Project Name :B10IE01 Rev : A

Platform : PineView D / M + TigerPoint

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M/B Schematic Version Change List

Release Date	Version	PCB P/N	PCB Description	PCBA P/N	Note
09/23		71R-B10IE0-T8A0	71-MB PCB,M/B,B10IE01,143.774*140.35mm,4, Rev.A0,Trendtronic		
		71R-B10IE0-9HA0	71-MB PCB,M/B,B10IE01,L:143*W:140*H:1.2,4,Rev.A0,hannstar		

Daughter Board Schematic Version Change List

Release Date	Version	PCB P/N	PCB Description	PCBA P/N	Note

SHUTTLE			
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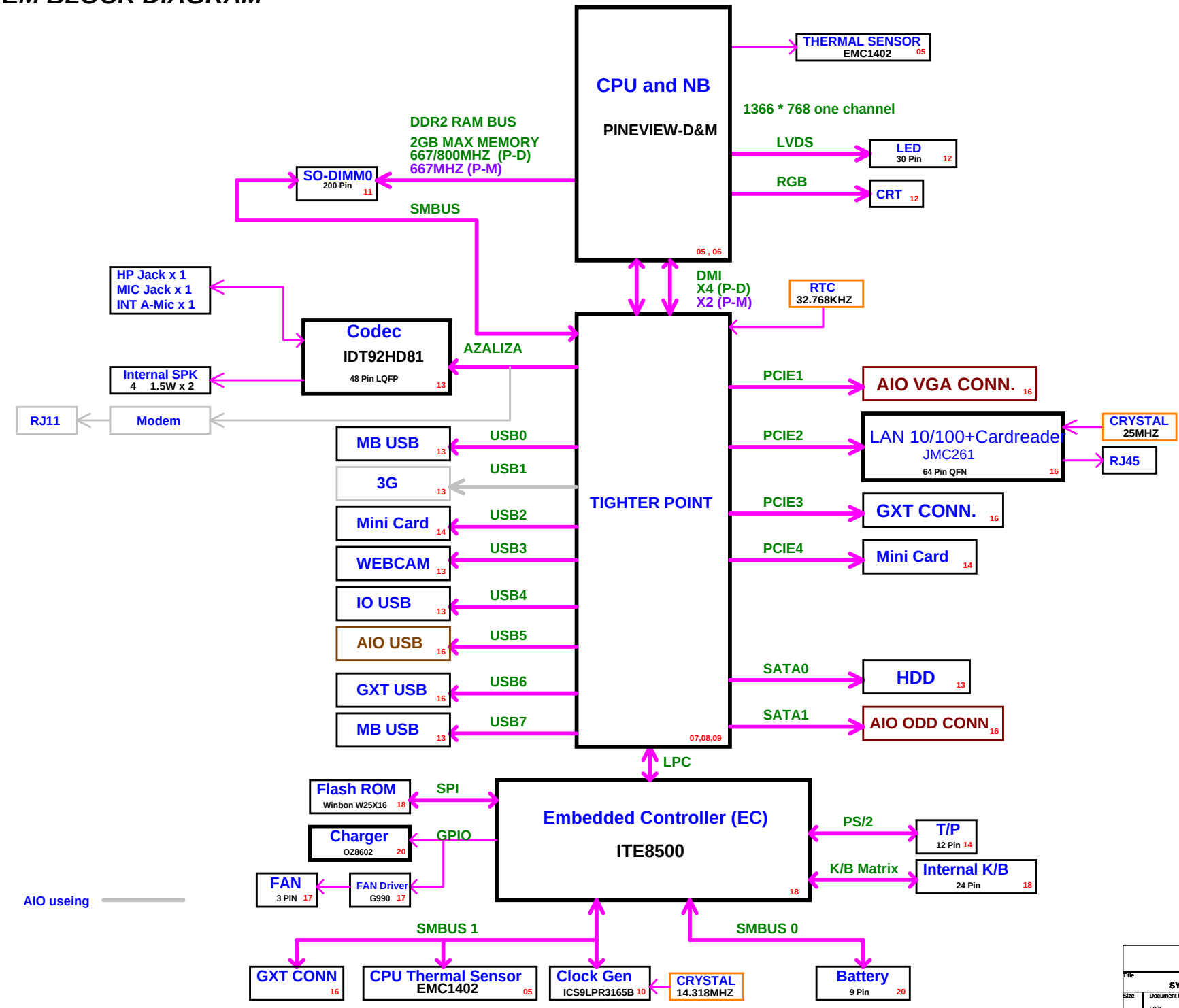
SYSTEM BLOCK DIAGRAM



	B10IE01
Title	SYSTEM BLOCK DIAGRAM
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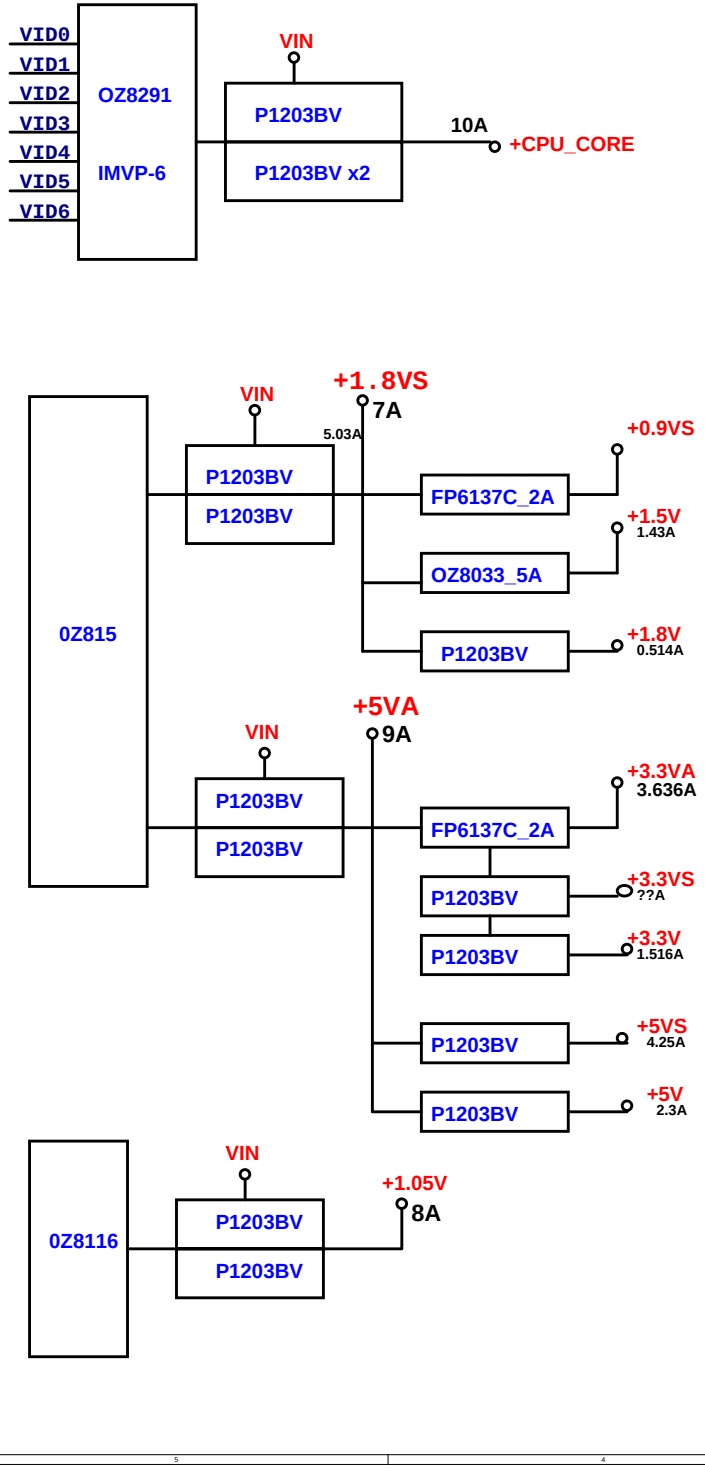
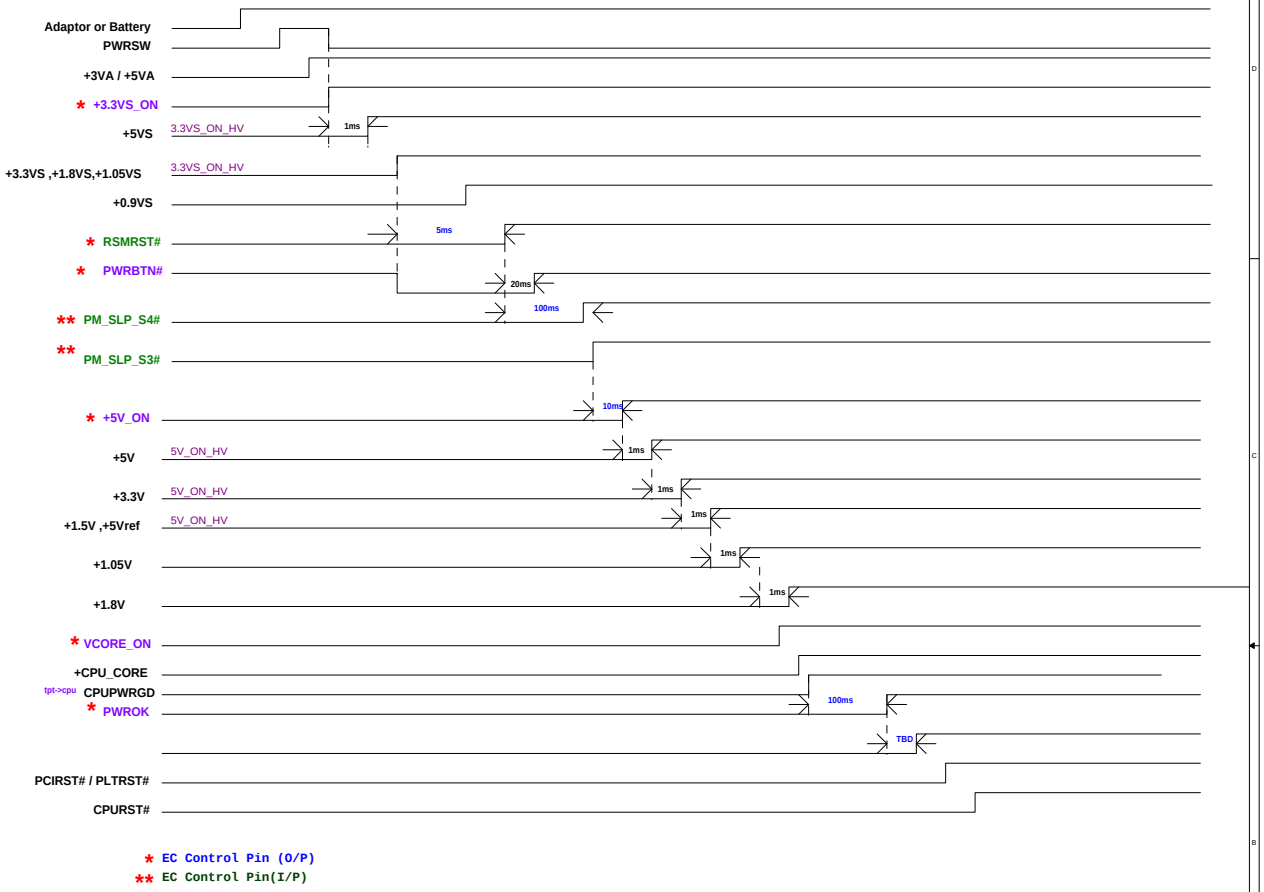
POWER BLOCK DIAGRAM



System Poewr On Sequence



* EC Control Pin (O/P)
** EC Control Pin(I/P)

SHUTTLE		
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TPT GPIO	
GPIO0	PM_BM_BUSY#
GPIO1	EC_EXTSMI#
GPIO2	INT_PIRQE#
GPIO3	INT_PIRQF#
GPIO4	INT_PIRQG#
GPIO5	INT_PIRQH#
GPIO6	BIOS_REC
GPIO7	EC_EXTSMI#
GPIO8	N.C
GPIO9	N.C
GPIO10	N.C
GPIO11	SMB_ALERT#
GPIO12	N.C
GPIO13	N.C
GPIO14	N.C
GPIO15	N.C
GPIO17	SB_SPI_EN#
GPIO18	STPPCI#
GPIO19	SATA1GP
GPIO20	STPCPU#
GPIO21	SATA0GP
GPIO22	PCI_REQ#4
GPIO24	NC
GPIO25	NC
GPIO26	NC
GPIO27	BIOS_REC
GPIO28	NC
GPIO29	USB_OC#5
GPIO30	USB_OC#6
GPIO31	USB_OC#7
GPIO32	PM_CLKRUN#
GPIO33	NC
GPIO34	NC
GPIO35	NC
GPIO36	SATA2GP
GPIO37	SATA3GP
GPIO38	NC
GPIO39	NC
GPIO40	USB_OC#1
GPIO41	USB_OC#2
GPIO42	USB_OC#3
GPIO43	USB_OC#4
GPIO48	GNT4#

ITE8512E GPIO		Default Pull/Mode
GPA0	P_ID0	UP / GPI
GPA1	P_ID1	UP / GPI
GPA2	PWR_LED#	UP / GPI
GPA3	Wirelan_B/T_ON	UP / GPI
GPA4	BTL_BEEP	UP / GPI
GPA5	LED1	UP / GPI
GPA6	PM_RSMRST#	UP / GPI
GPA7	EC_BL_PWM	UP / GPI
GPB0	PM_SLP_S4#	UP / GPI
GPB1	PM_SLP_S3#	UP / GPI
GPB2	+1.05VS_ON	Dn / GPI
GPB3	BAT_SMBCLK	/ GPI
GPB4	BAT_SMBDAT	/ GPI
GPB5	H_A20GATE	/ GPO
GPB6	H_RCIN#	UP / Func1
GPB7	LED2	Dn / GPI
GPC0	+1.5V_on	Dn / GPI
GPC1	SMB_CLK	/ GPI
GPC2	SMB_DAT	/ GPI
GPC3	N.C	Dn / GPI
GPC4	LCDSW0	Dn / GPI
GPC5	N.C	Dn / GPI
GPC6	LCDSW1	Dn / GPI
GPC7	N.C	UP / GPI
GPD0	ADAP_IN	UP / GPI
GPD1	PWRBTN#	UP / GPI
GPD2	EC_LPCRST#	UP / Func1
GPD3	N.C	UP / GPI
GPD4	EC_EXTSMI#	UP / GPI
GPD5	N.C	UP / GPI
GPD6	CHG_ON#	Dn / GPI
GPD7	EC_BL_EN	Dn / GPI
GPE0	LID#	Dn / GPI
GPE1	SET_V	Dn / GPI
GPE2	PWROK	Dn / GPI
GPE3	Vcore_ON	Dn / GPI
GPE4	PWRSW	UP / GPI
GPE5	CHG_G_LED	Dn / GPI
GPE6	CHG_R_LED	Dn / GPI
GPE7	MUTE	UP / GPI
GPF0	COYTOE_RDY	UP / GPI
GPF1	SB_SPI_EN#	UP / GPI
GPF2	Coyote_VDDP_on	UP / GPI
GPF3	N.C	UP / GPI
GPF4	TP_CLK	UP / GPI
GPF5	TP_DATA	UP / GPI
GPF6	N.C	UP / GPI
GPF7	N.C	UP / GPI
GPG0	EC_WDOG OK	Dn/GPO/TM
GPG1		Dn/GPO/ID7
GPG2	FLFRAME#	
GPG6	WEBCAN_ON	
GPH0		Dn/GPI/ID0
GPH1	+1.8VS_ON	Dn/GPI/ID1
GPH2	SENBAT_V	Dn/GPI/ID2
GPH3	3G_ON	Dn/GPI/ID3
GPH4	+5V_ON	Dn/GPI/ID4
GPH5		Dn/GPI/ID5
GPH6	RF_LED_ON	Dn/GPI/ID6

ITE8512E GPIO		Default Pull/Mode
GPI0	BATT_TEMP	/GPI/ADC
GPI1	ADAPTOR_I	/GPI/ADC
GPI2	BAT_V	/GPI/ADC
GPI3	DDR2_TEMP	/GPI/ADC
GPI4	BAT_I	/GPI/ADC
GPI5	SLP_S3_COY	/GPI/ADC
GPI6	EC_BSEL0	/GPI/ADC
GPI7	SYS_TEMP	/GPI/ADC
GPJ0	EC_BRGHT	/GPI/DAC
GPJ1	CHG_I	/GPI/DAC
GPJ2	FAN_CTRL0	/GPI/DAC
GPJ3	CHG_REF	/GPI/DAC
GPJ4	N.C	/GPI/DAC
GPJ5	PM_THROTTING#	/GPI/DAC

PINEVIEW-D

	CPU CORE(V)	ICC(A)	W	TEMP( )
IMVP-6+				

TPT

	CPU CORE(V)	ICC(A)	W	TEMP( )
IMVP-6+				

ITE8500E

VCC	ICC(mA)	mW	TEMP( )
+3.3V	100	330	70

CLOCK GENERATOR

VCC	ICC(mA)	mW	TEMP( )
+3.3V	250	825	70

EMC1402

VCC	ICC	mW	TEMP( )
+3.3V	170uA	0.56	150

CODEC

VCC	ICC(mA)	mW	TEMP( )
+3.3V	250	825	70

JMC261

VCC	ICC(mA)	mW	TEMP( )
+3.3V	250	825	70

SHUTTLE

Title: GPIO & Power Consumption

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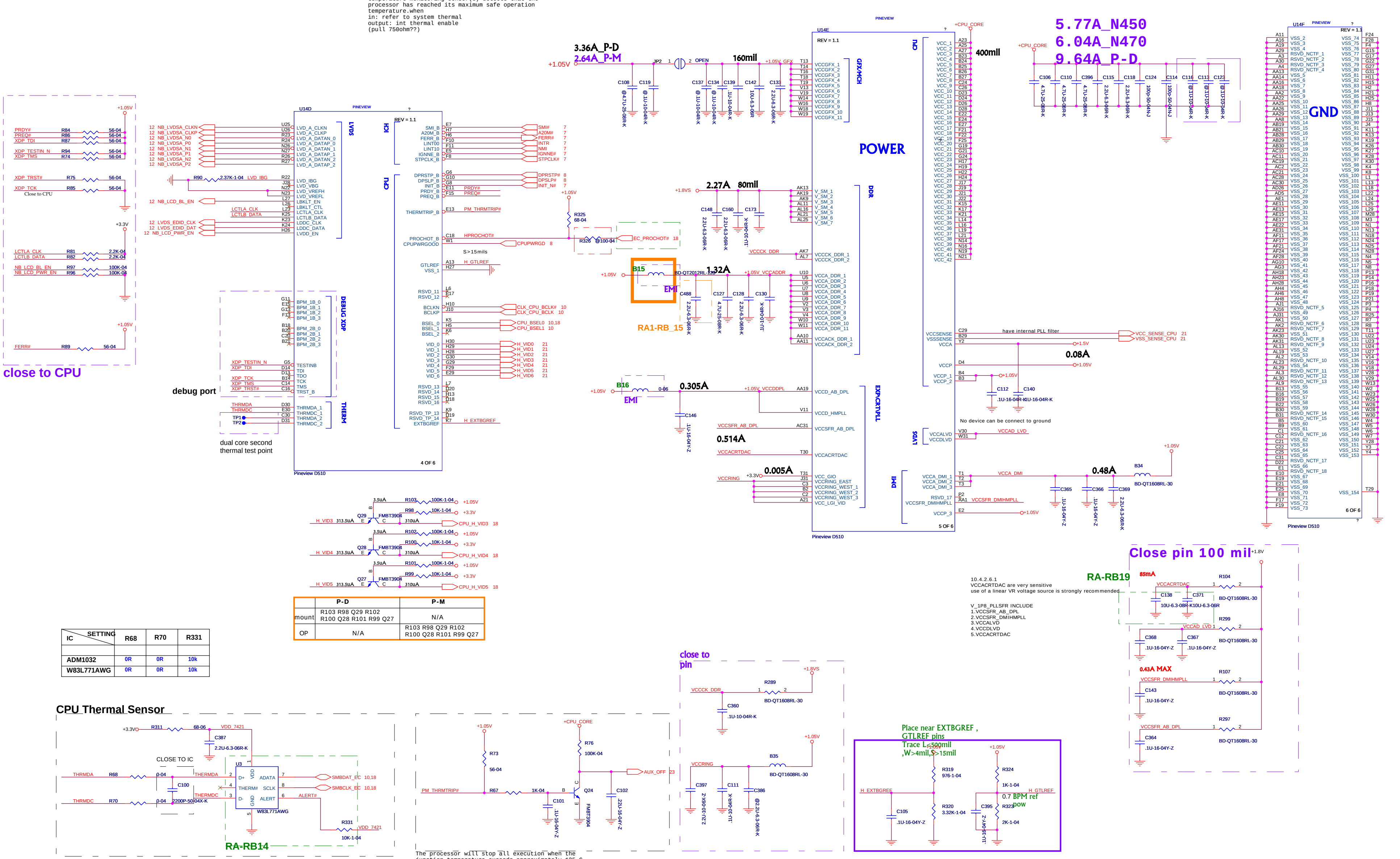
DPRSTP# / DPSLP#- This function is not supported for Pineview-D.

PROCHOT# -will go active when the processor temperature monitoring sensor(s) detects that the processor has reached its maximum safe operation temperature.when
in: refer to system thermal
output: int thermal enable
(pull 750ohm??)



close to CPU
debug port
dual core second thermal test point
LVDS
ICH
CPU
DEBUG XDP
THERM
POWER
GFX/MCH
DDR
EXP/CRT/PLL
DMI
GND
3.36A_P-D
2.64A_P-M
160mil
400mil
5.77A_N450
6.04A_N470
9.64A_P-D
2.27A 80mil
1.32A
0.305A
0.514A
0.005A
0.08A
0.48A
EMI
RA1-RB_15
RA-RB19
RA-RB14
Close pin 100 mil
close to pin
have internal PLL filter
No device can be connect to ground
10.4.2.6.1
VCCACRTDAC are very sensitive
use of a linear VR voltage source is strongly recommended
V_1P8_PLLSFR INCLUDE
1.VCCSFR_AB_DPL
2.VCCSFR_DMIHMPLL
3.VCCALVD
4.VCCDLVD
5.VCCACRTDAC
85mA
0.43A MAX
Place near EXTBGREF , GTLREF pins
Trace L<500mil
,W>4mil,S>15mil
0.7 BPM ref
CLOSE TO IC
Pineview D510
4 OF 6
5 OF 6
6 OF 6
S>15mils

	P-D	P-M
mount	R103 R98 Q29 R102 R100 Q28 R101 R99 Q27	N/A
OP	N/A	R103 R98 Q29 R102 R100 Q28 R101 R99 Q27

IC \ SETTING	R68	R70	R331
ADM1032	0R	0R	10k
W83L771AWG	0R	0R	10k

CPU Thermal Sensor

The processor will stop all execution when the junction temperature exceeds approximately 125 C.

The V1_05_core Linear Voltage Regulator will source to Tiger Point core Voltage and Pineview-D uncore voltage. V_1p8_PLLSFR will then need to be turned off before V_1p05_CORE start to ramp down.

SHUTTLE			
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	C376 C377 C372 C374
P-D	mount
P-M	

AC Couple
Close to CPU

	R306 R304 R302 R301
P-D	mount
P-M	

U14A PINEVIEW REV = 1.1

DMI

DMI_RXP_0 DMI_RXN_0 DMI_RXP_1 DMI_RXN_1 DMI_RXP_2 DMI_RXN_2 DMI_RXP_3 DMI_RXN_3

DMI_TXP_0 DMI_TXN_0 DMI_TXP_1 DMI_TXN_1 DMI_TXP_2 DMI_TXN_2 DMI_TXP_3 DMI_TXN_3

EXP_CLKINN EXP_CLKINP EXP_RCOMPO EXP_ICOMPI EXP_RBIAS

RSVD_1 RSVD_2 RSVD_3 RSVD_4 RSVD_TP_1 RSVD_TP_2

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Pineview D510

not recommand a test point

W=10mils,S=10mils

U14B PINEVIEW REV = 1.1

COMMAND DATA DDR CONTROL CLOCK MISC

DDR_A_MA_0 DDR_A_MA_1 DDR_A_MA_2 DDR_A_MA_3 DDR_A_MA_4 DDR_A_MA_5 DDR_A_MA_6 DDR_A_MA_7 DDR_A_MA_8 DDR_A_MA_9 DDR_A_MA_10 DDR_A_MA_11 DDR_A_MA_12 DDR_A_MA_13 DDR_A_MA_14

DDR_A_WEB DDR_A_CASB DDR_A_RASB DDR_A_BS_0 DDR_A_BS_1 DDR_A_BS_2

DDR_A_CSB_0 DDR_A_CSB_1 DDR_A_CSB_2 DDR_A_CSB_3 DDR_A_CKE_0 DDR_A_CKE_1 DDR_A_CKE_2 DDR_A_CKE_3 DDR_A_ODT_0 DDR_A_ODT_1 DDR_A_ODT_2 DDR_A_ODT_3

DDR_A_CK_0 DDR_A_CKB_0 DDR_A_CK_1 DDR_A_CKB_1 DDR_A_CK_2 DDR_A_CKB_2 DDR_A_CK_3 DDR_A_CKB_3 DDR_A_CK_4 DDR_A_CKB_4 DDR_A_CK_5 DDR_A_CKB_5

DDR_PREF DDR_VREF DDR_RPD DDR_RPU

RSVD_5 RSVD_TP_3 RSVD_TP_4 RSVD_6

DDR_A_DQS_0 DDR_A_DQSB_0 DDR_A_DM_0 DDR_A_DQ_0 DDR_A_DQ_1 DDR_A_DQ_2 DDR_A_DQ_3 DDR_A_DQ_4 DDR_A_DQ_5 DDR_A_DQ_6 DDR_A_DQ_7 DDR_A_DQS_1 DDR_A_DQSB_1 DDR_A_DM_1 DDR_A_DQ_8 DDR_A_DQ_9 DDR_A_DQ_10 DDR_A_DQ_11 DDR_A_DQ_12 DDR_A_DQ_13 DDR_A_DQ_14 DDR_A_DQ_15 DDR_A_DQS_2 DDR_A_DQSB_2 DDR_A_DM_2 DDR_A_DQ_16 DDR_A_DQ_17 DDR_A_DQ_18 DDR_A_DQ_19 DDR_A_DQ_20 DDR_A_DQ_21 DDR_A_DQ_22 DDR_A_DQ_23 DDR_A_DQS_3 DDR_A_DQSB_3 DDR_A_DM_3 DDR_A_DQ_24 DDR_A_DQ_25 DDR_A_DQ_26 DDR_A_DQ_27 DDR_A_DQ_28 DDR_A_DQ_29 DDR_A_DQ_30 DDR_A_DQ_31 DDR_A_DQS_4 DDR_A_DQSB_4 DDR_A_DM_4 DDR_A_DQ_32 DDR_A_DQ_33 DDR_A_DQ_34 DDR_A_DQ_35 DDR_A_DQ_36 DDR_A_DQ_37 DDR_A_DQ_38 DDR_A_DQ_39 DDR_A_DQS_5 DDR_A_DQSB_5 DDR_A_DM_5 DDR_A_DQ_40 DDR_A_DQ_41 DDR_A_DQ_42 DDR_A_DQ_43 DDR_A_DQ_44 DDR_A_DQ_45 DDR_A_DQ_46 DDR_A_DQ_47 DDR_A_DQS_6 DDR_A_DQSB_6 DDR_A_DM_6 DDR_A_DQ_48 DDR_A_DQ_49 DDR_A_DQ_50 DDR_A_DQ_51 DDR_A_DQ_52 DDR_A_DQ_53 DDR_A_DQ_54 DDR_A_DQ_55 DDR_A_DQS_7 DDR_A_DQSB_7 DDR_A_DM_7 DDR_A_DQ_56 DDR_A_DQ_57 DDR_A_DQ_58 DDR_A_DQ_59 DDR_A_DQ_60 DDR_A_DQ_61 DDR_A_DQ_62 DDR_A_DQ_63

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Pineview D510

P-M : AD17,AC17,AB15,AB17 RSVD.

U14C PINEVIEW REV = 1.1

VGA MISC

XDP_RSVD_00 XDP_RSVD_01 XDP_RSVD_02 XDP_RSVD_03 XDP_RSVD_04 XDP_RSVD_05 XDP_RSVD_06 XDP_RSVD_07 XDP_RSVD_08 XDP_RSVD_09 XDP_RSVD_10 XDP_RSVD_11 XDP_RSVD_12 XDP_RSVD_13 XDP_RSVD_14 XDP_RSVD_15 XDP_RSVD_16 XDP_RSVD_17

CRT_HSYNC CRT_VSYNC CRT_RED CRT_GREEN CRT_BLUE CRT_IRTN CRT_DDC_DATA CRT_DDC_CLK DAC_IREF

DPL_REFCLKINP DPL_REFCLKINN DPL_REFSSCLKINP DPL_REFSSCLKINN

RSVD_7 RSVD_8 RSVD_9 PWROK RSTINB HPL_CLKINN HPL_CLKINP

RSVD_TP_5 RSVD_TP_6 RSVD_TP_7 RSVD_TP_8 RSVD_TP_9 RSVD_TP_10 RSVD_TP_11 RSVD_TP_12

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Pineview D510

close to cpu : < 300mil
7.5mils wide up

place 75ohm

	R315
P-D	OP
P-M	mount

	R329	R327	R328
P-D	OP	OP	OP
P-M	OP	mount	mount

mount

PM_EXT_TS0# =]30 -> connection with the external thermal sensor device and the SODIMM thermal sensor pin.

close to cpu

MA_DQ[63:0] MA_DM[7:0] MA_DQS[7:0] MA_DQS#[7:0]

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	CPU PineView 1/2
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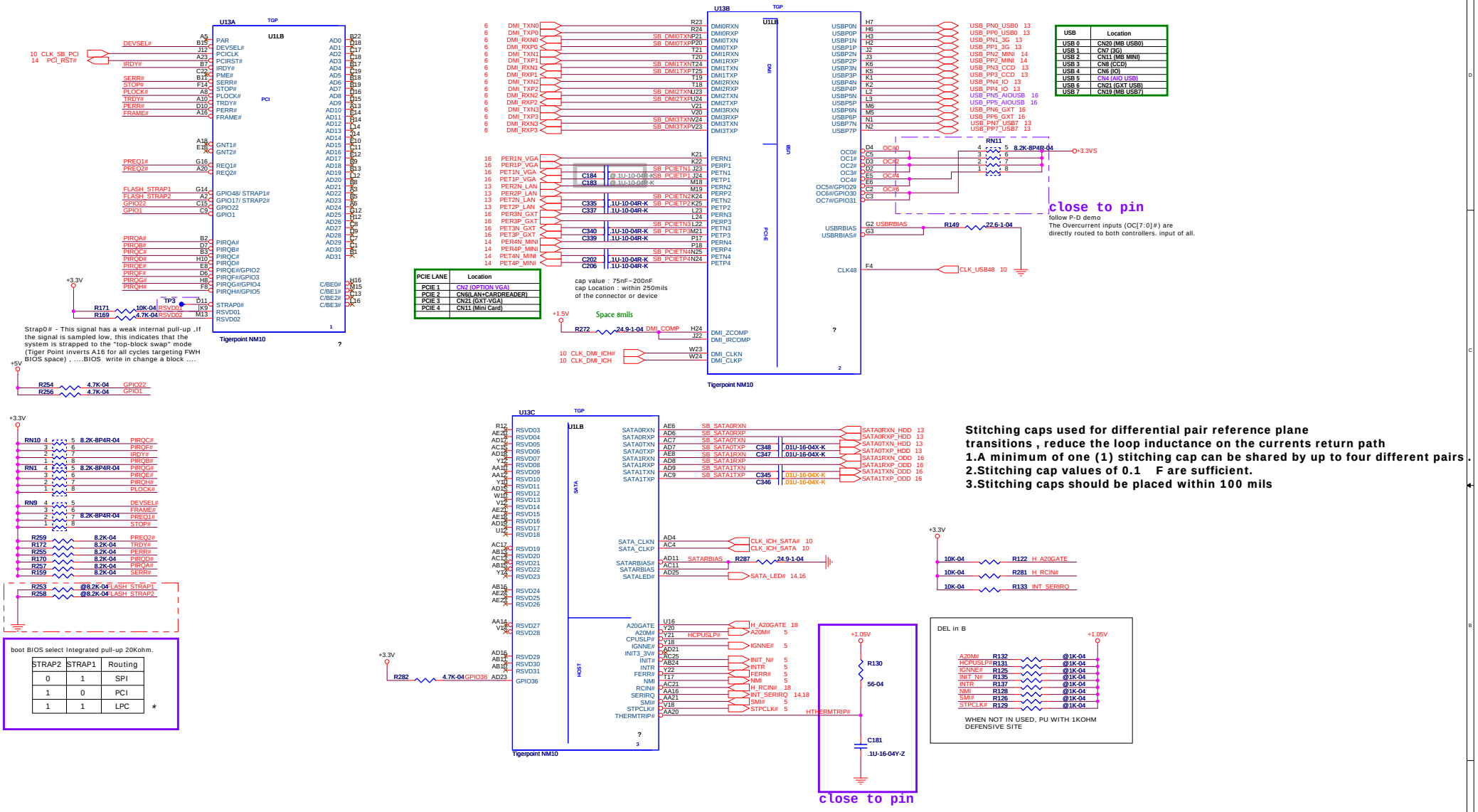
U13A
U1LB
TGP
Tigerpoint NM10
PCI
10 CLK_SB_PCI
14 PCI_RST#
DEVSEL#
IRDY#
SERR#
STOP#
PLOCK#
TRDY#
PERR#
FRAME#
GNT1#
GNT2#
REQ1#
REQ2#
FLASH_STRAP1
FLASH_STRAP2
GPIO22
GPIO1
GPIO48/ STRAP1#
GPIO17/ STRAP2#
PIRQA#
PIRQB#
PIRQC#
PIRQD#
PIRQE#/GPIO2
PIRQF#/GPIO3
PIRQG#/GPIO4
PIRQH#/GPIO5
STRAP0#
RSVD01
RSVD02
C/BE0#
C/BE1#
C/BE2#
C/BE3#
+3.3V
TP3
R171 10K-04 RSVD01
R169 4.7K-04 RSVD02
Strap0# - This signal has a weak internal pull-up ,If the signal is sampled low, this indicates that the system is strapped to the "top-block swap" mode (Tiger Point inverts A16 for all cycles targeting FWH BIOS space) , ...BIOS write in change a block ....
+5V
R254 4.7K-04 GPIO22
R256 4.7K-04 GPIO1
+3.3V
RN10 8.2K-8P4R-04 PIRQC# PIRQF# IRDY# PIRQB#
RN1 8.2K-8P4R-04 PIRQG# PIRQE# PIRQH# PLOCK#
RN9 8.2K-8P4R-04 DEVSEL# FRAME# PREQ1# STOP#
R259 8.2K-04 PREQ2#
R172 8.2K-04 TRDY#
R255 8.2K-04 PERR#
R170 8.2K-04 PIRQD#
R257 8.2K-04 PIRQA#
R159 8.2K-04 SERR#
R253 @8.2K-04 FLASH_STRAP1
R258 @8.2K-04 FLASH_STRAP2
boot BIOS select Integrated pull-up 20Kohm.
STRAP2 STRAP1 Routing
0 1 SPI
1 0 PCI
1 1 LPC *
U13B
U1LB
TGP
Tigerpoint NM10
DMI
USB
PCIE
DMI_TXN0 DMI_TXP0 DMI_RXN0 DMI_RXP0 DMI_TXN1 DMI_TXP1 DMI_RXN1 DMI_RXP1 DMI_TXN2 DMI_TXP2 DMI_RXN2 DMI_RXP2 DMI_TXN3 DMI_TXP3 DMI_RXN3 DMI_RXP3
SB_DMI0TXN SB_DMI0TXP SB_DMI1TXN SB_DMI1TXP SB_DMI2TXN SB_DMI2TXP SB_DMI3TXN SB_DMI3TXP
DMI0RXN DMI0RXP DMI0TXN DMI0TXP DMI1RXN DMI1RXP DMI1TXN DMI1TXP DMI2RXN DMI2RXP DMI2TXN DMI2TXP DMI3RXN DMI3RXP DMI3TXN DMI3TXP
PER1N_VGA PER1P_VGA PET1N_VGA PET1P_VGA PER2N_LAN PER2P_LAN PET2N_LAN PET2P_LAN PER3N_GXT PER3P_GXT PET3N_GXT PET3P_GXT PER4N_MINI PER4P_MINI PET4N_MINI PET4P_MINI
SB_PCIETN1 SB_PCIETP1 SB_PCIETN2 SB_PCIETP2 SB_PCIETN3 SB_PCIETP3 SB_PCIETN4 SB_PCIETP4
C184 @1U-10-04R-K C183 @1U-10-04R-K
C335 1U-10-04R-K C337 1U-10-04R-K
C340 1U-10-04R-K C339 1U-10-04R-K
C202 1U-10-04R-K C206 1U-10-04R-K
PERN1 PERP1 PETN1 PETP1 PERN2 PERP2 PETN2 PETP2 PERN3 PERP3 PETN3 PETP3 PERN4 PERP4 PETN4 PETP4
USBP0N USBP0P USBP1N USBP1P USBP2N USBP2P USBP3N USBP3P USBP4N USBP4P USBP5N USBP5P USBP6N USBP6P USBP7N USBP7P
USB_PN0_USB0 USB_PP0_USB0 USB_PN1_3G USB_PP1_3G USB_PN2_MINI USB_PP2_MINI USB_PN3_CCD USB_PP3_CCD USB_PN4_IO USB_PP4_IO USB_PN5_AIOUSB USB_PP5_AIOUSB USB_PN6_GXT USB_PP6_GXT USB_PN7_USB7 USB_PP7_USB7
USB Location
USB 0 CN20 (MB USB0)
USB 1 CN7 (3G)
USB 2 CN11 (MB MINI)
USB 3 CN8 (CCD)
USB 4 CN6 (IO)
USB 5 CN4 (AIO USB)
USB 6 CN21 (GXT USB)
USB 7 CN19 (MB USB7)
OC0# OC1# OC2# OC3# OC4#
OC5#/GPIO29 OC6#/GPIO30 OC7#/GPIO31
OC#0 OC#2 OC#4 OC#6
RN11 8.2K-8P4R-04
+3.3VS
close to pin
follow P-D demo
The Overcurrent inputs (OC[7:0]#) are directly routed to both controllers. input of all.
USBRBIAS USBRBIAS#
R149 22.6-1-04
CLK48
CLK_USB48 10
PCIE LANE Location
PCIE 1 CN2 (OPTION VGA)
PCIE 2 CN6(LAN+CARDREADER)
PCIE 3 CN21 (GXT-VGA)
PCIE 4 CN11 (Mini Card)
cap value : 75nF~200nF
cap Location : within 250mils
of the connector or device
+1.5V
Space 8mils
R272 24.9-1-04 DMI_COMP
DMI_ZCOMP DMI_IRCOMP
10 CLK_DMI_ICH# 10 CLK_DMI_ICH
DMI_CLKN DMI_CLKP
U13C
U1LB
TGP
Tigerpoint NM10
SATA
HOST
SATA0RXN SATA0RXP SATA0TXN SATA0TXP SATA1RXN SATA1RXP SATA1TXN SATA1TXP
SB_SATA0RXN SB_SATA0RXP SB_SATA0TXN SB_SATA0TXP SB_SATA1RXN SB_SATA1RXP SB_SATA1TXN SB_SATA1TXP
C348 01U-16-04X-K C347 01U-16-04X-K C345 01U-16-04X-K C346 01U-16-04X-K
SATA0RXN_HDD SATA0RXP_HDD SATA0TXN_HDD SATA0TXP_HDD SATA1RXN_ODD SATA1RXP_ODD SATA1TXN_ODD SATA1TXP_ODD
SATA_CLKN SATA_CLKP
CLK_ICH_SATA# CLK_ICH_SATA
SATARBIAS# SATARBIAS
R287 24.9-1-04
SATALED#
SATA_LED# 14,16
A20GATE A20M# CPUSLP# IGNNE# INIT3_3V# INIT# INTR FERR# NMI RCIN# SERIRQ SMI# STPCLK# THERMTRIP#
H_A20GATE A20M# HCPUSLP# IGNNE# INIT_N# INTR FERR# NMI H_RCIN# INT_SERIRQ SM# STPCLK#
+3.3V
R282 4.7K-04 GPIO36
GPIO36
+1.05V
R130 56-04
C181 .1U-16-04Y-Z
close to pin
Stitching caps used for differential pair reference plane transitions , reduce the loop inductance on the currents return path
1.A minimum of one (1) stitching cap can be shared by up to four different pairs .
2.Stitching cap values of 0.1 F are sufficient.
3.Stitching caps should be placed within 100 mils
+3.3V
10K-04 R122 H_A20GATE
10K-04 R281 H_RCIN#
10K-04 R133 INT_SERIRQ
DEL in B
+1.05V
A20M# R132 @1K-04
HCPUSLP# R131 @1K-04
IGNNE# R125 @1K-04
INIT_N# R135 @1K-04
INTR R137 @1K-04
NMI R128 @1K-04
SM# R126 @1K-04
STPCLK# R129 @1K-04
WHEN NOT IN USED, PU WITH 1KOHM DEFENSIVE SITE
SHUTTLE
Title
07 TPT - PCI&USB&HOST
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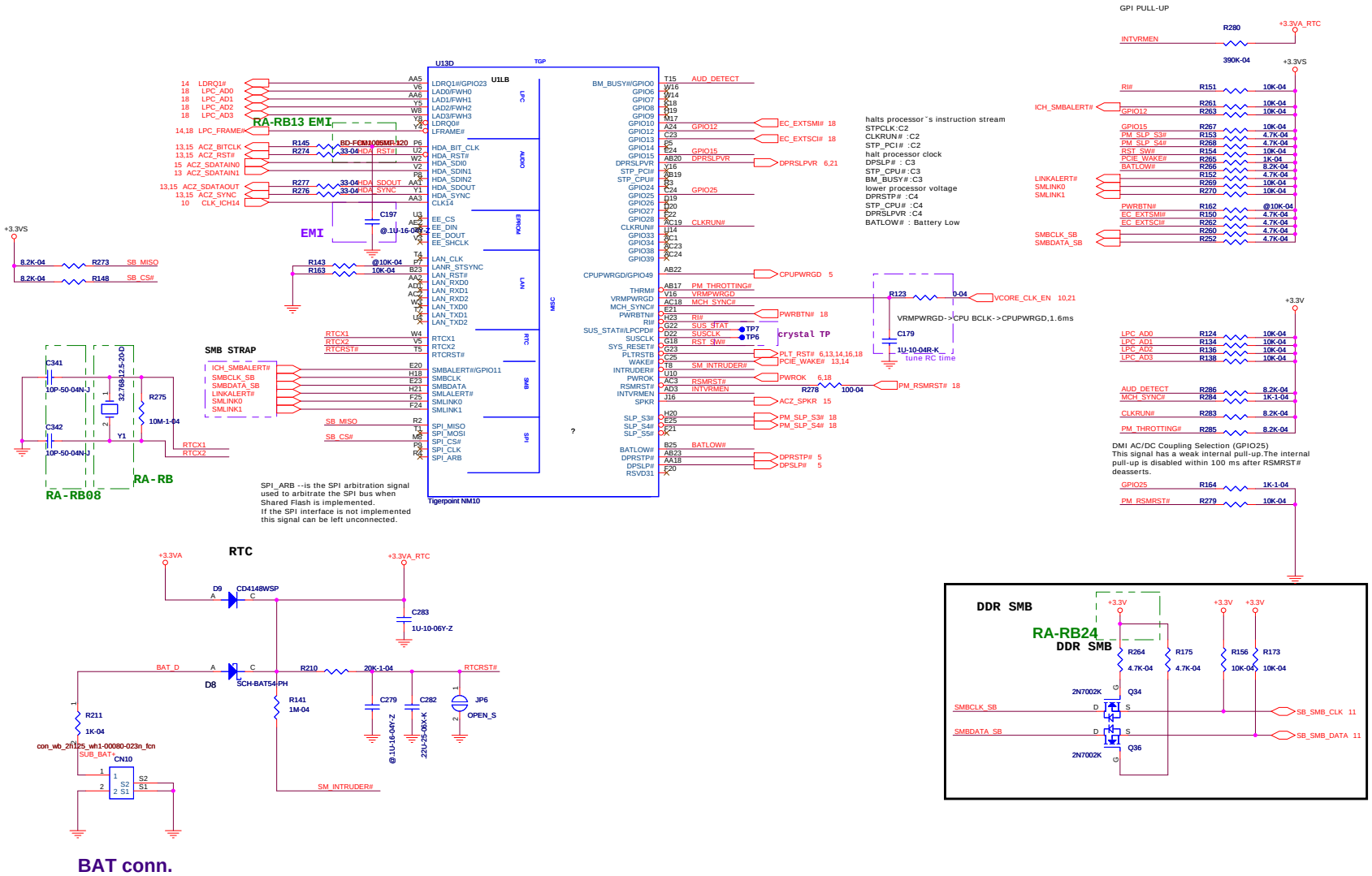
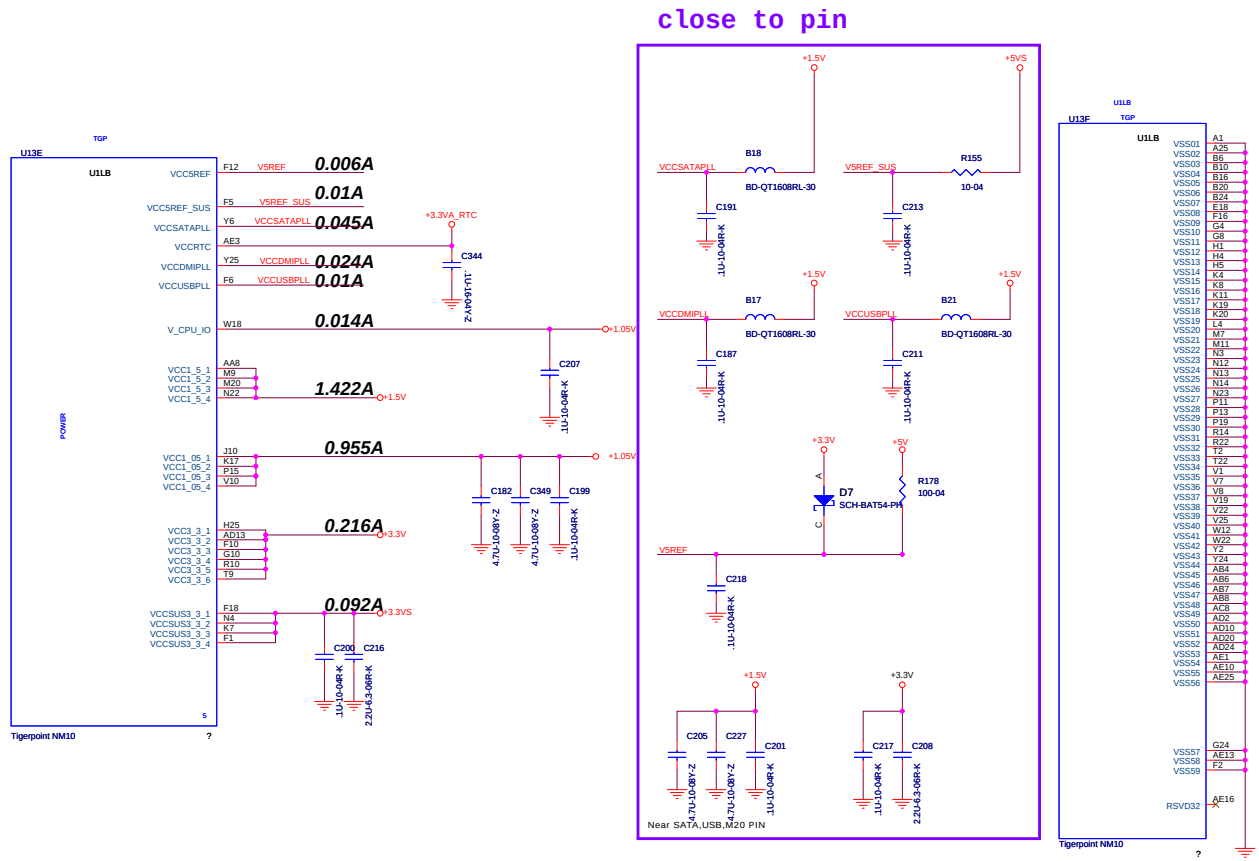


SHUTTLE	
Title	08 TPT - Audio&SPI&GPIO
Size	Document Number: 5025 — Rev: A
Date: Tuesday, December 22, 2009	Sheet 8 of 27



SHUTTLE

Title: TPT Power

Size	Document Number	Rev
	5025	A

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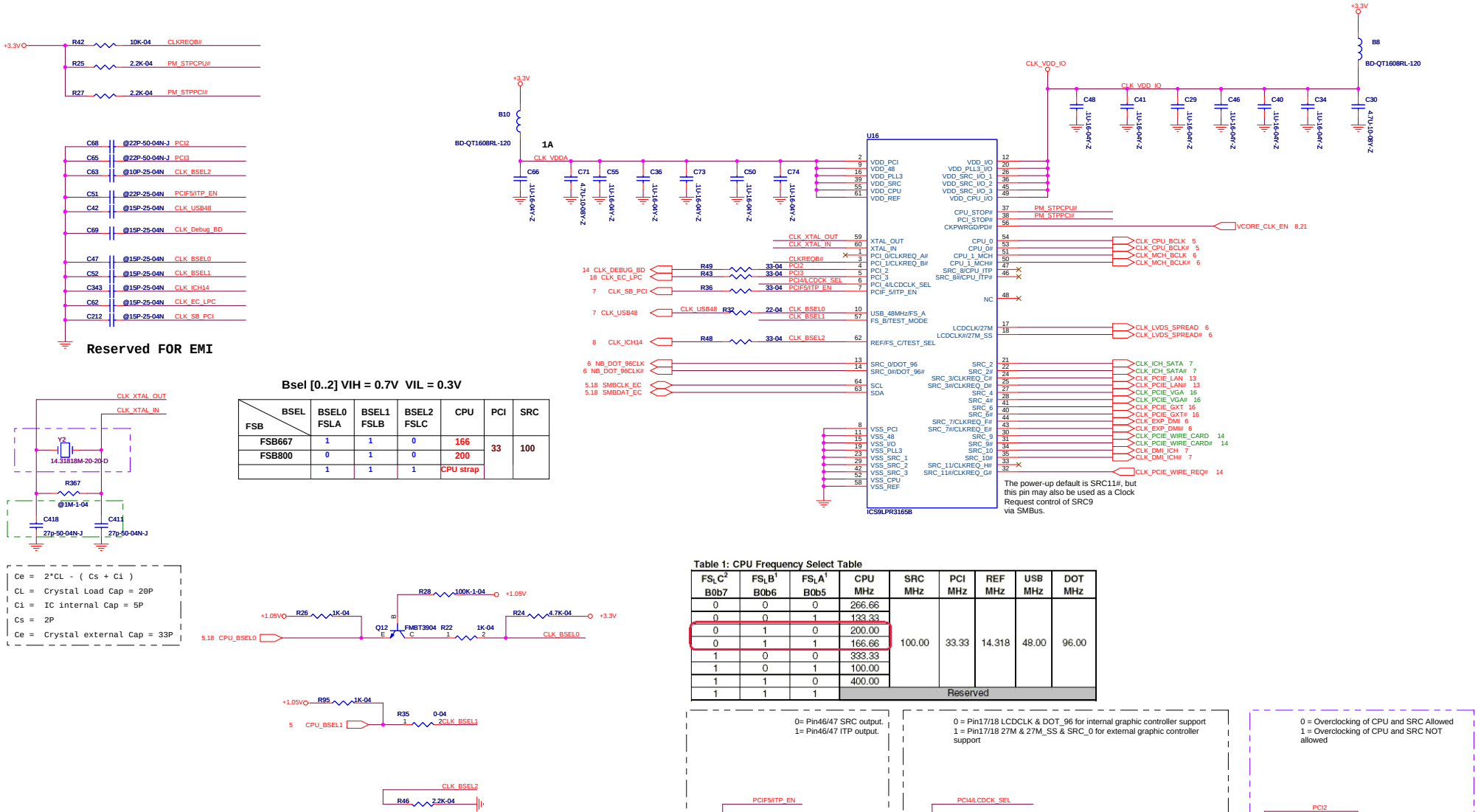

SHUTTLE

Title: CLOCK GEN (ICS9LPR365)

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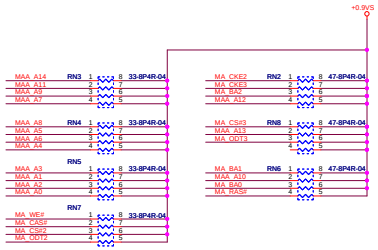
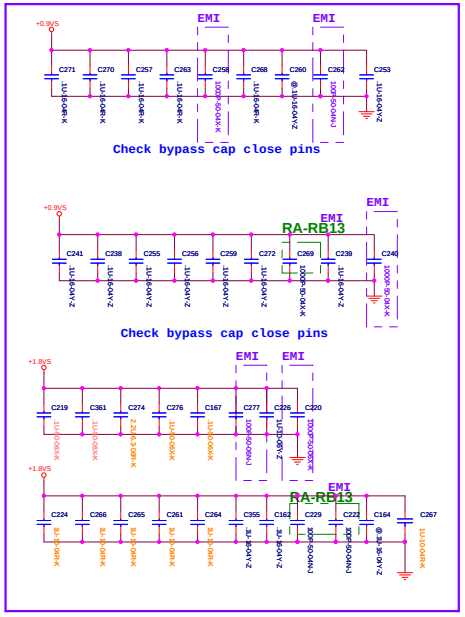
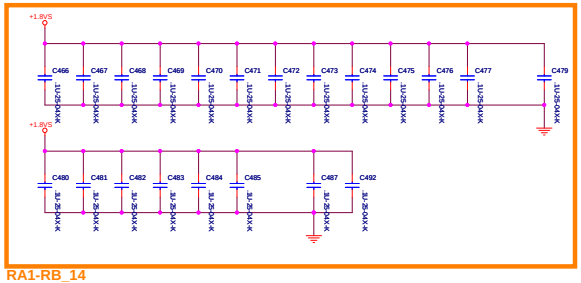
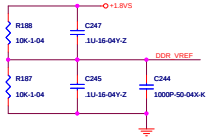
DDR Terminatation

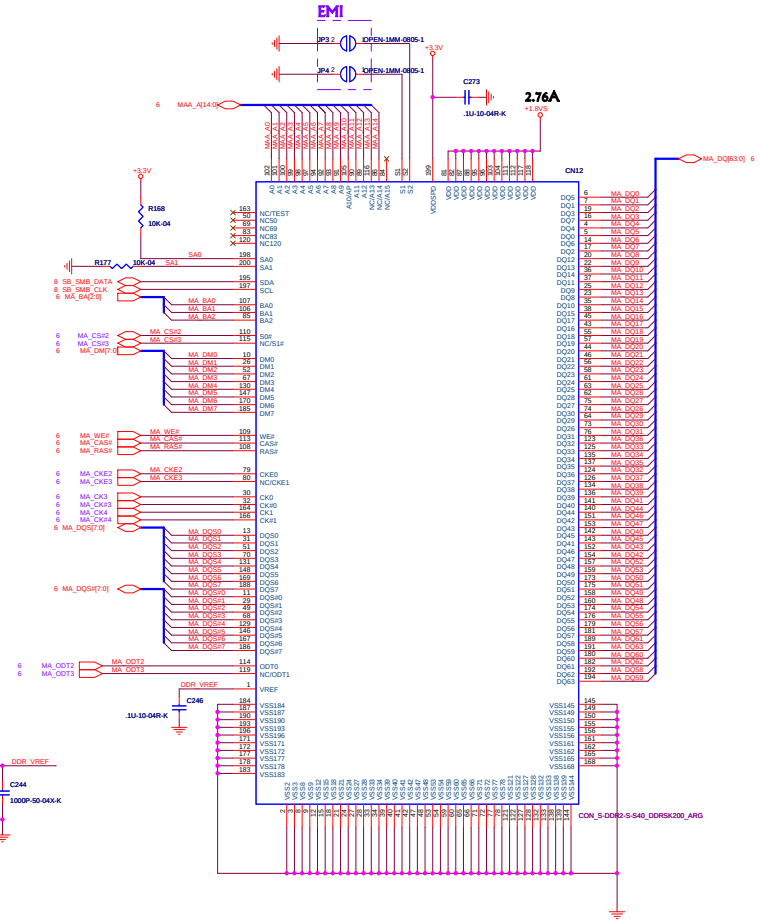






RA1-RB_14





SHUTTLE	
Title	DDR2 SODIMM
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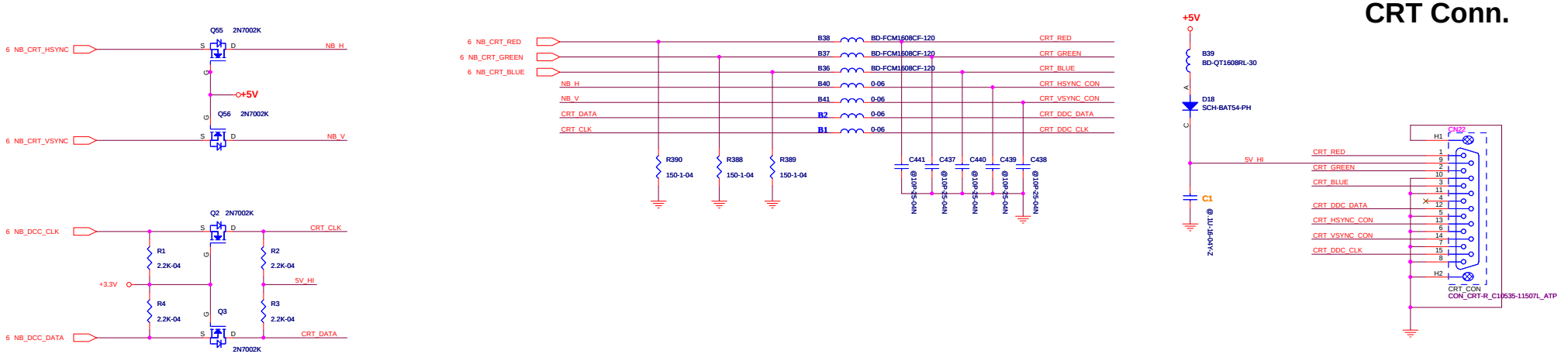
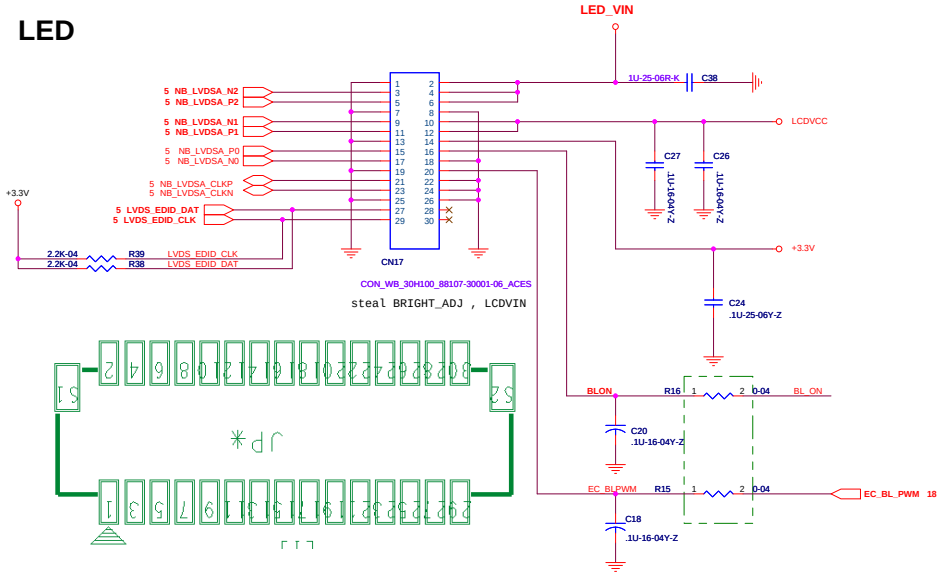
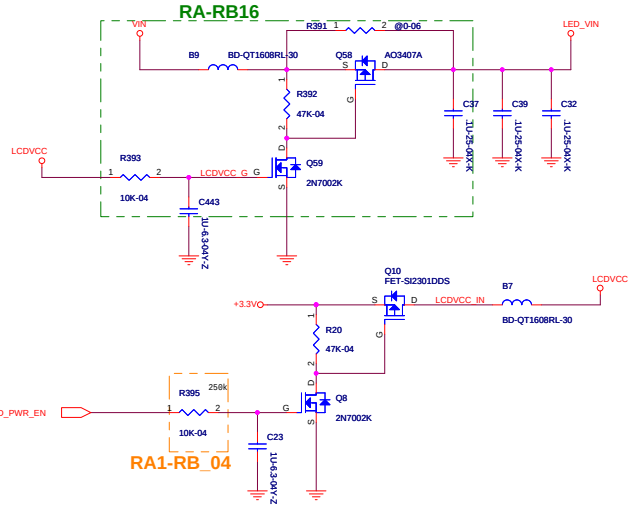
CRT Conn.

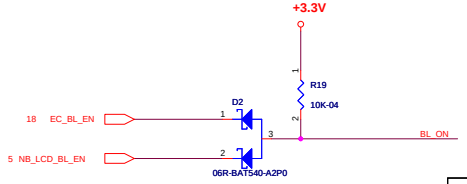


LVDS

LED







SHUTTLE		
Title	CRT /LVDS	
Size	Document Number 5025	Rev A
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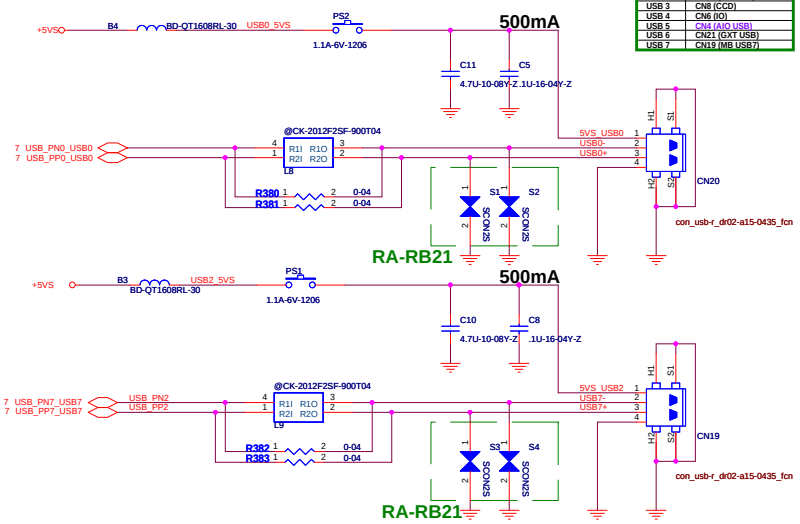
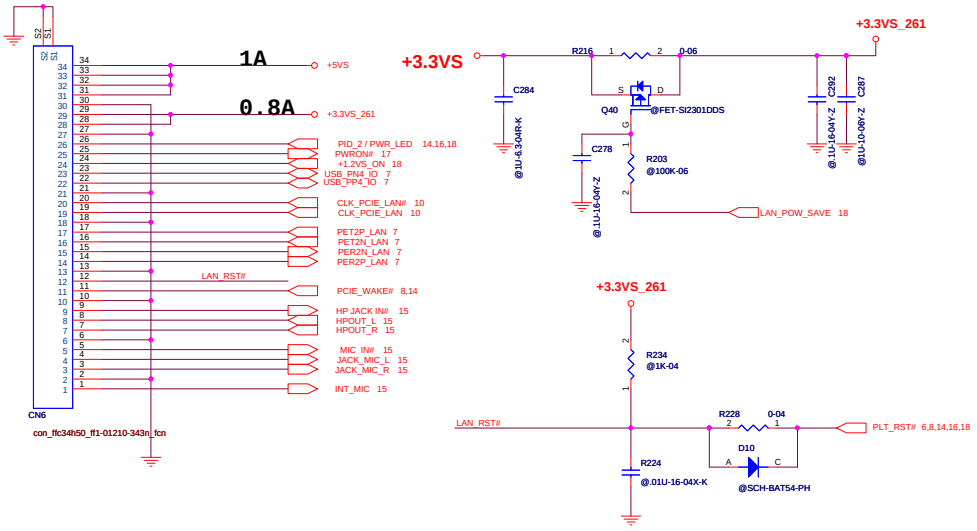
USB x 2

USB	Location
USB 0	CN20 (MB USB0)
USB 1	CN7 (3G)
USB 2	CN11 (MB MINI)
USB 3	CN8 (CCD)
USB 4	CN6 (IO)
USB 5	CN4 (AIO USB)
USB 6	CN21 (GXT USB)
USB 7	CN19 (MB USB7)

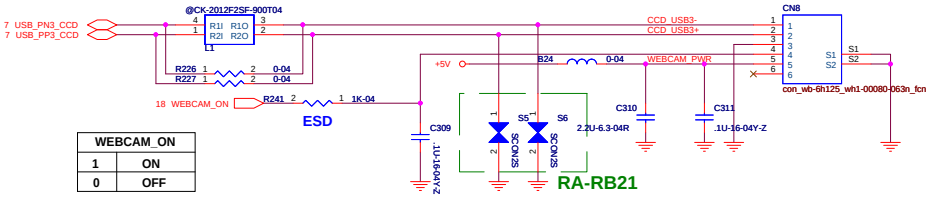


IO CON.



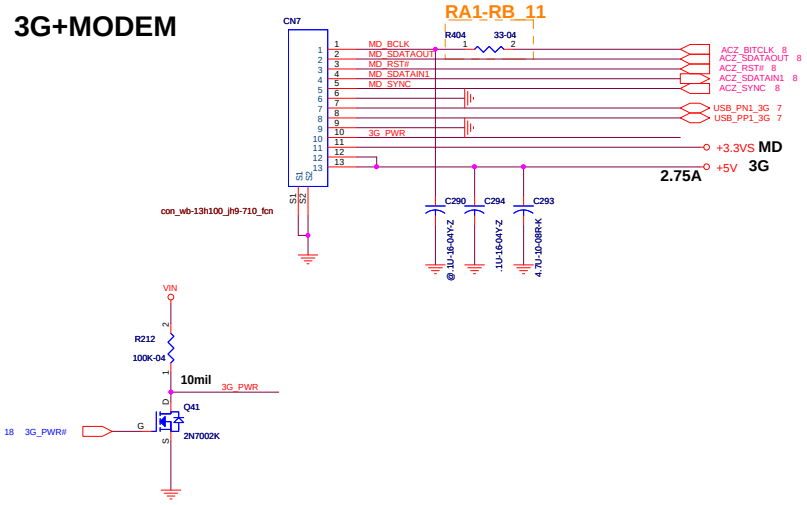
WEBCAM

USB	Location
USB 0	CN20 (MB USB0)
USB 1	CN7 (3G)
USB 2	CN11 (MB MINI)
USB 3	CN8 (CCD)
USB 4	CN6 (IO)
USB 5	CN4 (AIO USB)
USB 6	CN21 (GXT USB)
USB 7	CN19 (MB USB7)

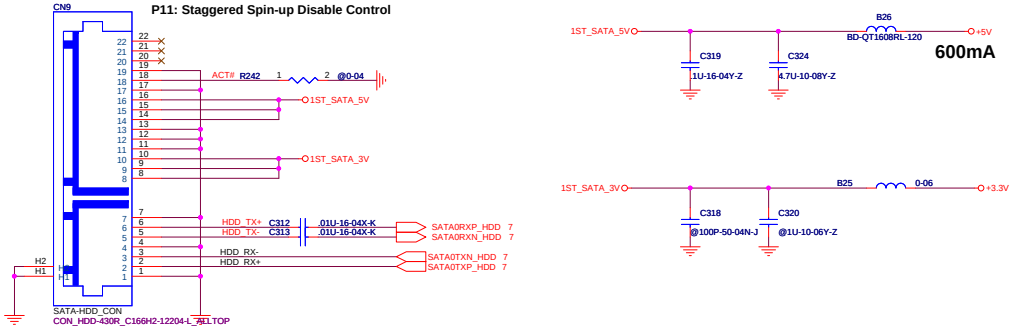


WEBCAM_ON	
1	ON
0	OFF

3G+MODEM



HDD



SHUTTLE			
Title	13 USB / WEBCAM / SATA / BT		
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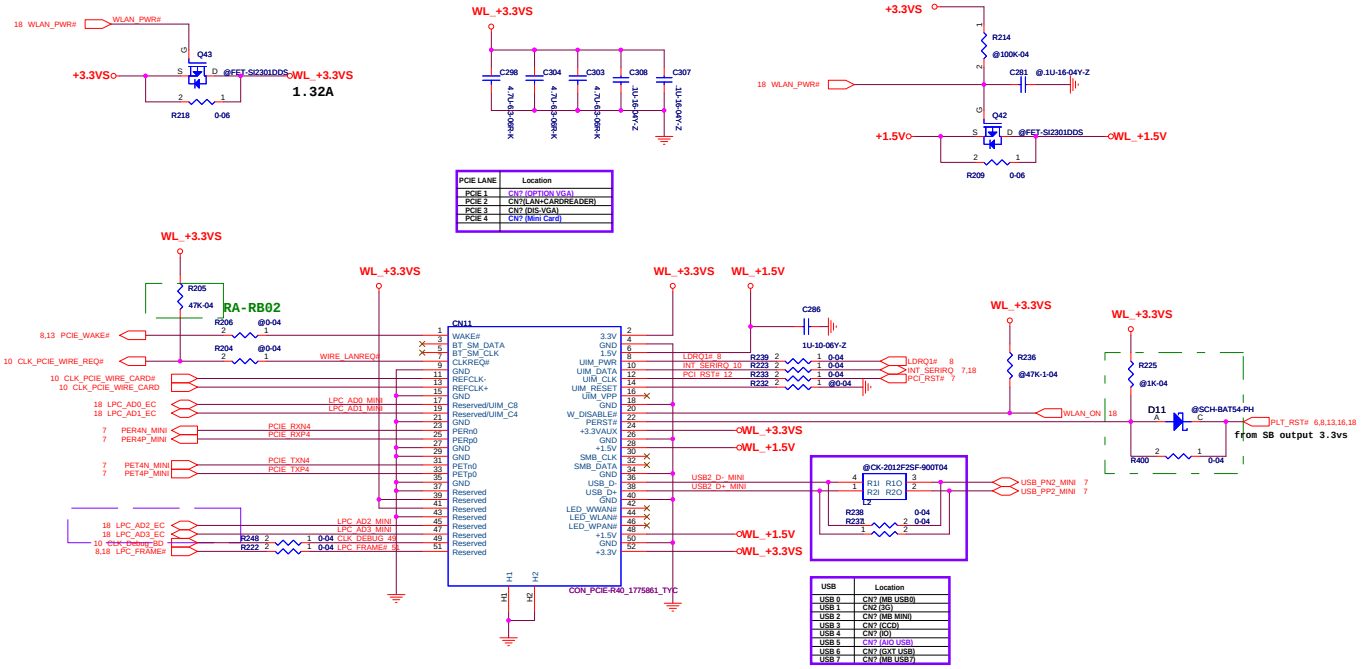
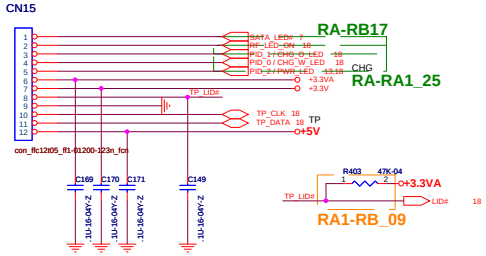
WLAN CONN



TP+LED CONN



SHUTTLE

Title: 14 TP/ Mini Card / WEBCAM

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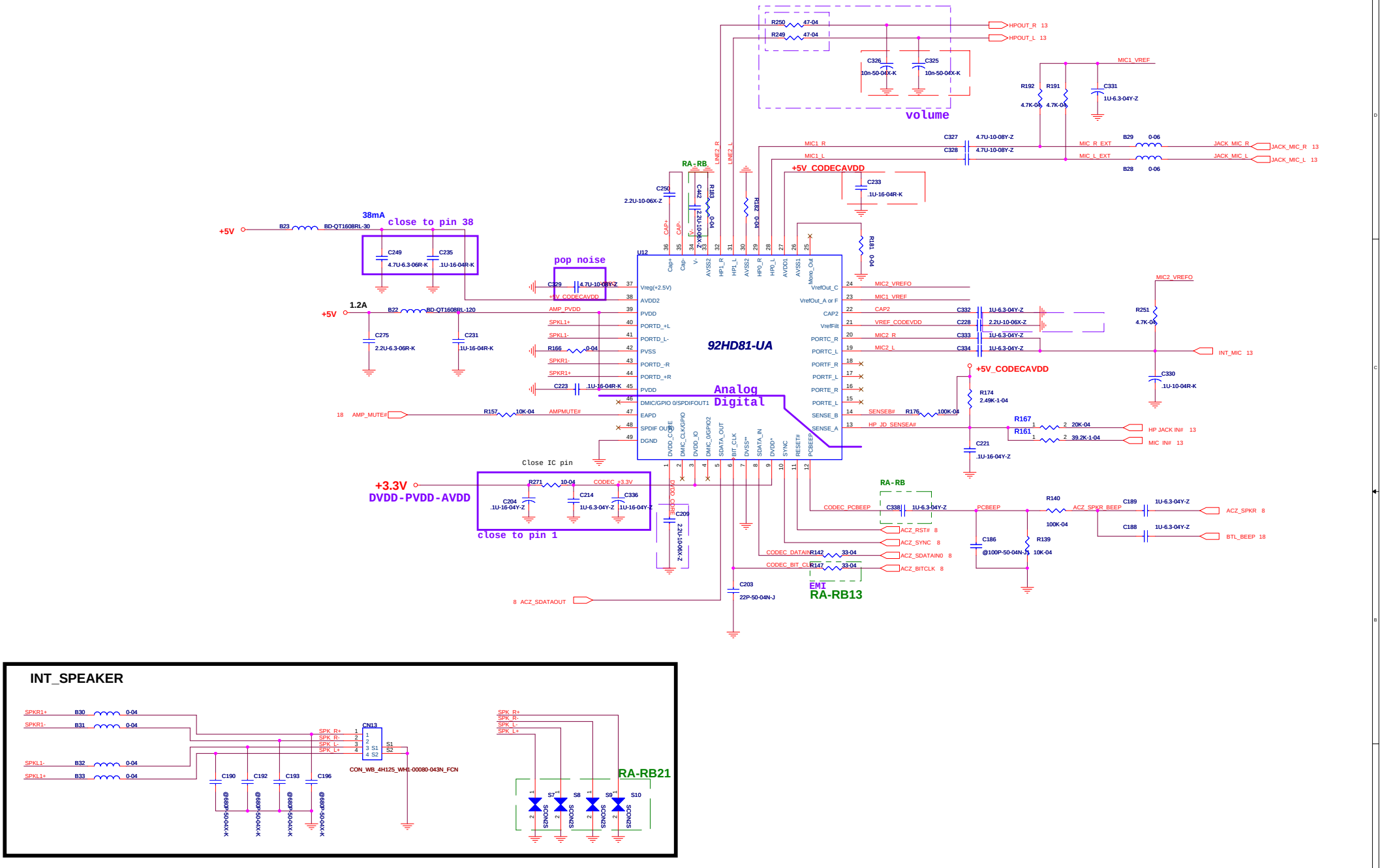
volume
92HD81-UA
Analog
Digital
RA-RB
RA-RB13
RA-RB21
EMI
pop noise
38mA
close to pin 38
close to pin 1
Close IC pin
+3.3V
DVDD-PVDD-AVDD
+5V_CODECAVDD
1.2A
+5V
INT_SPEAKER
CON_WB_4H125_WH1-00080-043N_FCN
HPOUT_R 13
HPOUT_L 13
JACK_MIC_R 13
JACK_MIC_L 13
INT_MIC 13
HP JACK IN# 13
MIC IN# 13
ACZ_SPKR 8
BTL_BEEP 18
ACZ_RST# 8
ACZ_SYNC 8
ACZ_SDATAIN0 8
ACZ_BITCLK 8
8 ACZ_SDATAOUT
18 AMP_MUTE#
SHUTTLE
15 CODEC & AMP/INT_MIC/SPK
5025
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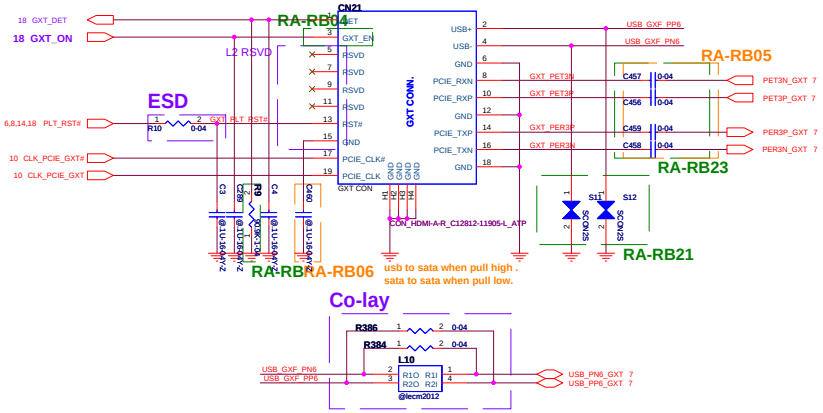
GXT CONN.

PCIE LANE	Location
PCIE 1	CN2 (OPTION VGA)
PCIE 2	CN6(LAN+CARDREADER)
PCIE 3	CN21 (GXT-VGA)
PCIE 4	CN11 (Mini Card)

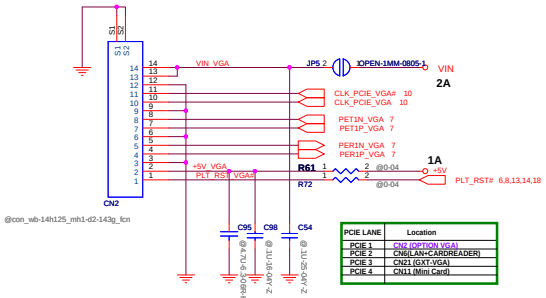
USB	Location
USB 0	CN20 (MB USB0)
USB 1	CN7 (3G)
USB 2	CN11 (MB MINI)
USB 3	CN8 (CCD)
USB 4	CN6 (IO)
USB 5	CN4 (AIO USB)
USB 6	CN21 (GXT USB)
USB 7	CN19 (MB USB7)



Co-lay

1'L ONLY

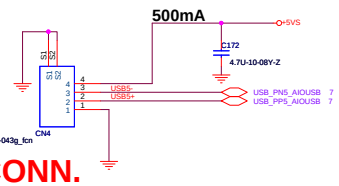
VGA CONN.



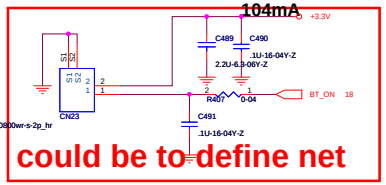
PCIE LANE	Location
PCIE 1	CN2 (OPTION VGA)
PCIE 2	CN6(LAN+CARDREADER)
PCIE 3	CN21 (GXT-VGA)
PCIE 4	CN11 (Mini Card)

USB CONN.

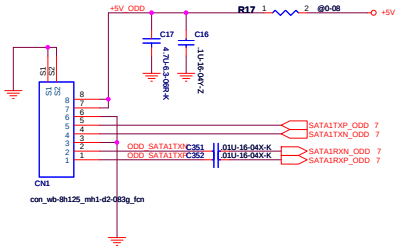
USB	Location
USB 0	CN20 (MB USB0)
USB 1	CN7 (3G)
USB 2	CN11 (MB MINI)
USB 3	CN8 (CCD)
USB 4	CN6 (IO)
USB 5	CN4 (AIO USB)
USB 6	CN21 (GXT USB)
USB 7	CN19 (MB USB7)



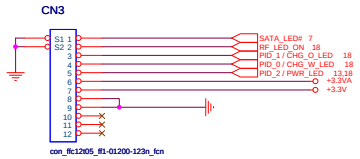
BT CONN.



ODD CONN.



LED CONN.



	SHUTTLE	
Title	LAN	
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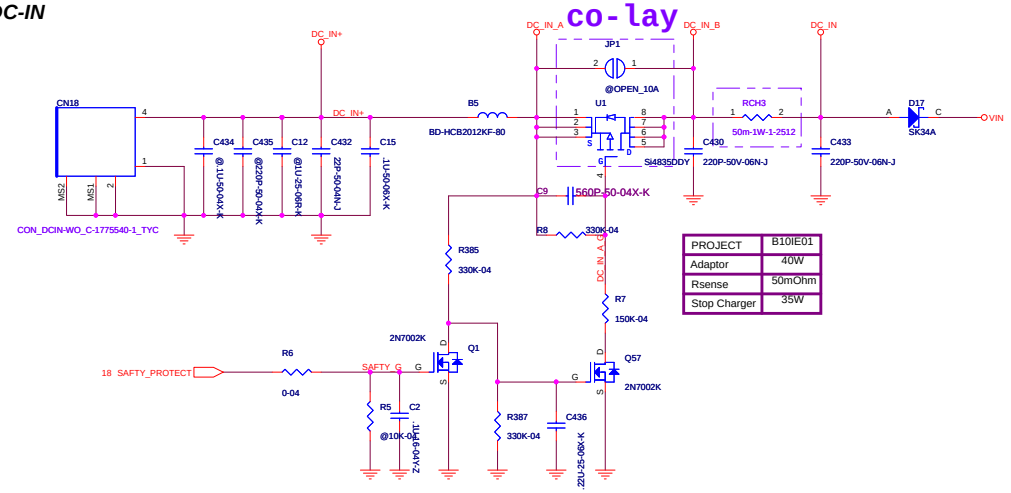
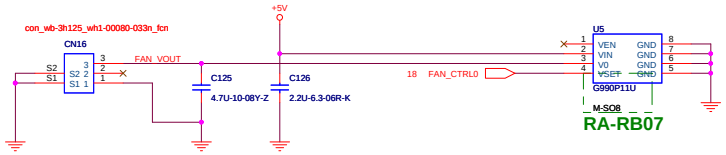
DC-IN

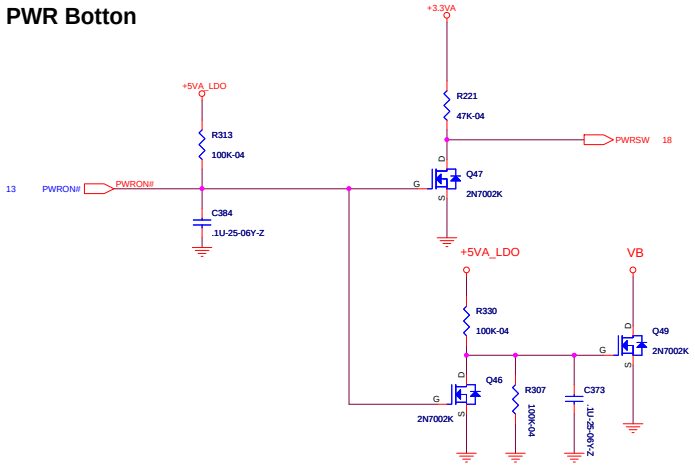


PROJECT	B10IE01
Adaptor	40W
Rsense	50mOhm
Stop Charger	35W

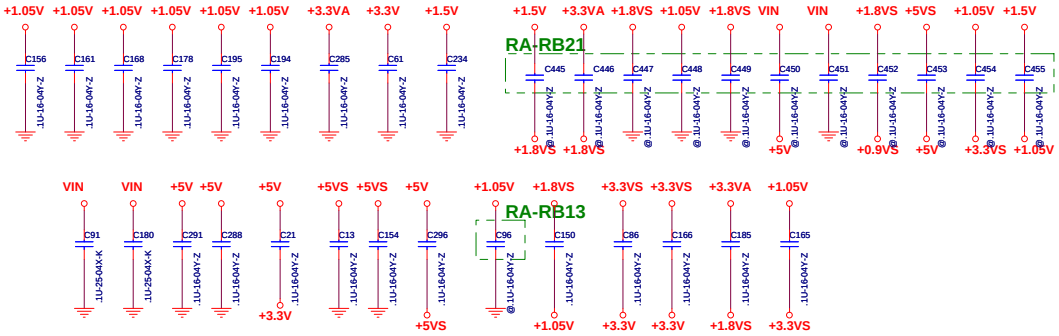
CPU FAN CONTROL



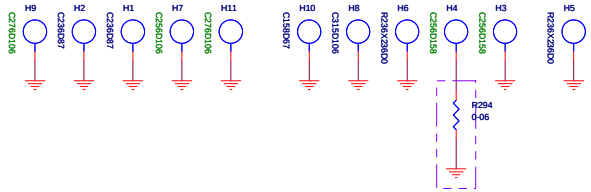
PWR Botton



BYPASS



HOLE



SHUTTLE

Title: PWR SW/FAN/HSCRP CAP/DC IN

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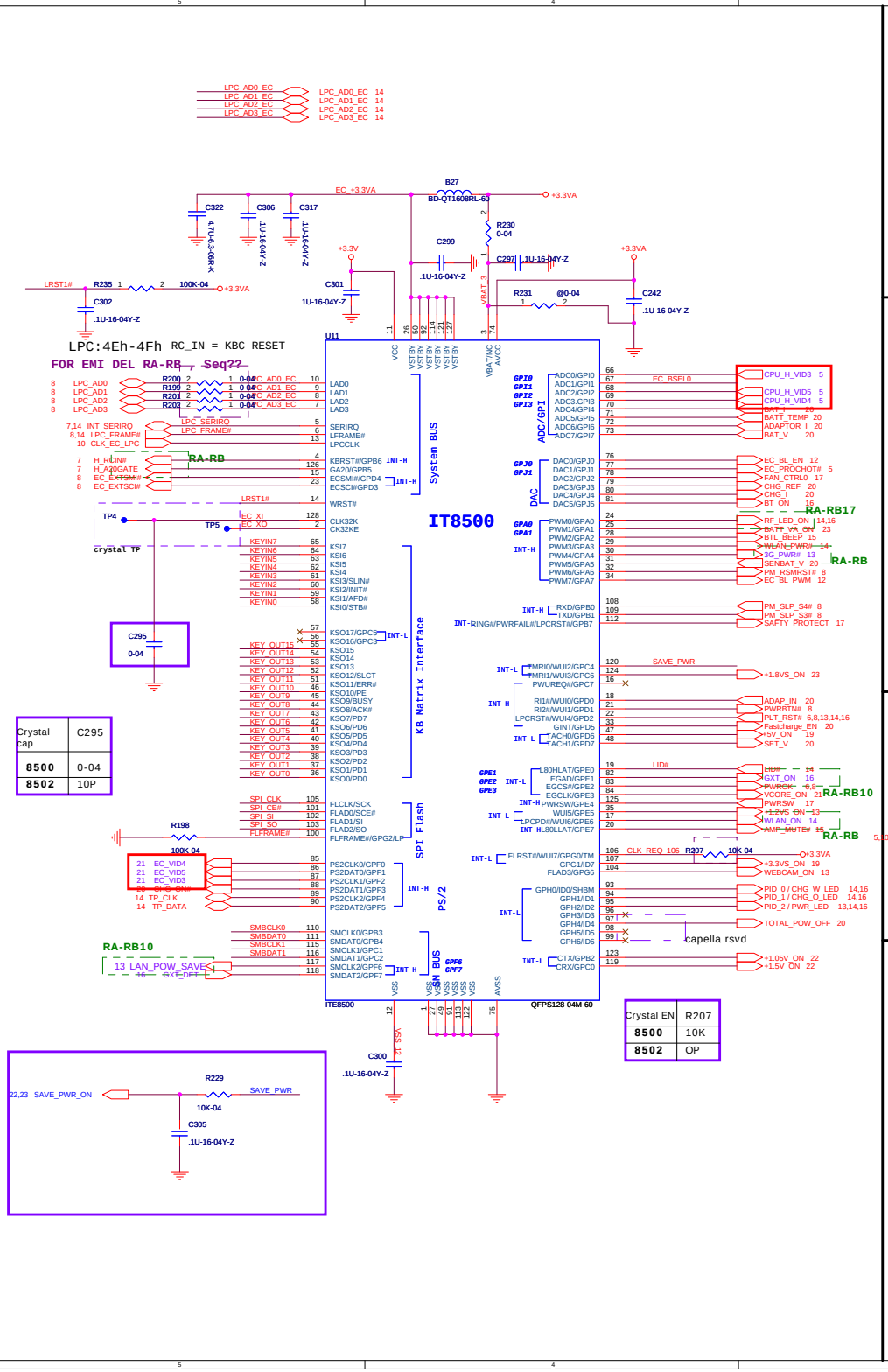

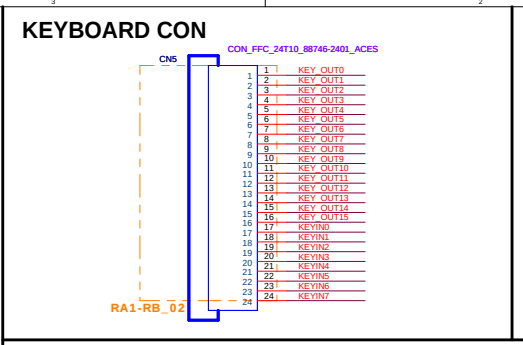

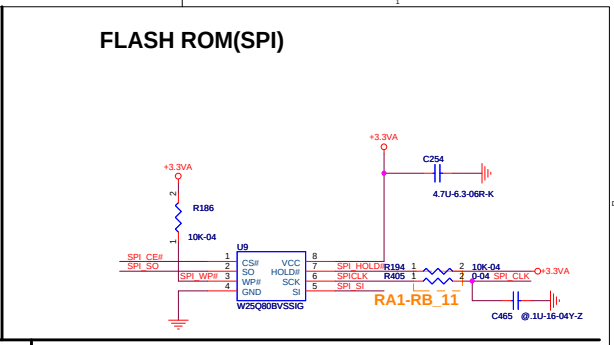

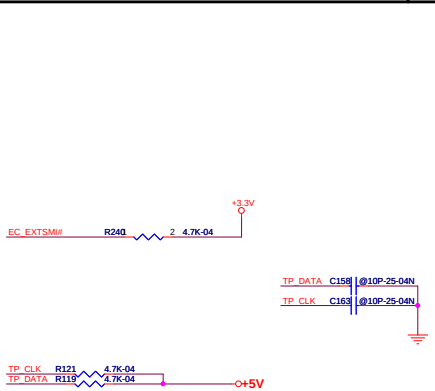

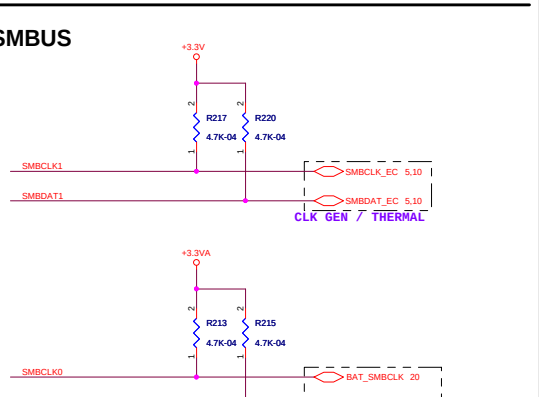

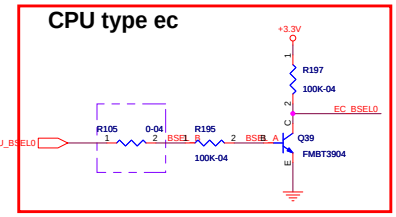

FSB \ BSEL	EC_BSEL0	CPU MHZ
FSB667	0	166
FSB800	1	200

Platform ID

Pine trail-D \ ID	(ID3) RF_LED_ON	(ID2) PID_2 / PWR_LED	(ID1) PID_1 / CHG_O_LED	(ID0) PID_0 / CHG_W_LED
B11IE01 B13IE01	0	0	0	0

Pine trail-M \ ID	(ID3)	(ID2)	(ID1)	(ID0)
B11IE01 B13IE01	0	0	0	1

Pine trail-D \ ID	(ID3)	(ID2)	(ID1)	(ID0)
DB14IE01	0	0	1	0

MODEL \ ID	(ID3)	(ID2)	(ID1)	(ID0)
DB18	0	0	0	0

SHUTTLE

Title: PWR SW/FAN/HSCRP CAP/DC IN

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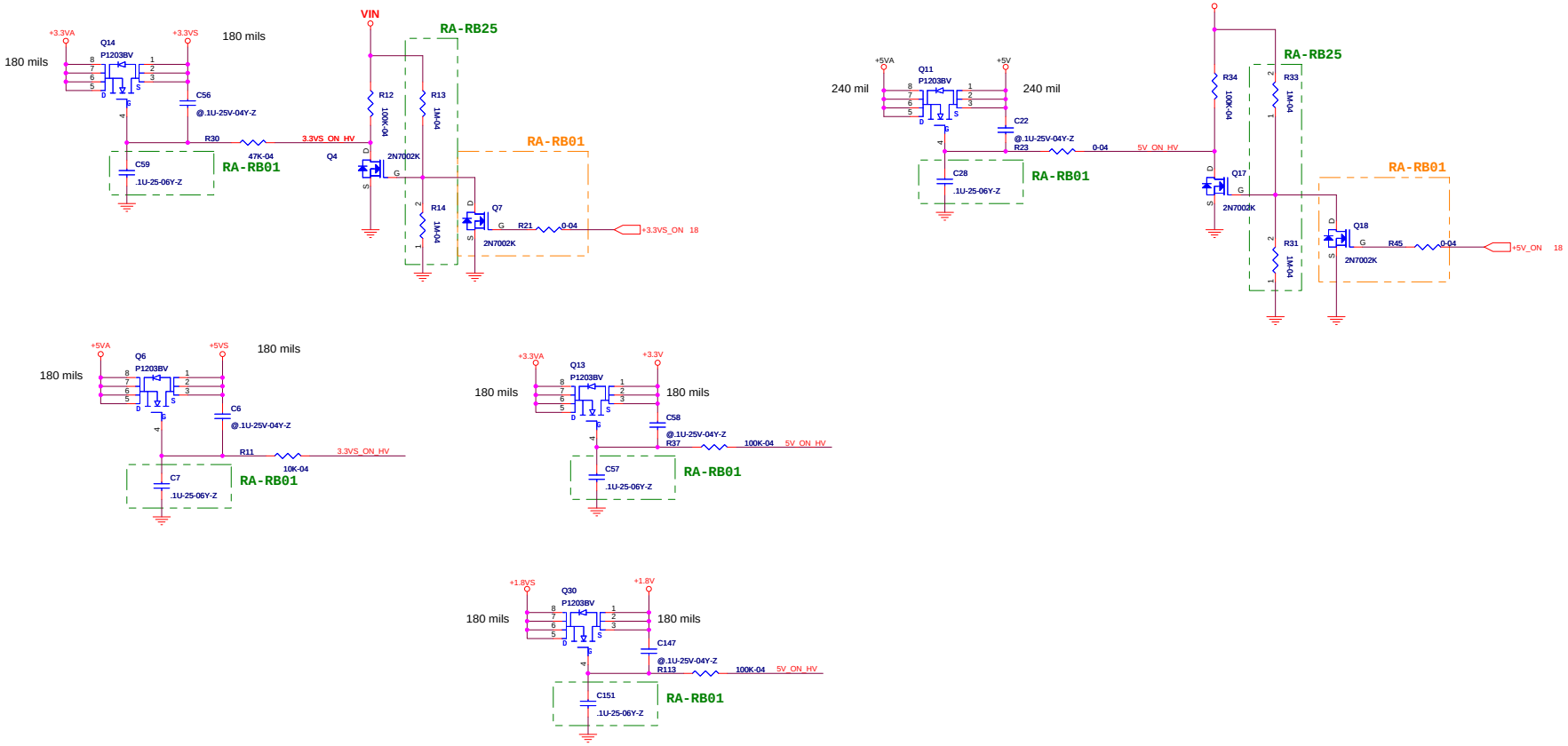

SHUTTLE

Title: VCC SW

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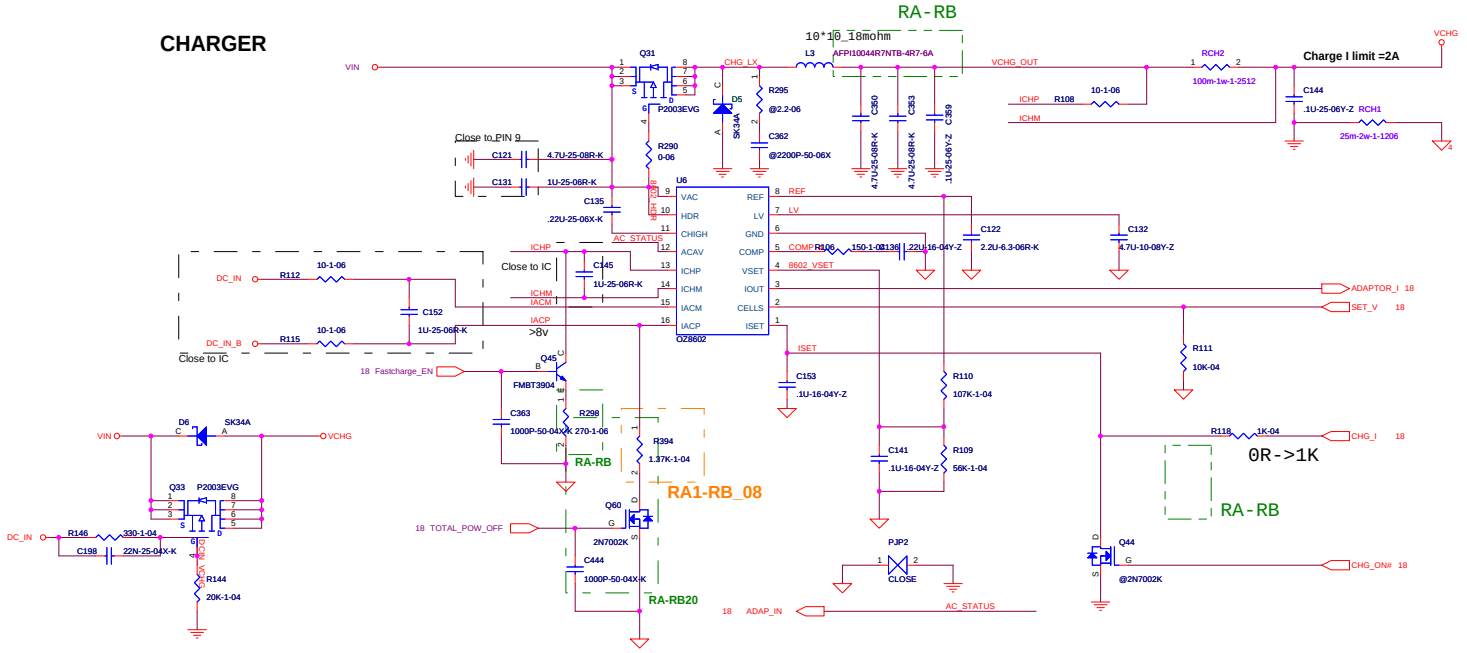
CHARGER



ADAPTOR_I	
Voltage	W
500mV	20W
1000mV	40W
1500mV	60W
2000mV	80W
1.25V	100W
X	X

Vichg =RAD1*Irsense*10

SET_V	
L (3CELL)	12.75V

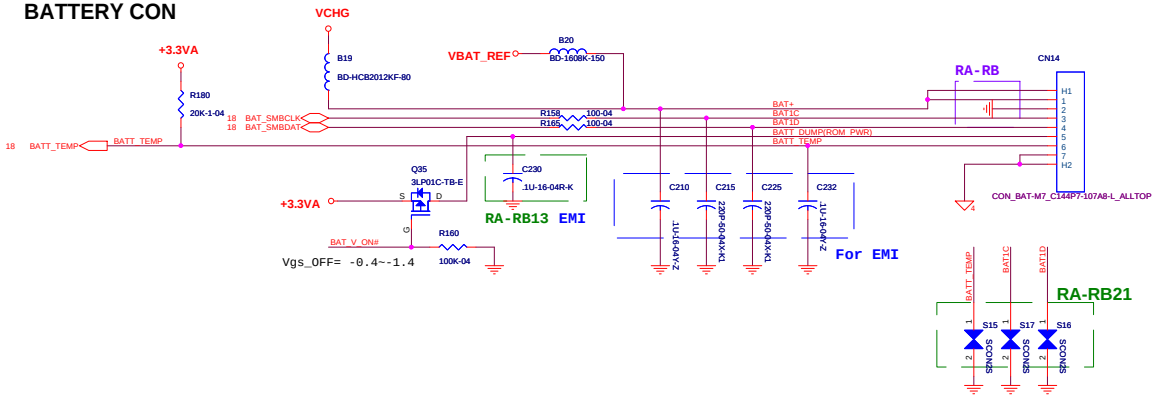
Vch =Nx(4.1 +Vset/10)
N=Cell (pin2 =hing -->4, low -->3)

Fastcharge_EN	CHG_I	Ich
H	3V	1.96A
L	3V	1A
L	0.75V	250mA
L	0.3V	100mA

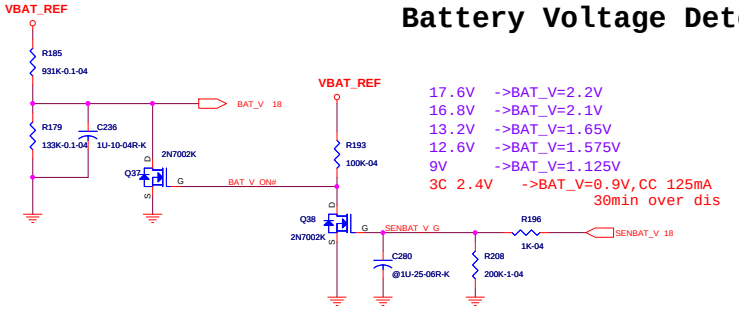
CHARGER CURRENT = (((Vfastcharge_EN-Vbe)/180)*10+CHG_I/30)))/0.1

CHG_ON	
L	CHARGER ON
H	CHARGER OFF

BATTERY CON

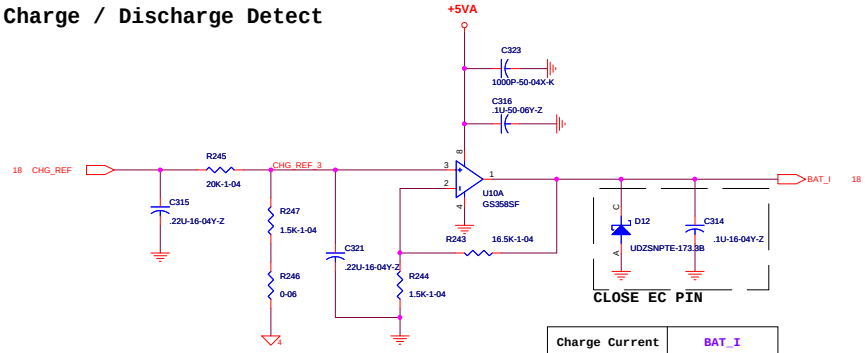


Battery Voltage Detect



17.6V ->BAT_V=2.2V
16.8V ->BAT_V=2.1V
13.2V ->BAT_V=1.65V
12.6V ->BAT_V=1.575V
9V ->BAT_V=1.125V
3C 2.4V ->BAT_V=0.9V,CC 125mA
30min over dis

Charge / Discharge Detect



Charge Current	BAT_I
4.75A	3.000V
3.00A	2.511V
2.00A	2.23V
1.00A	1.97V
0.00A	1.674V
-1A	1.395V
-3A	0.837V

SHUTTLE

Title: BATT IN / CHARGER (OZ8602)

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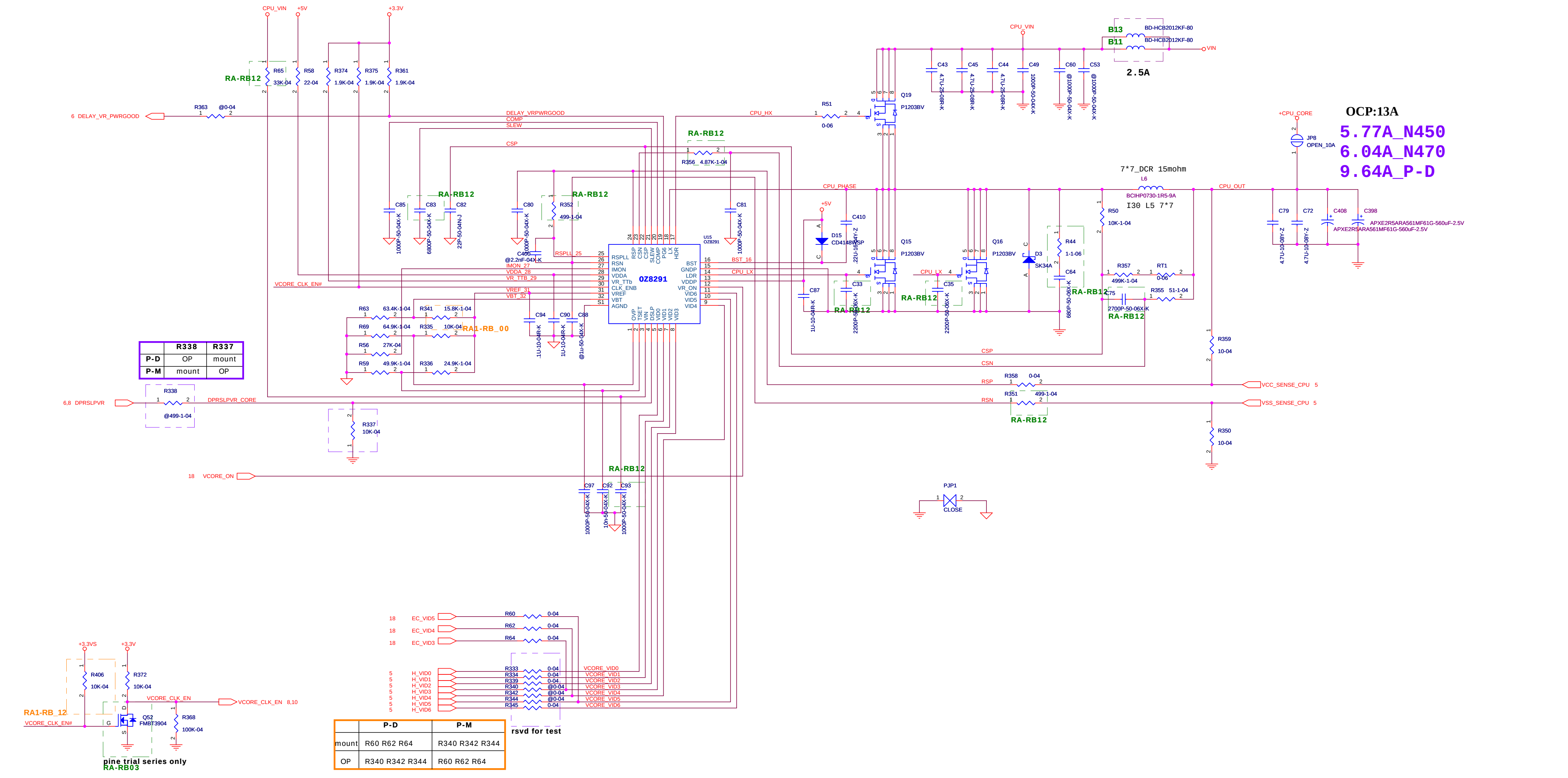

CPU_VIN
+5V
+3.3V
RA-RB12
DELAY_VR_PWRGOOD
DELAY_VRPWRGOOD
COMP
SLEW
CSP
CPU_HX
CPU_PHASE
CPU_OUT
CPU_LX
BST_16
VCORE_CLK_EN#
DPRSLPVR
DPRSLPVR_CORE
VCORE_ON
Q19 P1203BV
Q15 P1203BV
Q16 P1203BV
D15 CD4148WSP
D3 SK34A
U15 OZ8291
OZ8291
RSPLL RSN IMON VDDA VR_TTb CLK_ENB VREF VBT AGND
BST GNDP LDR VDDP VR_ON VID6 VID5 VID4
L6 BCIHP0730-1R5-9A
I30 L5 7*7
7*7_DCR 15mohm
B13 BD-HCB2012KF-80
B11 BD-HCB2012KF-80
VIN
2.5A
OCP:13A
5.77A_N450
6.04A_N470
9.64A_P-D
+CPU_CORE
JP8 OPEN_10A
APXE2R5ARA561MF61G-560uF-2.5V
CSN
RSP
VCC_SENSE_CPU 5
VSS_SENSE_CPU 5
RA1-RB_00
PJP1 CLOSE
EC_VID5
EC_VID4
EC_VID3
H_VID0
H_VID1
H_VID2
H_VID3
H_VID4
H_VID5
H_VID6
VCORE_VID0
VCORE_VID1
VCORE_VID2
VCORE_VID3
VCORE_VID4
VCORE_VID5
VCORE_VID6
rsvd for test
+3.3VS
RA1-RB_12
VCORE_CLK_EN
VCORE_CLK_EN 8,10
Q52 FMBT3904
pine trial series only
RA-RB03

	R338	R337
P-D	OP	mount
P-M	mount	OP

	P-D	P-M
mount	R60 R62 R64	R340 R342 R344
OP	R340 R342 R344	R60 R62 R64

SHUTTLE

Title: CPU CORE (OZ8291)

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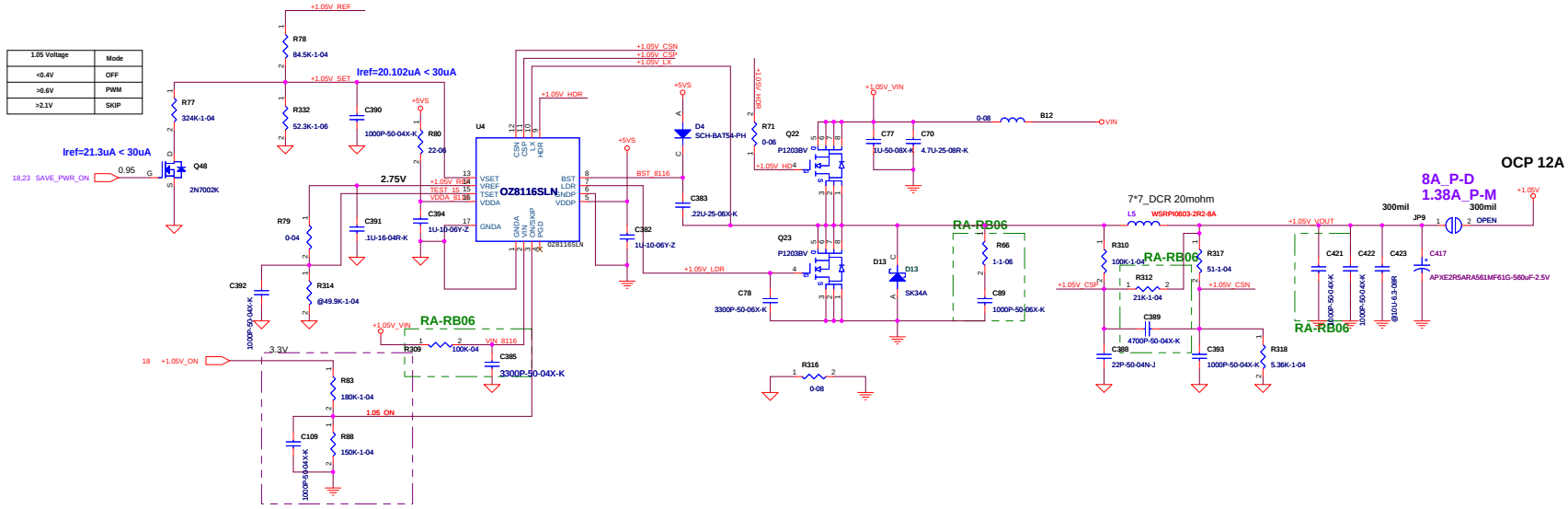

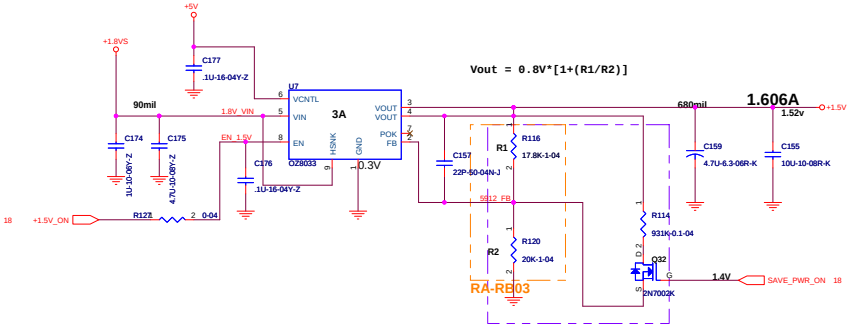

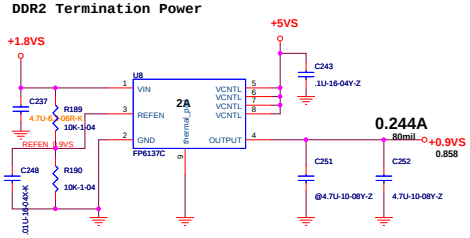

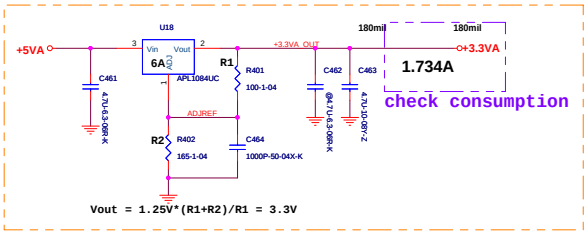

Title	+1.05VS/+1.8VS (OZ8138)
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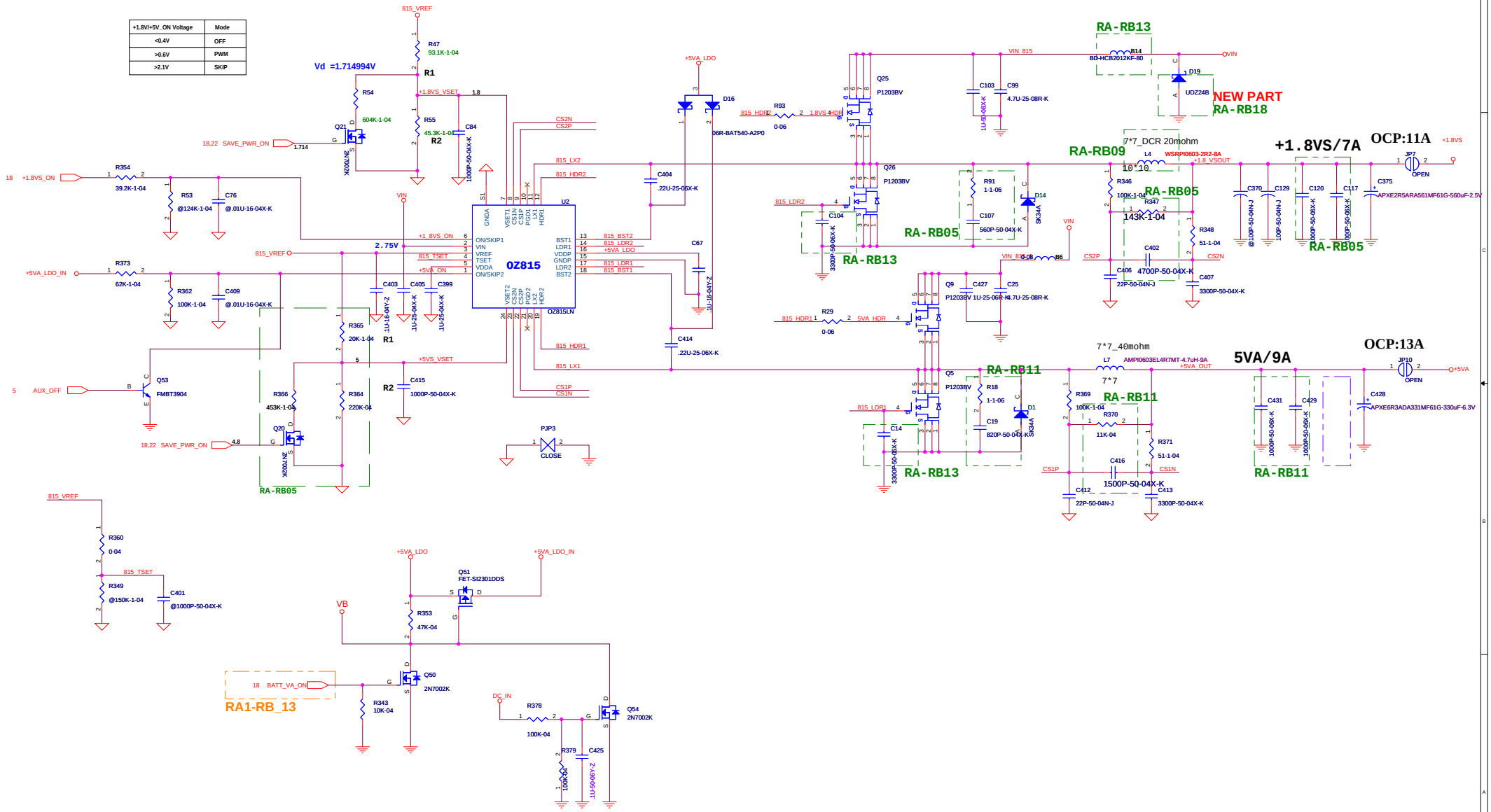
+1.8V/+5V_ON Voltage
Mode
<0.4V
OFF
>0.6V
PWM
>2.1V
SKIP
Vd =1.714994V
OZ815
OZ815LN
2.75V
+1.8VS/7A
OCP:11A
5VA/9A
OCP:13A
NEW PART
RA-RB18
RA-RB13
RA-RB09
RA-RB05
RA-RB11
RA1-RB_13
7*7_DCR 20mohm
10*10
7*7_40mohm
7*7
SHUTTLE
+1.8VS/+5VA (OZ815)
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5025
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