

Compal Confidential

ECQ60 Schematics Document

Desktop LGA-775 Package with Grantsdale + ICH6 + ATI M24-P

2004-08-09-C

REV: 1.0

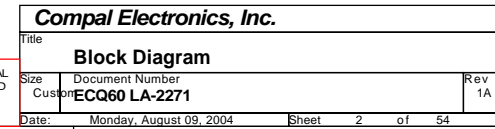
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Cover Sheet			
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Block Diagram

Diagram showing two components:

- Thermal Sensor ADM1032ARM** (page 5)
- Clock Generator ICS954101** (page 14)



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Voltage Rails

Power Plane	Description	S0-S1	S3	S5
VIN	Adapter power supply (19V)	N/A	N/A	N/A
B+	AC or battery power rail for power circuit.	N/A	N/A	N/A
+CPU_CORE	Core voltage for CPU	ON	OFF	OFF
+V_FSB_VTT	1.2V rail for Processor I/O & GTL Termination	ON	OFF	OFF
+PCIE_1.2VS	+PCIE_1.2VS power rail for VGA PCIExpress	ON	OFF	OFF
+1.3VS	1.3VS for DDR1 Termination	ON	OFF	OFF
+VGA_CORE	VGA Core Power	ON	OFF	OFF
+1.5VS	MCH & ICH Core Power	ON	OFF	OFF
+1.8VS	1.8V switched power rail	ON	OFF	OFF
+2.6V	2.6V power rail for DDR1	ON	ON	OFF
+2.6VS	2.6VS switched power rail	ON	OFF	OFF
+3VALW	3.3V always on power rail	ON	ON	ON*
+3V	3.3V power rail	ON	ON	OFF
+3VS	3.3V switched power rail	ON	OFF	OFF
+5VALW	5V always on power rail	ON	ON	ON*
+5VS	5V switched power rail	ON	OFF	OFF
+12VALW	12V always on power rail	ON	ON	ON*
+RTCVCC	RTC power	ON	ON	ON

Note : ON* means that this power plane is ON only with AC power available, otherwise it is OFF.

Board ID Table for AD channel

Vcc	3.3V +/- 5%			
Ra	100K +/- 5%			
Board ID	Rb	VAD_BID min	VAD_BID typ	VAD_BID max
0	0	0 V	0 V	0 V
1	8.2K +/- 5%	0.216 V	0.250 V	0.289 V
2	18K +/- 5%	0.436 V	0.503 V	0.538 V
3	33K +/- 5%	0.712 V	0.819 V	0.875 V
4	56K +/- 5%	1.036 V	1.185 V	1.264 V
5	100K +/- 5%	1.453 V	1.650 V	1.759 V
6	200K +/- 5%	1.935 V	2.200 V	2.341 V
7	NC	2.500 V	3.300 V	3.300 V

Board ID	PCB Revision
0	0.1
1	0.2
* 2	0.3
3	0.4
4	
5	
6	
7	

External PCI Devices

Device	IDSEL#	REQ#/GNT#	Interrupts
VGA			PIRQA
CardBus	AD20	2	PIRQA
LAN	AD17	3	PIRQF
Mini-PCI	AD18,AD22	1	PIRQG/PIRQH
1394	AD16	0	PIRQE

EC SM Bus1 address

Device	Address	Device	Address
Smart Battery	0001 011X b	ADM1032	1001 100X b
EEPROM(24C16/02)	1010 000X b		
(24C04)	1011 000Xb		

EC SM Bus2 address

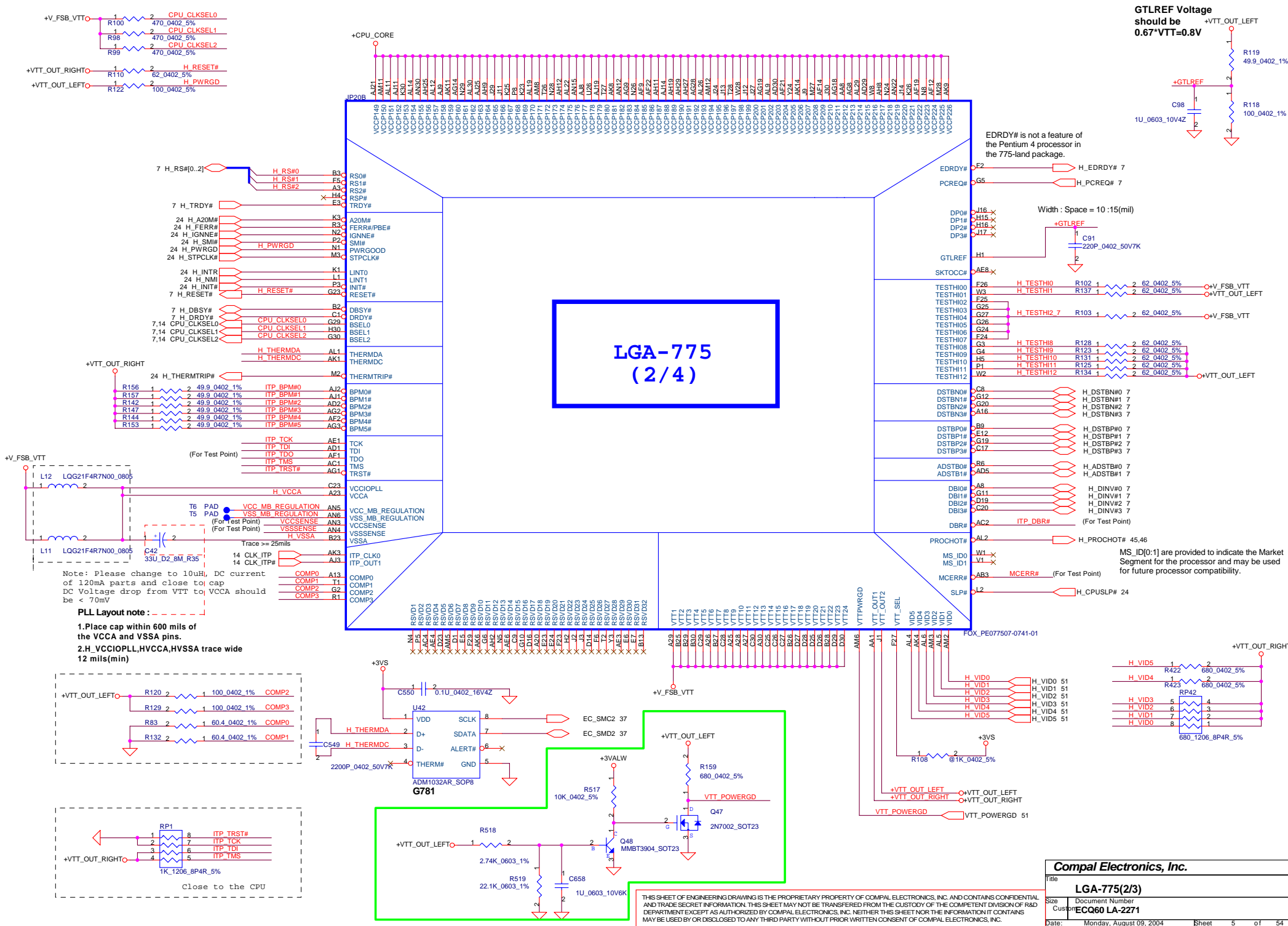
ICH6 SM Bus address

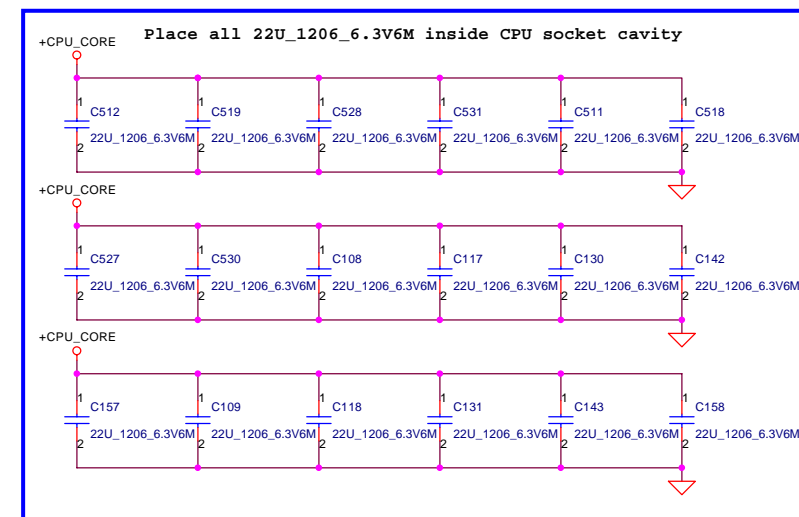
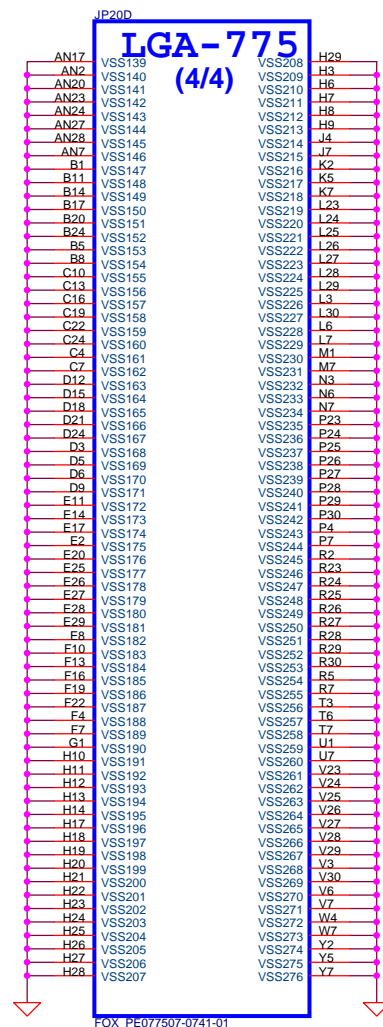
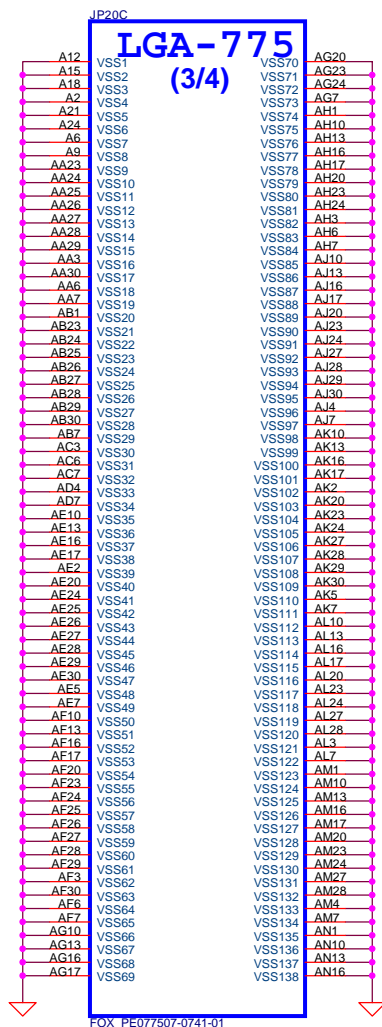
Device	Address
Clock Generator (ICS954101)	1101 001Xb
DDR DIMM0	1010 000Xb
DDR DIMM1	1010 010Xb

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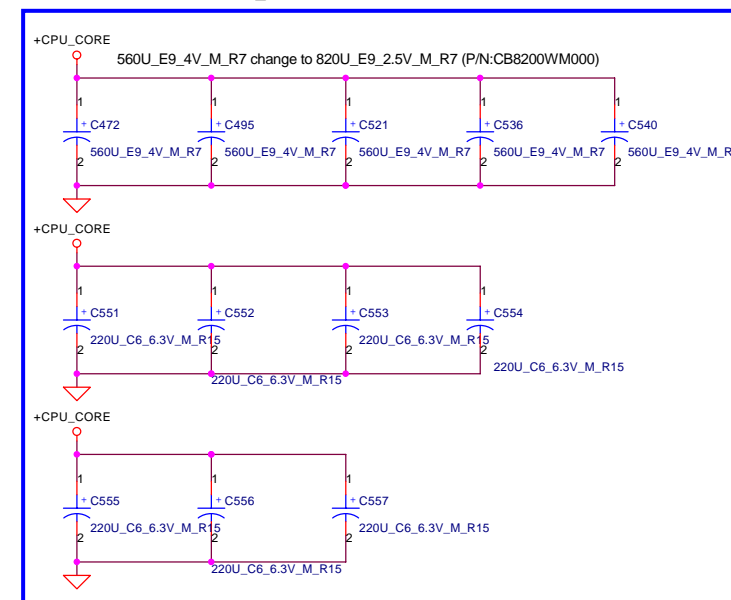
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SANYO OS-CON 820uF _ERS7m ohm* 5 H=13mm

SANYO OS-CON 220uF _ERS13m ohm*7 H=6mm

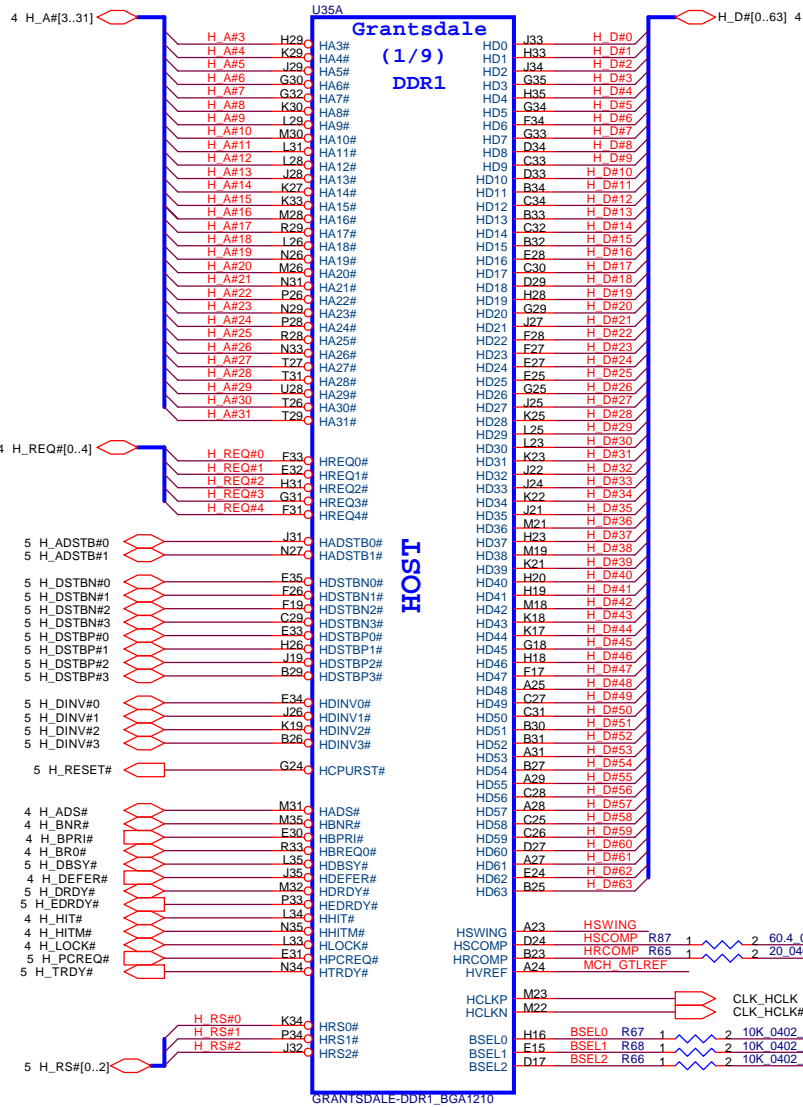


Decoupling Reference Document:
Grantsdale Chipset Platform Design guide Rev1.0
(14652)Page269

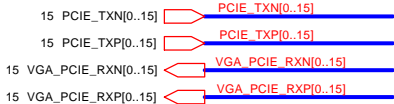
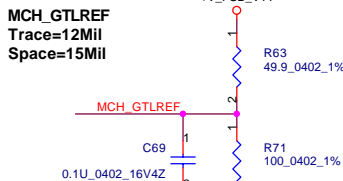
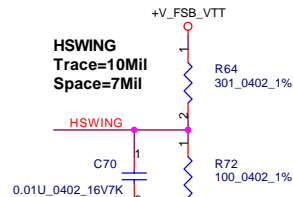
Decoupling Reference Requirement:
560uF Polymer, ESR:6m ohm(each) * 10
22uF X5R * 18

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LGA-775(3/3)			
Size	Document Number		
Custom	ECQ60 LA-2271		
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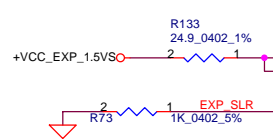


Grantsdale
(1/9)
DDR1
HOST



VGA_PCIE_RXN15	C444	1	2	0.1U_0402_16V4Z	PCIE_RXN15	C9	EXP_TXN0
VGA_PCIE_RXN14	C446	1	2	0.1U_0402_16V4Z	PCIE_RXN14	A8	EXP_TXN1
VGA_PCIE_RXN13	C447	1	2	0.1U_0402_16V4Z	PCIE_RXN13	C7	EXP_TXN2
VGA_PCIE_RXN12	C458	1	2	0.1U_0402_16V4Z	PCIE_RXN12	A6	EXP_TXN3
VGA_PCIE_RXN11	C460	1	2	0.1U_0402_16V4Z	PCIE_RXN11	C5	EXP_TXN4
VGA_PCIE_RXN10	C466	1	2	0.1U_0402_16V4Z	PCIE_RXN10	D2	EXP_TXN5
VGA_PCIE_RXN9	C467	1	2	0.1U_0402_16V4Z	PCIE_RXN9	F3	EXP_TXN6
VGA_PCIE_RXN8	C471	1	2	0.1U_0402_16V4Z	PCIE_RXN8	G4	EXP_TXN7
VGA_PCIE_RXN7	C475	1	2	0.1U_0402_16V4Z	PCIE_RXN7	H3	EXP_TXN8
VGA_PCIE_RXN6	C478	1	2	0.1U_0402_16V4Z	PCIE_RXN6	J1	EXP_TXN9
VGA_PCIE_RXN5	C487	1	2	0.1U_0402_16V4Z	PCIE_RXN5	K3	EXP_TXN10
VGA_PCIE_RXN4	C490	1	2	0.1U_0402_16V4Z	PCIE_RXN4	L1	EXP_TXN11
VGA_PCIE_RXN3	C492	1	2	0.1U_0402_16V4Z	PCIE_RXN3	M3	EXP_TXN12
VGA_PCIE_RXN2	C503	1	2	0.1U_0402_16V4Z	PCIE_RXN2	N1	EXP_TXN13
VGA_PCIE_RXN1	C507	1	2	0.1U_0402_16V4Z	PCIE_RXN1	P1	EXP_TXN14
VGA_PCIE_RXN0	C510	1	2	0.1U_0402_16V4Z	PCIE_RXN0	R1	EXP_TXN15

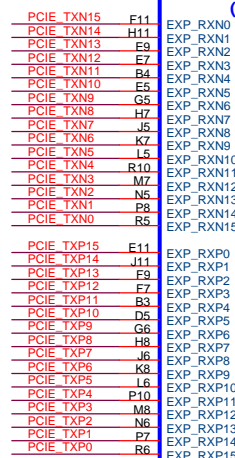
VGA_PCIE_RXP15	C441	1	2	0.1U_0402_16V4Z	PCIE_RXP15	C10	EXP_TXP0
VGA_PCIE_RXP14	C445	1	2	0.1U_0402_16V4Z	PCIE_RXP14	A9	EXP_TXP1
VGA_PCIE_RXP13	C450	1	2	0.1U_0402_16V4Z	PCIE_RXP13	C8	EXP_TXP2
VGA_PCIE_RXP12	C452	1	2	0.1U_0402_16V4Z	PCIE_RXP12	A7	EXP_TXP3
VGA_PCIE_RXP11	C459	1	2	0.1U_0402_16V4Z	PCIE_RXP11	C6	EXP_TXP4
VGA_PCIE_RXP10	C464	1	2	0.1U_0402_16V4Z	PCIE_RXP10	C2	EXP_TXP5
VGA_PCIE_RXP9	C469	1	2	0.1U_0402_16V4Z	PCIE_RXP9	E3	EXP_TXP6
VGA_PCIE_RXP8	C473	1	2	0.1U_0402_16V4Z	PCIE_RXP8	F1	EXP_TXP7
VGA_PCIE_RXP7	C474	1	2	0.1U_0402_16V4Z	PCIE_RXP7	G3	EXP_TXP8
VGA_PCIE_RXP6	C476	1	2	0.1U_0402_16V4Z	PCIE_RXP6	H1	EXP_TXP9
VGA_PCIE_RXP5	C484	1	2	0.1U_0402_16V4Z	PCIE_RXP5	J8	EXP_TXP10
VGA_PCIE_RXP4	C488	1	2	0.1U_0402_16V4Z	PCIE_RXP4	K1	EXP_TXP11
VGA_PCIE_RXP3	C497	1	2	0.1U_0402_16V4Z	PCIE_RXP3	L3	EXP_TXP12
VGA_PCIE_RXP2	C499	1	2	0.1U_0402_16V4Z	PCIE_RXP2	M1	EXP_TXP13
VGA_PCIE_RXP1	C504	1	2	0.1U_0402_16V4Z	PCIE_RXP1	N3	EXP_TXP14
VGA_PCIE_RXP0	C508	1	2	0.1U_0402_16V4Z	PCIE_RXP0	P1	EXP_TXP15



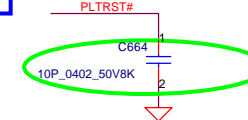
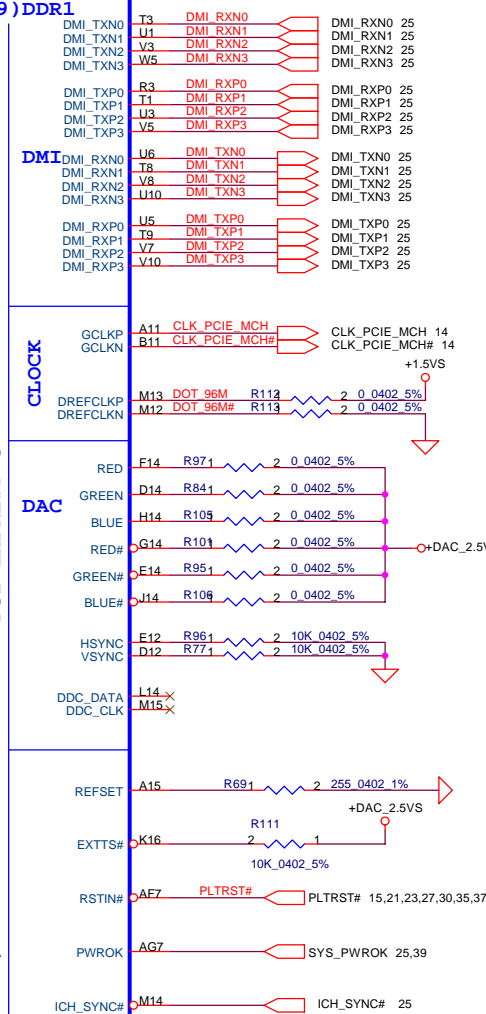
EXP_SLR

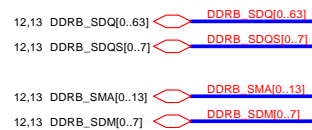
0 GMCH's PCI Express lane numbers are reversed

1 Normal operation



(2/9)DDR1
PCI EXPRESS-G





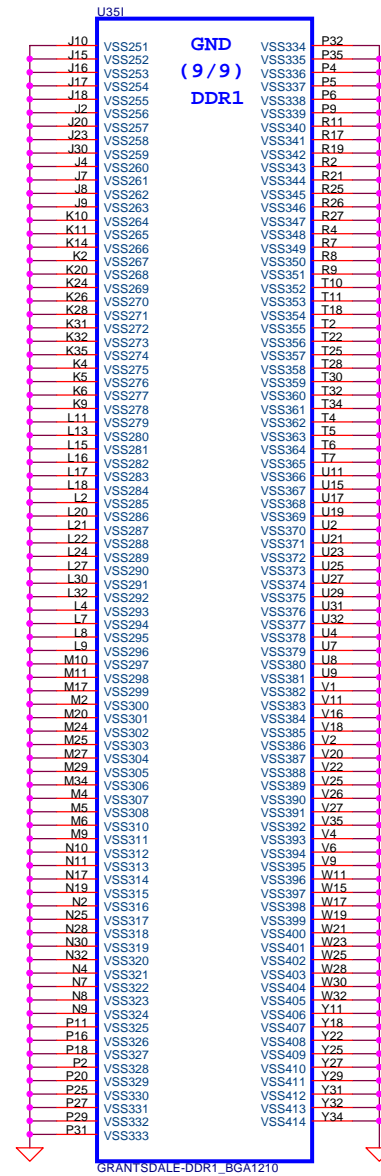
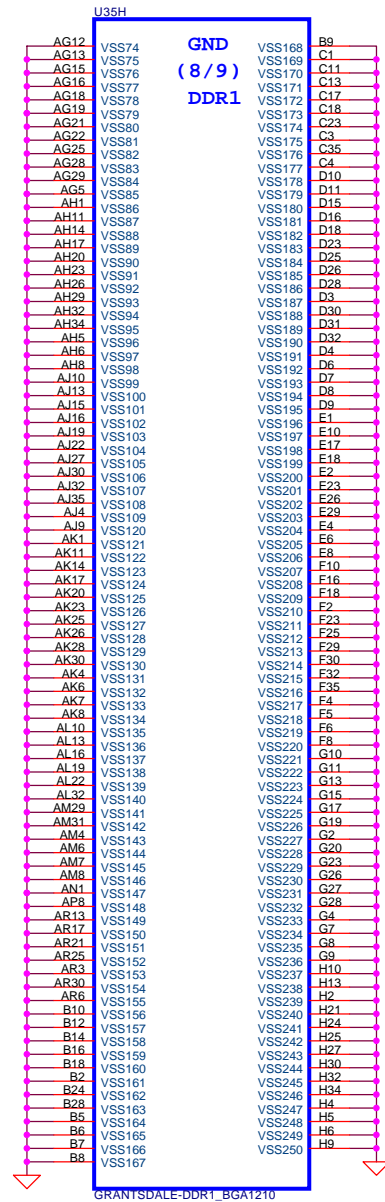
Decoupling Reference Document:
Grantsdale Chipset Platform Design guide Rev1.0
(14652)Page287
VCC : 10uF *2

Decoupling Reference Document:
Grantsdale Chipset Platform Design guide Rev1.0
(14652)Page287
VCCSM : 2.2uF *6

U35F

**RSV/NC
(5/9)
DDR1**

AA30	RSV1	NC1	A2	X
AA31	RSV2	NC2	A3	X
AA32	RSV3	NC3	AA12	X
AA33	RSV4	NC4	AA13	X
AA34	RSV5	NC5	AA14	X
AA35	RSV6	NC6	AA15	X
AA36	RSV7	NC7	AA16	X
AA37	RSV8	NC8	AA17	X
AA38	RSV9	NC9	AA18	X
AA39	RSV10	NC10	AA19	X
AA40	RSV11	NC11	AA20	X
AA41	RSV12	NC12	AA21	X
AA42	RSV13	NC13	AA22	X
AA43	RSV14	NC14	AA23	X
AA44	RSV15	NC15	AA24	X
AA45	RSV16	NC16	AA25	X
AA46	RSV17	NC17	AA26	X
AA47	RSV18	NC18	AA27	X
AA48	RSV19	NC19	AA28	X
AA49	RSV20	NC20	AA29	X
AA50	RSV21	NC21	AA30	X
AA51	RSV22	NC22	AA31	X
AA52	RSV23	NC23	AA32	X
AA53	RSV24	NC24	AA33	X
AA54	RSV25	NC25	AA34	X
AA55	RSV26	NC26	AA35	X
AA56	RSV27	NC27	AA36	X
AA57	RSV28	NC28	AA37	X
AA58	RSV29	NC29	AA38	X
AA59	RSV30	NC30	AA39	X
AA60	RSV31	NC31	AA40	X
AA61	RSV32	NC32	AA41	X
AA62	RSV33	NC33	AA42	X
AA63	RSV34	NC34	AA43	X
AA64	RSV35	NC35	AA44	X
AA65	RSV36	NC36	AA45	X
AA66	RSV37	NC37	AA46	X
AA67	RSV38	NC38	AA47	X
AA68	RSV39	NC39	AA48	X
AA69	RSV40	NC40	AA49	X
AA70	RSV41	NC41	AA50	X
AA71	RSV42	NC42	AA51	X
AA72	RSV43	NC43	AA52	X
AA73	RSV44	NC44	AA53	X
AA74	RSV45	NC45	AA54	X
AA75	RSV46	NC46	AA55	X
AA76	RSV47	NC47	AA56	X
AA77	RSV48	NC48	AA57	X
AA78	RSV49	NC49	AA58	X
AA79	RSV50	NC50	AA59	X
AA80	RSV51	NC51	AA60	X
AA81	RSV52	NC52	AA61	X
AA82	RSV53	NC53	AA62	X
AA83	RSV54	NC54	AA63	X
AA84	RSV55	NC55	AA64	X
AA85	RSV56	NC56	AA65	X
AA86	RSV57	NC57	AA66	X
AA87	RSV58	NC58	AA67	X
AA88	RSV59	NC59	AA68	X
AA89	RSV60	NC60	AA69	X
AA90	RSV61	NC61	AA70	X
AA91	RSV62	NC62	AA71	X
AA92	RSV63	NC63	AA72	X
AA93	RSV64	NC64	AA73	X
AA94	RSV65	NC65	AA74	X
AA95	RSV66	NC66	AA75	X
AA96	RSV67	NC67	AA76	X
AA97	RSV68	NC68	AA77	X
AA98	RSV69	NC69	AA78	X
AA99	RSV70	NC70	AA79	X
AA100	RSV71	NC71	AA80	X
AA101	RSV72	NC72	AA81	X
AA102	RSV73	NC73	AA82	X
AA103	RSV74	NC74	AA83	X
AA104	RSV75	NC75	AA84	X
AA105	RSV76	NC76	AA85	X
AA106	RSV77	NC77	AA86	X
AA107	RSV78	NC78	AA87	X
AA108	RSV79	NC79	AA88	X
AA109	RSV80	NC80	AA89	X
AA110	RSV81	NC81	AA90	X
AA111	RSV82	NC82	AA91	X
AA112	RSV83	NC83	AA92	X
AA113	RSV84	NC84	AA93	X
AA114	RSV85	NC85	AA94	X
AA115	RSV86	NC86	AA95	X
AA116	RSV87	NC87	AA96	X
AA117	RSV88	NC88	AA97	X
AA118	RSV89	NC89	AA98	X
AA119	RSV90	NC90	AA99	X
AA120	RSV91	NC91	AA100	X
AA121	RSV92	NC92	AA101	X
AA122	RSV93	NC93	AA102	X
AA123	RSV94	NC94	AA103	X
AA124	RSV95	NC95	AA104	X
AA125	RSV96	NC96	AA105	X
AA126	RSV97	NC97	AA106	X
AA127	RSV98	NC98	AA107	X
AA128	RSV99	NC99	AA108	X
AA129	RSV100	NC100	AA109	X
AA130	RSV101	NC101	AA110	X
AA131	RSV102	NC102	AA111	X
AA132	RSV103	NC103	AA112	X
AA133	RSV104	NC104	AA113	X
AA134	RSV105	NC105	AA114	X
AA135	RSV106	NC106	AA115	X
AA136	RSV107	NC107	AA116	X
AA137	RSV108	NC108	AA117	X
AA138	RSV109	NC109	AA118	X
AA139	RSV110	NC110	AA119	X
AA140	RSV111	NC111	AA120	X
AA141	RSV112	NC112	AA121	X
AA142	RSV113	NC113	AA122	X
AA143	RSV114	NC114	AA123	X
AA144	RSV115	NC115	AA124	X
AA145	RSV116	NC116	AA125	X
AA146	RSV117	NC117	AA126	X
AA147	RSV118	NC118	AA127	X
AA148	RSV119	NC119	AA128	X
AA149	RSV120	NC120	AA129	X
AA150	RSV121	NC121	AA130	X
AA151	RSV122	NC122	AA131	X
AA152	RSV123	NC123	AA132	X
AA153	RSV124	NC124	AA133	X
AA154	RSV125	NC125	AA134	X
AA155	RSV126	NC126	AA135	X
AA156	RSV127	NC127	AA136	X
AA157	RSV128	NC128	AA137	X
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AA168	RSV139	NC139	AA148	X
AA169	RSV140	NC140	AA149	X
AA170	RSV141	NC141	AA150	X
AA171	RSV142	NC142	AA151	X
AA172	RSV143	NC143	AA152	X
AA173	RSV144	NC144	AA153	X
AA174	RSV145	NC145	AA154	X
AA175	RSV146	NC146	AA155	X
AA176	RSV147	NC147	AA156	X
AA177	RSV148	NC148	AA157	X
AA178	RSV149	NC149	AA158	X
AA179	RSV150	NC150	AA159	X
AA180	RSV151	NC151	AA160	X
AA181	RSV152	NC152	AA161	X
AA182	RSV153	NC153	AA162	X
AA183	RSV154	NC154	AA163	X
AA184	RSV155	NC155	AA164	X
AA185	RSV156	NC156	AA165	X
AA186	RSV157	NC157	AA166	X
AA187	RSV158	NC158	AA167	X
AA188	RSV159	NC159	AA168	X
AA189	RSV160	NC160	AA169	X
AA190	RSV161	NC161	AA170	X
AA191	RSV162	NC162	AA171	X
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AA202	RSV173	NC173	AA182	X
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AA210	RSV181	NC181	AA190	X
AA211	RSV182	NC182	AA191	X
AA212	RSV183	NC183	AA192	X
AA213	RSV184	NC184	AA193	X
AA214	RSV185	NC185	AA194	X
AA215	RSV186	NC186	AA195	X
AA216	RSV187	NC187	AA196	X
AA217	RSV188	NC188	AA197	X
AA218	RSV189	NC189	AA198	X
AA219	RSV190	NC190	AA199	X
AA220	RSV191	NC191	AA200	X
AA221	RSV192	NC192	AA201	X
AA222	RSV193	NC193	AA202	X
AA223	RSV194	NC194	AA203	X
AA224	RSV195	NC195	AA204	X
AA225	RSV196	NC196	AA205	X
AA226	RSV197	NC197	AA206	X
AA227	RSV198	NC198	AA207	X
AA228	RSV199	NC199	AA208	X
AA229	RSV200	NC200	AA209	X
AA230	RSV201	NC201	AA210	X
AA231	RSV202	NC202	AA211	X
AA232	RSV203	NC203	AA212	X
AA233	RSV204	NC204	AA213	X
AA234	RSV205	NC205	AA214	X
AA235	RSV206	NC206	AA215	X
AA236	RSV207	NC207	AA216	X
AA237	RSV208	NC208	AA217	X
AA238	RSV209	NC209	AA218	X
AA239	RSV210	NC210	AA219	X
AA240	RSV211	NC211	AA220	X
AA241	RSV212	NC212	AA221	X
AA242	RSV213	NC213	AA222	X
AA243	RSV214	NC214	AA223	X
AA244	RSV215	NC215	AA224	X
AA245	RSV216	NC216	AA225	X
AA246	RSV217	NC217	AA226	X
AA247	RSV218	NC218	AA227	X
AA248	RSV219	NC219	AA228	X
AA249	RSV220	NC220	AA229	X
AA250	RSV221	NC221	AA230	X
AA251	RSV222	NC222	AA231	X
AA252	RSV223	NC223	AA232	X
AA253	RSV224	NC224	AA233	X
AA254	RSV225	NC225	AA234	X
AA255	RSV226	NC226	AA235	X
AA256	RSV227	NC227	AA236	X
AA257	RSV228	NC228	AA237	X
AA258	RSV229	NC229	AA238	X
AA259	RSV230	NC230	AA239	X
AA260	RSV231	NC231	AA240	X
AA261	RSV232	NC232	AA241	X
AA262	RSV233	NC233	AA242	X
AA263	RSV234	NC234	AA243	X
AA264	RSV235	NC235	AA244	X
AA265	RSV236	NC236	AA245	X
AA266	RSV237	NC237	AA246	X
AA267	RSV238	NC238	AA247	X
AA268	RSV239	NC239	AA248	X
AA269	RSV240	NC240	AA249	X
AA270	RSV241	NC241	AA250	X
AA271	RSV242	NC242	AA251	X
AA272	RSV243	NC243	AA252	X
AA273	RSV244	NC244	AA253	X
AA274	RSV245	NC245	AA254	X
AA275	RSV246	NC246	AA255	X
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AA283	RSV254	NC254	AA263	X
AA284	RSV255	NC255	AA264	X
AA285	RSV256	NC256	AA265	X
AA286	RSV257	NC257	AA266	X
AA287	RSV258	NC258	AA267	X
AA288	RSV259	NC259	AA268	X
AA289	RSV260	NC260	AA269	X
AA290	RSV261	NC261	AA270	X
AA291	RSV262	NC262	AA271	X
AA292	RSV263	NC263	AA272	X
AA293	RSV264	NC264	AA273	X
AA294	RSV265	NC265	AA274	X
AA295	RSV266	NC266	AA275	X
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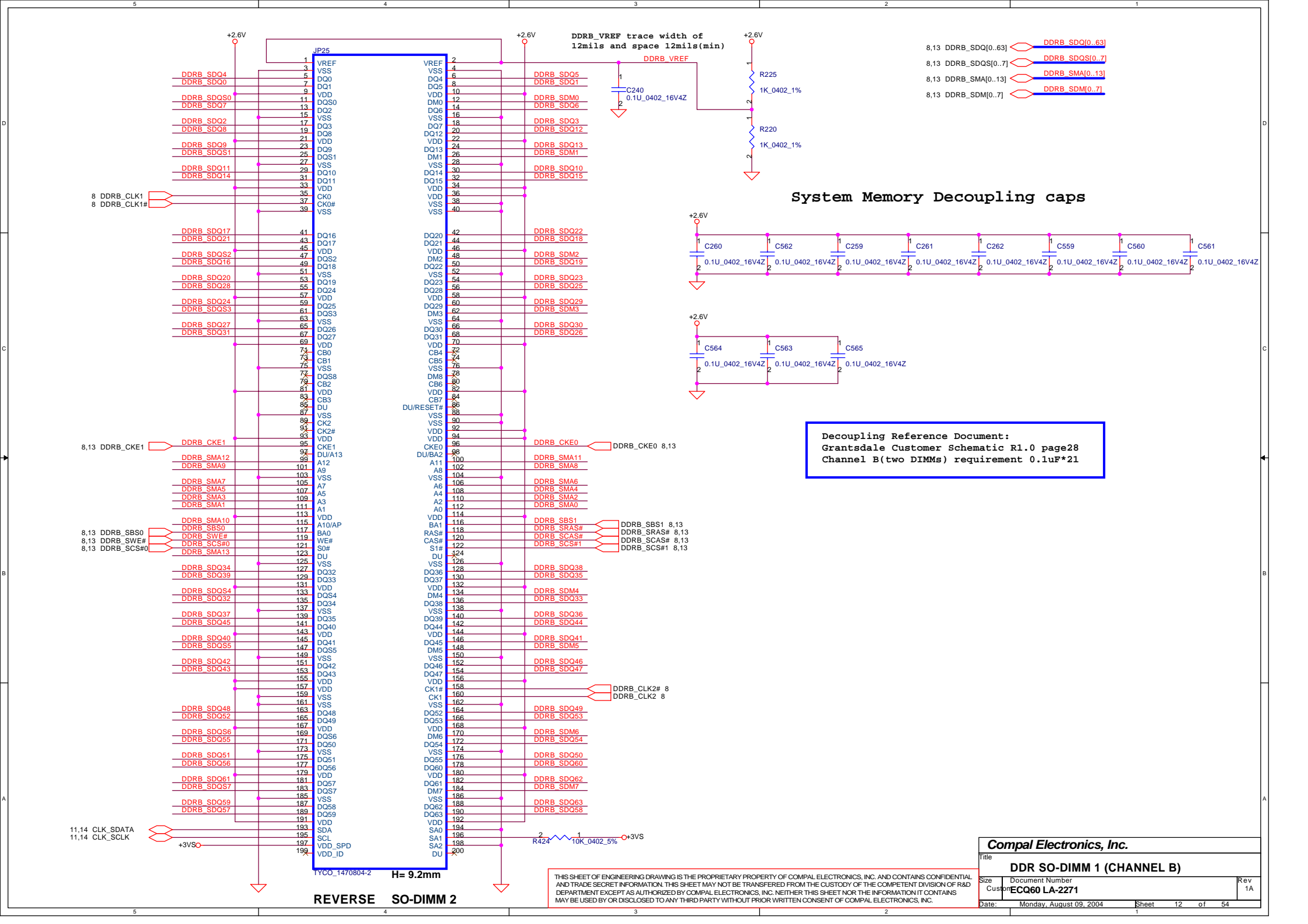


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- 8,13 DDRB_SDQ[0..63] **DDRBD_SDQ[0..63]**
- 8,13 DDRB_SDQS[0..7] **DDRBD_SDQS[0..7]**
- 8,13 DDRB_SMA[0..13] **DDRBD_SMA[0..13]**
- 8,13 DDRB_SDM[0..7] **DDRBD_SDM[0..7]**

System Memory Decoupling caps

Decoupling Reference Document:
Grantsdale Customer Schematic R1.0 page28
Channel B(two DIMMs) requirement 0.1uF*21

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REVERSE SO-DIMM 2

Channel A(DIMM0) Termination resistors & Decoupling caps



Decoupling Reference Document:
Grantsdale Customer Schematic R1.0 page24
Channel A(two DIMMs) requirement 4.7u*3 ; 0.1uF*26

Channel B(DIMM1) Termination resistors & Decoupling caps

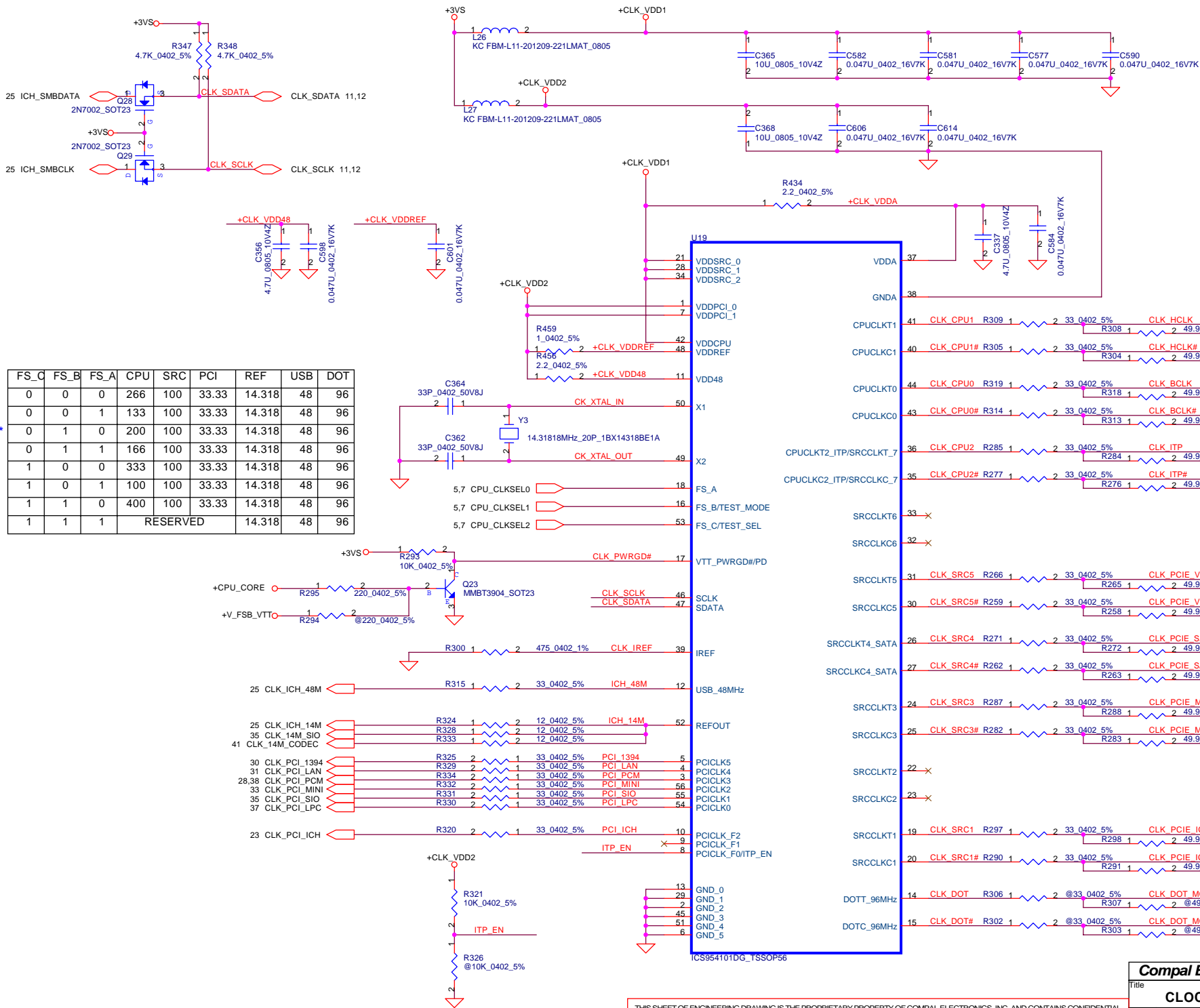


Decoupling Reference Document:
Grantsdale Customer Schematic R1.0 page28
Channel B(two DIMMs) requirement 4.7u*3 ; 0.1uF*28

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DDR Termination & Decoupling			
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Clock Generator



FS_C	FS_B	FS_A	CPU	SRC	PCI	REF	USB	DOT
0	0	0	266	100	33.33	14.318	48	96
0	0	1	133	100	33.33	14.318	48	96
0	1	0	200	100	33.33	14.318	48	96
0	1	1	166	100	33.33	14.318	48	96
1	0	0	333	100	33.33	14.318	48	96
1	0	1	100	100	33.33	14.318	48	96
1	1	0	400	100	33.33	14.318	48	96
1	1	1	RESERVED			14.318	48	96

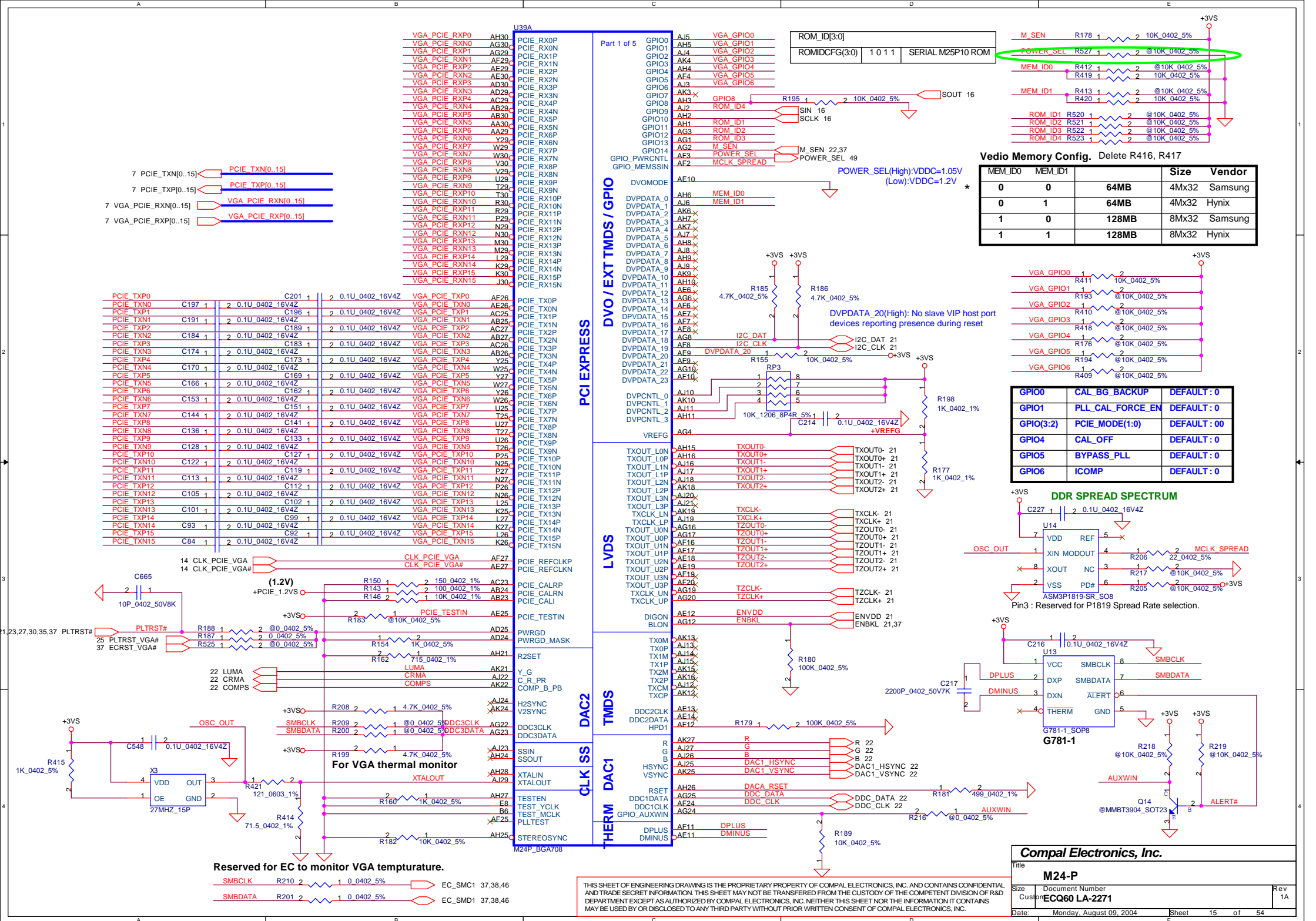
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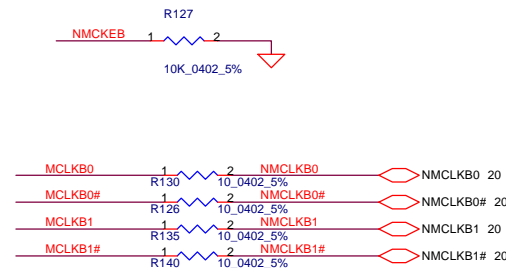
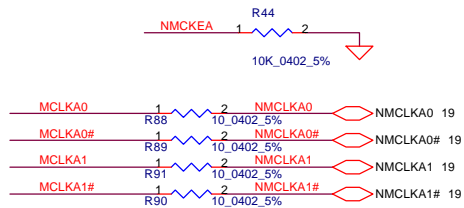
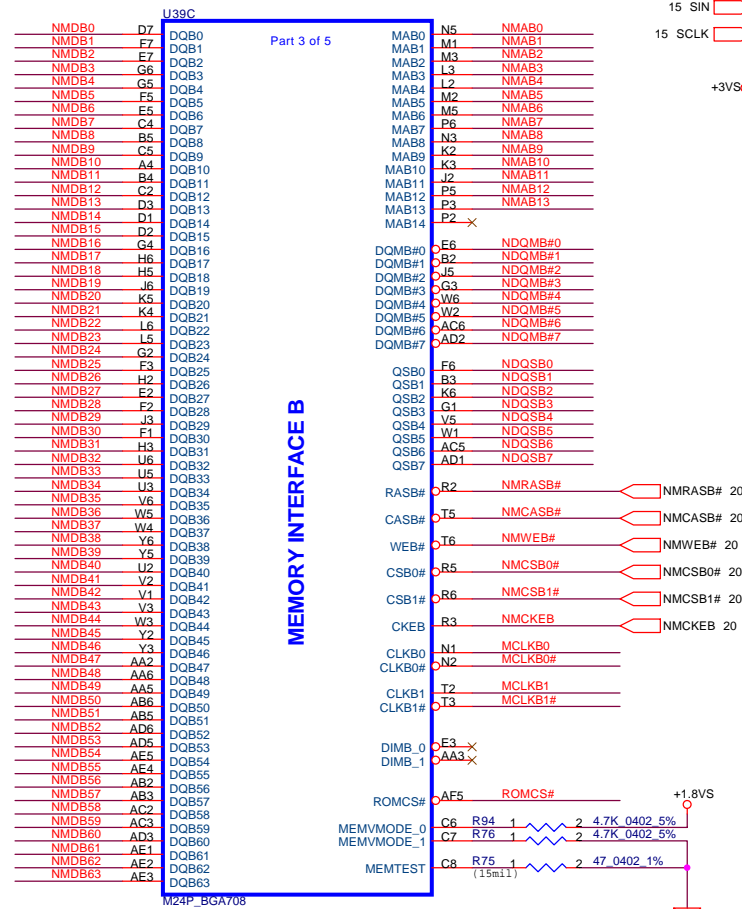
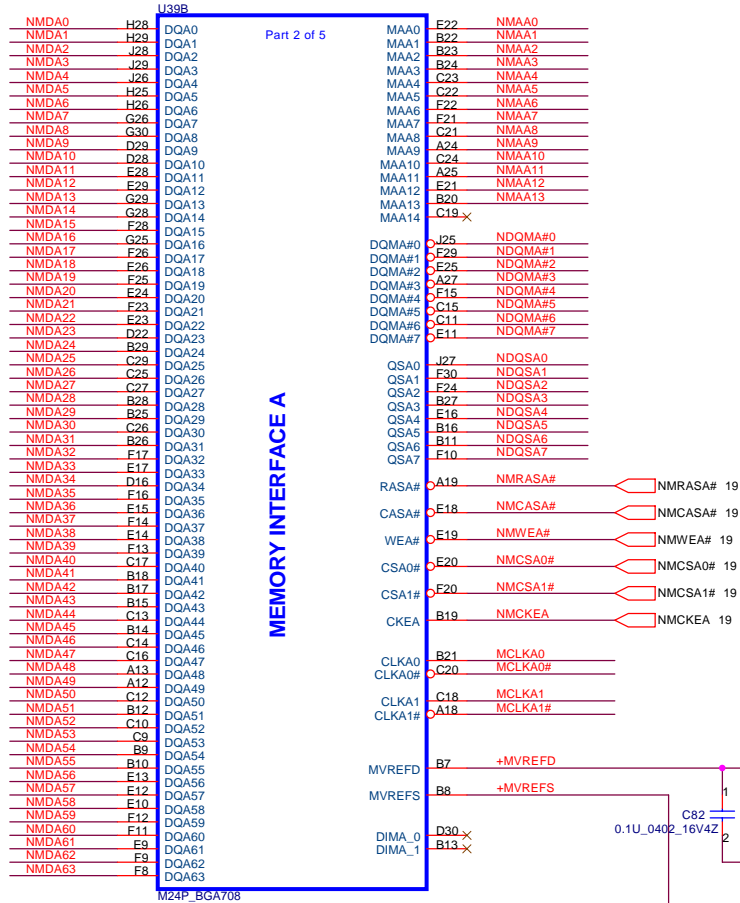
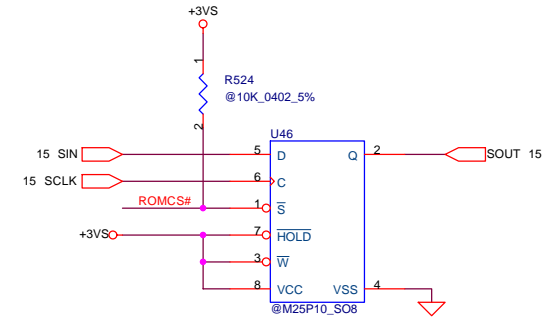
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Title
CLOCK GENERATOR

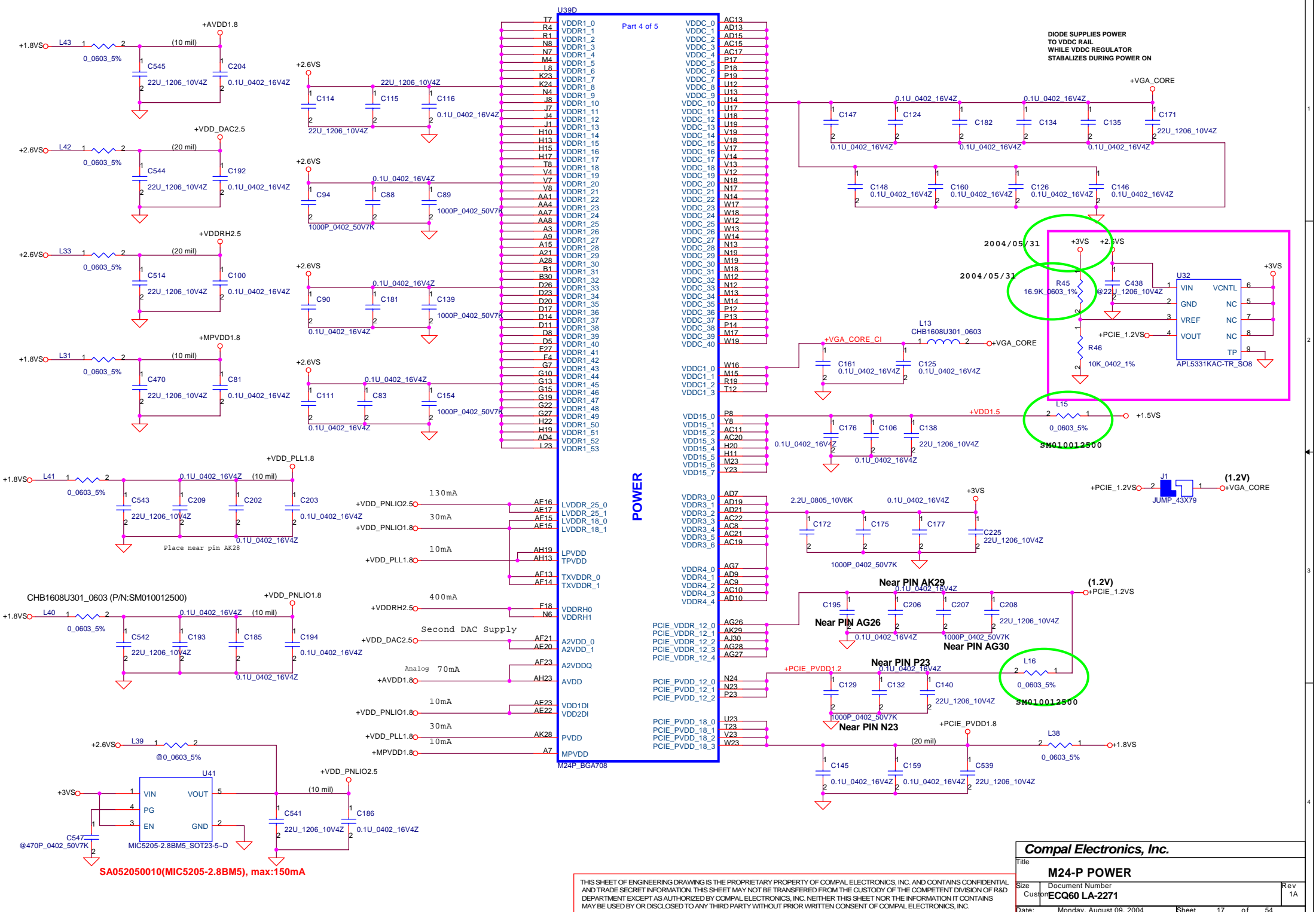
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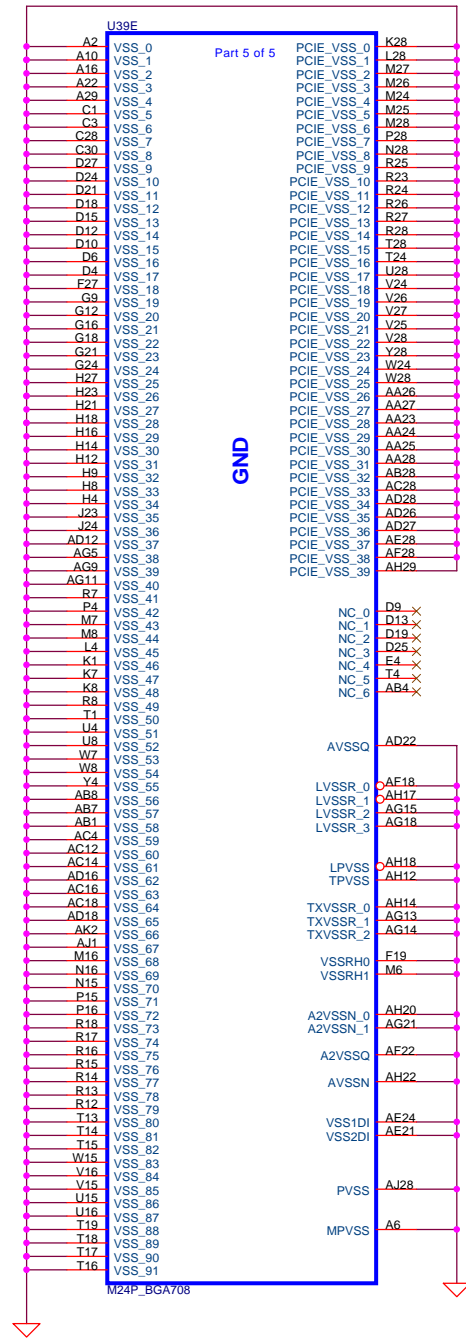




	2.5V VDDR1	1.8V VDDR1 (ELPIDA)
MEMVMODE0	HI	LOW
MEMVMODE1	LOW	HI



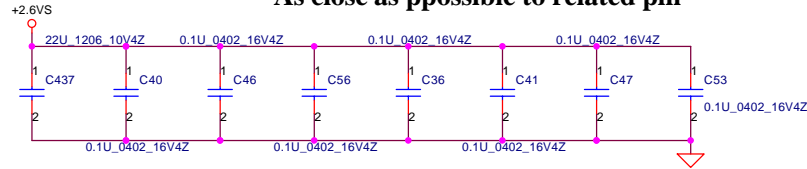
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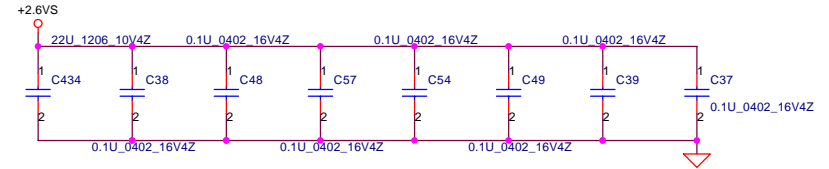
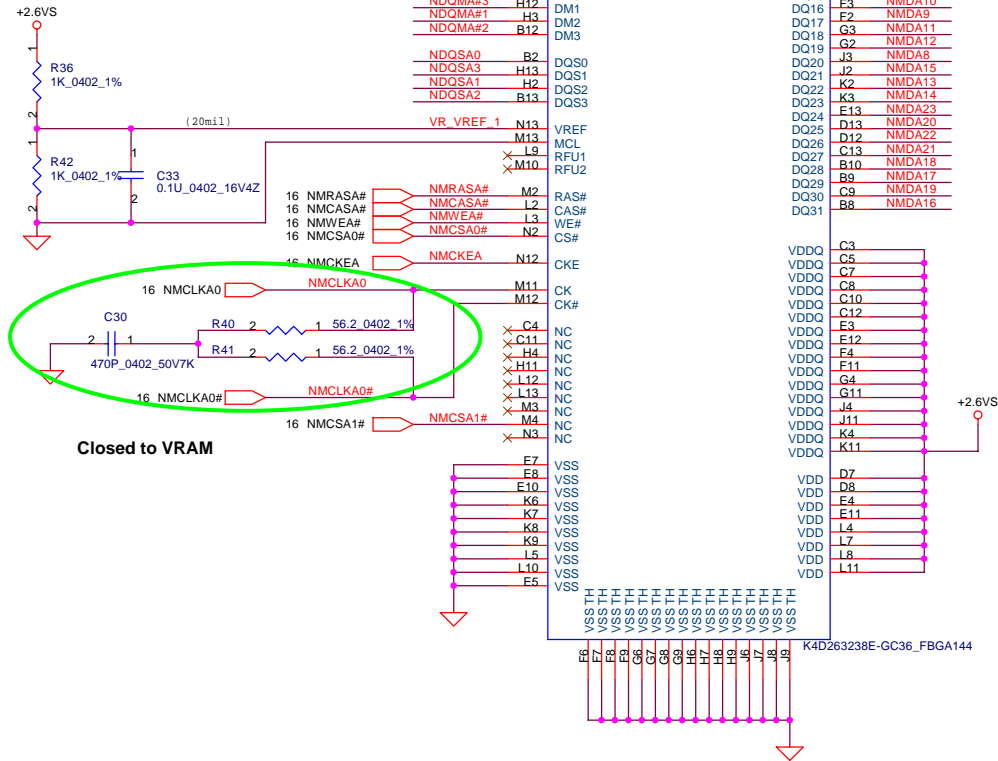
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As close as possible to related pin

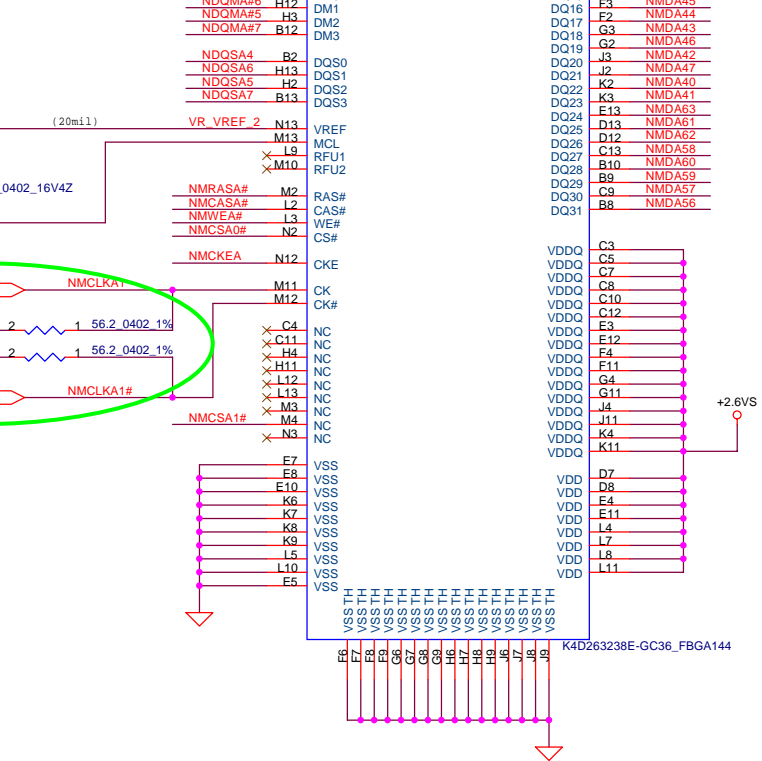


- 16 NDQMA#[0..7] \Rightarrow NDQMA#[0..7]
- 16 NDQSA#[0..7] \Rightarrow NDQSA#[0..7]
- 16 NMAA#[0..13] \Rightarrow NMAA#[0..13]
- 16 NMDA#[0..63] \Rightarrow NMDA#[0..63]



- NMAA0 N5
- NMAA1 N6
- NMAA2 N7
- NMAA3 N8
- NMAA4 N9
- NMAA5 N10
- NMAA6 N11
- NMAA7 N12
- NMAA8 N13
- NMAA9 N14
- NMAA10 N15
- NMAA11 N16
- NMAA12 N17
- NMAA13 N18

- NDQMA#0 B3
- NDQMA#1 H12
- NDQMA#2 B12
- NDQSA0 B2
- NDQSA1 H13
- NDQSA2 B13
- VR VREF 1 N13
- M13
- L9
- M10
- NMRASA# M2
- NMCASA# L2
- NMWEA# L3
- NMCSA0# N2
- NMCKEA N12
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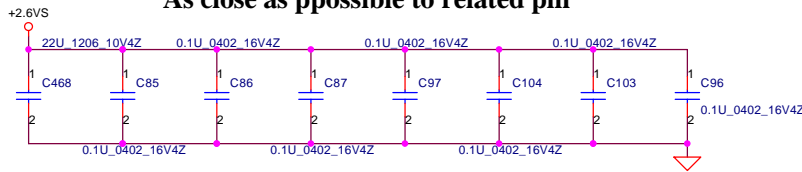
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GRAPHIC DDR CHANNEL A

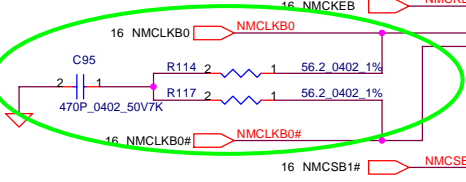
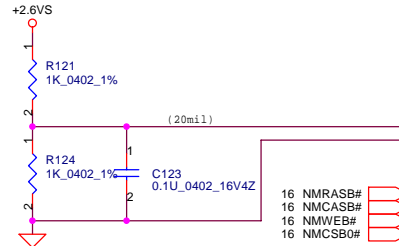
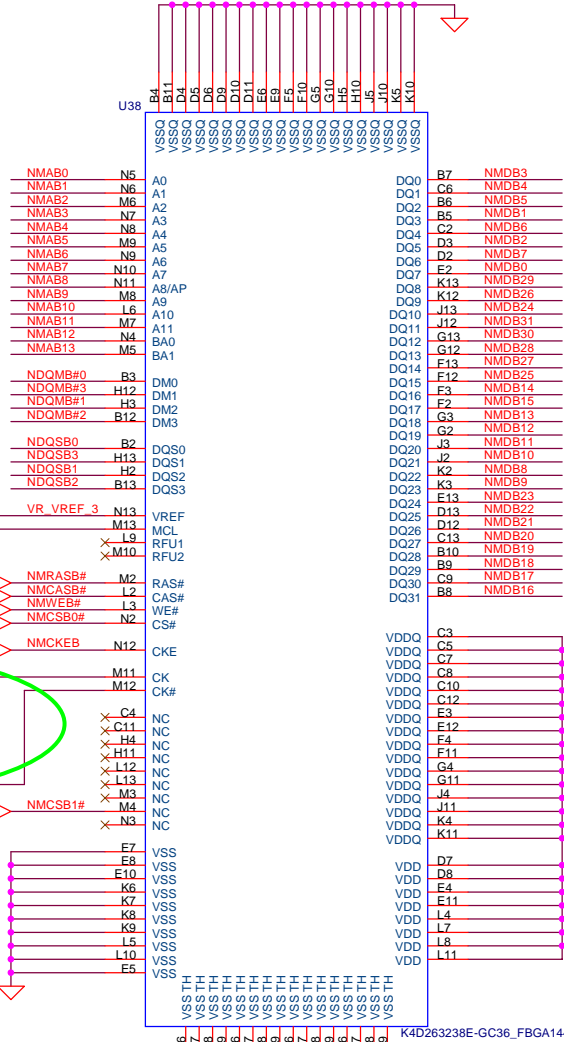
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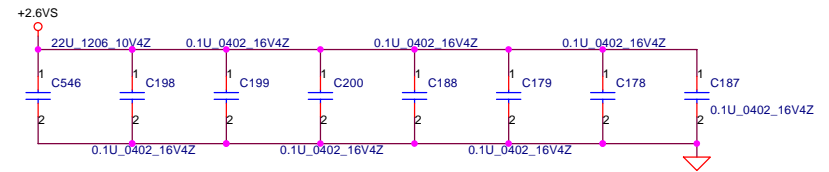
As close as possible to related pin



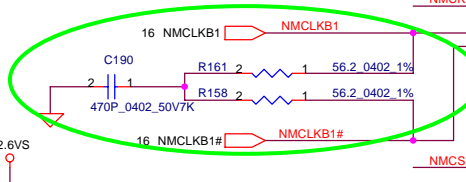
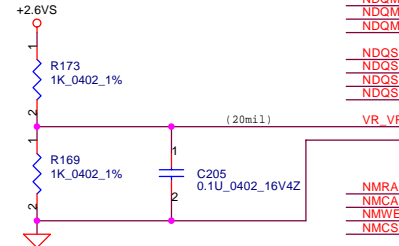
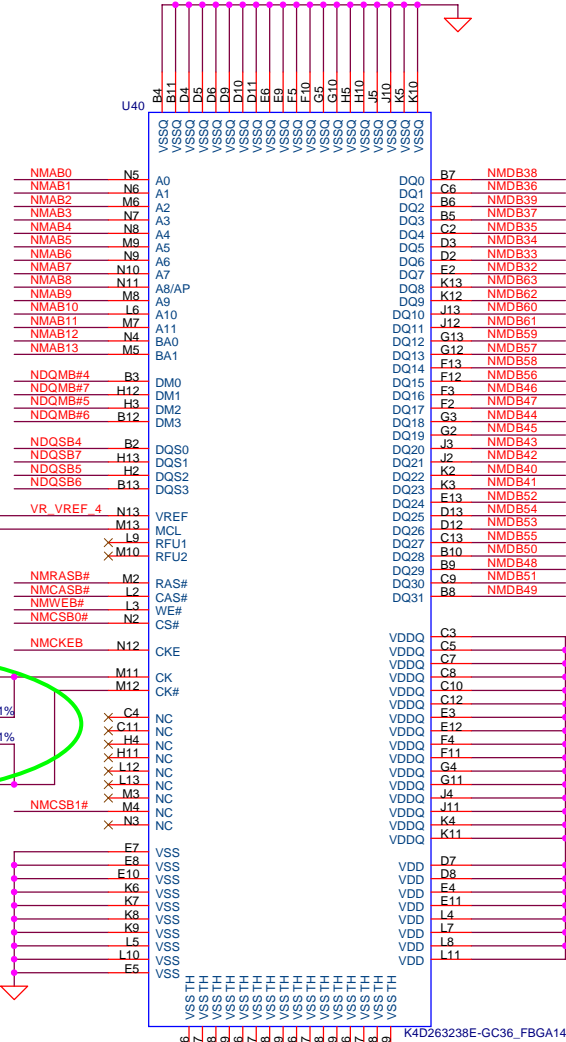
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- 16 NDQSB#[0..7] NDQSB#[0..7]
- 16 NMAB#[0..13] NMAB#[0..13]
- 16 NMDB#[0..63] NMDB#[0..63]



Closed to VRAM



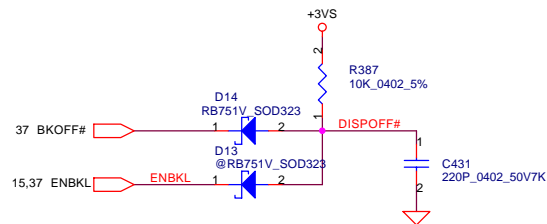
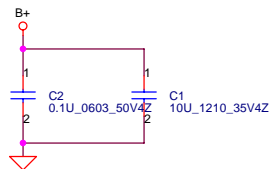
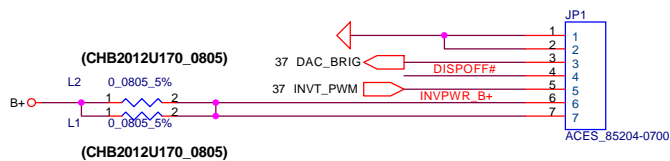
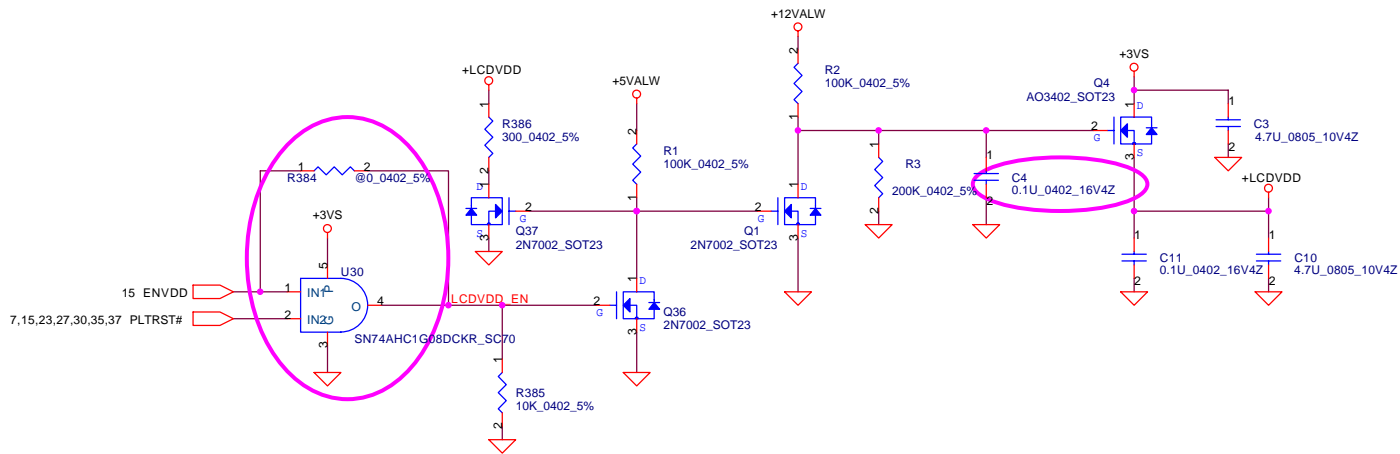
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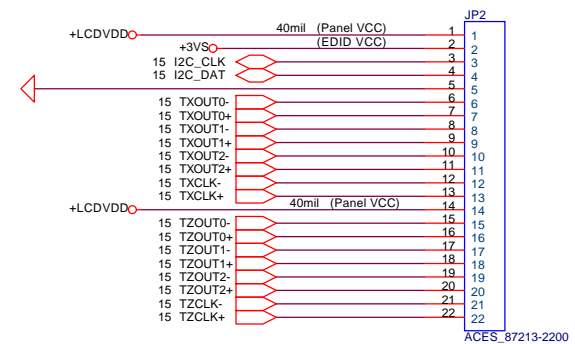
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Title		
GRAPHIC DDR CHANNEL B		
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LVDS Conn.

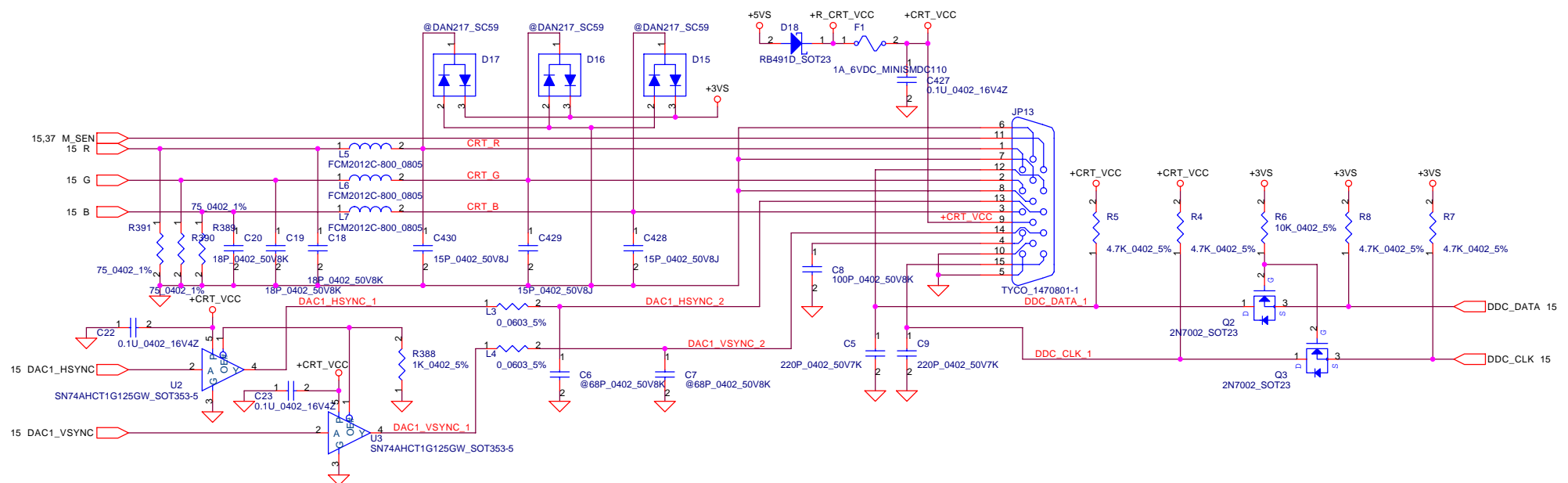


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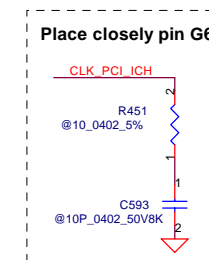
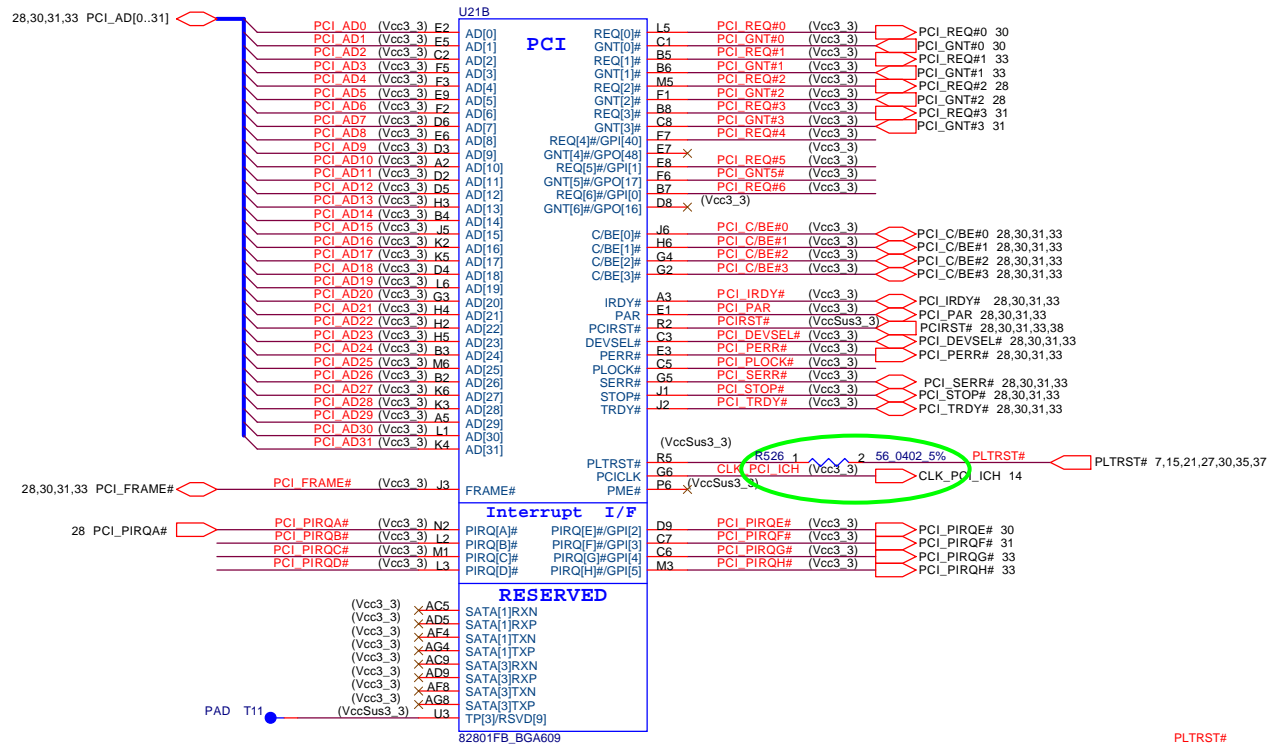
Compal Electronics, Inc.			
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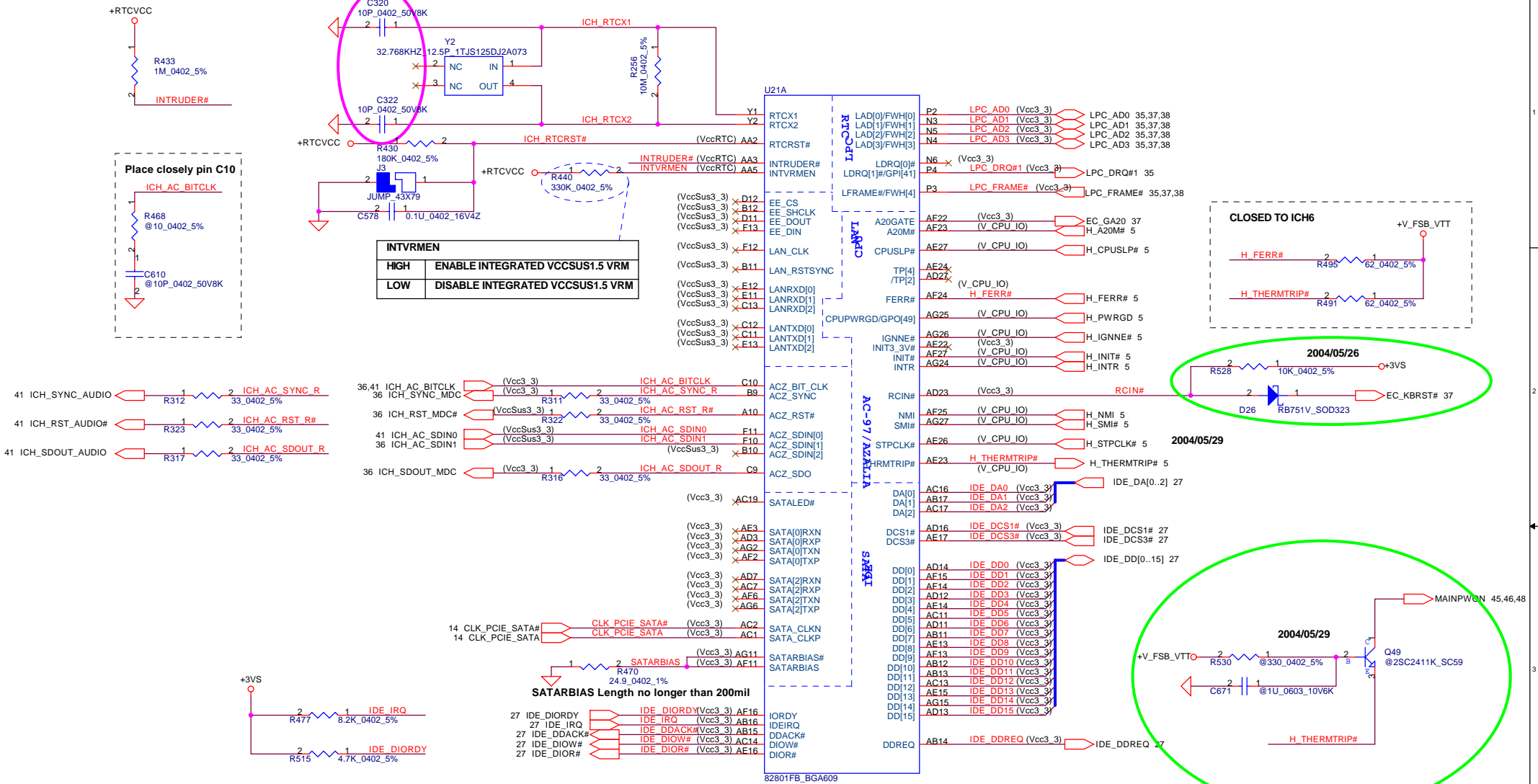
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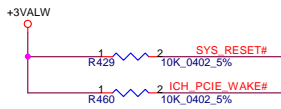
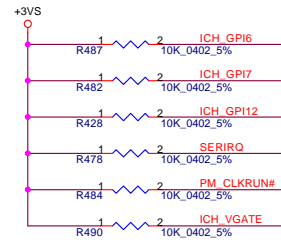
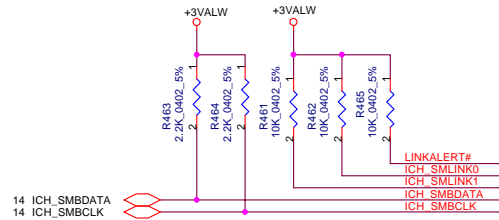
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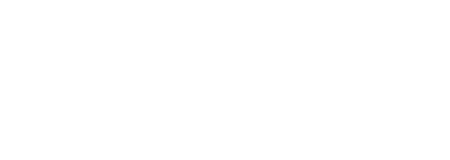
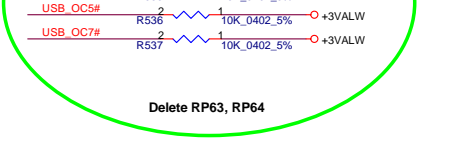
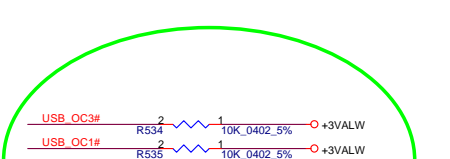
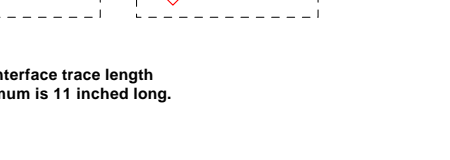
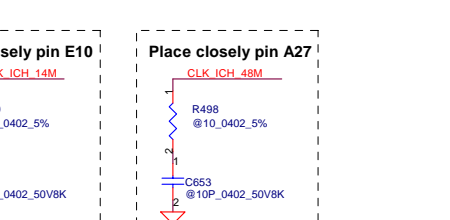
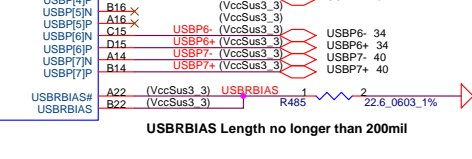
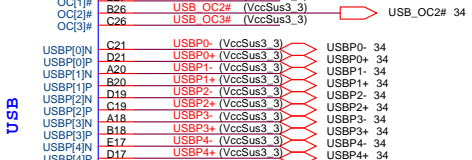
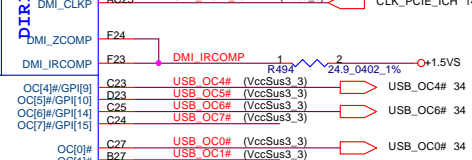
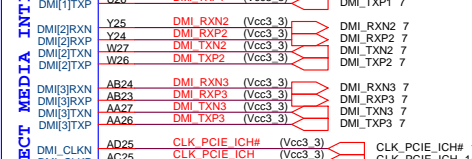
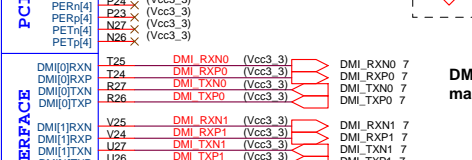
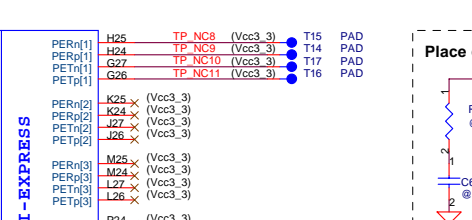
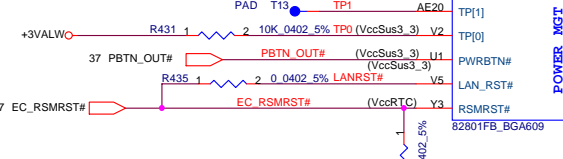
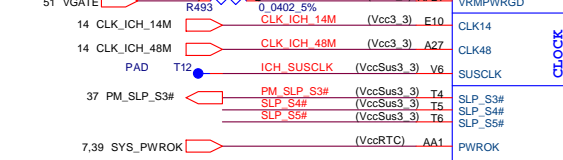
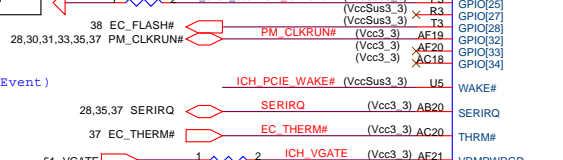
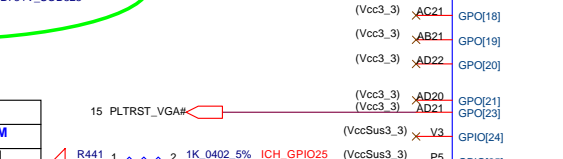
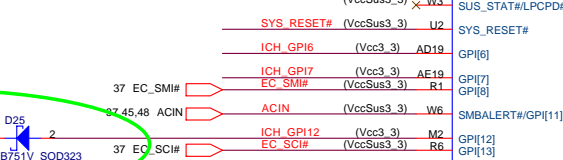
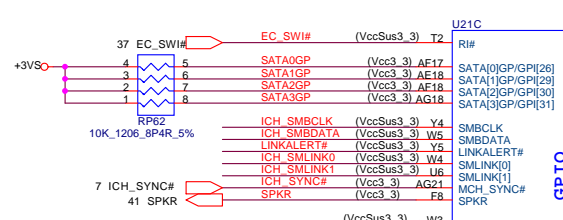
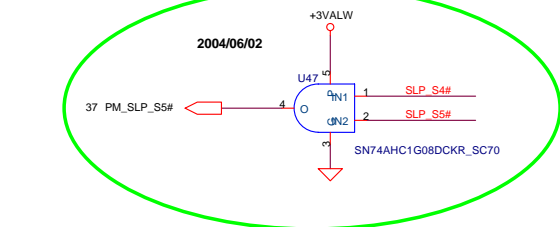
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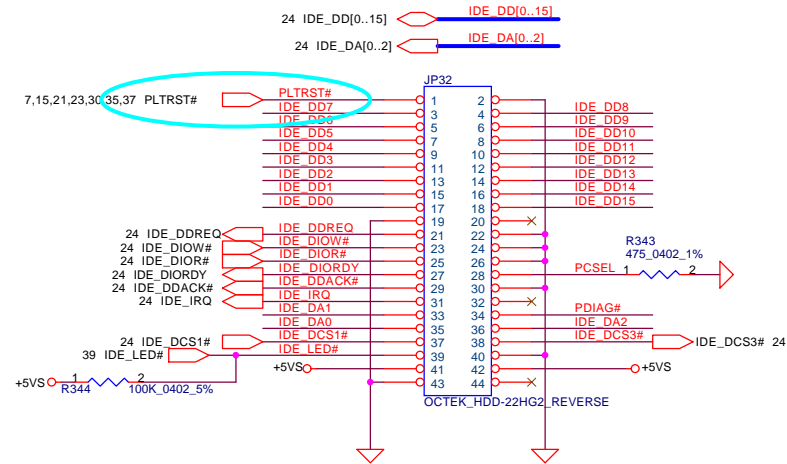
If PCI Express Port(s) will not be implemented on the platform:
PETp/n[x] and PERp/n[x] signals may be left unconnected.
Pull-up Wake# to VccSus3.3 via a 10KOhm resistor.
Grantsdale Chipset Platform Design Guide REV1.0 REF. 14652 Page167



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ICH6(3/4)			
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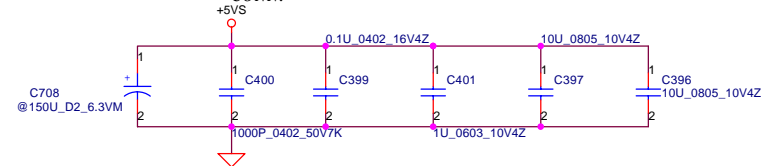
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HDD Connector

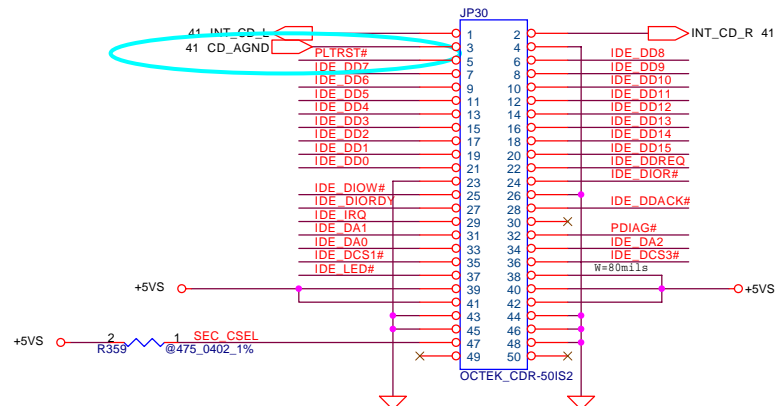


**When Pin28 CSEL grounded,
the device recognizes itself as a master.**

Place caps. near HDD
CONN.

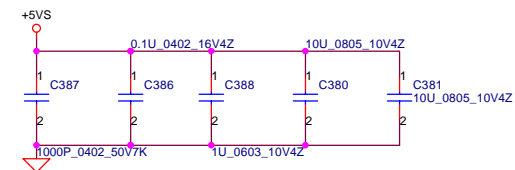


CD-ROM Connector



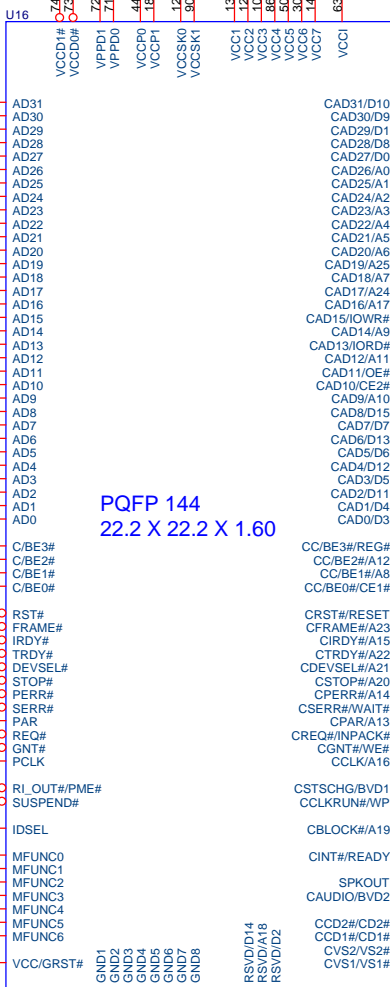
**When Pin47 CSEL grounded,
the device recognizes itself as a master.
When CSEL open,
the device recognizes itself as a slaver.**

*Place caps. near CDROM
CONN.*





23,30,31,33 PCI_AD[0..31]  PCI_AD[0..31]

PCI_AD31 3
PCI_AD30 4
PCI_AD29 5
PCI_AD28 6
PCI_AD27 7
PCI_AD26 8
PCI_AD25 9
PCI_AD24 10
PCI_AD23 11
PCI_AD22 12
PCI_AD21 13
PCI_AD20 14
PCI_AD19 15
PCI_AD18 16
PCI_AD17 17
PCI_AD16 18
PCI_AD15 19
PCI_AD14 20
PCI_AD13 21
PCI_AD12 22
PCI_AD11 23
PCI_AD10 24
PCI_AD9 25
PCI_AD8 26
PCI_AD7 27
PCI_AD6 28
PCI_AD5 29
PCI_AD4 30
PCI_AD3 31
PCI_AD2 32
PCI_AD1 33
PCI_AD0 34

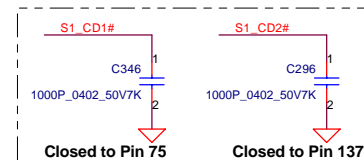


PQFP 144
22.2 X 22.2 X 1.60

CAD31/D10 144 S1_D10
CAD30/D9 142 S1_D9
CAD29/D8 141 S1_D8
CAD28/D7 140 S1_D7
CAD27/D6 139 S1_D6
CAD26/A0 129 S1_A0
CAD25/A1 128 S1_A1
CAD24/A2 127 S1_A2
CAD23/A3 126 S1_A3
CAD22/A4 125 S1_A4
CAD21/A5 124 S1_A5
CAD20/A6 118 S1_A6
CAD19/A25 116 S1_A25
CAD18/A7 115 S1_A7
CAD17/A24 113 S1_A24
CAD16/A17 98 S1_A17
CAD15/IOWR# 96 S1_IOWR# 29
CAD14/A9 97 S1_A9
CAD13/IORD# 93 S1_IORD# 29
CAD12/A11 95 S1_A11
CAD11/OE# 92 S1_OE# 29
CAD10/CE2# 91 S1_CE2# 29
CAD9/A10 89 S1_A10
CAD8/D15 87 S1_D15
CAD7/D7 85 S1_D7
CAD6/D13 82 S1_D13
CAD5/D6 83 S1_D6
CAD4/D12 80 S1_D12
CAD3/D5 81 S1_D5
CAD2/D11 77 S1_D11
CAD1/D4 79 S1_D4
CAD0/D3 76 S1_D3

S1_A[0..25]  S1_A[0..25] 29
S1_D[0..15]  S1_D[0..15] 29

CC/BE3#/REG# 125 S1_REG# 29
CC/BE2#/A12 112 S1_A12
CC/BE1#/A8 99 S1_A8
CC/BE0#/CE1# 88 S1_CE1# 29
RST# 119 S1_RST 29
CRST#/RESET 111 S1_A23
CFRAME#/A23 110 S1_A15
CIRDY#/A15 109 S1_A22
CTRDY#/A22 107 S1_A21
ODEVSEL#/A21 105 S1_A20
CSTOP#/A20 104 S1_A14
CPERR#/A14 103 S1_WAIT# 29
CSERR#/WAIT# 101 S1_A13
CPAR/A13 100 S1_INPACK# 29
CREQ#/INPACK# 123 S1_WE# 29
CGNT#/WER 106 S1_A16
CLK/A16 108 S1_A16
CSTSCHG/BVD1 135 S1_BVD1 29
CCLKRUN#/WVP 136 S1_WP 29
CBLOCK#/A19 103 S1_A19
CINT#/READY 132 S1_RDY# 29
SPKOUT 62 PCM_SPK# 41
CAUDIO/BVD2 134 S1_BVD2 29
CCD2#/CD2# 137 S1_CD2# 29
CCD1#/CD1# 135 S1_CD1# 29
CVS2/VS2# 117 S1_VS2 29
CVS1/VS1# 131 S1_VS1 29



IDSEL:PCI_AD20

23,30,31,33 PCI_C/BE#3 12 C/BE3#
23,30,31,33 PCI_C/BE#2 27 C/BE2#
23,30,31,33 PCI_C/BE#1 37 C/BE1#
23,30,31,33 PCI_C/BE#0 48 C/BE0#
23,30,31,33,38 PCIRST# 20
23,30,31,33 PCI_FRAME# 28 FRAME#
23,30,31,33 PCI_IRDY# 29 IRDY#
23,30,31,33 PCI_TRDY# 31 TRDY#
23,30,31,33 PCI_DEVSEL# 32 DEVSEL#
23,30,31,33 PCI_STOP# 33 STOP#
23,30,31,33 PCI_PERR# 34 PERR#
23,30,31,33 PCI_SERR# 35 SERR#
23,30,31,33 PCI_PAR 36 PAR
23 PCI_REQ#2 1 REQ#
23 PCI_GNT#2 2 GNT#
14,38 CLK_PCI_PCM 21 CLK_PCI_PCM

30,31,33,37 PCM_PME# 59 RI_OUT#/PME#
SUSPEND# 70 SUSPEND#

PCI_AD20 1 2 PCM_ID 13
R238 100_0402_5%

23 PCI_PIRQA# 60 MFUNC0

25,35,37 SERIRQ 61 MFUNC1

25,30,31,33,35,37 PM_CLKRUN# 64 MFUNC2

29,37 PCMRST# 65 MFUNC3

25,30,31,33,35,37 PM_CLKRUN# 66 MFUNC4

29,37 PCMRST# 67 MFUNC5

25,30,31,33,35,37 PM_CLKRUN# 68 MFUNC6

29,37 PCMRST# 69 VCC/GRST#

25,30,31,33,35,37 PM_CLKRUN# 66

29,37 PCMRST# 66

25,30,31,33,35,37 PM_CLKRUN# 66

29,37 PCMRST# 66

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29,37 PCMRST# 66

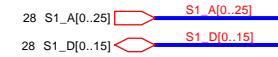
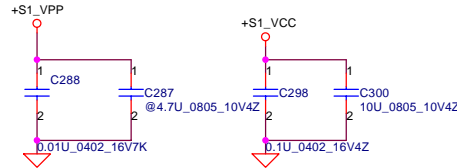
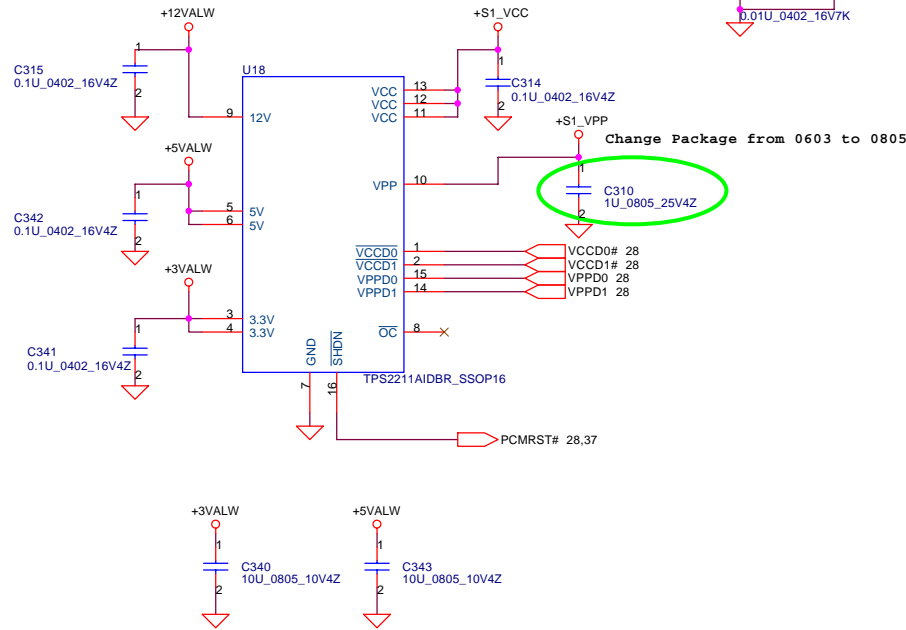
25,30,31,33,35,37 PM_CLKRUN# 66

29,37 PCMRST# 66

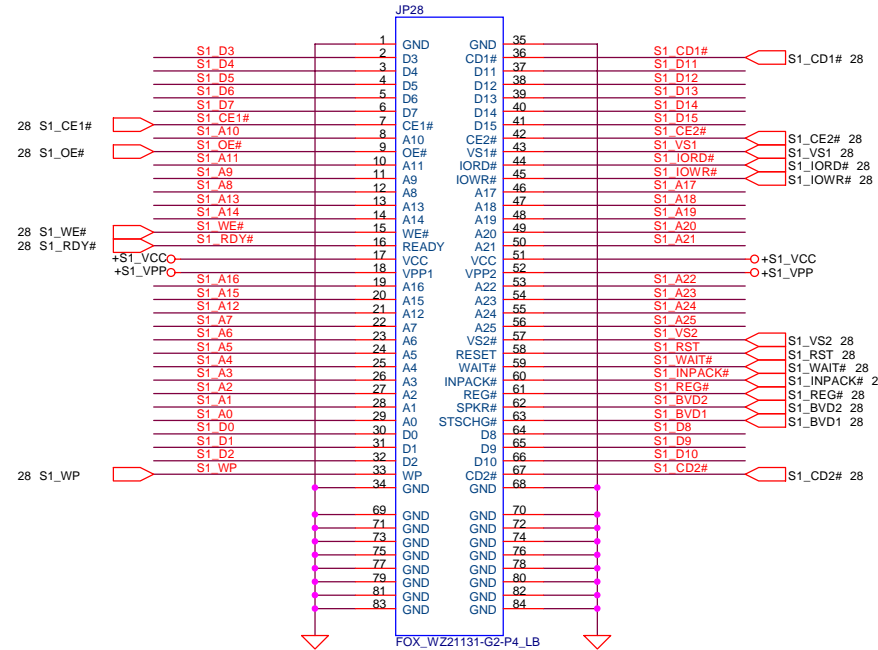
PCMRST# must be programmed to high before PCIRST#.
PCMRST# will be programmed to high after SUSP# but before PCIRST#.

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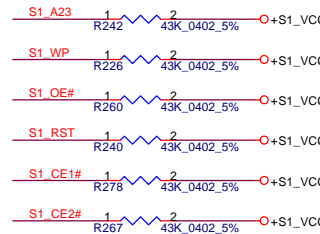
PCMCIA Power Controller



CardBus Socket



For CB1410 Rev.B0 (Place close to Connector)



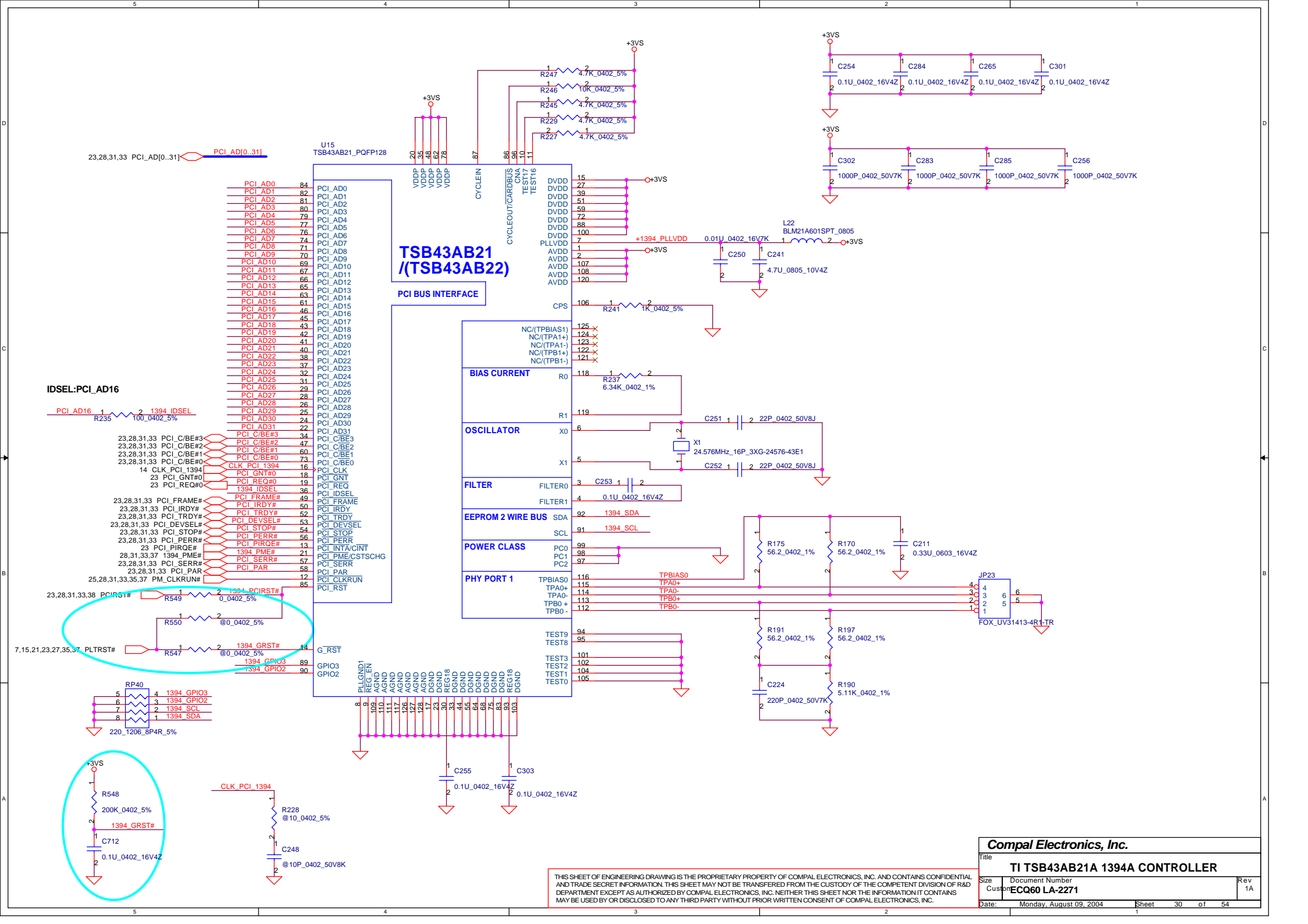
SP01F002800(CL51/AT20)
PCB Footprint : FOX_1CA43532-TC-CQ_84P_RB

Compal Electronics, Inc.

CardBus Socket

Size: Document Number
Customer: ECQ60 LA-2271
Date: Monday, August 09, 2004
Sheet: 29 of 54
Rev: 1A

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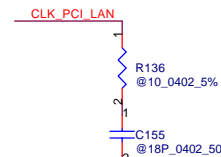
EN_WOL# = Low,
System can wake on LAN
(keep Low when Power On)

VGS(th) = -0.45V
IDmax = 2.3A

+3VS for BCM5788
+3V_LAN for BCM4401

23,28,30,33 PCI_AD[0..31]

BCM5788:SA057880000
BCM4401:SA044010000

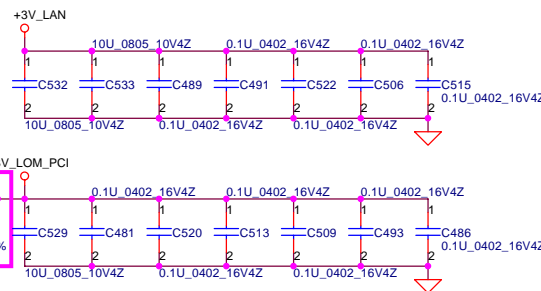
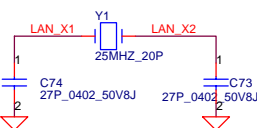


23,28,30,33 PCI_C/BE#3
23,28,30,33 PCI_C/BE#2
23,28,30,33 PCI_C/BE#1
23,28,30,33 PCI_C/BE#0

100_0402_5%
PCI_AD17 R139 1 2 LAN_IDSEL A4
23,28,30,33 PCI_FRAME# F2
23,28,30,33 PCI_IRDY# F1
23,28,30,33 PCI_TRDY# G3
23,28,30,33 PCI_DEVSEL# H3
23,28,30,33 PCI_STOP# J1
23,28,30,33 PCI_PERR# A2
23,28,30,33 PCI_SERR# J1
23,28,30,33 PCI_PAR# J1
14 CLK_PCI_LAN A3

23 PCI_PIRQ# H2
23,28,30,33 PCI_RST# C2
23 PCI_GNT#3 J3
23 PCI_REQ#3 C3

+3V_LAN 1 R109 2 LAN_AUXPWR J12
28,30,33,37 LAN_PME# A6



BCM5788M
/(BCM4401)

TRD3+/(NC_E13)
TRD3+/(NC_E14)
TRD2+/(NC_D13)
TRD2+/(NC_D14)
TRD1+(RDP)
TRD1+(RDN)
TRD0+(TDP)
TRD0+(TDN)

REGSUP12/(NC_B9)
REGCTL12/(NC_B10)
REGSEN12/(REG18OUT)
REGSUP25/(REGSUP18)
REGCTL25/(NC_C11)
REGSEN25/(REGSUP18)

VESD1
VESD2
VESD3
EEDATA/(SPROM_CS)
EECLK/(SPROM_CLK)

GPIO0/(NC_H12)
GPIO1/(NC_K13)
GPIO2/(NC_J13)

LINKLED/(LINKLED10)
SPD100LED/(LINKLED100)
SPD1000LED/(COL_LED)
TRAFFICLED/(ACT_LED)

PLLVD2/(PLLVD)
NC_P7
TCK
TDI
TDO
TMS
TRST

XTALVDD
XTALO
XTALI

NC_G11
NC_E10/(EEDATA_PXE)
NC_E11/(EECLK_PXE)
NC_H11

BIASVDD
RDAC

NC_A10
NC_C9

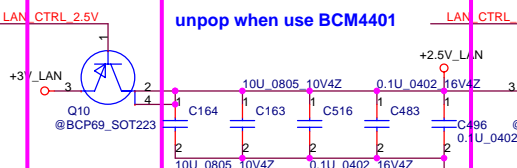
NC_G11
NC_E10/(EEDATA_PXE)
NC_E11/(EECLK_PXE)
NC_H11

NC_A10
NC_C9

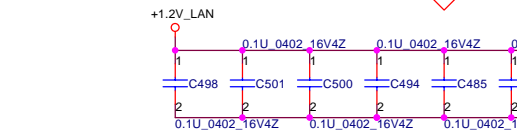
NC_G11
NC_E10/(EEDATA_PXE)
NC_E11/(EECLK_PXE)
NC_H11

NC_A10
NC_C9

NC_G11
NC_E10/(EEDATA_PXE)
NC_E11/(EECLK_PXE)
NC_H11



unpop when use BCM4401



VDDC_E12
VDDC_H5
VDDC_H6
VDDC_H7
VDDC_H8
VDDC_J5
VDDC_J6
VDDC_J7
VDDC_J8
VDDC_J9
VDDC_J10
VDDC_K5
VDDC_K6
VDDC_K7
VDDC_K8
VDDC_K9
VDDC_K10
VDDC_L5
VDDC_L6
VDDC_L7
VDDC_L8
VDDC_L9
VDDC_M14
VDDC_N14
VDDC_P8
VDDC_P12
VDDC_P13
VDDC_P14

VSS_B7
VSS_D4
VSS_D5
VSS_D6
VSS_D7
VSS_D8
VSS_D9
VSS_E2
VSS_E5
VSS_E6
VSS_E7
VSS_E8
VSS_E9
VSS_F5
VSS_F6
VSS_F7
VSS_F8
VSS_F9
VSS_F10
VSS_G4
VSS_G5
VSS_G6
VSS_G7
VSS_G8
VSS_G9
VSS_G10
VSS_H9
VSS_K2
VSS_L6
VSS_L9
VSS_M6
VSS_M12
VSS_N1
VSS_N12
VSS_N13

VDDIO-PCI_A7
VDDIO-PCI_B3
VDDIO-PCI_C5
VDDIO-PCI_E1
VDDIO-PCI_E4
VDDIO-PCI_G1
VDDIO-PCI_K3
VDDIO-PCI_L4
VDDIO-PCI_N6
VDDIO-PCI_P2

VDDP_K14/(NC_K14)VDDL_F12/(AVDD_F12)
VDDP_L13/(NC_L13)VDDL_F13/(AVDD_F13)
VDDP_P11/(NC_P11) AVDD_F14/(NC_F14)
AVDD_A13/(NC_A13)

VDDIO_A11
VDDIO_F11
VDDIO_K12
VDDIO_L12

NC_C8
CLKRUN
NC_H10
NC_J4
NC_K4
NC_J11/(GPIO_1)LOW_POWER/(TESTMODE)
NC_K11/(GPIO_0)
NC_L7
NC_L8

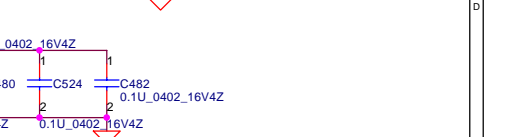
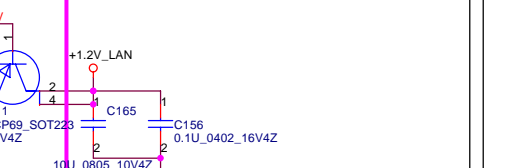
NC_C8
CLKRUN
NC_H10
NC_J4
NC_K4
NC_J11/(GPIO_1)LOW_POWER/(TESTMODE)
NC_K11/(GPIO_0)
NC_L7
NC_L8

NC_C8
CLKRUN
NC_H10
NC_J4
NC_K4
NC_J11/(GPIO_1)LOW_POWER/(TESTMODE)
NC_K11/(GPIO_0)
NC_L7
NC_L8

NC_C8
CLKRUN
NC_H10
NC_J4
NC_K4
NC_J11/(GPIO_1)LOW_POWER/(TESTMODE)
NC_K11/(GPIO_0)
NC_L7
NC_L8

NC_C8
CLKRUN
NC_H10
NC_J4
NC_K4
NC_J11/(GPIO_1)LOW_POWER/(TESTMODE)
NC_K11/(GPIO_0)
NC_L7
NC_L8

NC_C8
CLKRUN
NC_H10
NC_J4
NC_K4
NC_J11/(GPIO_1)LOW_POWER/(TESTMODE)
NC_K11/(GPIO_0)
NC_L7
NC_L8



VDDC_E12
VDDC_H5
VDDC_H6
VDDC_H7
VDDC_H8
VDDC_J5
VDDC_J6
VDDC_J7
VDDC_J8
VDDC_J9
VDDC_J10
VDDC_K5
VDDC_K6
VDDC_K7
VDDC_K8
VDDC_K9
VDDC_K10
VDDC_L5
VDDC_L6
VDDC_L7
VDDC_L8
VDDC_L9
VDDC_M14
VDDC_N14
VDDC_P8
VDDC_P12
VDDC_P13
VDDC_P14

VSS_B7
VSS_D4
VSS_D5
VSS_D6
VSS_D7
VSS_D8
VSS_D9
VSS_E2
VSS_E5
VSS_E6
VSS_E7
VSS_E8
VSS_E9
VSS_F5
VSS_F6
VSS_F7
VSS_F8
VSS_F9
VSS_F10
VSS_G4
VSS_G5
VSS_G6
VSS_G7
VSS_G8
VSS_G9
VSS_G10
VSS_H9
VSS_K2
VSS_L6
VSS_L9
VSS_M6
VSS_M12
VSS_N1
VSS_N12
VSS_N13

VDDIO-PCI_A7
VDDIO-PCI_B3
VDDIO-PCI_C5
VDDIO-PCI_E1
VDDIO-PCI_E4
VDDIO-PCI_G1
VDDIO-PCI_K3
VDDIO-PCI_L4
VDDIO-PCI_N6
VDDIO-PCI_P2

VDDP_K14/(NC_K14)VDDL_F12/(AVDD_F12)
VDDP_L13/(NC_L13)VDDL_F13/(AVDD_F13)
VDDP_P11/(NC_P11) AVDD_F14/(NC_F14)
AVDD_A13/(NC_A13)

VDDIO_A11
VDDIO_F11
VDDIO_K12
VDDIO_L12

NC_C8
CLKRUN
NC_H10
NC_J4
NC_K4
NC_J11/(GPIO_1)LOW_POWER/(TESTMODE)
NC_K11/(GPIO_0)
NC_L7
NC_L8

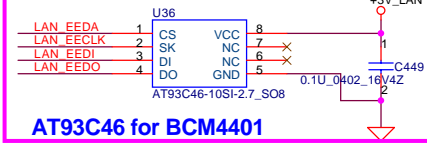
NC_C8
CLKRUN
NC_H10
NC_J4
NC_K4
NC_J11/(GPIO_1)LOW_POWER/(TESTMODE)
NC_K11/(GPIO_0)
NC_L7
NC_L8

NC_C8
CLKRUN
NC_H10
NC_J4
NC_K4
NC_J11/(GPIO_1)LOW_POWER/(TESTMODE)
NC_K11/(GPIO_0)
NC_L7
NC_L8

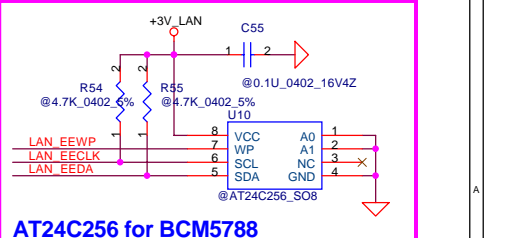
NC_C8
CLKRUN
NC_H10
NC_J4
NC_K4
NC_J11/(GPIO_1)LOW_POWER/(TESTMODE)
NC_K11/(GPIO_0)
NC_L7
NC_L8

NC_C8
CLKRUN
NC_H10
NC_J4
NC_K4
NC_J11/(GPIO_1)LOW_POWER/(TESTMODE)
NC_K11/(GPIO_0)
NC_L7
NC_L8

NC_C8
CLKRUN
NC_H10
NC_J4
NC_K4
NC_J11/(GPIO_1)LOW_POWER/(TESTMODE)
NC_K11/(GPIO_0)
NC_L7
NC_L8



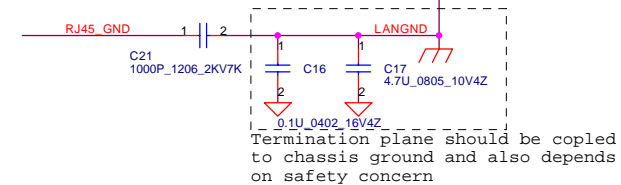
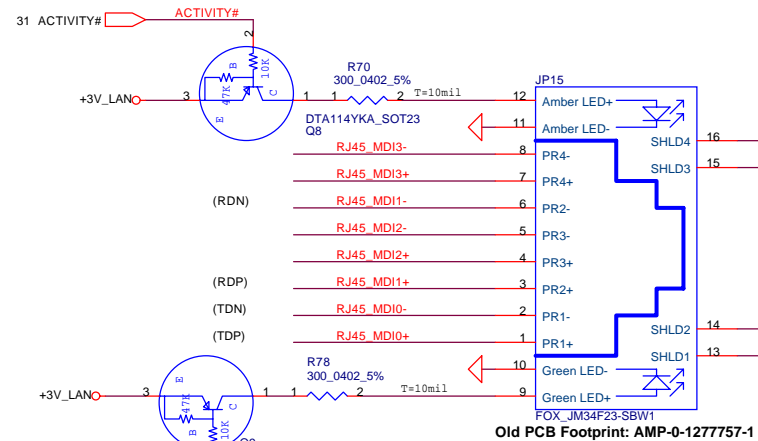
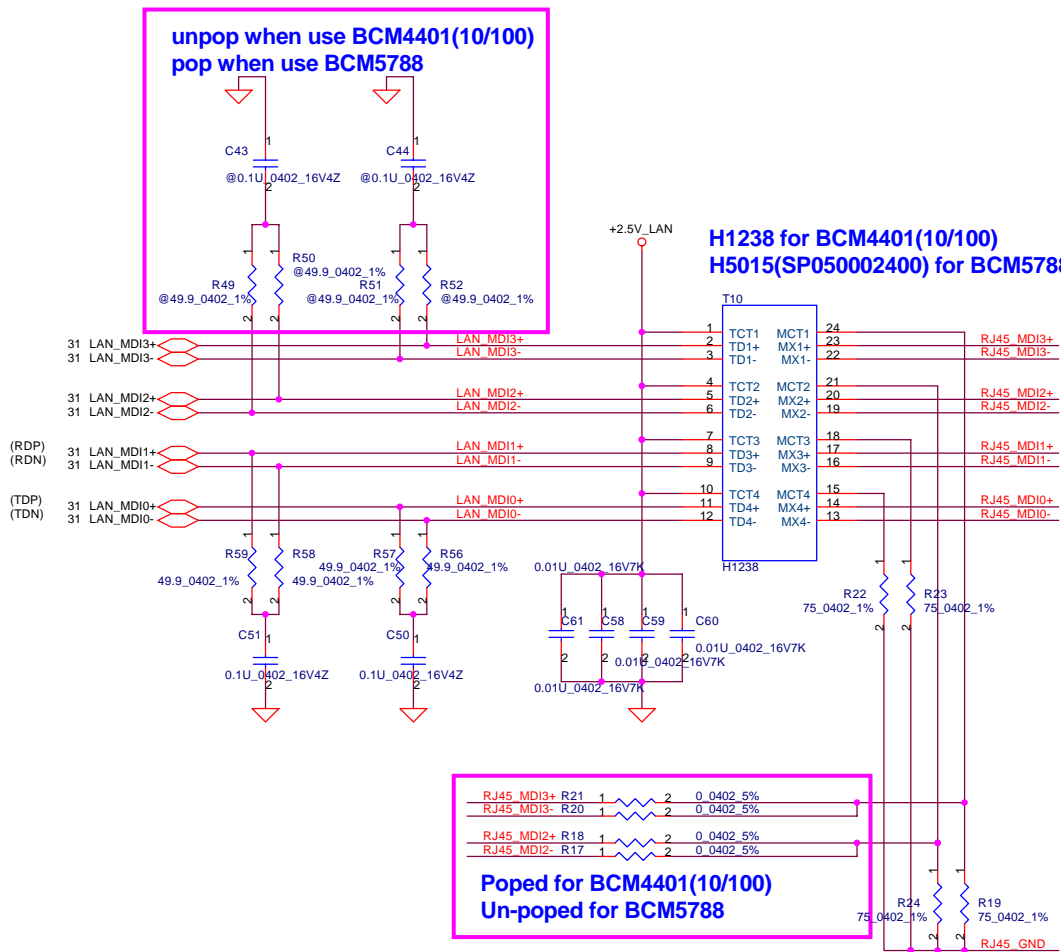
AT93C46 for BCM4401



AT24C256 for BCM5788

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LAN BCM5788M/BCM4401KFB

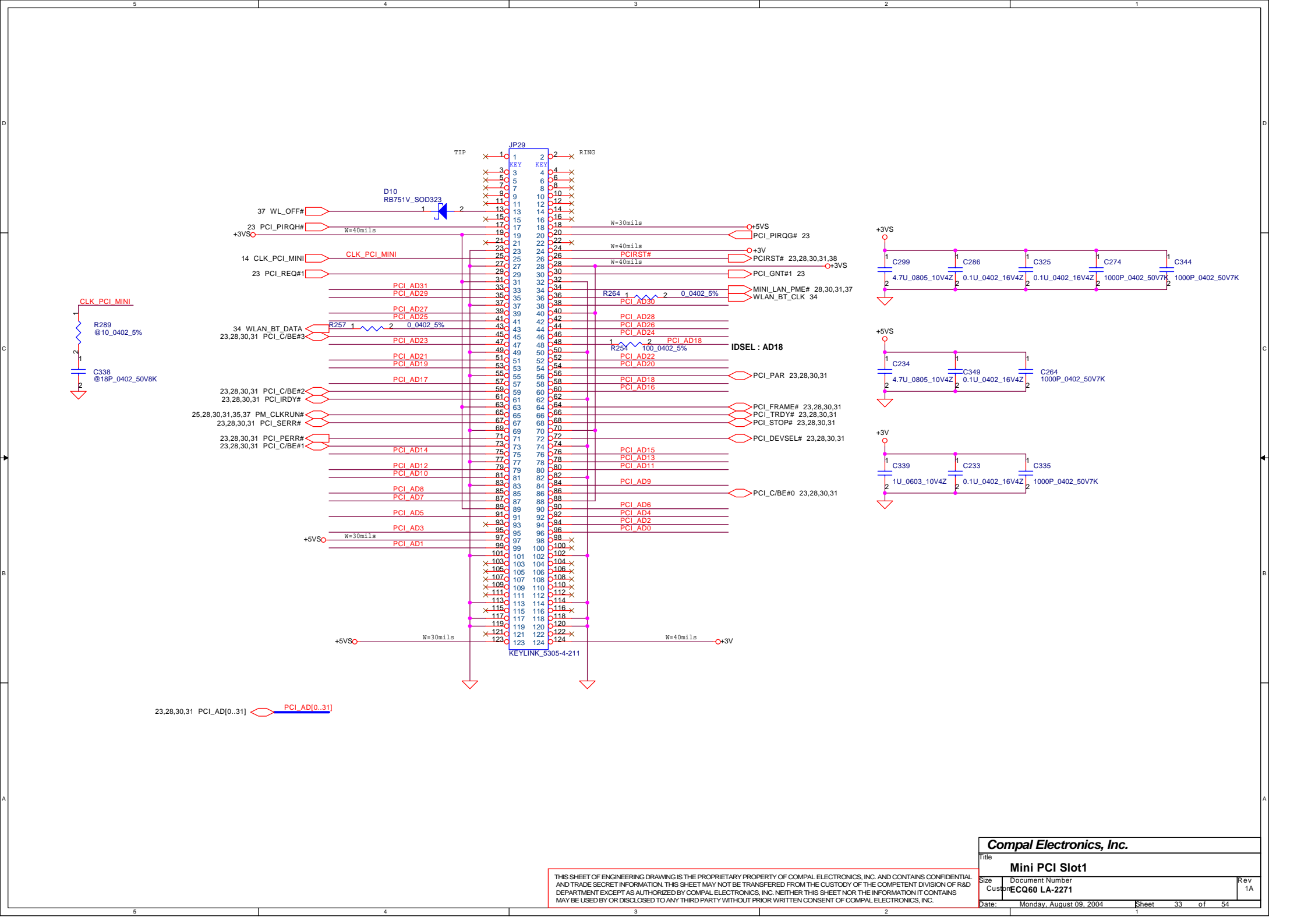
**Compal Electronics, Inc.**

Title	LAN Magnetic & RJ45 / RJ11
-------	----------------------------

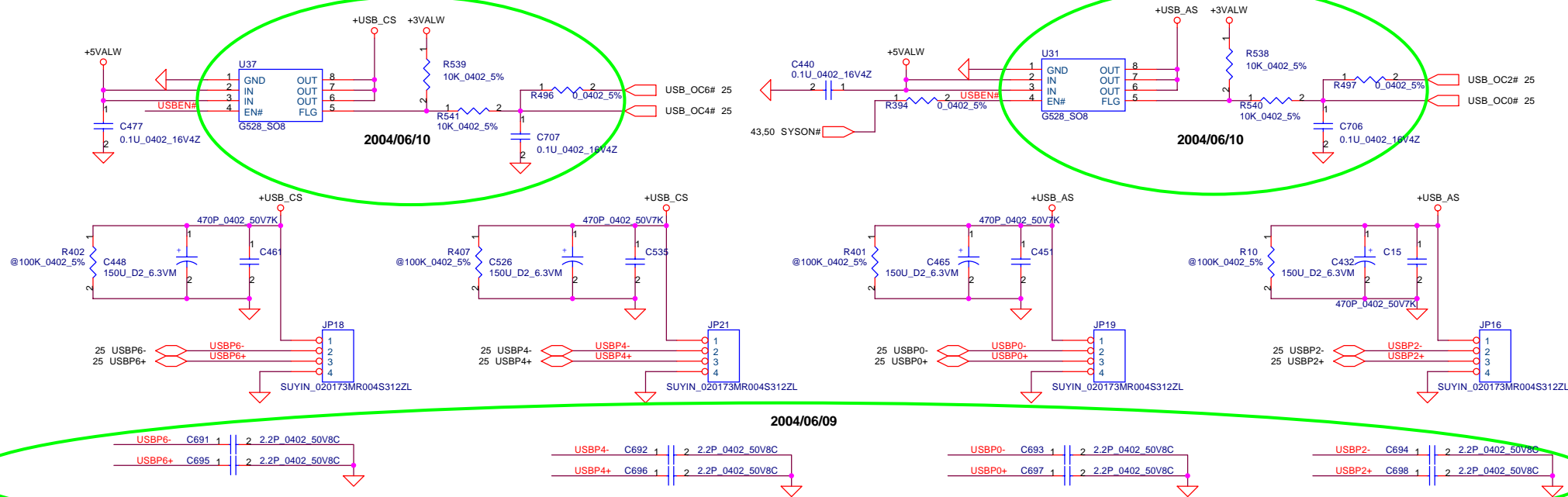
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Custom	ECQ60 LA-2271

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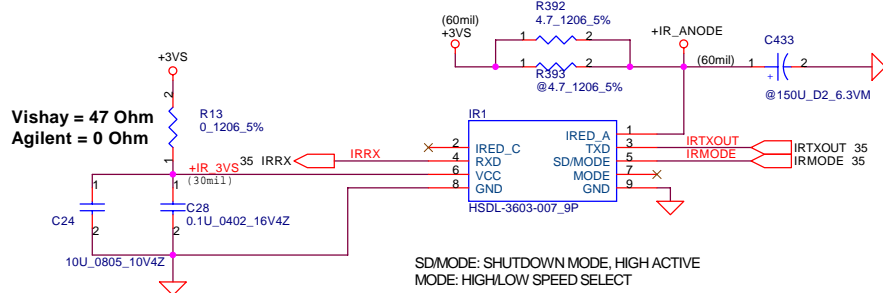


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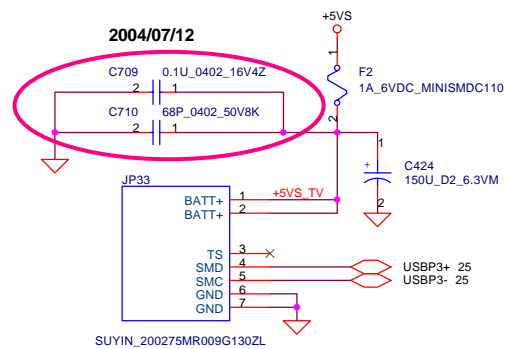


FIR Module

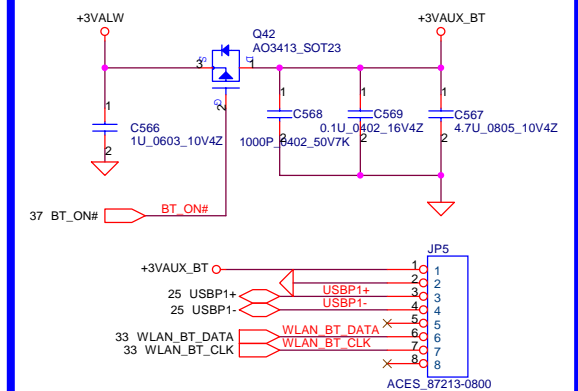
Vishay populate two 4.7 Ohm resistor
Agilent populate one 4.7 Ohm resistor



TV-Tuner Module Connector



Bluetooth Conn.



Compal Electronics, Inc.

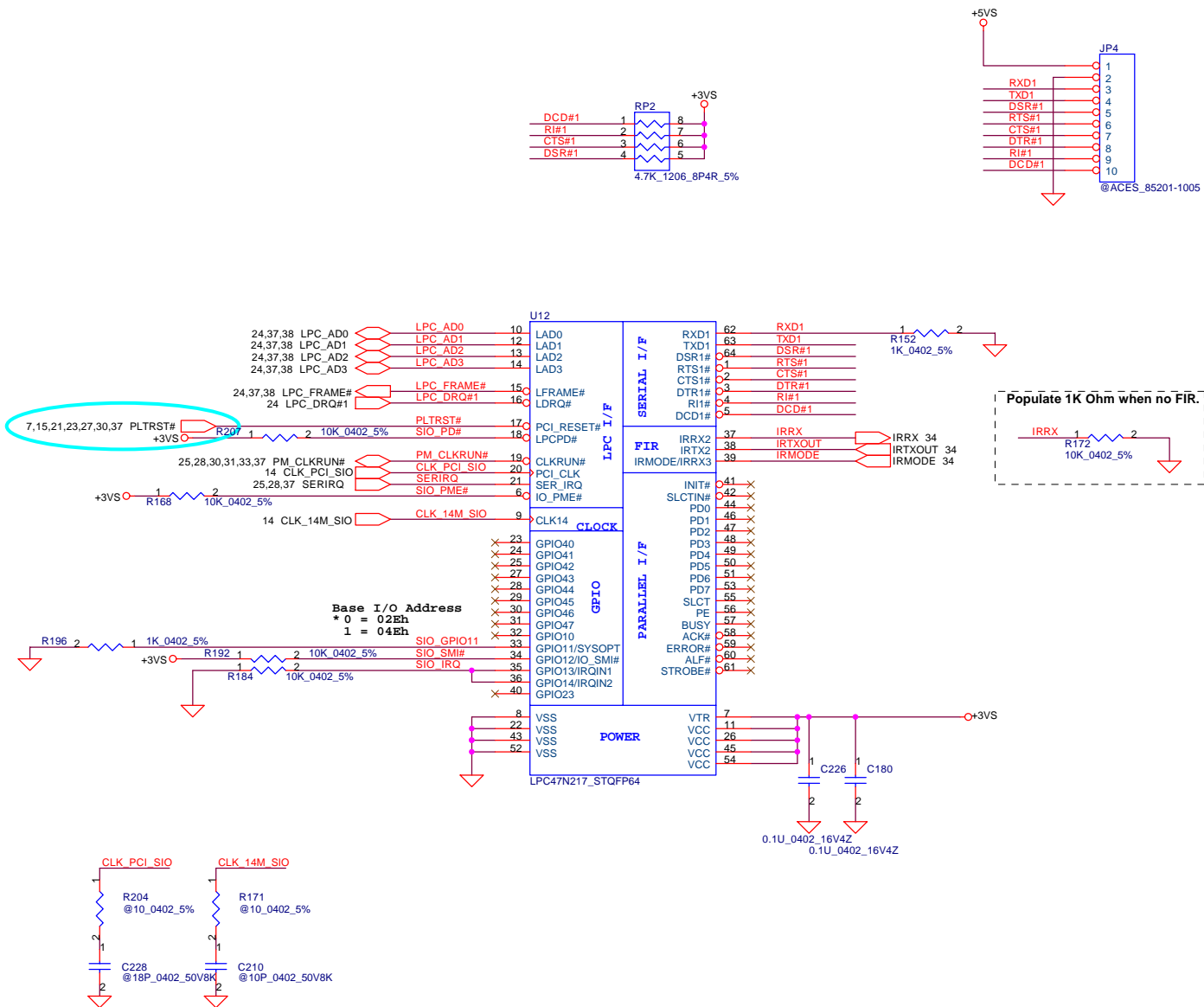
Title
USB / FIR / BT / TV

Size
Document Number
ECQ60 LA-2271

Date: Monday, August 09, 2004 Sheet 34 of 54

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SUPER I/O SMsC LPC47N217



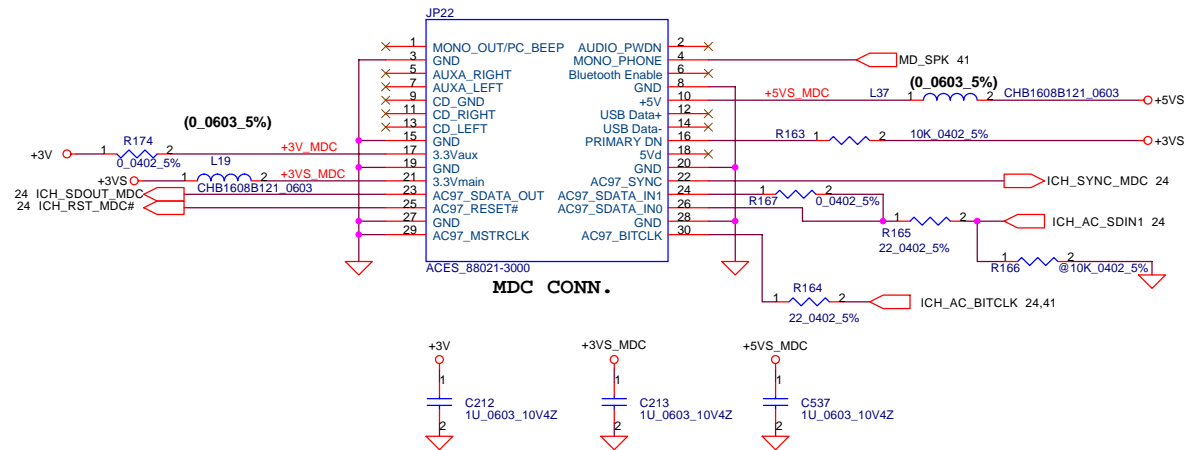
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Compal Electronics, Inc.

Title **SUPER I/O LPC47N217**

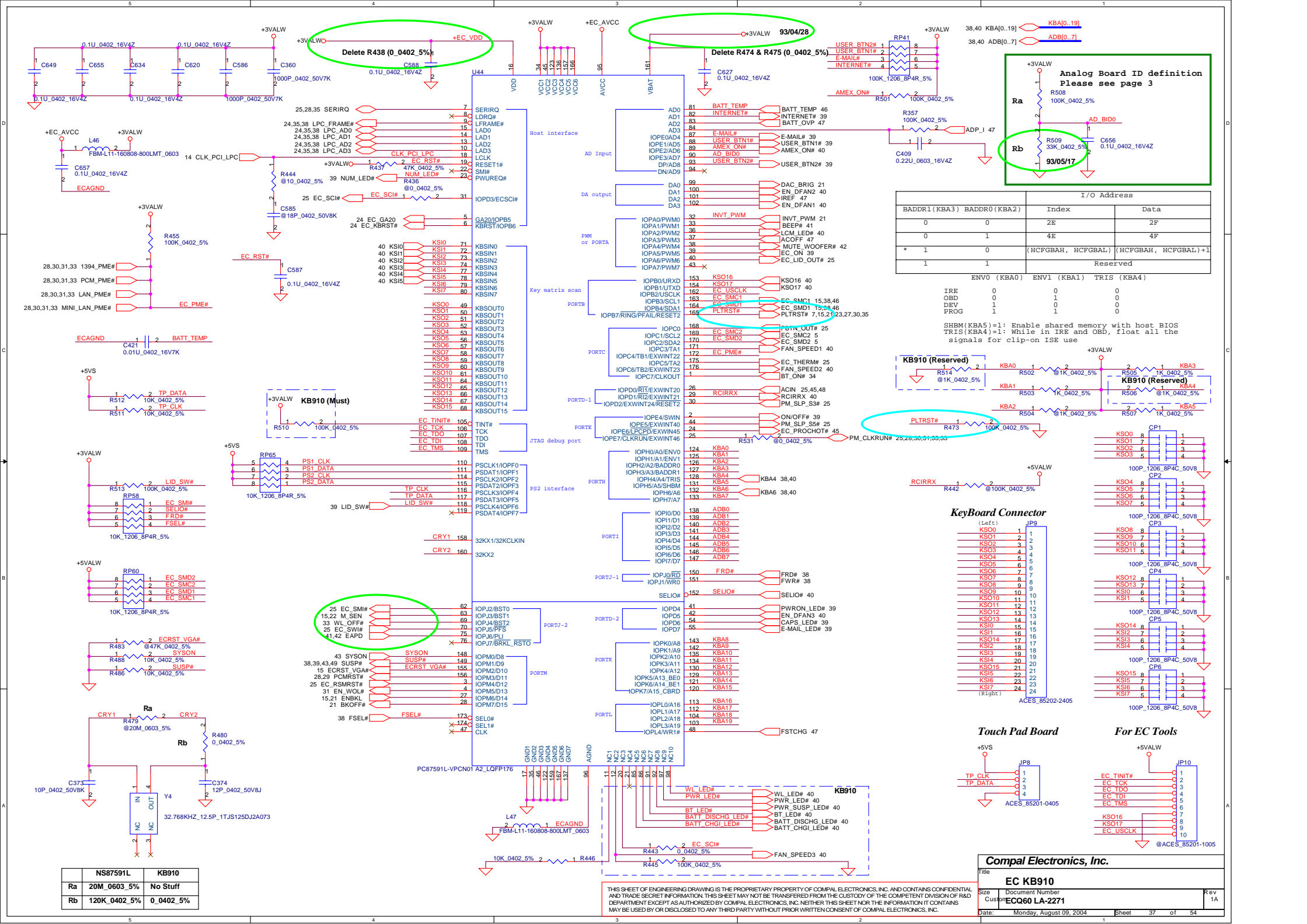
Size	Document Number	Rev
Custom	ECQ60 LA-2271	1A

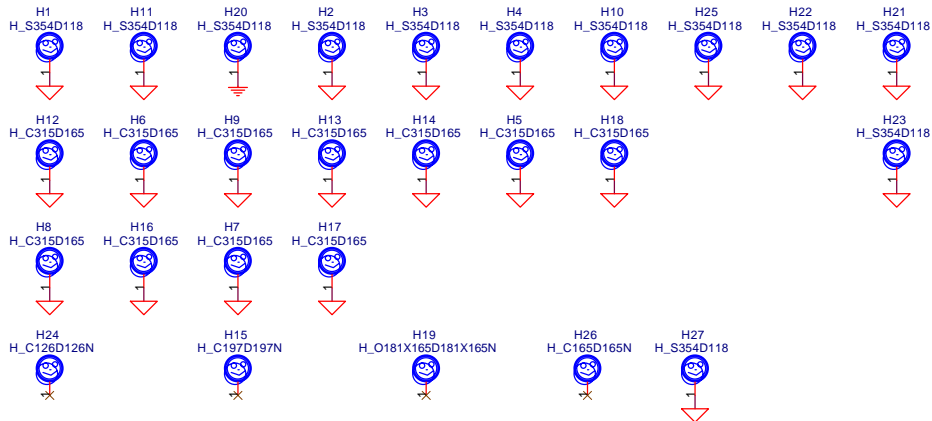
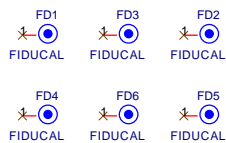
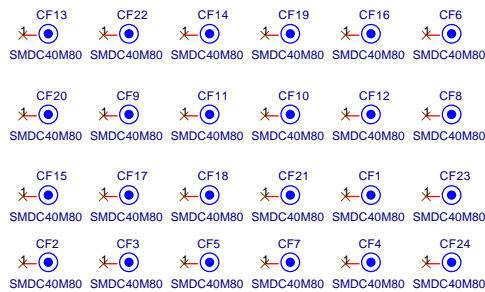
Date: Monday, August 09, 2004 Sheet 35 of 54



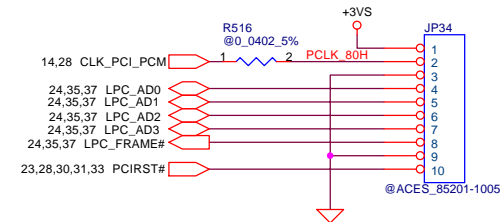
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Compal Electronics, Inc.			
Title			
PARALLEL PORT / MDC			
Size	Document Number	Rev	
Custom	ECQ60 LA-2271	1A	
Date:	Monday, August 09, 2004	Sheet	36 of 54

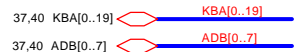




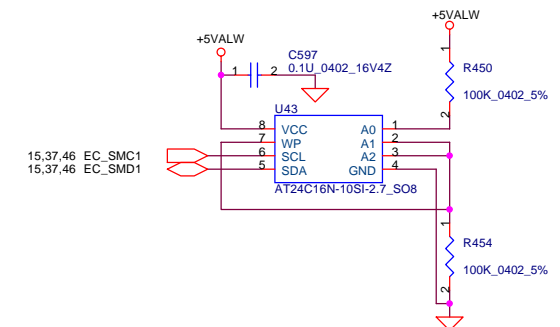
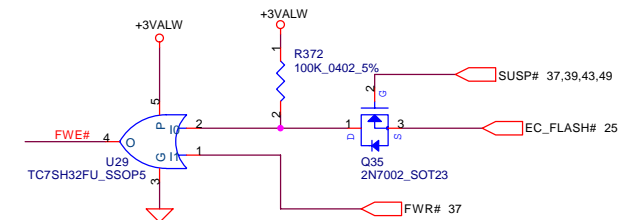
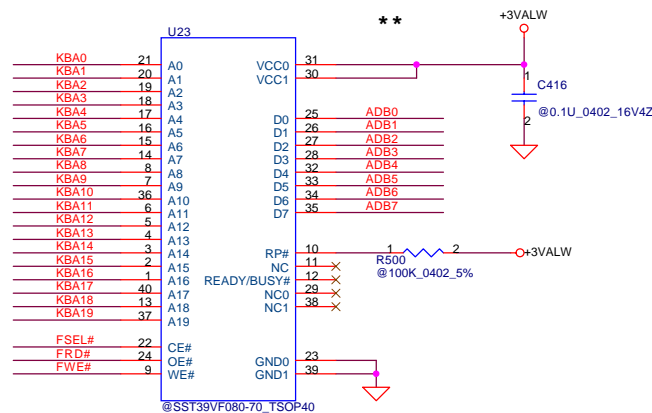
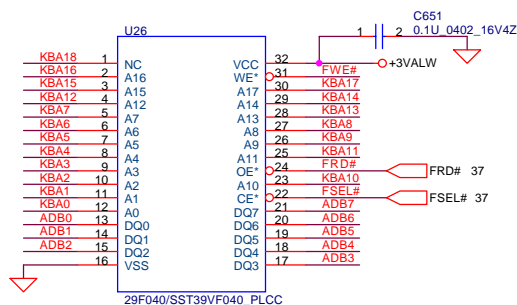
For LPC Debug Card



1MB Flash ROM



512KB Flash ROM



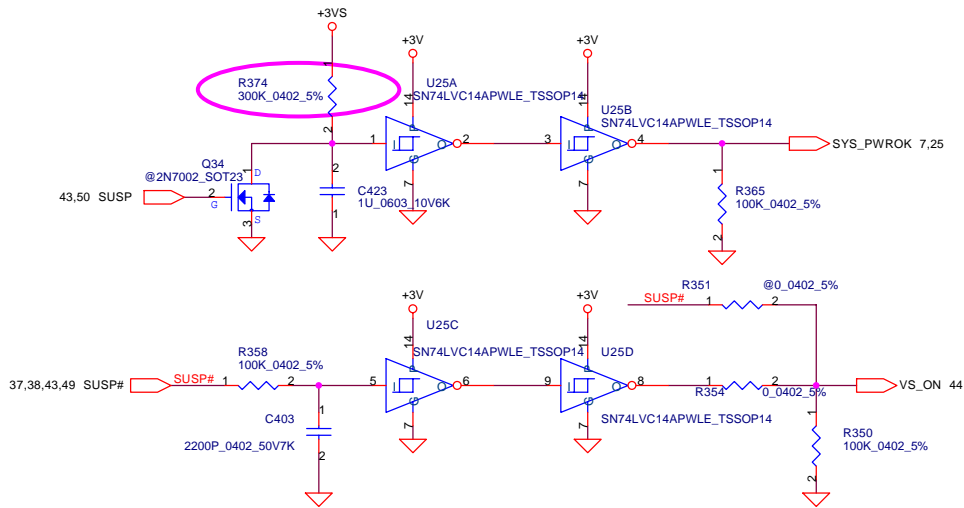
Compal Electronics, Inc.

BIOS & EXT. I/O PORT

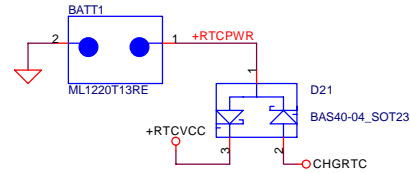
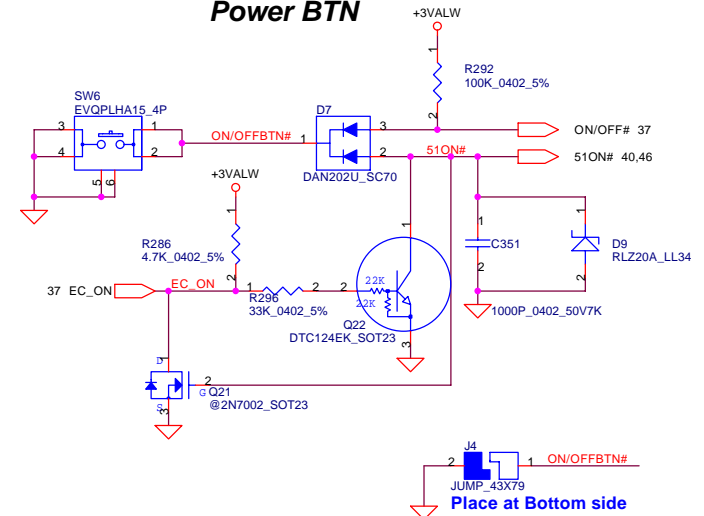
Title	Document Number	Rev
Customer	ECQ60 LA-2271	1A
Date	Monday, August 09, 2004	Sheet 38 of 54

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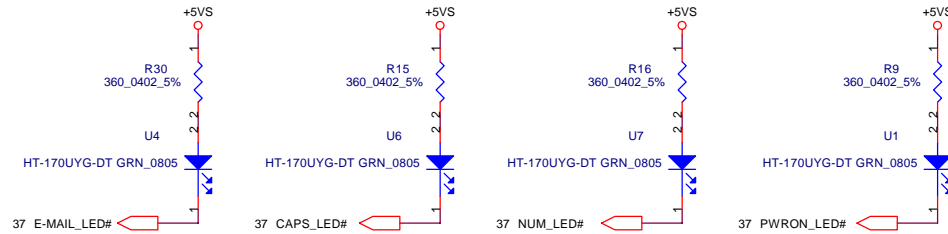
Power ON Circuit



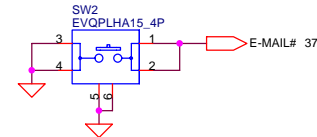
RTC Battery

**Power BTN**

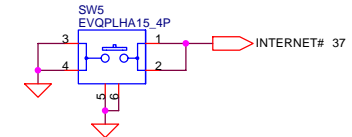
LED Indicator



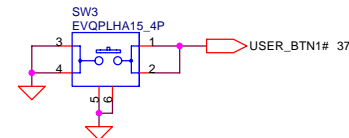
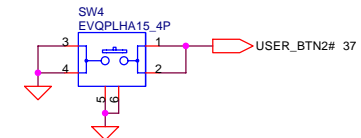
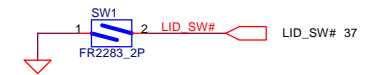
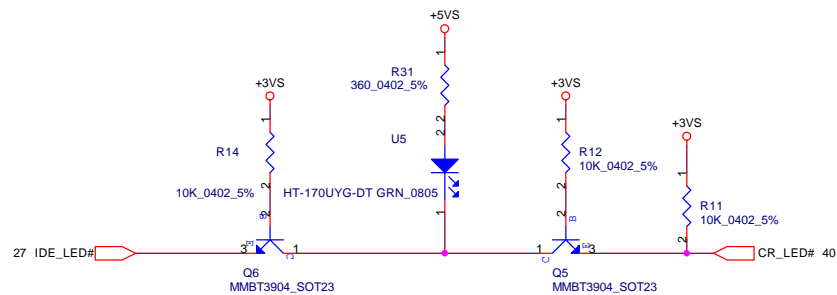
E-Mail_BTN



Internet_BTN



USER_BTN

**USER_BTN2*****LID_Switch***

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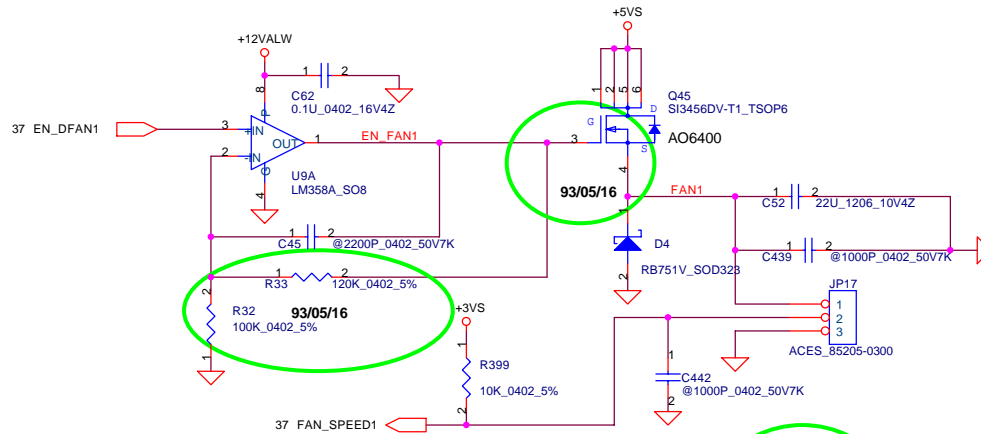
Compal Electronics, Inc.

Title	Power OK/Reset/RTC battery
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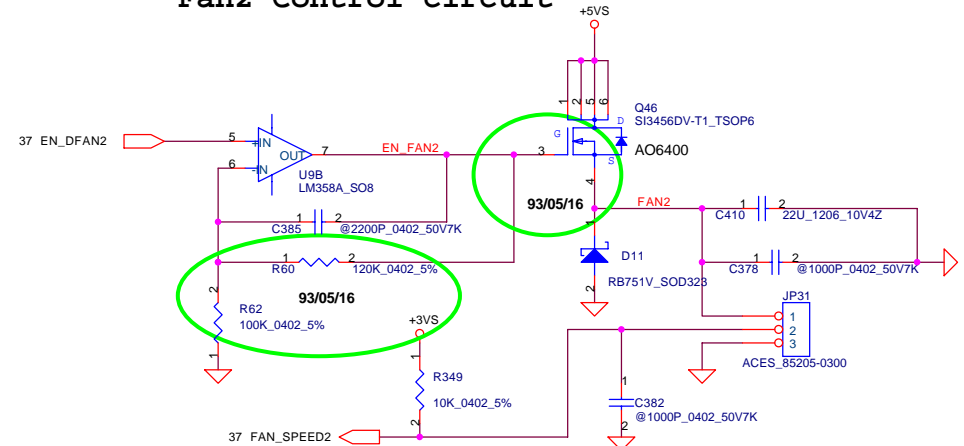
Size	Document Number	Rev
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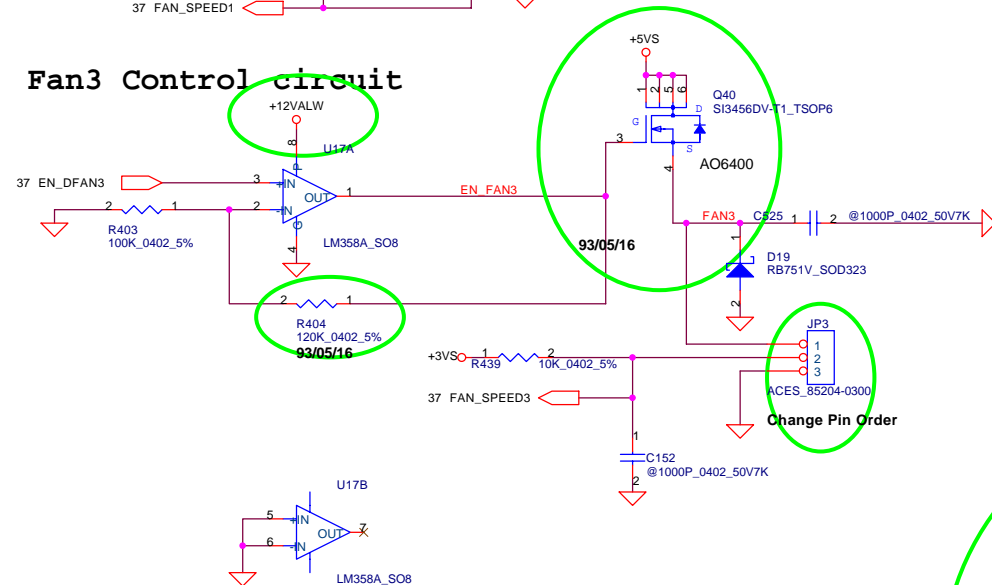
Fan1 Control circuit



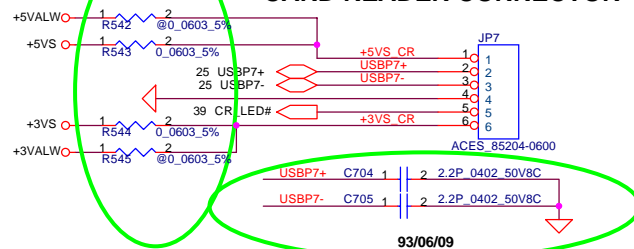
Fan2 Control circuit



Fan3 Control circuit



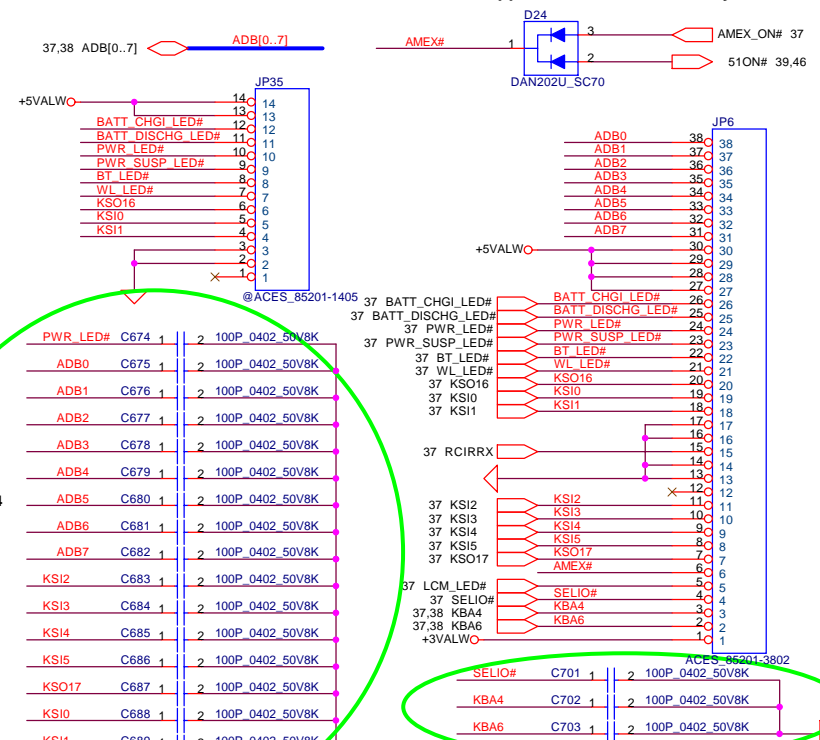
CARD READER CONNECTOR



	KSO16	KSO17
KSI0	BT_ENABLE	LEFT#
KSI1	WL_ENABLE	RIGHT#
KSI2	EC_PLAYBTN#	ENTER#
KSI3	EC_STOPBTN#	VOLUME_UP#
KSI4	EC_REVBTN#	VOLUME_DOWN#
KSI5	EC_FRDBTN#	

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AMEX# to support Instant On Media Play.

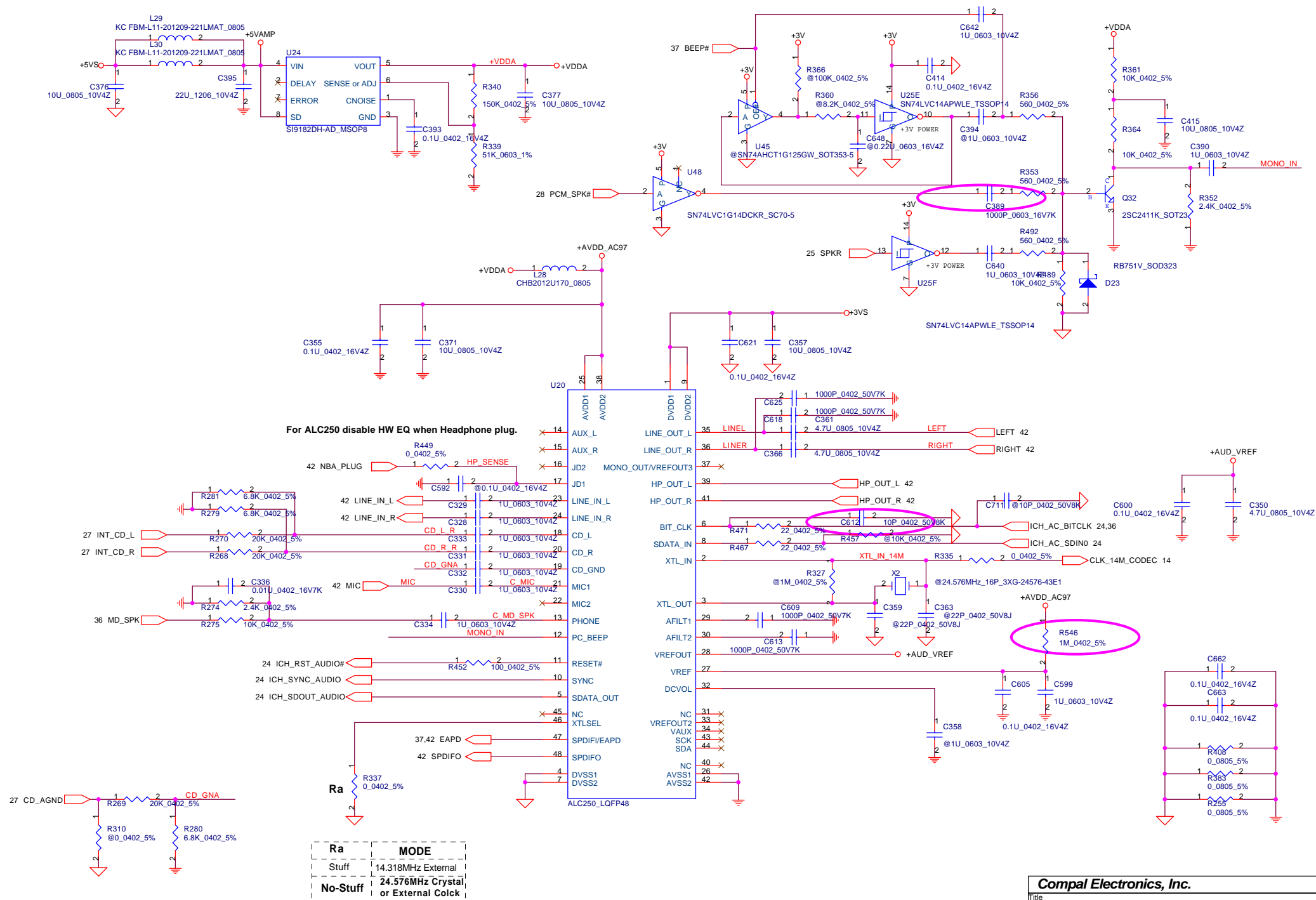


Compal Electronics, Inc.

Title	FAN Control Circuit
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AC97 Codec



Compal Electronics, Inc.

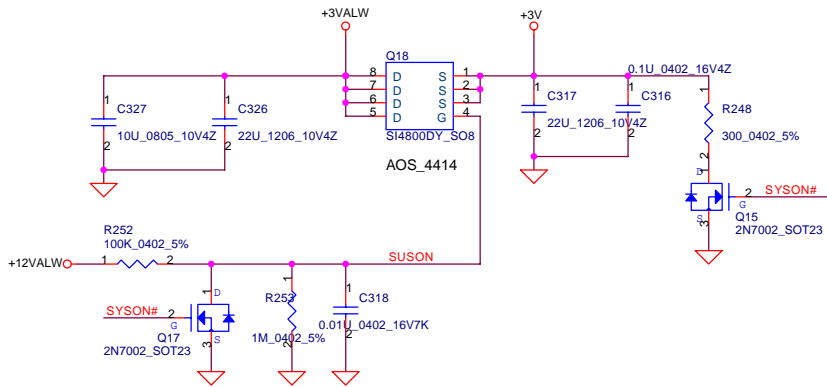
Title	AC97 Codec Realtek ALC250
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Size	Document Number	Rev
Custom	ECQ60 LA-2271	1A

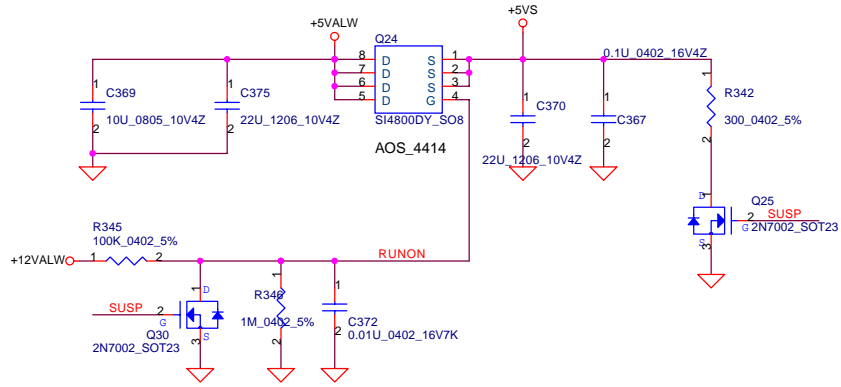
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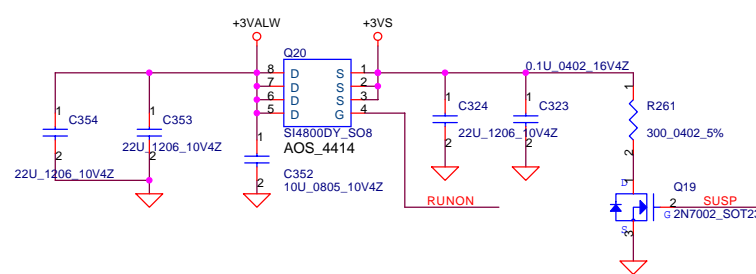
+3VALW to +3V Transfer



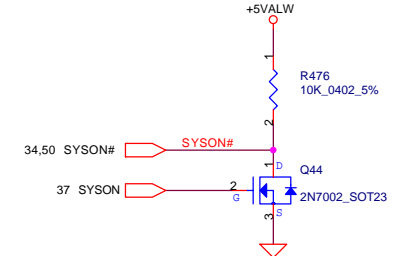
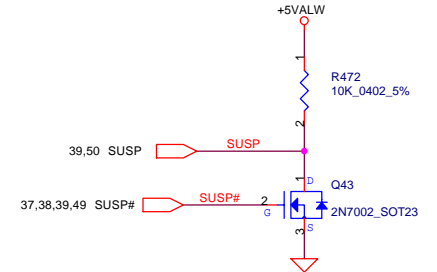
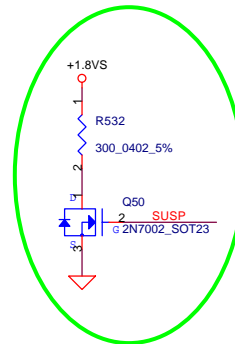
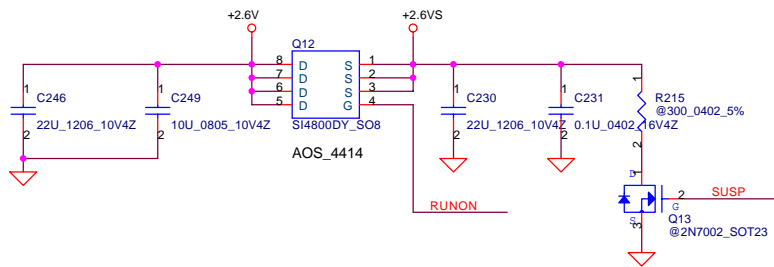
+5VALW to +5VS Transfer



+3VALW to +3VS Transfer



+2.6V to +2.6VS Transfer

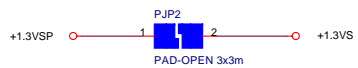


Compal Electronics, Inc.

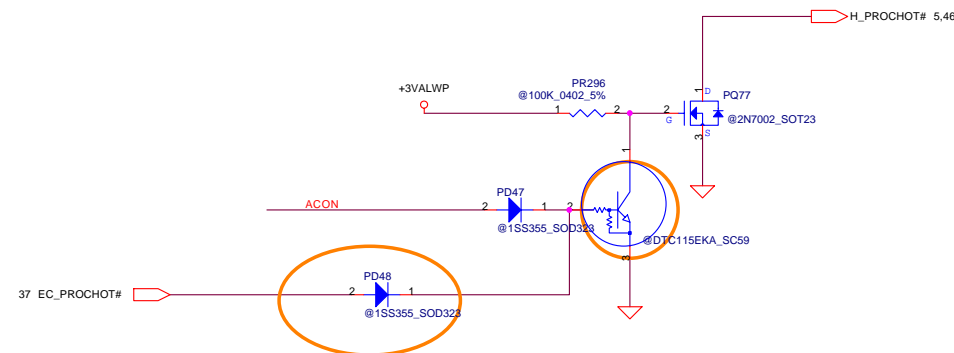
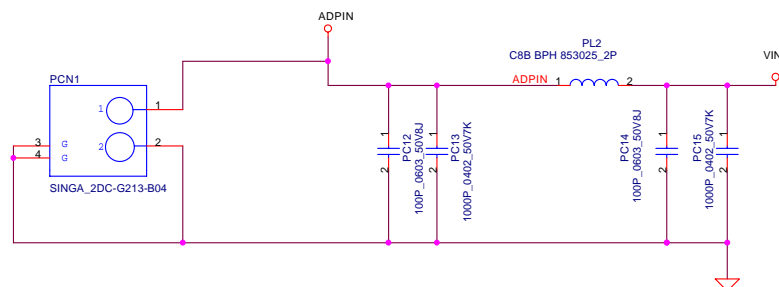
DC/DC Circuit Interface

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Customer ECQ60 LA-2271
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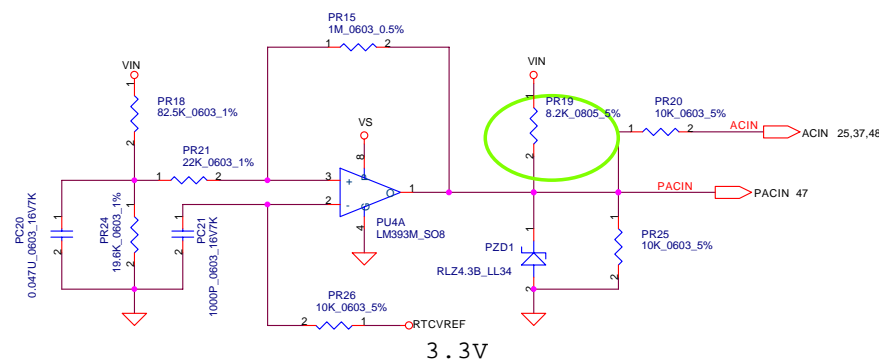
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Compal Electronics, Inc.			
Title			
12V(FAN)& 1.3V(DDR Temination)			
Size	Document Number		Rev
Customer	ECQ60 1A-2271		1A
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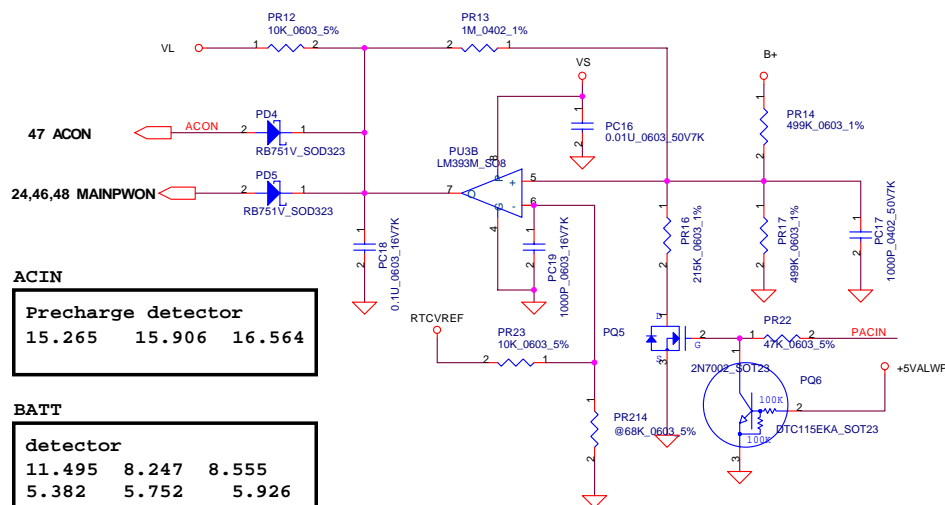


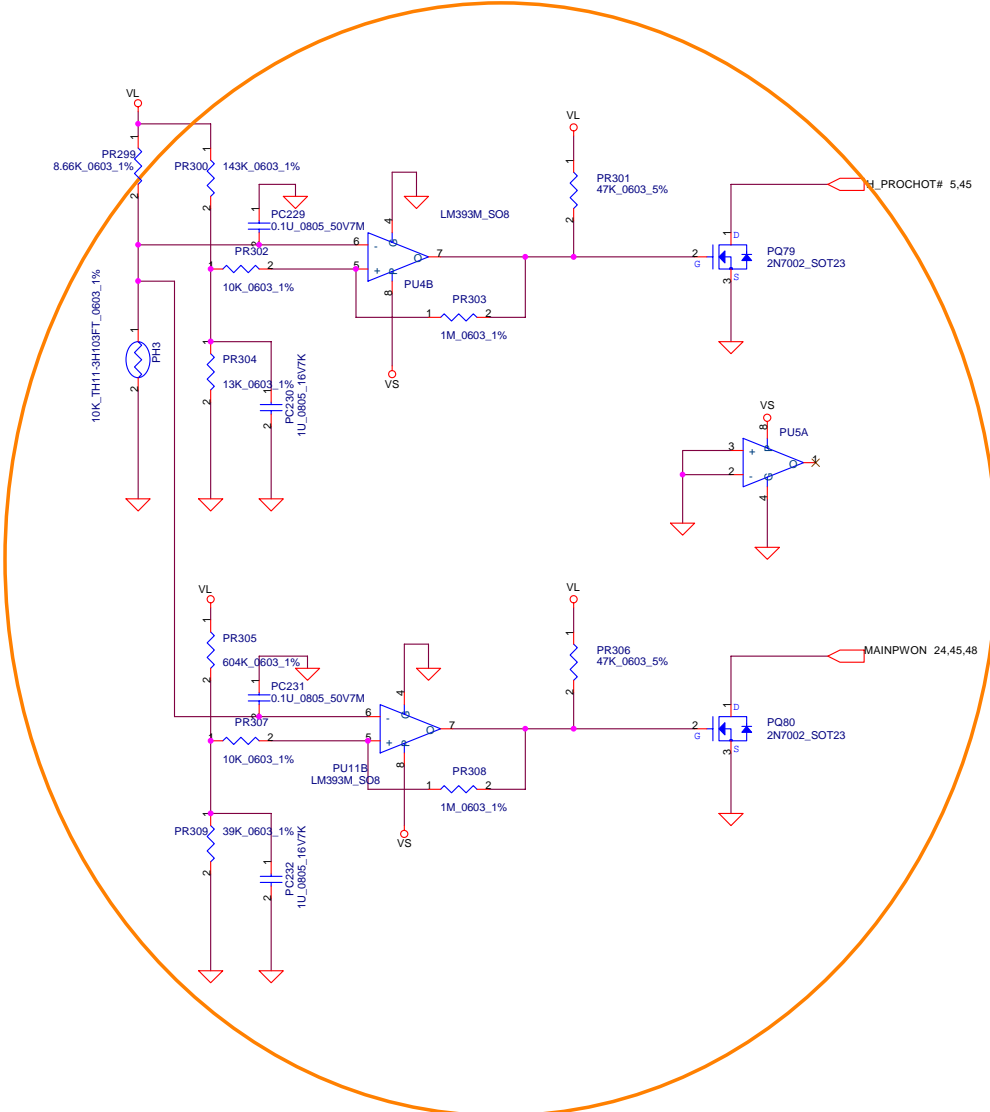
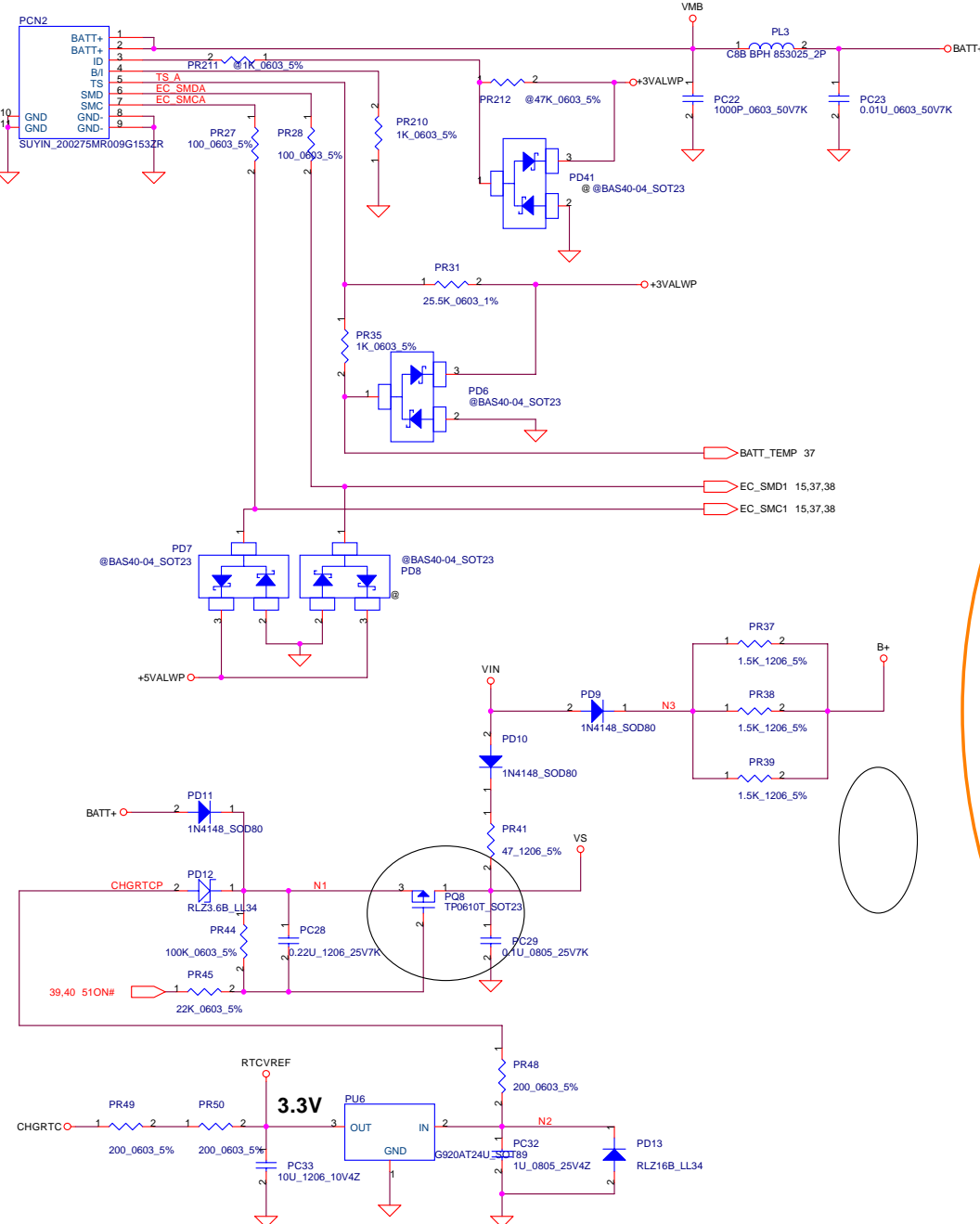
Vin Detector		
17.841	18.234	17.449
17.210	17.597	16.813

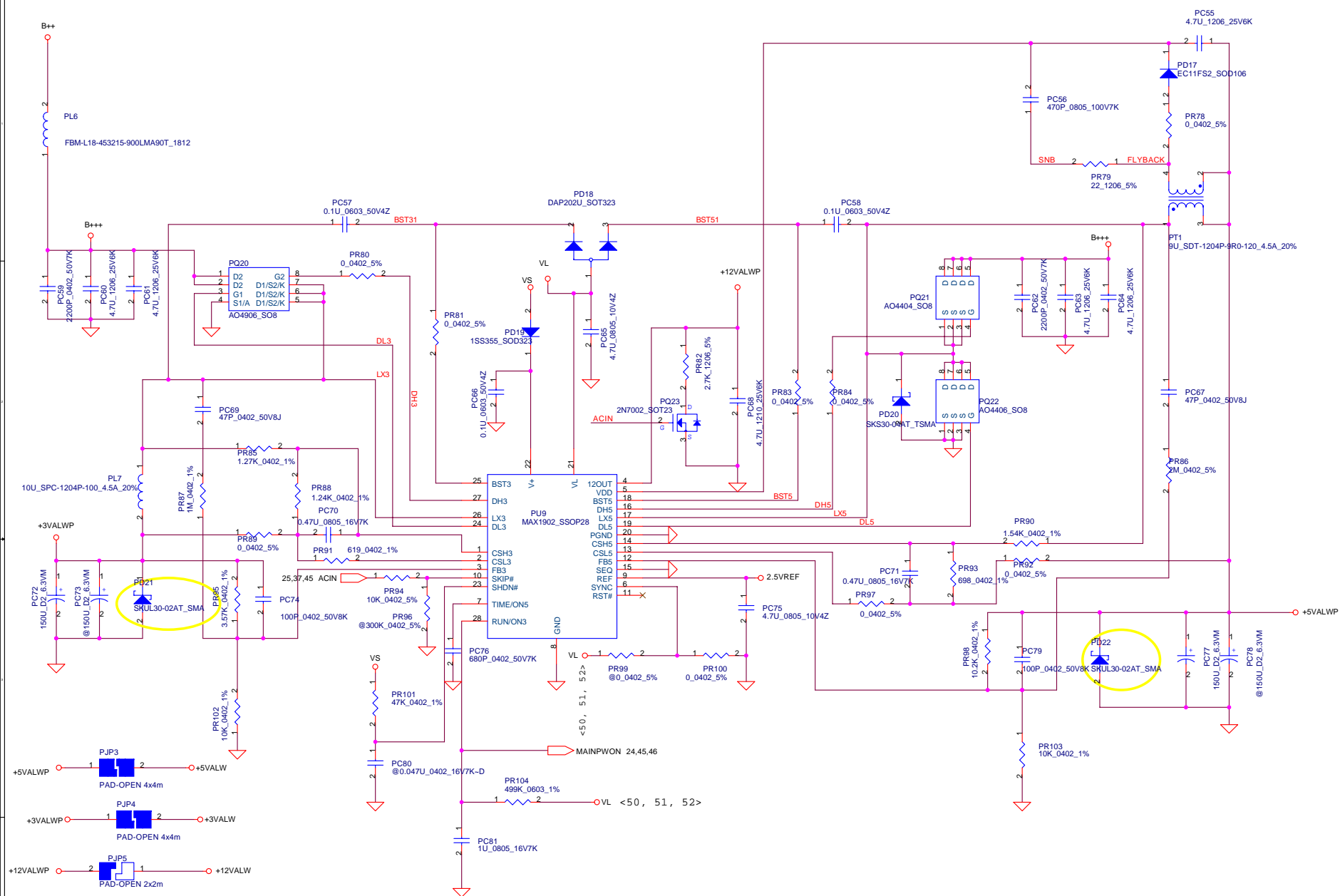


Precharge detector		
15.265	15.906	16.564

BATT detector		
11.495	8.247	8.555
5.382	5.752	5.926







Compal Electronics, Inc.

5V/3.3V/12V

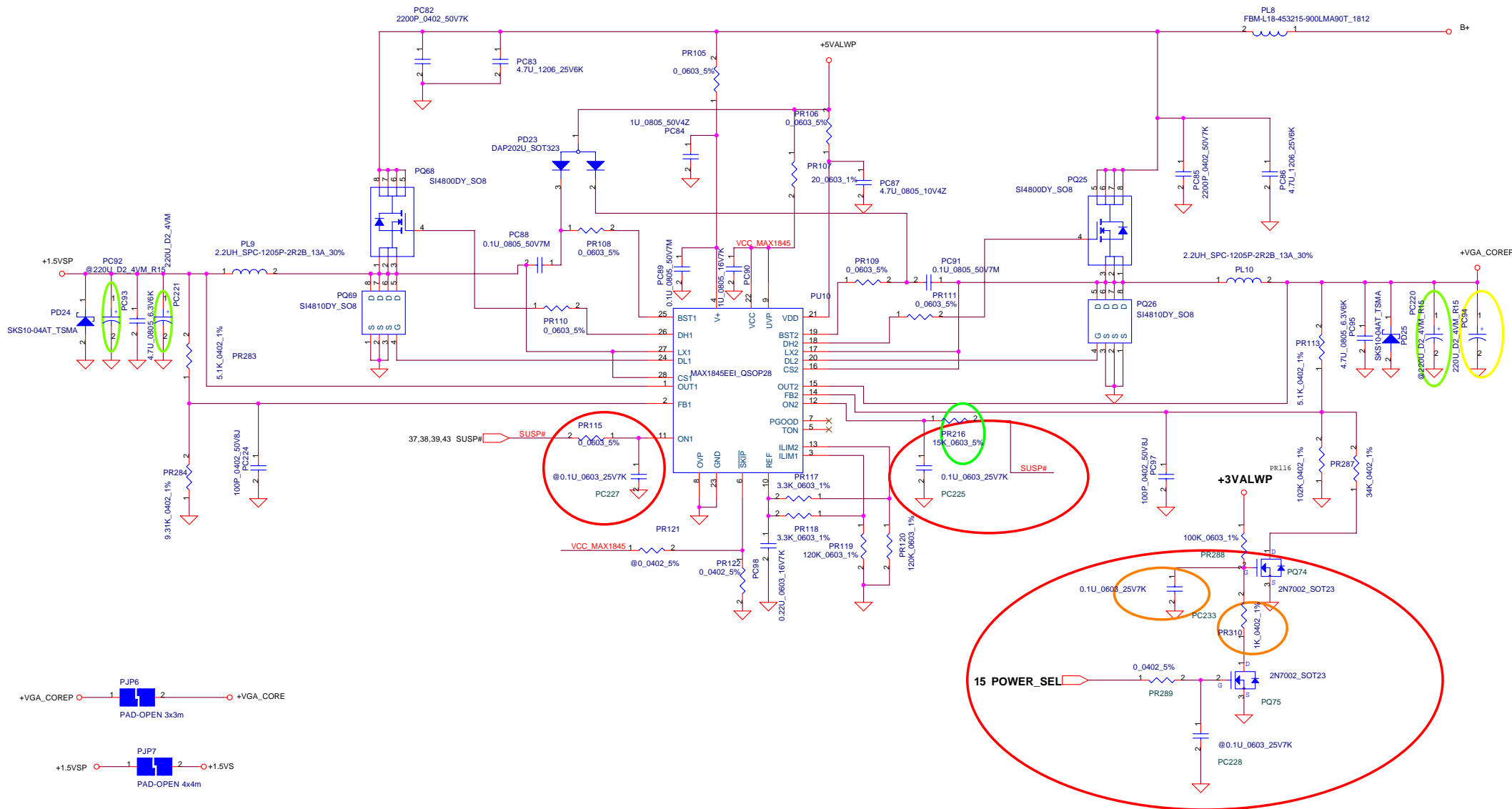
Size Document Number
Customer ECQ60 LA-2271

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Rev
1A

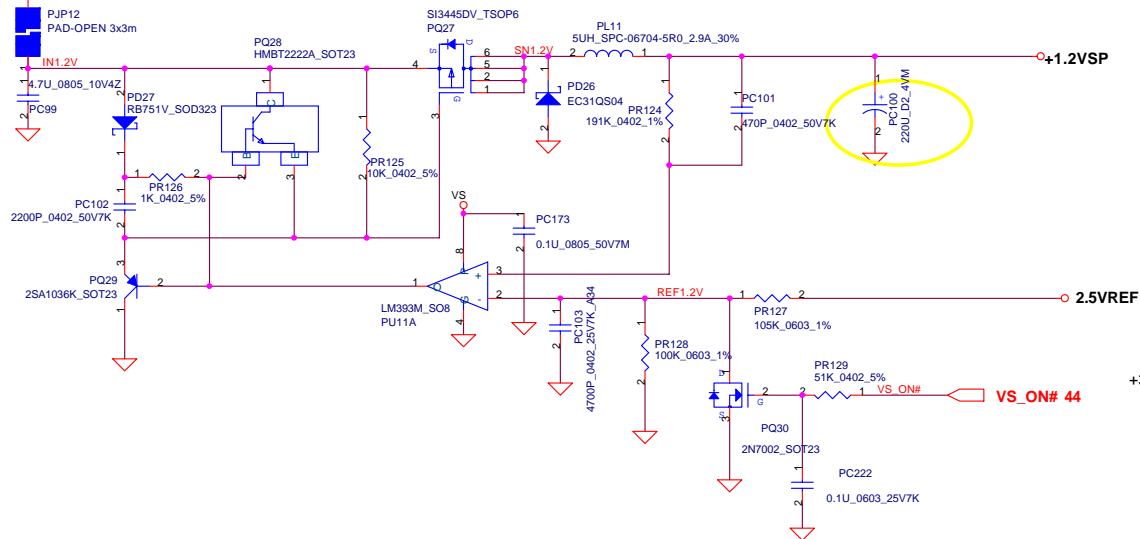
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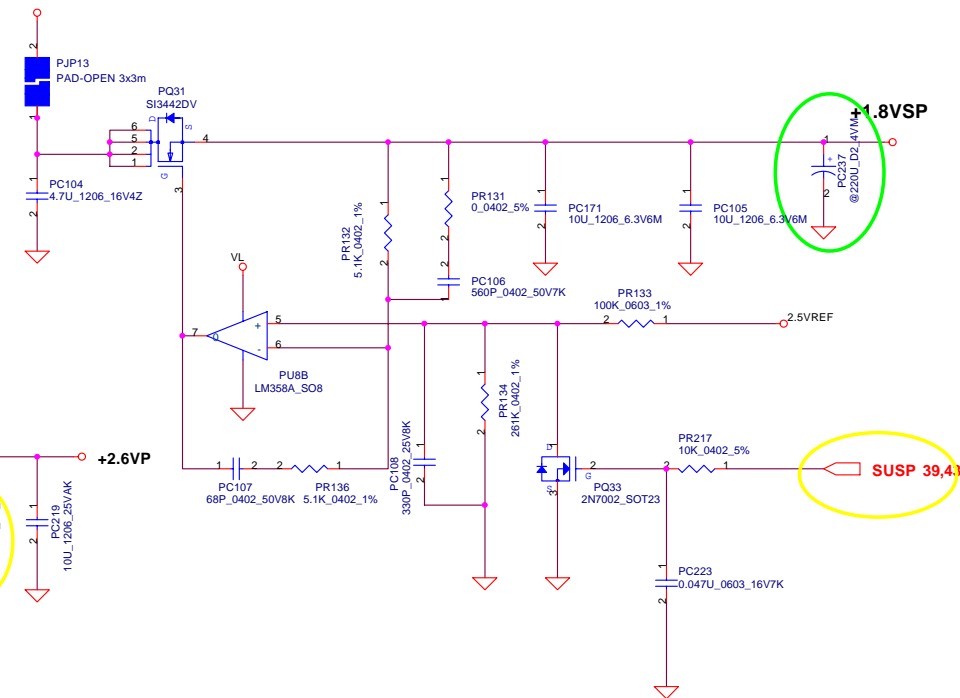
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Compal Electronics, Inc.			
Title			
VGA_CORE & 1.5VS			
Size	Document Number	Rev	
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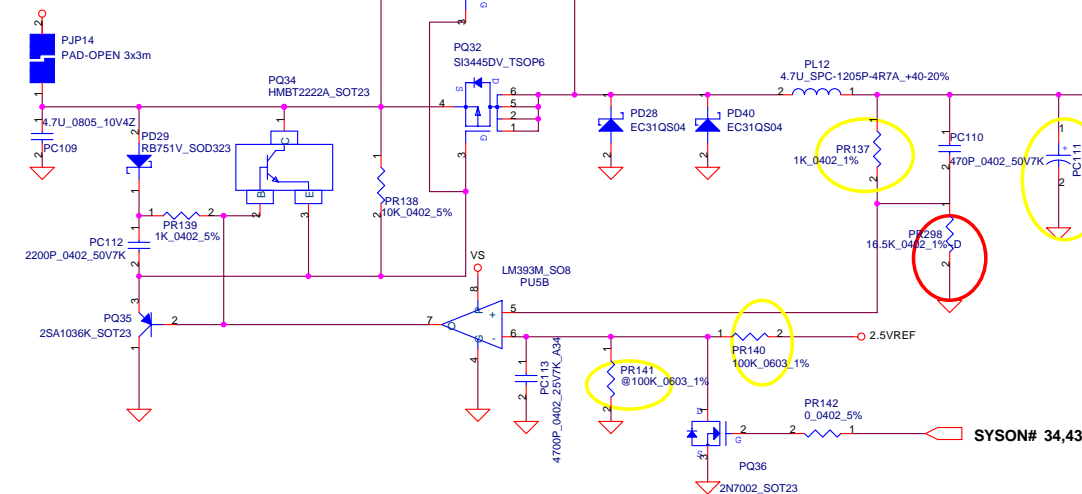
+3VALWP

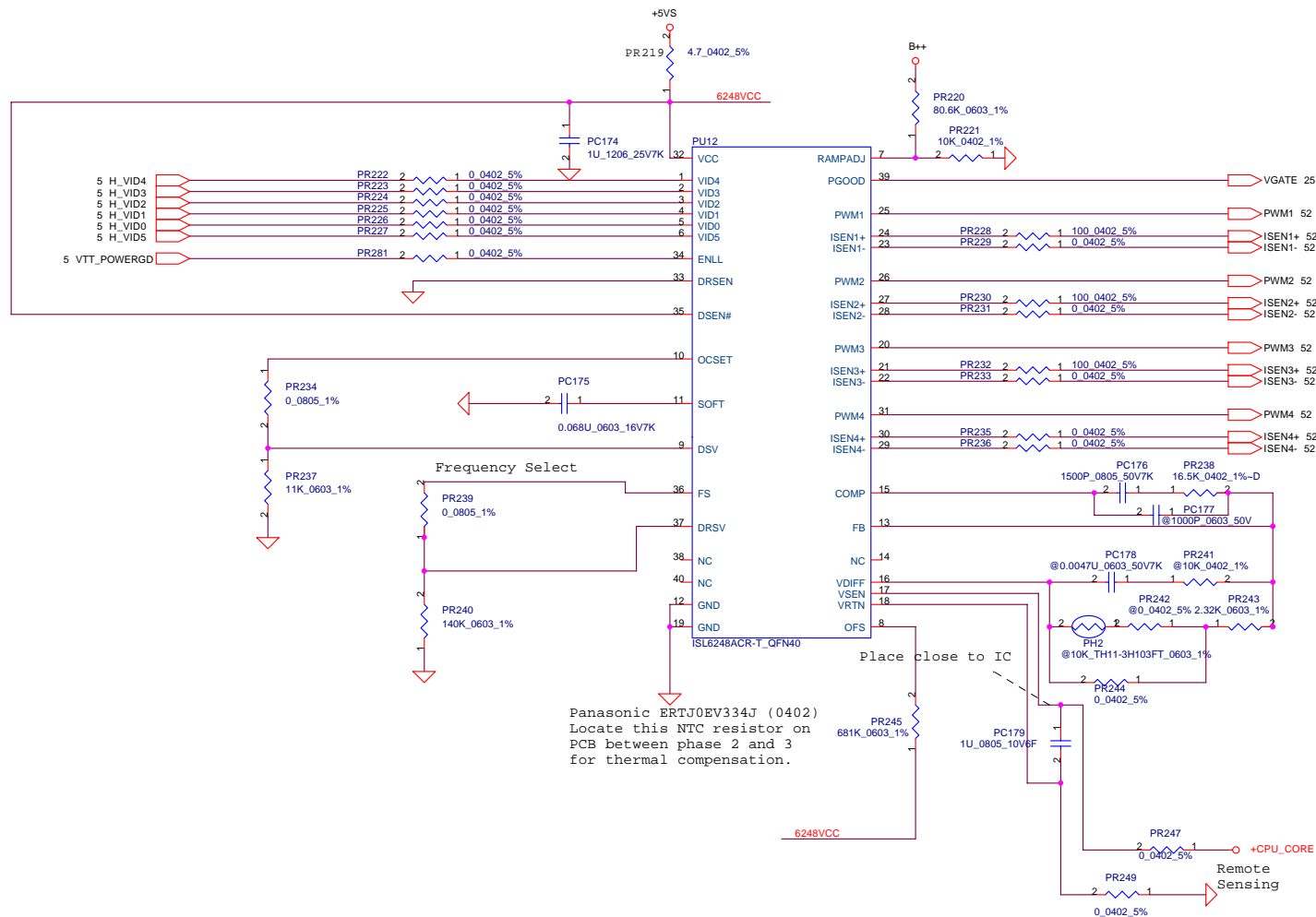


+3VALW



+5VALWP





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Compal Electronics, Inc.			
Title			
CPU_CORE_Controller			
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HW PIR

B Test

- Page 5Add R518, R519, C658, Q48, Q47, R517 for VTT_POWERGD timing
- Page 7Add C664
- Page 8Change Material R149, R151 to 80.6_0402_1%
- Page 9Add C659, C660, C661 for EMI request
- Page 14Change R347, R348 from 10K_0402_5% to 4.7K_0402_5%
- Page15Add C665, R210, R201, R411, R189
Change R414 to 71.5_0402_1%
R198, R177 to 1K_0402_1%

Delete R218, R219, R216,R209, R200
- Page17Delete D6
Change R45 from 16K_0402_1% to 10.7K_0603_1% for 1.2V +PCIE_1.2VS
Change L15, L16 from 0_0603_5% to CHB1608U301
- Page23Add R526 & C666
- Page26Delete D22, D8
Change R481, R299 from 1K_0402_5% to 10_0402_5%
- Page31Delete R81
- Page38Modify scroll hole pad size and add H27
- Page41Add C662, C663, R408, R383 for EMI request
- Page42Add R382, R380 for mix left & right channel
Change R370 from 100K_0402_5% to 47K_0402_5%
Change C422. C426 from 0.1U_0402_16V4Z to 0.047U_0402_16V7K
Reserved C667, C668, C669, C670 for EMI request
- B3 Test

Page 9Delete R395, C435, Q38, R26, Q39, R25, C29, U8, C34, R34, R43
Add R533
Change L34, R396, R48, R398, R53, R397 from SM010014500 to SD0020000T8

Page 17Change R45 to 16.9K_0603_1%

Page 19Add R40, R41, C30, R37, R38, C31 For VRAM Clock Termination

Page 20Add R114, R117, C95, R161, R158, C190 For VRAM Clock Termination

Page 21Change C320, C322 from 18P_0402_50V7K to 12P_0402_50V8J
Add R528, D26

Page 22Add D25 for EC_LID_OUT# to prevent power leakage
Add U47 to and SLP_S4# & SLP_S5#
Delete RP63, RP64 / Add R534, R535, R536, R537 for USB_OC# pull high

Page 23Change R299 from 10_0402_5% to 1K_0402_5%
Add D22, D8

Page 29Change C310 to 1U_0805_25V4Z

Page 34Change USB Power Switch to G528, (U31, U37)
Add C691, C692, C693, C694, C695, C696, C697, C698, C699, C700, C672, C673

Page 37Delete R438 R474, R475, R509,

Page 40Change R33, R60, R404 to 120K_0402_5%
Change R32, R62 to 100K_0402_5%
Change Q40 to AO6400 for 5V FAN
Add R543, R544 for Card Reader Power
Add C674, C675, C676, C677, C678,C679, C680, 681, C682, C683, C684, C685, C686
C687, C688, C689, C690, C701, C702, C703, C704, C705

Page 41Add U48 SN74LVC1G14DCKR_SC70-5

Page 43Add R532, Q50 for +1.8VS Power Down discharge

C Test

- Page 41Change C389 from 1U_0603_10V4Z to 1000P_0603_16V7K
Add C612 10P_0402_50V8K for EMI.
Add R546 1M_0402_5% for ALC250 issue.
- Page 42Change R363 from 10K_0402_5% to 15K_0402_5% to reduce woofer volume.
- Page 34Add C709, C710 for EMI.
- Pre-MP

Page 21Delete R384 & add U30 to prevent ENVDD output high pulse before reset
Change C4 from 100P_0402_50V7K to 0.1U_0402_16V4Z to delay +LCDVDD turn on timing.

Page 42Change C411 from 0.047U_0402_16V7K to 0.01U_0402_16V7K for ALC250 issue.

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Title			
HW PIR			
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Item	Reason for change	PG#	Modify List	Date	B.Ver#
1	Update 12VSP(FAN) SUSP Function	44	1. Change PR8 to 10K from 1K 2. Change PR218 to 100K from 0 ohm 3. Add PQ70 (2N7002) 4. Add PR282 0 ohm 5. Update design circuit for 2.5VREF and SUSP# signal	2004.04.22	
	Delete VTT_Powergood control module	44	1. Delete PR213 1K 2. Delete PC170 0.1U		
3	For common parts design				
4	delete unnecessary 0ohm resister		delete PR247,PR19,PR109,PR113,PR115,PR116,PR117,PR118, PR107,PR125,PR127,PR132,PR135,PR137,PR254,PR79, PR260,PR292,PR119		
5	adjust Vin detector	34	change PR170 from 73.2K_0603_1% to 22K_0603_1% change PR172 from 40.2K_0603_1% to 36K_0603_1% change PR167 from 84.5K_0603_1% to 82.5K_0603_1%		
6	adjust PACIN voltage from 3.3V to 3.2V	34	change PR168 from 8.2K_0805_5% to 10K_0805_1%		
7	EMI test failure	40	change PR105 and PR140 from 0_0603_5% to 2.2_0603_5%		
8	PC60 rate voltage not enough	36	change PC60 from 0.047_0603_16V to 0.047U_0603_25V		
9	Vin detector issue	34	change PR172 form 36K to 34.8K		

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Compal Electronics, Inc.			
Title PWR PIR			
Size	Document Number		Rev
Customer	ECQ60 LA-2271		1A
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