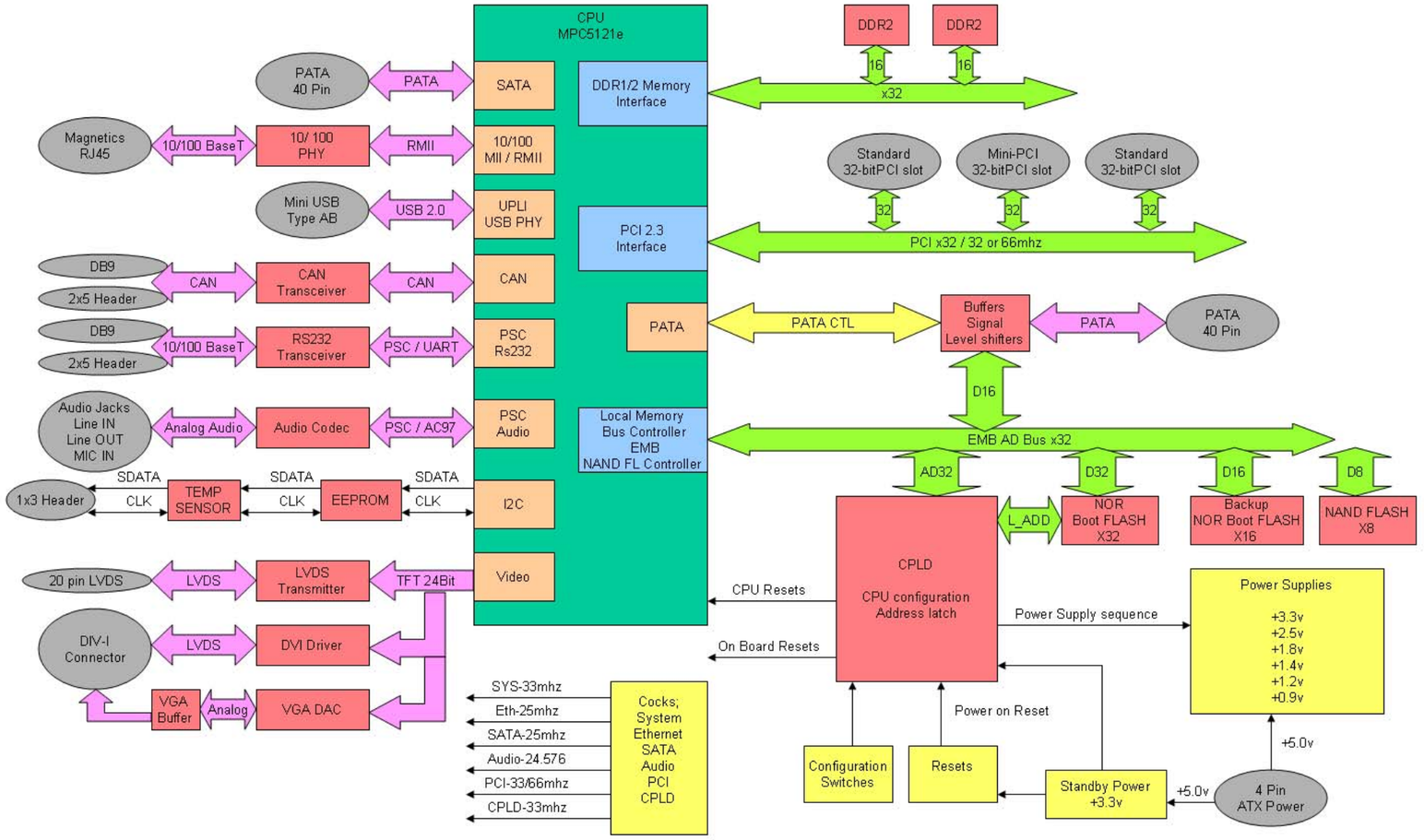
ADS5121e_02 BLOCK DIAGRAM



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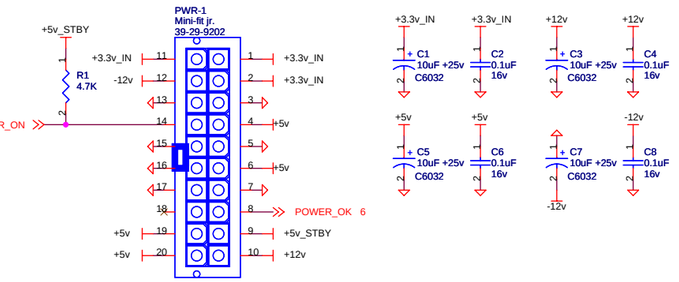
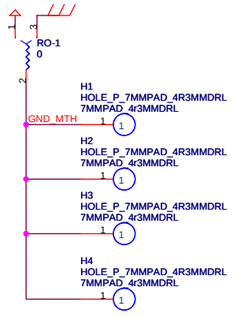
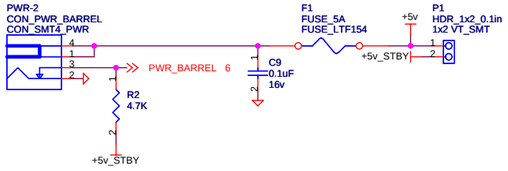
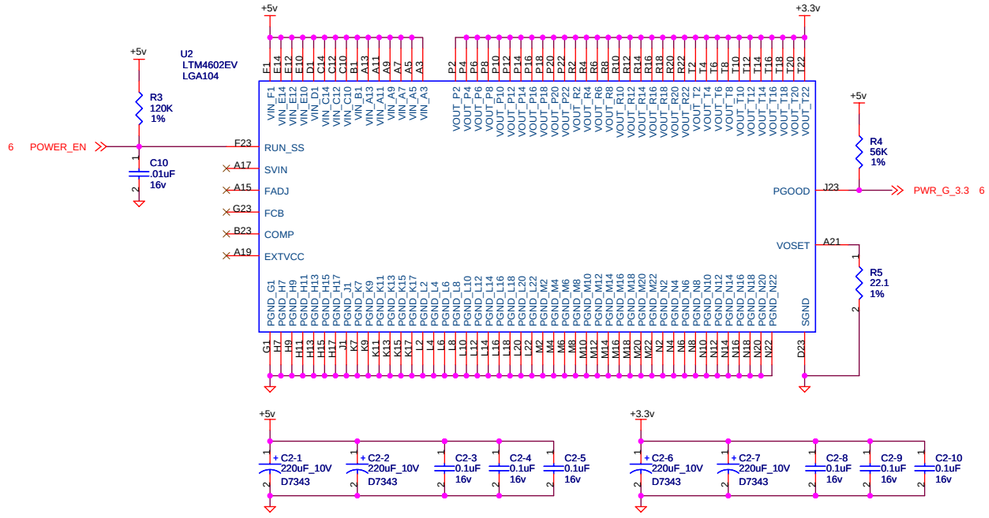
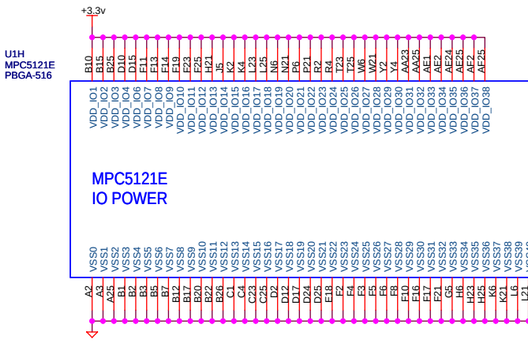
Title	01_Block_Diagram		
Size: Custom	Document Number: ADS5121e_03_SCH_01		Rev: 03
Date: Tuesday, October 30, 2007	Sheet 1 of 11		

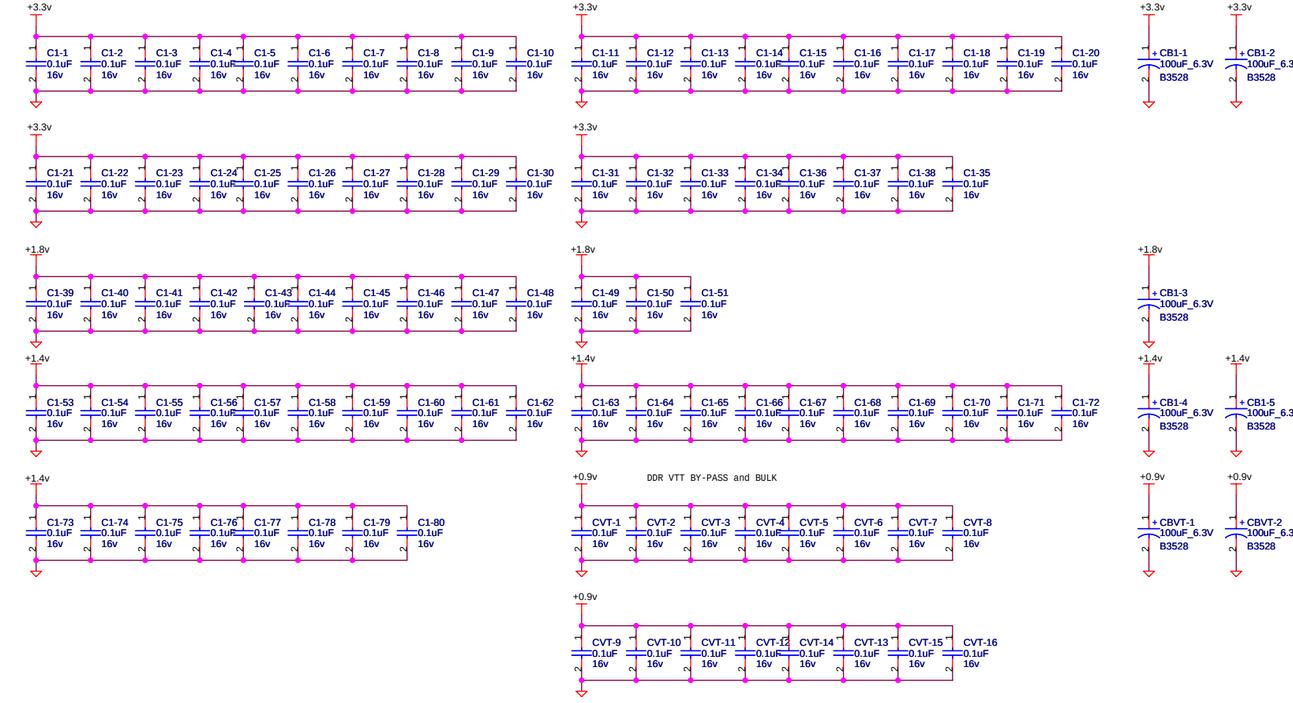


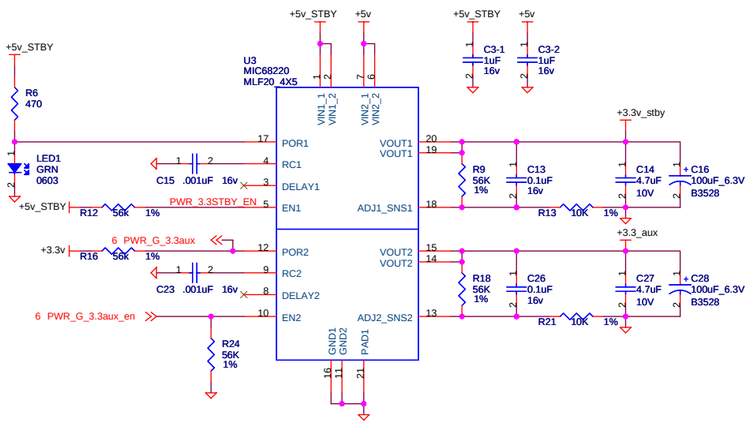


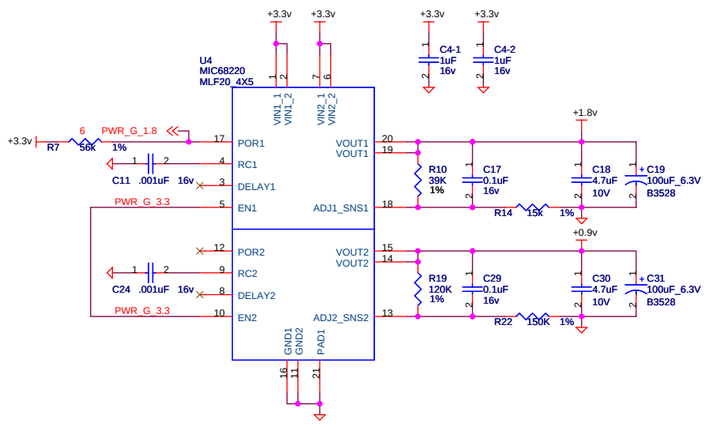


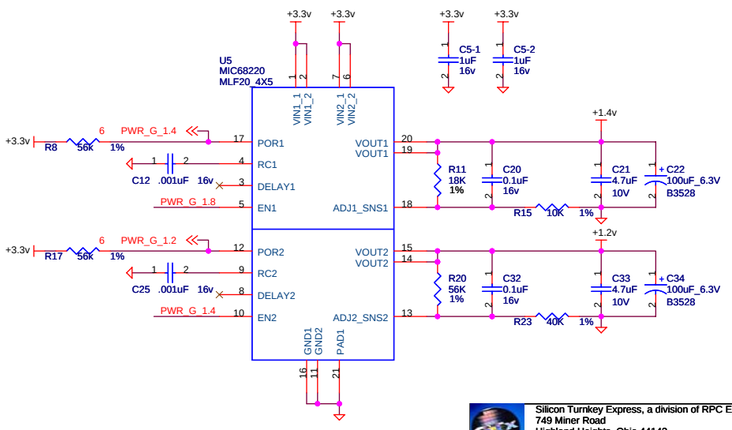












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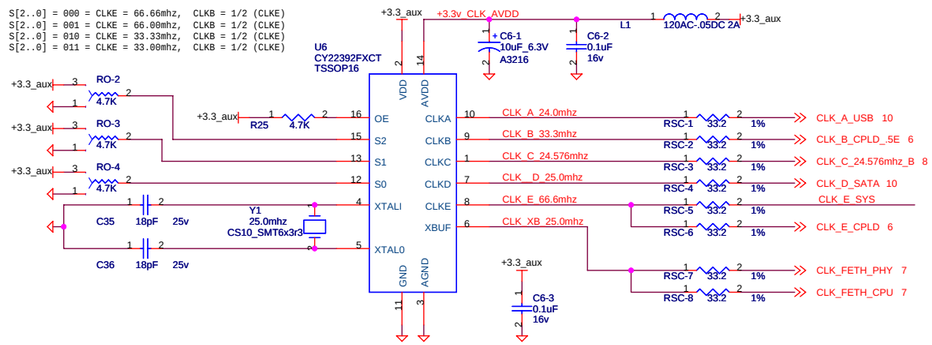
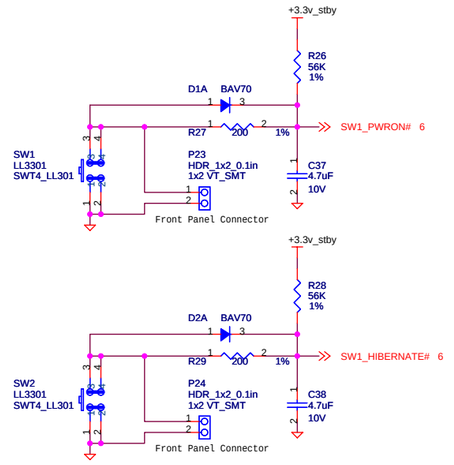
Title: 02_Power_Supplies_CPU_PWR

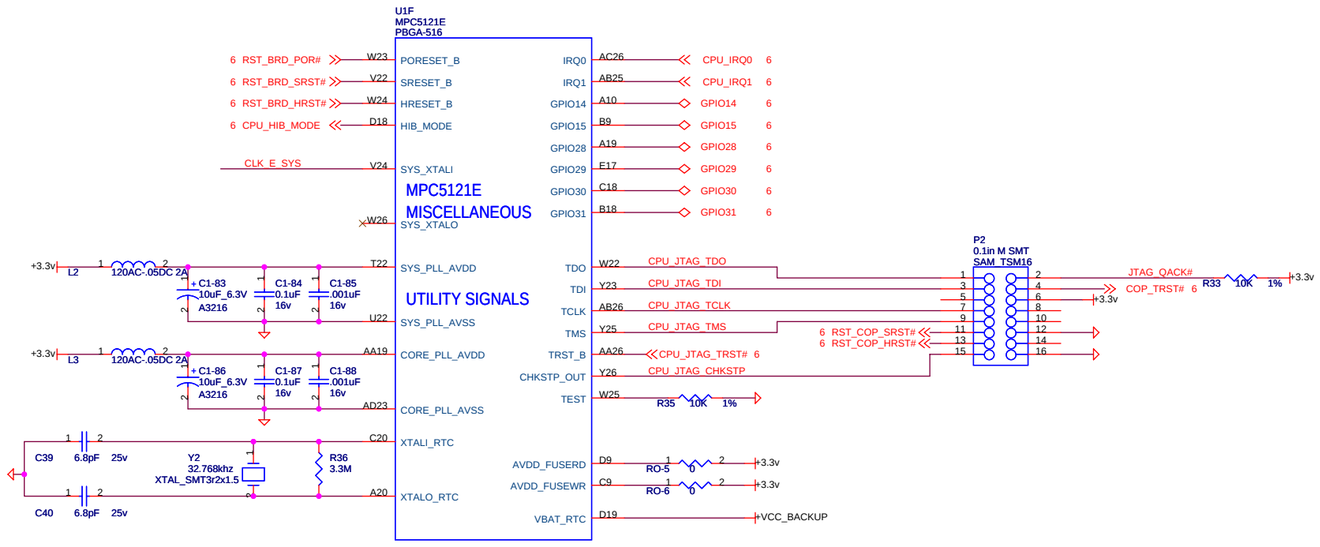
Size | Document Number: ADS5121e_03_SCH_01 | Rev: 03

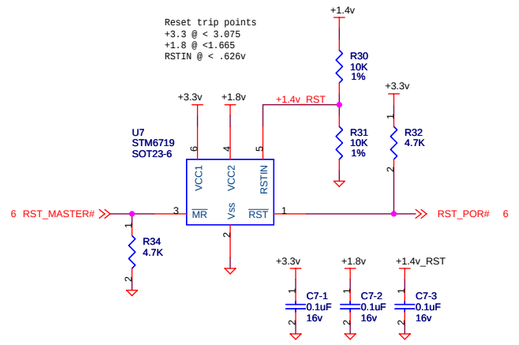
Date: Monday, December 03, 2007 | Sheet 2 of 11



CLOCK RULES:
All Clock traces are to be as short as possible
CLK_E_SYS = CLK_E_CPLD
CLK_FETH_PHY = CLK_FETH_CPU







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Title: 03_Clocks_Resets_COP-Debug	
Size	Document Number: ADS5121e_03_SCH_01 — Rev: 03
Date: Monday, December 03, 2007	Sheet 3 of 11

U1A
PBGA-516
MPC5121E

MPC5121E
EMB INTFC

EMB_AD[0..31]
EMB_LA[0..26]
EMB_AX[0..3]

U8
TSOP-48
8Gbyte (1Gbx8)
NAND Flash
Stacked Pkgs
Only

P29
Micro-SD
Micro-SD_PJS008

R258
4.7K

U9
256Mbx16
FBGA-64
FLASH

U10
256Mbx16
FBGA-64
FLASH

U11
256Mbx16
FBGA-64
FLASH

U12
256Mbx16
FBGA-64
FLASH

R37
4.7K

C8-1
0.1uF
16v

C8-2
0.1uF
16v

C9-1
0.1uF
16v

C9-2
0.1uF
16v

C9-3
0.1uF
16v

C10-1
0.1uF
16v

C10-2
0.1uF
16v

C10-3
0.1uF
16v

C11-1
0.1uF
16v

C11-2
0.1uF
16v

C11-3
0.1uF
16v

C12-1
0.1uF
16v

C12-2
0.1uF
16v

C12-3
0.1uF
16v

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Title
04_FLASH_MEMORY

Size	Document Number	Rev
	ADS5121e_03_SCH_01	03

Date: Monday, December 03, 2007 Sheet 4 of 11

U1B
MPC5121E
PBGA-516

MPC5121E
DDR SDRAM

Route same as DDR2 control signals

Place Caps as close to CPU pin as possible

U13
512Mbx8 DDR2
FBGA60

U14
512Mbx8 DDR2
FBGA60

U15
512Mbx8 DDR2
FBGA60

U16
512Mbx8 DDR2
FBGA60

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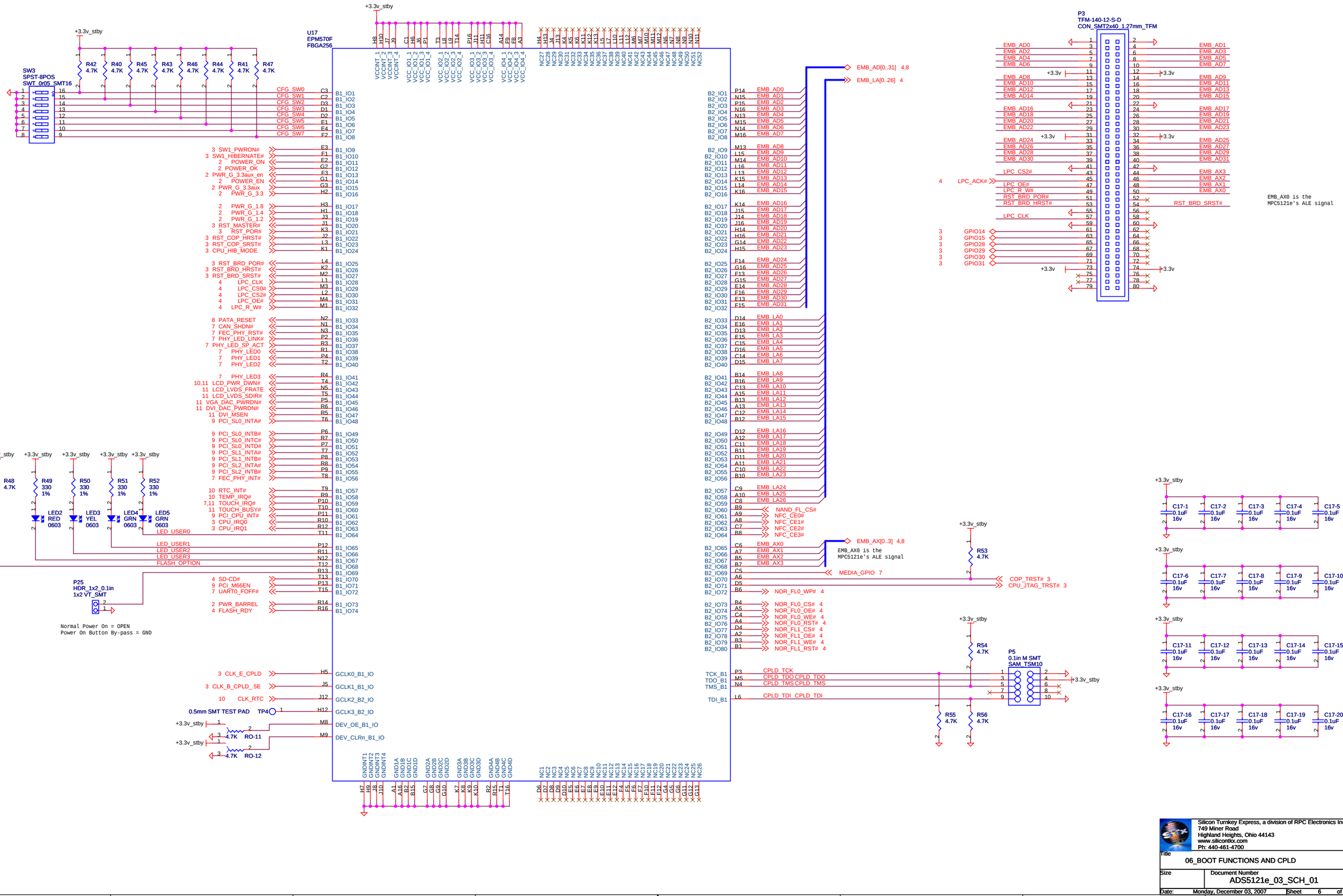
Title: 05_DDR2_MEMORY

Size | Document Number: ADS5121e_03_SCH_01 | Rev: 03

Date: Monday, December 03, 2007 | Sheet 5 of 11



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Title: 06_BOOT FUNCTIONS AND CPLD

Size | Document Number: ADS5121e_03_SCH_01 | Rev: 03

Date: Monday, December 03, 2007 | Sheet 6 of 11

10/100 BASET ETHERNET PHY INTERFACE AND CONNECTOR

Place parts as close to PHY as possible

L4 120AC-.05DC 1A IND_0603

C18-1 0.1uF 16v
C18-2 22uF_6.3V A3216
C18-3 10uF_6.3V A3216
C18-4 0.1uF 16v

LO-1 120AC-.05DC 1A IND_0603
LO-2 120AC-.05DC 1A IND_0603

Center tap of magnetics needs to be as short and direct as possible to +VDDA_PHY

ONLY 1 INDUCTOR IS TO BE POPULATED!

U1D MPC5121E PBGA-516

MPC5121E
FEC INTERFACE
SER (PSC) IO
CAN (PSC) IO

U18 KS28041NL MLF32

T1 EPF8119S XFR_H1102_SMT16

J1 RJ45/1X8/BILED RJ45_8P_DLED_SMT14

C43 .001uF,2KV

MEDIA_CONNECTOR

P6 0.1in M SMT SAM_TSM10

RS232 UARTS

U19 ICL3225E SSOP-20W

U20 ICL3225E SSOP-20W

P7 9P DSUB MALE CON_DSUB_9_M_RA_SMT

P8 0.1in M SMT SAM_TSM10

P27 1.25MM SMT 1x6 SMT_VT

Interface for Button Encoder Board.
This connector is shared with the second external UART connector.

CAN BUS

U21 MAX3050ASA SOIC-8

U22 MAX3050ASA SOIC-8

L5 ZJYS51R5-2P SMT-4_ZJYS

L6 ZJYS51R5-2P SMT-4_ZJYS

TVS1 NUP2105L SOT23-3

TVS2 NUP2105L SOT23-3

P9 9P DSUB MALE CON_DSUB_9_M_RA_SMT

P10 0.1in M SMT SAM_TSM10

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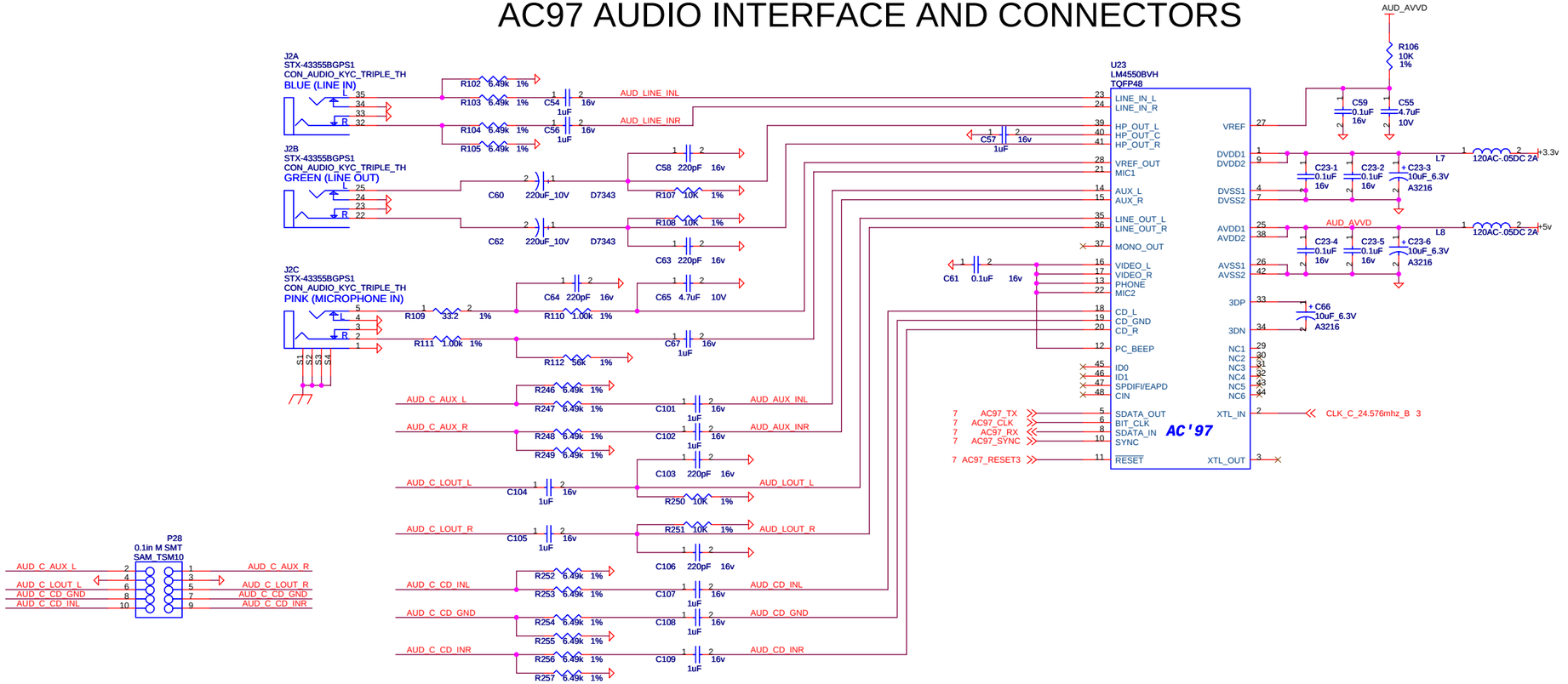
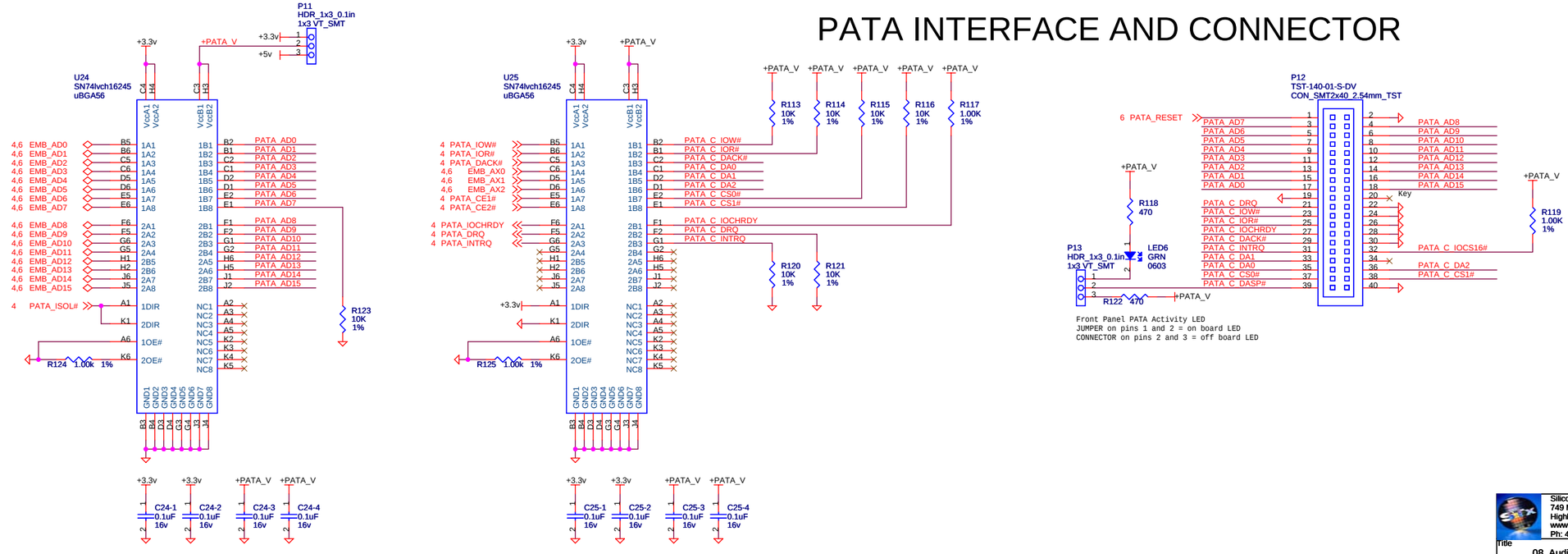
Title: 07_Ethernet_UART_CAN
Size:
Document Number: ADS5121e_03_SCH_01
Rev: 03
Date: Monday, December 03, 2007 Sheet 7 of 11

AC97 AUDIO INTERFACE AND CONNECTORS



PATA INTERFACE AND CONNECTOR



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Title: 08_Audio_PATA_Interfaces

Size | Document Number: ADS5121e_03_SCH_01 | Rev: 03

Date: Monday, December 03, 2007 | Sheet 8 of 11

U1C
MPC5121E
PBGA-516

MPC5121E
PCI BUS
INTERFACE

PCI_AD0 U24 PCI_AD0
PCI_AD1 V26 PCI_AD1
PCI_AD2 U25 PCI_AD2
PCI_AD3 R22 PCI_AD3
PCI_AD4 U26 PCI_AD4
PCI_AD5 T24 PCI_AD5
PCI_AD6 R23 PCI_AD6
PCI_AD7 T26 PCI_AD7
PCI_AD8 R26 PCI_AD8
PCI_AD9 P23 PCI_AD9
PCI_AD10 R24 PCI_AD10
PCI_AD11 R25 PCI_AD11
PCI_AD12 P26 PCI_AD12
PCI_AD13 P24 PCI_AD13
PCI_AD14 P25 PCI_AD14
PCI_AD15 N26 PCI_AD15
PCI_AD16 L22 PCI_AD16
PCI_AD17 K25 PCI_AD17
PCI_AD18 J26 PCI_AD18
PCI_AD19 K24 PCI_AD19
PCI_AD20 J25 PCI_AD20
PCI_AD21 H26 PCI_AD21
PCI_AD22 K23 PCI_AD22
PCI_AD23 J24 PCI_AD23
PCI_AD24 H24 PCI_AD24
PCI_AD25 J23 PCI_AD25
PCI_AD26 G25 PCI_AD26
PCI_AD27 J22 PCI_AD27
PCI_AD28 F26 PCI_AD28
PCI_AD29 G24 PCI_AD29
PCI_AD30 F24 PCI_AD30
PCI_AD31 H22 PCI_AD31

PCI_FRAME M23 PCI_FRAME#
PCI_DEVSEL L26 PCI_DEVSEL#
PCI_IRDY K26 PCI_IRDY#
PCI_TRDY M22 PCI_TRDY#
PCI_STOP M24 PCI_STOP#
PCI_SERR M26 PCI_SERR#
PCI_PERR M25 PCI_PERR#
PCI_CBE0 P22 PCI_CBE0#
PCI_CBE1 N24 PCI_CBE1#
PCI_CBE2 L24 PCI_CBE2#
PCI_CBE3 G26 PCI_CBE3#
PCI_IDSEL K22 PCI_CPU_IDSEL#
PCI_INTA U23 PCI_CPU_INT# 6
PCI_PAR N22 PCI_PAR
PCI_REQ0 G23 PCI_REQ0#
PCI_REQ1 E26 PCI_REQ1#
PCI_REQ2 D26 PCI_REQ2#
PCI_GNT0 E25 PCI_GNT0#
PCI_GNT1 G22 PCI_GNT1#
PCI_GNT2 E24 PCI_GNT2#
PCI_RST_OUT F22 PCI_RST#
PCI_CLK C26 CLK_PCI_CPU

R134 4.7K +3.3v
R127 4.7K +3.3v
R138 4.7K +3.3v
R130 4.7K +3.3v
R131 4.7K +3.3v
R140 4.7K +3.3v
R132 4.7K
R141 4.7K
R142 4.7K
R143 4.7K
R144 1.00k 1% PCI_AD20
R145 4.7K
R146 4.7K +3.3v
R147 4.7K
R148 4.7K
R149 4.7K
R150 4.7K
R151 4.7K
R153 4.7K
R154 4.7K
R155 33.2 1% CLK_PCI_BIN

U26
CY2305
SOIC127P600-8L

+3.3v
CLK_PCI_BIN 1 REF
VCC 6
GND 4
CLKOUT 8
CLK1 3 CLK_PCI_0 RSC-9 33.2 1% CLK_PCI_SLOT0
CLK2 2 CLK_PCI_1 RSC-10 33.2 1% CLK_PCI_SLOT1
CLK3 5 CLK_PCI_2 RSC-11 33.2 1% CLK_PCI_SLOT2
CLK4 7
+3.3v
C26-1 0.1uF 16v

CLOCK RULES:
All Clock traces are to be as short as possible

J3
Mini-PCI
CON_MINI-PCI_124P_RA_SOCKET

Mini PCI Connector 32 Bit / 3.3V

TIP RNG
8PMJ3 8PMJ1
8PMJ6 8PMJ2
8PMJ7 8PMJ4
8PMJ8 8PMJ5
LED1P LED2P
LED1N LED2N
CHSGND Reserved1
INTB +5V1
+3.3V1 INTA
Reserved2 Reserved3
GND1 +3.3VAUX1
CLK RST
GND2 +3.3V2
REQ GNT
+3.3V3 GND3
AD31 PME
AD29 RESERVED4
GND4 AD30
AD27 +3.3V4
AD25 AD28
RSVD5 AD26
C_BE3 AD24
AD23 IDSEL
+3.3V5 GND6
AD21 AD22
AD19 AD20
GND7 PAR
AD17 AD18
C_BE2 AD16
IRDY GND8
+3.3V6 FRAME
CLKRUN TRDY
SERR STOP
GND9 +3.3V7
PERR_N DEVSEL
C_BE1 GND10
AD14 AD15
GND11 AD13
AD12 AD11
AD10 GND12
GND13 AD9
AD8 C_BE0
AD7 +3.3V8
+3.3V9 AD6
AD5 AD4
Reserved6 AD2
AD3 AD0
5V2 Reserved_WIP1
AD1 Reserved_WIP2
GND14 GND15
AC_SYNC M66E
AC_SDIN AC_SDOUT
AC_BCLK AC_CODEC_IO
AC_CODECID1 AC_RESET
MOD_AUDIO_MON Reserved7
AUDIO_GND1 GND16
AUDIO_OUT AUDIO_IN
AOUT_GND AIN_GND
AUDIO_GND2 AUDIO_GND3
Reserved8 MPCIACT
5VANA +3.3VAUX2

+3.3v R159 4.7K 6 PCI_SL1_INTB#
+3.3v R160 4.7K PCI_SL1_INTA# 6
CLK_PCI_SLOT1
PCI_REQ1#
PCI_AD31
PCI_AD29
PCI_AD27
PCI_AD25
PCI_CBE3#
PCI_AD23
PCI_AD21
PCI_AD19
PCI_AD17
PCI_CBE2#
PCI_IRDY#
PCI_SERR#
PCI_PERR#
PCI_CBE1#
PCI_AD14
PCI_AD12
PCI_AD10
PCI_AD8
PCI_AD7
PCI_AD5
PCI_AD3
PCI_AD1
PCI_RST#
PCI_GNT1#
PCI_AD30
PCI_AD28
PCI_AD26
PCI_AD24
PCI_SL1_IDSEL
R163 1.00k 1%
PCI_AD22
PCI_AD20
PCI_PAR
PCI_AD18
PCI_AD16
PCI_FRAME#
PCI_TRDY#
PCI_STOP#
PCI_DEVSEL#
PCI_AD15
PCI_AD13
PCI_AD11
PCI_AD9
PCI_CBE0#
PCI_AD6
PCI_AD4
PCI_AD2
PCI_AD0
PCI_M66EN
C71 .01uF 16v

J4
Mini-PCI
CON_MINI-PCI_124P_RA_SOCKET

Mini PCI Connector 32 Bit / 3.3V

TIP RNG
8PMJ3 8PMJ1
8PMJ6 8PMJ2
8PMJ7 8PMJ4
8PMJ8 8PMJ5
LED1P LED2P
LED1N LED2N
CHSGND Reserved1
INTB +5V1
+3.3V1 INTA
Reserved2 Reserved3
GND1 +3.3VAUX1
CLK RST
GND2 +3.3V2
REQ GNT
+3.3V3 GND3
AD31 PME
AD29 RESERVED4
GND4 AD30
AD27 +3.3V4
AD25 AD28
RSVD5 AD26
C_BE3 AD24
AD23 IDSEL
+3.3V5 GND6
AD21 AD22
AD19 AD20
GND7 PAR
AD17 AD18
C_BE2 AD16
IRDY GND8
+3.3V6 FRAME
CLKRUN TRDY
SERR STOP
GND9 +3.3V7
PERR_N DEVSEL
C_BE1 GND10
AD14 AD15
GND11 AD13
AD12 AD11
AD10 GND12
GND13 AD9
AD8 C_BE0
AD7 +3.3V8
+3.3V9 AD6
AD5 AD4
Reserved6 AD2
AD3 AD0
5V2 Reserved_WIP1
AD1 Reserved_WIP2
GND14 GND15
AC_SYNC M66E
AC_SDIN AC_SDOUT
AC_BCLK AC_CODEC_IO
AC_CODECID1 AC_RESET
MOD_AUDIO_MON Reserved7
AUDIO_GND1 GND16
AUDIO_OUT AUDIO_IN
AOUT_GND AIN_GND
AUDIO_GND2 AUDIO_GND3
Reserved8 MPCIACT
5VANA +3.3VAUX2

+3.3v R161 4.7K 6 PCI_SL2_INTB#
+3.3v R162 4.7K PCI_SL2_INTA# 6
CLK_PCI_SLOT2
PCI_REQ2#
PCI_AD31
PCI_AD29
PCI_AD27
PCI_AD25
PCI_CBE3#
PCI_AD23
PCI_AD21
PCI_AD19
PCI_AD17
PCI_CBE2#
PCI_IRDY#
PCI_SERR#
PCI_PERR#
PCI_CBE1#
PCI_AD14
PCI_AD12
PCI_AD10
PCI_AD8
PCI_AD7
PCI_AD5
PCI_AD3
PCI_AD1
PCI_RST#
PCI_GNT2#
PCI_AD30
PCI_AD28
PCI_AD26
PCI_AD24
PCI_SL2_IDSEL
R164 1.00k 1% PCI_AD23
PCI_AD22
PCI_AD20
PCI_PAR
PCI_AD18
PCI_AD16
PCI_FRAME#
PCI_TRDY#
PCI_STOP#
PCI_DEVSEL#
PCI_AD15
PCI_AD13
PCI_AD11
PCI_AD9
PCI_CBE0#
PCI_AD6
PCI_AD4
PCI_AD2
PCI_AD0
PCI_M66EN
C72 .01uF 16v

P14
PCI 32-Bit
Componet side = B

-12v B1 A1 TRST
-12V B2 A2 +12V +12v R133 4.7K
TCK B3 A3 +12V
Ground1 B4 A4 TDI +3.3v +3.3v R137 4.7K
TDO B5 A5 +5V +5v R129 4.7K
+5V1 B6 A6 +5V
+5V2 B7 A7 INTC
INTB B8 A8 +5V6
INTD B9 A9 Reserved3
PRSNT1 B10 A10 +3.3V9
Reserved1 B11 A11 Reserved4
PRSNT2
KEY
Reserved2 B14 A14 3.3Vaux +3.3v
Ground2 B15 A15 RST PCI_RST#
CLK B16 A16 +3.3V10 +3.3v
Ground3 B17 A17 GNT PCI_GNT0#
REQ B18 A18 Ground12
+3.3V1 B19 A19 PME
AD[31] B20 A20 AD[30] PCI_AD30
AD[29] B21 A21 +3.3V11 +3.3v
Ground4 B22 A22 AD[28] PCI_AD28
AD[27] B23 A23 AD[26] PCI_AD26
AD[25] B24 A24 Ground13
+3.3V2 B25 A25 AD[24] PCI_AD24
C/BE[3] B26 A26 IDSEL PCI_SL0_IDSEL
AD[23] B27 A27 +3.3V12 +3.3v
Ground5 B28 A28 AD[22] PCI_AD22
AD[21] B29 A29 AD[20] PCI_AD20
AD[19] B30 A30 Ground14
+3.3V3 B31 A31 AD[18] PCI_AD18
AD[17] B32 A32 AD[16] PCI_AD16
C/BE[2] B33 A33 +3.3V13 +3.3v
Ground6 B34 A34 FRAME PCI_FRAME#
IRDY B35 A35 Ground15
+3.3V4 B36 A36 TRDY PCI_TRDY#
DEVSEL B37 A37 Ground16
Ground7 B38 A38 STOP# PCI_STOP#
LOCK B39 A39 +3.3V14 +3.3v
PERR B40 A40 Reserved5
+3.3V5 B41 A41 Reserved6
SERR B42 A42 Ground17
+3.3V6 B43 A43 PCI_PAR PCI_PAR
C/BE[1] B44 A44 AD[15] PCI_AD15
AD[14] B45 A45 +3.3V15 +3.3v
Ground8 B46 A46 AD[13] PCI_AD13
AD[12] B47 A47 AD[11] PCI_AD11
AD[10] B48 A48 Ground18
M66EN B49 A49 AD[09] PCI_AD9
Ground9 B50 A50 Ground19
Ground10 B51 A51 Ground20
AD[08] B52 A52 C/BE[0] PCI_CBE0#
AD[07] B53 A53 +3.3V16 +3.3v
+3.3V7 B54 A54 AD[06] PCI_AD6
AD[05] B55 A55 AD[04] PCI_AD4
AD[03] B56 A56 Ground21
Ground11 B57 A57 AD[02] PCI_AD2
AD[01] B58 A58 AD[00] PCI_AD0
+3.3V8 B59 A59 +3.3V17 +3.3v
ACK64 B60 A60 REQ64
+5V3 B61 A61 +5V7 +5v
+5V4 B62 A62 +5V8 +5v

+3.3v R128 4.7K +3.3v R139 4.7K R135 4.7K -12v
6 PCI_SL0_INTB#
6 PCI_SL0_INTD#
C68 .01uF 16v
C69 .01uF 16v
+3.3v R126 4.7K +3.3v R136 4.7K
PCI_SL0_INTA# 6
PCI_SL0_INTC# 6
CLK_PCI_SLOT0
PCI_REQ0#
PCI_AD31
PCI_AD29
PCI_AD27
PCI_AD25
PCI_CBE3#
PCI_AD23
PCI_AD21
PCI_AD19
PCI_AD17
PCI_CBE2#
PCI_IRDY#
PCI_DEVSEL#
PCI_PERR#
R156 4.7K +3.3v
PCI_SERR#
PCI_CBE1#
PCI_AD14
PCI_AD12
PCI_AD10
PCI_M66EN
PCI_AD8
PCI_AD7
PCI_AD5
PCI_AD3
PCI_AD1
+3.3v R244 4.7K
C70 .01uF 16v
6 PCI_M66EN
+3.3v R157 4.7K +5v +5v
R158 4.7K +3.3v
PCI_AD30
PCI_AD28
PCI_AD26
PCI_AD24
PCI_SL0_IDSEL
R152 1.00k 1% PCI_AD21
PCI_AD22
PCI_AD20
PCI_AD18
PCI_AD16
PCI_FRAME#
PCI_TRDY#
PCI_STOP#
PCI_PAR
PCI_AD15
PCI_AD13
PCI_AD11
PCI_AD9
PCI_CBE0#
PCI_AD6
PCI_AD4
PCI_AD2
PCI_AD0

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Title
09_PCI_BUS_INTERFACE

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SATA, USB AND I2C INTERFACES

U1E
MPC5121E
PBGA-516

MPC5121E
SATA INTERFACE
J1850 INTERFACE
SPDIF INTERFACE
USB_INTERFACE
I2C INTERFACES

J5
47155-4001
SATA-7P_SMT

P15
HDR_1x3_0.1in
1x3 VT_SMT

P16
HDR_1x4_0.1in
1x4 VT_SMT

U27
MIC2026-2
SOIC-8

P17
USB Mini-AB

U28
AT24C32CU2-UU
dBGA8

P18
HDR_1x2_0.1in
1x2 VT_SMT

U29
AD7414-0
SOT23-6

U30
M41T62
QFN16

U31
AD5246
SC70-6

P19
1.25MM SMT
1x8 SMT_VT

ALL USB PAIRS NEEDED TO BE ROUTED AS DIFFERENTIAL PAIRS

ALL COMPONENTS NEED TO BE PLACED CLOSE TO THE USB CONNECTORS

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Title	0A_USB_SATA_I2C
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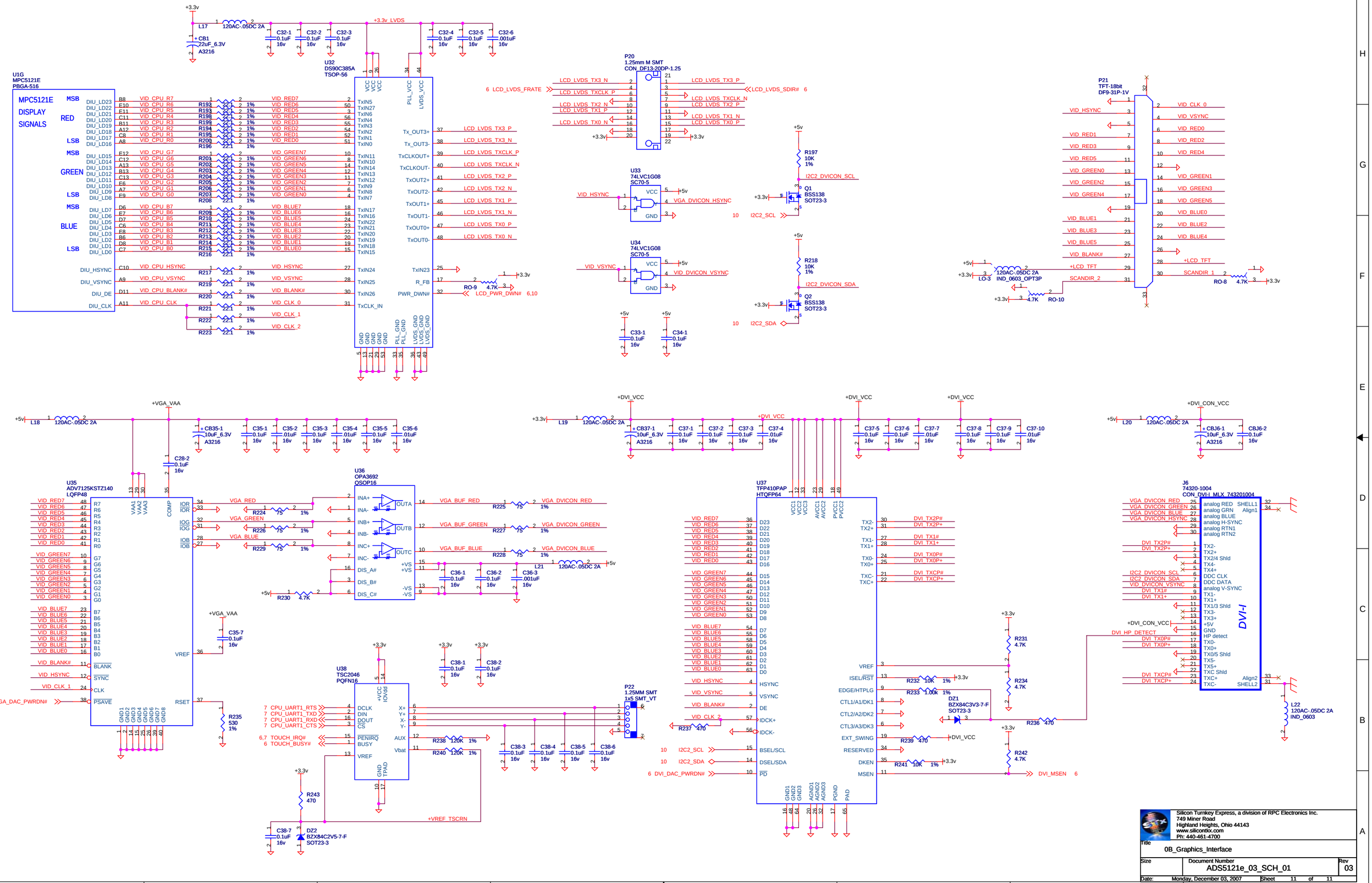
U1G
MPC5121E
PBGA-516
MPC5121E DISPLAY SIGNALS
MSB RED LSB
MSB GREEN LSB
MSB BLUE LSB
DIU_HSYNC
DIU_VSYNC
DIU_DE
DIU_CLK
VID_CPU_R7
VID_CPU_R6
VID_CPU_R5
VID_CPU_R4
VID_CPU_R3
VID_CPU_R2
VID_CPU_R1
VID_CPU_R0
VID_CPU_G7
VID_CPU_G6
VID_CPU_G5
VID_CPU_G4
VID_CPU_G3
VID_CPU_G2
VID_CPU_G1
VID_CPU_G0
VID_CPU_B7
VID_CPU_B6
VID_CPU_B5
VID_CPU_B4
VID_CPU_B3
VID_CPU_B2
VID_CPU_B1
VID_CPU_B0
VID_CPU_HSYNC
VID_CPU_VSYNC
VID_CPU_BLANK#
VID_CPU_CLK
VID_RED7
VID_RED6
VID_RED5
VID_RED4
VID_RED3
VID_RED2
VID_RED1
VID_RED0
VID_GREEN7
VID_GREEN6
VID_GREEN5
VID_GREEN4
VID_GREEN3
VID_GREEN2
VID_GREEN1
VID_GREEN0
VID_BLUE7
VID_BLUE6
VID_BLUE5
VID_BLUE4
VID_BLUE3
VID_BLUE2
VID_BLUE1
VID_BLUE0
VID_HSYNC
VID_VSYNC
VID_BLANK#
VID_CLK_0
VID_CLK_1
VID_CLK_2
+3.3v
L17 120AC-.05DC 2A
CB1 22uF_6.3V A3216
C32-1 0.1uF 16v
C32-2 0.1uF 16v
C32-3 0.1uF 16v
+3.3v_LVDS
C32-4 0.1uF 16v
C32-5 0.1uF 16v
C32-6 .001uF 16v
U32
DS90C385A
TSOP-56
TxIN5
TxIN27
TxIN6
TxIN4
TxIN3
TxIN2
TxIN1
TxIN0
TxIN11
TxIN10
TxIN14
TxIN13
TxIN12
TxIN9
TxIN8
TxIN7
TxIN17
TxIN16
TxIN22
TxIN21
TxIN20
TxIN19
TxIN18
TxIN15
TxIN24
TxIN25
TxIN26
TxCLK_IN
Tx_OUT3+
Tx_OUT3-
TxCLKOUT+
TxCLKOUT-
TxOUT2+
TxOUT2-
TxOUT1+
TxOUT1-
TxOUT0+
TxOUT0-
LCD_LVDS_TX3_P
LCD_LVDS_TX3_N
LCD_LVDS_TXCLK_P
LCD_LVDS_TXCLK_N
LCD_LVDS_TX2_P
LCD_LVDS_TX2_N
LCD_LVDS_TX1_P
LCD_LVDS_TX1_N
LCD_LVDS_TX0_P
LCD_LVDS_TX0_N
TxIN23
R_FB
PWR_DWN#
LCD_PWR_DWN# 6,10
RO-9 4.7K
P20
1.25mm M SMT
CON_DF13-20DP-1.25
6 LCD_LVDS_FRATE
LCD_LVDS_SDIR# 6
U33
74LVC1G08
SC70-5
VID_HSYNC
VGA_DVICON_HSYNC
U34
74LVC1G08
SC70-5
VID_VSYNC
VID_DVICON_VSYNC
R197 10K 1%
I2C2_DVICON_SCL
Q1 BSS138 SOT23-3
I2C2_SCL
R218 10K 1%
I2C2_DVICON_SDA
Q2 BSS138 SOT23-3
I2C2_SDA
C33-1 0.1uF 16v
C34-1 0.1uF 16v
P21
TFT-18bit
DF9-31P-1V
VID_CLK_0
VID_VSYNC
VID_RED0
VID_RED2
VID_RED4
VID_GREEN1
VID_GREEN3
VID_GREEN5
VID_BLUE0
VID_BLUE2
VID_BLUE4
+LCD_TFT
SCANDIR_1
SCANDIR_2
RO-8 4.7K
RO-10 4.7K
LO-3 120AC-.05DC 2A IND_0603_OPT3P
+VGA_VAA
L18 120AC-.05DC 2A
CB35-1 10uF_6.3V A3216
C35-1 0.1uF 16v
C35-2 .01uF 16v
C35-3 0.1uF 16v
C35-4 .01uF 16v
C35-5 0.1uF 16v
C35-6 .01uF 16v
C28-2 0.1uF 16v
U35
ADV7125KSTZ140
LQFP48
VREF
RSET
BLANK
SYNC
CLK
PSAVE
6 VGA_DAC_PWRDN#
C35-7 0.1uF 16v
R235 530 1%
U36
OPA3692
QSOP16
INA+
INA-
INB+
INB-
INC+
INC-
DIS_A#
DIS_B#
DIS_C#
OUTA
OUTB
OUTC
+VS
-VS
VGA_RED
VGA_GREEN
VGA_BLUE
VGA_BUF_RED
VGA_BUF_GREEN
VGA_BUF_BLUE
VGA_DVICON_RED
VGA_DVICON_GREEN
VGA_DVICON_BLUE
R224 75 1%
R226 75 1%
R229 75 1%
R225 75 1%
R227 75 1%
R228 75 1%
R230 4.7K
L21 120AC-.05DC 2A
C36-1 0.1uF 16v
C36-2 0.1uF 16v
C36-3 .001uF 16v
+DVI_VCC
L19 120AC-.05DC 2A
CB37-1 10uF_6.3V A3216
C37-1 0.1uF 16v
C37-2 0.1uF 16v
C37-3 0.1uF 16v
C37-4 .01uF 16v
C37-5 0.1uF 16v
C37-6 0.1uF 16v
C37-7 .01uF 16v
C37-8 0.1uF 16v
C37-9 0.1uF 16v
C37-10 .01uF 16v
U37
TFP410PAP
HTQFP64
D23
D22
D21
D20
D19
D18
D17
D16
D15
D14
D13
D12
D11
D10
D9
D8
D7
D6
D5
D4
D3
D2
D1
D0
HSYNC
VSYNC
DE
IDCK+
IDCK-
BSEL/SCL
DSEL/SDA
PD
TX2-
TX2+
TX1-
TX1+
TX0-
TX0+
TXC-
TXC+
ISEL/RST
EDGE/HTPLG
CTL1/A1/DK1
CTL2/A2/DK2
CTL3/A3/DK3
EXT_SWING
RESERVED
DKEN
MSEN
DVI_TX2P#
DVI_TX2P+
DVI_TX1#
DVI_TX1+
DVI_TX0P#
DVI_TX0P+
DVI_TXCP#
DVI_TXCP+
R231 4.7K
R234 4.7K
R232 10K 1%
R233 1.00K 1%
DZ1 BZX84C3V3-7-F SOT23-3
R236 470
R239 470
R241 10K 1%
R242 4.7K
DVI_MSEN 6
6 DVI_DAC_PWRDN#
R237 470
+DVI_CON_VCC
L20 120AC-.05DC 2A
CBJ6-1 10uF_6.3V A3216
CBJ6-2 0.1uF 16v
J6
74320-1004
CON_DVI_MLX_743201004
DVI-I
VGA_DVICON_RED
VGA_DVICON_GREEN
VGA_DVICON_BLUE
VGA_DVICON_HSYNC
DVI_HP_DETECT
L22 120AC-.05DC 2A IND_0603
U38
TSC2046
PQFN16
DCLK
DIN
DOUT
CS
PENIRQ
BUSY
VREF
X+
Y+
X-
Y-
AUX
Vbat
7 CPU_UART1_RTS
7 CPU_UART1_TXD
7 CPU_UART1_RXD
7 CPU_UART1_CTS
6,7 TOUCH_IRQ#
6 TOUCH_BUSY#
R238 120K 1%
R240 120K 1%
C38-1 0.1uF 16v
C38-2 0.1uF 16v
C38-3 0.1uF 16v
C38-4 0.1uF 16v
C38-5 0.1uF 16v
C38-6 0.1uF 16v
P22
1.25MM SMT
1x5 SMT_VT
R243 470
C38-7 0.1uF 16v
DZ2 BZX84C2V5-7-F SOT23-3
+VREF_TSCRN
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0B_Graphics_Interface
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