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54			
55			
56			
57			
58			
59			
60			

P. Leader	Check by	Design by

Project Code & Schematics Subject: MS70 Main Board

PCB P/N:
(FUBAI) 1P-0067100-6010
(NAN YA) 1P-0067200-6010
(HANSTAR) 1P-0067500-6010

FOXCONN
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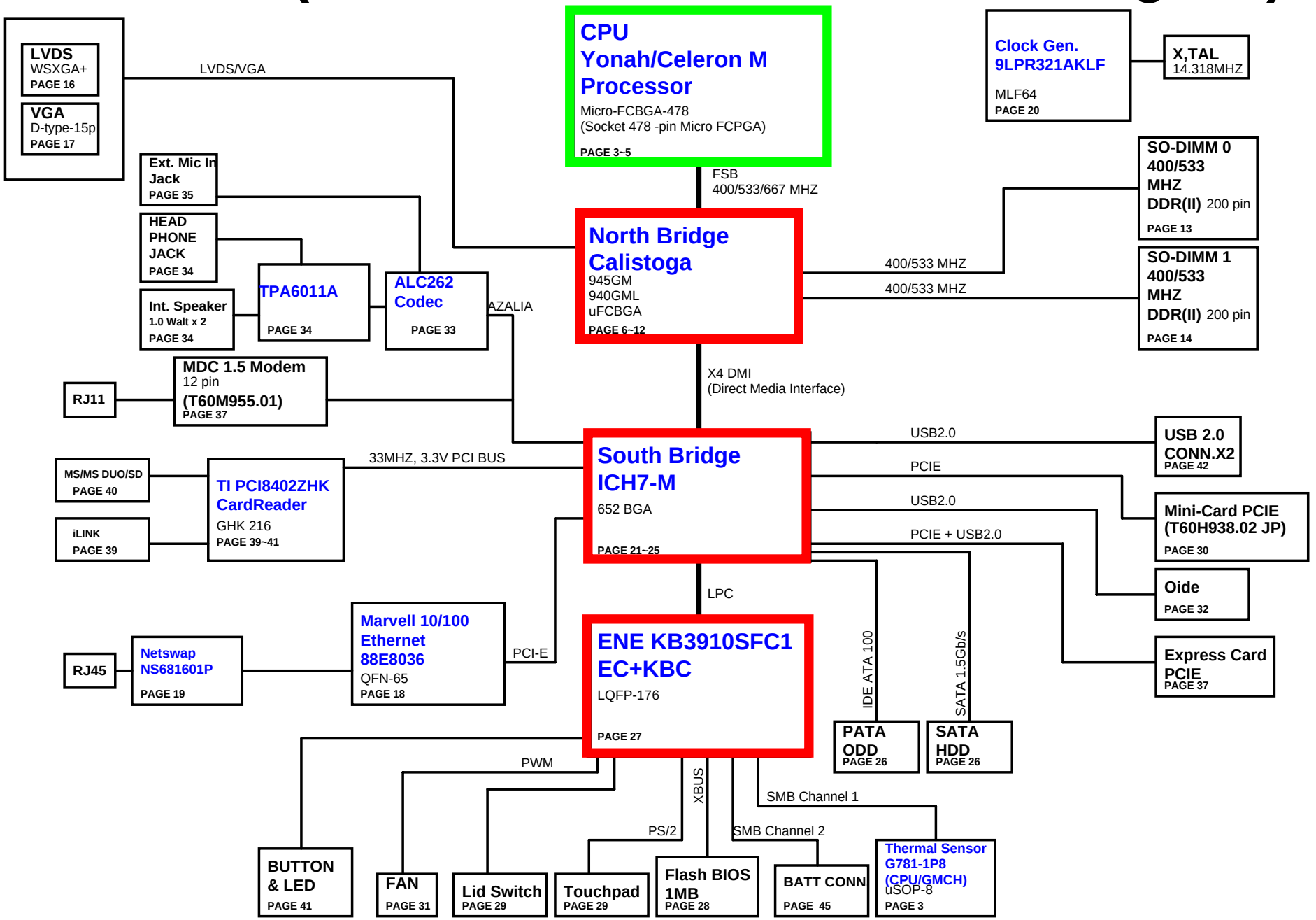
RAPTOR/MS70(CALISTOGA GM/GML Block Diagram)



FOXCONN HON HAI Precision Ind. Co., Ltd.
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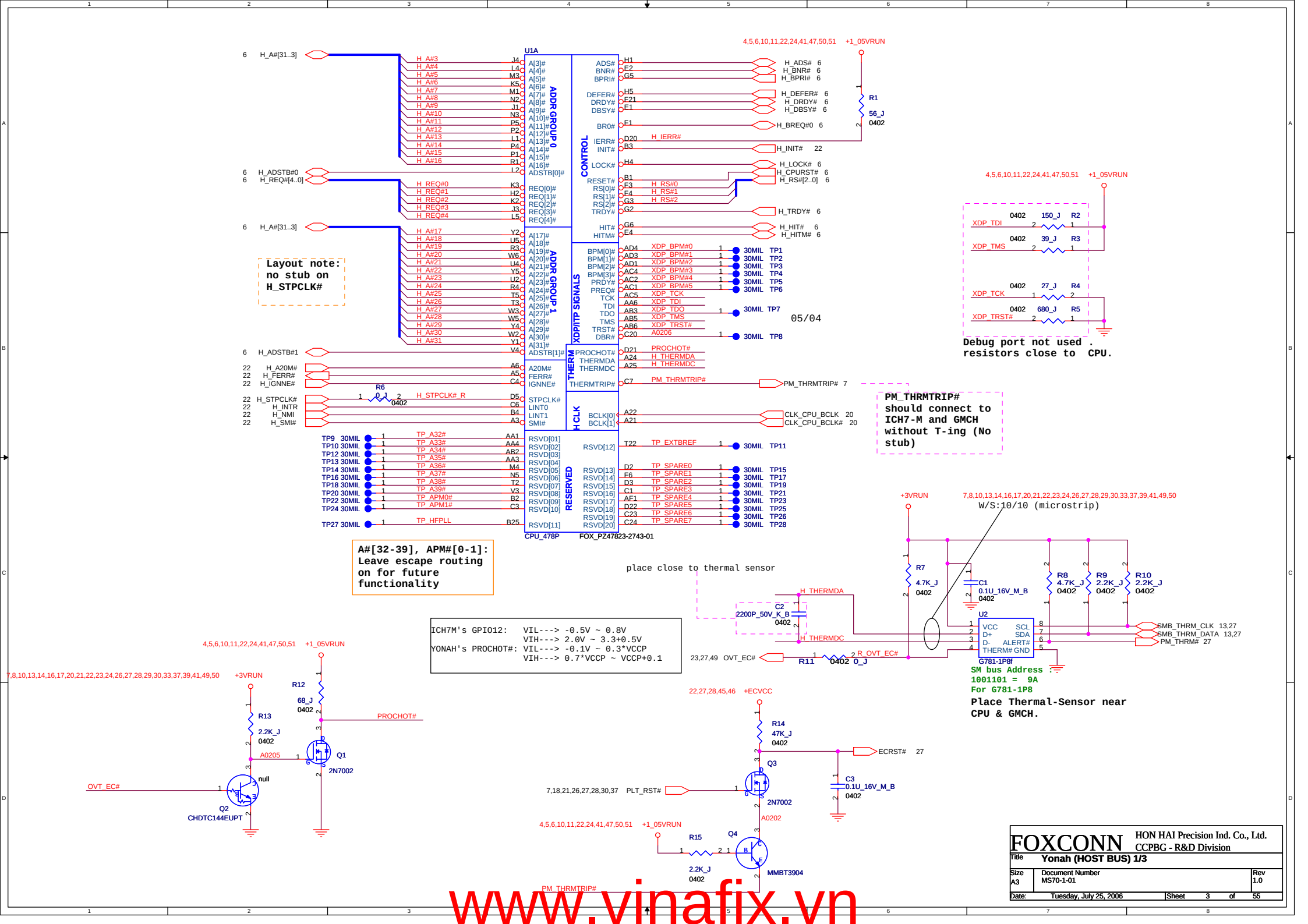
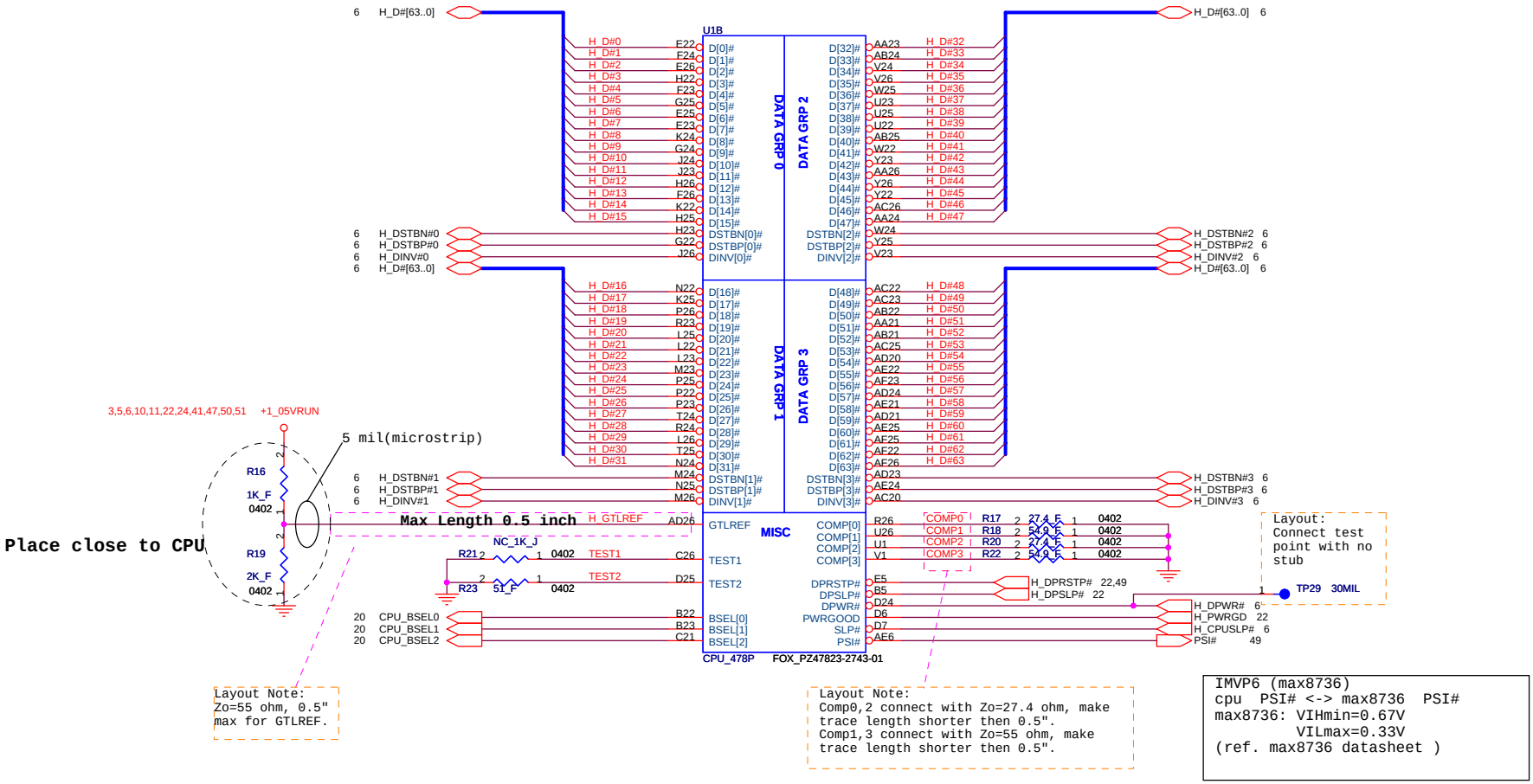
Title	Block Diagram	
Size: Custom	Document Number: MS70-1-01	Rev: 1.0
Date: Tuesday, July 25, 2006	Sheet 2 of 55	





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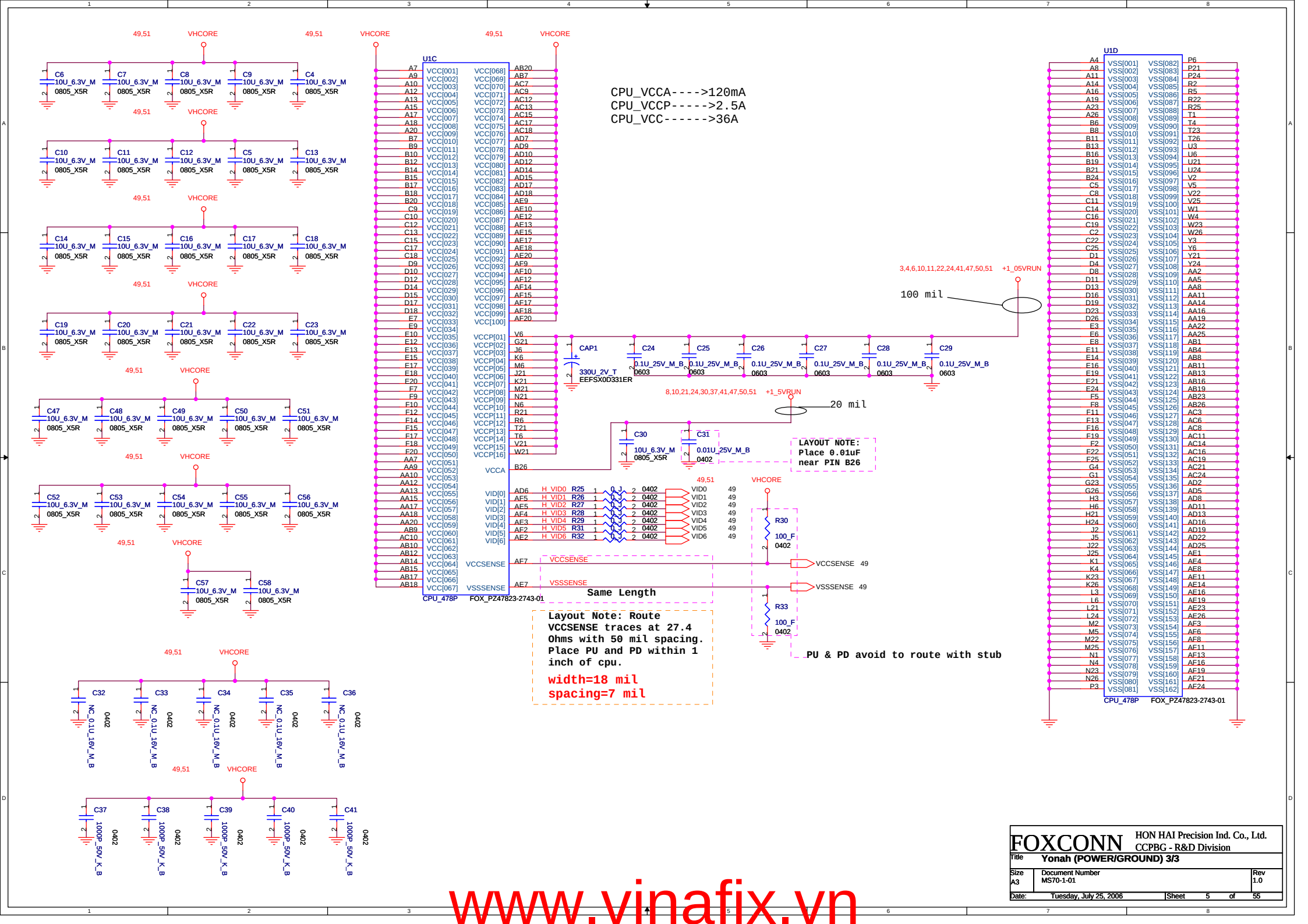

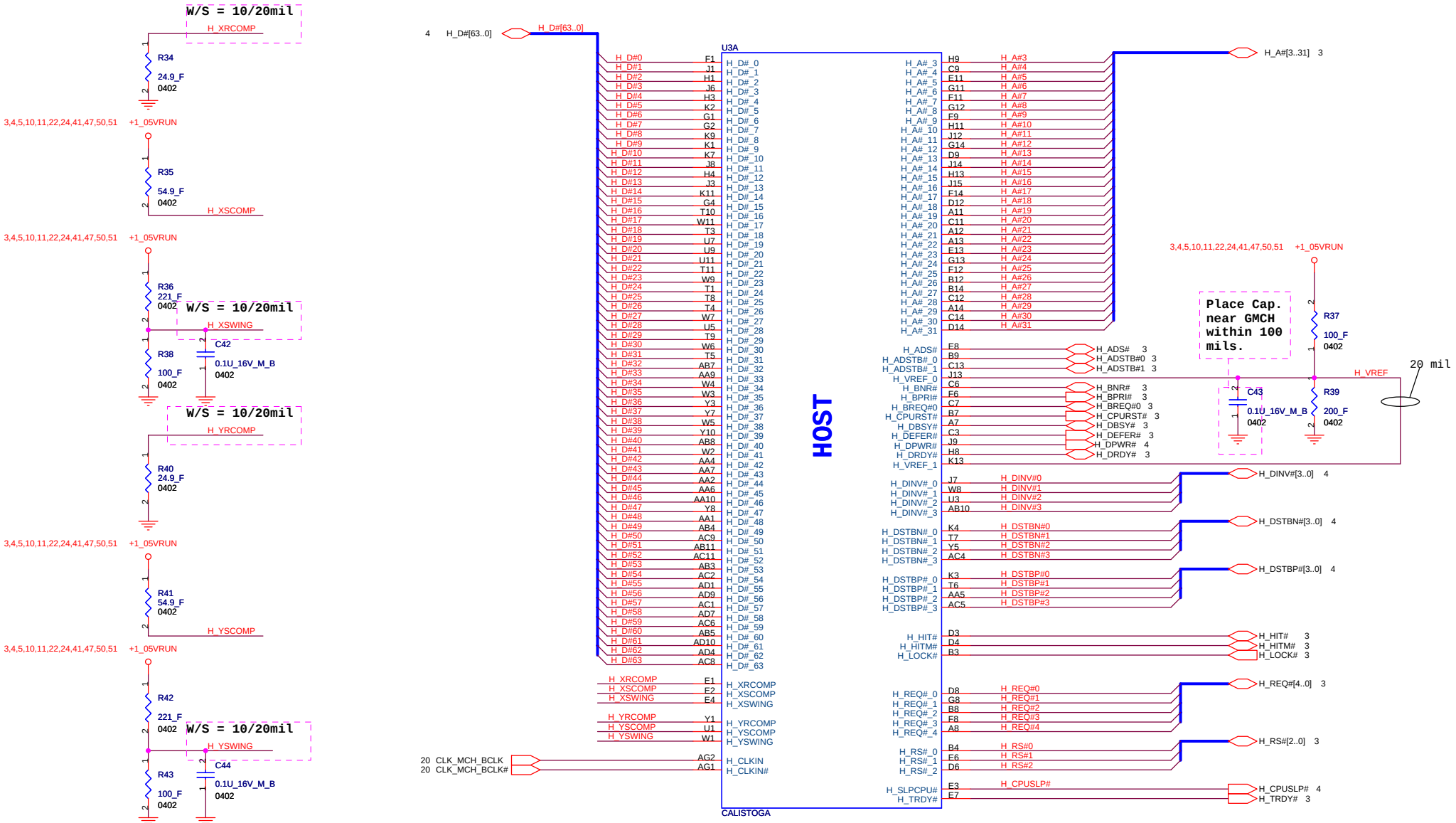

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division		
Title	CALISTOGA (HOST) 1 of 7		
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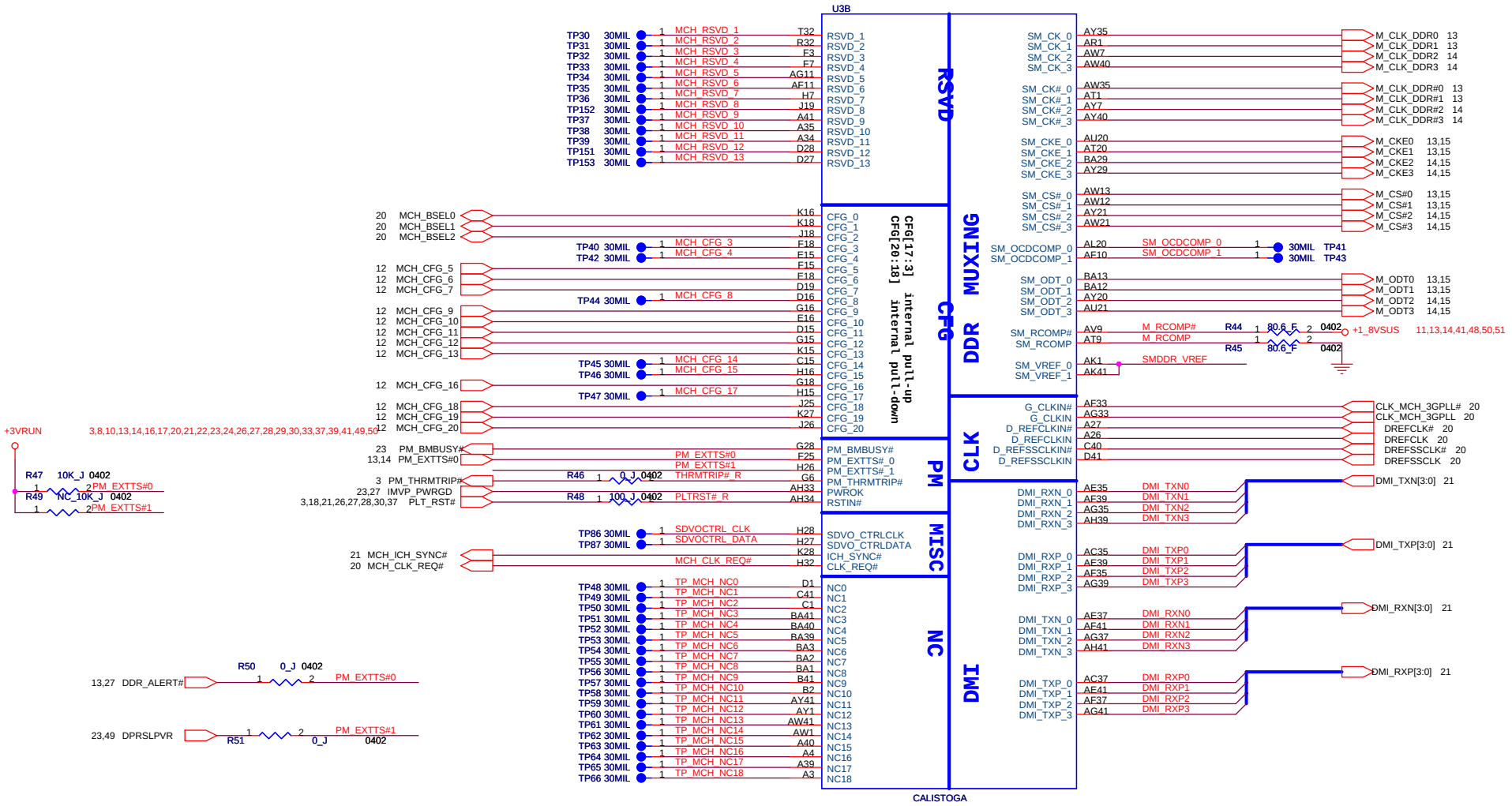

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Title	CALISTOGA (DMI) 2 of 7
Size A3	Document Number MS70-1-01 Rev 1.0
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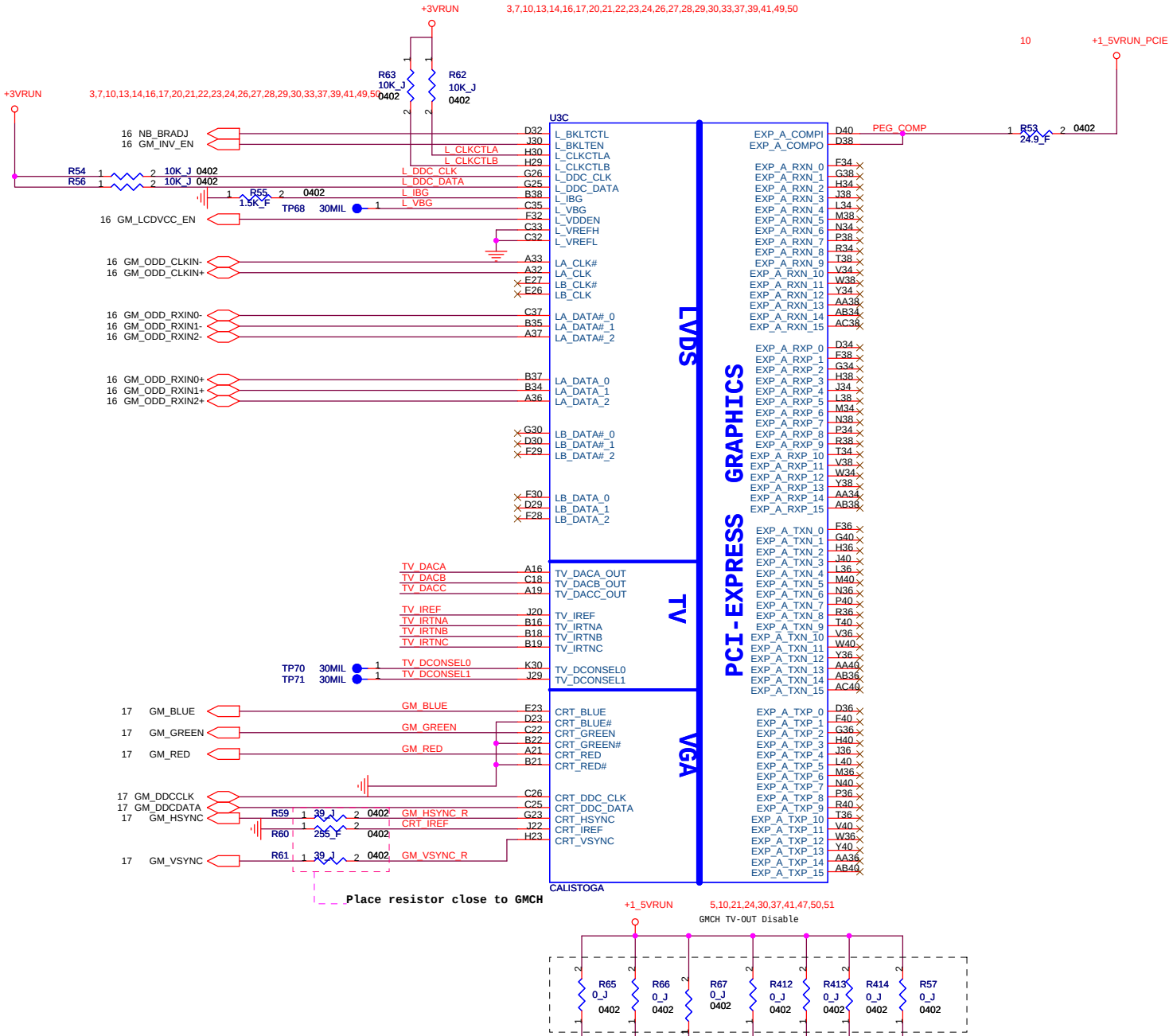

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Title	CALISTOGA (DMI) 3 of 7	
Size A3	Document Number MS70-1-01	Rev 1.0
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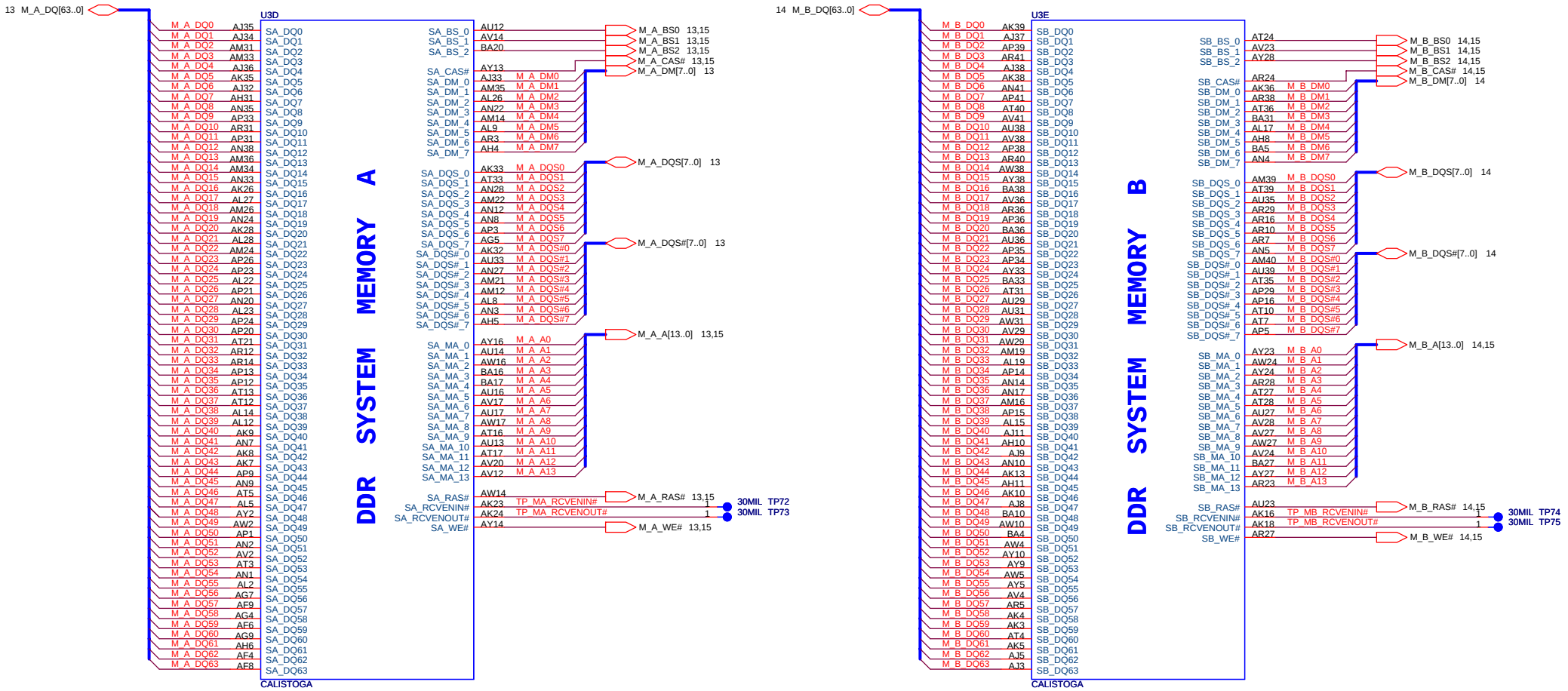

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Title	CALISTOGA (DDRII) 4 of 7	
Size A3	Document Number MS70-1-01	Rev 1.0
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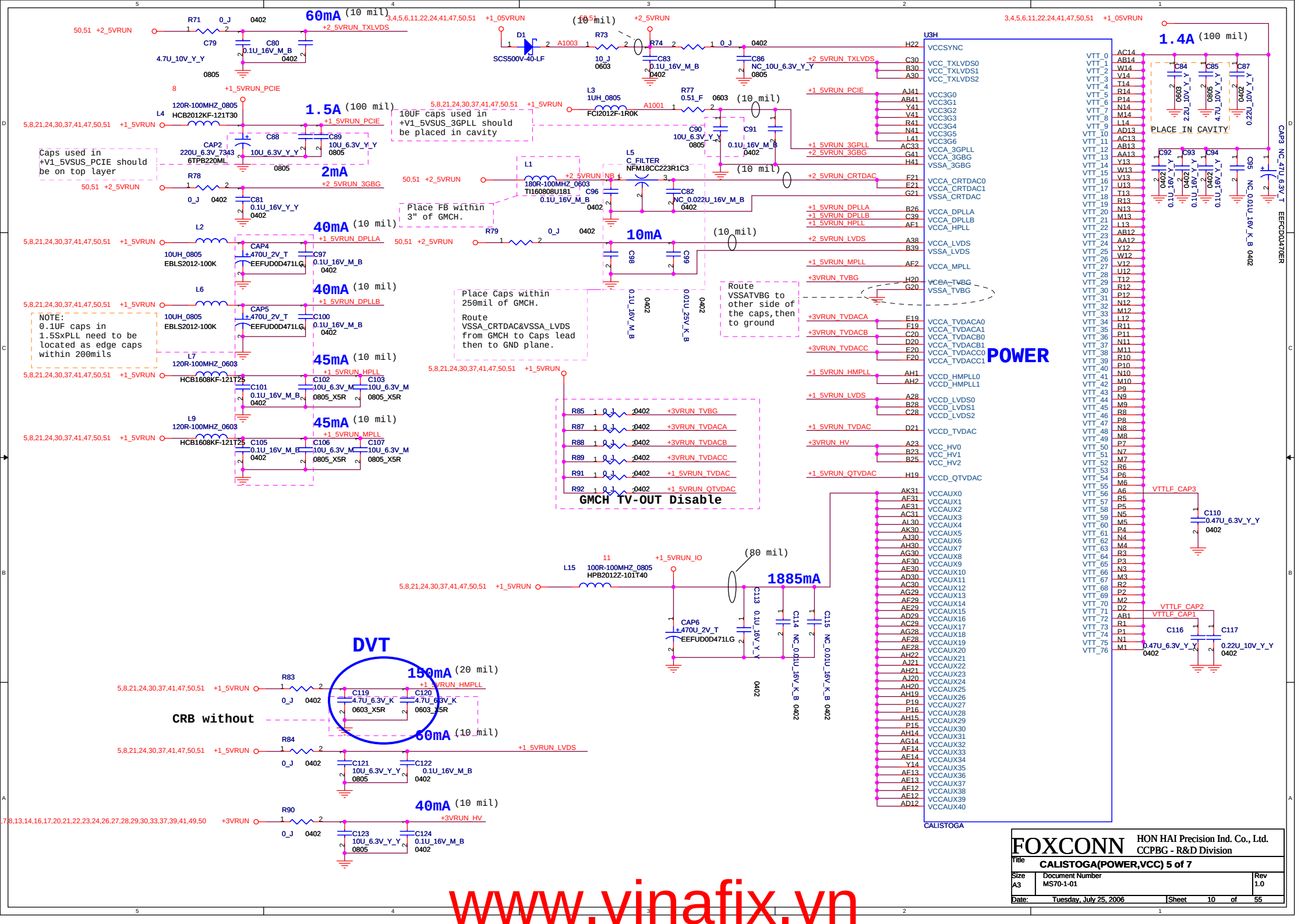

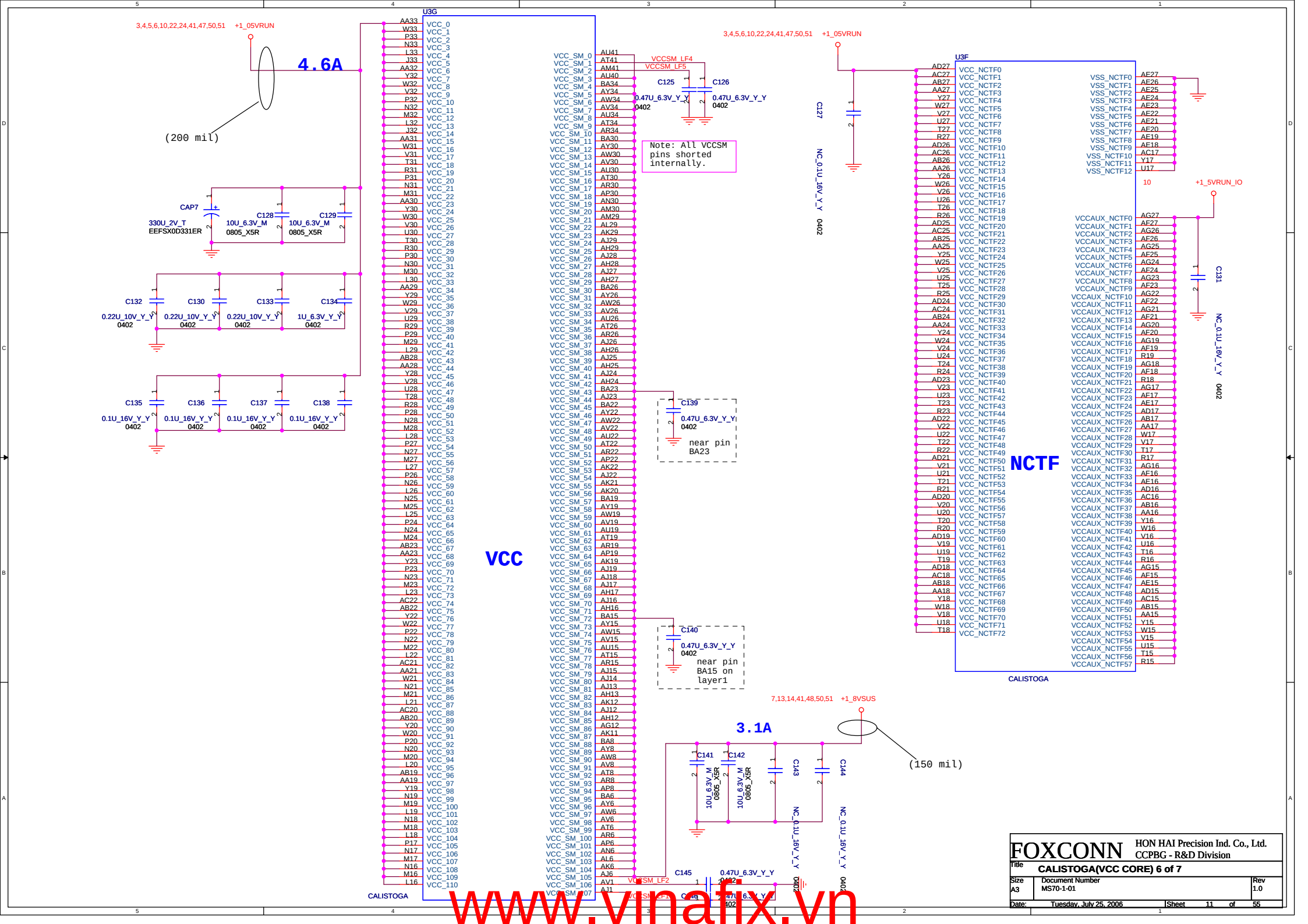

7 MCH_CFG_5 — 1 — 30MIL TP76

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

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

R93 NC_2.2K_J 0402

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

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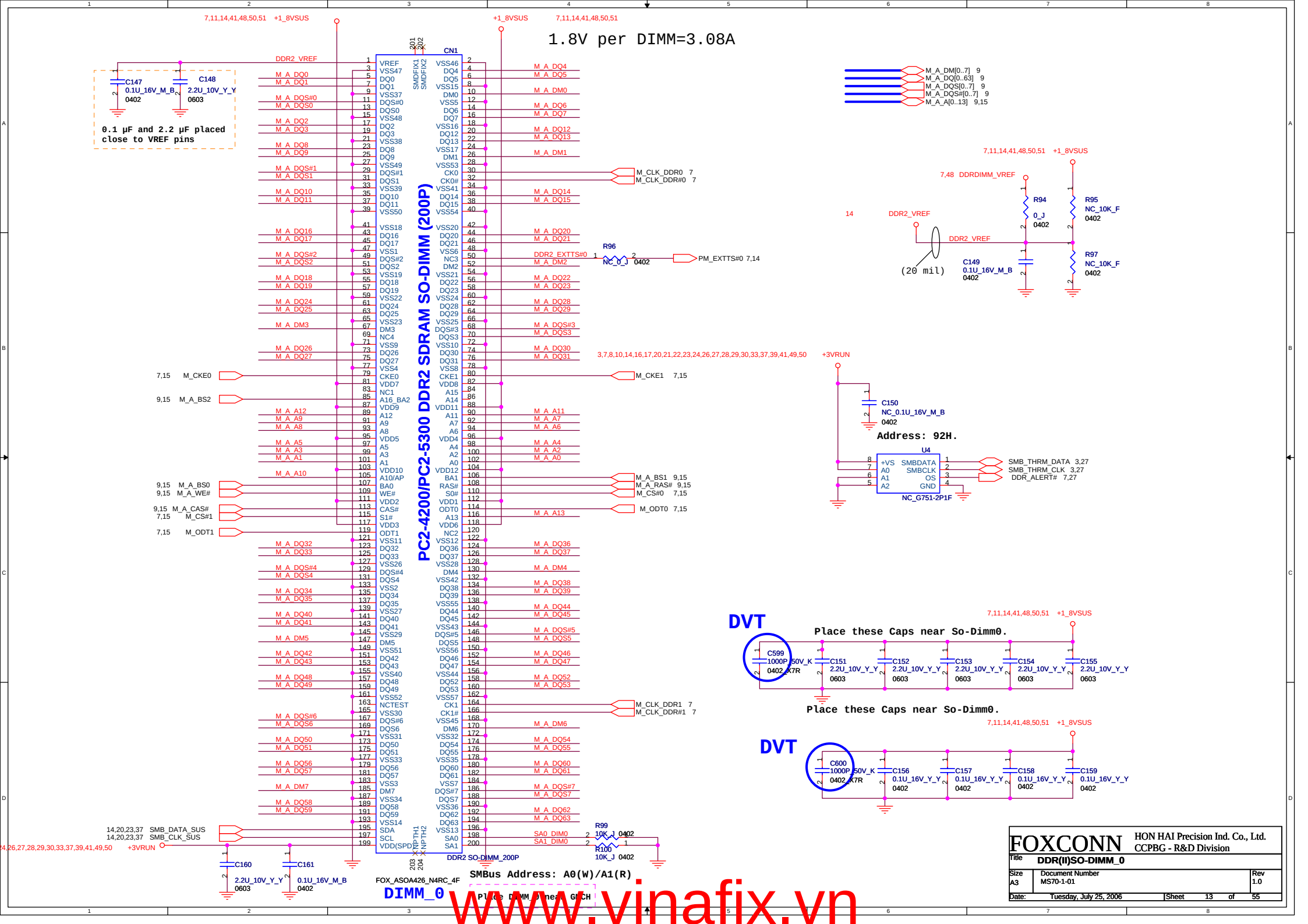
FOXCONN HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division
Title	DDR(II)SO-DIMM_0
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Date: Tuesday, July 25, 2006	Sheet 13 of 55

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 SO-DIMM_200P

DIMM_1

FOX_ASOA426_N4SC_4F

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
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_CKE3 7,15
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

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 from 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

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Title: DDR(II)SO-DIMM_1

Size: A3 | Document Number: MS70-1-01 | Rev: 1.0

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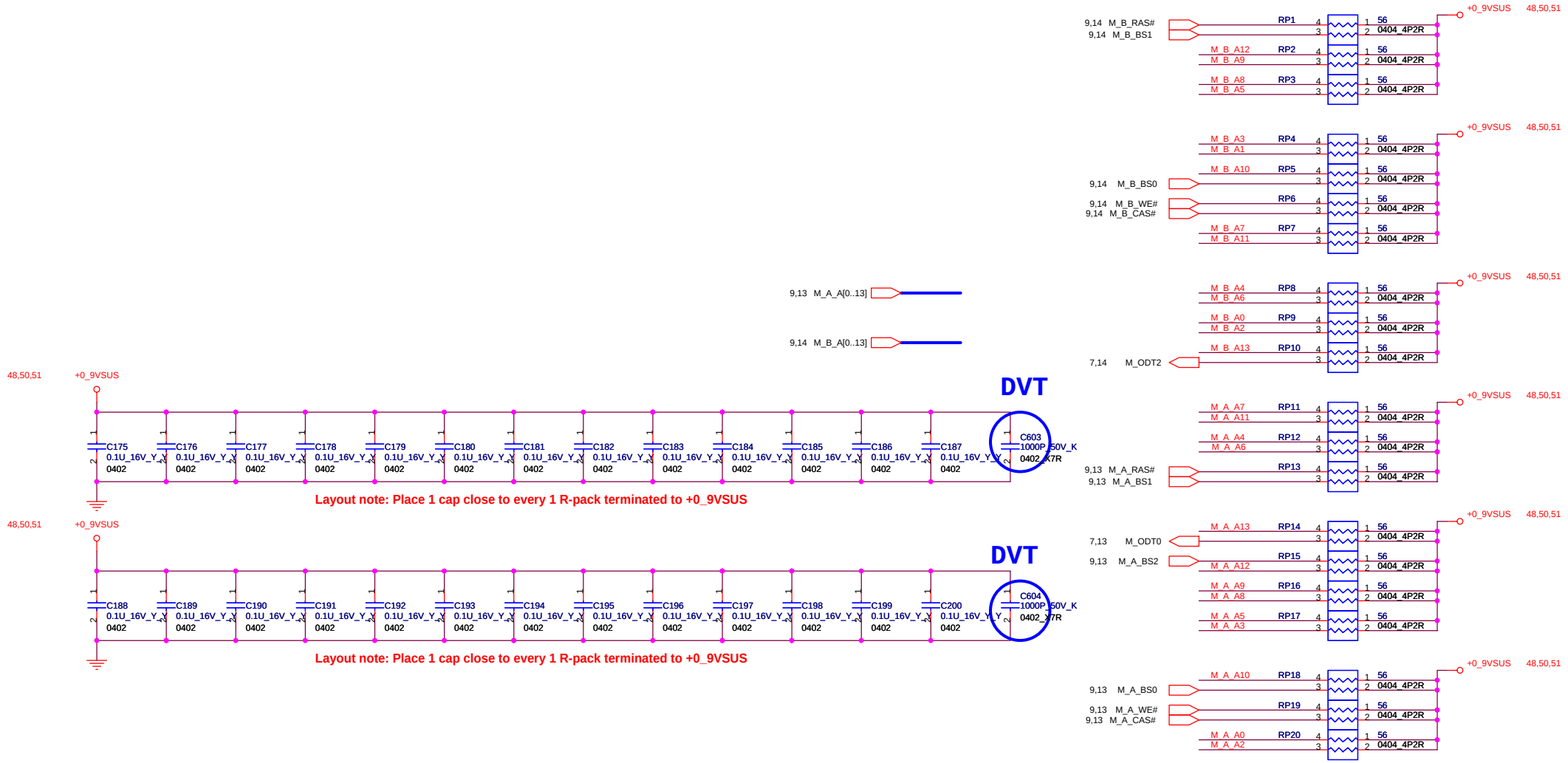

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	DDR(II)Termination	
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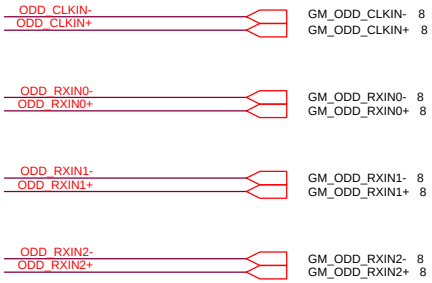
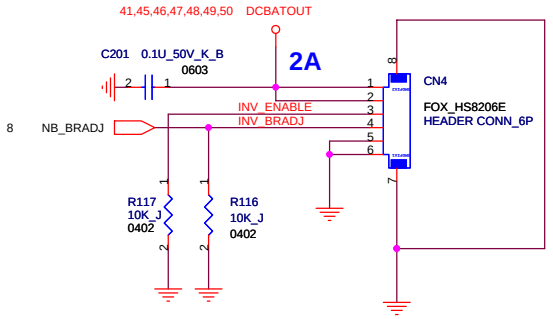
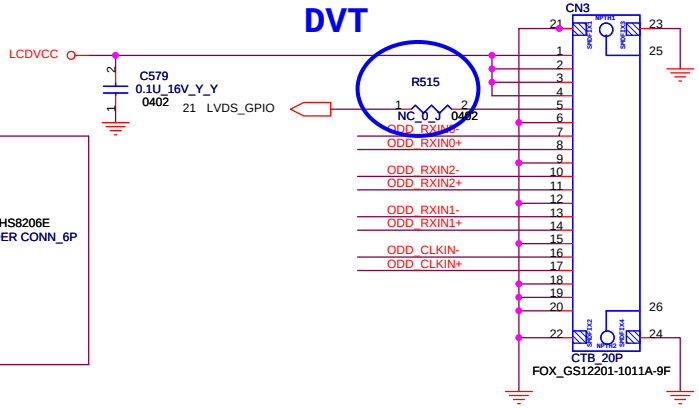
LVDS



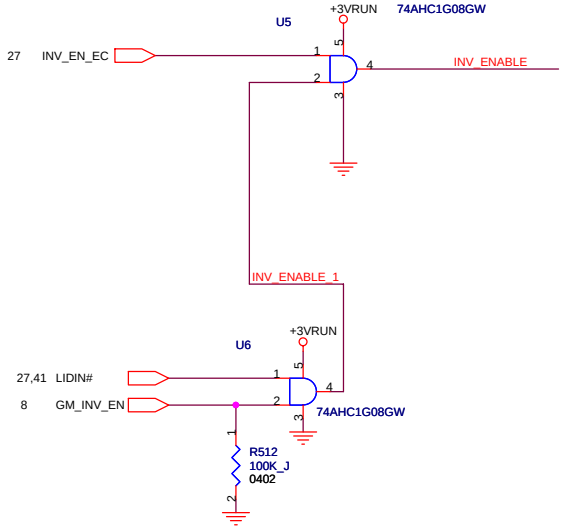
LVDS CONNECTOR

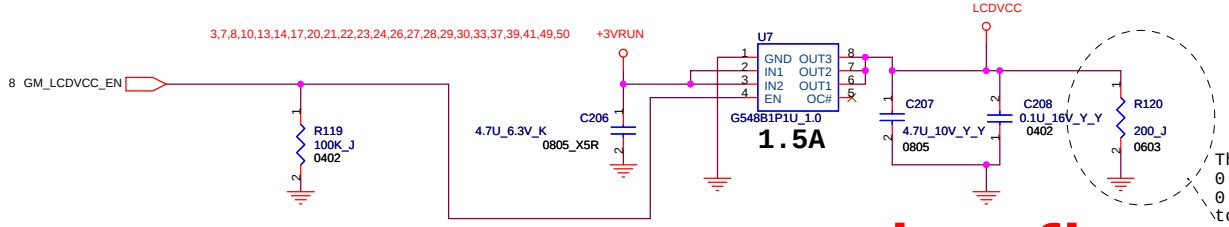
DVT





INVERTER CONNECTOR

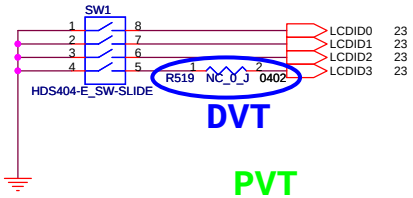




DISCHARGE

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

PANEL ID



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

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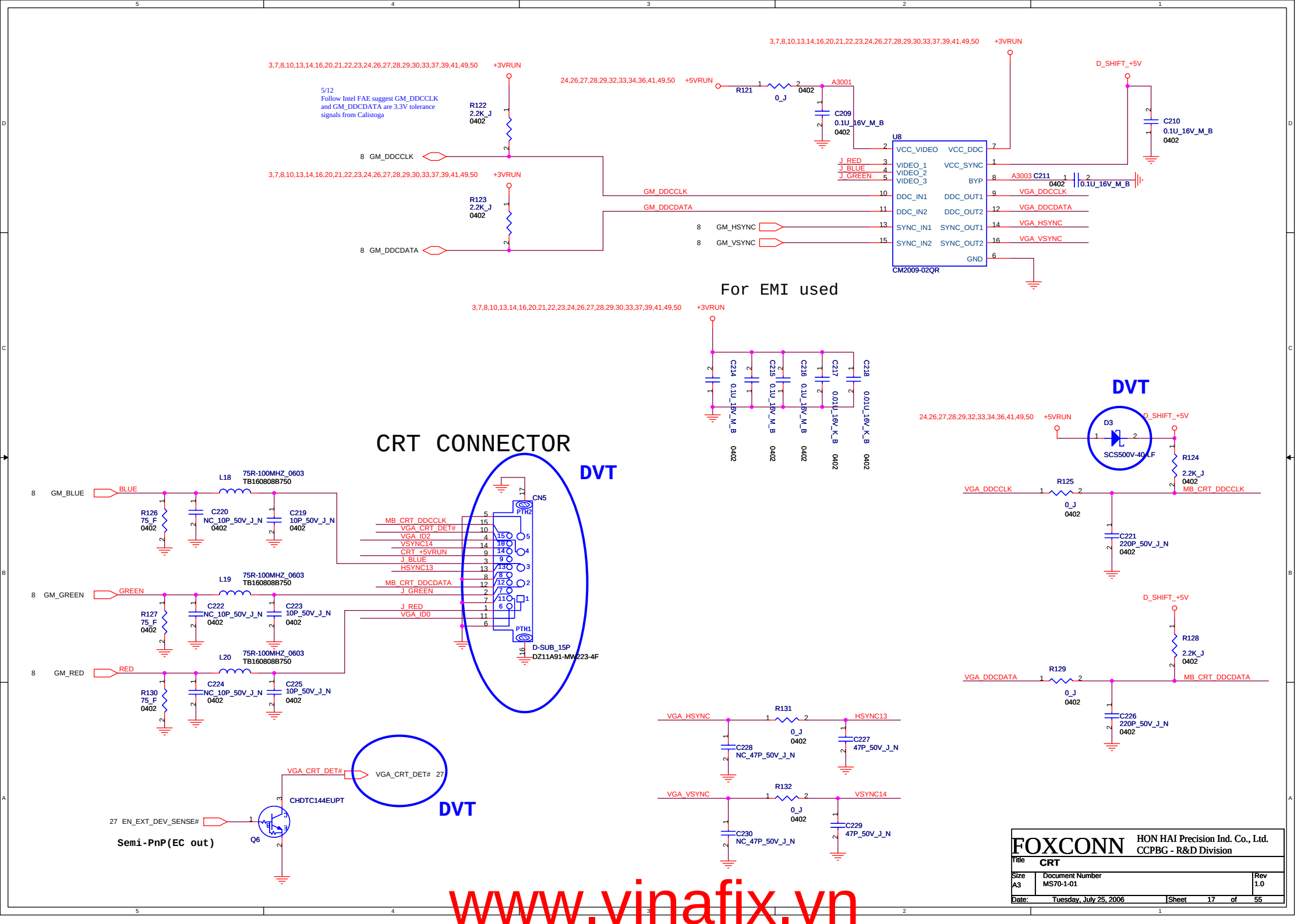

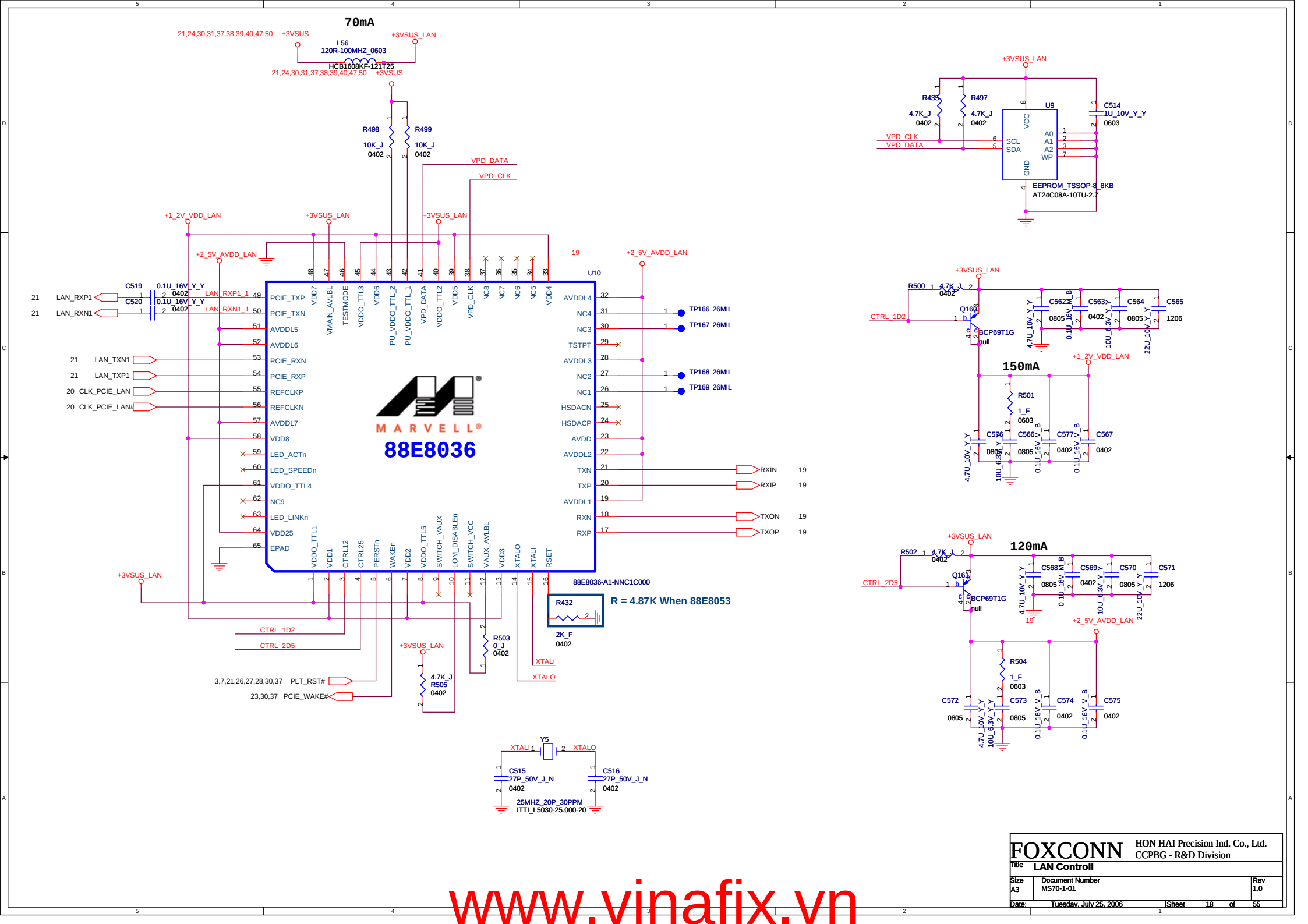

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division
Title	LAN Controll
Size A3	Document Number MS70-1-01
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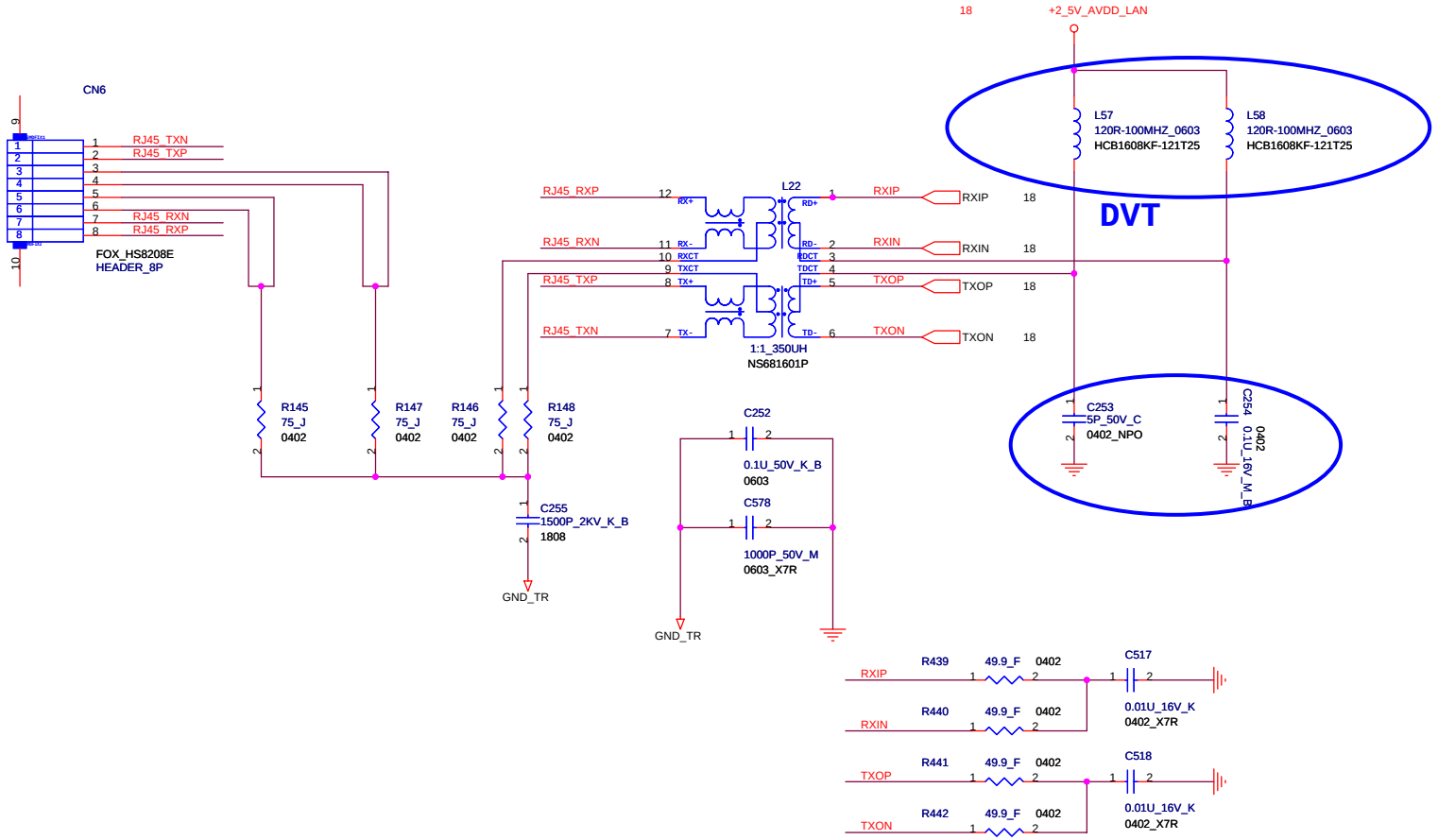

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	LAN Transformer	
Size A3	Document Number MS70-1-01	Rev 1.0
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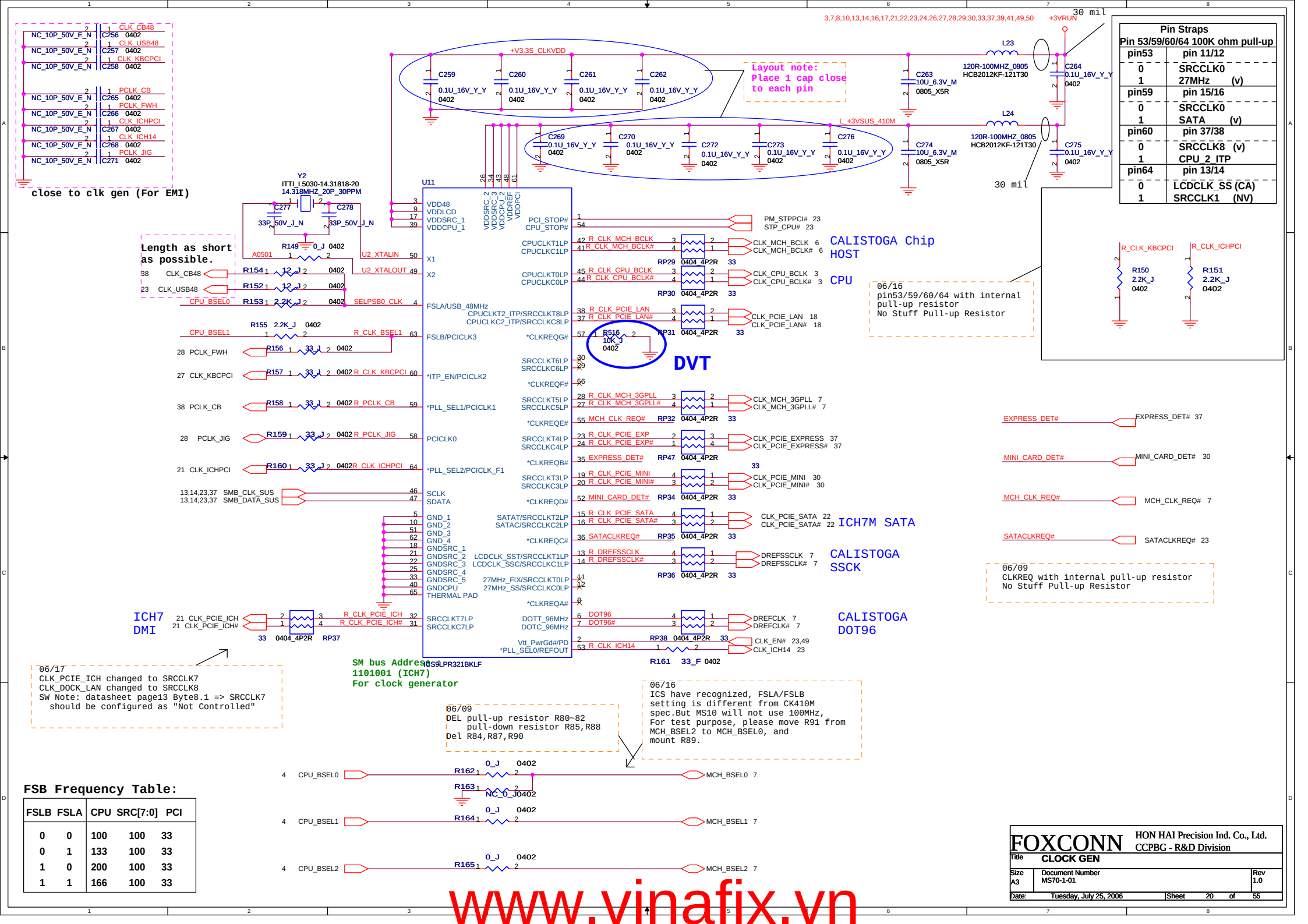
close to clk gen (For EMI)
Length as short as possible.
SM bus Address
1101001 (ICH7)
For clock generator
CALISTOGA Chip HOST CPU
DVT
ICH7M SATA
CALISTOGA SSCK
CALISTOGA DOT96
ICH7 DMI
Layout note: Place 1 cap close to each pin
Pin Straps
Pin 53/59/60/64 100K ohm pull-up
pin53 pin 11/12
0 SRCCLK0 27MHz (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
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.
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
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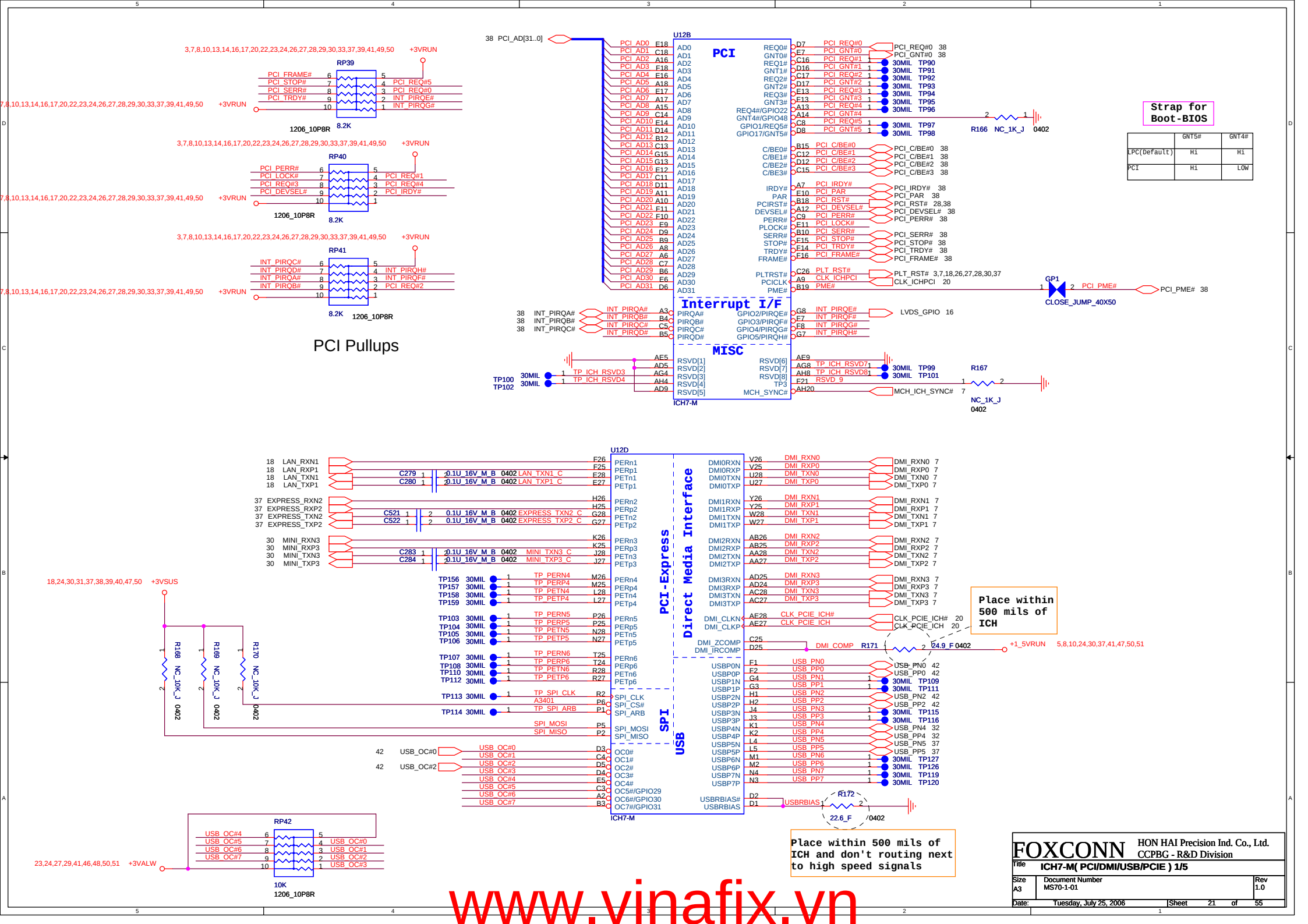

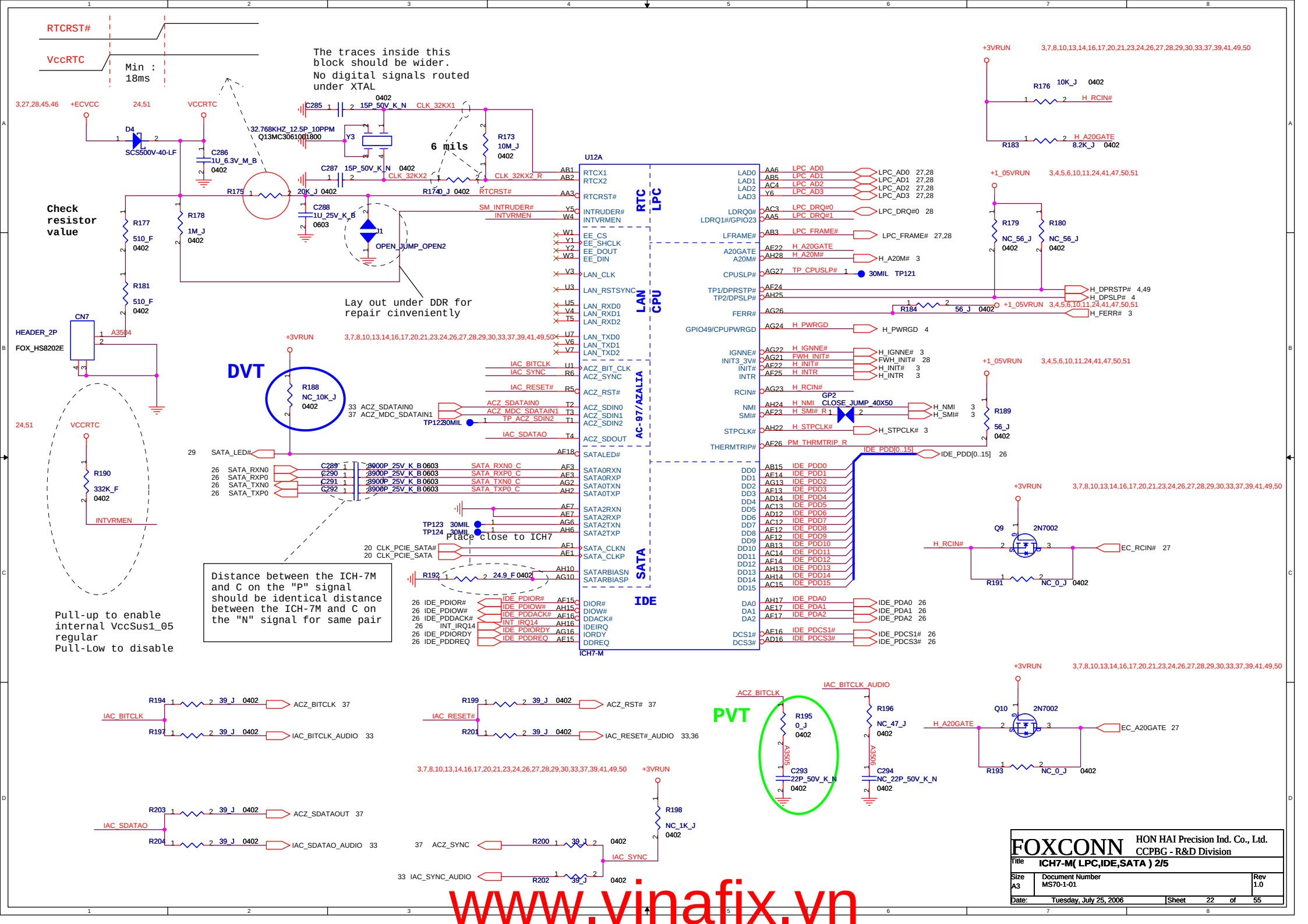

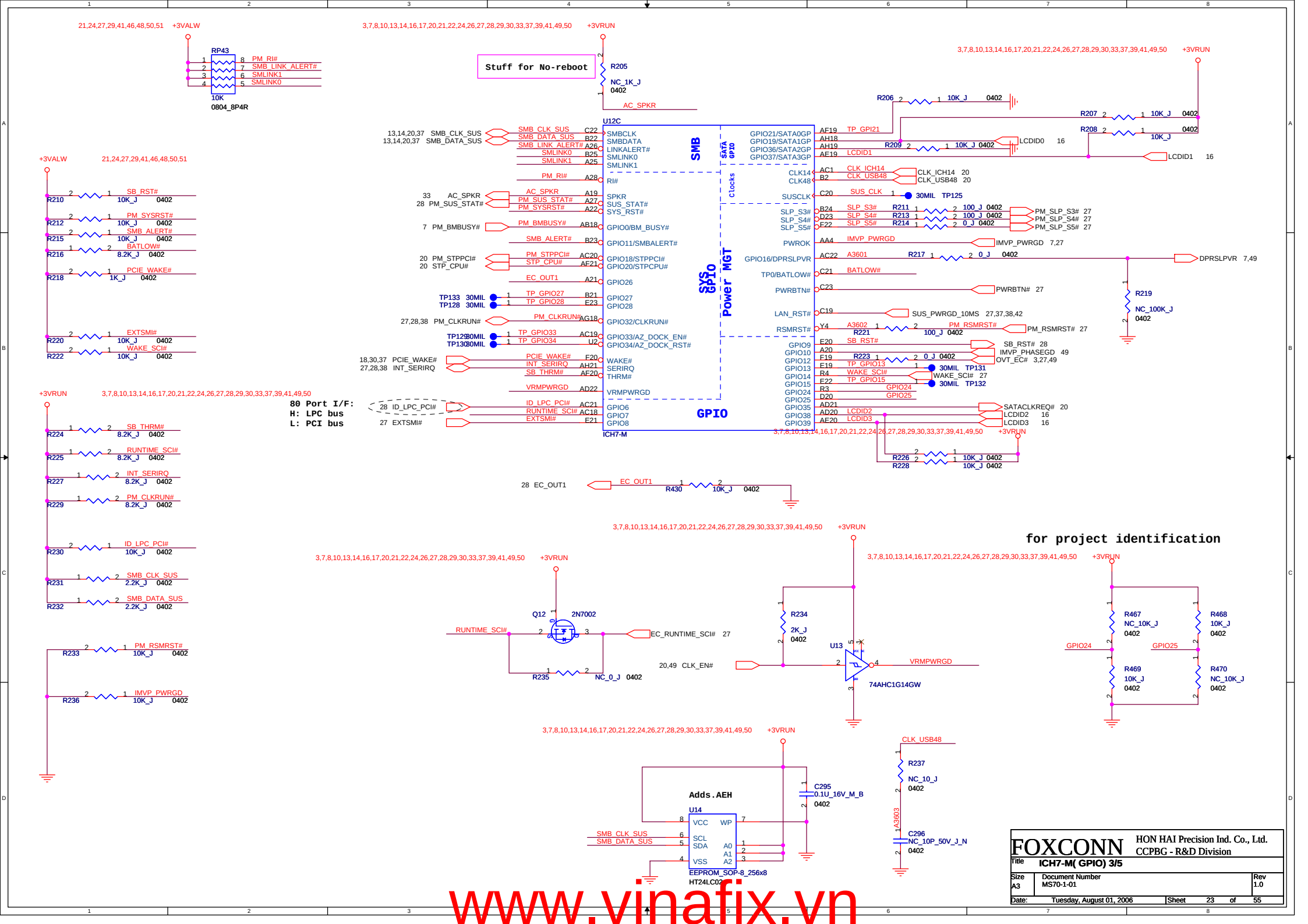

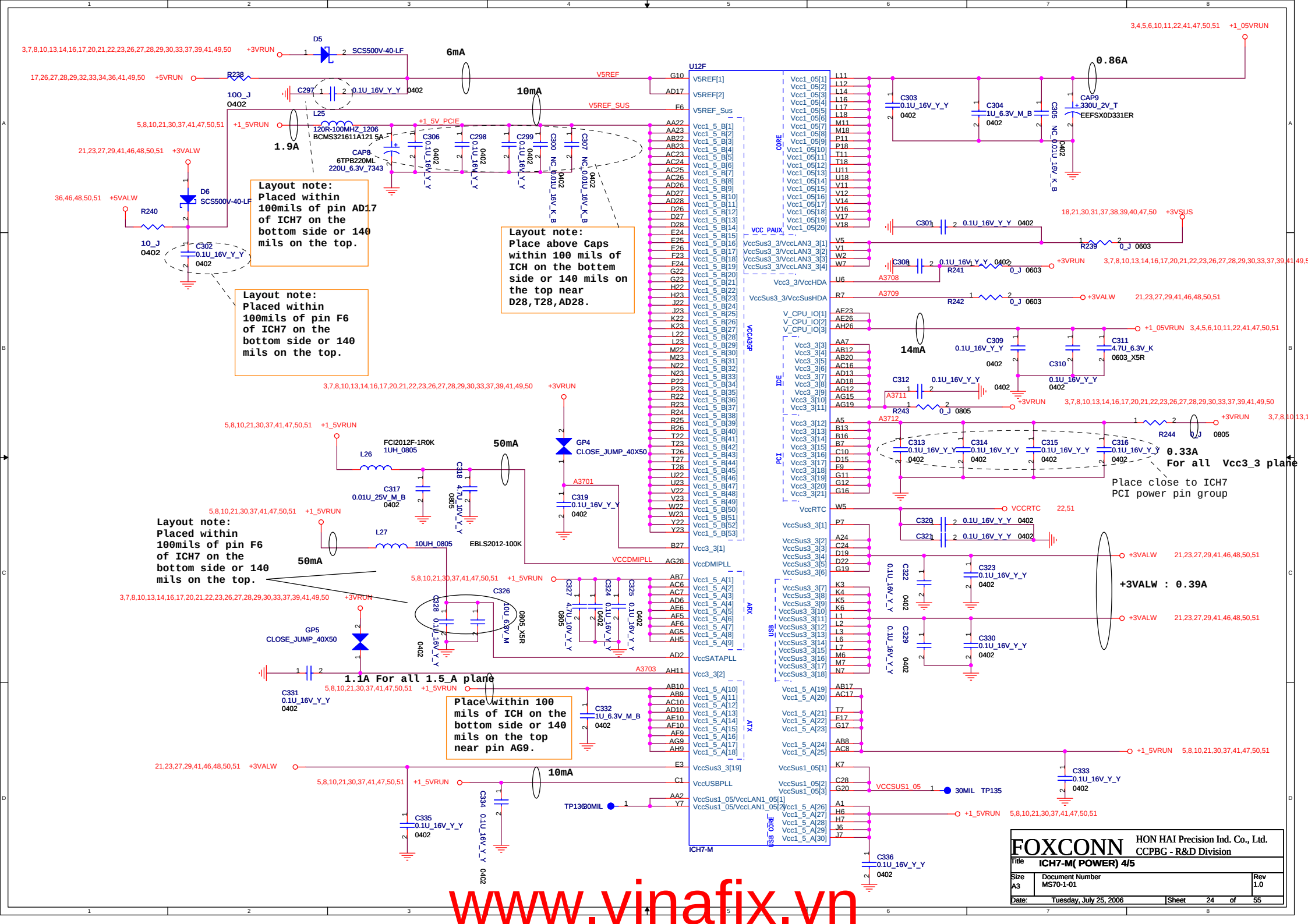
U12F
ICH7-M
Layout note: Placed within 100mils of pin AD17 of ICH7 on the bottom side or 140 mils on the top.
Layout note: Place above Caps within 100 mils of ICH on the bottem side or 140 mils on the top near D28,T28,AD28.
Layout note: Placed within 100mils of pin F6 of ICH7 on the bottom side or 140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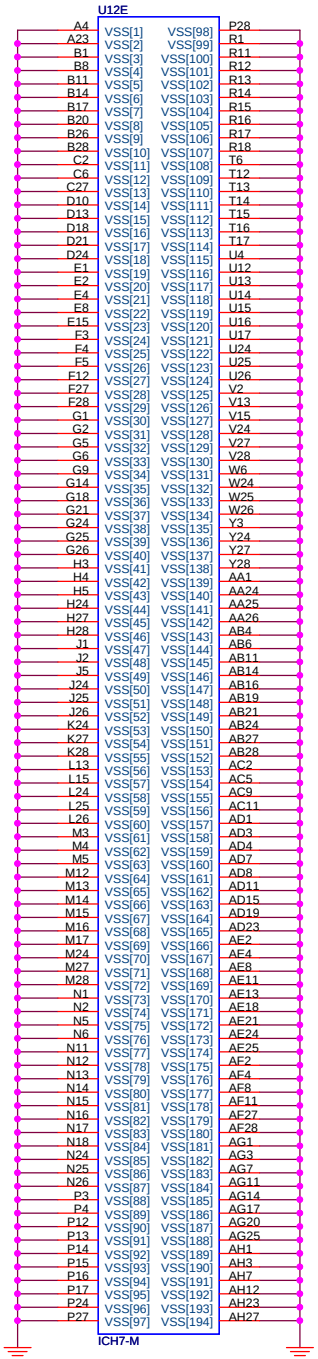

FOXCONN HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division

Title	ICH7-M(GND) 5/5	
Size A3	Document Number MS70-1-01	Rev 1.0
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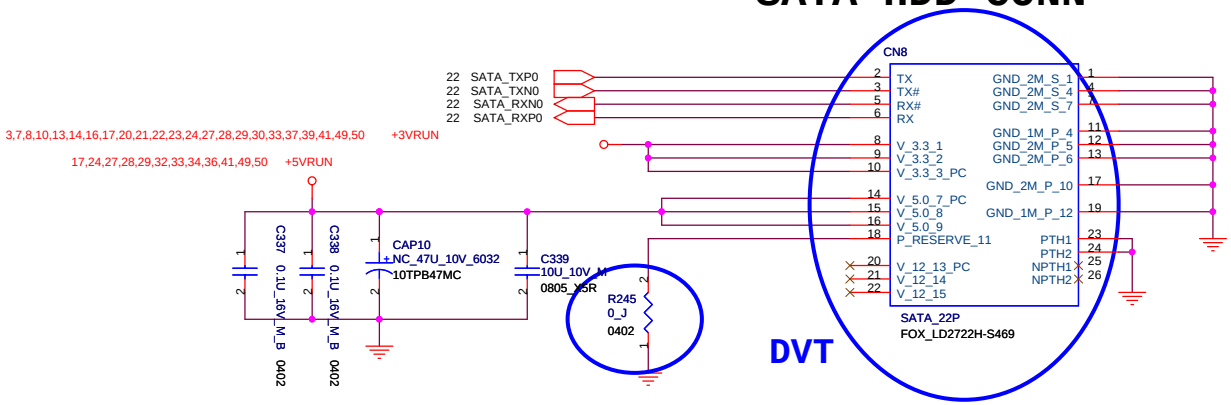
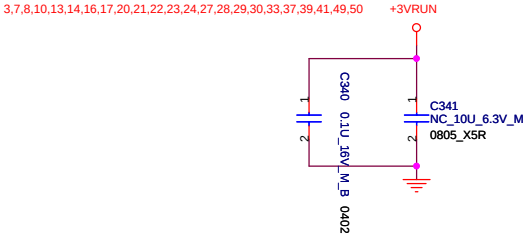
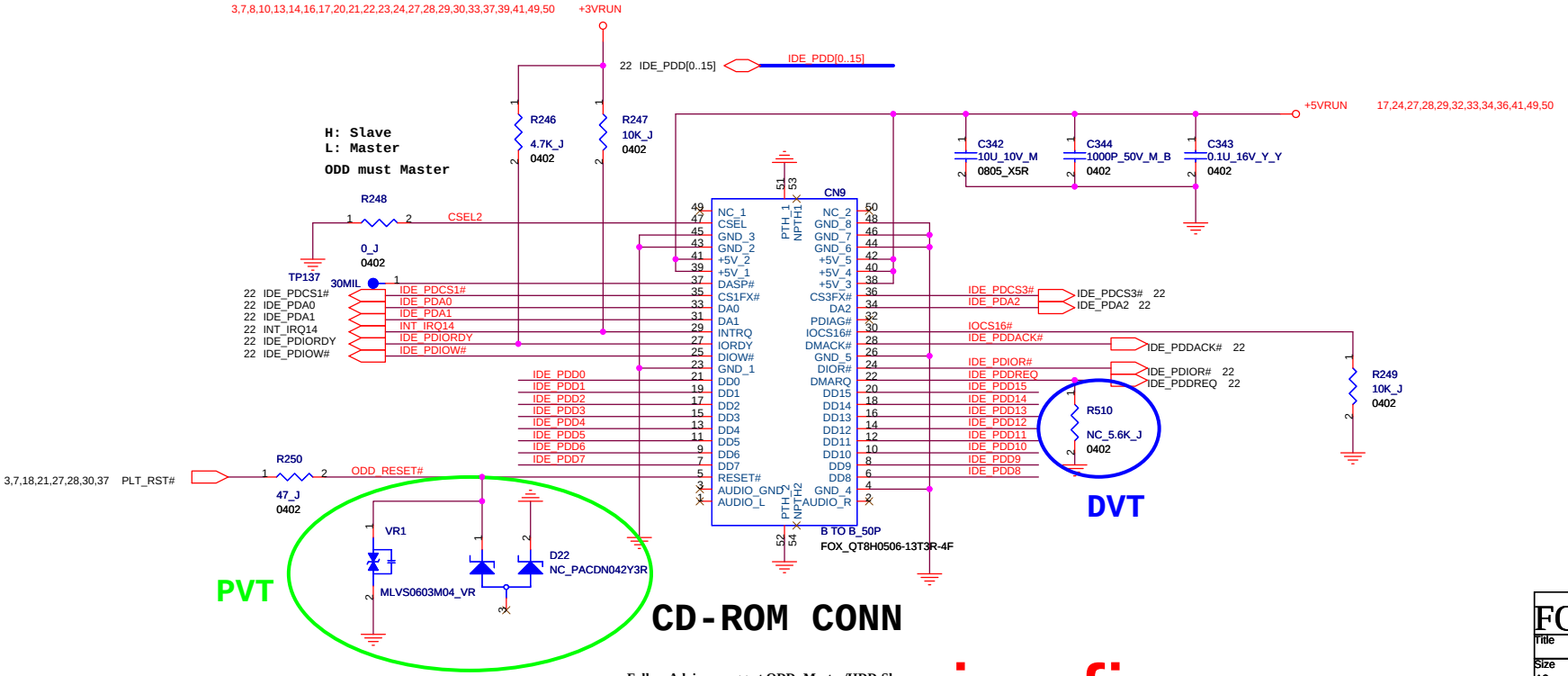
SATA HDD CONN







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	
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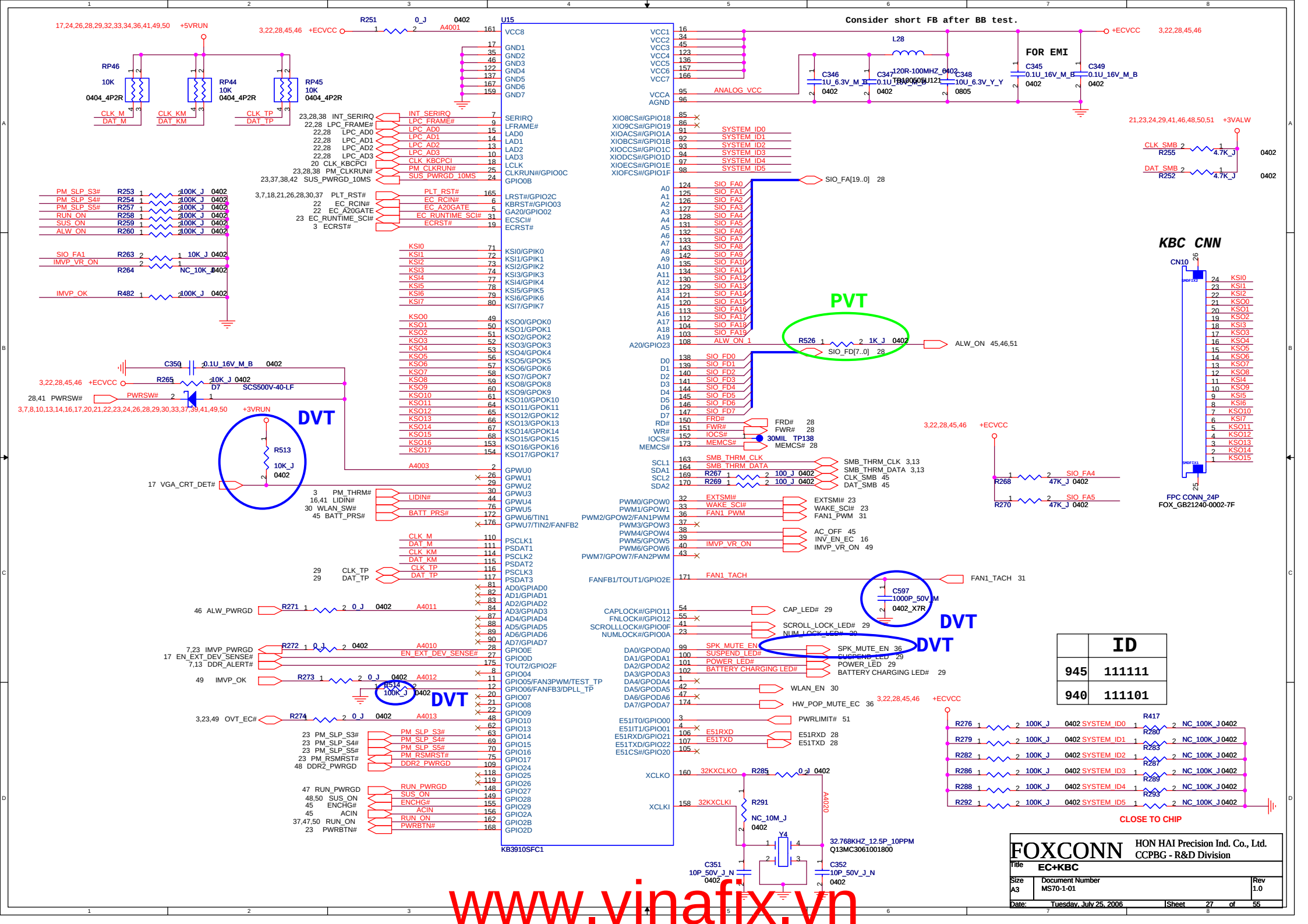
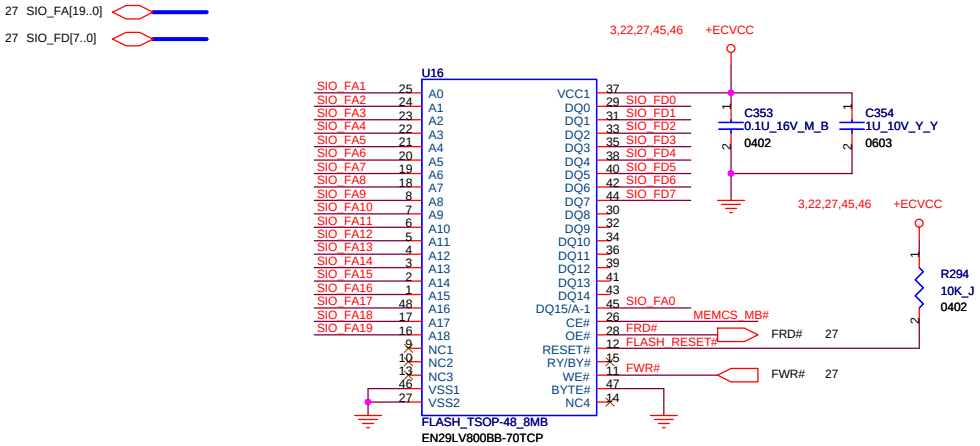
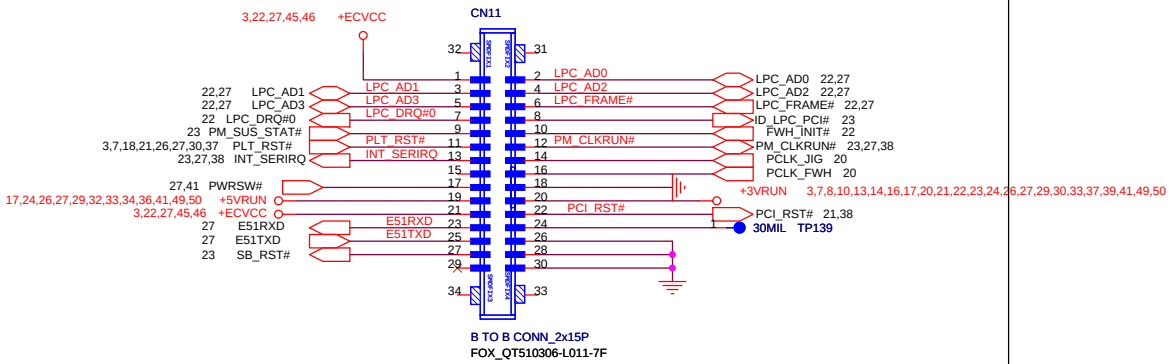


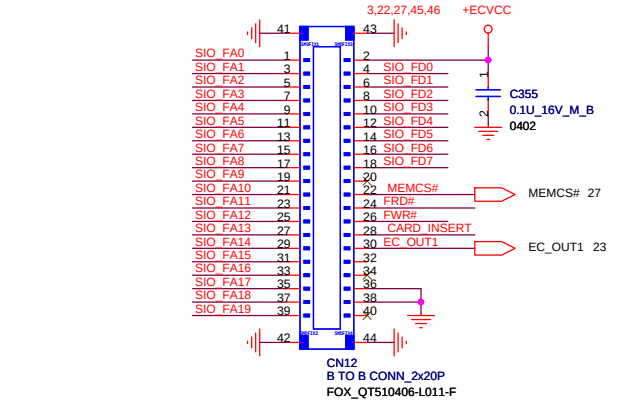


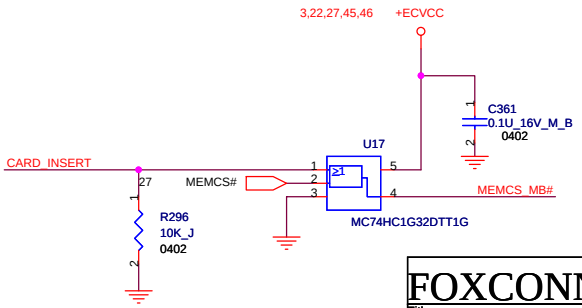
FLASH BIOS

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 1.0
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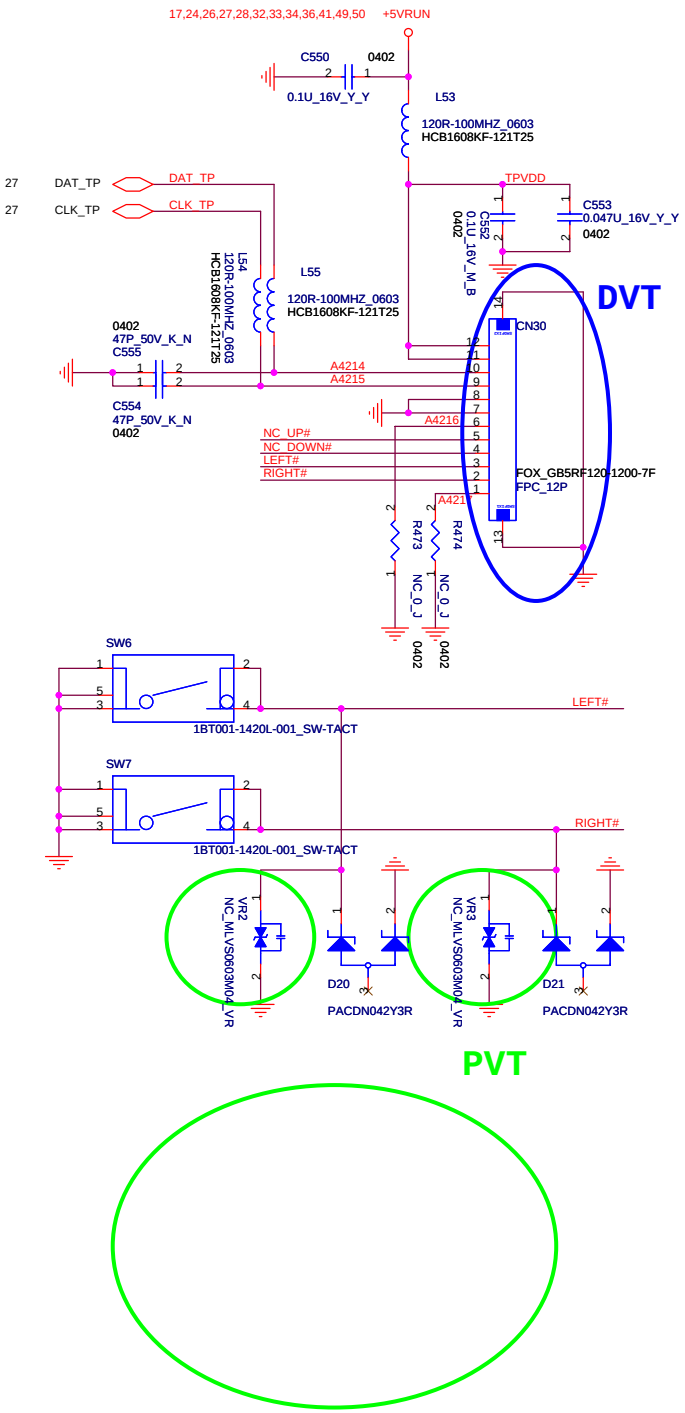
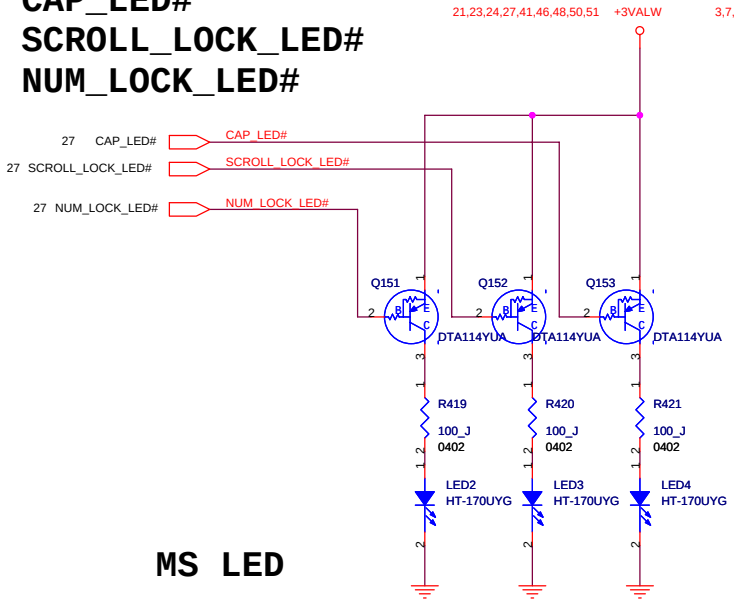
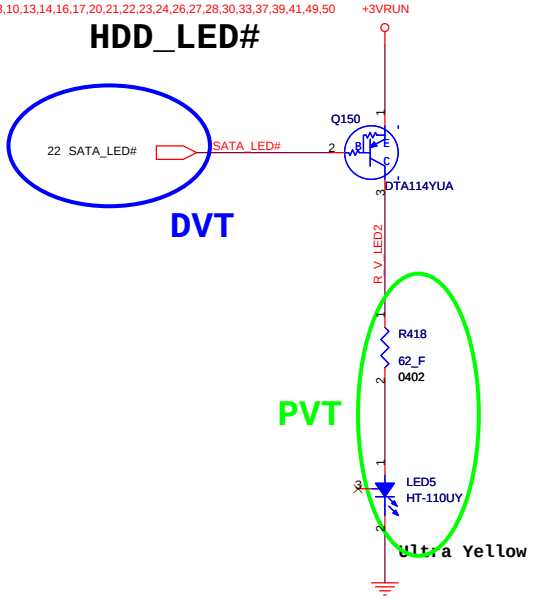
Touch Pad Board



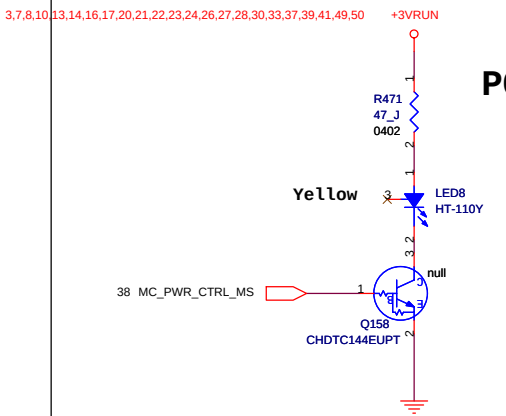
CAP_LED#
SCROLL_LOCK_LED#
NUM_LOCK_LED#



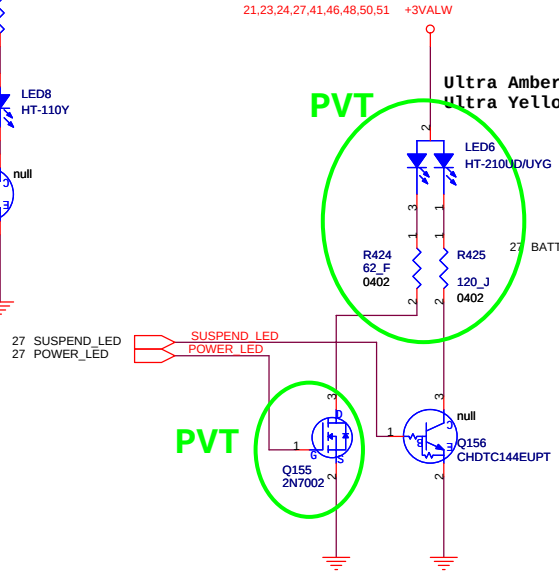
HDD_LED#



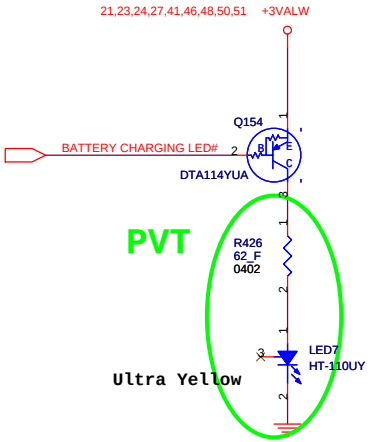
MS LED



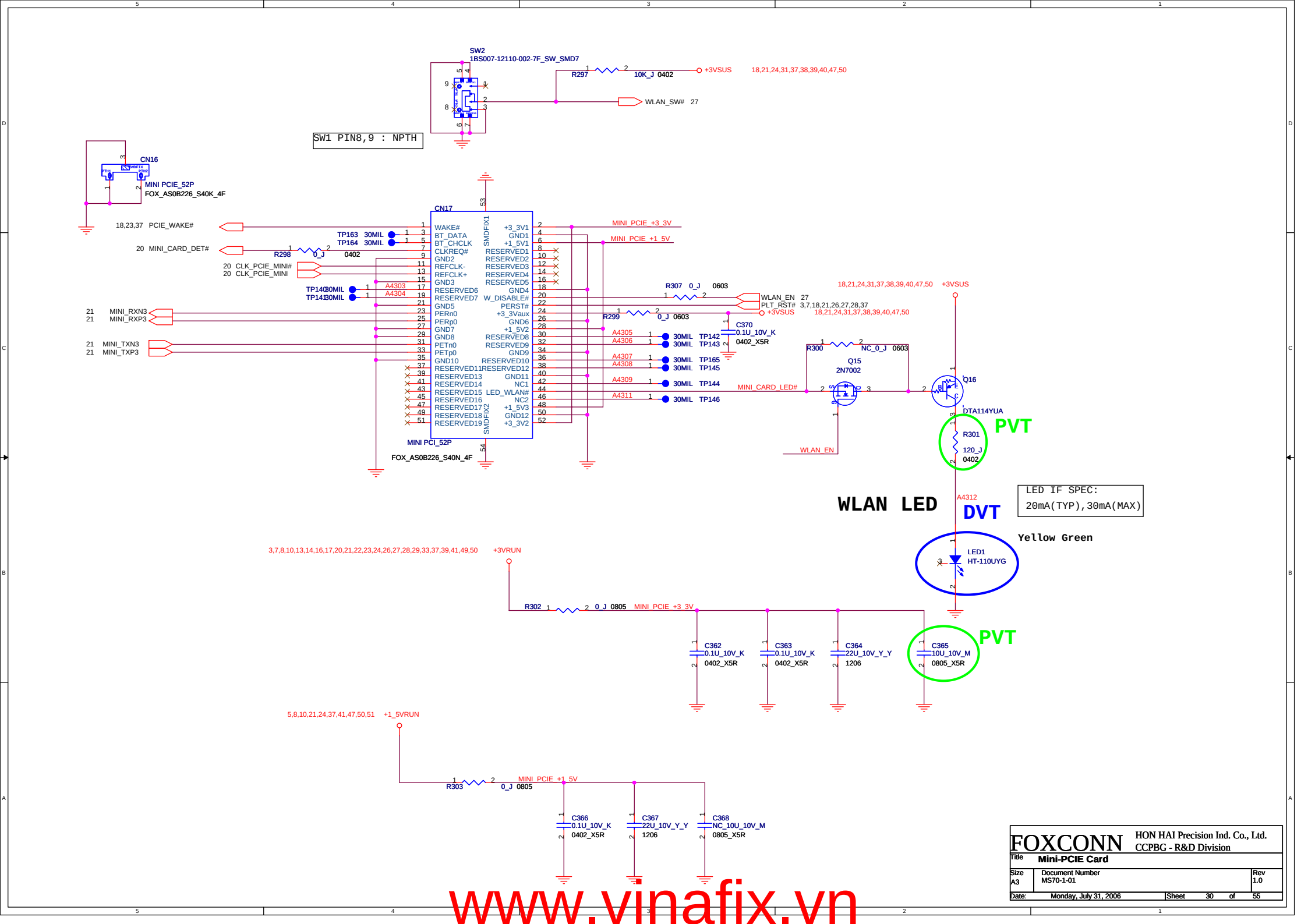
POWER/SUSPEND LED



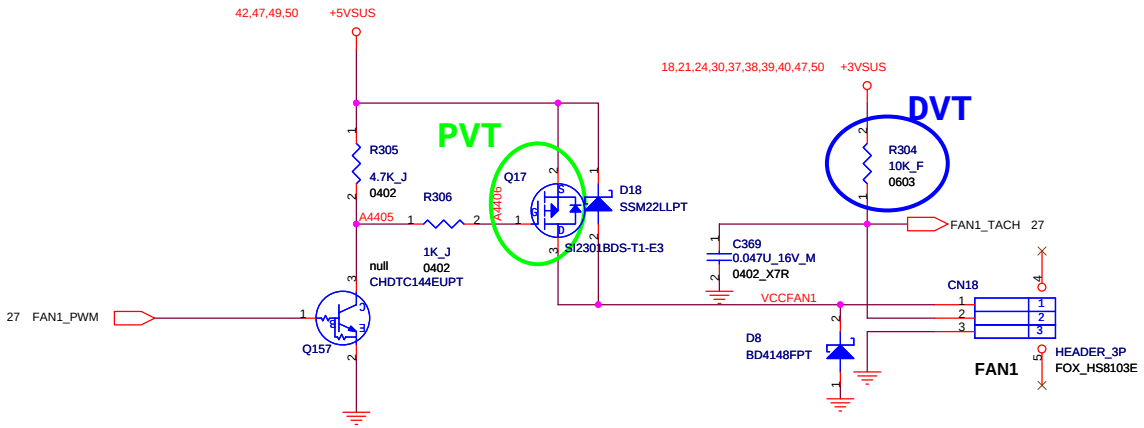
BATTERY CHARGING LED#



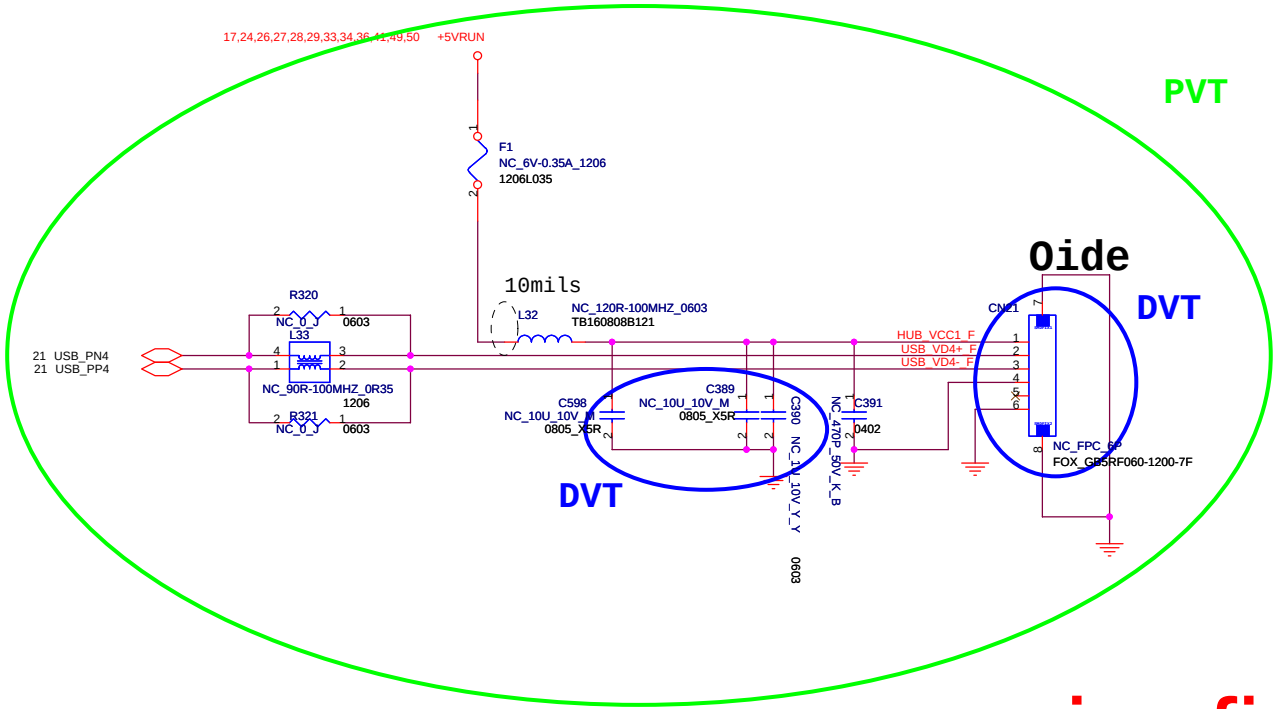
FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: LED/Touch PAD		
Size: A3	Document Number: MS70-1-01	Rev: 1.0
Date: Monday, July 31, 2006	Sheet 29 of 55	



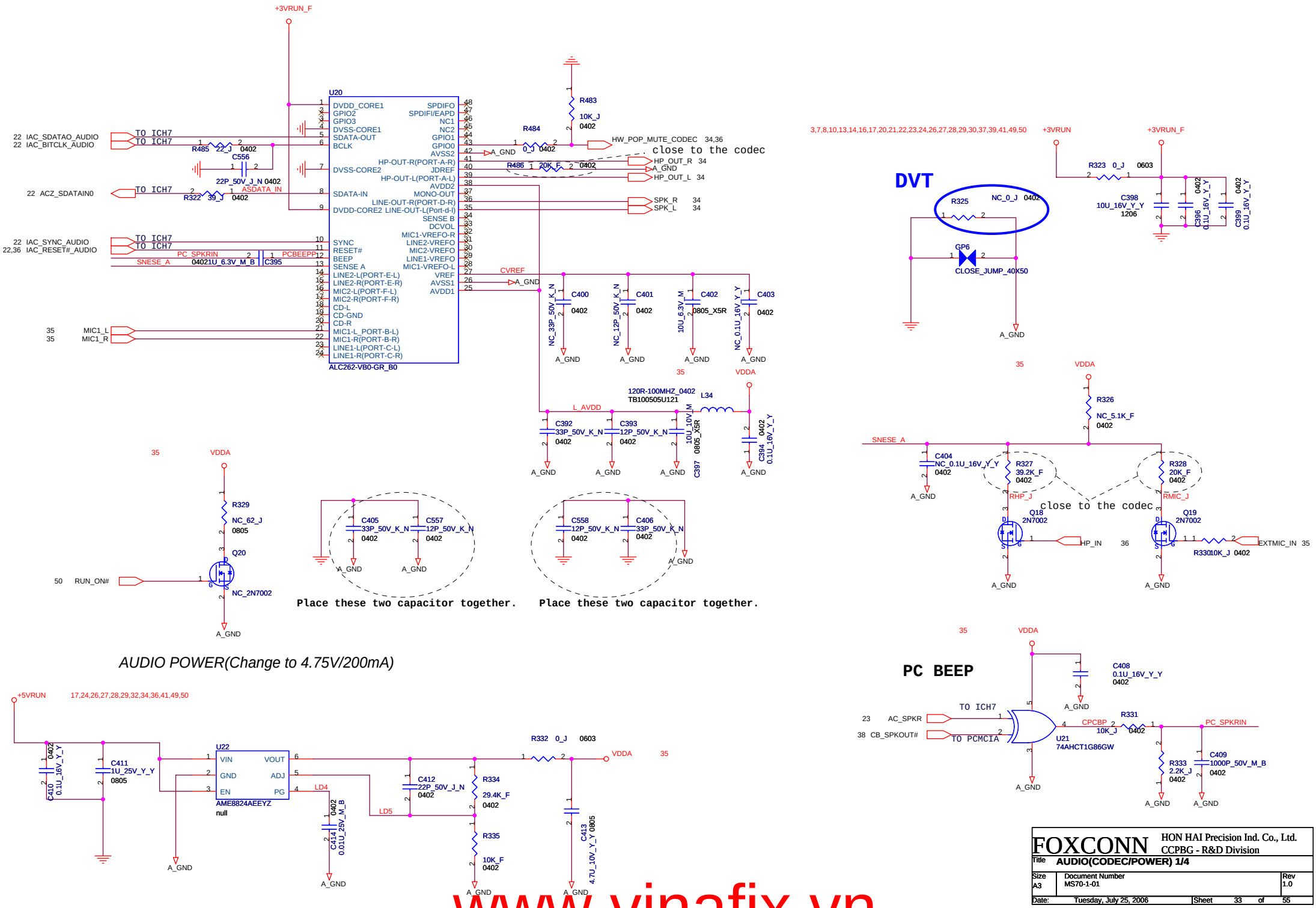
FAN1

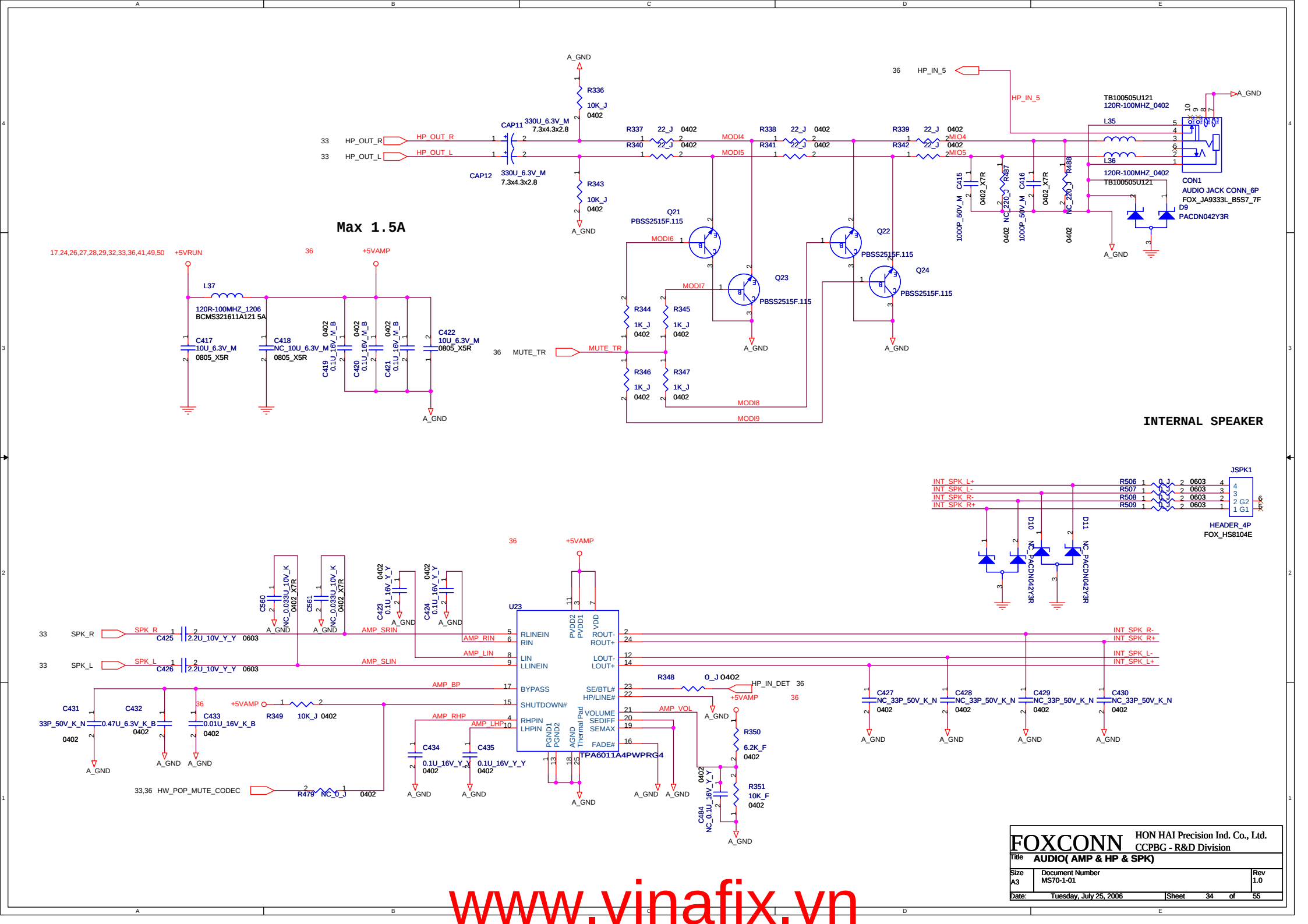


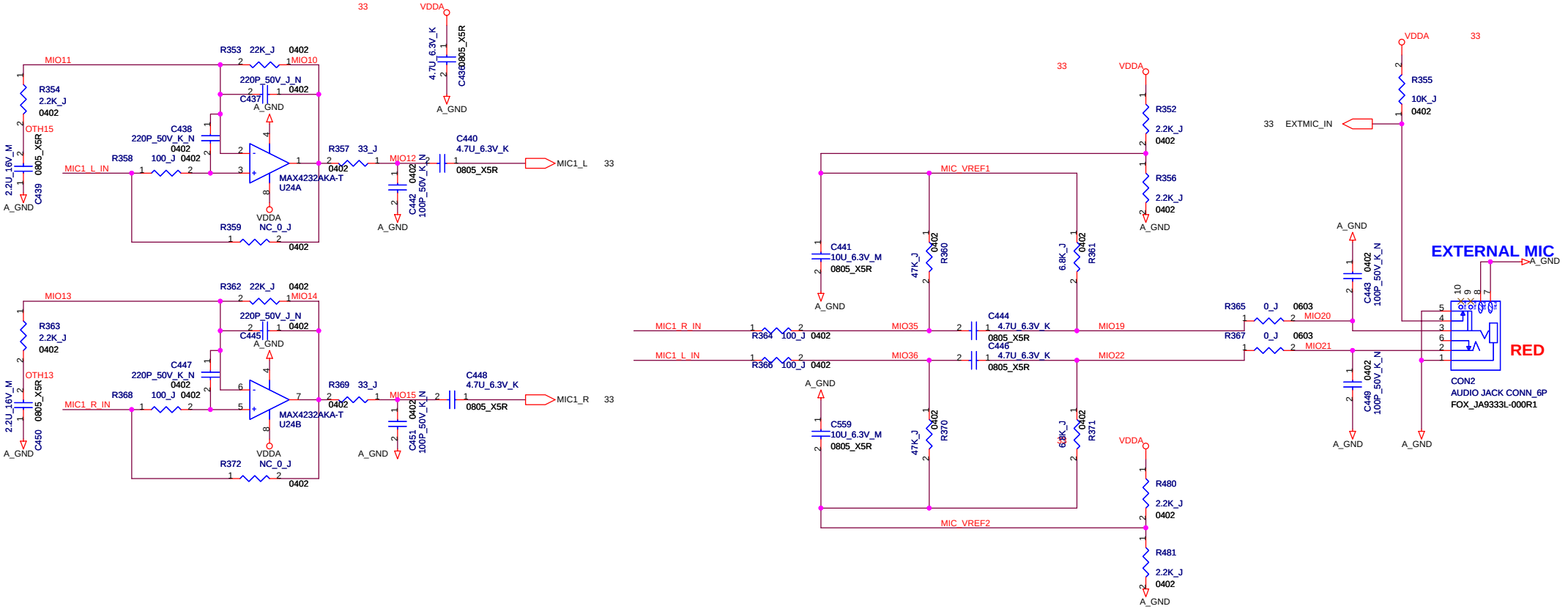
FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division		
Title: FAN			
Size: A3	Document Number: MS70-1-01		Rev: 1.0
Date: Tuesday, August 01, 2006	Sheet 31 of 55		



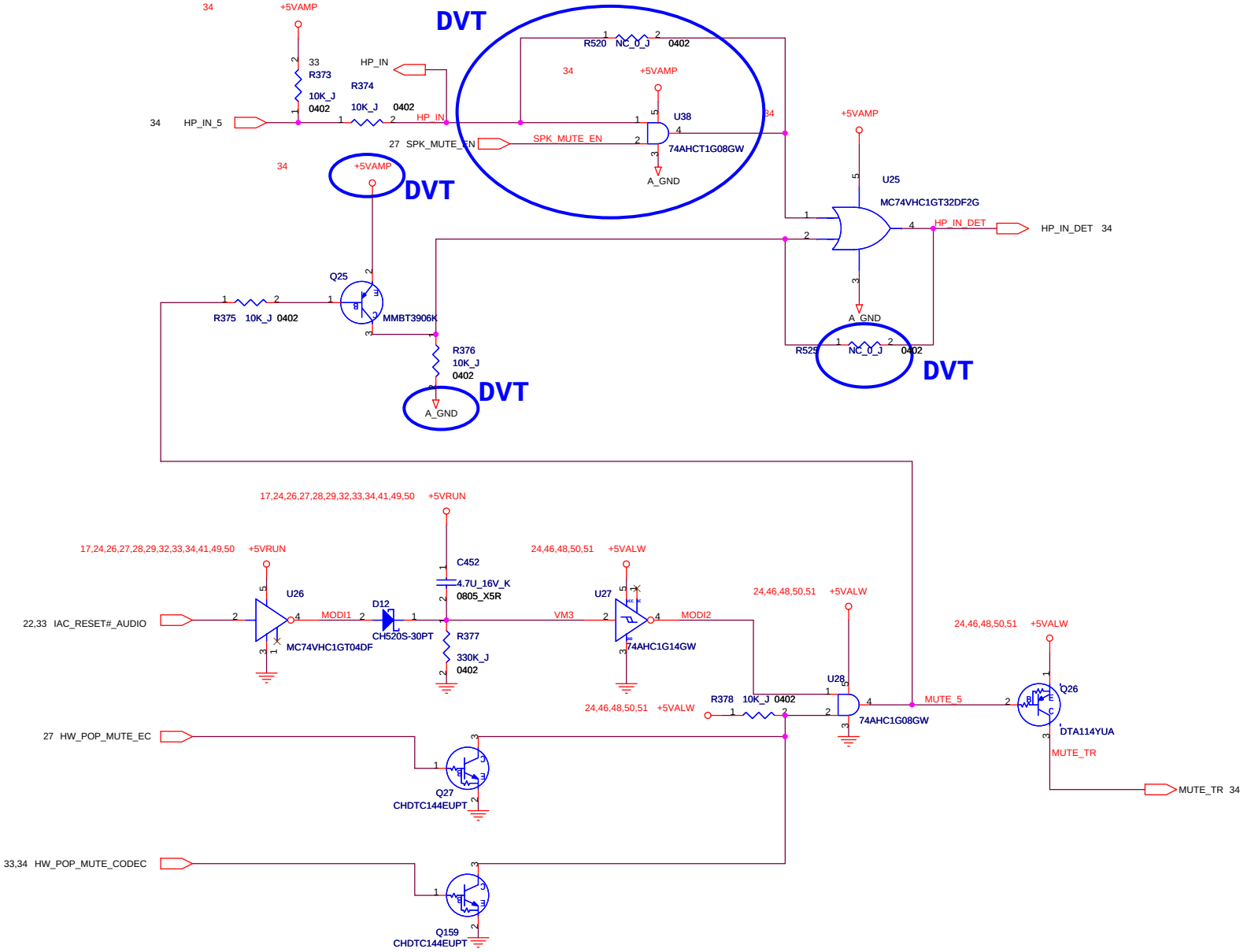
FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: OIDE		
Size: A3	Document Number: MS70-1-01	Rev: 1.0
Date: Tuesday, July 25, 2006	Sheet 32 of 55	







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 1.0
Date: Tuesday, July 25, 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 1.0
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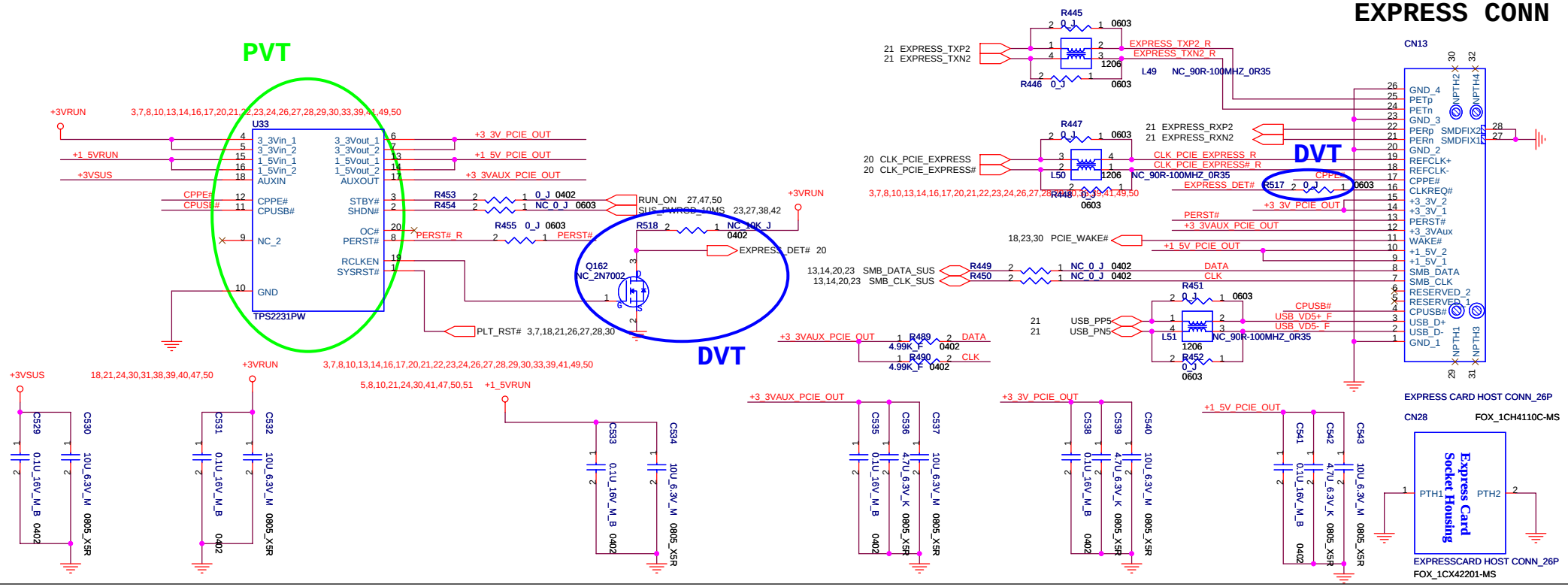
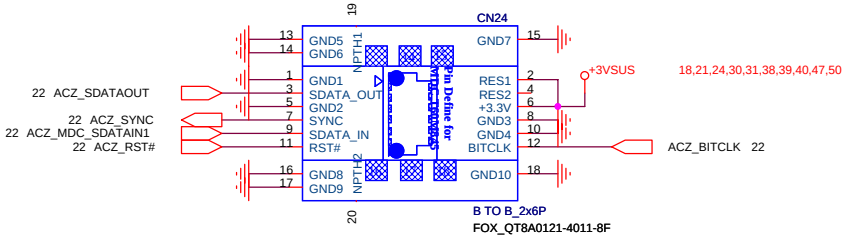
EXPRESS CONN



MDC CONN.



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: EXPRESS CARD		
Size: A3	Document Number: MS70-1-01	Rev: 1.0
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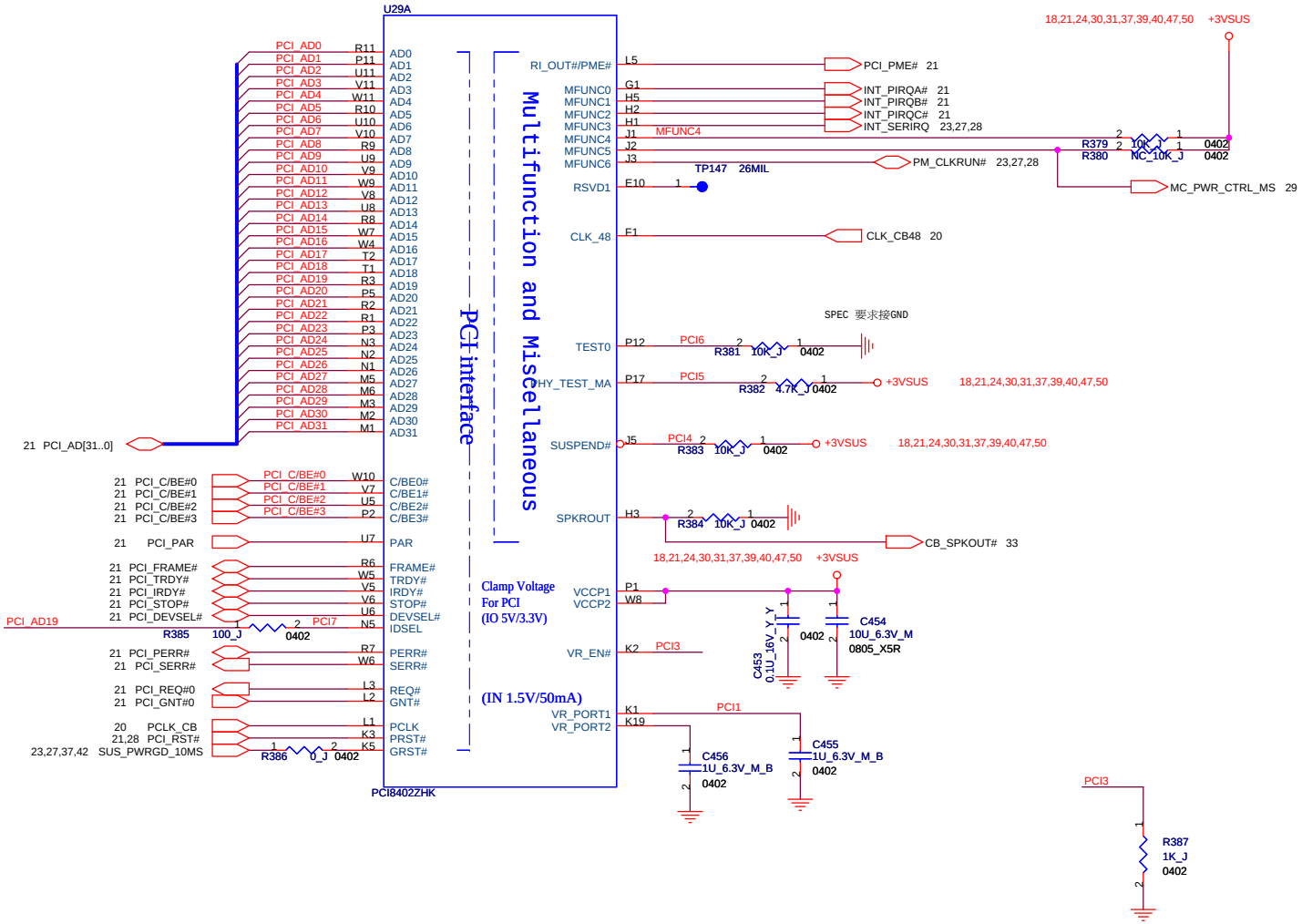

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	PCI (PCI BUS) 1/3	
Size A3	Document Number MS70-1-01	Rev 1.0
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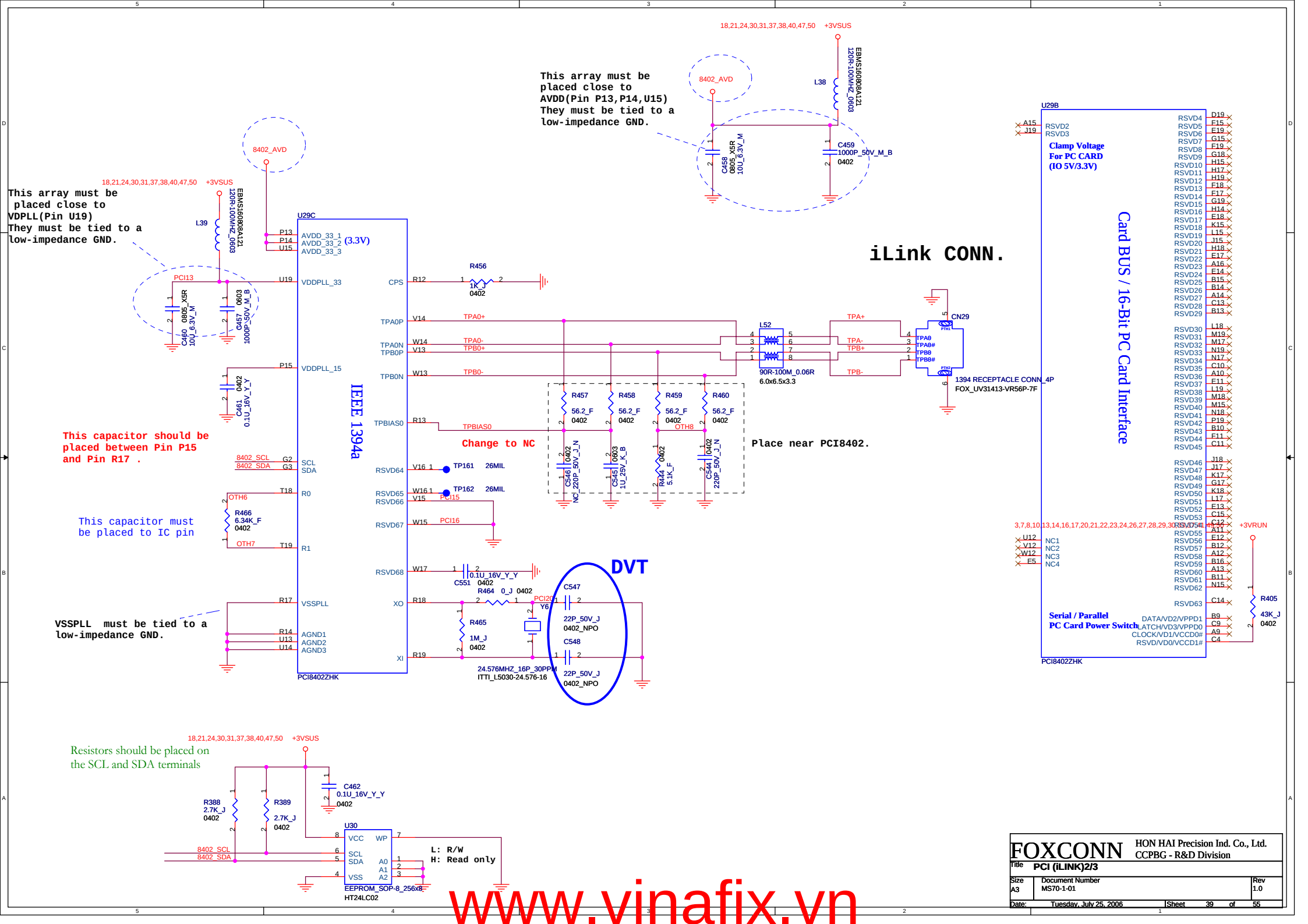
This array must be placed close to AVDD(Pin P13,P14,U15) They must be tied to a low-impedance GND.
18,21,24,30,31,37,38,40,47,50 +3VSUS
8402_AVD
L38
EBMS160808A121 120R-100MHZ_0603
C458 0805_X5R 10U_6.3V_M
C459 1000P_50V_M_B 0402
This array must be placed close to VDDPLL(Pin U19) They must be tied to a low-impedance GND.
L39
U29C
P13 AVDD_33_1
P14 AVDD_33_2 (3.3V)
U15 AVDD_33_3
PCI13
U19 VDDPLL_33
C460 0805_X5R 10U_6.3V_M
C457 0603 1000P_50V_M_B
P15 VDDPLL_15
C461 0402 0.1U_16V_Y_Y
IEEE 1394a
CPS R12
R456 1K_J 0402
TPA0P V14 TPA0+
TPA0N W14 TPA0-
TPB0P V13 TPB0+
TPB0N W13 TPB0-
TPBIAS0 R13 TPBIAS0
Change to NC
R457 56.2_F 0402
R458 56.2_F 0402
R459 56.2_F 0402
R460 56.2_F 0402
C546 0402 220P_50V_J_N NC
C545 0603 1U_25V_K_B
R444 0402 5.1K_F
C544 0402 220P_50V_J_N
Place near PCI8402.
L52
90R-100M_0.06R 6.0x6.5x3.3
TPA+ TPA- TPB+ TPB-
TPA0 TPA0# TPB0 TPB0#
CN29
1394 RECEPTACLE CONN_4P FOX_UV31413-VR56P-7F
iLink CONN.
This capacitor should be placed between Pin P15 and Pin R17 .
8402_SCL G2 SCL
8402_SDA G3 SDA
T18 R0
OTH6
R466 6.34K_F 0402
OTH7 T19 R1
This capacitor must be placed to IC pin
RSVD64 V16 TP161 26MIL
RSVD65 W16 TP162 26MIL
RSVD66 V15 PCI15
RSVD67 W15 PCI16
RSVD68 W17
C551 0.1U_16V_Y_Y 0402
R464 0_J 0402
XO R18 PCI20
Y6
R465 1M_J 0402
XI R19
C547 22P_50V_J 0402_NPO
C548 22P_50V_J 0402_NPO
24.576MHZ_16P_30PPM ITTI_L5030-24.576-16
DVT
R17 VSSPLL
VSSPLL must be tied to a low-impedance GND.
R14 AGND1
U13 AGND2
U14 AGND3
PCI8402ZHK
U29B
Clamp Voltage For PC CARD (IO 5V/3.3V)
A15 RSVD2
J19 RSVD3
RSVD4 RSVD5 RSVD6 RSVD7 RSVD8 RSVD9 RSVD10 RSVD11 RSVD12 RSVD13 RSVD14 RSVD15 RSVD16 RSVD17 RSVD18 RSVD19 RSVD20 RSVD21 RSVD22 RSVD23 RSVD24 RSVD25 RSVD26 RSVD27 RSVD28 RSVD29
RSVD30 RSVD31 RSVD32 RSVD33 RSVD34 RSVD35 RSVD36 RSVD37 RSVD38 RSVD39 RSVD40 RSVD41 RSVD42 RSVD43 RSVD44 RSVD45
RSVD46 RSVD47 RSVD48 RSVD49 RSVD50 RSVD51 RSVD52 RSVD53 RSVD54 RSVD55 RSVD56 RSVD57 RSVD58 RSVD59 RSVD60 RSVD61 RSVD62 RSVD63
Card BUS / 16-Bit PC Card Interface
3,7,8,10,13,14,16,17,20,21,22,23,24,26,27,28,29,30,45 +3VRUN
U12 NC1
V12 NC2
W12 NC3
E5 NC4
R405 43K_J 0402
Serial / Parallel PC Card Power Switch
DATA/VD2/VPPD1
LATCH/VD3/VPPD0
CLOCK/VD1/VCCD0#
RSVD/VD0/VCCD1#
PCI8402ZHK
Resistors should be placed on the SCL and SDA terminals
18,21,24,30,31,37,38,40,47,50 +3VSUS
R388 2.7K_J 0402
R389 2.7K_J 0402
C462 0.1U_16V_Y_Y 0402
U30
VCC WP
SCL
SDA A0
A1
A2
VSS
8402_SCL
8402_SDA
L: R/W
H: Read only
EEPROM_SOP-8_256x8
HT24LC02
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title PCI (iLINK)2/3
Size A3
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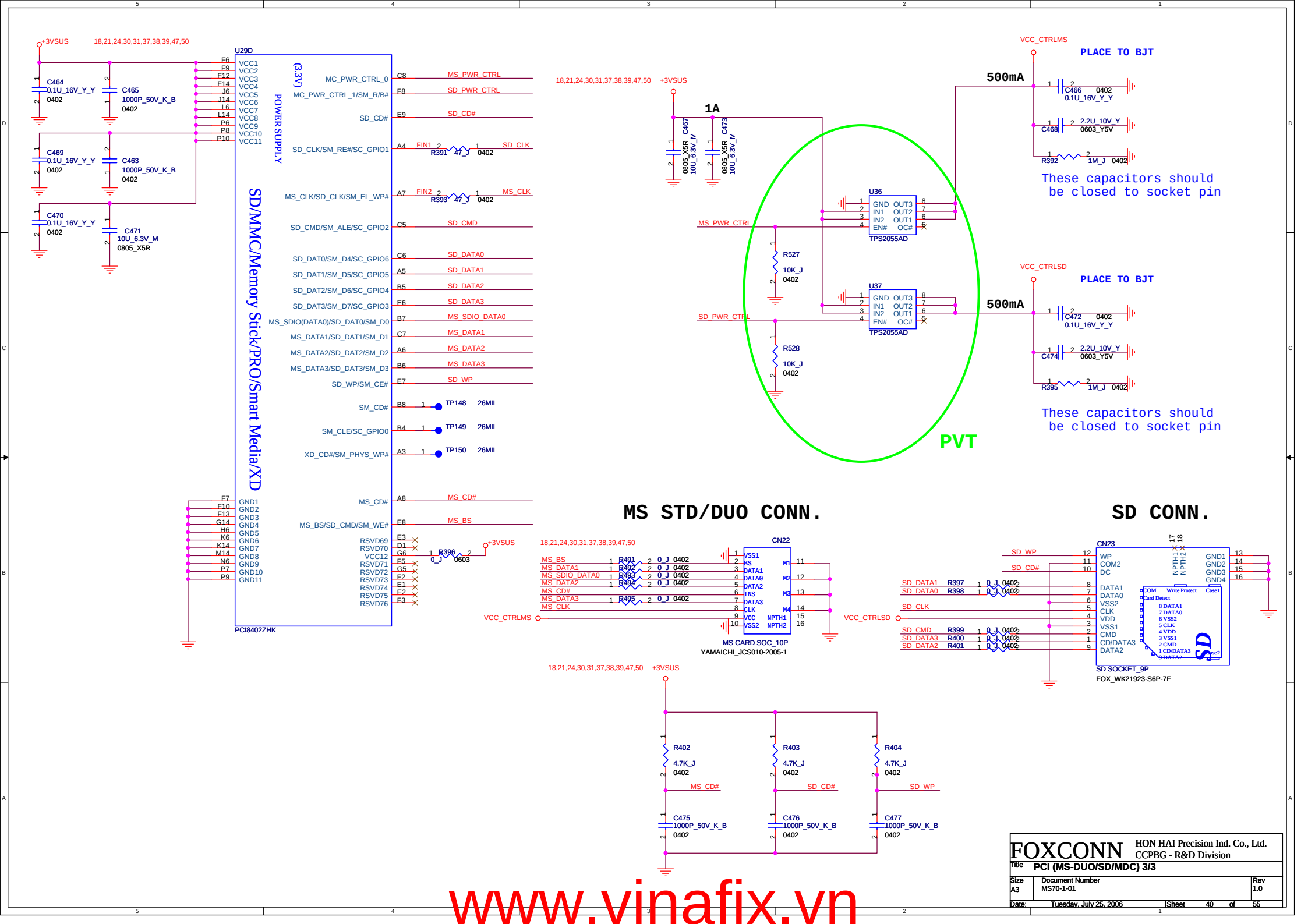
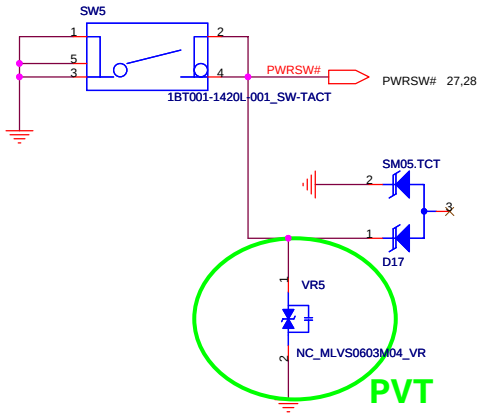
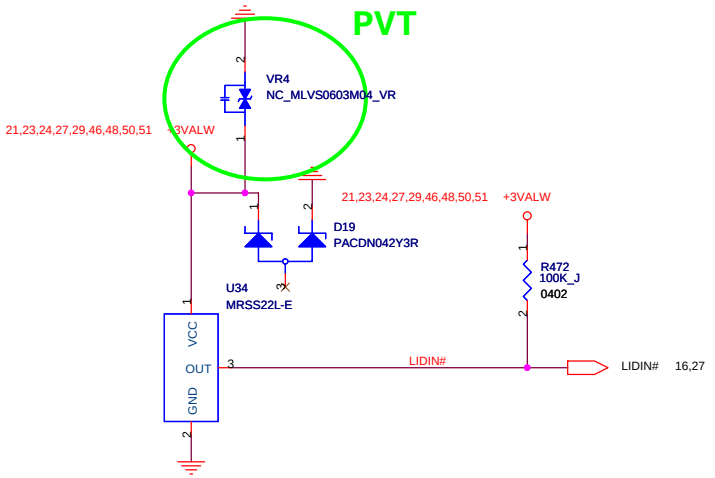


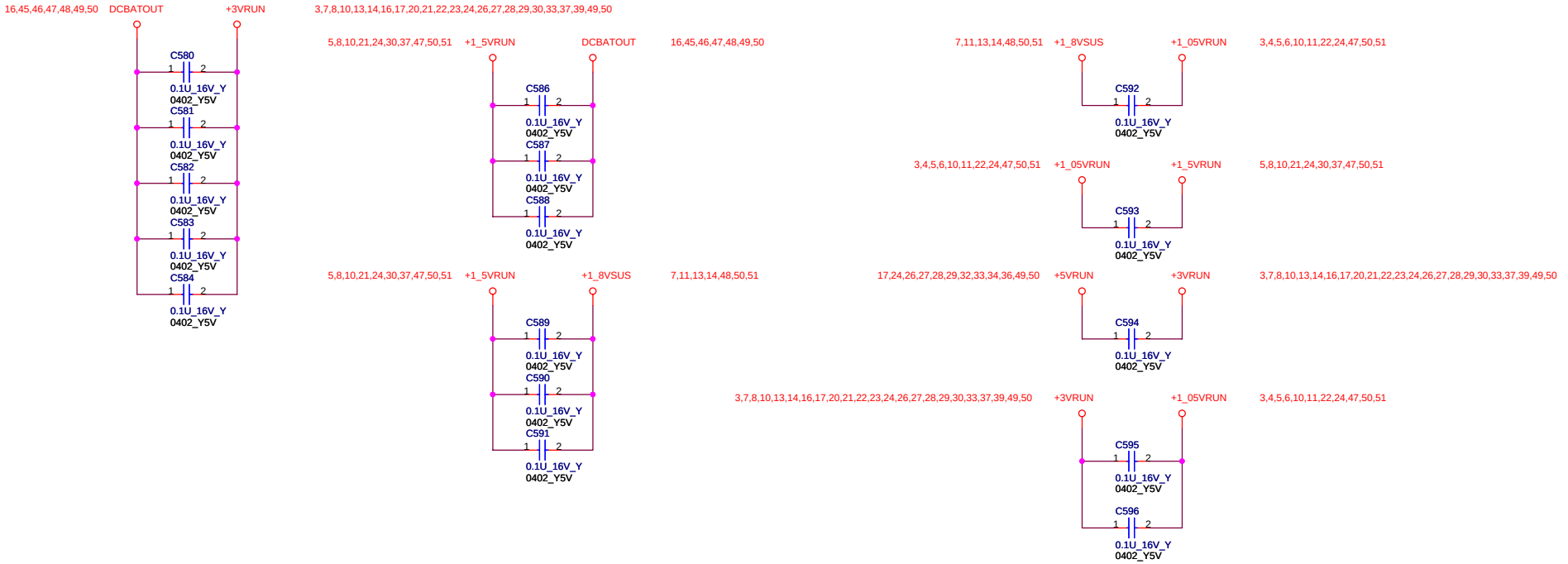
POWER BUTTON





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 1.0
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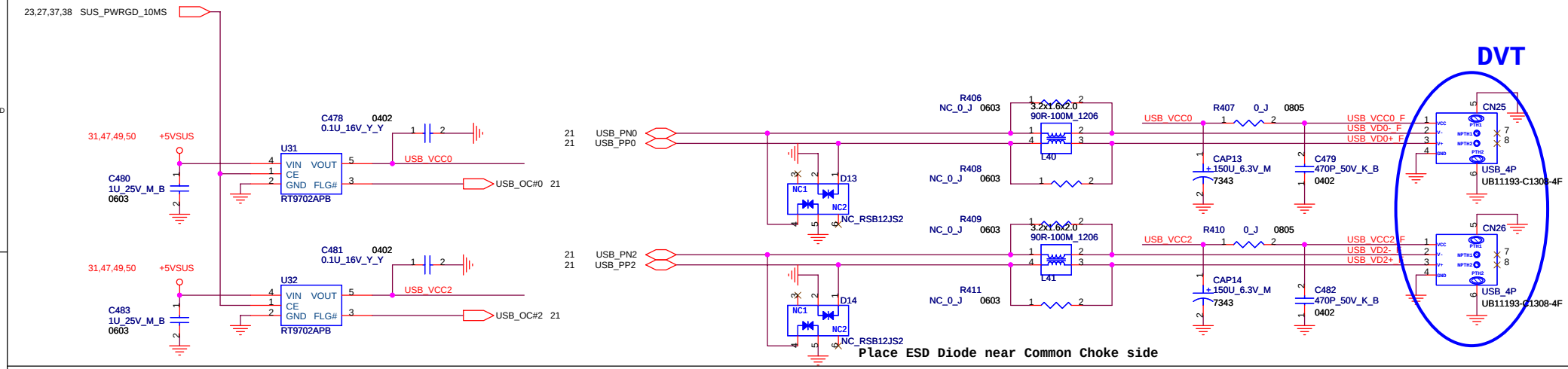
USB CONN X 2



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: USB2.0		
Size: A3	Document Number: MS70-1-01	Rev: 1.0
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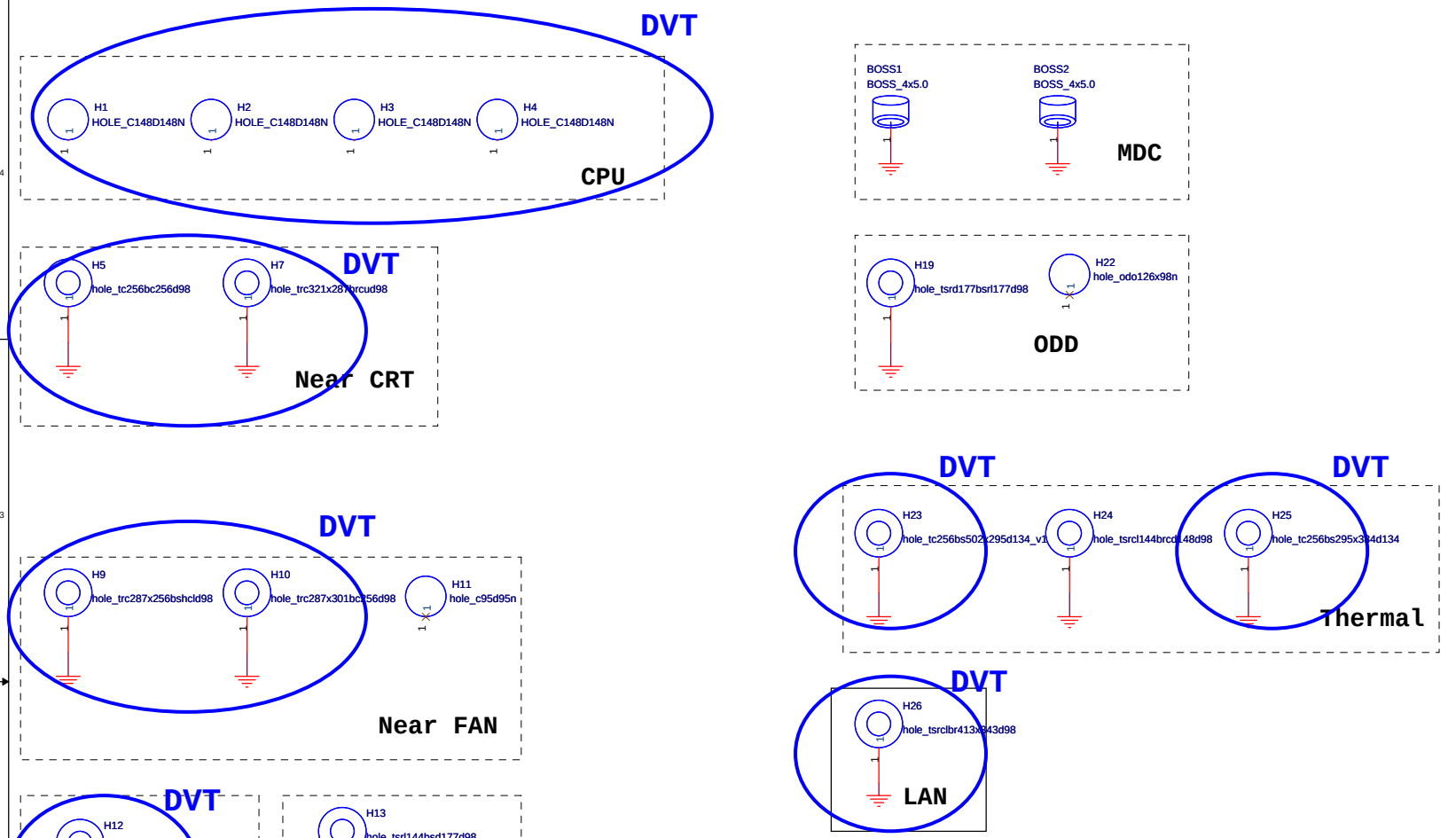

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	HOLE	
Size A3	Document Number MS70-1-01	Rev 1.0
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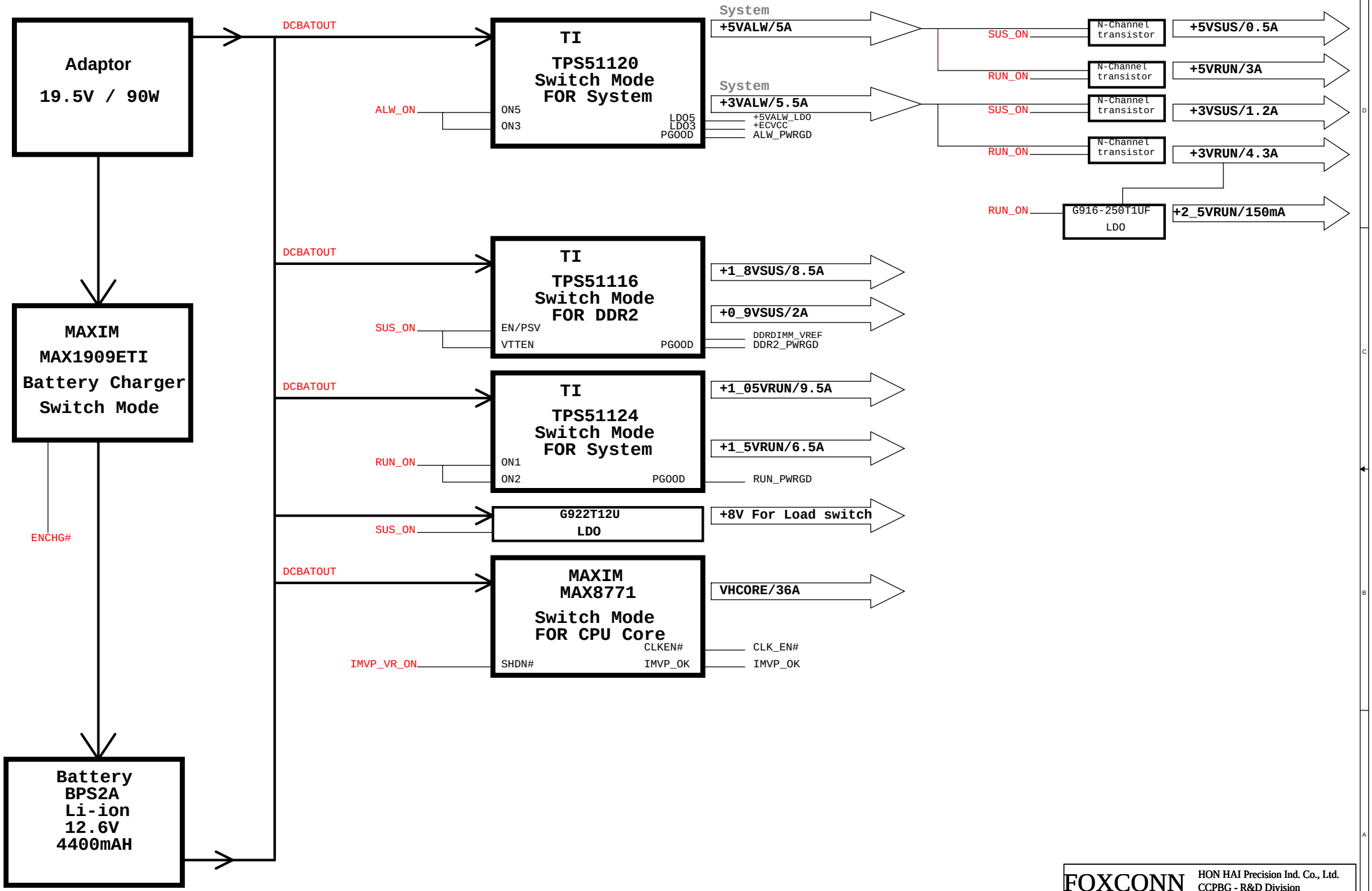
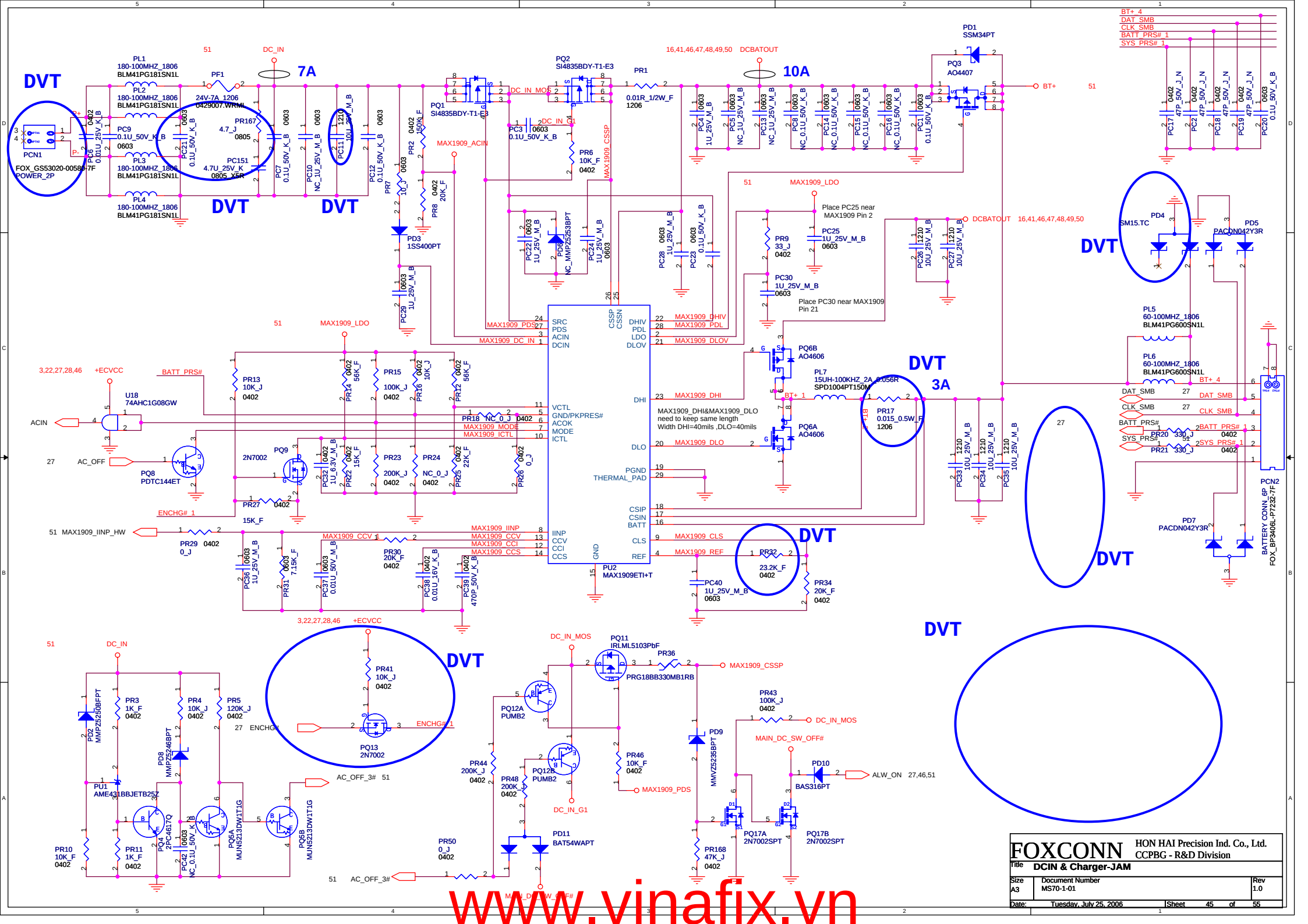


FOXCONN HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division

Title	Power Design Diagram-ZG	
Size A3	Document Number MS70-1-01	Rev 1.0
Date: Tuesday, July 25, 2006	Sheet 44 of 55	


DVT
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
PR167
4.7_J
0805
PC151
4.7U_25V_K
0805_X5R
PQ1
SI4835BDY-T1-E3
PQ2
PR1
0.01R_1/2W_F
1206
PD1
SSM34PT
PQ3
AO4407
BT+
DC_IN_MOS
MAX1909_ACIN
MAX1909_CSSP
PR6
10K_F
0402
PC3
0603
0.1U_50V_K_B
PD3
1SS400PT
PR7
10_J
PR8
20K_F
PC29
1U_25V_M_B
PD6
NC_MMPZ5253BPT
PC22
PC24
PC28
PC23
PC25
1U_25V_M_B
0603
PR9
33_J
0402
PC30
Place PC25 near
MAX1909 Pin 2
Place PC30 near MAX1909
Pin 21
DCBATOUT
16,41,46,47,48,49,50
MAX1909_LDO
MAX1909_PDS
MAX1909_DC_IN
MAX1909_DHIV
MAX1909_PDL
MAX1909_DLOV
MAX1909_DHI
MAX1909_DLO
MAX1909_CLS
MAX1909_REF
SRC
PDS
ACIN
DCIN
CSSP
CSSN
DHIV
PDL
LDO
DLOV
DHI
DLO
PGND
THERMAL_PAD
CSIP
CSIN
BATT
CLS
REF
VCTL
GND/PKPRES#
ACOK
MODE
ICTL
IINP
CCV
CCI
CCS
GND
PU2
MAX1909ETI+T
PQ6B
AO4606
PQ6A
PL7
15UH-100KHZ_2A_0.056R
SPD1004PT150M
PR17
0.015_0.5W_F
1206
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
PD4
SM15.TC
PD5
PACDN042Y3R
PD7
PACDN042Y3R
PL5
60-100MHZ_1806
BLM41PG600SN1L
PL6
PR20
330_J
PR21
330_J
DAT_SMB
CLK_SMB
BATT_PRS#
SYS_PRS#_1
PCN2
BATTERY CONN_6P
FOX_BP3406L-PT232-7F
U18
74AHC1G08GW
ACIN
AC_OFF
PQ8
PDTC144ET
PQ9
2N7002
PR13
10K_J
0402
PR14
56K_F
PR15
100K_J
PR16
10K_J
PR12
56K_F
PR18
NC_0_J
PR23
200K_J
PR24
NC_0_J
PR25
22K_F
PR26
0_J
PR27
15K_F
ENCHG#_1
PR29
0_J
PR30
20K_F
PR31
7.15K_F
PC32
1U_6.3V_M_B
PC36
1U_25V_M_B
PC37
0.01U_50V_M_B
PC38
0.01U_16V_K_B
PC39
470P_50V_K_B
MAX1909_IINP_HW
MAX1909_IINP
MAX1909_CCV_1
MAX1909_CCV
MAX1909_CCI
MAX1909_CCS
PR41
10K_J
0402
PQ13
2N7002
ENCHG#_1
PR3
1K_F
PR4
10K_J
PR5
120K_J
PD2
MMPZ5250BFPT
PD8
MMPZ5246BPT
PU1
AME431BBJETB25Z
PQ4
2PC4617Q
PQ5A
MUN5213DW1T1G
PQ5B
MUN5213DW1T1G
PR10
10K_F
PR11
1K_F
AC_OFF_3#
PQ11
IRLML5103PbF
PRG18BB330MB1RB
PR36
PQ12A
PUMB2
PQ12B
PUMB2
PR44
200K_J
PR48
200K_J
PR46
10K_F
PR43
100K_J
DC_IN_G1
PD11
BAT54WAPT
PR50
0_J
PD9
MMVZ5235BPT
MAIN_DC_SW_OFF#
PD10
BAS316PT
ALW_ON
27,46,51
PR17A
2N7002SPT
PQ17B
2N7002SPT
PR168
47K_J
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title
DCIN & Charger-JAM
Size
A3
Document Number
MS70-1-01
Rev
1.0
Date:
Tuesday, July 25, 2006
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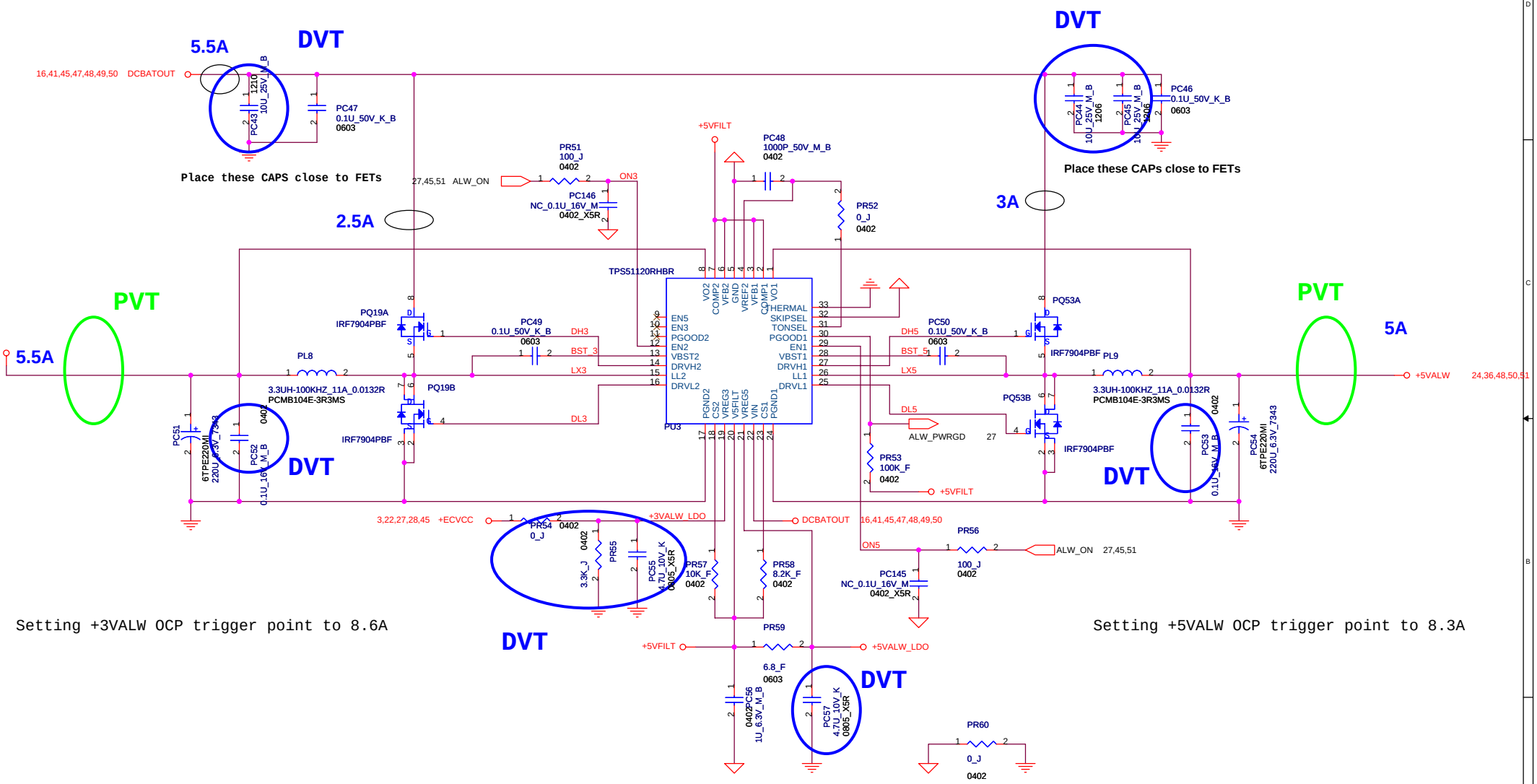

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division		
Title	D/D Power-JAM		
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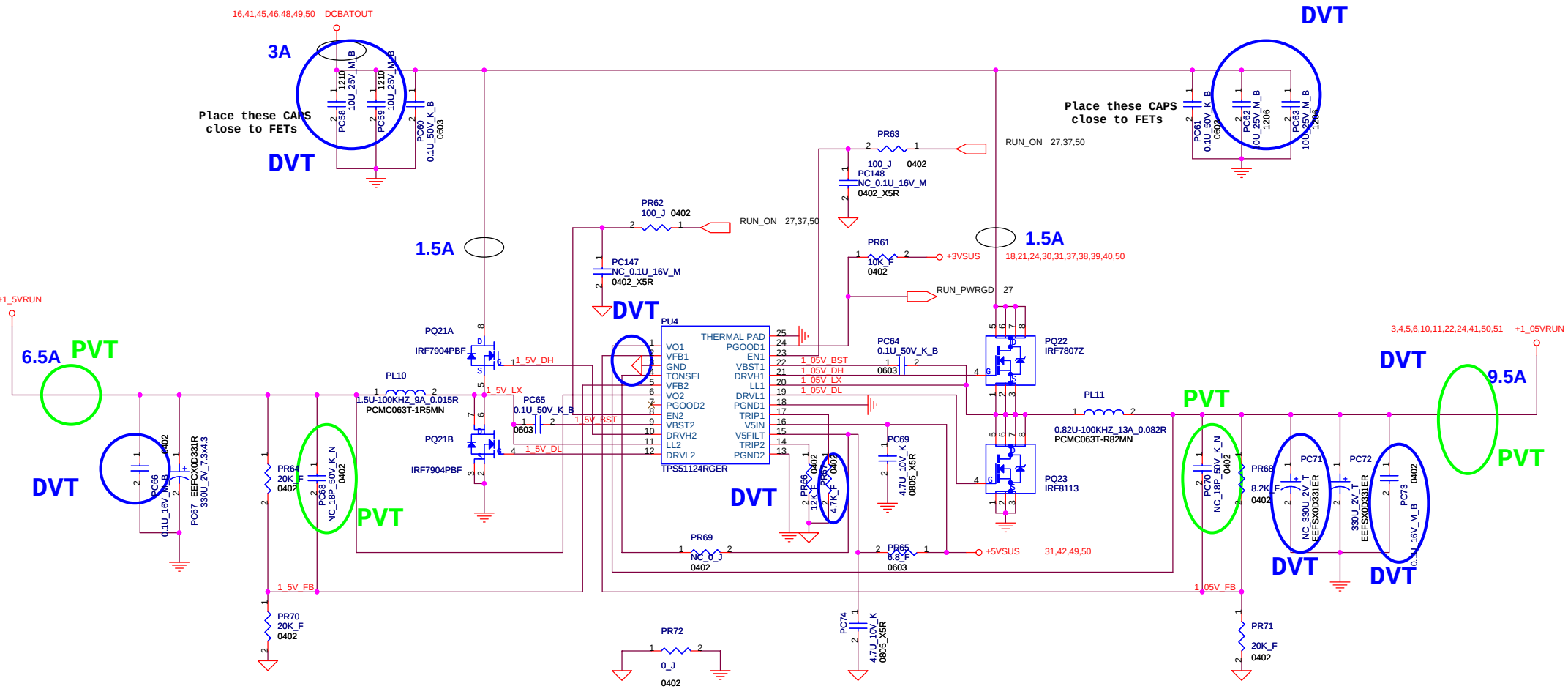

Setting +1_5VRUN OCP trigger point to 10.5A

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 1.0
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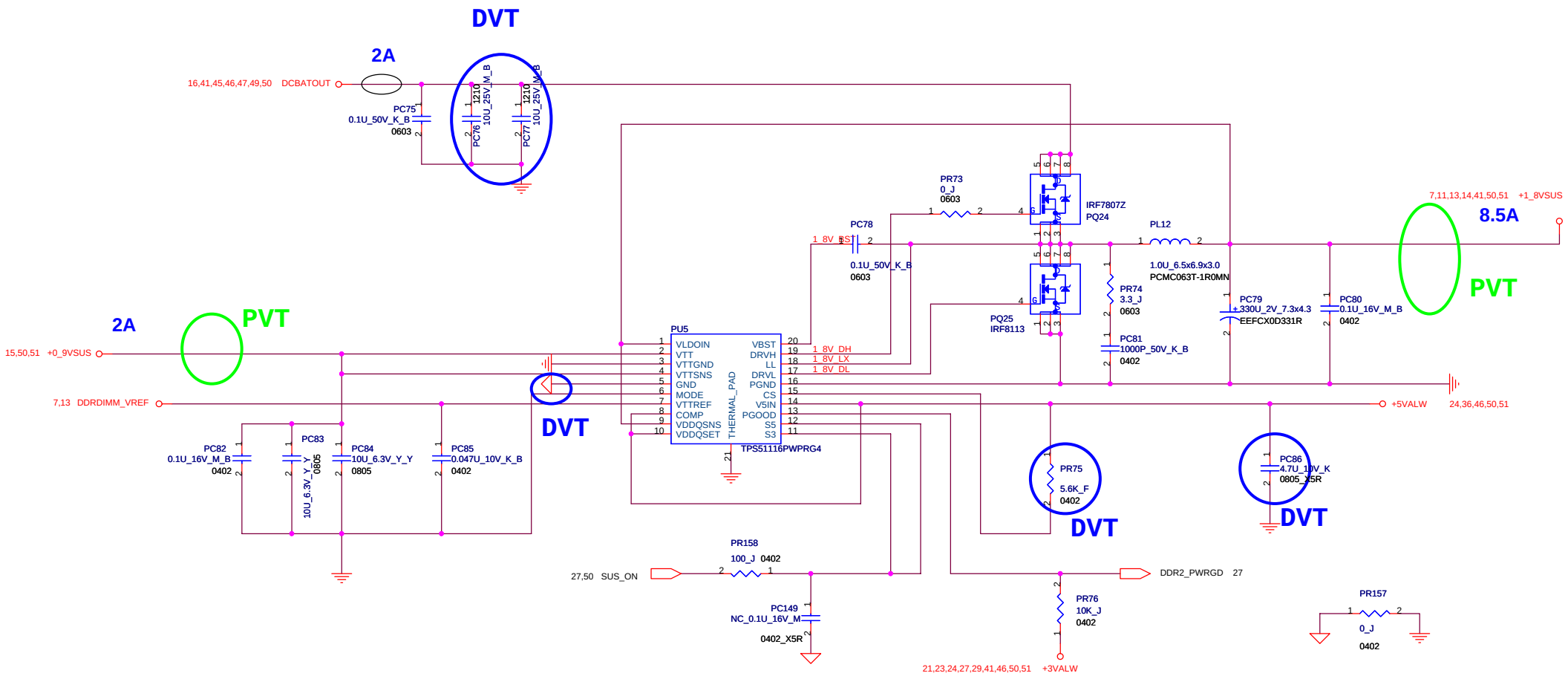
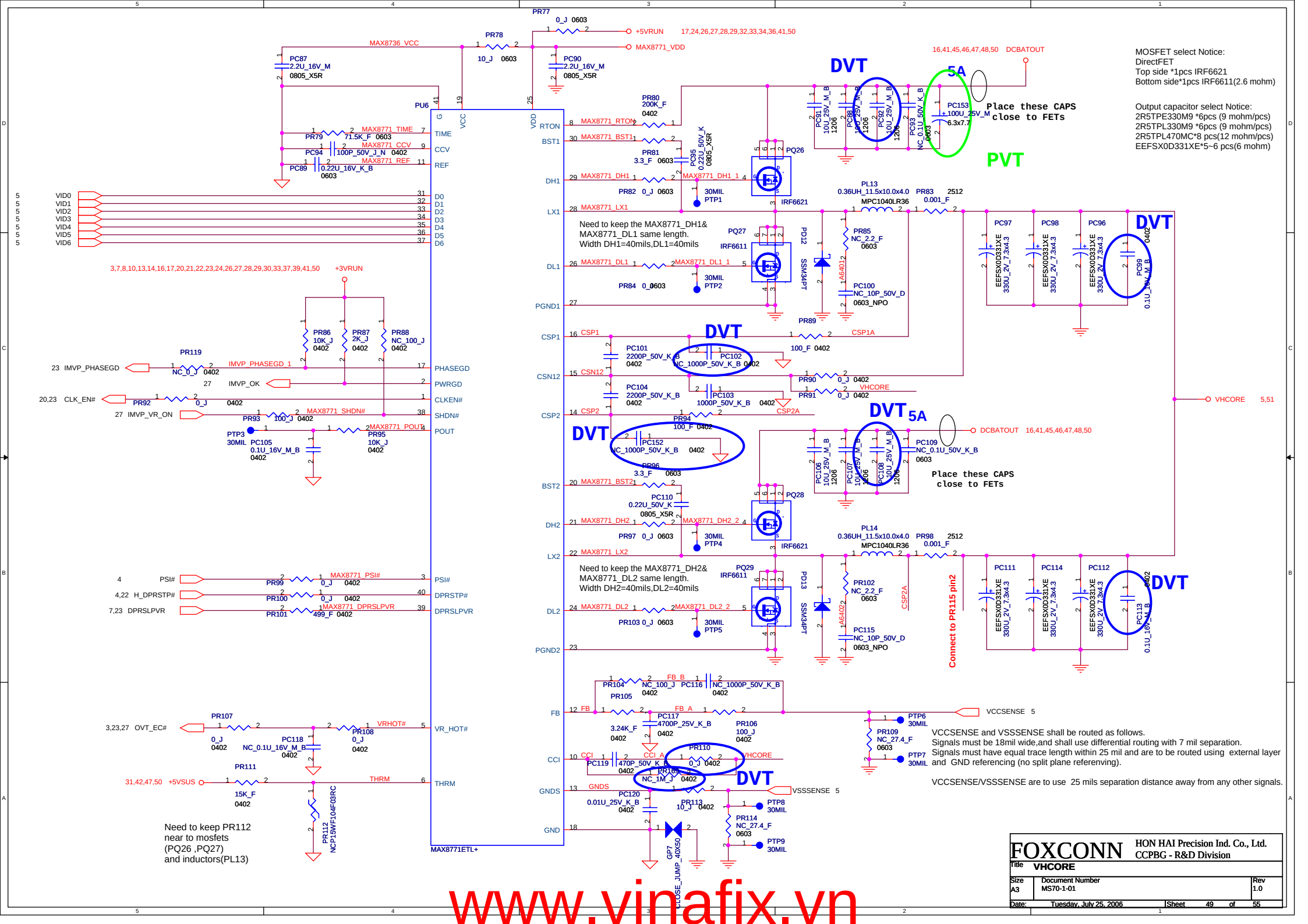
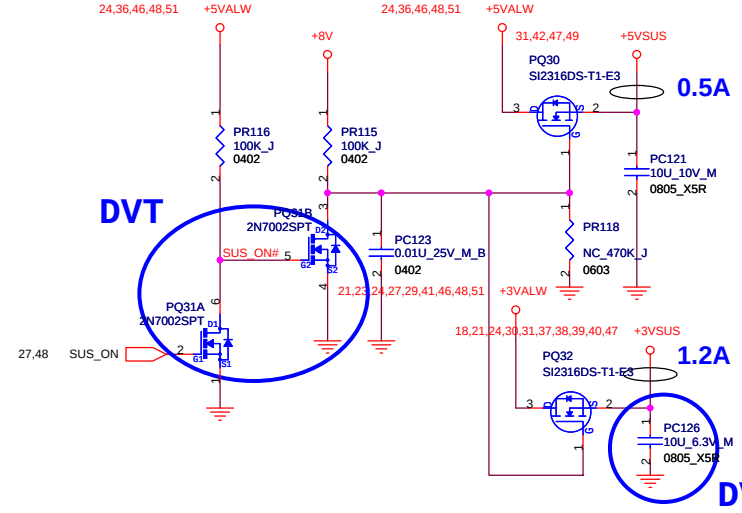
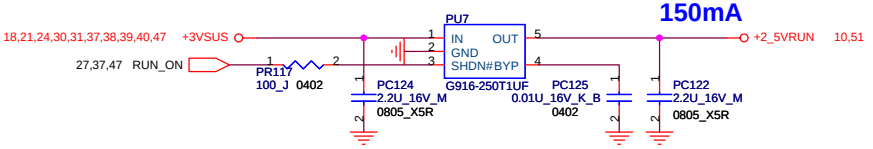


Setting +1_8VSUS OCP trigger point to 11.6A

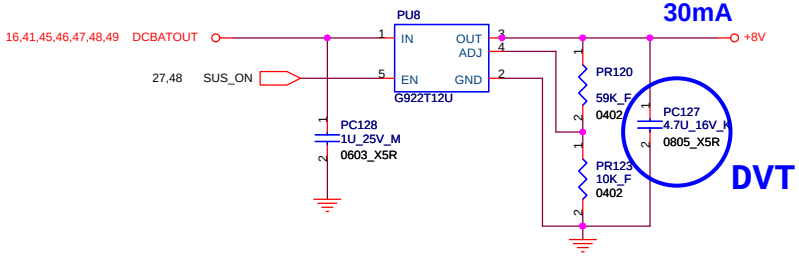
FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	1.8V/0.9V-CWK	
Size A3	Document Number MS70-1-01	Rev 1.0
Date: Tuesday, July 25, 2006	Sheet 48 of 55	

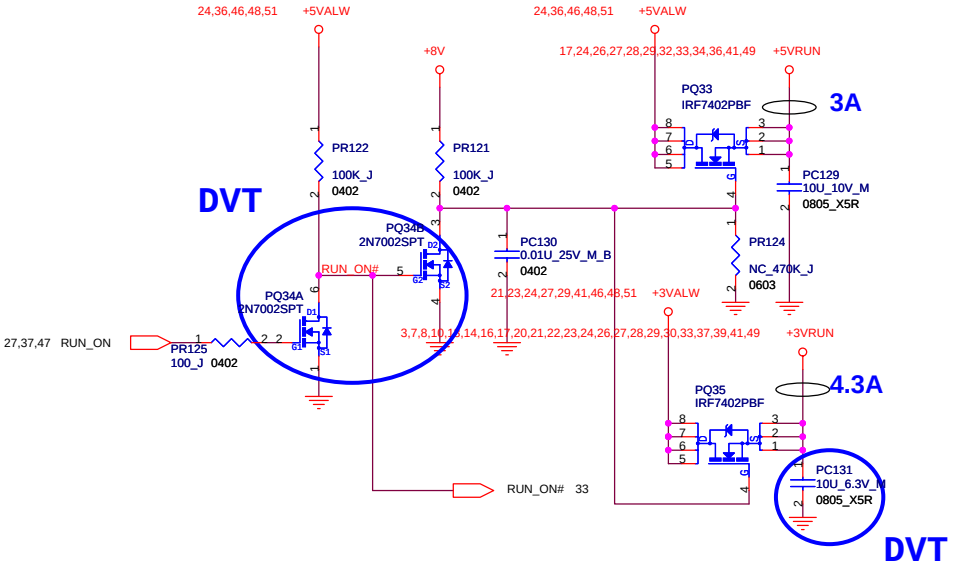




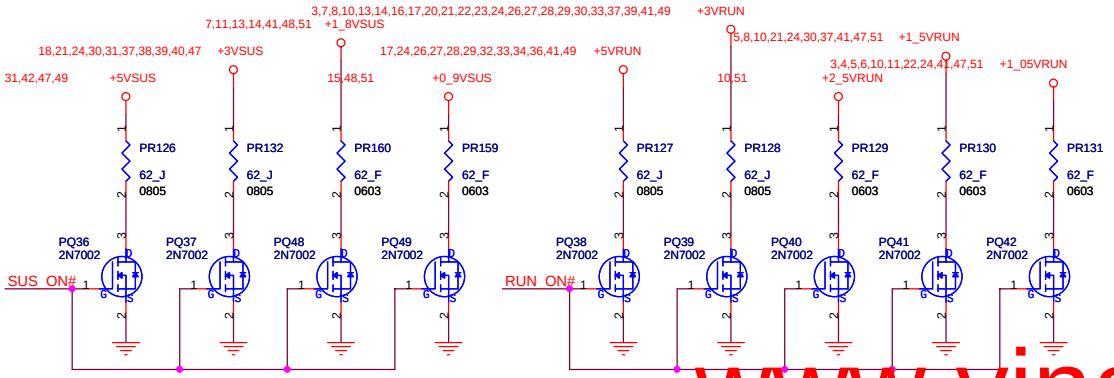


for load switch





Discharge circuit for power-off



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division		
Title	Other power plan-ZG		
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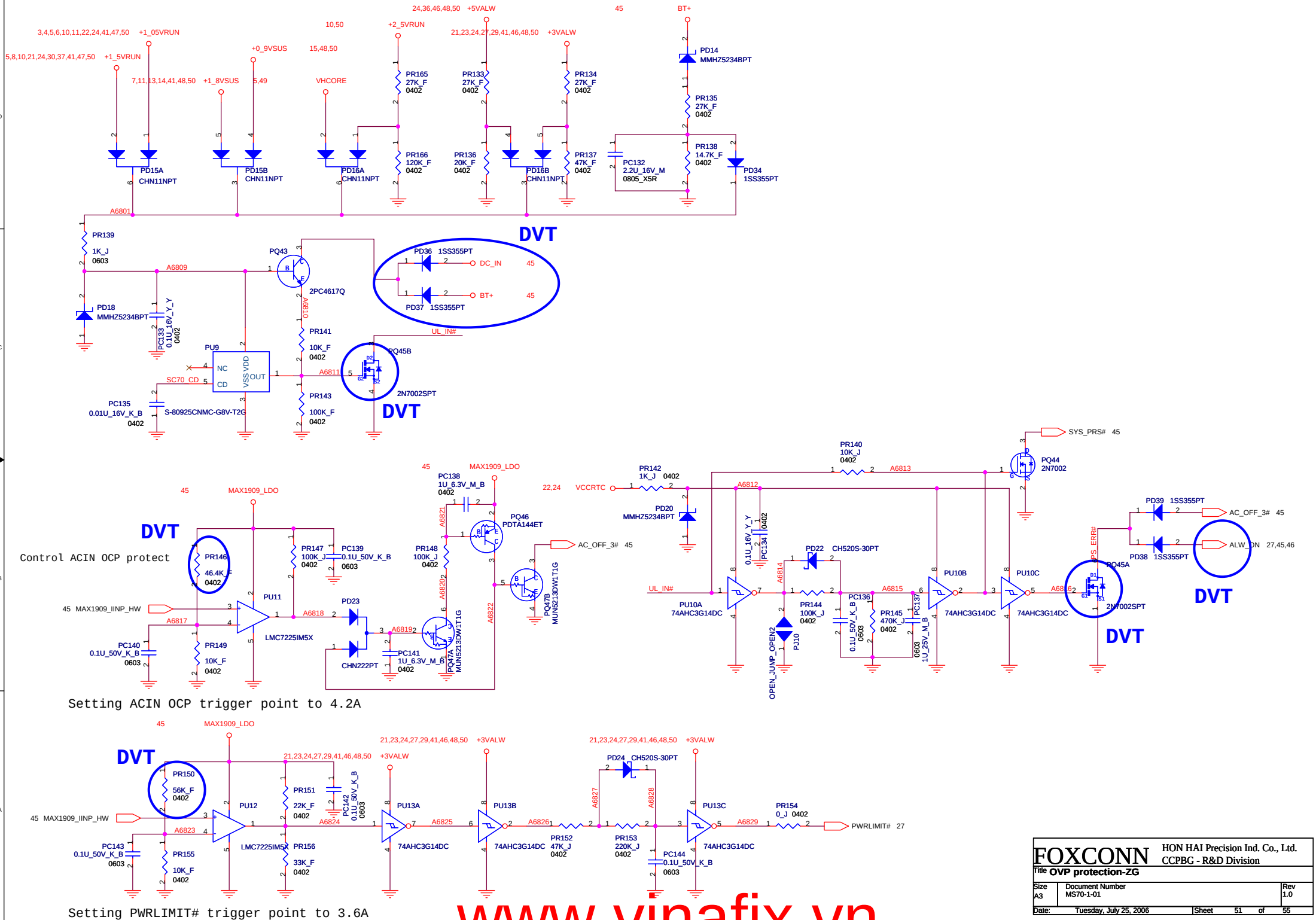

HISTORY (1)

(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

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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

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