

Model Name: GA-Z68MA-D2H-B3

Revision 1.3

SHEET

TITLE

01	COVER SHEET
02	BOM & PCB MODIFY HISTORY
03	BLOCK DIAGRAM
04	CPU_LGA1155-A
05	CPU_LGA1155-B
06	CPU_LGA1155-C
07	DDR III CHANNEL A 1,2
08	DDR III CHANNEL B 1,2
09	PCH_FDI,DMI,USB,PCIE,NVRAM
10	PCH_DP
11	PCH_HOST,SATA,PCI
12	PCH_GPIO,CTRL,AUDIO
13	PCH_PWR,GND
14	PCI EXPRESS*16 SLOT
15	PCI EXPRESS*4 SLOT
16	PCI EXPRESS*8 SLOT
17	PCI EXPRESS*16 SWITCH
18	PCI EXPRESS*1 SLOT
19	ITE 8728 LPC IO
20	COM,KB_USB,USB_ESATA,-PROCHOT
21	HWM,FAN CTRL
22	DUAL BIOS
23	FP,FUSB,SPK,SATALED
24	ALC889
25	REAR AUDIO JACK
26	REALTEK RTL8111E
27	HDMI/DVI

SHEET

TITLE

28	USB3.0- EJ168
29	DISCRETE POWER
30	ATX,TPM
31	ISL95870_CPU_VTT
32	VCORE ISL6364_1
33	VCORE ISL6364_2
34	VCORE ISL6364_3

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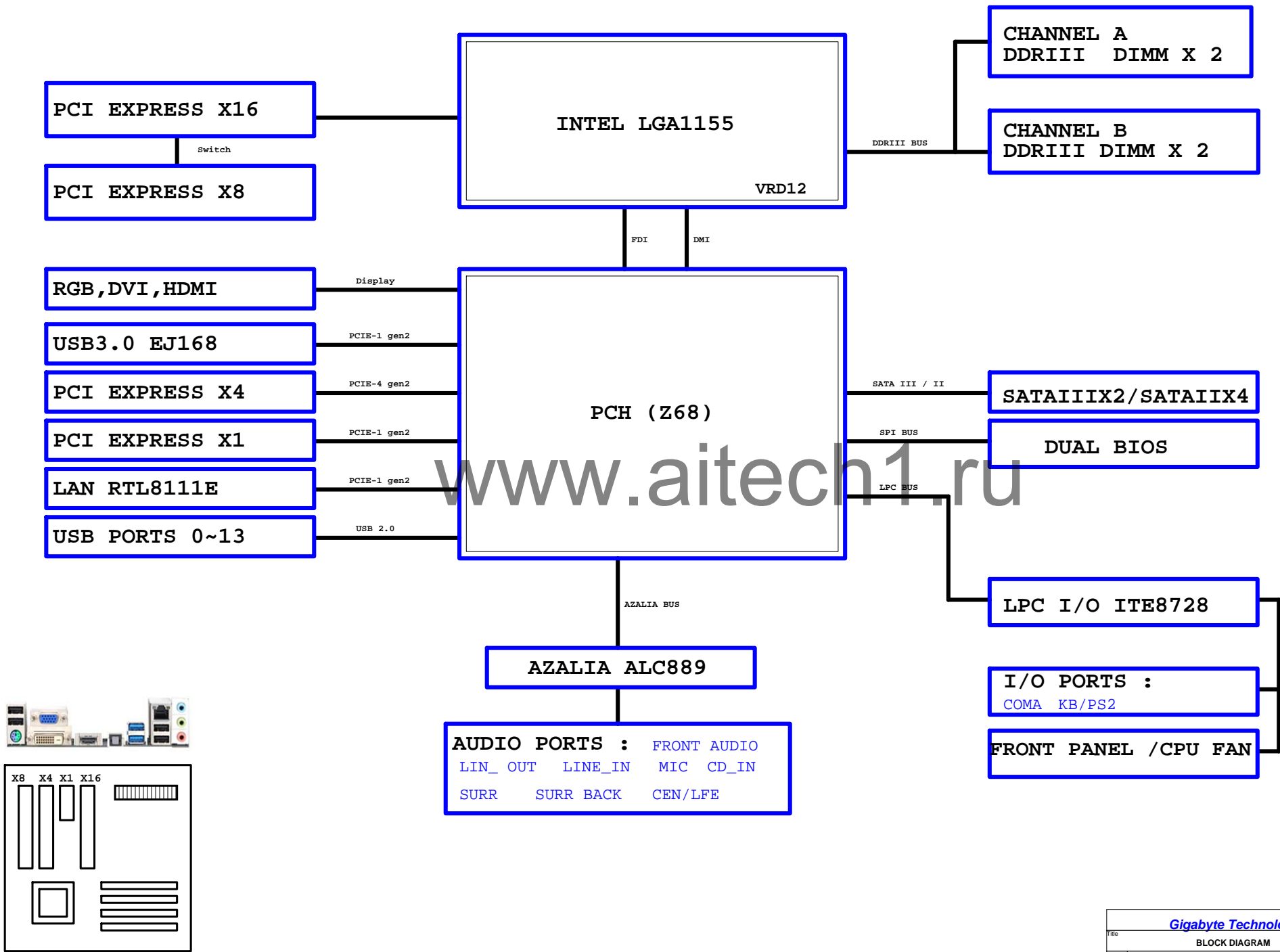
Gigabyte Technology

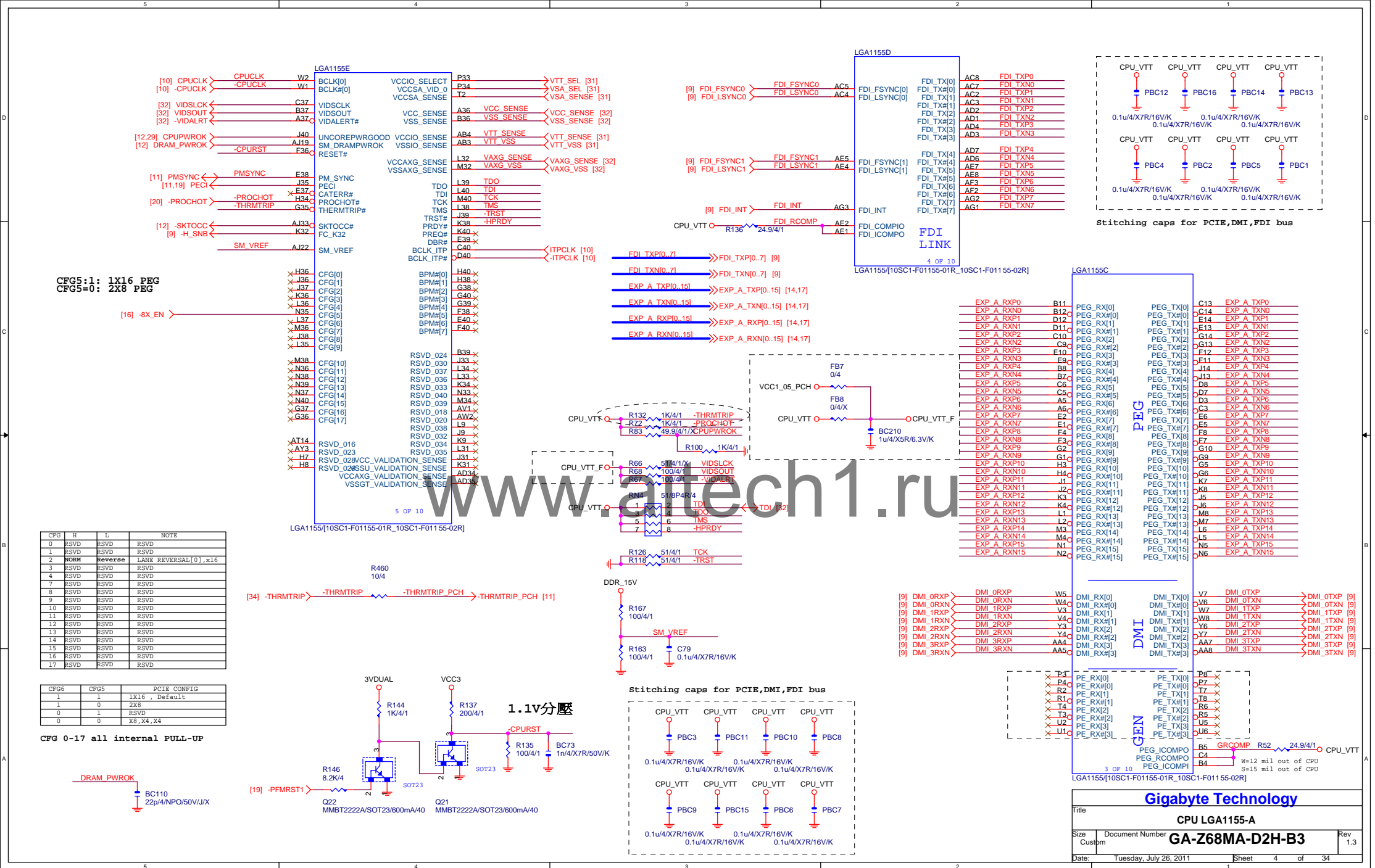
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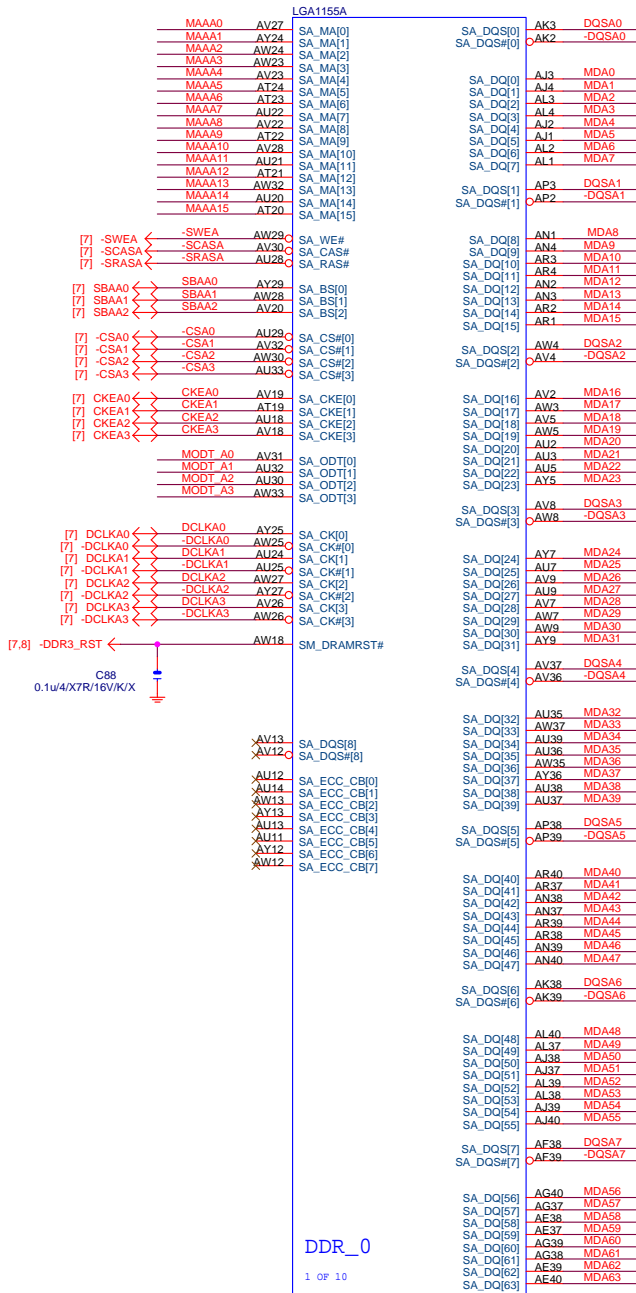
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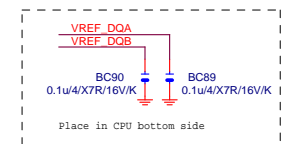
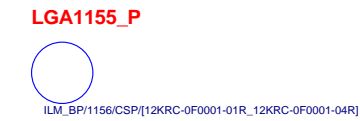
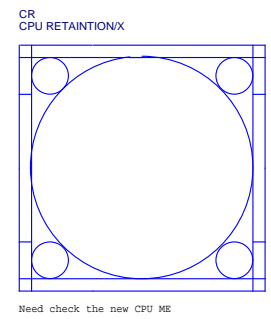
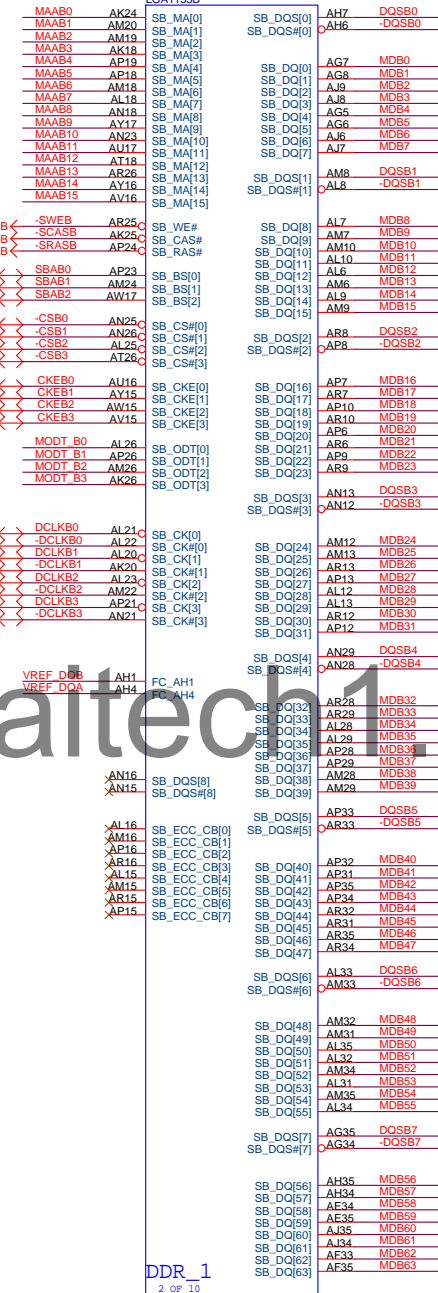
BLOCK DIAGRAM



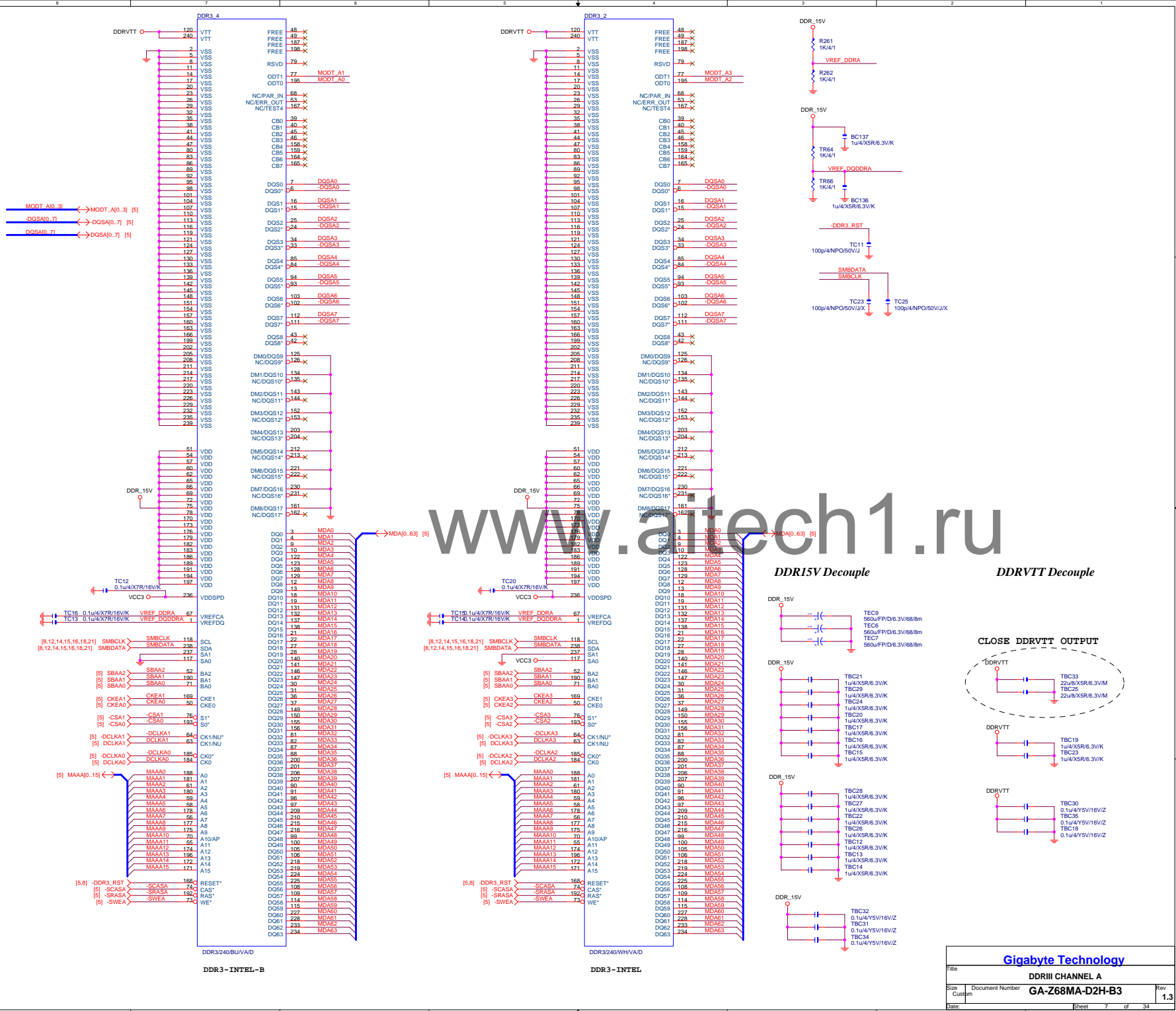




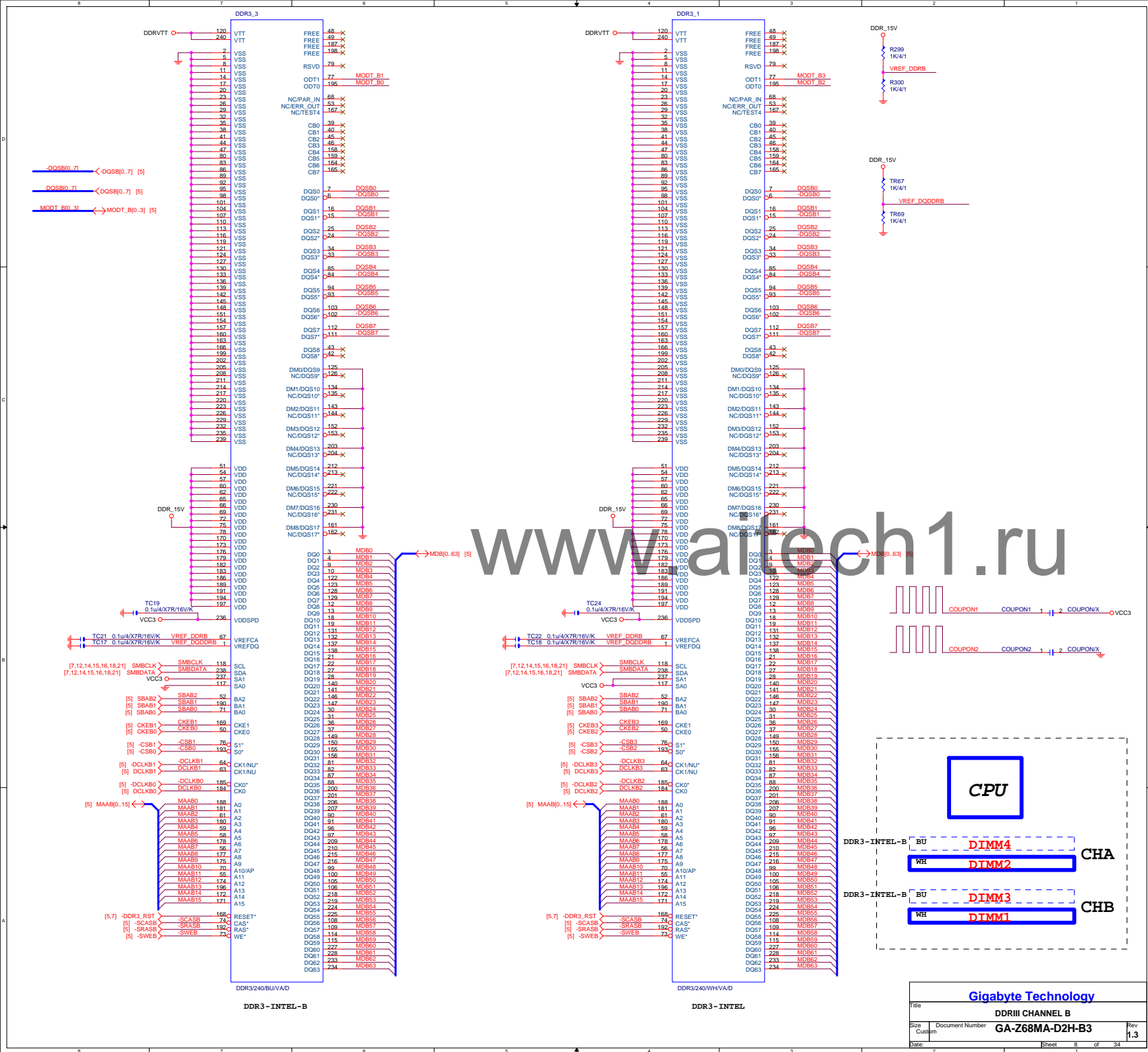
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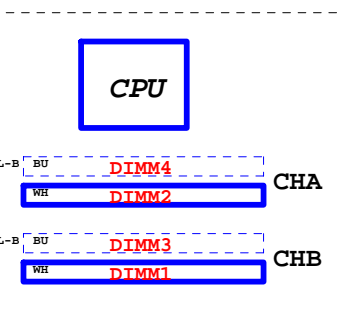




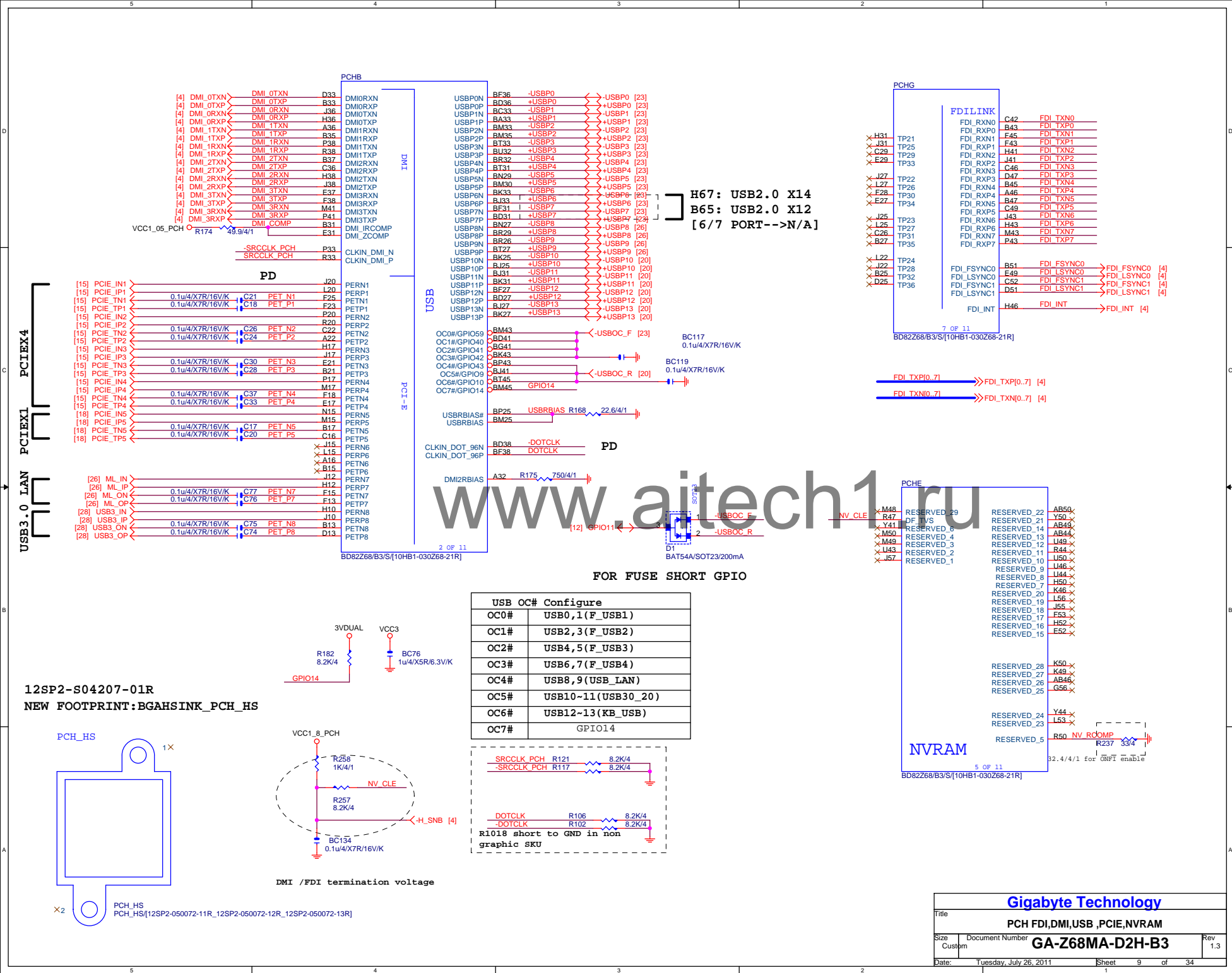


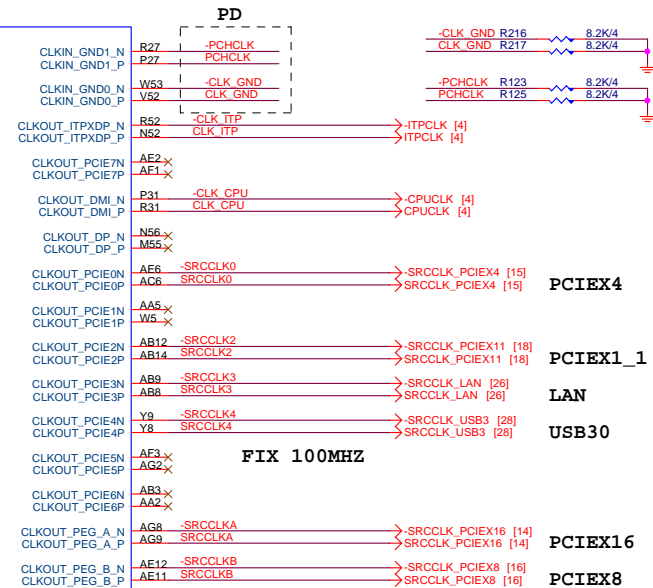
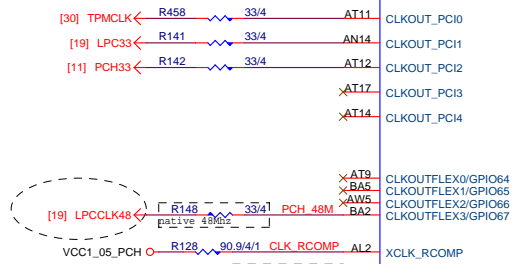
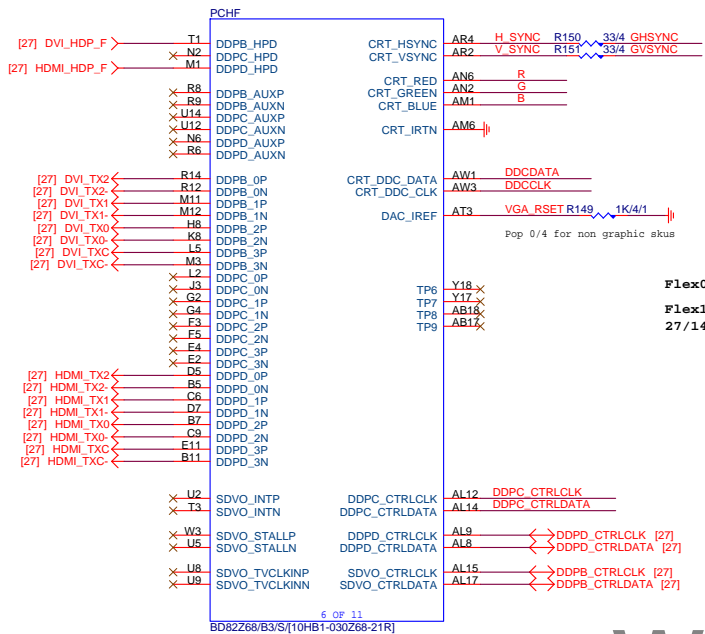


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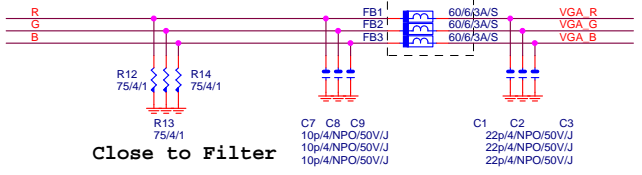
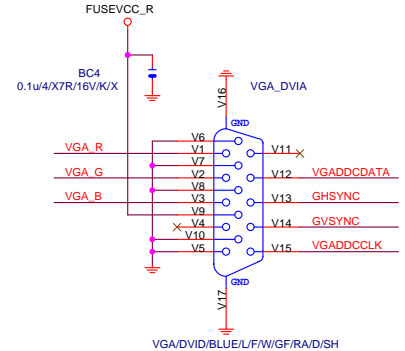
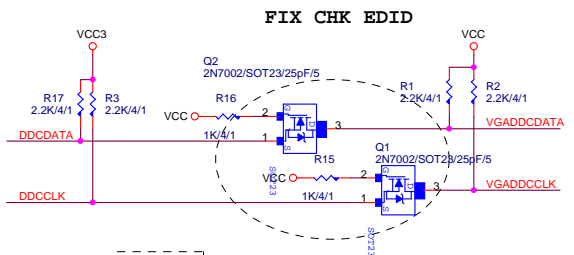
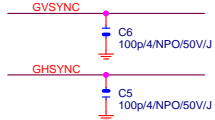
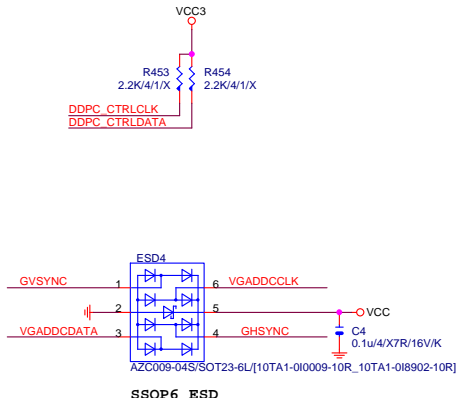








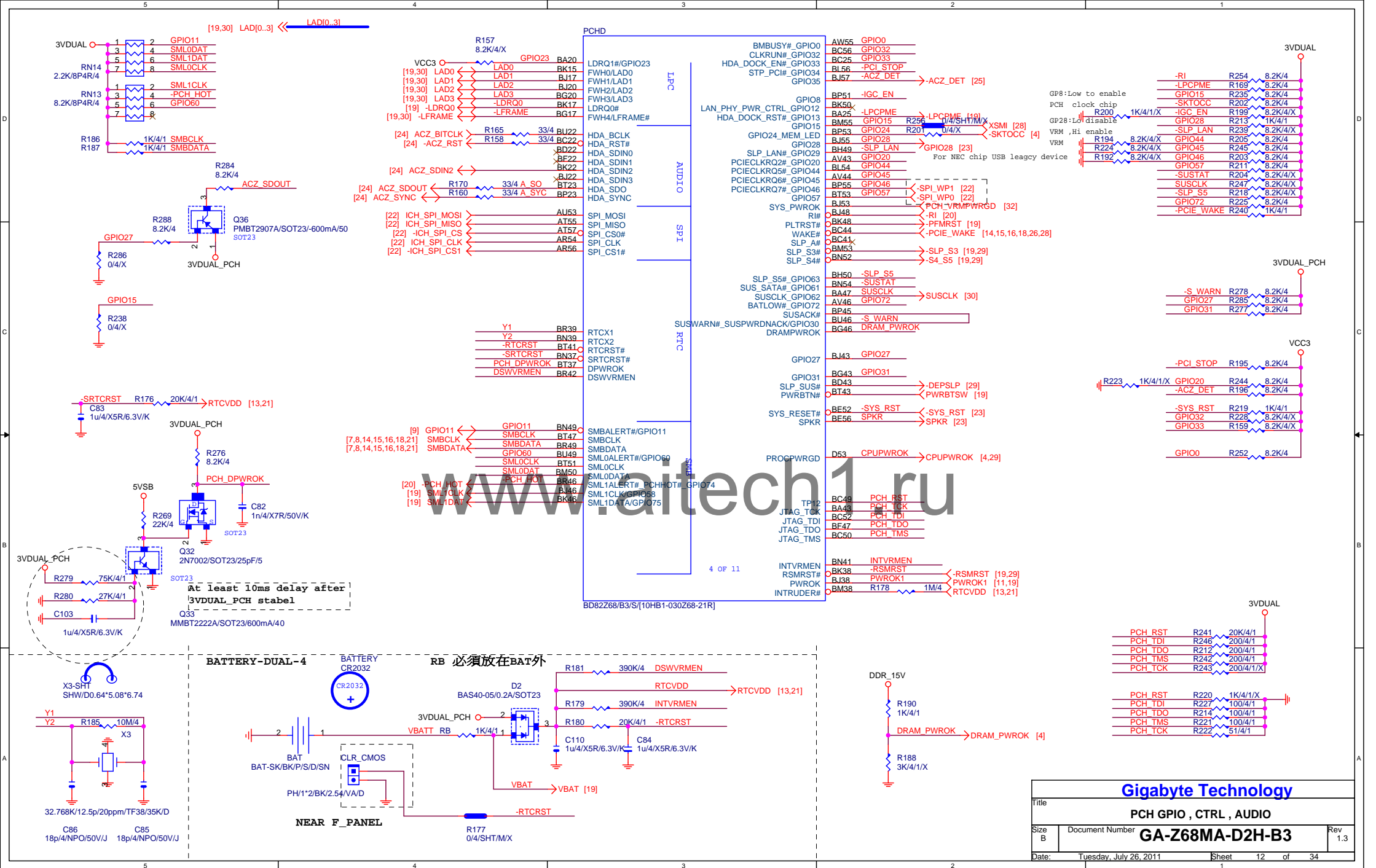
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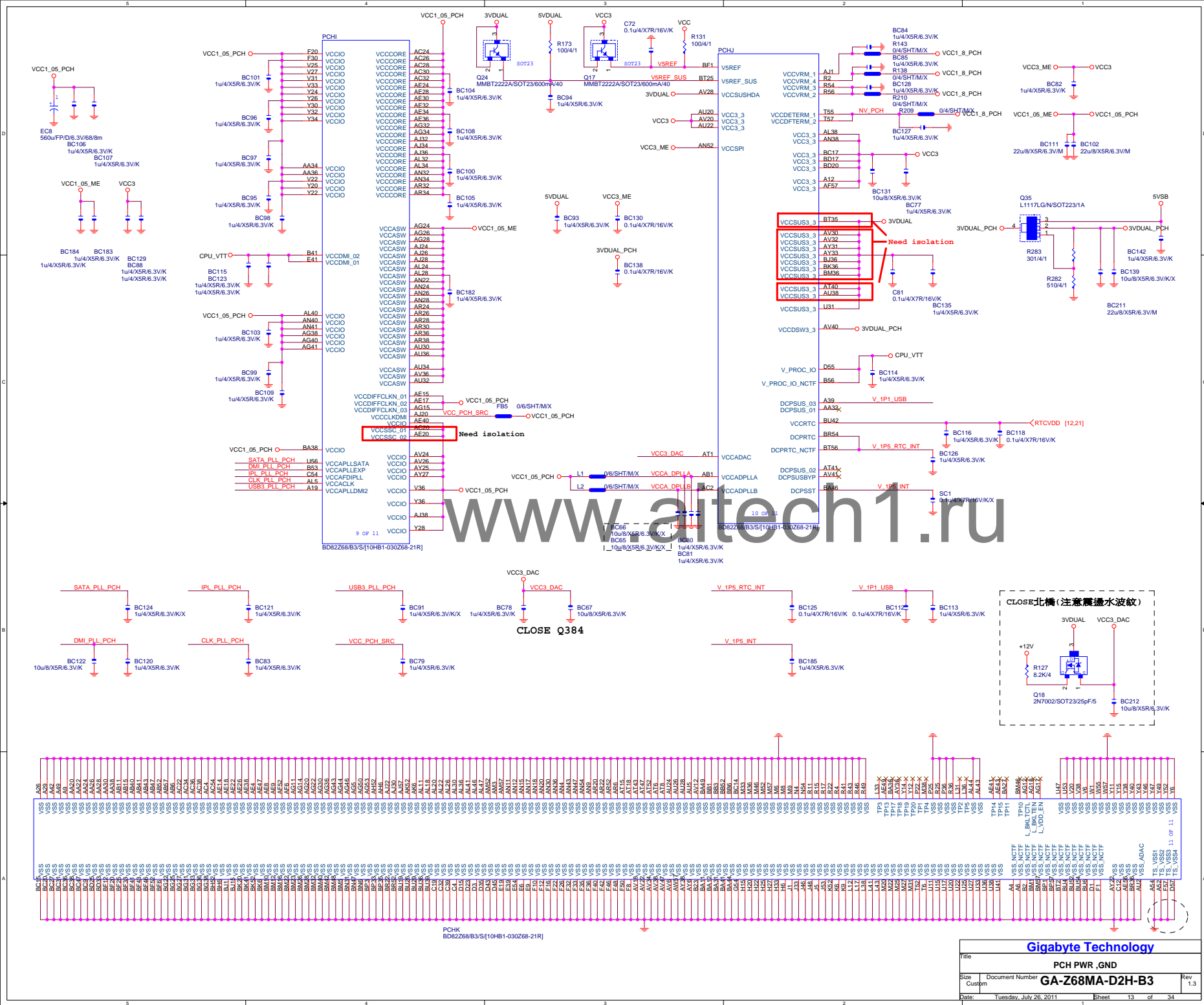


Gigabyte Technology			
PCH DISPLAY, CLK BUFFER			
GA-Z68MA-D2H-B3			
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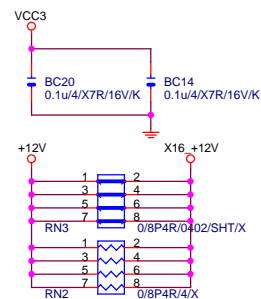
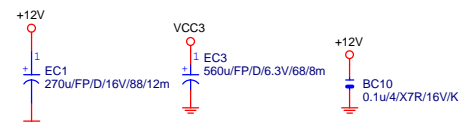
The schematic diagram illustrates the internal connections of the GA-Z68MA-D2H-B3 motherboard, focusing on the PCH (Platform Controller Hub), SATA, and PCI interfaces. The diagram is organized into several sections:

- PCH (Platform Controller Hub):** Shows the PCH0, PCH1, and PCH2 sections, detailing the connections for various signals like CL\_CLK1, CL\_RST1#, APWROK, PWM0, PWM1, PWM2, PWM3, TACH0, TACH1, TACH2, TACH3, TACH4, TACH5, TACH6, TACH7, SSTCTL, SCLOCK, SLOAD, SDATAOUT, and SDATAIN.
- SATA (Serial ATA):** Details the connections for SATA0, SATA1, SATA2, SATA3, and SATA4, including the SATA0RXN, SATA0TXN, SATA0RXP, and SATA0TXP signals, as well as the SATA1RXN, SATA1TXN, SATA1RXP, and SATA1TXP signals.
- PCI (Peripheral Component Interconnect):** Shows the connections for the PCI0, PCI1, and PCI2 sections, including the PCI0RXN, PCI0TXN, PCI0RXP, and PCI0TXP signals, as well as the PCI1RXN, PCI1TXN, PCI1RXP, and PCI1TXP signals.
- Other Components:** Includes various capacitors (C97, C98, C99, C100, C101, C102, C103, C104, C105, C106, C107, C108, C109, C110, C111, C112, C113, C114, C115, C116, C117, C118, C119, C120, C121, C122, C123, C124, C125, C126, C127, C128, C129, C130, C131, C132, C133, C134, C135, C136, C137, C138, C139, C140, C141, C142, C143, C144, C145, C146, C147, C148, C149, C150, C151, C152, C153, C154, C155, C156, C157, C158, C159, C160, C161, C162, C163, C164, C165, C166, C167, C168, C169, C170, C171, C172, C173, C174, C175, C176, C177, C178, C179, C180, C181, C182, C183, C184, C185, C186, C187, C188, C189, C190, C191, C192, C193, C194, C195, C196, C197, C198, C199, C200, C201, C202, C203, C204, C205, C206, C207, C208, C209, C210, C211, C212, C213, C214, C215, C216, C217, C218, C219, C220, C221, C222, C223, C224, C225, C226, C227, C228, C229, C230, C231, C232, C233, C234, C235, C236, C237, C238, C239, C240, C241, C242, C243, C244, C245, C246, C247, C248, C249, C250, C251, C252, C253, C254, C255, C256, C257, C258, C259, C260, C261, C262, C263, C264, C265, C266, C267, C268, C269, C270, C271, C272, C273, C274, C275, C276, C277, C278, C279, C280, C281, C282, C283, C284, C285, C286, C287, C288, C289, C290, C291, C292, C293, C294, C295, C296, C297, C298, C299, C300, C301, C302, C303, C304, C305, C306, C307, C308, C309, C310, C311, C312, C313, C314, C315, C316, C317, C318, C319, C320, C321, C322, C323, C324, C325, C326, C327, C328, C329, C330, C331, C332, C333, C334, C335, C336, C337, C338, C339, C340, C341, C342, C343, C344, C345, C346, C347, C348, C349, C350, C351, C352, C353, C354, C355, C356, C357, C358, C359, C360, C361, C362, C363, C364, C365, C366, C367, C368, C369, C370, C371, C372, C373, C374, C375, C376, C377, C378, C379, C380, C381, C382, C383, C384, C385, C386, C387, C388, C389, C390, C391, C392, C393, C394, C395, C396, C397, C398, C399, C400, C401, C402, C403, C404, C405, C406, C407, C408, C409, C410, C411, C412, C413, C414, C415, C416, C417, C418, C419, C420, C421, C422, C423, C424, C425, C426, C427, C428, C429, C430, C431, C432, C433, C434, C435, C436, C437, C438, C439, C440, C441, C442, C443, C444, C445, C446, C447, C448, C449, C450, C451, C452, C453, C454, C455, C456, C457, C458, C459, C460, C461, C462, C463, C464, C465, C466, C467, C468, C469, C470, C471, C472, C473, C474, C475, C476, C477, C478, C479, C480, C481, C482, C483, C484, C485, C486, C487, C488, C489, C490, C491, C492, C493, C494, C495, C496, C497, C498, C499, C500, C501, C502, C503, C504, C505, C506, C507, C508, C509, C510, C511, C512, C513, C514, C515, C516, C517, C518, C519, C520, C521, C522, C523, C524, C525, C526, C527, C528, C529, C530, C531, C532, C533, C534, C535, C536, C537, C538, C539, C540, C541, C542, C543, C544, C545, C546, C547, C548, C549, C550, C551, C552, C553, C554, C555, C556, C557, C558, C559, C560, C561, C562, C563, C564, C565, C566, C567, C568, C569, C570, C571, C572, C573, C574, C575, C576, C577, C578, C579, C580, C581, C582, C583, C584, C585, C586, C587, C588, C589, C590, C591, C592, C593, C594, C595, C596, C597, C598, C599, C600, C601, C602, C603, C604, C605, C606, C607, C608, C609, C610, C611, C612, C613, C614, C615, C616, C617, C618, C619, C620, C621, C622, C623, C624, C625, C626, C627, C628, C629, C630, C631, C632, C633, C634, C635, C636, C637, C638, C639, C640, C641, C642, C643, C644, C645, C646, C647, C648, C649, C650, C651, C652, C653, C654, C655, C656, C657, C658, C659, C660, C661, C662, C663, C664, C665, C666, C667, C668, C669, C670, C671, C672, C673, C674, C675, C676, C677, C678, C679, C680, C681, C682, C683, C684, C685, C686, C687, C688, C689, C690, C691, C692, C693, C694, C695, C696, C697, C698, C699, C700, C701, C702, C703, C704, C705, C706, C707, C708, C709, C710, C711, C712, C713, C714, C715, C716, C717, C718, C719, C720, C721, C722, C723, C724, C725, C726, C727, C728, C729, C730, C731, C732, C733, C734, C735, C736, C737, C738, C739, C740, C741, C742, C743, C744, C745, C746, C747, C748, C749, C750, C751, C752, C753, C754, C755, C756, C757, C758, C759, C760, C761, C762, C763, C764, C765, C766, C767, C768, C769, C770, C771, C772, C773, C774, C775, C776, C777, C778, C779, C780, C781, C782, C783, C784, C785, C786, C787, C788, C789, C790, C791, C792, C793, C794, C795, C796, C797, C798, C799, C800, C801, C802, C803, C804, C805, C806, C807, C808, C809, C810, C811, C812, C813, C814, C815, C816, C817, C818, C819, C820, C821, C822, C823, C824, C825, C826, C827, C828, C829, C830, C831, C832









EXP A RXP0[0..15] >> EXP\_A\_RXP[0..15] [4,17]  
 EXP A RXN0[0..15] >> EXP\_A\_RXN[0..15] [4,17]  
 EXP A TXP0[0..15] >> EXP\_A\_TXP[0..15] [4,17]  
 EXP A TXN0[0..15] >> EXP\_A\_TXN[0..15] [4,17]

EXP A TXP0	C22	0.22u/4/X5R/6.3V/K	EXP A TXP0C
EXP A TXN0	C23	0.22u/4/X5R/6.3V/K	EXP A TXN0C
EXP A TXP1	C25	0.22u/4/X5R/6.3V/K	EXP A TXP1C
EXP A TXN1	C27	0.22u/4/X5R/6.3V/K	EXP A TXN1C
EXP A TXP2	C29	0.22u/4/X5R/6.3V/K	EXP A TXP2C
EXP A TXN2	C31	0.22u/4/X5R/6.3V/K	EXP A TXN2C
EXP A TXP3	C34	0.22u/4/X5R/6.3V/K	EXP A TXP3C
EXP A TXN3	C38	0.22u/4/X5R/6.3V/K	EXP A TXN3C
EXP A TXP4	C39	0.22u/4/X5R/6.3V/K	EXP A TXP4C
EXP A TXN4	C41	0.22u/4/X5R/6.3V/K	EXP A TXN4C
EXP A TXP5	C42	0.22u/4/X5R/6.3V/K	EXP A TXP5C
EXP A TXN5	C43	0.22u/4/X5R/6.3V/K	EXP A TXN5C
EXP A TXP6	C44	0.22u/4/X5R/6.3V/K	EXP A TXP6C
EXP A TXN6	C45	0.22u/4/X5R/6.3V/K	EXP A TXN6C
EXP A TXP7	C46	0.22u/4/X5R/6.3V/K	EXP A TXP7C
EXP A TXN7	C47	0.22u/4/X5R/6.3V/K	EXP A TXN7C
EXP A SW TXP8	C52	0.22u/4/X5R/6.3V/K	EXP A SW TXP8C
EXP A SW TXN8	C53	0.22u/4/X5R/6.3V/K	EXP A SW TXN8C
EXP A SW TXP9	C54	0.22u/4/X5R/6.3V/K	EXP A SW TXP9C
EXP A SW TXN9	C55	0.22u/4/X5R/6.3V/K	EXP A SW TXN9C
EXP A SW TXP10	C57	0.22u/4/X5R/6.3V/K	EXP A SW TXP10C
EXP A SW TXN10	C59	0.22u/4/X5R/6.3V/K	EXP A SW TXN10C
EXP A SW TXP11	C61	0.22u/4/X5R/6.3V/K	EXP A SW TXP11C
EXP A SW TXN11	C60	0.22u/4/X5R/6.3V/K	EXP A SW TXN11C
EXP A SW TXP12	C63	0.22u/4/X5R/6.3V/K	EXP A SW TXP12C
EXP A SW TXN12	C64	0.22u/4/X5R/6.3V/K	EXP A SW TXN12C
EXP A SW TXP13	C66	0.22u/4/X5R/6.3V/K	EXP A SW TXP13C
EXP A SW TXN13	C67	0.22u/4/X5R/6.3V/K	EXP A SW TXN13C
EXP A SW TXP14	C69	0.22u/4/X5R/6.3V/K	EXP A SW TXP14C
EXP A SW TXN14	C68	0.22u/4/X5R/6.3V/K	EXP A SW TXN14C
EXP A SW TXP15	C70	0.22u/4/X5R/6.3V/K	EXP A SW TXP15C
EXP A SW TXN15	C71	0.22u/4/X5R/6.3V/K	EXP A SW TXN15C

EXP A SW RXP8[0..15] >> EXP\_A\_SW\_RXP[8..15] [17]  
 EXP A SW RXN8[0..15] >> EXP\_A\_SW\_RXN[8..15] [17]  
 EXP A SW TXP8[0..15] >> EXP\_A\_SW\_TXP[8..15] [17]  
 EXP A SW TXN8[0..15] >> EXP\_A\_SW\_TXN[8..15] [17]

PCI-E REV:1.1--> 2.5GHZ

PCE-E X1(單向) BANDWIDTH=2.5GHz\*(8b/10b)=2Gb/s=250MB/s

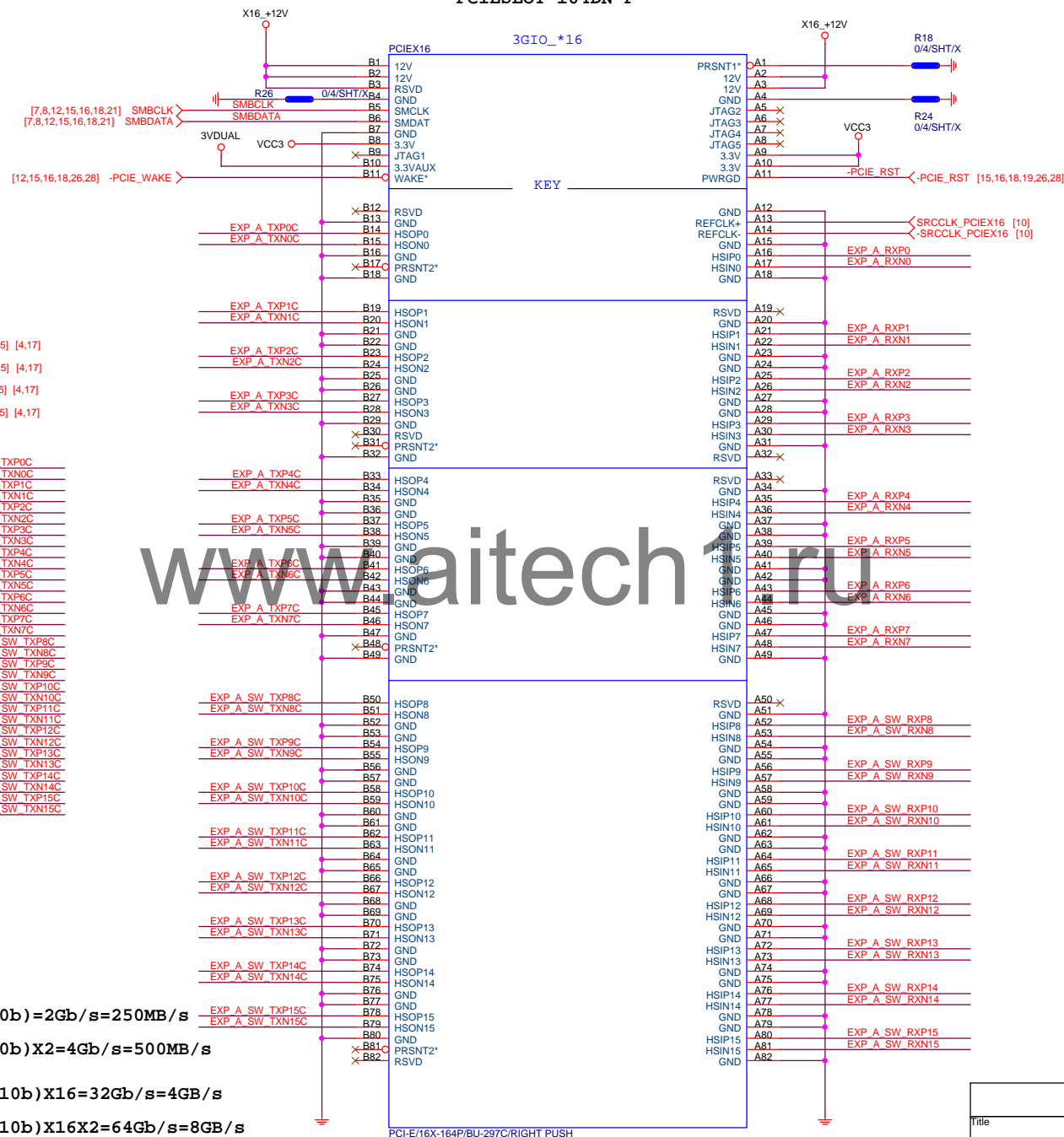
PCE-E X1(雙向) BANDWIDTH=2.5GHz\*(8b/10b)X2=4Gb/s=500MB/s

PCE-E X16(單向) BANDWIDTH=2.5GHz\*(8b/10b)X16=32Gb/s=4GB/s

PCE-E X16(雙向) BANDWIDTH=2.5GHz\*(8b/10b)X16X2=64Gb/s=8GB/s

PCI-E REV:2.0--> 5GHZ

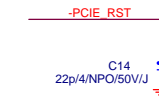
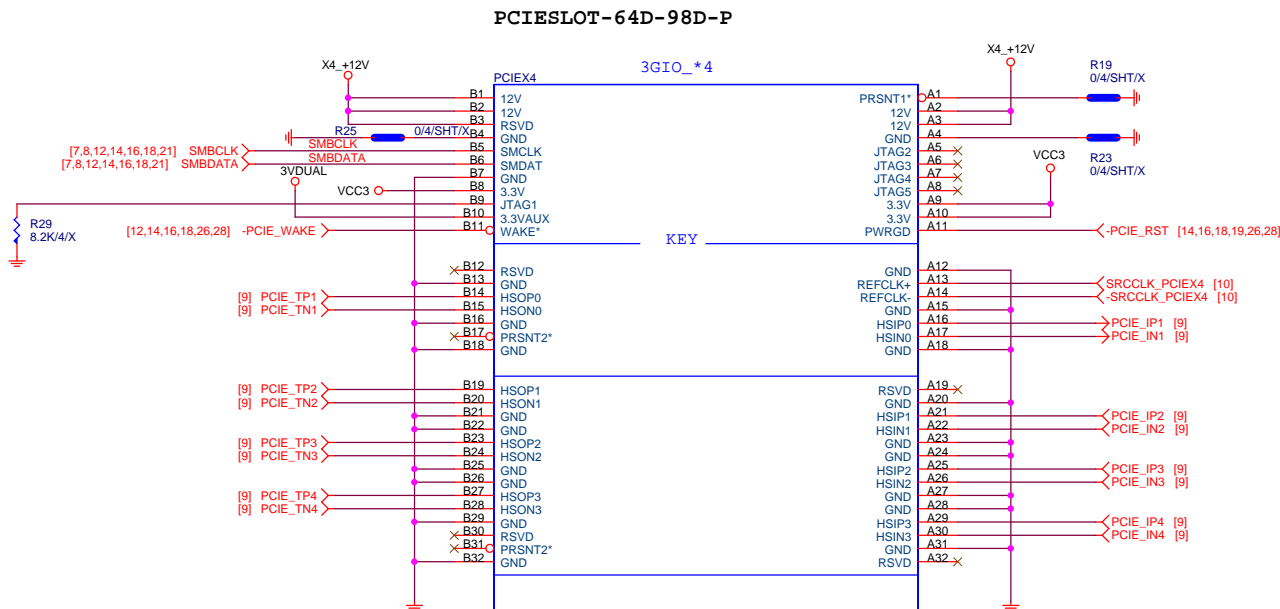
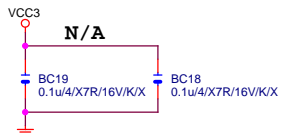
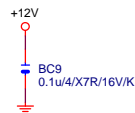
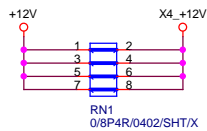
## PCIESLOT-164DN-P



PCI-E/16X-164P/BU-297C/RIGHT PUSH

Gigabyte Technology			
PCI EXPRESS * 16			
Title	Document Number	Rev	
	GA-Z68MA-D2H-B3	1.3	
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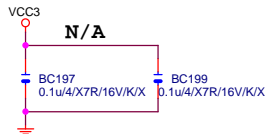
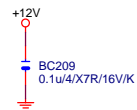
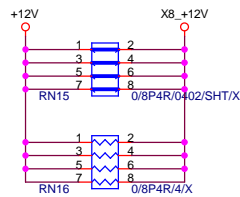


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✕ B81 PRSNT2\*

PCI-E/16X-65P/BU/RIGHT PUSH

Gigabyte Technology			
Title			
PCI EXPRESS X 4 PORT			
Size	Document Number	Rev	
Custom	GA-Z68MA-D2H-B3	1.3	
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[7,8,12,14,15,18,21] SMBCLK  
[7,8,12,14,15,18,21] SMBDATA

[12,14,15,18,26,28] -PCIE\_WAKE

EXP\_B\_SW\_TXP8C  
EXP\_B\_SW\_TXN8C

EXP\_B\_SW\_TXP9C  
EXP\_B\_SW\_TXN9C

EXP\_B\_SW\_TXP10C  
EXP\_B\_SW\_TXN10C

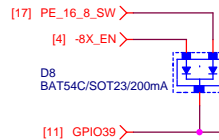
EXP\_B\_SW\_TXP11C  
EXP\_B\_SW\_TXN11C

EXP\_B\_SW\_TXP12C  
EXP\_B\_SW\_TXN12C

EXP\_B\_SW\_TXP13C  
EXP\_B\_SW\_TXN13C

EXP\_B\_SW\_TXP14C  
EXP\_B\_SW\_TXN14C

EXP\_B\_SW\_TXP15C  
EXP\_B\_SW\_TXN15C



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PCI-E/16X-99P/BU/RIGHT PUSH

EXP\_B\_SW\_RXP8\_15] >> EXP\_B\_SW\_RXP[8..15] [17]  
EXP\_B\_SW\_RXN8\_15] >> EXP\_B\_SW\_RXN[8..15] [17]  
EXP\_B\_SW\_TXP8\_15] >> EXP\_B\_SW\_TXP[8..15] [17]  
EXP\_B\_SW\_TXN8\_15] >> EXP\_B\_SW\_TXN[8..15] [17]

EXP_B_SW_TXP8	C161	0.22u/4/X5R/6.3V/K	EXP_B_SW_TXP8C
EXP_B_SW_TXN8	C162	0.22u/4/X5R/6.3V/K	EXP_B_SW_TXN8C
EXP_B_SW_TXP9	C163	0.22u/4/X5R/6.3V/K	EXP_B_SW_TXP9C
EXP_B_SW_TXN9	C164	0.22u/4/X5R/6.3V/K	EXP_B_SW_TXN9C
EXP_B_SW_TXP10	C165	0.22u/4/X5R/6.3V/K	EXP_B_SW_TXP10C
EXP_B_SW_TXN10	C166	0.22u/4/X5R/6.3V/K	EXP_B_SW_TXN10C
EXP_B_SW_TXP11	C167	0.22u/4/X5R/6.3V/K	EXP_B_SW_TXP11C
EXP_B_SW_TXN11	C168	0.22u/4/X5R/6.3V/K	EXP_B_SW_TXN11C
EXP_B_SW_TXP12	C169	0.22u/4/X5R/6.3V/K	EXP_B_SW_TXP12C
EXP_B_SW_TXN12	C170	0.22u/4/X5R/6.3V/K	EXP_B_SW_TXN12C
EXP_B_SW_TXP13	C171	0.22u/4/X5R/6.3V/K	EXP_B_SW_TXP13C
EXP_B_SW_TXN13	C172	0.22u/4/X5R/6.3V/K	EXP_B_SW_TXN13C
EXP_B_SW_TXP14	C173	0.22u/4/X5R/6.3V/K	EXP_B_SW_TXP14C
EXP_B_SW_TXN14	C174	0.22u/4/X5R/6.3V/K	EXP_B_SW_TXN14C
EXP_B_SW_TXP15	C175	0.22u/4/X5R/6.3V/K	EXP_B_SW_TXP15C
EXP_B_SW_TXN15	C176	0.22u/4/X5R/6.3V/K	EXP_B_SW_TXN15C

Gigabyte Technology

PCI EXPRESS X 8 PORT

GA-Z68MA-D2H-B3

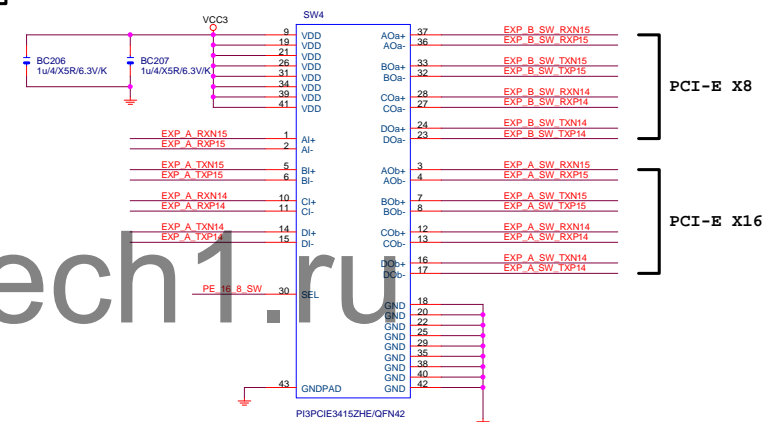
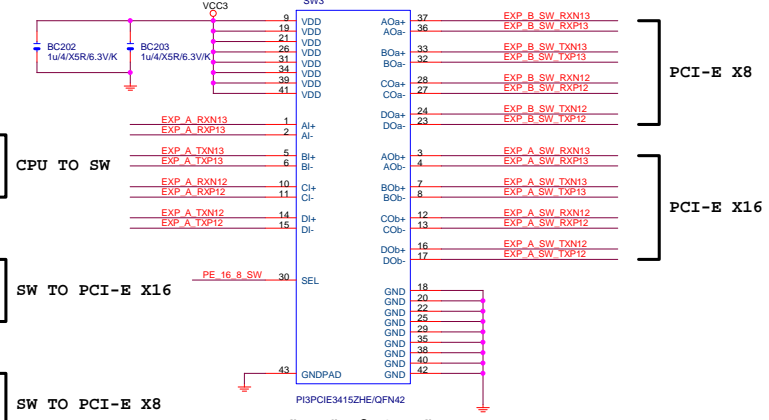
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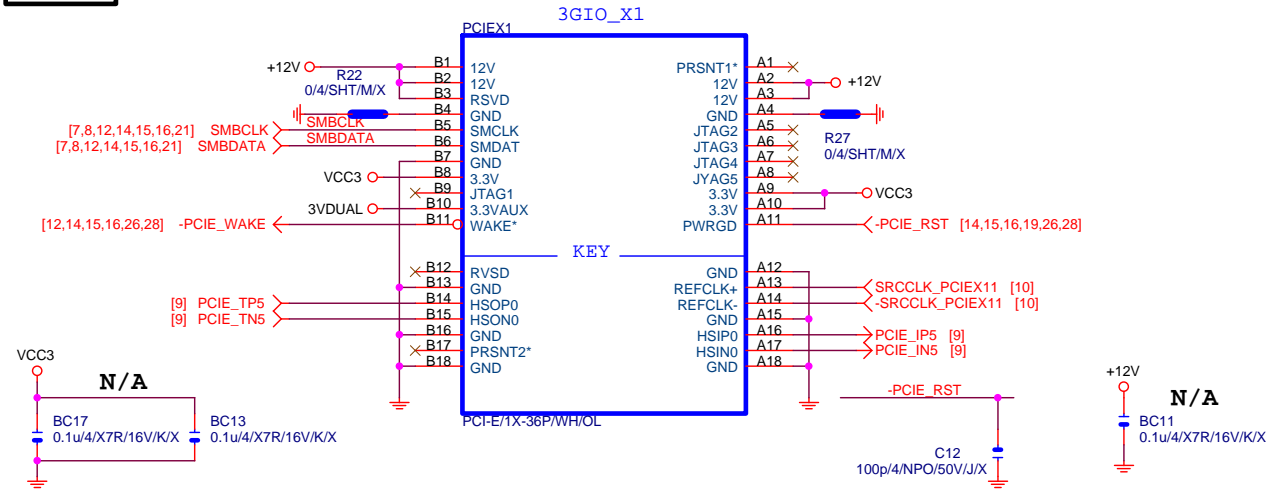
PCI-E X16

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EXP A, TXN14 14 D+ CO  
EXP A, TXP14 15 D+ CO  
PE 16.8 SW 30 SEL DE  
GL  
GL  
GL



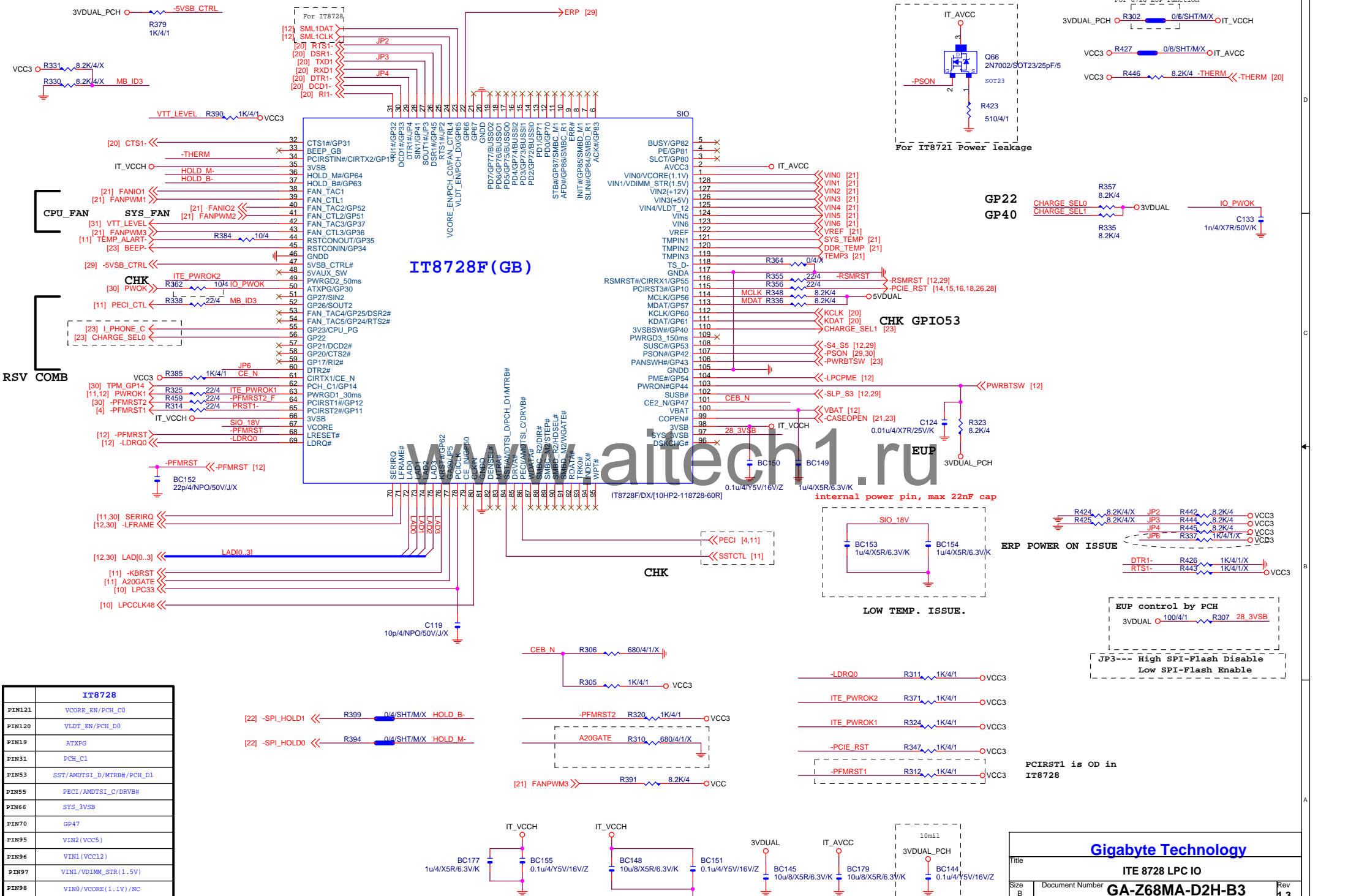
PCIEX1



CLK GEN CK505

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Gigabyte Technology			
Title			
PCIEX1			
Size	Document Number	GA-Z68MA-D2H-B3	
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IT8728	
PIN121	VCORE_EN/PCH_C0
PIN120	VLDT_EN/PCH_D0
PIN19	ATXPG
PIN31	PCH_C1
PIN53	SST/AMDTSI_D/MTRB#/PCH_D1
PIN55	PECI/AMDTSI_C/DRV#
PIN66	SYS_3VSB
PIN70	GP47
PIN95	VIN2 (VCC5)
PIN96	VIN1 (VCC12)
PIN97	VIN1/VDIMM_STR (1.5V)
PIN98	VIN0/VCORE (1.1V)/NC

Gigabyte Technology

ITE 8728 LPC IO

Document Number

GA-Z68MA-D2H-B3

Date:

Tuesday, July 26, 2011

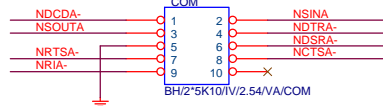
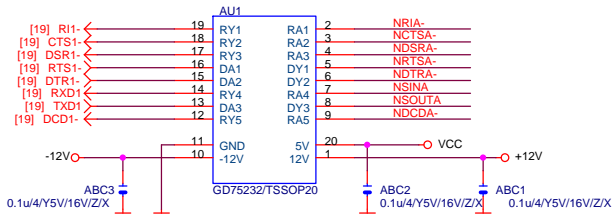
Sheet

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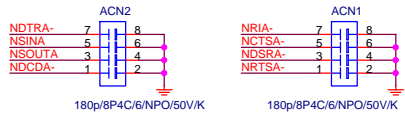
Rev

1.3

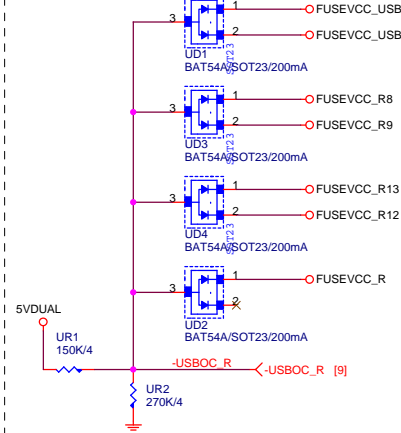
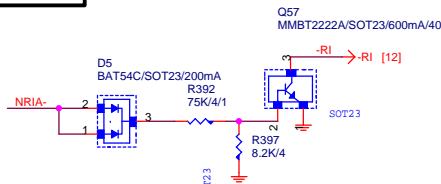
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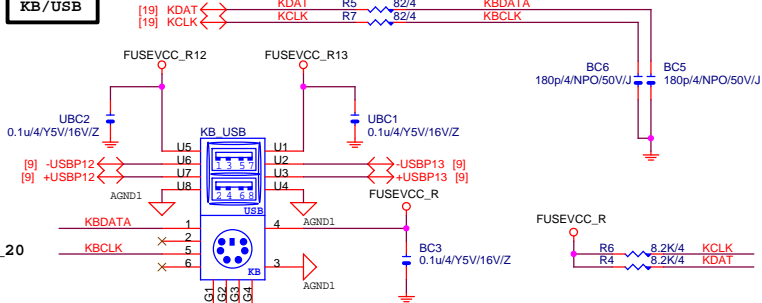
11NH3-000205-Y1R/Y2R



## COM RI



## KB/USB



USB30\_20

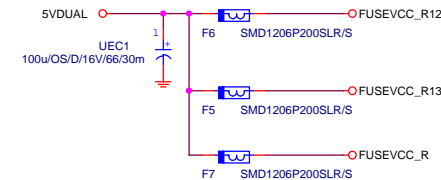
USB\_LAN

KB\_USB

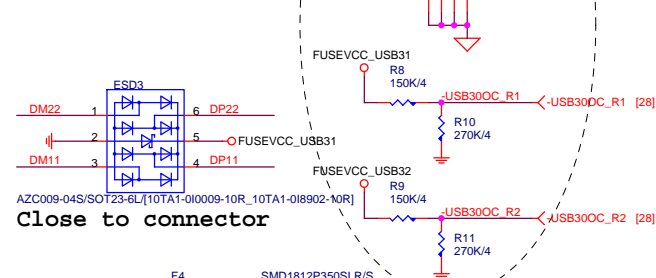
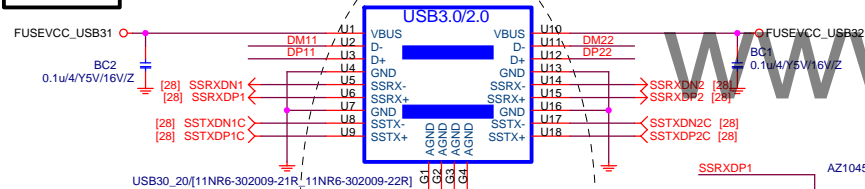
KB/VGA/DVI

KB/2USB/PC99(DUAL)/RED/RA/GF:NEW

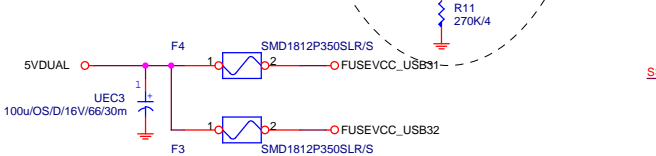
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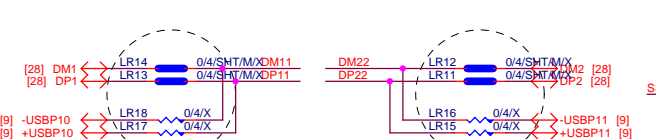
## USB30\_20



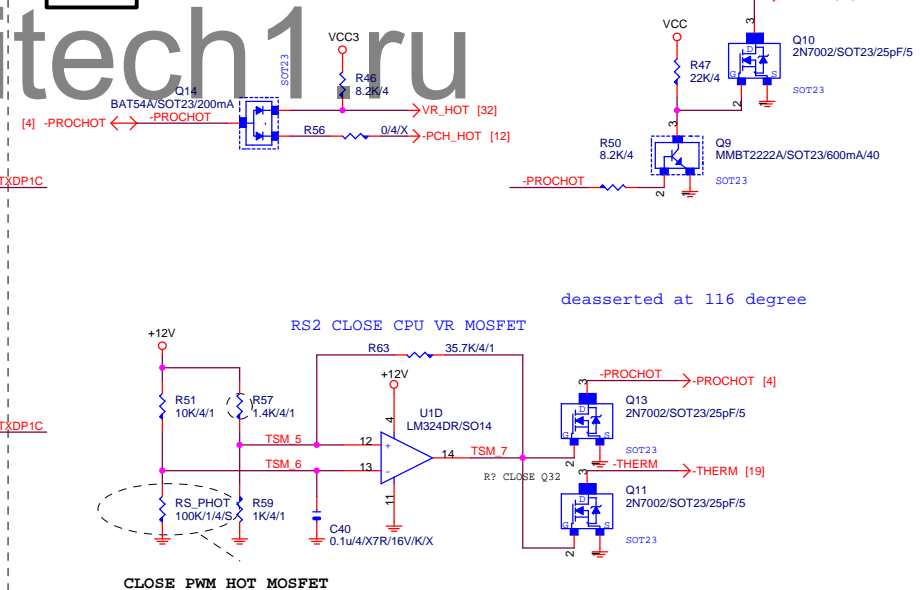
Close to connector



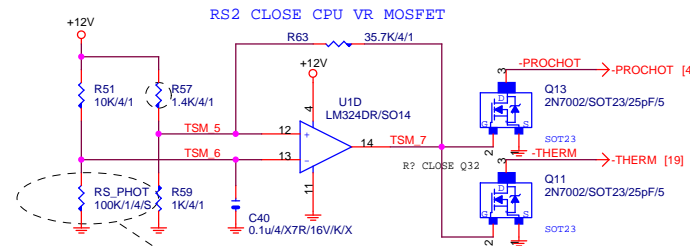
CLOSE USB30\_LAN



## -PROHOT



CLOSE PWM HOT MOSFET



deasserted at 116 degree

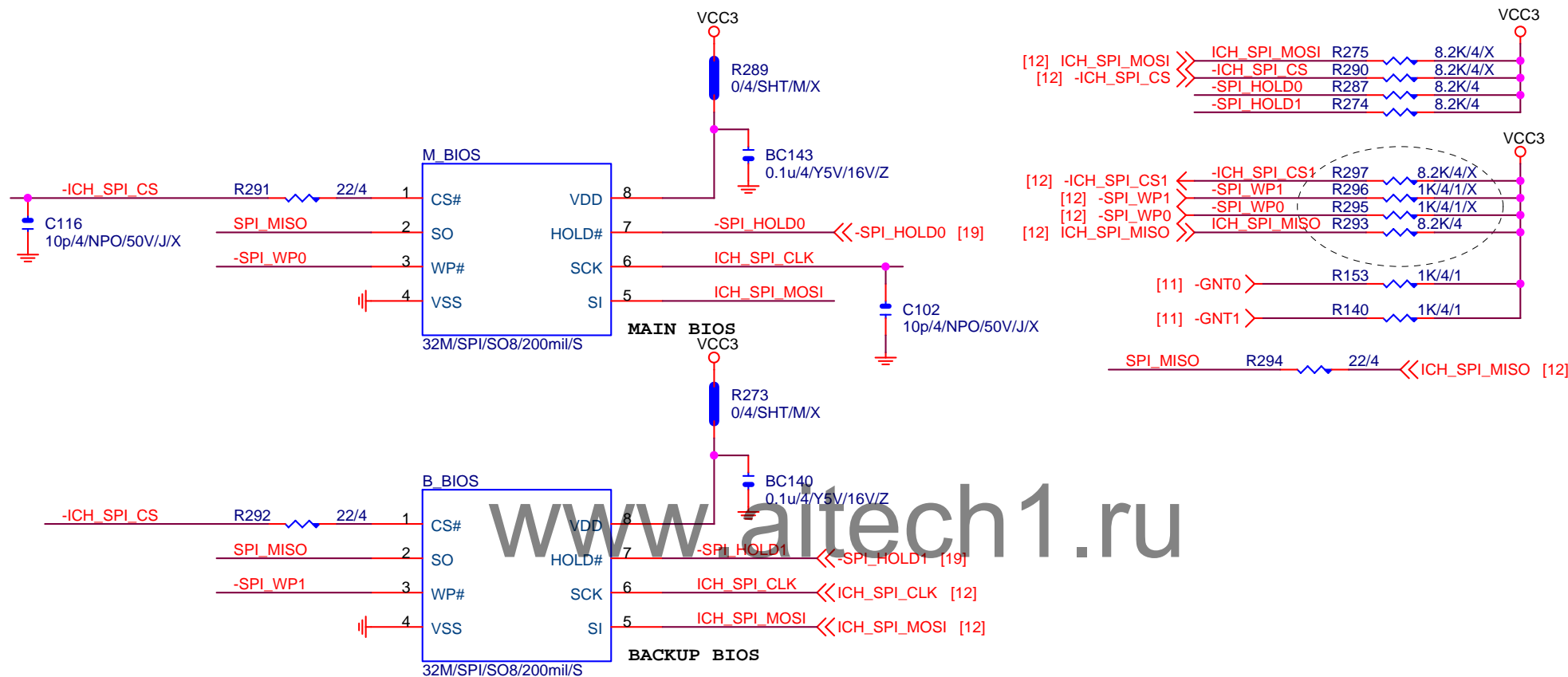
Gigabyte Technology

Title			COM,-RI,KB_USB,USB_ESATA,-PROHOT
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Custom			GA-Z68MA-D2H-B3
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# DUAL BIOS



BOOT DEVICE	GNT1	GNT0
LPC	0	0
PCI	0	1
SPI	1	1

1 means floating  
0 means PD 1K

**Gigabyte Technology**

**DUAL BIOS**

Title

Size  
A

Document Number

**GA-Z68MA-D2H-B3**

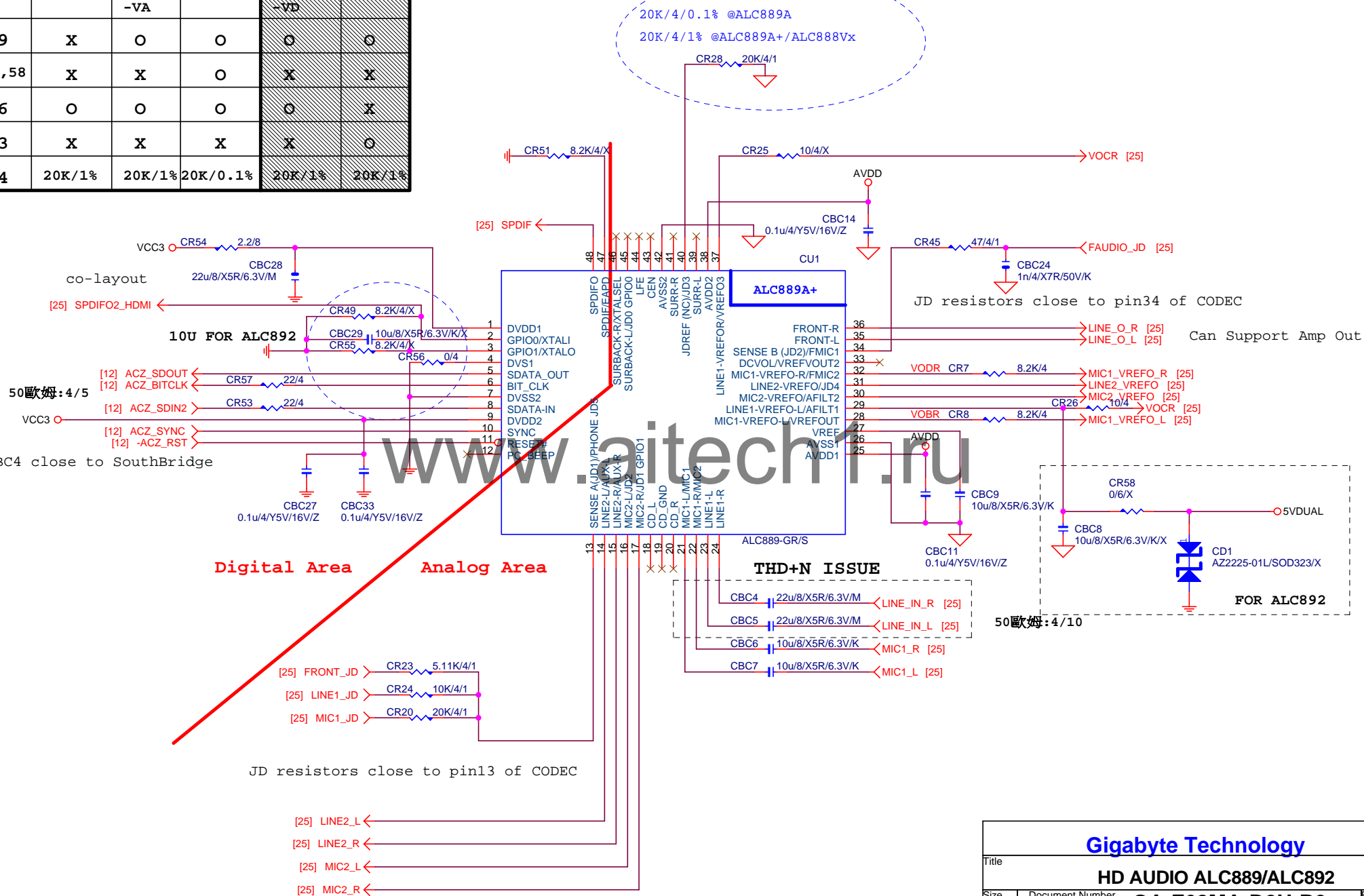
Rev  
**1.3**

Date: Tuesday, July 26, 2011

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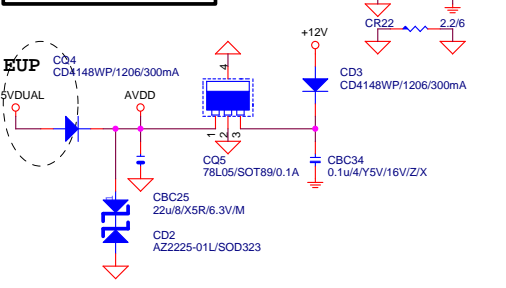


	ALC888B	ALC888 -VA	ALC889A	ALC888 -VD	ALC892
CR59	X	O	O	O	O
CR53,58	X	X	O	X	X
CR56	O	O	O	O	X
CR63	X	X	X	X	O
CR34	20K/1%	20K/1%	20K/0.1%	20K/1%	20K/1%

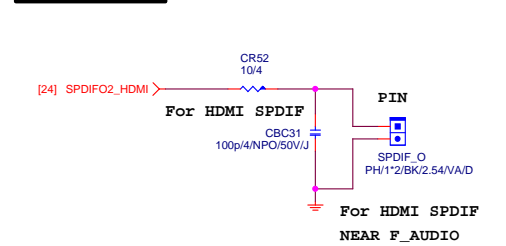


Can Support Amp Out

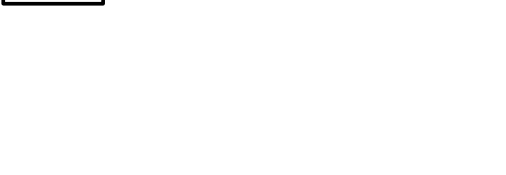
# CODEC POWER/EMI PAD



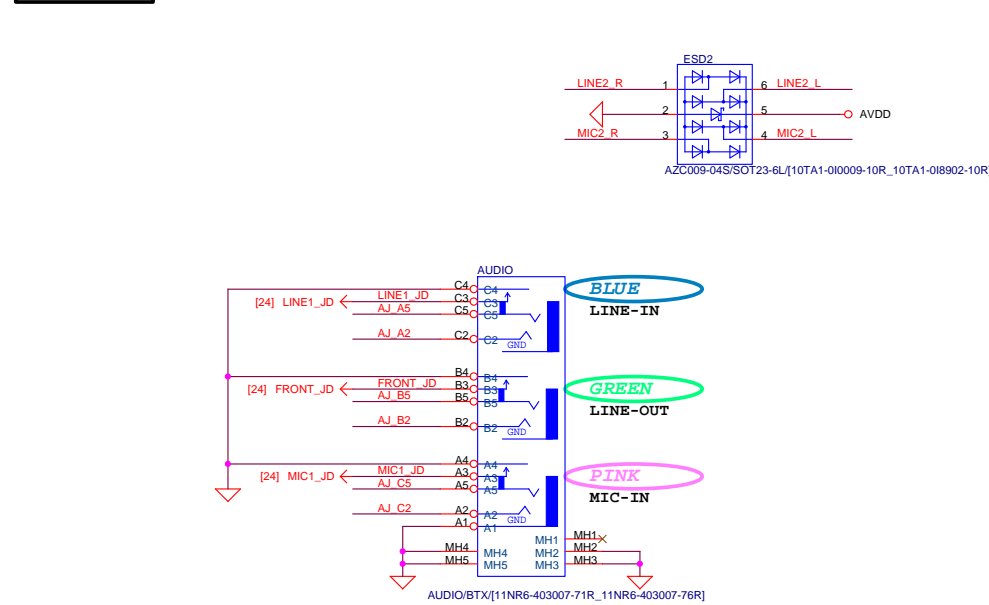
# HDMI SPDIF



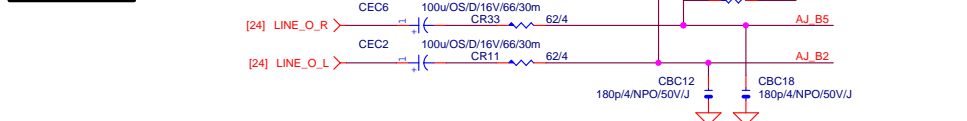
# SPDIF\_IN



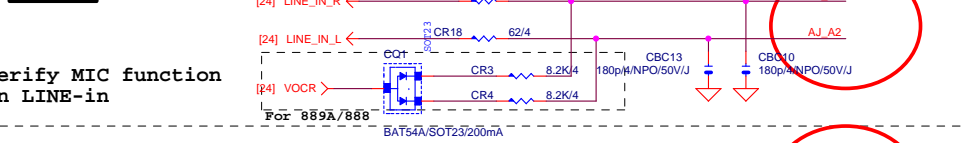
# AZALIA JACK



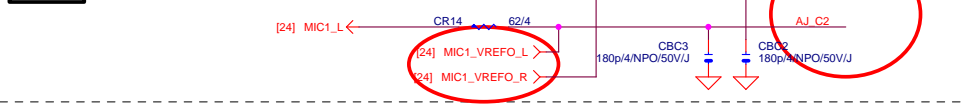
# LINE-OUT



# LINE-IN

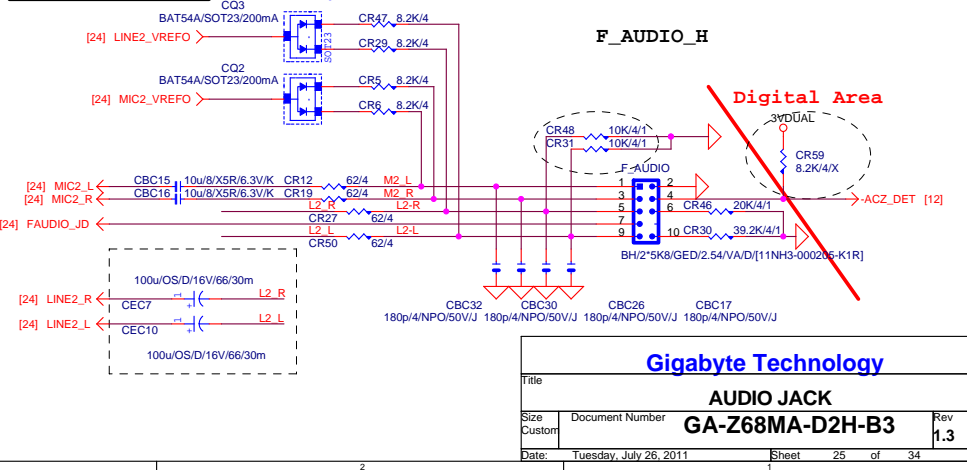


# MIC-IN



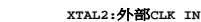
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# AZALIA FRONT PANEL

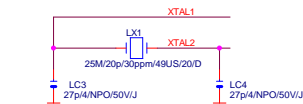
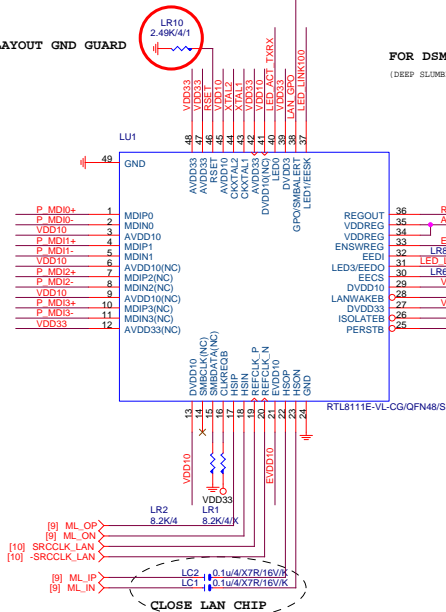


Gigabyte Technology			
Title			
AUDIO JACK			
Size	Document Number	GA-Z68MA-D2H-B3	
Custom			Rev 1.3
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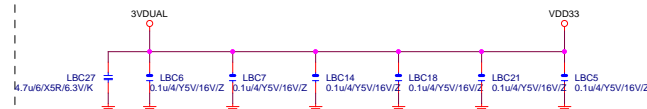
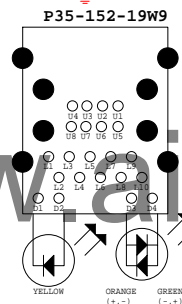
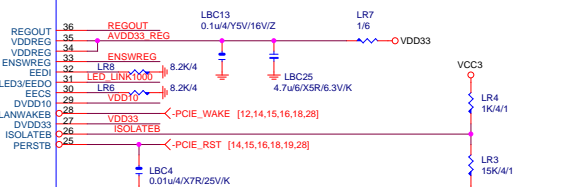
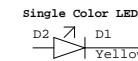
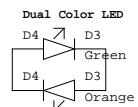
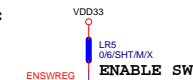
## PCIE-1G LAN



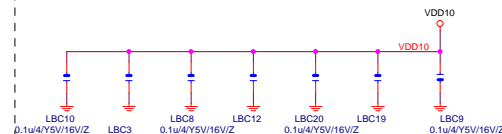
RSET LAYOUT GND GUARD



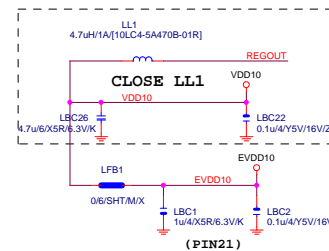
**FOR DSM MODE**  
(DEEP SLUMBER MODE)



(CLOSE LU1)

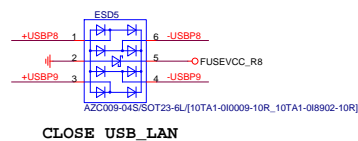


(PIN3,6,9,13,29,41,45)

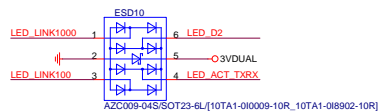


## USB\_LAN CONNECTOR

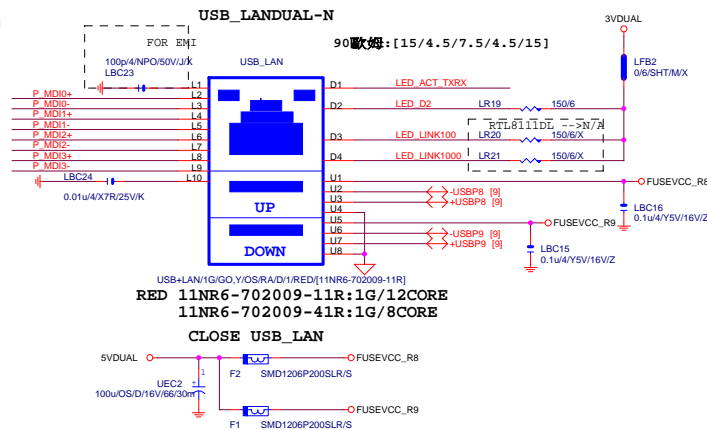
90 歐姆:[20/4/8/4/20]



CLOSE USB\_LAN



CLOSE USB\_LAN

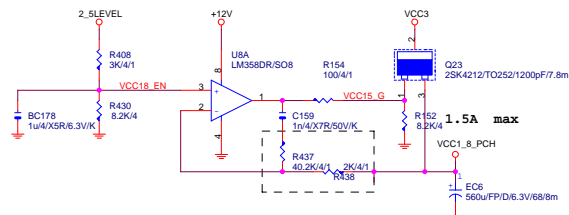




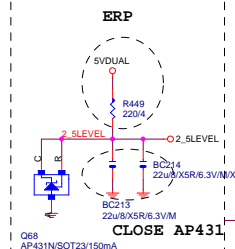




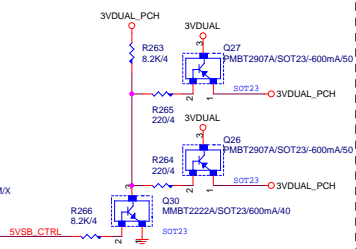
VCC1_8_PCH
------------



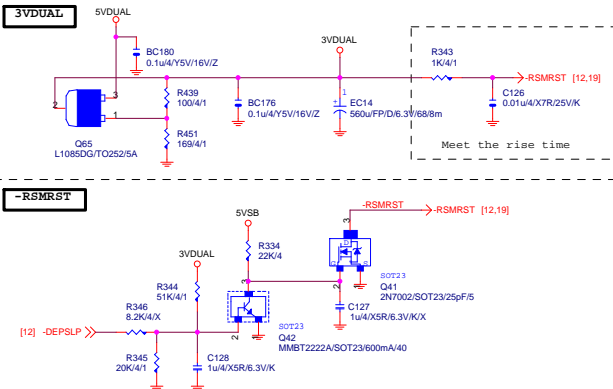
## 2\_5LEVEL



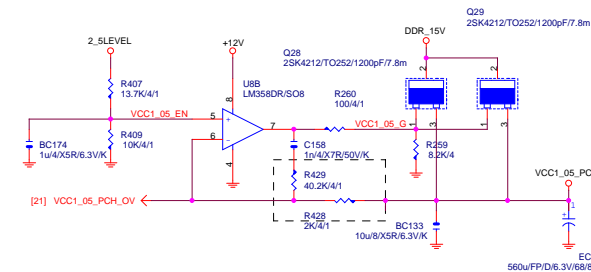
**FIX ERP 5VSB DROP**



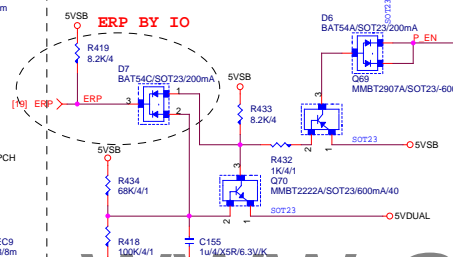
## 3VDUAL



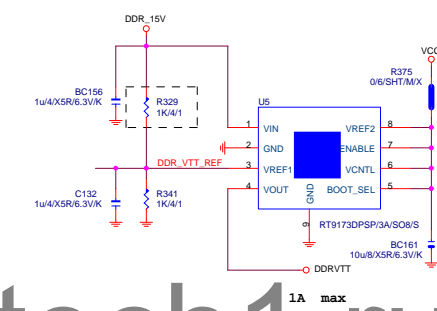
## VCC1\_05\_PCH



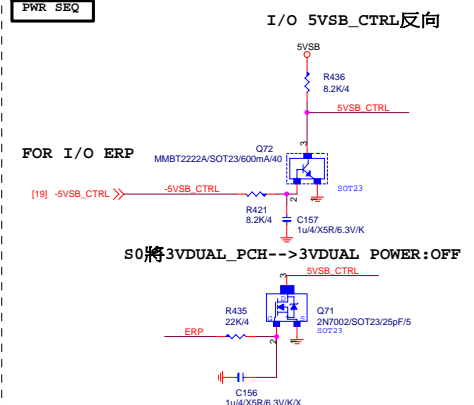
## 5VDUAL SHORT PROTECT



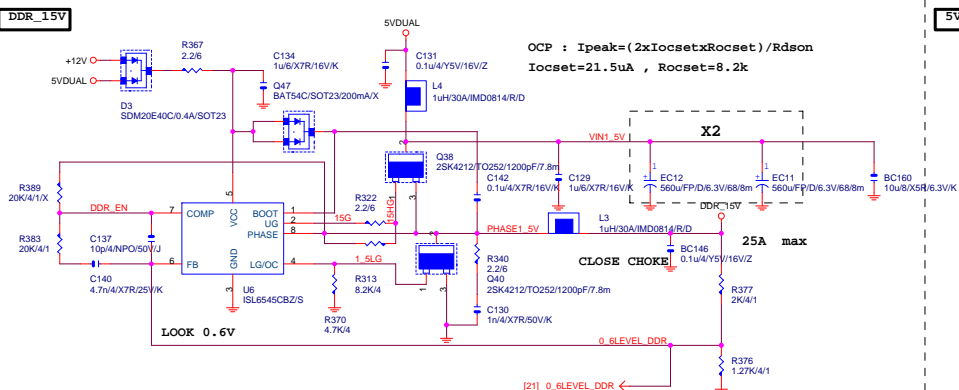
DDRVTT



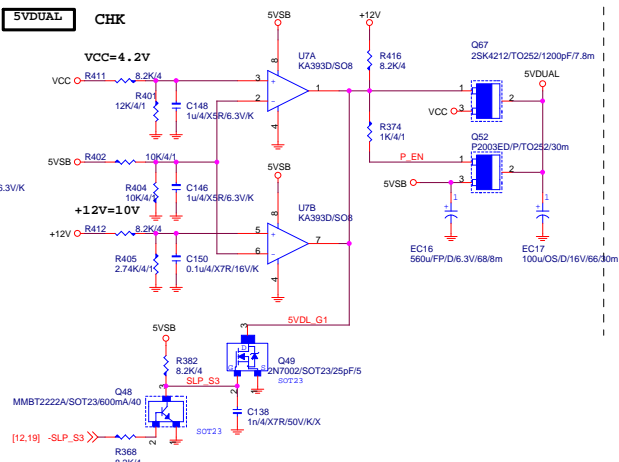
PWR SEQ
---------



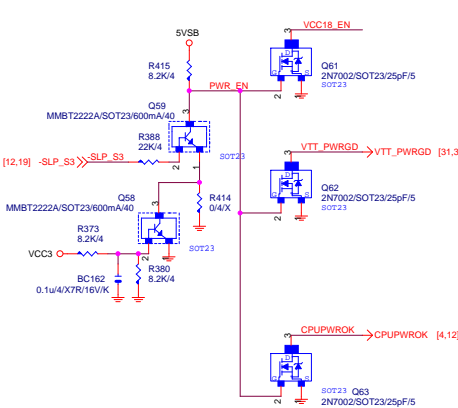
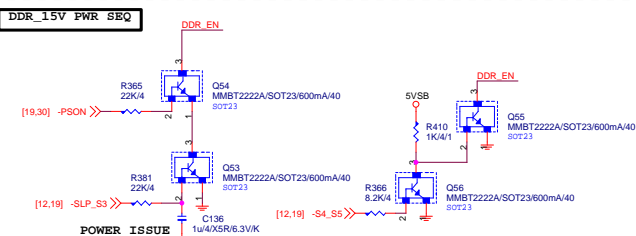
## DDR\_15V



## 5VDUAL

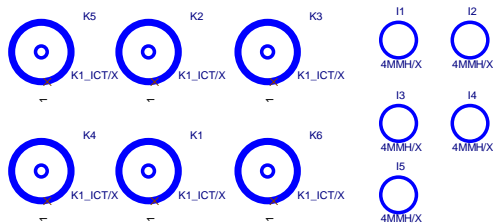
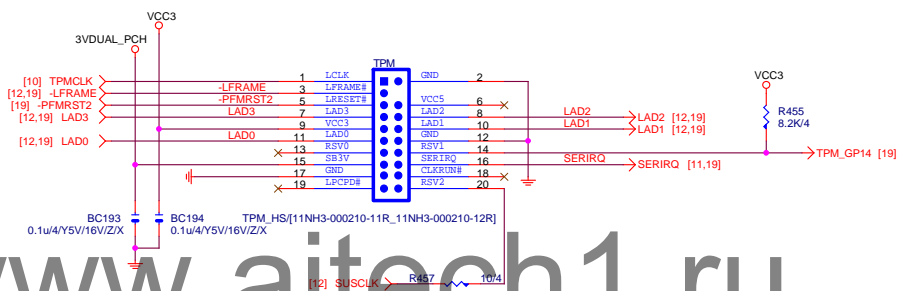
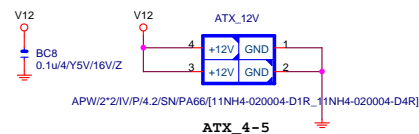


DDR_15V PWR SEQ
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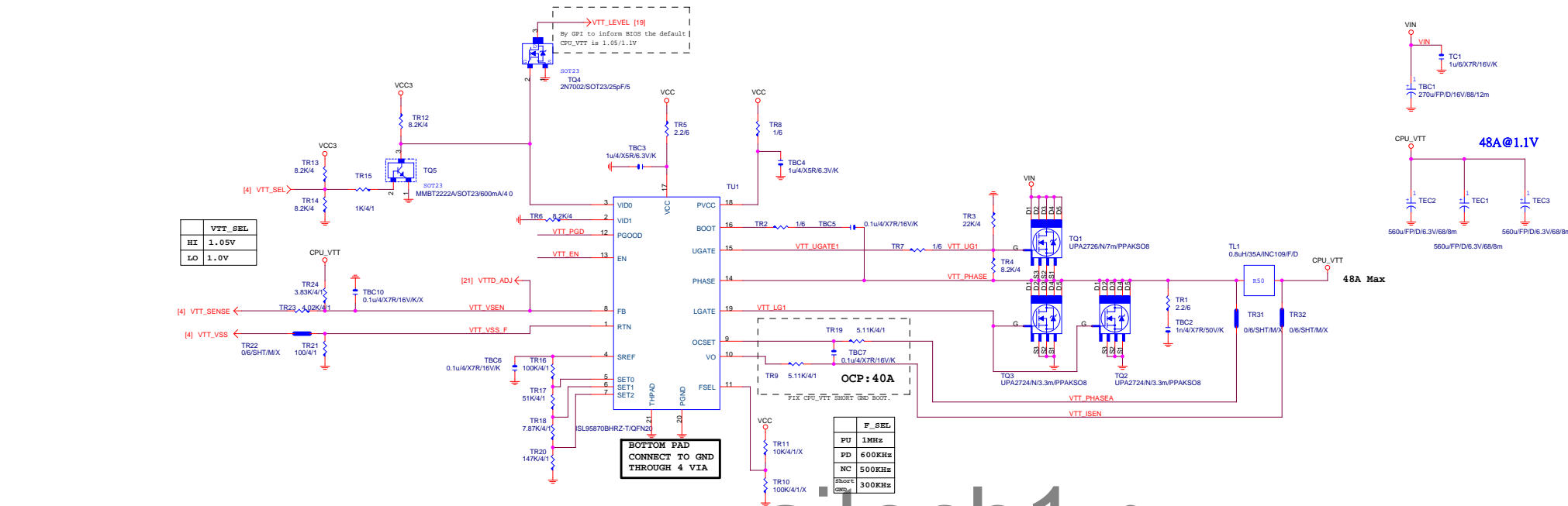
LOW SIDE RDS-ON同HI SIDE, 否則太低, ISL6545 過燙

## ATXX4 POWER CONNECTOR



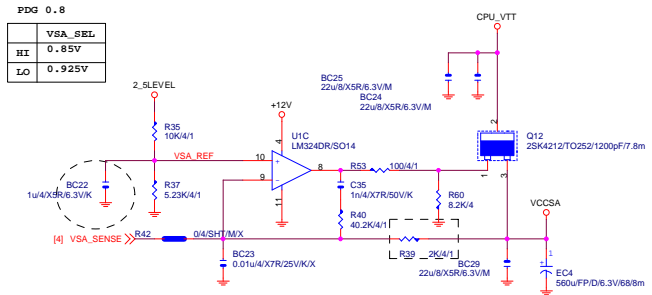
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# CPU\_VTT

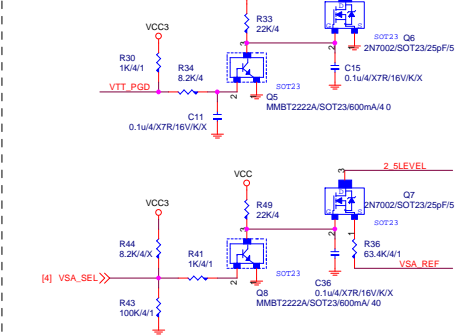


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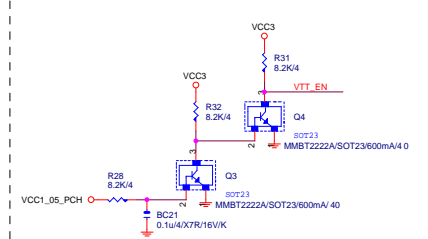
## VCCSA



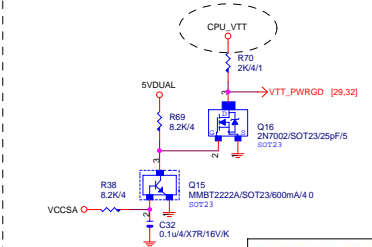
## VCCSA PWR SEQ



## CPU\_VTT PWR SEQ

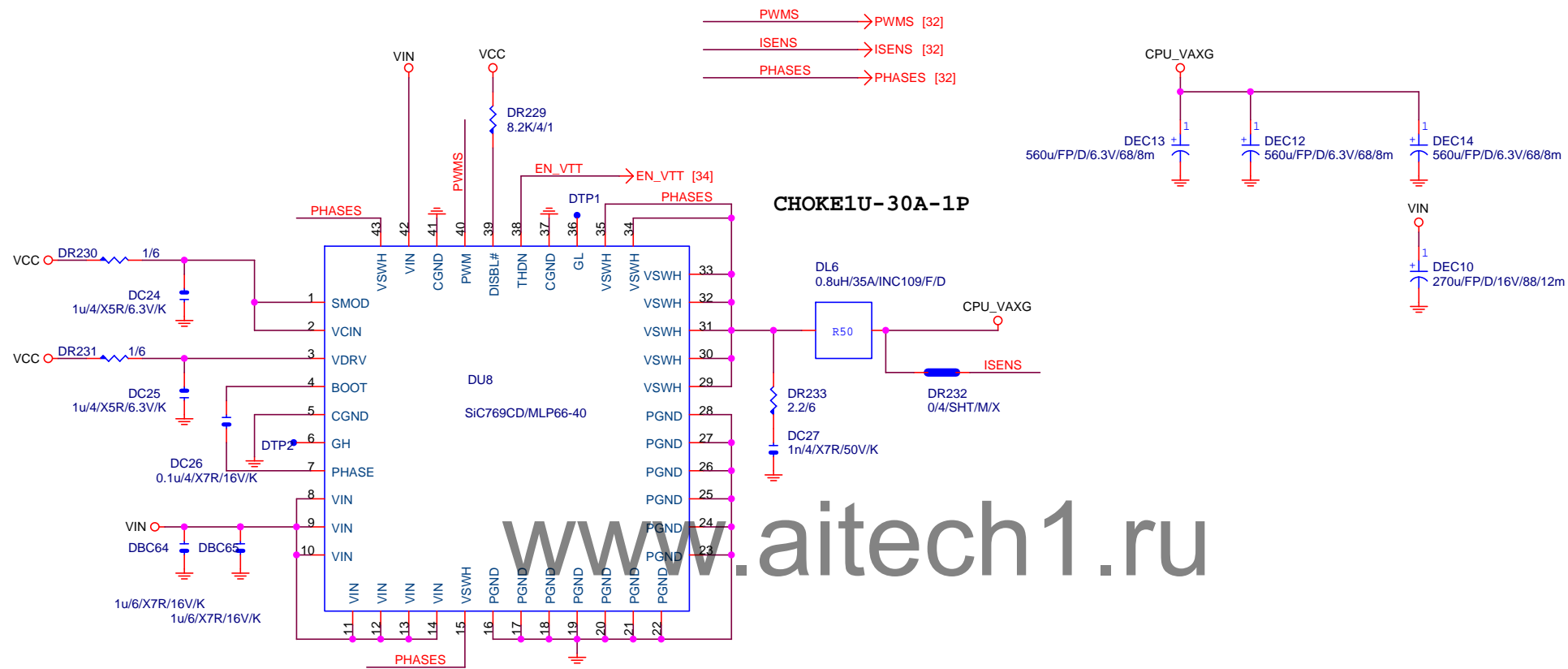


## VTT\_PWRGD



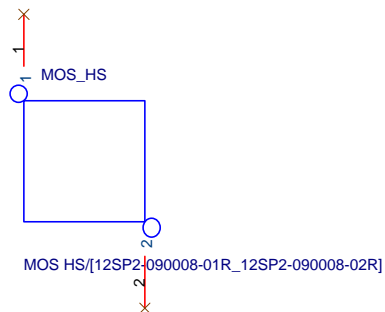


VAXG



## MOS HEATSINK

**MOSHSINK-P67A-D3**



## Gigabyte Technology

CPU CORE VR-2

Size	
Custom	

Document Number
-----------------

GA-Z68MA-D2H-B3

Rev	
1.3	

Date: Tuesday, July 26, 2011

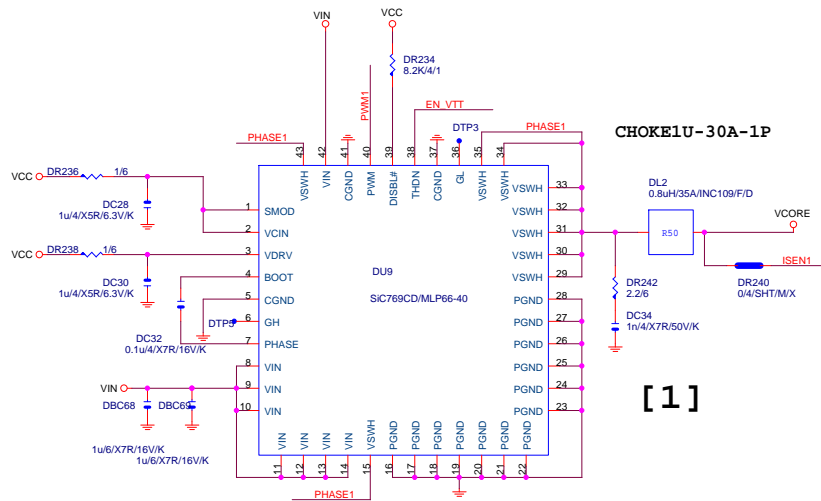
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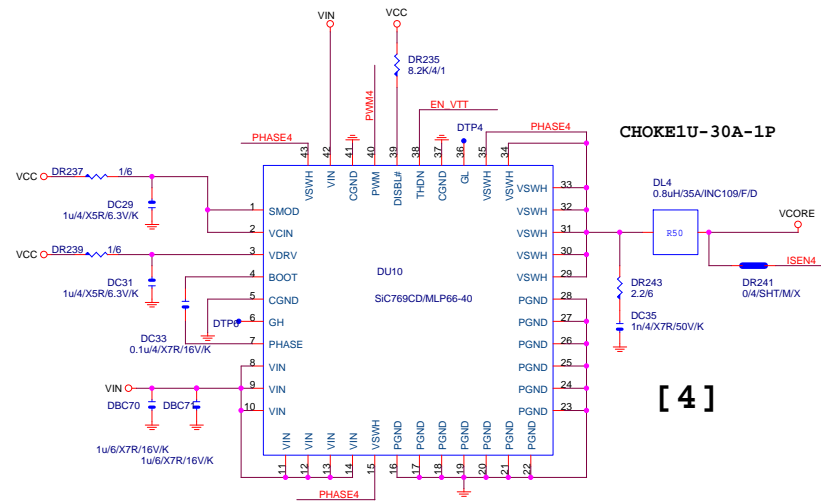
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 PWM2 → PWM2 [32]  
 PWM3 → PWM3 [32]  
 PWM4 → PWM4 [32]

ISEN1 → ISEN1 [32]  
 ISEN2 → ISEN2 [32]  
 ISEN3 → ISEN3 [32]  
 ISEN4 → ISEN4 [32]

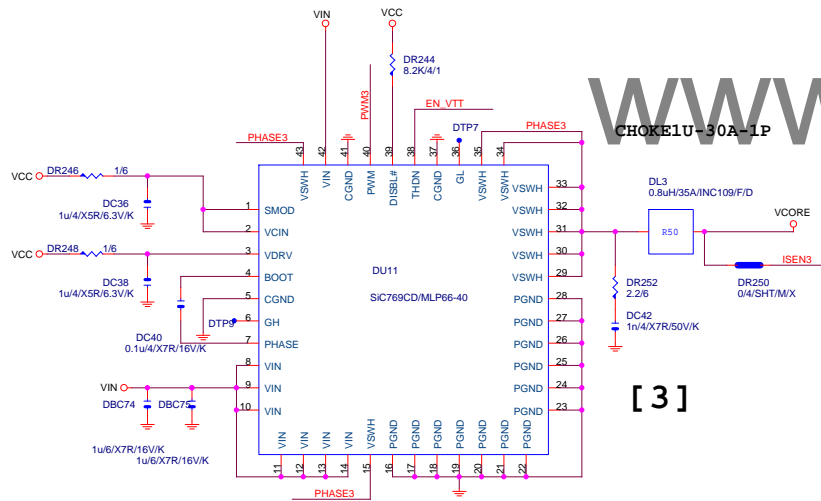
PHASE1 → PHASE1 [32]  
 PHASE2 → PHASE2 [32]  
 PHASE3 → PHASE3 [32]  
 PHASE4 → PHASE4 [32]



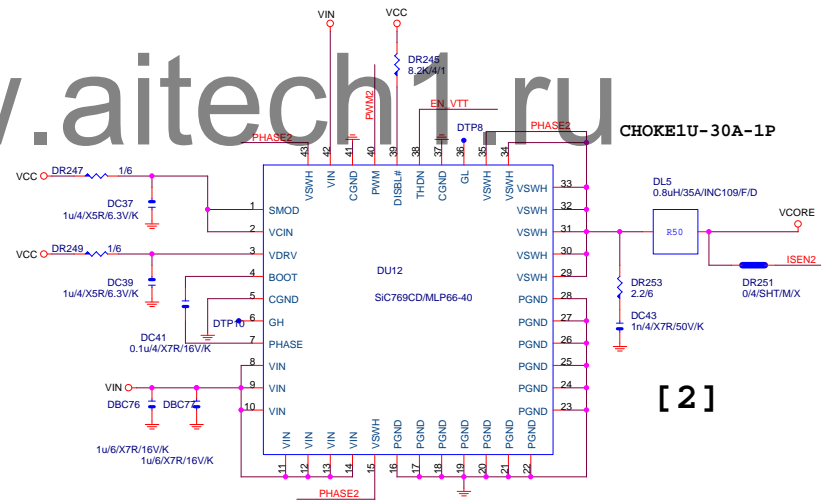
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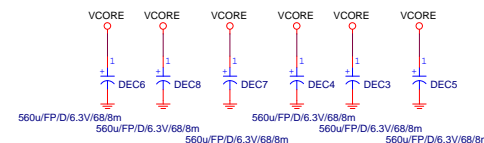
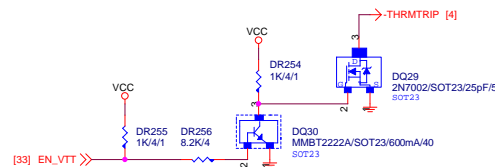
[4]



[3]



[2]



Gigabyte Technology			
File			
CPU CORE VR-3			
Size	Document Number	GA-Z68MA-D2H-B3	
Custom		Rev 1.3	
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