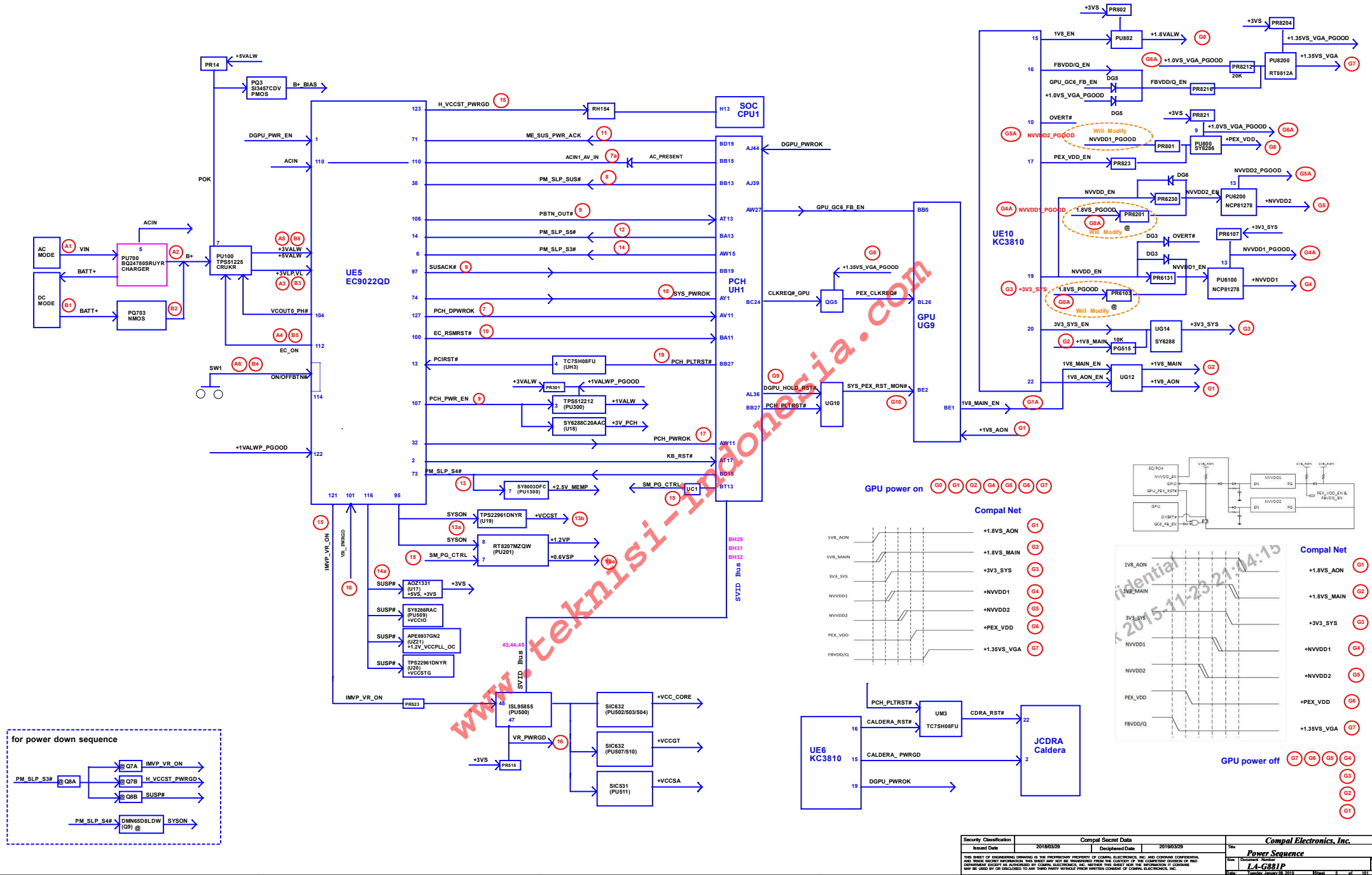
[illegible]

HSIO	USB3.1	PCIe	SATA3	Function
0	1			
1	2			
2	3			
3	4			
4	5			JUSB3
5	6			JUSB1(Powershare)
6	7	1		JUSB2
7	8	2		Caldera
8	9	3		
9	10	4		
10	5			
11	6			
12	7			
13	8			
14	9			
15	10			
16	11	0a		JSSD2 , Z80
17	12	1a		SATA/PCIe x4
18	13	0b	JHDD	
19	14	1b		
20	15	2	LAN	
21	16	3	WLAN	
22	17	4		
23	18	5		
24	19			JSSD1 , Z80
25	20			SATA/PCIe x4
26	21			
27	22			
28	23		Thunderbolt	
29	24			

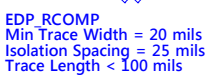
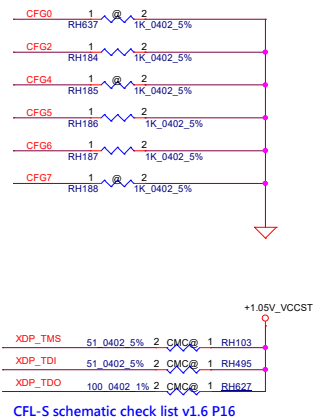
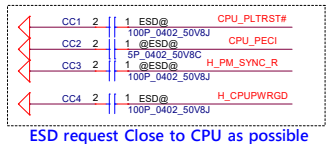
USB2	Function
1	JUSB1 (Powershare)
2	JUSB2
3	Caldera
4	ELC
5	
6	
7	Camera
8	JUSB3
9	Tobii
10	Per-key
11	Thunderbolt PD
12	
13	
14	Bluetooth

 *Digital Ground*
 *Analog Ground*





Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Discontinued Date	2018/03/29	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 REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF COMPAL ELECTRONICS, INC. ANY UNAUTHORIZED REPRODUCTION OR TRANSMISSION OF THIS SHEET IS STRICTLY PROHIBITED.				Power Sequence	
Rev				L1-G881P	
Date				Rev	

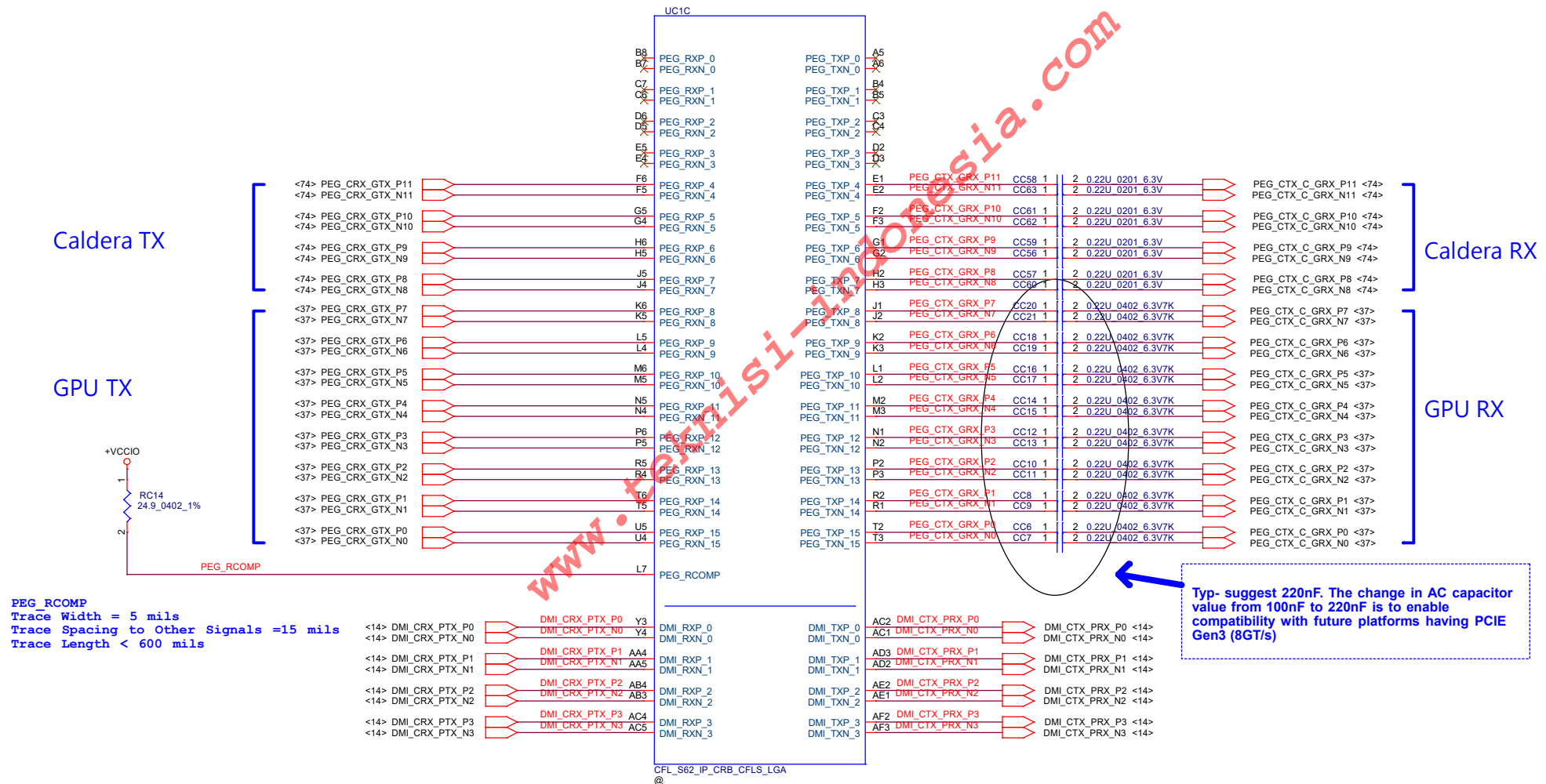


PEG DEFER TRAINING	
CFG7	<p>★ 1: (Default) PEG Train immediately following xxRESETB de assertion</p> <p>0: PEG Wait for BIOS for training</p>

Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.			CFL-S JTAG/XDP/DDI Size Document Number Custom LA-G881P Rev 1.0	
			Date: Tuesday, January 08, 2019	Sheet 6 of 101

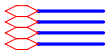
Table 2-13. PCI Express* Bifurcation and Lane Reversal Mapping

Bifurcation	Link Width			CFG Signals			Lanes															
	0:1:0	0:1:1	0:1:2	CFG [6]	CFG [5]	CFG [2]	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1x16	x16	N/A	N/A	1	1	1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1x16 Reversed	x16	N/A	N/A	1	1	0	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
2x8	x8	x8	N/A	1	0	1	0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7
2x8 Reversed	x8	x8	N/A	1	0	0	7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0
1x8+2x4	x8	x4	x4	0	0	1	0	1	2	3	4	5	6	7	0	1	2	3	0	1	2	3
1x8+2x4 Reversed	x8	x4	x4	0	0	0	3	2	1	0	3	2	1	0	7	6	5	4	3	2	1	0



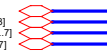
Security Classification		Compal Secret Data		Compal Electronics, Inc.			
Issued Date	2018/03/29	Deciphered Date	2019/03/29	Title CFL-S DMI/PEG			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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-G881P	1.0
Date:				Tuesday, January 08, 2019	Sheet	7	of 101

<23.25> DDR_A_DQ[0..63]
<23.25> DDR_A_MA[0..15]
<23.25> DDR_A_DQS[0..7]
<23.25> DDR_A_DQS[0..7]



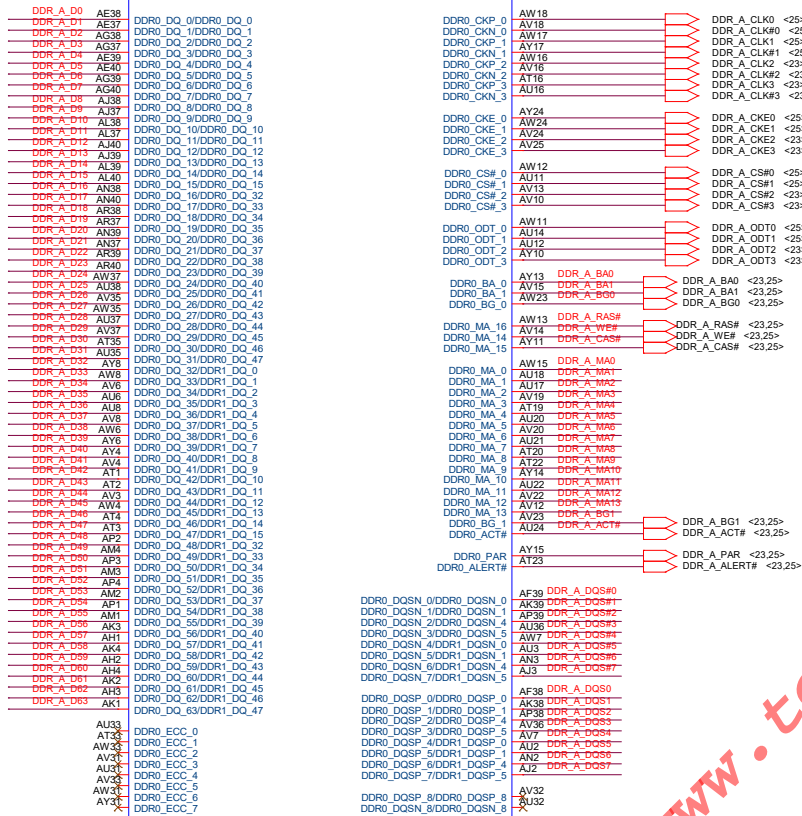
Channel A

<24.25> DDR_B_DQ[0..63]
<24.25> DDR_B_MA[0..15]
<24.25> DDR_B_DQS[0..7]
<24.25> DDR_B_DQS[0..7]



Channel B

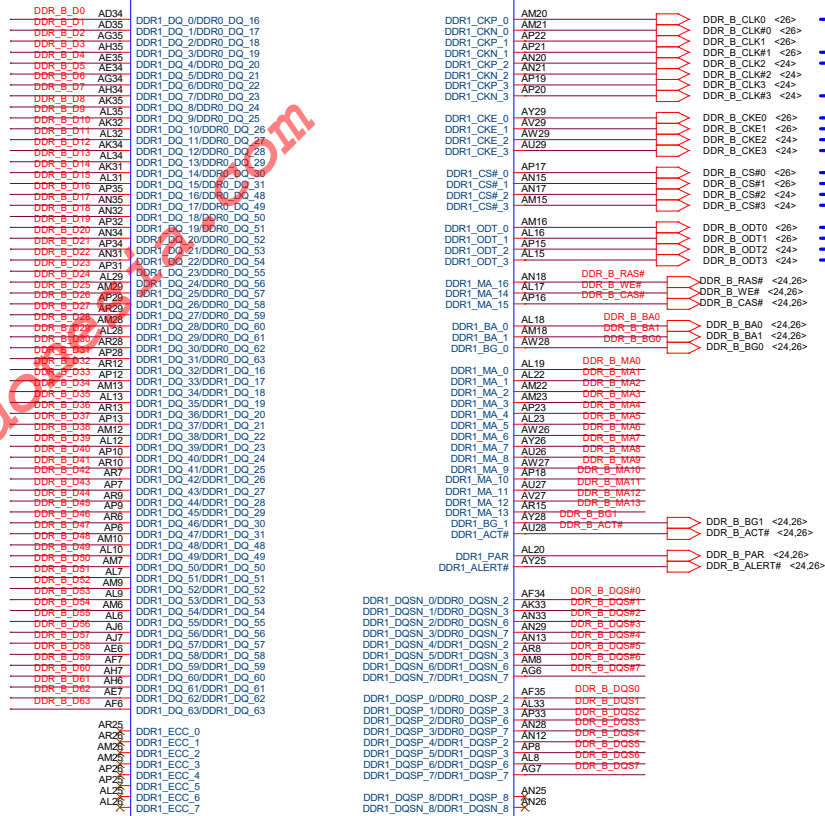
UC1A



DDR CHANNEL A

CFL_S62_IP_CRB_CFLS_LGA

UC1B



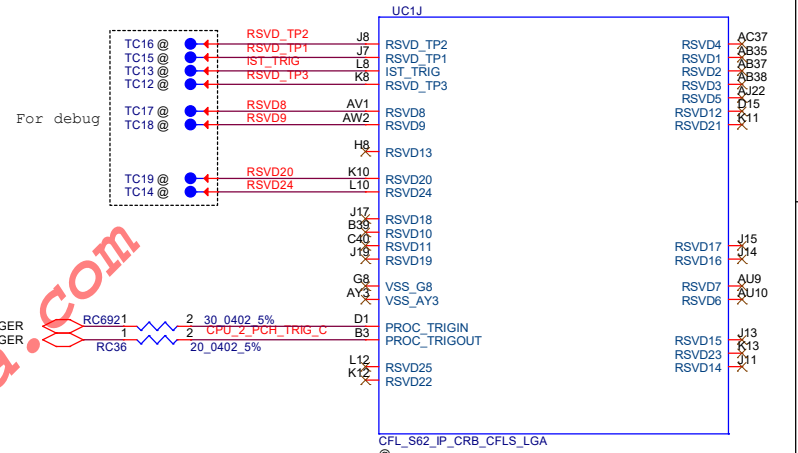
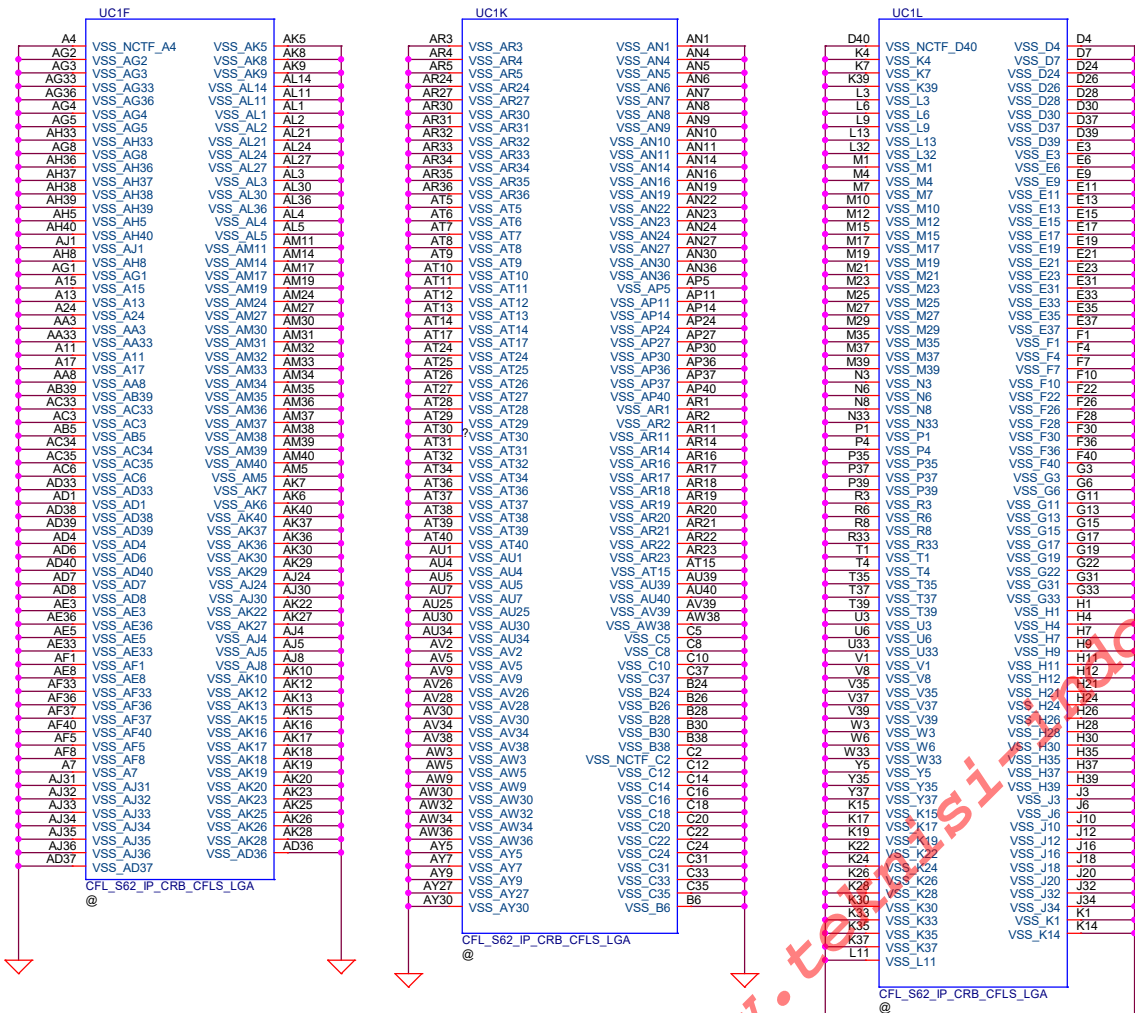
DDR CHANNEL B

CFL_S62_IP_CRB_CFLS_LGA

Trace width / Spacing = 10 / 12 mils

AB40 DDR_VREF_CA
AC40 DDR_VREF_DQ
AC39 DDR_VREF_DQ

Trace width / Spacing = 10 / 12 mils



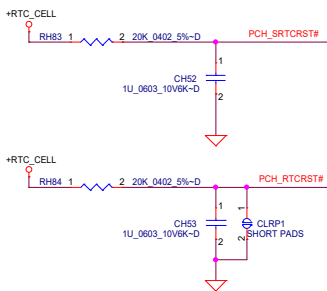
Security Classification		Compal Secret Data				Compal Electronics, Inc.			
Issued Date		2018/03/29		Deciphered Date		2019/03/29		Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT 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.		CFL-S GND, RSVD							
		Size		Document		Number		Rev	
		Custom				LA-G881P		1.0	
		Date:		Tuesday, January 08, 2019		Sheet		10 of 101	

EC interface
High
Low(default) eSPI
Low(default) LPC

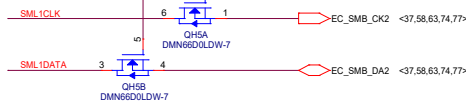
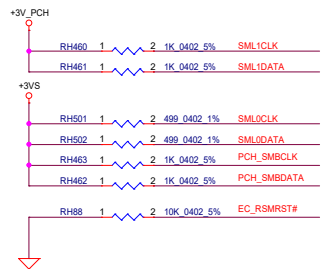
+3V_PCH

+3V_PCH

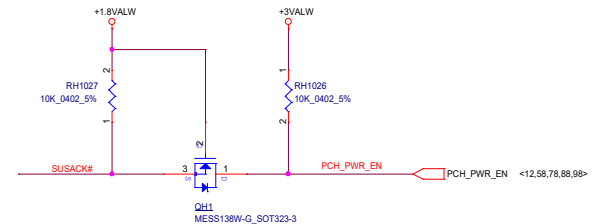
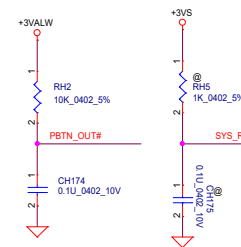
This signal has a weak internal Pull-down.
0 = Disable Intel ME Crypto Transport Layer Security (TLS) cipher suite (no confidentiality). (Default)
1 = Enable Intel ME Crypto Transport Layer Security (TLS) cipher suite (with confidentiality). Must be pulled up to support Intel AMT with TLS.
Notes:
1. The internal Pull-down is disabled after RSMRST# de-asserts.
2. This signal is in the primary well.



CLR1P in DIMM door



This signal has an internal pull-down.
0 = Disable Intel DCI-OOB (Default)
1 = Enable Intel DCI-OOB
1. The internal pull-down is disabled after RSMRST# de-asserts.
2. When used as PCHHOT# and strap low, a 150K pull-up is needed to ensure it does not override the internal pull-down strap sampling.



Top Swap Override
0 = Disable Top Swap mode (Default)
1 = Enable Top Swap mode.
The internal Pull-down is disabled after PCH_PWRCK# is high

Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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 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.				PCH (2/7) PM,HDA,SMB,JTAG
Size	Document Number	Sheet	12 of 101	Rev
LA-G881P				1.0
Date:	Tuesday, January 08, 2019	Sheet	12 of 101	

UH1
S IC A31 FHSSKU04 QNDQ A1 BGA 874P PCH-H
SA0000B40L
CPCHE5@

UH1
S IC A31 FHZ390 QQLP B0 BGA 874P PCH-H
SA0000C500L
CPCHE5@

M.2 SSD Slot#2
PCIe/SATA

SATA HDD

M.2 SSD Slot#2
PCIe/SATA

M.2 SSD Slot#1
PCIe/SATA

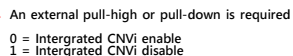
M.2 SSD Slot#1
PCIe/SATA

LAN

WLAN

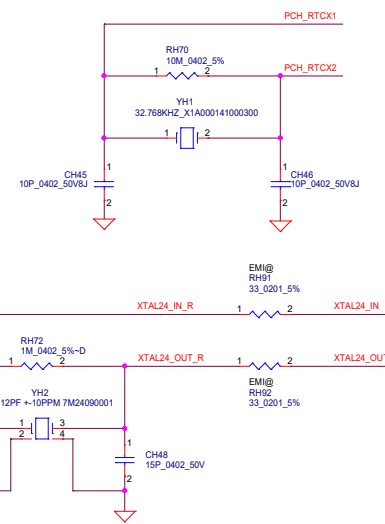
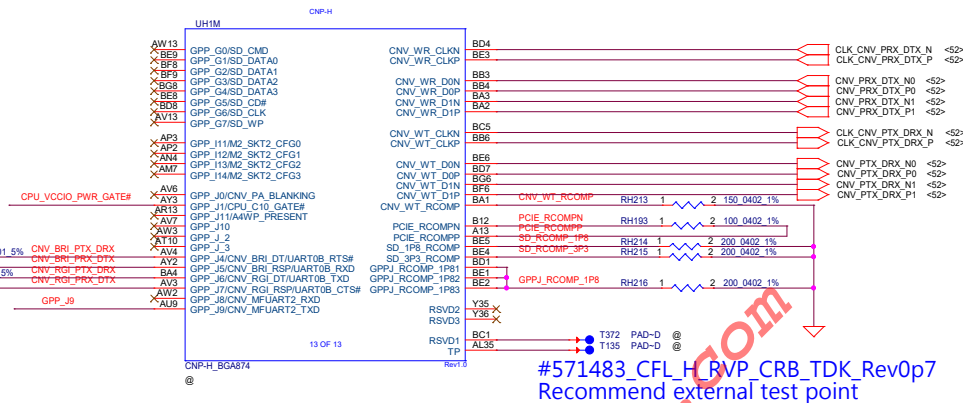
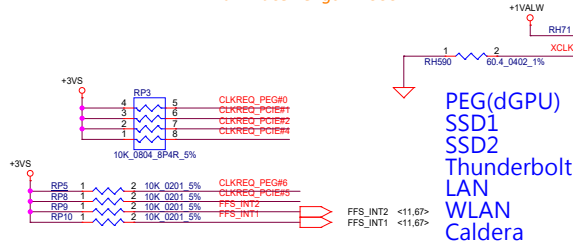
M.2 SSD Slot#1
PCIe/SATA

Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	Title	PCH (3/7) SATA,DDC,PCIe
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:	Rev
				Tuesday, January 08, 2019	1.0
				Sheet	13 of 101

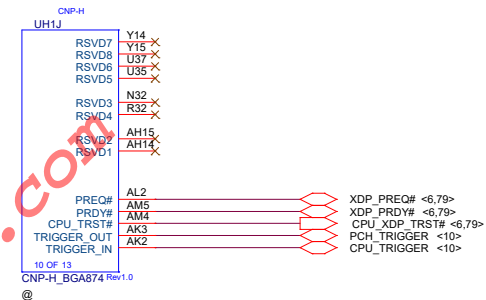
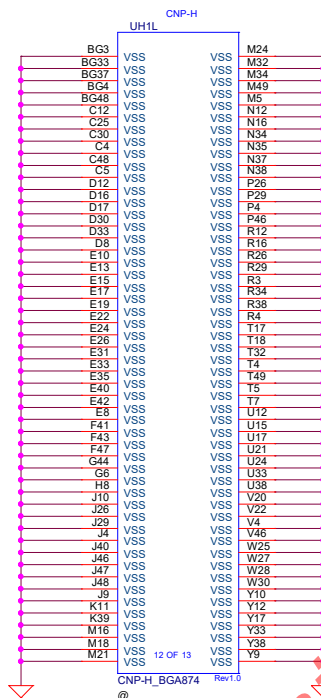
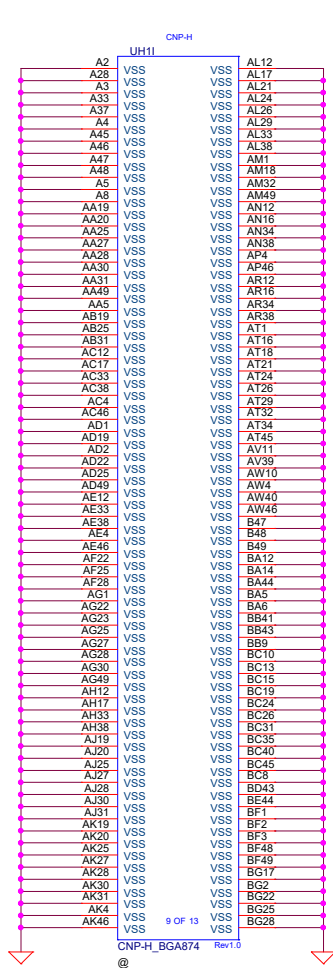


The signal has a weak internal pull-down
0 = VCCPSPI is connected to 3.3V rail
1 = VCCPSPI is connected to 1.8V rail
Note: If VCCPSPI is connected to 1.8V rail, this pin
strap must be 1 for the proper functionality
of the SPI (Flash) I/Os

Net : XCLK_BIASREF
Trace Width/Space: 15mil /15 mil
Max Trace Length: 1000 mil



Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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 REPRODUCED 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.				PCH (5/7) CNVI, CLK		
				Size	Document Number	Rev
				LA-G881P		
Date: Tuesday, January 08, 2019				Sheet	15	of 101



www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.			
Issued Date		2018/03/29	Deciphered Date	2019/03/29	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.					PCH (7/7) GND		
					Size	Document Number	Rev
						LA-G881P	1.0
					Date:	Tuesday, January 08, 2019	Sheet
						17	of
						101	

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reserved	
				Size	Document Number
				Date: Tuesday, January 08, 2019	Rev 1.0
				Sheet 18 of 101	

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reserved	
				Size	Document Number
				LA-G881P	
				Date: Tuesday, January 08, 2019	Sheet 19 of 101
				Rev	1.0

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reserved	
				Size	Document Number
				LA-G881P	
Date: Tuesday, January 08, 2019				Sheet	20 of 101
Rev		1.0			

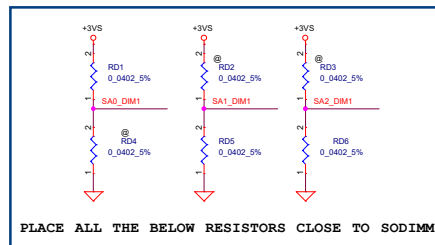
www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reserved	
				Size	Document Number
				LA-G881P	
Date: Tuesday, January 08, 2019				Sheet	21 of 101
Rev		1.0			

www.teknisi-indonesia.com

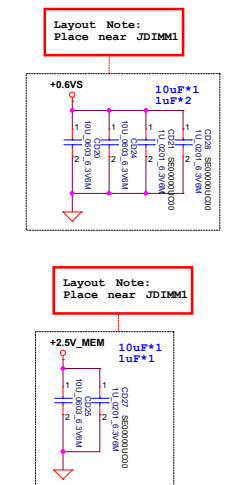
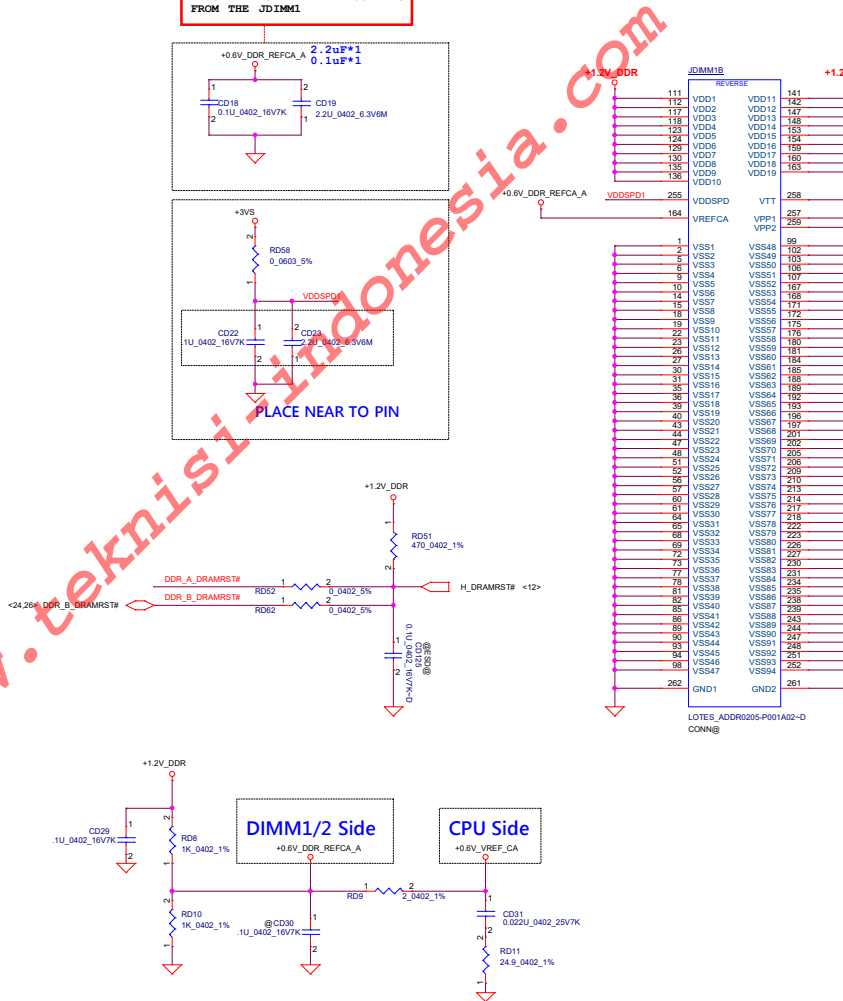
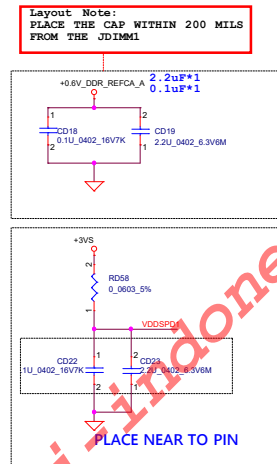
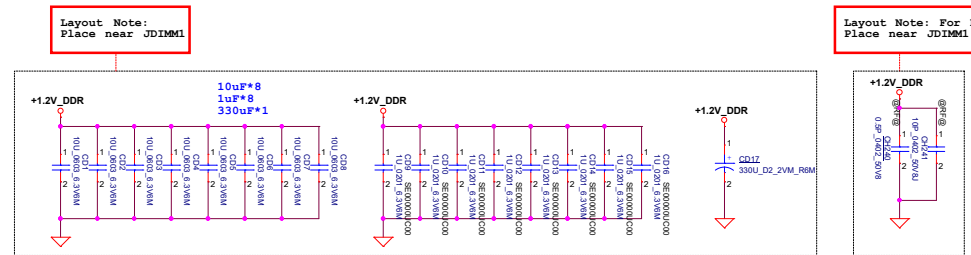
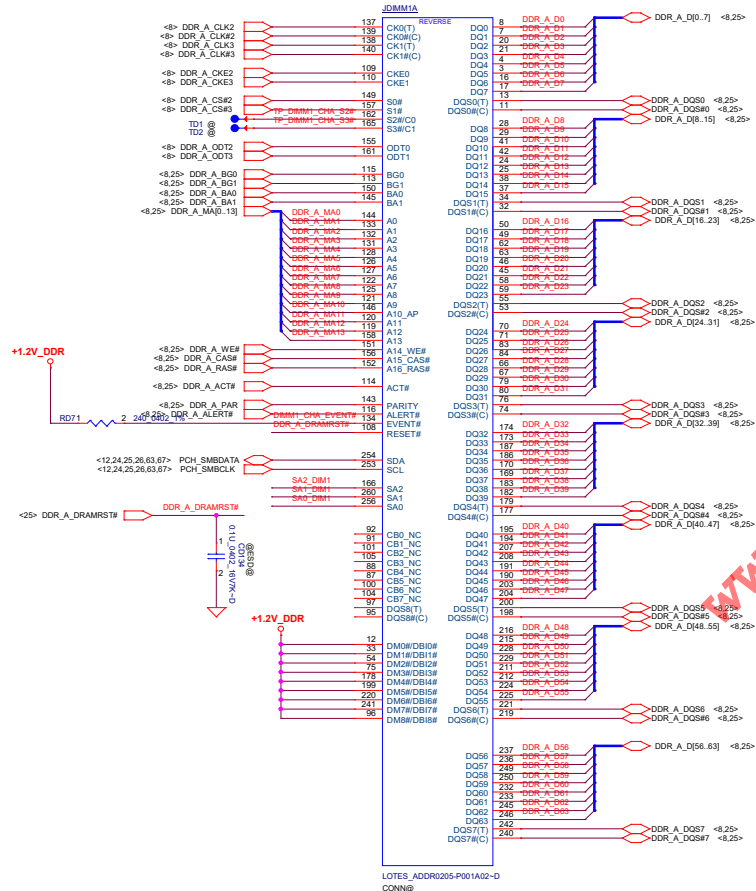
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Reserved	
				Size	Document Number
				LA-G881P	
Date: Tuesday, January 08, 2019				Sheet	22 of 101
Rev		1.0			

Interleaved JDIMM1



	SA0	SA1	SA2
DIMM1	1	0	0
DIMM2	0	0	0
DIMM3	1	1	0
DIMM4	0	1	0

(4.0 mm) STD



The three diagrams illustrate the connection of RD26, RD27, and RD28 to RD31 through the SA0_DIM3 signal line. Each diagram shows a 3V5 supply connected to a resistor (RD26, RD27, or RD28) which is then connected to the SA0_DIM3 line. The SA0_DIM3 line is also connected to a resistor (RD31) which is connected to ground. The resistors are labeled with a value of 0_0402_5%.

PLACE ALL THE BELOW RESISTORS CLOSE TO SODIMM

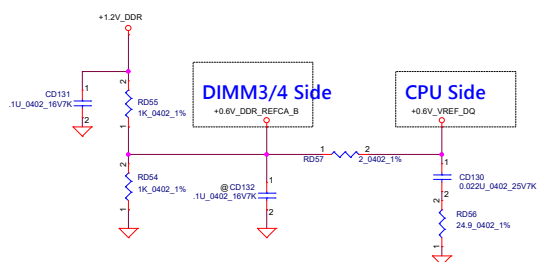
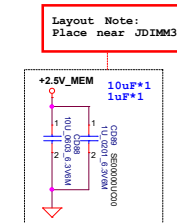
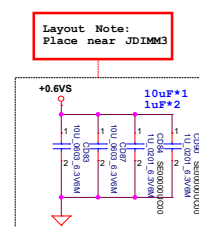
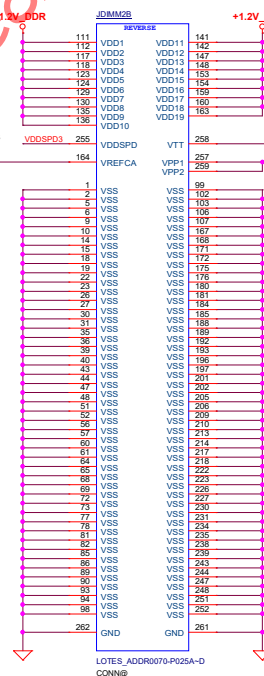
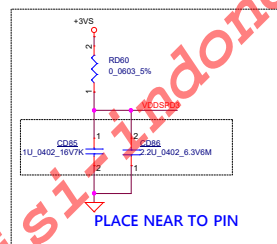
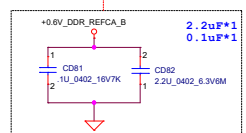
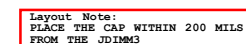
[illegible]

Diagram 1: RD12 0.0402_5% resistor connected to +3VS and SA0_DIM2.

Diagram 2: RD13 0.0402_5% resistor connected to +3VS and SA1_DIM2.

Diagram 3: RD14 0.0402_5% resistor connected to +3VS and SA2_DIM2.

Diagram 4: RD15 0.0402_5% resistor connected to +3VS and ground.

Diagram 5: RD16 0.0402_5% resistor connected to +3VS and ground.

Diagram 6: RD17 0.0402_5% resistor connected to +3VS and ground.

PLACE ALL THE BELOW RESISTORS CLOSE TO SODIMM

	SA0	SA1	SA2
DIMM1	1	0	0
DIMM2	0	0	0
DIMM3	1	1	0
DIMM4	0	1	0

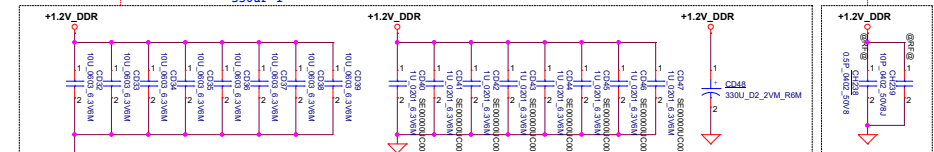
JDM4A

JDM4A Pin	Internal Signal	External Signal
137	CK0(1)	DDR_A_D0 [-823]
139	CK0(0)	DDR_A_D1 [-823]
138	CK1(0)	DDR_A_D2 [-823]
140	CK1(1)	DDR_A_D3 [-823]
136	CK1BC	DDR_A_D4 [-823]
109	CKE0	DDR_A_D5 [-823]
108	CKE1	DDR_A_D6 [-823]
149	S0	DDR_A_D7 [-823]
147	S1#	DDR_A_D8 [-823]
148	S2	DDR_A_D9 [-823]
146	S3#	DDR_A_D10 [-823]
155	S3C0	DDR_A_D11 [-823]
156	S3C1	DDR_A_D12 [-823]
155	ODT1	DDR_A_D13 [-823]
156	ODT1	DDR_A_D14 [-823]
115	BG0	DDR_A_D15 [-823]
157	BG1	DDR_A_DQS0 [-823]
158	BG2	DDR_A_DQS1 [-823]
159	BG3	DDR_A_DQS2 [-823]
160	BG4	DDR_A_DQS3 [-823]
161	BA1	DDR_A_DQS4 [-823]
162	BA2	DDR_A_DQS5 [-823]
163	BA3	DDR_A_DQS6 [-823]
164	BA4	DDR_A_DQS7 [-823]
165	BA5	DDR_A_DQS8 [-823]
166	BA6	DDR_A_DQS9 [-823]
167	BA7	DDR_A_DQS10 [-823]
168	BA8	DDR_A_DQS11 [-823]
169	BA9	DDR_A_DQS12 [-823]
170	BA10	DDR_A_DQS13 [-823]
171	BA11	DDR_A_DQS14 [-823]
172	BA12	DDR_A_DQS15 [-823]
173	BA13	DDR_A_DQS16 [-823]
174	BA14	DDR_A_DQS17 [-823]
175	BA15	DDR_A_DQS18 [-823]
176	BA16	DDR_A_DQS19 [-823]
177	BA17	DDR_A_DQS20 [-823]
178	BA18	DDR_A_DQS21 [-823]
179	BA19	DDR_A_DQS22 [-823]
180	BA20	DDR_A_DQS23 [-823]
181	BA21	DDR_A_DQS24 [-823]
182	BA22	DDR_A_DQS25 [-823]
183	BA23	DDR_A_DQS26 [-823]
184	BA24	DDR_A_DQS27 [-823]
185	BA25	DDR_A_DQS28 [-823]
186	BA26	DDR_A_DQS29 [-823]
187	BA27	DDR_A_DQS30 [-823]
188	BA28	DDR_A_DQS31 [-823]
189	BA29	DDR_A_DQS32 [-823]
190	BA30	DDR_A_DQS33 [-823]
191	BA31	DDR_A_DQS34 [-823]
192	BA32	DDR_A_DQS35 [-823]
193	BA33	DDR_A_DQS36 [-823]
194	BA34	DDR_A_DQS37 [-823]
195	BA35	DDR_A_DQS38 [-823]
196	BA36	DDR_A_DQS39 [-823]
197	BA37	DDR_A_DQS40 [-823]
198	BA38	DDR_A_DQS41 [-823]
199	BA39	DDR_A_DQS42 [-823]
200	BA40	DDR_A_DQS43 [-823]
201	BA41	DDR_A_DQS44 [-823]
202	BA42	DDR_A_DQS45 [-823]
203	BA43	DDR_A_DQS46 [-823]
204	BA44	DDR_A_DQS47 [-823]
205	BA45	DDR_A_DQS48 [-823]
206	BA46	DDR_A_DQS49 [-823]
207	BA47	DDR_A_DQS50 [-823]
208	BA48	DDR_A_DQS51 [-823]
209	BA49	DDR_A_DQS52 [-823]
210	BA50	DDR_A_DQS53 [-823]
211	BA51	DDR_A_DQS54 [-823]
212	BA52	DDR_A_DQS55 [-823]
213	BA53	DDR_A_DQS56 [-823]
214	BA54	DDR_A_DQS57 [-823]
215	BA55	DDR_A_DQS58 [-823]
216	BA56	DDR_A_DQS59 [-823]
217	BA57	DDR_A_DQS60 [-823]
218	BA58	DDR_A_DQS61 [-823]
219	BA59	DDR_A_DQS62 [-823]
220	BA60	DDR_A_DQS63 [-823]
221	BA61	DDR_A_DQS64 [-823]
222	BA62	DDR_A_DQS65 [-823]
223	BA63	DDR_A_DQS66 [-823]
224	BA64	DDR_A_DQS67 [-823]
225	BA65	DDR_A_DQS68 [-823]
226	BA66	DDR_A_DQS69 [-823]
227	BA67	DDR_A_DQS70 [-823]
228	BA68	DDR_A_DQS71 [-823]
229	BA69	DDR_A_DQS72 [-823]
230	BA70	DDR_A_DQS73 [-823]
231	BA71	DDR_A_DQS74 [-823]
232	BA72	DDR_A_DQS75 [-823]
233	BA73	DDR_A_DQS76 [-823]
234	BA74	DDR_A_DQS77 [-823]
235	BA75	DDR_A_DQS78 [-823]
236	BA76	DDR_A_DQS79 [-823]
237	BA77	DDR_A_DQS80 [-823]
238	BA78	DDR_A_DQS81 [-823]
239	BA79	DDR_A_DQS82 [-823]
240	BA80	DDR_A_DQS83 [-823]
241	BA81	DDR_A_DQS84 [-823]
242	BA82	DDR_A_DQS85 [-823]
243	BA83	DDR_A_DQS86 [-823]
244	BA84	DDR_A_DQS87 [-823]
245	BA85	DDR_A_DQS88 [-823]
246	BA86	DDR_A_DQS89 [-823]
247	BA87	DDR_A_DQS90 [-823]
248	BA88	DDR_A_DQS91 [-823]
249	BA89	DDR_A_DQS92 [-823]
250	BA90	DDR_A_DQS93 [-823]
251	BA91	DDR_A_DQS

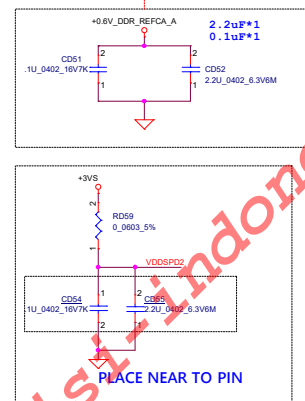
Layout Note:
Place near JDIMM2

10uF*8
1uF*8
330uF*1

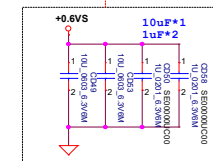
Layout Note: For RF
Place near JDIMM2



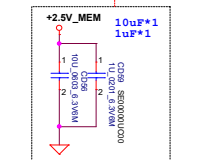
Layout Note:
PLACE THE CAP WITHIN 200 MILS
FROM THE JDIMM2



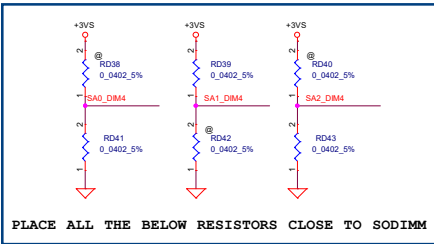
Layout Note:
Place near JDIMM2



Layout Note:
Place near JDIMM2

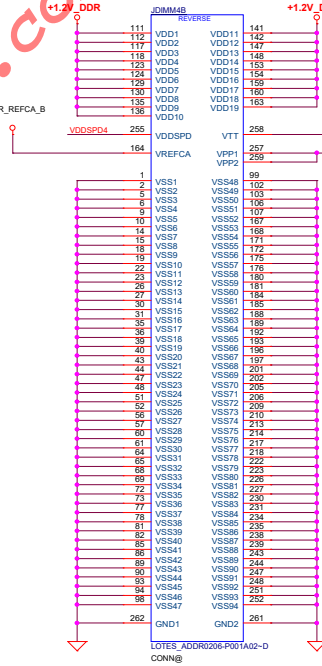
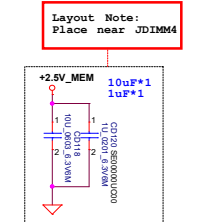
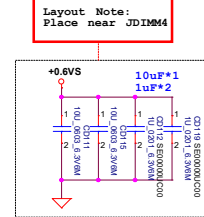
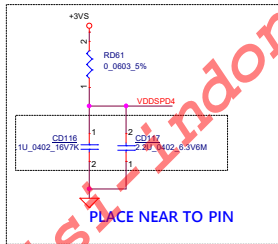
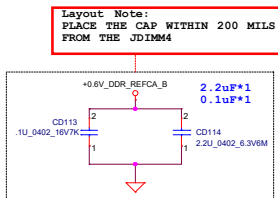
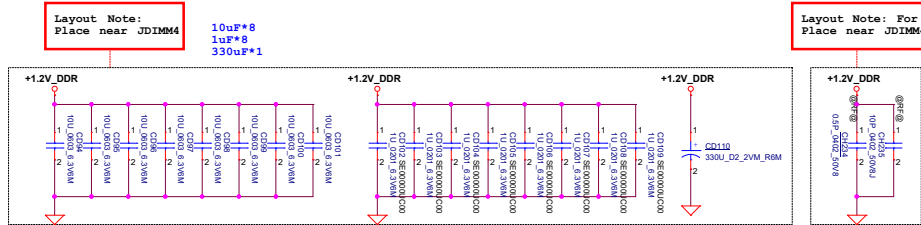


Interleaved JDIMM4



	SA0	SA1	SA2
DIMM1	1	0	0
DIMM2	0	0	0
DIMM3	1	1	0
DIMM4	0	1	0

(4.0 mm) RVS



www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date:		Tuesday, January 08, 2019		Sheet	27 of 101
				Rev	1.0

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date: Tuesday, January 08, 2019				Sheet	28 of 101
				Rev	1.0

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date:		Tuesday, January 08, 2019		Sheet	29 of 101
				Rev	1.0

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date:		Tuesday, January 08, 2019		Sheet	30 of 101
				Rev	1.0

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date:		Tuesday, January 08, 2019		Sheet	31 of 101
				Rev	1.0

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date: Tuesday, January 08, 2019				Sheet	32 of 101
				Rev	1.0

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date:		Tuesday, January 08, 2019		Sheet	33 of 101
				Rev	1.0

www.teknisi-indonesia.com

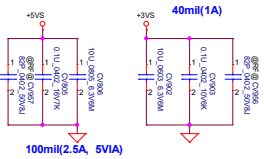
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Reversed	
				Size	Document Number
				LA-G881P	
Date:		Tuesday, January 08, 2019		Sheet	34 of 101
				Rev	1.0

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date: Tuesday, January 08, 2019				Sheet	35 of 101
				Rev	1.0

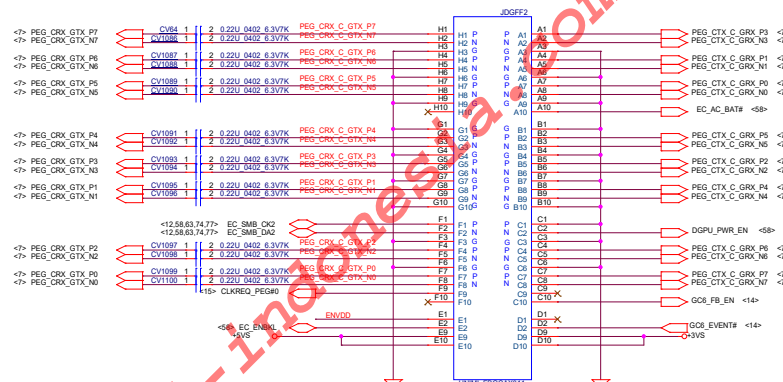
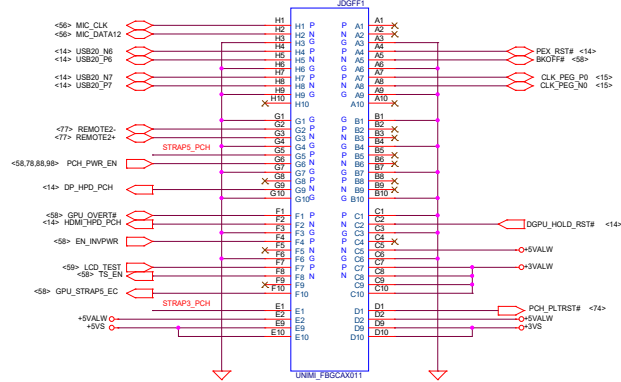
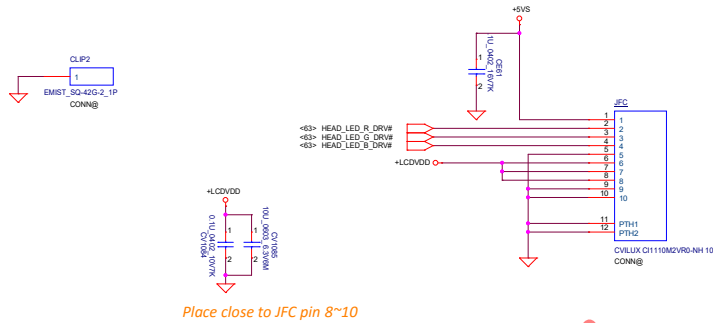
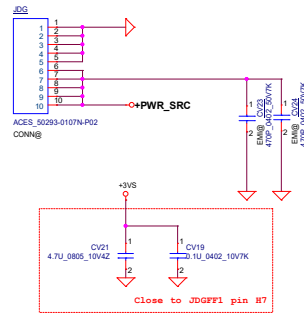
www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date:		Tuesday, January 08, 2019		Sheet	36 of 101
				Rev	1.0

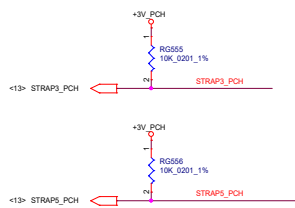


2 DP channels from GPU
(A & B & EDP)

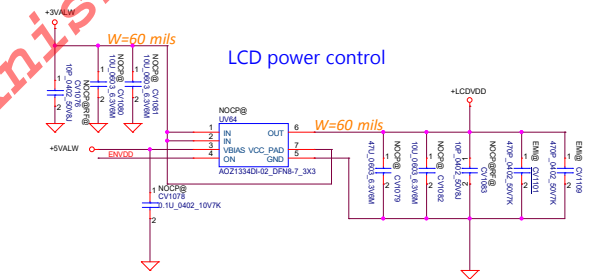
X-Beam I/per pin=0.5A
I/per connector=0.75A



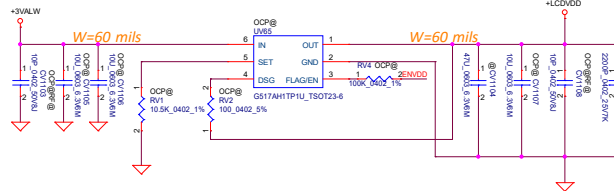
Strap to PCH



LCD power control



LCD power control



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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 TRANSMITTED FROM THE CUSTODY OF THE PROPRIETARY DIVISION OF R&D DEPARTMENT OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	
				Document Number	
				Rev	
				Date	
				Sheet	
				of	
				101	

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date: Tuesday, January 08, 2019				Sheet	38 of 101
				Rev	1.0

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date:		Tuesday, January 08, 2019		Sheet	39 of 101
				Rev	1.0

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date: Tuesday, January 08, 2019				Sheet	40 of 101
				Rev	1.0

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date:		Tuesday, January 08, 2019		Sheet	41 of 101
				Rev	1.0

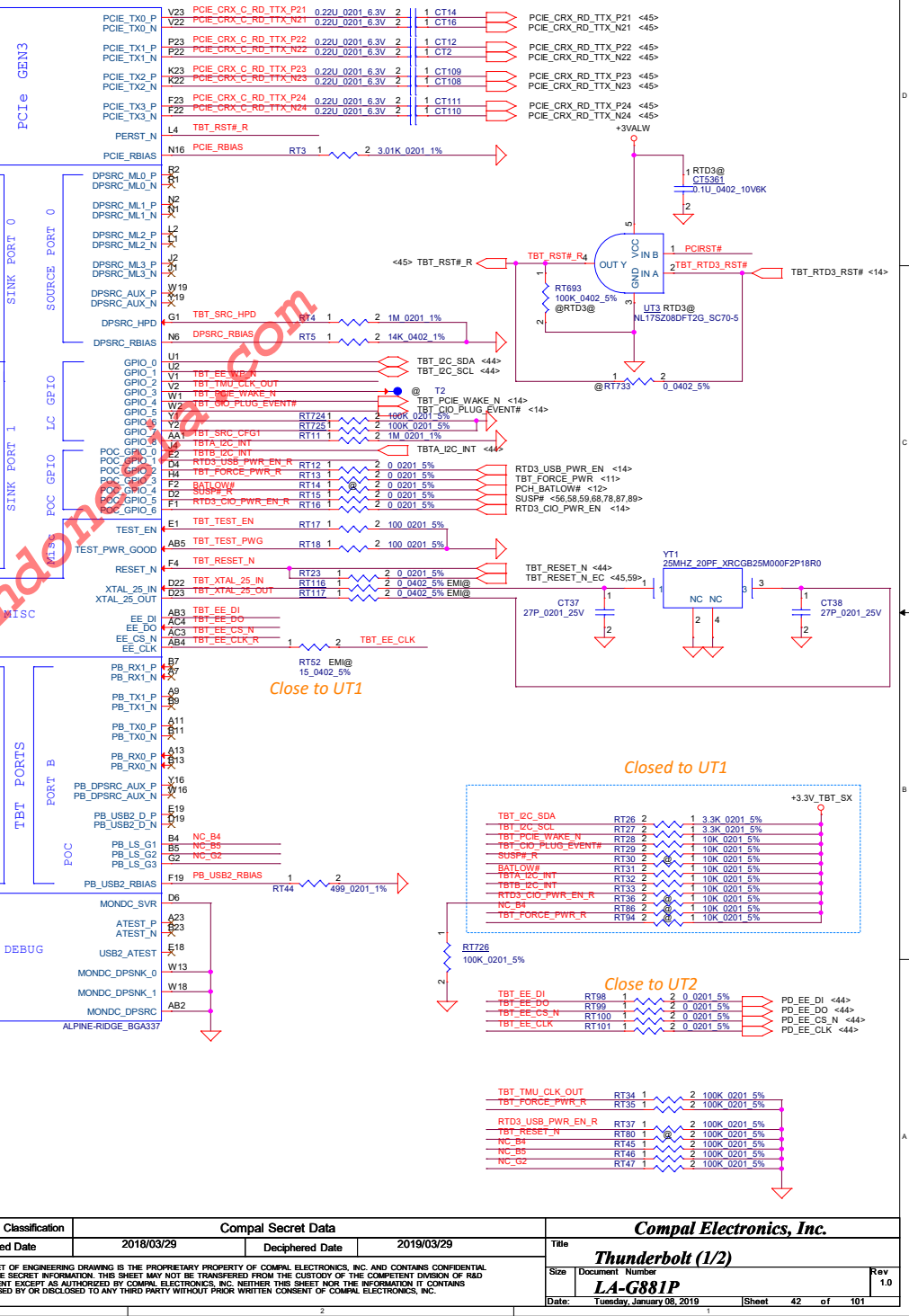
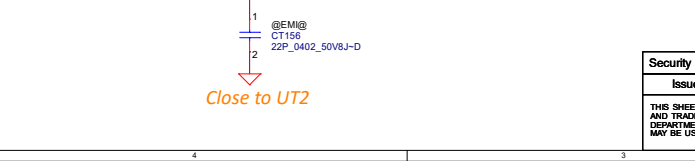
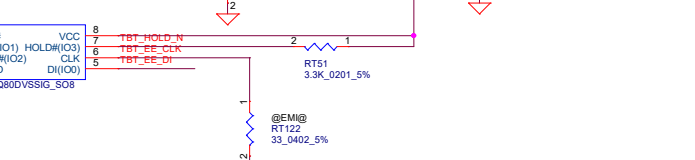
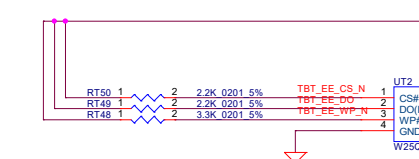
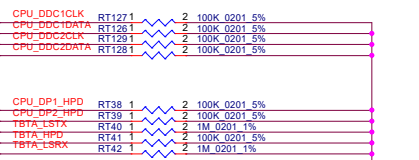
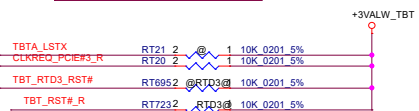
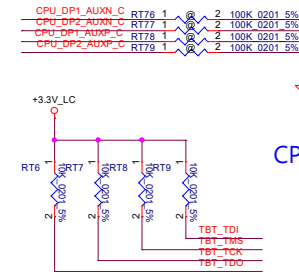
CONN@
CLIP1
CLIP1_10P2X7P2_SHIELDING_CASE1
EQ0X000000

PCIE TX

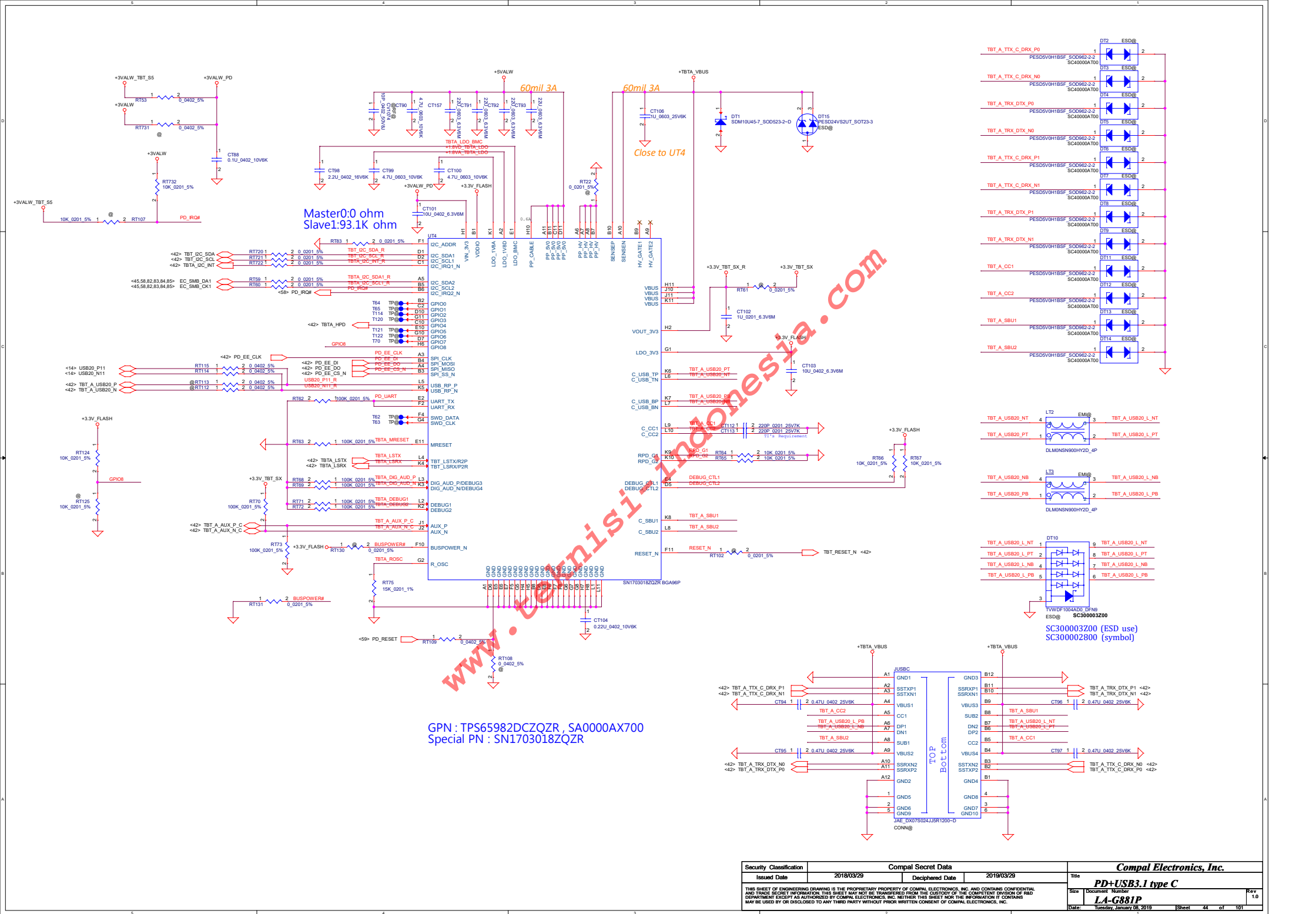
PCIE CLK

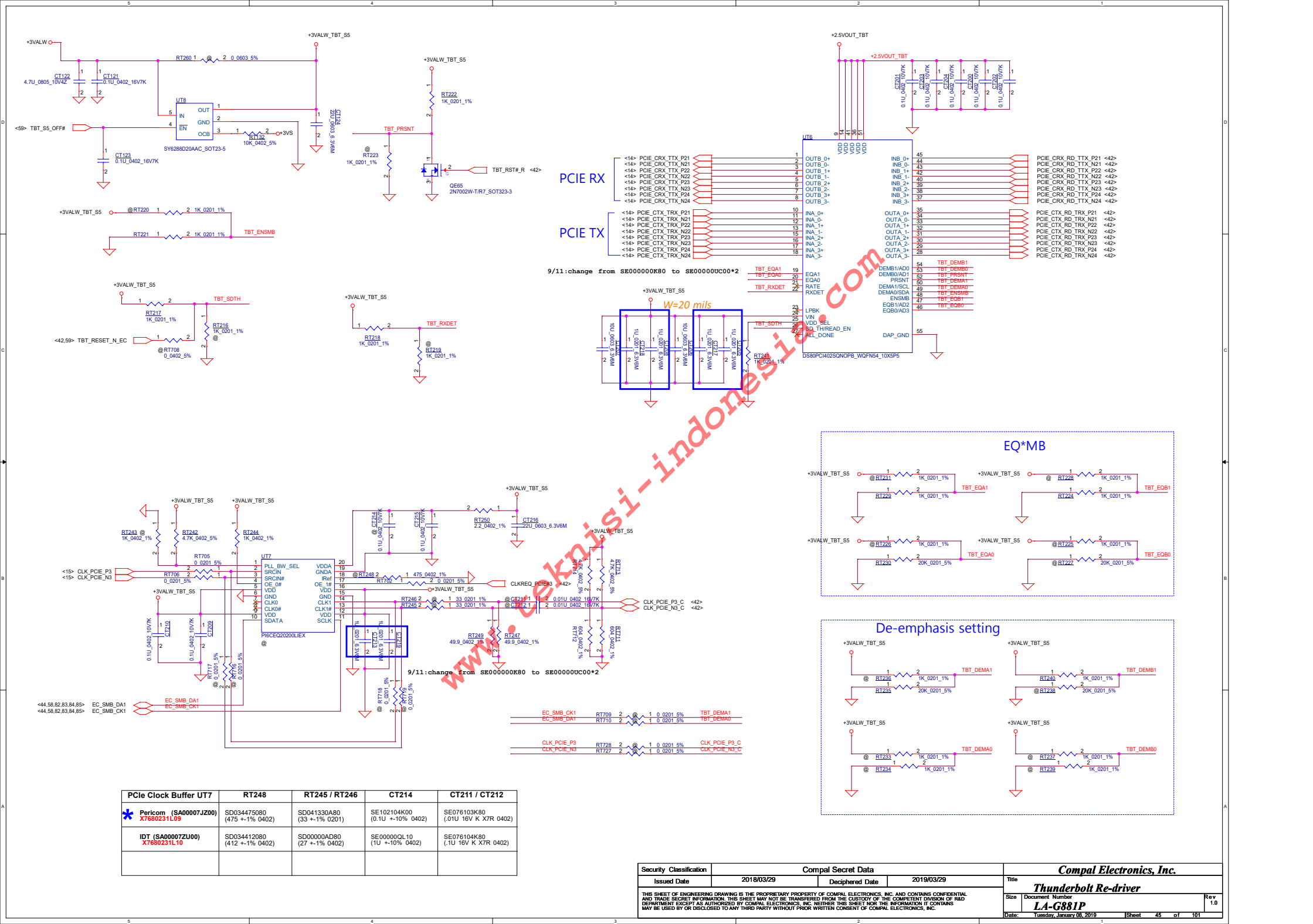
CPU DDI1

CPU DDI2



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	Title	Thunderbolt (1/2)
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	LA-G881P
				Sheet	42 of 101





www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date:		Tuesday, January 08, 2019		Sheet	46 of 101
				Rev	1.0

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date:		Tuesday, January 08, 2019		Sheet	47 of 101
				Rev	1.0

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date: Tuesday, January 08, 2019				Sheet	48 of 101
				Rev	1.0

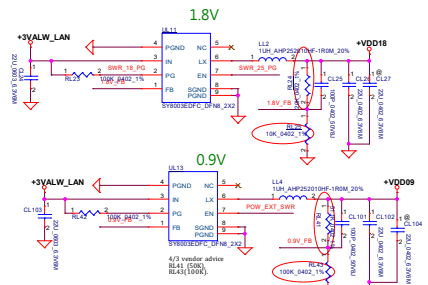
www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date:		Tuesday, January 08, 2019		Sheet	49 of 101
				Rev	1.0

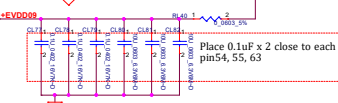
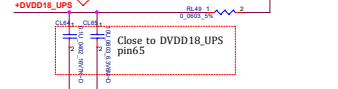
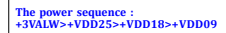
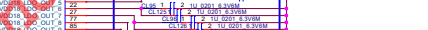
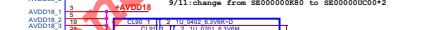
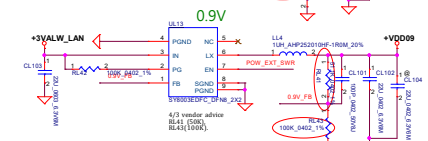
www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date:		Tuesday, January 08, 2019		Sheet	50 of 101
				Rev	1.0

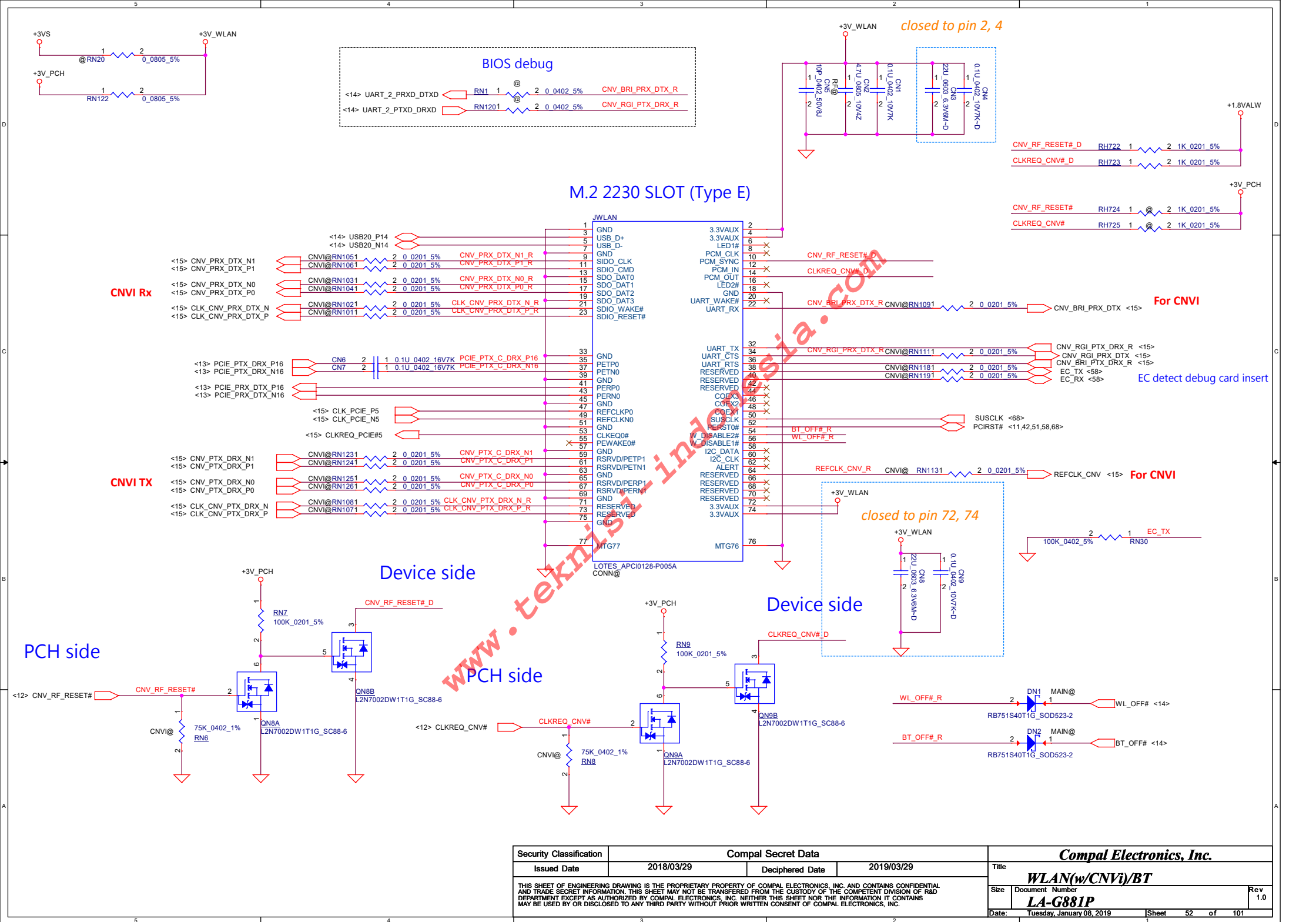
LL4 need close to rUL13.6 and placement the same layer



RTL8125CG	RL24	RL25	Voltage of VDD18
ES sample	50K	21.5K	2.0V
MP sample	50K	25K	1.8V



Security Classification	Compul Secret Data		<i>Compul Electronics, Inc.</i> LAN RTL8125	
Issued Date	2010/03/29	Deciphered Date	2010/03/29	Title LAN RTL8125
THIS SKETCH OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPUL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SKETCH MAY NOT BE TRANSMITTED FROM THE CUSTODY OF THE COMPETENT DIVISION OF BIRD ELECTRONICS, INC. WITHOUT THE AUTHORIZATION OF COMPUL ELECTRONICS, INC. ANY INFORMATION CONTAINED HEREIN IS UNCLASSIFIED AND BEING RELEASED BY THE UNITED STATES GOVERNMENT UNDER E.O. 13526.			Date LA-6881P 2010/03/29	
Date 2010/03/29			Sheet	51 of 101



www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date: Tuesday, January 08, 2019				Sheet	53 of 101
				Rev	1.0

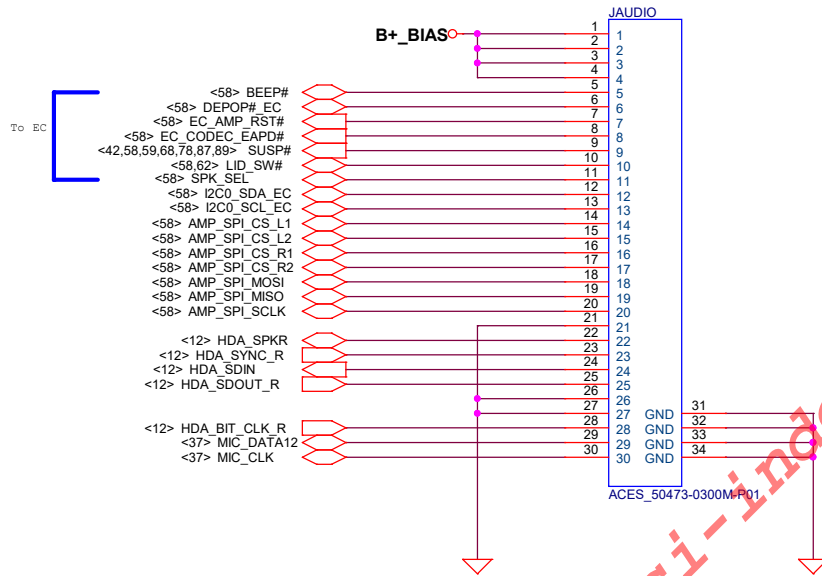
www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date:		Tuesday, January 08, 2019		Sheet	54 of 101
				Rev	1.0

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date: Tuesday, January 08, 2019				Sheet	55 of 101
				Rev	1.0

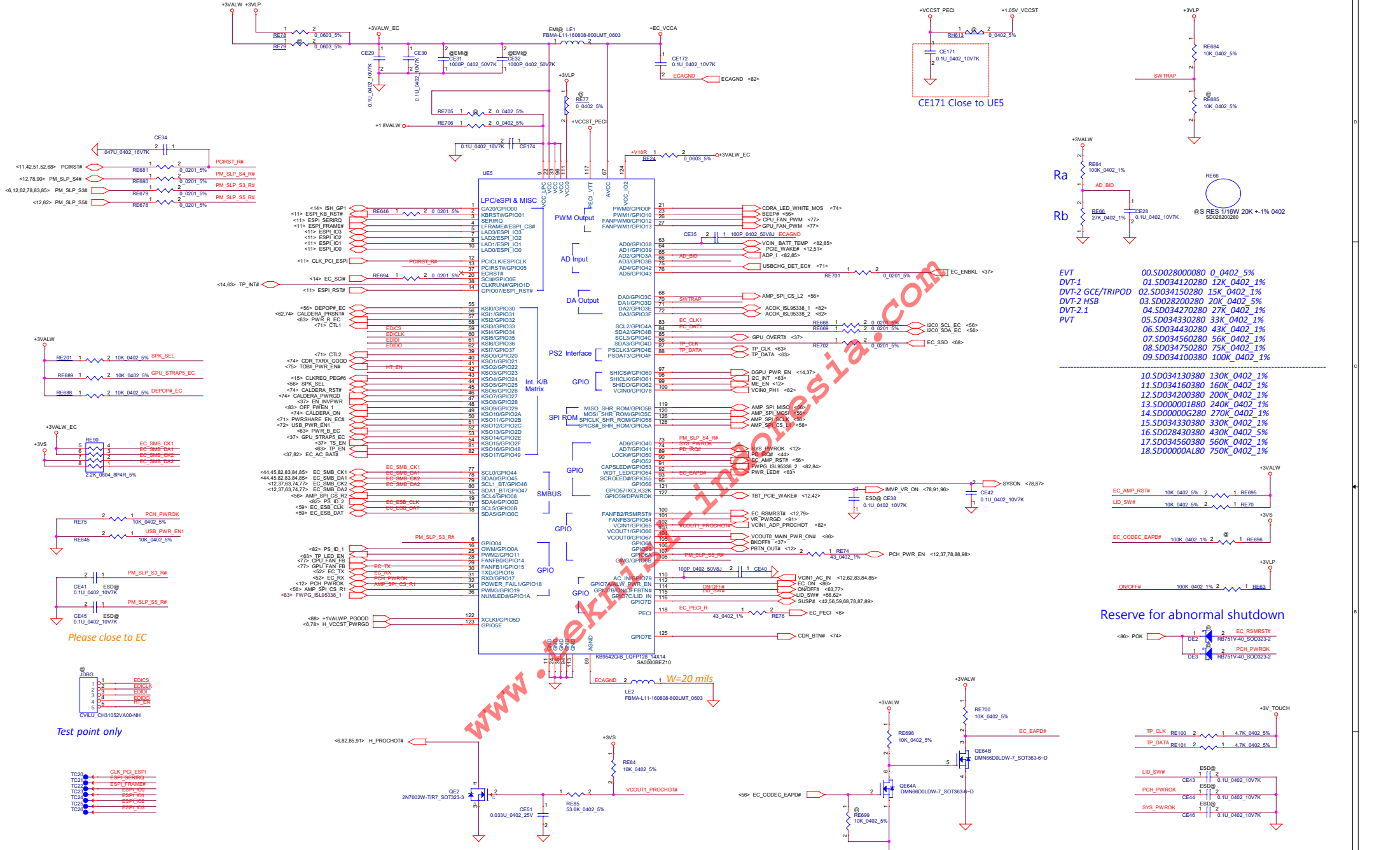
M/B to Audio/B



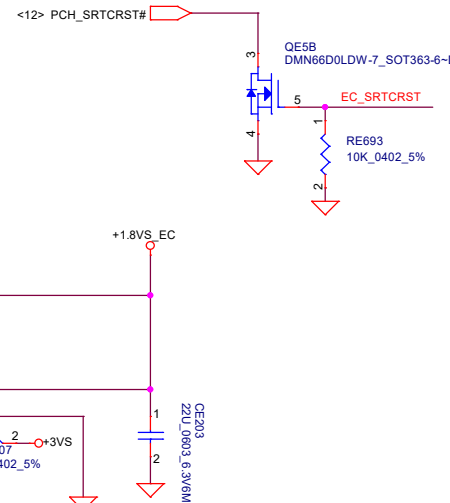
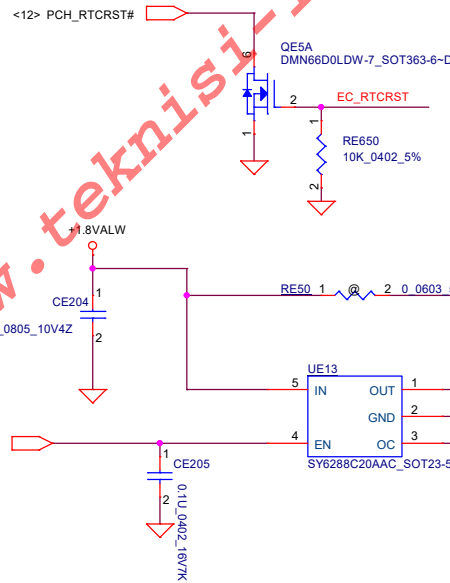
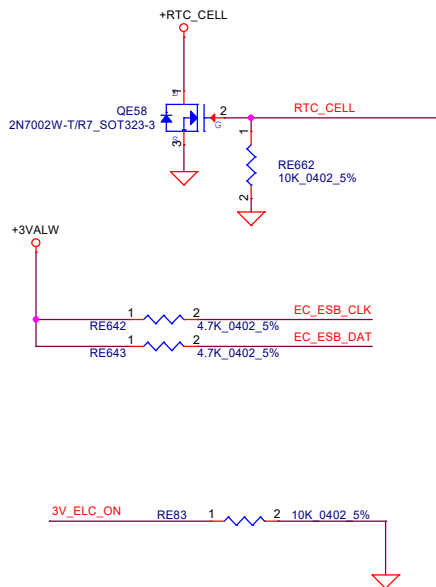
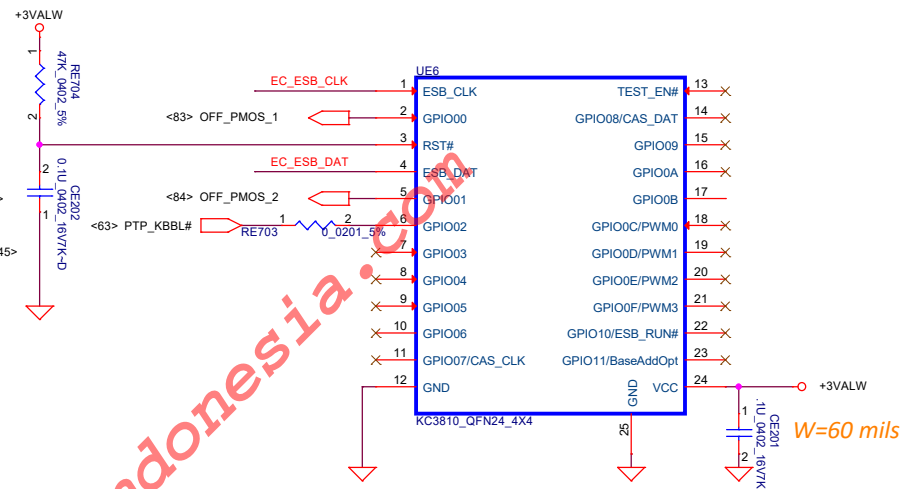
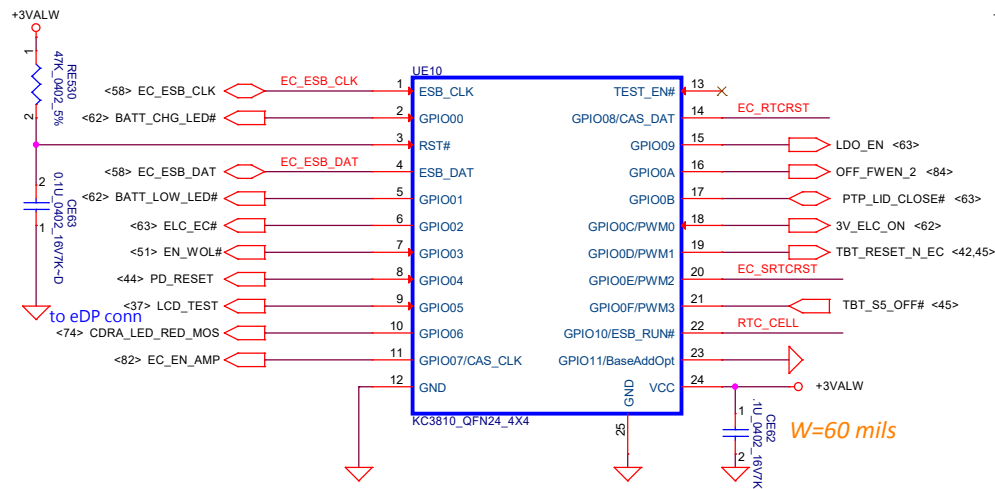
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Audio Conn.	
				Size	Rev
				Document Number	1.0
				Date:	Sheet
				Tuesday, January 08, 2019	56 of 101

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reversed	
				Size	Document Number
				LA-G881P	
Date: Tuesday, January 08, 2019				Sheet	57 of 101
				Rev	1.0



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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 TRANSMITTED 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.				P44-EC ENE-KB9542 QFN	
Size		Document Number		Rev	
Date:		Tuesday, January 08, 2019		Sheet 58 of 101	



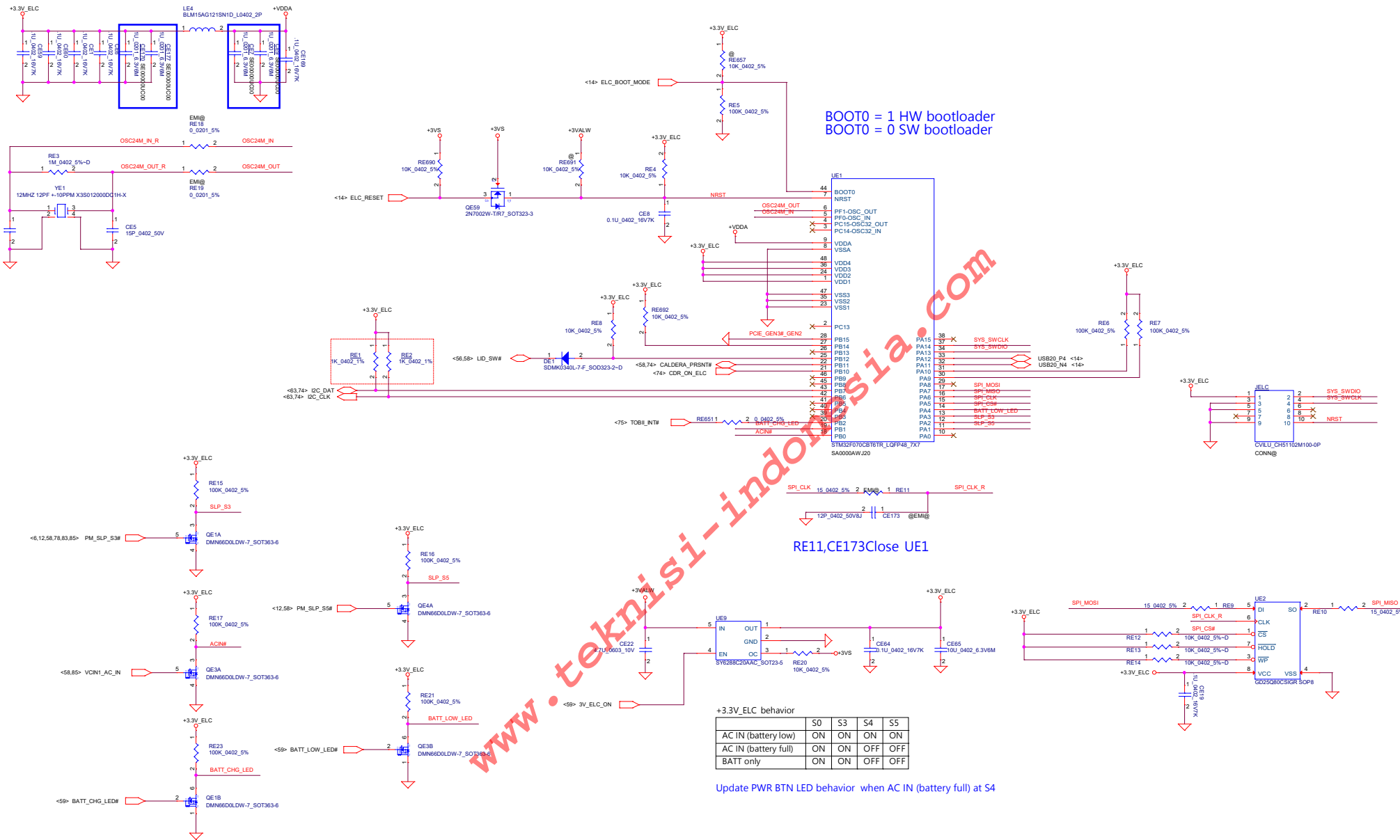
Security Classification		Compal Secret Data				Compal Electronics, Inc.			
Issued Date		2018/03/29		Deciphered Date		2019/03/29		Title	
								EC ENE-KB9022	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF RAD 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 1.0	
		LA-G881P							
Date:		Tuesday, January 08, 2019				Sheet 59 of 101			

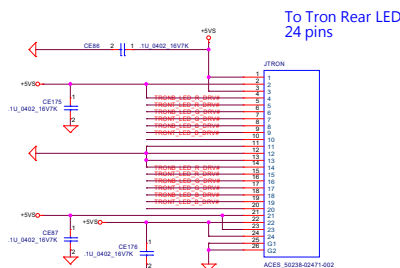
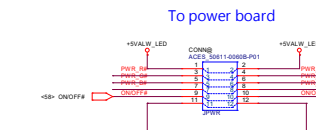
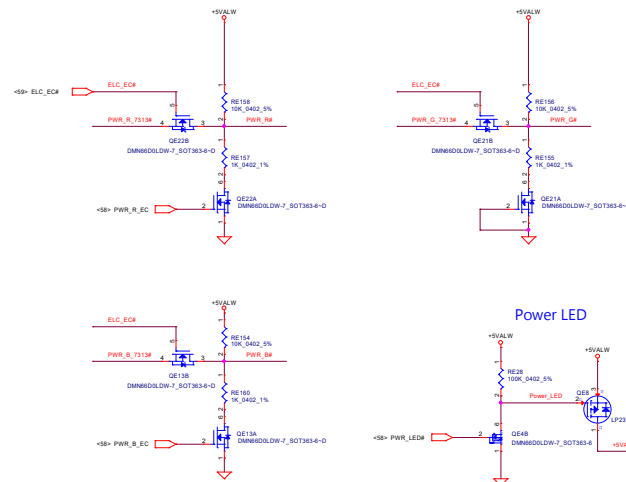
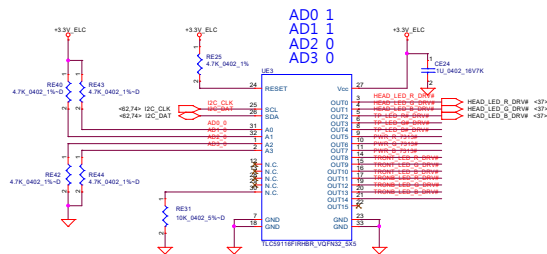
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reserved	
				Size	Document Number
				LA-G881P	
				Date:	Tuesday, January 08, 2019
				Sheet	60 of 101
				Rev	1.0

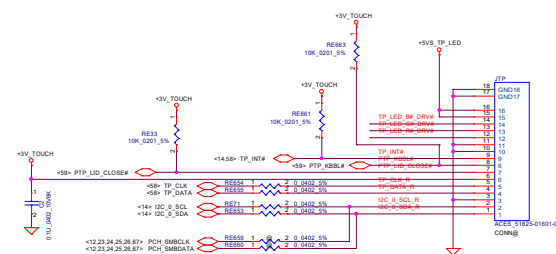
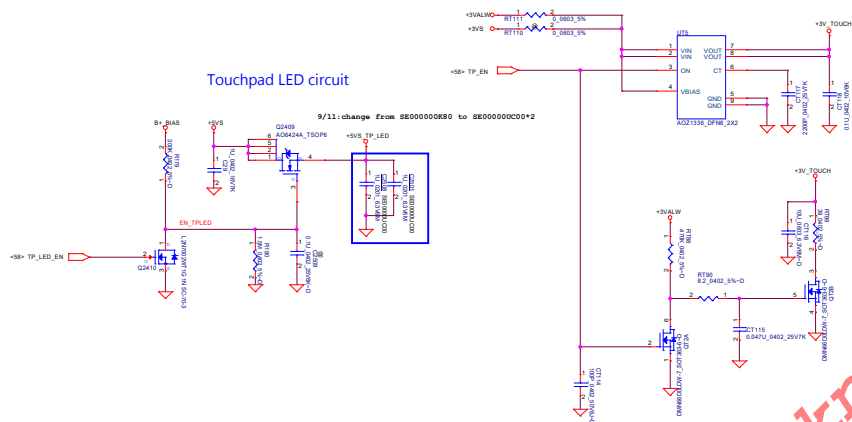
9/11: change from SE000000K80 to SE000000UC00*2





NOTE:
CE86 close to JTRON PIN1 and PIN3
CE175 close to JTRON PIN2 and PIN4
CE87 close to JTRON PIN21 and PIN23
CE176 close to JTRON PIN22 and PIN24

Touchpad LED circuit



To touchpad module

5V, TP_LED
5V, TP_LED
TP_LED_B_DRV
TP_LED_G_DRV
TP_LED_R_DRV
GND
ATTN
BACK LIGHT
LID_CLOSE
3VS
PS2_CLK
PS2_DAT
GND
I2C_CLK
I2C_DATA

Per Key pin define

Pin1~5 VBUS
Pin6 NC
Pin7~9 GND
Pin10 D+
Pin11 D-
Pin12~14 GND
Pin15 I2C_INT
Pin16 I2C_CLK
Pin17 I2C_DAT
Pin18 LDO_EN
Pin19~20 NC

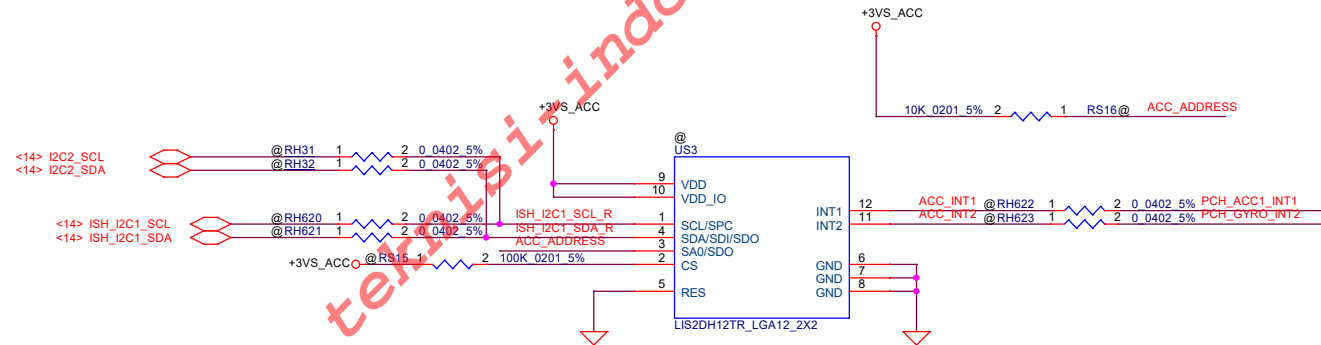
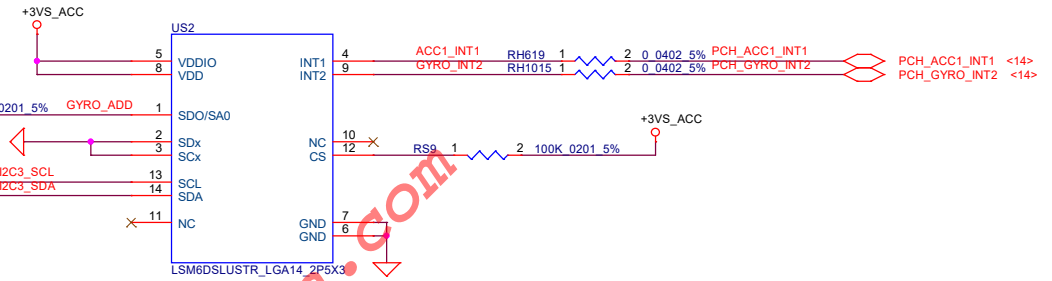
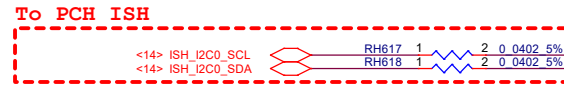
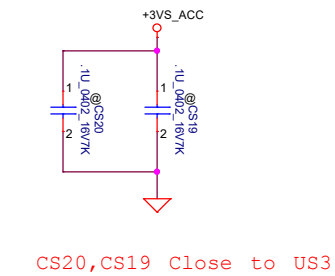
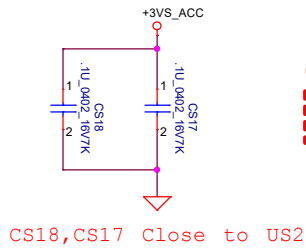
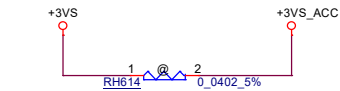
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Displacement Date	2018/03/29	Ver	1.0
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. NO PART MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.					
Doc No	ELC (2) TP/PW/HEAD/TRON/PK				Rev
Rev	1.0				1.0
Rev	1.0				1.0

www.teknisi-indonesia.com

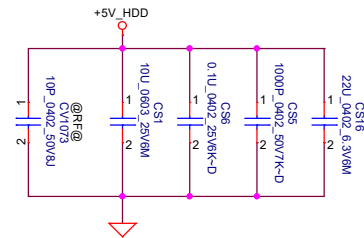
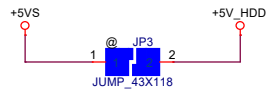
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				ELC (4) Per Key	
				Size	Document Number
				LA-G881P	
				Date:	Tuesday, January 08, 2019
				Sheet	64 of 101
				Rev	1.0

www.teknisi-indonesia.com

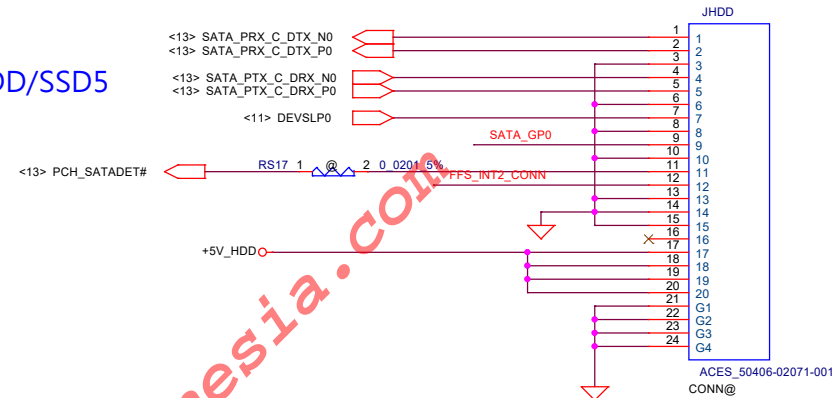
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Declassified Date	2018/03/29	Tab	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE REPRODUCED FROM THE CUSTODY OF THE CURRENT OWNER OF THIS DOCUMENT 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	LA-G881P
				Rev	1.0
				Issue	January 28, 2019
				Sheet	65 of 101



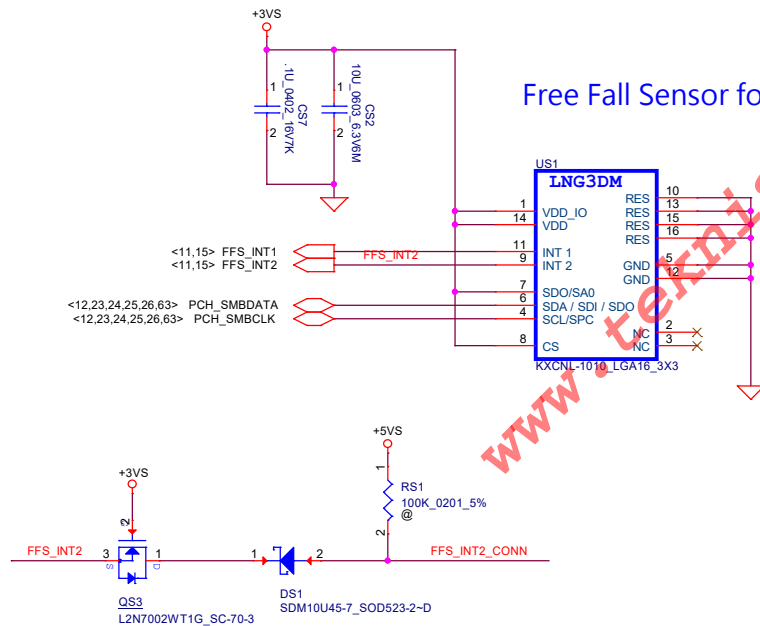
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	Title	Reversed
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT 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, January 08, 2019
				Sheet	66 of 101
				Rev	1.0



HDD/SSD5

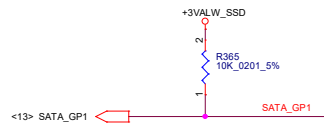
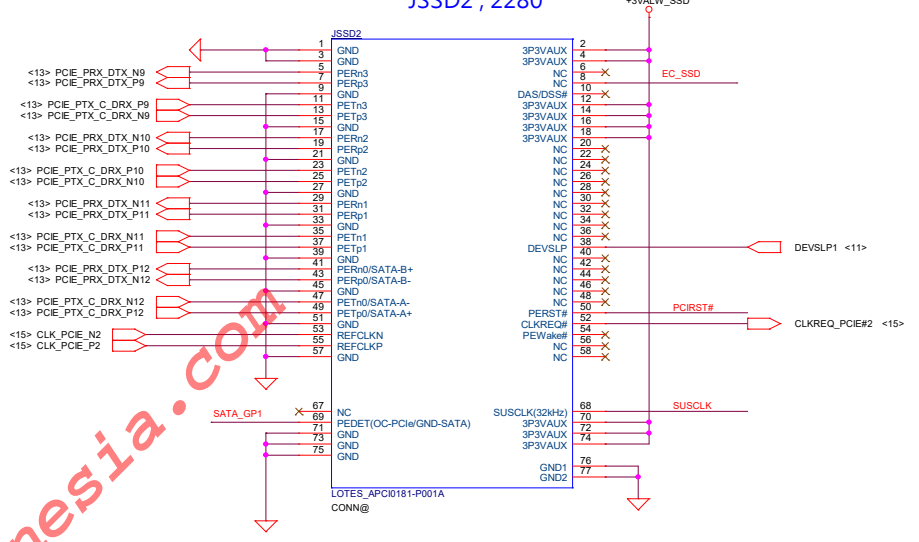


Free Fall Sensor for HDD

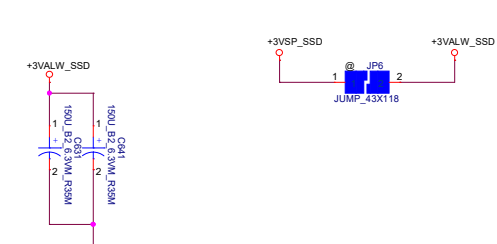
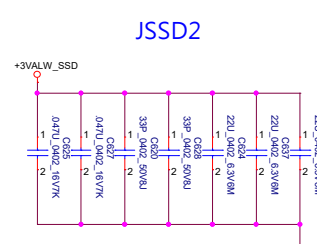
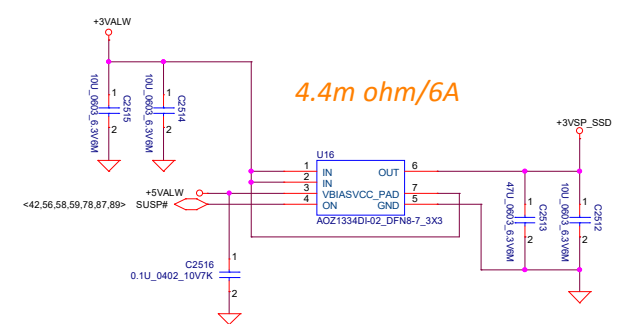


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				SATA HDD Connector	
Size	Document Number	Rev		1.0	
Date	Tuesday, January 08, 2019	Sheet	67	of	101

PCIe / SATA SSD
JSSD2, 2280



PEDET	Module Type
0	SATA
1	PCIe

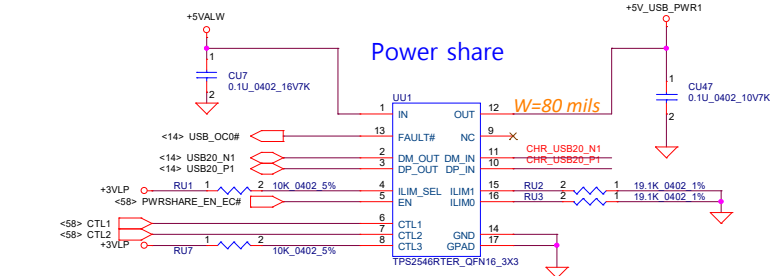


www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reserved	
				Size	Document Number
				LA-G881P	
				Date: Tuesday, January 08, 2019	Rev 1.0
				Sheet 69 of 101	

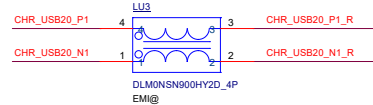
www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reserved	
				Size	Document Number
				LA-G881P	
Date: Tuesday, January 08, 2019				Sheet	70 of 101
Rev		1.0			

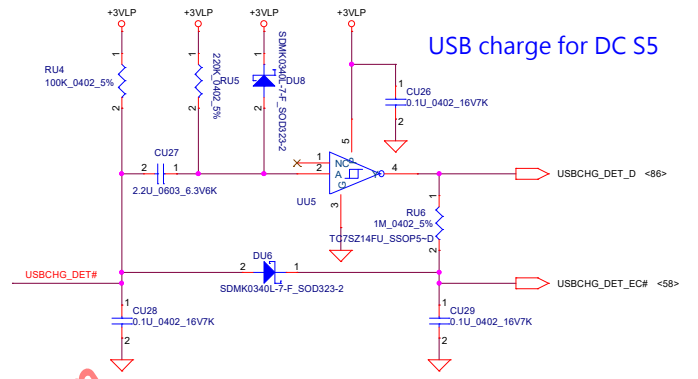
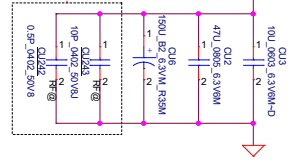


Power share

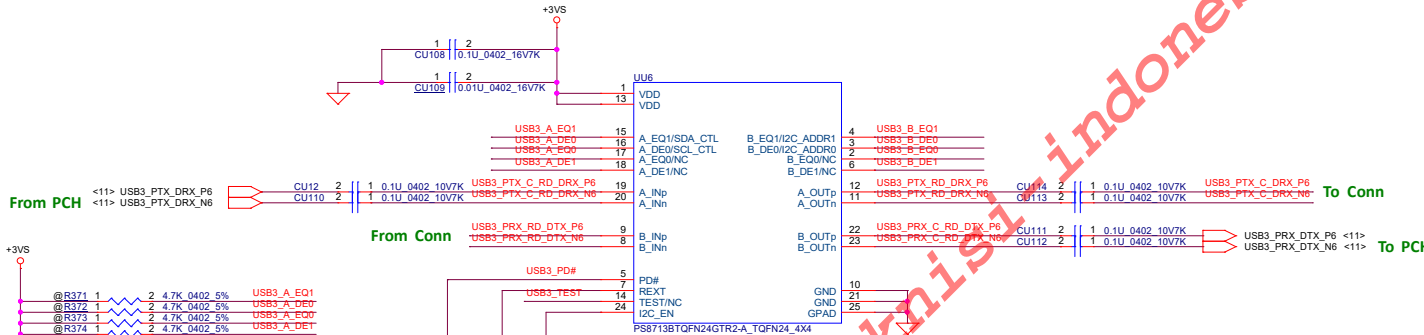
W=80 mils



Layout Note: For RF Place near USB1



USB charge for DC S5

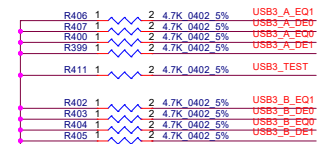
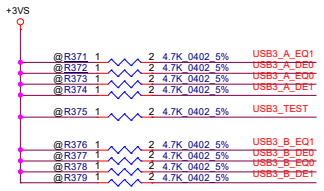


From PCH

From Conn

To Conn

To PCH

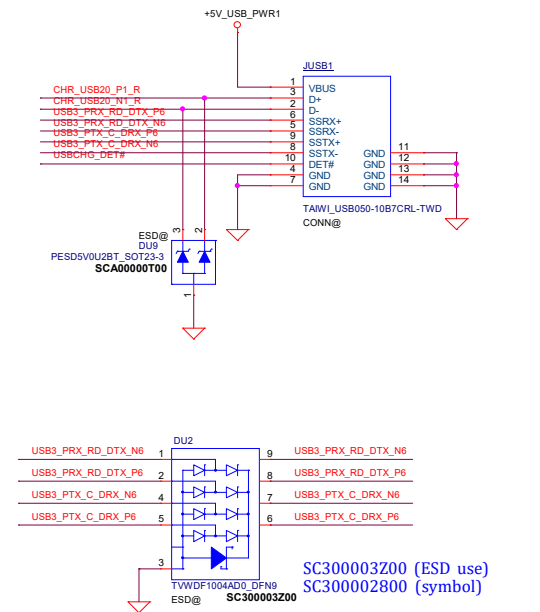


Parade_PS8713B

A_EQ0	A_EQ1	B_EQ0	B_EQ1	Recommended EQ
0	0	0	0	loss up to 9.5dB
0	1	0	1	loss up to 4.5dB
1	0	1	0	loss up to 13dB
1	1	1	1	loss up to 7.5dB

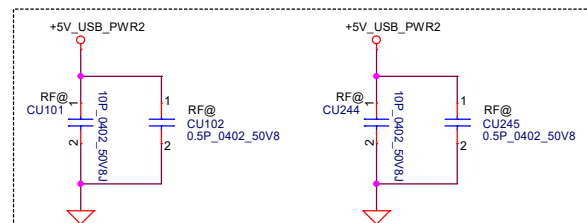
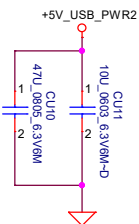
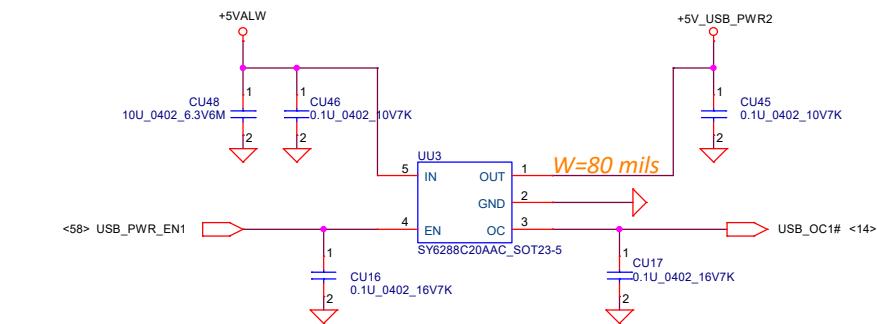
Both A_EQ0&B_EQ1 have internal pull-down 150k
PD# pin have internal pull-up 150k

USB3_TEST
LFPS swing adjust. 3.3V tolerant.
Internally pulled down 150KΩ.
L: Normal LFPS swing (default)
H: Tune down LFPS swing

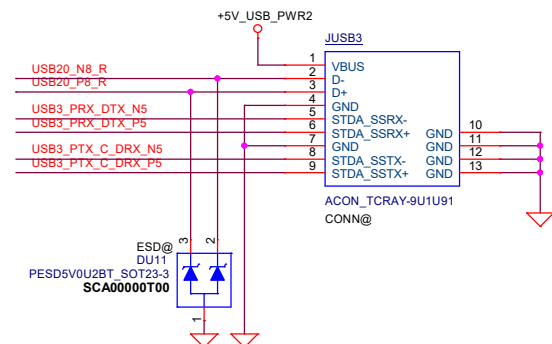
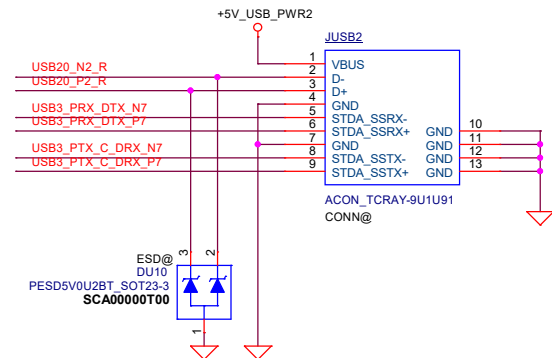
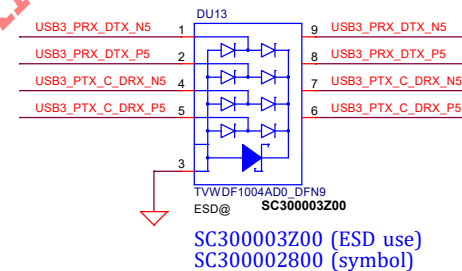
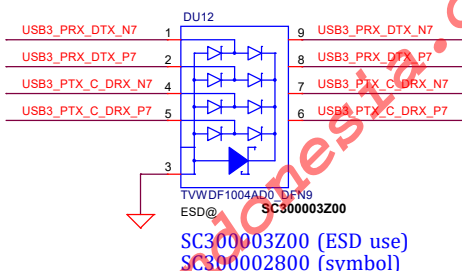
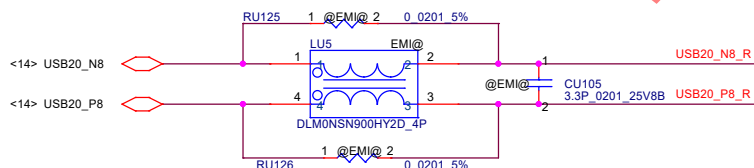
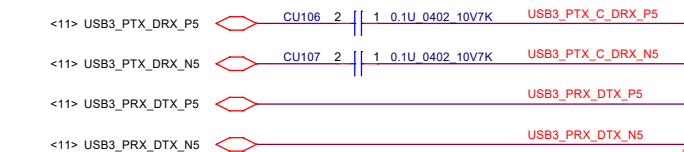
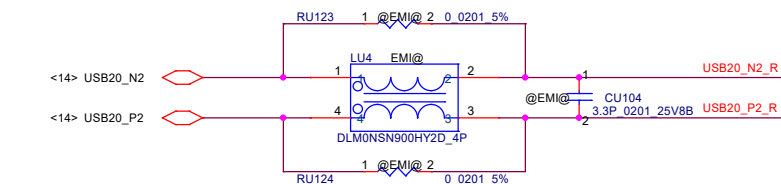
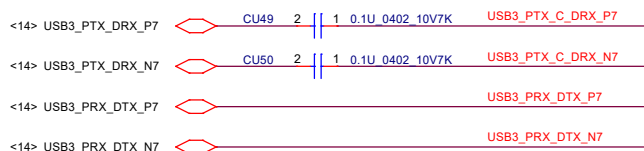


SC300003200 (ESD use)
SC300002800 (symbol)

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	Title	USB3.0/2.0 TPS2546/PS8713
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	Rev
				Tuesday, January 08, 2019	1.0
				Sheet	71 of 101



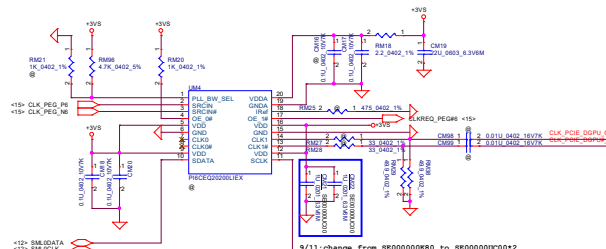
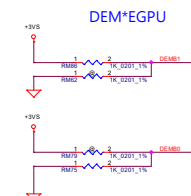
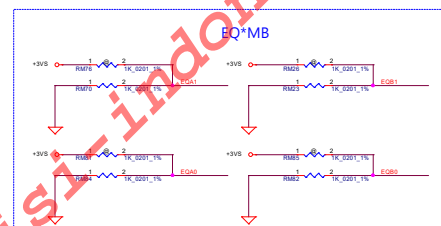
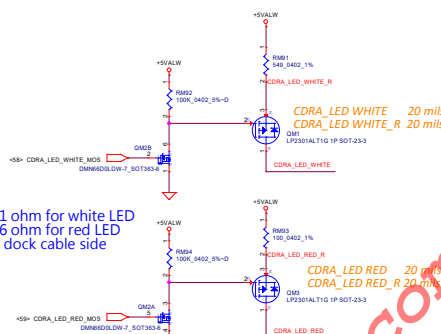
Layout Note: For RF
Place near JUSB2 JUSB3



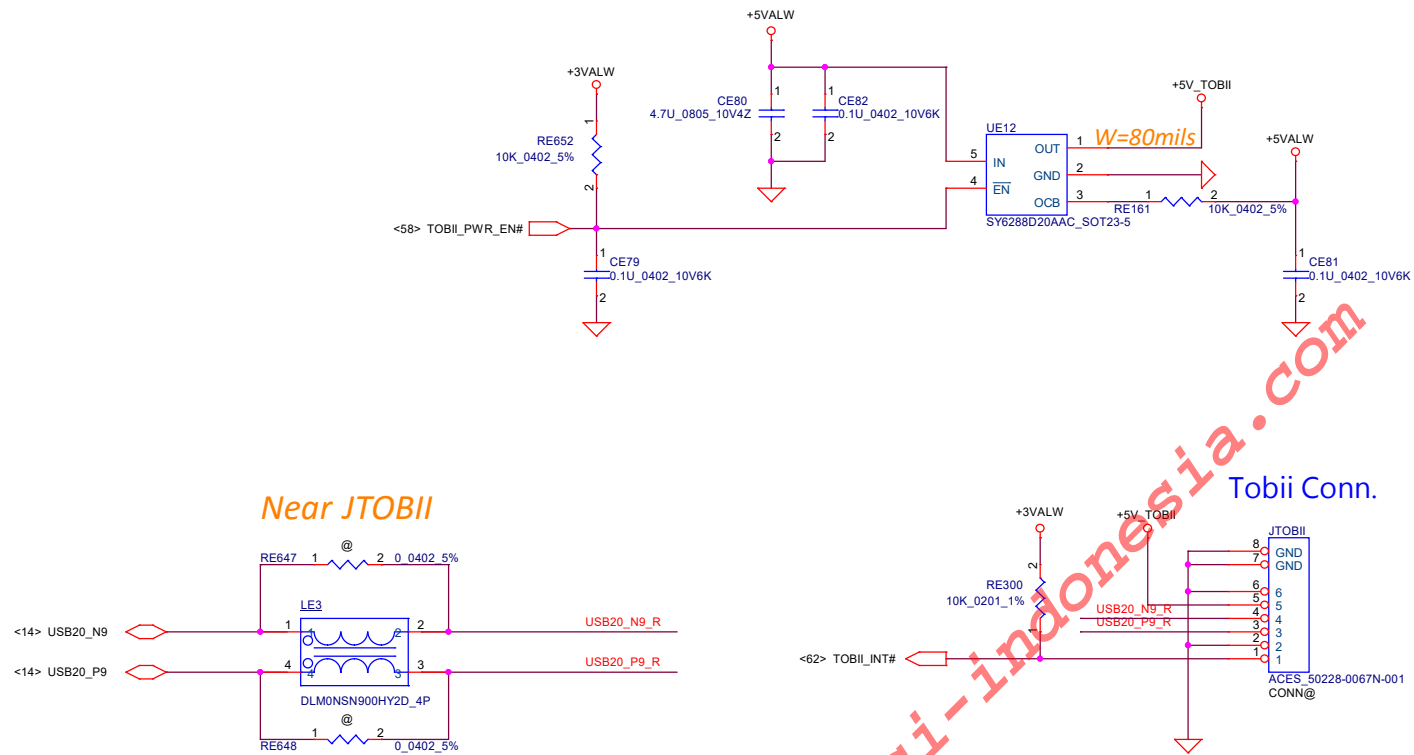
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				USB3.0/2.0 (TypeA port)	
Size	Document Number	Rev		1.0	
LA-G881P		Date		Tuesday, January 08, 2019	
Sheet		72		of 101	

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reserved	
				Size	Document Number
				LA-G881P	
Date: Tuesday, January 08, 2019				Sheet	73 of 101
Rev		1.0			



Security Classification	Compul Secret Data		Compul Electronics, Inc.	
Issued Date	20180329	Declassified Date	20190329	Title
THIS BEST OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAUL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS DRAWING MAY NOT BE REPRODUCED FROM THE CUSTODY OF THE COMPETITOR DIVISION OF THIS COMPANY WITHOUT BEING AUTHORIZED BY COMPAUL ELECTRONICS, INC. IF THESE TRADE SECRET INFORMATION IS CONTAINED HEREIN, IT SHALL BE DESTROYED OR DISPOSED BY THIS PARTY WITHIN FORTY EIGHT HOURS OF THE DATE OF THIS DOCUMENT.			Size	
			Doc#	
			LA-G881P	
			Rev	
			1	

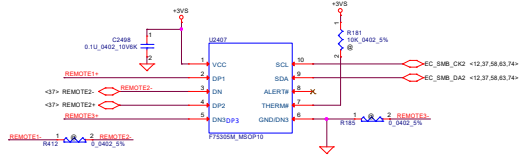


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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.				Tobii (17" Only)	
				Size	Document Number
				LA-G881P	
Date: Tuesday, January 08, 2019		Sheet 75 of 101		Rev 1.0	

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reserved	
				Size	Document Number
				LA-G881P	
				Date:	Tuesday, January 08, 2019
				Sheet	76 of 101
				Rev	1.0

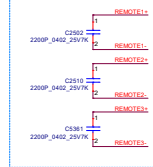
Fintek thermal sensor



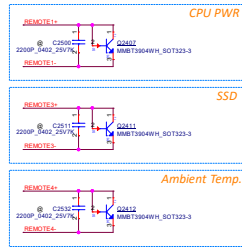
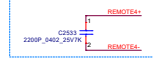
Address 1001_101xb

REMOTE1,2,3,4 (+/-) :
Trace width/space:10/10 mil
Trace length:<8"

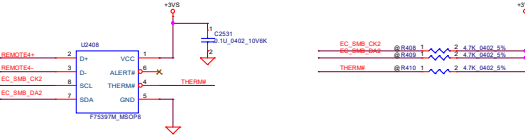
Close U2407



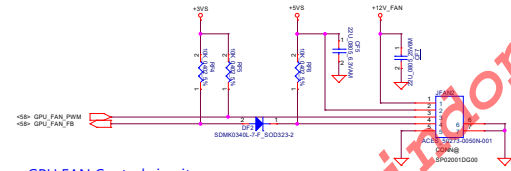
Close U2408



www.teknisi-indonesia.com



CPU FAN Control circuit



GPU FAN Control circuit

Power ON circuit

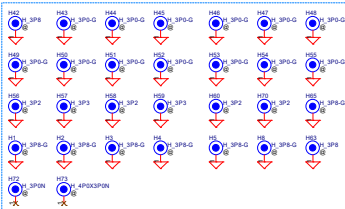
Power Button-TOP side



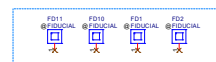
Power Button-BOT side



PCB Screw Hole

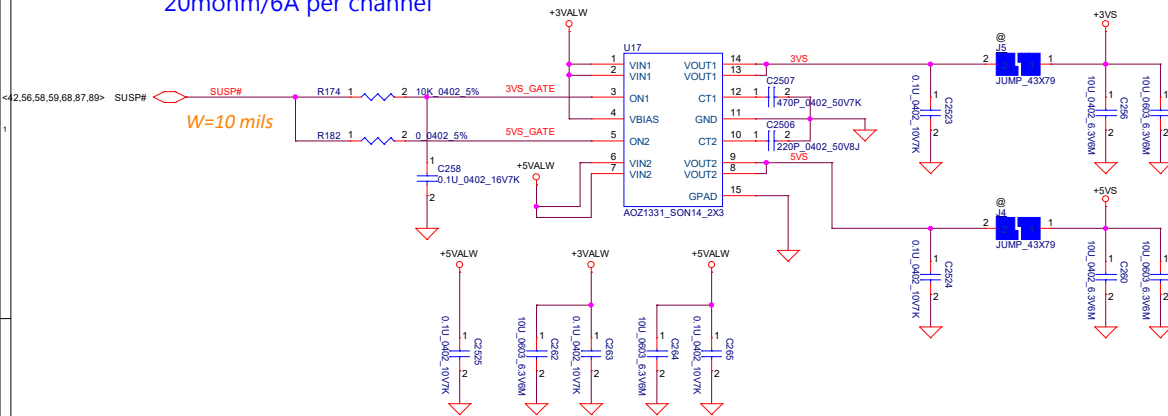


Fiducial Mark

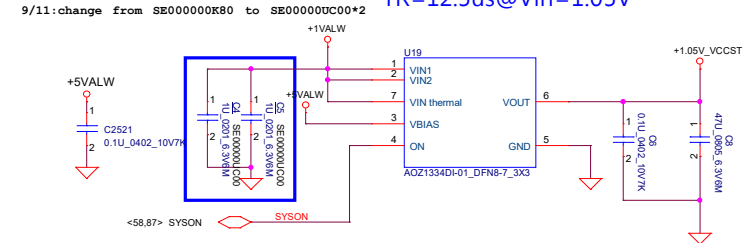


Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Discontinued Date	2018/03/29	Ver
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF COMPAL ELECTRONICS, INC. ANY UNAUTHORIZED REPRODUCTION OR TRANSMISSION OF THIS SHEET IS STRICTLY PROHIBITED. ANY VIOLATION OF THIS POLICY WILL BE PROSECUTED TO THE FULL EXTENT OF THE LAW.				Rev
Title				1/1
Part No.				LA-G881P
Date				2018/03/29
Sheet				1/1

+5VS and +3VS switch
20mohm/6A per channel

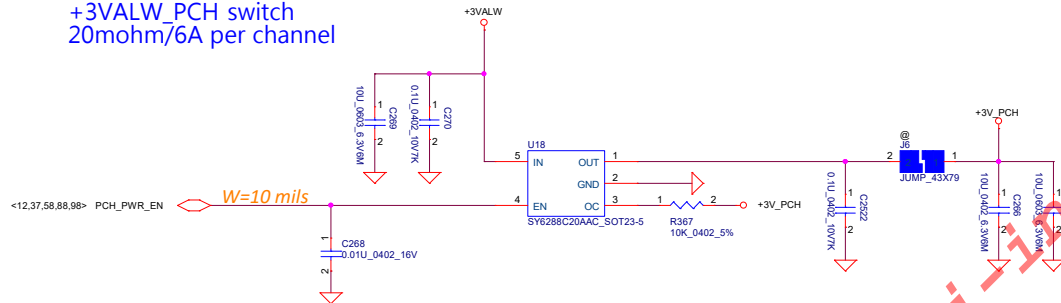


+VCCST switch
4.4mohm/6A
TR=12.5us@Vin=1.05V

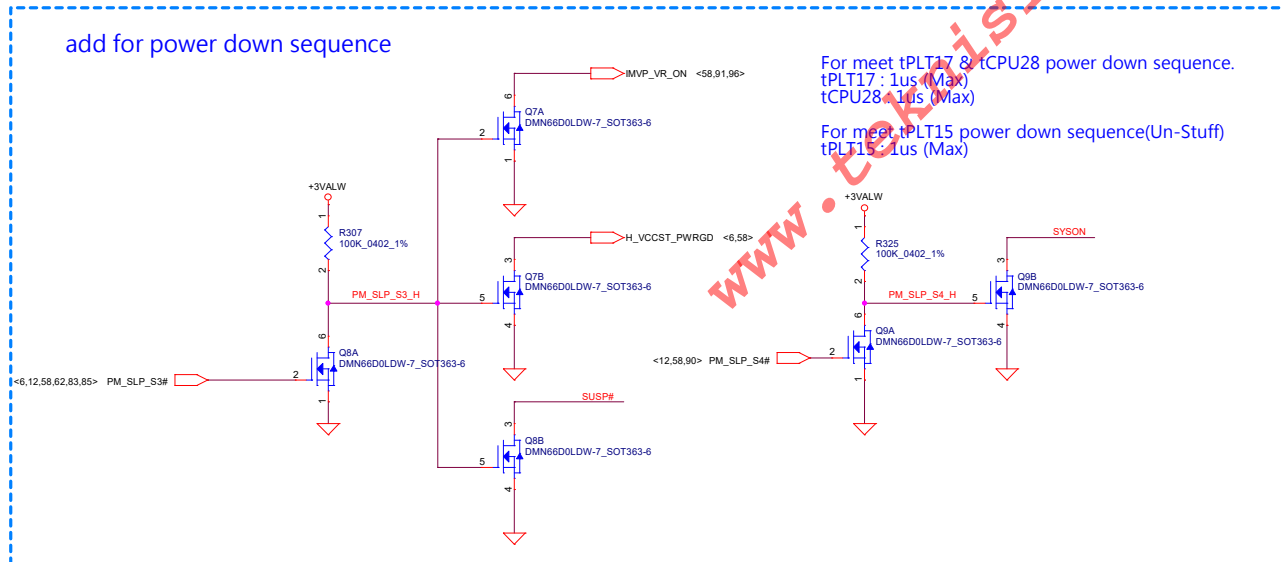


Main source A C S A00008A800 (SI C AOZ1334DI-01_DFN8-7_3X3) N8P 9 NGLE LOADS W
2nd source APEC S A00006V300 (SI C APE8939GN8_DFN8-7_3X3) N8P L OADS WTC H
3rd source E MC S A00008R600 (SI C E M201V_DFN8-7_3X3) N8P L OADS WTC H

+3VALW_PCH switch
20mohm/6A per channel



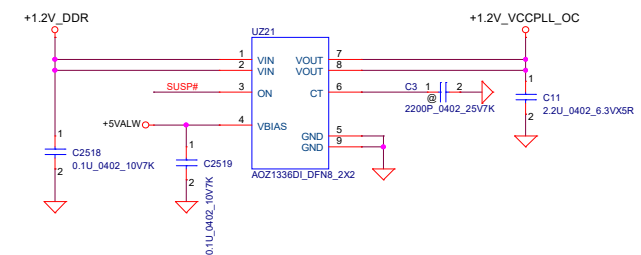
add for power down sequence



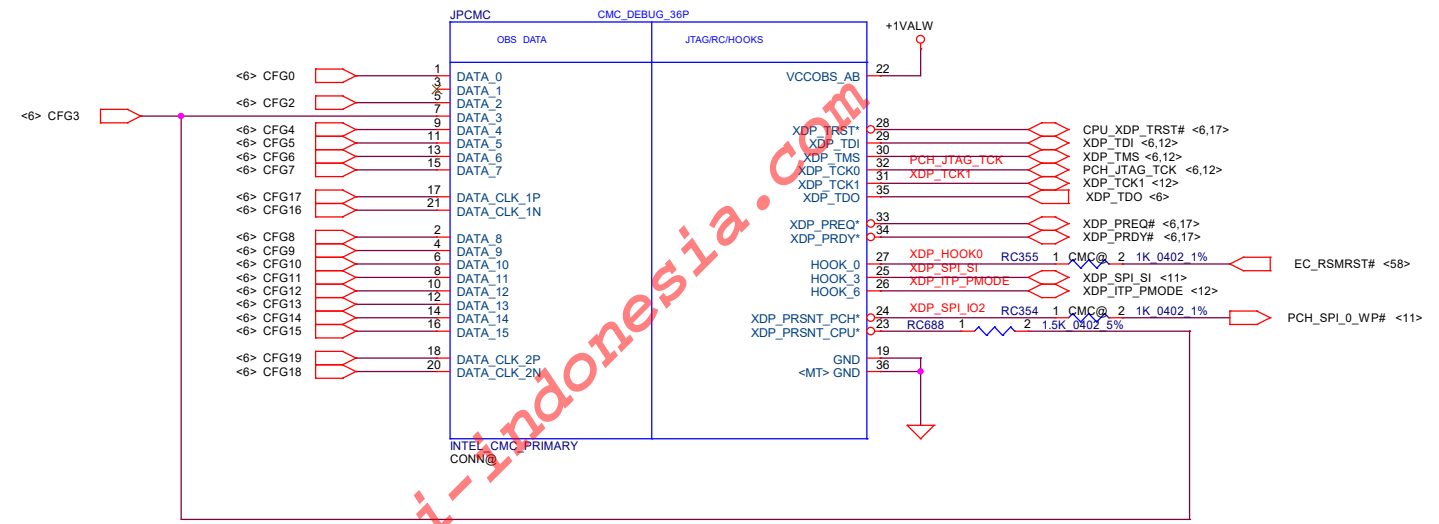
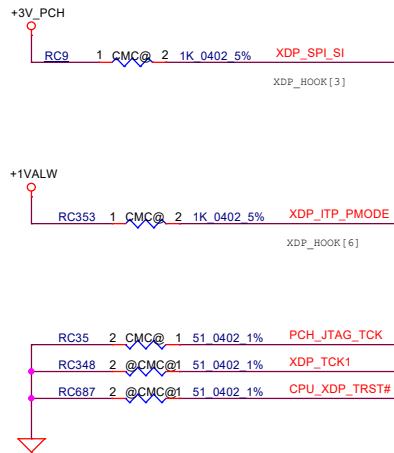
For meet tPLT17 & tCPU28 power down sequence.
tPLT17: 1us (Max)
tCPU28: 1us (Max)

For meet tPLT15 power down sequence(Un-Stuff)
tPLT15: 1us (Max)

+1.2V_VCCPLL_OC switch
22mohm/4A
TR=520us@Vin=0.8V



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	Title	DC/DC Interface
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:	Rev
				Tuesday, January 08, 2019	1.0
				Sheet	78 of 101



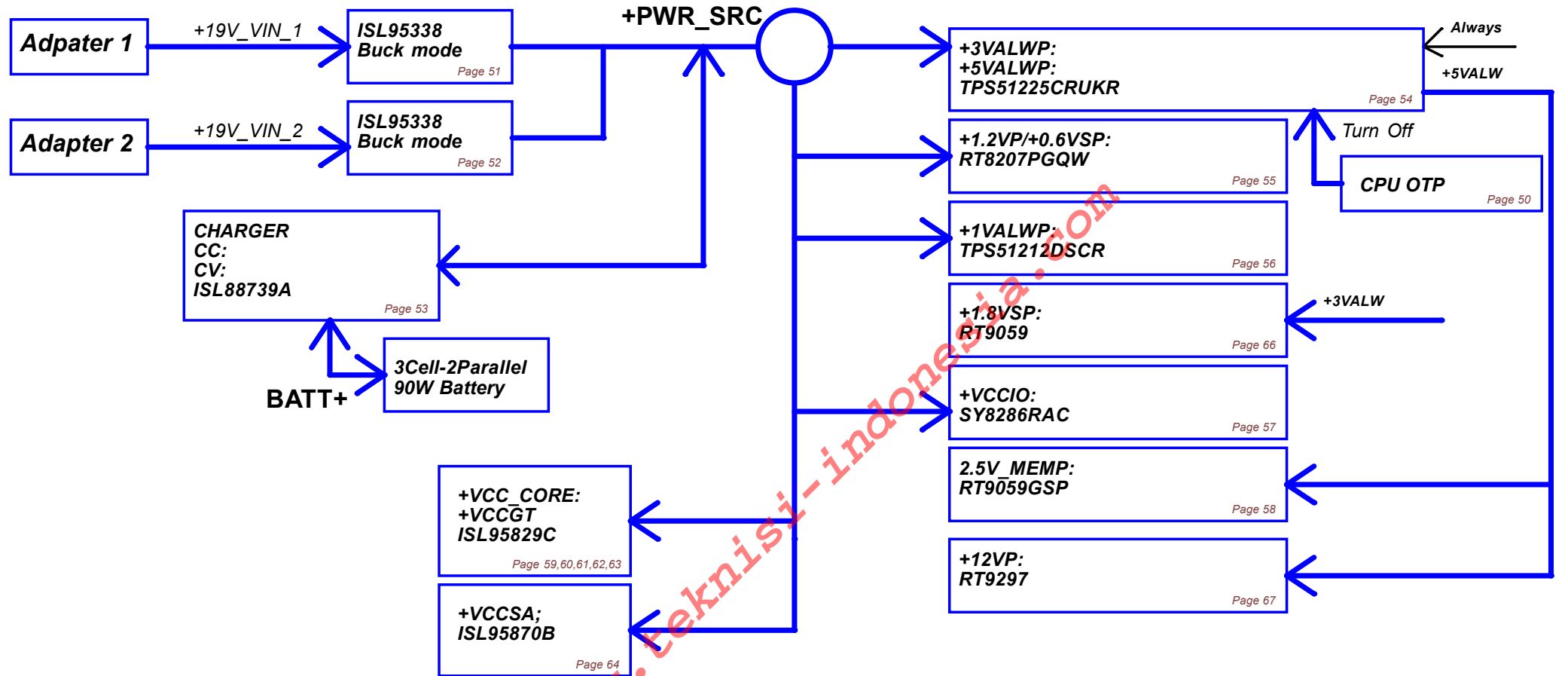
www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				CMC Conn	
Size		Document Number			Rev
Date		Tuesday, January 08, 2019			1.0
Sheet		79 of 101			

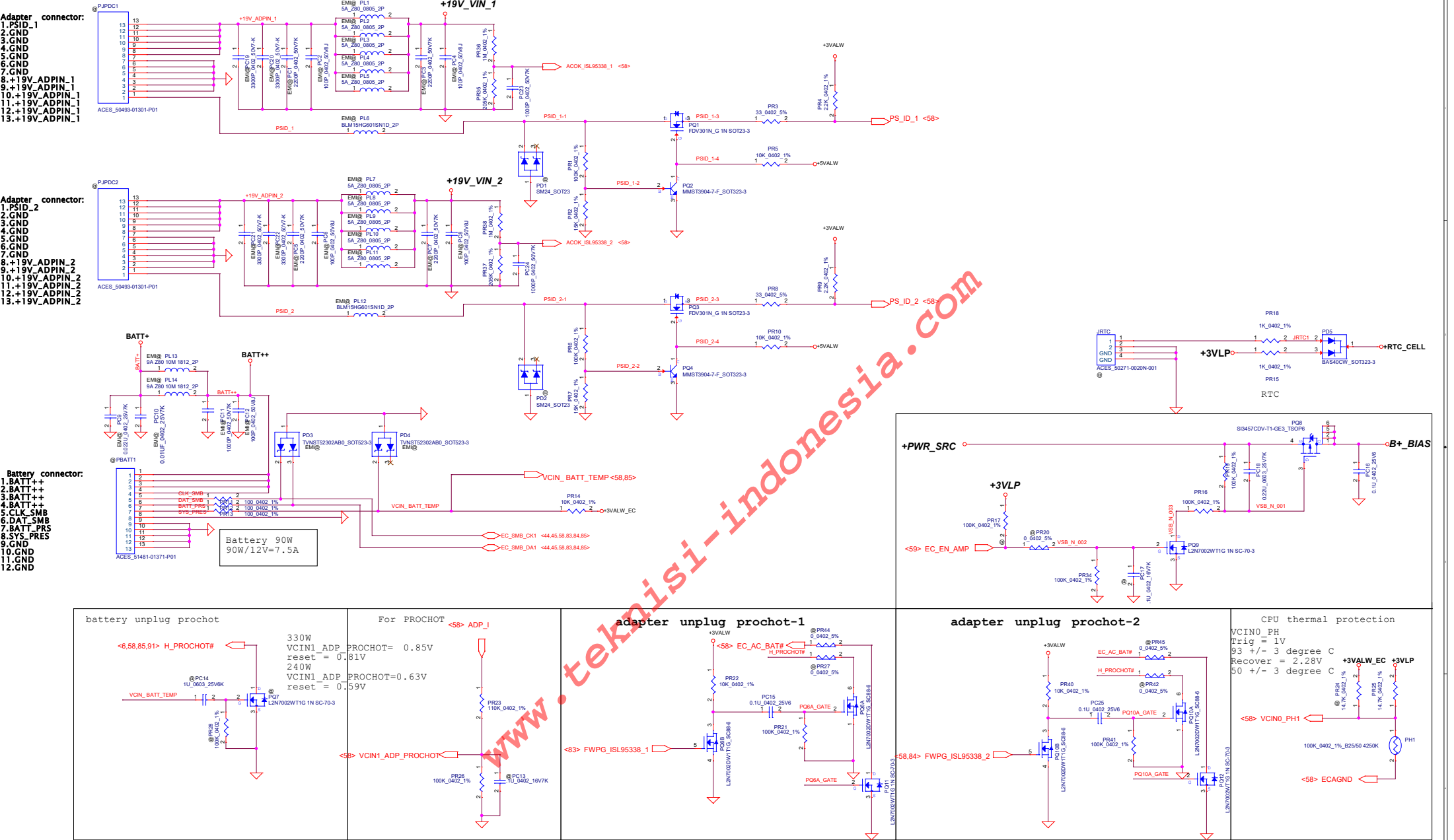
www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/03/29	Deciphered Date	2019/03/29	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.				Reserved	
				Size	Document Number
				LA-G881P	
				Date:	Tuesday, January 08, 2019
				Sheet	80 of 101
				Rev	1.0

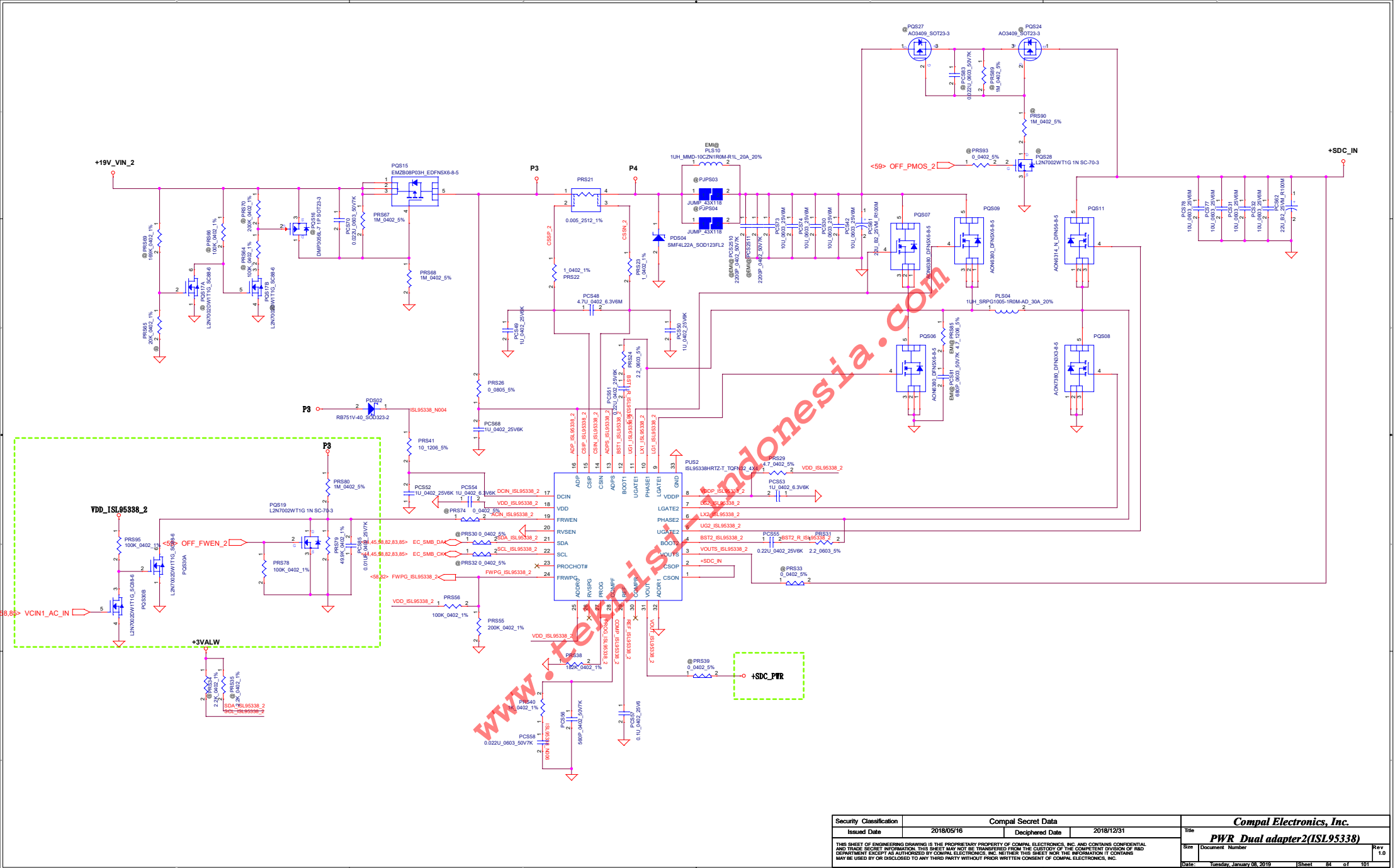
Power block



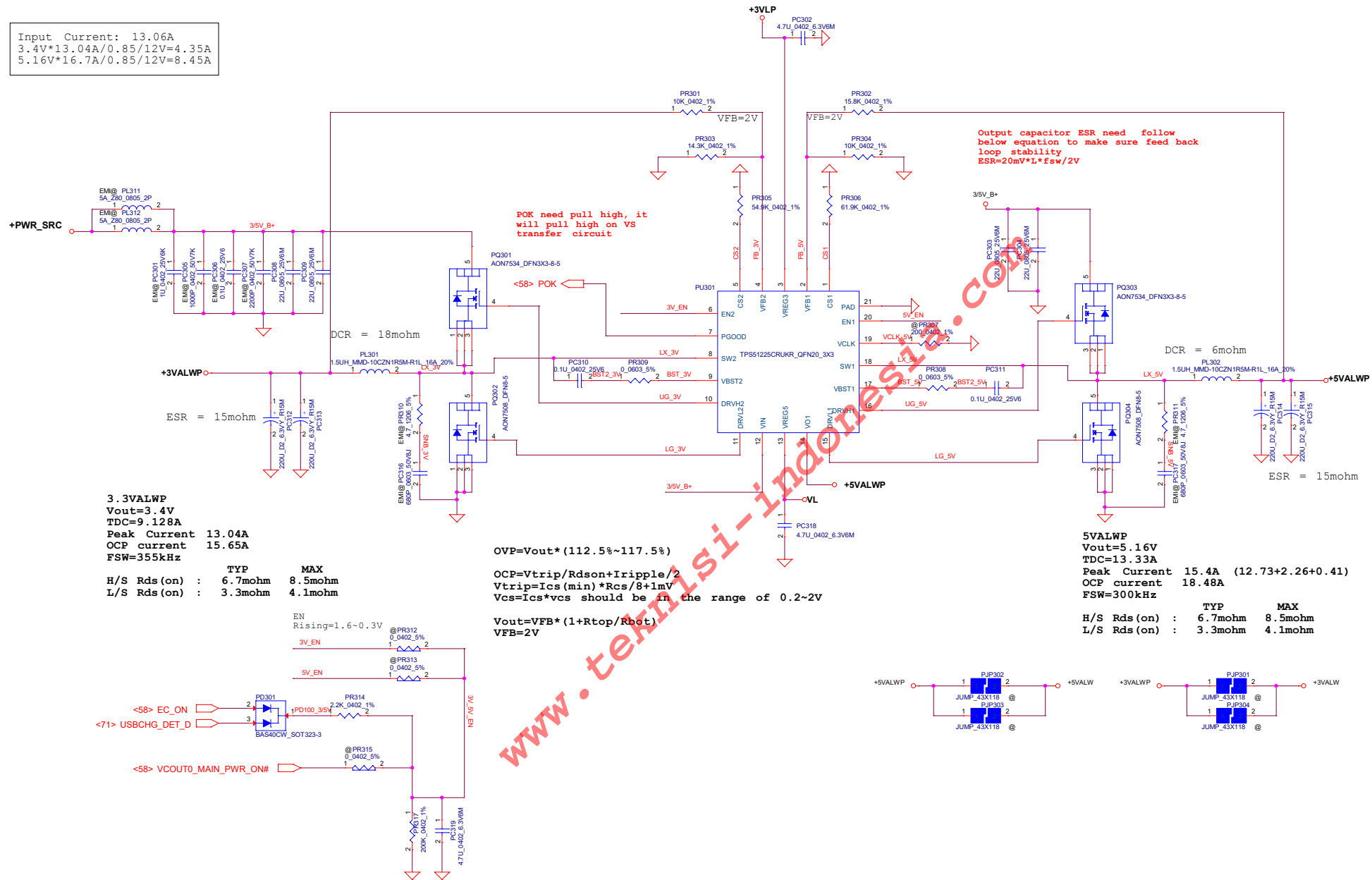
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/05/16	Deciphered Date	2019/03/29	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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
				Date	Rev
				Tuesday, January 08, 2019	1.0
				Sheet	81 of 101



Security Classification		Compal Secret Data	
Issued Date	2018/05/16	Deciphered Date	2018/12/31
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		Compal Electronics, Inc.	
PWR_DC/BATT Conn/OTP/RTC		Rev	
Size		Document Number	
Date		Tuesday, January 08, 2019	
Sheet		82 of 101	

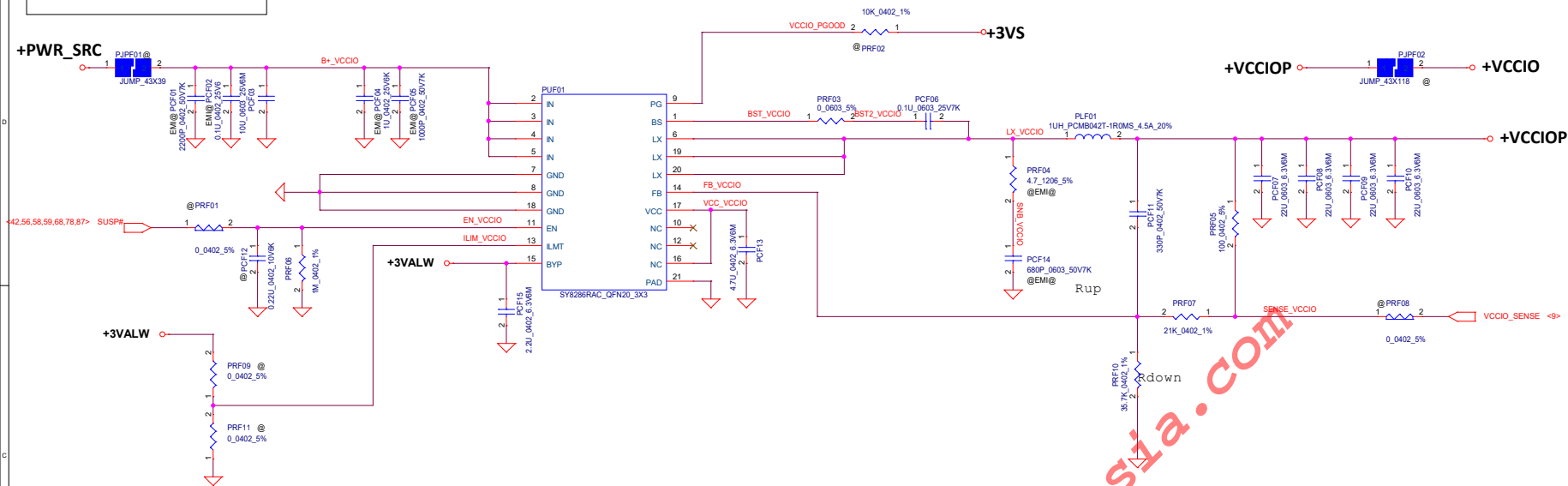


Input Current: 13.06A
 $3.4V \times 13.04A / 0.85 / 12V = 4.35A$
 $5.16V \times 16.7A / 0.85 / 12V = 8.45A$



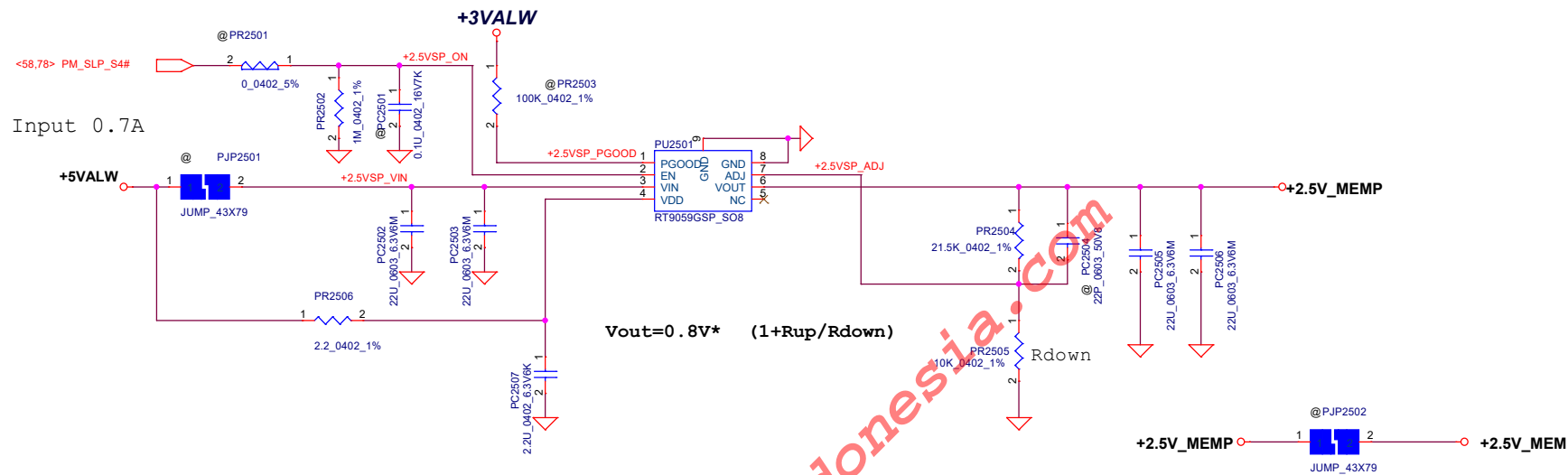
www.termlsi-indonesia.com

Input Current: 0.6A
 $0.95V \times 6.4A / 0.85 / 12V = 0.6A$



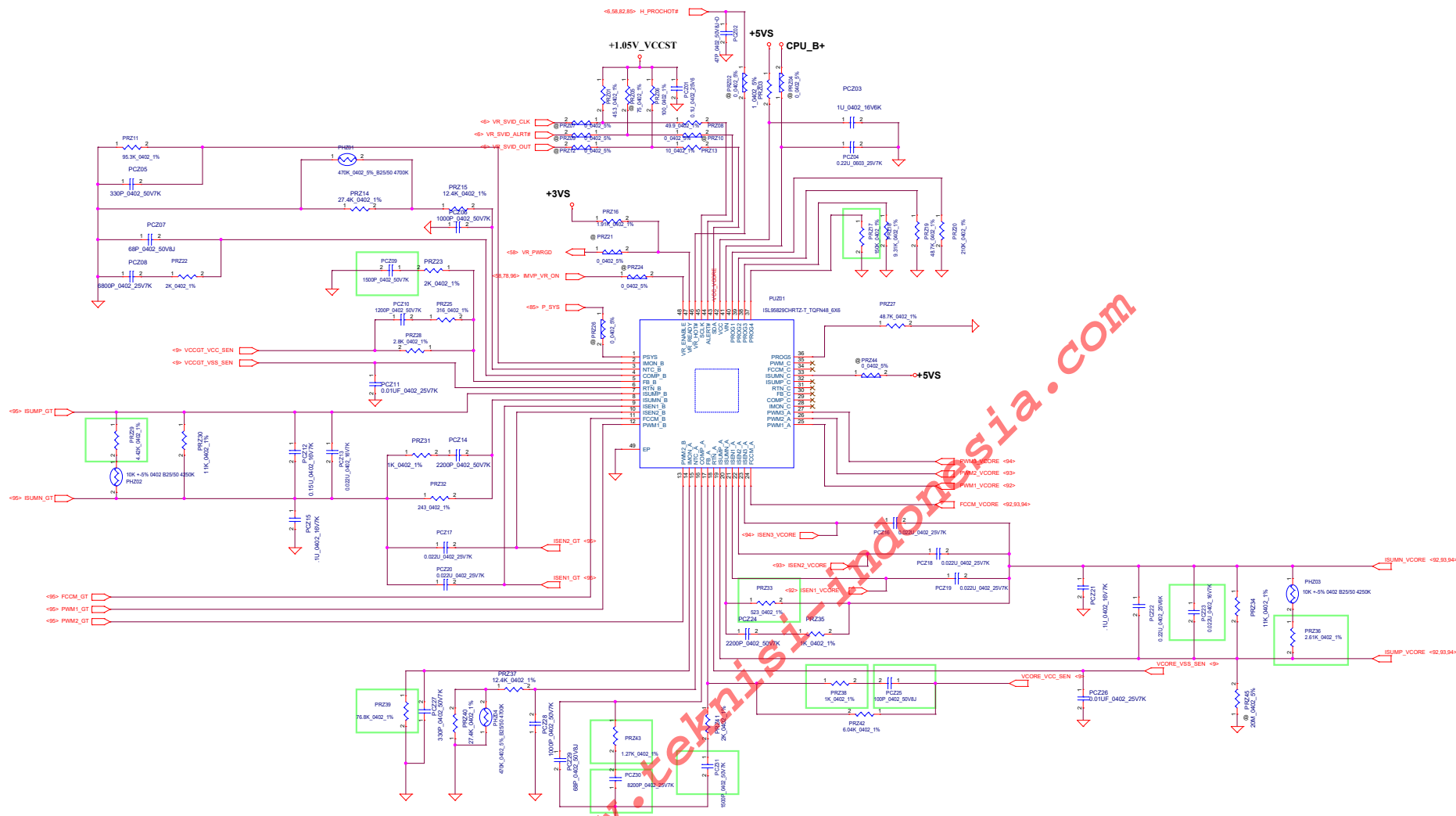
+VCCIOP (0.95V)
TDC 4.48 A
Peak Current 6.4 A
OCP Current 9 A Fix by IC
TYP MAX
Choke DCR 24.0mohm , 27.0mohm

Input Current:0.41A
 $2.5V \times 0.7A / 0.85 / 5V = 0.41A$

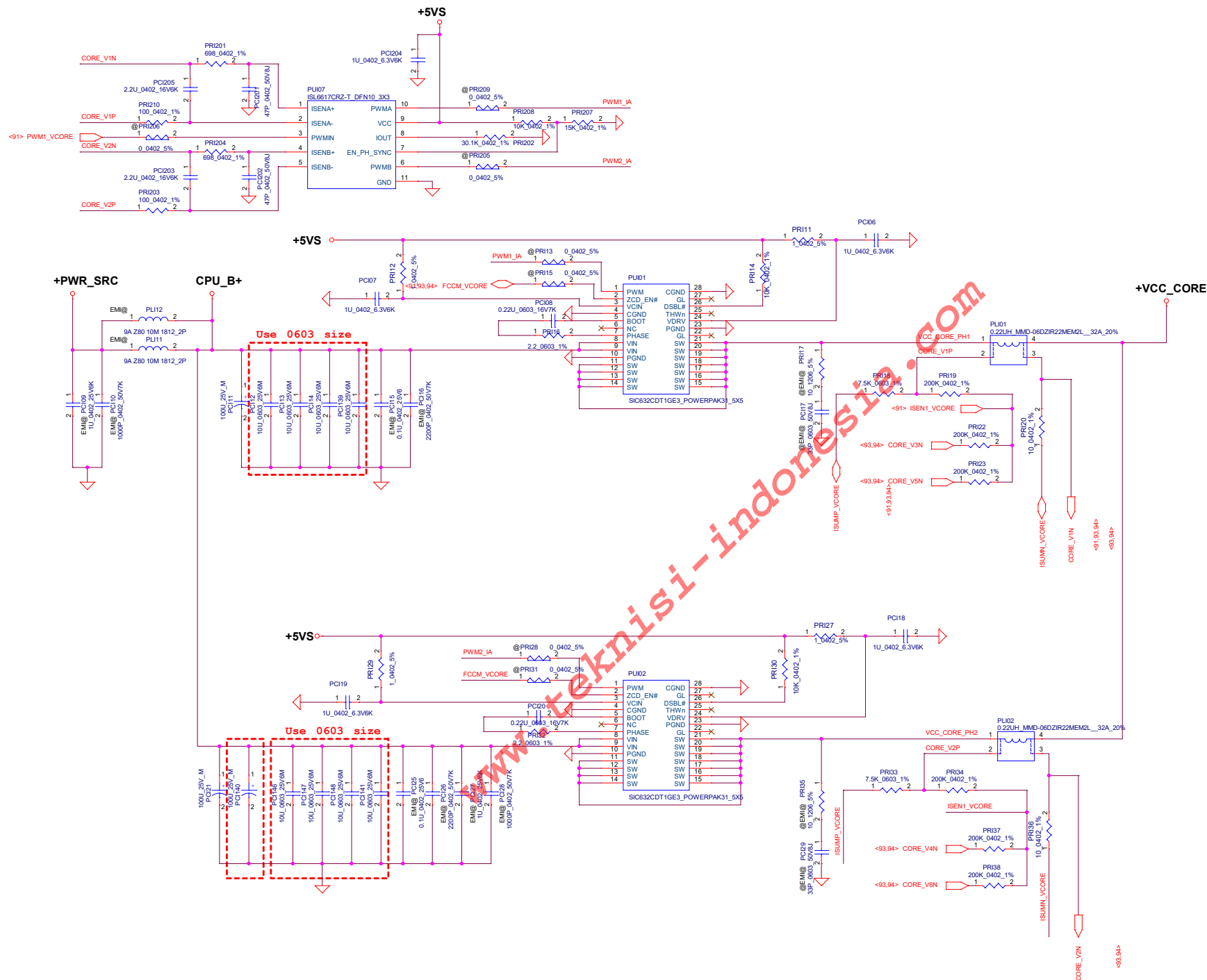


+2.5V MEM
 TDC 0.49A
 Peak Current 0.7A
 OCP Current 3.5A

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/05/16	Deciphered Date	2018/12/31	Title	PWR +2.5V MEM
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
				LA-G881P	Rev 1.0
				Date:	Tuesday, January 08, 2019
				Sheet	90 of 101

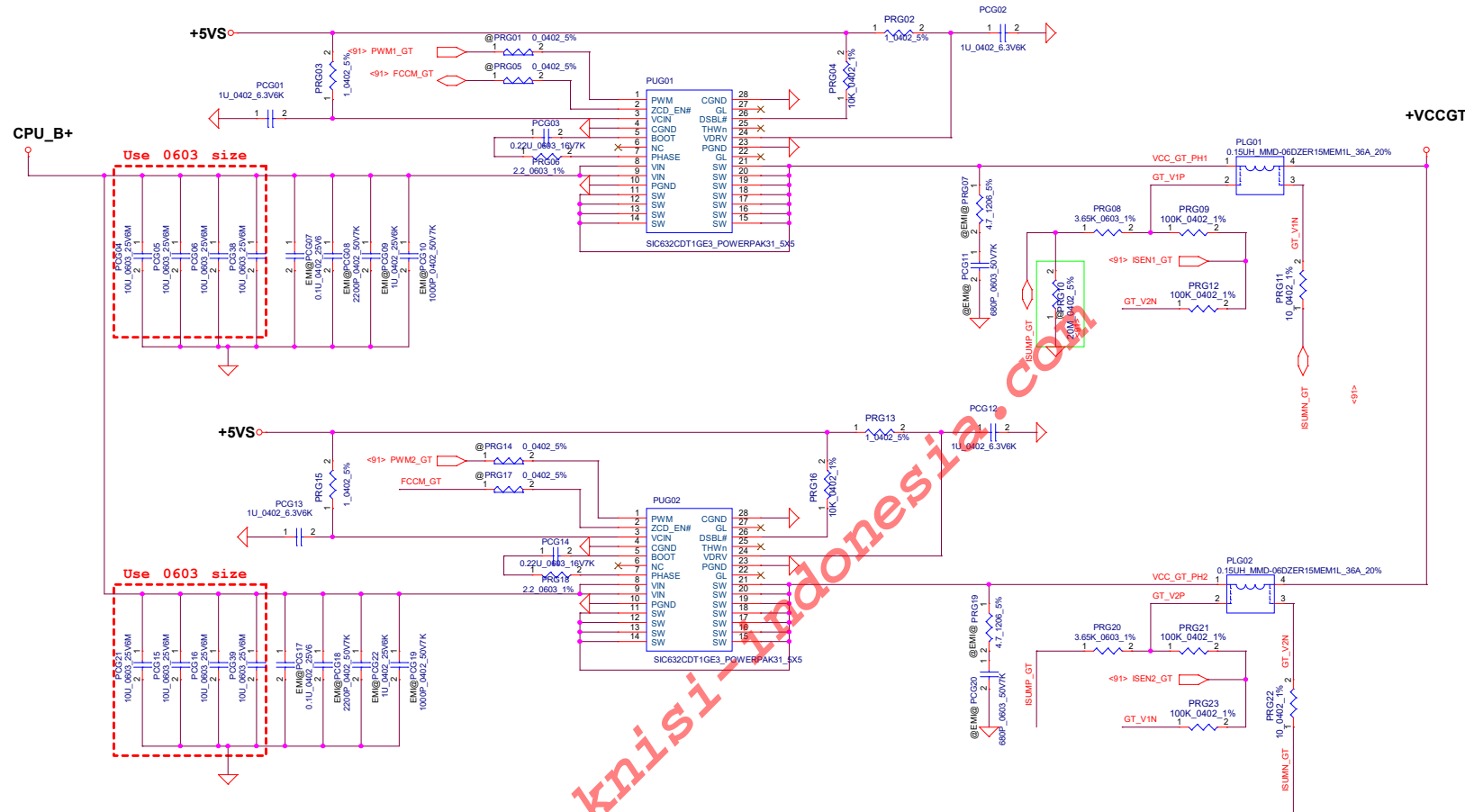


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/05/16	Deciphered Date	2018/12/31	Title	PWR_VCORE ISL95829C
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET 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.					
Rev	1	Date	Tuesday, January 08, 2019	Sheet	91 of 91



+VCC CORE
 TDC PL2 :150A
 Peak Current 193A
 OCP Current
 DCR 0.98mohm +/-5%
 Load Line 1.6mV/A

+VCCGT
TDC PL2 :30A
Peak Current 45A
OCP Current
DCR 0.67mohm +/-5%
Load Line 3.1mV/A

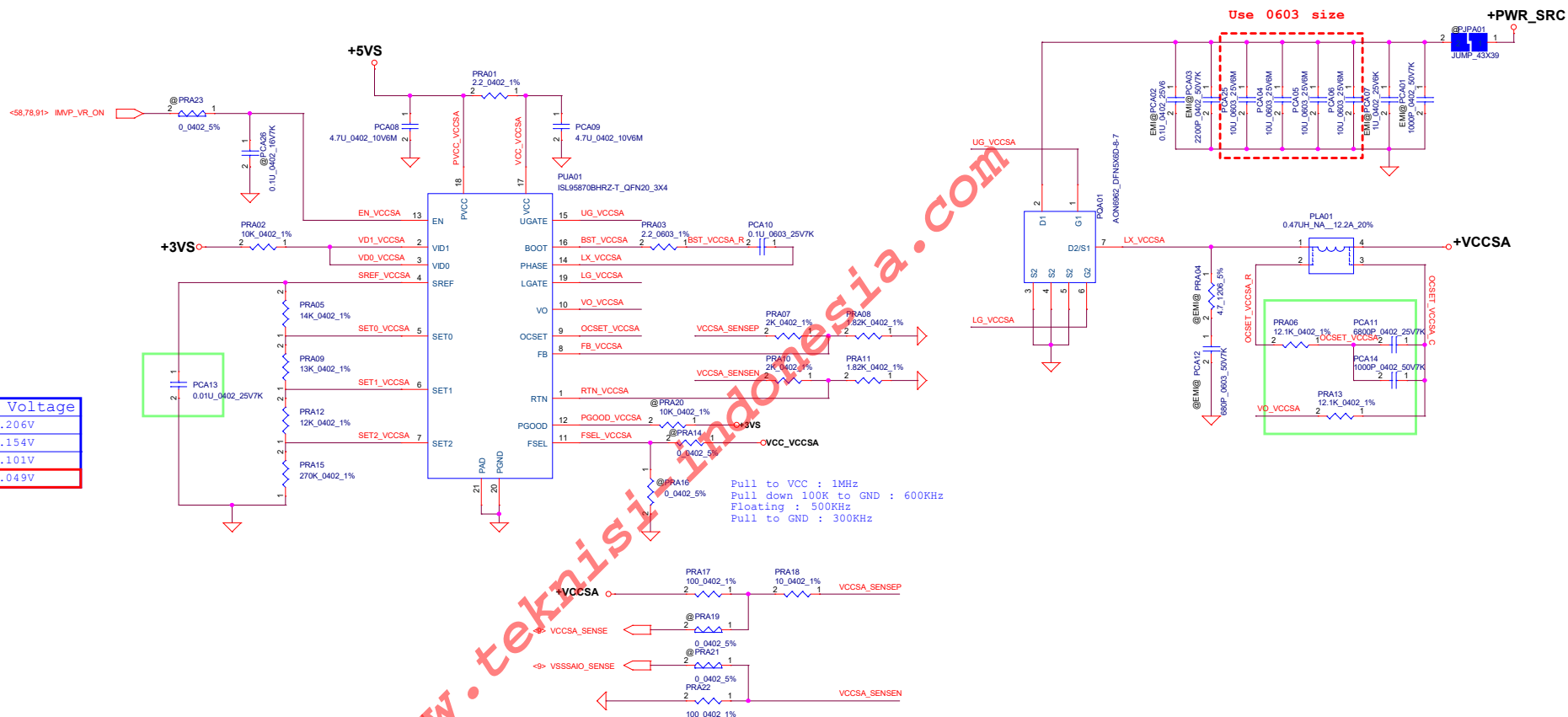


www.teknisi-indonesia.com

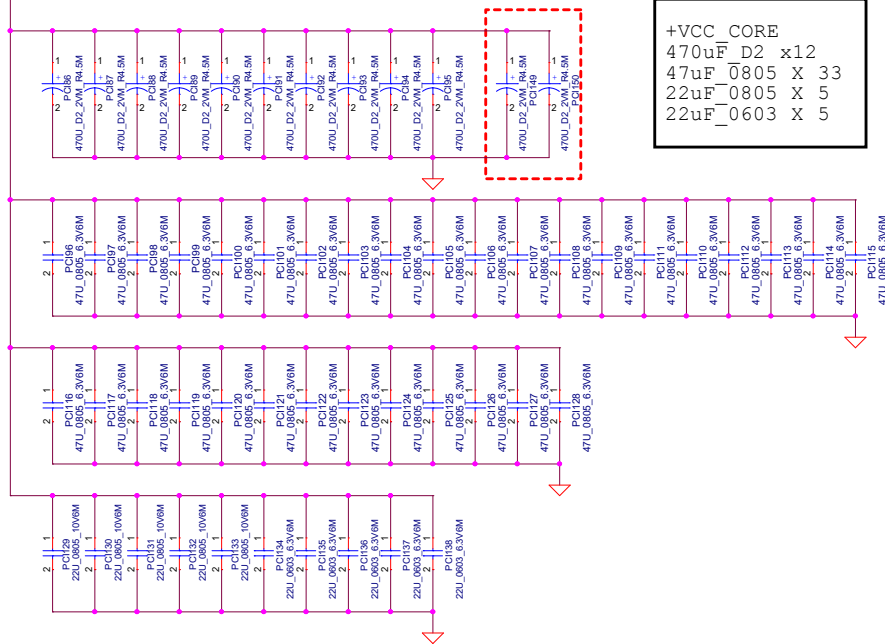
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/05/16	Deciphered Date	2018/12/31	Title	PWR VCCGT
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT 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, January 08, 2019
				Sheet	95 of 101
				Rev	1.0

+VCCSA
TDC 10A
Peak Current 11.1A
OCP Current 13.32A
DCR 6.2mohm +/-5%

VID1	VID0	Output Voltage
0	0	1.206V
0	1	1.154V
1	0	1.101V
1	1	1.049V

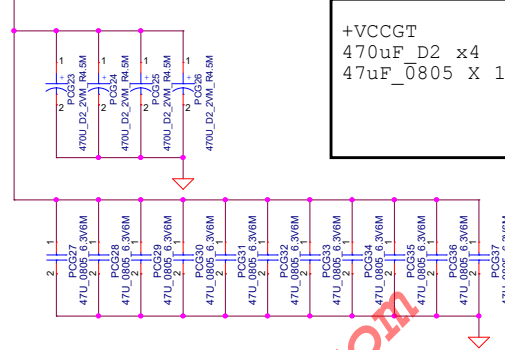


+VCC_CORE



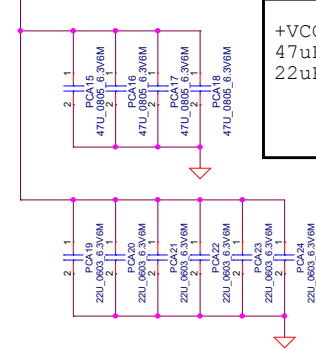
+VCC_CORE
470uF_D2 x12
47uF_0805 X 33
22uF_0805 X 5
22uF_0603 X 5

+VCCCGT



+VCCCGT
470uF_D2 x4
47uF_0805 X 11
47uF_0805 X 11

+VCCSA

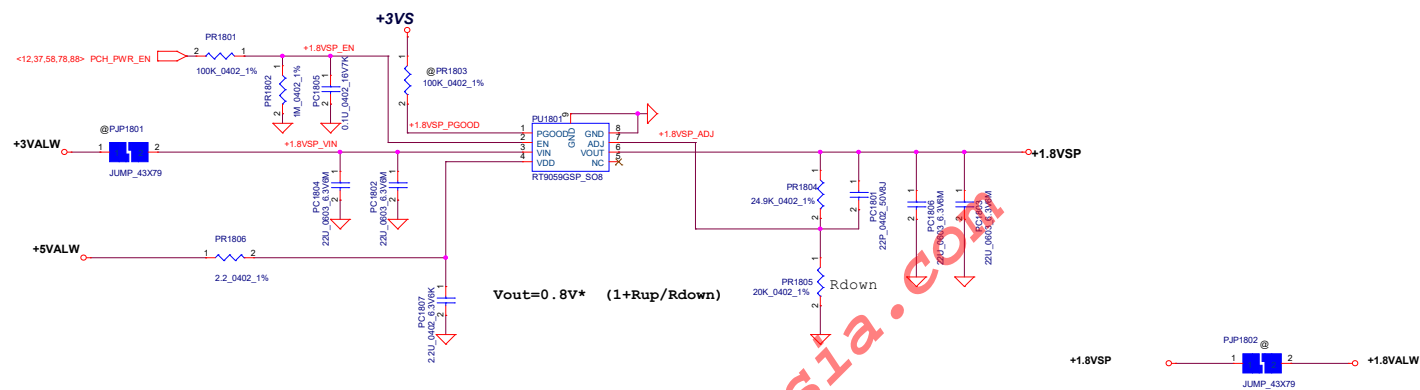


+VCCSA
470uF_D2 x6
47uF_0805 X 6
22uF_0805 X 6

www.teknisi-indonesia.com

Input Current: 0.03A
 $1.8V \times 0.18A / 0.85 / 3 = 0.127A$

+1.8VSP
TDC 0.13A
Peak Current 0.18A
OCP current 3.5A



$$V_{out} = 0.8V \times (1 + R_{up}/R_{down})$$

www.teknisi-indonesia.com

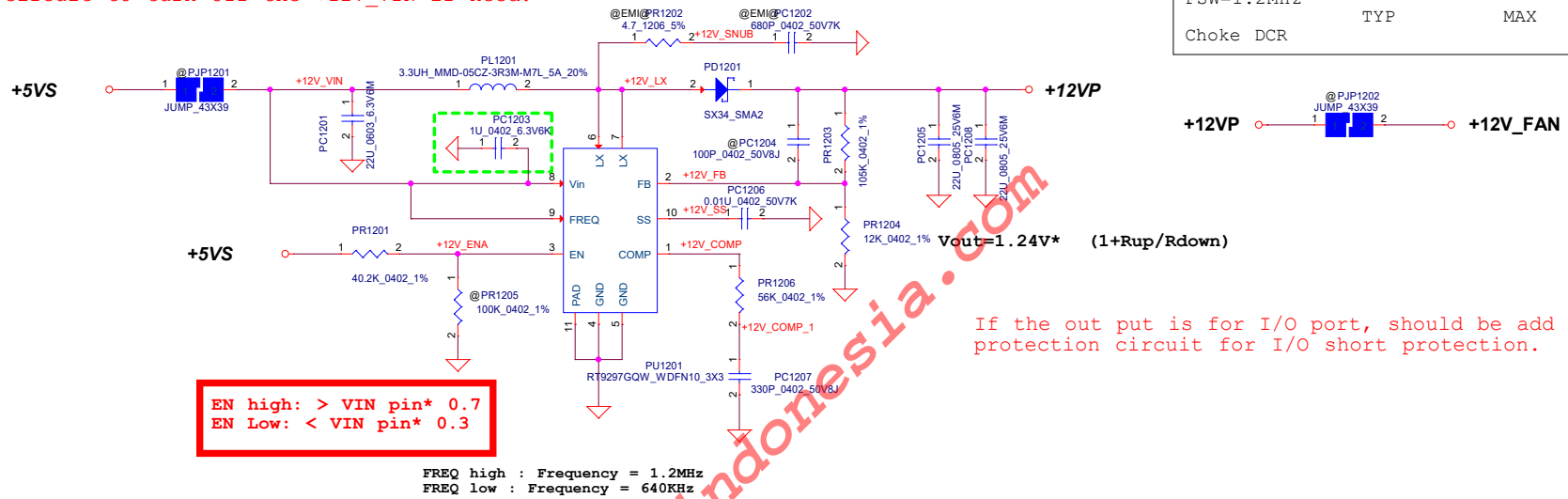
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2018/05/16	Deciphered Date	2018/12/31	Title	PWR +1.8VSP
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT 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	Rev
				Tuesday, January 08, 2019	1.0
				Sheet	98 of 101

Input Current: 2.26A
 $12V \times 0.8A / 0.85 / 5V = 2.26A$

+1.2VP
 TDC 0.56A
 Peak Current 0.8A
 OCP current 3A
 FSW=1.2MHz
 Choke DCR TYP MAX

Add a switch circuit to turn off the +12V_VIN if need.

Must check PL1201 and PD1201 rating for your application.



Security Classification		Compal Secret Data		Title	
Issued Date	2018/05/16	Deciphered Date	2018/12/31	+12VP	
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
				Date:	Tuesday, January 08, 2019
				Sheet	99 of 101