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P. Leader	Check by	Design by
8/23.06	8/23'06	8/23 06

Schematics Subject:	MS70 Main Board	PCB P/N:	(FUBAI)	1P-0068100-6011
			(NAN YA)	1P-0068200-6011
			(HANSTAR)	1P-0068500-6011

FOXCONN HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division

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P. Leader	Check by	Design by

Project Code & Schematics Subject: MS70 Main Board

PCB P/N:
(FUBAI) 1P-0068100-6011
(NAN YA) 1P-0068200-6011
(HANSTAR) 1P-0068500-6011

FOXCONN HON HAI Precision Ind. Co., Ltd.
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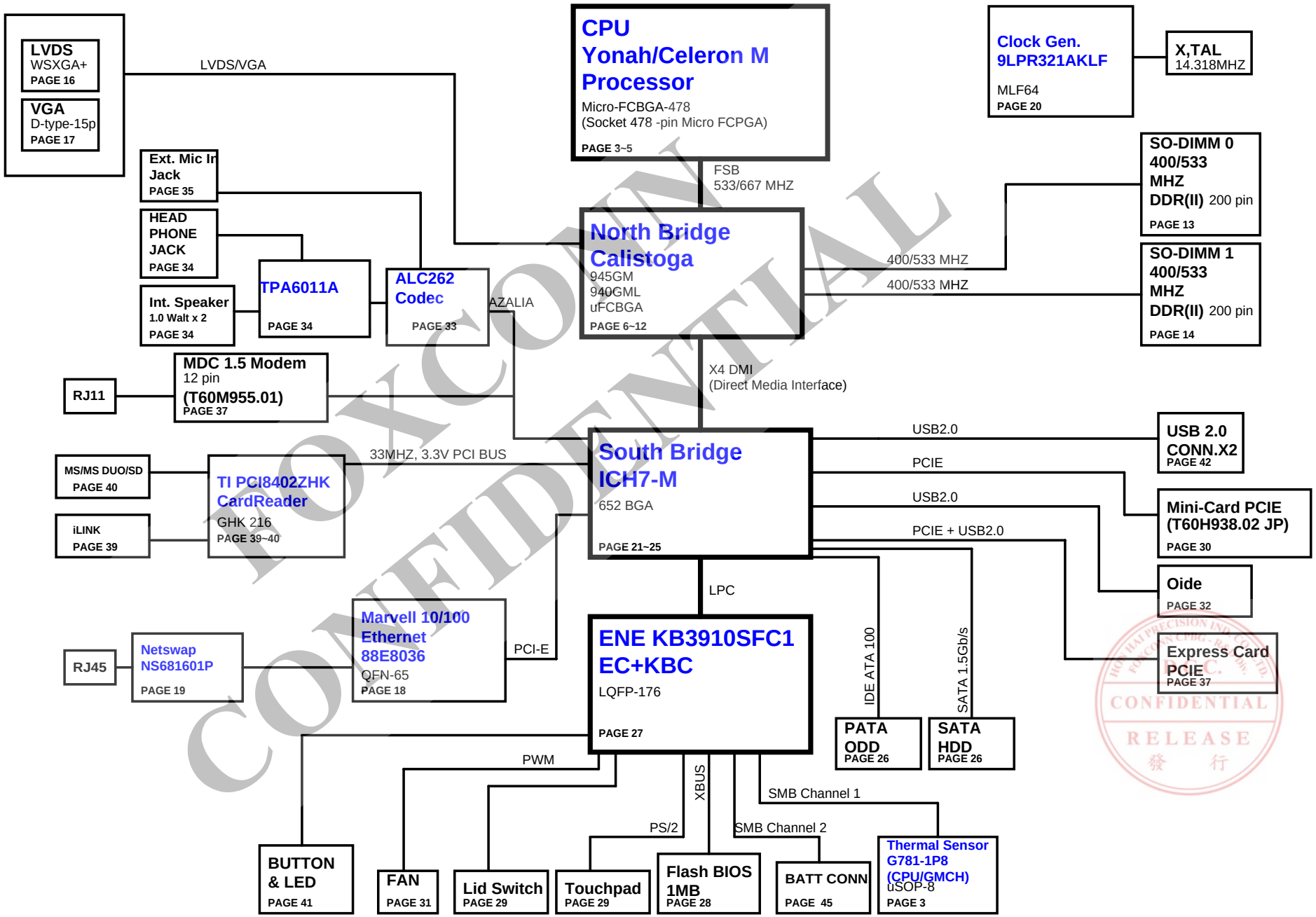
RAPTOR/MS70(CALISTOGA GM/GML Block Diagram)



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
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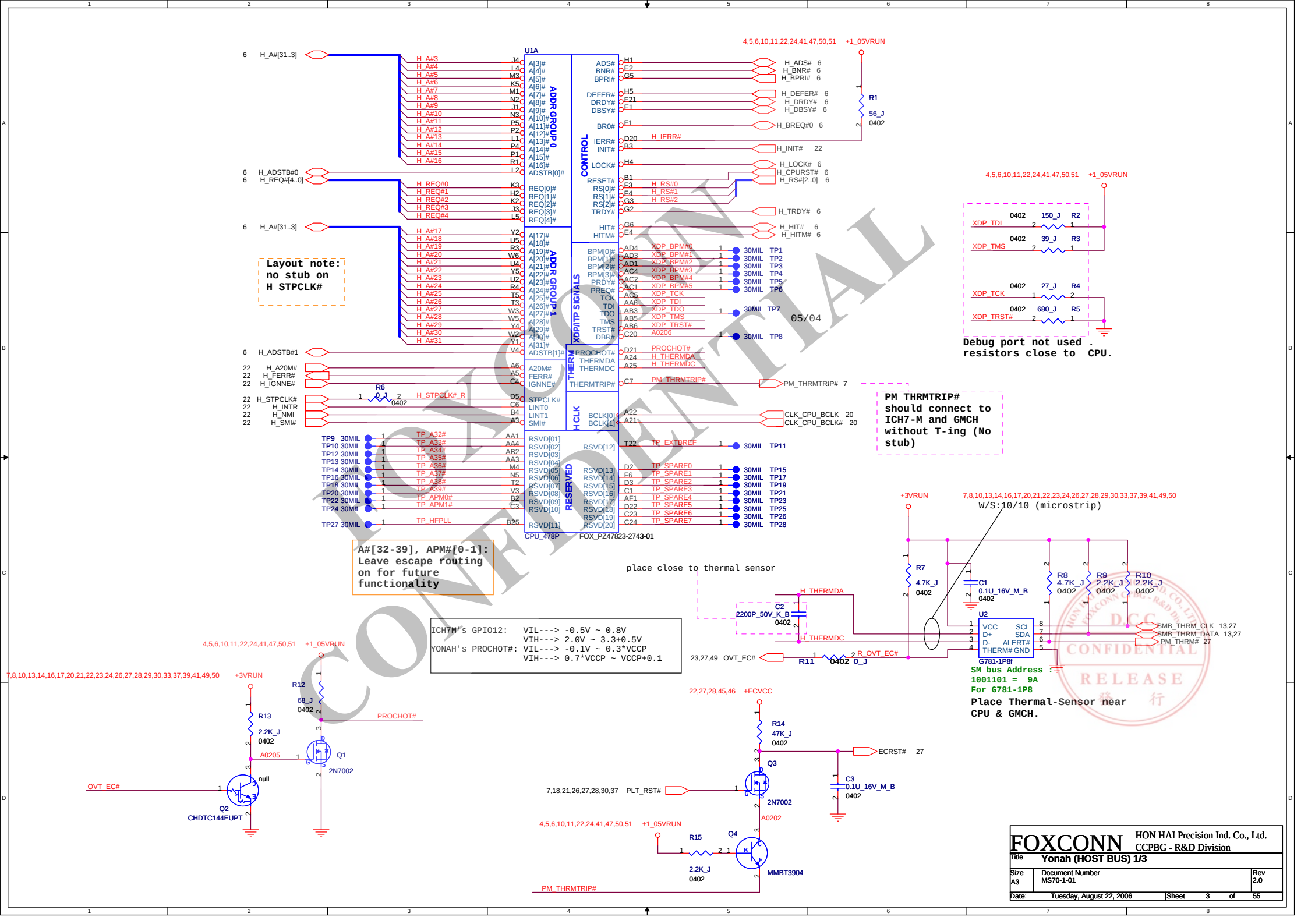

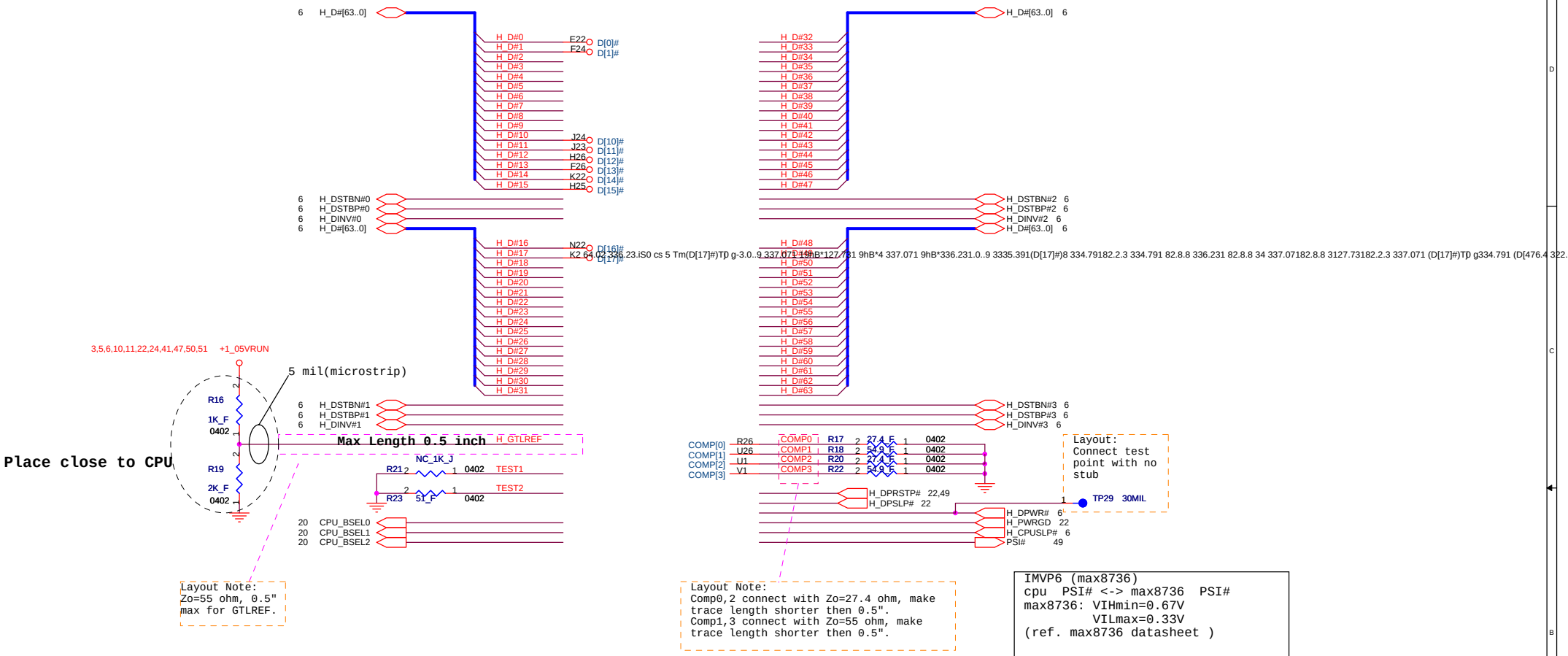

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	Yonah (HOST BUS) 2/3	
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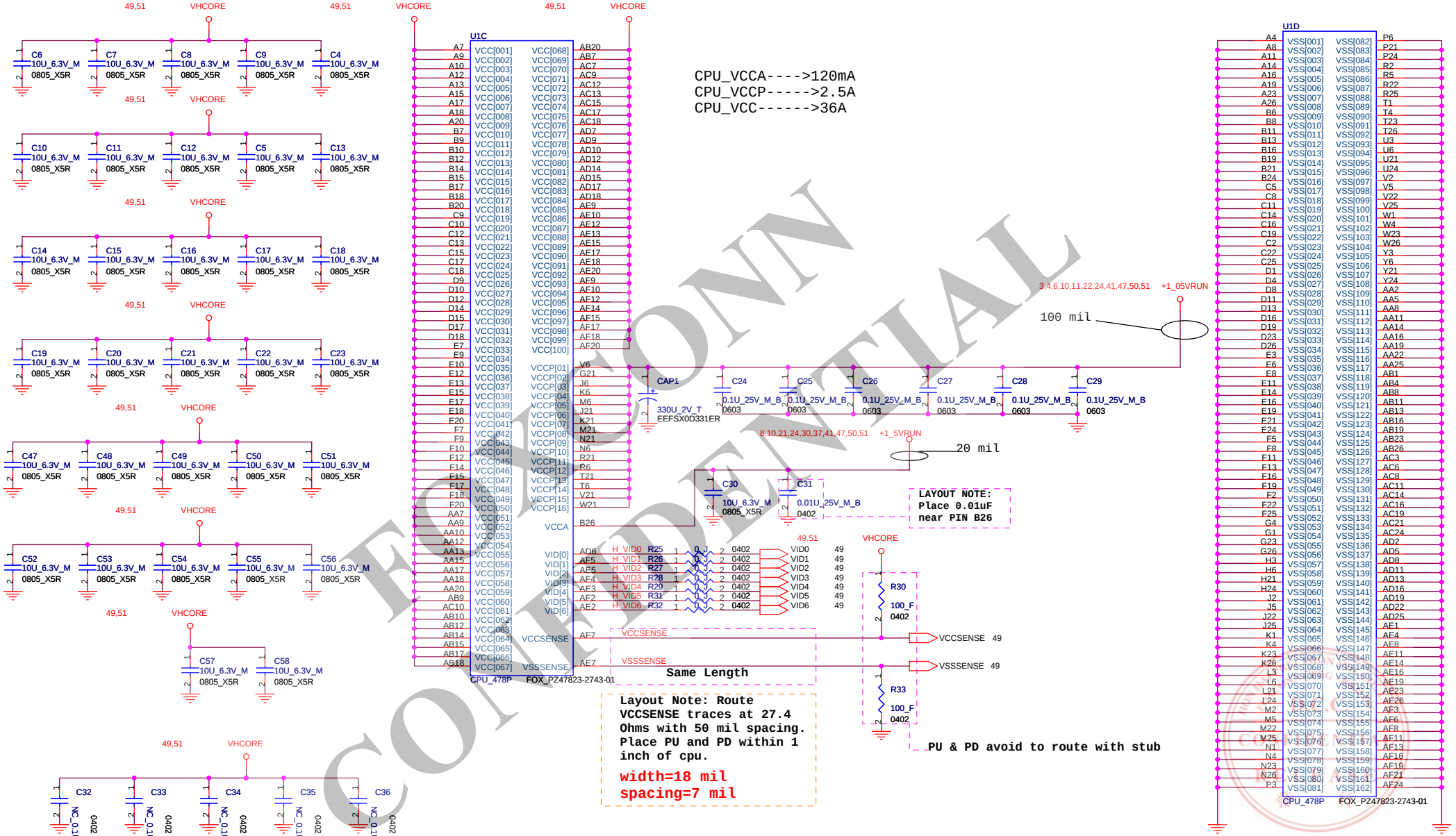

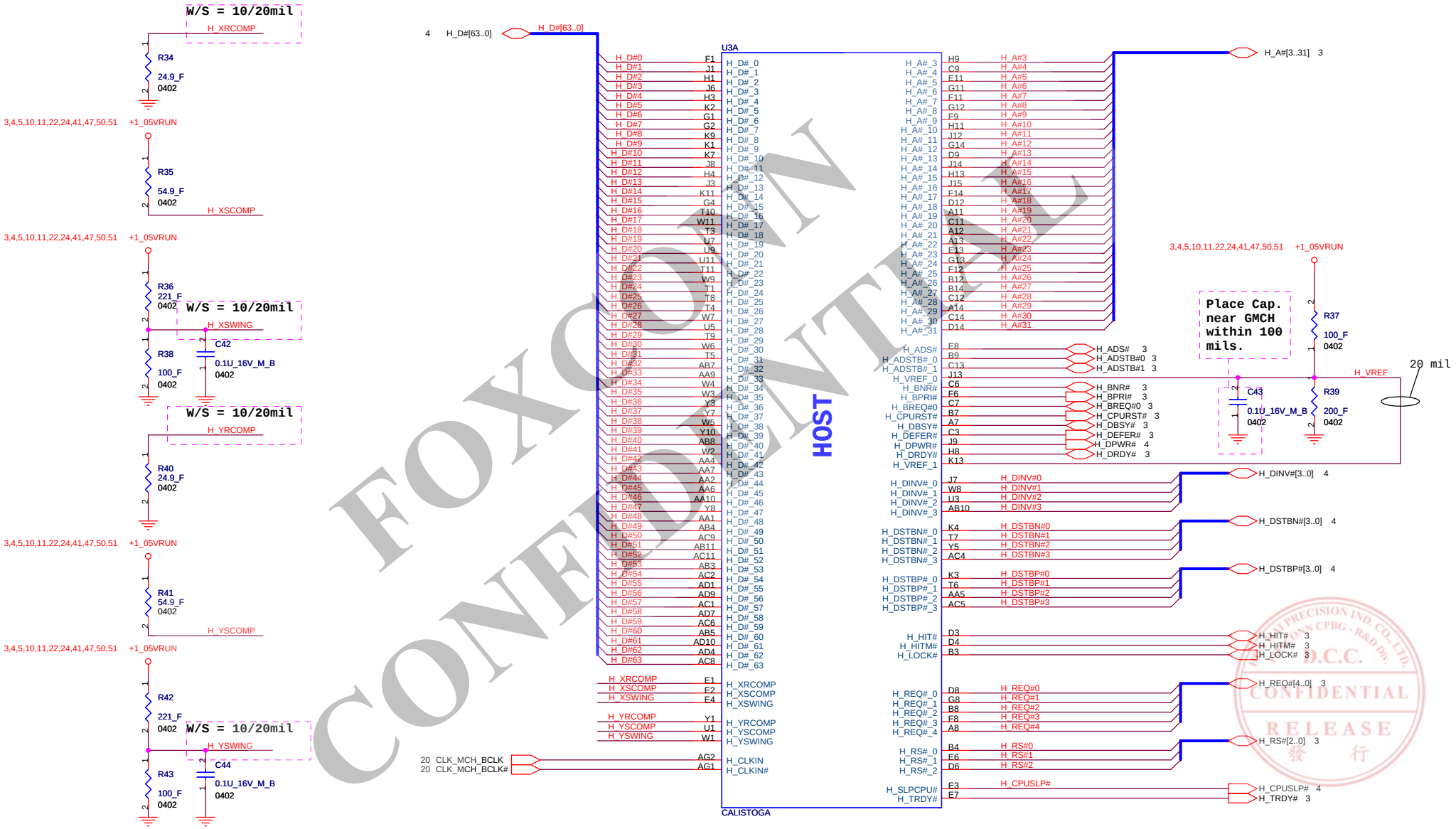

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	CALISTOGA (HOST) 1 of 7	
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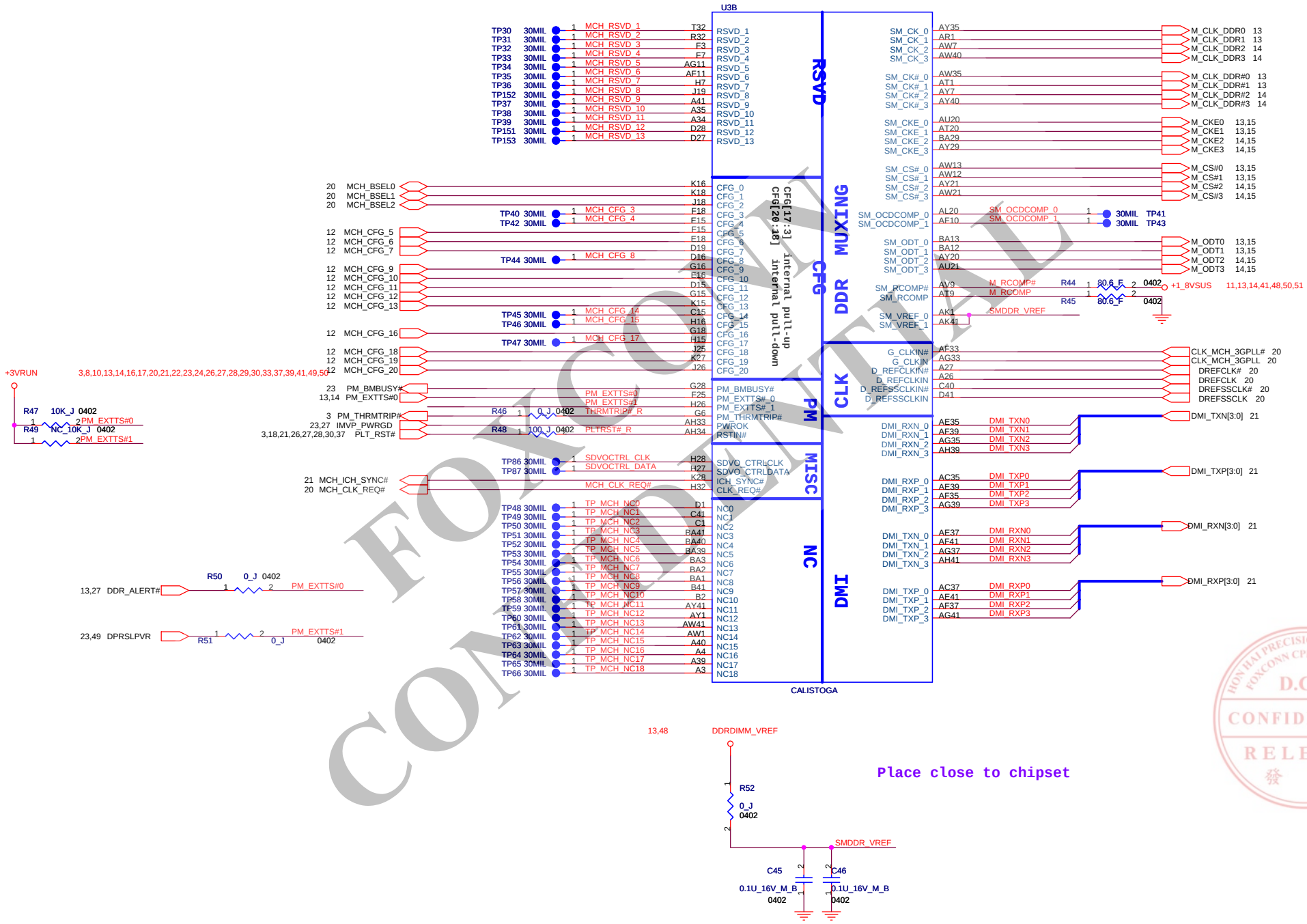

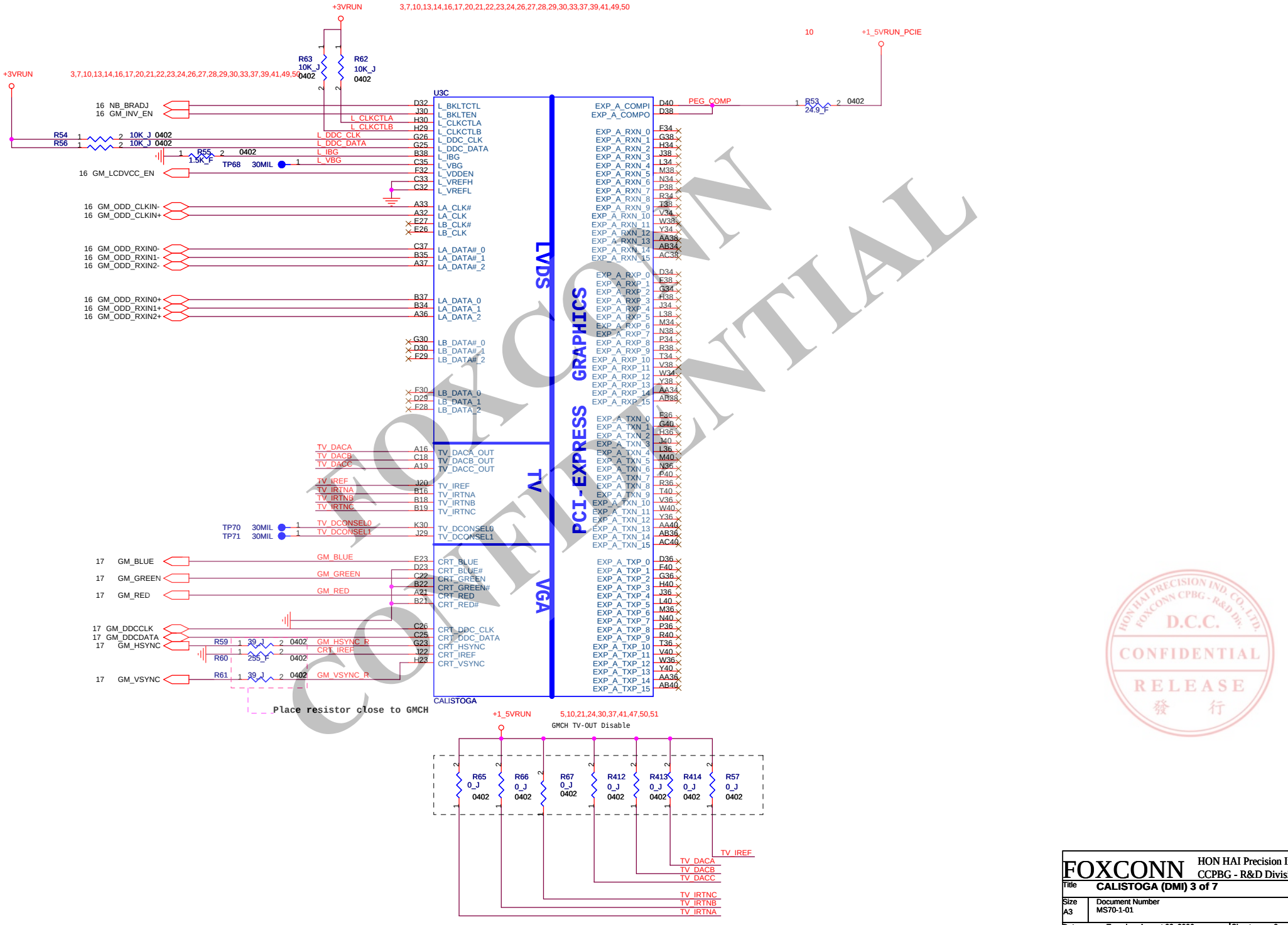

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	CALISTOGA (DMI) 3 of 7	
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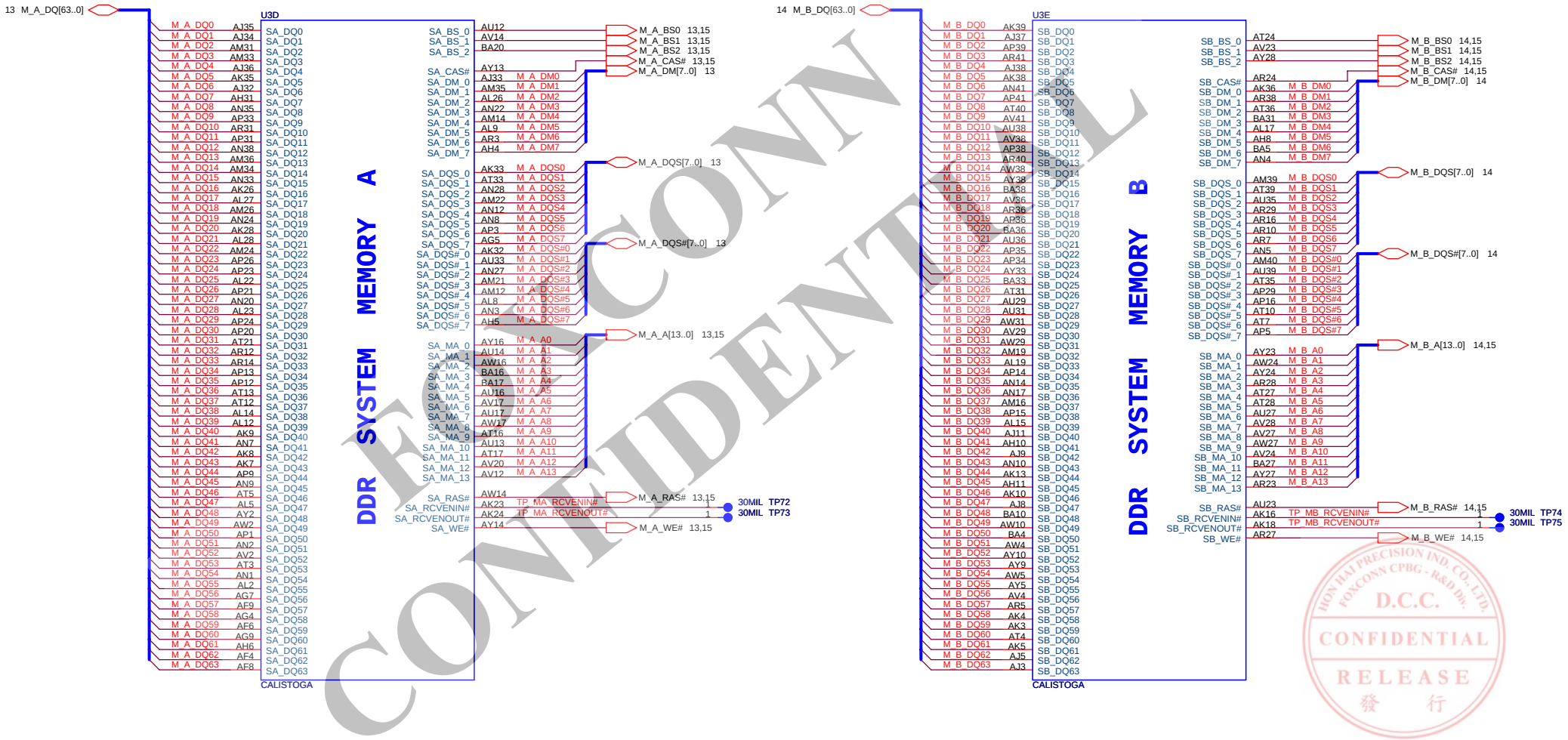

FOXCONN HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division

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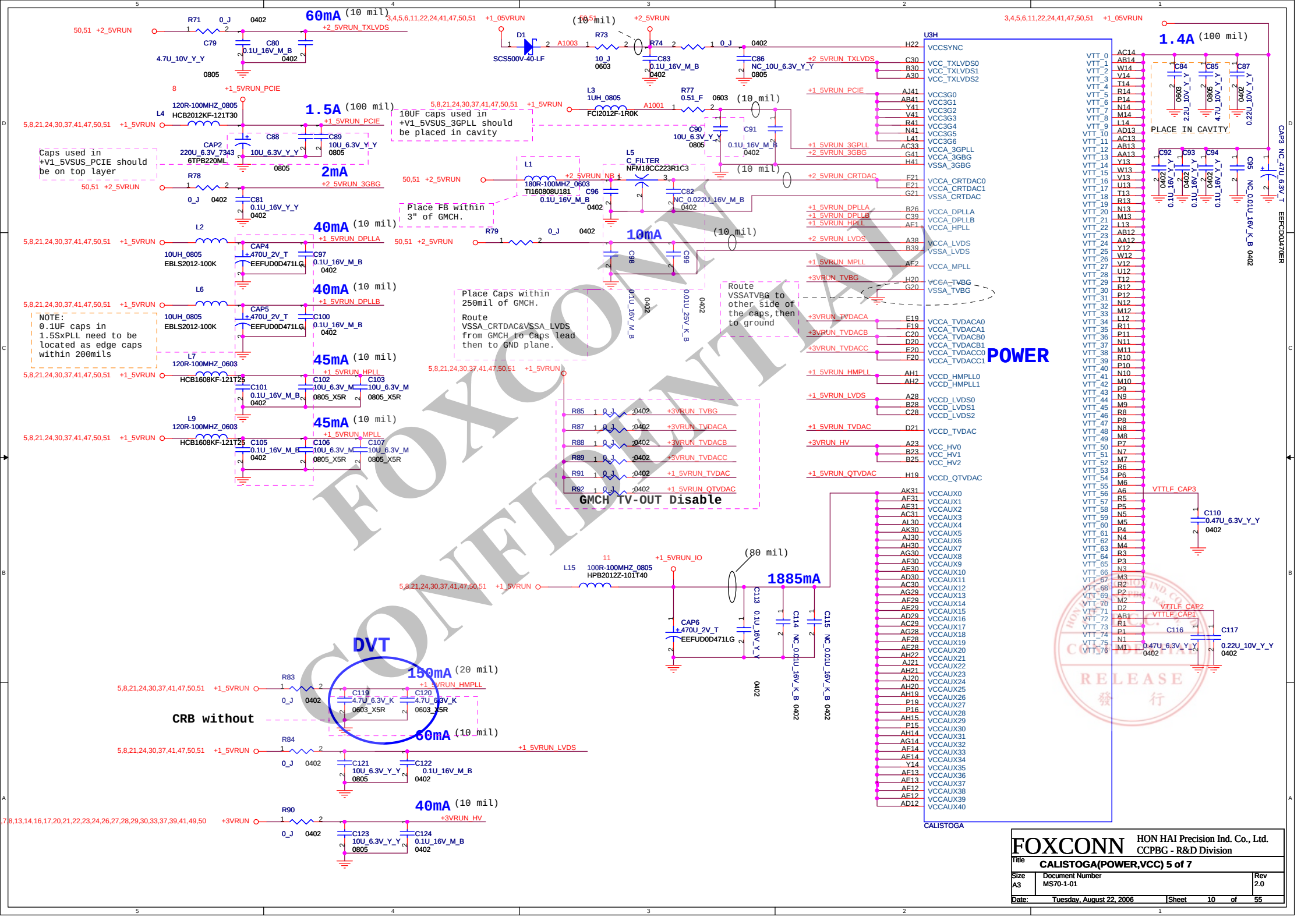

FOXCONN	HON HAI Precision Ind. Co., Ltd.
	CCPBG - R&D Division
Title	CALISTOGA(POWER,VCC) 5 of 7
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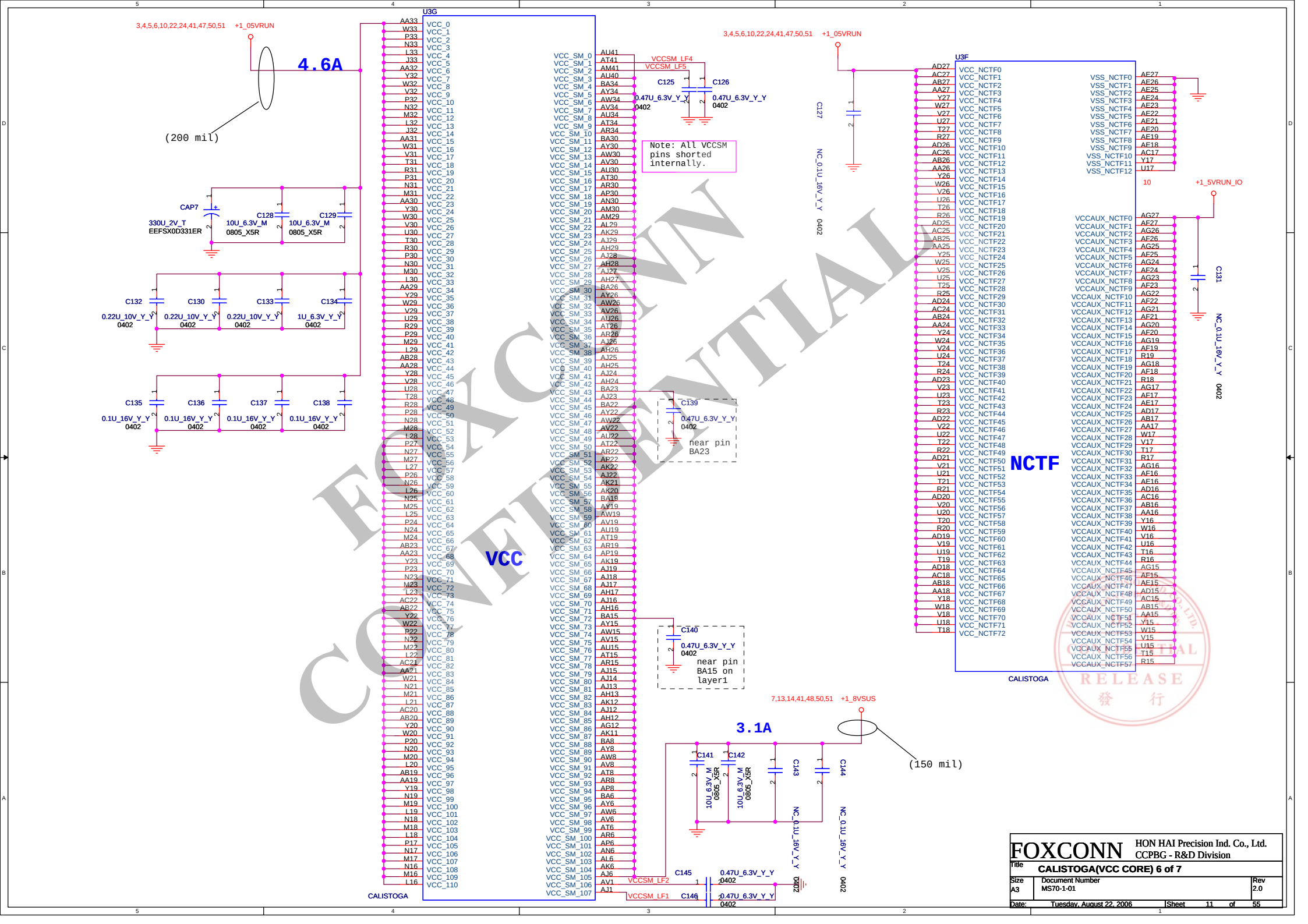

7 MCH_CFG_5 — 1 — 30MIL TP76

MCH_CFG_5	Low = DMIx2 High = DMIx4

7 MCH_CFG_6 — 1 — 30MIL TP77

MCH_CFG_6	Low = Moby Dick High = Calistoga

DDR2 select (default high)

7 MCH_CFG_7 — 1 — 30MIL TP78

MCH_CFG_7 (CPU Strap)	Low = RSVD High = Mobile Yonah processor

7 MCH_CFG_9 — 1 — 30MIL TP81

MCH_CFG_9 (PCIE Graphics Lane)	Low = Reverse Lane High = Normal operation

For layout convenience

7 MCH_CFG_10 — 1 — 30MIL TP82

MCH_CFG_10 (HOST PLL VCC SELECT)	Low = RESERVED High = MOBILITY

7 MCH_CFG_11 — 1 — R93 NC_2.2K_J 0402 — 2

MCH_CFG_11 (PSB 4x CLK ENABLE)	Low = Calistoga High = Reserved

7 MCH_CFG_12 — 1 — 30MIL TP84
7 MCH_CFG_13 — 1 — 30MIL TP85

MCH_CFG_[13:12] (XOR/ALLZ)	00=Partial Clock Gating Disable 01=XOR Mode Enable 10=All-Z Mode Enable 11=Normal Operation(Default)

7 MCH_CFG_16 — 1 — 30MIL TP160

MCH_CFG_16 (FSB Dynamic ODT)	Low = Dynamic ODT Disabled High = Dynamic ODT Enable

MCH_CFG_18 (VCC_CORE Select)	Low = 1.05V(default) High = 1.5V

7 MCH_CFG_18 — 1 — 30MIL TP79

MCH_CFG_19 (DMI LANE REVERSAL)	Low = Normal(default) High = LANES REVERSED

7 MCH_CFG_19 — 1 — 30MIL TP80

MCH_CFG_20 (PCIe Backward Interpoerability mode)	Low = Only SDVO or PCIE x1 is operational (defaults)) High = SDVO and PCIE x1 are operating simultaneously via the PEG port

7 MCH_CFG_20 — 1 — 30MIL TP83

Layout Noe:
Location of all MCH_CFG strap resistors needs to be close to trace to minimize stub

U3I

VSS

CALISTOGA

U3J

VSS

CALISTOGA

FOXCONN HON HAI Precision Ind. Co., Ltd.
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Title: CALISTOGA(VSS) 7 of 7

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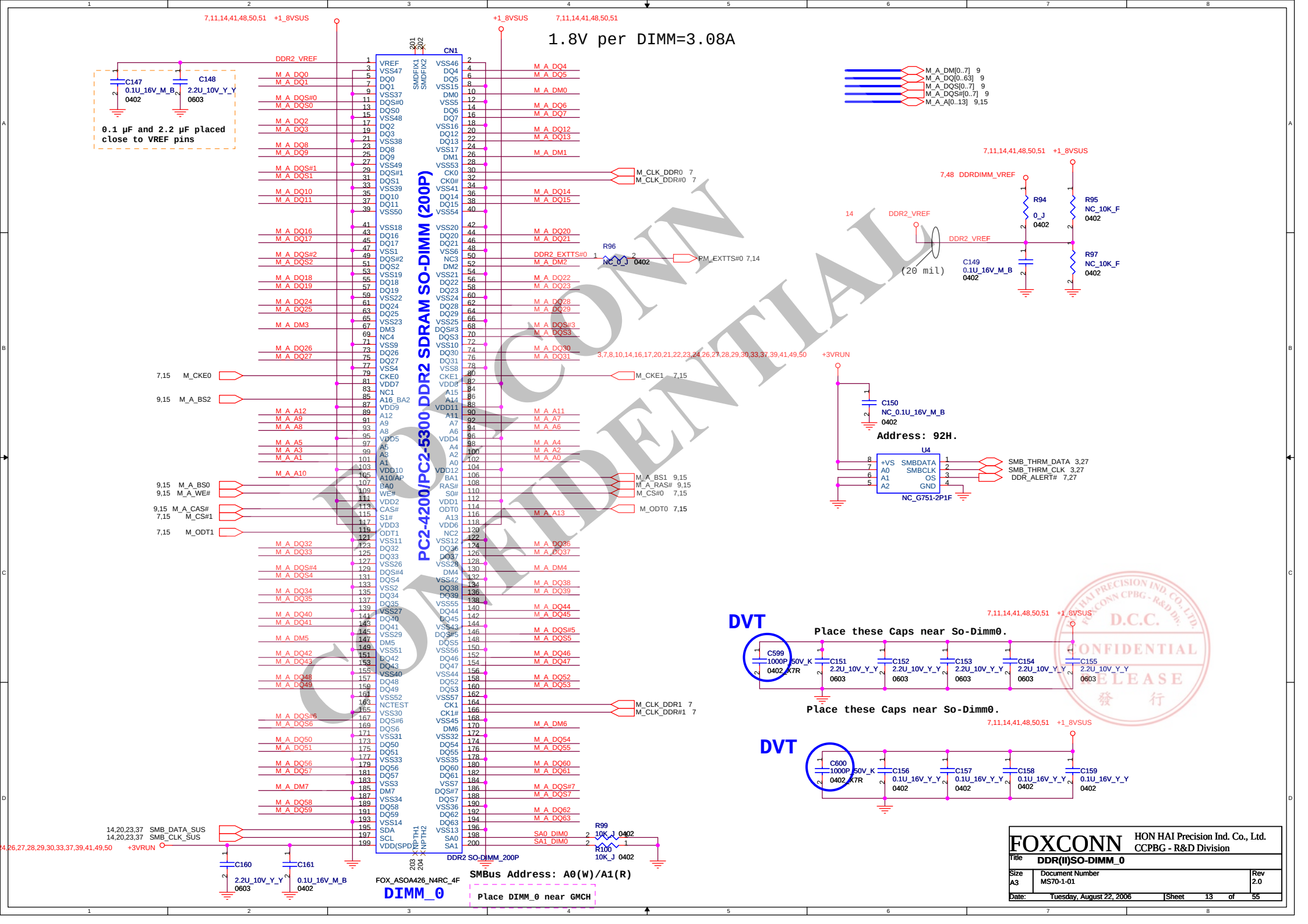
1.8V per DIMM=3.08A
CN1
PC2-4200/PC2-5300 DDR2 SDRAM SO-DIMM (200P)
DDR2 SO-DIMM_200P
DIMM_0
FOX_ASOA426_N4RC_4F
SMBus Address: A0(W)/A1(R)
Place DIMM_0 near GMCH
0.1 µF and 2.2 µF placed close to VREF pins
DDR2_VREF
C147 0.1U_16V_M_B 0402
C148 2.2U_10V_Y_Y 0603
+1_8VSUS
+3VRUN
DDRDIMM_VREF
R94 0_J 0402
R95 NC_10K_F 0402
R97 NC_10K_F 0402
C149 0.1U_16V_M_B 0402
(20 mil)
C150 NC_0.1U_16V_M_B 0402
Address: 92H.
U4
NC_G751-2P1F
SMB_THRM_DATA 3,27
SMB_THRM_CLK 3,27
DDR_ALERT# 7,27
R96 NC_0_J 0402
DDR2_EXTTS#0
PM_EXTTS#0 7,14
R99 10K_J 0402
R100 10K_J 0402
SA0_DIM0
SA1_DIM0
C160 2.2U_10V_Y_Y 0603
C161 0.1U_16V_M_B 0402
DVT
Place these Caps near So-Dimm0.
C599 1000P_50V_K 0402_X7R
C151 2.2U_10V_Y_Y 0603
C152 2.2U_10V_Y_Y 0603
C153 2.2U_10V_Y_Y 0603
C154 2.2U_10V_Y_Y 0603
C155 2.2U_10V_Y_Y 0603
C600 1000P_50V_K 0402_X7R
C156 0.1U_16V_Y_Y 0402
C157 0.1U_16V_Y_Y 0402
C158 0.1U_16V_Y_Y 0402
C159 0.1U_16V_Y_Y 0402
M_A_DM[0..7] 9
M_A_DQ[0..63] 9
M_A_DQS[0..7] 9
M_A_DQS#[0..7] 9
M_A_A[0..13] 9,15
M_CLK_DDR0 7
M_CLK_DDR#0 7
M_CLK_DDR1 7
M_CLK_DDR#1 7
M_CKE0 7,15
M_CKE1 7,15
M_A_BS2 9,15
M_A_BS0 9,15
M_A_BS1 9,15
M_A_WE# 9,15
M_A_RAS# 9,15
M_A_CAS# 9,15
M_CS#0 7,15
M_CS#1 7,15
M_ODT0 7,15
M_ODT1 7,15
SMB_DATA_SUS 14,20,23,37
SMB_CLK_SUS 14,20,23,37
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
DDR(II)SO-DIMM_0
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FOXCONN CONFIDENTIAL
D.C.C.
CONFIDENTIAL
RELEASE

13

DDR2_VREF

7,11,13,41,48,50,51 +1_8VSUS

+1_8VSUS 7,11,13,41,48,50,51

1.8V per DIMM=3.08A

C163 0.1U_16V_M_B 0402

C162 2.2U_10V_Y_Y 0603

0.1 µF and 2.2 µF placed close to VREF pins

CN2

DDR2 S0-DIMM_200P

FOX_ASOA426_N4SC_4F

DIMM_1

PC2-4200/PC2-5300 DDR2 SDRAM SO-DIMM (200P)

M_B_DM[0..7] 9
M_B_DQ[0..63] 9
M_B_DQS[0..7] 9
M_B_DQS#[0..7] 9
M_B_A[0..13] 9,15

M_CLK_DDR3 7
M_CLK_DDR#3 7

R101 NC_0_J 0402

DDR2_EXTTS#1 → PM_EXTTS#0 7,13

7,15 M_CKE2

9,15 M_B_BS2

M_CKE3 7,15

9,15 M_B_BS0
9,15 M_B_WE#
9,15 M_B_CAS#
7,15 M_CS#3
7,15 M_ODT3

M_B_BS1 9,15
M_B_RAS# 9,15
M_CS#2 7,15
M_ODT2 7,15

M_CLK_DDR2 7
M_CLK_DDR#2 7

13,20,23,37 SMB_DATA_SUS
13,20,23,37 SMB_CLK_SUS

+3VRUN

,7,8,10,13,16,17,20,21,22,23,24,26,27,28,29,30,33,37,39,41,49,50 +3VRUN

R102 10K_J 0402

R103 10K_J 0402

SA0_DIM1

SA1_DIM1

C173 2.2U_10V_Y_Y 0603

C174 0.1U_16V_M_B 0402

SMBus Address: A4(W)/A5(R)

DIMM_1 is placed farther than the GMCH than DIMM_0

DVT

Place these Caps near So-Dimm1.

7,11,13,41,48,50,51 +1_8VSUS

C601 1000P_50V_K 0402_X7R

C164 2.2U_10V_Y_Y 0603

C165 2.2U_10V_Y_Y 0603

C166 2.2U_10V_Y_Y 0603

C167 2.2U_10V_Y_Y 0603

C168 2.2U_10V_Y_Y 0603

DVT

Place these Caps near So-Dimm1.

7,11,13,41,48,50,51 +1_8VSUS

C602 1000P_50V_K 0402_X7R

C169 0.1U_16V_Y_Y 0402

C170 0.1U_16V_Y_Y 0402

C171 0.1U_16V_Y_Y 0402

C172 0.1U_16V_Y_Y 0402

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	DDR(II)SO-DIMM_1	
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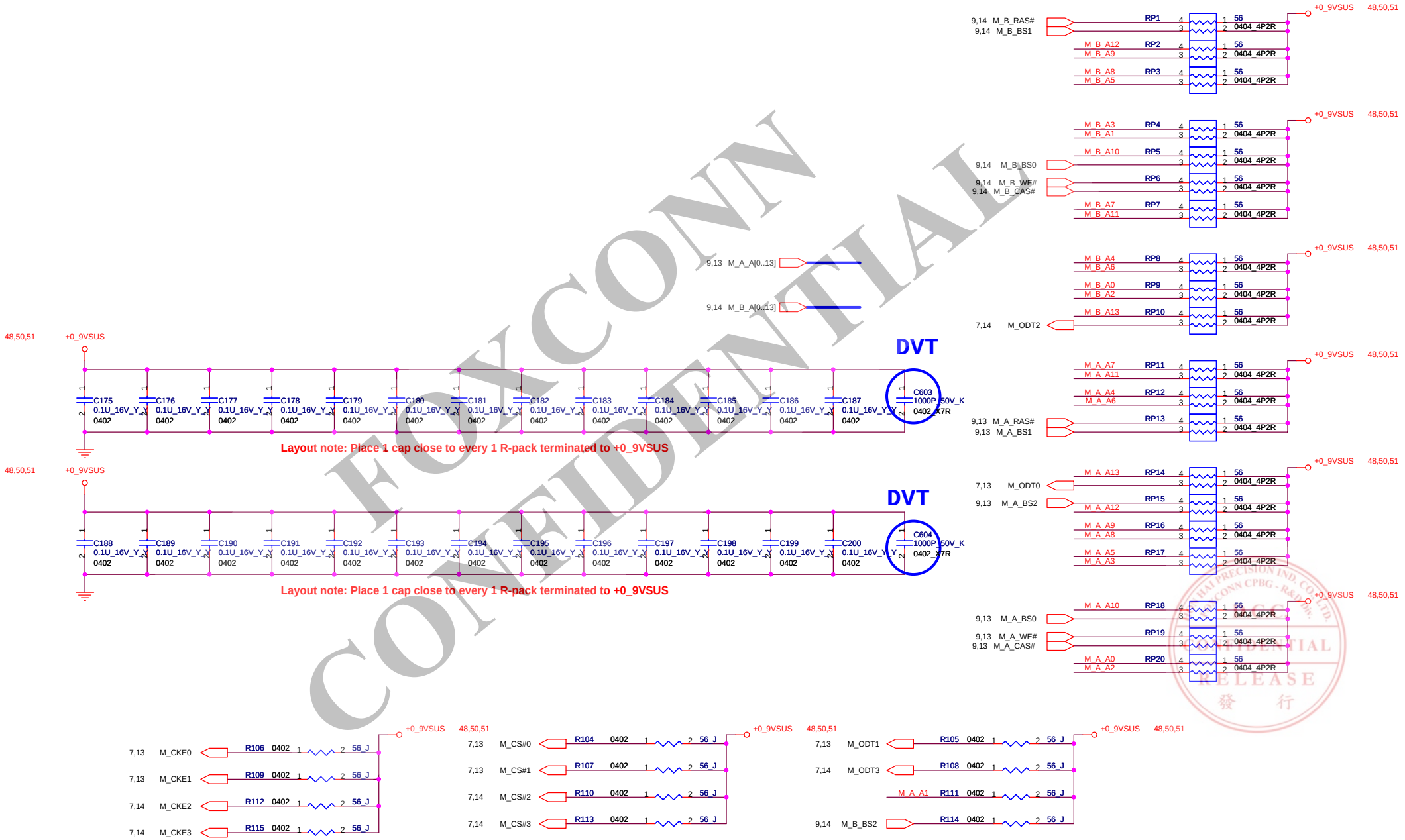

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: DDR(II)Termination		
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LVDS

ODD_CLKIN- GM_ODD_CLKIN- 8
ODD_CLKIN+ GM_ODD_CLKIN+ 8

ODD_RXIN0- GM_ODD_RXIN0- 8
ODD_RXIN0+ GM_ODD_RXIN0+ 8

ODD_RXIN1- GM_ODD_RXIN1- 8
ODD_RXIN1+ GM_ODD_RXIN1+ 8

ODD_RXIN2- GM_ODD_RXIN2- 8
ODD_RXIN2+ GM_ODD_RXIN2+ 8

41,45,46,47,48,49,50 DCBATOUT

C201 0.1U_50V_K_B 0603

2A

8 NB_BRADJ

INV_ENABLE
INV_BRADJ

CN4
FOX_HS8206E
HEADER CONN_6P

R117 10K_J 0402

R116 10K_J 0402

LVDS CONNECTOR

DVT

LCDVCC

C579 0.1U_16V_Y_Y 0402

21 LVDS_GPIO

R515 NC_0_J 0402

CN3

ODD_RXIN2-
ODD_RXIN2+
ODD_RXIN1-
ODD_RXIN1+
ODD_CLKIN-
ODD_CLKIN+

CTB_20P
FOX_GS12201-1011A-9F

INVERTER CONNECTOR

U5 +3VRUN 74AHC1G08GW

27 INV_EN_EC

INV_ENABLE

INV_ENABLE_1

U6 +3VRUN

27,41 LIDIN#

8 GM_INV_EN

74AHC1G08GW

R512 100K_J 0402

PANEL ID

SW1

HDS404-E_SW-SLIDE

LCDID0 23
LCDID1 23
LCDID2 23
LCDID3 23

R519 NC_0_J 0402

DVT

PVT

Type	WXGA	WXGA	WSXGA
Size	15.4" wide	15.4" wide	15.4" wide
Vender	CPT	QDI	InnoLux
Device Name	CLAA154WA05AN	QDI15TL0703	TBD
Panel ID Check[3..0]	1001	1010	1011

ON=0

3,7,8,10,13,14,17,20,21,22,23,24,26,27,28,29,30,33,37,39,41,49,50 +3VRUN

8 GM_LCDVCC_EN

R119 100K_J 0402

C206 4.7U_6.3V_K 0805_X5R

U7 G548B1P1U_1.0

GND OUT3
IN1 OUT2
IN2 OUT1
EN OC#

1.5A

LCDVCC

C207 4.7U_10V_Y_Y 0805

C208 0.1U_16V_Y_Y 0402

R120 200_J 0603

DISCHARGE

The R461 will consume about 0.054 Watt (3.3x3.3/200 = 0.054W). We changed resistor to 0603 size (1/8 Watt)

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	LVDS	
Size A3	Document Number MS70-1-01	Rev 2.0
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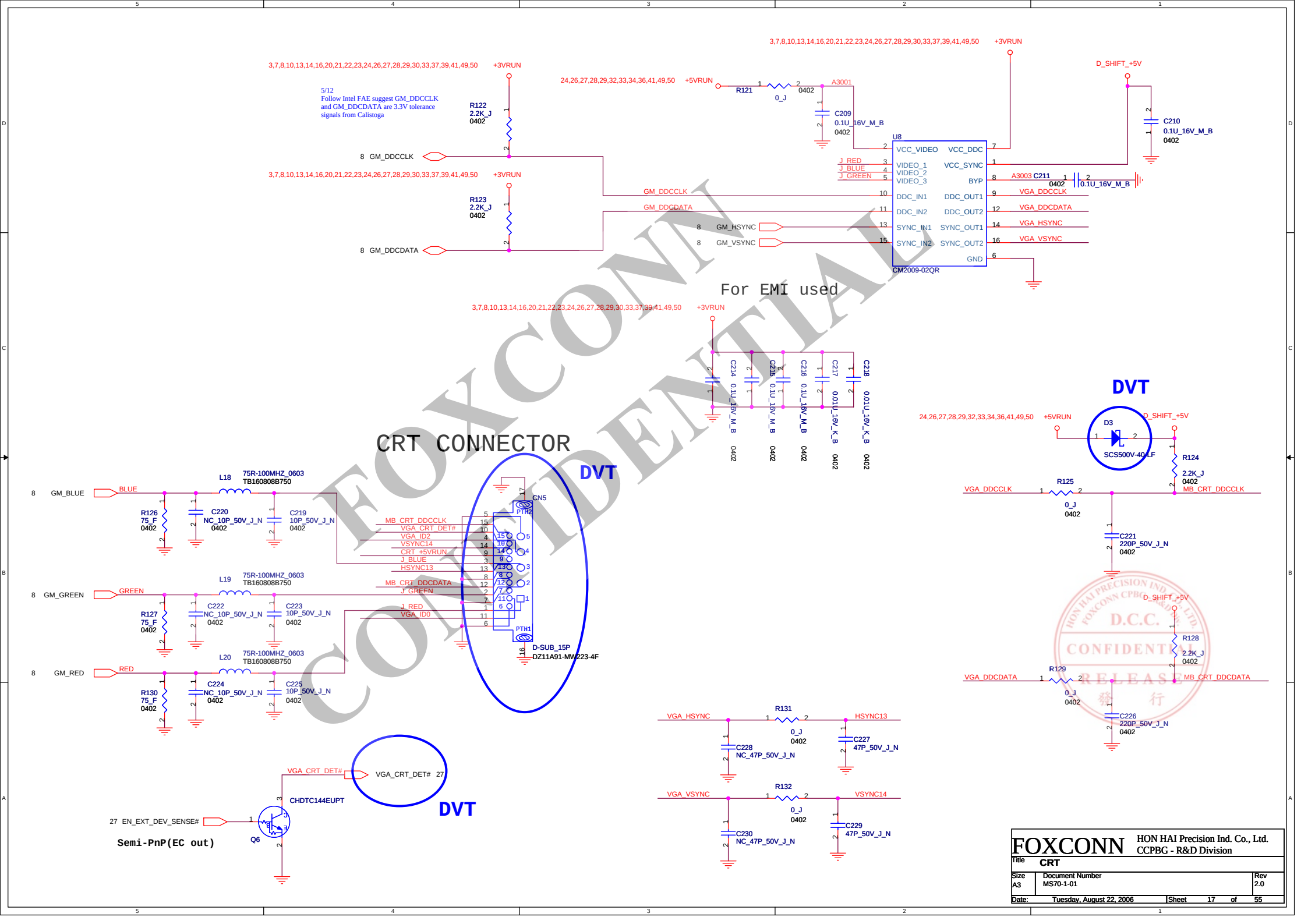
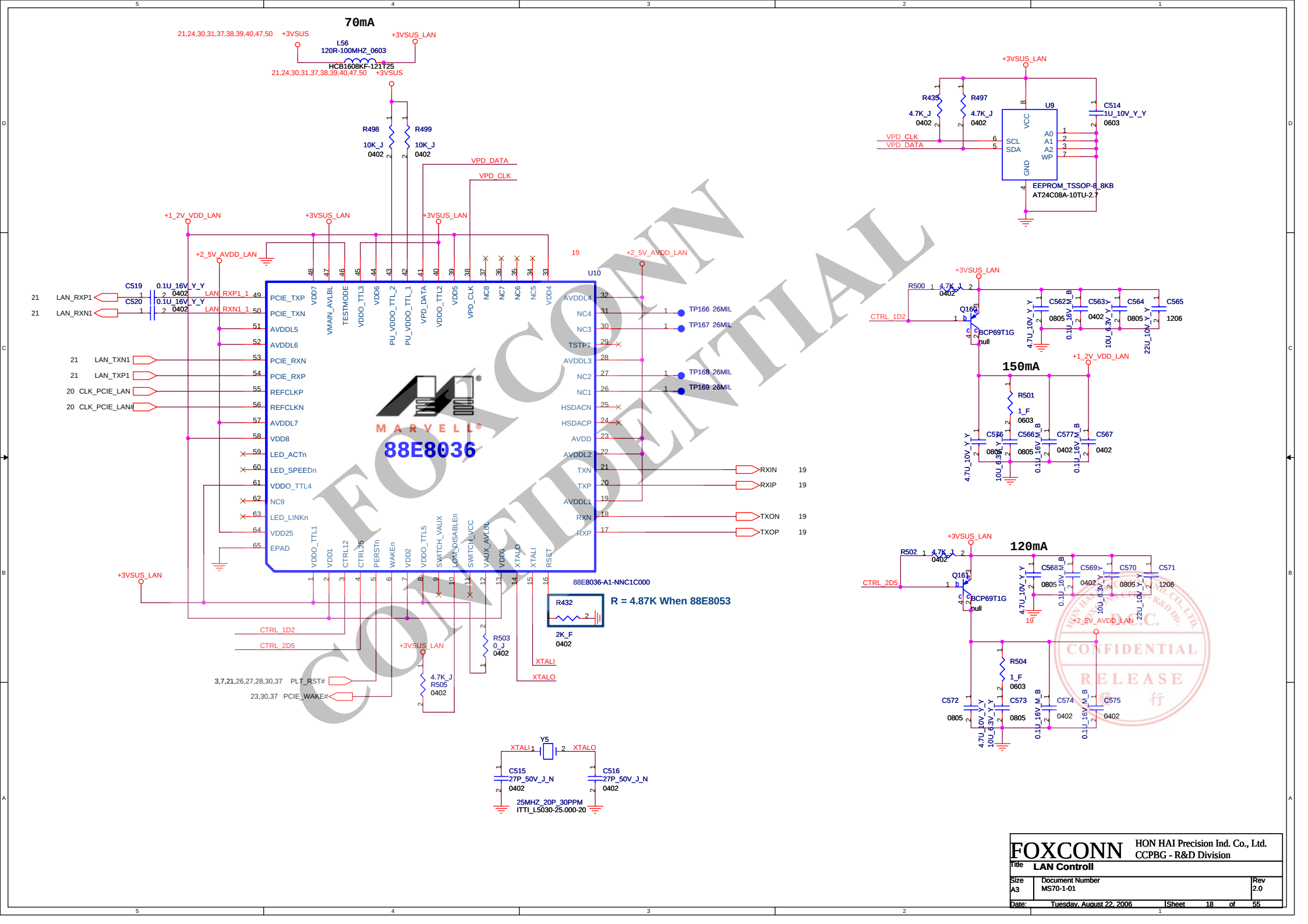
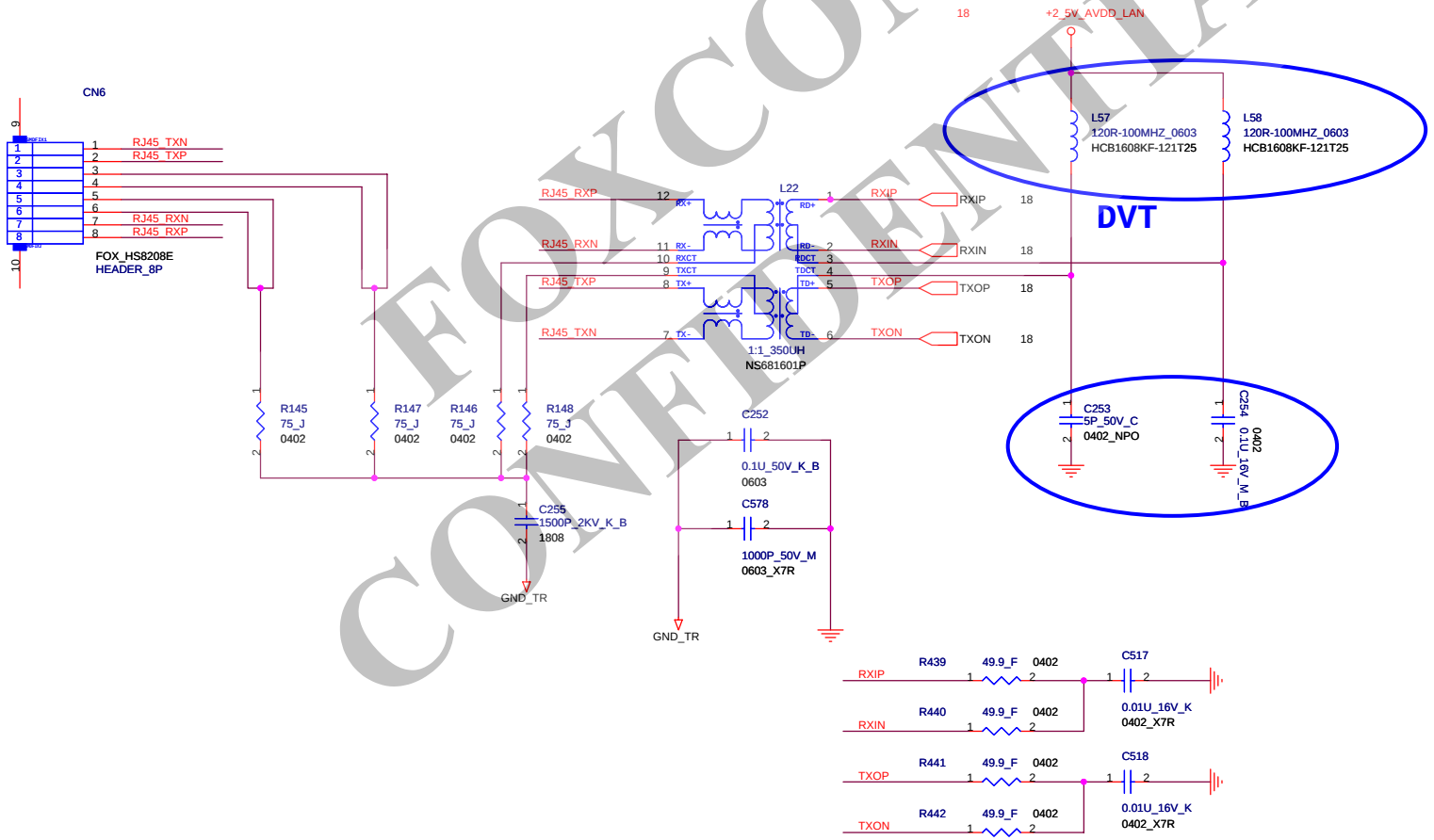
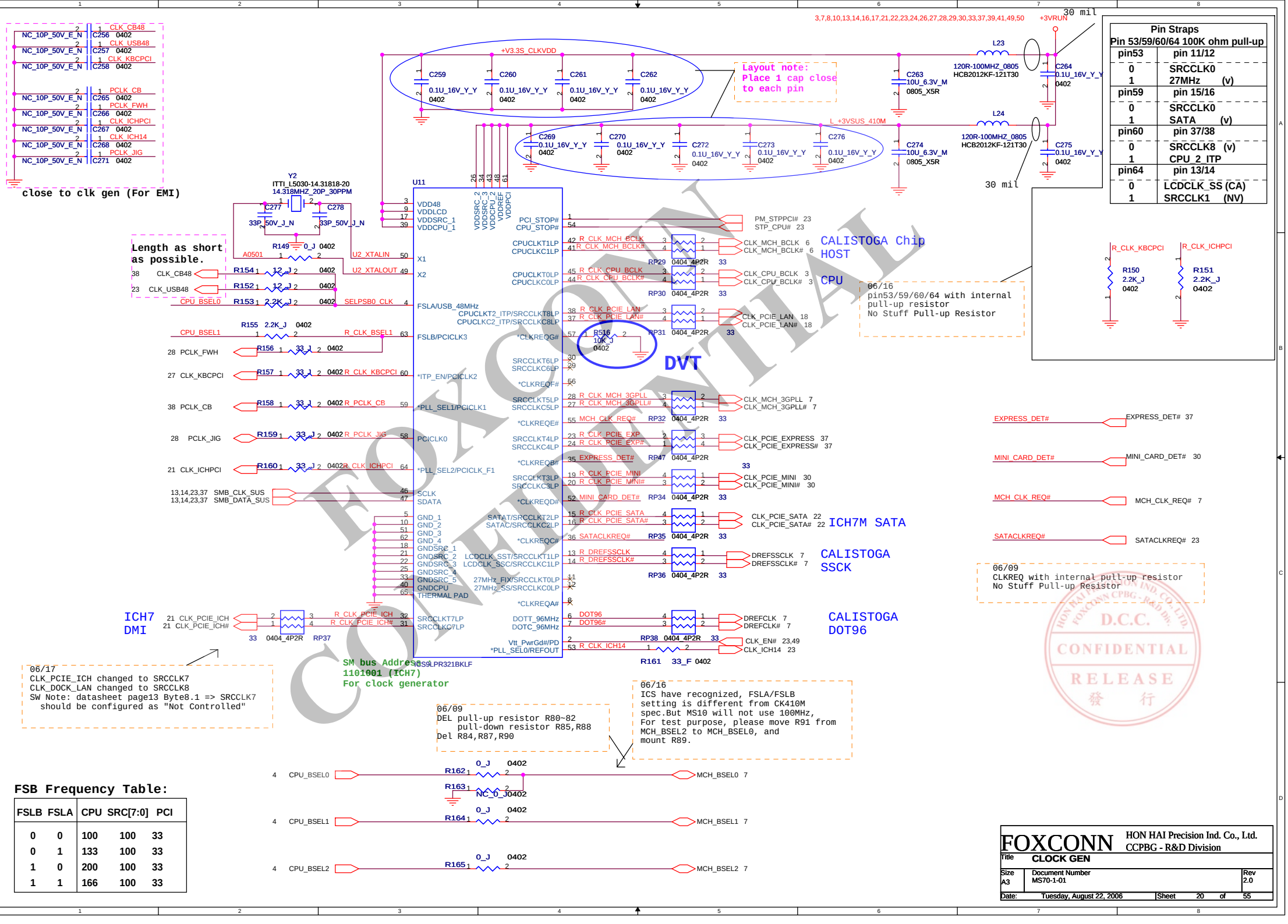
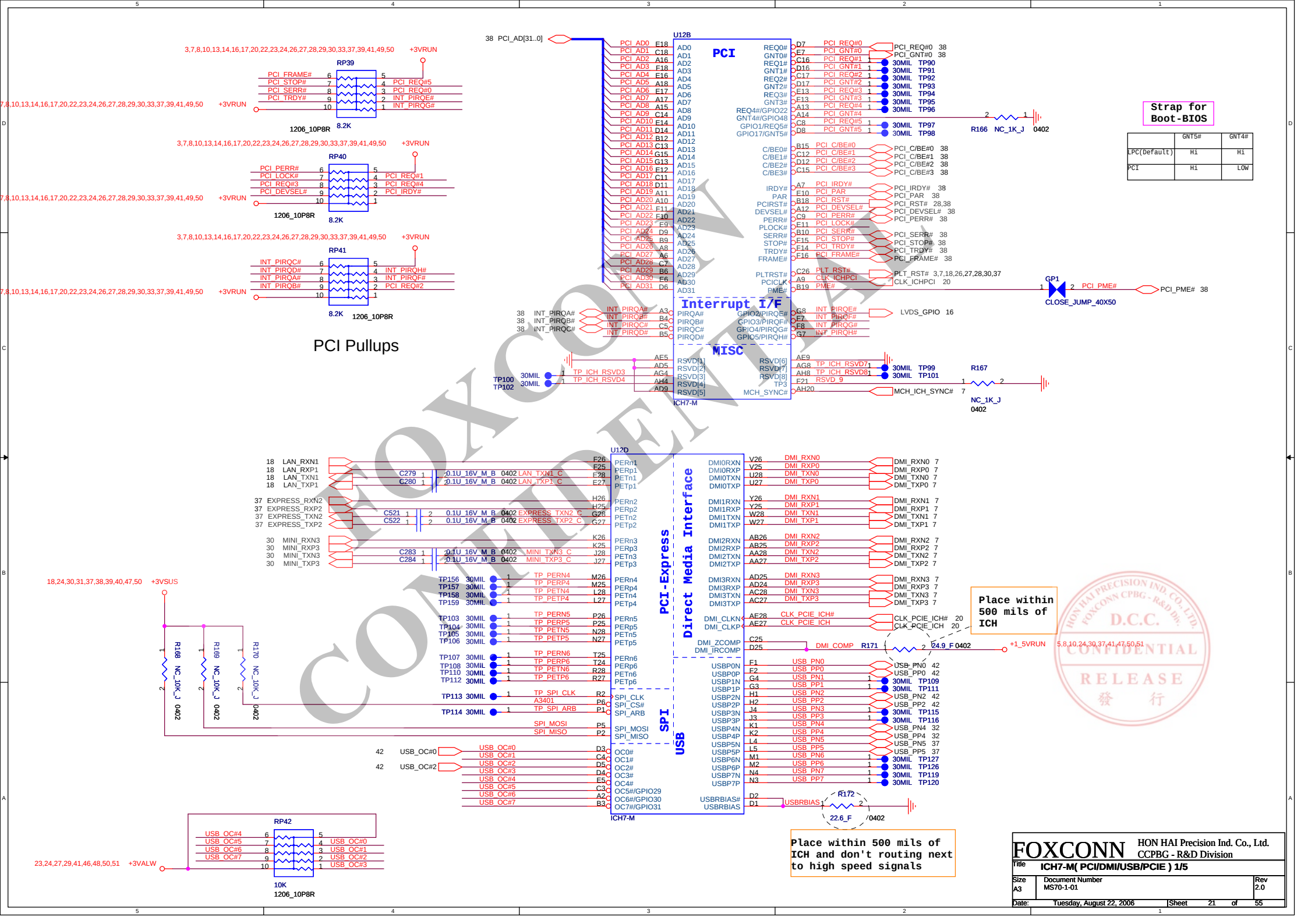

CRT CONNECTOR
For EMI used
DVT
DVT
DVT
Semi-PnP(EC out)
CM2009-02QR
D-SUB_15P
DZ11A91-MW223-4F
SCS500V-40-LF
CHDTC144EUPT
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title CRT
Size A3
Document Number MS70-1-01
Rev 2.0
Date: Tuesday, August 22, 2006
Sheet 17 of 55

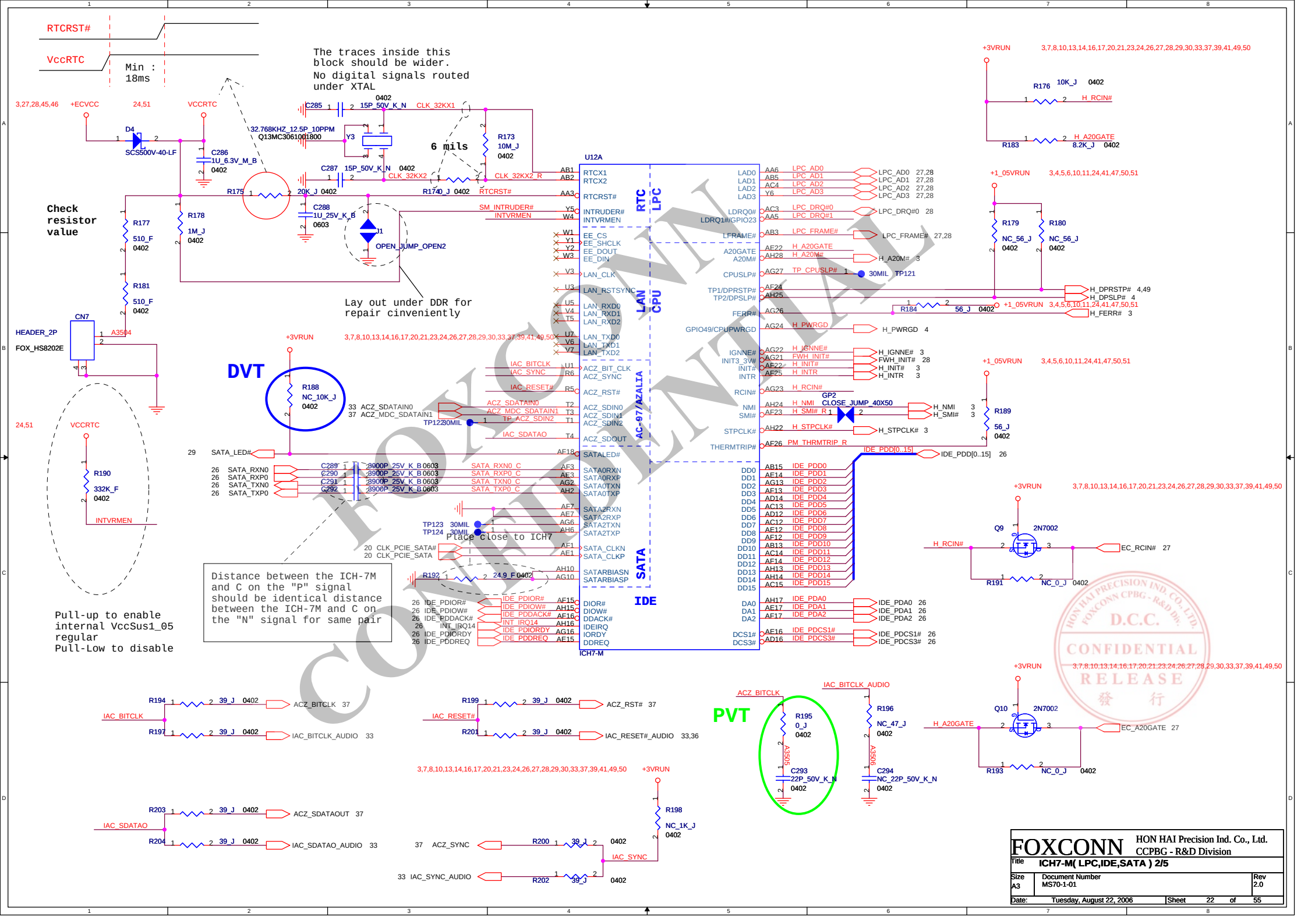


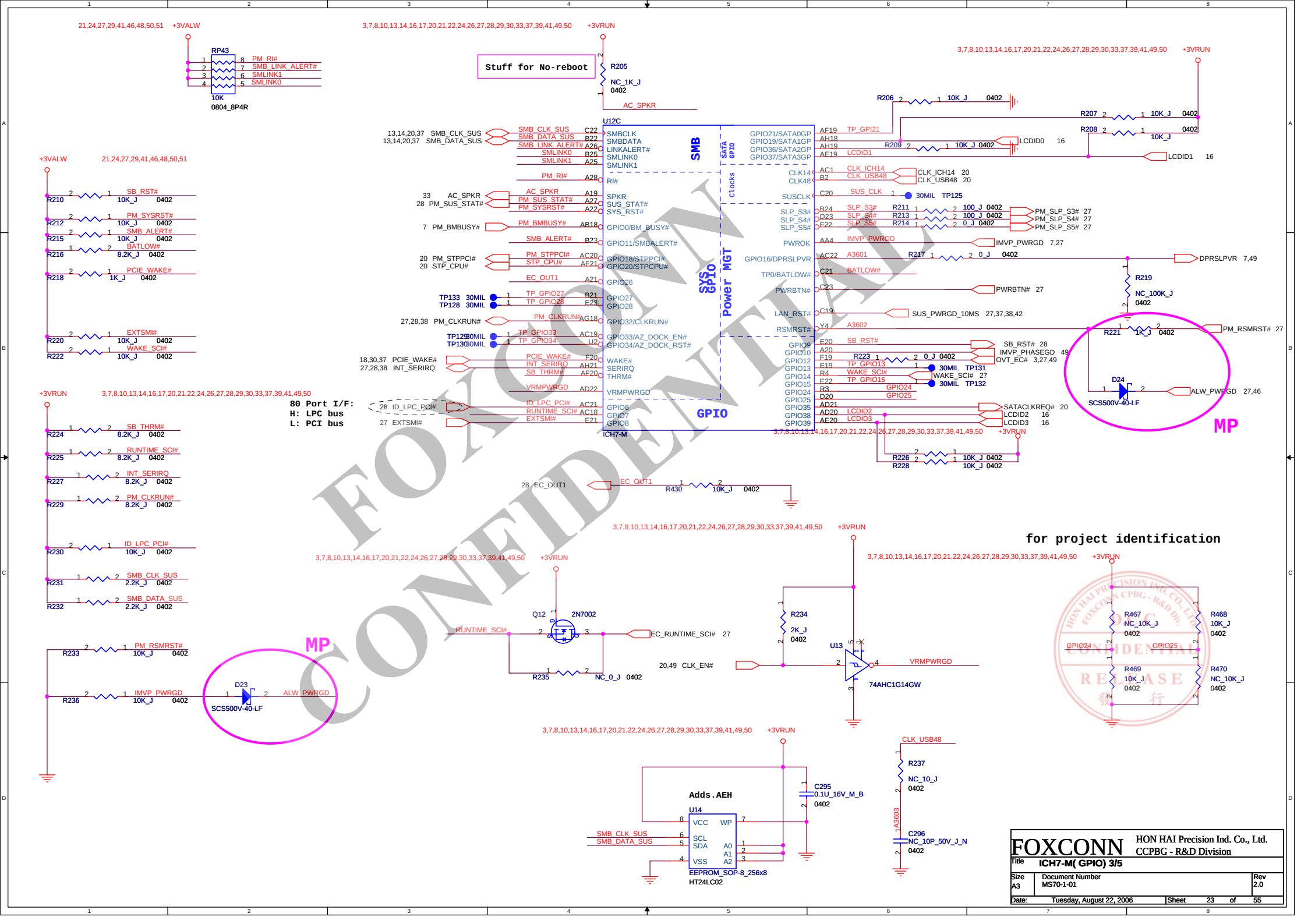


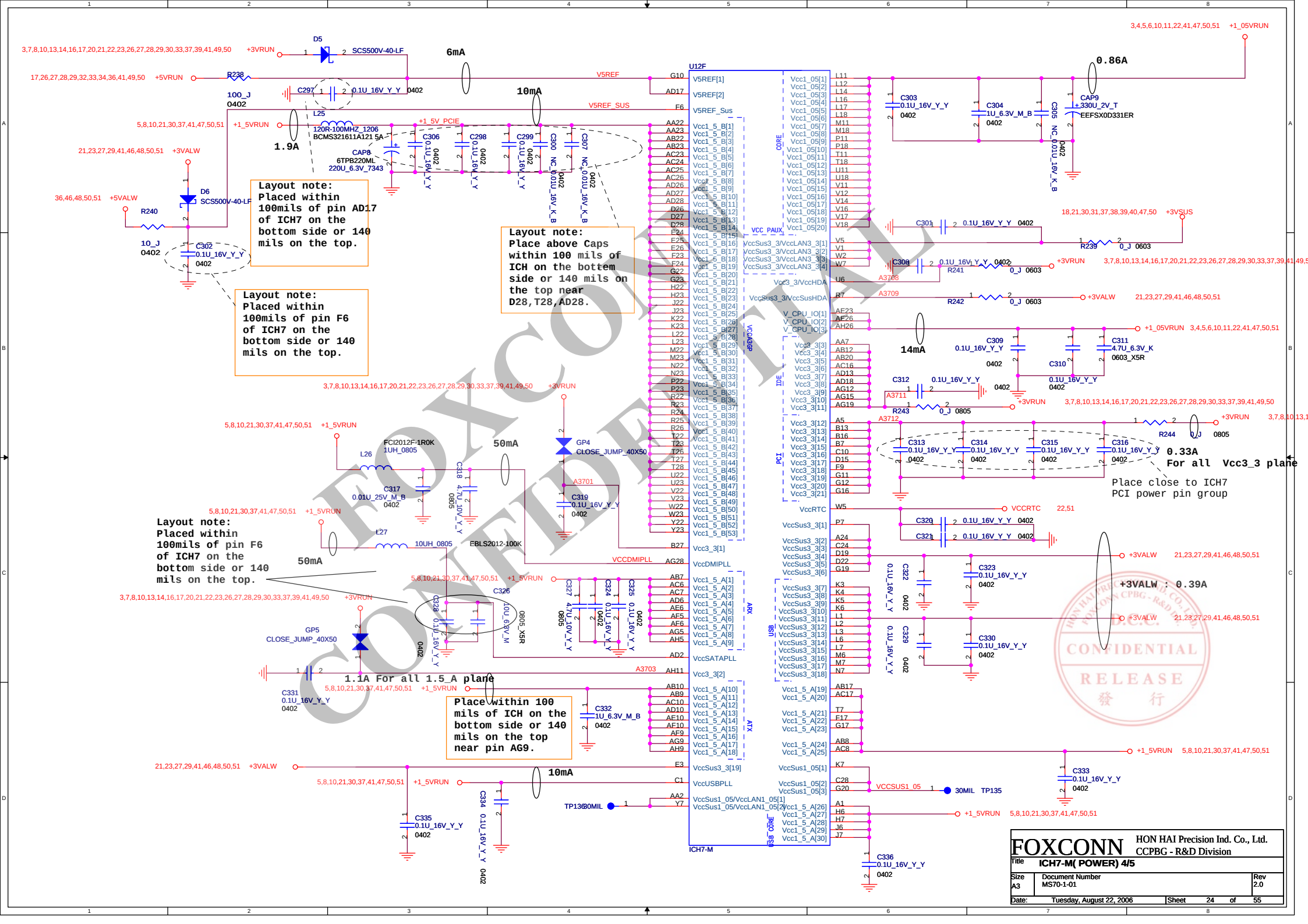
FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: LAN Transformer		
Size: A3	Document Number: MS70-1-01	Rev: 2.0
Date: Tuesday, August 22, 2006	Sheet 19 of 55	

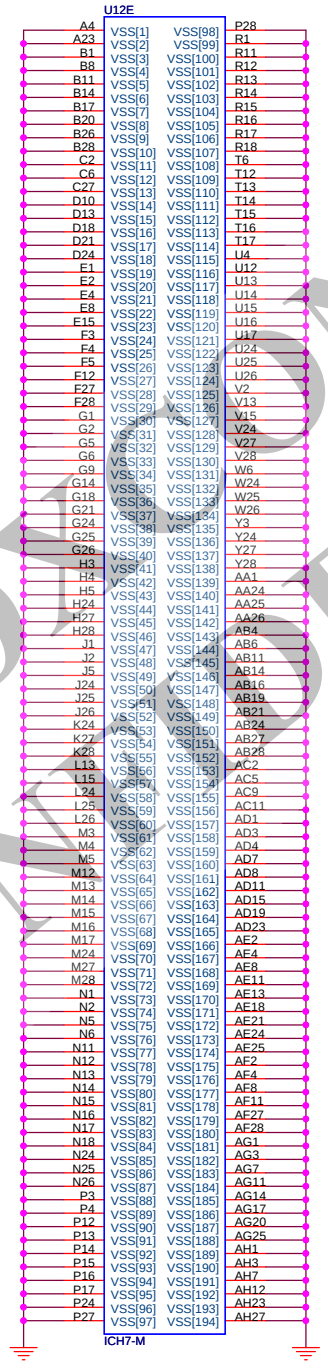

close to clk gen (For EMI)
Length as short as possible.
Layout note: Place 1 cap close to each pin
CALISTOGA Chip HOST
CPU
DVT
ICH7M SATA
CALISTOGA SSCK
CALISTOGA DOT96
ICH7 DMI
SM bus Address 1101001 (ICH7) For clock generator
06/16 pin53/59/60/64 with internal pull-up resistor No Stuff Pull-up Resistor
06/09 CLKREQ with internal pull-up resistor No Stuff Pull-up Resistor
06/17 CLK_PCIE_ICH changed to SRCCLK7 CLK_DOCK_LAN changed to SRCCLK8 SW Note: datasheet page13 Byte8.1 => SRCCLK7 should be configured as "Not Controlled"
06/09 DEL pull-up resistor R80~82 pull-down resistor R85,R88 Del R84,R87,R90
06/16 ICS have recognized, FSLA/FSLB setting is different from CK410M spec.But MS10 will not use 100MHz, For test purpose, please move R91 from MCH_BSEL2 to MCH_BSEL0, and mount R89.
Pin Straps
Pin 53/59/60/64 100K ohm pull-up
pin53 pin 11/12
0 SRCCLK0 27MHz (v)
1 SRCCLK0 SATA (v)
pin59 pin 15/16
0 SRCCLK8 (v)
1 CPU_2_ITP
pin60 pin 37/38
0 LCDCLK_SS (CA)
1 SRCCLK1 (NV)
pin64 pin 13/14
FSB Frequency Table:
FSLB FSLA CPU SRC[7:0] PCI
0 0 100 100 33
0 1 133 100 33
1 0 200 100 33
1 1 166 100 33
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title CLOCK GEN
Size A3
Document Number MS70-1-01
Rev 2.0
Date: Tuesday, August 22, 2006
Sheet 20 of 55
FOXCONN CONFIDENTIAL
D.C.C. CONFIDENTIAL RELEASE 發行


PCI Pullups
Strap for Boot-BIOS
Place within 500 mils of ICH
Place within 500 mils of ICH and don't routing next to high speed signals
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
ICH7-M(PCI/DMI/USB/PCIE) 1/5
Document Number MS70-1-01
Tuesday, August 22, 2006
CONFIDENTIAL
RELEASE


RTCRST#
VccRTC
Min : 18ms
The traces inside this block should be wider.
No digital signals routed under XTAL
Check resistor value
Lay out under DDR for repair cinveniently
DVT
PVT
Place Close to ICH7
Distance between the ICH-7M and C on the "P" signal should be identical distance between the ICH-7M and C on the "N" signal for same pair
Pull-up to enable internal VccSus1_05 regular
Pull-Low to disable
6 mils
U12A
ICH7-M
RTC
LPC
LAN
CPU
AC-97/AZALIA
SATA
IDE
FOXCONN CONFIDENTIAL
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title ICH7-M(LPC,IDE,SATA) 2/5
Size A3
Document Number MS70-1-01
Rev 2.0
Date: Tuesday, August 22, 2006
Sheet 22 of 55


21,24,27,29,41,46,48,50,51 +3VALW
RP43
PM_RI#
SMB_LINK_ALERT#
SMLINK1
SMLINK0
10K
0804_8P4R
3,7,8,10,13,14,16,17,20,21,22,24,26,27,28,29,30,33,37,39,41,49,50 +3VRUN
Stuff for No-reboot
R205
NC_1K_J
0402
AC_SPKR
U12C
SMB
SATA GPIO
Clocks
SYS Power MGT
GPIO
ICH7-M
SMBCLK
SMBDATA
LINKALERT#
SMLINK0
SMLINK1
RI#
SPKR
SUS_STAT#
SYS_RST#
GPIO0/BM_BUSY#
GPIO11/SMBALERT#
GPIO18/STPPCI#
GPIO20/STPCPU#
GPIO26
GPIO27
GPIO28
GPIO32/CLKRUN#
GPIO33/AZ_DOCK_EN#
GPIO34/AZ_DOCK_RST#
WAKE#
SERIRQ
THRM#
VRMPWRGD
GPIO6
GPIO7
GPIO8
GPIO21/SATA0GP
GPIO19/SATA1GP
GPIO36/SATA2GP
GPIO37/SATA3GP
CLK14
CLK48
SUSCLK
SLP_S3#
SLP_S4#
SLP_S5#
PWROK
GPIO16/DPRSLPVR
TP0/BATLOW#
PWRBTN#
LAN_RST#
RSMRST#
GPIO9
GPIO10
GPIO12
GPIO13
GPIO14
GPIO15
GPIO24
GPIO25
GPIO35
GPIO38
GPIO39
R206 10K_J 0402
R207 10K_J 0402
R208 10K_J 0402
R209 10K_J 0402
LCDID0 16
LCDID1 16
CLK_ICH14 20
CLK_USB48 20
30MIL TP125
R211 100_J 0402
R213 100_J 0402
R214 0_J 0402
PM_SLP_S3# 27
PM_SLP_S4# 27
PM_SLP_S5# 27
IMVP_PWRGD 7,27
R217 0_J 0402
DPRSLPVR 7,49
R219 NC_100K_J 0402
PWRBTN# 27
SUS_PWRGD_10MS 27,37,38,42
R221 1K_J 0402
PM_RSMRST# 27
D24
SCS500V-40-LF
ALW_PWRGD 27,46
MP
SB_RST# 28
IMVP_PHASEGD 49
OVT_EC# 3,27,49
R223 0_J 0402
TP_GPIO13
TP_GPIO15
WAKE_SCI# 27
30MIL TP131
30MIL TP132
GPIO24
GPIO25
SATACLKREQ# 20
LCDID2 16
LCDID3 16
R226 10K_J 0402
R228 10K_J 0402
+3VALW 21,24,27,29,41,46,48,50,51
SB_RST# R210 10K_J 0402
PM_SYSRST# R212 10K_J 0402
SMB_ALERT# R215 10K_J 0402
BATLOW# R216 8.2K_J 0402
PCIE_WAKE# R218 1K_J 0402
EXTSMI# R220 10K_J 0402
WAKE_SCI# R222 10K_J 0402
+3VRUN 3,7,8,10,13,14,16,17,20,21,22,24,26,27,28,29,30,33,37,39,41,49,50
SB_THRM# R224 8.2K_J 0402
RUNTIME_SCI# R225 8.2K_J 0402
INT_SERIRQ R227 8.2K_J 0402
PM_CLKRUN# R229 8.2K_J 0402
ID_LPC_PCI# R230 10K_J 0402
SMB_CLK_SUS R231 2.2K_J 0402
SMB_DATA_SUS R232 2.2K_J 0402
PM_RSMRST# R233 10K_J 0402
IMVP_PWRGD R236 10K_J 0402
D23
SCS500V-40-LF
ALW_PWRGD
MP
80 Port I/F:
H: LPC bus
L: PCI bus
28 ID_LPC_PCI#
27 EXTSMI#
RUNTIME_SCI#
EXTSMI#
18,30,37 PCIE_WAKE#
27,28,38 INT_SERIRQ
27,28,38 PM_CLKRUN#
TP133 30MIL
TP128 30MIL
TP129 30MIL
TP130 30MIL
TP_GPIO27
TP_GPIO28
TP_GPIO33
TP_GPIO34
33 AC_SPKR
28 PM_SUS_STAT#
7 PM_BMBUSY#
20 PM_STPPCI#
20 STP_CPU#
EC_OUT1
13,14,20,37 SMB_CLK_SUS
13,14,20,37 SMB_DATA_SUS
28 EC_OUT1
R430 10K_J 0402
3,7,8,10,13,14,16,17,20,21,22,24,26,27,28,29,30,33,37,39,41,49,50 +3VRUN
Q12 2N7002
RUNTIME_SCI#
EC_RUNTIME_SCI# 27
R234 2K_J 0402
R235 NC_0_J 0402
20,49 CLK_EN#
U13
74AHC1G14GW
VRMPWRGD
for project identification
R467 NC_10K_J 0402
R468 10K_J 0402
R469 10K_J 0402
R470 NC_10K_J 0402
GPIO24
GPIO25
CONFIDENTIAL
RELEASE
3,7,8,10,13,14,16,17,20,21,22,24,26,27,28,29,30,33,37,39,41,49,50 +3VRUN
Adds.AEH
U14
VCC
WP
SCL
SDA
A0
A1
A2
VSS
EEPROM_SOP-8_256x8
HT24LC02
SMB_CLK_SUS
SMB_DATA_SUS
C295 0.1U_16V_M_B 0402
CLK_USB48
R237 NC_10_J 0402
A3603
C296 NC_10P_50V_J_N 0402
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title ICH7-M(GPIO) 3/5
Size A3
Document Number MS70-1-01
Rev 2.0
Date: Tuesday, August 22, 2006
Sheet 23 of 55
FOXCONN CONFIDENTIAL


U12F
ICH7-M
Layout note: Placed within 100mils of pin AD17 of ICH7 on the bottom side or 140 mils on the top.
Layout note: Placed within 100mils of pin F6 of ICH7 on the bottom side or 140 mils on the top.
Layout note: Place above Caps within 100 mils of ICH on the bottem side or 140 mils on the top near D28,T28,AD28.
Layout note: Placed within 100mils of pin F6 of ICH7 on the bottom side or 140 mils on the top.
Place within 100 mils of ICH on the bottom side or 140 mils on the top near pin AG9.
Place close to ICH7 PCI power pin group
0.86A
14mA
0.33A For all Vcc3_3 plane
+3VALW : 0.39A
1.1A For all 1.5_A plane
1.9A
6mA
10mA
50mA
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
ICH7-M(POWER) 4/5
Document Number MS70-1-01
Rev 2.0
Tuesday, August 22, 2006
Sheet 24 of 55



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: ICH7-M(GND) 5/5		
Size: A3	Document Number: MS70-1-01	Rev: 2.0
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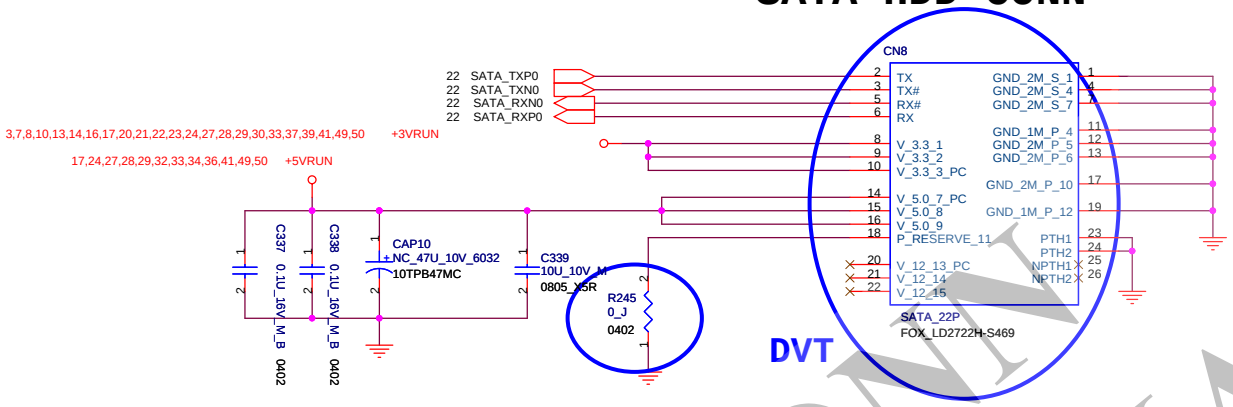
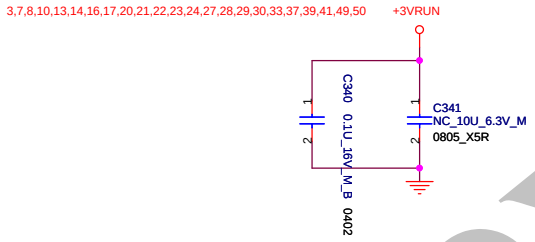
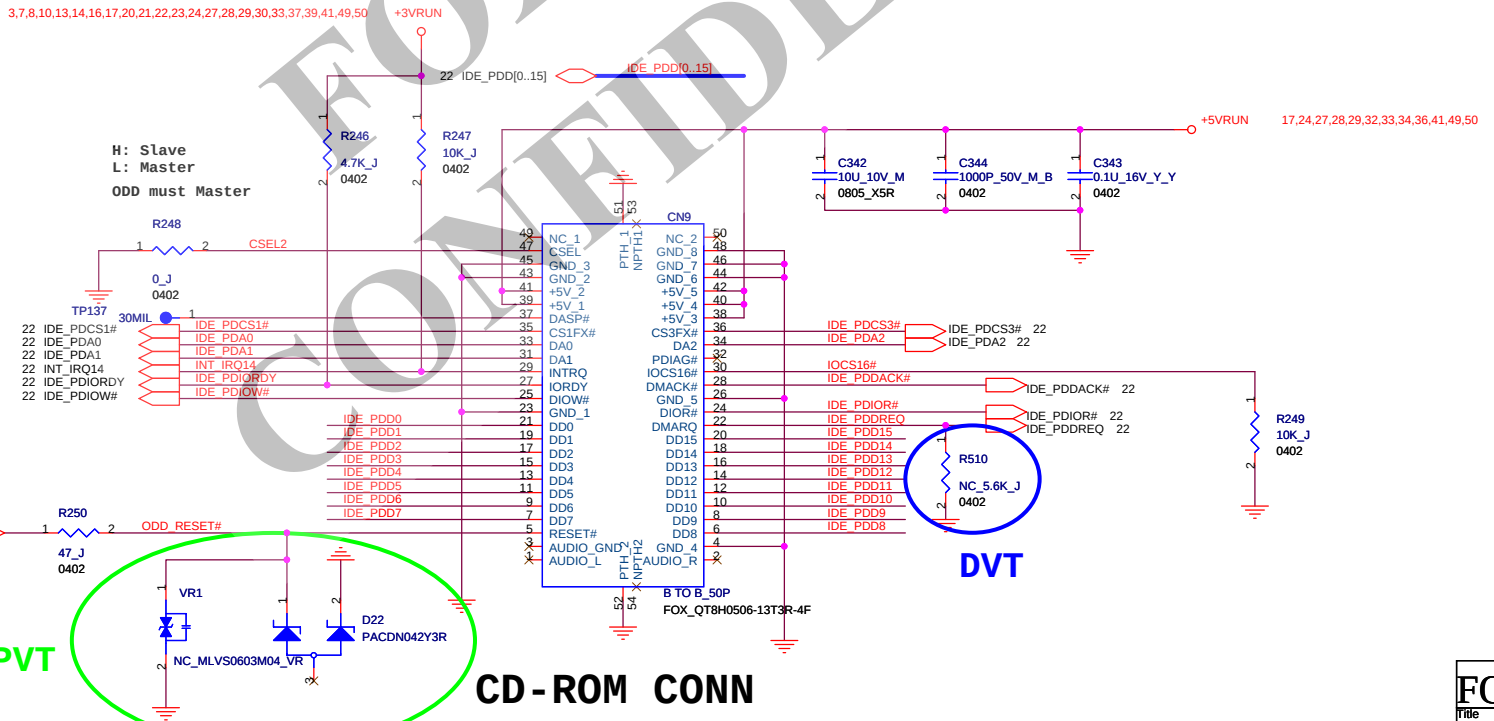
SATA HDD CONN



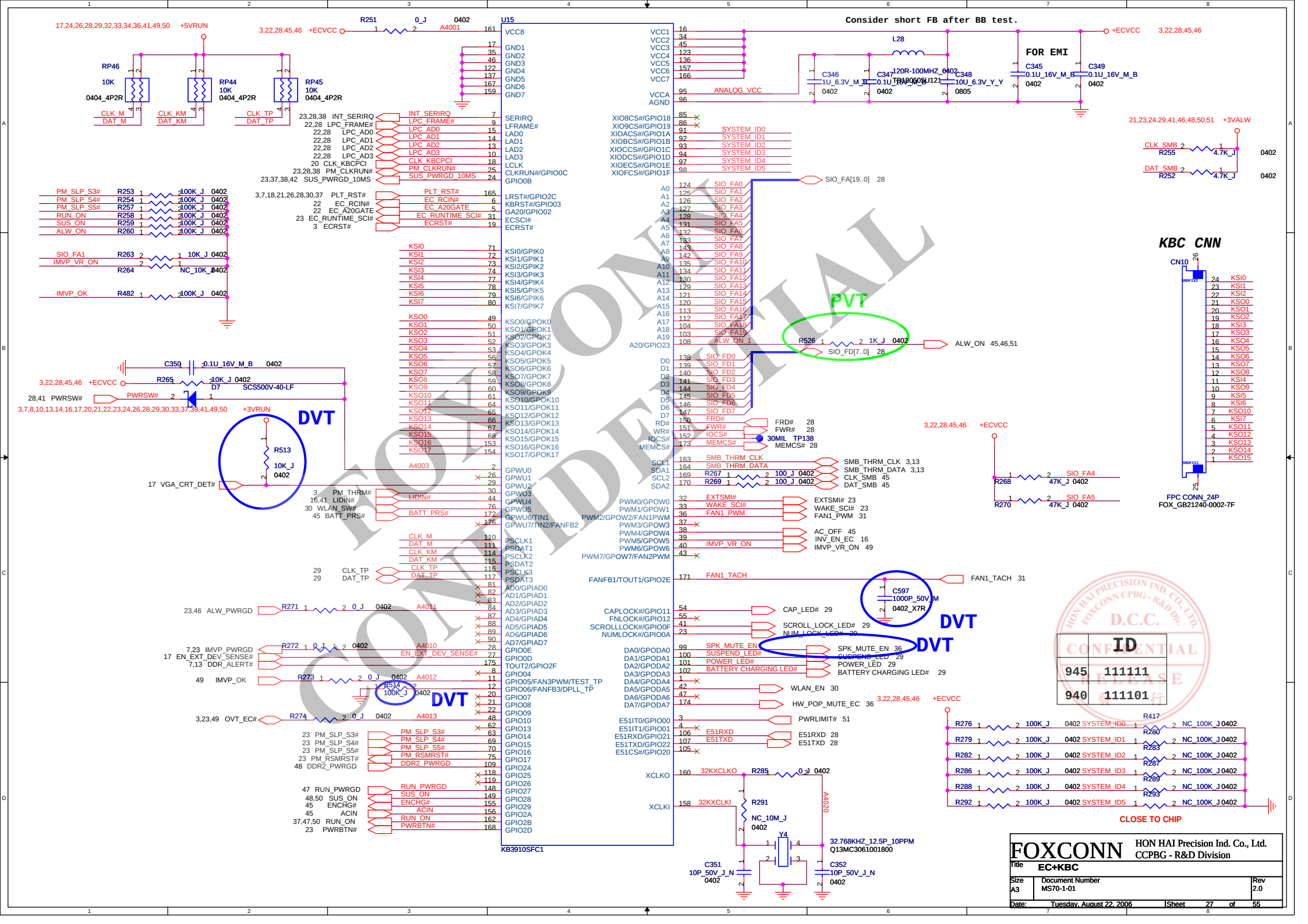




CD-ROM CONN

Follow Adoi san suggest ODD: Master/HDD:Slave

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	SATA HDD/CD-ROM	
Size A3	Document Number MS70-1-01	Rev 2.0
Date: Tuesday, August 22, 2006	Sheet 26 of 55	


Consider short FB after BB test.
U15
KB3910SFC1
FOR EMI
L28
120R-100MHZ_0402
PVT
DVT
DVT
DVT
KBC CNN
CN10
FPC CONN_24P
FOX_GB21240-0002-7F
CLOSE TO CHIP
ID
945 111111
940 111101
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
EC+KBC
Document Number MS70-1-01
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Tuesday, August 22, 2006
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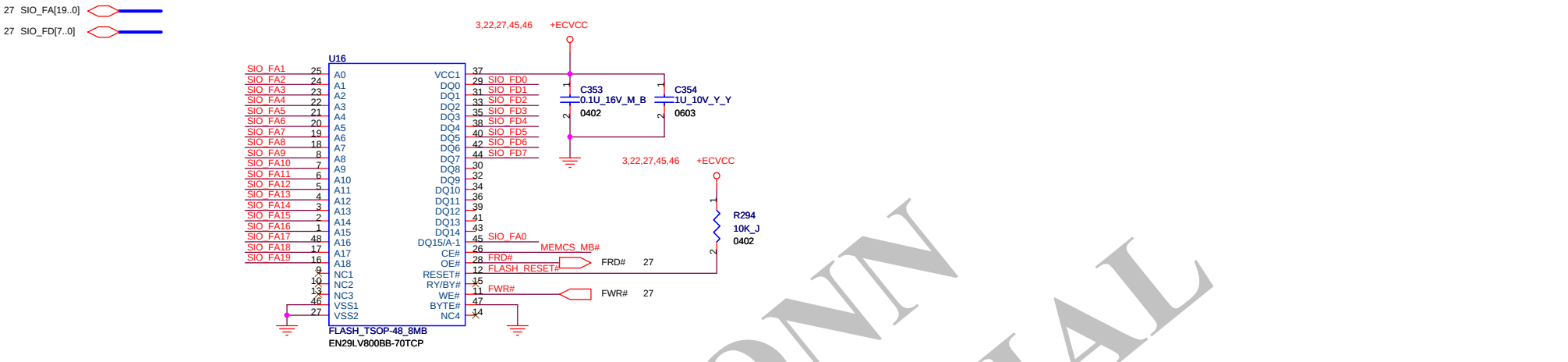
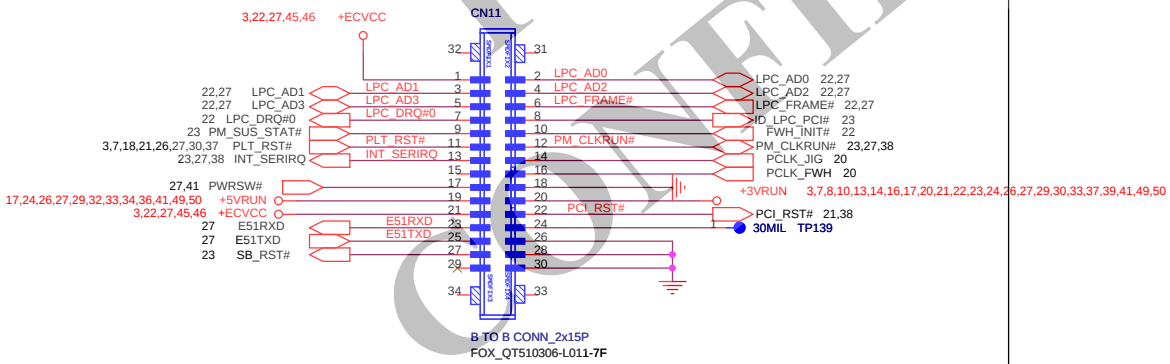
FOXCONN CONFIDENTIAL

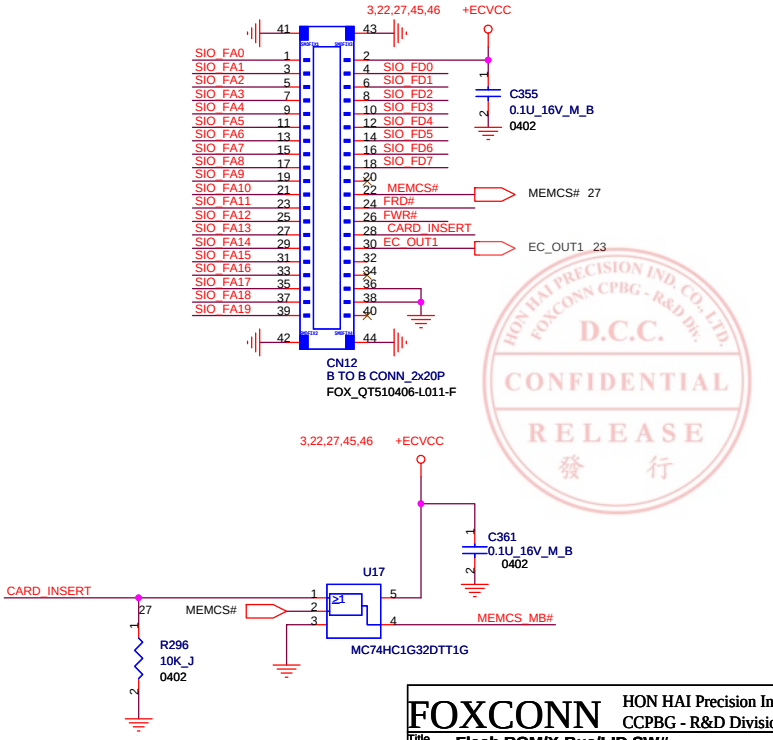


FLASH BIOS

JIG-120

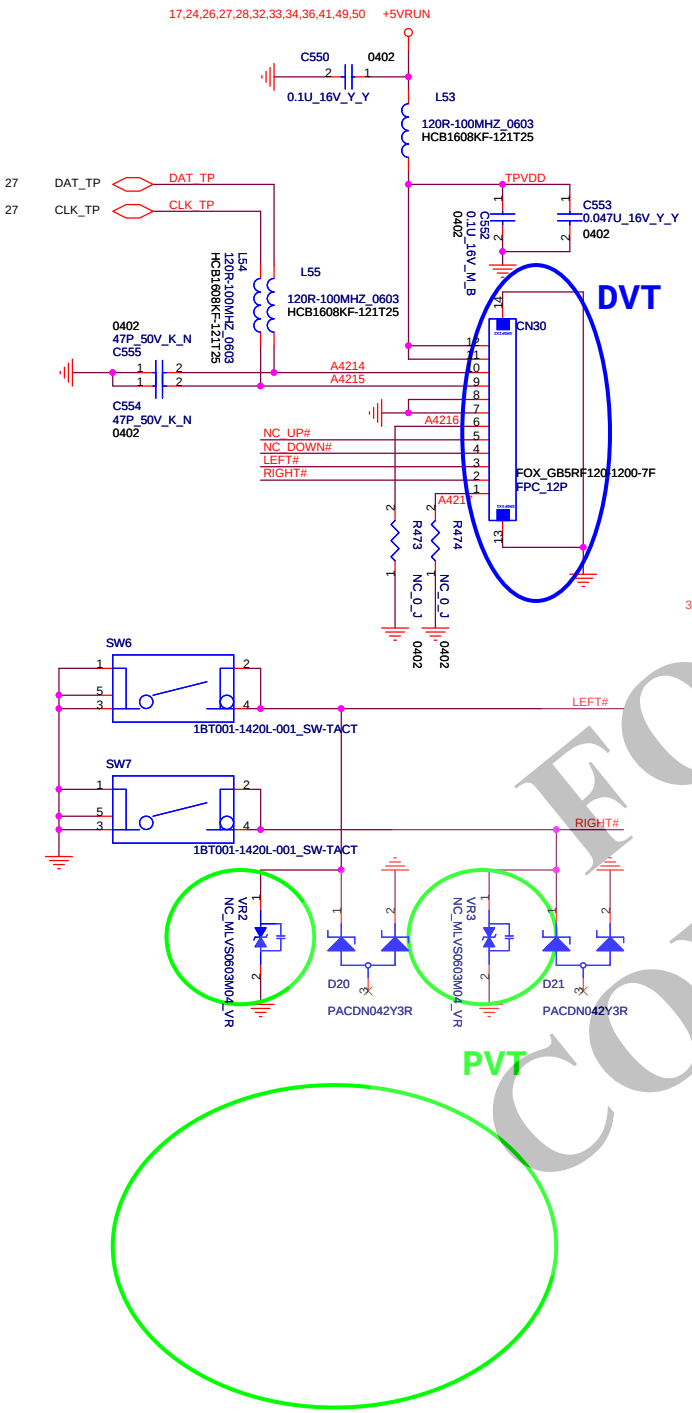


X-BUS

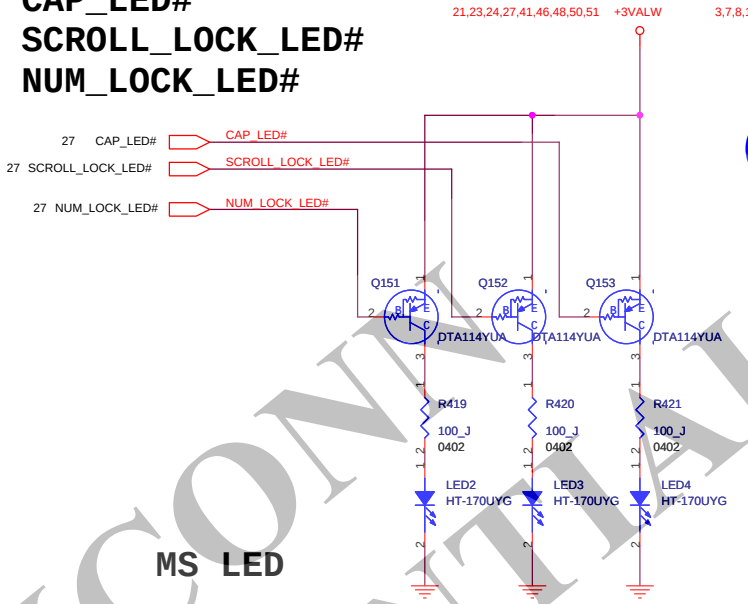


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	Flash ROM/X-Bus/LID SW#	
Size A3	Document Number MS70-1-01	Rev 2.0
Date: Tuesday, August 22, 2006	Sheet 28 of 55	

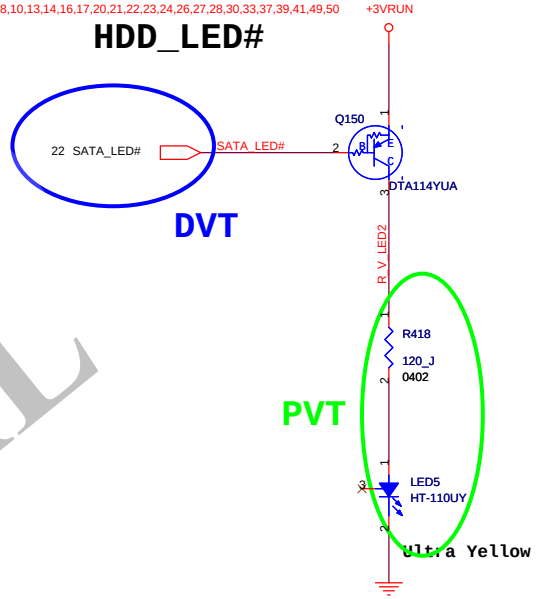
Touch Pad Board



CAP_LED#
SCROLL_LOCK_LED#
NUM_LOCK_LED#

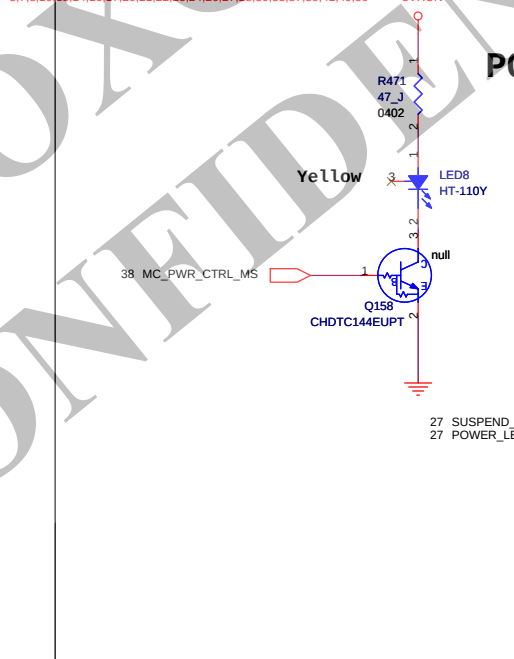


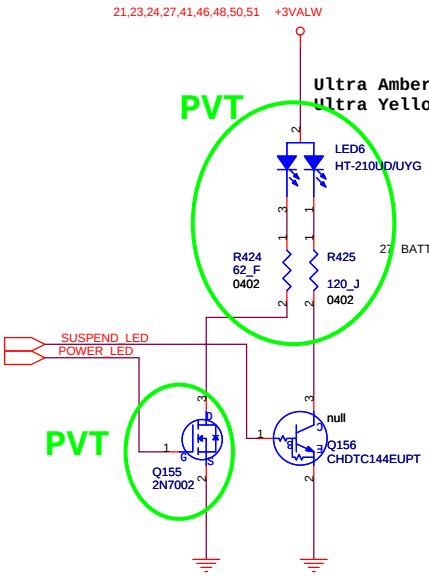
HDD_LED#



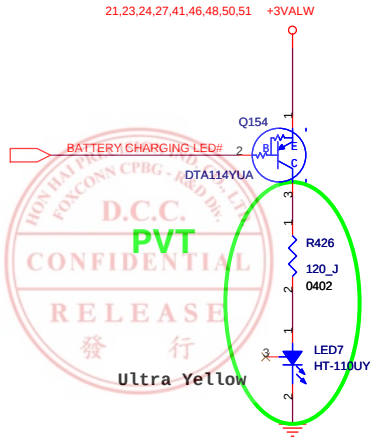
MS LED

POWER/SUSPEND LED

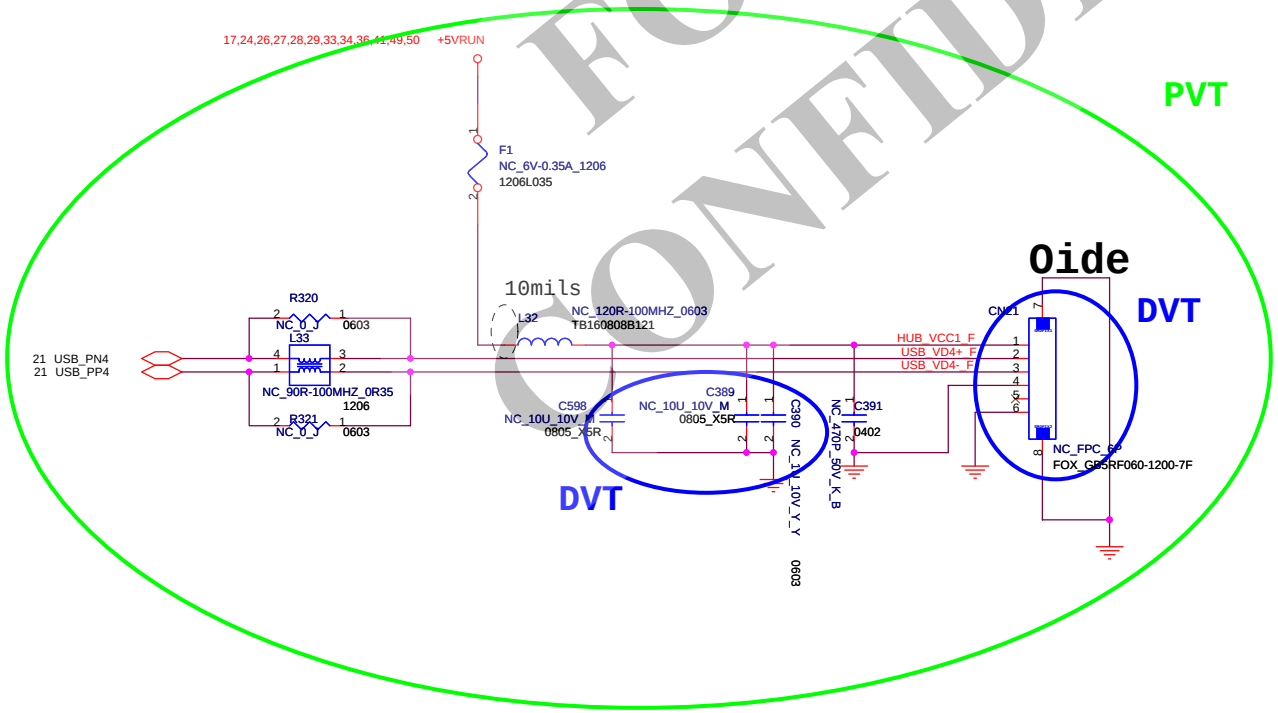




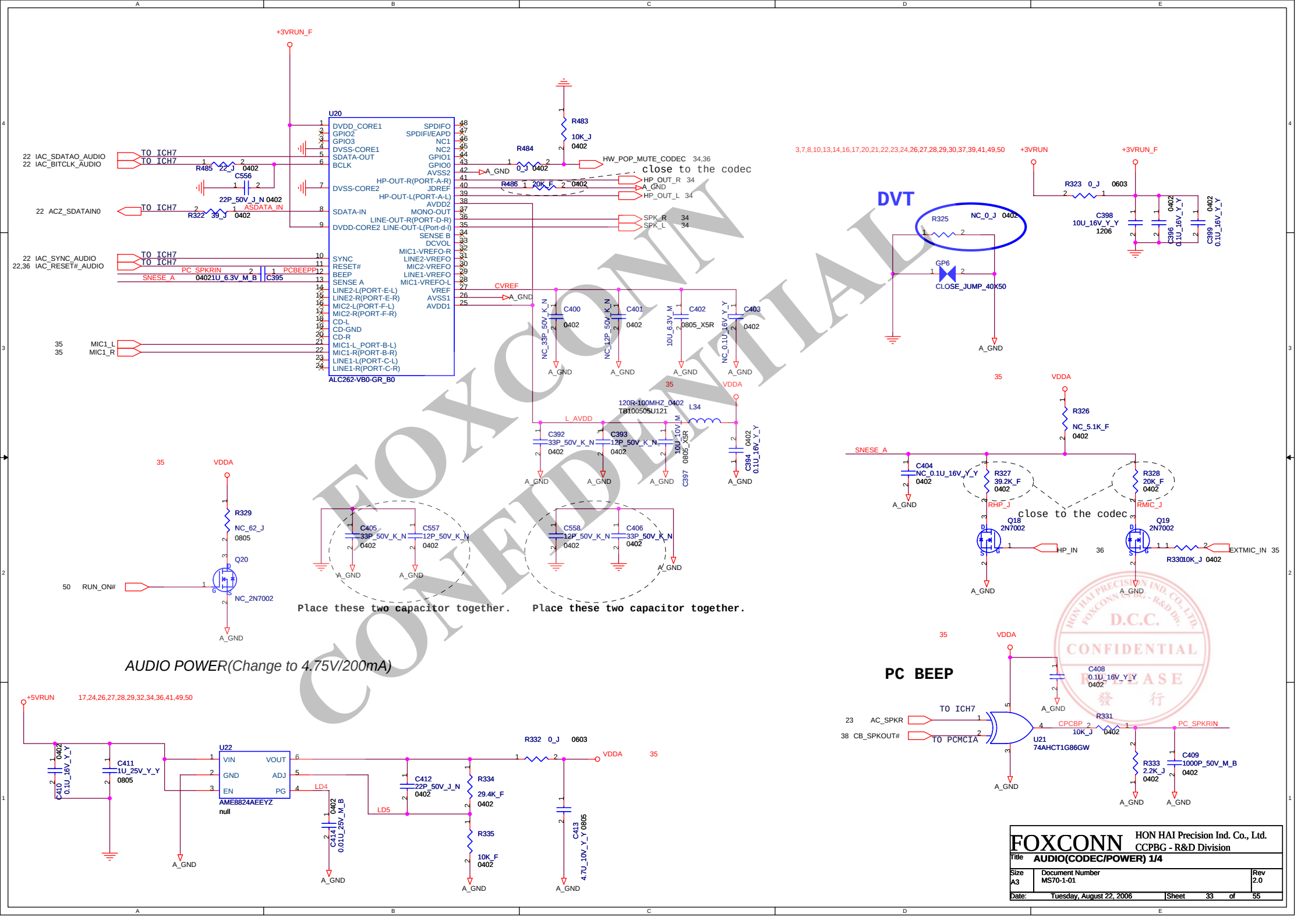
BATTERY CHARGING LED#



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	LED/Touch PAD	
Size A3	Document Number MS70-1-01	Rev 2.0
Date: Tuesday, August 22, 2006	Sheet 29 of 55	



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: OIDE		
Size: A3	Document Number: MS70-1-01	Rev: 2.0
Date: Tuesday, August 22, 2006	Sheet 32 of 55	


+3VRUN_F
U20
ALC262-VB0-GR_B0
DVDD_CORE1
GPIO2
GPIO3
DVSS-CORE1
SDATA-OUT
BCLK
DVSS-CORE2
SDATA-IN
SYNC
RESET#
BEEP
SENSE A
DVDD-CORE2
SENSE B
DCVOL
SPDIFO
SPDIFI/EAPD
NC1
NC2
GPIO1
GPIO0
AVSS2
JDREF
AVDD2
MONO-OUT
LINE2-VREFO
MIC2-VREFO
LINE1-VREFO
MIC1-VREFO-L
VREF
AVSS1
AVDD1
HP-OUT-R(PORT-A-R)
HP-OUT-L(PORT-A-L)
LINE-OUT-R(PORT-D-R)
LINE-OUT-L(Port-d-l)
LINE2-L(PORT-E-L)
LINE2-R(PORT-E-R)
MIC2-L(PORT-F-L)
MIC2-R(PORT-F-R)
CD-L
CD-GND
CD-R
MIC1-L_PORT-B-L)
MIC1-R(PORT-B-R)
LINE1-L(PORT-C-L)
LINE1-R(PORT-C-R)
22 IAC_SDATAO_AUDIO
22 IAC_BITCLK_AUDIO
TO ICH7
R485 22_J 0402
C556
22P_50V_J_N 0402
22 ACZ_SDATAIN0
R322 39_J 0402
ASDATA_IN
22 IAC_SYNC_AUDIO
22,36 IAC_RESET#_AUDIO
PC_SPKRIN
SNESE_A
04021U_6.3V_M_B
C395
PCBEEPP
35 MIC1_L
35 MIC1_R
R484 0_J 0402
A_GND
R483 10K_J 0402
HW_POP_MUTE_CODEC 34,36
close to the codec
R486 20K_F 0402
HP_OUT_R 34
HP_OUT_L 34
SPK_R 34
SPK_L 34
CVREF
C400 0402
C401 0402
C402 0805_X5R
C403 0402
NC_33P_50V_K_N
NC_12P_50V_K_N
10U_6.3V_M
NC_0.1U_16V_Y_Y
35 VDDA
120R-100MHZ_0402
TB100505U121
L34
L_AVDD
C392 33P_50V_K_N 0402
C393 12P_50V_K_N 0402
10U_10V_M 0805_X5R
C397
C394 0.1U_16V_Y_Y 0402
35 VDDA
R329 NC_62_J 0805
Q20
50 RUN_ON#
NC_2N7002
C405 33P_50V_K_N 0402
C557 12P_50V_K_N 0402
C558 12P_50V_K_N 0402
C406 33P_50V_K_N 0402
Place these two capacitor together.
Place these two capacitor together.
AUDIO POWER(Change to 4.75V/200mA)
+5VRUN
17,24,26,27,28,29,32,34,36,41,49,50
C410 0.1U_16V_Y_Y 0402
C411 1U_25V_Y_Y 0805
U22
AME8824AEEYZ
null
VIN
GND
EN
VOUT
ADJ
PG
LD4
LD5
C412 22P_50V_J_N 0402
C414 0.01U_25V_M_B 0402
R332 0_J 0603
R334 29.4K_F 0402
R335 10K_F 0402
C413 4.7U_10V_Y_Y 0805
VDDA 35
3,7,8,10,13,14,16,17,20,21,22,23,24,26,27,28,29,30,37,39,41,49,50
+3VRUN
+3VRUN_F
DVT
R325 NC_0_J 0402
GP6
CLOSE_JUMP_40X50
R323 0_J 0603
C398 10U_16V_Y_Y 1206
C396 0.1U_16V_Y_Y 0402
C399 0.1U_16V_Y_Y 0402
35 VDDA
R326 NC_5.1K_F 0402
SNESE_A
C404 NC_0.1U_16V_Y_Y 0402
R327 39.2K_F 0402
R328 20K_F 0402
RHP_J
RMIC_J
close to the codec
Q18 2N7002
Q19 2N7002
HP_IN 36
R330 10K_J 0402
EXTMIC_IN 35
PC BEEP
35 VDDA
C408 0.1U_16V_Y_Y 0402
TO ICH7
23 AC_SPKR
38 CB_SPKOUT#
TO PCMCIA
U21
74AHCT1G86GW
CPCBP
R331 10K_J 0402
PC_SPKRIN
R333 2.2K_J 0402
C409 1000P_50V_M_B 0402
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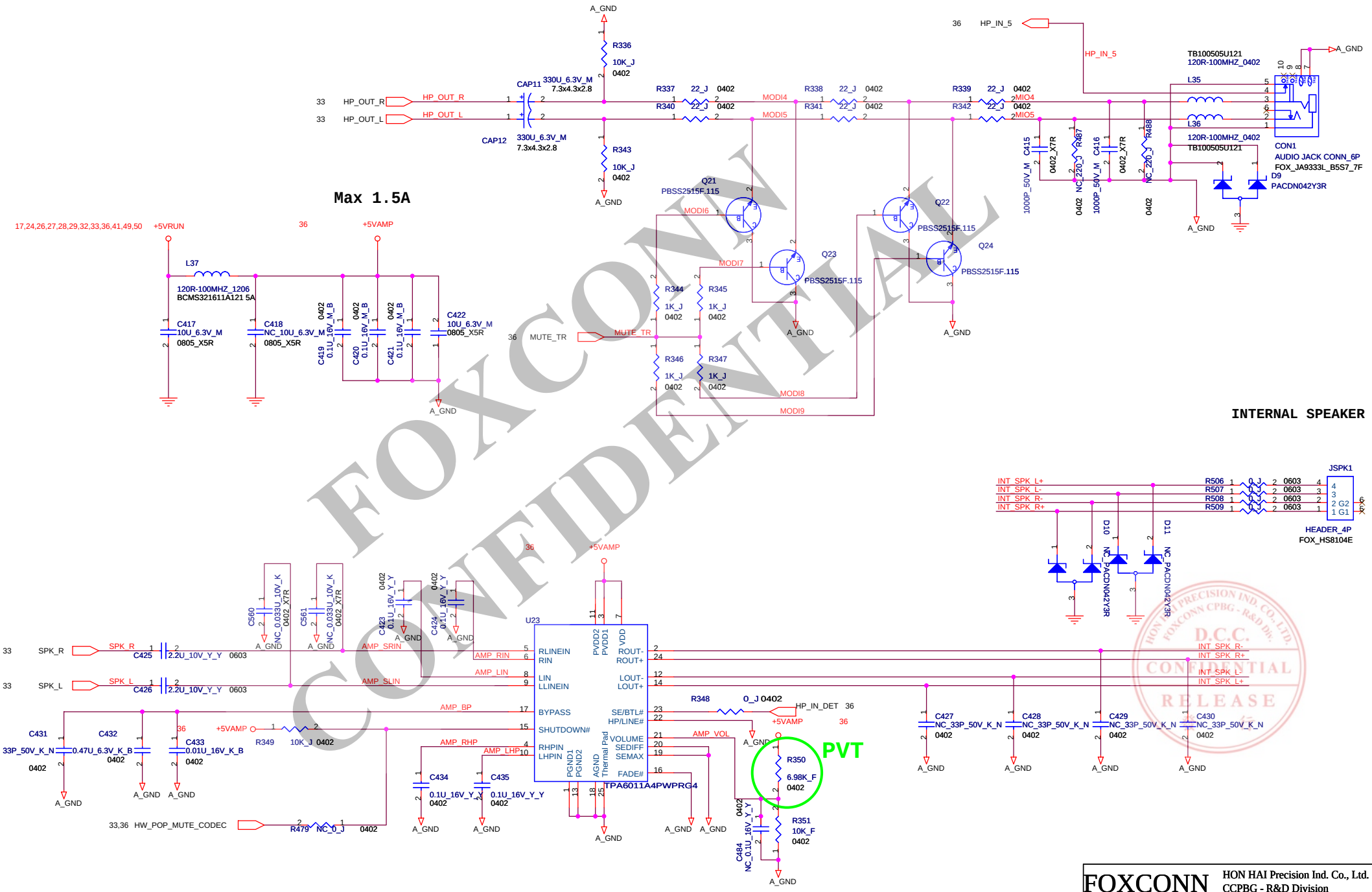
RELEASE
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title AUDIO(CODEC/POWER) 1/4
Size A3
Document Number MS70-1-01
Rev 2.0
Date: Tuesday, August 22, 2006
Sheet 33 of 55


Max 1.5A
INTERNAL SPEAKER
PVT
TPA6011A4PWPRG4
U23
CON1
AUDIO JACK CONN_6P
FOX_JA9333L_B5S7_7F
JSPK1
HEADER_4P
FOX_HS8104E
HP_OUT_R
HP_OUT_L
HP_IN_5
SPK_R
SPK_L
MUTE_TR
HW_POP_MUTE_CODEC
+5VRUN
+5VAMP
A_GND
INT_SPK_L+
INT_SPK_L-
INT_SPK_R-
INT_SPK_R+
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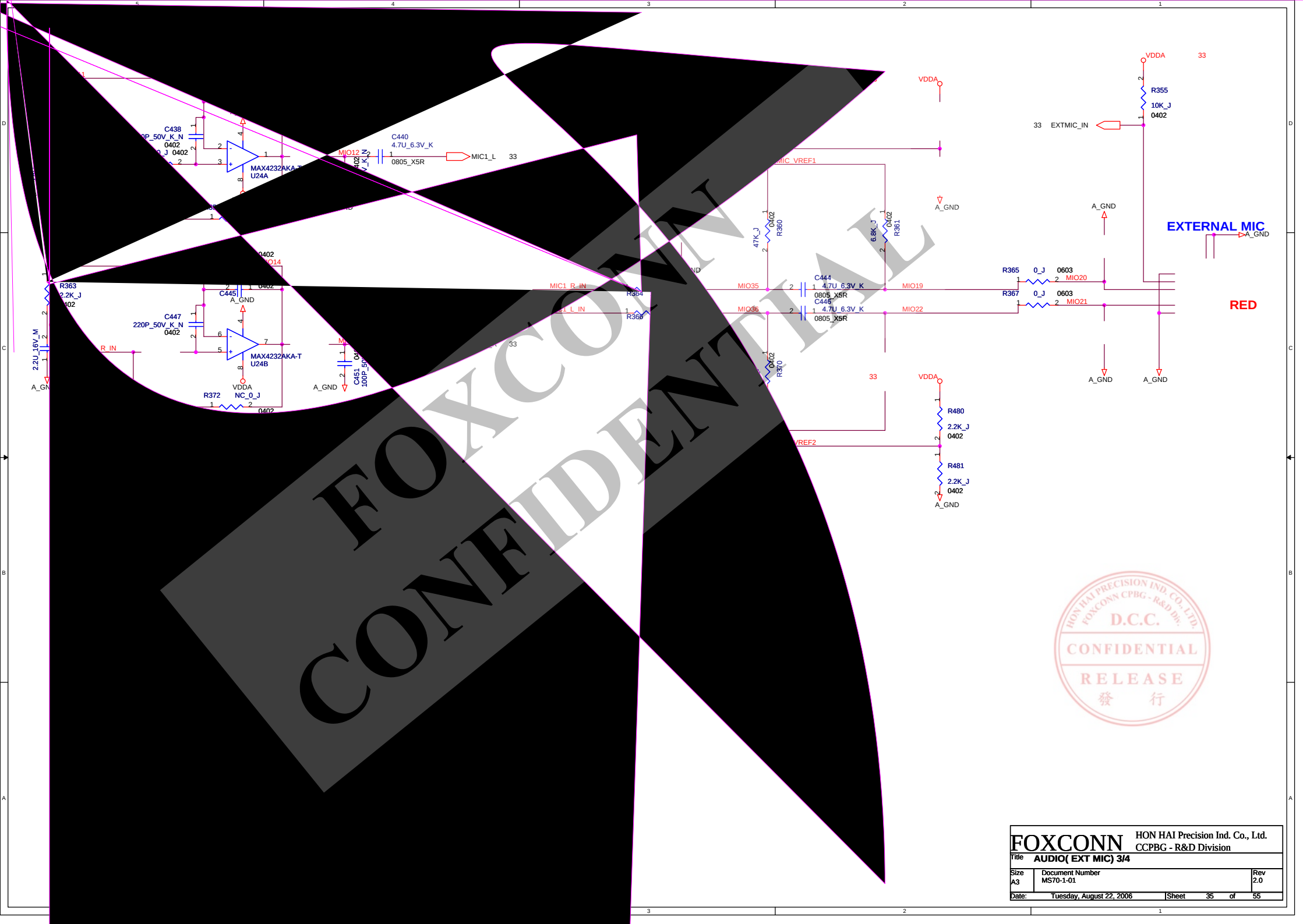
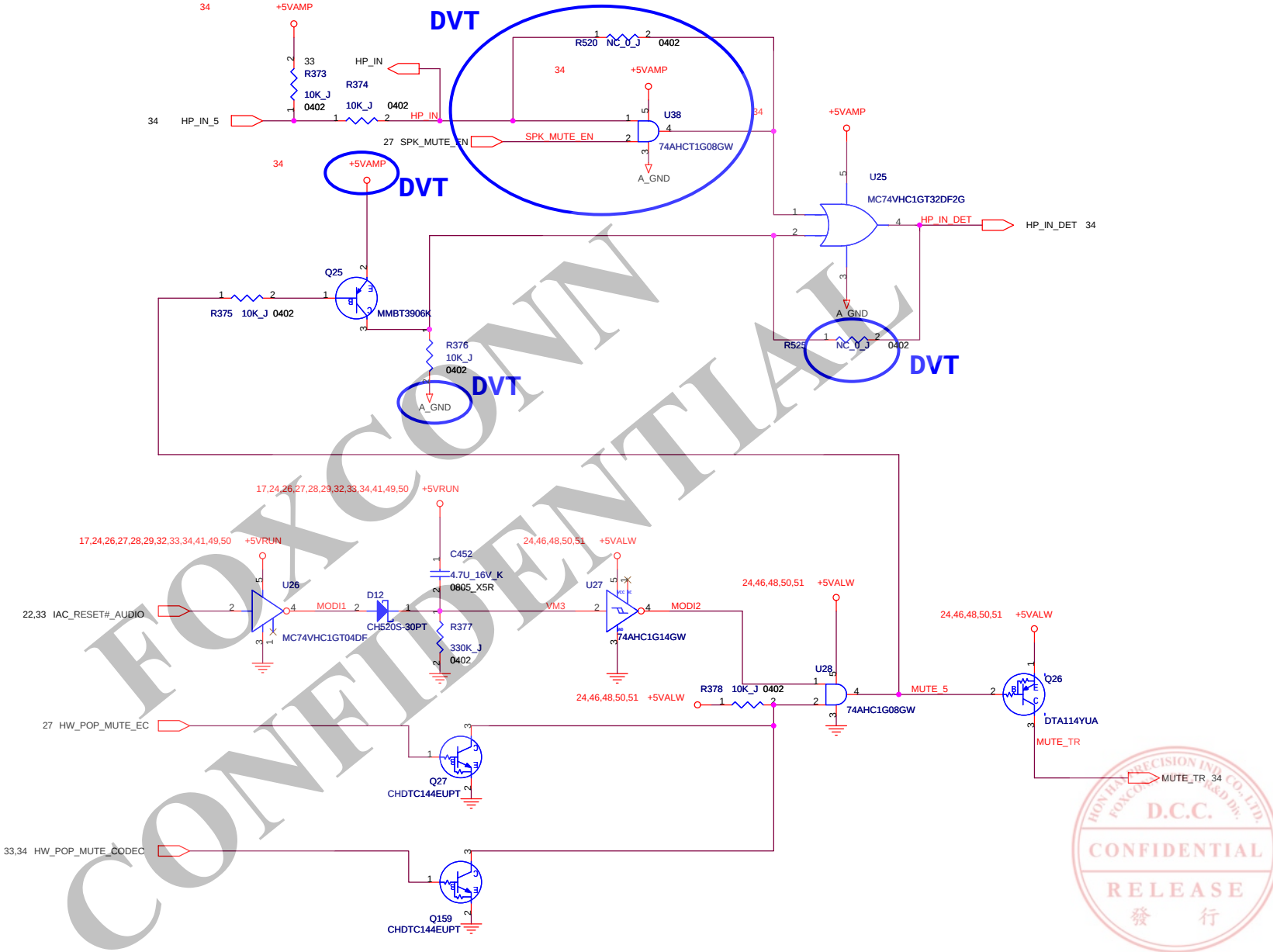
HON HAI PRECISION IND. CO., LTD.
FOXCONN CPBG - R&D Div.
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title AUDIO(AMP & HP & SPK)
Size A3
Document Number MS70-1-01
Rev 2.0
Date: Tuesday, August 22, 2006
Sheet 34 of 55



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	AUDIO(EXT MIC) 3/4	
Size A3	Document Number MS70-1-01	Rev 2.0
Date: Tuesday, August 22, 2006	Sheet 35 of 55	



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	AUDIO (MUTE) 4/4	
Size A3	Document Number MS70-1-01	Rev 2.0
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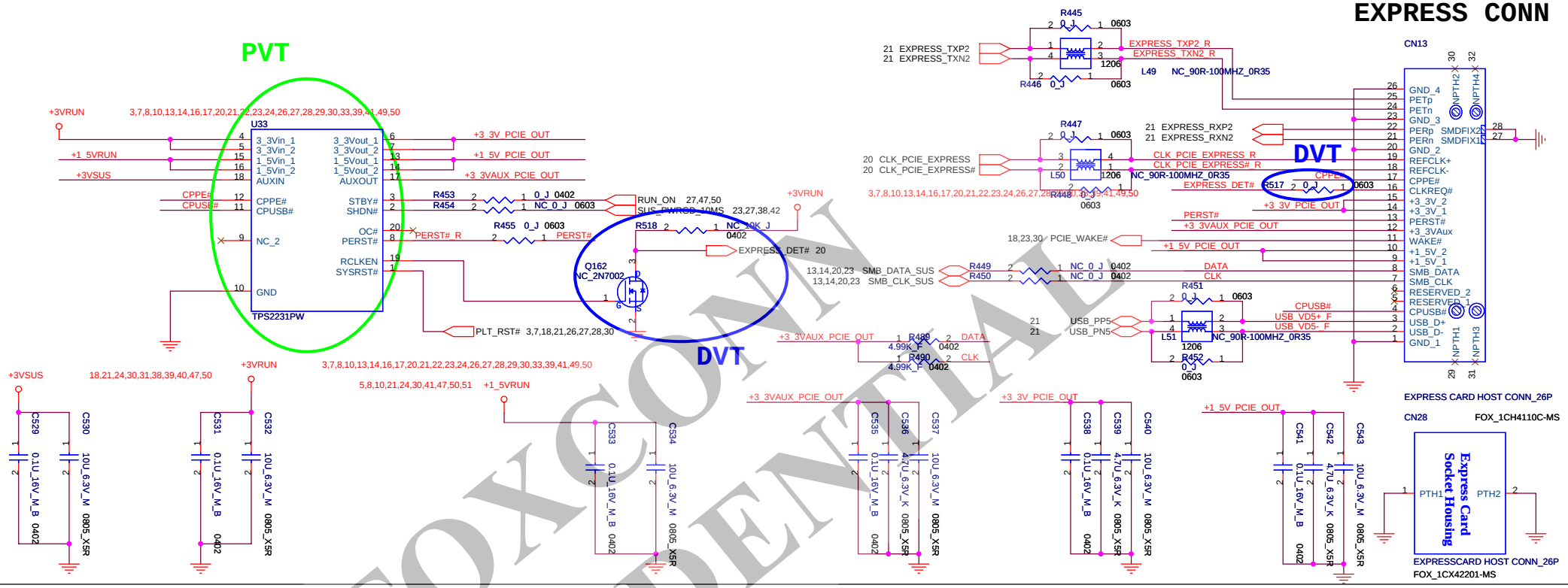
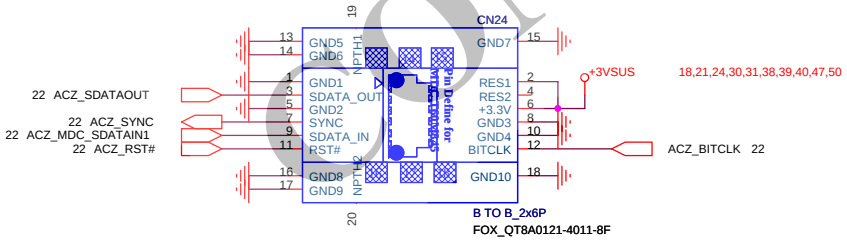
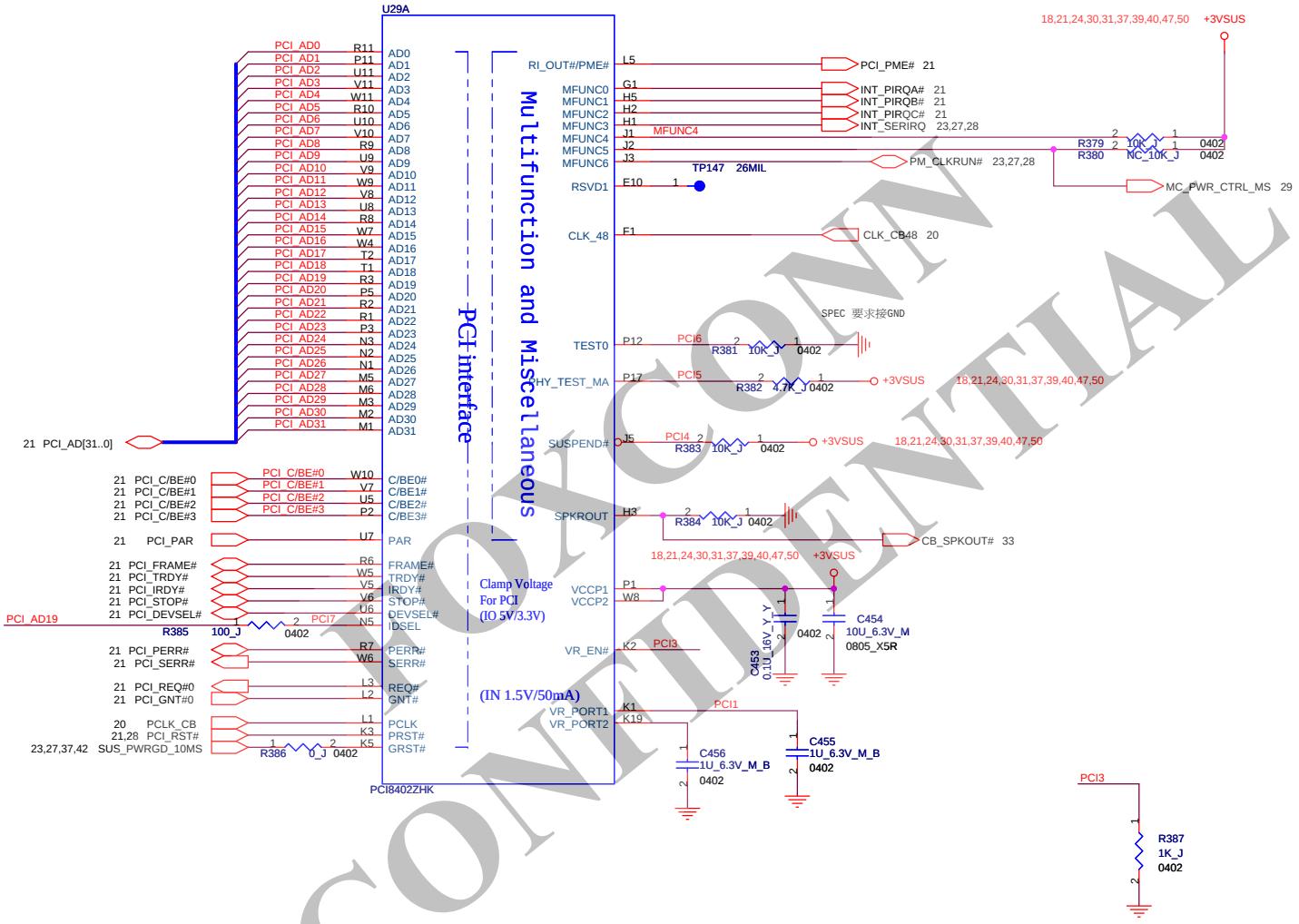
EXPRESS CONN



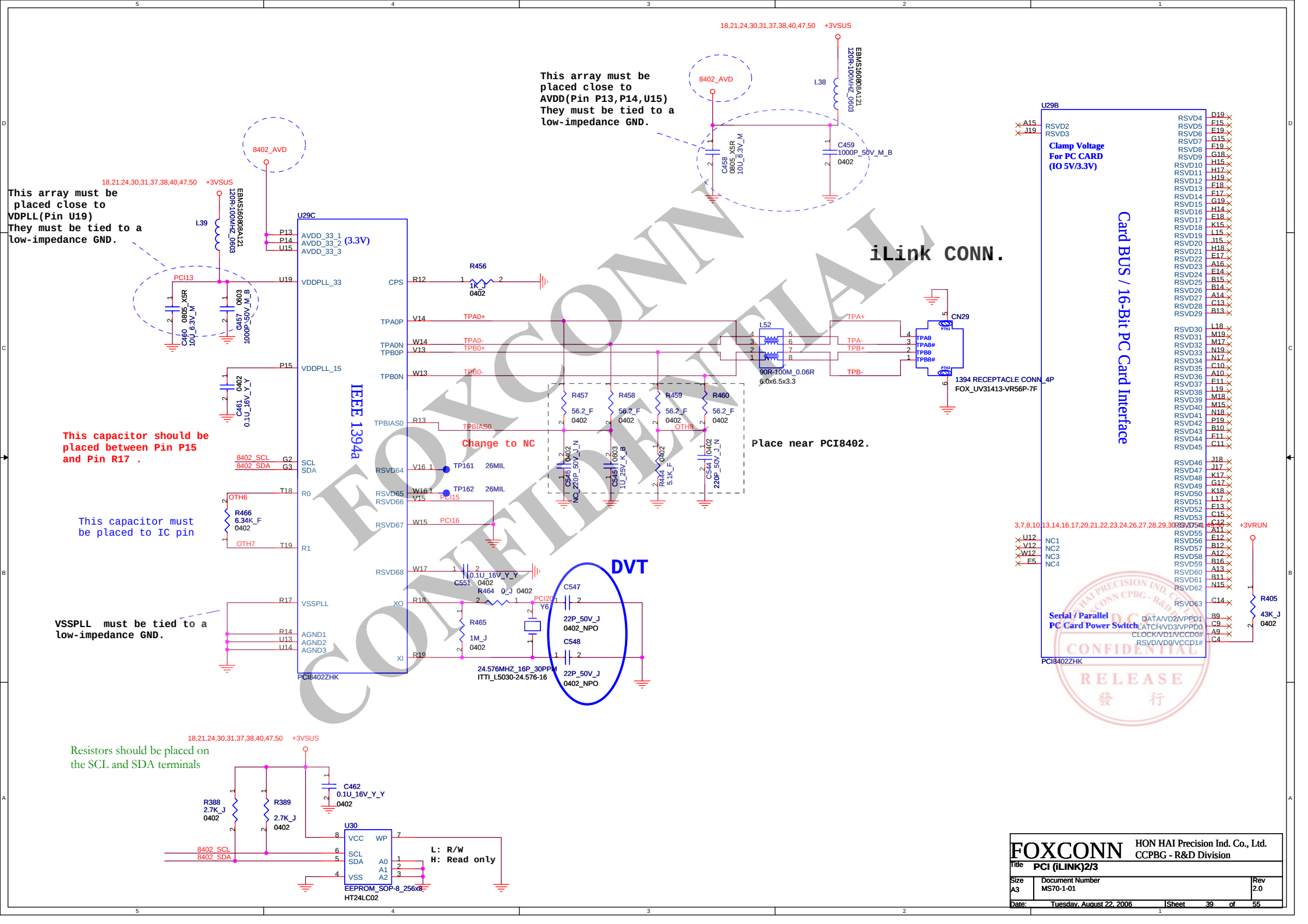
MDC CONN.



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	EXPRESS CARD	
Size A3	Document Number MS70-1-01	Rev 2.0
Date: Tuesday, August 22, 2006	Sheet 37 of 55	



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	PCI (PCI BUS) 1/3	
Size A3	Document Number MS70-1-01	Rev 2.0
Date: Tuesday, August 22, 2006	Sheet 38 of 55	


This array must be placed close to AVDD(Pin P13,P14,U15) They must be tied to a low-impedance GND.
This array must be placed close to VDPLL(Pin U19) They must be tied to a low-impedance GND.
iLink CONN.
Card BUS / 16-Bit PC Card Interface
IEEE 1394a
Change to NC
Place near PCI8402.
This capacitor should be placed between Pin P15 and Pin R17 .
This capacitor must be placed to IC pin
VSSPLL must be tied to a low-impedance GND.
DVT
Clamp Voltage For PC CARD (IO 5V/3.3V)
Serial / Parallel PC Card Power Switch
1394 RECEPTACLE CONN_4P
FOX_UV31413-VR56P-7F
90R-100M_0.06R
6.0x6.5x3.3
PCI8402ZHK
Resistors should be placed on the SCL and SDA terminals
L: R/W
H: Read only
EEPROM_SOP-8_256x8
HT24LC02
24.576MHZ_16P_30PPM
ITTI_L5030-24.576-16
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
PCI (iLINK)2/3
Document Number MS70-1-01
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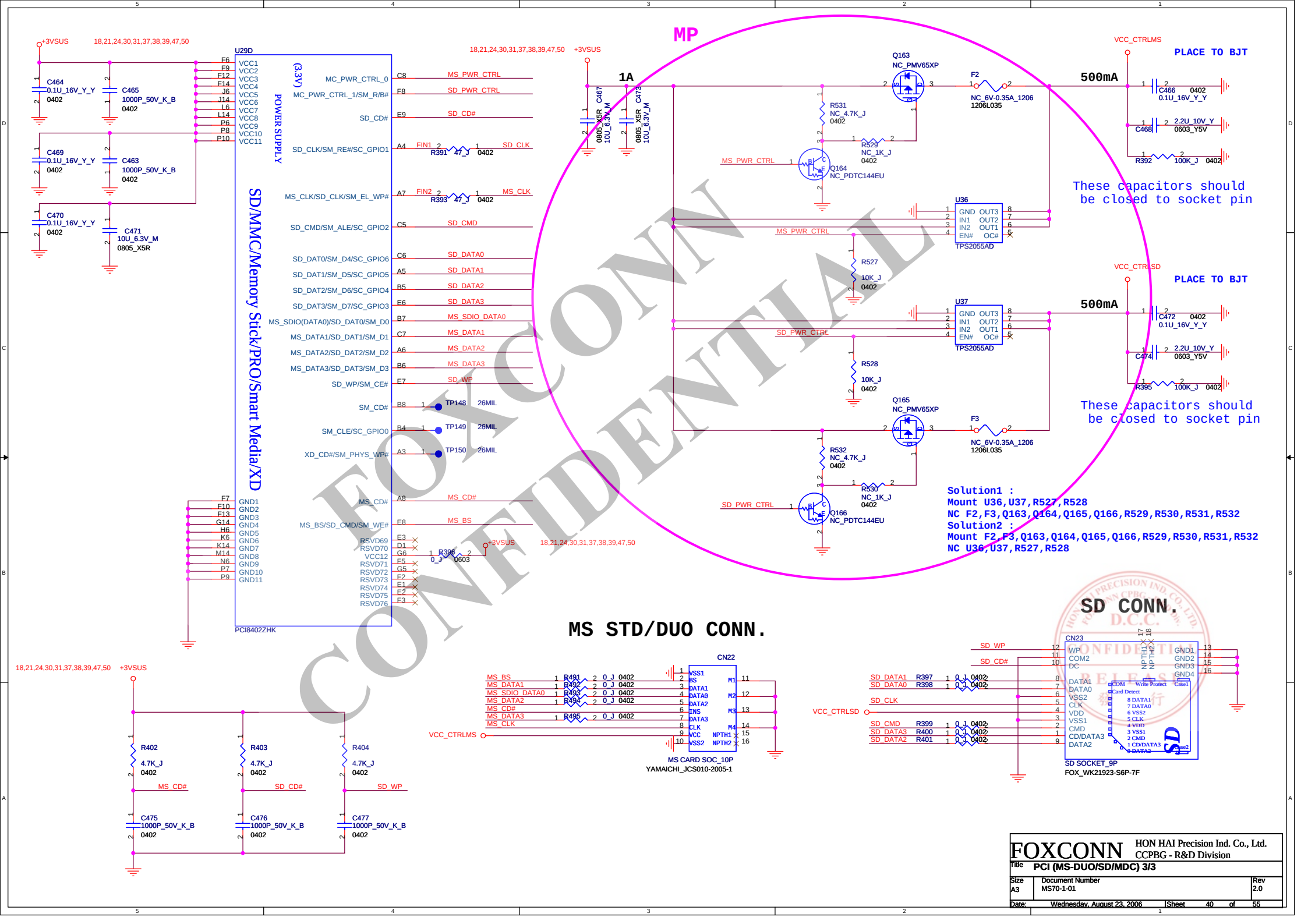

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	PCI (MS-DUO/SD/MDC) 3/3	
Size A3	Document Number MS70-1-01	Rev 2.0
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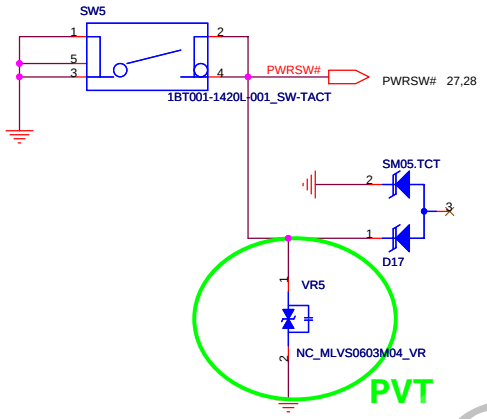
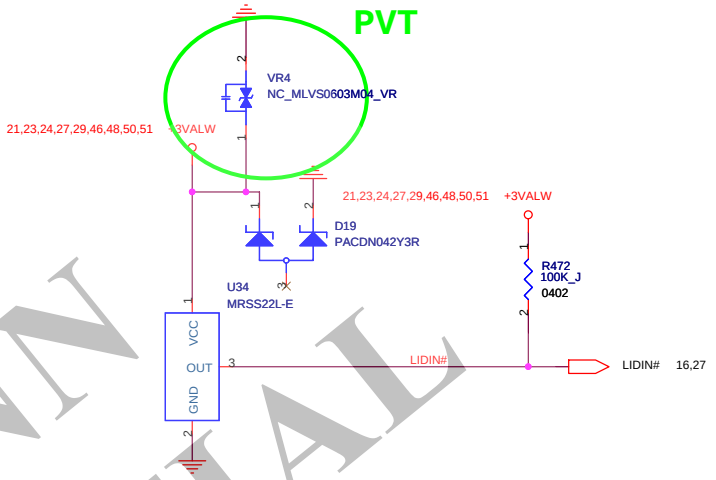
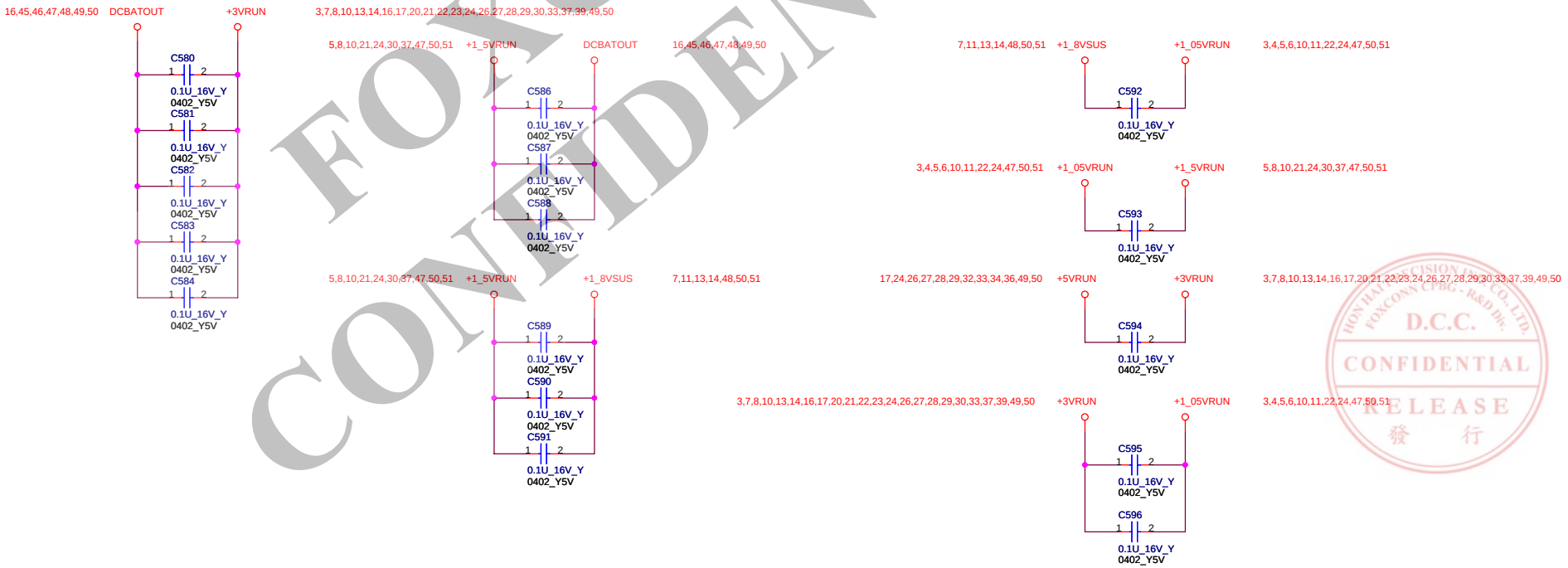
POWER BUTTON



LID Switch



EMI CAP



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	Button/LID Switch/EMI CAP	
Size A3	Document Number MS70-1-01	Rev 2.0
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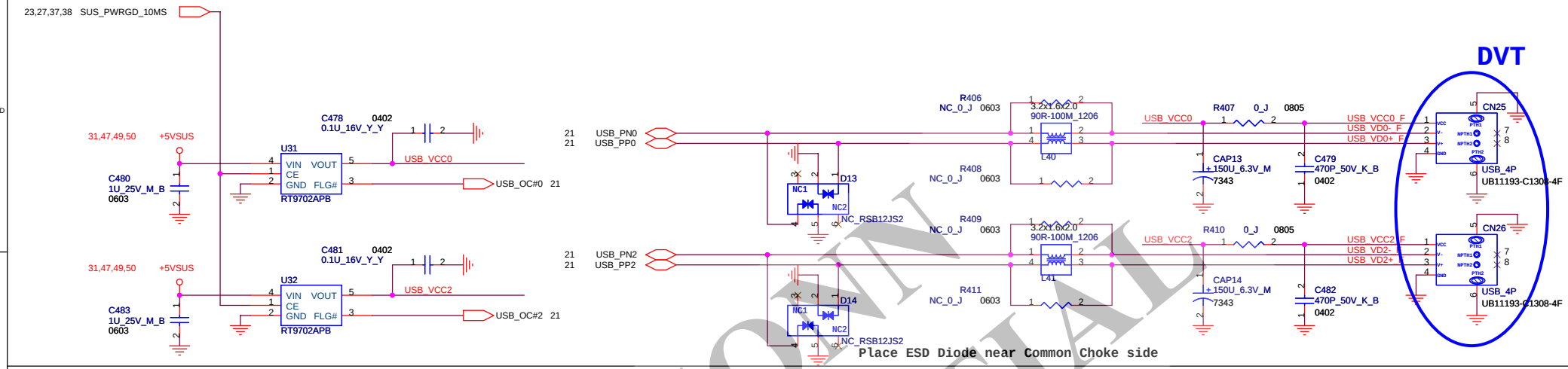
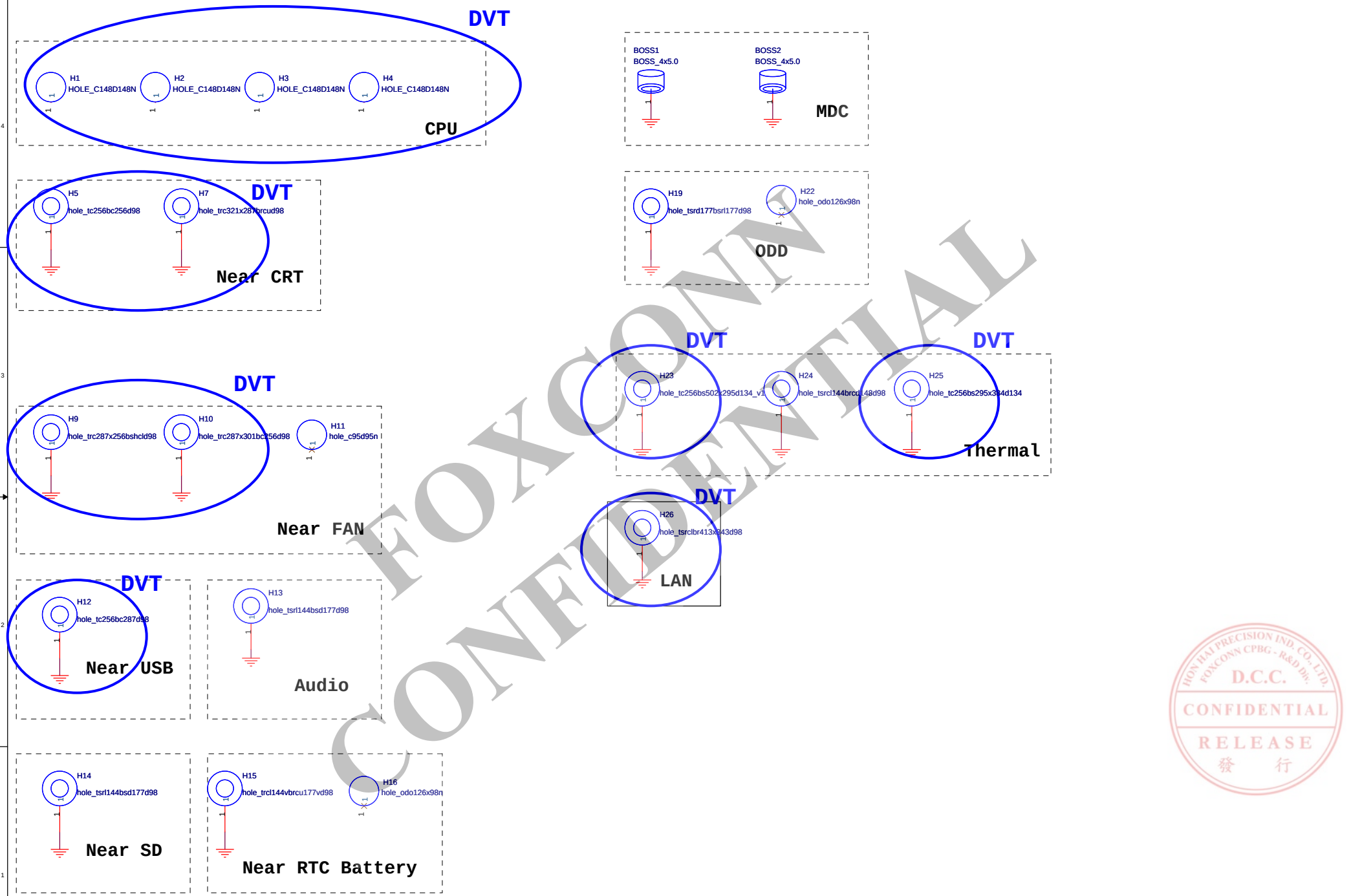
USB CONN X 2



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: USB2.0		
Size: A3	Document Number: MS70-1-01	Rev: 2.0
Date: Tuesday, August 22, 2006	Sheet 42 of 55	



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	HOLE	
Size A3	Document Number MS70-1-01	Rev 2.0
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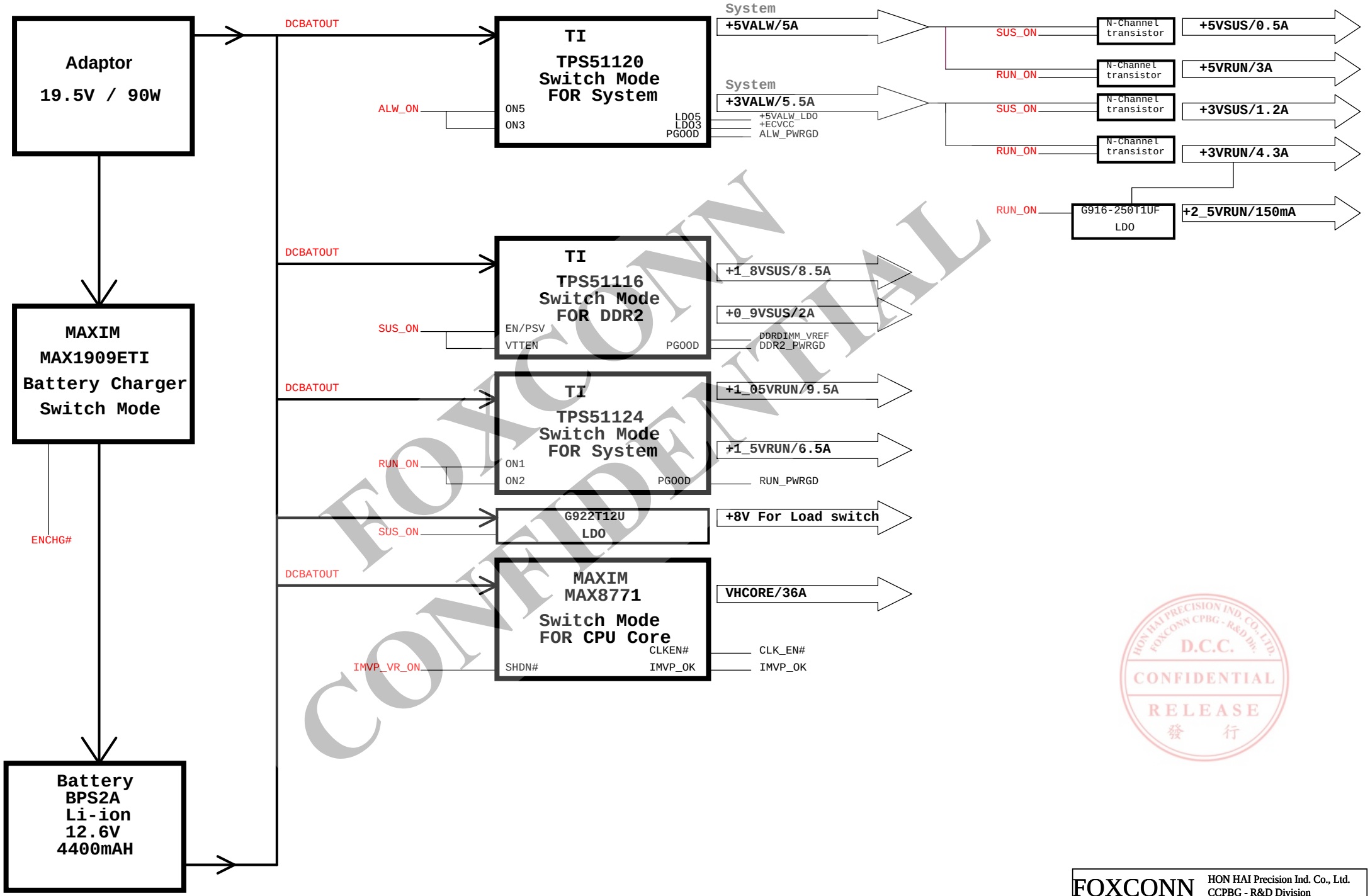
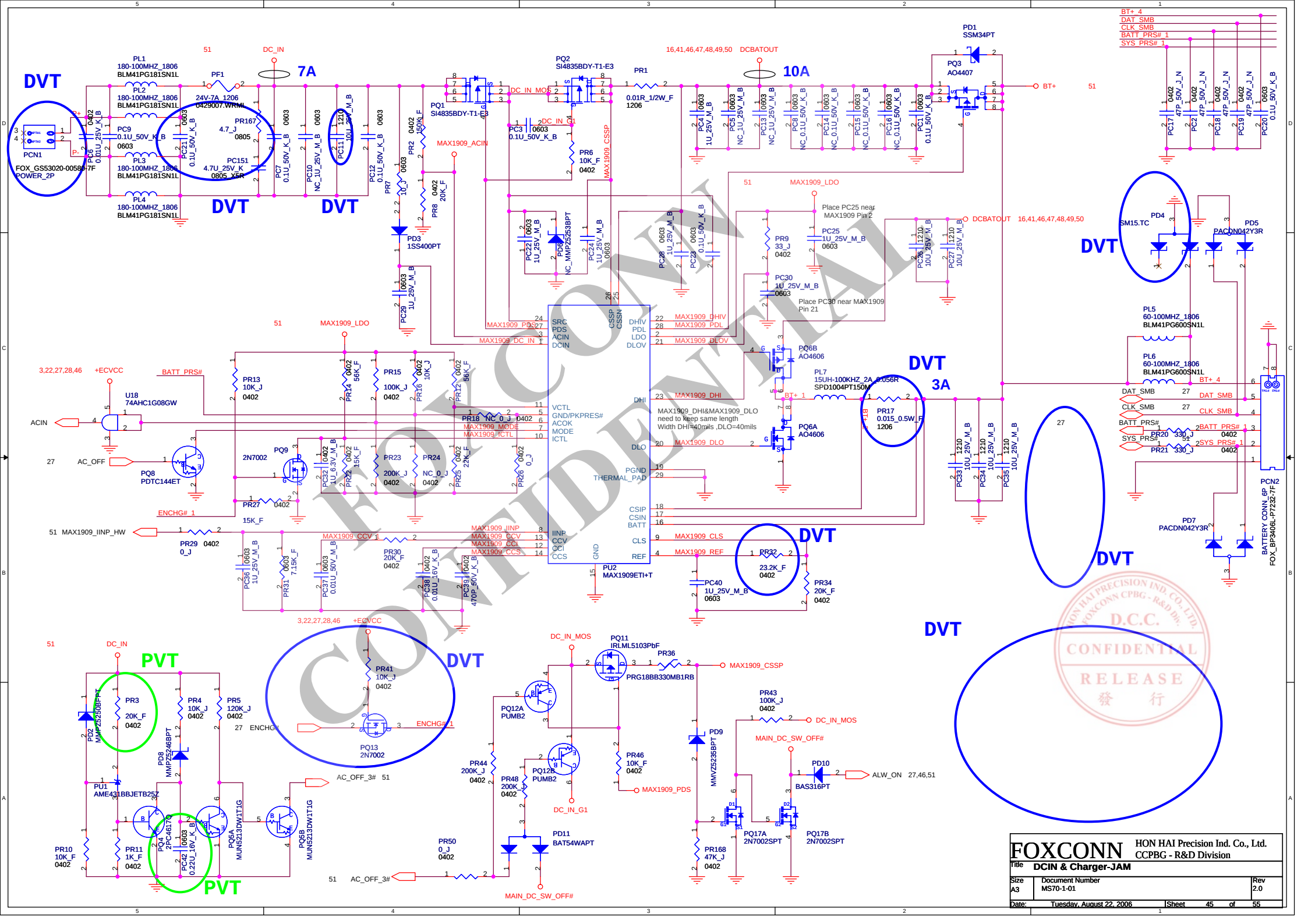


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	Power Design Diagram-ZG	
Size A3	Document Number MS70-1-01	Rev 2.0
Date: Tuesday, August 22, 2006	Sheet 44 of 55	


DVT
PVT
7A
10A
3A
PCN1
FOX_GS53020-0058-7F
POWER_2P
PL1
180-100MHZ_1806
BLM41PG181SN1L
PL2
PL3
PL4
PF1
24V-7A_1206
0429007.WRML
DC_IN
PQ1
SI4835BDY-T1-E3
PQ2
PR1
0.01R_1/2W_F
1206
PD1
SSM34PT
PQ3
AO4407
BT+
DCBATOUT
16,41,46,47,48,49,50
MAX1909_ACIN
MAX1909_CSSP
DC_IN_MOS
PD3
1SS400PT
PD6
NC_MMPZ5253BPT
MAX1909_LDO
Place PC25 near MAX1909 Pin 2
Place PC30 near MAX1909 Pin 21
PD4
SM15.TC
PD5
PACDN042Y3R
PL5
60-100MHZ_1806
BLM41PG600SN1L
PL6
PL7
15UH-100KHZ_2A_0.056R
SPD1004PT150M
PQ6B
AO4606
PQ6A
PR17
0.015_0.5W_F
PCN2
BATTERY CONN_6P
FOX_BP3406L-P7232-7F
U18
74AHC1G08GW
BATT_PRS#
ACIN
AC_OFF
PQ8
PDTC144ET
PQ9
2N7002
ENCHG# 1
MAX1909_IINP_HW
MAX1909_CCV 1
PU2
MAX1909ETI+T
SRC
PDS
ACIN
DCIN
GSSP
GSSN
DHIV
PDL
LDO
DLOV
VCTL
GND/PKPRES#
ACOK
MODE
ICTL
DHI
DLO
PGND
THERMAL_PAD
CSIP
CSIN
BATT
CLS
REF
IINP
CCV
CCI
CCS
GND
MAX1909_DHI&MAX1909_DLO need to keep same length
Width DHI=40mils ,DLO=40mils
PR32
23.2K_F
0402
PC40
1U_25V_M_B
0603
PR34
20K_F
0402
PR41
10K_J
0402
PQ13
2N7002
PQ11
IRLML5103PbF
PRG18BB330MB1RB
PR36
PQ12A
PUMB2
PQ12B
PUMB2
PR43
100K_J
0402
PD9
MMVZ5235BPT
PD10
BAS316PT
ALW_ON
27,46,51
MAIN_DC_SW_OFF#
PQ17A
2N7002SPT
PQ17B
2N7002SPT
PR168
47K_J
0402
PD11
BAT54WAPT
PR50
0_J
0402
AC_OFF_3#
DC_IN_G1
PD2
MMPZ5250BPT
PD8
MMPZ5246BPT
PU1
AME431BBJETB25Z
PQ4
2PC4617Q
PQ5A
MUN5213DW1T1G
PQ5B
MUN5213DW1T1G
PR3
20K_F
0402
PR4
10K_J
0402
PR5
120K_J
0402
PR10
10K_F
0402
PR11
1K_F
0402
PC42
0.22U_16V_K_B
0603
PR167
4.7_J
0805
PC151
4.7U_25V_K
0805_X5R
PR2
150K_F
0402
PR7
10_J
0603
PR8
20K_F
0402
PC3
0.1U_50V_K_B
0603
PR6
10K_F
0402
PR9
33_J
0402
PC30
1U_25V_M_B
0603
PR13
10K_J
0402
PR14
56K_F
0402
PR15
100K_J
0402
PR16
10K_J
0402
PR12
56K_F
0402
PR18
NC_0_J
0402
PR23
200K_J
0402
PR24
NC_0_J
0402
PR25
22K_F
0402
PR26
0_J
0402
PR27
15K_F
0402
PR29
0_J
0402
PR30
20K_F
0402
PR31
7.15K_F
0603
PR20
330_J
0402
PR21
330_J
0402
PC1
PC2
PC4
PC5
PC6
PC7
PC8
PC9
PC10
PC11
PC12
PC13
PC14
PC15
PC16
PC17
PC18
PC19
PC20
PC21
PC22
PC23
PC24
PC25
PC26
PC27
PC28
PC29
PC32
PC33
PC34
PC35
PC36
PC37
PC38
PC39
PC41
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Title
DCIN & Charger-JAM
Size
A3
Document Number
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2.0
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Tuesday, August 22, 2006
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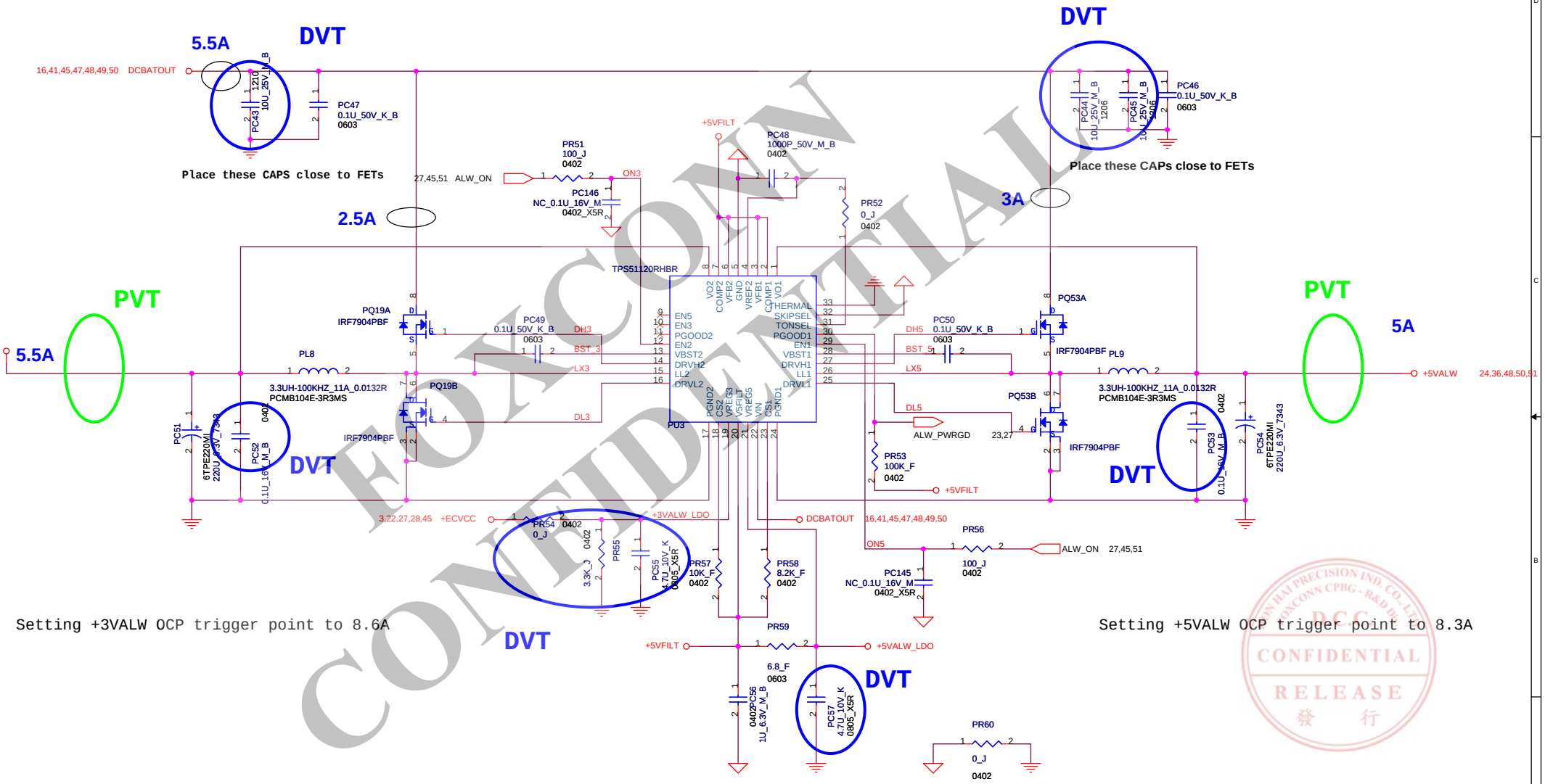

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	D/D Power-JAM	
Size A3	Document Number MS70-1-01	Rev 2.0
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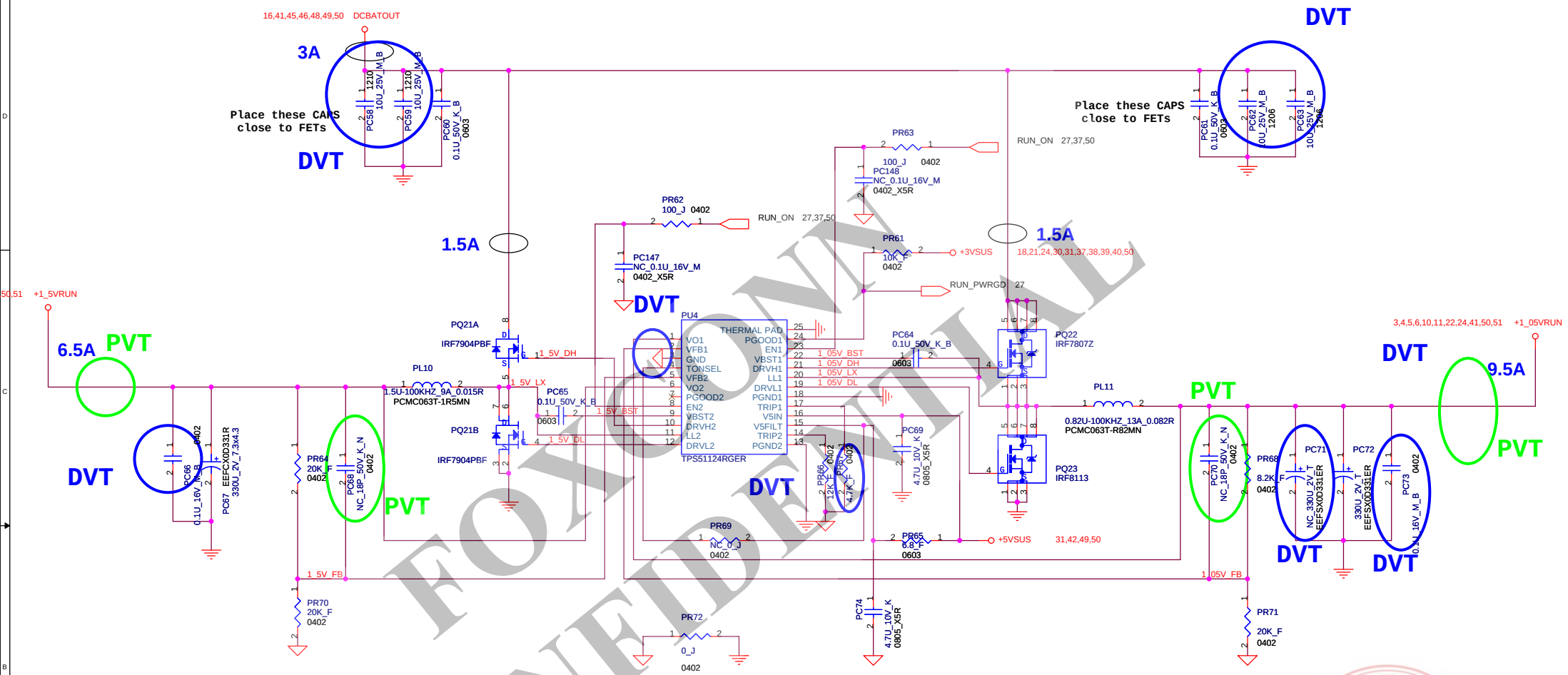
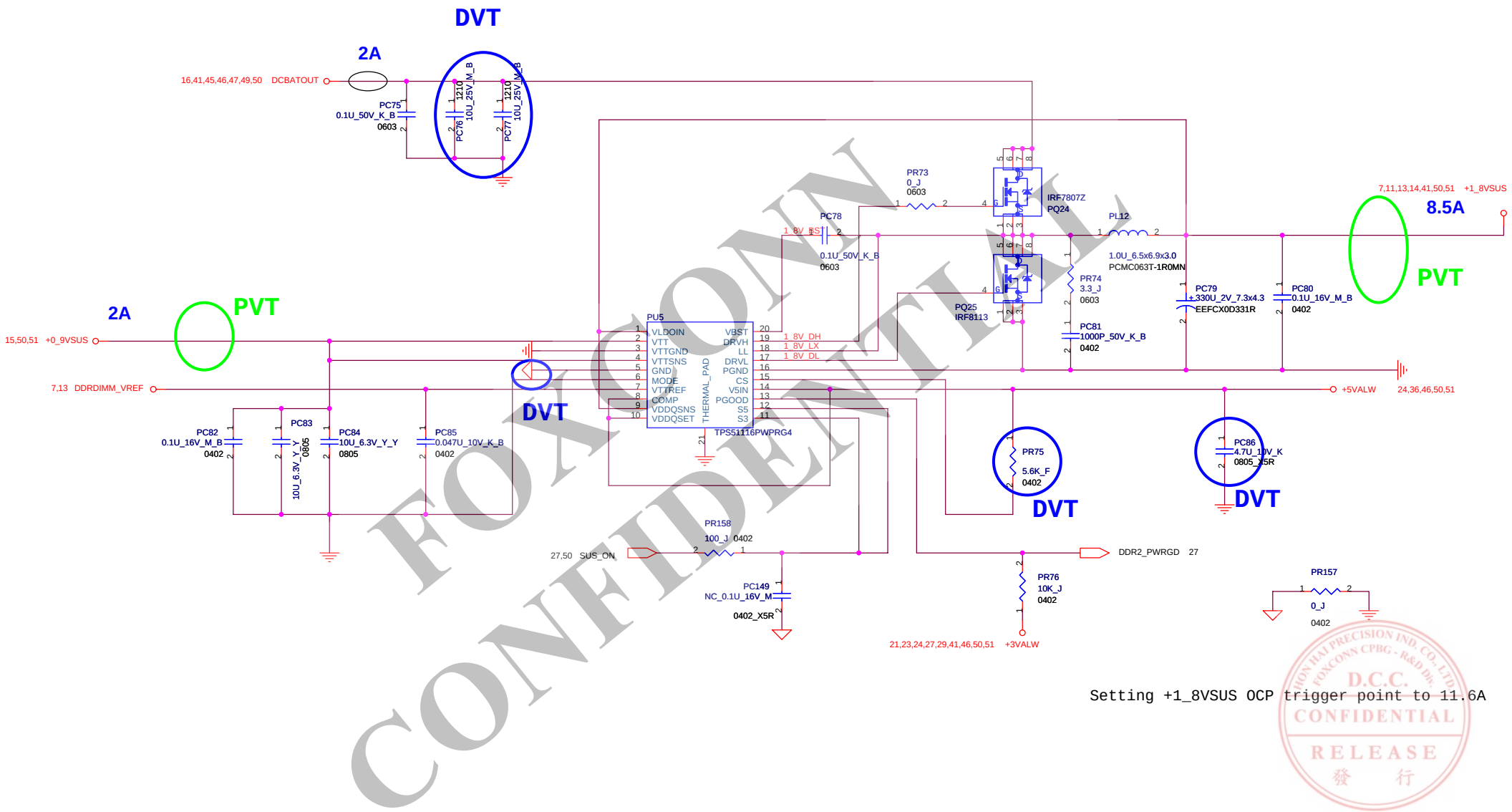


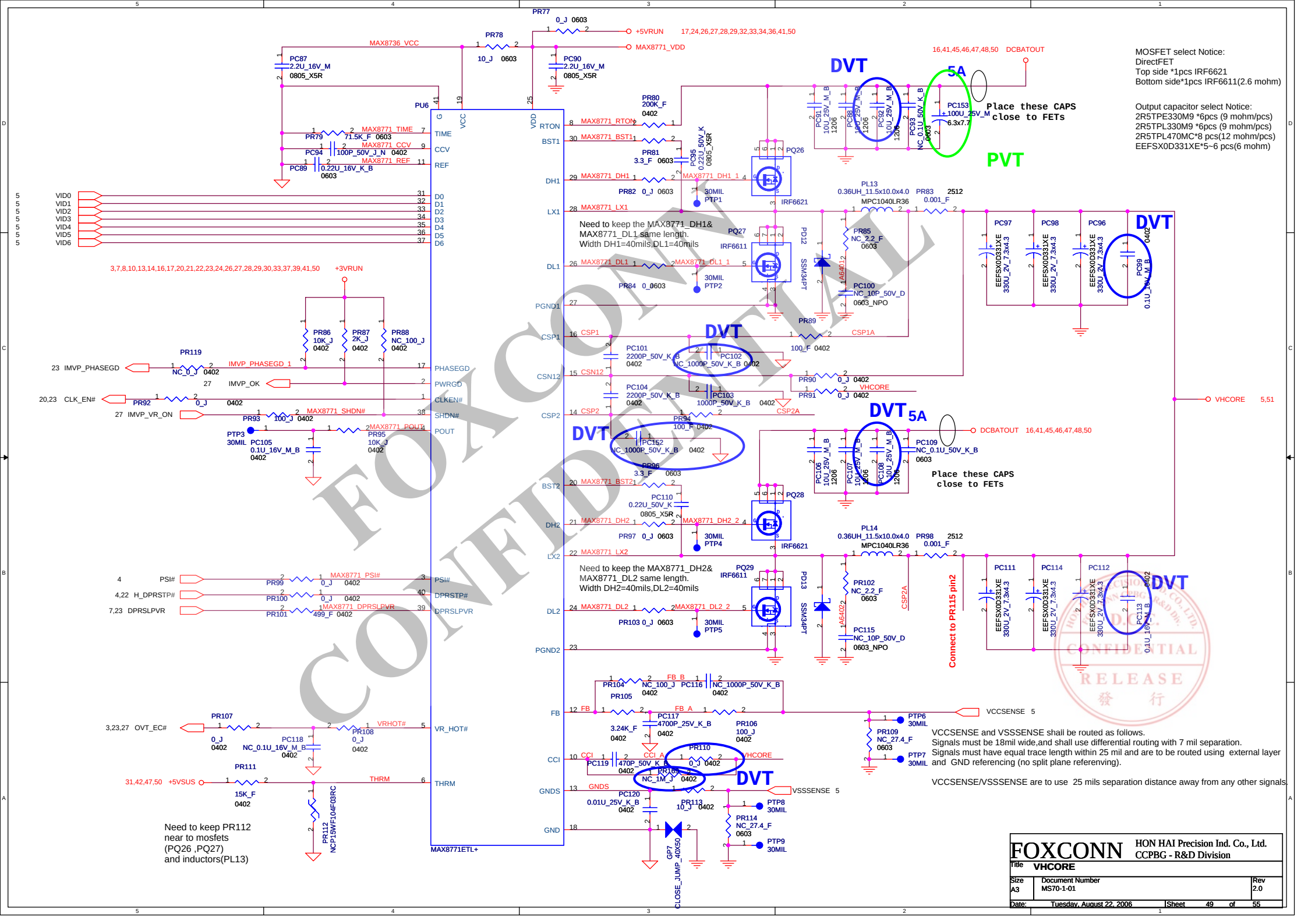
Setting +1_5VRUN OCP trigger point to 10.5A

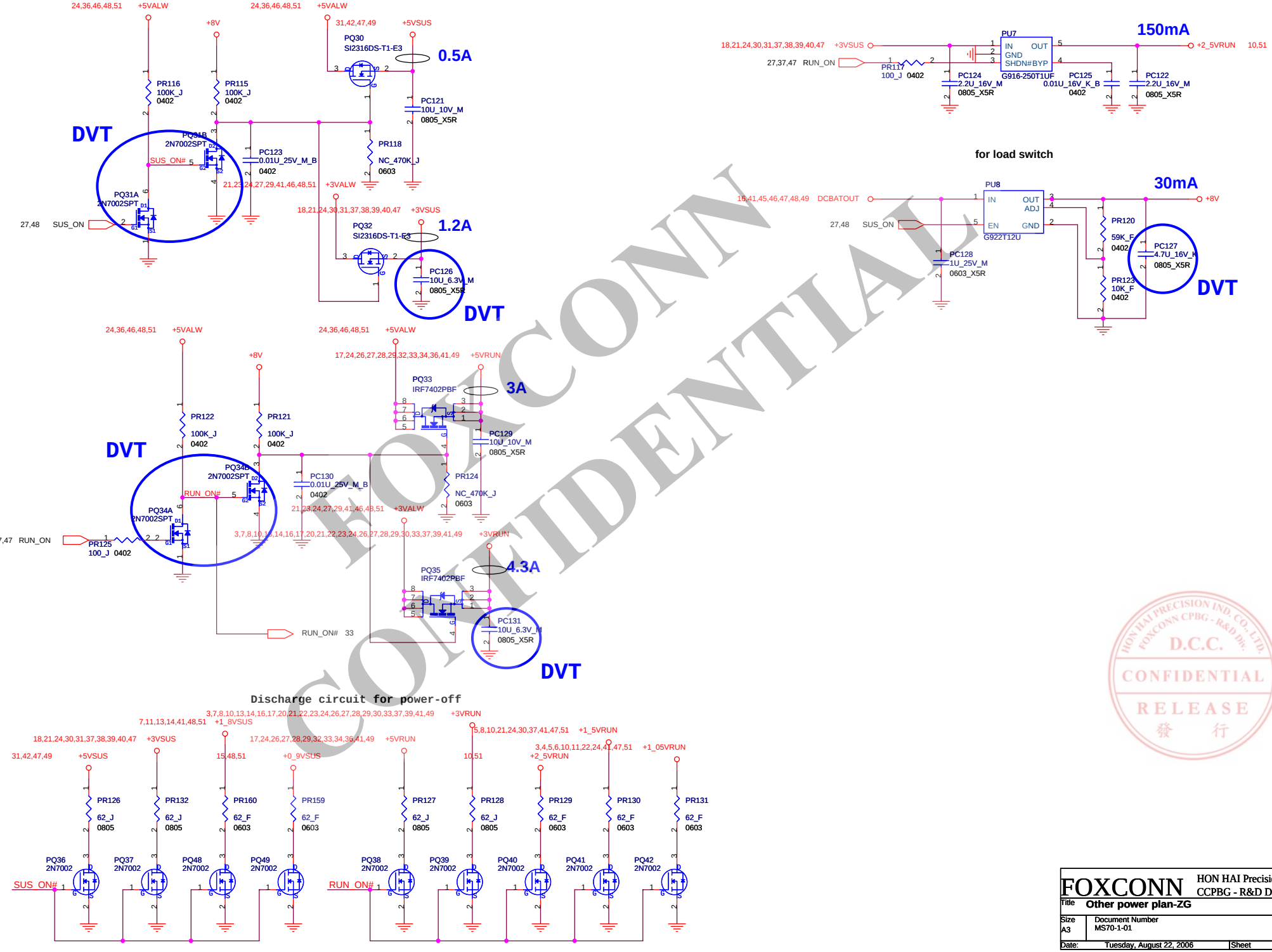
Setting +1_05VRUN OCP trigger point to 12.8A

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	1.5V/1.05V-JAM	
Size A3	Document Number MS70-1-01	Rev 2.0
Date: Tuesday, August 22, 2006	Sheet 47 of 55	

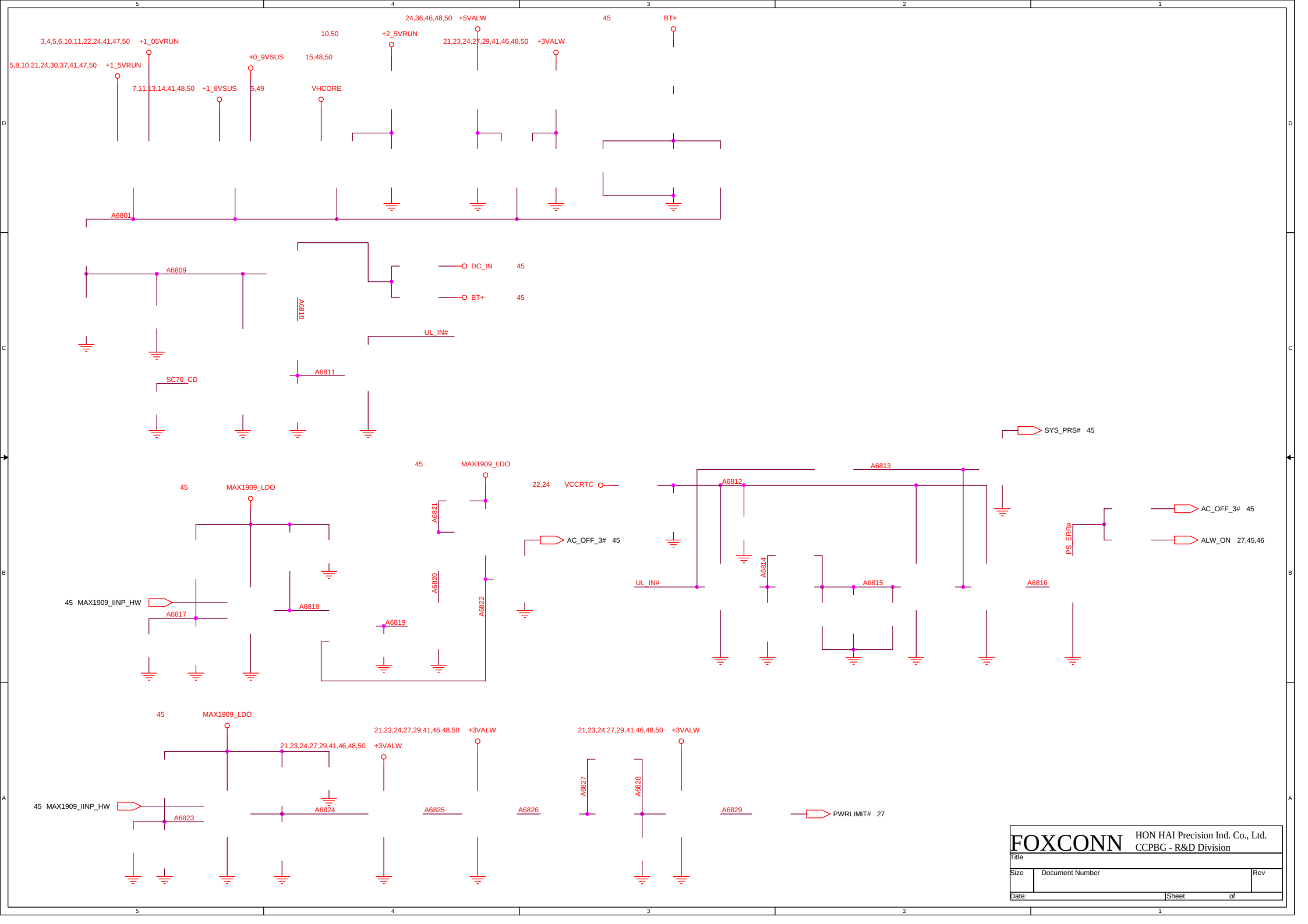


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	1.8V/0.9V-CWK	
Size A3	Document Number MS70-1-01	Rev 2.0
Date: Tuesday, August 22, 2006	Sheet 48 of 55	





FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division		
Title	Other power plan-ZG		
Size A3	Document Number MS70-1-01		Rev 2.0
Date: Tuesday, August 22, 2006	Sheet 50 of 55		


3,4,5,6,10,11,22,24,41,47,50
+1_05VRUN
5,8,10,21,24,30,37,41,47,50
+1_5VRUN
7,11,13,14,41,48,50
+1_8VSUS
+0_9VSUS
5,49
15,48,50
VHCORE
10,50
+2_5VRUN
24,36,46,48,50
+5VALW
21,23,24,27,29,41,46,48,50
+3VALW
45
BT+
A6801
A6809
A6810
DC_IN
45
BT+
45
UL_IN#
A6811
SC70_CD
SYS_PRS# 45
45
MAX1909_LDO
A6821
22,24
VCCRTC
AC_OFF_3# 45
A6812
A6813
A6814
A6815
A6816
PS_ERR#
AC_OFF_3# 45
ALW_ON 27,45,46
45 MAX1909_IINP_HW
A6817
A6818
A6819
A6820
A6822
UL_IN#
45
MAX1909_LDO
21,23,24,27,29,41,46,48,50
+3VALW
45 MAX1909_IINP_HW
A6823
A6824
A6825
A6826
A6827
A6828
A6829
PWRLIMIT# 27
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HON HAI Precision Ind. Co., Ltd.
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Rev
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HISTORY (1)

(2006/04/25)

P.16 CN3 pin5 Add R515 0ohm for QDI LCD Panel doesn't support gamma correction issue.
P.17 Add VGA_CRT_DET# connect to U15 pin29 for Semi-PnP function fail issue.
P.20 U11 pin57 add R516 10Kohm pull down for LAN can't be recognized issue.
P.27 U15 pin29 add R513 10Kohm pull up for Semi-PnP function fail issue.
P.27 U15 pin12 add R514 100Kohm pull down for EC hardware strap pin.
P.27 U15 pin171 add C597 1000pF to ground for FAN can't be controlled issue.
P.31 R304 change from 4.7k to 10k for FAN can't be controlled issue.

(2006/05/03)

P.49 Add netname(IMVP_PHASEGD_1) on the right side of PR119 for application modification.
P.45 PC11, PC21, PC151, PR167 change from DNI to mount for DC_IN spike issue
P.45 PD4 pin1 and pin3 exchange for application modification
P.46 PR54 change from 100 ohm to 0 ohm for PU3 output abnormal issue
P.46 PR55 change from DNI to mount for can't boot up issue
P.47 PU4 pin3 change from GND to GND_SIGNAL_1D5V for application modification
P.48 PU5 pin5 change from GND to GND_SIGNAL_1D8V for application modification
P.49 Add PR169 NC_1M ohm for MAX8771 CCI issue
P.49 PC96, PC97, PC98, PC111, PC112, PC114 chenge from SANYO 2R5TPL330M9 to Panasonic EEFSX0D331XE for purchase difficult

(2006/05/04)

P.37 Add Q162(NC), R517, R518(NC) for Express card power sequence issue

(2006/05/15)

P.45 PR32 change from 22K_F to 23.2K_F for ACIN Vcls function trigger point correct to 3.4A
P.47 PR67 change from 8.2K_F to 4.7K_F for +1_05VRUN OCP trigger point correct to 12.8A
P.48 PR75 change from 6.8K_F to 5.6K_F for +1_8VSUS OCP trigger point correct to 11.6A
P.51 PR146 change from 51K_F to 46.4K_F for DCBATOUT OCP trigger point correct to 4.2A
P.51 PR150 change from 62K_F to 56K for PWRLIMIT# function trigger point correct to 3.6A
P.46 Delete PJ1, PJ2
P.47 Delete PJ3, PJ4, PJ5, PJ6
P.48 Delete PJ7, PJ8, PJ9

(2006/05/17)

P.45 Add PR41 10K_J_0402 and PQ13 2N7002 for preventing leakage current
P.45 PR17 change from 0.015_J 0805 to 0.015_F 1206 for application modification
P.46 PR55 change from 1K_J to 3.3K_J and PC55, PC57 change from 10u_25V X5R 1206 to 4.7u_10V X5R 0805 for reducing +ECVCC static current
P.47 PC71 change from mount to DNI for application modification
P.49 PR110 change from 20K_J to 0_J and PC102 change from DNI to mount for MAX8771 CCI issue
P.45 Delete PR19, PR28, PR33, PR35, PR37, PR38, PR39, PR40, PC31, PQ7, PQ10, PQ14, PQ16 For +ECVCC needed to work in battery only mode
P.51 Delete PD36, PD37 for +ECVCC needed to work in battery only mode
P.51 The net of VSOURCE (PQ43 pin3) change to DCBATOUT for +ECVCC needed to work in battery only mode
P.51 The net of BATT_EN (PD38 pin2) change to ALW_ON for +ECVCC needed to work in battery only mode

(2006/05/19)

P.13 C155 change from 2.2U_10V_Y_Y to 1000P_16V_K ; C159 change from 0.1U_16V_Y_Y to 1000P_50V_K for EMC DDR2 solution
P.14 C168 change from 2.2U_10V_Y_Y to 1000P_16V_K ; C172 change from 0.1U_16V_Y_Y to 1000P_50V_K for EMC DDR2 solution
P.15 C177,C179,C181,C191,C192,C196 change from 0.1U_16V_Y_Y to 1000P_50V_K for EMC DDR2 solution
P.39 C547,C548 change from 18P_50V_J_N to 22P_50V_J for PCI8402's Crystal issue
P.30 LED1 change from HT-110Y to HT-110UYG for LED color requirement
P.45 PCN1 change from MOLEX_53259-0229 to FOX_GS53020-00580-7F
P.45 PC11 change from 10U_25V_M_1206 to 10U_25V_M_B_1210 for purchase convenient
P.46 PC43,PC44,PC45 change from 10U_25V_M_B_1206 to 10U_25V_M_B_1210 for purchase convenient
P.47 PC58,PC59,PC62,PC63 change from 10U_25V_M_B_1206 to 10U_25V_M_B_1210 for purchase convenient
P.48 PC76,PC77 change from 10U_25V_M_B_1206 to 10U_25V_M_B_1210 for purchase convenient
P.48 PC86 change from 4.7U_10V_K_B_1206 to 4.7U_10V_K_0805 for purchase convenient
P.50 PC126,PC131 change from 10U_10V_M to 10U_6.3V_M for purchase convenient
P.50 PC127 change from 4.7U_25V_K_B_1206 to 4.7U_16V_K_0805 for purchase convenient

(2006/05/22)

P.32 CN21 change from FOXCONN_GB11060_0221_7F to FOXCONN_GB5RF060_1200_7F for ME's requirement
P.29 CN30,CN31 change from foxconn_gb11120_0221_7f to FOXCONN_GB5RF120_1200_7F for ME's requirement
P.29 CN31 change from mount to DNI for ME's requirement
P.50 PQ31,PQ34 change from DIODES,2N7002DW-7-F to CHENMKO,2N7002SPT for purchase convenient
P.51 PQ45 change from DIODES,2N7002DW-7-F to CHENMKO,2N7002SPT for purchase convenient
P.27 Q149 change from DIODES,2N7002DW-7-F to CHENMKO,2N7002SPT for purchase convenient

(2006/05/23)

P.47 PC62,PC63 change from 10U_25V_M_B_1210 to 10U_25V_M_B_1206 for ME limit of height
P.46 PC44,PC45 change from 10U_25V_M_B_1210 to 10U_25V_M_B_1206 for ME limit of height
P.46 Add PJ1,PJ2 for test request
P.47 Add PJ3,PJ4 for test request
P.48 Add PJ7,PJ9 for test request

(2006/05/24)

P.42 CN25,CN26(USB CONN) change from FOX_UB11193_C1301_4F to UB11193-C1308-4F for ME's requirement
P.17 CN5(VGA CONN) change from FOX_DZ11A91_MB221_4F to DZ11A91-MW223-4F for ME's requirement

(2006/05/25)

P.47 Add PJ6 for test request
P.26 CN8 footprint change from FOXCONN_LD2722H_S469 to FOXCONN_LD2722H_S469_MS70 for ME PAD request
P.32 C389 change from 22U_10V_Y_Y_1206 to 10U_10V_M_0805 and add C598 10U_10V_M_0805 for limit of ME
P.43 H1,H2,H3,H4 change from hole_c158d158n to HOLE_C148D148N for ME request
P.43 H7 change from hole_tsru144bsru177d98 to hole_trc321x287brcud98 for ME request
P.43 H26 change from hole_c120d100 to hole_tsrclbr413x343d98 for ME request
P.43 H23 change from hole_tc256brcld295d98_v1 to hole_tc256bs502x295d134_v1 for ME request
P.43 H25 change from hole_tc256brcu148d98 to hole_tc256bs295x384d134 for ME request
P.43 H5 change from hole_tc256bc315d98 to hole_tc256bc256d98 for ME request
P.43 H10 change from hole_tshrd144bc315d98 to hole_trc287x301bc256d98 for ME request
P.43 H9 change from hole_trcd144brcl177d98 to hole_trc287x321brcd98 for ME request
P.43 H12 change from hole_tc256bsrcu144d98 to hole_tc256bc287d98 for ME request

(2006/05/26)

P.42 CN25,CN26 change from FOXCONN_UB11193_C1308_4F to FOXCONN_UB11193_C1308_4F_HM for solder issue
P.43 H9 change from hole_trc287x321brcd98 to hole_trc287x256bshcld98 for ME request
P.17 D3 change from 16-CH500H4-0P00 to 16-SCS500V-4000 for purchase convenient
P.10 C119 change from 1C-2B30105-K000 to 1C-2B30475-K100 ;
C120 change from 1C-2B20103-K001(0402) to 1C-2B30475-K100(0603) for +1_5VRUN_HMPLL noise issue
P.48 Add PJ8 for test request

(2006/06/01)

P.16 Add R519(0ohm 0402) for desinger set "LCDID3" to "0" by mistake.
P.49 PC102 change from mount to NC for application modification
P.46 PC52,PC53 change from 0.1U_16V_Y_Y(Y5V) to 0.1U_16V_M_B(X5R) for application modification
P.47 PC66,PC73 change from 0.1U_16V_Y_Y(Y5V) to 0.1U_16V_M_B(X5R) for application modification
P.49 PC99,PC113 change from 0.1U_16V_Y_Y(Y5V) to 0.1U_16V_M_B(X5R) for application modification
P.36 Q25 pin2 netname change from +5VRUN to +5VAMP
P.36 R376 pin2 netname change from GND to A_GND
P.36 Add U38,R520(NC) for SPK_MUTE_EN for Vista requirement
P.36 Add NET "SPK_MUTE_EN" from U38 pin2 to U15 pin99 for Vista requirement
P.40 Change U36,U37 from RT9702 to RT9703, Add R521~R524.
P.27 Delete Q149.

(2006/06/02)

P.16 R515,R519 change from mount to NC
P.36 Add R525(NC) for Audio mute option
P.49 Add PC152 for application modification
P.26 R510 change from mount to NC for application modification
P.22 R188 change from mount to NC for application modification

(2006/06/05)

P.49 PC92,PC108 change from NC to mount for design rating
P.40 U36,U37 change from RT9703 to RT9702, Del R521~R524 for RT9703 phase out issue
P.49 Add PC153 for solving audible noise
P.19 Add R526 for LAN application modification

(2006/06/06)

P.13 Add C599,C600(1000P_50V_K) ; C155 change from 1000P_16V_K to 2.2U_10V_Y_Y ; C159 change from 1000P_50V_K to 0.1U_16V_Y_Y for EMC solution
P.14 Add C601,C602(1000P_50V_K) ; C168 change from 1000P_16V_K to 2.2U_10V_Y_Y ; C172 change from 1000P_50V_K to 0.1U_16V_Y_Y for EMC solution
P.15 Add C603,C604(1000P_50V_K) ; C177,C179,C181,C191,C192,C196 change from 1000P_50V_K to 0.1U_16V_Y_Y for EMC solution
P.51 Add PD36,PD37 for application modification
P.19 C253 change form 0.1U_16V_M_B to 5P_50V_C ; C254 change from 5P_50V_C to 0.1U_16V_M_B ; Add L58 ; Del R526 for LAN application modification

HISTORY (2)

(2006/06/07)
P.26 R245 change from NC to mount for application modification

(2006/06/13)
P.33 R325 change from mount to NC for acoustic noise.
P.36 U38 change from 74AHC1G08GW to 74AHCT1G08GW for Vih can't meet EC spec.

PVT

(2006/07/12)
P.47 Change PC68, PC70 from mount to NC for TPS51124 OVP issue.
P.27 Add R526 (1K ohm) series on ALW_ON net to prevent EC damage issue.
P.46 Delete PJ1, PJ2
P.47 Delete PJ3, PJ4, PJ6
P.48 Delete PJ7, PJ8, PJ9
P.32 F1,R320,R321,L32,C598,C389,C390,C391,CN21 change from mount to NC for cancel Oide function
P.37 U33 change from 15-TPS2231-0000(24pin) to 15-TPS2231-0002(20pin) for purchase convenient
P.40 U36,U37 change from 15-RT9702A-0000 to 15-TPS2055-0000 ;
Add R527,R528 for MS_PWR_CTRL and SD_PWR_CTRL are recognized to be high level by accident

(2006/07/20)
P.26 CN9 vendor part number change from QT8H0506-13T3R-7F to QT8H0506-13T3R-4F
for packing type change.
P.49 PC153 change from 1C-10X0107-M403 to 1C-1XX0107-M400 for purchase convenient.
P.29 Delete CN31 for touch pad application modification.
P.22 R195 change from 47ohm to 0ohm ; C293 change from NC to mount for EMI solution.
P.29 LED6 change from 16-HT210DY-G000 to 16-HT210UD-UY00 for ME brightness issue.
LED5,LED7 change from 16-HT110Y0-0000 to 16-HT110UY-0000 for ME brightness issue.

(2006/07/21)
P.26 Add D22(NC) for ESD solution
P.30 R301 change from 120ohm to 47ohm for ME brightness issue

(2006/07/25)
P.30 C365 change from NC to mount for WLAN power ripple noise issue
P.26 Add VR1 for ESD solution
P.29 Add VR2,VR3(NC) for ESD solution
P.41 Add VR4,VR5(NC) for ESD solution

(2006/07/28)
P.29 Q155 change from 17-CHDTC14-4E01 to 17-2N70020-0000 for ME brightness issue.

(2006/07/31)
P.30 R301 change from 47ohm to 120ohm (LED1 is 10mA) for ME brightness issue
P.29 R418 change from 47ohm to 62ohm (LED5 is 18.75mA) for ME brightness issue
P.29 R424 change from 47ohm to 62ohm (LED6 is 19.5mA)
R425 change from 47ohm to 120ohm (LED6 is 10mA)for ME brightness issue
P.29 R426 change from 47ohm to 62ohm (LED7 is 18.9mA)

(2006/08/01)
P.31 Q17 change from 17-ME2301T-1000 to 17-S12301B-DS00 for Fan rotational speed issue

PVT schematic released

(2006/08/07)
P.45 PC42 change from 1C-2B30104-K000(0.1u) to 1C-2B30224-K000(0.22u)
and mount PC42 for solving AC_OFF_3# abnormal issue
P.34 R350 change from 6.2kohm to 6.98kohm for adjust the gain of speaker amp
P.26 VR1 change from mount to NC ; D22 change from NC to mount for purchase convenient.
P.29 R418,R426 change from 62ohm to 120ohm for LED brightness issue

(2006/08/13)
P.45 PR3 change from 1kohm to 20kohm for power circuit design improvement plan
which is DC_IN OVP circuit.

PVT SMT

MP

(2006/08/16)
P.23 Add D23 from IMVP_PWRGD to ALW_PWRGD for RTC stop issue backup (D23 is NC)
Add D24 from PM_RSMRST#(A3602) to ALW_PWRGD for RTC stop issue backup (D24 is NC)

(2006/08/17)
P.40 Add Q163,Q164,R529,F2(MS_PWR) for purchase convenient
Add Q165,Q166,R530,F3(SD_PWR) for purchase convenient

(2006/08/18)
P.40 R392,R395 change from 1Mohm to 100Kohm
F2,F3 move to pin3 side of Q163,Q165
P.40 Q163,Q165 change from PMBT2907A(PNP) to SI2301BDS-T1-E3(P-MOS)
R529,R530 change from 1.5kohm to 1kohm
Add R531,R532 4.7kohm
P.23 R221 change from 100ohm to 1kohm
D23,D24 change from BAS316PT to SCS500V-40-LF
D23,D24 change from NC to mount for RTC stop issue

(2006/08/23)
P.40 Q163,Q165 change from VISHAY_SI2301BDS-T1-E3 to Philips_PMV65XP for purchase convenient.

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