

Model Name: P35-S3 Rev1.01

SHEET

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03	BLOCK DIAGRAM
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23	CLOCK GEN CK505
24	PCI EXPRESS*1 ,PCI SLOT 1,2
25	ITE8718/GB,RESET DRIVE
26	COM,LPT
27	BIOS,CI,HWM,KB/MS

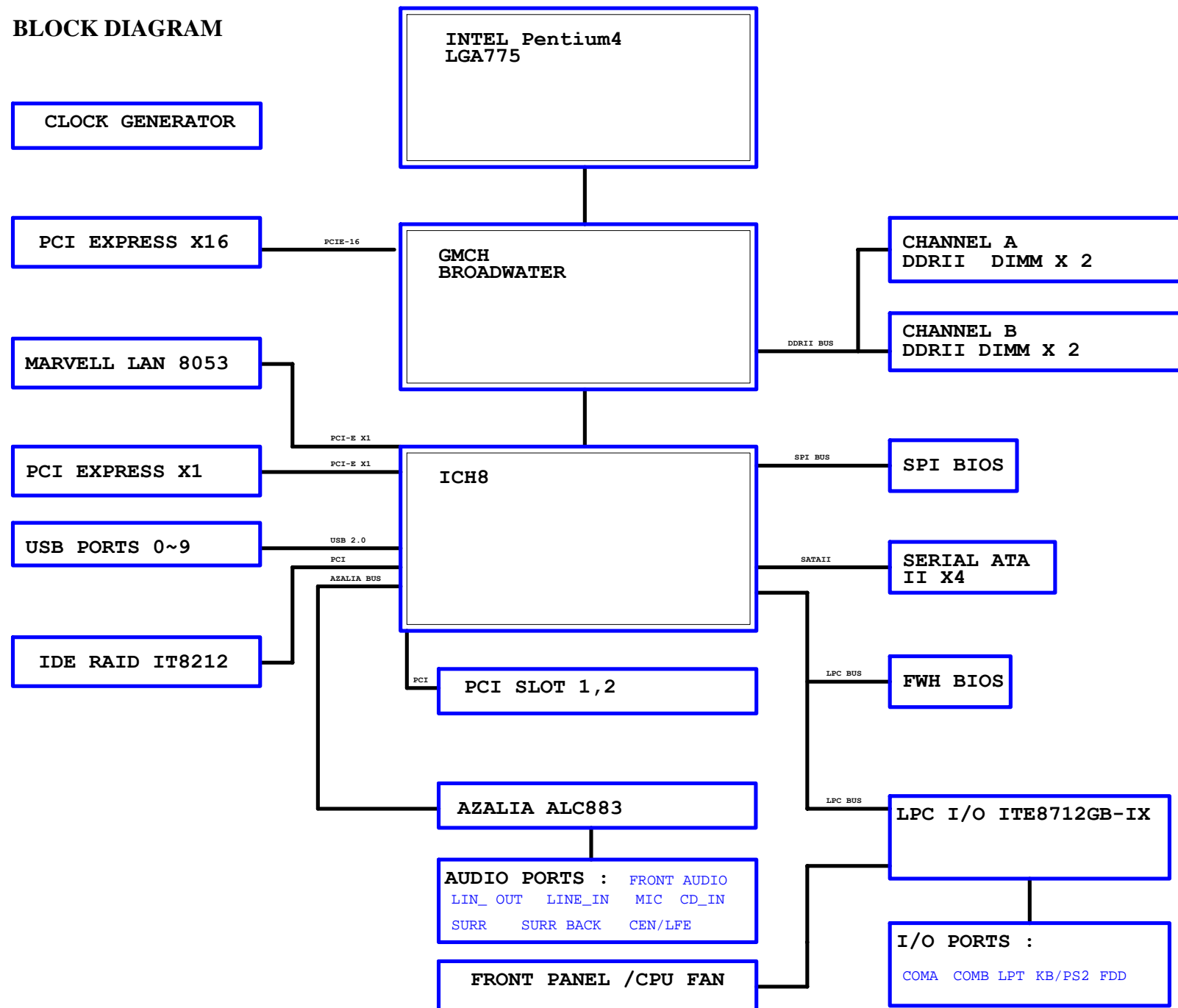
SHEET

TITLE

28	AZALIA ALC889A
29	AUDIO JACK
30	VCORE PWM ISL6327
31	DISCRETE POWER
32	ATX POWER
33	JMicron JMB363
34	LAN REALTEK RTL8111B
35	FRONT PANEL,FUSB,FDD

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BLOCK DIAGRAM

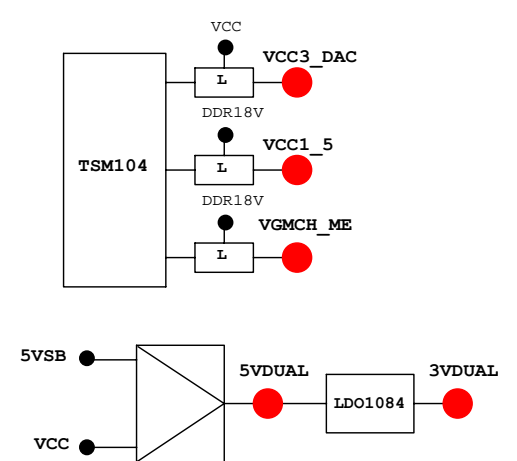
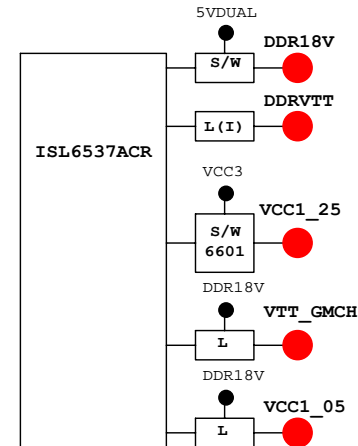
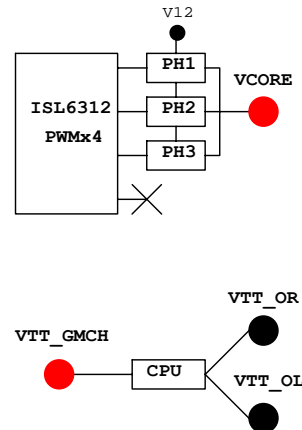
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ICH8 GPIO LIST TABLE

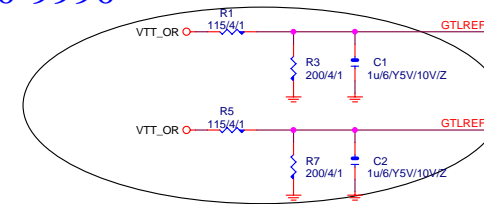
PIN NAME	PWR WELL	AFTER/ PLTRST	USAGE	NOTE
GP0	MAIN	IN	-ACZ_DET	P/U 8.2K VCC3
GP1/TACH1	MAIN	IN	ICH_FAN_TACH1	P/U 8.2K VCC3
GP2/PIRQE#	MAIN	IN	-PIRQE	P/U 8.2K VCC3
GP3/PIRQF#	MAIN	IN	-PIRQF	P/U 8.2K VCC3
GP4/PIRQG#	MAIN	IN	-PIRQG	P/U 8.2K VCC3
GP5/PIRQH#	MAIN	IN	-PIRQH	P/U 8.2K VCC3
GP6/TACH2	MAIN	IN	ICH_FAN_TACH2	P/U 8.2K VCC3
GP7/TACH3	MAIN	IN	ICH_FAN_TACH3	P/U 8.2K VCC3
GP8	STBY	IN	GPIO8(DUALBIOS_INPUT)	P/U 8.2K 3VDUAL
GP9	STBY	OUT	WOL_ONLY	P/D 100K GND
GP10	STBY	IN	CLGPIO1	P/U 8.2K 3VDUAL
GP11/SMBALERT#	STBY	OUT	-SMBALRT	P/U 8.2K 3VDUAL
GP12	STBY	IN	MB_ID0	P/U 8.2K 3VDUAL
GP13	STBY	IN	-LPCPME	P/U 8.2K 3VDUAL
GP14	STBY	IN	CLGPIO2	P/U 8.2K 3VDUAL
GP15	STBY	OUT	LAN_DISABLE(STP_PCI-)	N/A
GP16	MAIN	OUT/LOW	RESET	N/A
GP17/TACH0	MAIN	IN	ICH_FAN_TACH0	P/U 8.2K VCC3
GP18	MAIN	OUT	MB_ID1	P/U 8.2K VCC3
GP19	MAIN	IN	SATA1GP	P/U 8.2K VCC3
GP20	MAIN	OUT	-SPI_WP0	P/U 1K 3VCL
GP21	MAIN	IN	SATA0GP	P/U 8.2K VCC3
GP22	MAIN	IN	SCLOCK	P/U 8.2K VCC3
GP23	MAIN	OUT	-LDRQ1	P/U 8.2K VCC3
GP24	STBY	OUT	CLGPIO0	P/U 8.2K 3VDUAL
GP25	STBY	IN	MB_ID2(STP_CPU-)	P/U 8.2K 3VDUAL
GP26/S4_STATE#	STBY	OUT	S4_STATE#	P/U 8.2K 3VDUAL
GP27	STBY	OUT/LOW	GPIO27(EL_STATE0)	P/U 8.2K 3VDUAL
GP28	STBY	OUT/LOW	PWR_LED(EL_STATE1)	N/A
GP29/OC5#	STBY	IN	-USBOC_R	P/U FUSEVCC
GP30/OC6#	STBY	IN	-USBOC_R	P/U FUSEVCC
GP31/OC7#	STBY	IN	-USBOC_R	P/U FUSEVCC
GP32	MAIN	OUT	DUAL_BIOS	P/U 100K+1M VCC3
GP33	MAIN	OUT	DUAL_BIOS	P/U 8.2K VCC3
GP34	MAIN	OUT/LOW	GPIO34/SMB_RST	N/A
GP35	MAIN	OUT	SATACLKREQ#	N/A
GP36	MAIN	IN	SATA2GP	P/U 8.2K VCC3
GP37	MAIN	IN	SATA3GP	P/U 8.2K VCC3
GP38	MAIN	IN	SLOAD	P/U 8.2K VCC3
GP39	MAIN	IN	GPIO39	P/D 8.2K GND
GP48	MAIN	IN	GPIO48	P/U 8.2K VCC3
GP49	MAIN	IN	CPUPWROK	P/U 100 VTT_OL

VCORE:3 PHASE PWM--ISL6312



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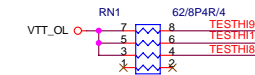
HA/REQ:4/11 50+-15%
ADSTB:4/14 50+-15%



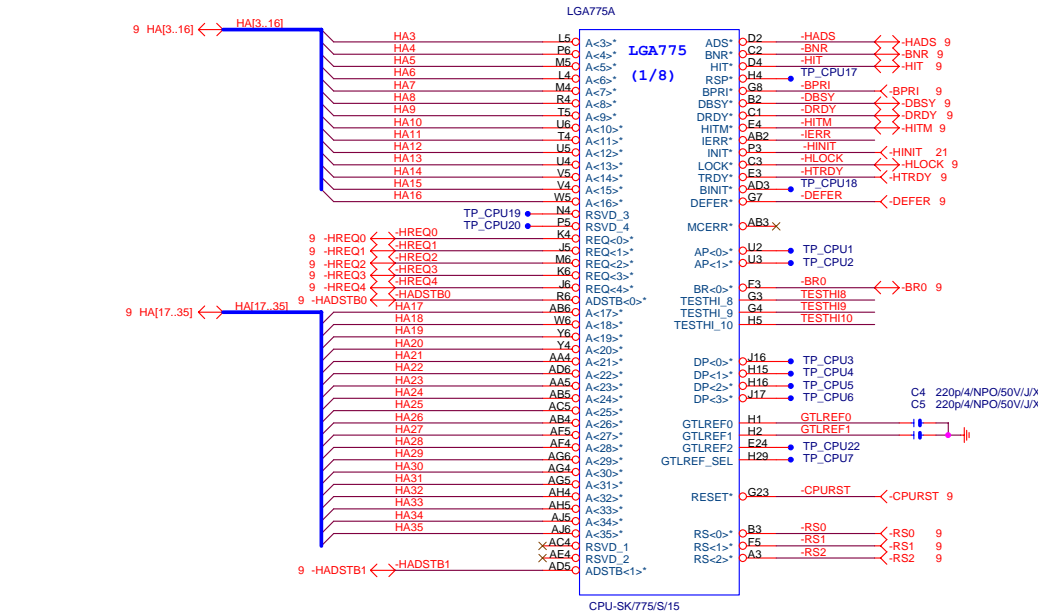
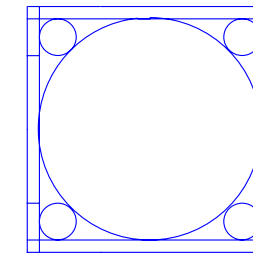
VTT_OR R8 62/4 -IERR

VTT_OL R10 62/4 -BR0

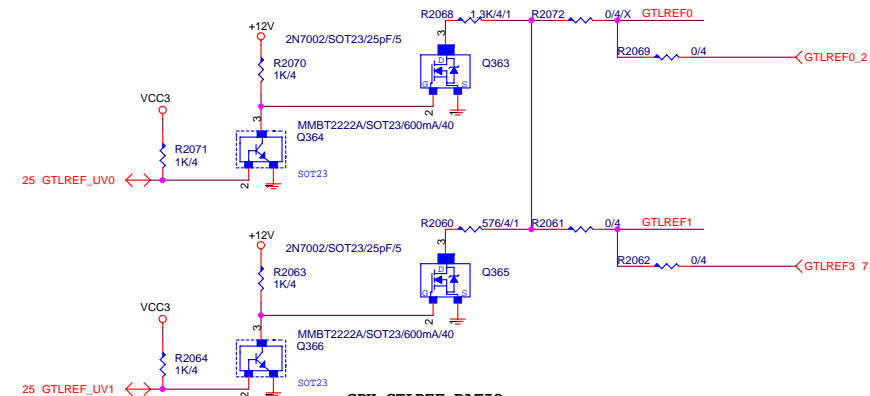
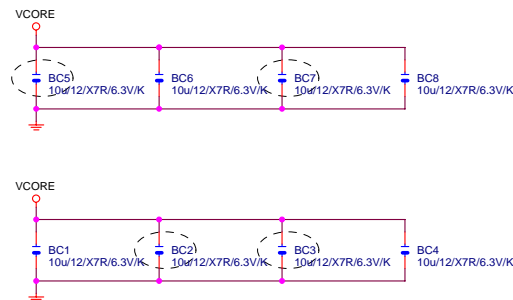
VTT_OR R12 62/4 -CPURST



CR
CPU RETAINIONX



Impedance=50 +- 15% for 4 -layer

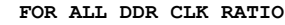
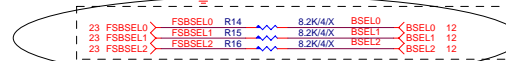
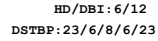


CPU GTLREF RATIO

GTLREF_UV0	GTLREF_UV1	Ratio Set
HIGH	HIGH	0.67
LOW	HIGH	0.65
HIGH	LOW	0.63
LOW	LOW	0.615

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?	1	0	1	100MHz	
?	1	0	0	133MHz	3/4
G33	0	1	0	200MHz	2/2.66/3.33/4
G33	0	0	0	266MHz	2/2.5/3
G33	0	0	1	333MHz	2/2.4

VCCA & VCOREPLL
define doesn't same as
old P4 design kit

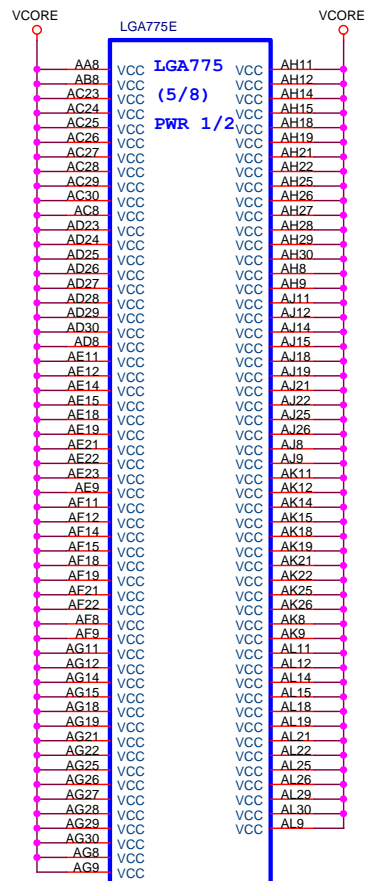
Trace width doesn't
less than 12 Mil

Place outside of CPU socket

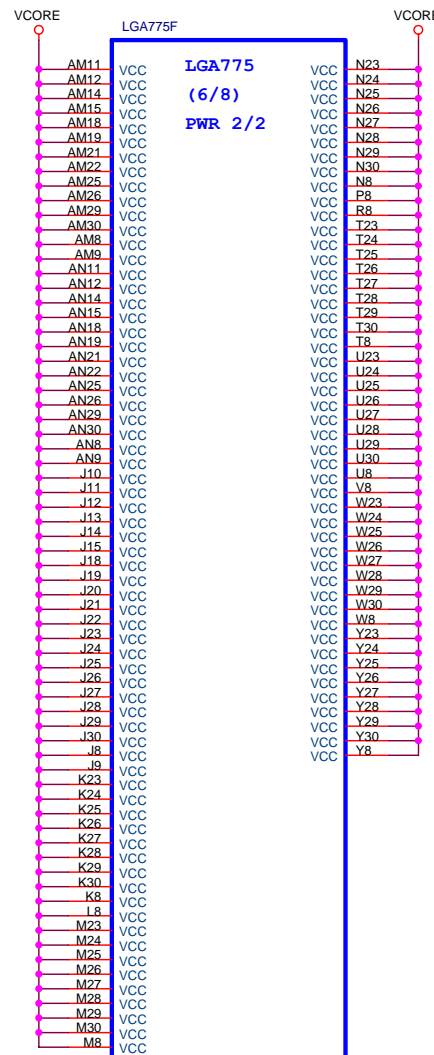
1u/6/Y5V/10V/Z

Title			
P4_LGA775-C			
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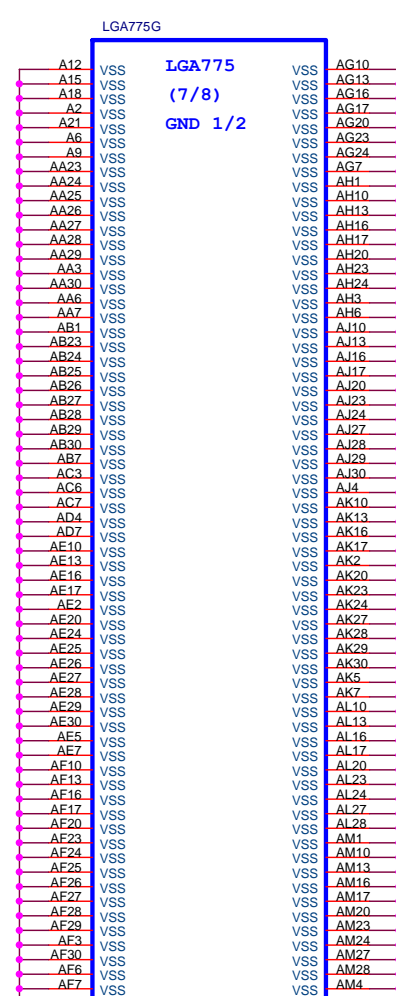
PECI:Platform Environment Control Interface



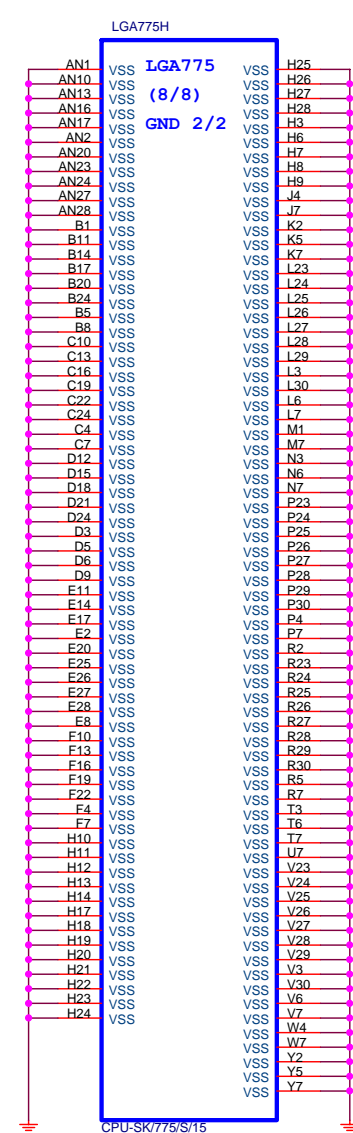
CPU-SK/775/S/15



CPU-SK/775/S/15



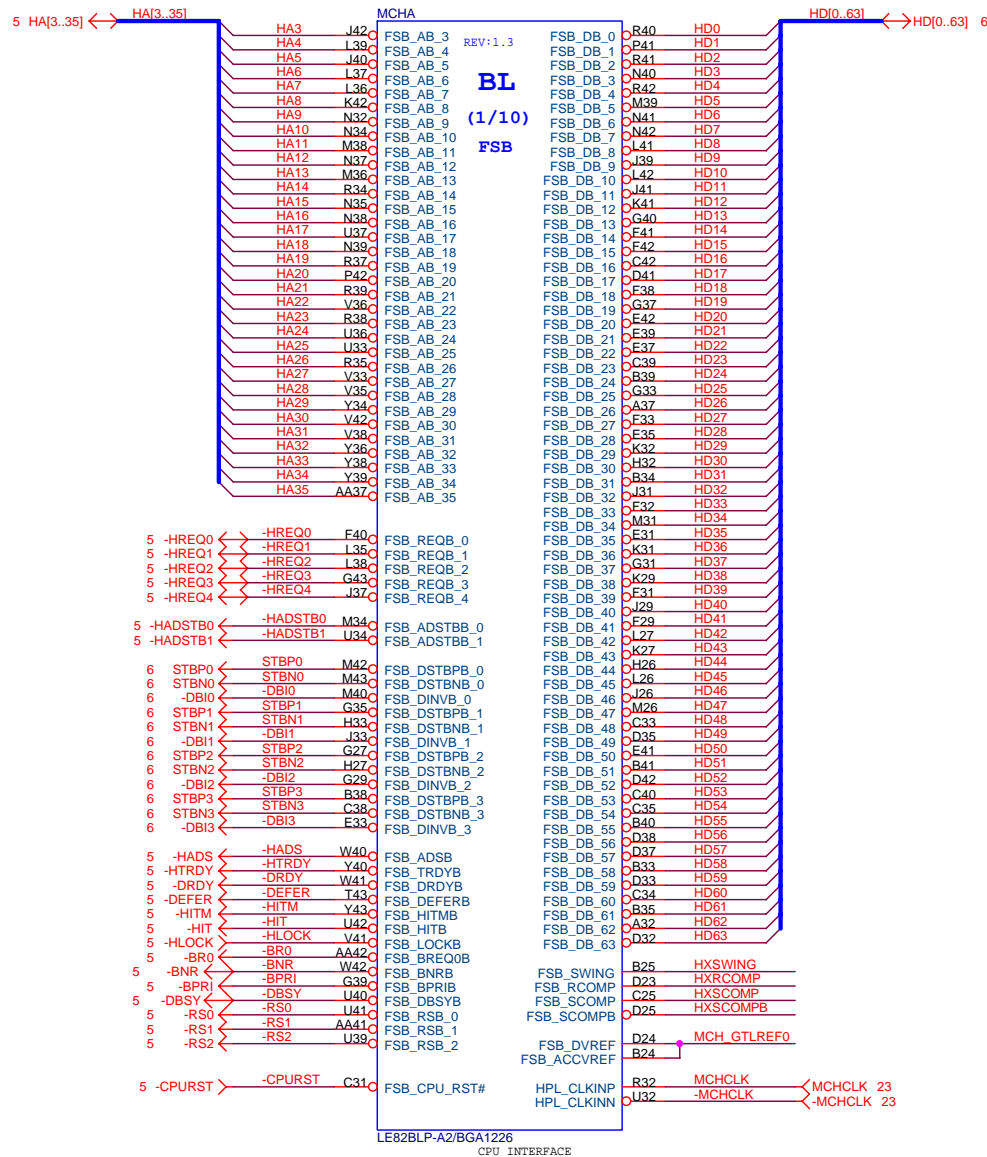
CPU-SK/775/S/15



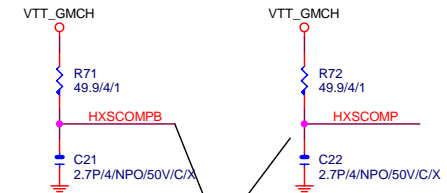
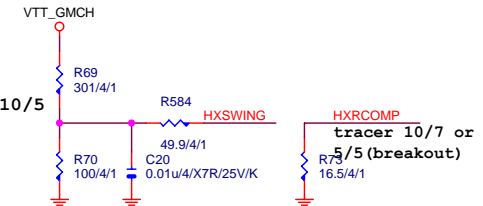
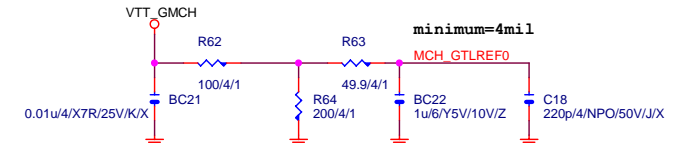
CPU-SK/775/S/15

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tracer min 10/10 or (10/5
breakout) ,L1<3"

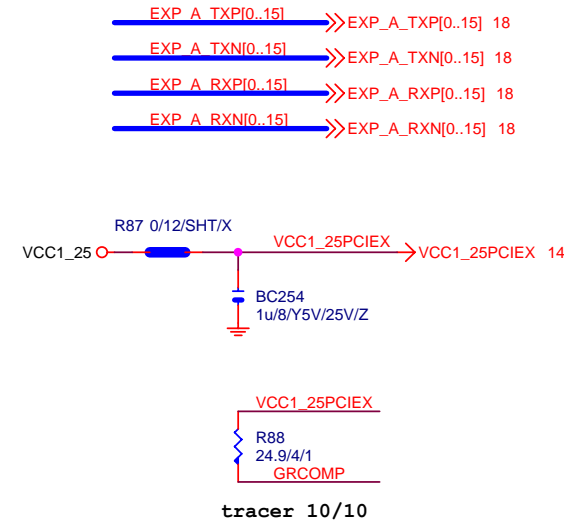
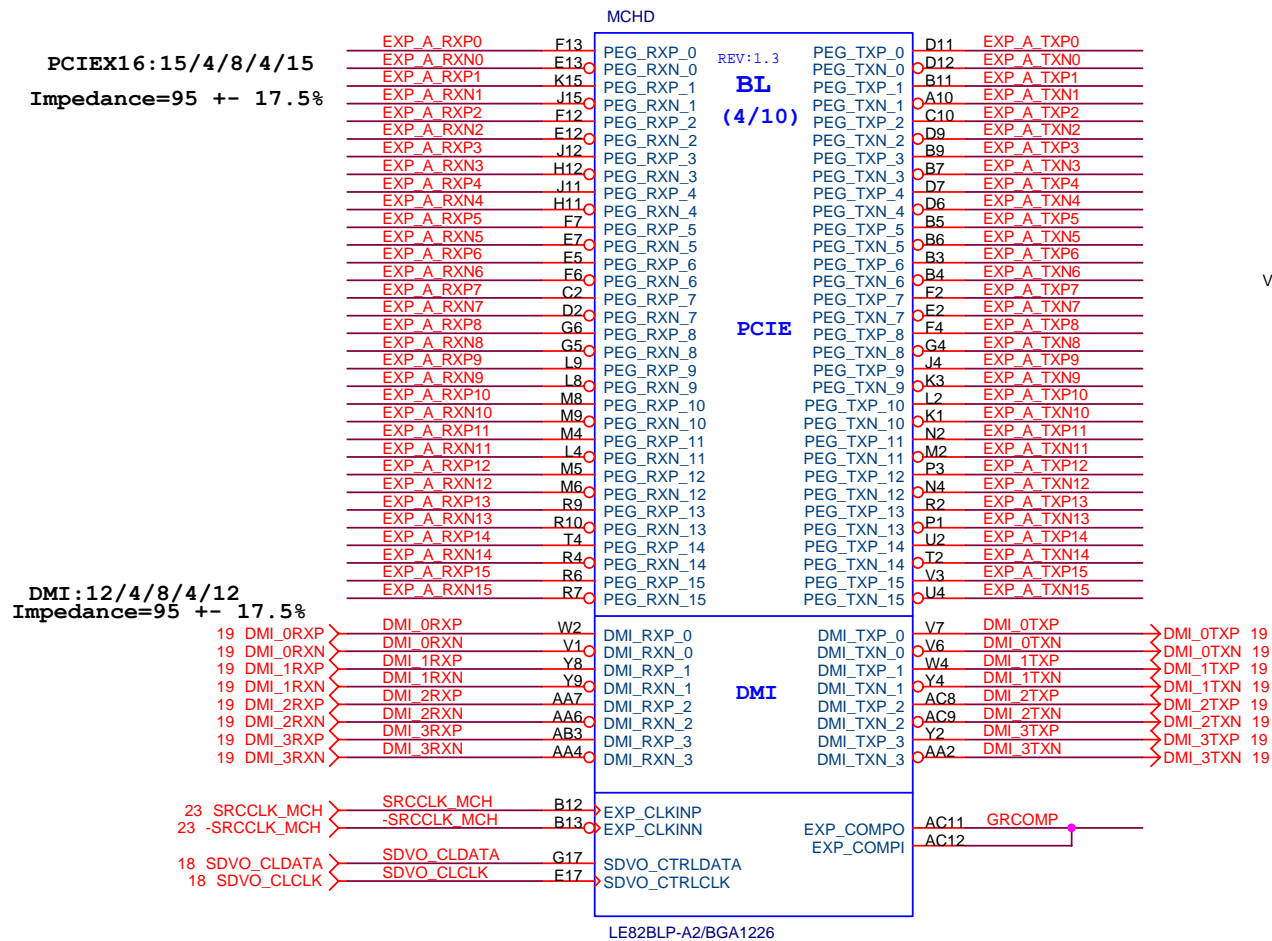


tracer 4/14 or
4/6 (breakout)



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MCHG

REV:1.3

BL

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GND

BC37	VSS_1	VSS_181	AE24
BC32	VSS_2	VSS_182	AE22
BC28	VSS_3	VSS_183	AE20
BC24	VSS_4	VSS_184	AE4
BC10	VSS_5	VSS_185	AE3
BC5	VSS_6	VSS_186	AE2
BB7	VSS_7	VSS_187	AD42
AY41	VSS_8	VSS_188	AD39
AY4	VSS_9	VSS_189	AD37
AW43	VSS_10	VSS_190	AD35
AW41	VSS_11	VSS_191	AD33
AV37	VSS_12	VSS_192	AD25
AV35	VSS_13	VSS_193	AD23
AV27	VSS_14	VSS_194	AD21
AV23	VSS_15	VSS_195	AD19
AV21	VSS_16	VSS_196	AC38
AV17	VSS_17	VSS_197	AC35
AV11	VSS_18	VSS_198	AC24
AV9	VSS_19	VSS_199	AC22
AV7	VSS_20	VSS_200	AC20
AV2	VSS_21	VSS_201	AC10
AU42	VSS_22	VSS_202	AC7
AU38	VSS_23	VSS_203	AC5
AU32	VSS_24	VSS_204	AB43
AU24	VSS_25	VSS_205	AB25
AU20	VSS_26	VSS_206	AB23
AU16	VSS_27	VSS_207	AB21
AU4	VSS_28	VSS_208	AB19
AT31	VSS_29	VSS_209	AB2
AT29	VSS_30	VSS_210	AB1
AT15	VSS_31	VSS_211	AA38
AT13	VSS_32	VSS_212	AA35
AT12	VSS_33	VSS_213	AA24
AR38	VSS_34	VSS_214	AA22
AR33	VSS_35	VSS_215	AA20
AR32	VSS_36	VSS_216	AA8
AR27	VSS_37	VSS_217	AA5
AR26	VSS_38	VSS_218	Y42
AR23	VSS_39	VSS_219	Y37
AR21	VSS_40	VSS_220	Y35
AR20	VSS_41	VSS_221	Y33
AR17	VSS_42	VSS_222	Y25
AR9	VSS_43	VSS_223	Y23
AR6	VSS_44	VSS_224	Y21
AP43	VSS_45	VSS_225	Y19
AP24	VSS_46	VSS_226	Y10
AP18	VSS_47	VSS_227	Y7
AP1	VSS_48	VSS_228	Y5
AN38	VSS_49	VSS_229	Y1
AN31	VSS_50	VSS_230	W24
AN29	VSS_51	VSS_231	W22
AN24	VSS_52	VSS_232	W20
AN23	VSS_53	VSS_233	W3
AN20	VSS_54	VSS_234	V43
AN13	VSS_55	VSS_235	V39
AN12	VSS_56	VSS_236	V37
AN11	VSS_57	VSS_237	V34
AN4	VSS_58	VSS_238	V32
AM42	VSS_59	VSS_239	V11
AM40	VSS_60	VSS_240	V8
AM36	VSS_61	VSS_241	V5
AM33	VSS_62	VSS_242	V2
AM29	VSS_63	VSS_243	U38
AM24	VSS_64	VSS_244	U35
AM23	VSS_65	VSS_245	U8
AM20	VSS_66	VSS_246	U7
AM11	VSS_67	VSS_247	U5
AM9	VSS_68	VSS_248	T42
AM7	VSS_69	VSS_249	T1
AM4	VSS_70	VSS_250	R36
AL36	VSS_71	VSS_251	R33
AL33	VSS_72	VSS_252	R31
AL31	VSS_73	VSS_253	R11
AK43	VSS_74	VSS_254	R8
AJ39	VSS_75	VSS_255	R5
AJ36	VSS_76	VSS_256	R3
AJ33	VSS_77	VSS_257	P43
AJ32	VSS_78	VSS_258	P30
AH42	VSS_79	VSS_259	P21
AG37	VSS_80	VSS_260	P18
AG34	VSS_81	VSS_261	P17
AF43	VSS_82	VSS_262	P2
AF37	VSS_83	VSS_263	N36
AF36	VSS_84	VSS_264	N33
AF10	VSS_85	VSS_265	N31
AF9	VSS_86	VSS_266	N27
AF8	VSS_87	VSS_267	N21
AF7	VSS_88	VSS_268	N13
AF6	VSS_89	VSS_269	N10
AF5	VSS_90	VSS_270	N7

LE82BLP-A2/BGA1226

MSAH

REV:1.3

BL

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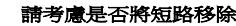
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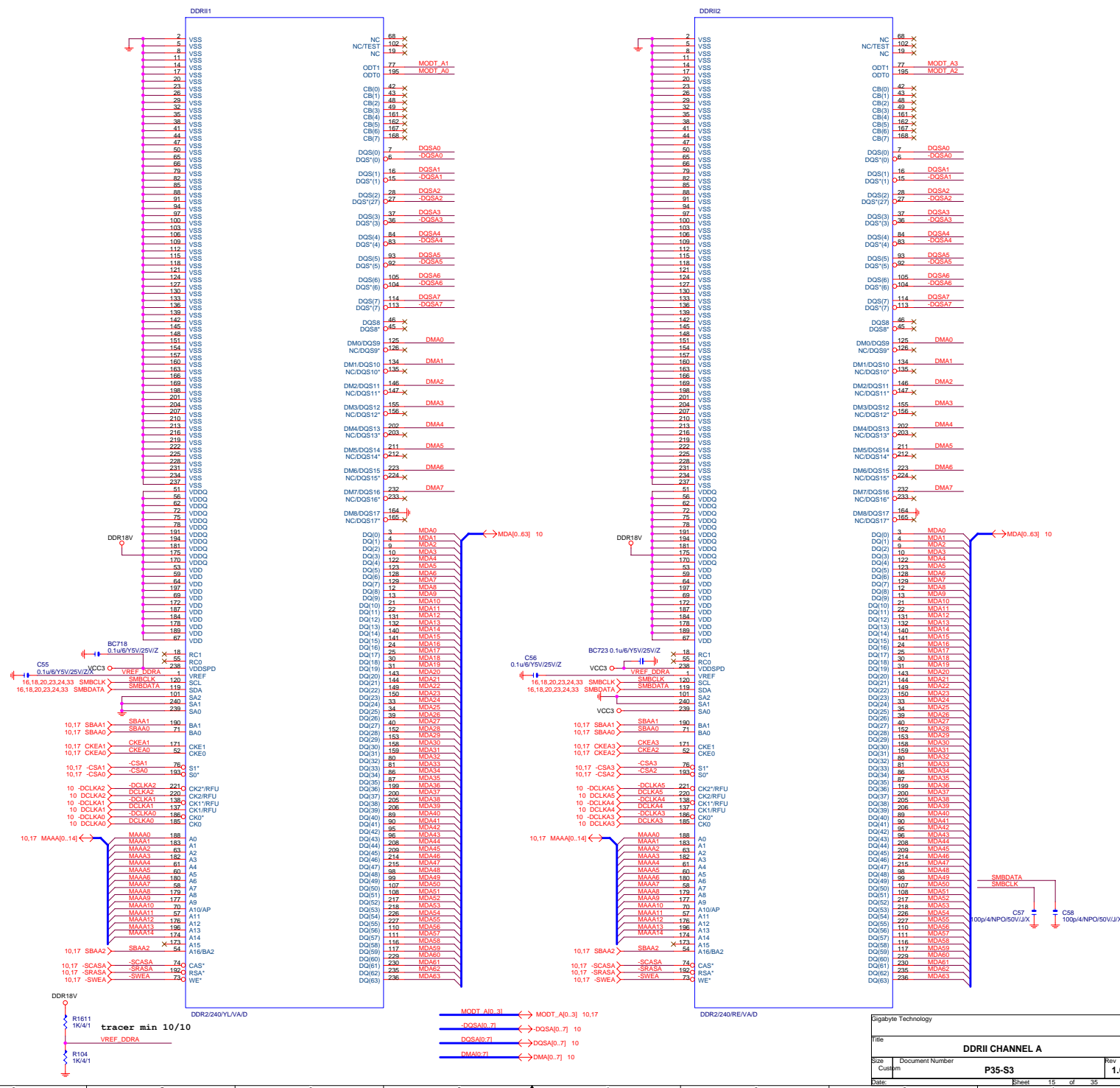
N5	VSS_91	VSS_271	B10
M37	VSS_92	VSS_272	A39
M35	VSS_93	VSS_273	A34
M33	VSS_94	VSS_274	A26
M27	VSS_95	VSS_275	A18
M21	VSS_96	VSS_276	A12
M20	VSS_97	VSS_277	A7
M17	VSS_98	VSS_278	BC41
M15	VSS_99	VSS_279	BC3
M10	VSS_100	VSS_280	BA1
M7	VSS_101	VSS_281	AY40
M1	VSS_102	VSS_282	AF23
L40	VSS_103	VSS_283	AF21
L33	VSS_104	VSS_284	AF19
L32	VSS_105	VSS_285	AE18
L31	VSS_106	VSS_286	AC18
L29	VSS_107	VSS_287	AA18
L21	VSS_108	VSS_288	V29
L20	VSS_109	VSS_289	U29
L11	VSS_110	VSS_290	U27
L7	VSS_111	VSS_291	R21
L5	VSS_112	VSS_292	E1
L3	VSS_113	VSS_293	C43
K43	VSS_114	VSS_294	C1
K26	VSS_115	VSS_295	A41
K21	VSS_116	VSS_296	A5
K18	VSS_117	VSS_297	A3
K13	VSS_118		
K12	VSS_119	VSS_298	V30
K2	VSS_120		
J38	VSS_121		
J35	VSS_122		
J32	VSS_123		
J27	VSS_124		
J21	VSS_125		
J9	VSS_126		
J7	VSS_127		
J5	VSS_128		
H31	VSS_129		
H29	VSS_130		
H21	VSS_131		
H20	VSS_132		
H17	VSS_133		
H15	VSS_134		
H13	VSS_135		
G42	VSS_136		
G38	VSS_137		
G32	VSS_138		
G21	VSS_139		
G13	VSS_140		
G12	VSS_141		
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G1	VSS_145		
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F35	VSS_147		
F27	VSS_148		
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F18	VSS_150		
F15	VSS_151		
F3	VSS_152		
E43	VSS_153		
E32	VSS_154		
E24	VSS_155		
E21	VSS_156		
E11	VSS_157		
E9	VSS_158		
E3	VSS_159		
D40	VSS_160		
D31	VSS_161		
D21	VSS_162		
D17	VSS_163		
D15	VSS_164		
D3	VSS_165		
C26	VSS_166		
C11	VSS_167		
C6	VSS_168		
C5	VSS_169		
C4	VSS_170		
B37	VSS_171		
B32	VSS_172		
B31	VSS_173		
B26	VSS_174		
B23	VSS_175		
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B19	VSS_177		
B14	VSS_178		
D16	VSS_179		
M11	VSS_180????		

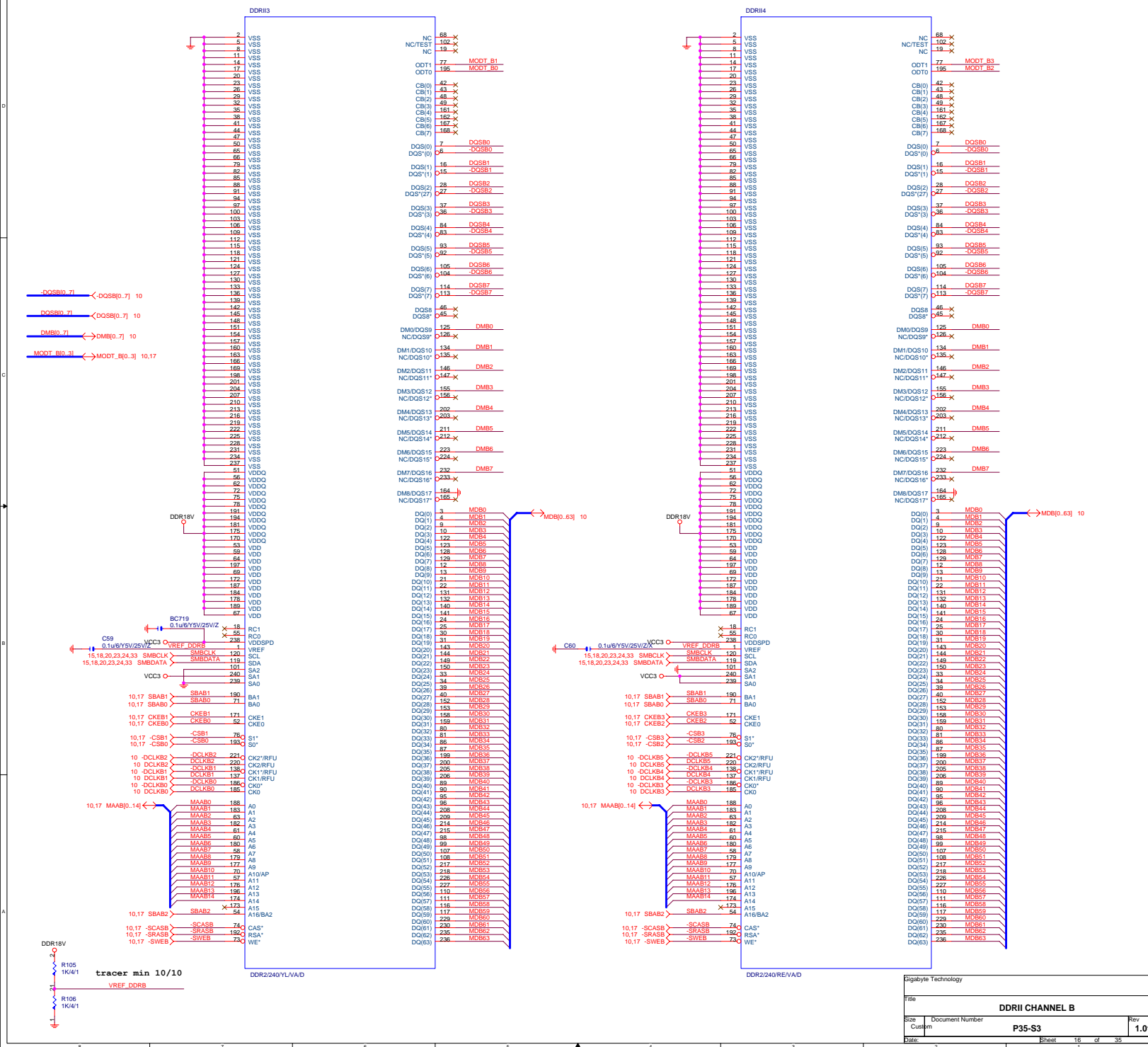
LE82BLP-A2/BGA1226

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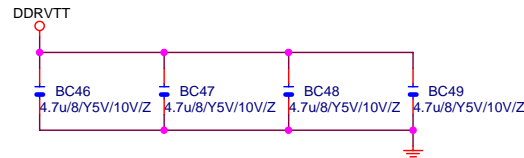
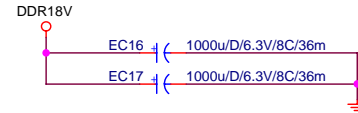
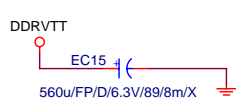






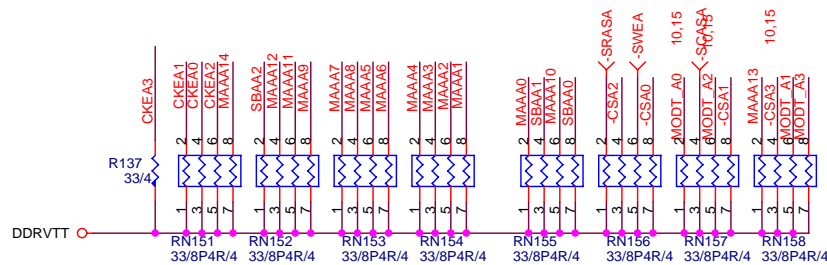
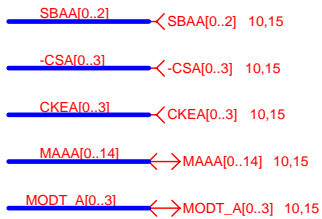
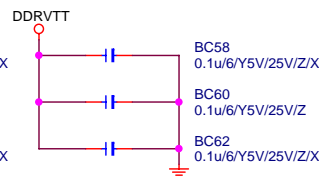
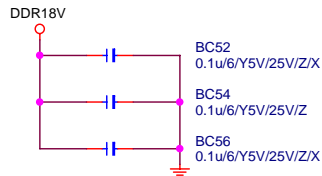
DDR TERMINATION CHANNEL A

DDRVTT Decouple



DDR18V Decouple

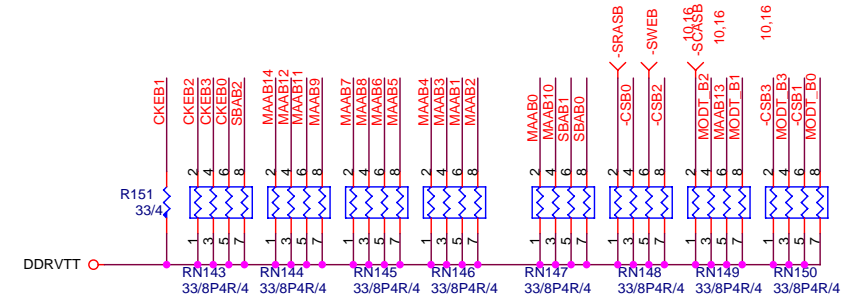
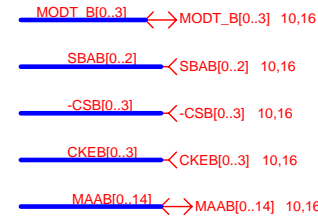
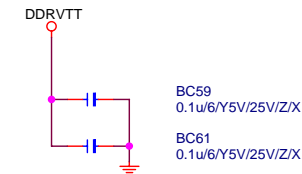
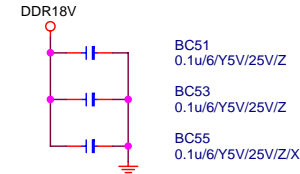
DDRVTT Decouple



DDR TERMINATION CHANNEL B

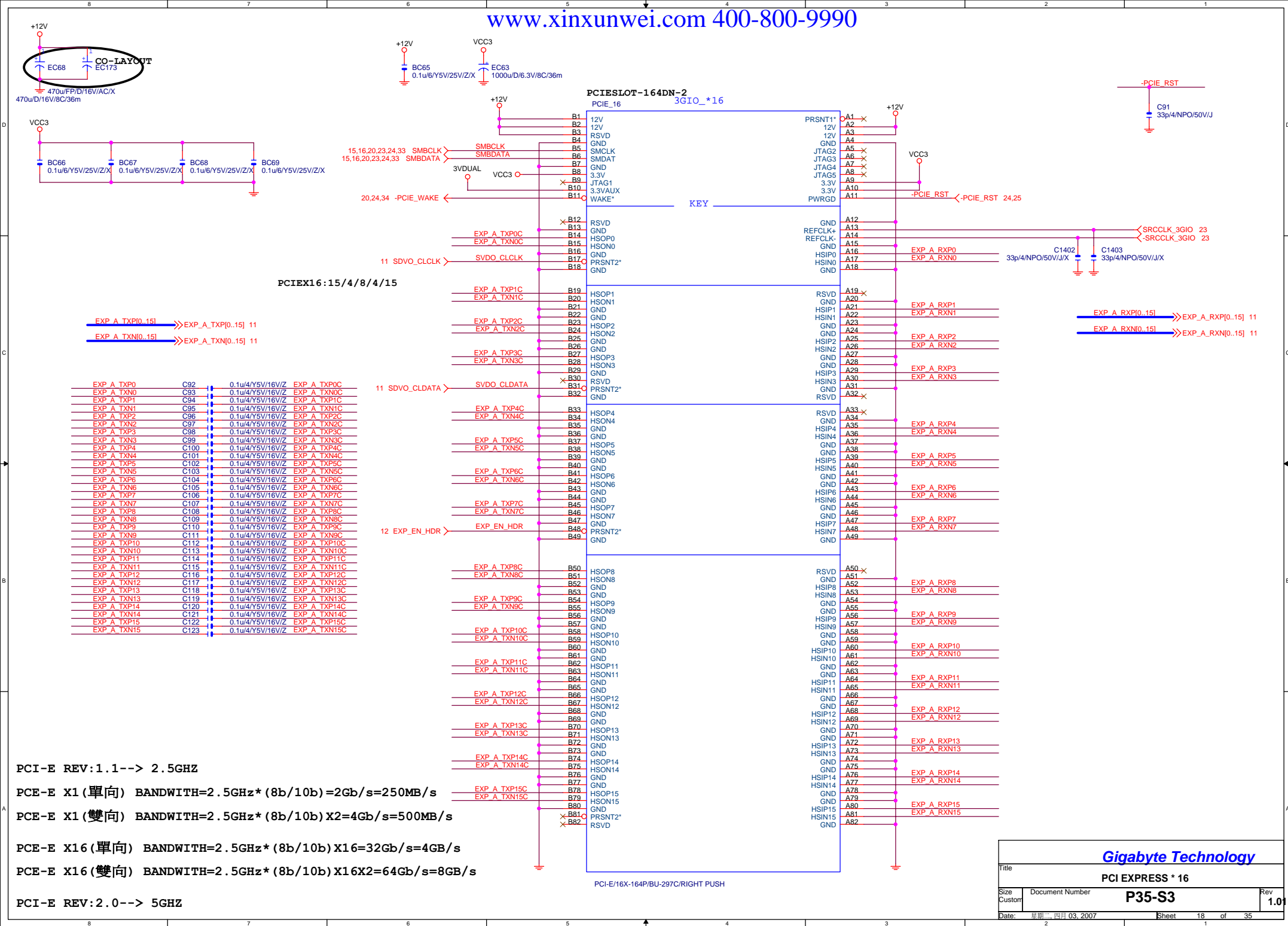
DDR18V Decouple

DDRVTT Decouple

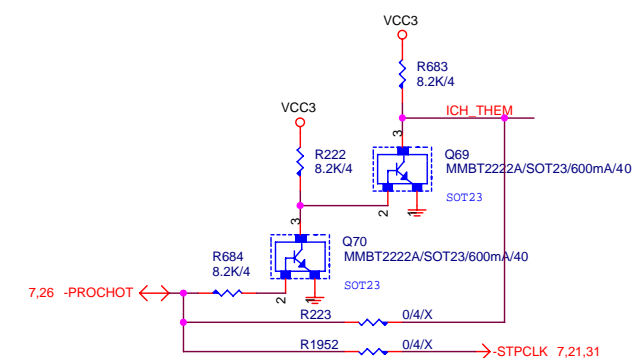
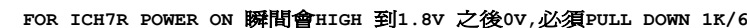
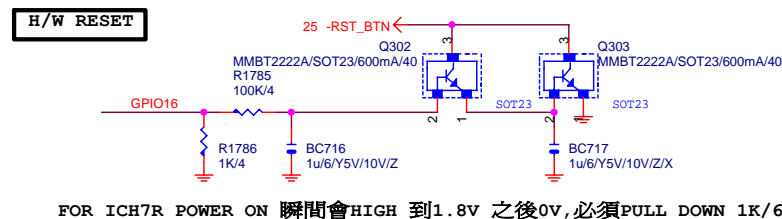
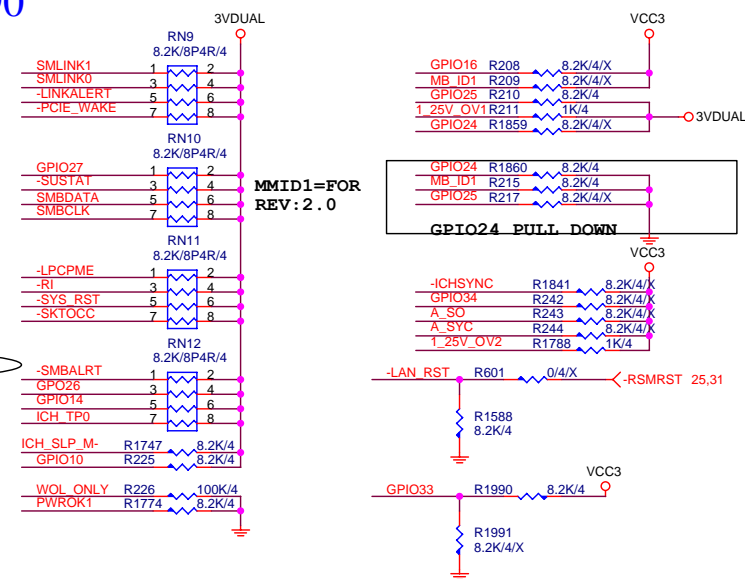
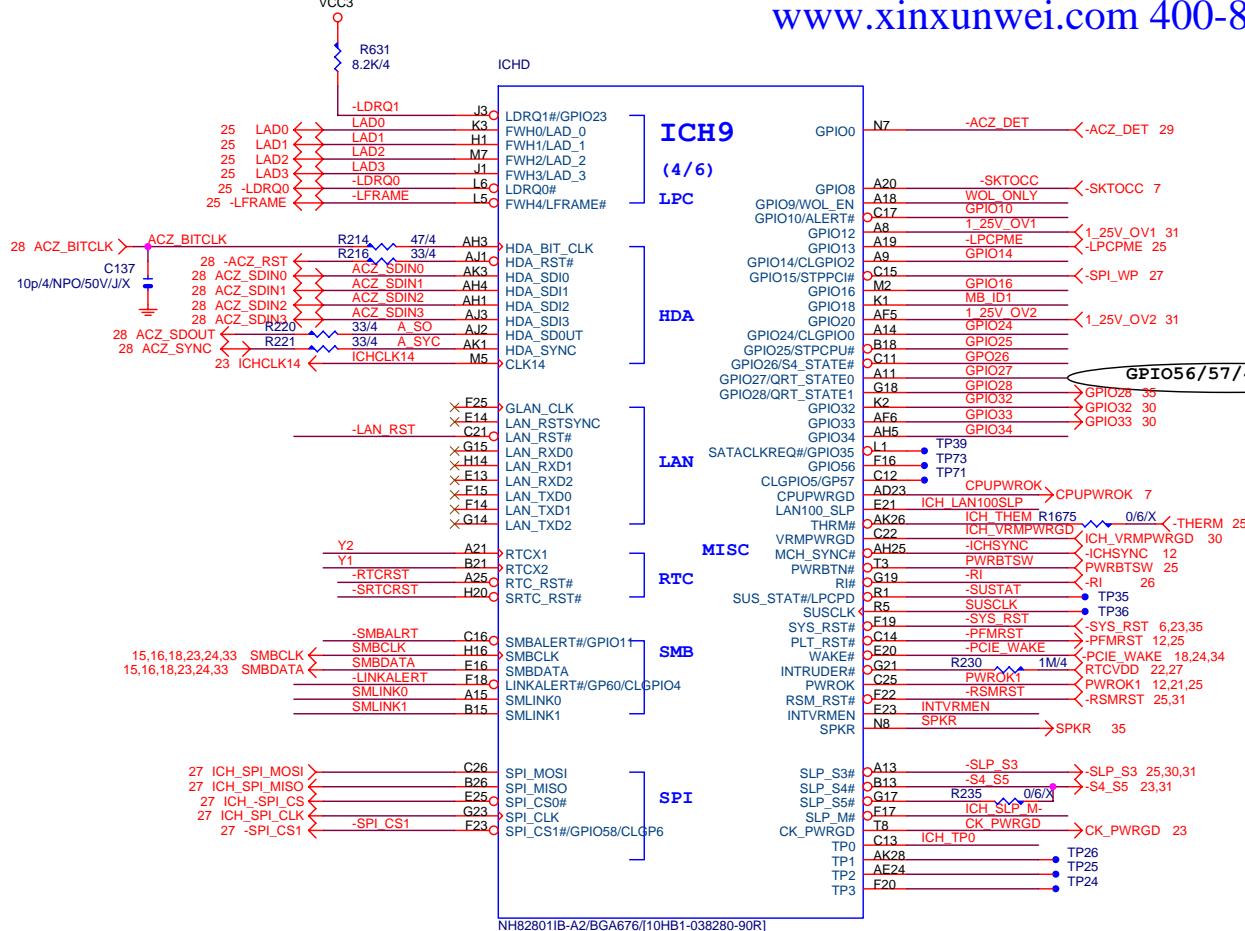


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DDRII TERMINATOR		
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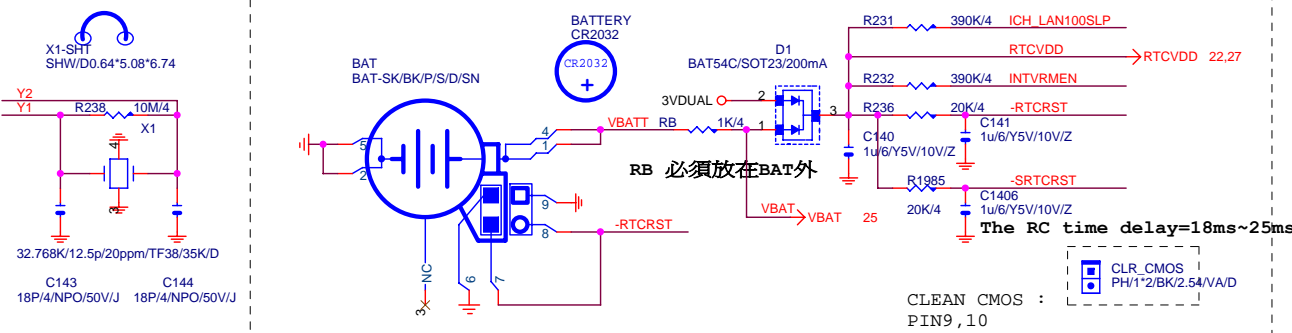


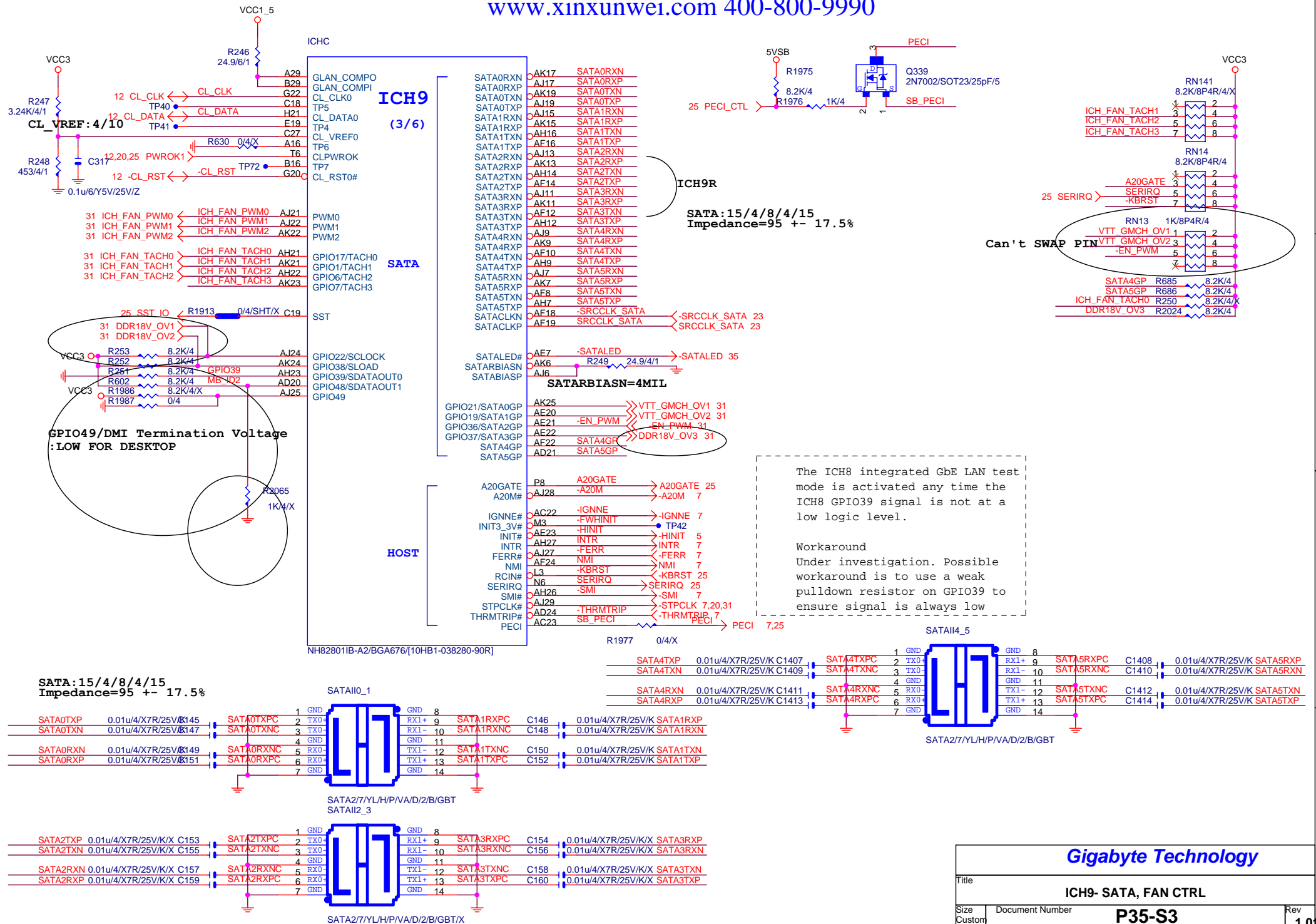


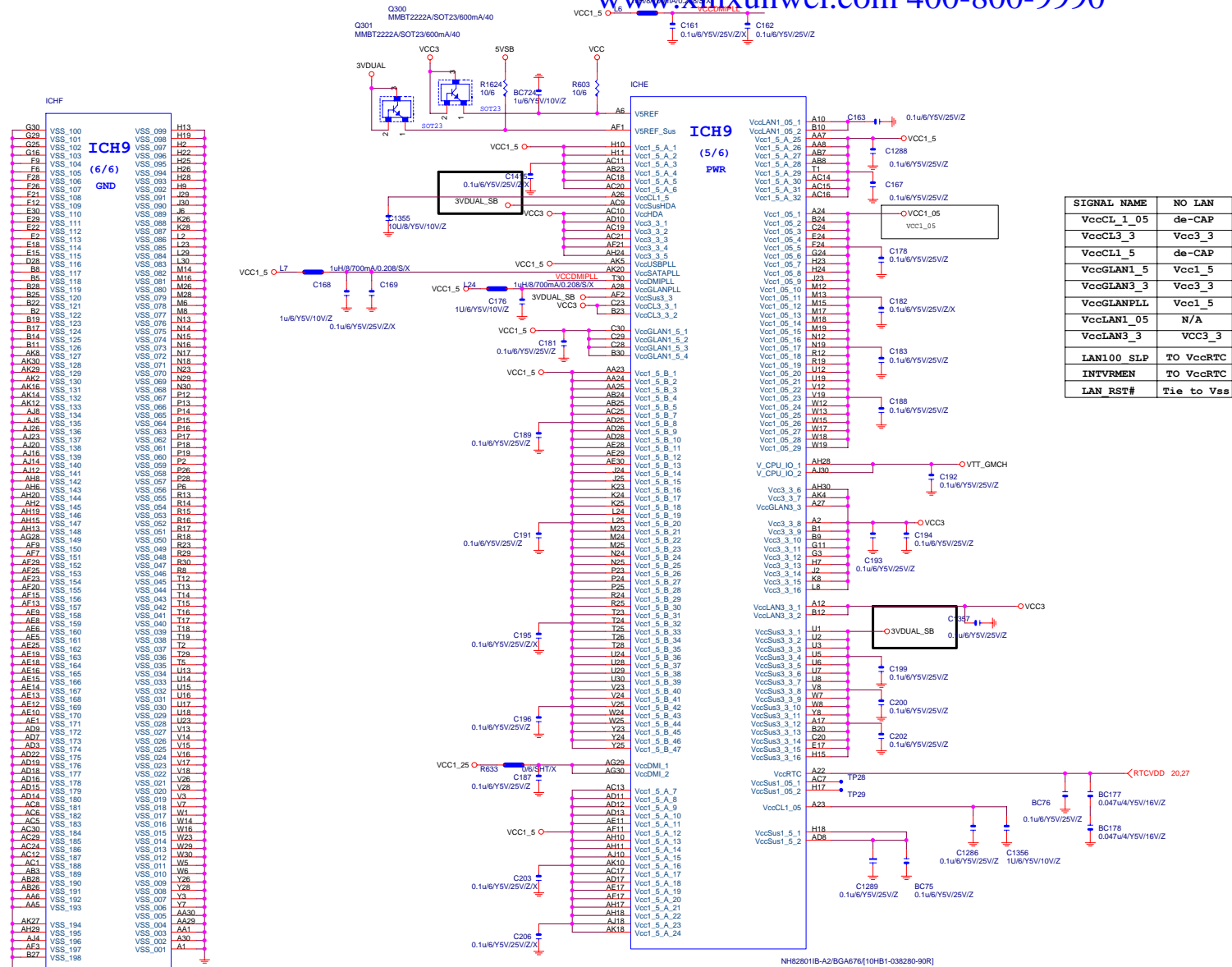


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Title			
ICH9 GPIO, CTRL			
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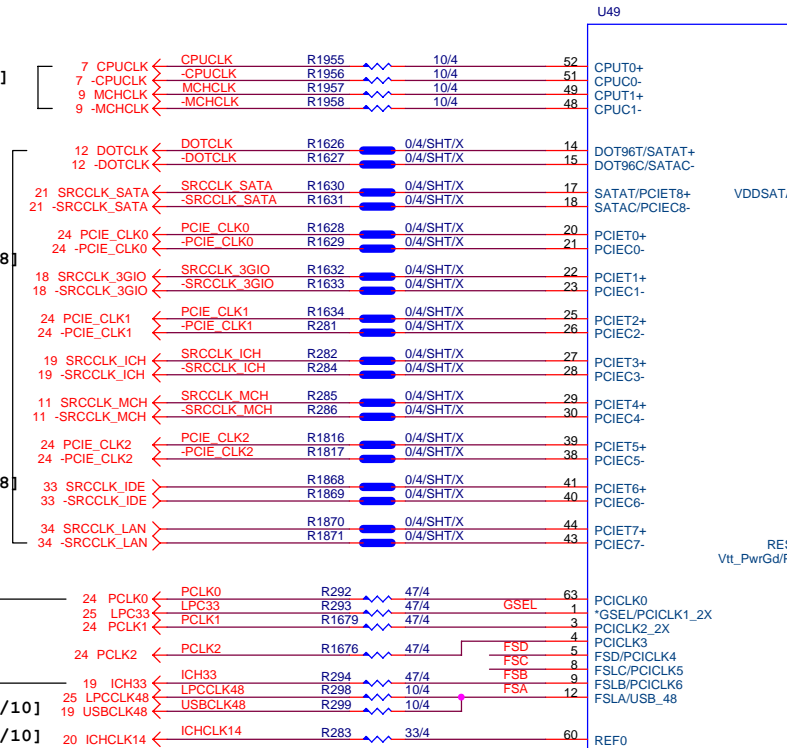




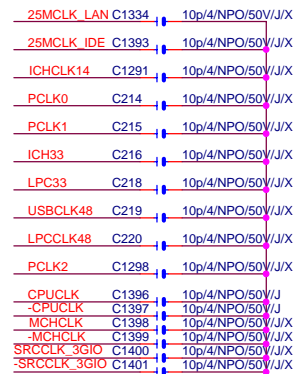
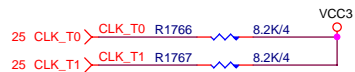
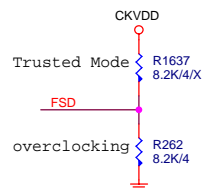
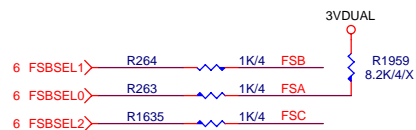
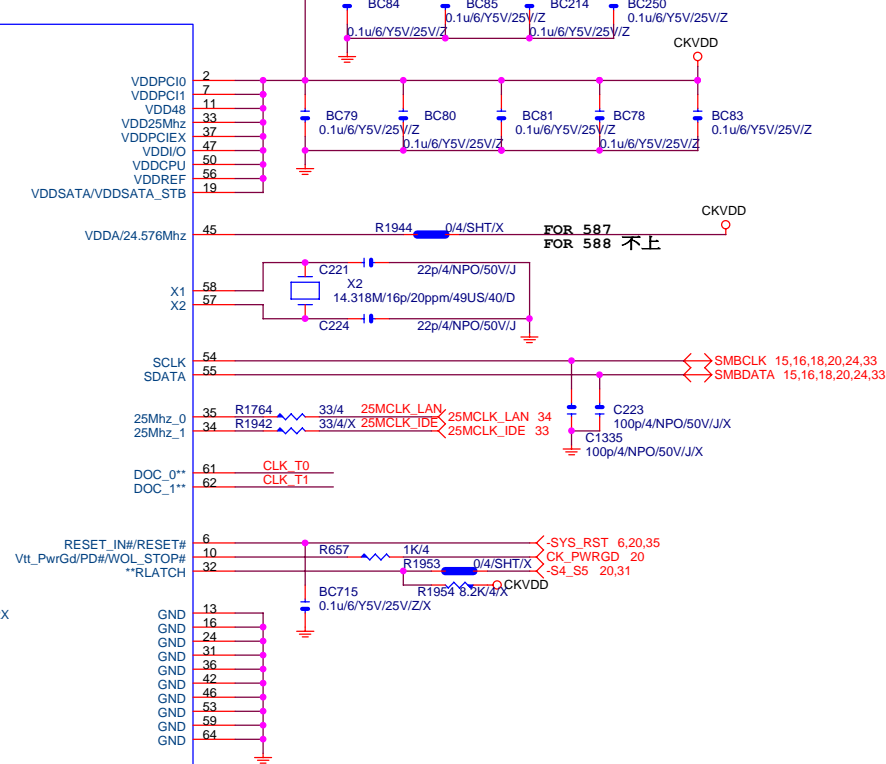


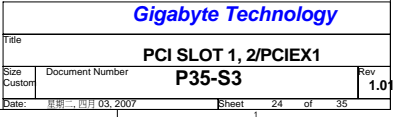
Gigabyte Technology

50歐姆:[4/10]



```
GSEL=1,96Mhz from 14/15,SATACLK from 17/18
GSEL=0,SATACLK from 14/15,PCIECLK from
17/18
```

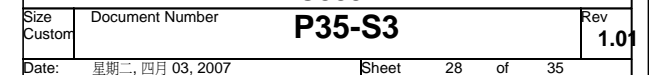


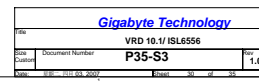


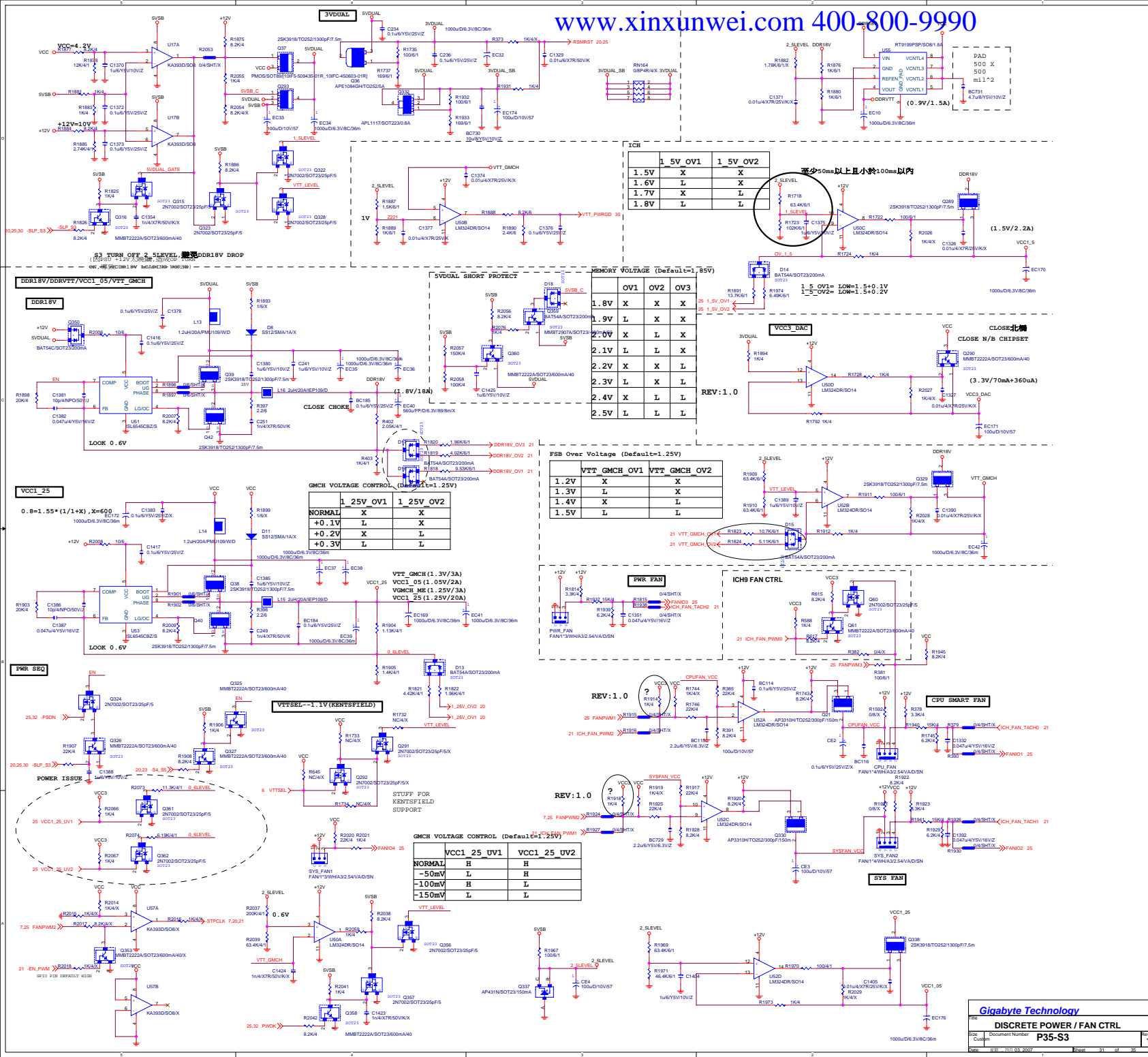
IT8712F LPC I/O

Title			
BIOS/HW-MONITOR/C/KB/MS			
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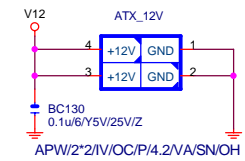
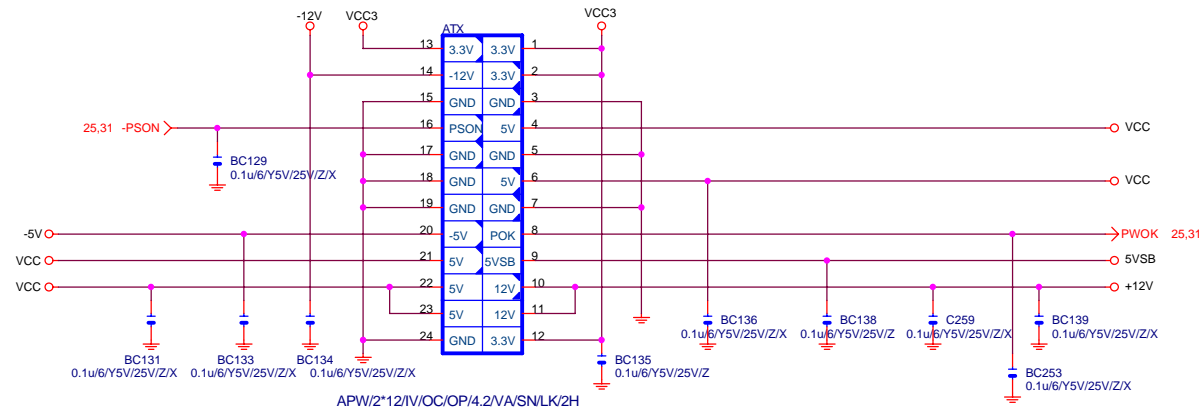
For ALC883: CBC50=470P/6
For ALC880: CBC50=10/6



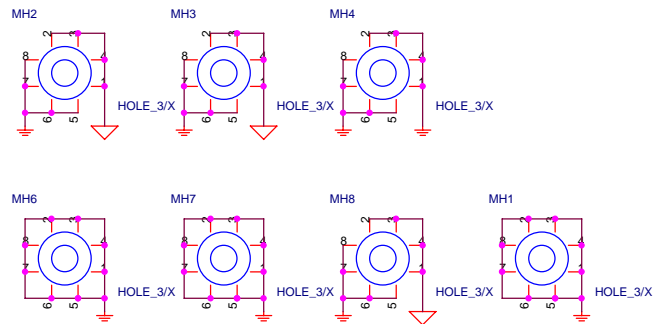




ATX POWER CONNECTOR



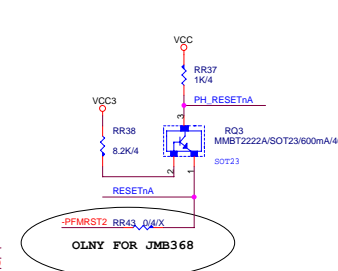
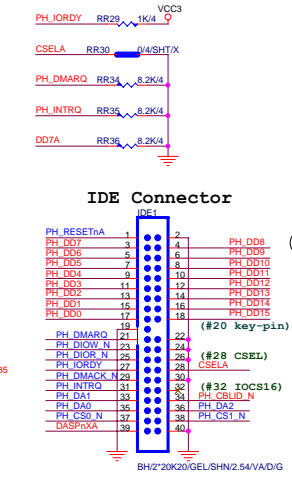
HOLE_3-2--->有鉛



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	2		1

JMB368 REMOVE

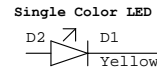
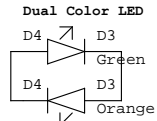
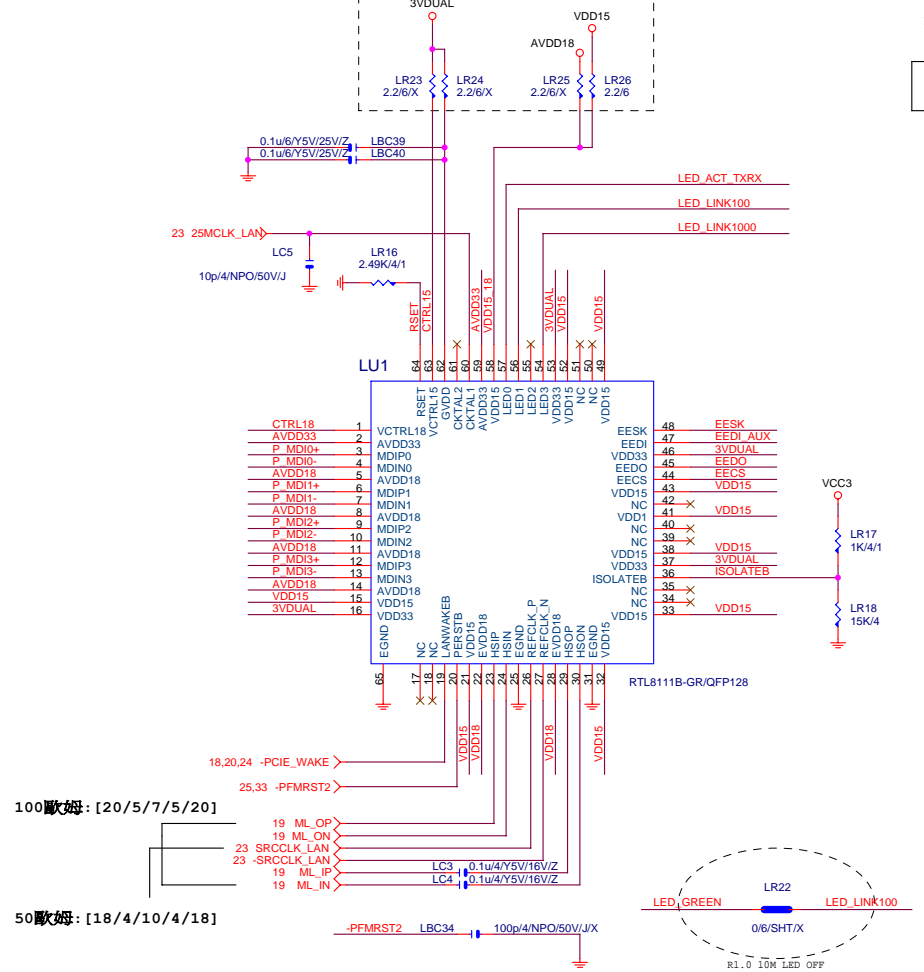


PH RESETn	1	2	
PH D07	3	4	PH D08
PH D06	5	6	PH D09
PH D05	7	8	PH D10
PH D04	9	10	PH D11
PH D03	11	12	PH D12
PH D02	13	14	PH D13
PH D01	15	16	PH D14
PH D00	17	18	PH D15
			(#20 key-pin)
PH DMAR0	19	20	
PH DIOW N	21	22	
PH DIOR N	23	24	
PH DIOZ	25	26	CS[2:0] CSSEL
PH DMACK	27	28	
PH DMACK	29	30	
PH INTIO	31	32	CS[32:16] IOCSS16
PH DA1	33	34	
PH DA0	35	36	PH DA2
PH CS0 N	37	38	PH CS1 N
DSPSRnA	39	40	

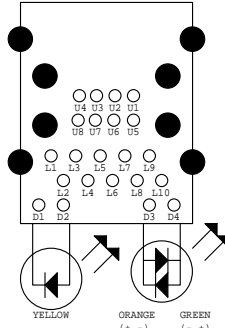
BH2720K20GEL/SHN2.54VAD/G

JMB368 REMOVE

PCIE-1G LAN

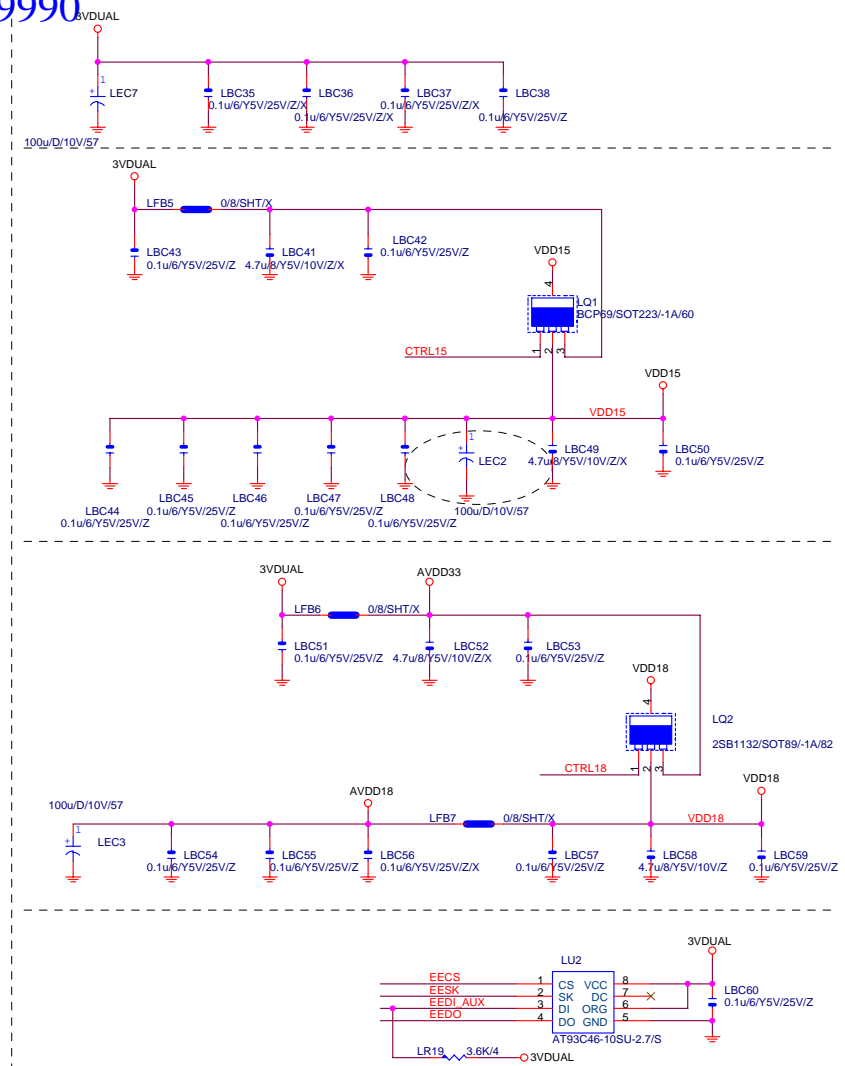


P35-152-19W9



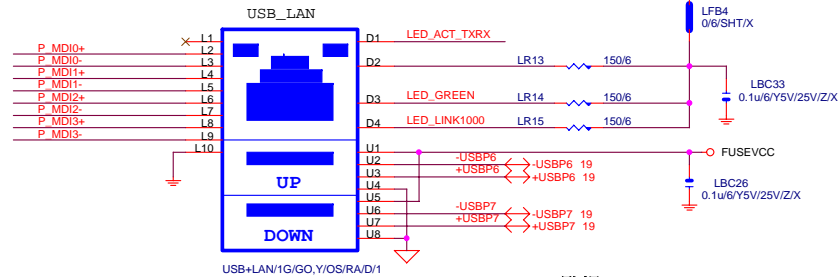
Power domain chart

	RTL8111B / RTL8101E	RTL8111C
AVDD33	3.3V	3.3V
AVDD18	1.8V	1.2V
EVDD18	1.8V	1.2V
DVDD15	1.5V	1.2V

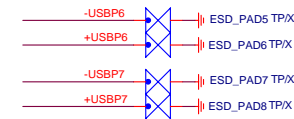


USB LAN CONNECTOR

LAN 100欧姆: [30/4/8/4/30] FOR B 製程



USB LAN



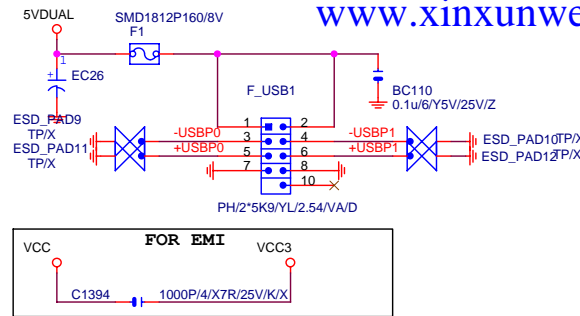
Gigabyte Technology

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FRONT USB1

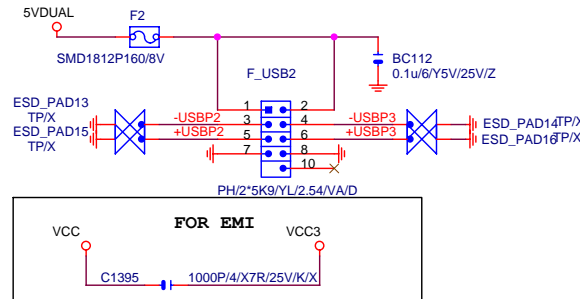
19 +USBP0 <-> +USBP0
19 -USBP0 <-> -USBP0
19 +USBP1 <-> +USBP1
19 -USBP1 <-> -USBP1

1000u/D/6.3V/8C/36m



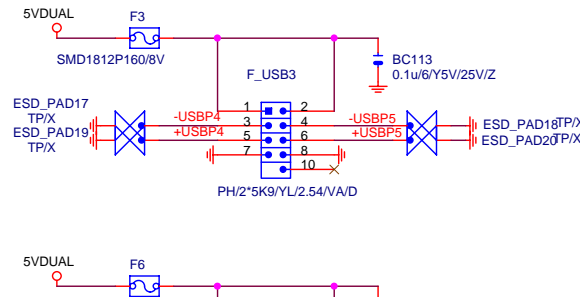
FRONT USB2

19 +USBP2 <-> +USBP2
19 -USBP2 <-> -USBP2
19 +USBP3 <-> +USBP3
19 -USBP3 <-> -USBP3



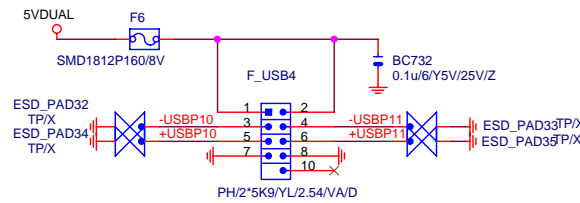
FRONT USB3

19 -USBP4 <-> -USBP4
19 +USBP4 <-> +USBP4
19 -USBP5 <-> -USBP5
19 +USBP5 <-> +USBP5

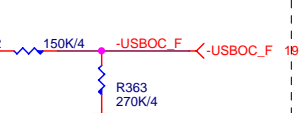


FRONT USB4

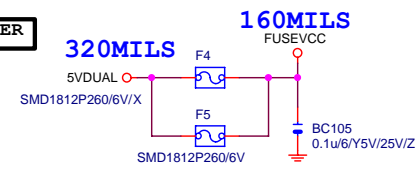
19 -USBP10 <-> -USBP10
19 +USBP10 <-> +USBP10
19 -USBP11 <-> -USBP11
19 +USBP11 <-> +USBP11



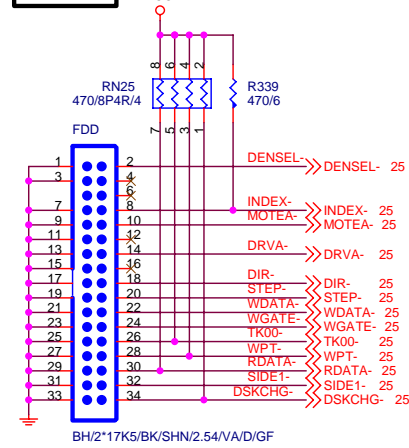
FRONT USB OC1



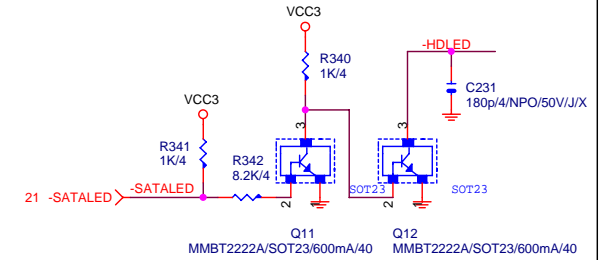
USB POWER



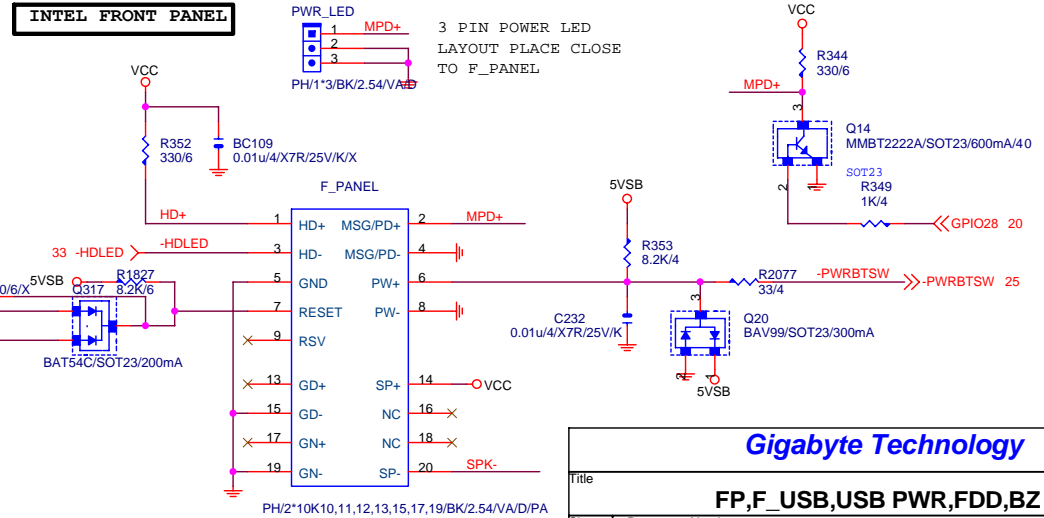
FLOPPY



SATA LED



INTEL FRONT PANEL



Gigabyte Technology

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