

[illegible]

CLK-GEN
ICS 952801

Page 2

HOST 200MHz
ZCLK 133MHz
AGP 66MHz
PCI 33MHz
USB 48MHz
REF 14.318MHz

3V/5V

Page 22

3V_ALWAYS
5VPCU
3V_S5
1.8V_S5
3VSUS
5VSUS
+3V
+5V
15V

2.5V/1.25V

Page 23

2.5VSUS
1.25VREF
+2.5V
DDR_VTT

**1.2V/1.5V
1.8V**

Page 24

+1.2V_HT
+1.5V
+1.8V

CPU CORE

Page 25

VCC_CORE

**BATTERY
CHARGER**

Page 26

DDR SO-DIMM

Page 5

DDR 333

CPU
AMD Athlon64
SMT uPGA754

Page 3,4

HyperTransport
16x16
1600MT/s

Thermal
Thermal sensor & Fan

ZL5
Block Diagram

NB
SIS M760GX
(698 PIN BGA)

Page 6,7,8

MuTIOL(1GB/s)

HDD
Primary Master

Page 19

ATA 66/100

ODD
Secondary Master

Page 19

ATA 66/100

USB
3x connector

Page 15

USB 2.0

MINI USB
(BLUETOOTH)

Page 15

SB
SIS 963L
(371 PIN BGA)

Page 11,12,13

Int. Keyboard
87-Key

Page 21

Touch Pad
6-Button

Page 21

EC
NS PC97551

Page 20

LPC

PCI 2.2 133MB/s (33MHZ)

REQ1#, GNT1#
INTD# IDSEL : AD17

CardBus
TI PCI1410

Page 14

LAN PHY
RTL8201CP

Page 16

MII

AC'97 2.1

AC97 Codec
ALC203

Page 17

BIOS

Page 20

REQ0#, GNT0#
INTB#, INTC# IDSEL : AD22

Mini PCI
WLAN 802.11A/G

Page 15

Antenna

PC Card
1x type-I/II

Transformer

Page 16

MDC1.5
56K MODEM

Page 17

RJ-45

Page 16

RJ-11

Page 16

MIC-In Jack

Line-In Jack

AMP
MAX9755

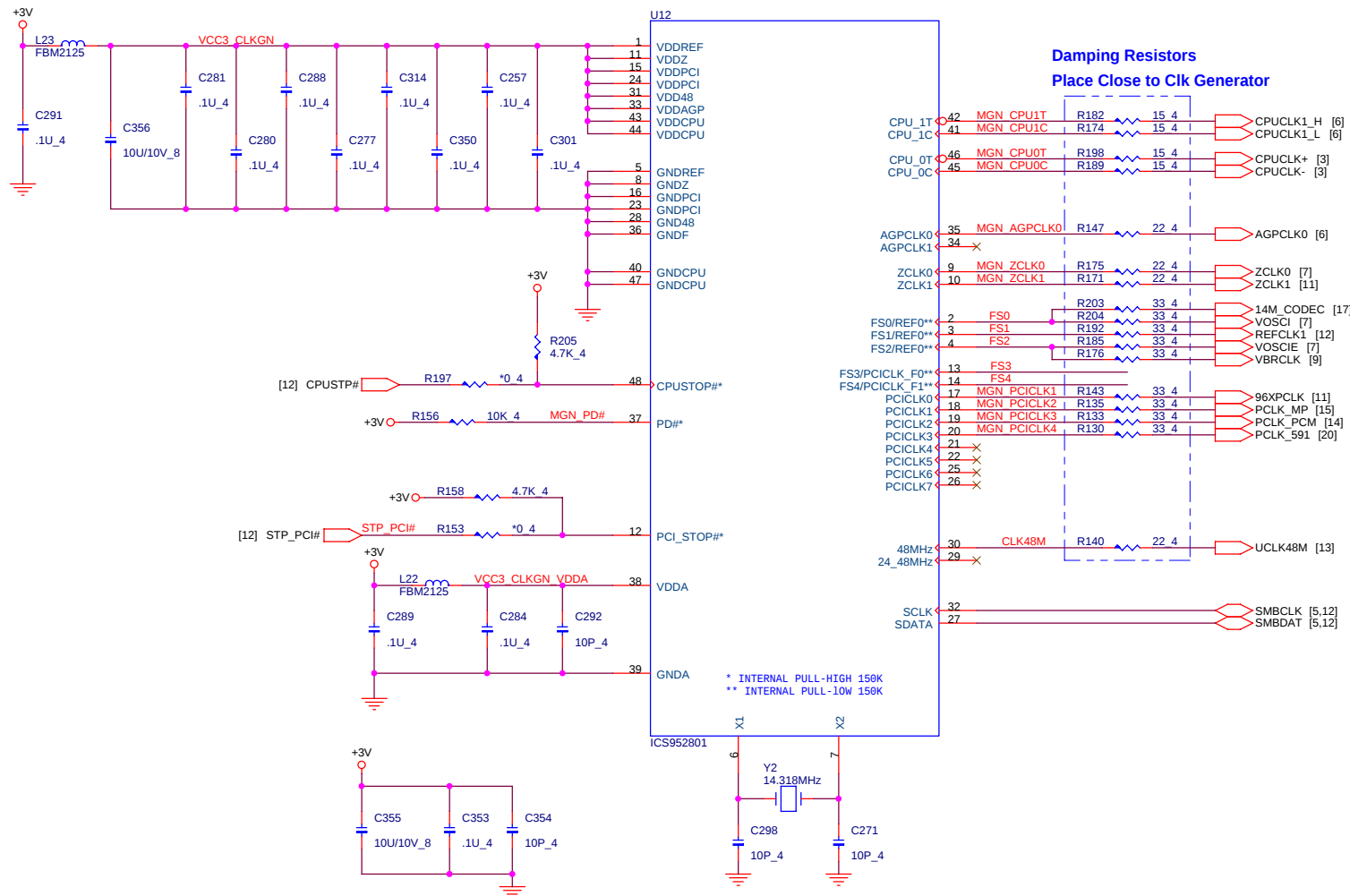
Page 18

HP-Out Jack

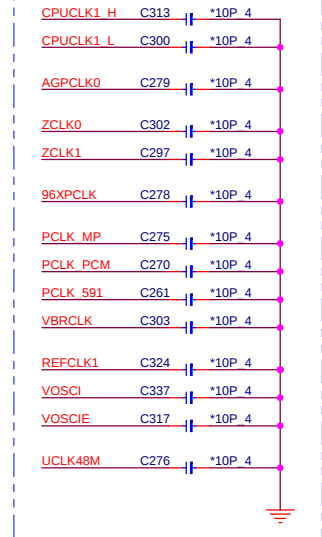
Int. Speaker



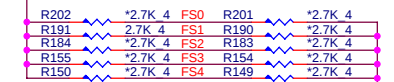
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By-Pass Capacitors Place Close to Clock Generator



Frequency Selection



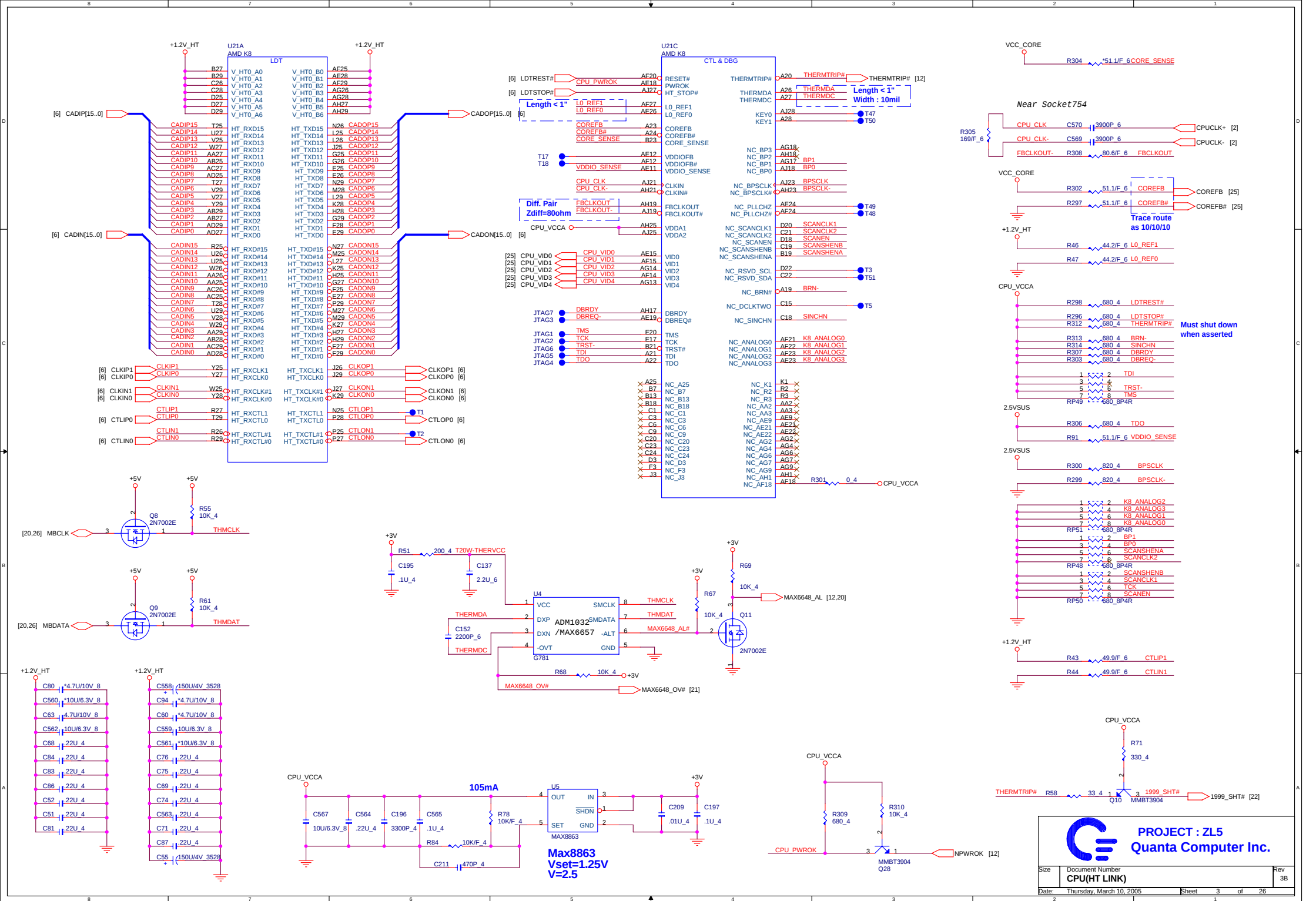
CLK Table for SiS M760 (Not For ICS ICS-952801)

SiS 755/M760 CLOCK									
(FS4)	(FS3)	(FS2)	(FS1)	(FS0)	CPU (MHz)	ZCLK (MHz)	AGPCLK (MHz)	PCI (MHz)	VCO (MHz)
0	0	0	0	0	200	66.66	66.66	33.33	400
0	0	0	0	1	200	100	66.66	33.33	400
0	0	0	1	0	200	133.33	66.66	33.33	400
0	0	0	1	1	200	166.66	66.66	33.33	1000
0	0	1	0	0	233	66.66	66.66	33.33	466
0	0	1	0	1	233	93.2	66.66	33.33	466
0	0	1	1	0	233	133.28	66.66	33.33	933
0	0	1	1	1	233	139.8	69.9	33.33	699
0	1	0	0	0	266	66.66	66.66	33.33	266
0	1	0	0	1	266	106.4	66.5	33.33	532
0	1	0	1	0	266	133	66.5	33.33	532
0	1	0	1	1	266	159.6	66.5	33.33	798
0	1	1	0	0	200	133	50	33.33	400
0	1	1	0	1	200	114	66.66	33.33	800
0	1	1	1	0	200	142	66.66	33.33	1000
0	1	1	1	1	200	160	66.66	33.33	800

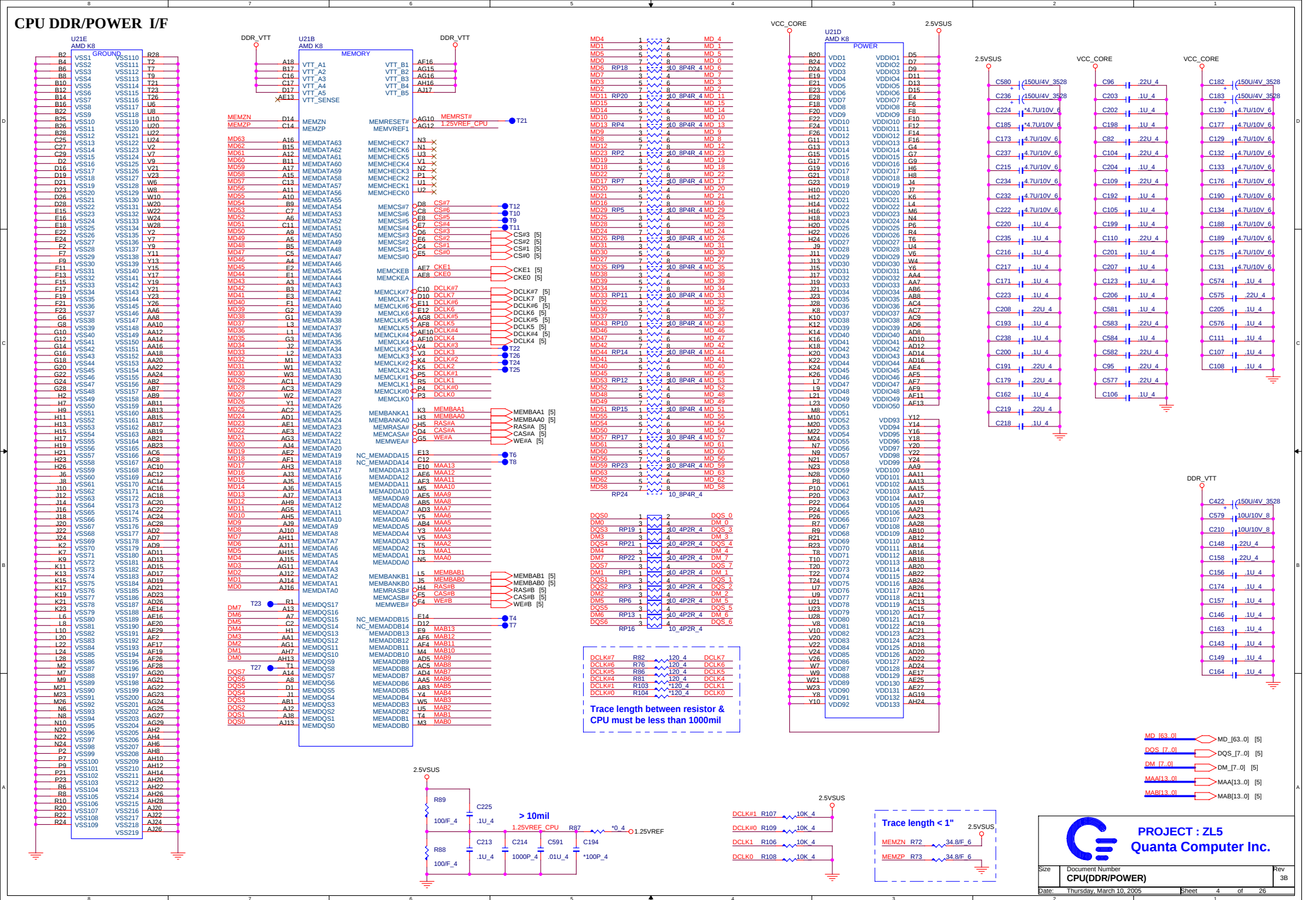
SiS 755/M760 CLOCK									
(FS4)	(FS3)	(FS2)	(FS1)	(FS0)	CPU (MHz)	ZCLK (MHz)	AGPCLK (MHz)	PCI (MHz)	
1	0	0	0	0	180	135	67.5	33.75	
1	0	0	0	1	185	132.14	66.07	33.04	
1	0	0	1	0	190	135.71	67.08	33.93	
1	0	0	1	1	195	130	65	32.5	
1	0	1	0	0	205	136.66	68.33	34.17	
1	0	1	0	1	210	140	70	35	
1	0	1	1	0	215	129	64.5	32.25	
1	0	1	1	1	220	132	66	33	
1	1	0	0	0	66.66	66.66	66.66	33.33	
1	1	0	0	1	66.66	100	66.66	33.33	
1	1	0	1	0	100	100	66.66	33.33	
1	1	0	1	1	100	133.33	66.66	33.33	
1	1	1	0	0	133	100	66.66	33.33	
1	1	1	0	1	133	133.33	66.66	33.33	
1	1	1	1	0	166	100	66.66	33.33	
1	1	1	1	1	166	133.33	66.66	33.33	

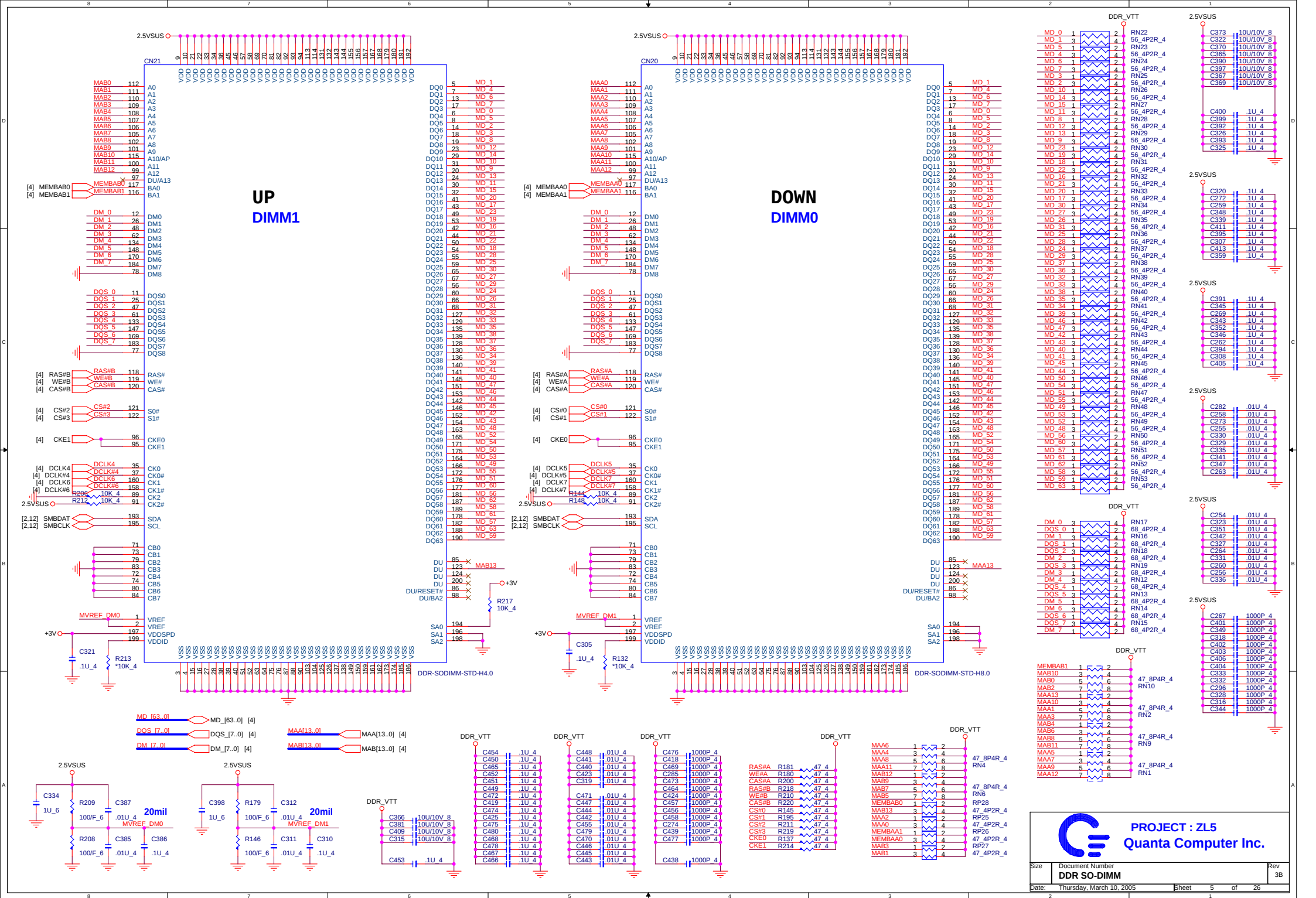


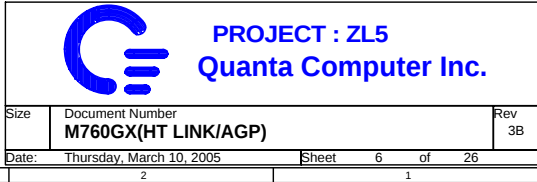
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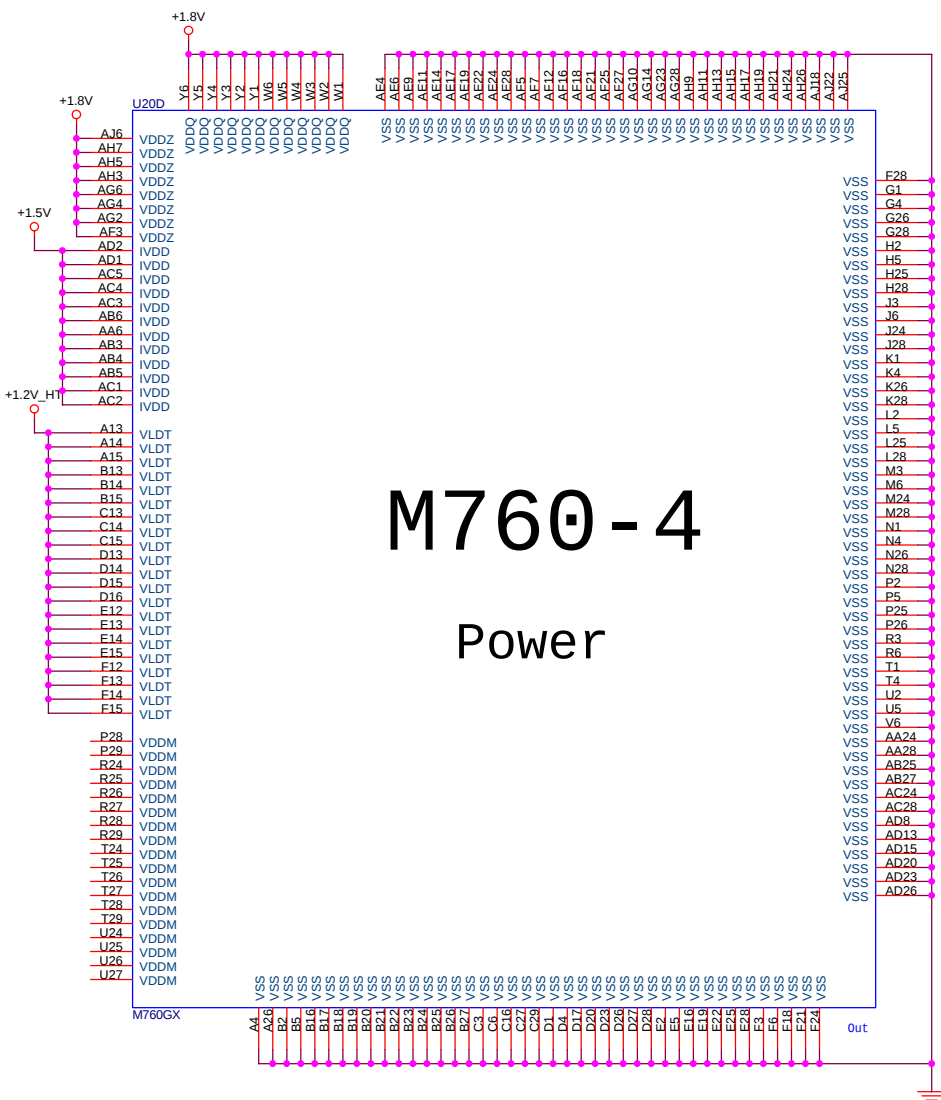
CPU DDR/POWER I/F





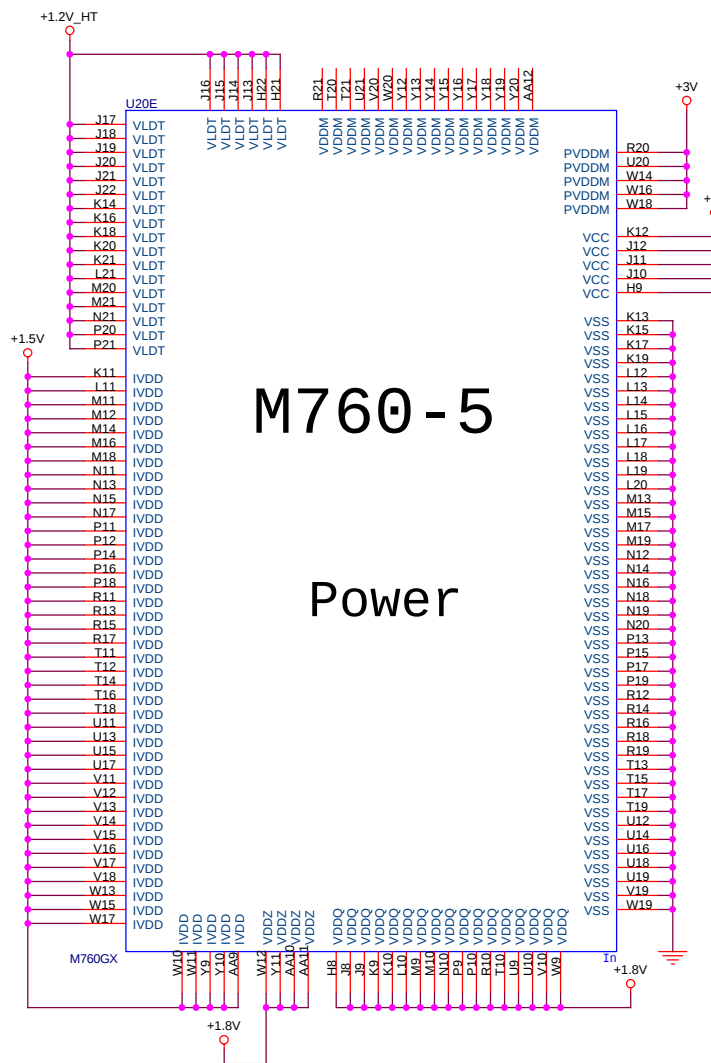


If Support SiS M760LV IVDD=1.5V



M760-4

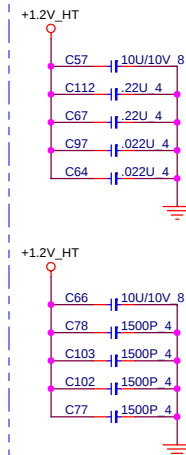
Power



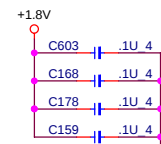
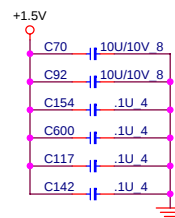
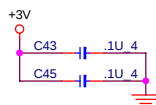
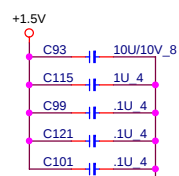
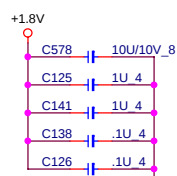
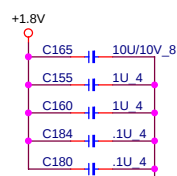
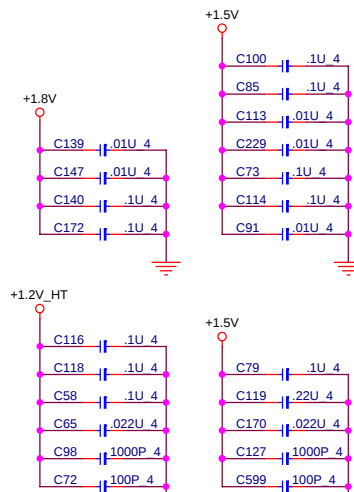
M760-5

Power

LAYOUT: Place HT bypass caps on topside near connected Lokar HT link.

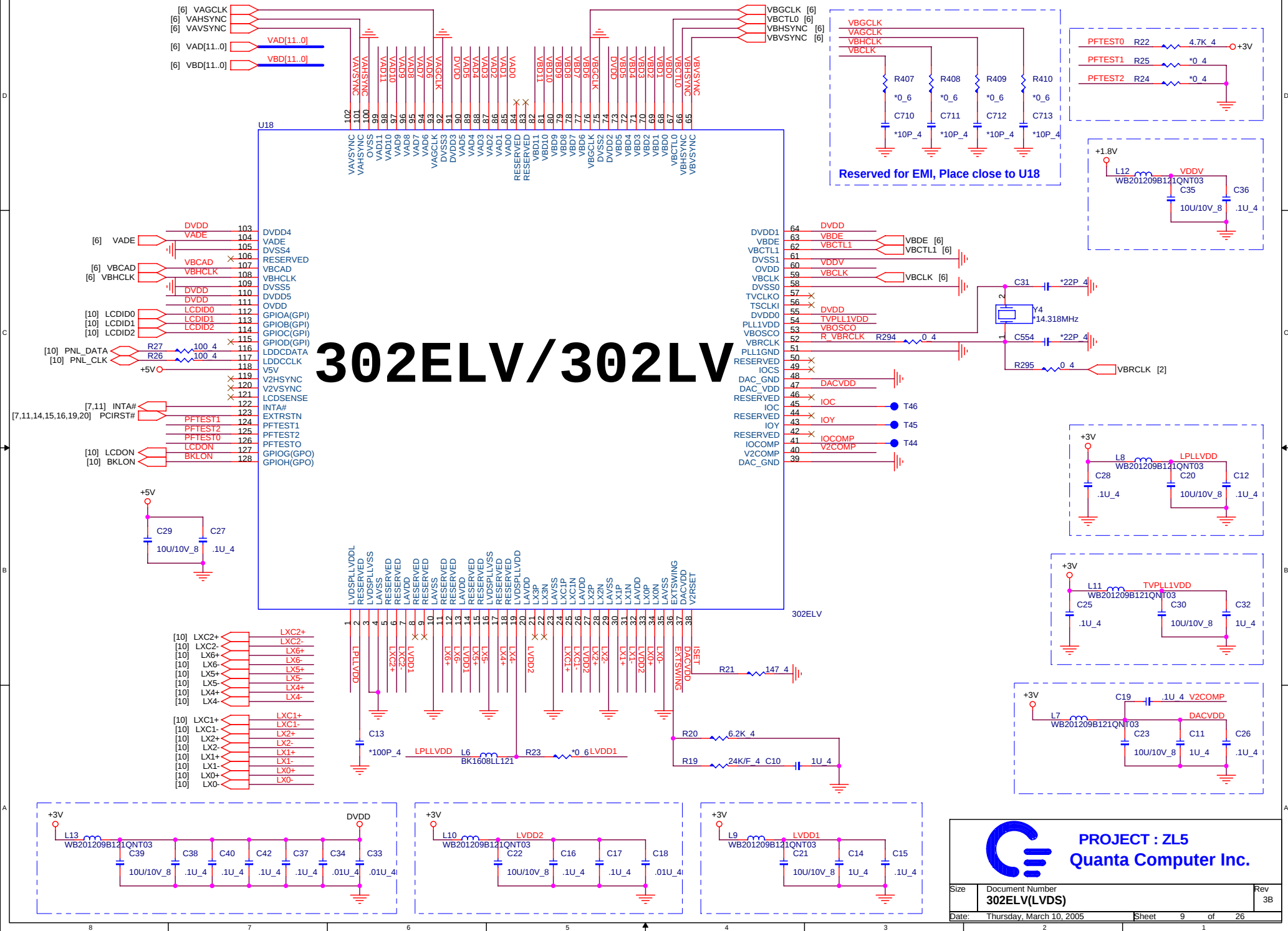


Place these capacitors under 760 solder side.



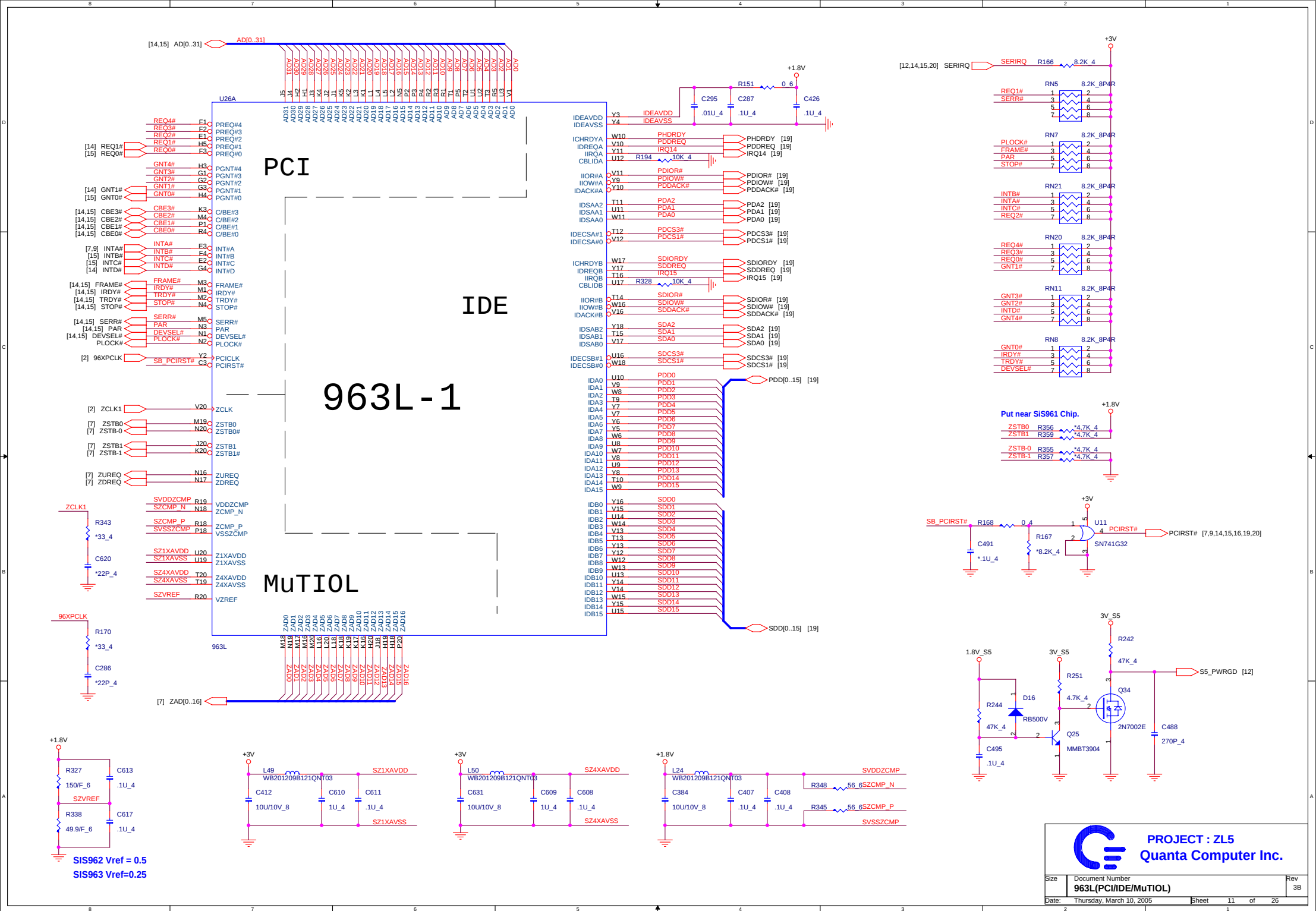
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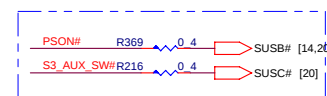
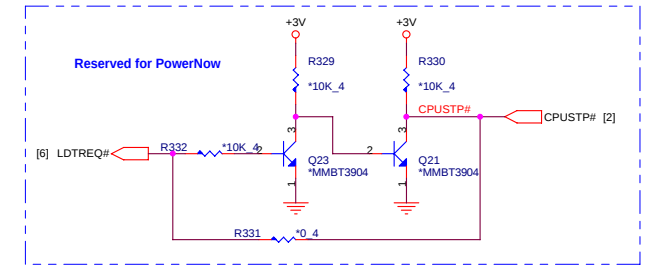
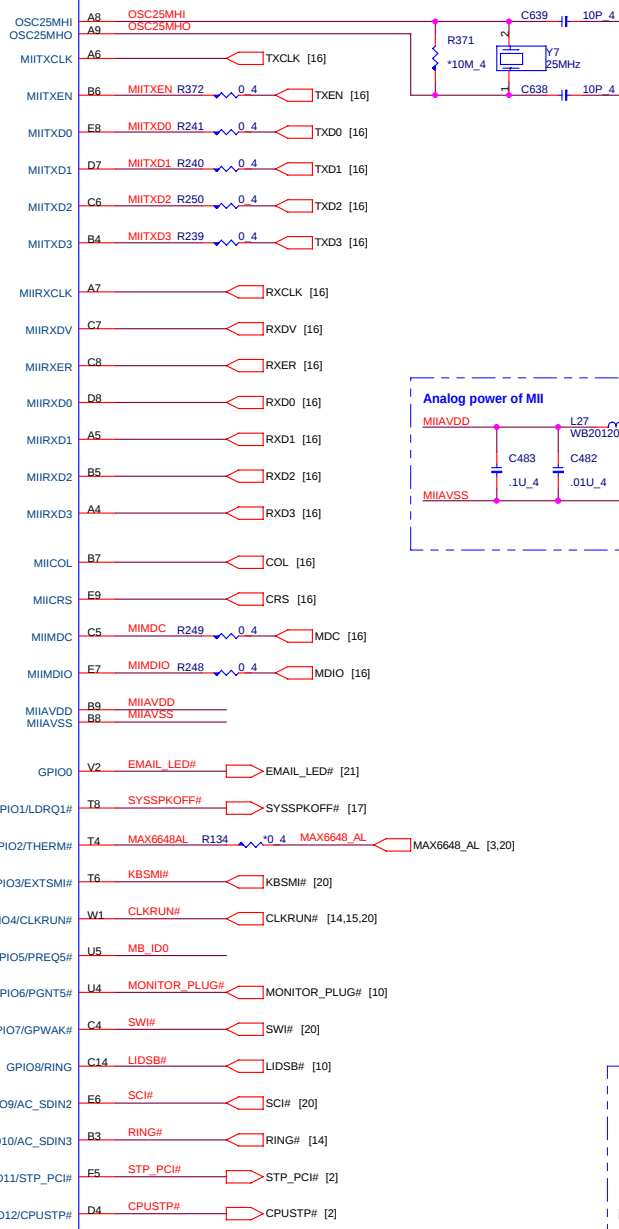
302ELV/302LV

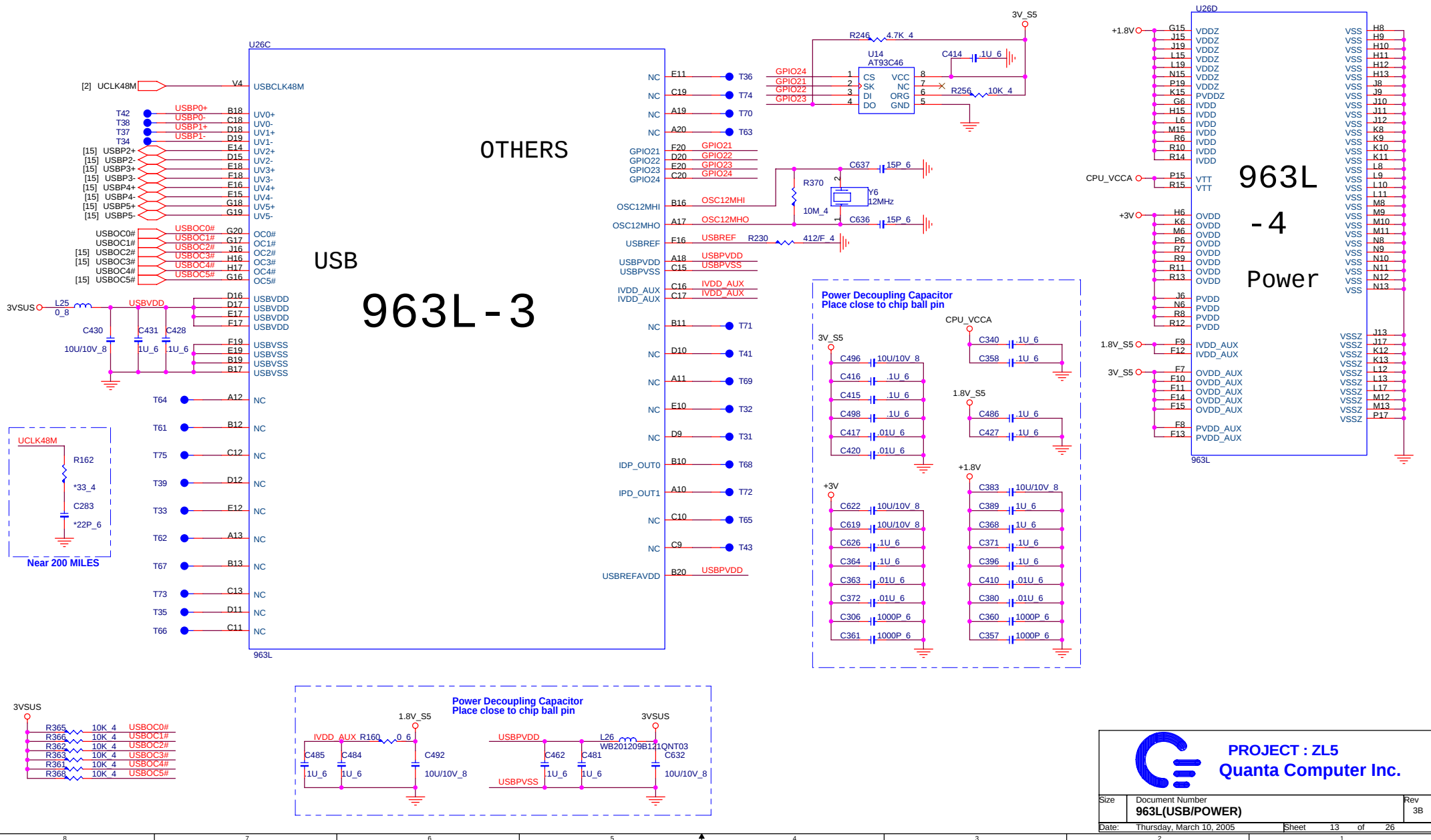


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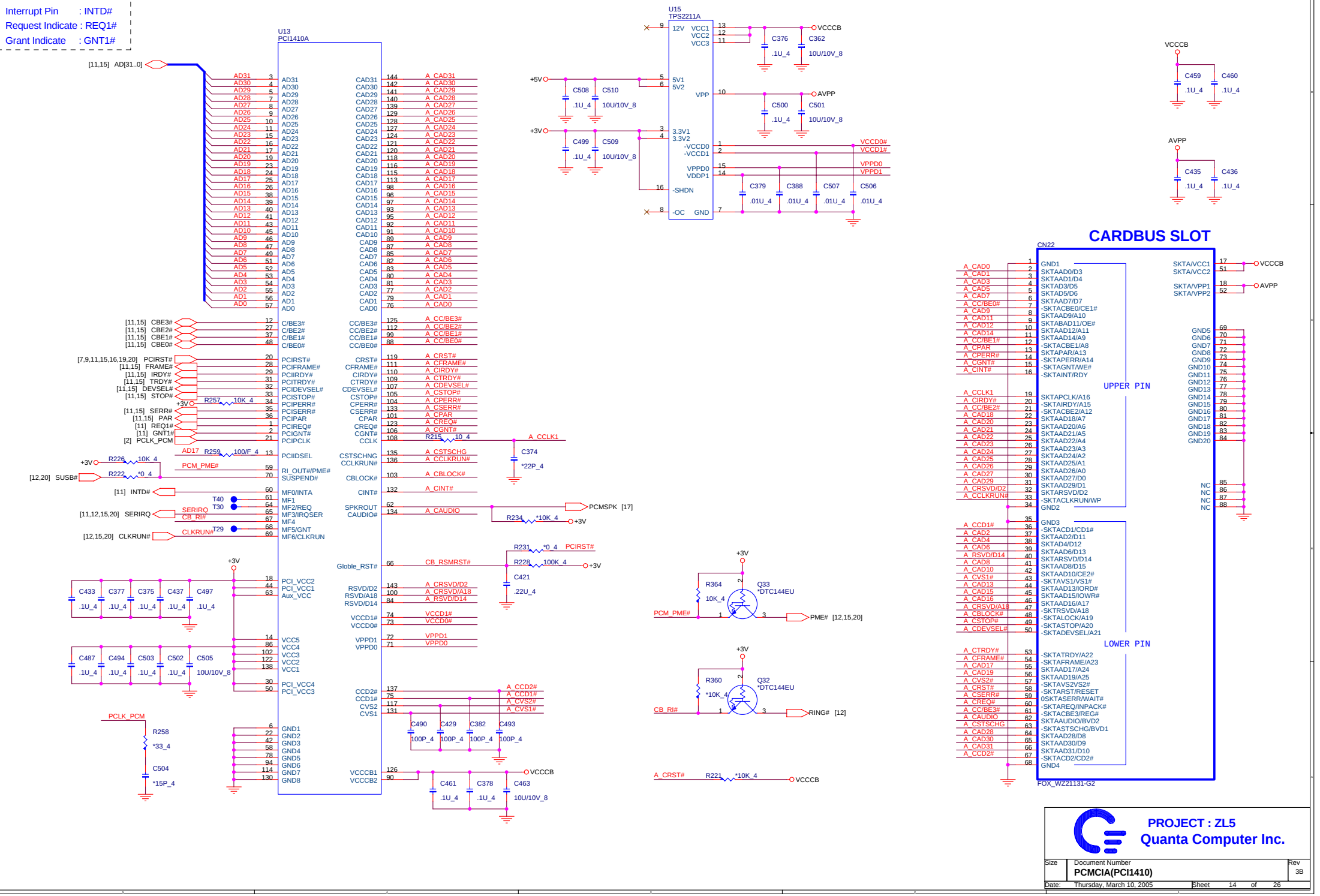
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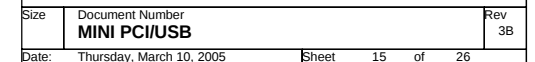
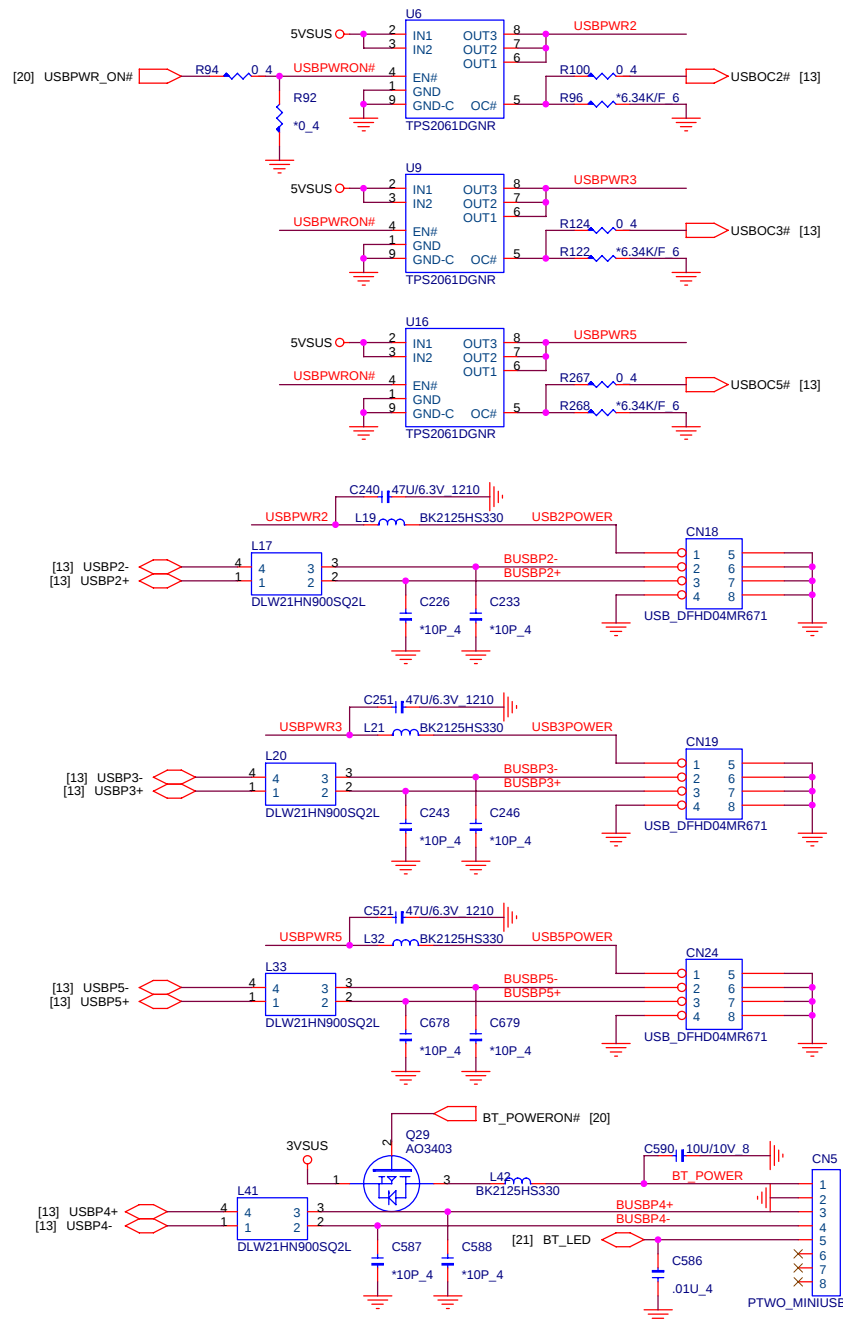


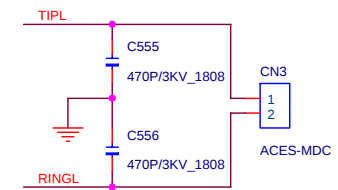
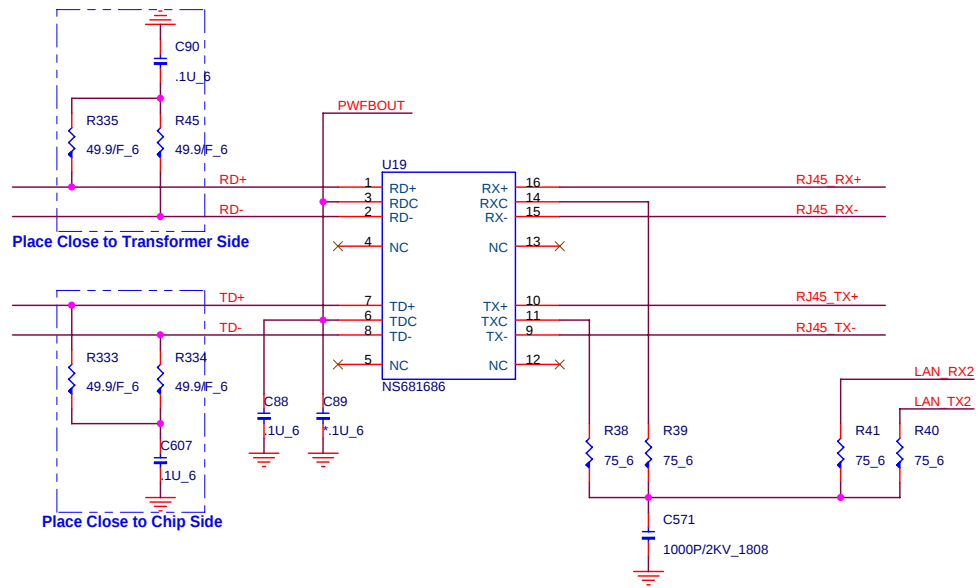
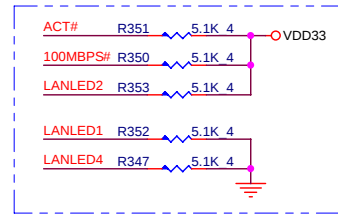
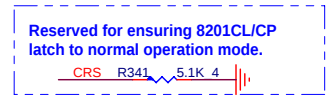
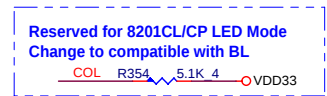
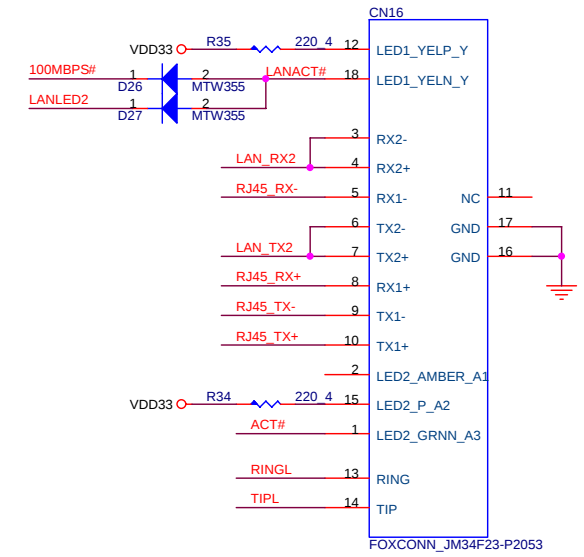
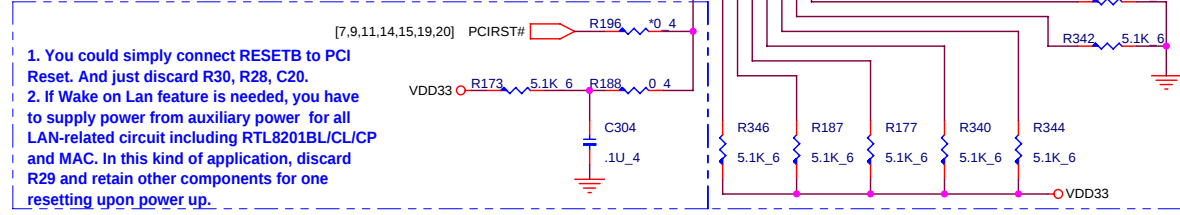
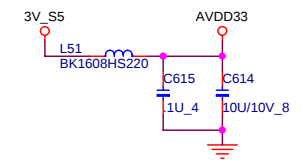
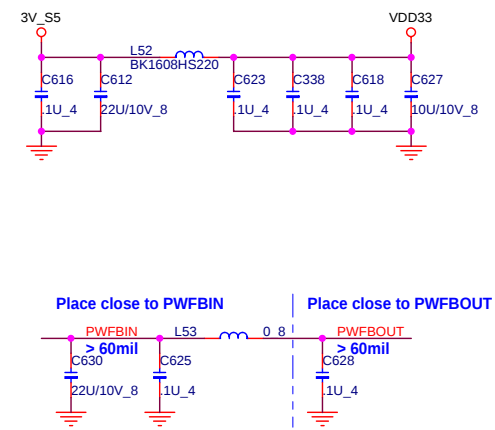
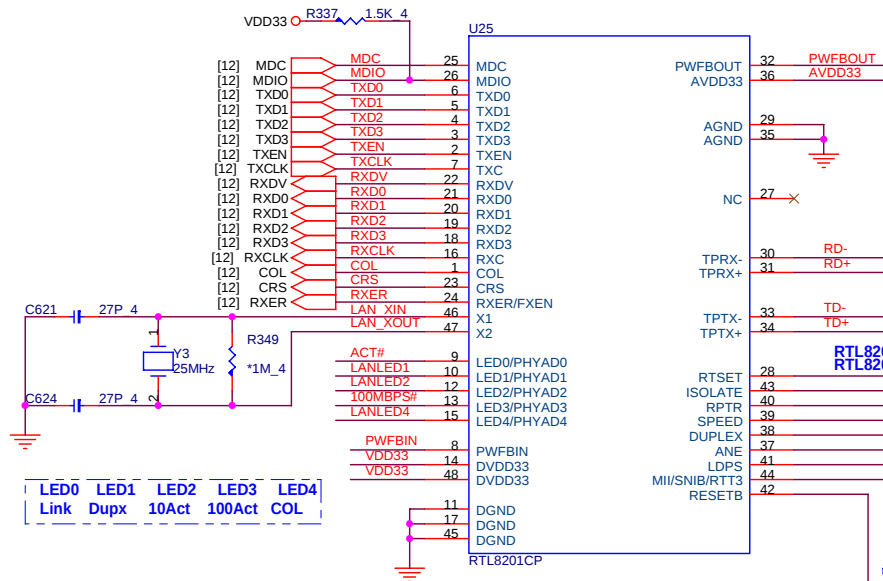




ID Select : AD17
Interrupt Pin : INTD#
Request Indicate : REQ1#
Grant Indicate : GNT1#

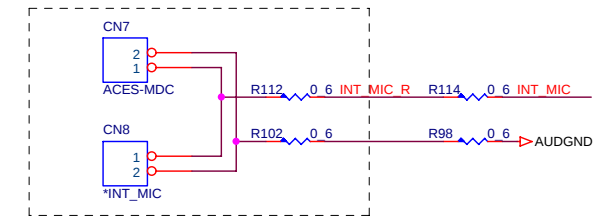
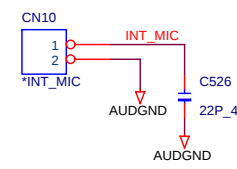
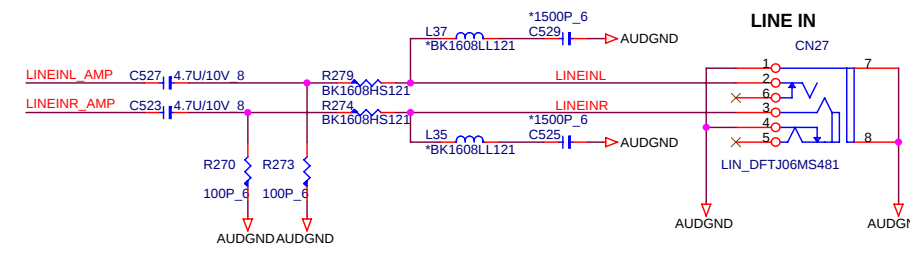
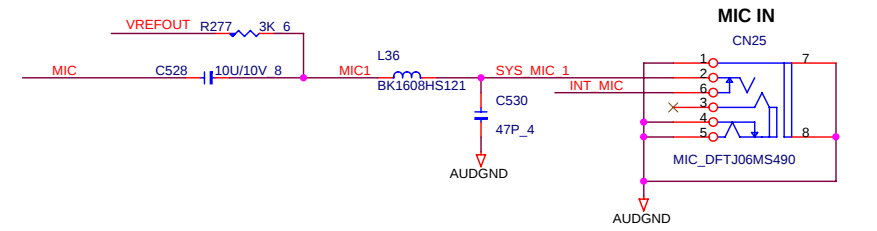
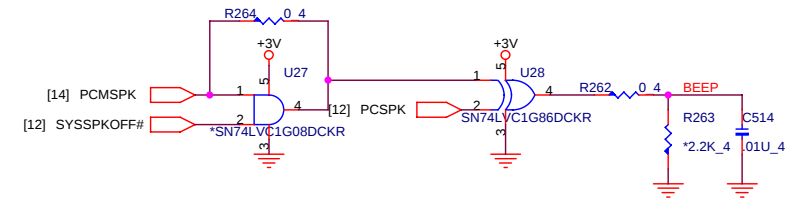
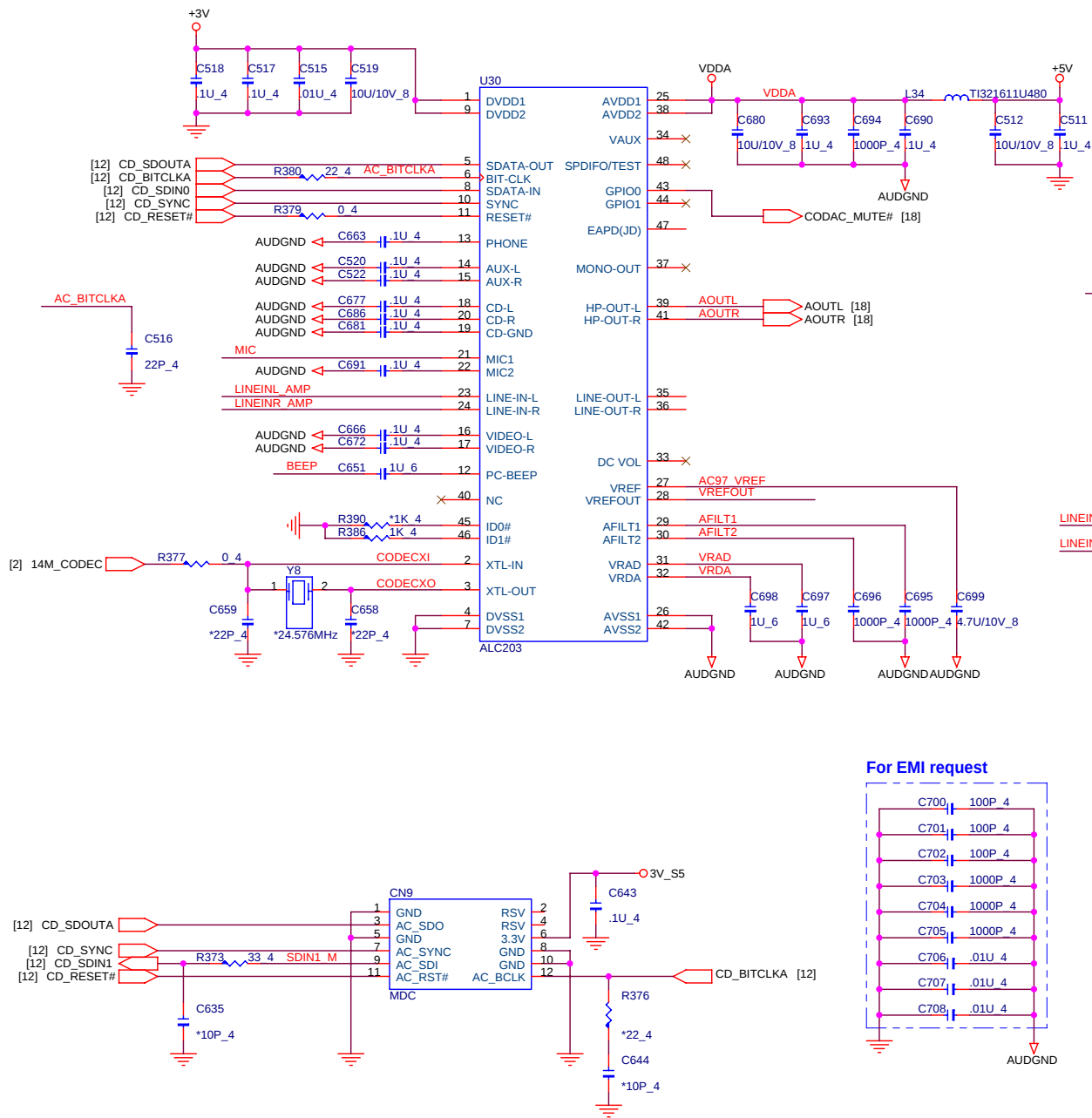






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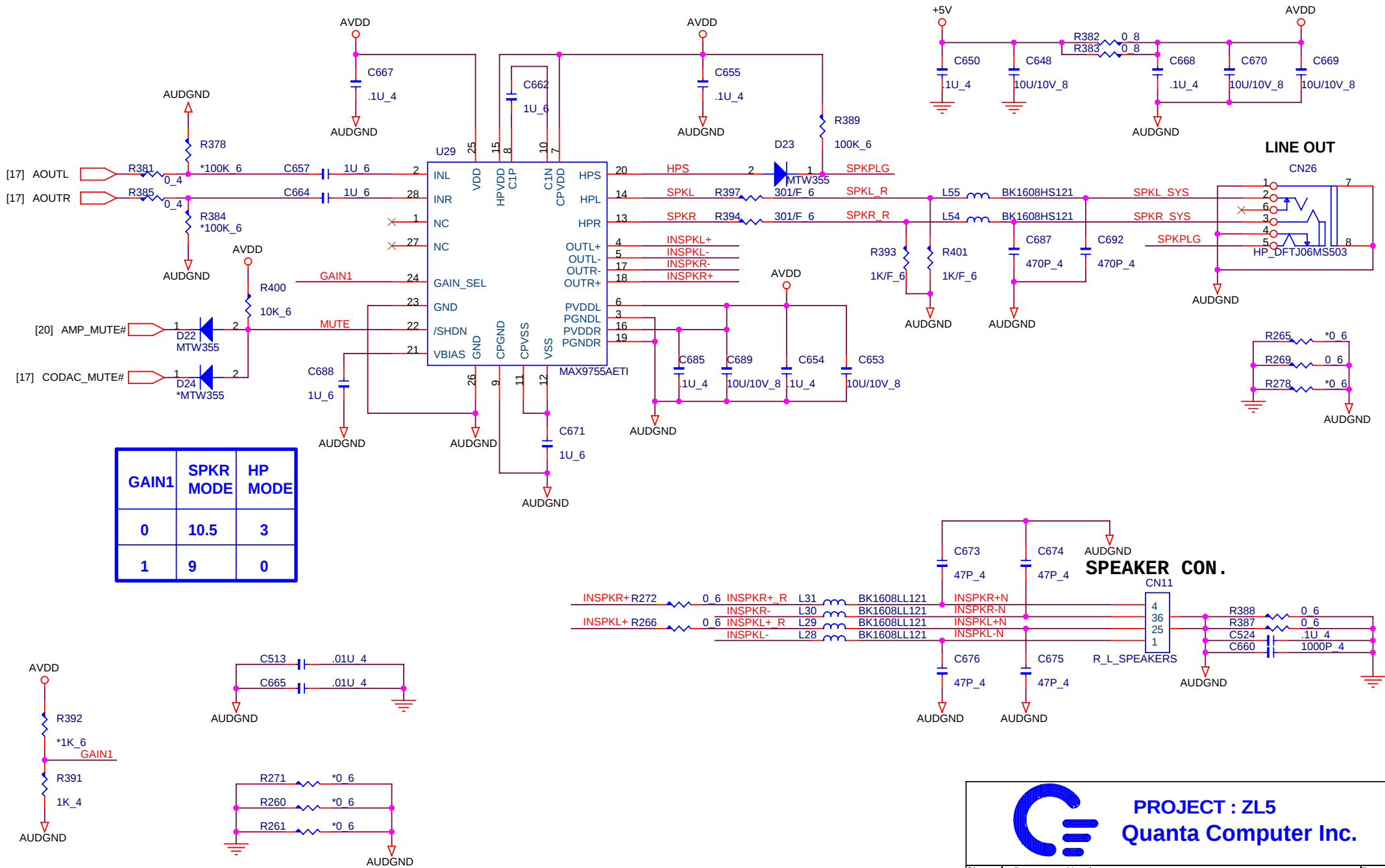
Size	Document Number	Rev
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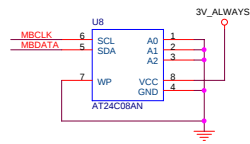
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Size	Document Number	Rev
	CODEC(ALC203)/MDC1.5	3B
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LDRQ#(pin 8) internal is no use

PCLK_591 R117 *22_4 C248 *10P_4



[21] TBCLK
[21] TBDATA#
[21] CAPSLD#
[21] NUMLED#

[21] TBCLK
[21] TBDATA#
[21] CAPSLD#
[21] NUMLED#

[21] TBCLK
[21] TBDATA#
[21] CAPSLD#
[21] NUMLED#

[21] TBCLK
[21] TBDATA#
[21] CAPSLD#
[21] NUMLED#

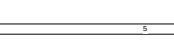
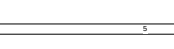
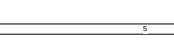
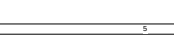
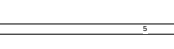
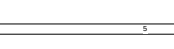
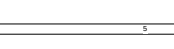
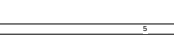
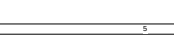
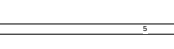
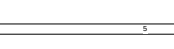
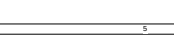
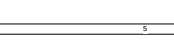
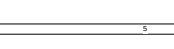
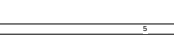
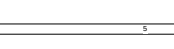
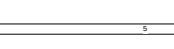
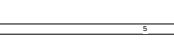
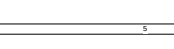
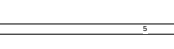
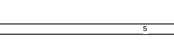
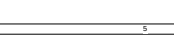
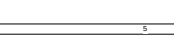
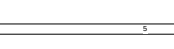
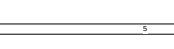
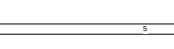
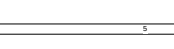
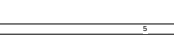
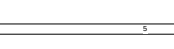
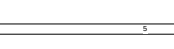
[21] TBCLK
[21] TBDATA#
[21] CAPSLD#
[21] NUMLED#

[21] TBCLK
[21] TBDATA#
[21] CAPSLD#
[21] NUMLED#

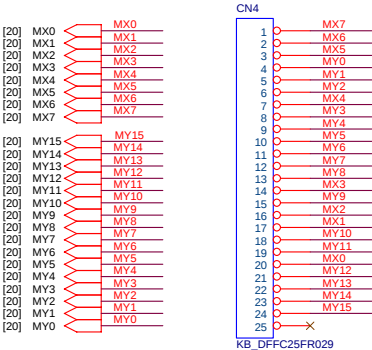
[21] TBCLK
[21] TBDATA#
[21] CAPSLD#
[21] NUMLED#

[21] TBCLK
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[21] CAPSLD#
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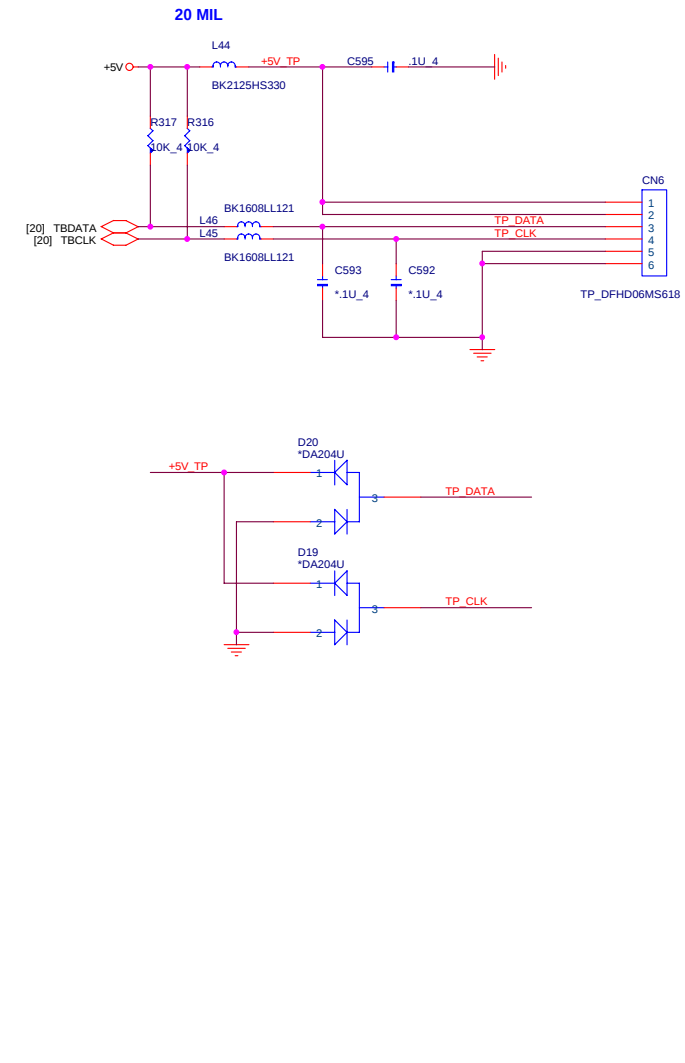
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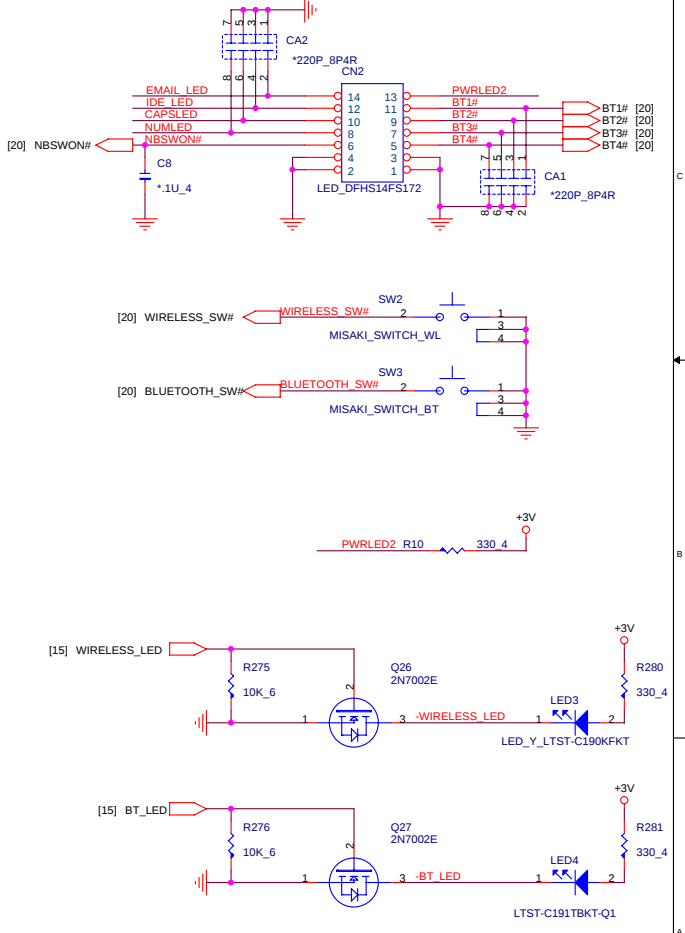
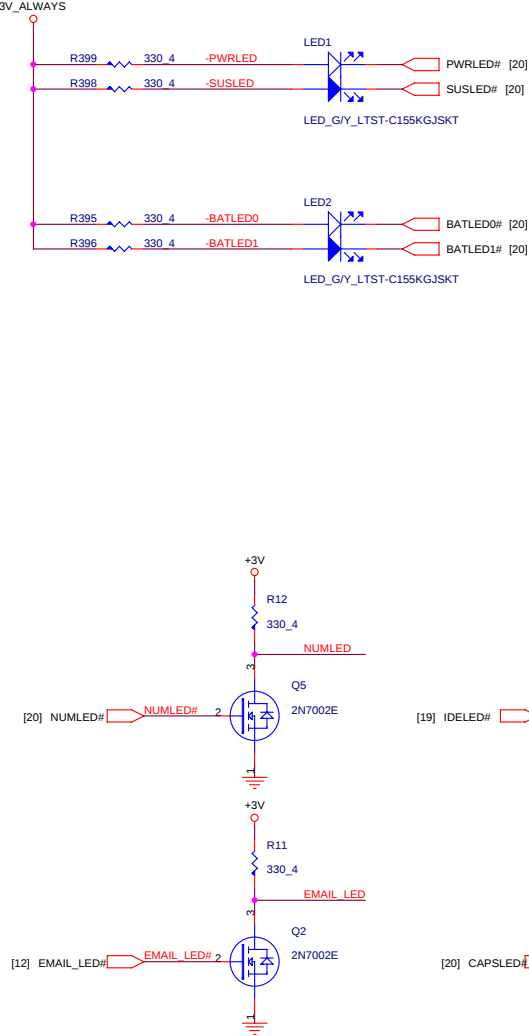
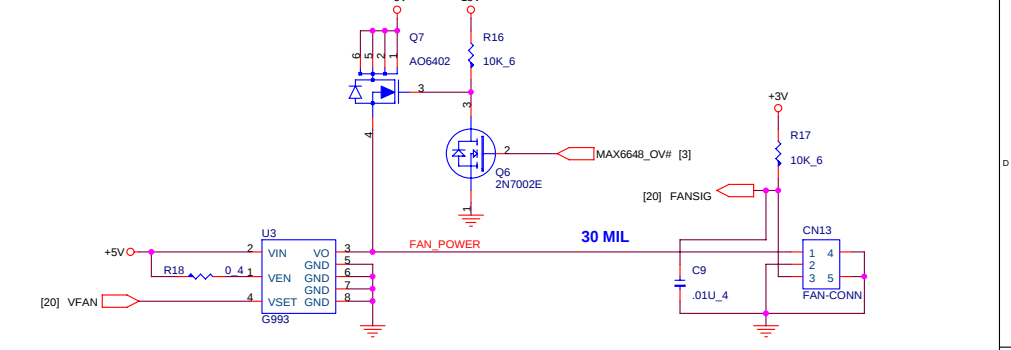
INT K/B

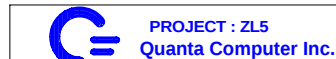


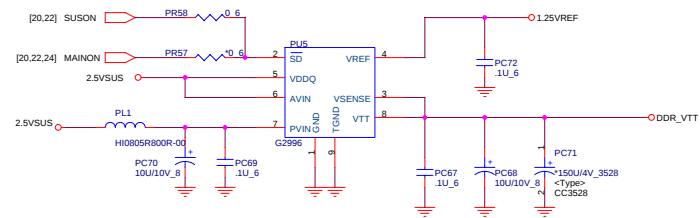
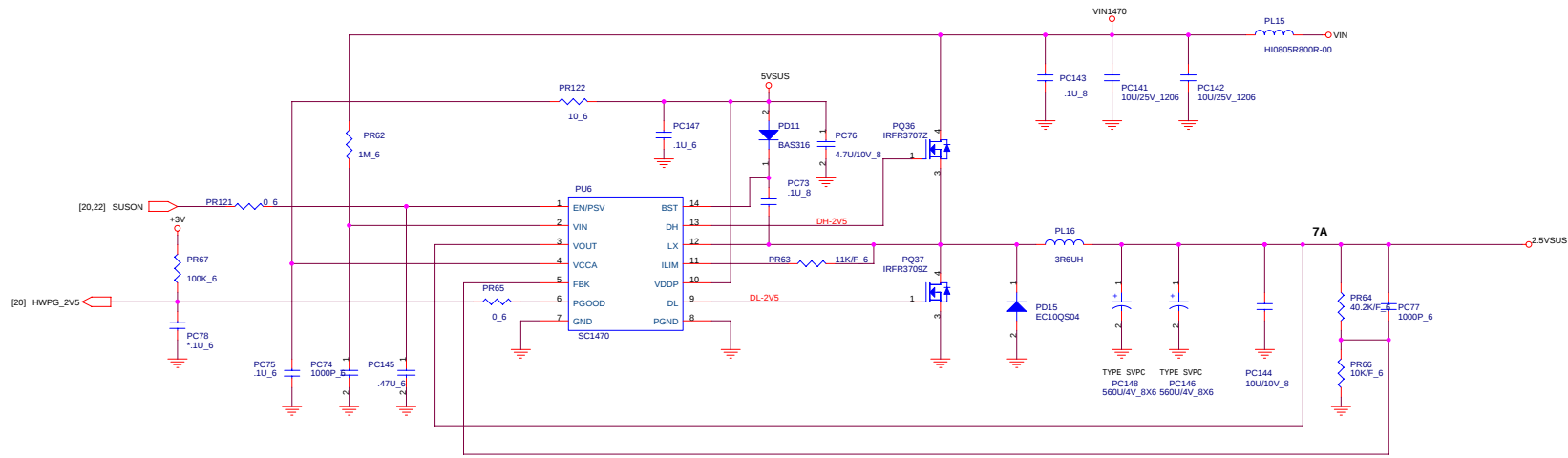
TOUCH PAD



FAN CONTROL

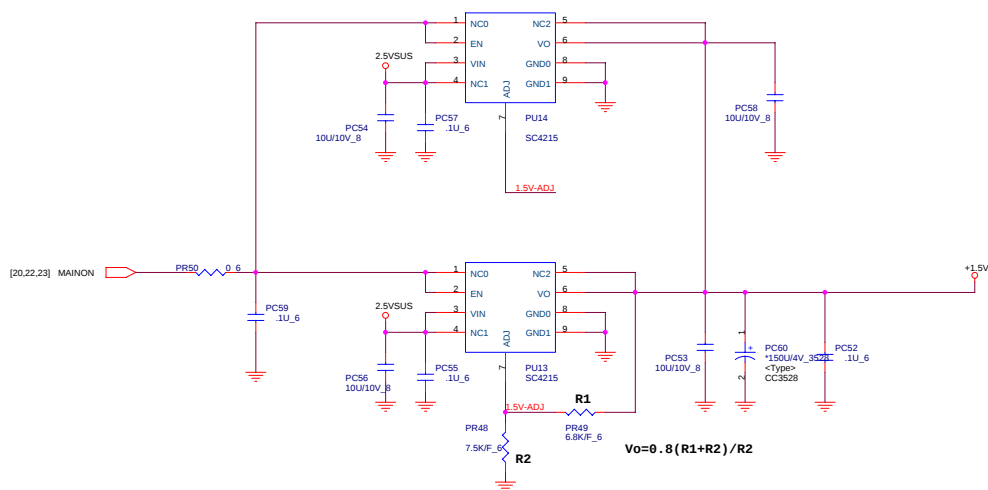
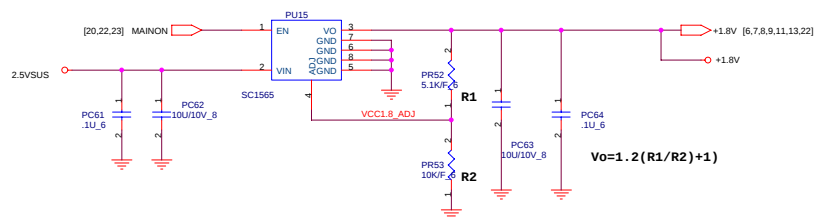
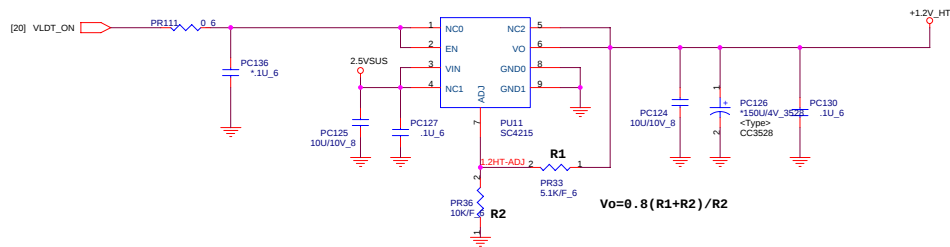






PROJECT : ZL5
Quanta Computer Inc.

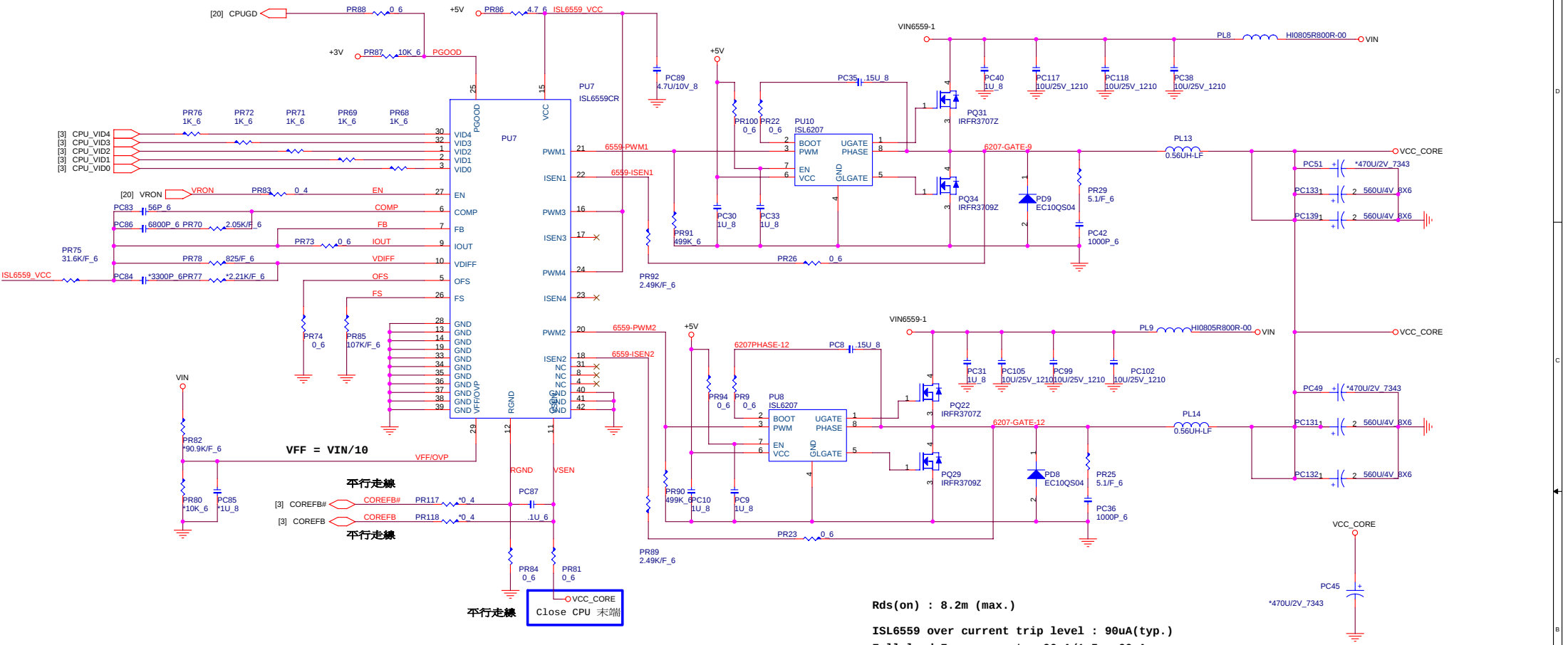
Size	Document Number	Rev
	2.5VSUS/+1.25TERM	3B
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PROJECT : ZL5
Quanta Computer Inc.

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	+1.5V/+1.8V/+1.2V	3B
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Vcore



Rds(on) : 8.2m (max.)
ISL6559 over current trip level : 90uA(typ.)
Full load Isen current : 90uA/1.5 ~ 60uA
AMD LPM 35W current 28A

 $Rds(on) * Io(phase) = Rsen * Isen$
 $8.2m * 1.3 * (28A/2) = Rsen * 60uA$
 $Rsen = 2.48K \sim 2.49K$
 $OCP : 28A * 1.5 = 42A$

