

Compal Confidential

GOG10

DIS M/B Schematic Document

Intel Tiger Lake- H35 Processor with DDR4 SoDIMM + GN20-P0/P1

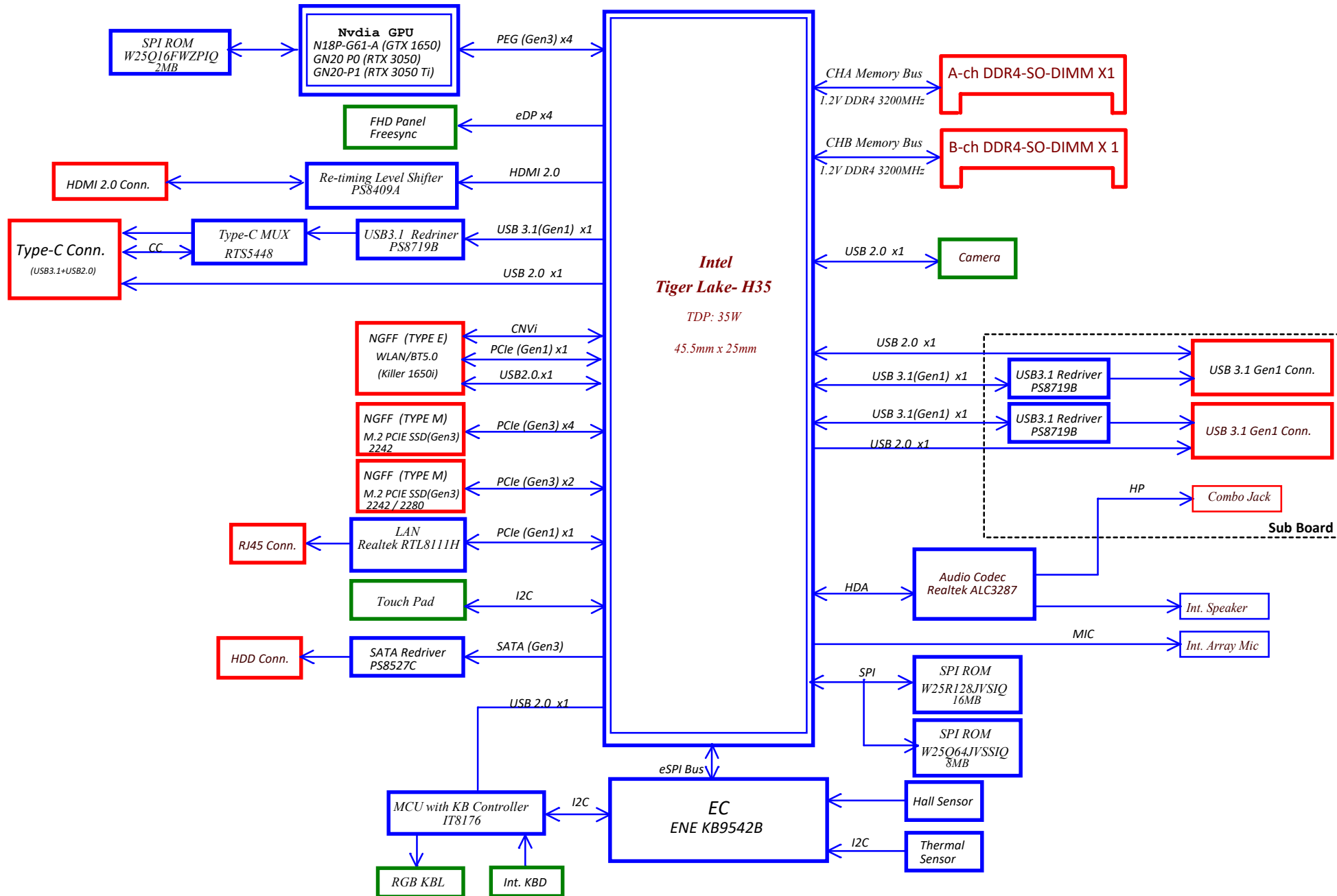
2020-09-15

LA-L161P

REV : 0.1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Cover Page
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 1 of 121	

TGL-H35 Block Diagram



Function		BOM Structure	Stuff
		Description	
CPU	CPU i5@		
	CPU i7@		
GPU	GN20P@		GPU side, GN20-P0/P0 Component
	GN20P0@		1. GN20-P0 Chipset 2. BIOS Strap Pin
	GN20P1@		1. GN20-P1 Chipset 2. BIOS Strap Pin
	45495@		For GN20-P0/P1 OVR-M.
	N18P@		GPU side, N18P-G61-A Component
	N18PG61A@		1. N18P-G61-A Chipset 2. BIOS Strap Pin
Debug	DCI@		For Intel Debug tool
LAN	8111H LDO@		For 8111H LAN
CNVi	CNVi@		For CNVi Function
HDD	HDD@		For HDD
SSD	SSD2@		For SSD2
EMI	EMI@		For EMI
ESD	ESD@		For ESD
RF	RF@		For RF

X76		
Function	BOM Structure	Description
GPU	H4G@	Hynix VRAM
	M4G@	Micron VRAM
	S4G@	SAMSUNG VRAM
	X76 H@	Hynix VRAM Strap Pin
	X76 M@	Micron VRAM Strap Pin
	X76 S@	SAMSUNG VRAM Strap Pin
	45492@	For N18P-G61-A OVR-M
	UPI@	For N18P-G61-A OVR-M

[illegible]

Function		GOG10
USB 2.0	Port 1	USB2_External_Port (IO BD)
	Port 2	USB2_External_Port (IO BD)
	Port 3	USB2_External_Port (Type-C)
	Port 4	
	Port 5	
	Port 6	Camera
	Port 7	KB RGB
	Port 8	IT8176
	Port 9	
	Port 10	NGFF_BT
USB3.2 Gen1x1	Port 1	USB3_External_Port (IO BD)
	Port 2	USB3_External_Port (IO BD)
	Port 3	USB3_External_Port (Type-C)
	Port 4	
PCIe 3.0	Port 1	
	Port 2	
	Port 3	
	Port 4	
	Port 5	WLAN
	Port 5	GPU_Lane0
	Port 6	GPU_Lane1
	Port 7	GPU_Lane2
	Port 8	GPU_Lane3
	Port 9	NGFF_SSD1/2280(Second)_Lane0
	Port 10	NGFF_SSD1/2280(Second)_Lane1
	Port 11	
PCIe 4.0	Port 12	LAN
	Port 0	NGFF_SSD2/2242(Main)_Lane0
	Port 1	NGFF_SSD2/2242(Main)_Lane1
	Port 2	NGFF_SSD2/2242(Main)_Lane2
	Port 3	NGFF_SSD2/2242(Main)_Lane3
SATA	Port 0	HDD
	Port 1	

For Load BOM

PCB



EMC



OVR-M



VRAM

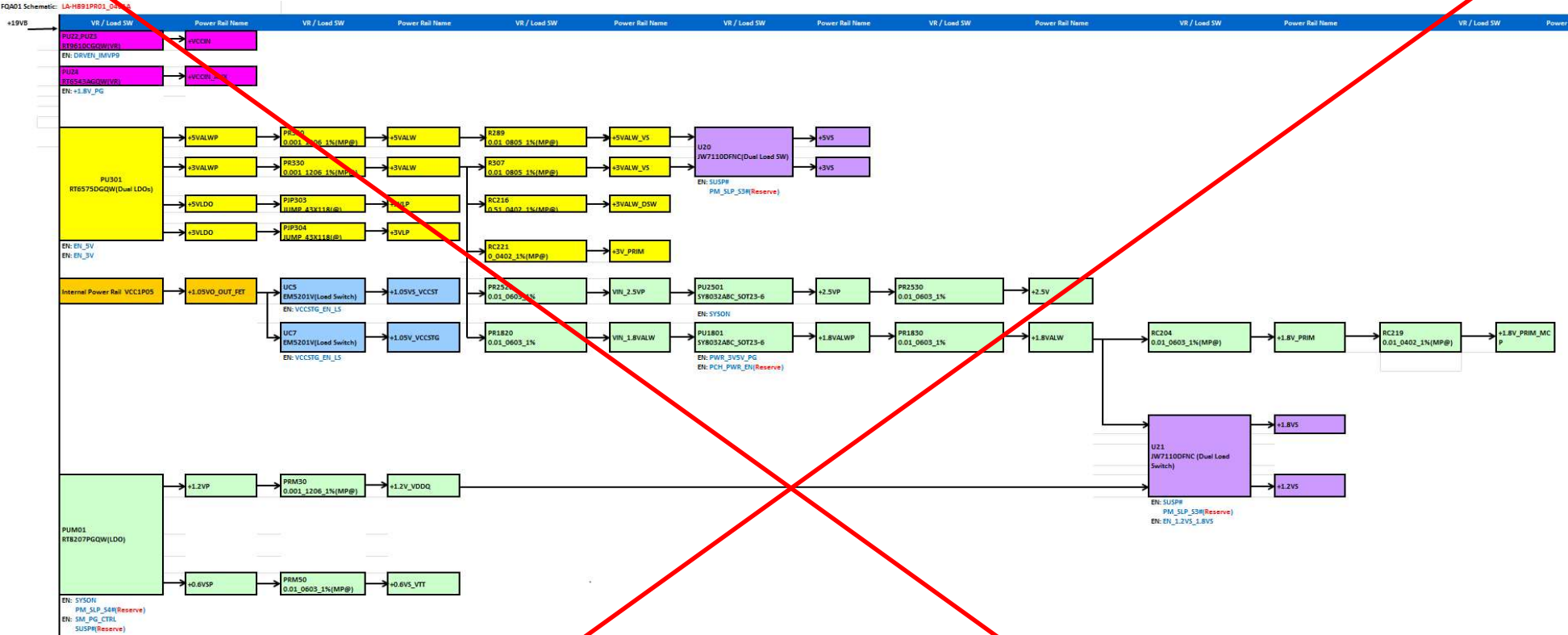


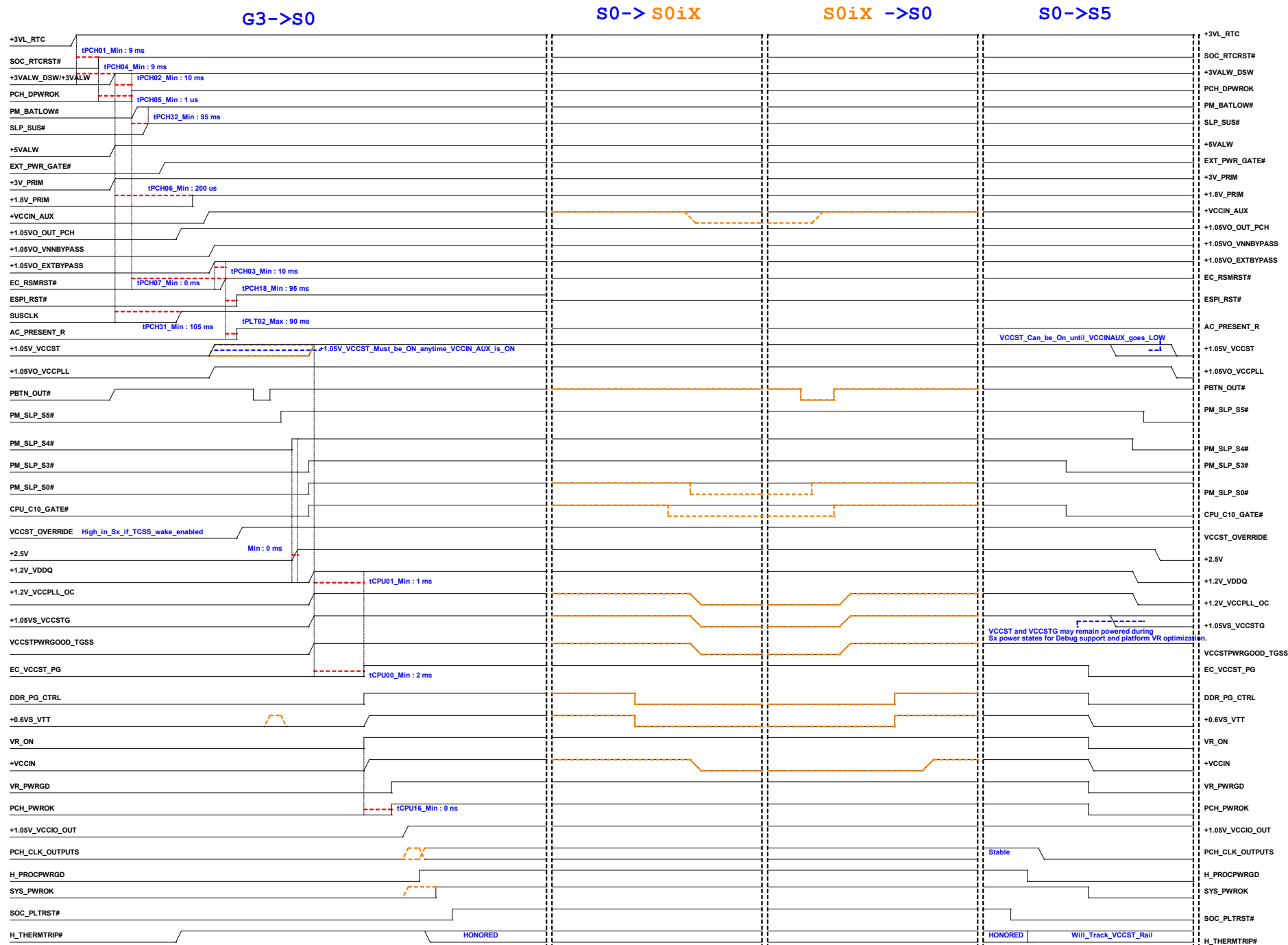
HDMI Logo



Security Classification	Compal Secret Data		Title	
Issued Date		Deciphered Date	Notes List	
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 CUSTOMER TO THE COMPETENT DIVISION OF R&D DEPARTMENT WITHOUT THE AUTHORIZATION BY COMPAL ELECTRONICS, INC. NOR THE SHEET INFORMATION MAY BE REPRODUCED OR RE-TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF COMPAL ELECTRONICS, INC.			Size	Rev
			Custom	1 A
			LA-1161P	
			Date:	Wednesday, March 10, 2021
			Sheet	3 of 121

[FQA01-Power Map_TGL-UP3_DDR4_Volume_S0ix]





CPU

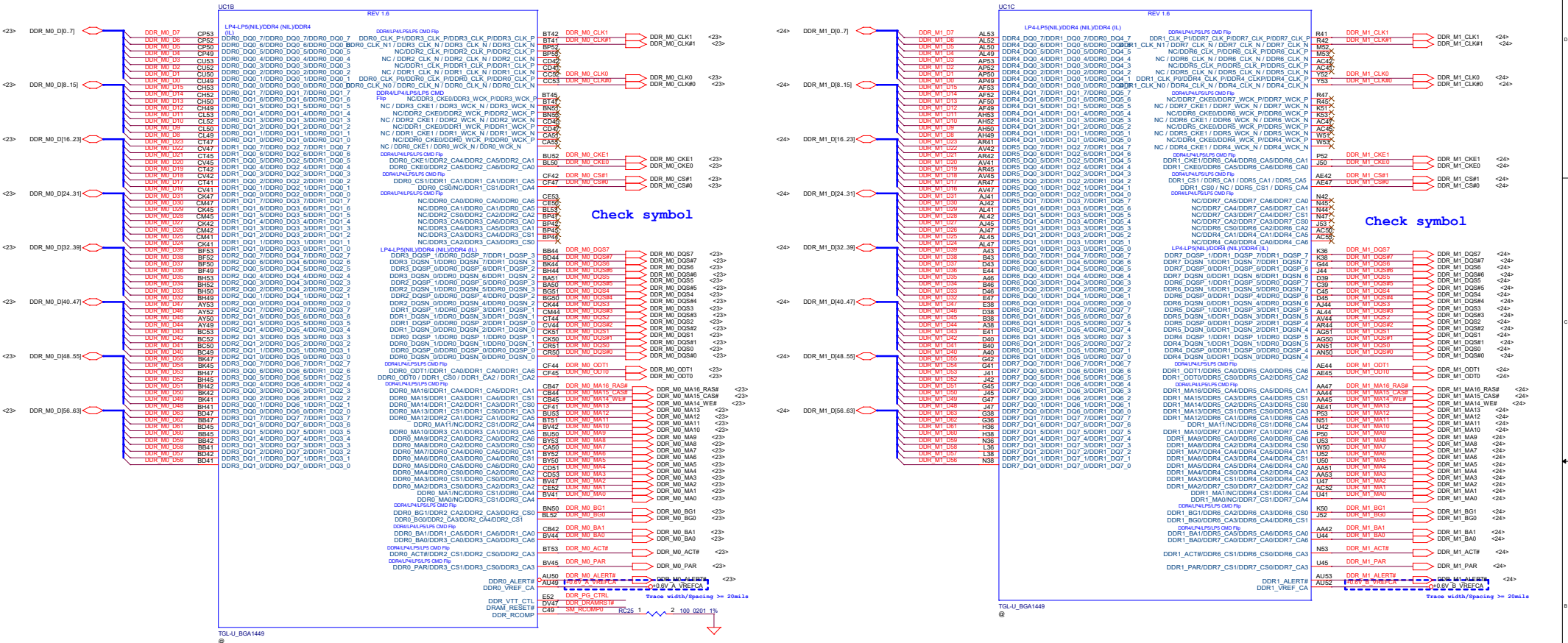


Table 32. USB3/USB2 Port Pairing for USB-C* Connectors

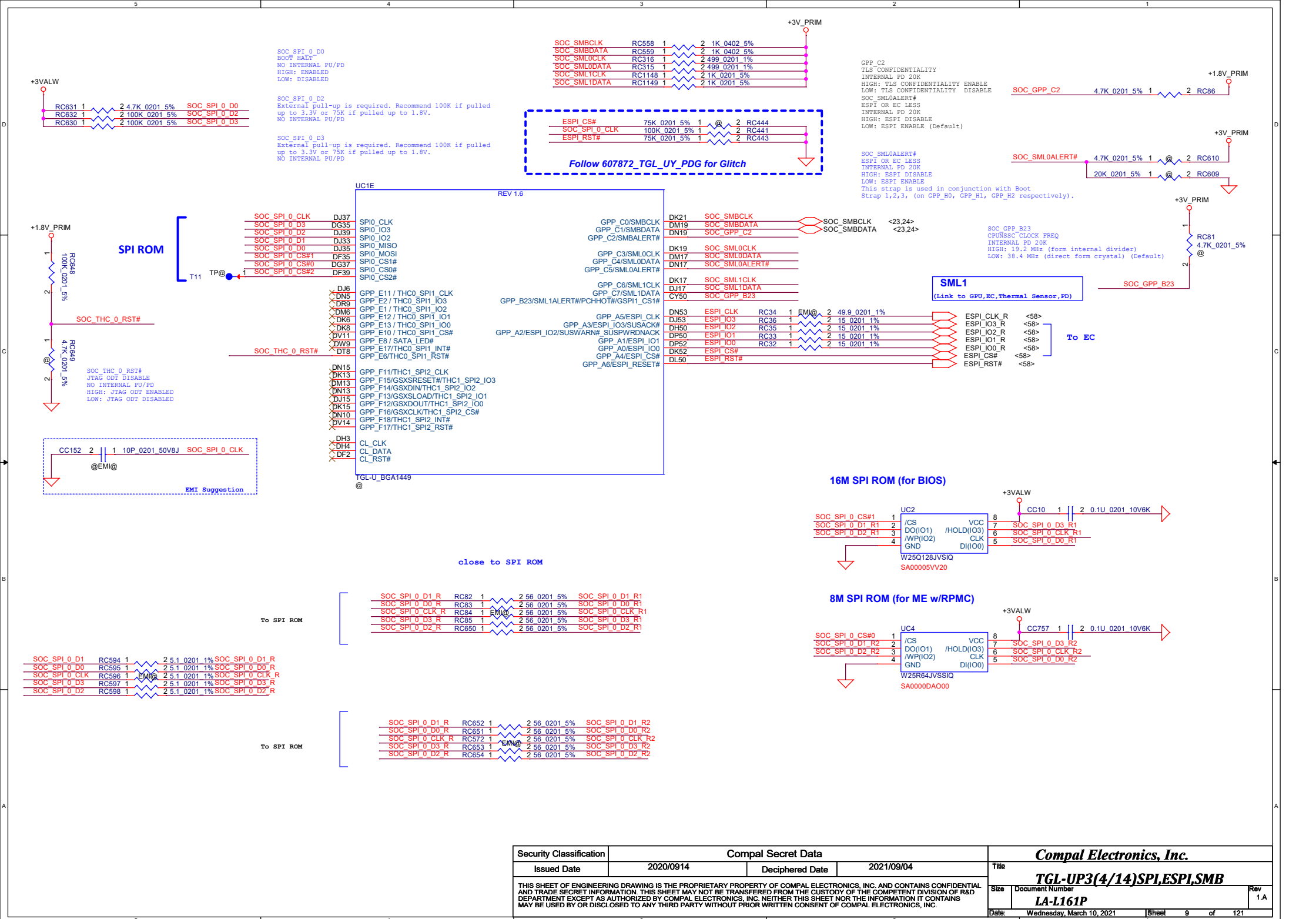
	Connector C0	Connector C1	Connector C2	Connector C3
CPU USB3 port#	1	2	3	4
PCH USB2 port#	2	3	4	6

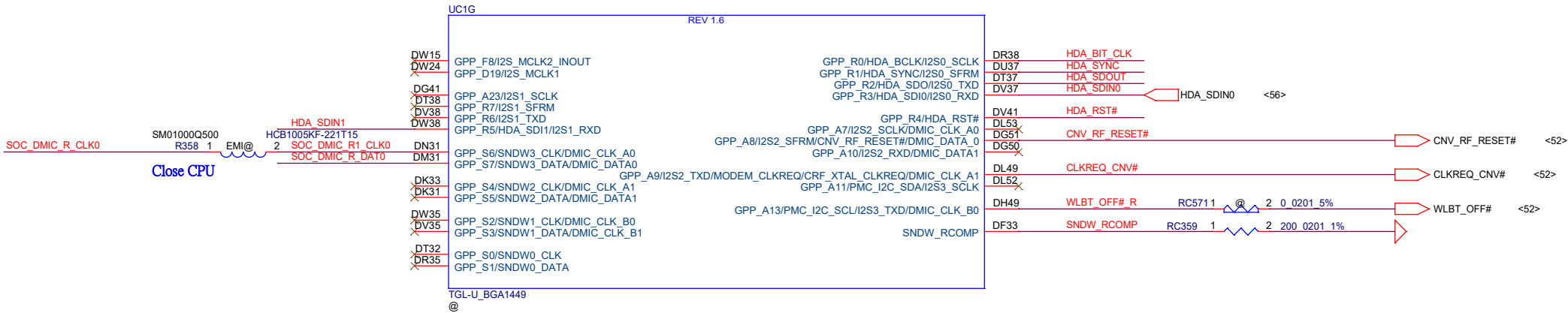
To make split xDCI controller working functionally for different USB-C* connectors with increasing port numbers (TCP0_*, TCP1_*, TCP2_*, TCP3_*), recommended to pair with increasing number of USB2 ports from PCH. Simplest form of requirement is to match USB2/USB3 port numbers for USB-C* connectors, but it is not strictly required.

Follow Intel DDR4 NIL

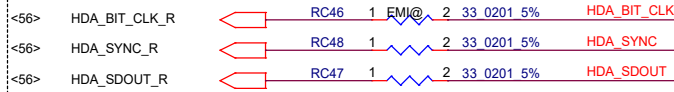


Security Classification		Compal Secret Data		Title	
Issued Date	2020/09/14	Deciphered Date	2021/09/04	Size	Document Number
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED 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 THE PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Rev	1A
TGL-UP3(3/14)DDR4				Date	Wednesday, March 10, 2021
LA-161P				Sheet	8 of 121

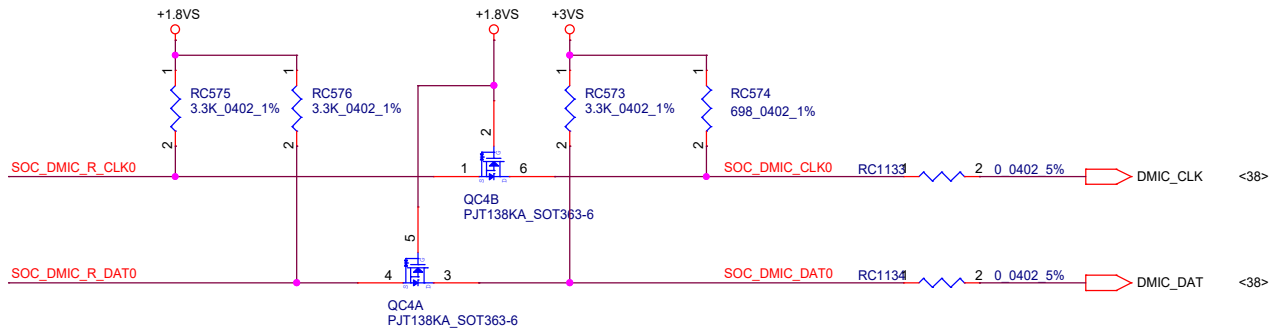
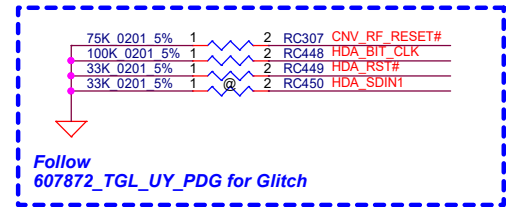




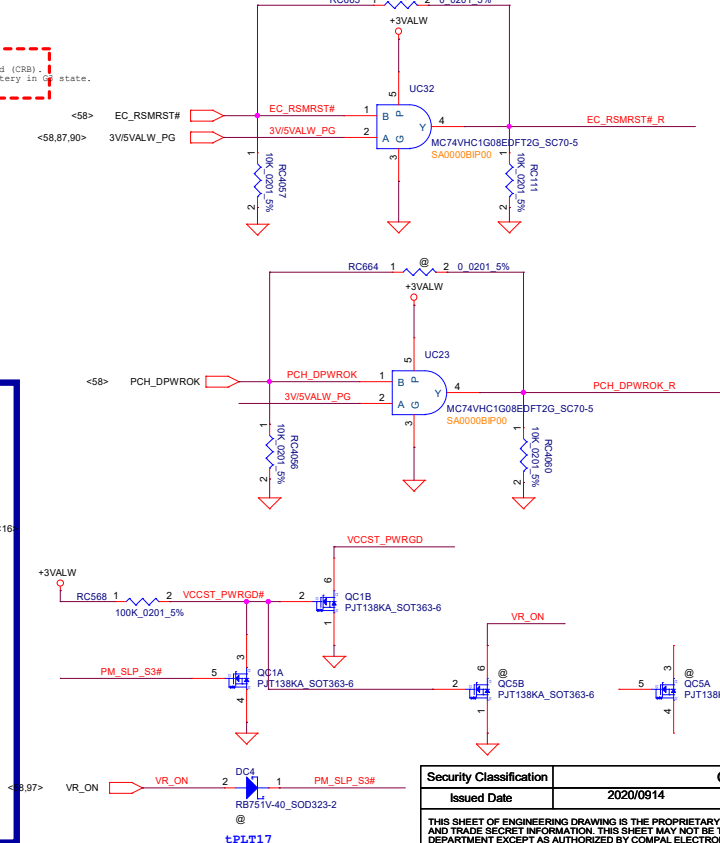
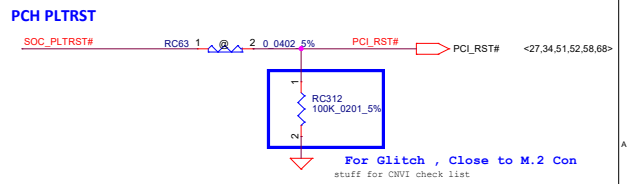
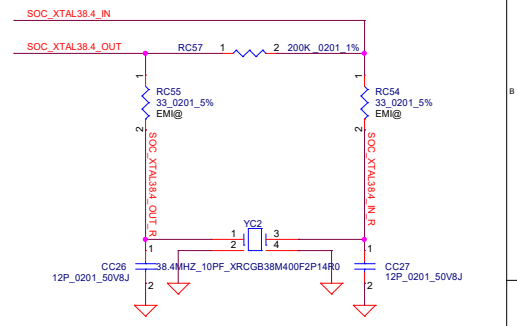
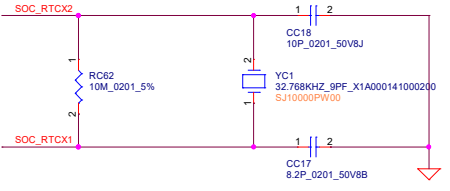
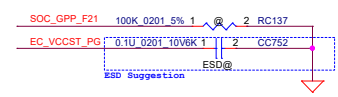
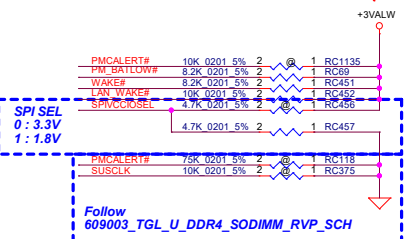
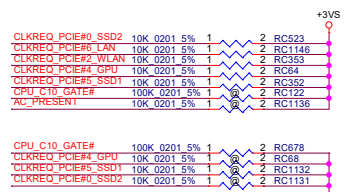
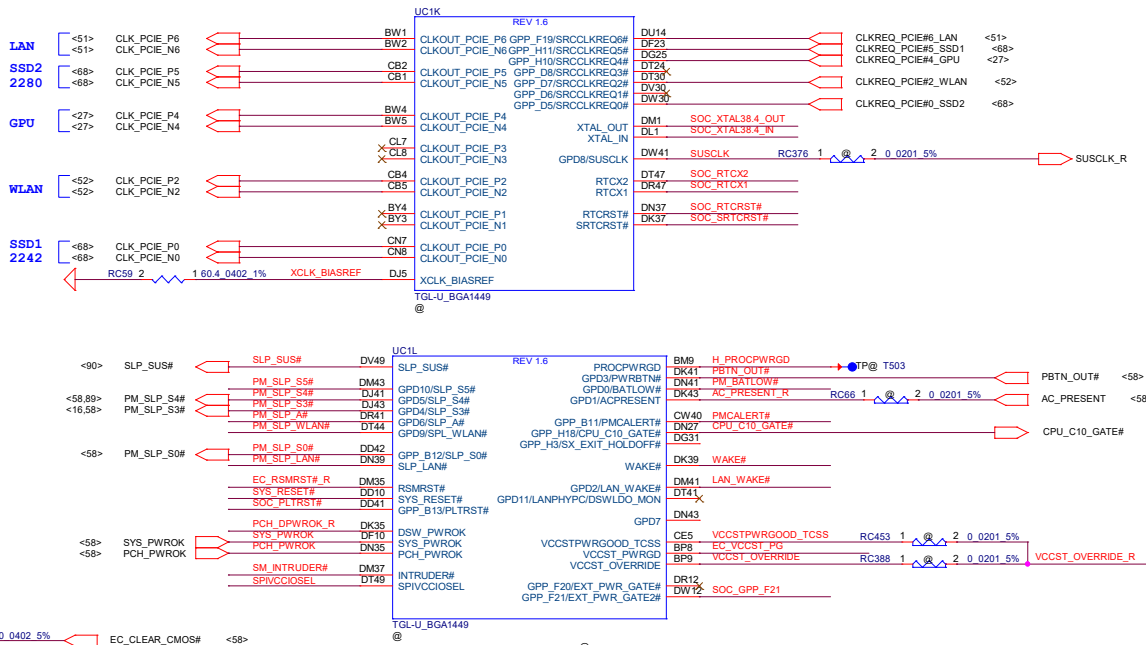
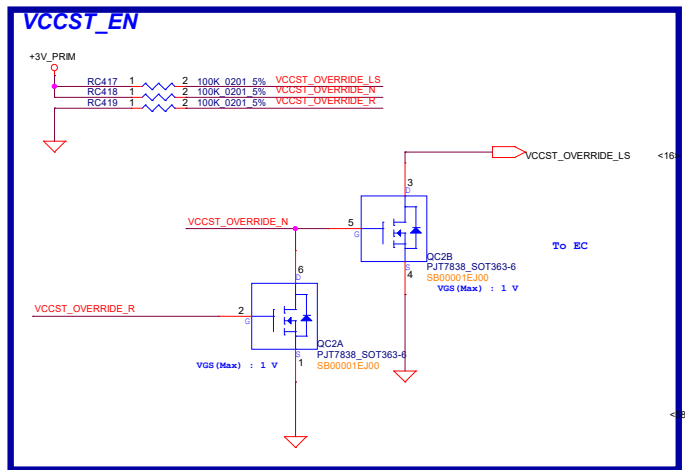
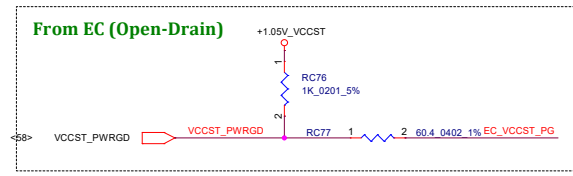
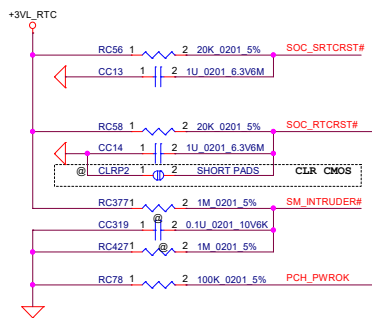
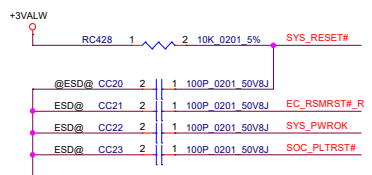
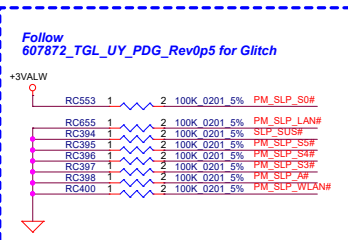
< HD AUDIO >



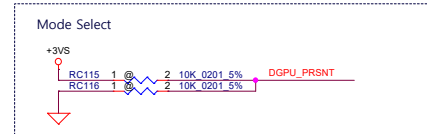
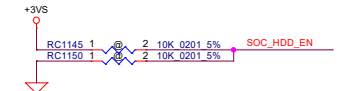
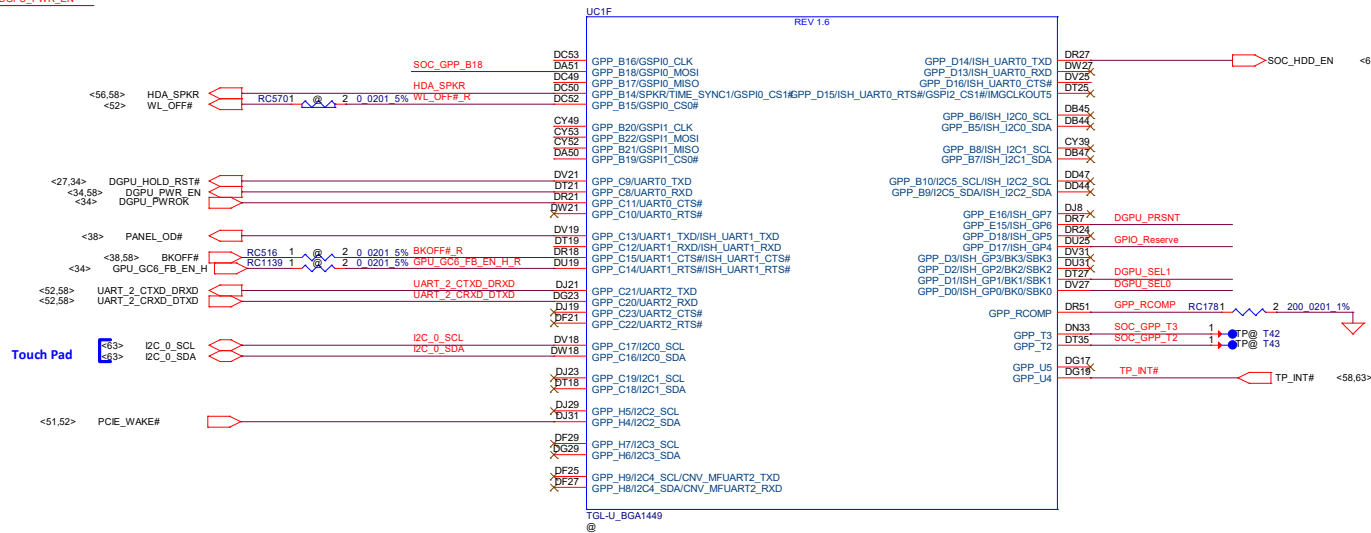
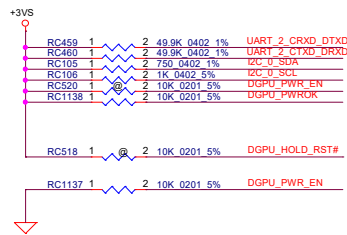
< To Enable ME Override >



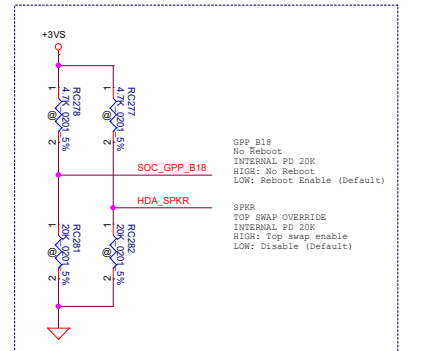
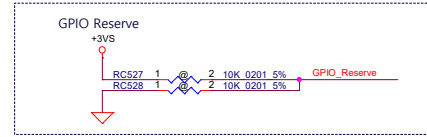
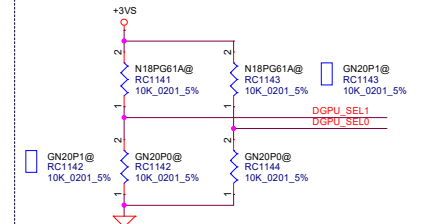
Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF 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-L161P	Rev 1.A
				Date:	Wednesday, March 10, 2021
				Sheet	10 of 121



Security Classification		Compal Secret Data				Compal Electronics, Inc.					
Issued Date		2020/09/14		Deciphered Date		2021/09/04		Title			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF 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.						TGL-UP3(6/14)CLK,GPIO					
						Size		Document Number		Rev	
						LA-I161P				1A	
						Date:		Wednesday, March 10, 2021		Sheet	
										11 of 121	

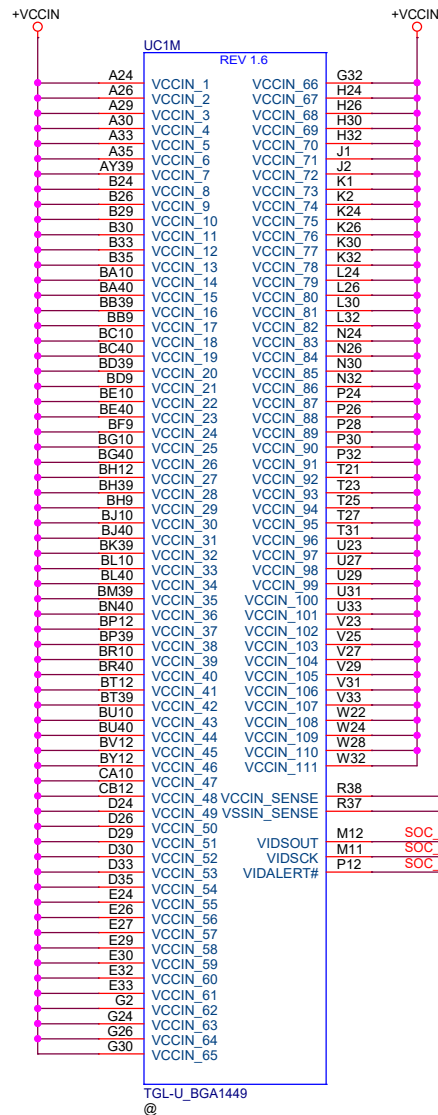


GPU	DGPU_SEL1 (GPP_D1)	DGPU_SELO (GPP_D0)
GN20-P0	0	0
GN20-P1	0	1
N18P-G61-A	1	1

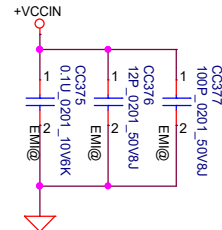


teknisi-indonesia.com

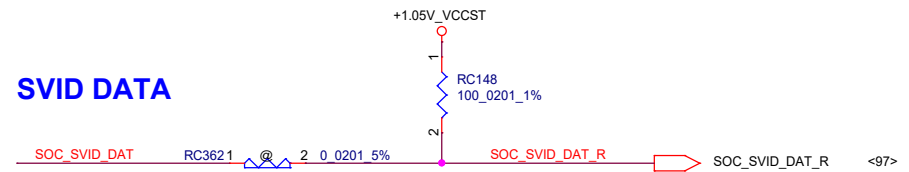
Security Classification				Compal Secret Data				Compal Electronics, Inc.			
Issued Date				2020/09/14				Title			
Deciphered Date				2021/09/04				TGL-UP3(7/14)GPIO			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET 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			
Date: Wednesday, March 10, 2021				Sheet				1A			



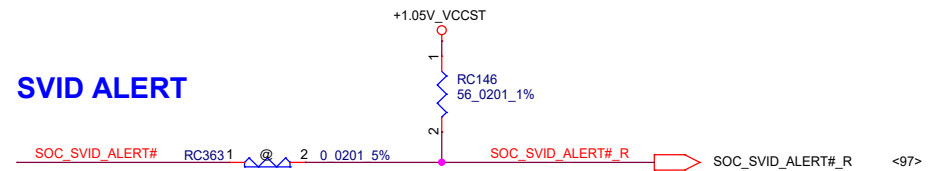
EMI CAPS-PLACE < 5mm from SOC VCCIN



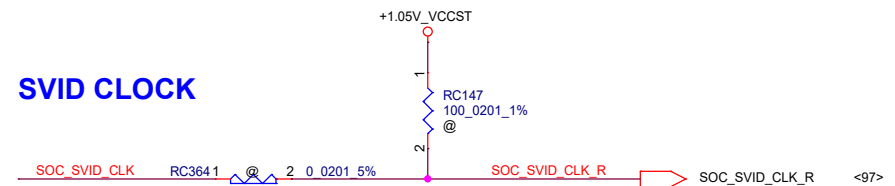
SVID DATA



SVID ALERT

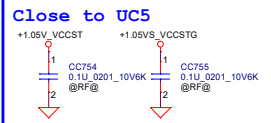
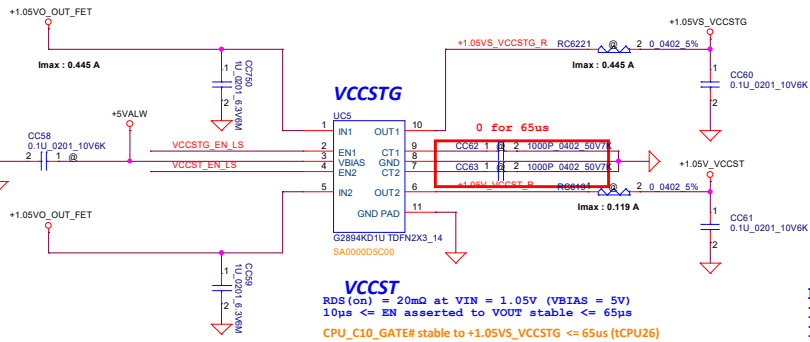
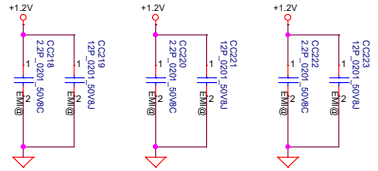


SVID CLOCK

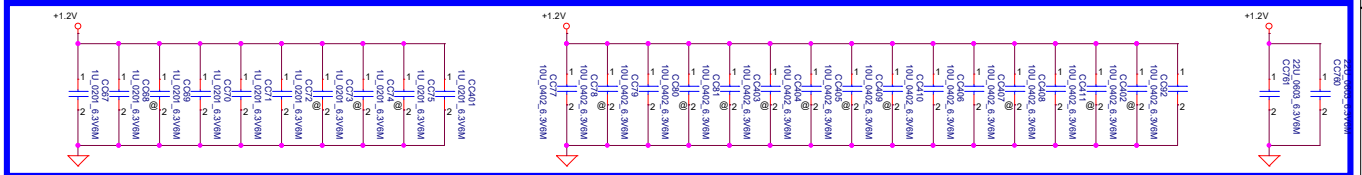


Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2020/09/14	Deciphered Date	2021/09/04	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF 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-L161P	Rev 1.A
Date:	Wednesday, March 10, 2021	Sheet	15	of	121

EMI CAPS-PLACE
< 4mm from SOC VDDQ
with each pair < 12mm Apart
12pF* 3 (EMI@)
2.2pF* 3 (EMI@)



Place on CPU Side
1uF* 10
10uF* 16
47uF * 2



VCCST/VCCSTG Enable

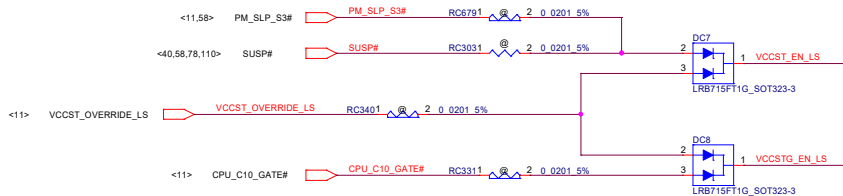


Figure 228. VCCST Enable Logic

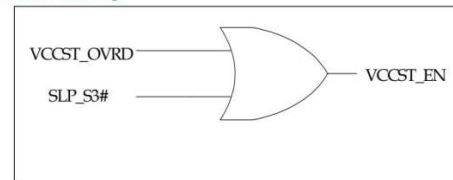
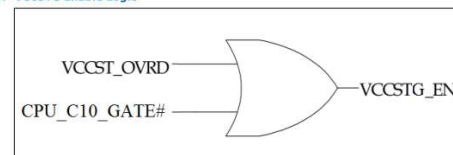


Figure 229. VCCSTG Enable Logic



www.teknisi-indonesia.com

Follow
612304_TGL_UP3_LPDDR4x_RVP_TDK_Rev0p7

T85 TP@ 1

UC1P

REV 1.6

A27	VSS_223	B19
A32	VSS_224	B2
A45	VSS_225	B23
A49	VSS_226	B27
AA41	VSS_227	B32
AA48	VSS_228	B36
AB5	VSS_229	B39
AB7	VSS_230	B42
AB8	VSS_231	B48
AC44	VSS_232	B52
AC49	VSS_233	B8
AD4	VSS_234	BA48
AD48	VSS_235	BA53
AD8	VSS_236	BB4
AF4	VSS_237	BB8
AF8	VSS_238	BC1
AG41	VSS_239	BC2
AG42	VSS_240	BD12
AG44	VSS_241	BD4
AG45	VSS_242	BD48
AG47	VSS_243	BD8
AG48	VSS_244	BF39
AG53	VSS_245	BF4
AH4	VSS_246	BF41
AH8	VSS_247	BF42
AK12	VSS_248	BF44
AK4	VSS_249	BF45
AK48	VSS_250	BF47
AK5	VSS_251	BF5
AK7	VSS_252	BF7
AK8	VSS_253	BF8
AM1	VSS_254	BG48
AM2	VSS_255	BG53
AM4	VSS_256	BH1
AM8	VSS_257	BH2
AN41	VSS_258	BH4
AN42	VSS_259	BH8
AN44	VSS_260	BK12
AN45	VSS_261	BK4
AN47	VSS_262	BK48
AN48	VSS_263	BK8
AN53	VSS_264	BL49
AP4	VSS_265	BM1
AP8	VSS_266	BM4
AT4	VSS_267	BM41
AT48	VSS_268	BM42
AT51	VSS_269	BM44
AT8	VSS_270	BM45
AV12	VSS_271	BM47
AV39	VSS_272	BM8
AV4	VSS_273	BN48
AV5	VSS_274	BP41
AV7	VSS_275	BP49
AV8	VSS_276	BP5
AW1	VSS_277	BP50
AW2	VSS_278	BP7
AW48	VSS_279	BT44
AY4	VSS_280	BT48
AY41	VSS_281	BU49
AY42	VSS_282	BV3
AY44	VSS_283	BV48
AY45	VSS_284	BV5
AY47	VSS_285	BW10
AY8	VSS_286	BY41
AY9	VSS_287	BY42
B13	VSS_288	

TGL-U_BGA1449

@

UC1Q

REV 1.6

BY44	VSS_109	VSS_169	CY44
BY45	VSS_110	VSS_170	CY45
BY47	VSS_111	VSS_171	CY5
BY49	VSS_112	VSS_172	D27
C13	VSS_113	VSS_173	D32
C19	VSS_114	VSS_174	D36
C23	VSS_115	VSS_175	D42
CA48	VSS_116	VSS_176	D49
CB41	VSS_117	VSS_177	D5
CC10	VSS_118	VSS_178	DA30
CC3	VSS_119	VSS_179	DA33
CC44	VSS_120	VSS_180	DA53
CD44	VSS_121	VSS_181	DC17
CD48	VSS_122	VSS_182	DD15
CD7	VSS_123	VSS_183	DD24
CE49	VSS_124	VSS_184	DD26
CG48	VSS_125	VSS_185	DD28
CG51	VSS_126	VSS_186	DD31
CG52	VSS_127	VSS_187	DD33
CG9	VSS_128	VSS_188	DD35
CH41	VSS_129	VSS_189	DD39
CH42	VSS_130	VSS_190	DD45
CH44	VSS_131	VSS_191	DD51
CH45	VSS_132	VSS_192	DD52
CH47	VSS_133	VSS_193	DE3
CJ3	VSS_134	VSS_194	DE5
CJ5	VSS_135	VSS_195	DF19
CJ9	VSS_136	VSS_196	DF37
CK39	VSS_137	VSS_197	DG15
CK48	VSS_138	VSS_198	DG21
CK53	VSS_139	VSS_199	DG27
CL9	VSS_140	VSS_200	DG33
CN12	VSS_141	VSS_201	DG39
CN48	VSS_142	VSS_202	DG45
CN51	VSS_143	VSS_203	DG5
CN52	VSS_144	VSS_204	DG53
CN5	VSS_145	VSS_205	DG6
CN9	VSS_146	VSS_206	DJ1
CP3	VSS_147	VSS_207	DJ2
CP41	VSS_148	VSS_208	DJ4
CP42	VSS_149	VSS_209	DK51
CP44	VSS_150	VSS_210	DL3
CP45	VSS_151	VSS_211	DL5
CP5	VSS_152	VSS_212	DM10
CR48	VSS_153	VSS_213	DM15
CR53	VSS_154	VSS_214	DM21
CR9	VSS_155	VSS_215	DM27
CU4	VSS_156	VSS_216	DM33
CU9	VSS_157	VSS_217	DM39
CV10	VSS_158	VSS_218	DM4
CV48	VSS_159	VSS_219	DM45
CV5	VSS_160	VSS_220	DN1
CV51	VSS_161	VSS_221	DN2
CV52	VSS_162	VSS_222	
CY17	VSS_163		
CY22	VSS_164		
CY35	VSS_165		
CY41	VSS_166		
CY42	VSS_167		
	VSS_168		

TGL-U_BGA1449

@

UC1R

REV 1.6

DP53	VSS_2	K34
DR11	VSS_3	K48
DR16	VSS_4	K5
DR22	VSS_5	L22
DR28	VSS_6	L28
DR34	VSS_7	L34
DR40	VSS_8	L39
DR46	VSS_9	L41
DT4	VSS_10	L42
DT50	VSS_11	L44
DU11	VSS_12	L45
DU16	VSS_13	L47
DU22	VSS_14	L49
DU28	VSS_15	M1
DU34	VSS_16	M2
DU40	VSS_17	M50
DU46	VSS_18	N22
DV1	VSS_19	N28
DV40	VSS_20	N34
DV52	VSS_21	N39
DW51	VSS_22	N41
E13	VSS_23	N48
E19	VSS_24	P11
E35	VSS_25	P14
E48	VSS_26	P16
G22	VSS_27	P18
G28	VSS_28	P20
G34	VSS_29	P22
G39	VSS_30	P33
G48	VSS_31	P35
G51	VSS_32	P4
G52	VSS_33	P49
H12	VSS_34	P8
H22	VSS_35	R39
H28	VSS_36	R44
H34	VSS_37	T19
H8	VSS_38	T29
J39	VSS_39	T33
J49	VSS_40	T4
K16	VSS_41	T48
K18	VSS_42	T8
K20	VSS_43	U19
K22	VSS_44	U25
K28	VSS_45	U39
		U49
		V19
		V4
		V8
		W1
		W16
		W26
		W30
		W39
		W41
		W42
		W44
		W45
		W47
		W48
		Y4
		Y49
		Y50
		Y8
		VSS_108

TGL-U_BGA1449

@

Security Classification		Compal Secret Data		Title	
Issued Date	2020/0914	Deciphered Date	2021/09/04	TGL-UP3(13/14)GND	
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-L161P	
				Date:	Wednesday, March 10, 2021
				Sheet	18 of 121
				Rev	1.A

5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

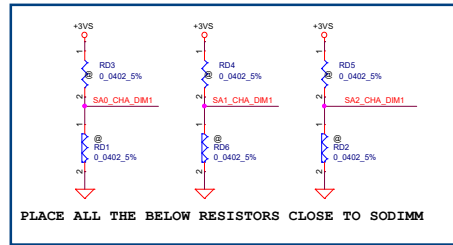
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 21 of 121	

5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

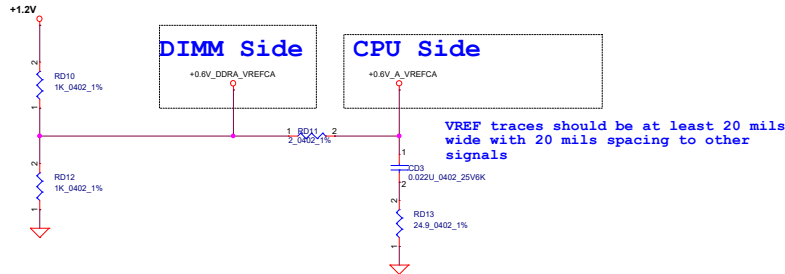
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 22 of 121	

CHANNEL-M0

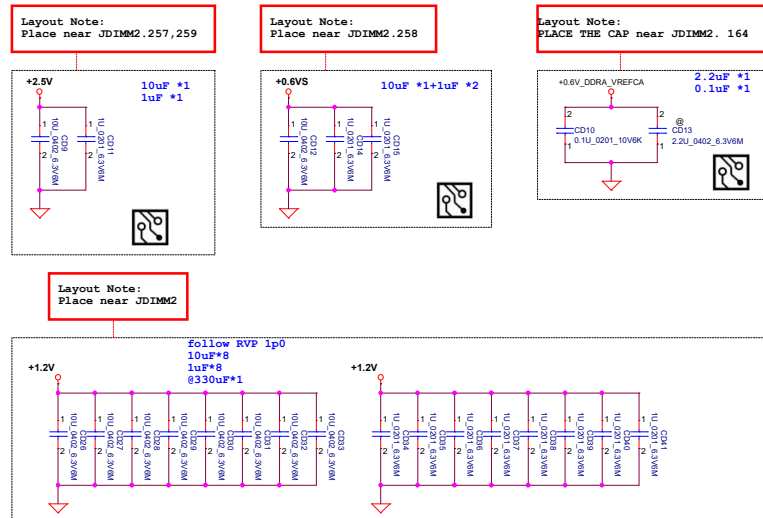
TOP: JDIMM1 CONN Non-ECC DIMM



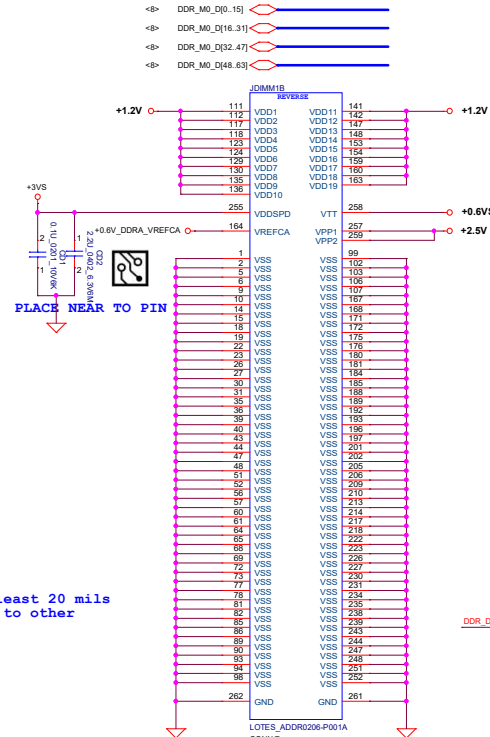
SPD ADDRESS FOR CHANNEL A :
WRITE ADDRESS: 0XA0
READ ADDRESS: 0XA1
SA0 = 0; SA1 = 0; SA2 = 0.
DDR4 POR OPERATING SPEED: 1867 MT/S
STRETCH GOAL IS 2133 MT/S



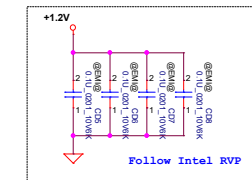
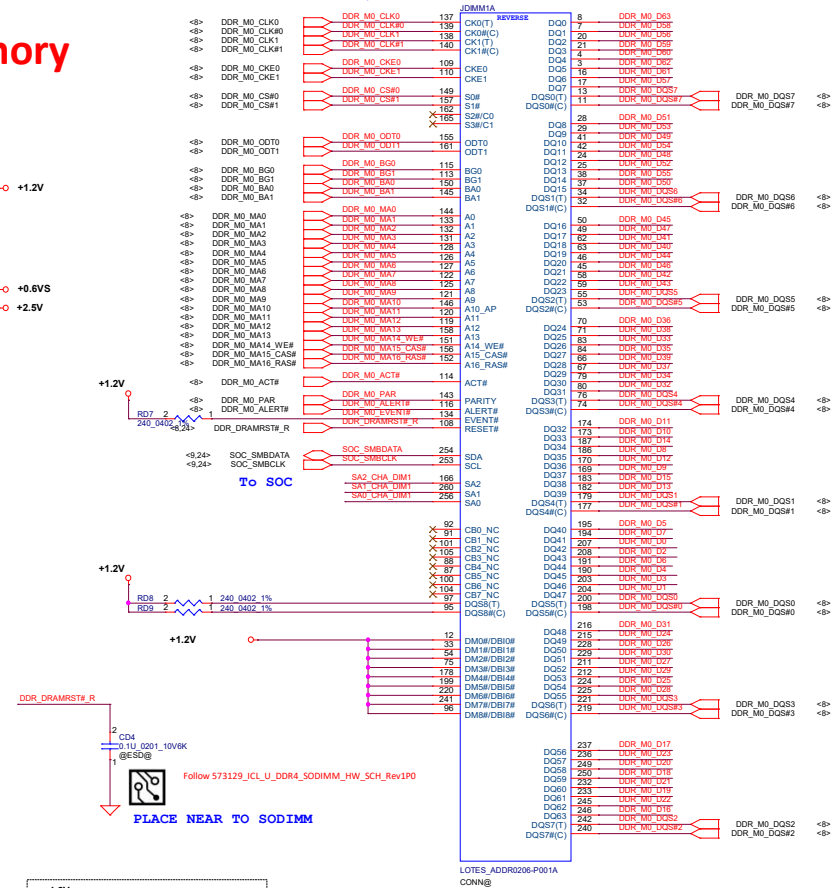
Decoupling Cap_Channel A



Non-Interleaved Memory



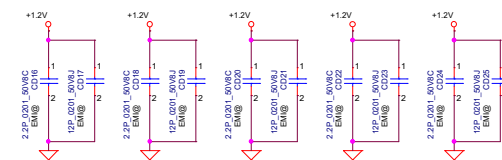
Reverse (4 mm), the same with Y750 DDR CONN



Part Number:SP07001JH00
Part Value:S SOCKET LOTES ADDR0208-P001A 260P DDR4

teknisi-indonesia.com

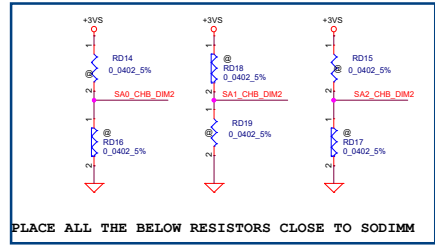
EMC CAPS-PLACE
< 4mm from SO-DIMM VDDQ
with each pair < 12mm Apart
12pF* 5 (EMI@)
2.2pF* 5 (EMI@)



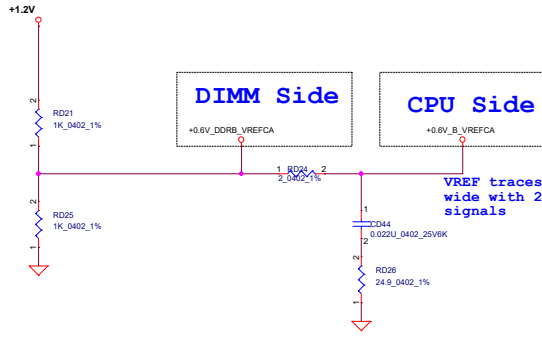
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF 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.				DDR4 CHMO: DIMM0	
				Size	Document Number
				LA-L161P	
				Date: Wednesday, March 10, 2021	Rev 1A

CHANNEL-M1

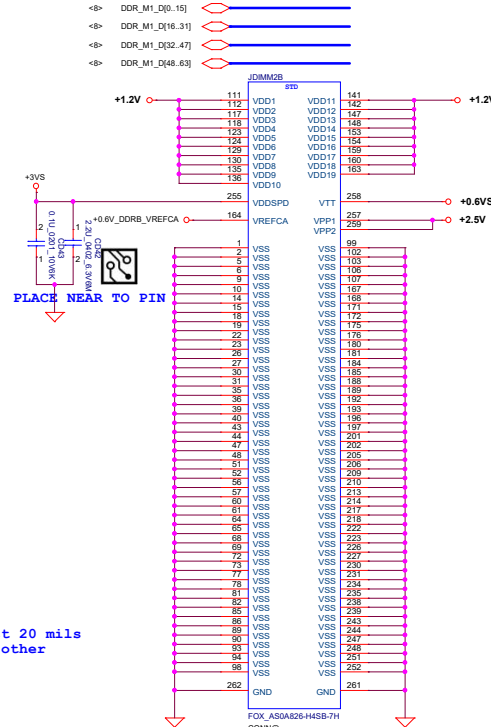
TOP: JDIMM2 CONN Non-ECC DIMM



SPD ADDRESS FOR CHANNEL B :
WRITE ADDRESS: 0XA4
READ ADDRESS: 0XA3
SA0 = 0; SA1 = 1; SA2 = 0.
DDR4 POR OPERATING SPEED: 1867 MT/S
STRETCH GOAL IS 2133 MT/S



Non-Interleaved Memory

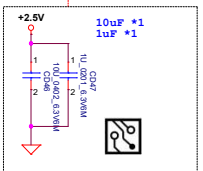


STD (4 mm), the same with Y750 DDR CONN

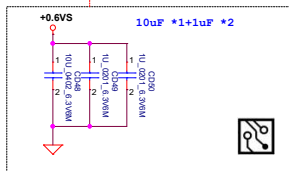


Decoupling Cap_Channel B

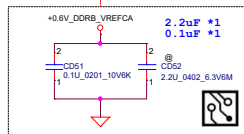
Layout Note:
Place near JDIMM1.257,259



Layout Note:
Place near JDIMM1.258



Layout Note:
PLACE THE CAP WITHIN 200 MILS FROM THE JDIMM1



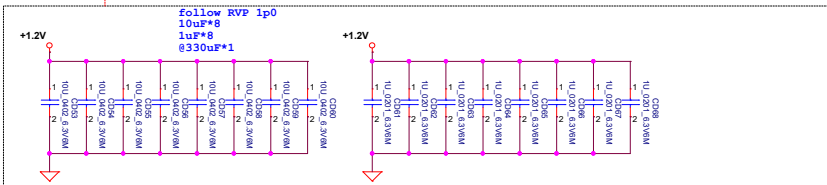
Refer for DDR4 SO-DIMM Decoupling Caps
607872_TGL_UY_PdG_Rev0p5

Table 50. DDR4 SODIMM Power Plane Decoupling

Memory Configuration	Power Domain	Decoupling Location	Qty x μ F (size)
DDR4 SODIMM 1DPC	VDDQ/VDD	4 near each side of the DIMM connector close to VDD pins	16x 10 μ F (0603)
		4 near each side of the DIMM connector close to VDD pins	16x 1 μ F (0402)
	VTT	Place on VTT plane close to DIMM 1 cap stuffed, 1 placeholder	2x 10 μ F (0603)
		Place on VTT plane close to DIMM	4x 1 μ F (0402)
	VPP	DIMM pin side, 1 per DIMM	2x 10 μ F (0603)
	VDDSPD	DIMM pin side, 1 per DIMM	2x 1 μ F (0402)

Note: 1. Total quantity is referring to 2 channels.

Layout Note:
Place near JDIMM1



5	4	3	2	1																																																												
D				D																																																												
C				C																																																												
B				B																																																												
A				A																																																												
<table><tr><td colspan="2">Security Classification</td><td colspan="2">Compal Secret Data</td><td>Compal Electronics, Inc.</td></tr><tr><td>Issued Date</td><td>2020/0914</td><td>Deciphered Date</td><td>2021/09/04</td><td>Title</td></tr><tr><td colspan="4">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.</td><td>Size</td></tr><tr><td colspan="4"></td><td>Document Number</td></tr><tr><td colspan="4"></td><td>Rev</td></tr><tr><td colspan="4"></td><td>1.A</td></tr><tr><td colspan="4"></td><td>Date</td></tr><tr><td colspan="4"></td><td>Wednesday, March 10, 2021</td></tr><tr><td colspan="4"></td><td>Sheet</td></tr><tr><td colspan="4"></td><td>25</td></tr><tr><td colspan="4"></td><td>of</td></tr><tr><td colspan="4"></td><td>121</td></tr></table>					Security Classification		Compal Secret Data		Compal Electronics, Inc.	Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF 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					1.A					Date					Wednesday, March 10, 2021					Sheet					25					of					121
Security Classification		Compal Secret Data		Compal Electronics, Inc.																																																												
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title																																																												
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF 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																																																												
				1.A																																																												
				Date																																																												
				Wednesday, March 10, 2021																																																												
				Sheet																																																												
				25																																																												
				of																																																												
				121																																																												
5	4	3	2	1																																																												

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/09/14	Deciphered Date	2021/09/04	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF 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.				Reserve for DDR3	
				Size	Document Number
				LA-L161P	Rev 1.A
Date:		Wednesday, March 10, 2021		Sheet	26 of 121

GC OFF 1.0 GPU Power ON/OFF

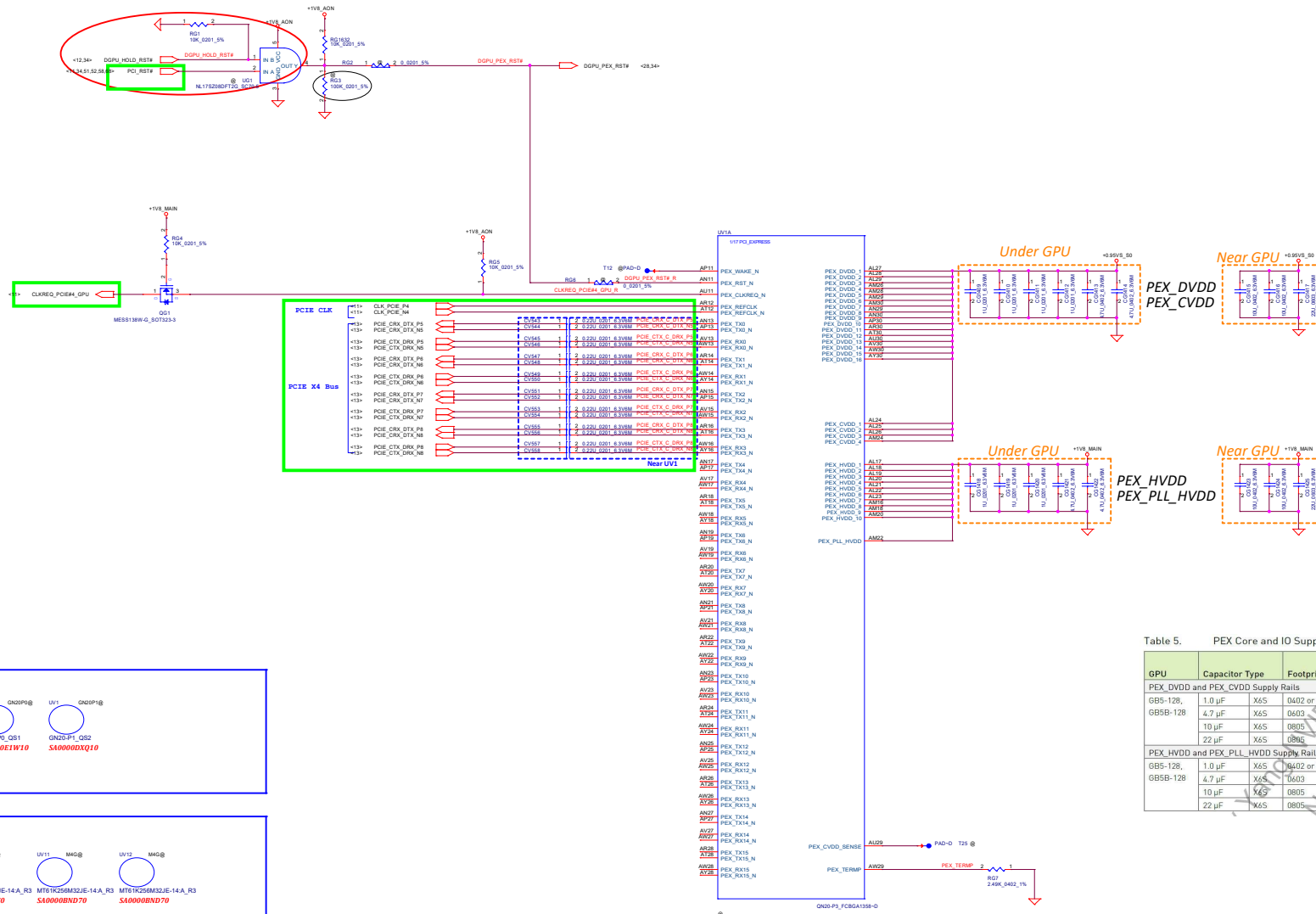
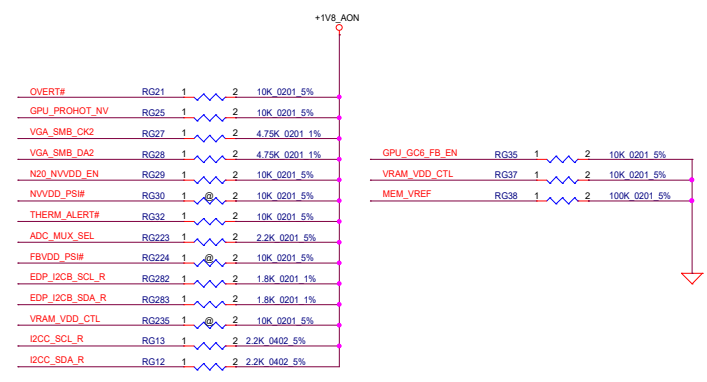
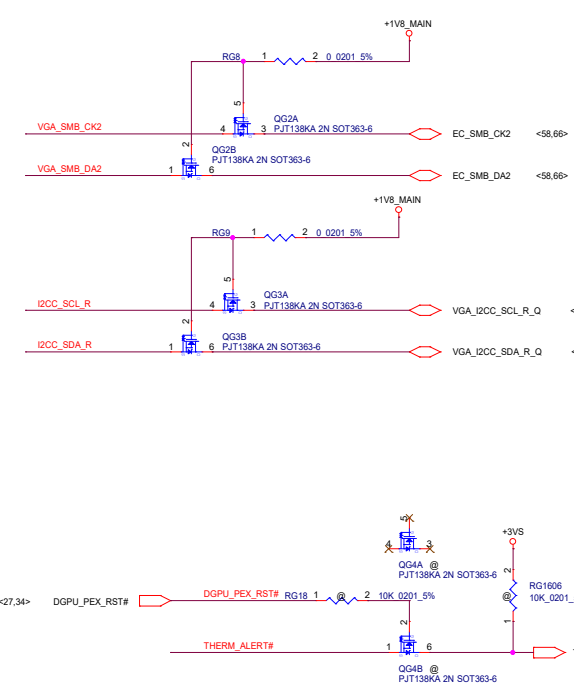
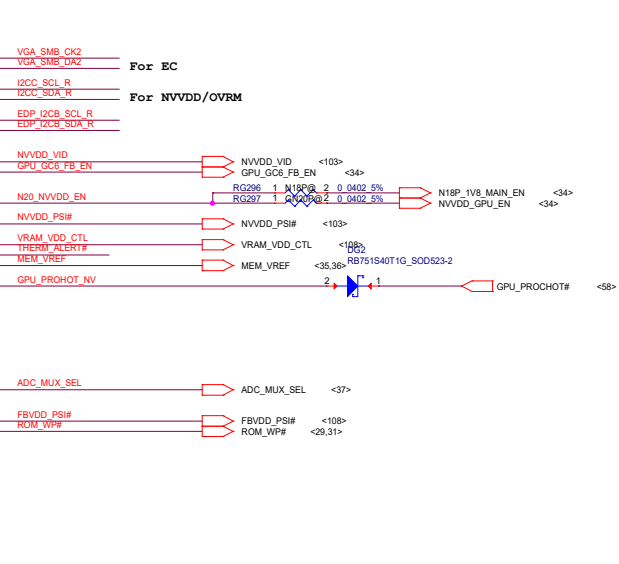
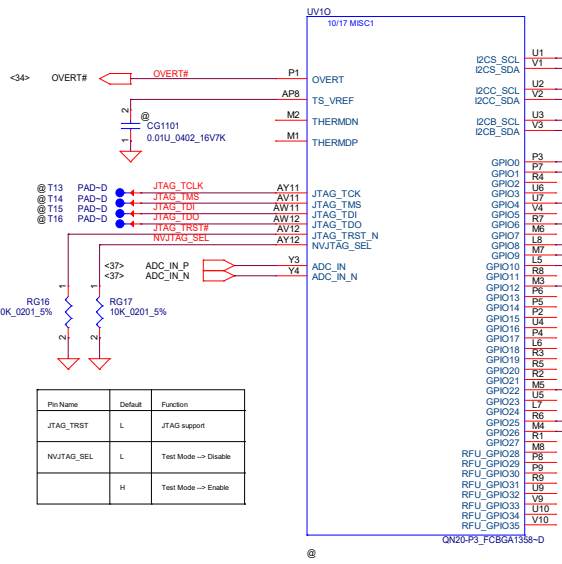
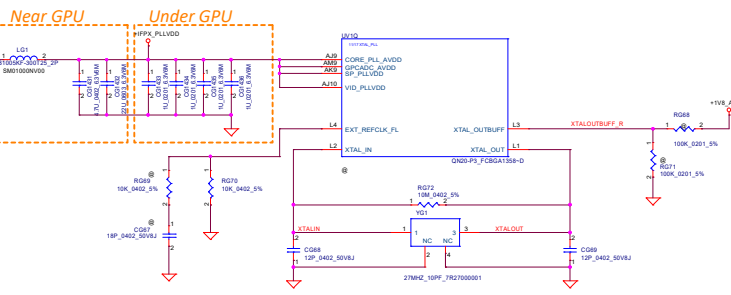


Table 5. PEX Core and I/O Supply Decoupling and Filtering

GPU	Capacitor Type	Footprint	Population	Location
PEX_DVDD and PEX_CVDD Supply Rails				
GB5-128, GB5B-128	1.0 µF	X65 0402 or 0201W	4	Under GPU
	4.7 µF	X65 0603	2	Under GPU
	10 µF	X65 0805	2	Near GPU
	22 µF	X65 0806	1	Near GPU
PEX_HVDD and PEX_PLL_HVDD Supply Rails				
GB5-128, GB5B-128	1.0 µF	X65 0402 or 0201W	3	Under GPU
	4.7 µF	X65 0603	2	Under GPU
	10 µF	X65 0805	2	Near GPU
	22 µF	X65 0805	1	Near GPU

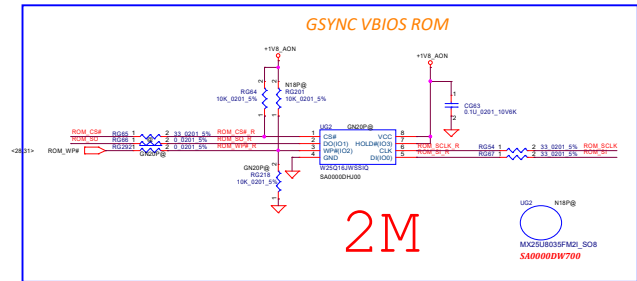




GDDR6 VRAM	Strap2	Strap1	Strap0	RAMCFG
Samsung ,K4ZB0326BC-HC14	L	L	L	0x0
Micron ,MT61K26M32JE-14A	L	L	H	0x1
Hynix ,H56C8H24AIR-S2C	L	H	L	0x2

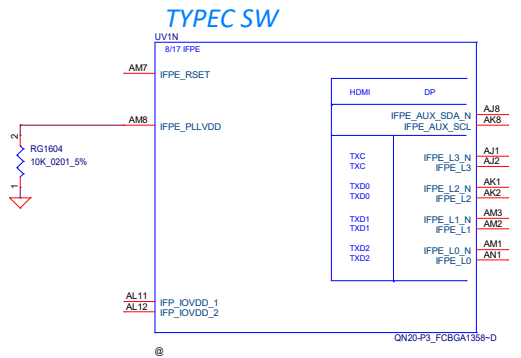
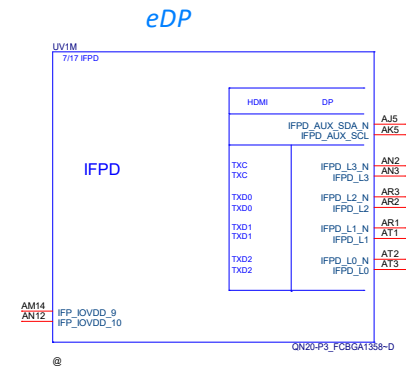
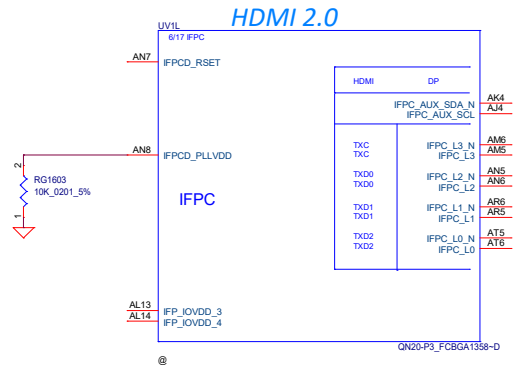
Table 9.3 RAMCFG

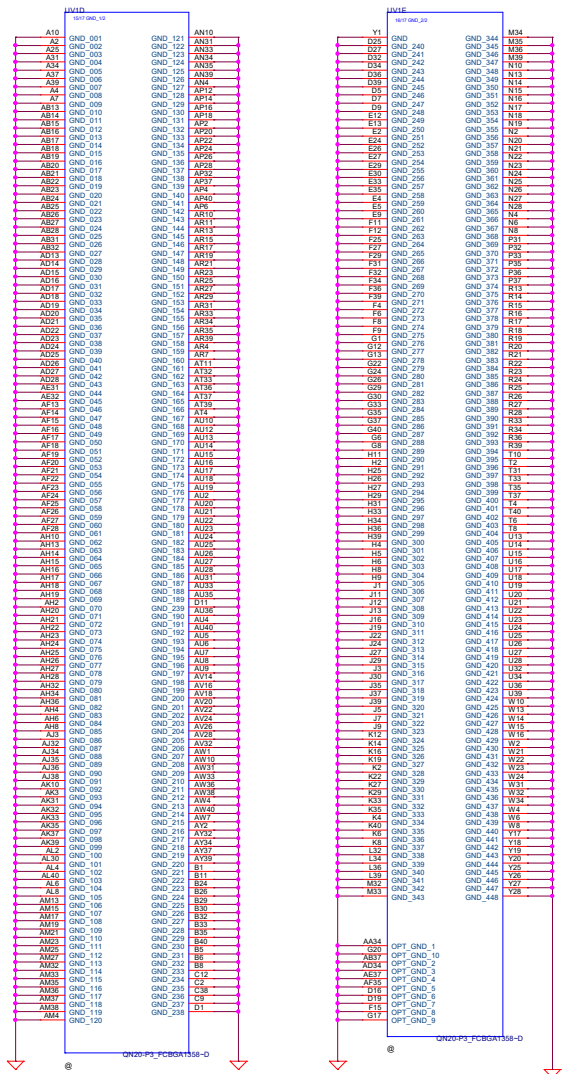
Strap Pins ^{See Note}			RAMCFG Setting Number [see Memory RVL for memory config numbers]
STRAP2	STRAP1	STRAP0	
L	L	L	0 (0x000)
L	L	H	1 (0x000)
L	H	L	2 (0x000)
L	H	H	3 (0x000)
H	L	L	4 (0x000)
H	L	H	5 (0x000)
H	H	L	6 (0x000)
H	H	H	7 (0x000)
L	L	M	8 (0x000)
L	M	L	9 (0x000)
L	M	M	10 (0x000)
L	H	M	11 (0x000)
M	L	L	12 (0x000)
M	L	H	13 (0x000)
M	H	L	14 (0x000)
M	H	H	15 (0x000)



Strap Pins <small>see Note</small>			FS_OVERT* Function
ROM_SO	ROM_SI	ROM_SCLK	
L	L	L	FS_OVERT* function ENABLE
L	L	H	FS_OVERT* function DISABLE
all other configurations			(Reserved; do not configure) (Invalid; do not configure)

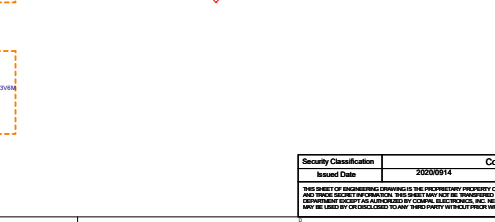
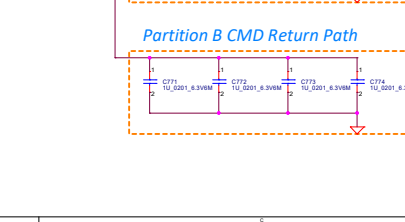
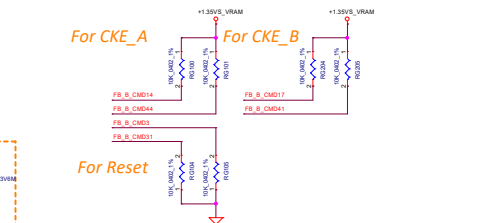
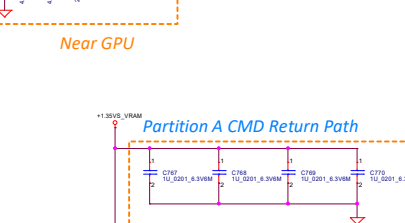
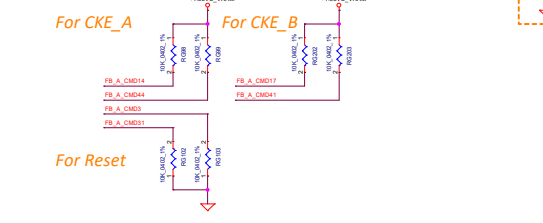
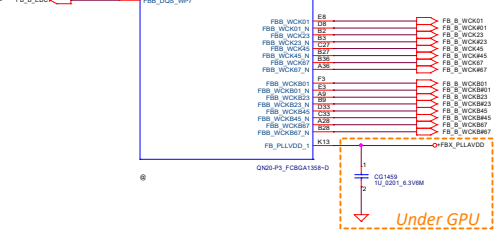
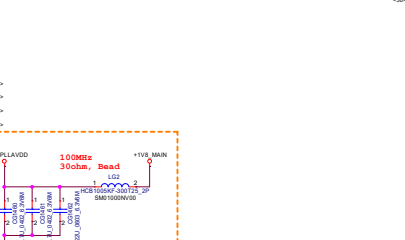
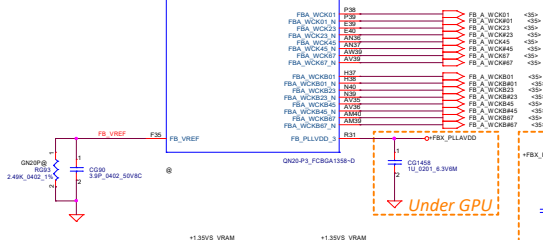
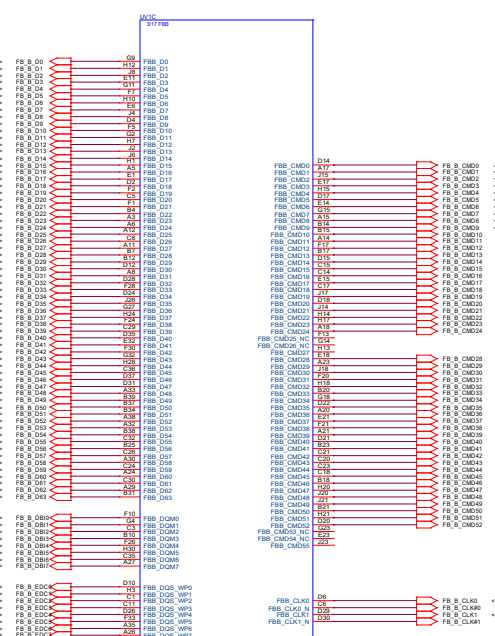
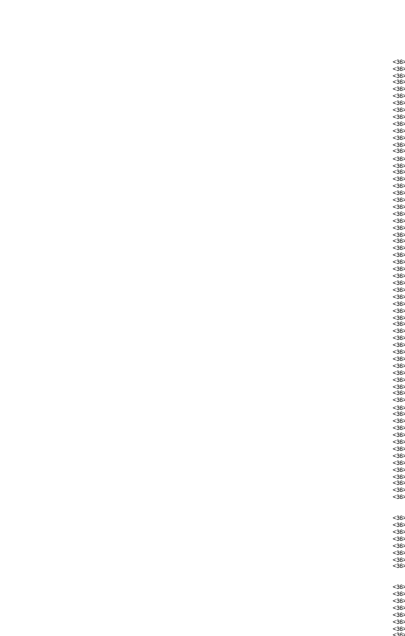
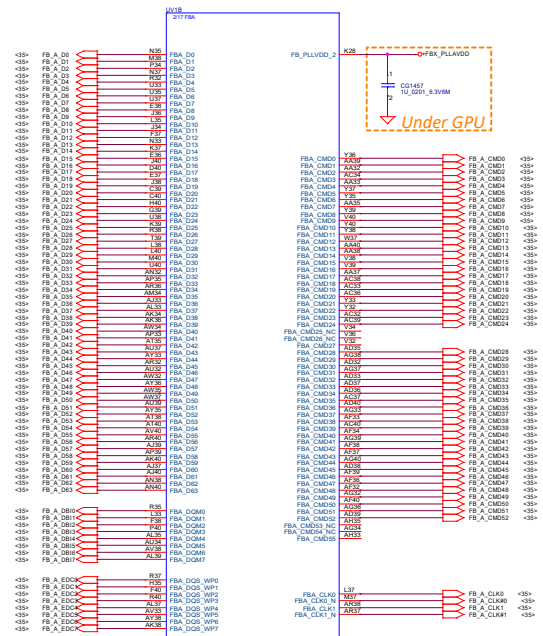
Note that configurations other than the two listed in Table 11.4 must be avoided, as otherwise damage to strap inputs may result.





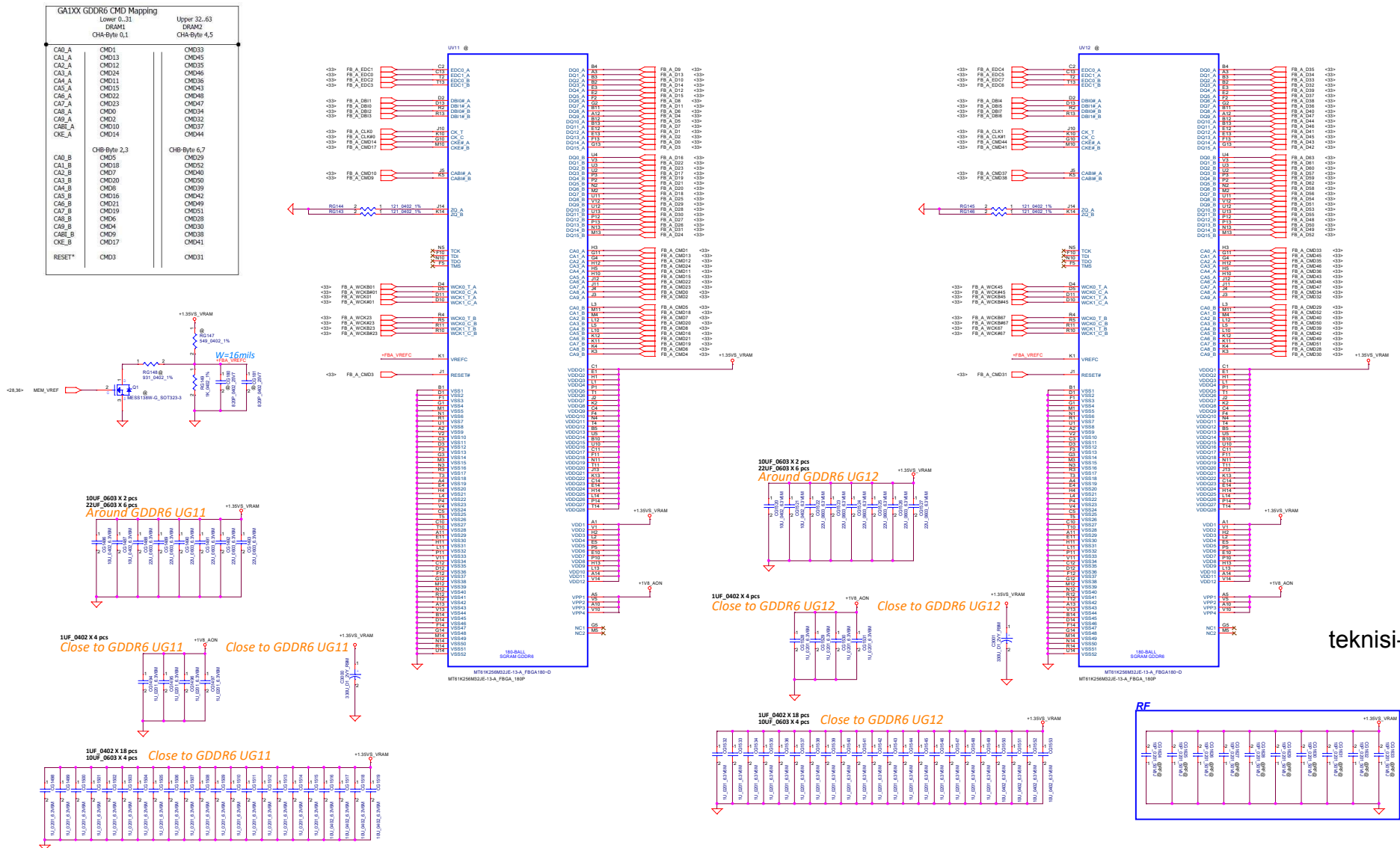
Security Classification		Compal Secret Data		Title	
Issued Date		Deciphered Date		2021/05/04	
2020/09/14				N18E(7/9) GND	
Size		Document Number		LA-L161P	
Date		Wednesday, March 10, 2021		Sheet 32 of 121	

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 COMPANY, INVESTOR, OR 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.



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/09/14	Deciphered Date	2021/06/04	Y/N	N/A
THIS SHEET OF ENGINEERING DRAWINGS IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND IS CONFIDENTIAL. ANY REPRODUCTION OR DISSEMINATION OF THIS SHEET WITHOUT THE WRITTEN PERMISSION OF COMPAL ELECTRONICS, INC. IS STRICTLY PROHIBITED. ANY VIOLATION OF THIS POLICY WILL BE PROSECUTED TO THE FULL EXTENT OF THE LAW.					
L.A-L161P				Rev.	1.0
Issued Date: 2020/09/14				Rev.	1.0

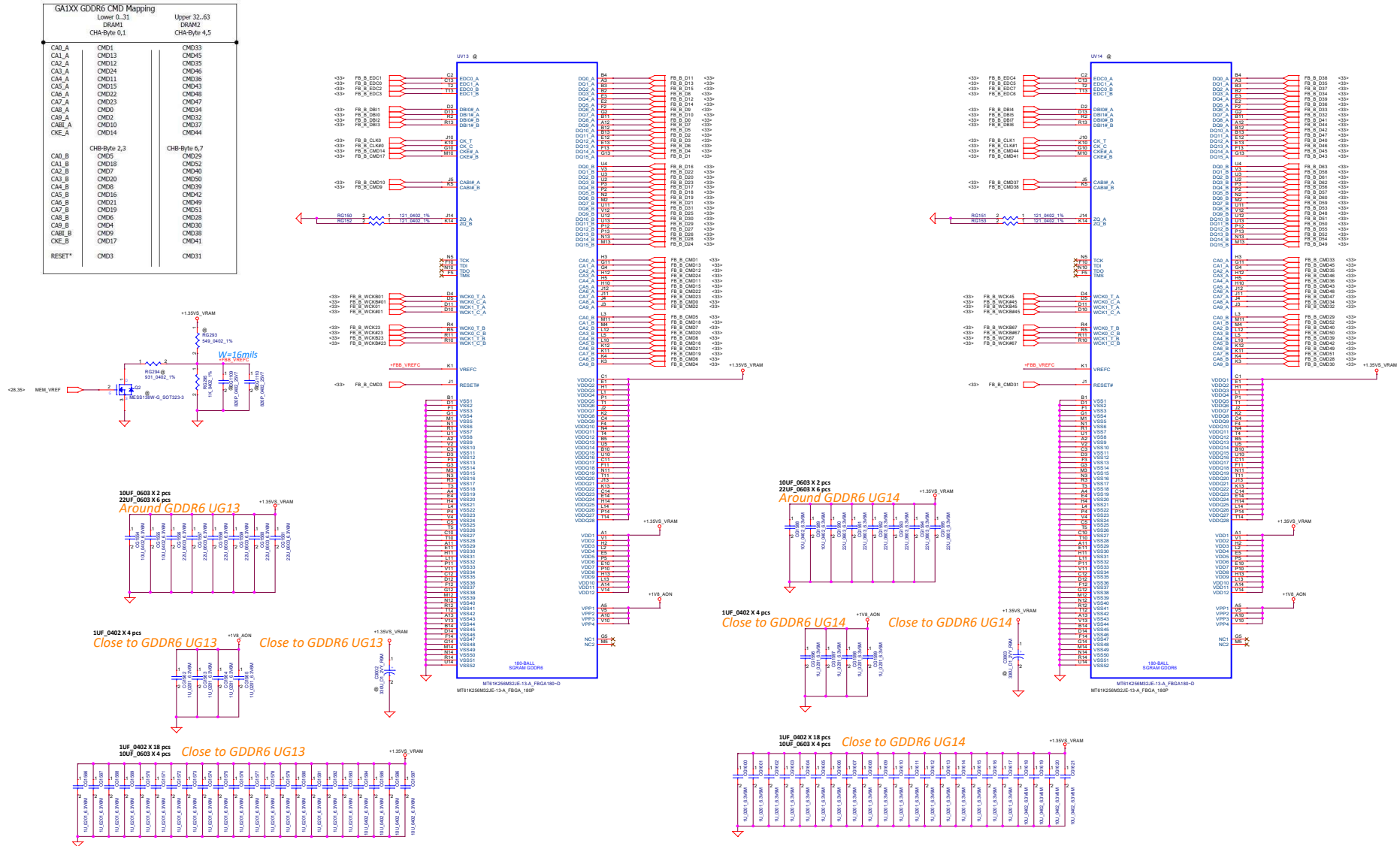
VRAM A



teknisi-indonesia.com

Security Classification	Compul Secret Data		<div>  </div>	
Issued Date	2020/09/14	Deciphered Date	2021/09/04	
THIS SET OF ENGINEERING DRAWINGS IS THE PROPRIETARY PROPERTY OF COMPUL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSMITTED FROM THE CUSTODY OF THE COMPETENT DIVISION OF FIELD SERVICE TO ANY OTHER PERSON OR ENTITY WITHOUT THE WRITTEN PERMISSION OF COMPUL ELECTRONICS, INC. ANY INFORMATION CONTAINED HEREIN IS UNCLASSIFIED BY DATE 05/01/2018 BY SP-1.			<div>  </div>	
<div>  </div>			<div>  </div>	

VRAM B



Security Classification	Compul Secret Data		Tm		Compul Electronics, Inc.	
Issued Date	20200914	Deciphered Date	20210604			
THIS SET OF ENGINEERING DRAWINGS IS THE PROPRIETARY PROPERTY OF COMPUL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL INFORMATION. NO PART OF THIS SET SHALL BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF COMPUL ELECTRONICS, INC. NEITHER THIS SET NOR ITS INFORMATION CONTENTS MAY BE USED OR DISCLOSED TO ANY THIRD PARTY WITHOUT THE WRITTEN CONSENT OF COMPUL ELECTRONICS, INC.				Title GD6R6 B CH2 Size 14-1161P Date Wednesday, March 11, 2021 Sheet 36 of 14		

Power Monitor(OVR-M)

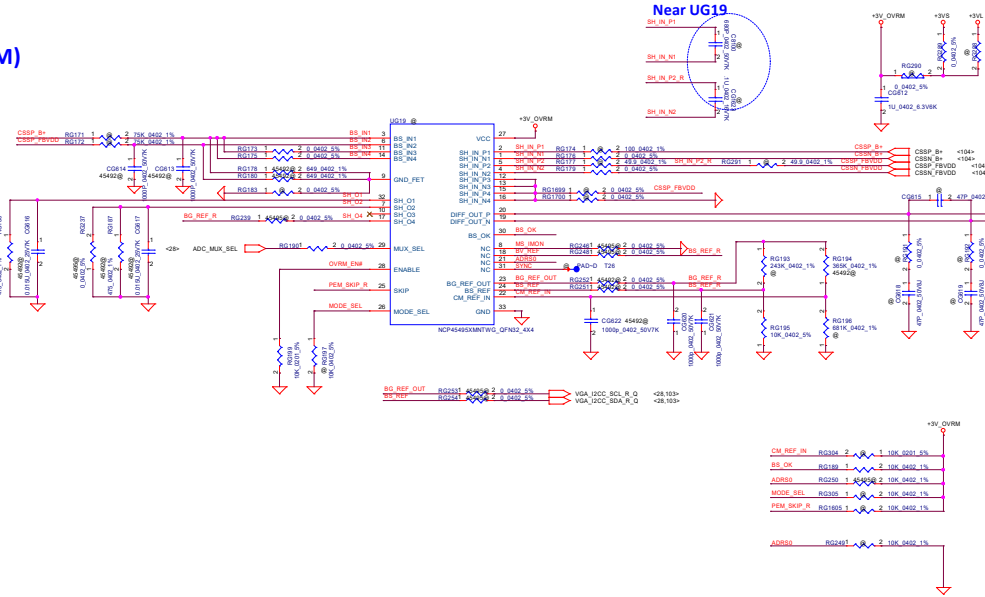
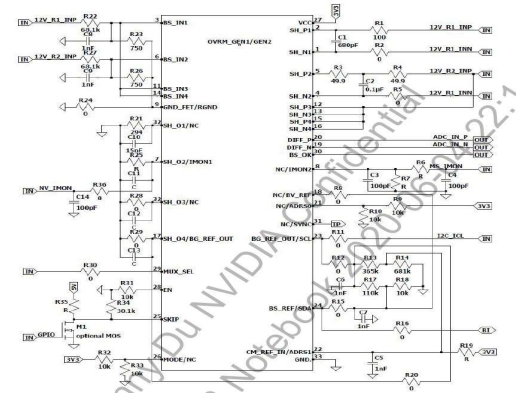


Figure 3.5 OVR-M GEN1 and GEN2 Co-Design



OVR-M Gen2 (Only For GN20)

UC19	45495	RG171	45495	RG172	45495	RG174	45495	RG177	45495	RG251	45495	RG198	45495	RG193	45495	CG153	45495	RG183	45495	RG169	45495	CG150	45495	RG165	45495
45495																									
NCP45495	0.0402 5%	0.0402 5%	0.0402 5%	0.0402 5%	49.9_0402 1%	49.9_0402 1%	49.9_0402 1%	10K_0402 5%	31.6K_0402 1%	11U_0402 16V7K	0.0402 5%	0.0402 5%	680P_0402 50V7K	10K_0402 5%	680P_0402 50V7K	10K_0402 5%	680P_0402 50V7K	10K_0402 5%	680P_0402 50V7K	10K_0402 5%	680P_0402 50V7K	10K_0402 5%	680P_0402 50V7K		
SA00000000	SD03479280	SD03479280	SD03479280	SD03479280	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0		

OVR-M Gen1 (Onsemi) (N18P-G61A)

UG19	45492	RG171	45492	RG172	45492	RG174	45492	RG177	45492	RG251	45492	RG198	45492	RG193	45492	CG153	45492	RG183	45492	RG169	45492	CG150	45492	RG165	45492
																									
NCP45492	75K_0402 1%	75K_0402 1%	75K_0402 1%	100_0402 1%	49.9_0402 1%	49.9_0402 1%	49.9_0402 1%	49.9_0402 1%	49.9_0402 1%	49.9_0402 1%	49.9_0402 1%	681K_0402 1%	243K_0402 1%	1U_0402 16V7K	0.0402 5%	0.0402 5%	0.0402 5%	0.0402 5%	0.0402 5%	0.0402 5%	0.0402 5%	680P_0402 50V7K	10K_0402 5%		
SA00000000	SD03479280	SD03479280	SD03479280	SD03410080	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD034499A0	SD00000020	SD01000040	SD02000080	SD02000080	SD02000080	SD02000080	SD02000080	SD02000080	SD02000080	SD01681830	SD01681830	SD02010020	

OVR-M Gen1 (UPI) (N18P-G61A)

US19 UPI	RG171 UPI	RG172 UPI	RG174 UPI	RG177 UPI	RG251 UPI	RG198 UPI	RG193 UPI	CG153 UPI	RG183 UPI	RG169 UPI	CG150 UPI	RG165 UPI	RG156 UPI
US0600Q001	75K_0402 1%	75K_0402 1%	100_0402 1%	49.9_0402 1%	49.9_0402 1%	100_0402 1%	49.9_0402 1%	49.9_0402 1%	100_0402 1%	49.9_0402 1%	49.9_0402 1%	100_0402 1%	360K_0402 1%
SA00000000	SD03479280	SD03479280	SD03479280	SD03479280	SD03479280	SD03479280	SD03479280	SD03479280	SD03479280	SD03479280	SD03479280	SD03479280	SD03479280
RG251 UPI	RG198 UPI	RG193 UPI	CG153 UPI	CG150 UPI	RG183 UPI	RG169 UPI	CG156 UPI	CG153 UPI	CG150 UPI	RG165 UPI	RG156 UPI		
0_0402 5%	0_0402 5%	487_0402 1%	487_0402 1%	487_0402 1%	1000K_0402 50V7K	1000K_0402 50V7K	357_0402 1%	357_0402 1%	357_0402 1%	357_0402 1%	0.0181_0402 25V7K	0.0181_0402 25V7K	1000K_0402 50V7K_0402 5%
SD03479280	SD03479280	SD03479280	SD03479280	SD03479280	SD03479280	SD03479280	SD03479280	SD03479280	SD03479280	SD03479280	SD03479280	SD03479280	SD03479280

OVR-M Gen1 (Onsemi) (GN20) (Reserve Only)

RG171	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@
45492																									
NCP45492	75K_0402 1%	75K_0402 1%	100_0402 1%	49.9_0402 1%	49.9_0402 1%	681K_0402 1%	237K_0402 1%	1J_0402 16V7K	0_0402 5%	0_0402 5%	689P_0402 50V7K	10K_0402 5%													
SA00000000	SD03479280	SD03479280	SD03479280	SD03449A80	SD03449A80	SD03449A80	SD03423780	SE07610480	SD02800080	SD02800080	SE07481K80	SD02810C80													
RG171	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@
	665_0402 1%	665_0402 1%	1000P_0402 50V7K	1000P_0402 50V7K	340_0402 1%	634_0402 1%	0.015J_0402 25V7K	0.015J_0402 25V7K	1000P_0402 50V7K																
	SD000001J00	SD000001J00	SE074102K80	SE074102K80	SD00000K780	SD00000J280	SE07513K80	SE07513K80	SE074102K80																
RG211	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@	45492_FurGN20Gen1@
	0_0402 5%	0_0402 5%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	365K_0402 1%	
	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	SD03000080	

OVR-M Gen1 (UPI) (GN20) (Reserve Only)

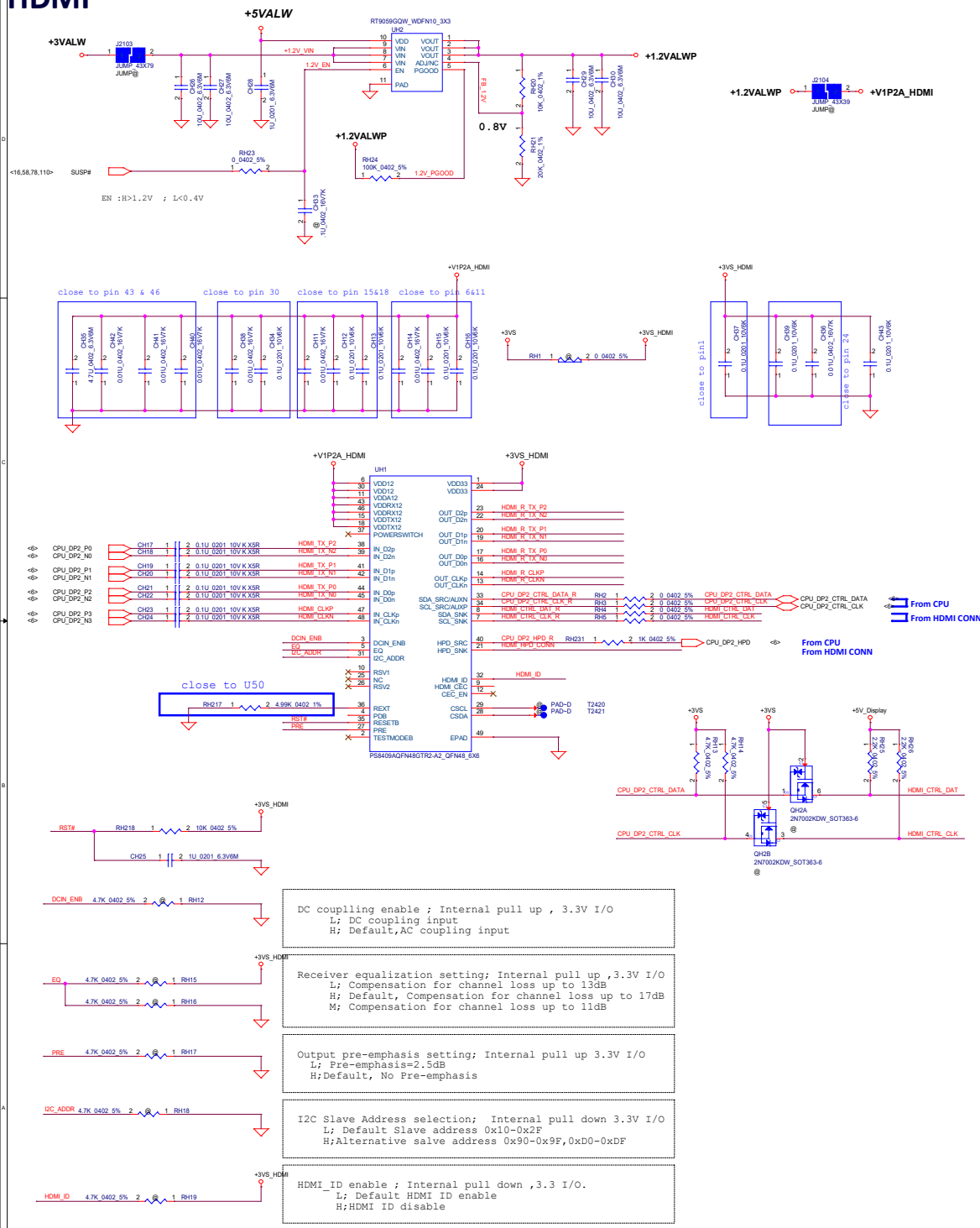
US19	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND00000000	UPI_FurGND
------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	--------------------	------------

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Declassified Date		Title	
2020/09/14		2021/06/04		OVR-M	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND IS CONFIDENTIAL. ANY REUSE OR REPRODUCTION OF THIS SHEET WITHOUT THE WRITTEN PERMISSION OF COMPAL ELECTRONICS, INC. IS STRICTLY PROHIBITED. ANY VIOLATION OF THIS POLICY WILL BE TREATED AS A VIOLATION OF THE COMPANY'S POLICY AND WILL BE SUBJECT TO LEGAL ACTION.				Size	
L1-L161P				Rev. 1A	
Date: <u>December 19, 2021</u>				Sheet 37 of 121	

5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 39 of 121	

HDMI

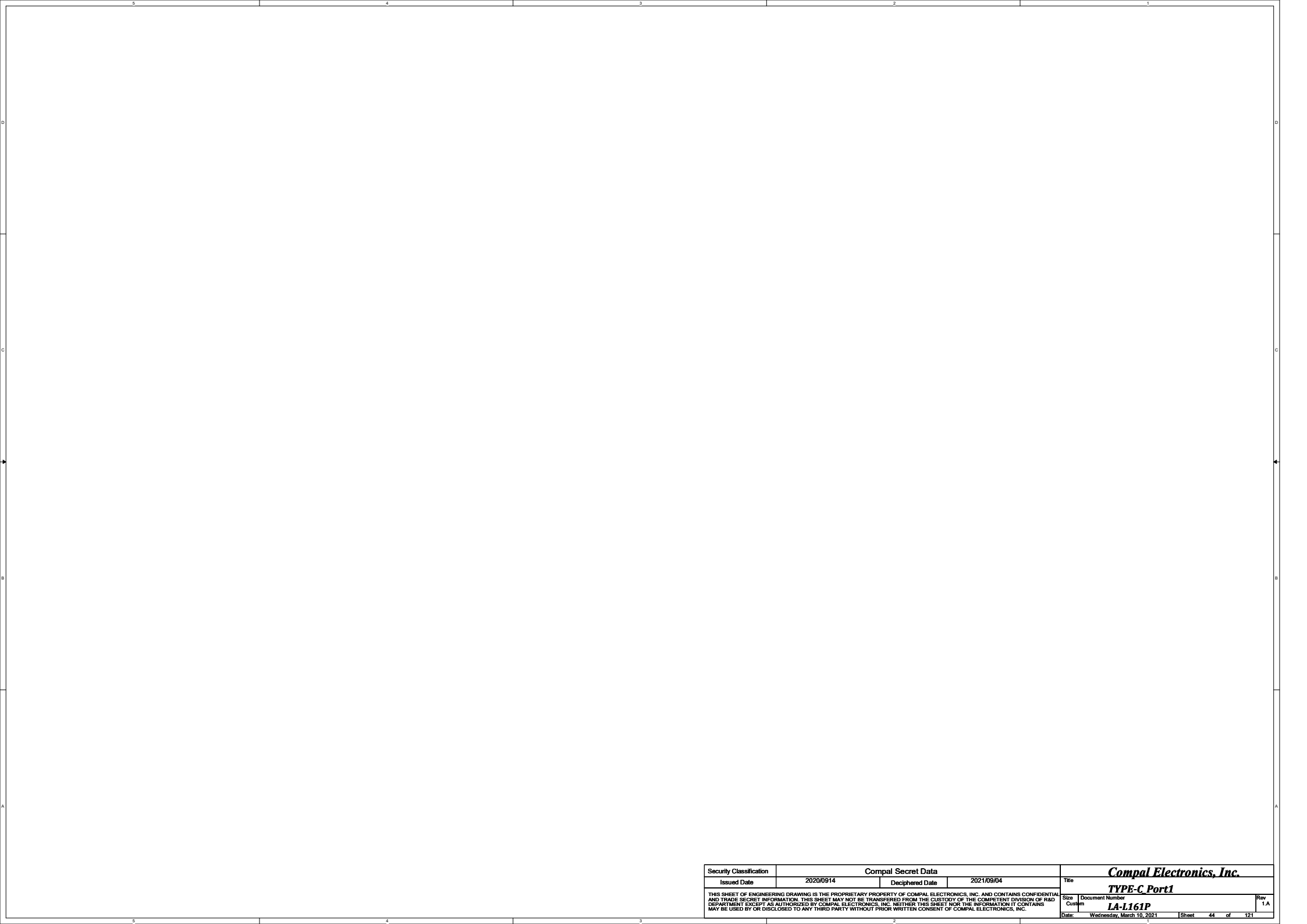


5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

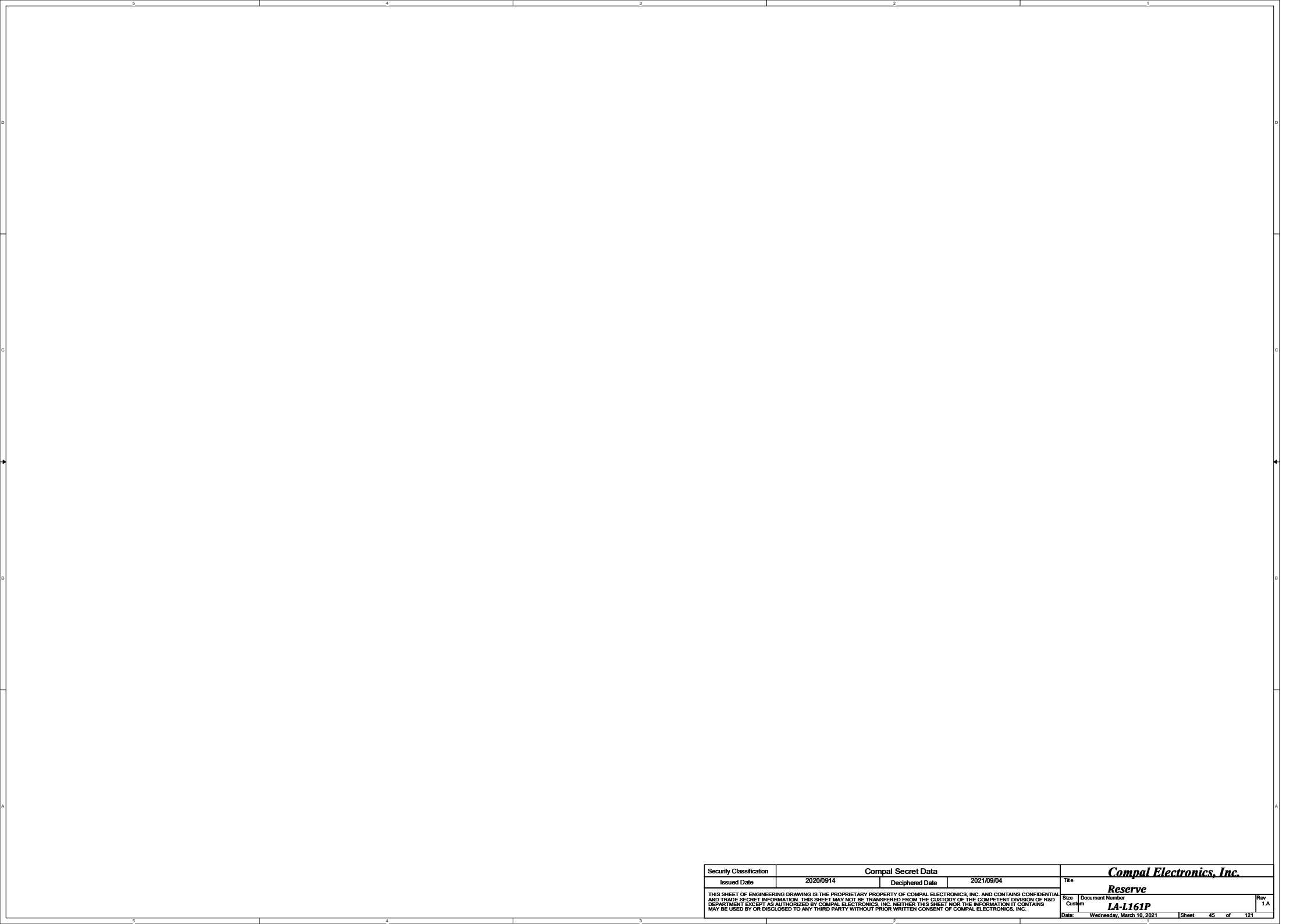
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 41 of 121	

5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 43 of 121	



Security Classification	Compal Secret Data			Compal Electronics, Inc.		
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF 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
				Custm	LA-L161P	1 A
				Date	Wednesday, March 10, 2021	Sheet 44 of 121



Security Classification	Compal Secret Data			Title	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Reserve	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date	Wednesday, March 10, 2021
				Sheet	45 of 121
				Rev	1 A

5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 46 of 121	

5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 47 of 121	

5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 48 of 121	

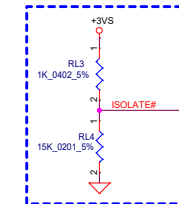
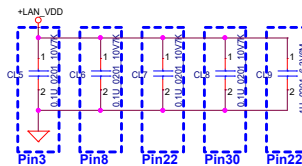
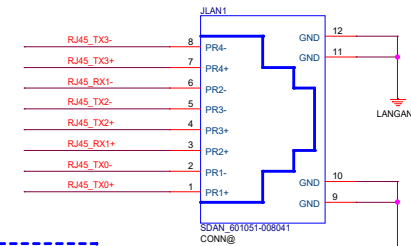
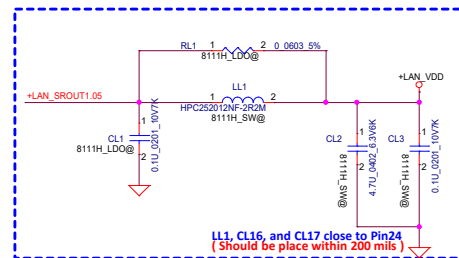
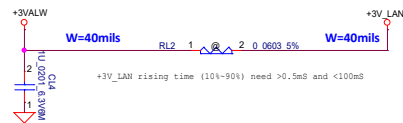
5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
Date:	Wednesday, March 10, 2021	Sheet	49	of	121
					Rev 1.A

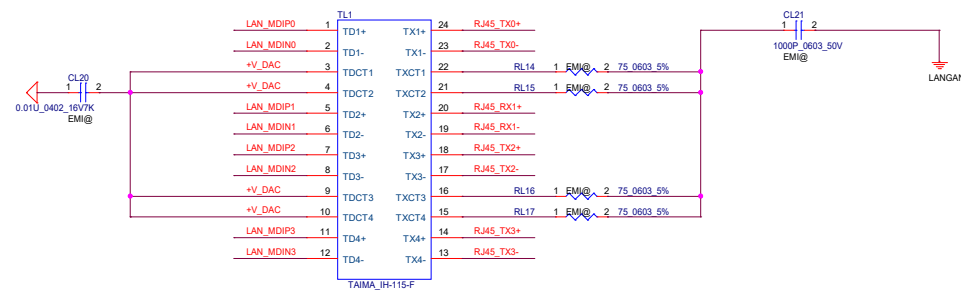
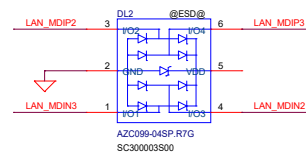
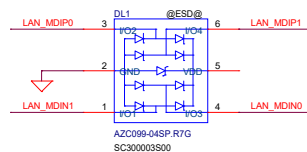
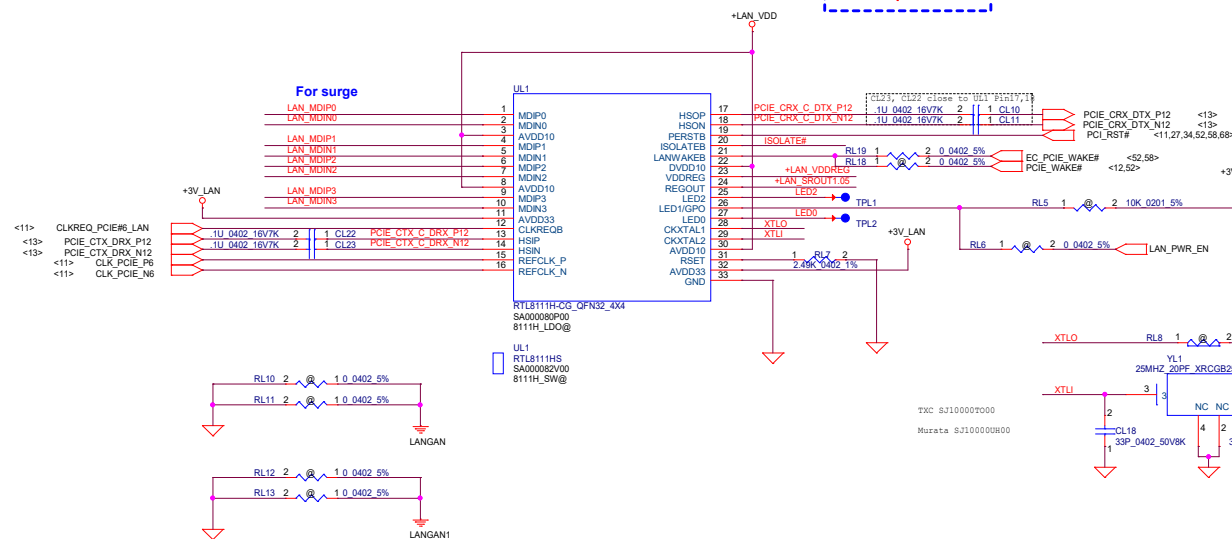
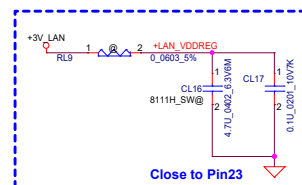
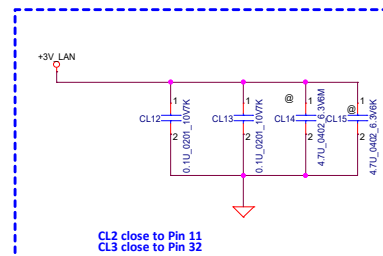
5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 50 of 121	

RJ-45 CONN.

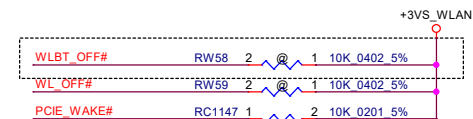


www.teknisi-indonesia.com



Security Classification	Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/09/14	Deciphered Date	2021/09/04	Title
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF 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.				LAN RTL8111H/RTL8107E
Size	C	Document Number	LA-L161P	Rev
Date:	Wednesday, March 10, 2021	Sheet	51	of 121

NGFF Wireless LAN / BT (Key E) [PCIE+USB/CNVi]



Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title NGFF WLAN / BT		
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 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.A
				LA-L161P Date: Wednesday, March 10, 2021 Sheet 52 of 121		

5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification	Compal Secret Data			Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 53 of 121	

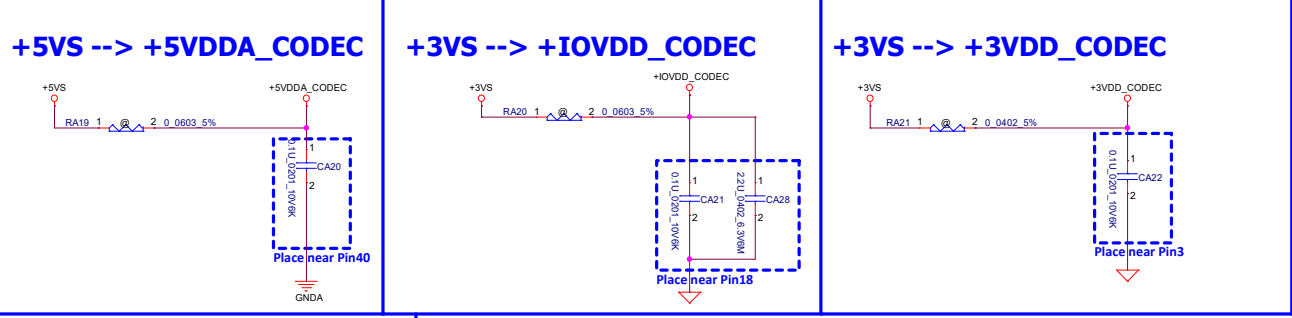


Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 54 of 121	

5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

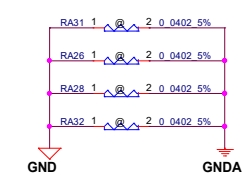
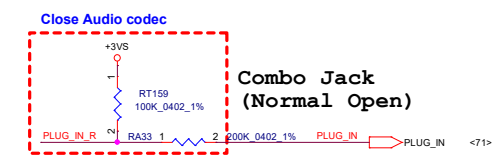
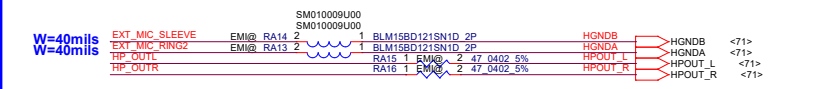
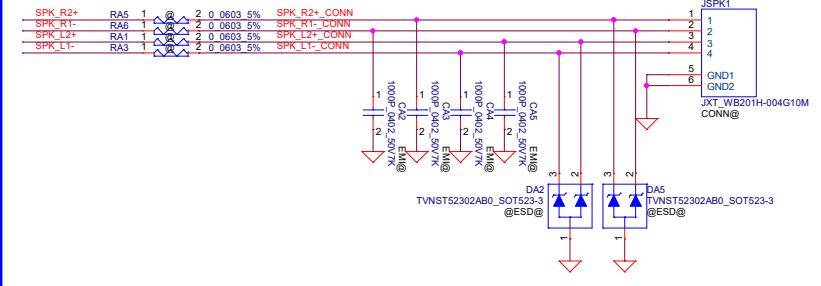
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 55 of 121	

ALC3287

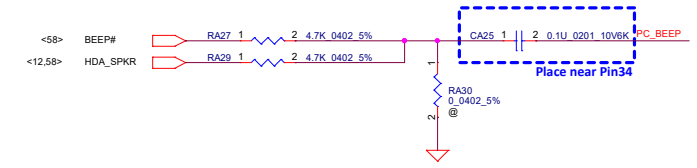


Speaker

SPEAK 4 ohm : 40MIL
SPEAK 8 ohm : 20MIL



PC Beep



Security Classification		Compal Secret Data		Compal Electronics, Inc. Audio Codec Realtek ALC3287	
Issued Date	2020/09/14	Deciphered Date	2021/09/04	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER BY THE 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-1161P	
Date: Wednesday, March 10, 2021				Sheet	56 of 121

5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 57 of 121	



5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 59 of 121	

5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 60 of 121	

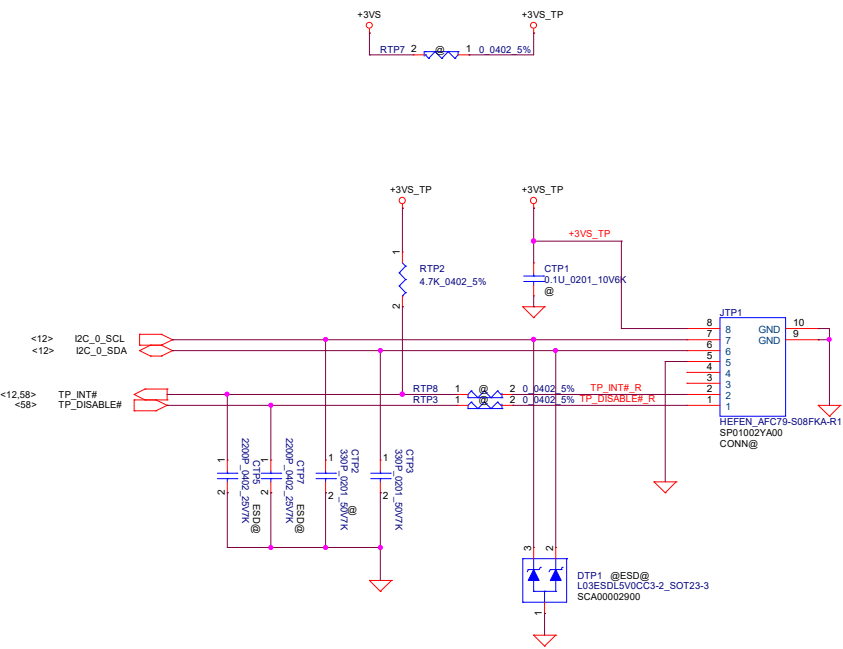
5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 61 of 121	

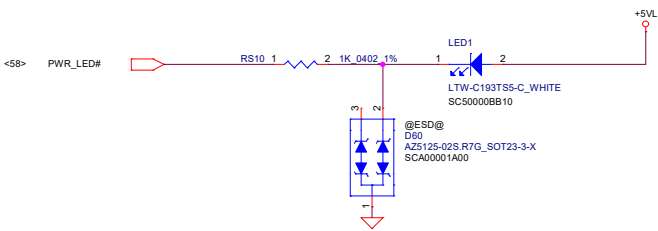
5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 62 of 121	

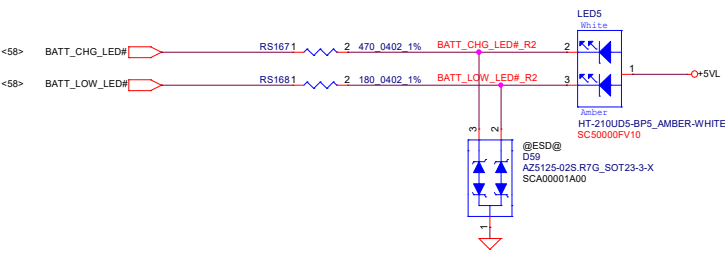
Touch Pad



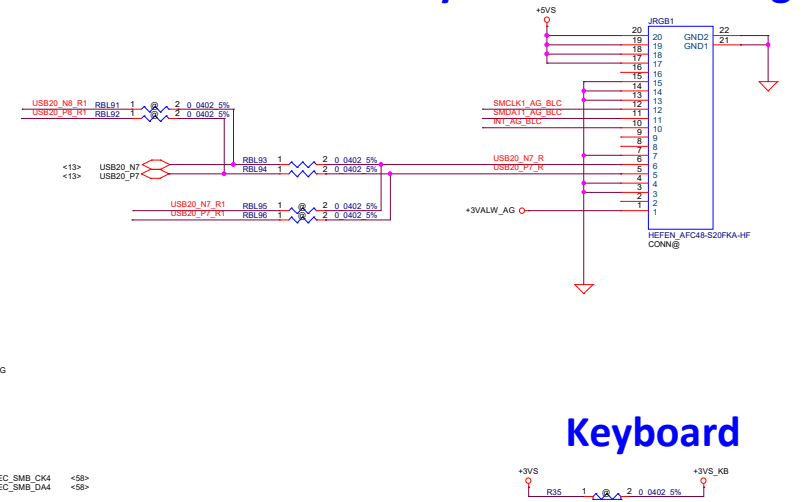
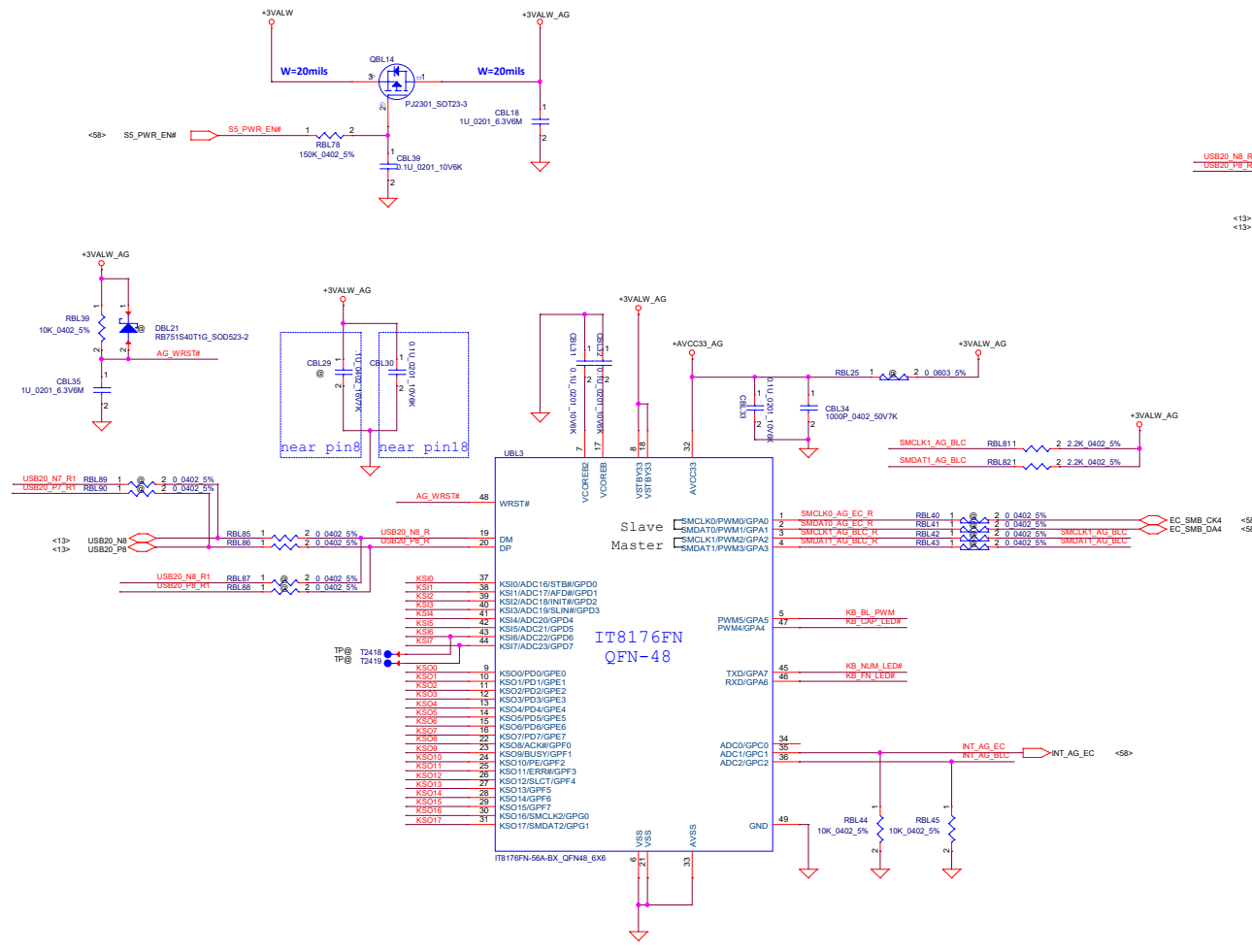
Power Button LED



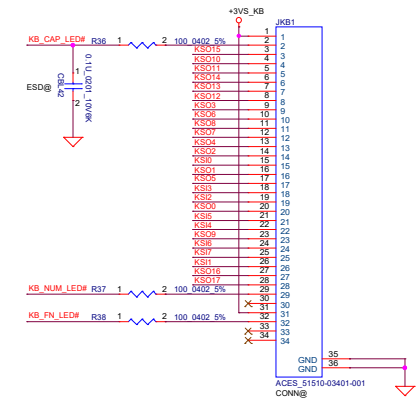
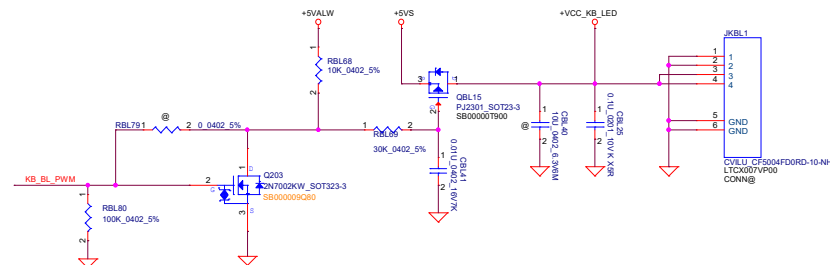
BATT LED



Keyboard RGB Backlight



Keyboard White Backlight



Security Classification		Compal Secret Data		Compal Electronics, Inc.					
Issued Date		2020/09/14		Deciphered Date		2021/08/04			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL INFORMATION AND TRADE SECRET INFORMATION. IT IS NOT TO BE DISCLOSED OR THE CONTENT THEREOF DISCLOSED BY ANY MEANS OR BY ANY PERSON WITHOUT THE WRITTEN PERMISSION OF COMPAL ELECTRONICS, INC. IF THIS SHEET OR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT YOUR PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Title		Reserve			
				Size		Document Number		Rev	
				Class		LA-1161P		1A	
				Date:		Wednesday, March 10, 2021		Sheet	

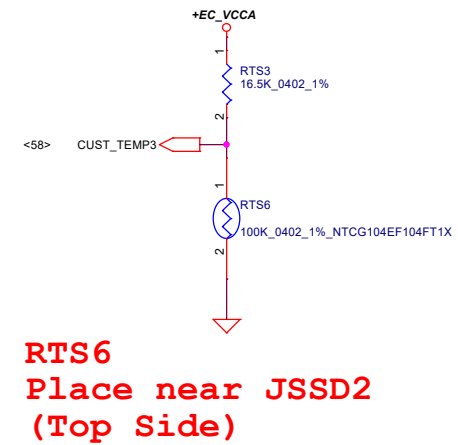
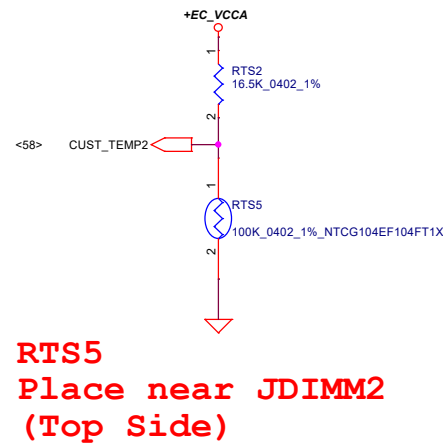
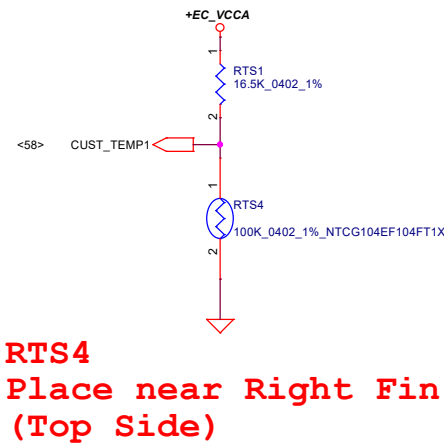
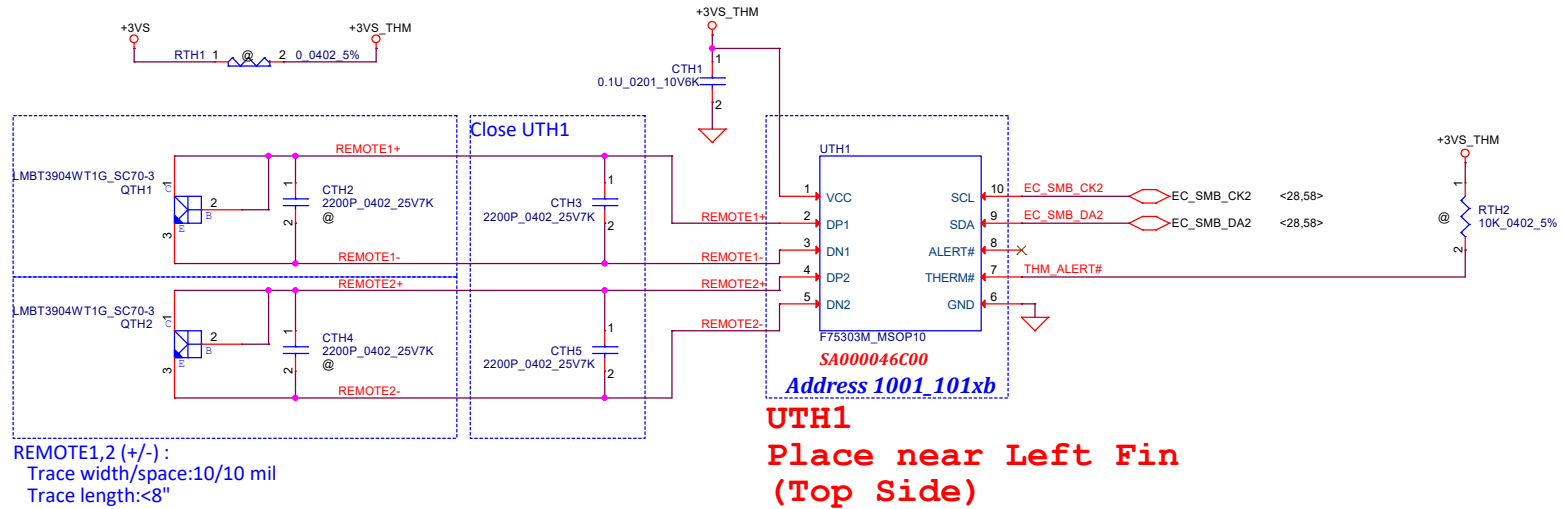
www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 65 of 121	

THERMAL SENSOR

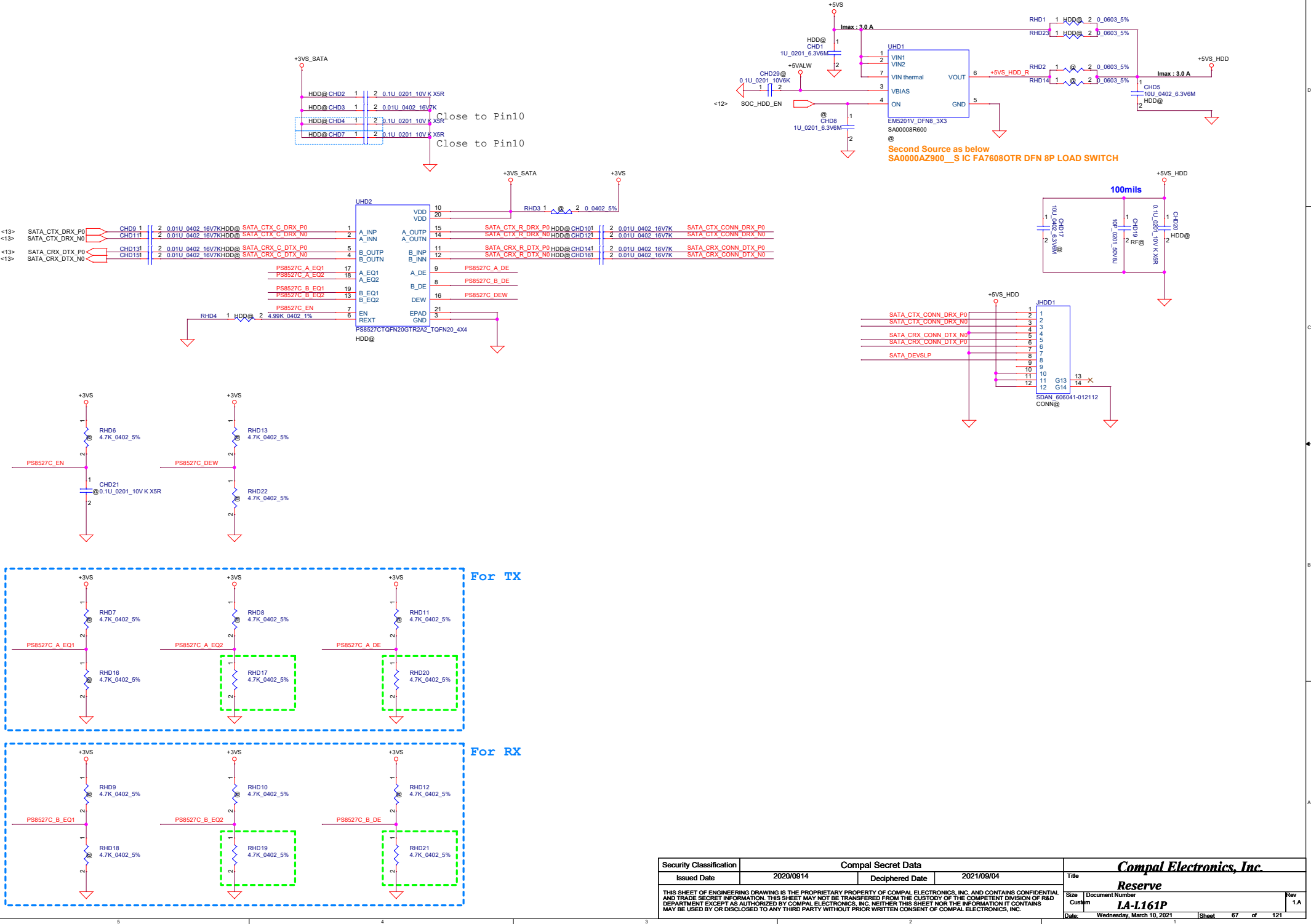
QTH1
Place near +NVVDD
(Bottom Side)

QTH2
Place near +VCCIN
(Bottom Side)



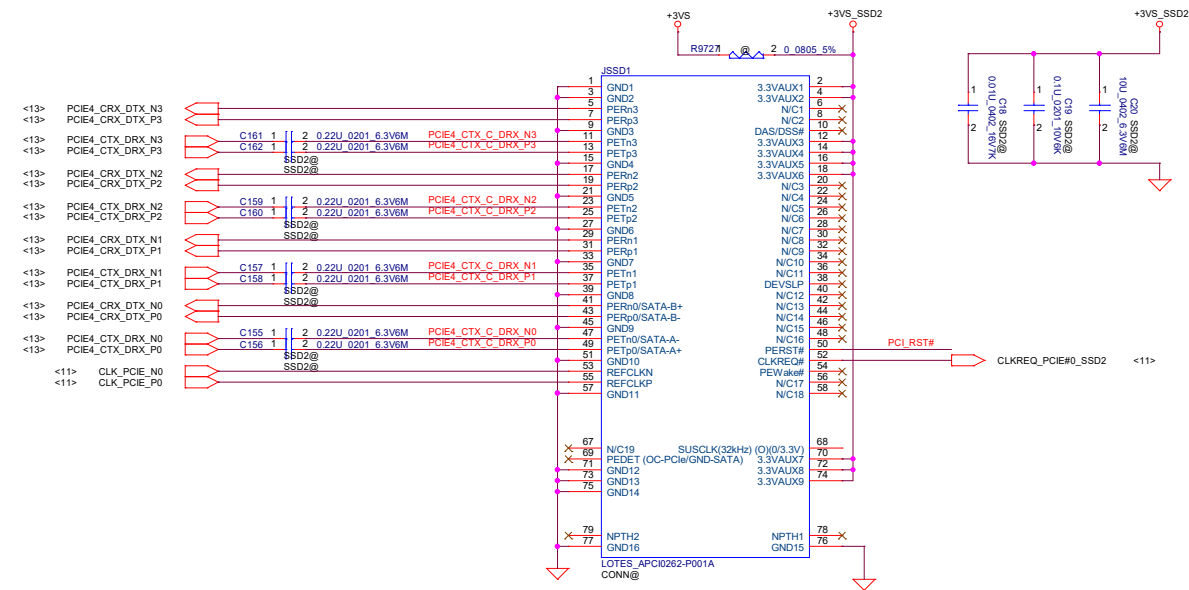
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Finger Printer/ Thermal
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Custom
				Document Number	LA-L161P
				Date	Wednesday, March 10, 2021
				Sheet	66 of 121
				Rev	1.A

HDD



Security Classification		Compal Secret Data		Title		Compal Electronics, Inc.	
Issued Date		Deciphered Date		Size		Document Number	
2020/09/14		2021/09/04		Custom		LA-L161P	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.		Date		Wednesday, March 10, 2021		Sheet 67 of 121	
Rev		1.A					

SSD1_2242 (TYPE M) Main (PCIe Gen4)



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.

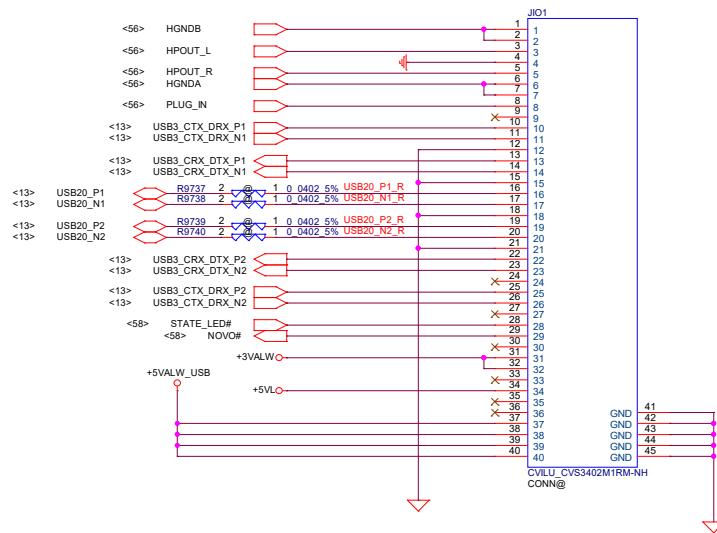
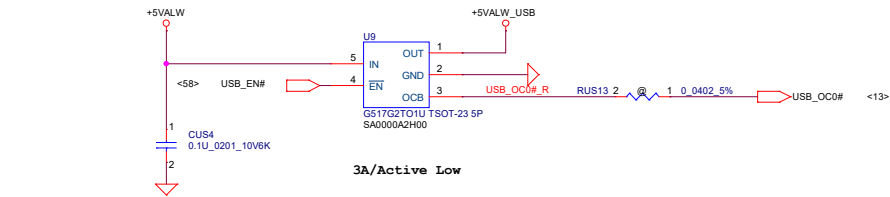
5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 69 of 121	



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 70 of 121	

IO connector



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/09/14	Deciphered Date	2021/09/04	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF ROAD DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				Custom	LA-L161P
				Date	Wednesday, March 10, 2021
				Sheet	71 of 121
				Rev	1.A

5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 72 of 121	



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 73 of 121	

5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 74 of 121	

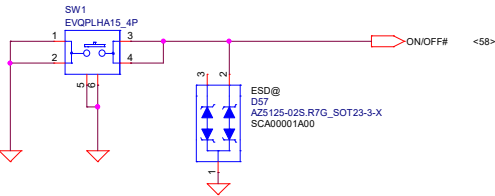
5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 75 of 121	

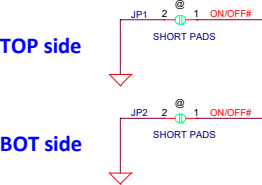
5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
				Date: Wednesday, March 10, 2021	Rev 1.A
				Sheet 76 of 121	

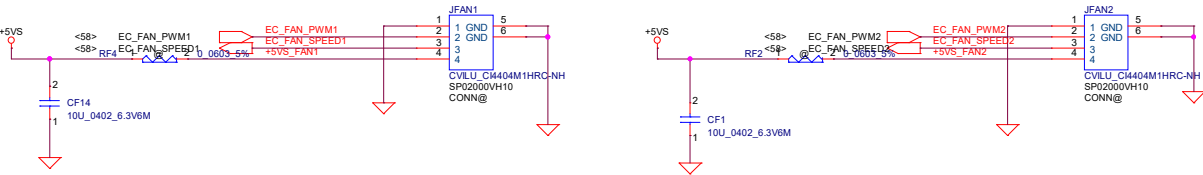
Power Button



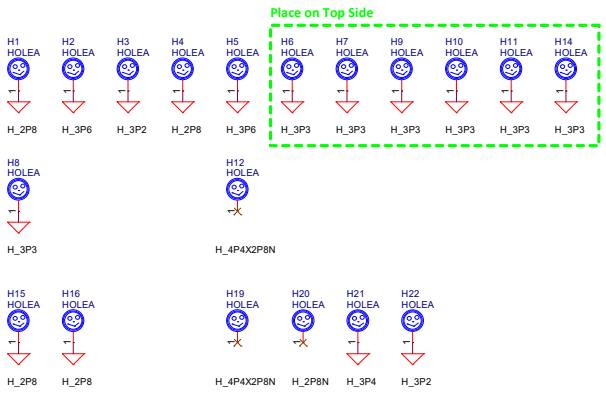
ON/OFF# SHORT PAD



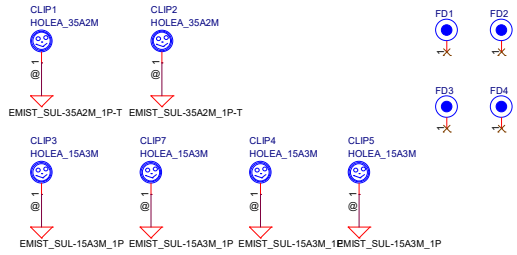
FAN



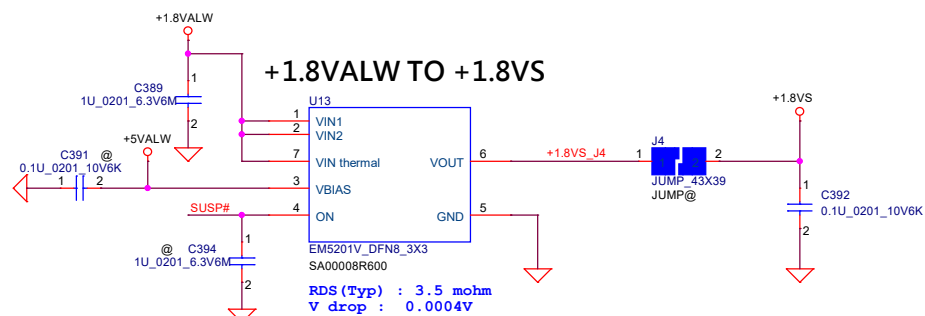
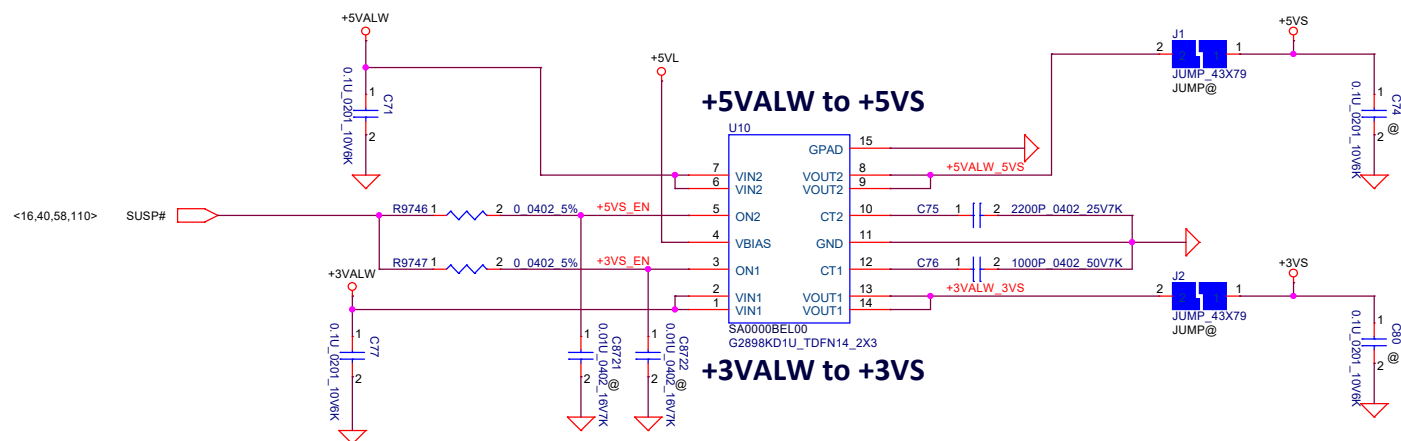
SCREW



CLIP



DC to DC



Security Classification		Compal Secret Data		Compal Electronics, Inc. DC to DC	
Issued Date	2020/09/14	Deciphered Date	2021/09/04		
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	
				Size	Document Number
				Custum	LA-L161P Date: Wednesday, March 10, 2021
				Sheet	78 of 121

5	4	3	2	1																														
D				D																														
C				C																														
B				B																														
A				A																														
<table><tr><td>Security Classification</td><td colspan="3">Compal Secret Data</td><td>Title</td></tr><tr><td>Issued Date</td><td>2020/09/14</td><td>Deciphered Date</td><td>2021/09/04</td><td>Reserve</td></tr><tr><td colspan="4">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 TRANSFERED 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.</td><td>Size Custom</td></tr><tr><td colspan="4"></td><td>Document Number LA-L161P</td></tr><tr><td colspan="4"></td><td>Rev 1.A</td></tr><tr><td>Date:</td><td colspan="2">Wednesday, March 10, 2021</td><td>Sheet</td><td>79 of 121</td></tr></table>					Security Classification	Compal Secret Data			Title	Issued Date	2020/09/14	Deciphered Date	2021/09/04	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 TRANSFERED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom					Document Number LA-L161P					Rev 1.A	Date:	Wednesday, March 10, 2021		Sheet	79 of 121
Security Classification	Compal Secret Data			Title																														
Issued Date	2020/09/14	Deciphered Date	2021/09/04	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 TRANSFERED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom																														
				Document Number LA-L161P																														
				Rev 1.A																														
Date:	Wednesday, March 10, 2021		Sheet	79 of 121																														
5	4	3	2	1																														

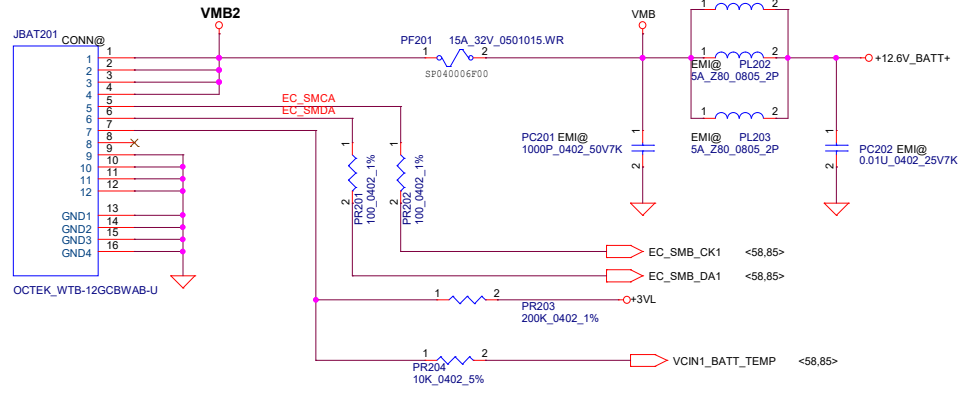
5	4	3	2	1
D				D
C				C
B				B
A				A
5	4	3	2	1

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	Reserve
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LA-L161P
Date:	Wednesday, March 10, 2021			Sheet 80 of 121	Rev 1.A

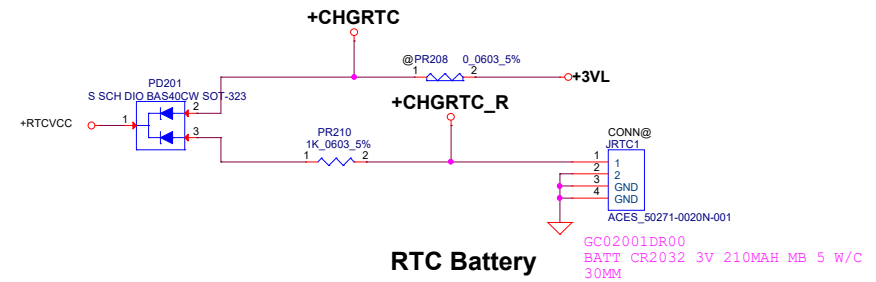
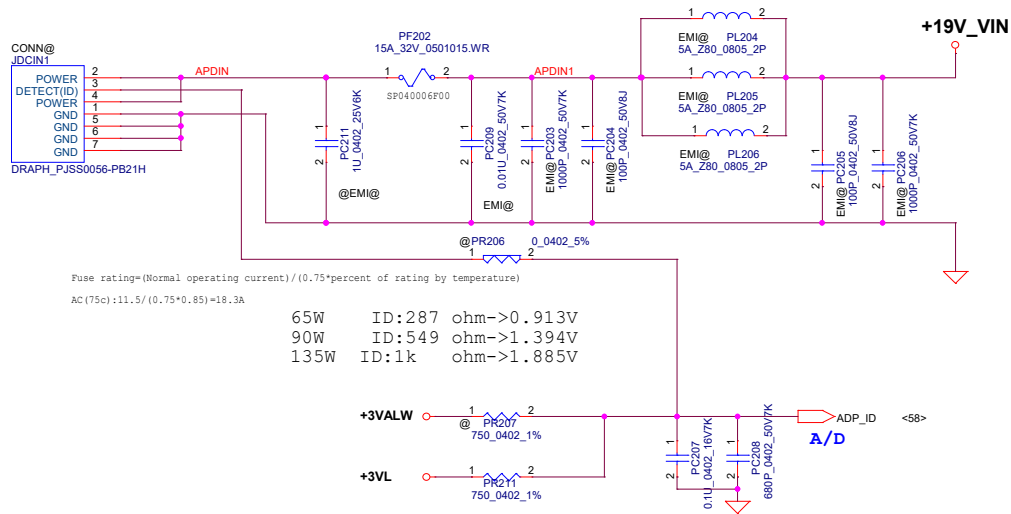
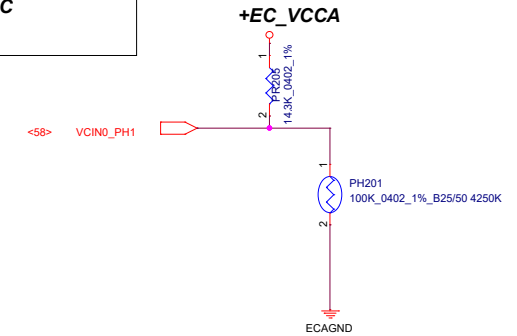
PWR Reserve

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				PWR- Reserve	
		Size	Document Number	Rev	
		Custom		1.0	
		Date:	Wednesday, March 10, 2021	Sheet	81 of 121

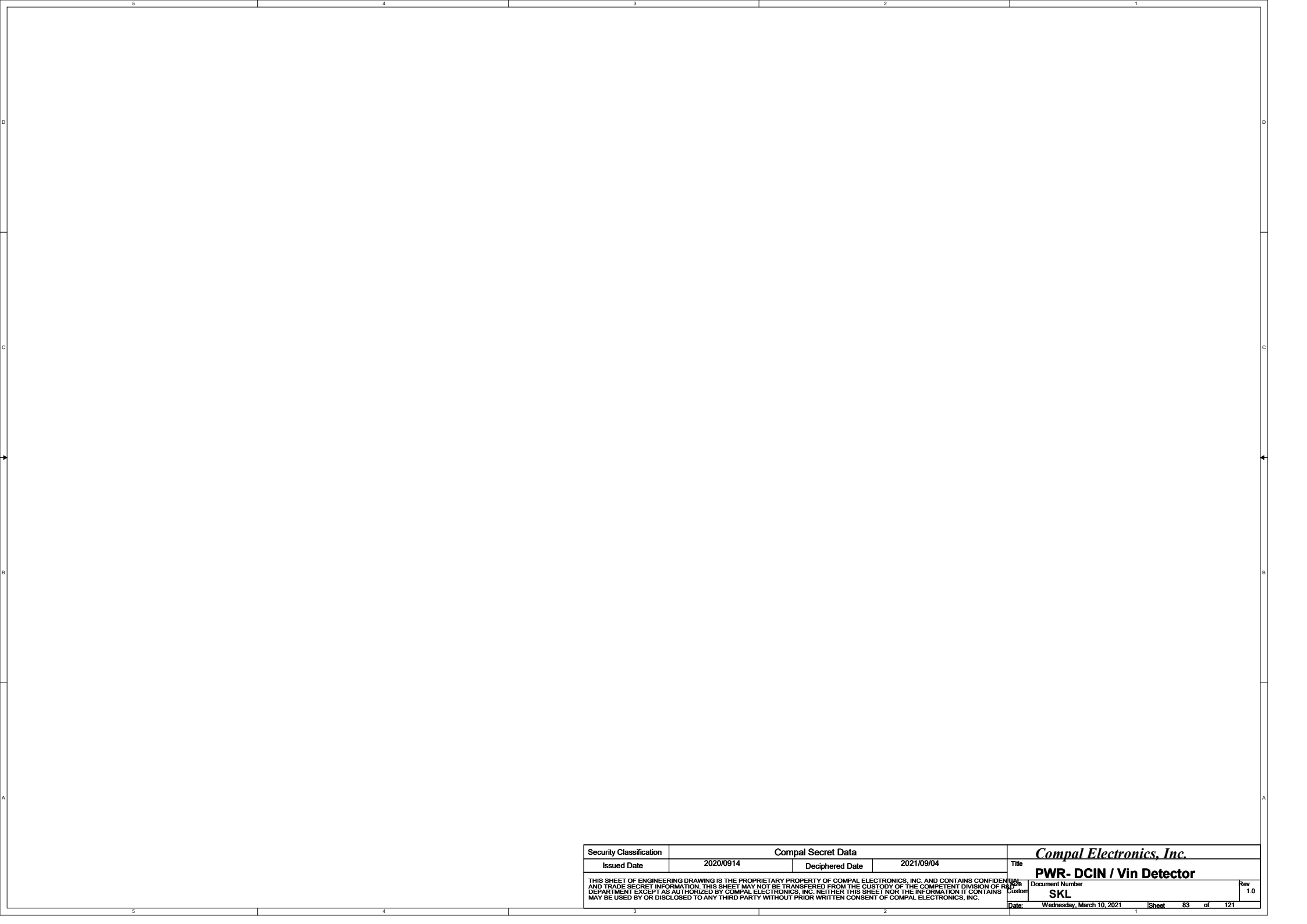
Fuse rating=(Normal operating
BATT(95c):8A/(0.75*0.8)=13.3A



PH201 under CPU botten side :
CPU thermal protection at 97 +-3 degree C
Recovery at 59 +-3 degree C



Security Classification		Compal Secret Data		<i>Compal Electronics, Inc.</i> PWR- BATTERY CONN/OTP	
Issued Date	2020/09/14	Deciphered Date	2021/09/04	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF ROGER 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.				Document Number Y750	Rev 1.0
				Date	Wednesday, March 10, 2021
				Sheet	82 of 121



Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/09/14	Deciphered Date	2021/09/04	Title	PWR- DCIN / Vin Detector
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.				Document Number	Rev
				SKL	1.0
				Date	Wednesday, March 10, 2021
				Sheet	83 of 121

PWR Reserve

Security Classification		Compal Secret Data		Compal Electronics, Inc.					
Issued Date		Deciphered Date		Title					
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				PWR- Reserve					
				Size	Document Number		Rev		
				Custom			1.0		
				Date:		Wednesday, March 10, 2021		Sheet	84 of 121
				3		2			

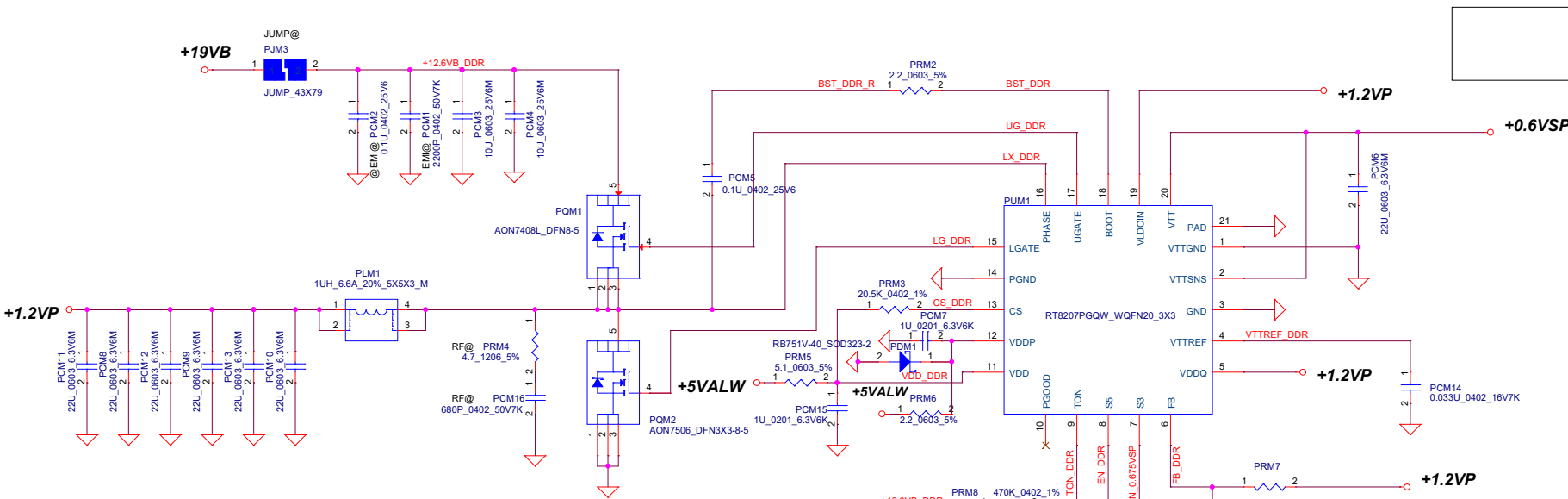
PWR Reserve

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				PWR- Reserve	
		Size	Document Number	Rev	1.0
		Date:	Wednesday, March 10, 2021	Sheet	86 of 121

PWR Reserve

Security Classification		Compal Secret Data		Compal Electronics, Inc.			
Issued Date		Deciphered Date		Title			
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				PWR- Reserve			
				Size	Document Number		Rev
				Custom			1.0
				Date:	Wednesday, March 10, 2021		Sheet



- $V_{out} = 0.75V(1 + 6.04k/10k) = 1.2V$
- $OCP = \text{Current limit} + I_{ripple}/2 = (20.5K * 10uA / 15.8ohm) + (2A/2) = 13.9A$

Mode	Level	+0.675VSP	VTTREF_1.35V
S5	L	off	off
S3	L	off	on
S0	H	on	on

Note: S3 - sleep ; S5 - power off

$R_{ds-on} = 13mohm (Typ) , 15.8mohm (Max)$

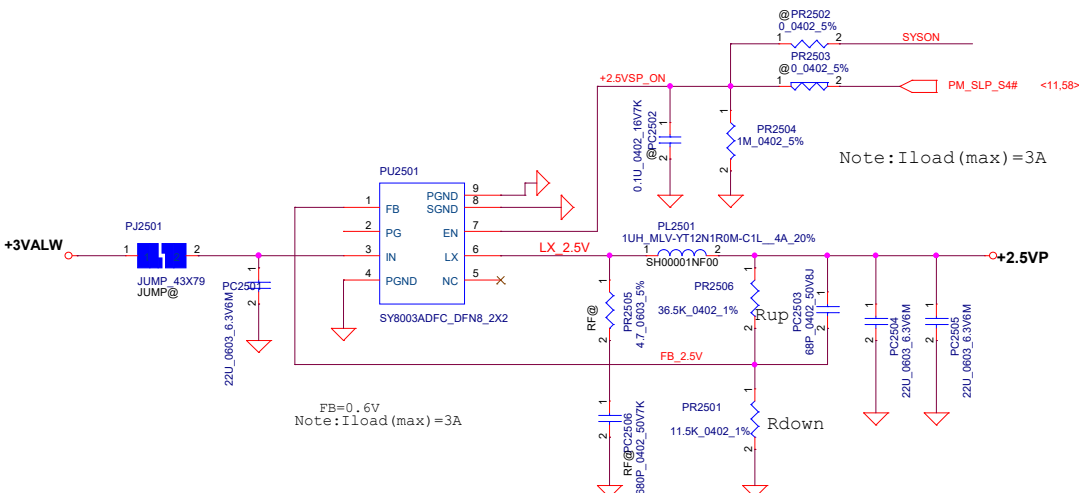
Switching Frequency: 530kHz

$I_{ocp} = A$

OVP: 113%~120%

VFB=0.75V, $V_{out} = 1.203V$

<8> DDR_VTT_PG_CTRL



Fb=0.6V
Note: Iload(max)=3A

$$V_{out} = 0.6V * (1 + R_{up}/R_{down})$$

Note:
When design Vin=5V, please stuff snubber to prevent Vin damage

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/09/14	Deciphered Date	2021/09/04	Title	RT8207P
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.				Document Number	Rev 1.0
				Date	Wednesday, March 10, 2021
				Sheet	89 of 121

	5	4	3	2	1																																			
D																																								
C																																								
B																																								
A																																								
			<table><tr><td>Security Classification</td><td colspan="2">Compal Secret Data</td><td colspan="2">Title</td></tr><tr><td>Issued Date</td><td></td><td>Deciphered Date</td><td colspan="2"></td></tr><tr><td colspan="3">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.</td><td>Size</td><td>Document Number</td></tr><tr><td colspan="3"></td><td>Custom</td><td>Rev</td></tr><tr><td colspan="3"></td><td>Date:</td><td>Wednesday, March 10, 2021</td></tr><tr><td colspan="3"></td><td>Sheet</td><td>91 of 121</td></tr><tr><td colspan="3"></td><td>1</td><td></td></tr></table>			Security Classification	Compal Secret Data		Title		Issued Date		Deciphered Date			THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.			Size	Document Number				Custom	Rev				Date:	Wednesday, March 10, 2021				Sheet	91 of 121				1	
Security Classification	Compal Secret Data		Title																																					
Issued Date		Deciphered Date																																						
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.			Size	Document Number																																				
			Custom	Rev																																				
			Date:	Wednesday, March 10, 2021																																				
			Sheet	91 of 121																																				
			1																																					
	5	4	3	2	1																																			

D

C

B

A

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		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 OR USED AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number
				Date: Wednesday, March 10, 2021	Rev 1.0
				Sheet 92 of 121	

PWR Reserve

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				PWR- Reserve	
		Size	Document Number	Rev	
		Custom		1.0	
		Date:	Wednesday, March 10, 2021	Sheet	93 of 121

PWR Reserve

Security Classification		Compal Secret Data				Compal Electronics, Inc.						
Issued Date				Deciphered Date				Title				
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.						PWR- Reserve						
						Size	Document Number			Rev		
						Custom				1.0		
						Date:	Wednesday, March 10, 2021			Sheet	94 of 121	
						3		2		1		

PWR Reserve

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				PWR- Reserve	
		Size	Document Number	Rev	
		Custom		1.0	
		Date:	Wednesday, March 10, 2021	Sheet	96 of 121

Module model information

RT3613EE_3Phase_V1A.mdd for IC portion

RT3613EE_3Phase_V1B.mdd for SW portion

RT3613EEGQW-02 is not MP part

teknisi-indonesia.com

Pull High in HW site.

High: > 0.7V
Low: < 0.3V

2 pahse
PRZ19 is 0ohm
PRZ27 is 7.68K ohm

VR_HOT# 100 degreeC
ALERT# 97 degreeC

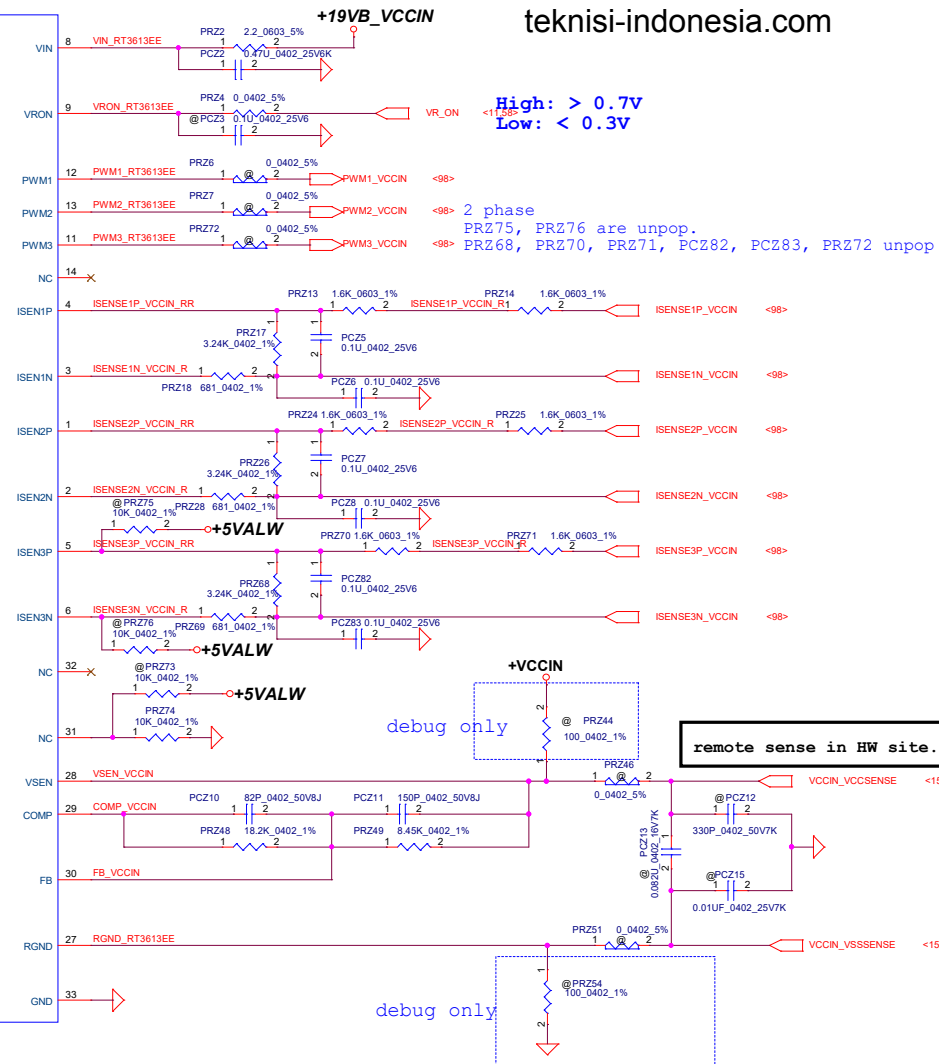
+1.05V_VCCST

+3VS

VREF06_RT3613EE

Close to Phasel Inductor

RT3613EEGQW-02_WQFN32_4X4



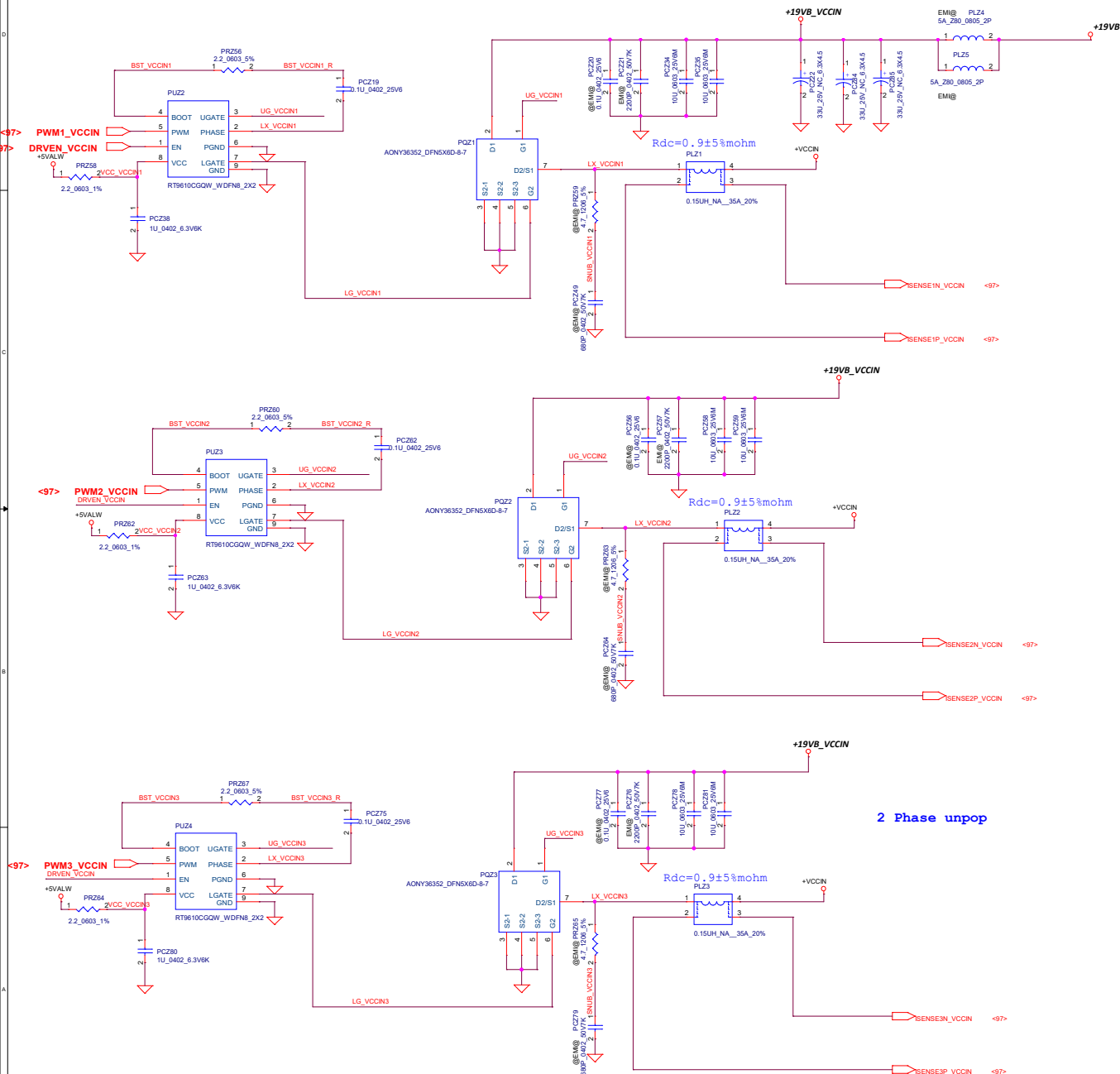
31 pin is a function to fix decay down slew rate to reduce acoustic noise.
High(5V): enable (5V is request)
Low:(0V): disable
this pin can dynamic change state.

Compal Electronics			
File	+VCCIN(RT3613EE)		
Size	Document Number	Rev 1.0	
Date	Wednesday, March 10, 2021	Sheet	97 of 121

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 COMPAL ELECTRONICS, INC. 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.

ICCMAX=62A
TDC=36A

Frequency 600KHz



2 Phase unpop

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 OR 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.

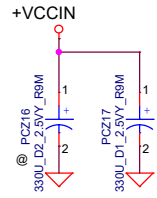
Compal Electronics			
CPU MOSMDecoupling cap			
Size	Document Number	Rev	1.0
Date	Wednesday, March 10, 2021	Sheet	96 of 121

PWR Reserve

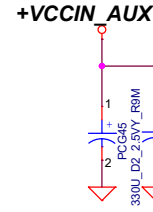
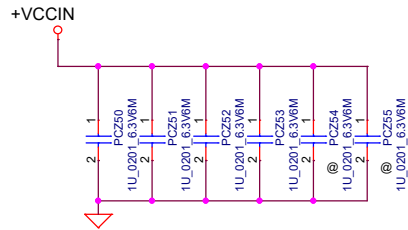
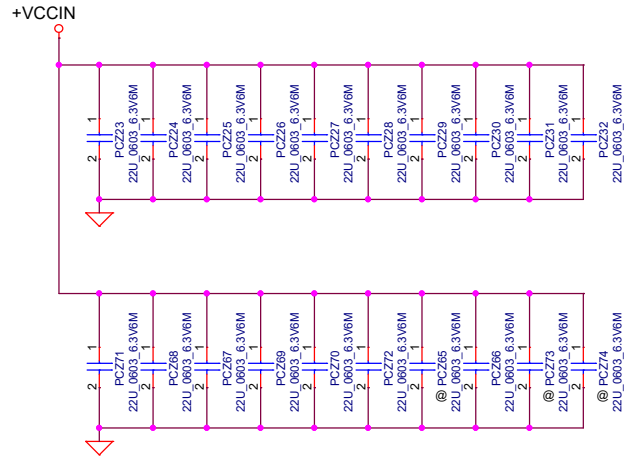
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY 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.		Document Number		PWR- Reserve	
		Date: Wednesday, March 10, 2021		Sheet 99 of 121	
		Size Custom		Rev 1.0	

PWR Reserve

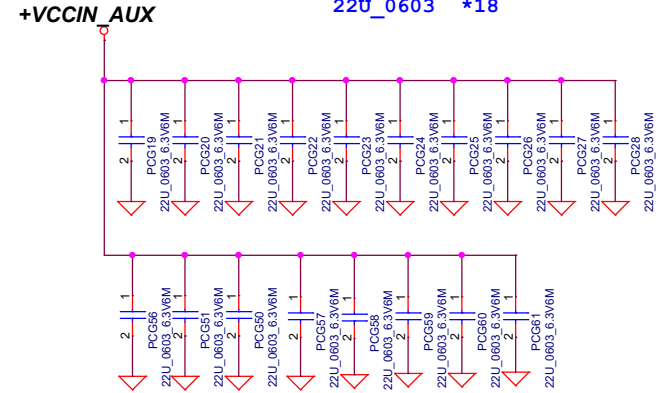
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.		PWR- Reserve		Rev	
		Size	Document Number		1.0
		Date:	Wednesday, March 10, 2021	Sheet	100 of 121



Compal :
Primary side :
330U_R9 *1
22U_0603 *20
Back side:
1U_0201 *6



330U_R9 *1
22U_0603 *18

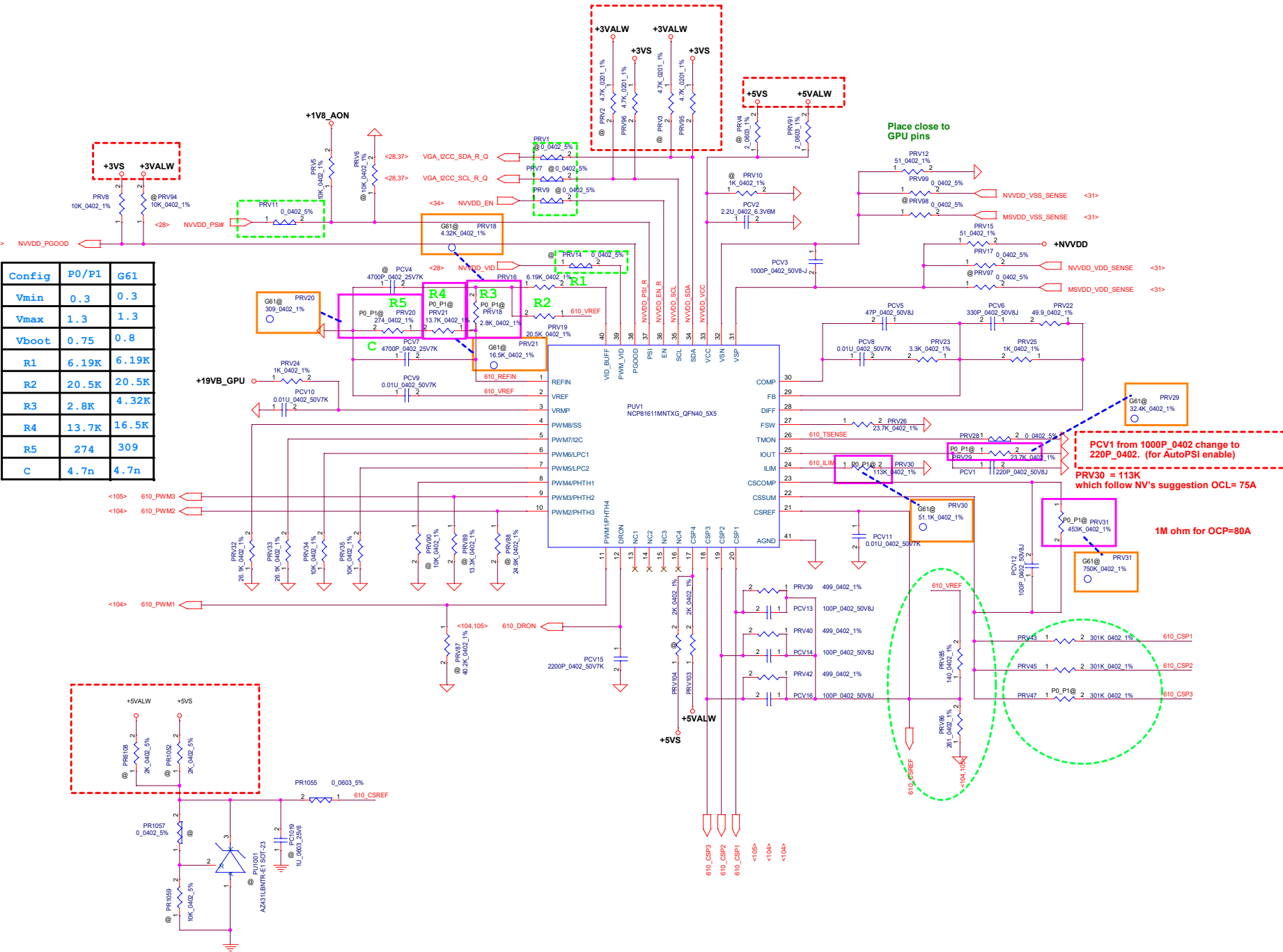


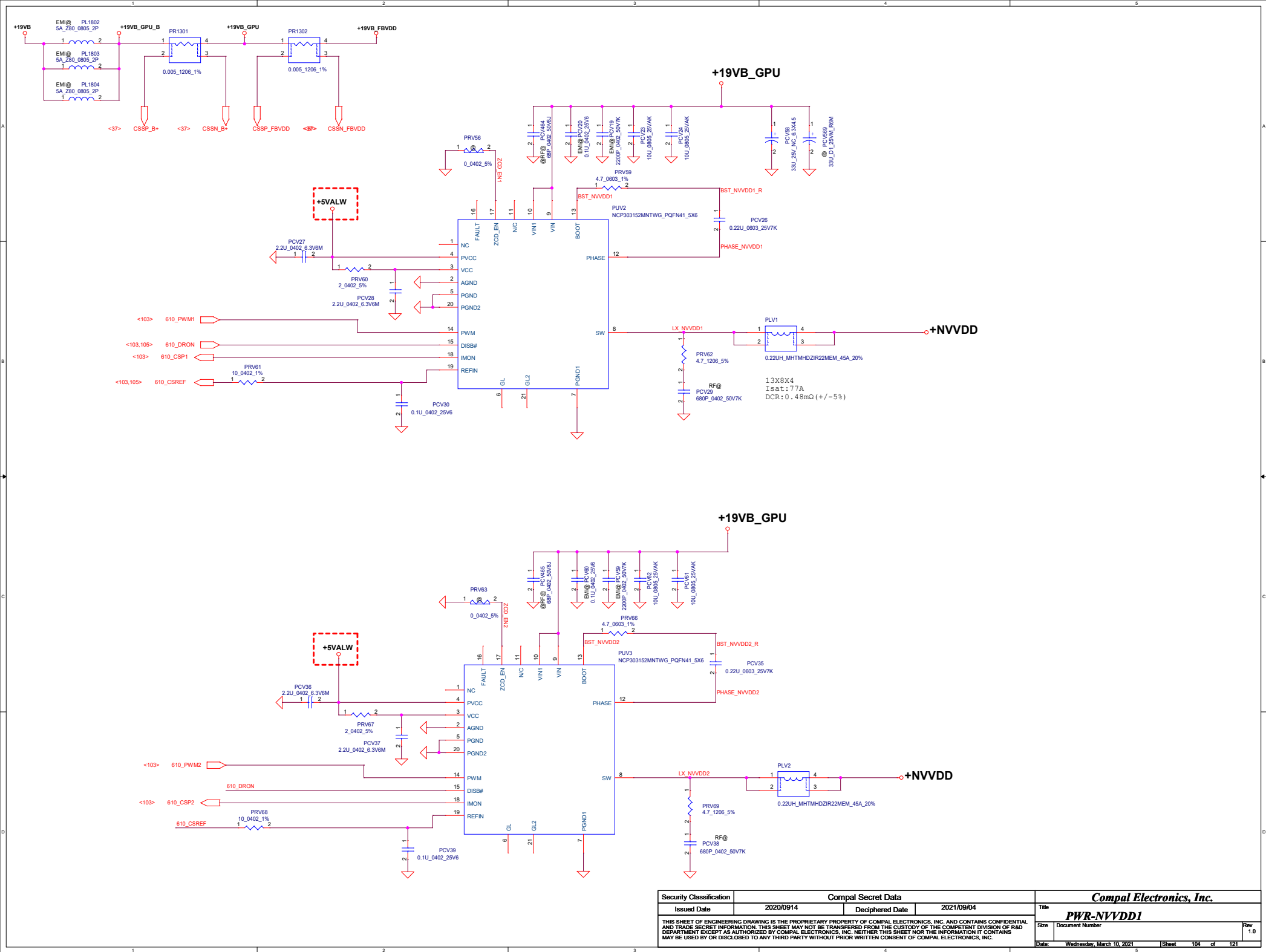
Security Classification		Compal Secret Data				Compal Electronics, Inc.				
Issued Date		2020/0914		Deciphered Date		2021/09/04		Title		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.								+APU CORE Cap		
								Size	Document Number	Rev
								Custom	LA-L161P	1.0
								Date:	Wednesday, March 10, 2021	Sheet

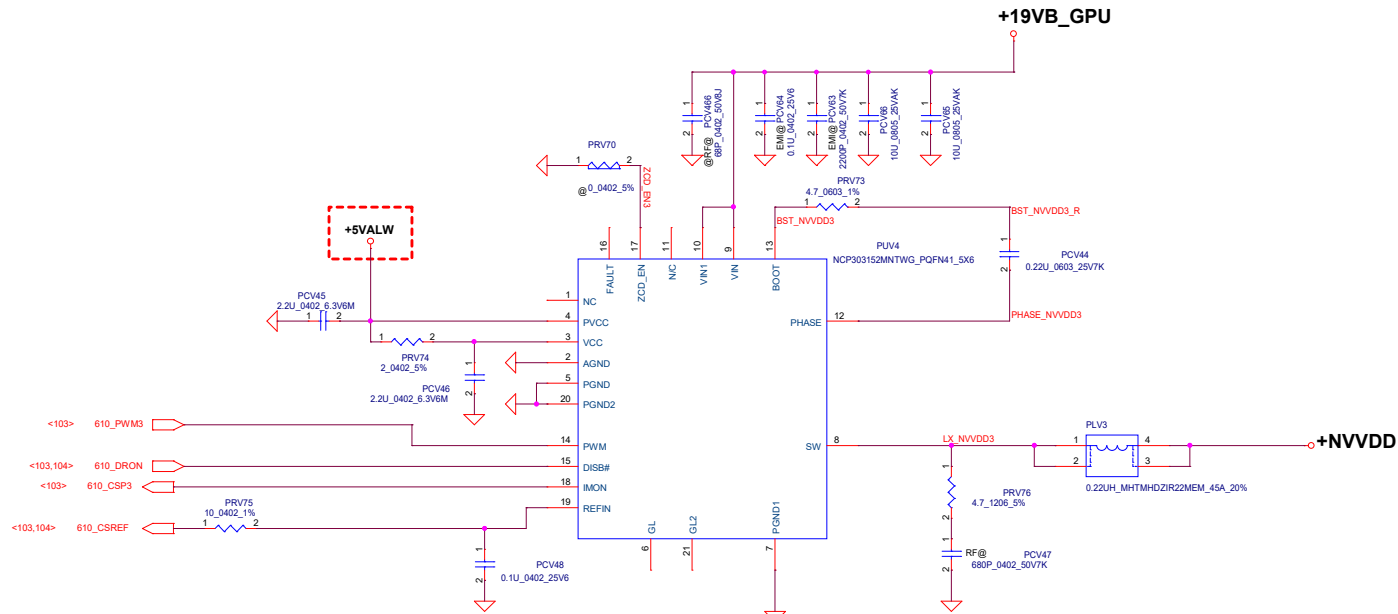
PWR Reserve

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				PWR- Reserve	
		Size	Document Number	Rev	1.0
		Custom			
		Date:	Wednesday, March 10, 2021	Sheet	102 of 121

Config	P0/P1	G61
Vmin	0.3	0.3
Vmax	1.3	1.3
Vboot	0.75	0.8
R1	6.19K	6.19K
R2	20.5K	20.5K
R3	2.8K	4.32K
R4	13.7K	16.5K
R5	274	309
C	4.7n	4.7n



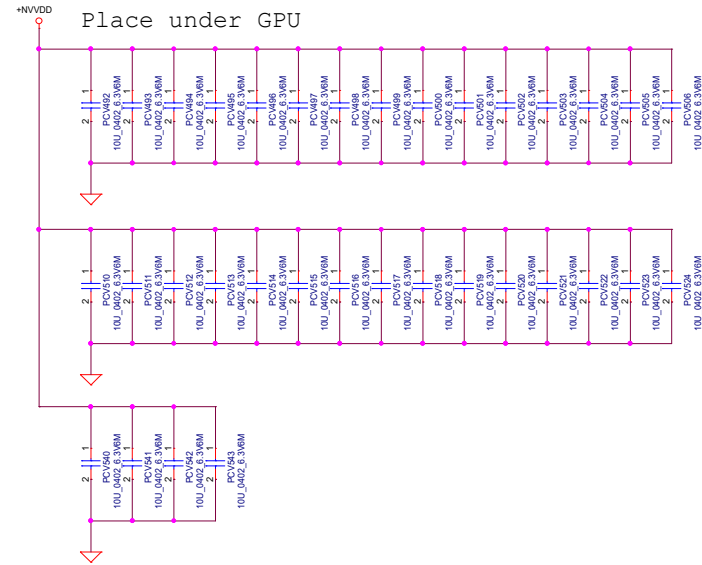
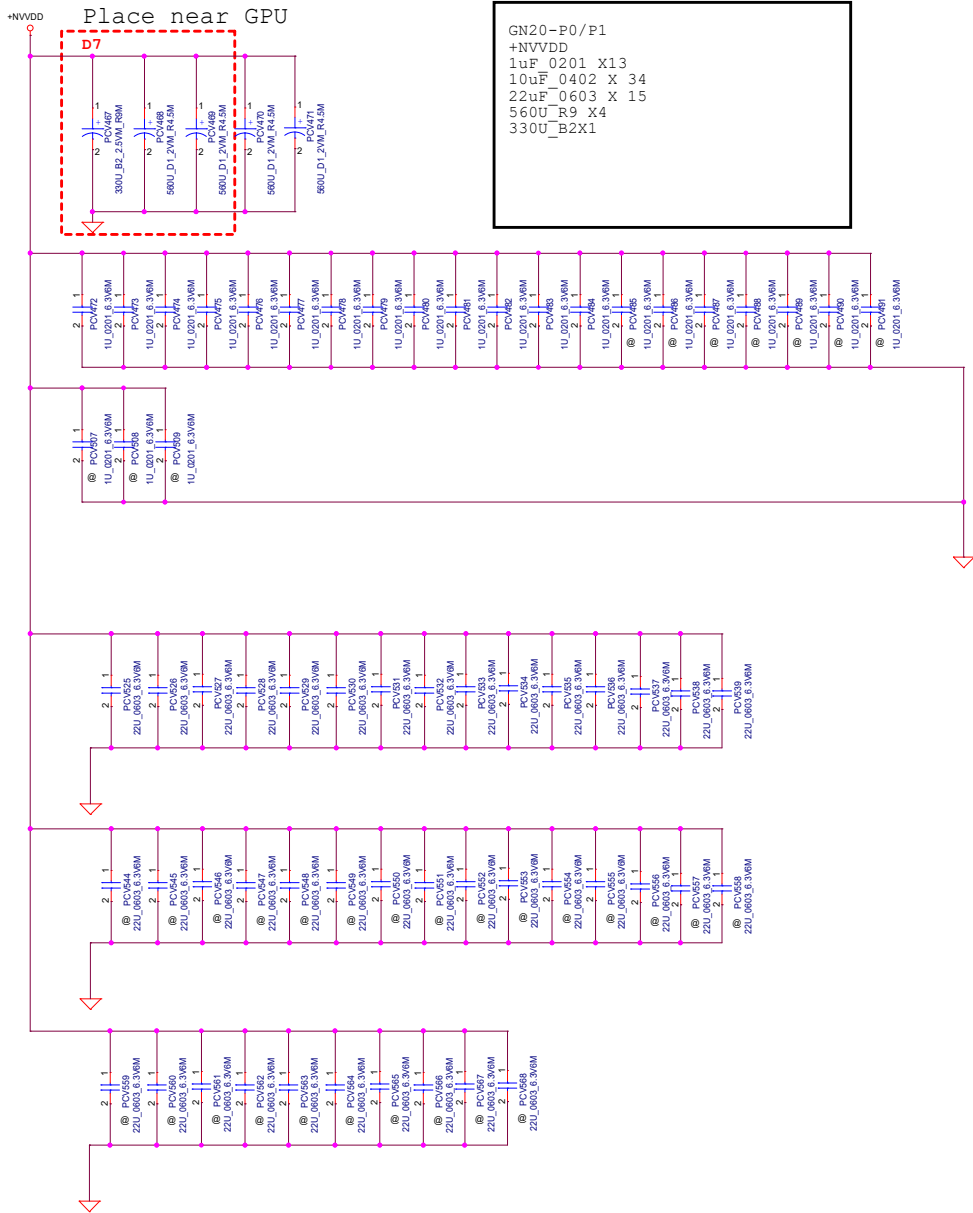




Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/09/14	Deciphered Date	2021/09/04	Title	PWR-NVDD2
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT 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	1.0
				Date	Wednesday, March 10, 2021
				Sheet	105 of 121

PWR Reserve

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		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.		Document Number		PWR- Reserve	
		Date: Wednesday, March 10, 2021		Sheet 106 of 121	
		Size Custom		Rev 1.0	



Samsung & Micron VRAM
When, VRAM VDD_CTL=High
Vboot=1.25V
When, VRAM VDD_CTL=Low
Vboot=1.2V

PSI=0.79V
When the voltage is
between 0.7V to 0.88V,
the device will operate into
1 phase force CCM

MOSFET: DFN 5X6E
H/S Rds (on): 5.2mohm (Typ), 7mohm (Max)
L/S Rds (on): 0.8mohm (Typ), 1.05mohm (Max)

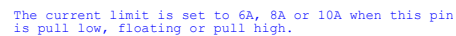
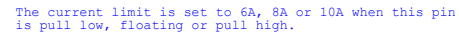
+1.35VSDGPU
N18P-G62
TDC 17.2A
Peak Current 18.4A
OCP current 30A
fsw=400kHz

www.teknisi-indonesia.com

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		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.				Document Number	
				Size	
				Custom	
				Date	Wednesday, March 10, 2021
				Sheet	108 of 121
				Rev	1.0

PWR Reserve

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				PWR- Reserve	
		Size	Document Number	Rev	
		Custom		1.0	
		Date:	Wednesday, March 10, 2021	Sheet	109 of 121



Security Classification	Compal Secret Data			<i>Compal Electronics, Inc.</i> PWR- GPU 1.8V/0.95V		
Issued Date		Deciphered Date		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 OR 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. 1.0
				Date:	Wednesday, March 10, 2021	Sheet 110 of 121

PWR Reserve

Security Classification		Compal Secret Data		Compal Electronics, Inc.					
Issued Date		Deciphered Date		Title					
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				PWR- Reserve					
				Size	Document Number		Rev		
				Custom			1.0		
				Date:		Wednesday, March 10, 2021		Sheet	111 of 121

PWR Reserve

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				PWR- Reserve	
		Size	Document Number	Rev	
		Custom		1.0	
		Date:	Wednesday, March 10, 2021	Sheet	112 of 121

PWR Reserve

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				PWR- Reserve	
		Size	Document Number	Rev	
		Custom		1.0	
		Date:	Wednesday, March 10, 2021	Sheet	113 of 121

PWR Reserve

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				PWR- Reserve	
		Size	Document Number	Rev	1.0
		Date:	Wednesday, March 10, 2021	Sheet	114 of 121

PWR Reserve

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				PWR- Reserve	
		Size	Document Number	Rev	1.0
		Date:	Wednesday, March 10, 2021	Sheet	115 of 121

PWR Reserve

Security Classification		Compal Secret Data		Compal Electronics, Inc.		
Issued Date		Deciphered Date		Title		
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				PWR- Reserve		
				Size	Document Number	Rev
				Custom		1.0
				Date: Wednesday, March 10, 2021		
3		2		Sheet 116 of 121		

PWR Reserve

Security Classification		Compal Secret Data		Compal Electronics, Inc.				
Issued Date		Deciphered Date		Title				
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				PWR- Reserve				
				Size	Document Number		Rev	
				Custom			1.0	
				Date:	Wednesday, March 10, 2021		Sheet	117 of 121

PWR Reserve

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.		PWR- Reserve		Rev	
		Size	Document Number	1.0	
		Date:	Wednesday, March 10, 2021	Sheet	118 of 121

Item	Reason for change	PG#	Modify List	Date	Phase
1	Change IC from 6A to 8A for design request	87	PU301 Change IC SY8386->SY8388	2020/11/3	SDV
2	Change choke for common design	85	PL2503 4.7uH -> 2.2uH	2020/11/3	SDV
3	Hw suggust to change for sequence	90	PC1801 mount PR1803 to 3.3k	2020/11/3	SDV
4	Change Capacitance for design request	107	PCV468 PCV469 PCV470 PCV471 330u to 560u	2020/11/3	SDV
5	Design circuit for battery FW	85	PQ311, PR335, PR336, PR338, PC9231	2020/11/3	SDV
6	Change resistor for common design	85	PR2507 0.01 -> 0.005 ohm	2020/11/12	SDV
7	Modify circuit for design request	103	add PRV103 2k Unmount PRV87 PRV88 PRV89 PRV1052 PRV1019 PRV1001 PRV26 41.2K ->23.7K PRV29 21.5K ->23.7K (P0P1) 32.4K (G61) PRV30 21.5K ->113K (P0P1) 51.1K (G61) PRV31 261K ->453K (P0P1) 750K (G61) PRV39 PRV40 PRV42 715 ->499 ohm PCV13 PCV14 PCV16 47p ->100p PRV85 PRV86 mount PRV6 unmount	2020/11/12	SDV
8	Change resistor for common design	88	PR514 52.3K ->> 84.5K	2020/11/12	SDV
9	Change resistor for common design	108	PRW23 7.87K ->>11K PRW25 35.7K ->> 100K	2020/11/12	SDV
10	Change Capacitance for common design	101	PCZ 16 unmount -> PCZ17 mount PCG50, PCG51, PCG56, PCG57, PCG58, PCG59, PCG60, PCG61 Mount	2020/11/12	SDV
11	Follow TI Spec design	85	PR350 PR351 1K-->0 ohm	2020/12/14	SIV
12	Change component for design	85	PC310 & PC9213 0.01u -> 0.1 u PQ311 Change P/N PC9207 Change 0603 -> 0402 (Sourcer recommend) PC9205 Change 0603 -> 0402 (Sourcer recommend)	2020/11/23	SIV
13	Change component for design	108	PQW1 AOS6932 ->AOS6930 PCW12 330u -> 560u PRW135 10K->0 ohm PRW24 25.5 K ->26.7K (Vram Voltage) PRW22 4.7K ->4.87K (Vram Voltage) PLW2 0.22uH ->0.47uH (for performance)	2020/12/14	SIV
14	Change component for design	103	PRV4 UNMOUNT -> PRV91 MOUNT (5VS -> 5VALW) PCV3 1000P Change P/N 25v->50v (Sourcer recommend)	2020/12/14	SIV
15	Follow NV Spec design	103	PRV97 PRV98 Unmount	2020/12/14	SIV
16	Change component for design	97	PRZ2 down size 0805 -> 0603 (Sourcer recommend) PRZ53 23.7K ->17.4K (for IMON) PRZ48 20K ->18.2K (for LL)	2020/12/14	SIV
17	Change component for design	87	PC302 1000P Change P/N (Sourcer recommend)	2020/12/14	SIV
18	Change component for design	110	PR912 42.2K ->48.7K (For G61 +1VS DGPUP)	2020/12/14	SIV
19	Change Compoent for design	104	PRV62 PRV69 PRV76 Change P/N (Sourcer recommend)	2020/12/14	SIV
20	Change Compoent for design	101	PCG 45 & PCG47 Change P/N (Sourcer recommend)	2020/12/14	SIV
21	Modify circuit for design request	82	add EMI@ PL206	2020/12/14	SIV

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2020/09/14	Deciphered Date	2021/09/04	Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size	Document Number
				Custom	PWR-PIR
				Rev	1.0
				Date	Wednesday, March 18, 2021
				Sheet	119 of 121

Security Classification	Compal Secret Data								
Issued Date	2020/0914	Deciphered Date	2021/09/04	Title	PWR- PIR				
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number				Rev 1.0
				Date:	Wednesday, March 10, 2021	Sheet	120	of	121

PWR Reserve

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date		Deciphered Date		Title	
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				PWR- Reserve	
		Size	Document Number	Rev	
		Custom		1.0	
		Date:	Wednesday, March 10, 2021	Sheet	121 of 121