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P. Leader	Check by	Design by

Project Code & Schematics Subject: MS70 Main Board

PCB P/N:
(FUBAI) 1P-0065100-60SB
(NAN YA) 1P-0065200-60SB
(HANSTAR) 1P-0065500-60SB

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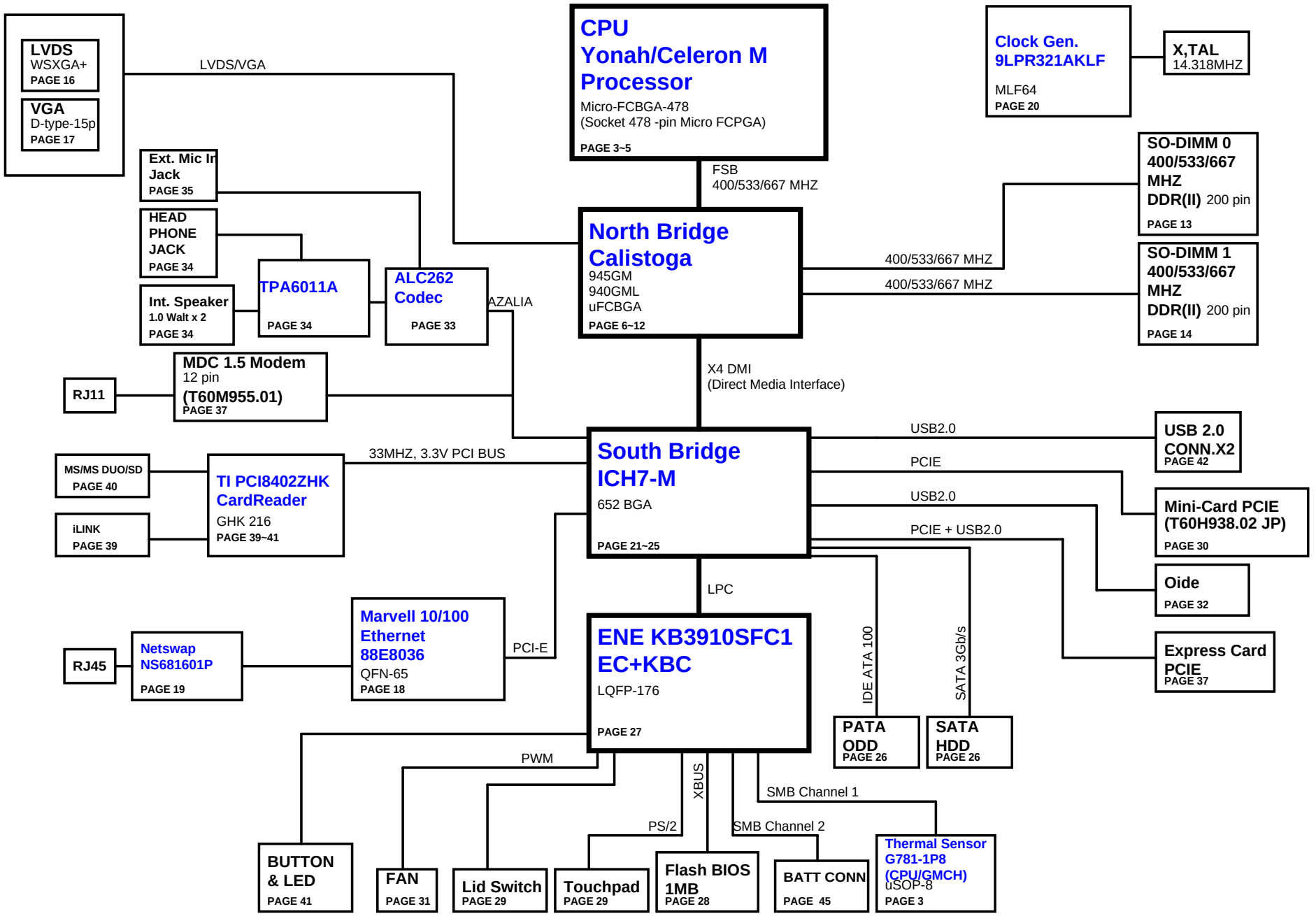
RAPTOR/MS70(CALISTOGA GM/GML Block Diagram)



FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
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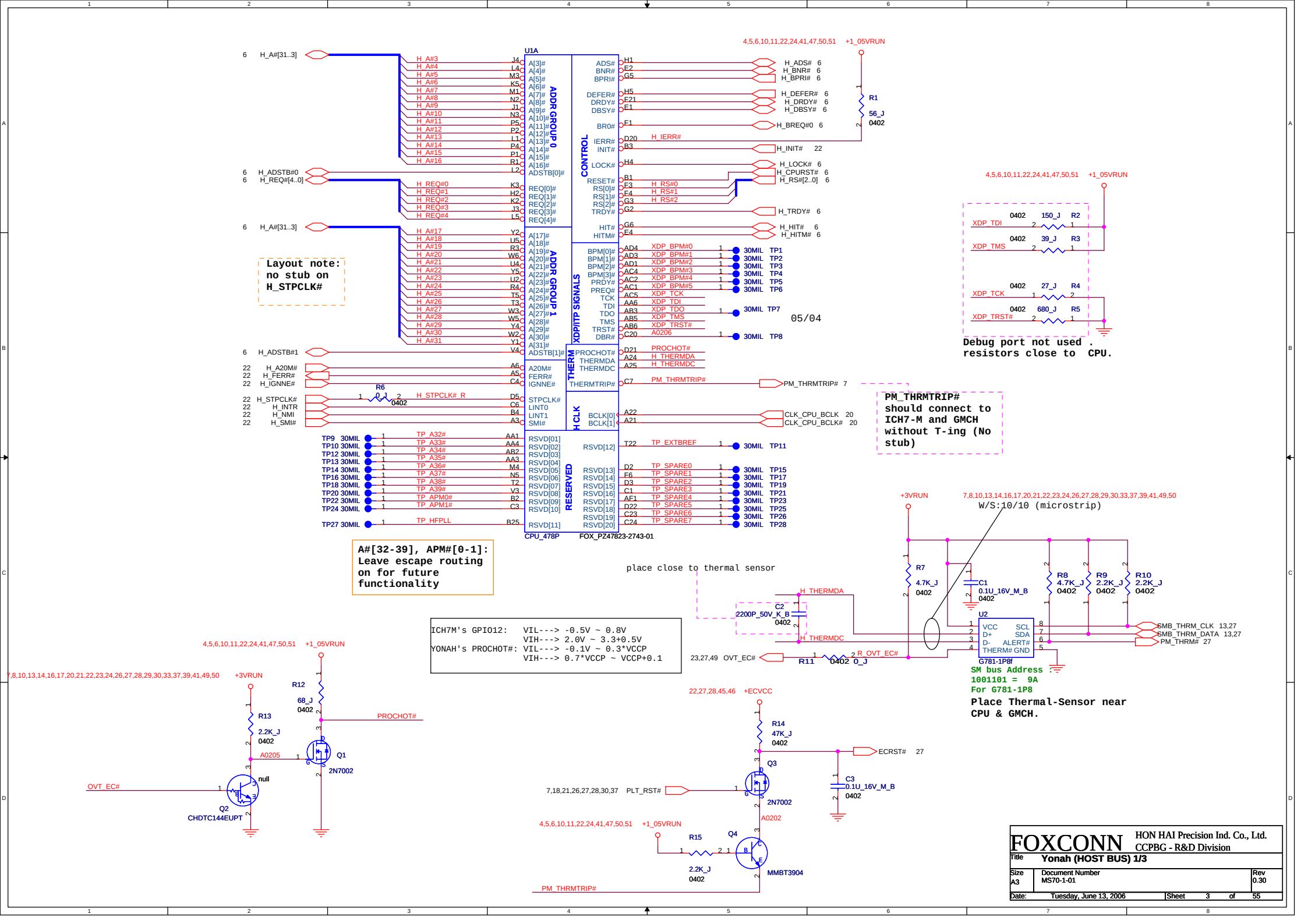
U1A
ADDR GROUP 0
ADDR GROUP 1
CONTROL
XDP/ITP SIGNALS
THERM
H CLK
RESERVED
CPU_478P
FOX_PZ47823-2743-01
Layout note:
no stub on
H_STPCLK#
A#[32-39], APM#[0-1]:
Leave escape routing
on for future
functionality
PM_THRMTRIP#
should connect to
ICH7-M and GMCH
without T-ing (No
stub)
Debug port not used .
resistors close to CPU.
place close to thermal sensor
W/S:10/10 (microstrip)
ICH7M's GPIO12: VIL---> -0.5V ~ 0.8V
VIH---> 2.0V ~ 3.3+0.5V
YONAH's PROCHOT#: VIL---> -0.1V ~ 0.3*VCCP
VIH---> 0.7*VCCP ~ VCCP+0.1
SM bus Address :
1001101 = 9A
For G781-1P8
Place Thermal-Sensor near
CPU & GMCH.
05/04
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HON HAI Precision Ind. Co., Ltd.
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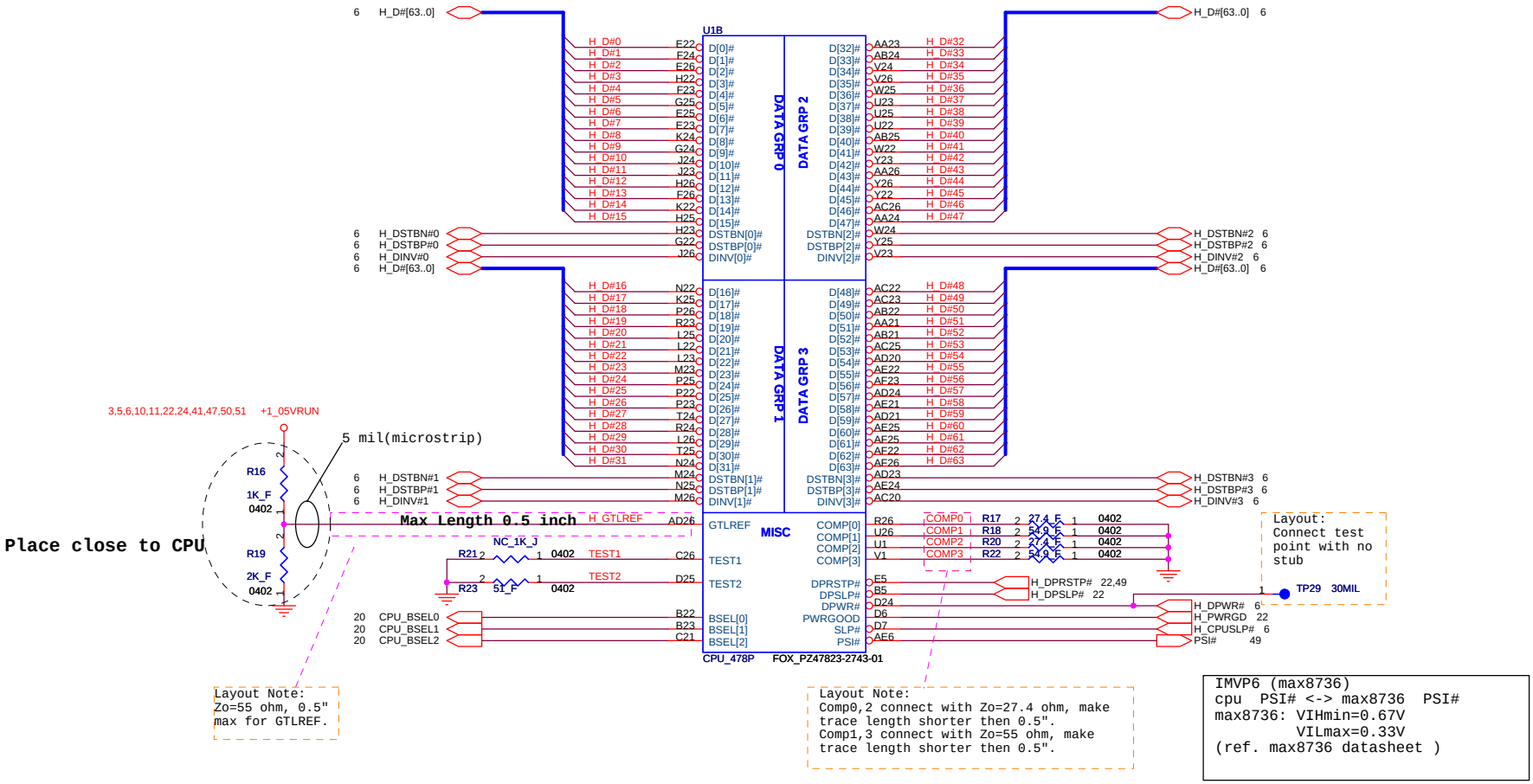

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CPU_VCCA---->120mA
CPU_VCCP----->2.5A
CPU_VCC------>36A

U1C — CPU_478P — FOX_PZ47823-2743-01

U1D — CPU_478P — FOX_PZ47823-2743-01

CAP1 330U_2V_T EEFSX0D331ER

C24–C29 0.1U_25V_M_B 0603

C30 10U_6.3V_M 0805_X5R

C31 0.01U_25V_M_B 0402

3,4,6,10,11,22,24,41,47,50,51 +1_05VRUN

100 mil

8,10,21,24,30,37,41,47,50,51 +1_5VRUN

20 mil

LAYOUT NOTE:
Place 0.01uF
near PIN B26

H_VID0 R25 0_J 0402
H_VID1 R26 0_J 0402
H_VID2 R27 0_J 0402
H_VID3 R28 0_J 0402
H_VID4 R29 0_J 0402
H_VID5 R31 0_J 0402
H_VID6 R32 0_J 0402

VID0 VID1 VID2 VID3 VID4 VID5 VID6 — 49

R30 100_F 0402

R33 100_F 0402

VCCSENSE — 49

VSSSENSE — 49

Same Length

Layout Note: Route VCCSENSE traces at 27.4 Ohms with 50 mil spacing. Place PU and PD within 1 inch of cpu.

width=18 mil
spacing=7 mil

PU & PD avoid to route with stub

C6–C58 10U_6.3V_M 0805_X5R

C32–C36 NC_0.1U_16V_M_B 0402

C37–C41 1000P_50V_K_B 0402

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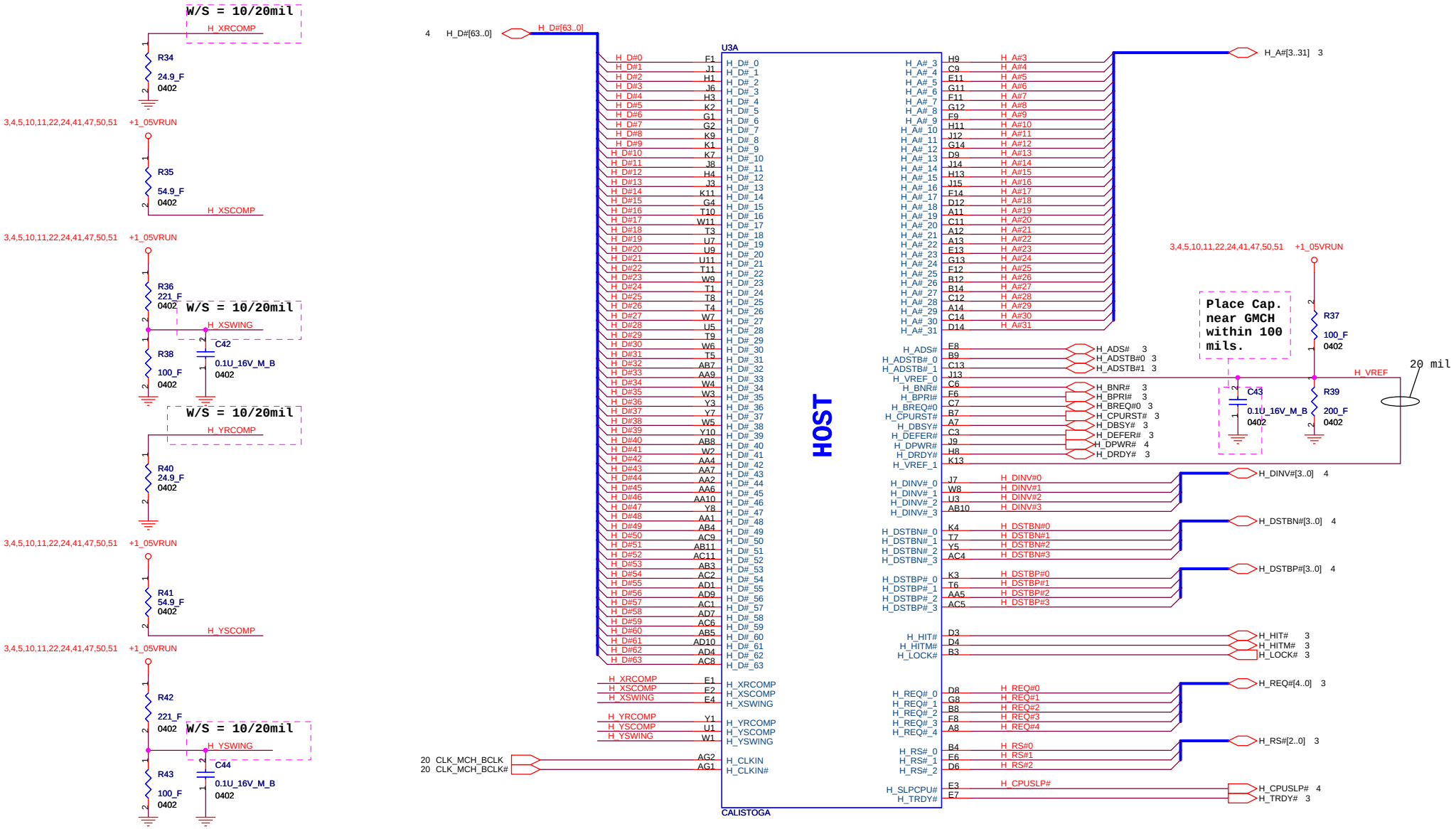

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Title	CALISTOGA (HOST) 1 of 7		
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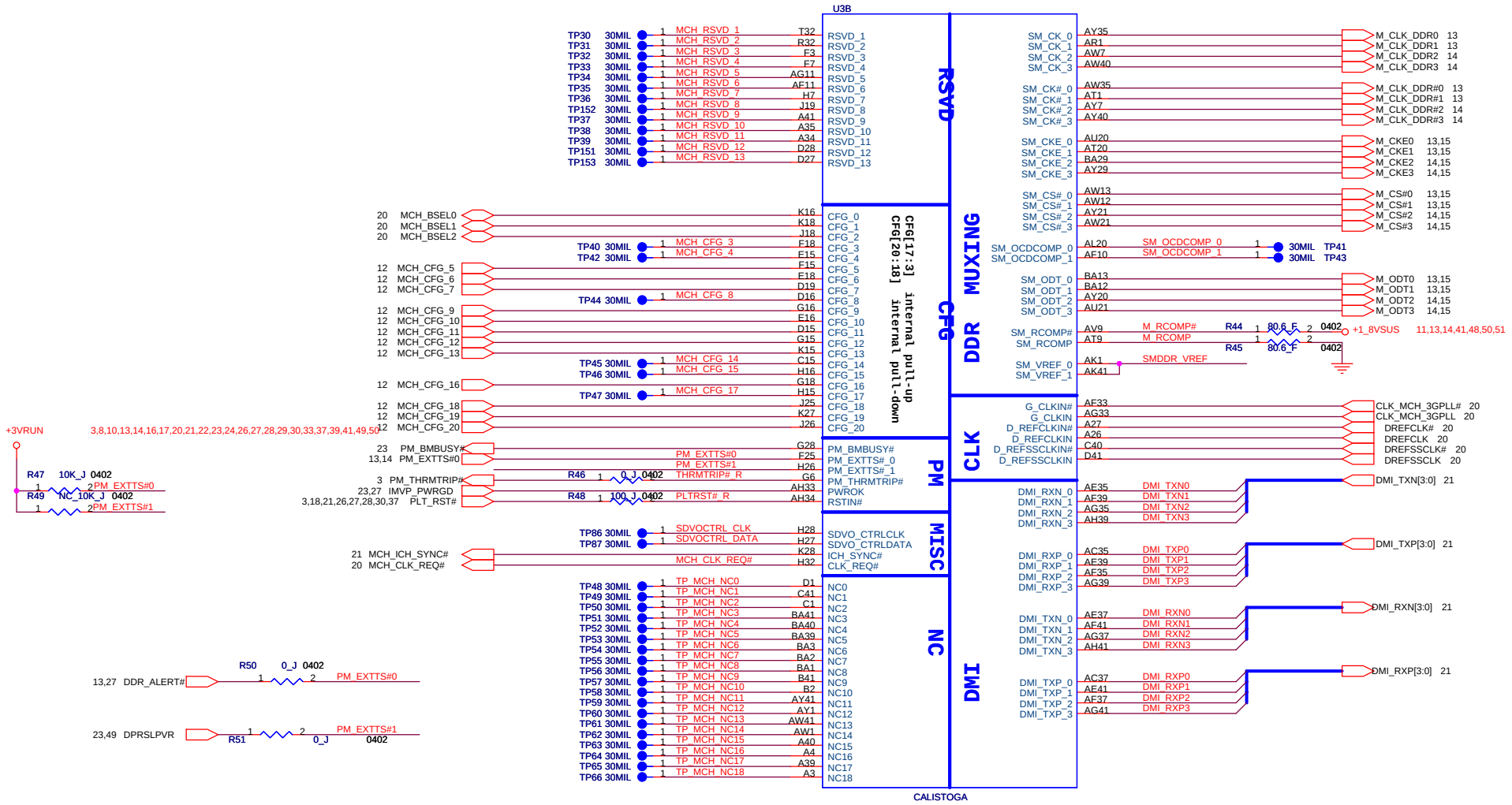
U3B
RSVD
CFG
DDR MUXING
CLK
PM
MISC
NC
DMI
CFG[17:3] internal pull-up
CFG[20:18] internal pull-down
CALISTOGA
Place close to chipset
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Title CALISTOGA (DMI) 2 of 7
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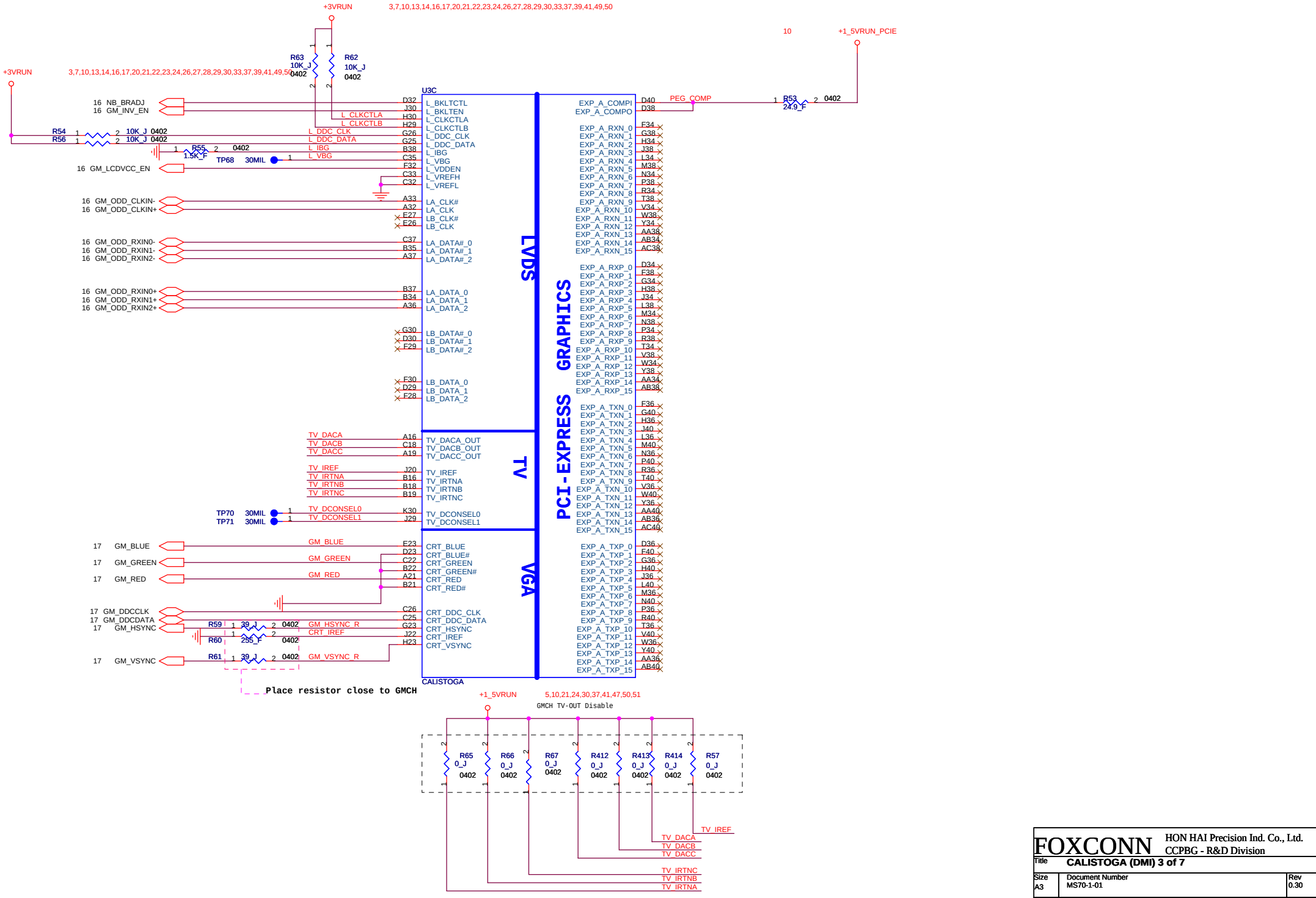

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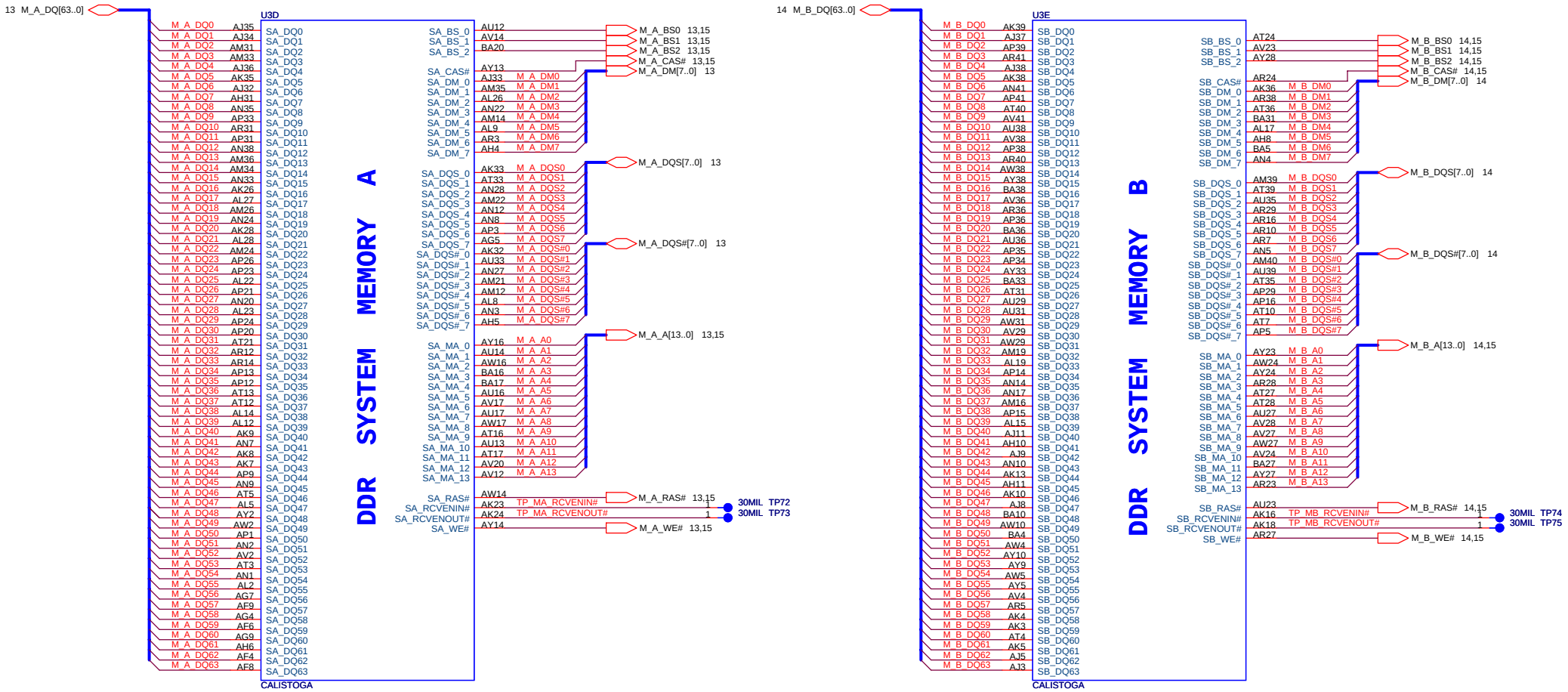

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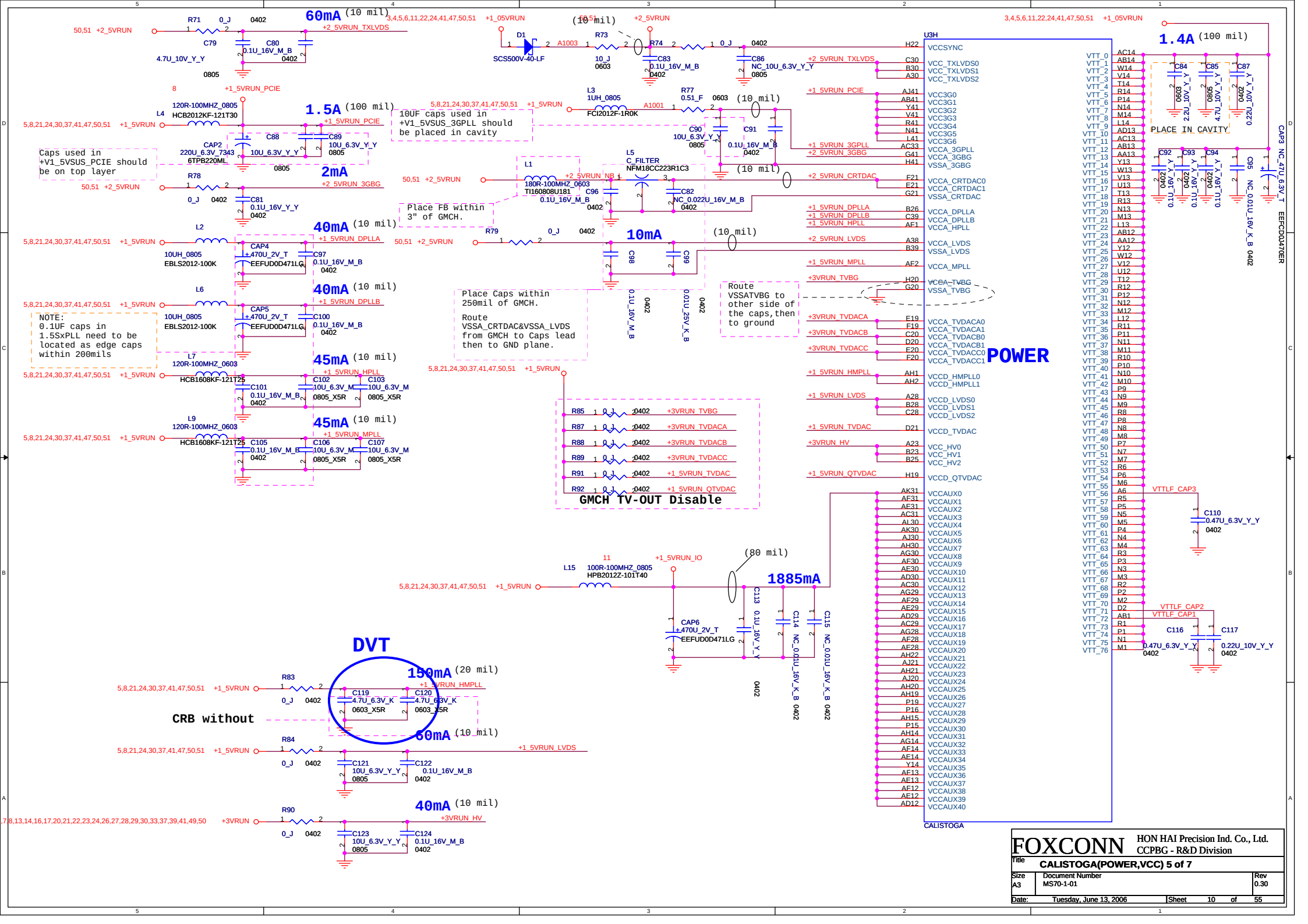
POWER
U3H
CALISTOGA
60mA (10 mil)
1.5A (100 mil)
2mA
40mA (10 mil)
40mA (10 mil)
45mA (10 mil)
45mA (10 mil)
10mA
(10 mil)
1.4A (100 mil)
1885mA
(80 mil)
DVT
150mA (20 mil)
60mA (10 mil)
40mA (10 mil)
CRB without
GMCH TV-OUT Disable
PLACE IN CAVITY
10UF caps used in +V1_5VSUS_3GPLL should be placed in cavity
Caps used in +V1_5VSUS_PCIE should be on top layer
Place FB within 3" of GMCH.
Place Caps within 250mil of GMCH.
Route VSSATVBG to other side of the caps,then to ground
Route VSSA_CRTDAC&VSSA_LVDS from GMCH to Caps lead then to GND plane.
NOTE: 0.1UF caps in 1.5SxPLL need to be located as edge caps within 200mils
SCS500V-40-LF
FOXCONN
HON HAI Precision Ind. Co., Ltd.
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Title: CALISTOGA(POWER,VCC) 5 of 7
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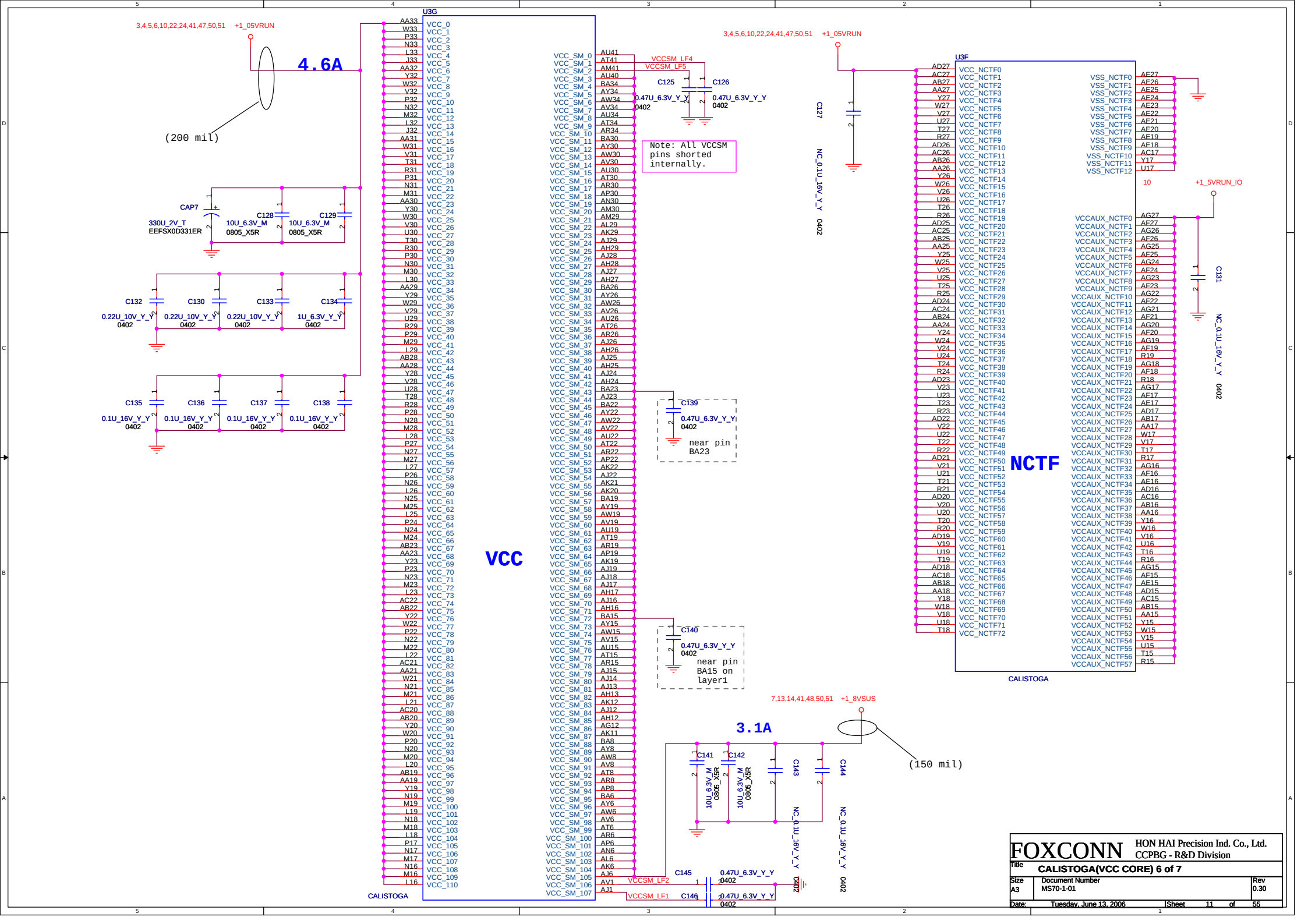
3,4,5,6,10,22,24,41,47,50,51 +1_05VRUN
4.6A
(200 mil)
CAP7
330U_2V_T
EEFSX0D331ER
C128
10U_6.3V_M
0805_X5R
C129
10U_6.3V_M
0805_X5R
C132
0.22U_10V_Y_Y
0402
C130
0.22U_10V_Y_Y
0402
C133
0.22U_10V_Y_Y
0402
C134
1U_6.3V_Y_Y
0402
C135
0.1U_16V_Y_Y
0402
C136
0.1U_16V_Y_Y
0402
C137
0.1U_16V_Y_Y
0402
C138
0.1U_16V_Y_Y
0402
U3G
VCC_0
VCC_1
VCC_2
VCC_3
VCC_4
VCC_5
VCC_6
VCC_7
VCC_8
VCC_9
VCC_10
VCC_11
VCC_12
VCC_13
VCC_14
VCC_15
VCC_16
VCC_17
VCC_18
VCC_19
VCC_20
VCC_21
VCC_22
VCC_23
VCC_24
VCC_25
VCC_26
VCC_27
VCC_28
VCC_29
VCC_30
VCC_31
VCC_32
VCC_33
VCC_34
VCC_35
VCC_36
VCC_37
VCC_38
VCC_39
VCC_40
VCC_41
VCC_42
VCC_43
VCC_44
VCC_45
VCC_46
VCC_47
VCC_48
VCC_49
VCC_50
VCC_51
VCC_52
VCC_53
VCC_54
VCC_55
VCC_56
VCC_57
VCC_58
VCC_59
VCC_60
VCC_61
VCC_62
VCC_63
VCC_64
VCC_65
VCC_66
VCC_67
VCC_68
VCC_69
VCC_70
VCC_71
VCC_72
VCC_73
VCC_74
VCC_75
VCC_76
VCC_77
VCC_78
VCC_79
VCC_80
VCC_81
VCC_82
VCC_83
VCC_84
VCC_85
VCC_86
VCC_87
VCC_88
VCC_89
VCC_90
VCC_91
VCC_92
VCC_93
VCC_94
VCC_95
VCC_96
VCC_97
VCC_98
VCC_99
VCC_100
VCC_101
VCC_102
VCC_103
VCC_104
VCC_105
VCC_106
VCC_107
VCC_108
VCC_109
VCC_110
CALISTOGA
VCC
VCC_SM_0
VCC_SM_1
VCC_SM_2
VCC_SM_3
VCC_SM_4
VCC_SM_5
VCC_SM_6
VCC_SM_7
VCC_SM_8
VCC_SM_9
VCC_SM_10
VCC_SM_11
VCC_SM_12
VCC_SM_13
VCC_SM_14
VCC_SM_15
VCC_SM_16
VCC_SM_17
VCC_SM_18
VCC_SM_19
VCC_SM_20
VCC_SM_21
VCC_SM_22
VCC_SM_23
VCC_SM_24
VCC_SM_25
VCC_SM_26
VCC_SM_27
VCC_SM_28
VCC_SM_29
VCC_SM_30
VCC_SM_31
VCC_SM_32
VCC_SM_33
VCC_SM_34
VCC_SM_35
VCC_SM_36
VCC_SM_37
VCC_SM_38
VCC_SM_39
VCC_SM_40
VCC_SM_41
VCC_SM_42
VCC_SM_43
VCC_SM_44
VCC_SM_45
VCC_SM_46
VCC_SM_47
VCC_SM_48
VCC_SM_49
VCC_SM_50
VCC_SM_51
VCC_SM_52
VCC_SM_53
VCC_SM_54
VCC_SM_55
VCC_SM_56
VCC_SM_57
VCC_SM_58
VCC_SM_59
VCC_SM_60
VCC_SM_61
VCC_SM_62
VCC_SM_63
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VCC_SM_65
VCC_SM_66
VCC_SM_67
VCC_SM_68
VCC_SM_69
VCC_SM_70
VCC_SM_71
VCC_SM_72
VCC_SM_73
VCC_SM_74
VCC_SM_75
VCC_SM_76
VCC_SM_77
VCC_SM_78
VCC_SM_79
VCC_SM_80
VCC_SM_81
VCC_SM_82
VCC_SM_83
VCC_SM_84
VCC_SM_85
VCC_SM_86
VCC_SM_87
VCC_SM_88
VCC_SM_89
VCC_SM_90
VCC_SM_91
VCC_SM_92
VCC_SM_93
VCC_SM_94
VCC_SM_95
VCC_SM_96
VCC_SM_97
VCC_SM_98
VCC_SM_99
VCC_SM_100
VCC_SM_101
VCC_SM_102
VCC_SM_103
VCC_SM_104
VCC_SM_105
VCC_SM_106
VCC_SM_107
VCCSM_LF4
VCCSM_LF5
C125
0.47U_6.3V_Y_Y
0402
C126
0.47U_6.3V_Y_Y
0402
Note: All VCCSM pins shorted internally.
C139
0.47U_6.3V_Y_Y
0402
near pin BA23
C140
0.47U_6.3V_Y_Y
0402
near pin BA15 on layer1
VCCSM_LF2
VCCSM_LF1
C145
0.47U_6.3V_Y_Y
0402
C146
0.47U_6.3V_Y_Y
0402
3,4,5,6,10,22,24,41,47,50,51 +1_05VRUN
C127
NC_0.1U_16V_Y_Y
0402
U3F
VCC_NCTF0
VCC_NCTF1
VCC_NCTF2
VCC_NCTF3
VCC_NCTF4
VCC_NCTF5
VCC_NCTF6
VCC_NCTF7
VCC_NCTF8
VCC_NCTF9
VCC_NCTF10
VCC_NCTF11
VCC_NCTF12
VCC_NCTF13
VCC_NCTF14
VCC_NCTF15
VCC_NCTF16
VCC_NCTF17
VCC_NCTF18
VCC_NCTF19
VCC_NCTF20
VCC_NCTF21
VCC_NCTF22
VCC_NCTF23
VCC_NCTF24
VCC_NCTF25
VCC_NCTF26
VCC_NCTF27
VCC_NCTF28
VCC_NCTF29
VCC_NCTF30
VCC_NCTF31
VCC_NCTF32
VCC_NCTF33
VCC_NCTF34
VCC_NCTF35
VCC_NCTF36
VCC_NCTF37
VCC_NCTF38
VCC_NCTF39
VCC_NCTF40
VCC_NCTF41
VCC_NCTF42
VCC_NCTF43
VCC_NCTF44
VCC_NCTF45
VCC_NCTF46
VCC_NCTF47
VCC_NCTF48
VCC_NCTF49
VCC_NCTF50
VCC_NCTF51
VCC_NCTF52
VCC_NCTF53
VCC_NCTF54
VCC_NCTF55
VCC_NCTF56
VCC_NCTF57
VCC_NCTF58
VCC_NCTF59
VCC_NCTF60
VCC_NCTF61
VCC_NCTF62
VCC_NCTF63
VCC_NCTF64
VCC_NCTF65
VCC_NCTF66
VCC_NCTF67
VCC_NCTF68
VCC_NCTF69
VCC_NCTF70
VCC_NCTF71
VCC_NCTF72
NCTF
VSS_NCTF0
VSS_NCTF1
VSS_NCTF2
VSS_NCTF3
VSS_NCTF4
VSS_NCTF5
VSS_NCTF6
VSS_NCTF7
VSS_NCTF8
VSS_NCTF9
VSS_NCTF10
VSS_NCTF11
VSS_NCTF12
10
+1_5VRUN_IO
VCCAUX_NCTF0
VCCAUX_NCTF1
VCCAUX_NCTF2
VCCAUX_NCTF3
VCCAUX_NCTF4
VCCAUX_NCTF5
VCCAUX_NCTF6
VCCAUX_NCTF7
VCCAUX_NCTF8
VCCAUX_NCTF9
VCCAUX_NCTF10
VCCAUX_NCTF11
VCCAUX_NCTF12
VCCAUX_NCTF13
VCCAUX_NCTF14
VCCAUX_NCTF15
VCCAUX_NCTF16
VCCAUX_NCTF17
VCCAUX_NCTF18
VCCAUX_NCTF19
VCCAUX_NCTF20
VCCAUX_NCTF21
VCCAUX_NCTF22
VCCAUX_NCTF23
VCCAUX_NCTF24
VCCAUX_NCTF25
VCCAUX_NCTF26
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VCCAUX_NCTF28
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VCCAUX_NCTF30
VCCAUX_NCTF31
VCCAUX_NCTF32
VCCAUX_NCTF33
VCCAUX_NCTF34
VCCAUX_NCTF35
VCCAUX_NCTF36
VCCAUX_NCTF37
VCCAUX_NCTF38
VCCAUX_NCTF39
VCCAUX_NCTF40
VCCAUX_NCTF41
VCCAUX_NCTF42
VCCAUX_NCTF43
VCCAUX_NCTF44
VCCAUX_NCTF45
VCCAUX_NCTF46
VCCAUX_NCTF47
VCCAUX_NCTF48
VCCAUX_NCTF49
VCCAUX_NCTF50
VCCAUX_NCTF51
VCCAUX_NCTF52
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VCCAUX_NCTF54
VCCAUX_NCTF55
VCCAUX_NCTF56
VCCAUX_NCTF57
C131
NC_0.1U_16V_Y_Y
0402
CALISTOGA
7,13,14,41,48,50,51 +1_8VSUS
3.1A
(150 mil)
C141
10U_6.3V_M
0805_X5R
C142
10U_6.3V_M
0805_X5R
C143
C144
NC_0.1U_16V_Y_Y
0402
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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

AC41 AA41 W41 T41 P41 M41 J41 F41 AV40 AP40 AN40 AK40 AJ40 AH40 AG40 AF40 AE40 B40 AY39 AW39 AV39 AR39 AN39 AJ39 AC39 AB39 AA39 Y39 W39 V39 T39 R39 P39 N39 M39 L39 J39 H39 G39 F39 D39 AT38 AM38 AH38 AG38 AF38 AE38 C38 AK37 AH37 AB37 AA37 Y37 W37 V37 T37 R37 P37 N37 M37 L37 J37 H37 G37 F37 D37 AY36 AW36 AN36 AH36 AG36 AF36 AE36 AC36 C36 B36 BA35 AV35 AR35 AH35 AB35 AA35 Y35 W35 V35 T35 R35 P35 N35 M35 L35 J35 H35 G35 F35 D35 AN34

VSS_0 VSS_1 VSS_2 VSS_3 VSS_4 VSS_5 VSS_6 VSS_7 VSS_8 VSS_9 VSS_10 VSS_11 VSS_12 VSS_13 VSS_14 VSS_15 VSS_16 VSS_17 VSS_18 VSS_19 VSS_20 VSS_21 VSS_22 VSS_23 VSS_24 VSS_25 VSS_26 VSS_27 VSS_28 VSS_29 VSS_30 VSS_31 VSS_32 VSS_33 VSS_34 VSS_35 VSS_36 VSS_37 VSS_38 VSS_39 VSS_40 VSS_41 VSS_42 VSS_43 VSS_44 VSS_45 VSS_46 VSS_47 VSS_48 VSS_49 VSS_50 VSS_51 VSS_52 VSS_53 VSS_54 VSS_55 VSS_56 VSS_57 VSS_58 VSS_59 VSS_60 VSS_61 VSS_62 VSS_63 VSS_64 VSS_65 VSS_66 VSS_67 VSS_68 VSS_69 VSS_70 VSS_71 VSS_72 VSS_73 VSS_74 VSS_75 VSS_76 VSS_77 VSS_78 VSS_79 VSS_80 VSS_81 VSS_82 VSS_83 VSS_84 VSS_85 VSS_86 VSS_87 VSS_88 VSS_89 VSS_90 VSS_91 VSS_92 VSS_93 VSS_94 VSS_95 VSS_96

VSS_97 VSS_98 VSS_99 VSS_100 VSS_101 VSS_102 VSS_103 VSS_104 VSS_105 VSS_106 VSS_107 VSS_108 VSS_109 VSS_110 VSS_111 VSS_112 VSS_113 VSS_114 VSS_115 VSS_116 VSS_117 VSS_118 VSS_119 VSS_120 VSS_121 VSS_122 VSS_123 VSS_124 VSS_125 VSS_126 VSS_127 VSS_128 VSS_129 VSS_130 VSS_131 VSS_132 VSS_133 VSS_134 VSS_135 VSS_136 VSS_137 VSS_138 VSS_139 VSS_140 VSS_141 VSS_142 VSS_143 VSS_144 VSS_145 VSS_146 VSS_147 VSS_148 VSS_149 VSS_150 VSS_151 VSS_152 VSS_153 VSS_154 VSS_155 VSS_156 VSS_157 VSS_158 VSS_159 VSS_160 VSS_161 VSS_162 VSS_163 VSS_164 VSS_165 VSS_166 VSS_167 VSS_168 VSS_169 VSS_170 VSS_171 VSS_172 VSS_173 VSS_174 VSS_175 VSS_176 VSS_177 VSS_178 VSS_179

AK34 AG34 AF34 AE34 AC34 C34 AW33 AV33 AR33 AE33 AB33 Y33 V33 T33 R33 M33 H33 G33 F33 D33 B33 AH32 AG32 AF32 AE32 AC32 AB32 G32 B32 AY31 AV31 AN31 AJ31 AG31 AB31 Y31 AB30 E30 AT29 AN29 AB29 T29 N29 K29 G29 E29 C29 B29 A29 BA28 AW28 AU28 AP28 AM28 AD28 AC28 W28 J28 F28 AP27 AM27 AK27 J27 G27 F27 C27 B27 AN26 M26 K26 F26 D26 AK25 P25 K25 H25 F25 D25 A25 BA24 AU24 AL24 AW23

VSS

CALISTOGA

U3J

AT23 AN23 AM23 AH23 AC23 W23 K23 J23 F23 C23 AA22 K22 G22 F22 E22 D22 A22 BA21 AV21 AR21 AN21 AL21 AB21 Y21 P21 K21 J21 H21 C21 AW20 AR20 AM20 AA20 K20 B20 A20 AN19 AC19 W19 K19 G19 C19 AH18 P18 H18 D18 A18 AY17 AR17 AP17 AM17 AK17 AV16 AN16 AL16 J16 F16 C16 AN15 AM15 AK15 N15 M15 L15 B15 A15 BA14 AT14 AK14 AD14 AA14 U14 K14 H14 E14 AV13 AR13 AN13 AM13 AL13 AG13 P13 F13 D13 B13 AY12 AC12 K12 H12 E12 AD11 AA11 Y11

VSS_180 VSS_181 VSS_182 VSS_183 VSS_184 VSS_185 VSS_186 VSS_187 VSS_188 VSS_189 VSS_190 VSS_191 VSS_192 VSS_193 VSS_194 VSS_195 VSS_196 VSS_197 VSS_198 VSS_199 VSS_200 VSS_201 VSS_202 VSS_203 VSS_204 VSS_205 VSS_206 VSS_207 VSS_208 VSS_209 VSS_210 VSS_211 VSS_212 VSS_213 VSS_214 VSS_215 VSS_216 VSS_217 VSS_218 VSS_219 VSS_220 VSS_221 VSS_222 VSS_223 VSS_224 VSS_225 VSS_226 VSS_227 VSS_228 VSS_229 VSS_230 VSS_231 VSS_232 VSS_233 VSS_234 VSS_235 VSS_236 VSS_237 VSS_238 VSS_239 VSS_240 VSS_241 VSS_242 VSS_243 VSS_244 VSS_245 VSS_246 VSS_247 VSS_248 VSS_249 VSS_250 VSS_251 VSS_252 VSS_253 VSS_254 VSS_255 VSS_256 VSS_257 VSS_258 VSS_259 VSS_260 VSS_261 VSS_262 VSS_263 VSS_264 VSS_265 VSS_266 VSS_267 VSS_268 VSS_269 VSS_270 VSS_271 VSS_272

VSS_273 VSS_274 VSS_275 VSS_276 VSS_277 VSS_278 VSS_279 VSS_280 VSS_281 VSS_282 VSS_283 VSS_284 VSS_285 VSS_286 VSS_287 VSS_288 VSS_289 VSS_290 VSS_291 VSS_292 VSS_293 VSS_294 VSS_295 VSS_296 VSS_297 VSS_298 VSS_299 VSS_300 VSS_301 VSS_302 VSS_303 VSS_304 VSS_305 VSS_306 VSS_307 VSS_308 VSS_309 VSS_310 VSS_311 VSS_312 VSS_313 VSS_314 VSS_315 VSS_316 VSS_317 VSS_318 VSS_319 VSS_320 VSS_321 VSS_322 VSS_323 VSS_324 VSS_325 VSS_326 VSS_327 VSS_328 VSS_329 VSS_330 VSS_331 VSS_332 VSS_333 VSS_334 VSS_335 VSS_336 VSS_337 VSS_338 VSS_339 VSS_340 VSS_341 VSS_342 VSS_343 VSS_344 VSS_345 VSS_346 VSS_347 VSS_348 VSS_349 VSS_350 VSS_351 VSS_352 VSS_353 VSS_354 VSS_355 VSS_356 VSS_357 VSS_358 VSS_359 VSS_360

J11 D11 B11 AV10 AP10 AL10 AJ10 AG10 AC10 W10 U10 BA9 AW9 AR9 AH9 AB9 Y9 R9 G9 E9 A9 AG8 AD8 AA8 U8 K8 C8 BA7 AV7 AP7 AL7 AJ7 AH7 AF7 AC7 R7 G7 D7 AG6 AD6 AB6 Y6 U6 N6 K6 H6 B6 AV5 AF5 AD5 AY4 AR4 AP4 AL4 AJ4 Y4 U4 R4 J4 F4 C4 AY3 AW3 AV3 AL3 AH3 AG3 AF3 AD3 AC3 AA3 G3 AT2 AR2 AP2 AK2 AJ2 AD2 AB2 Y2 U2 T2 N2 J2 H2 F2 C2 AL1

VSS

CALISTOGA

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Title	CALISTOGA(VSS) 7 of 7	
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1.8V per DIMM=3.08A

7,11,14,41,48,50,51 +1_8VSUS

DDR2_VREF

C147 0.1U_16V_M_B 0402

C148 2.2U_10V_Y_Y 0603

0.1 µF and 2.2 µF placed close to VREF pins

+1_8VSUS 7,11,14,41,48,50,51

CN1

201 202

SMDFIX1 SMDFIX2

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

1	VREF	VSS46	2
3	VSS47	DQ4	4
5	DQ0	DQ5	6
7	DQ1	VSS15	8
9	VSS37	DM0	10
11	DQS#0	VSS5	12
13	DQS0	DQ6	14
15	VSS48	DQ7	16
17	DQ2	VSS16	18
19	DQ3	DQ12	20
21	VSS38	DQ13	22
23	DQ8	VSS17	24
25	DQ9	DM1	26
27	VSS49	VSS53	28
29	DQS#1	CK0	30
31	DQS1	CK0#	32
33	VSS39	VSS41	34
35	DQ10	DQ14	36
37	DQ11	DQ15	38
39	VSS50	VSS54	40
41	VSS18	VSS20	42
43	DQ16	DQ20	44
45	DQ17	DQ21	46
47	VSS1	VSS6	48
49	DQS#2	NC3	50
51	DQS2	DM2	52
53	VSS19	VSS21	54
55	DQ18	DQ22	56
57	DQ19	DQ23	58
59	VSS22	VSS24	60
61	DQ24	DQ28	62
63	DQ25	DQ29	64
65	VSS23	VSS25	66
67	DM3	DQS#3	68
69	NC4	DQS3	70
71	VSS9	VSS10	72
73	DQ26	DQ30	74
75	DQ27	DQ31	76
77	VSS4	VSS8	78
79	CKE0	CKE1	80
81	VDD7	VDD8	82
83	NC1	A15	84
85	A16_BA2	A14	86
87	VDD9	VDD11	88
89	A12	A11	90
91	A9	A7	92
93	A8	A6	94
95	VDD5	VDD4	96
97	A5	A4	98
99	A3	A2	100
101	A1	A0	102
103	VDD10	VDD12	104
105	A10/AP	BA1	106
107	BA0	RAS#	108
109	WE#	S0#	110
111	VDD2	VDD1	112
113	CAS#	ODT0	114
115	S1#	A13	116
117	VDD3	VDD6	118
119	ODT1	NC2	120
121	VSS11	VSS12	122
123	DQ32	DQ36	124
125	DQ33	DQ37	126
127	VSS26	VSS28	128
129	DQS#4	DM4	130
131	DQS4	VSS42	132
133	VSS2	DQ38	134
135	DQ34	DQ39	136
137	DQ35	VSS55	138
139	VSS27	DQ44	140
141	DQ40	DQ45	142
143	DQ41	VSS43	144
145	VSS29	DQS#5	146
147	DM5	DQS5	148
149	VSS51	VSS56	150
151	DQ42	DQ46	152
153	DQ43	DQ47	154
155	VSS40	VSS44	156
157	DQ48	DQ52	158
159	DQ49	DQ53	160
161	VSS52	VSS57	162
163	NCTEST	CK1	164
165	VSS30	CK1#	166
167	DQS#6	VSS45	168
169	DQS6	DM6	170
171	VSS31	VSS32	172
173	DQ50	DQ54	174
175	DQ51	DQ55	176
177	VSS33	VSS35	178
179	DQ56	DQ60	180
181	DQ57	DQ61	182
183	VSS3	VSS7	184
185	DM7	DQS#7	186
187	VSS34	DQ57	188
189	DQ58	VSS36	190
191	DQ59	DQ62	192
193	VSS14	DQ63	194
195	SDA	VSS13	196
197	SCL	SA0	198
199	VDD(SPD)	SA1	200

203 204 SPTH1 SPTH2

DDR2 SO-DIMM_200P

M_A_DQ4 M_A_DQ5 M_A_DM0 M_A_DQ6 M_A_DQ7 M_A_DQ12 M_A_DQ13 M_A_DM1 M_CLK_DDR0 7 M_CLK_DDR#0 7 M_A_DQ14 M_A_DQ15 M_A_DQ20 M_A_DQ21 DDR2_EXTTS#0 M_A_DM2 M_A_DQ22 M_A_DQ23 M_A_DQ28 M_A_DQ29 M_A_DQS#3 M_A_DQS3 M_A_DQ30 M_A_DQ31

3,7,8,10,14,16,17,20,21,22,23,24,26,27,28,29,30,33,37,39,41,49,50

M_CKE1 7,15

M_A_BS1 9,15 M_A_RAS# 9,15 M_CS#0 7,15 M_ODT0 7,15 M_A_A13 M_A_DQ36 M_A_DQ37 M_A_DM4 M_A_DQ38 M_A_DQ39 M_A_DQ44 M_A_DQ45 M_A_DQS#5 M_A_DQS5 M_A_DQ46 M_A_DQ47 M_A_DQ52 M_A_DQ53 M_CLK_DDR1 7 M_CLK_DDR#1 7 M_A_DM6 M_A_DQ54 M_A_DQ55 M_A_DQ60 M_A_DQ61 M_A_DQS#7 M_A_DQS7 M_A_DQ62 M_A_DQ63 SA0_DIM0 SA1_DIM0

R96 NC_0_J 0402 DDR2_EXTTS#0 1 2 PM_EXTTS#0 7,14

R99 10K_J 0402 R100 10K_J 0402

7,15 M_CKE0

9,15 M_A_BS2

9,15 M_A_BS0 9,15 M_A_WE#

9,15 M_A_CAS# 7,15 M_CS#1

7,15 M_ODT1

M_A_A12 M_A_A9 M_A_A8 M_A_A5 M_A_A3 M_A_A1 M_A_A10 M_A_A11 M_A_A7 M_A_A6 M_A_A4 M_A_A2 M_A_A0

14,20,23,37 SMB_DATA_SUS

14,20,23,37 SMB_CLK_SUS

+3VRUN

C160 2.2U_10V_Y_Y 0603

C161 0.1U_16V_M_B 0402

FOX_ASOA426_N4RC_4F

DIMM_0

SMBus Address: A0(W)/A1(R)

Place DIMM_0 near GMCH

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

7,11,14,41,48,50,51 +1_8VSUS

7,48 DDRDIMM_VREF

R94 0_J 0402

R95 NC_10K_F 0402

14 DDR2_VREF

DDR2_VREF

(20 mil)

C149 0.1U_16V_M_B 0402

R97 NC_10K_F 0402

+3VRUN

C150 NC_0.1U_16V_M_B 0402

Address: 92H.

U4

+VS SMBDATA
A0 SMBCLK
A1 OS
A2 GND

SMB_THRM_DATA 3,27
SMB_THRM_CLK 3,27
DDR_ALERT# 7,27

NC_G751-2P1F

DVT

7,11,14,41,48,50,51 +1_8VSUS

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

Place these Caps near So-Dimm0.

DVT

7,11,14,41,48,50,51 +1_8VSUS

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

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Title	DDR(II)SO-DIMM_0	
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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 → M_CKE3 7,15

9,15 M_B_BS2

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

9,15 M_B_BS0
9,15 M_B_WE#

9,15 M_B_CAS#
7,15 M_CS#3

M_ODT2 7,15

7,15 M_ODT3

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 → +3VRUN

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

FOXCONN

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Title: DDR(II)SO-DIMM_1

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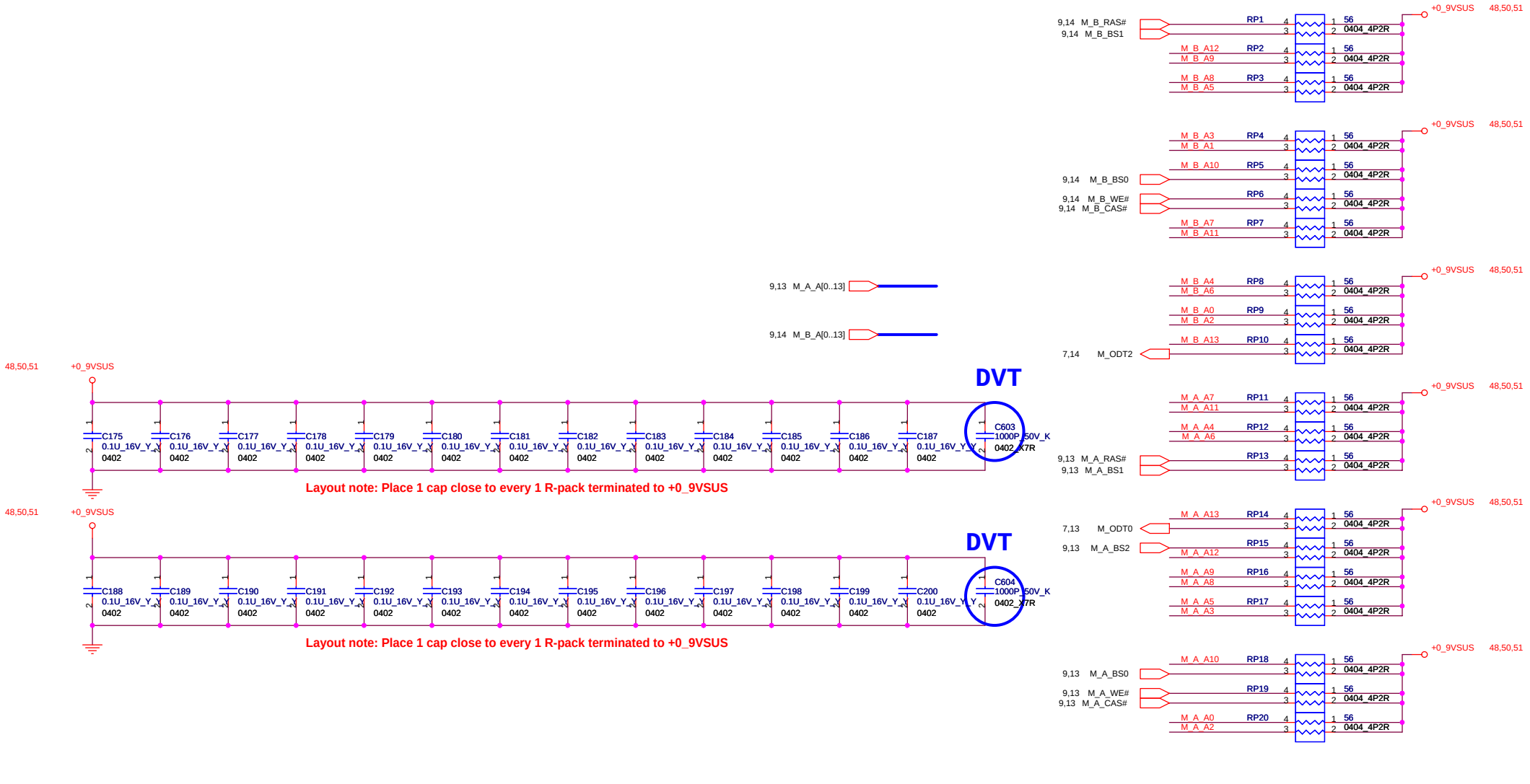

FOXCONN HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division

Title: DDR(II)Termination		
Size: A3	Document Number: MS70-1-01	Rev: 0.30
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LVDS

ODD_CLKIN- → GM_ODD_CLKIN- 8
ODD_CLKIN+ → GM_ODD_CLKIN+ 8

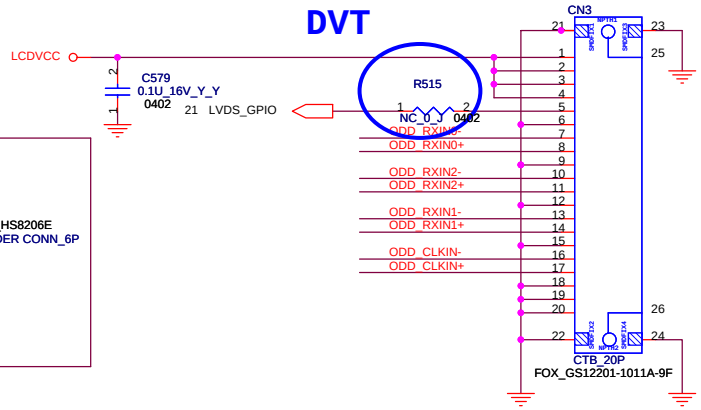
ODD_RXIN0- → GM_ODD_RXIN0- 8
ODD_RXIN0+ → GM_ODD_RXIN0+ 8

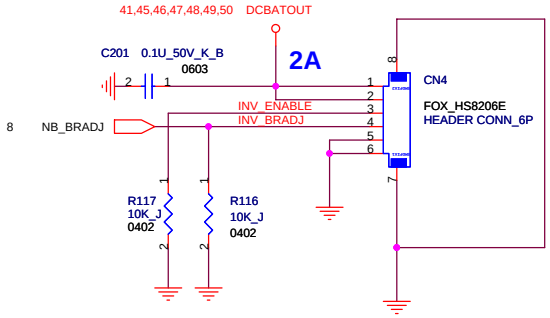
ODD_RXIN1- → GM_ODD_RXIN1- 8
ODD_RXIN1+ → GM_ODD_RXIN1+ 8

ODD_RXIN2- → GM_ODD_RXIN2- 8
ODD_RXIN2+ → GM_ODD_RXIN2+ 8

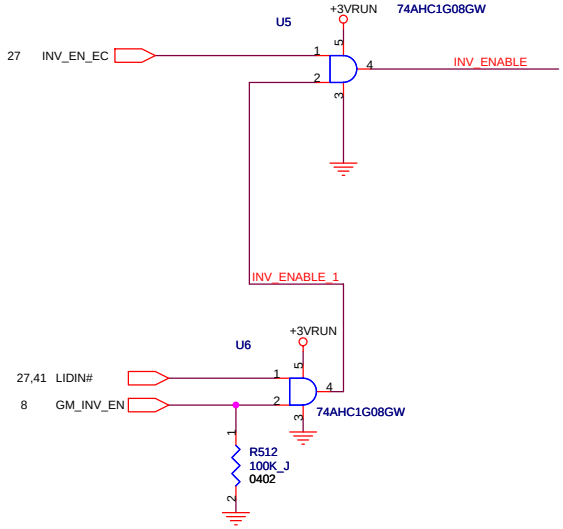
LVDS CONNECTOR

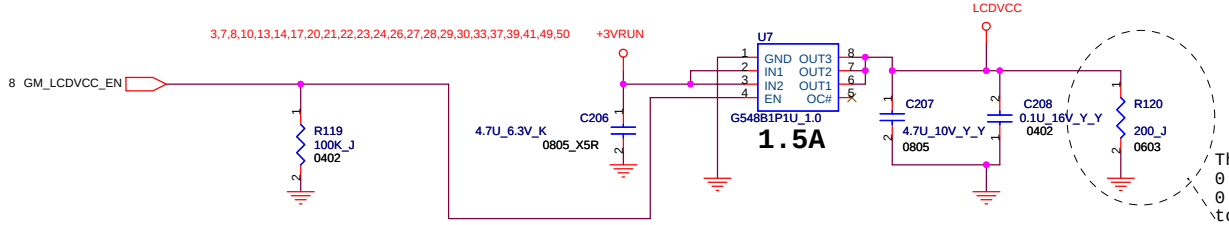
DVT





INVERTER CONNECTOR

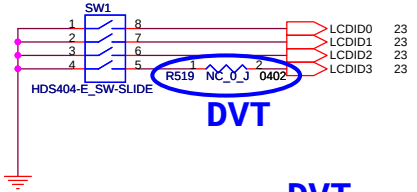




DISCHARGE

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

ON=0

Type	WXGA	WXGA	WSXGA
Size	15.4" wide	15.4" wide	15.4" wide
Vender	CMO	QDI	InnoLux
Device Name	N154I2-L02	QD15TL0703	BT154HG01
Panel ID Check[3..0]	1100	1010	1011

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Title: LVDS
Size: A3 | Document Number: MS70-1-01 | Rev: 0.30
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CRT CONNECTOR

5/12
Follow Intel FAE suggest GM_DDCCLK and GM_DDCDATA are 3.3V tolerance signals from Calistoga

3,7,8,10,13,14,16,20,21,22,23,24,26,27,28,29,30,33,37,39,41,49,50 +3VRUN

R122 2.2K_J 0402 — 8 GM_DDCCLK

R123 2.2K_J 0402 — 8 GM_DDCDATA

24,26,27,28,29,32,33,34,36,41,49,50 +5VRUN

R121 0_J 0402

C209 0.1U_16V_M_B 0402

C210 0.1U_16V_M_B 0402

D_SHIFT_+5V

U8 CM2009-02QR

	VCC_VIDEO	VCC_DDC	7
J_RED 3	VIDEO_1	VCC_SYNC	1
J_BLUE 4	VIDEO_2		
J_GREEN 5	VIDEO_3	BYP	8 A3003 C211 0402 0.1U_16V_M_B
GM_DDCCLK	DDC_IN1	DDC_OUT1	9 VGA_DDCCLK
GM_DDCDATA	DDC_IN2	DDC_OUT2	12 VGA_DDCDATA
8 GM_HSYNC	SYNC_IN1	SYNC_OUT1	14 VGA_HSYNC
8 GM_VSYNC	SYNC_IN2	SYNC_OUT2	16 VGA_VSYNC
		GND	6

For EMI used

3,7,8,10,13,14,16,20,21,22,23,24,26,27,28,29,30,33,37,39,41,49,50 +3VRUN

C214 0.1U_16V_M_B 0402
C215 0.1U_16V_M_B 0402
C216 0.1U_16V_M_B 0402
C217 0.01U_16V_K_B 0402
C218 0.01U_16V_K_B 0402

DVT

24,26,27,28,29,32,33,34,36,41,49,50 +5VRUN

D3 SCS500V-40 LF

D_SHIFT_+5V

R124 2.2K_J 0402

R125 0_J 0402 — VGA_DDCCLK — MB_CRT_DDCCLK

C221 220P_50V_J_N 0402

D_SHIFT_+5V

R128 2.2K_J 0402

R129 0_J 0402 — VGA_DDCDATA — MB_CRT_DDCDATA

C226 220P_50V_J_N 0402

8 GM_BLUE — BLUE — L18 75R-100MHZ_0603 TB160808B750

R126 75_F 0402

C220 NC_10P_50V_J_N 0402

C219 10P_50V_J_N 0402

8 GM_GREEN — GREEN — L19 75R-100MHZ_0603 TB160808B750

R127 75_F 0402

C222 NC_10P_50V_J_N 0402

C223 10P_50V_J_N 0402

8 GM_RED — RED — L20 75R-100MHZ_0603 TB160808B750

R130 75_F 0402

C224 NC_10P_50V_J_N 0402

C225 10P_50V_J_N 0402

DVT

CN5 D-SUB_15P DZ11A91-MW223-4F PTH1 PTH2

MB_CRT_DDCCLK	5
VGA_CRT_DET#	10
VGA_ID2	4
VSYNC14	14
CRT_+5VRUN	9
J_BLUE	3
HSYNC13	13
MB_CRT_DDCDATA	12
J_GREEN	2
J_RED	1
VGA_ID0	11
	6

VGA_CRT_DET# — VGA_CRT_DET# 27

CHDTC144EUPT Q6

27 EN_EXT_DEV_SENSE#

Semi-PnP(EC out)

DVT

VGA_HSYNC — R131 0_J 0402 — HSYNC13

C228 NC_47P_50V_J_N

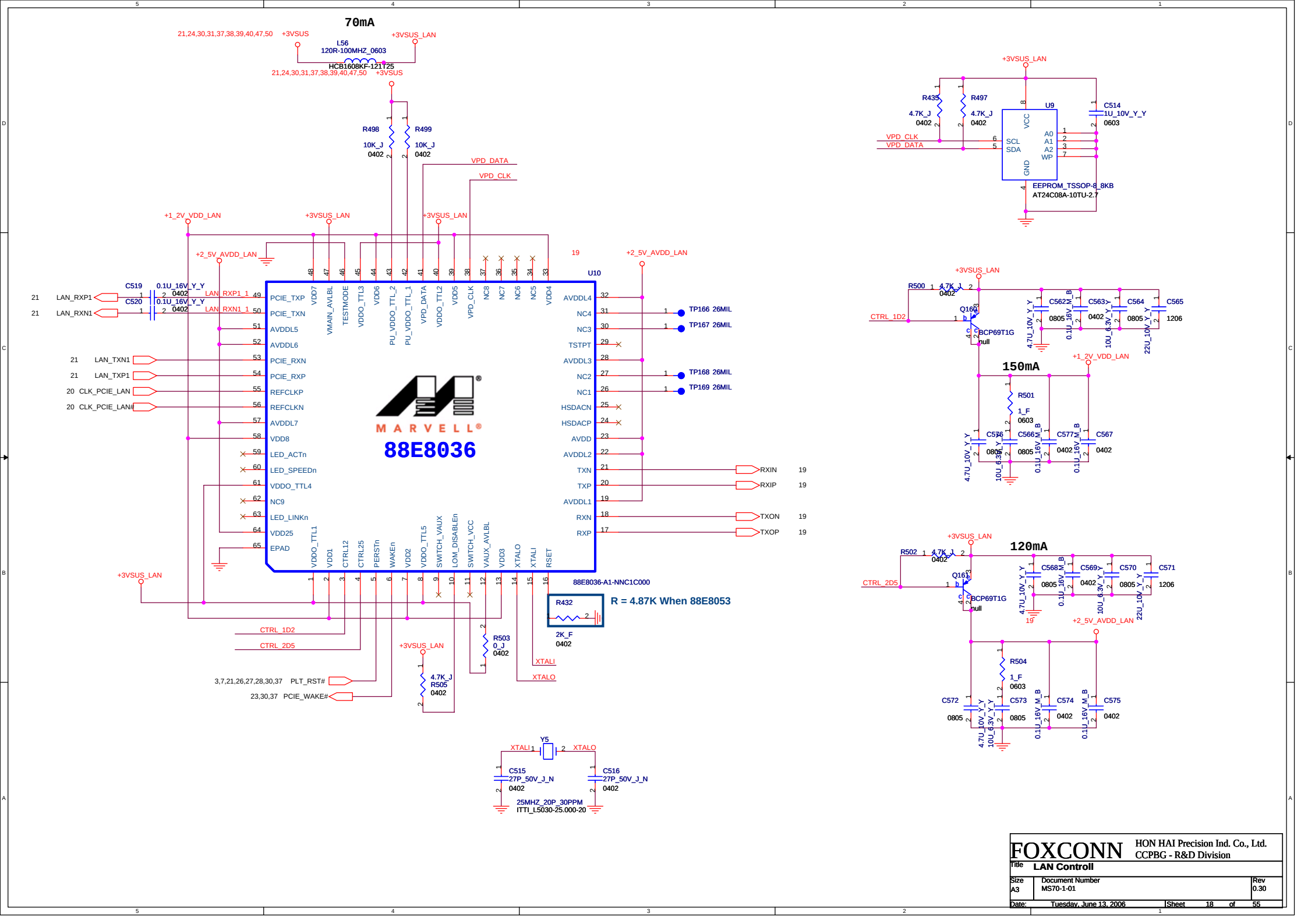
C227 47P_50V_J_N

VGA_VSYNC — R132 0_J 0402 — VSYNC14

C230 NC_47P_50V_J_N

C229 47P_50V_J_N

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: CRT		
Size: A3	Document Number: MS70-1-01	Rev: 0.30
Date: Tuesday, June 13, 2006	Sheet 17 of 55	


70mA
21,24,30,31,37,38,39,40,47,50 +3VSUS
L56
120R-100MHZ_0603
HCB1608KF-121T25
+3VSUS_LAN
21,24,30,31,37,38,39,40,47,50 +3VSUS
R498
10K_J
0402
R499
10K_J
0402
VPD_DATA
VPD_CLK
+1_2V_VDD_LAN
+3VSUS_LAN
+3VSUS_LAN
+2_5V_AVDD_LAN
+2_5V_AVDD_LAN
19
U10
C519
0.1U_16V_Y_Y
0402
C520
0.1U_16V_Y_Y
0402
21 LAN_RXP1
21 LAN_RXN1
LAN_RXP1_1
LAN_RXN1_1
21 LAN_TXN1
21 LAN_TXP1
20 CLK_PCIE_LAN
20 CLK_PCIE_LAN#
PCIE_TXP
PCIE_TXN
AVDDL5
AVDDL6
PCIE_RXN
PCIE_RXP
REFCLKP
REFCLKN
AVDDL7
VDD8
LED_ACTn
LED_SPEEDn
VDDO_TTL4
NC9
LED_LINKn
VDD25
EPAD
VDD7
VMAIN_AVLBL
TESTMODE
VDDO_TTL3
VDD6
PU_VDDO_TTL_2
PU_VDDO_TTL_1
VPD_DATA
VDDO_TTL2
VDD5
VPD_CLK
NC8
NC7
NC6
NC5
VDD4
AVDDL4
NC4
NC3
TSTPT
AVDDL3
NC2
NC1
HSDACN
HSDACP
AVDD
AVDDL2
TXN
TXP
AVDDL1
RXN
RXP
TP166 26MIL
TP167 26MIL
TP168 26MIL
TP169 26MIL
RXIN 19
RXIP 19
TXON 19
TXOP 19
MARVELL
88E8036
88E8036-A1-NNC1C000
VDDO_TTL1
VDD1
CTRL12
CTRL25
PERSTn
WAKEn
VDD2
VDDO_TTL5
SWITCH_VAUX
LOM_DISABLEn
SWITCH_VCC
VAUX_AVLBL
VDD3
XTALO
XTALI
RSET
+3VSUS_LAN
R432
2K_F
0402
R = 4.87K When 88E8053
CTRL_1D2
CTRL_2D5
+3VSUS_LAN
R503
0_J
0402
XTALI
XTALO
3,7,21,26,27,28,30,37 PLT_RST#
23,30,37 PCIE_WAKE#
4.7K_J
R505
0402
Y5
XTALI
XTALO
C515
27P_50V_J_N
0402
C516
27P_50V_J_N
0402
25MHZ_20P_30PPM
ITTI_L5030-25.000-20
+3VSUS_LAN
R435
4.7K_J
0402
R497
4.7K_J
0402
U9
C514
1U_10V_Y_Y
0603
VPD_CLK
VPD_DATA
SCL
SDA
VCC
GND
A0
A1
A2
WP
EEPROM_TSSOP-8_8KB
AT24C08A-10TU-2.7
+3VSUS_LAN
R500
4.7K_J
0402
CTRL_1D2
Q160
BCP69T1G
null
C562
C563
C564
C565
0805
0402
0805
1206
4.7U_10V_Y_Y
0.1U_16V_M_B
10U_6.3V_Y_Y
22U_10V_Y_Y
150mA
+1_2V_VDD_LAN
R501
1_F
0603
C576
C566
C577
C567
0805
0805
0402
0402
4.7U_10V_Y_Y
10U_6.3V_Y_Y
0.1U_16V_M_B
0.1U_16V_M_B
+3VSUS_LAN
120mA
R502
4.7K_J
0402
CTRL_2D5
Q161
BCP69T1G
null
C568
C569
C570
C571
0805
0402
0805
1206
4.7U_10V_Y_Y
0.1U_16V_M_B
10U_6.3V_Y_Y
22U_10V_Y_Y
19
+2_5V_AVDD_LAN
R504
1_F
0603
C572
C573
C574
C575
0805
0805
0402
0402
4.7U_10V_Y_Y
10U_6.3V_Y_Y
0.1U_16V_M_B
0.1U_16V_M_B
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title
LAN Controll
Size
A3
Document Number
MS70-1-01
Rev
0.30
Date:
Tuesday, June 13, 2006
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18
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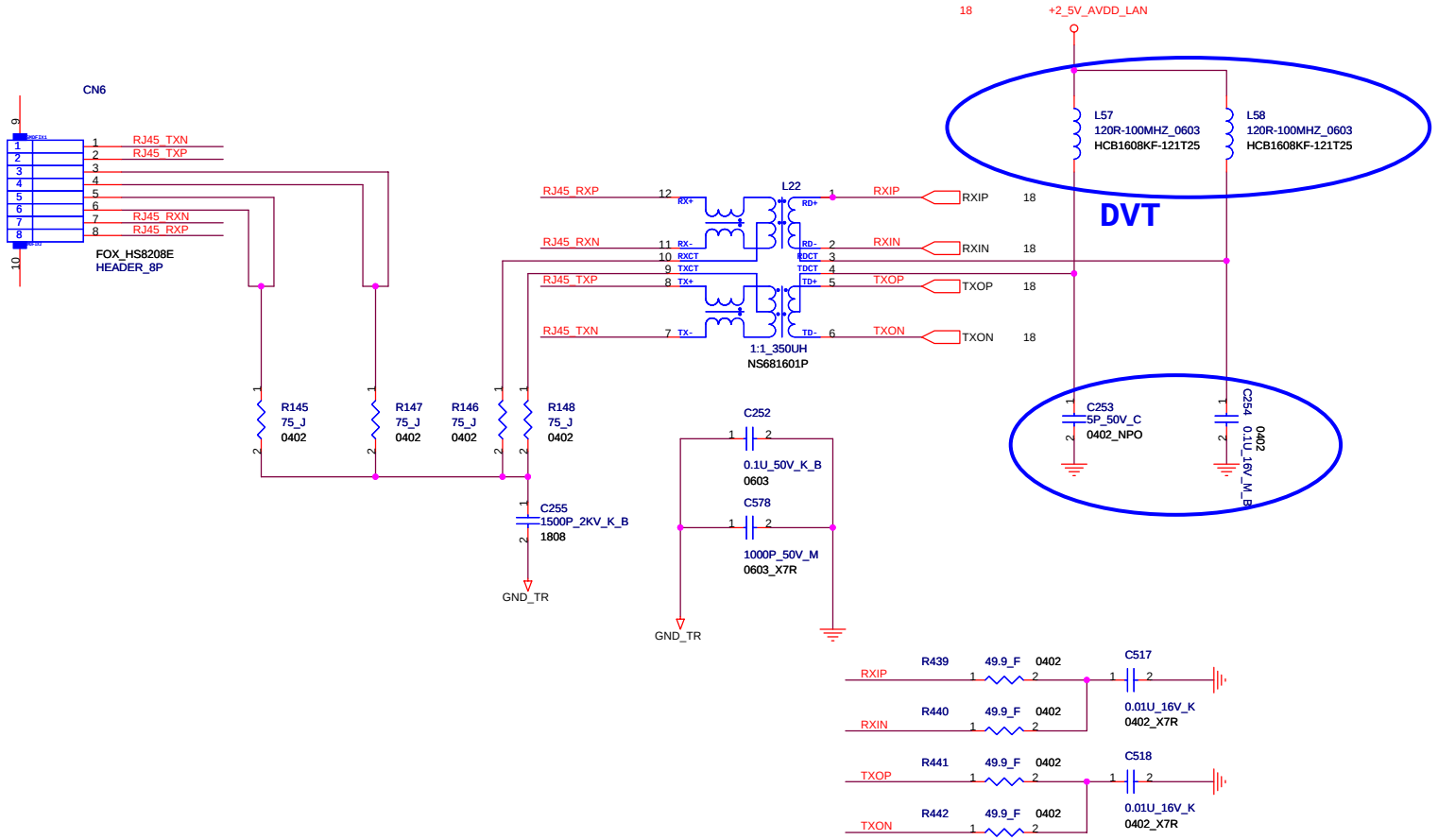
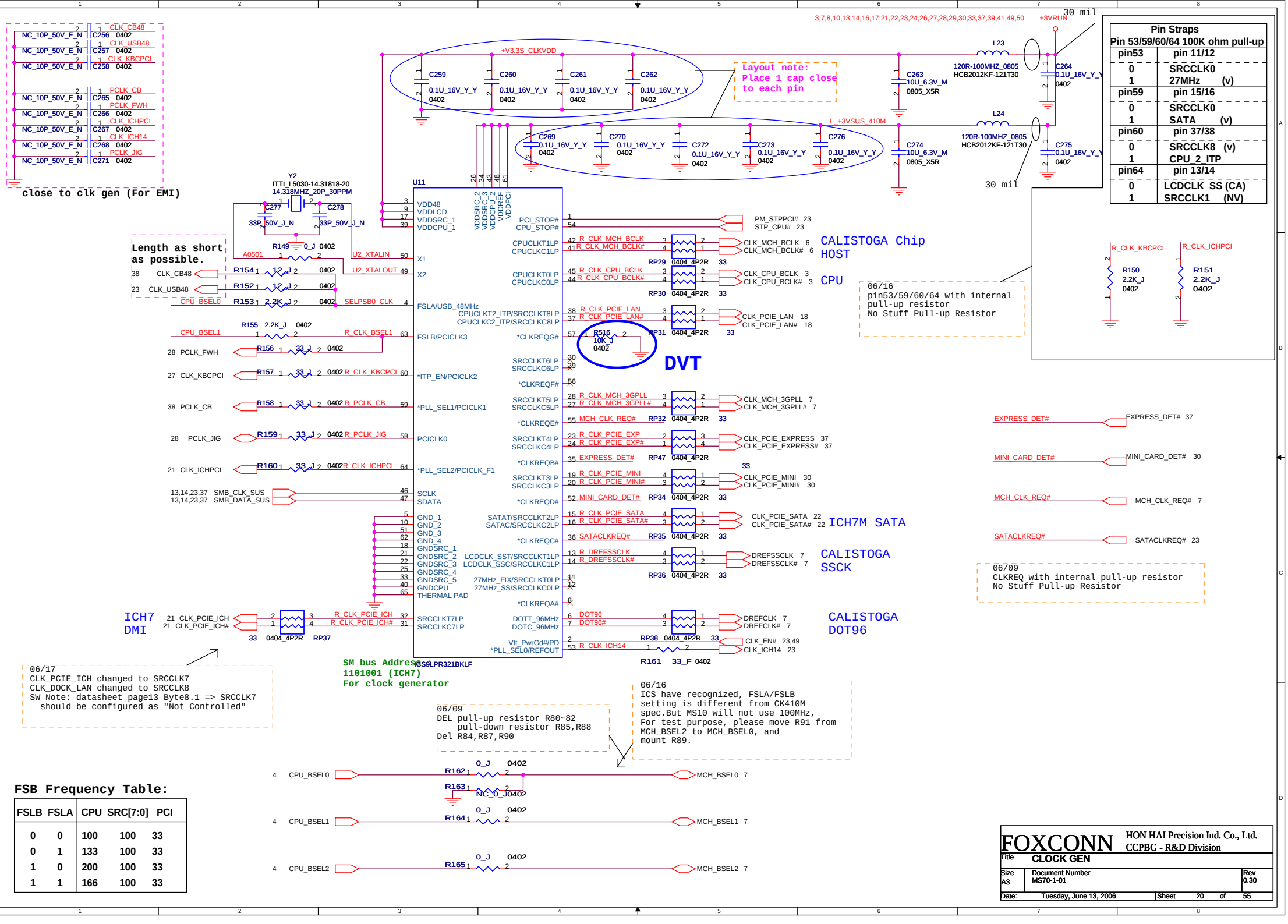
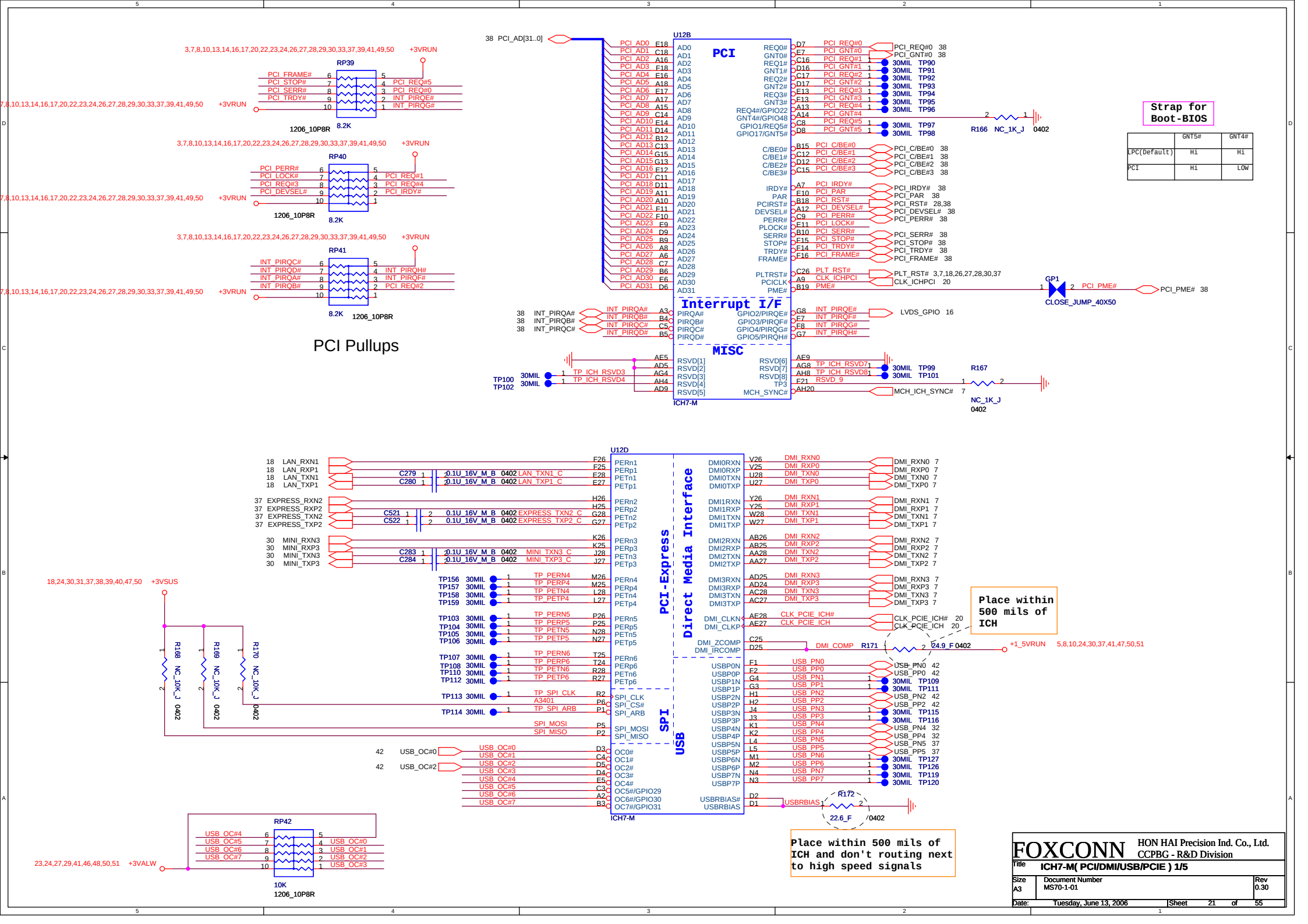
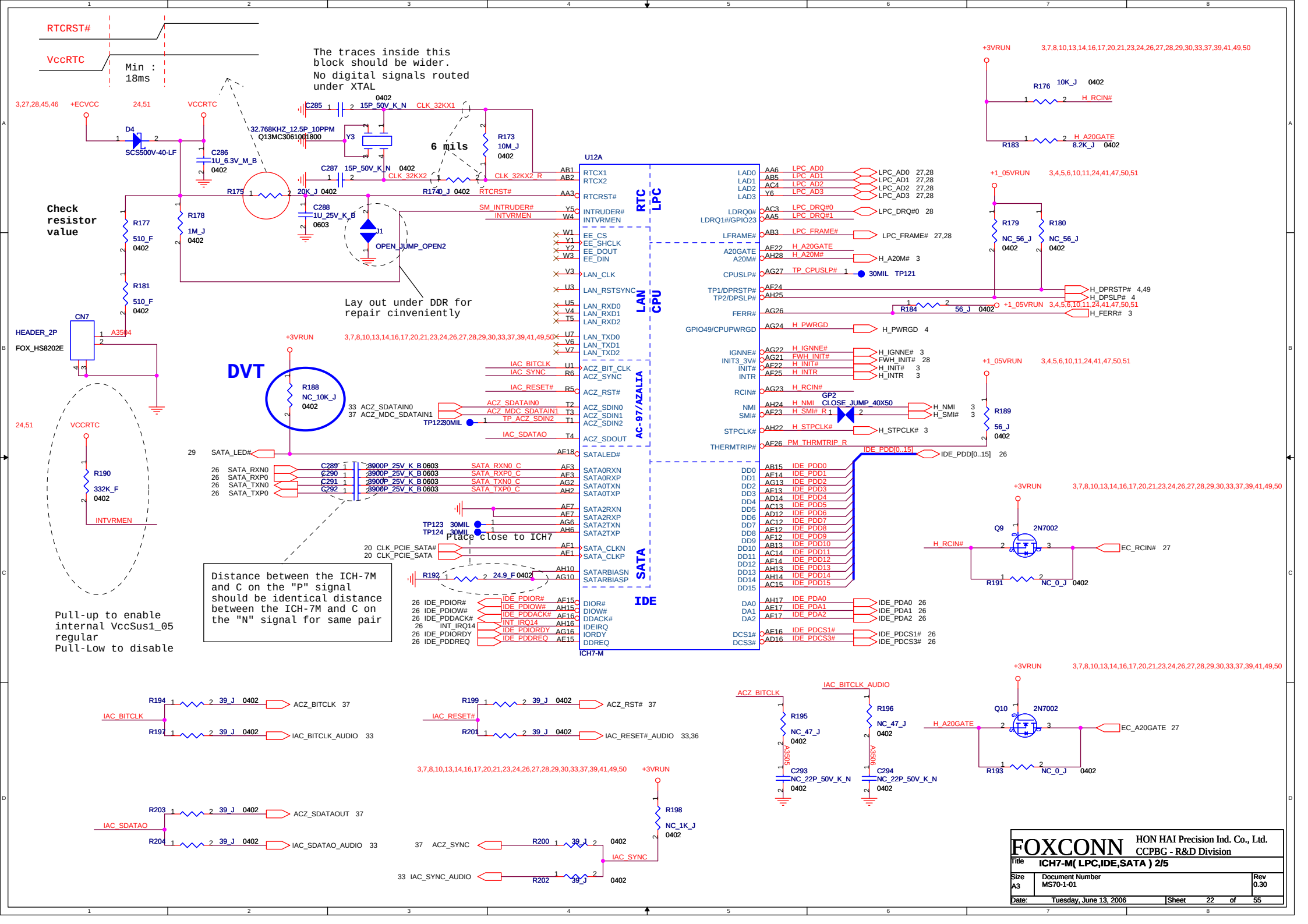
55

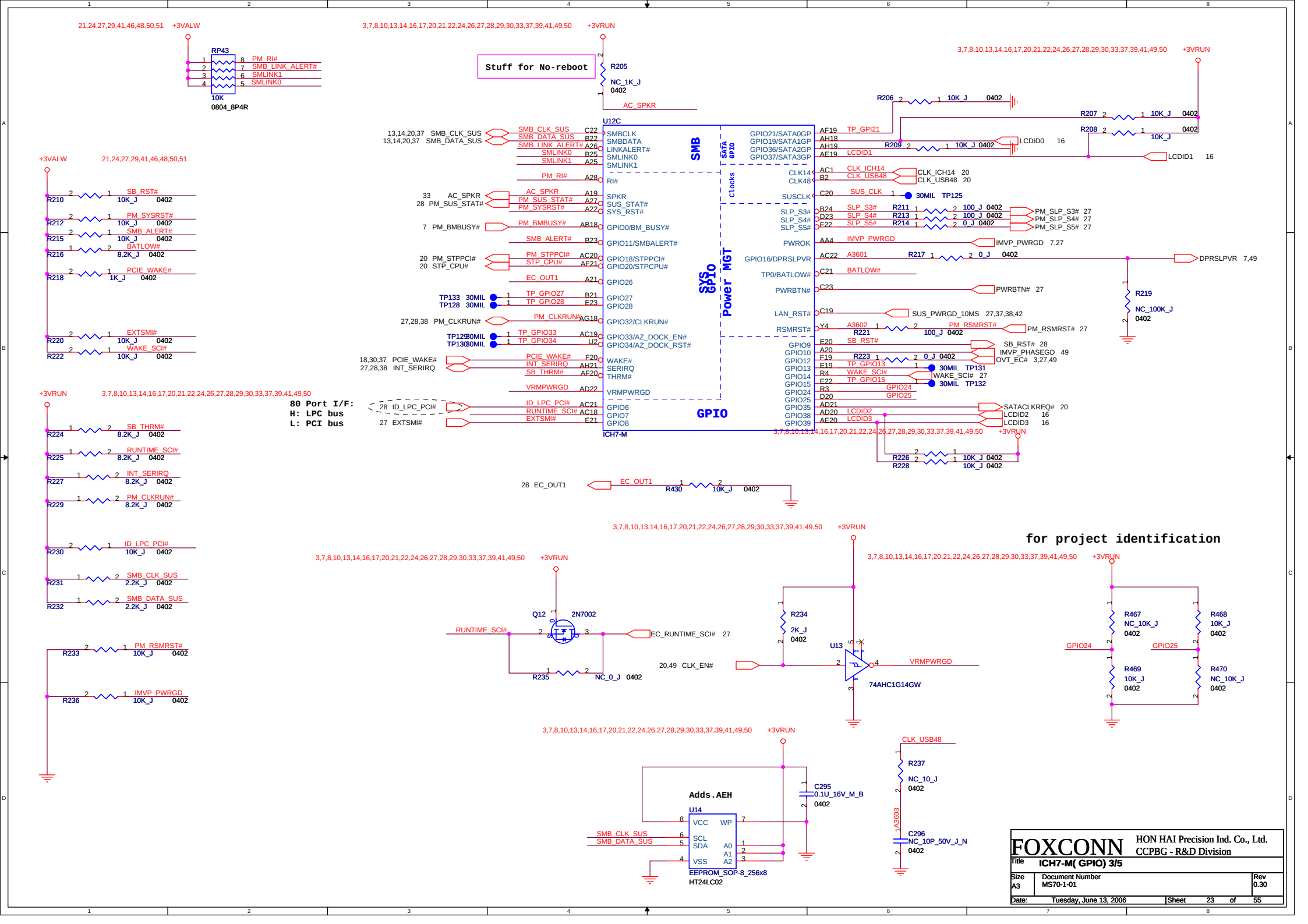


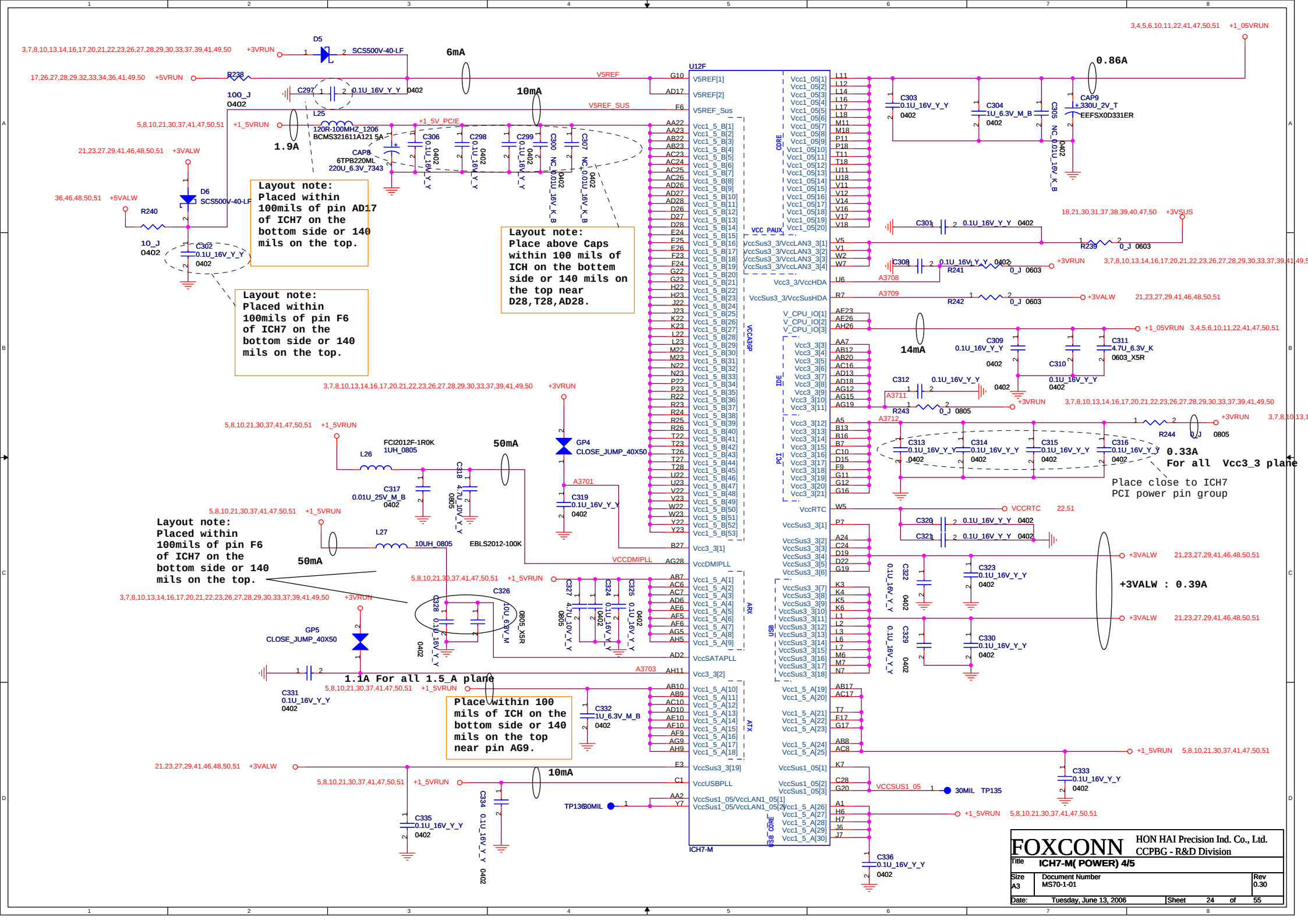
FOXCONN	HON HAI Precision Ind. Co., Ltd.	
	CCPBG - R&D Division	
Title	LAN Transformer	
Size A3	Document Number MS70-1-01	Rev 0.30
Date: Tuesday, June 13, 2006	Sheet 19 of 55	

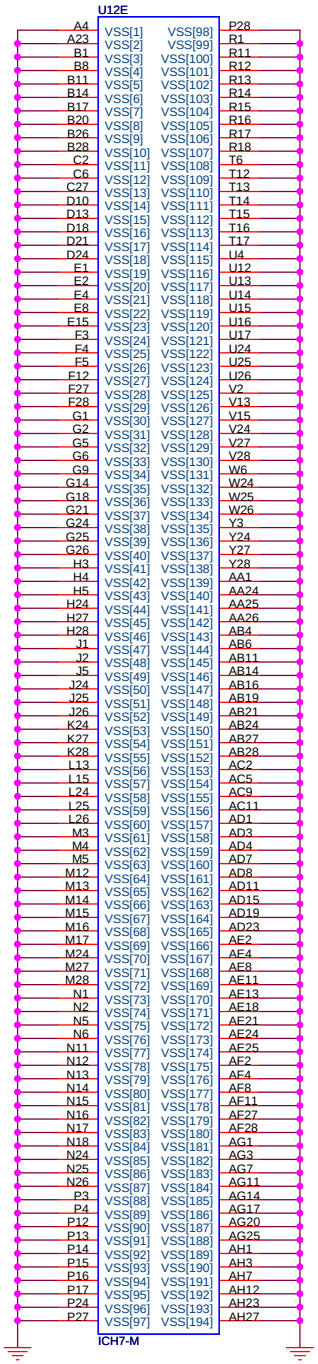

close to clk gen (For EMI)
Length as short as possible.
Layout note: Place 1 cap close to each pin
Pin Straps
Pin 53/59/60/64 100K ohm pull-up
pin53 pin 11/12
0 SRCCLK0 27MHz (v)
1 SRCCLK0 SATA (v)
pin59 pin 15/16
0 SRCCLK8 (v)
1 CPU_2_ITP
pin60 pin 37/38
0 LCDCLK_SS (CA)
1 SRCCLK1 (NV)
pin64 pin 13/14
CALISTOGA Chip HOST CPU
DVT
ICH7M SATA
CALISTOGA SSCK
CALISTOGA DOT96
ICH7 DMI
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"
SM bus Address
1101001 (ICH7)
For clock generator
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
Rev 0.30
Date: Tuesday, June 13, 2006
Sheet 20 of 55


RP39
RP40
RP41
RP42
1206_10P8R
8.2K
10K
PCI Pullups
U12B
PCI
Interrupt I/F
MISC
ICH7-M
Strap for Boot-BIOS
GP1
CLOSE_JUMP_40X50
U12D
PCI-Express
Direct Media Interface
SPI
USB
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
Rev 0.30
Tuesday, June 13, 2006
Sheet 21 of 55


RTCRST#
VccRTC
Min : 18ms
The traces inside this block should be wider.
No digital signals routed under XTAL
6 mils
Check resistor value
Lay out under DDR for repair cinveniently
DVT
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
U12A
ICH7-M
RTC
LPC
LAN
CPU
AC-97/AZALIA
SATA
IDE
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 0.30
Date: Tuesday, June 13, 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
13,14,20,37 SMB_CLK_SUS
13,14,20,37 SMB_DATA_SUS
SMB_CLK_SUS C22
SMB_DATA_SUS B22
SMB_LINK_ALERT# A26
SMLINK0 B25
SMLINK1 A25
SMBCLK
SMBDATA
LINKALERT#
SMLINK0
SMLINK1
SMB
PM_RI# A28
RI#
33 AC_SPKR
28 PM_SUS_STAT#
AC_SPKR A19
PM_SUS_STAT# A27
PM_SYSRST# A22
SPKR
SUS_STAT#
SYS_RST#
7 PM_BMBUSY#
PM_BMBUSY# AB18
GPIO0/BM_BUSY#
SMB_ALERT# B23
GPIO11/SMBALERT#
20 PM_STPPCI#
20 STP_CPU#
PM_STPPCI# AC20
STP_CPU# AF21
GPIO18/STPPCI#
GPIO20/STPCPU#
EC_OUT1 A21
GPIO26
TP133 30MIL
TP128 30MIL
TP_GPIO27 B21
TP_GPIO28 E23
GPIO27
GPIO28
27,28,38 PM_CLKRUN#
PM_CLKRUN# AG18
GPIO32/CLKRUN#
TP129 30MIL
TP130 30MIL
TP_GPIO33 AC19
TP_GPIO34 U2
GPIO33/AZ_DOCK_EN#
GPIO34/AZ_DOCK_RST#
18,30,37 PCIE_WAKE#
27,28,38 INT_SERIRQ
PCIE_WAKE# F20
INT_SERIRQ AH21
SB_THRM# AF20
WAKE#
SERIRQ
THRM#
VRMPWRGD AD22
VRMPWRGD
28 ID_LPC_PCI#
ID_LPC_PCI# AC21
RUNTIME_SCI# AC18
EXTSMI# F21
27 EXTSMI#
GPIO6
GPIO7
GPIO8
GPIO
ICH7-M
SATA GPIO
GPIO21/SATA0GP
GPIO19/SATA1GP
GPIO36/SATA2GP
GPIO37/SATA3GP
Clocks
CLK14
CLK48
SUSCLK
SLP_S3#
SLP_S4#
SLP_S5#
PWROK
GPIO16/DPRSLPVR
TP0/BATLOW#
PWRBTN#
LAN_RST#
RSMRST#
SYS
Power MGT
AE19 TP_GPI21
AH18
AH19
AE19 LCDID1
AC1 CLK_ICH14
B2 CLK_USB48
CLK_ICH14 20
CLK_USB48 20
C20 SUS_CLK
30MIL TP125
B24 SLP_S3#
D23 SLP_S4#
F22 SLP_S5#
PM_SLP_S3# 27
PM_SLP_S4# 27
PM_SLP_S5# 27
AA4 IMVP_PWRGD
IMVP_PWRGD 7,27
AC22 A3601
DPRSLPVR 7,49
C21 BATLOW#
C23
PWRBTN# 27
C19
SUS_PWRGD_10MS 27,37,38,42
Y4 A3602
PM_RSMRST#
PM_RSMRST# 27
E20 SB_RST#
A20 GPIO9
E19 GPIO10
E19 GPIO12
R4 GPIO13
E22 GPIO14
R3 GPIO15
D20 GPIO24
AD21 GPIO25
AD20 GPIO35
AE20 GPIO38
GPIO39
SB_RST# 28
IMVP_PHASEGD 49
OVT_EC# 3,27,49
TP_GPIO13
TP_GPIO15
WAKE_SCI# 27
30MIL TP131
30MIL TP132
GPIO24
GPIO25
SATACLKREQ# 20
LCDID2 16
LCDID3 16
R206 10K_J 0402
R207 10K_J 0402
R208 10K_J 0402
R209 10K_J 0402
LCDID0 16
LCDID1 16
R210 SB_RST# 10K_J 0402
R212 PM_SYSRST# 10K_J 0402
R215 SMB_ALERT# 10K_J 0402
R216 BATLOW# 8.2K_J 0402
R218 PCIE_WAKE# 1K_J 0402
R220 EXTSMI# 10K_J 0402
R222 WAKE_SCI# 10K_J 0402
R211 100_J 0402
R213 100_J 0402
R214 0_J 0402
R217 0_J 0402
R219 NC_100K_J 0402
R221 100_J 0402
R223 0_J 0402
R224 SB_THRM# 8.2K_J 0402
R225 RUNTIME_SCI# 8.2K_J 0402
R227 INT_SERIRQ 8.2K_J 0402
R229 PM_CLKRUN# 8.2K_J 0402
R230 ID_LPC_PCI# 10K_J 0402
R231 SMB_CLK_SUS 2.2K_J 0402
R232 SMB_DATA_SUS 2.2K_J 0402
R233 PM_RSMRST# 10K_J 0402
R236 IMVP_PWRGD 10K_J 0402
80 Port I/F:
H: LPC bus
L: PCI bus
28 EC_OUT1
R430 10K_J 0402
R226 10K_J 0402
R228 10K_J 0402
for project identification
Q12 2N7002
RUNTIME_SCI#
EC_RUNTIME_SCI# 27
R235 NC_0_J 0402
R234 2K_J 0402
20,49 CLK_EN#
U13
74AHC1G14GW
VRMPWRGD
R467 NC_10K_J 0402
R468 10K_J 0402
R469 10K_J 0402
R470 NC_10K_J 0402
GPIO24
GPIO25
Adds.AEH
U14
VCC
WP
SCL
SDA
A0
A1
A2
VSS
SMB_CLK_SUS
SMB_DATA_SUS
EEPROM_SOP-8_256x8
HT24LC02
C295 0.1U_16V_M_B 0402
C296 NC_10P_50V_J_N 0402
R237 NC_10_J 0402
A3603
CLK_USB48
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 0.30
Date: Tuesday, June 13, 2006
Sheet 23 of 55


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.
6mA
10mA
1.9A
14mA
50mA
1.1A For all 1.5_A plane
0.86A
0.33A For all Vcc3_3 plane
Place close to ICH7 PCI power pin group
+3VALW : 0.39A
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title ICH7-M(POWER) 4/5
Size A3
Document Number MS70-1-01
Rev 0.30
Date: Tuesday, June 13, 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 0.30
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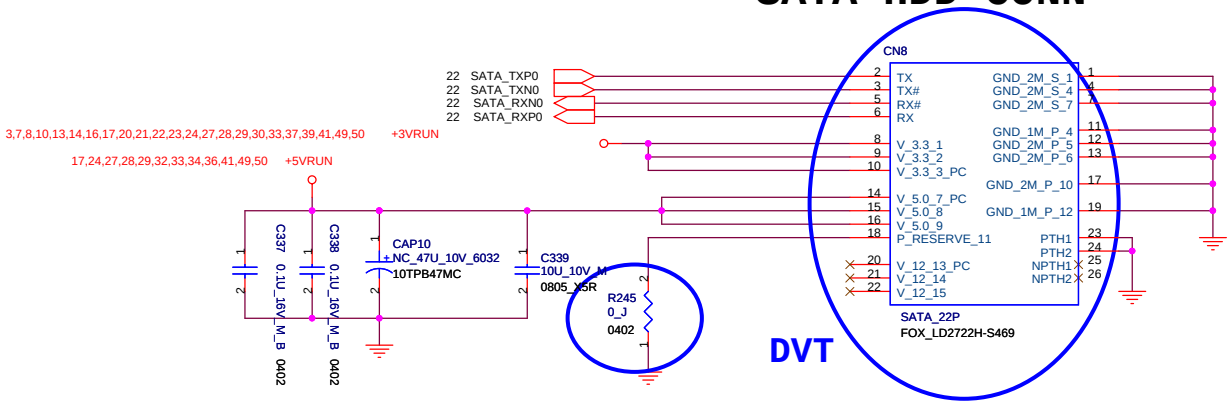
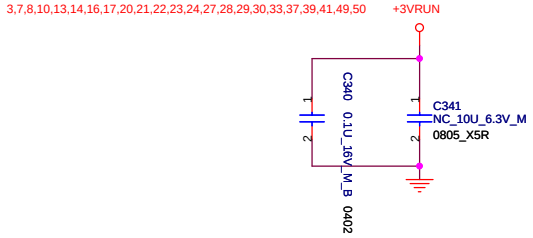
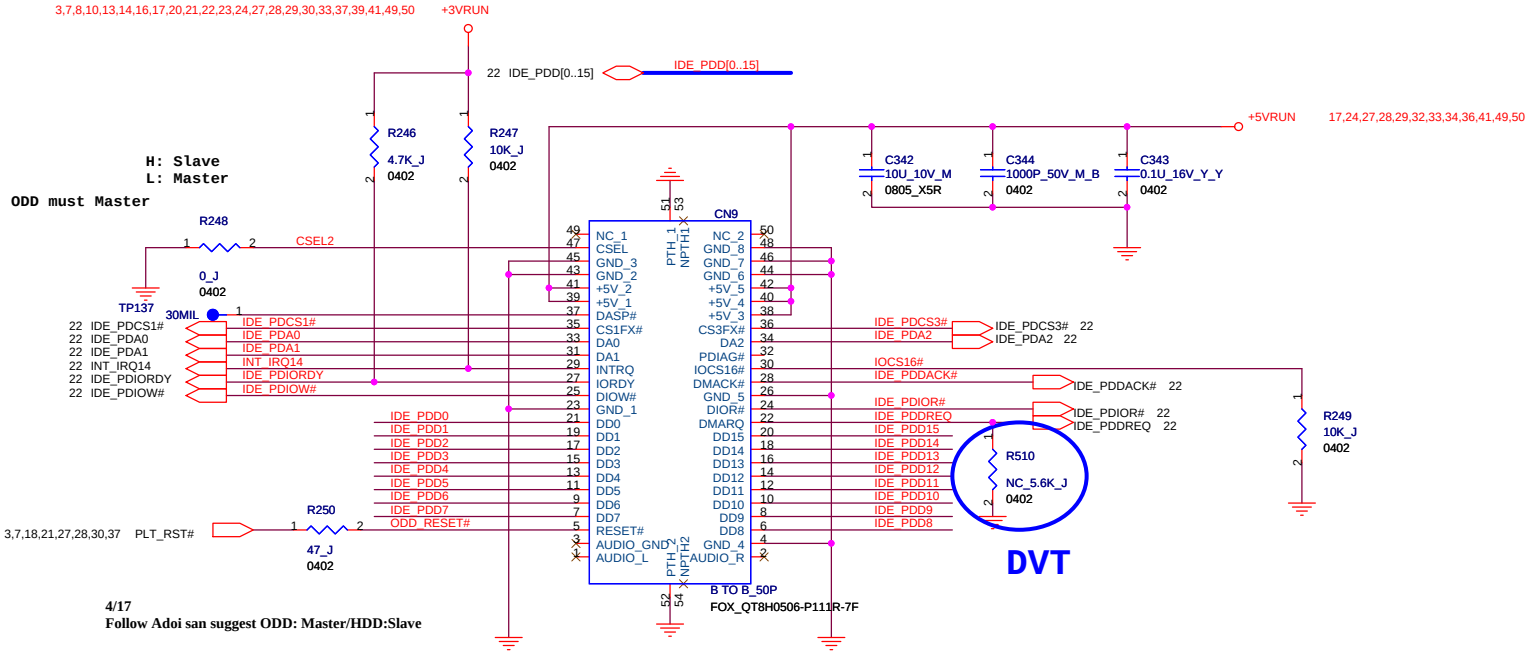
SATA HDD CONN







CD-ROM CONN

FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	SATA HDD/CD-ROM	
Size A3	Document Number MS70-1-01	Rev 0.30
Date: Tuesday, June 13, 2006	Sheet 26 of 55	

Consider short FB after BB test.

FOR EMI

DVT

DVT

DVT

KBC CNN

CLOSE TO CHIP

	ID
945	111111
940	111101

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

Title: EC+KBC
Size: A3
Document Number: MS70-1-01
Rev: 0.30
Date: Tuesday, June 13, 2006
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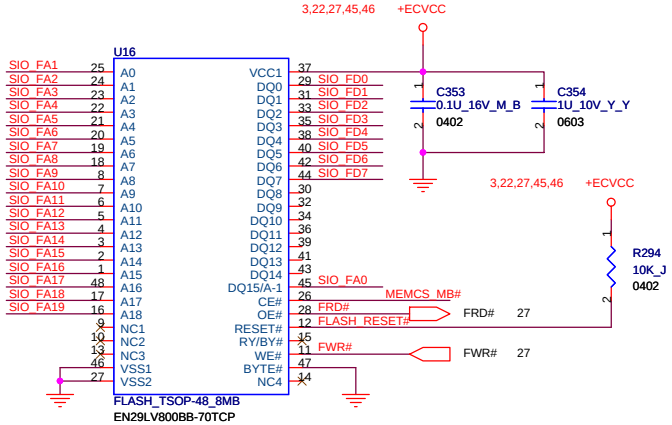
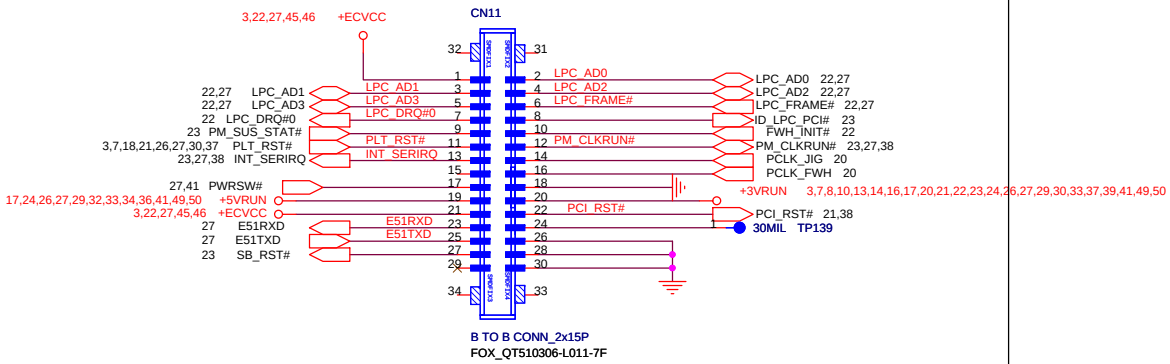
27 SIO_FA[19..0]
27 SIO_FD[7..0]

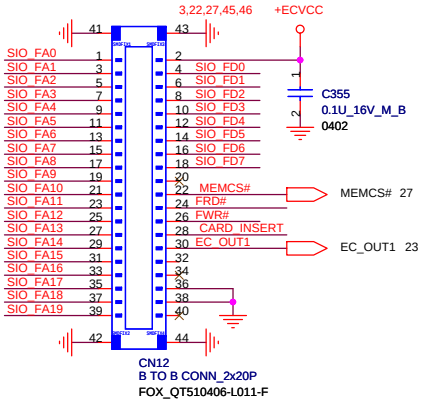


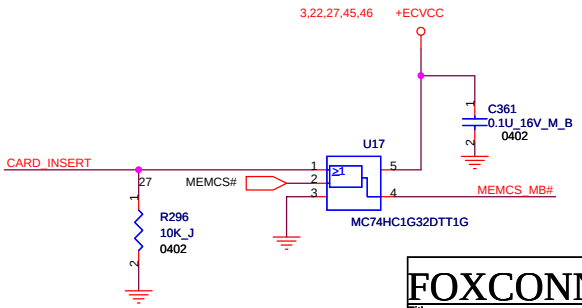
FLASH BIOS

JIG-120



X-BUS

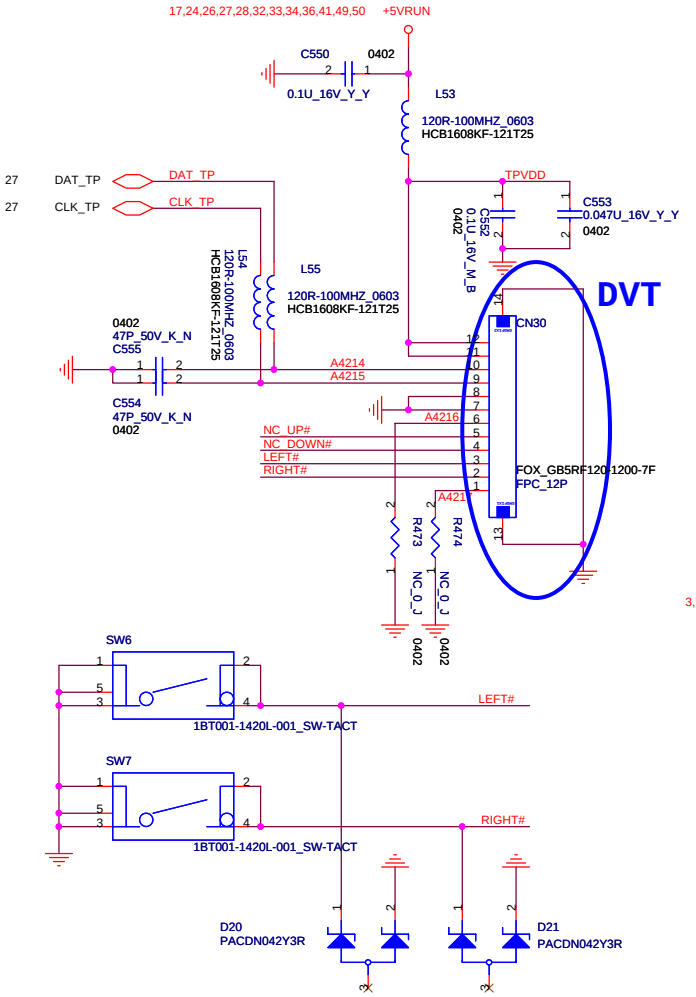




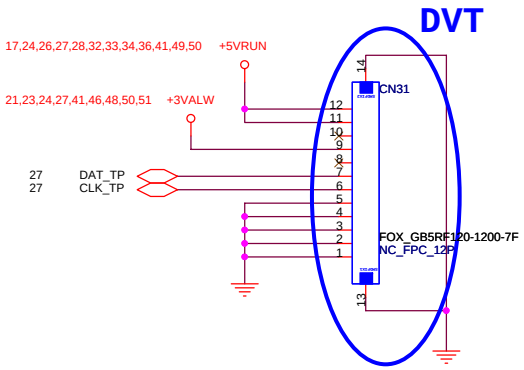
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division

Title	Flash ROM/X-Bus/LID SW#	
Size A3	Document Number MS70-1-01	Rev 0.30
Date: Tuesday, June 13, 2006	Sheet 28 of 55	

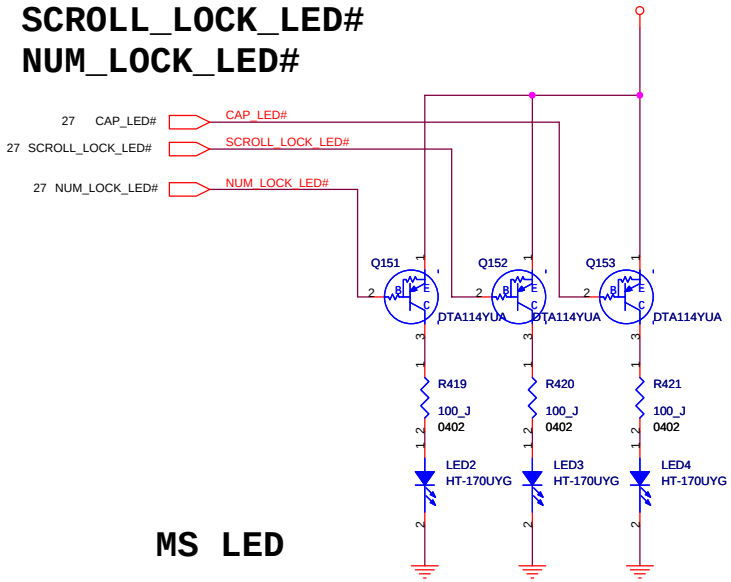
Touch Pad Board



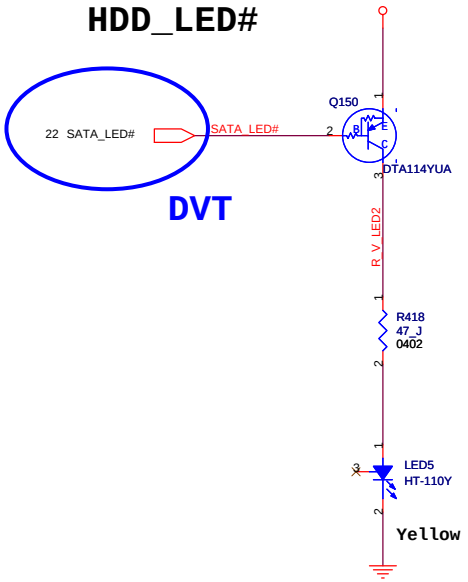
Touch Pad Daughter Board Conn



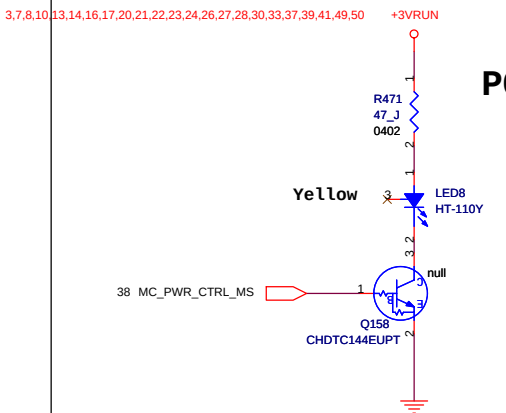
CAP_LED#
SCROLL_LOCK_LED#
NUM_LOCK_LED#



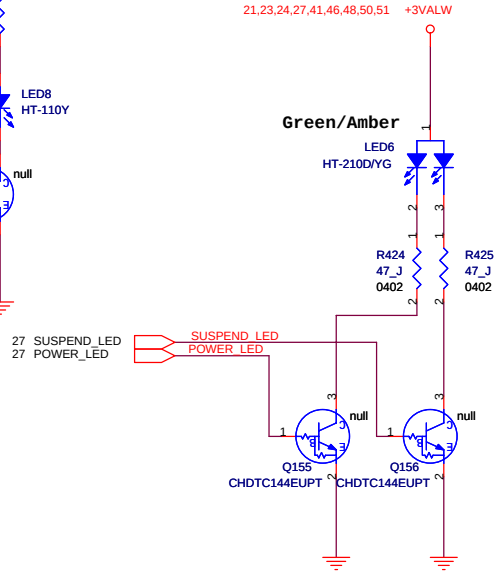
HDD_LED#



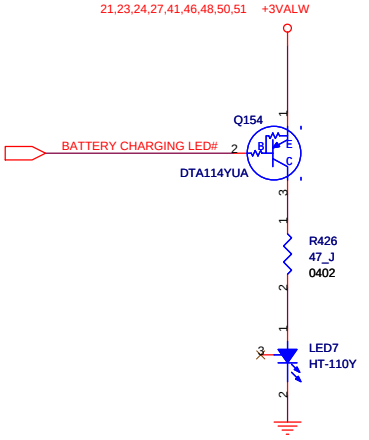
MS LED



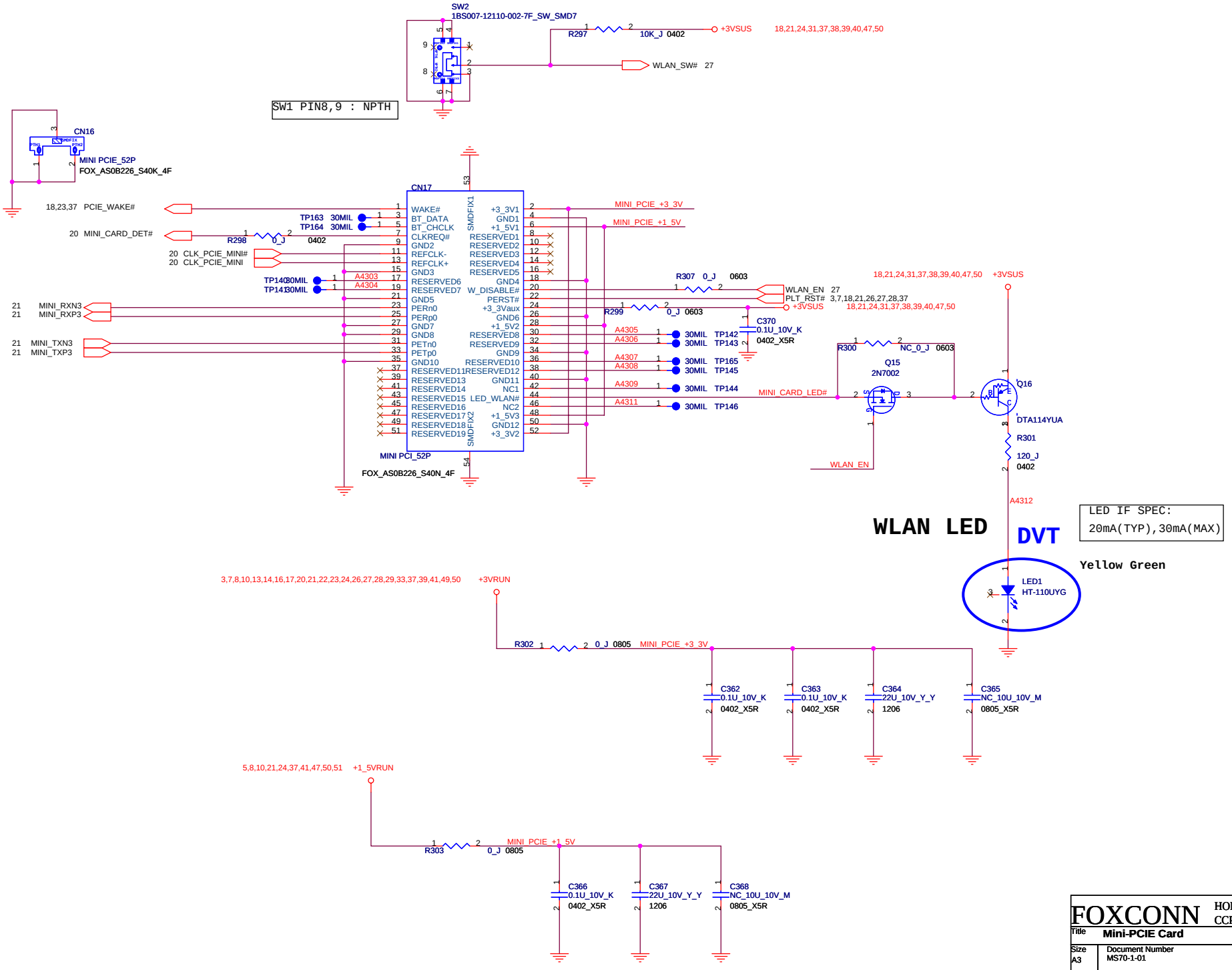
POWER/SUSPEND LED



BATTERY CHARGING LED#

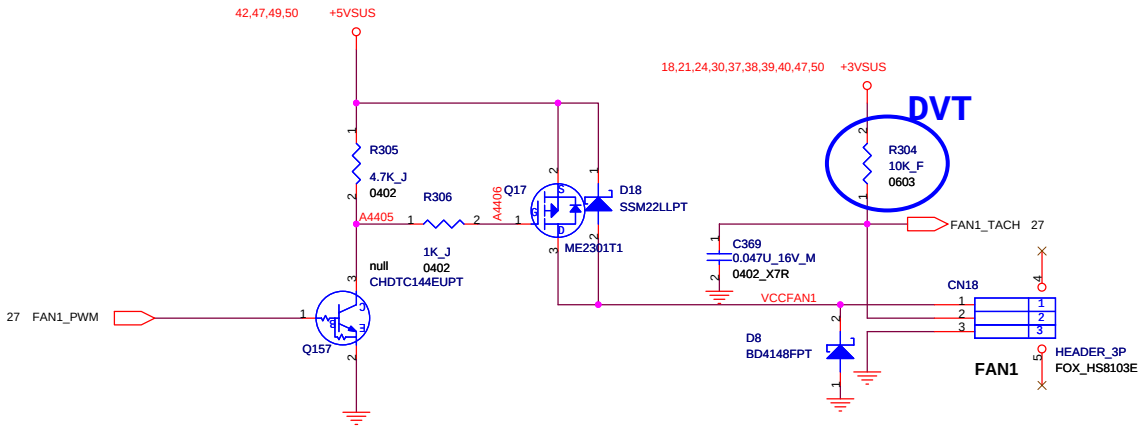


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	LED/Touch PAD	
Size A3	Document Number MS70-1-01	Rev 0.30
Date: Tuesday, June 13, 2006	Sheet 29 of 55	

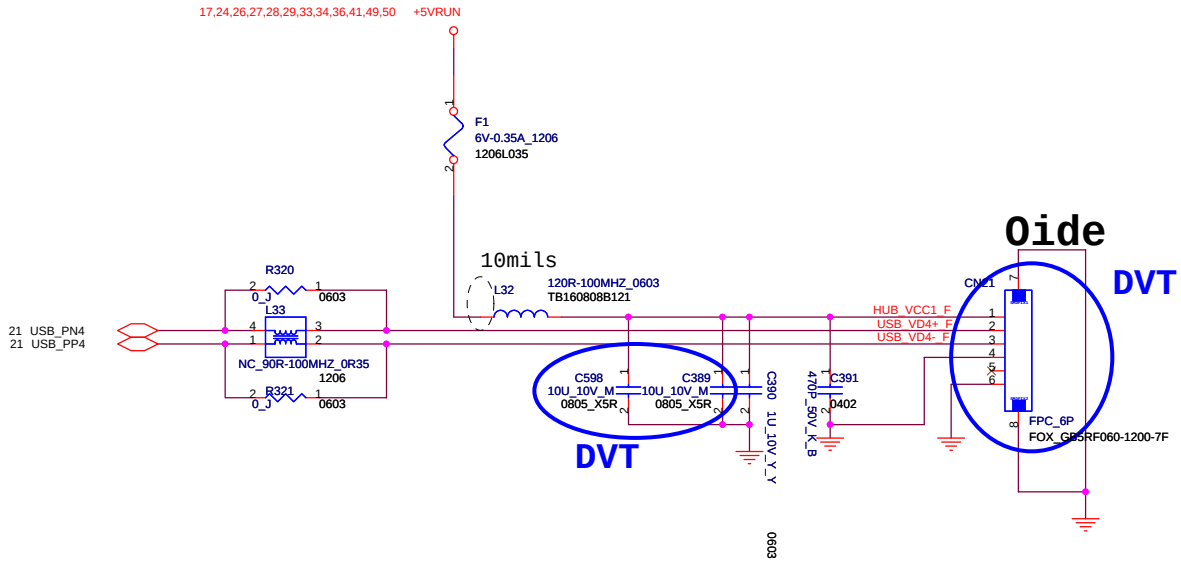


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	Mini-PCIE Card	
Size A3	Document Number MS70-1-01	Rev 0.30
Date: Tuesday, June 13, 2006	Sheet 30 of 55	

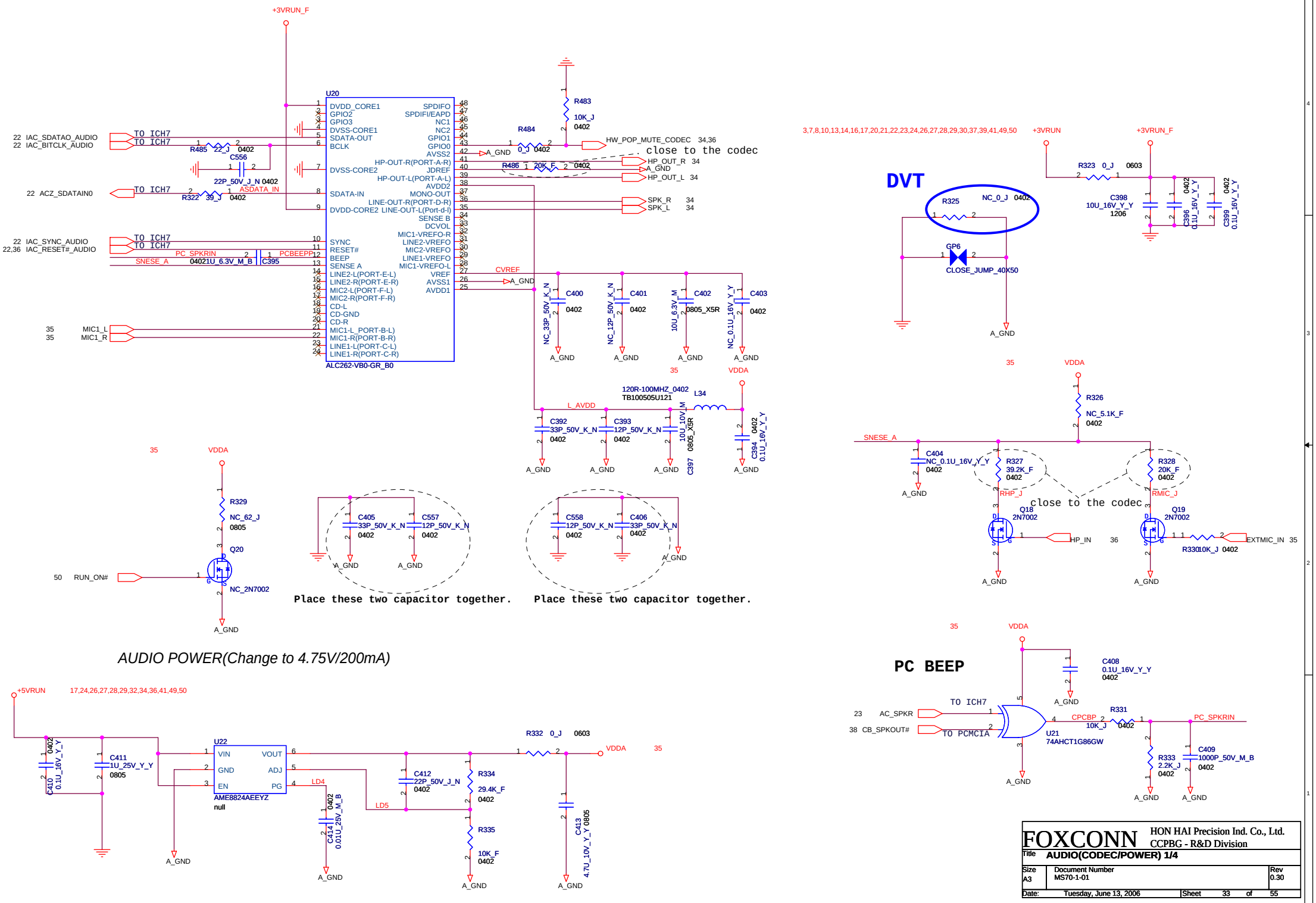
FAN1

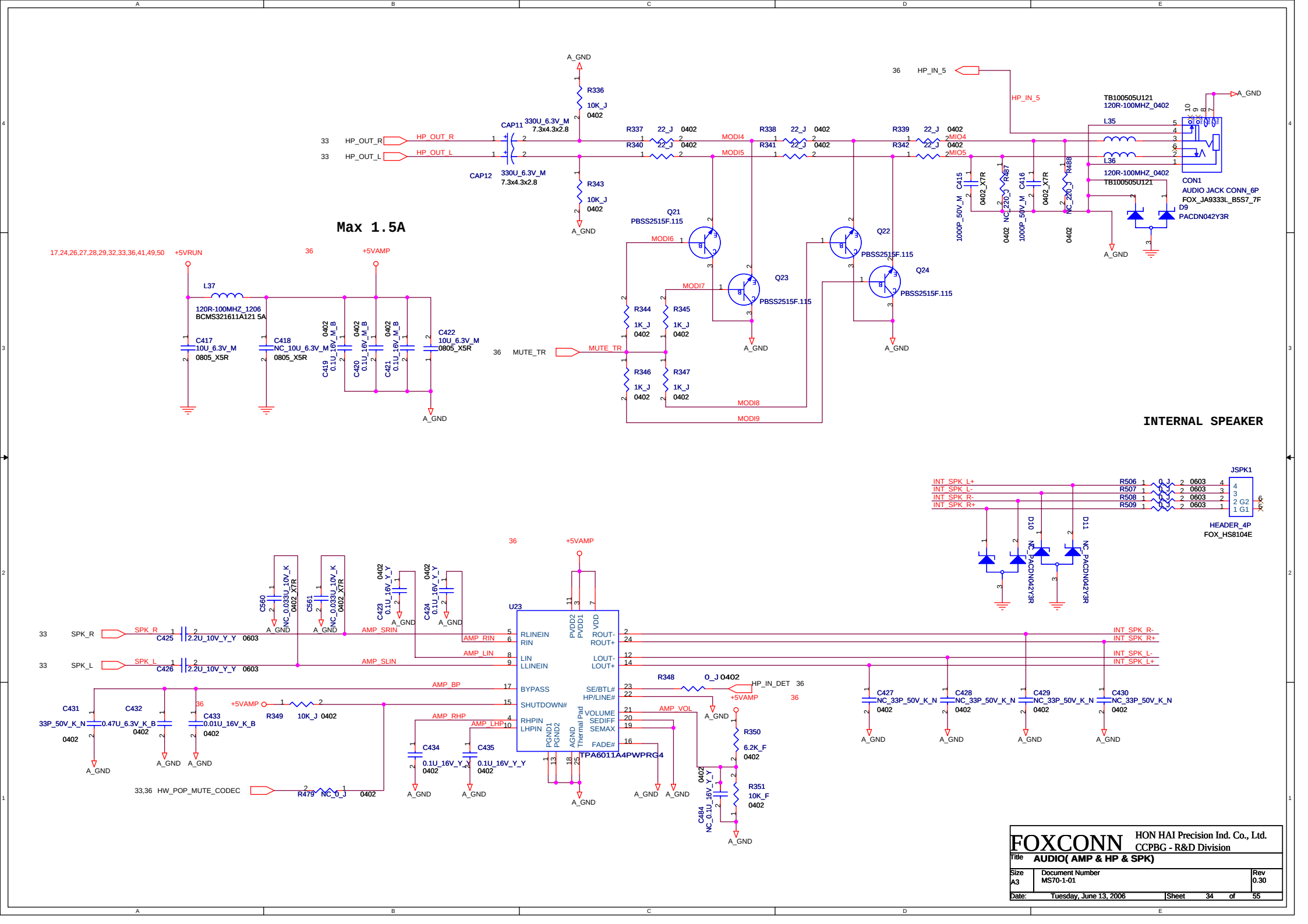


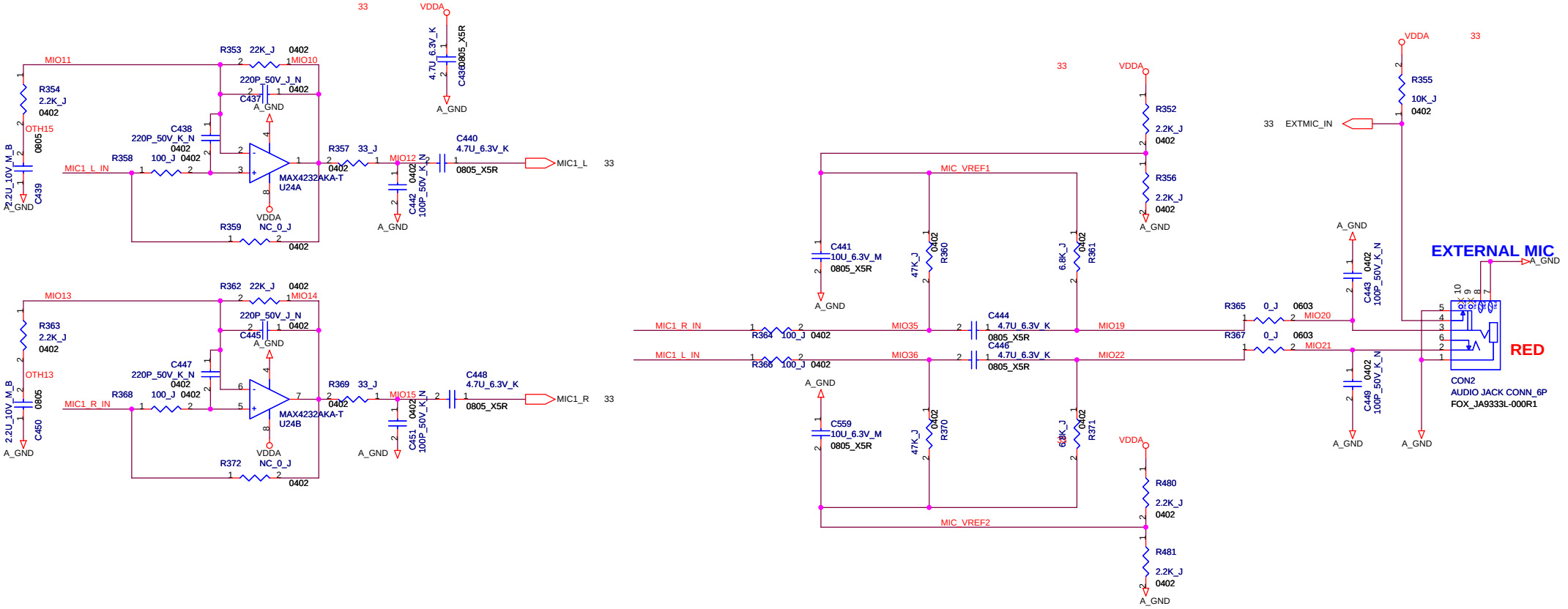
FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: FAN		
Size: A3	Document Number: MS70-1-01	Rev: 0.30
Date: Tuesday, June 13, 2006	Sheet 31 of 55	



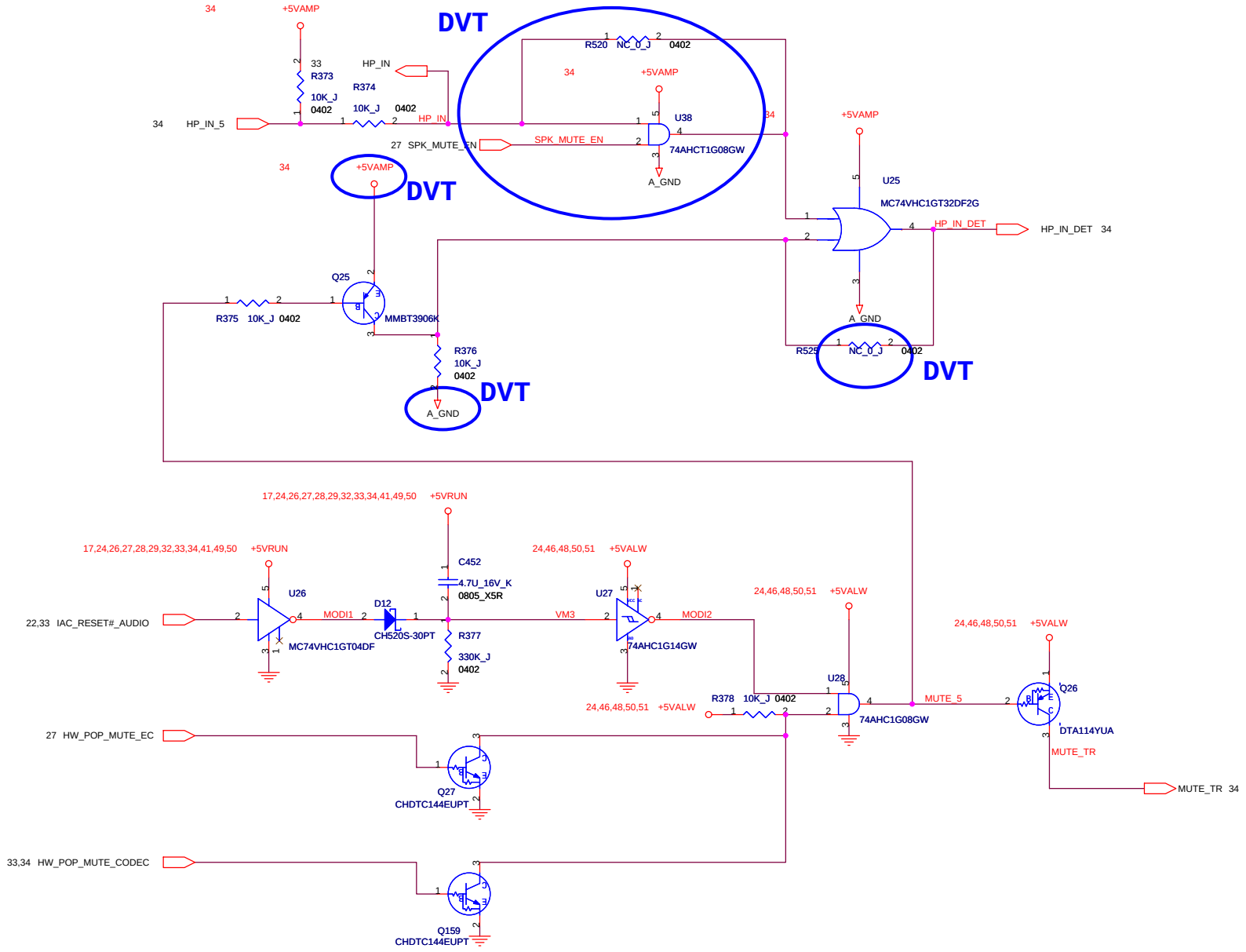
FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: OIDE		
Size: A3	Document Number: MS70-1-01	Rev: 0.30
Date: Tuesday, June 13, 2006	Sheet 32 of 55	


+3VRUN_F
U20
ALC262-VB0-GR_B0
close to the codec
Place these two capacitor together.
Place these two capacitor together.
AUDIO POWER(Change to 4.75V/200mA)
DVT
PC BEEP
close to the codec
+5VRUN
AME8824AEEYZ
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title AUDIO(CODEC/POWER) 1/4
Size A3
Document Number MS70-1-01
Rev 0.30
Date: Tuesday, June 13, 2006
Sheet 33 of 55


Max 1.5A
INTERNAL SPEAKER
+5VRUN
+5VAMP
HP_OUT_R
HP_OUT_L
HP_IN_5
MUTE_TR
HW_POP_MUTE_CODEC
SPK_R
SPK_L
INT_SPK_L+
INT_SPK_L-
INT_SPK_R-
INT_SPK_R+
A_GND
L37
120R-100MHZ_1206
BCMS321611A121 5A
C417 10U_6.3V_M 0805_X5R
C418 NC_10U_6.3V_M 0805_X5R
C422 10U_6.3V_M 0805_X5R
C419 0.1U_16V_M_B 0402
C420 0.1U_16V_M_B 0402
C421 0.1U_16V_M_B 0402
CAP11 330U_6.3V_M 7.3x4.3x2.8
CAP12 330U_6.3V_M 7.3x4.3x2.8
R336 10K_J 0402
R343 10K_J 0402
R337 22_J 0402
R340 22_J 0402
R338 22_J 0402
R341 22_J 0402
R339 22_J 0402
R342 22_J 0402
MODI4
MODI5
MODI6
MODI7
MODI8
MODI9
MIO4
MIO5
Q21 PBSS2515F.115
Q22 PBSS2515F.115
Q23 PBSS2515F.115
Q24 PBSS2515F.115
R344 1K_J 0402
R345 1K_J 0402
R346 1K_J 0402
R347 1K_J 0402
C415 1000P_50V_M 0402_X7R
R487 NC_220_J 0402
C416 1000P_50V_M 0402_X7R
R488 NC_220_J 0402
TB100505U121
120R-100MHZ_0402
L35
L36
CON1
AUDIO JACK CONN_6P
FOX_JA9333L_B5S7_7F
D9 PACDN042Y3R
JSPK1
HEADER_4P
FOX_HS8104E
D10 NC_PACDN042Y3R
D11 NC_PACDN042Y3R
R506 0_J 0603
R507 0_J 0603
R508 0_J 0603
R509 0_J 0603
C560 NC_0.033U_10V_K 0402_X7R
C561 NC_0.033U_10V_K 0402_X7R
C423 0.1U_16V_Y_Y 0402
C424 0.1U_16V_Y_Y 0402
C425 2.2U_10V_Y_Y 0603
C426 2.2U_10V_Y_Y 0603
U23
TPA6011A4PWPRG4
RLINEIN
RIN
LIN
LLINEIN
BYPASS
SHUTDOWN#
RHPIN
LHPIN
PVDD1
PVDD2
VDD
ROUT-
ROUT+
LOUT-
LOUT+
SE/BTL#
HP/LINE#
VOLUME
SEDIFF
SEMAX
FADE#
PGND1
PGND2
AGND
Thermal Pad
AMP_SRIN
AMP_SLIN
AMP_RIN
AMP_LIN
AMP_BP
AMP_RHP
AMP_LHP
AMP_VOL
R348 0_J 0402
HP_IN_DET
R349 10K_J 0402
R350 6.2K_F 0402
R351 10K_F 0402
R479 NC_0_J 0402
C427 NC_33P_50V_K_N 0402
C428 NC_33P_50V_K_N 0402
C429 NC_33P_50V_K_N 0402
C430 NC_33P_50V_K_N 0402
C431 33P_50V_K_N 0402
C432 0.47U_6.3V_K_B 0402
C433 0.01U_16V_K_B 0402
C434 0.1U_16V_Y_Y 0402
C435 0.1U_16V_Y_Y 0402
C484 NC_0.1U_16V_Y_Y 0402
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title AUDIO(AMP & HP & SPK)
Size A3
Document Number MS70-1-01
Rev 0.30
Date: Tuesday, June 13, 2006
Sheet 34 of 55

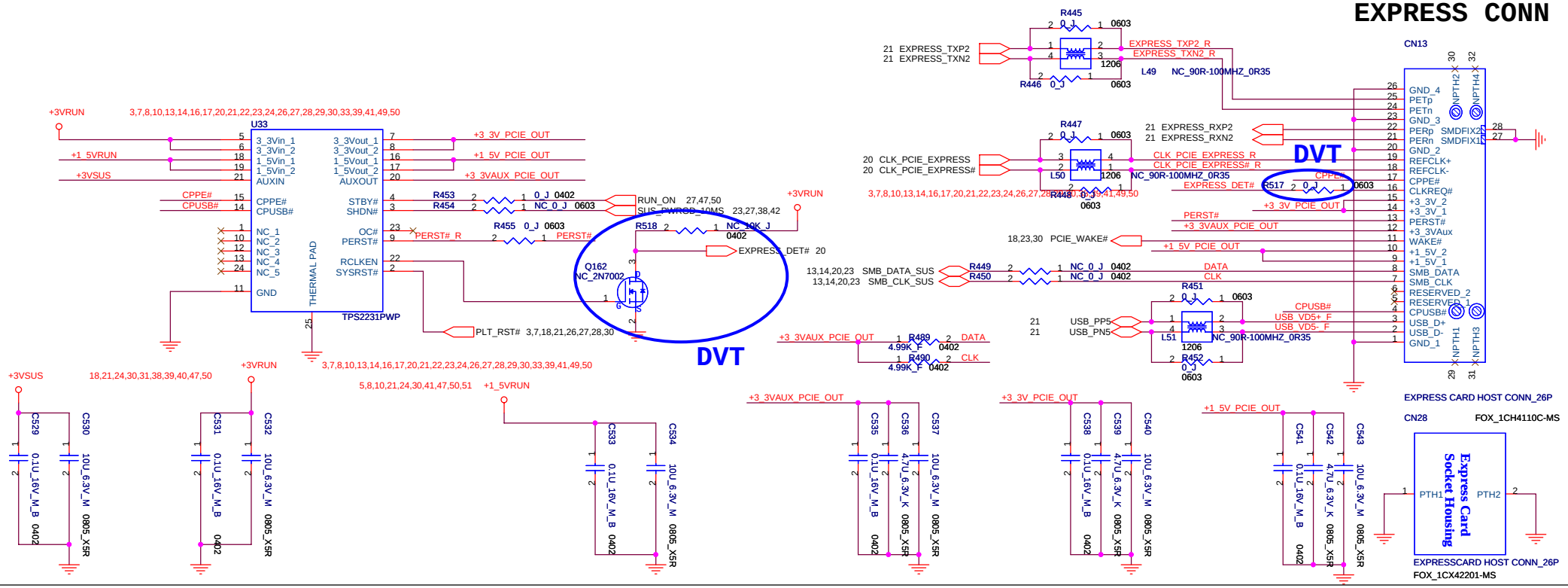


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	AUDIO(EXT MIC) 3/4	
Size A3	Document Number MS70-1-01	Rev 0.30
Date: Tuesday, June 13, 2006	Sheet 35 of 55	

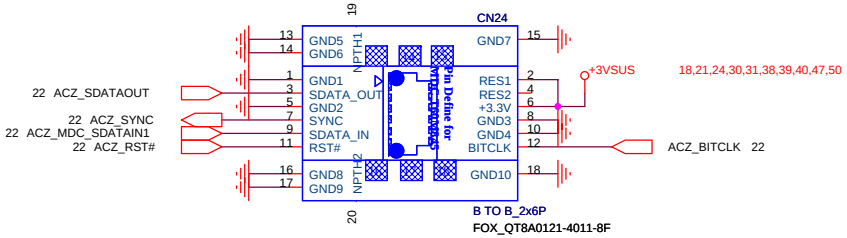


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	AUDIO (MUTE) 4/4	
Size A3	Document Number MS70-1-01	Rev 0.30
Date: Tuesday, June 13, 2006	Sheet 36 of 55	

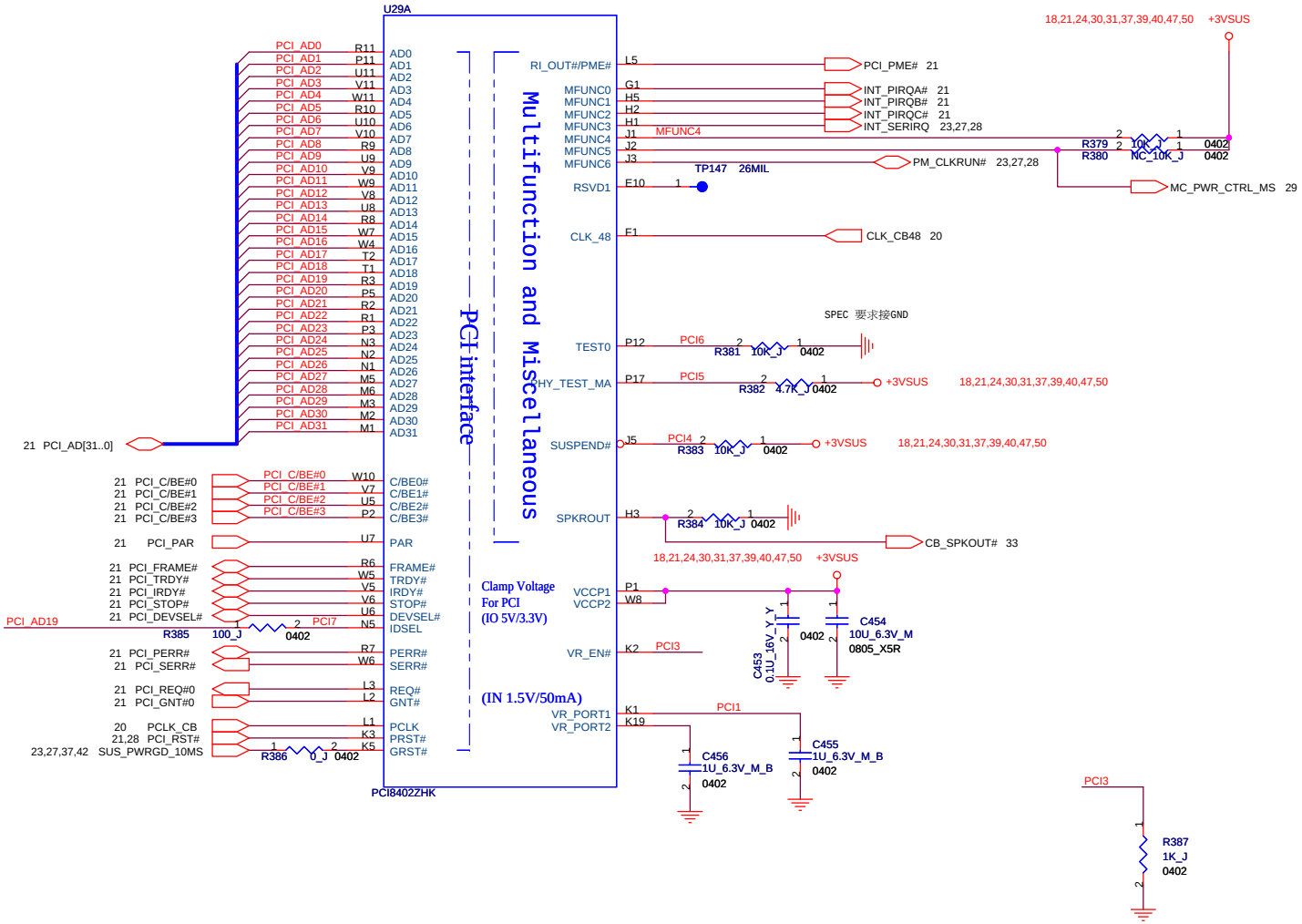
EXPRESS CONN



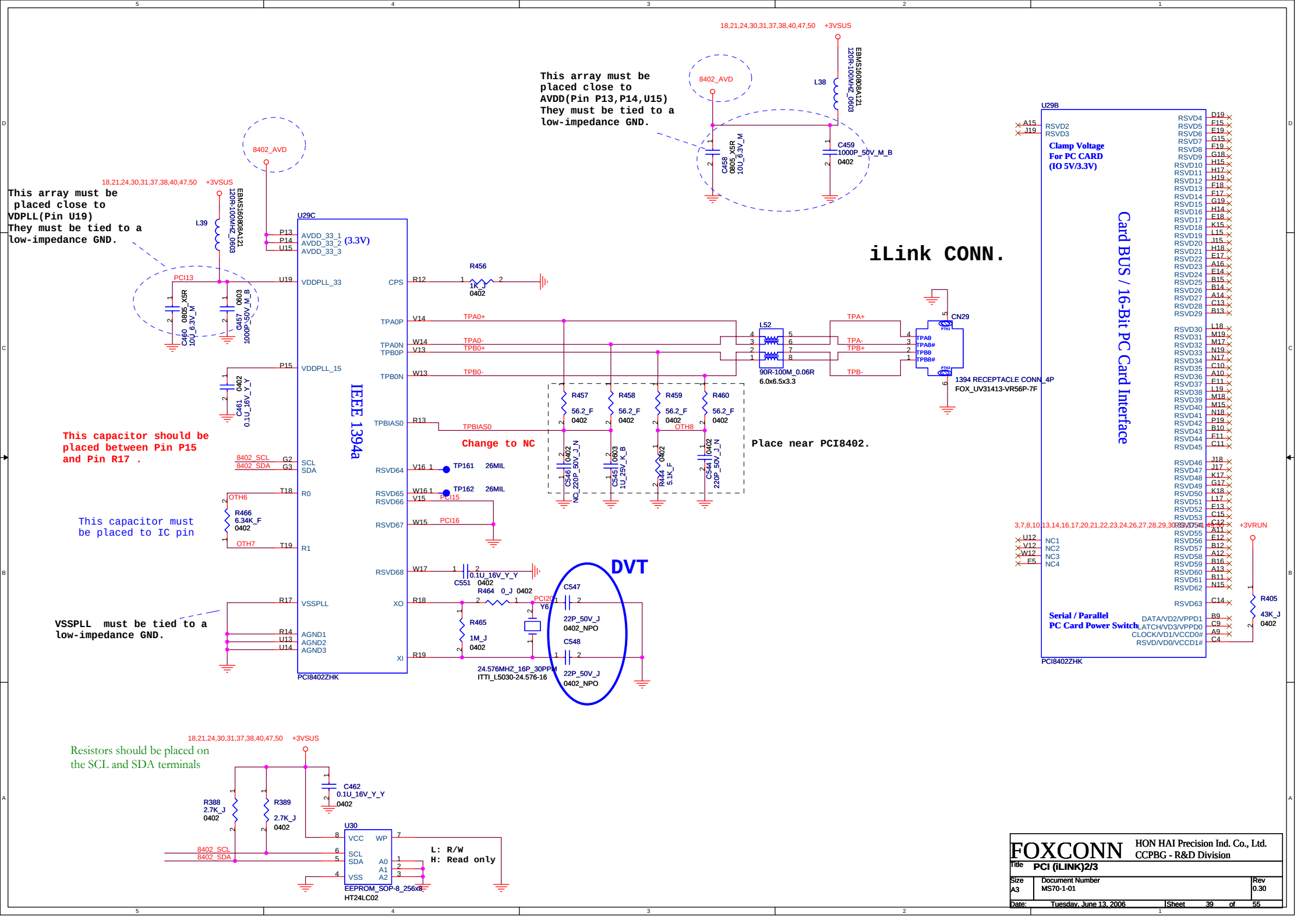
MDC CONN.

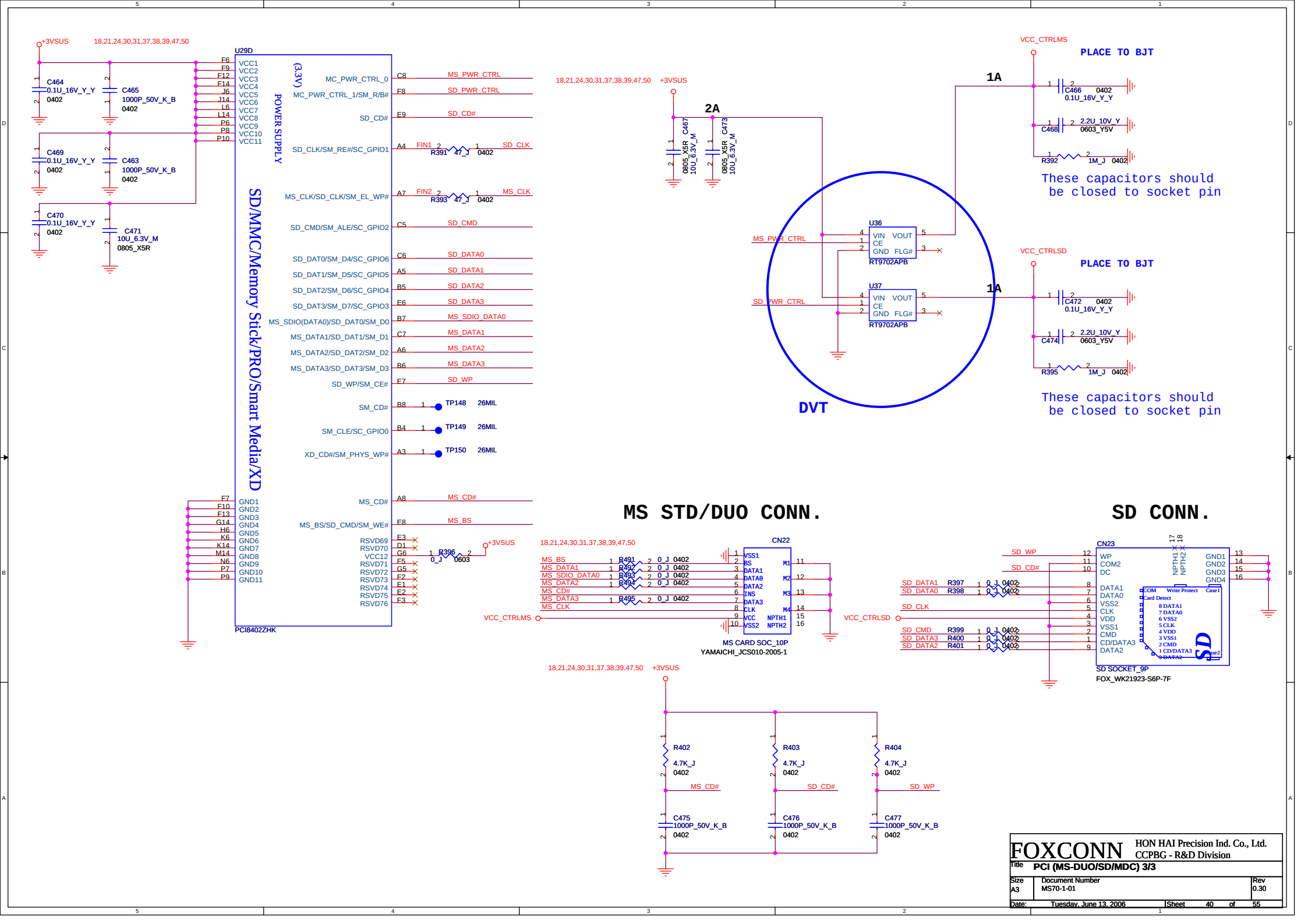


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: EXPRESS CARD		
Size: A3	Document Number: MS70-1-01	Rev: 0.30
Date: Tuesday, June 13, 2006	Sheet 37 of 55	



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 0.30
Date: Tuesday, June 13, 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.
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 VDPLL(Pin U19) They must be tied to a low-impedance GND.
L39
U29C
P13 AVDD_33_1
P14 AVDD_33_2
U15 AVDD_33_3
(3.3V)
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 NC_220P_50V_J_N
C545 0603 1U_25V_K_B
R444 0402 5.1K_F
C544 0402 220P_50V_J_N
OTH8
Place near PCI8402.
L52
90R-100M_0.06R
6.0x6.5x3.3
CN29
1394 RECEPTACLE CONN_4P
FOX_UV31413-VR56P-7F
TPA+
TPA-
TPB+
TPB-
iLink CONN.
This capacitor should be placed between Pin P15 and Pin R17 .
8402_SCL G2 SCL
8402_SDA G3 SDA
RSVD64 V16 TP161 26MIL
RSVD65 W16 TP162 26MIL
RSVD66 V15 PCI15
RSVD67 W15 PCI16
T18 R0
OTH6
R466 6.34K_F 0402
This capacitor must be placed to IC pin
OTH7 T19 R1
RSVD68 W17
C551 0.1U_16V_Y_Y 0402
R464 0_J 0402
PCI20
Y6
C547 22P_50V_J 0402_NPO
C548 22P_50V_J 0402_NPO
DVT
R17 VSSPLL
XO R18
R465 1M_J 0402
XI R19
24.576MHZ_16P_30PPM ITTI_L5030-24.576-16
VSSPLL must be tied to a low-impedance GND.
R14 AGND1
U13 AGND2
U14 AGND3
PCI8402ZHK
U29B
Card BUS / 16-Bit PC Card Interface
A15 RSVD2
J19 RSVD3
Clamp Voltage For PC CARD (IO 5V/3.3V)
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
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
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
Document Number MS70-1-01
Rev 0.30
Date: Tuesday, June 13, 2006
Sheet 39 of 55


+3VSUS
18,21,24,30,31,37,38,39,47,50
C464 0.1U_16V_Y_Y 0402
C465 1000P_50V_K_B 0402
C469 0.1U_16V_Y_Y 0402
C463 1000P_50V_K_B 0402
C470 0.1U_16V_Y_Y 0402
C471 10U_6.3V_M 0805_X5R
U29D
VCC1 VCC2 VCC3 VCC4 VCC5 VCC6 VCC7 VCC8 VCC9 VCC10 VCC11
POWER SUPPLY (3.3V)
SD/MMC/Memory Stick/PRO/Smart Media/XD
MC_PWR_CTRL_0
MC_PWR_CTRL_1/SM_R/B#
SD_CD#
SD_CLK/SM_RE#/SC_GPIO1
MS_CLK/SD_CLK/SM_EL_WP#
SD_CMD/SM_ALE/SC_GPIO2
SD_DAT0/SM_D4/SC_GPIO6
SD_DAT1/SM_D5/SC_GPIO5
SD_DAT2/SM_D6/SC_GPIO4
SD_DAT3/SM_D7/SC_GPIO3
MS_SDIO(DATA0)/SD_DAT0/SM_D0
MS_DATA1/SD_DAT1/SM_D1
MS_DATA2/SD_DAT2/SM_D2
MS_DATA3/SD_DAT3/SM_D3
SD_WP/SM_CE#
SM_CD#
SM_CLE/SC_GPIO0
XD_CD#/SM_PHYS_WP#
MS_CD#
MS_BS/SD_CMD/SM_WE#
RSVD69 RSVD70 VCC12 RSVD71 RSVD72 RSVD73 RSVD74 RSVD75 RSVD76
GND1 GND2 GND3 GND4 GND5 GND6 GND7 GND8 GND9 GND10 GND11
PCI8402ZHK
MS_PWR_CTRL
SD_PWR_CTRL
SD_CD#
SD_CLK
MS_CLK
SD_CMD
SD_DATA0
SD_DATA1
SD_DATA2
SD_DATA3
MS_SDIO_DATA0
MS_DATA1
MS_DATA2
MS_DATA3
SD_WP
MS_CD#
MS_BS
R391 47_J 0402
R393 47_J 0402
TP148 26MIL
TP149 26MIL
TP150 26MIL
R396 0_J 0603
18,21,24,30,31,37,38,39,47,50
+3VSUS
2A
C467 0805_X5R 10U_6.3V_M
C473 0805_X5R 10U_6.3V_M
U36
U37
VIN VOUT CE GND FLG#
RT9702APB
1A
VCC_CTRLMS
VCC_CTRLSD
PLACE TO BJT
C466 0402 0.1U_16V_Y_Y
C468 2.2U_10V_Y 0603_Y5V
R392 1M_J 0402
C472 0402 0.1U_16V_Y_Y
C474 2.2U_10V_Y 0603_Y5V
R395 1M_J 0402
These capacitors should be closed to socket pin
DVT
MS STD/DUO CONN.
CN22
MS_BS MS_DATA1 MS_SDIO_DATA0 MS_DATA2 MS_CD# MS_DATA3 MS_CLK
R491 R492 R493 R494 R495 0_J 0402
VSS1 BS DATA1 DATA0 DATA2 INS DATA3 CLK VCC VSS2 NPTH1 NPTH2 M1 M2 M3 M4
MS CARD SOC_10P
YAMAICHI_JCS010-2005-1
SD CONN.
CN23
SD_WP SD_CD# SD_DATA1 SD_DATA0 SD_CLK SD_CMD SD_DATA3 SD_DATA2
R397 R398 R399 R400 R401 0_J 0402
WP COM2 DC DATA1 DATA0 VSS2 CLK VDD VSS1 CMD CD/DATA3 DATA2 NPTH1 NPTH2 GND1 GND2 GND3 GND4
COM Write Protect Case1
Card Detect
8 DATA1 7 DATA0 6 VSS2 5 CLK 4 VDD 3 VSS1 2 CMD 1 CD/DATA3 9 DATA2
Case2
SD
SD SOCKET_9P
FOX_WK21923-S6P-7F
R402 R403 R404 4.7K_J 0402
C475 C476 C477 1000P_50V_K_B 0402
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 0.30
Date: Tuesday, June 13, 2006
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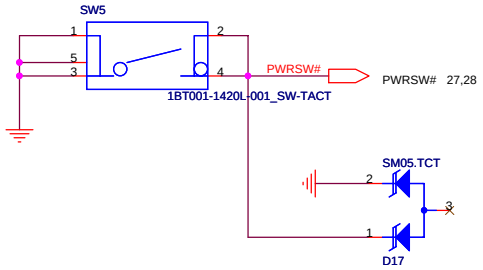
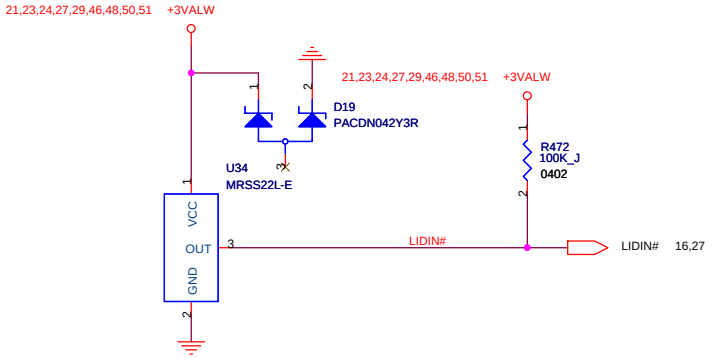
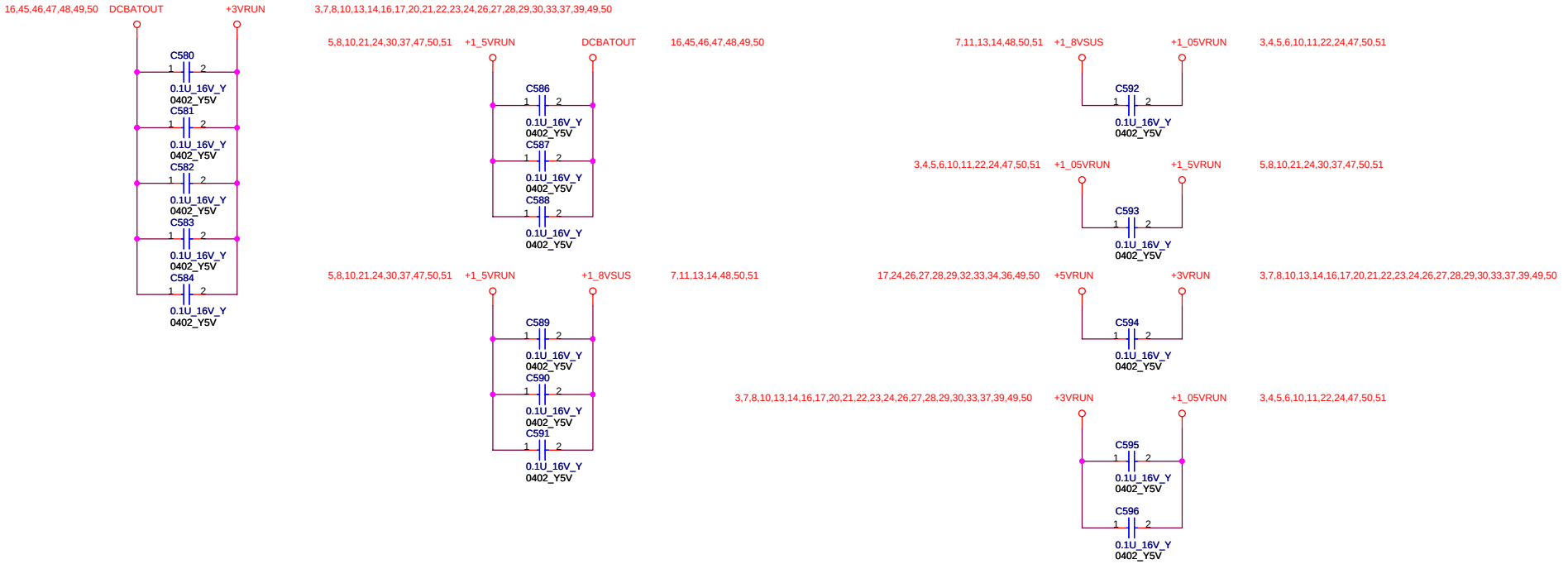
POWER BUTTON



LID Switch

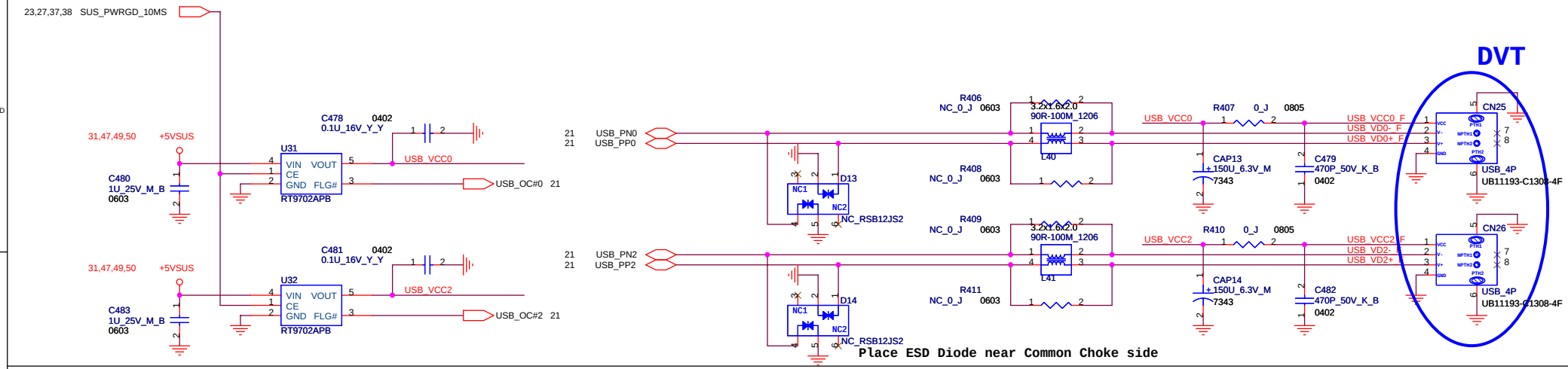


EMI CAP

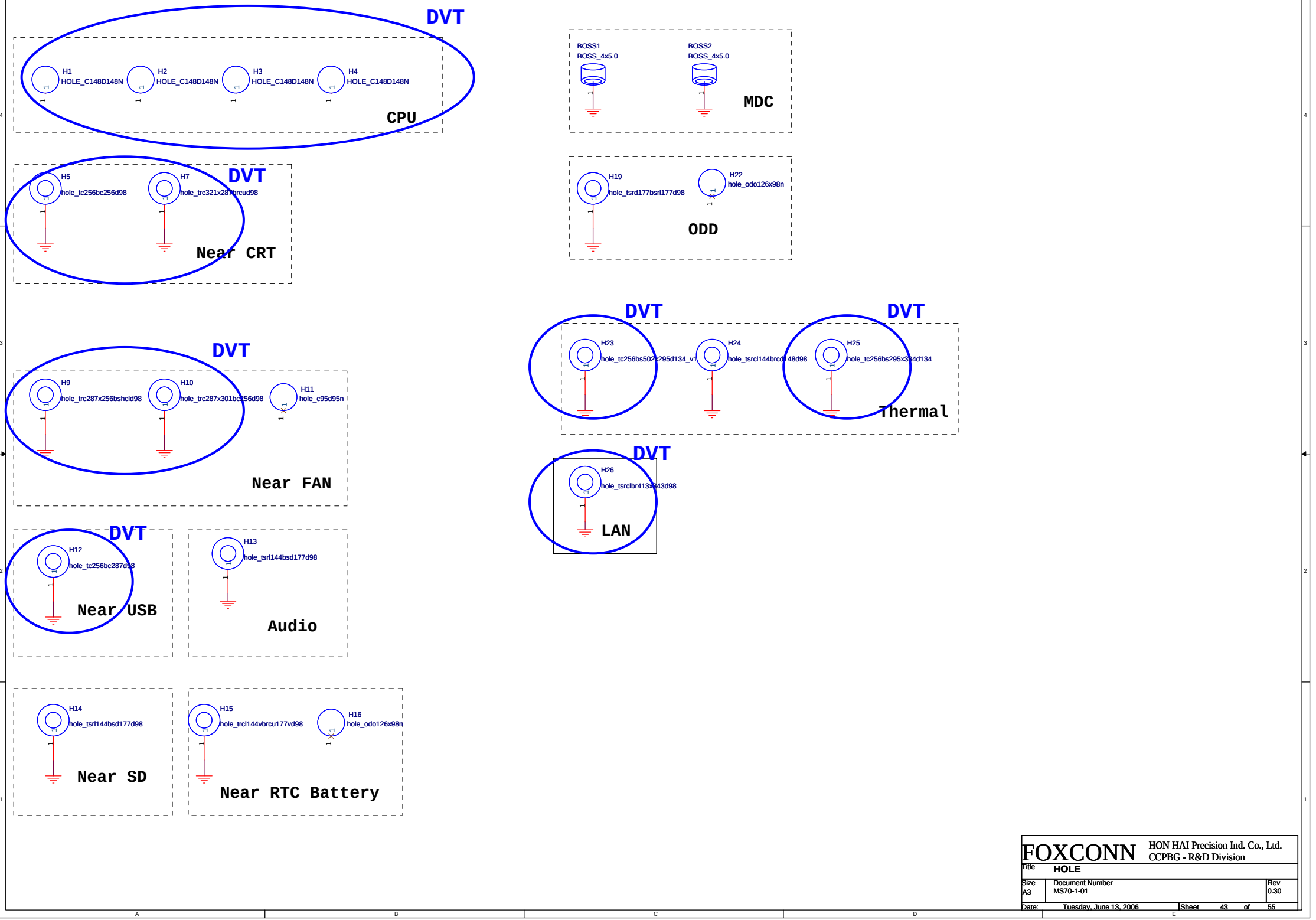


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	Button/LID Switch/EMI CAP	
Size A3	Document Number MS70-1-01	Rev 0.30
Date: Tuesday, June 13, 2006	Sheet 41 of 55	

USB CONN X 2

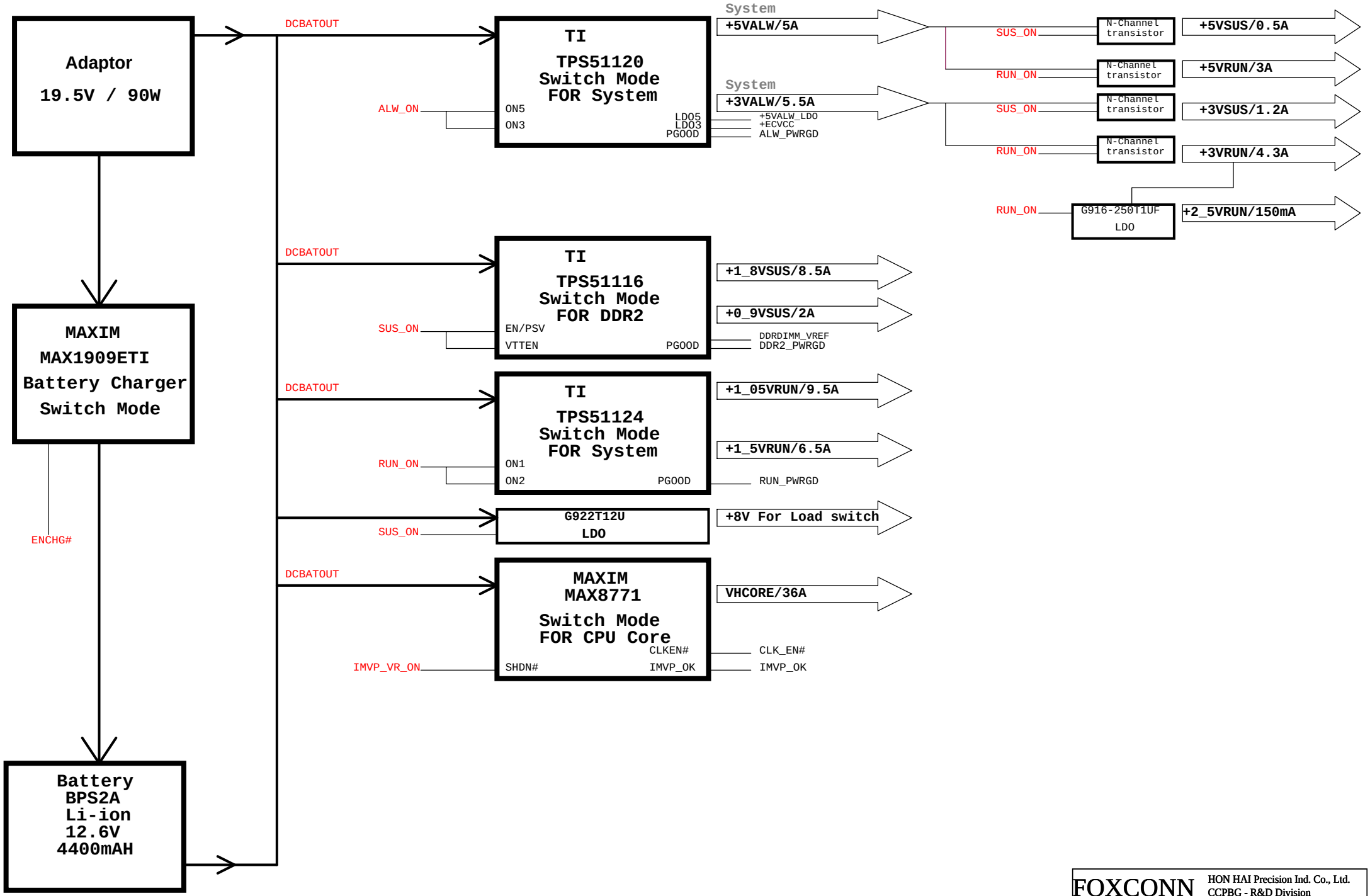


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title: USB2.0		
Size: A3	Document Number: MS70-1-01	Rev: 0.30
Date: Tuesday, June 13, 2006	Sheet 42 of 55	



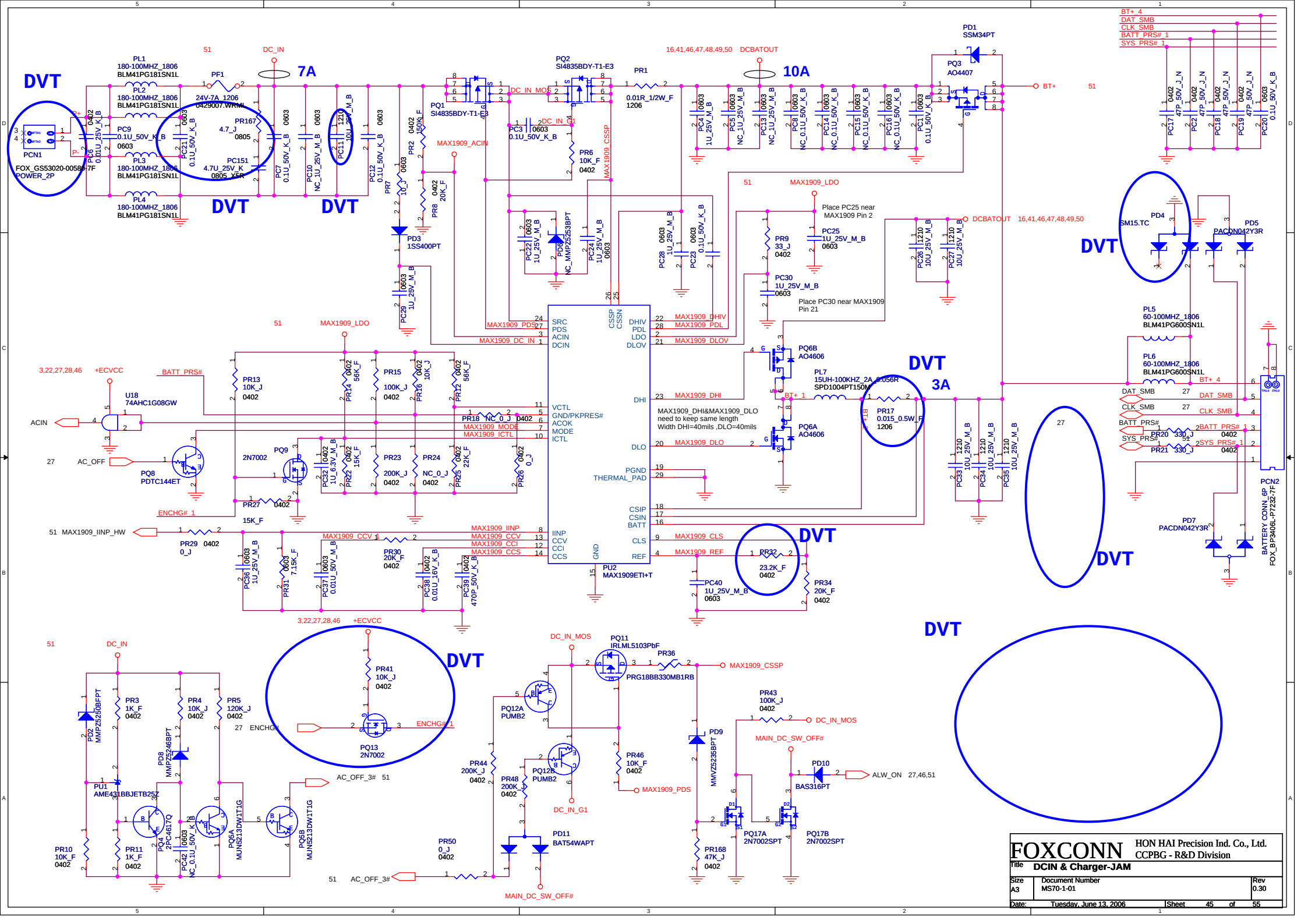
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division

Title	HOLE	
Size A3	Document Number MS70-1-01	Rev 0.30
Date: Tuesday, June 13, 2006	Sheet 43 of 55	



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

Title	Power Design Diagram-ZG	
Size A3	Document Number MS70-1-01	Rev 0.30
Date: Tuesday, June 13, 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
PD3
1SS400PT
PR6
10K_F
0402
PC3
0.1U_50V_K_B
PC4
1U_25V_M_B
PC5
NC_1U_25V_M_B
PC6
PC7
PC8
NC_0.1U_50V_K_B
PC9
PC10
PC11
PC12
PC13
PC14
PC15
PC16
PC17
PC18
PC19
PC20
PC21
PC22
PC23
PC24
PC25
1U_25V_M_B
0603
PC26
PC27
10U_25V_M_B
1210
PC28
PC29
PC30
PD4
SM15.TC
PD5
PACDN042Y3R
PD7
PACDN042Y3R
PR9
33_J
0402
Place PC25 near
MAX1909 Pin 2
Place PC30 near MAX1909
Pin 21
MAX1909_LDO
DCBATOUT
16,41,46,47,48,49,50
51
PU2
MAX1909ETI+T
SRC
PDS
ACIN
DCIN
CSSP
CSSN
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_PDS
MAX1909_DC_IN
MAX1909_DHIV
MAX1909_PDL
MAX1909_DLOV
MAX1909_DHI
MAX1909_DLO
MAX1909_CLS
MAX1909_REF
MAX1909_MODE
MAX1909_ICTL
MAX1909_IINP
MAX1909_CCV
MAX1909_CCI
MAX1909_CCS
MAX1909_DHI&MAX1909_DLO
need to keep same length
Width DHI=40mils ,DLO=40mils
PQ6A
AO4606
PQ6B
PL7
15UH-100KHZ_2A_0.056R
SPD1004PT150M
PR17
0.015_0.5W_F
1206
PR18
NC_0_J
0402
PR32
23.2K_F
0402
PR34
20K_F
0402
PC40
1U_25V_M_B
0603
PL5
60-100MHZ_1806
BLM41PG600SN1L
PL6
60-100MHZ_1806
BLM41PG600SN1L
BT+_4
DAT_SMB
CLK_SMB
BATT_PRS#_1
SYS_PRS#_1
PR20
330_J
0402
PR21
330_J
0402
PCN2
BATTERY CONN_6P
FOX_BP3406L-PT232-7F
U18
74AHC1G08GW
3,22,27,28,46
+ECVCC
BATT_PRS#
ACIN
AC_OFF
27
PQ8
PDTC144ET
PQ9
2N7002
PR13
10K_J
0402
PR14
56K_F
PR15
100K_J
PR16
10K_J
PR12
56K_F
PR22
15K_F
PR23
200K_J
PR24
NC_0_J
PR25
22K_F
PR26
0_J
PR27
15K_F
ENCHG#_1
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
PR29
0_J
PR31
7.15K_F
PR30
20K_F
MAX1909_IINP_HW
PR41
10K_J
0402
PQ13
2N7002
ENCHG#_1
PQ11
IRLML5103PbF
PRG18BB330MB1RB
PR36
PQ12A
PUMB2
PQ12B
PUMB2
PR44
200K_J
PR48
200K_J
PR46
10K_F
PR43
100K_J
PD9
MMVZ5235BPT
PD10
BAS316PT
ALW_ON
27,46,51
PR168
47K_J
PQ17A
2N7002SPT
PQ17B
2N7002SPT
PR50
0_J
PD11
BAT54WAPT
AC_OFF_3#
MAIN_DC_SW_OFF#
DC_IN_G1
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
PR42
NC_0.1U_50V_K_B
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title
DCIN & Charger-JAM
Size
A3
Document Number
MS70-1-01
Rev
0.30
Date:
Tuesday, June 13, 2006
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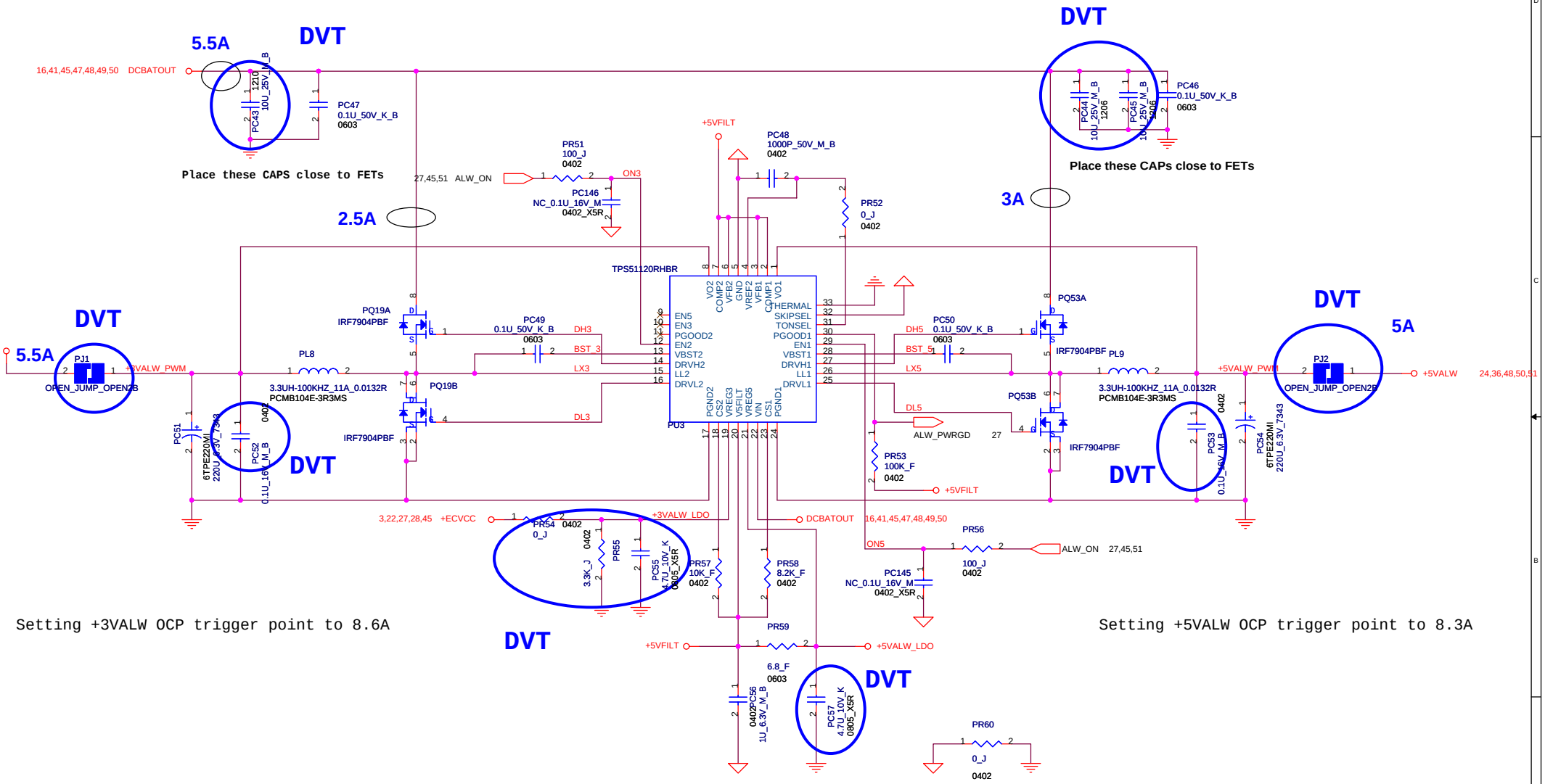
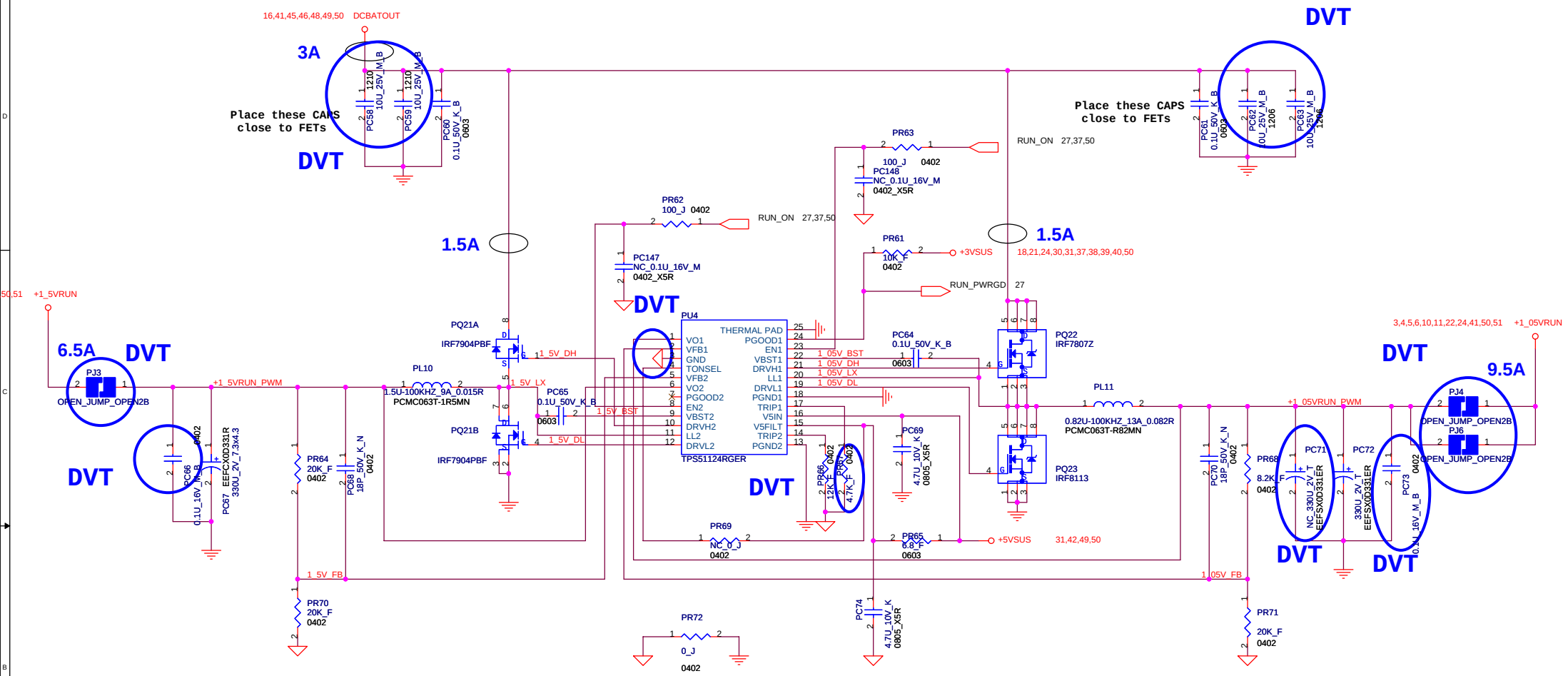
45
of
55



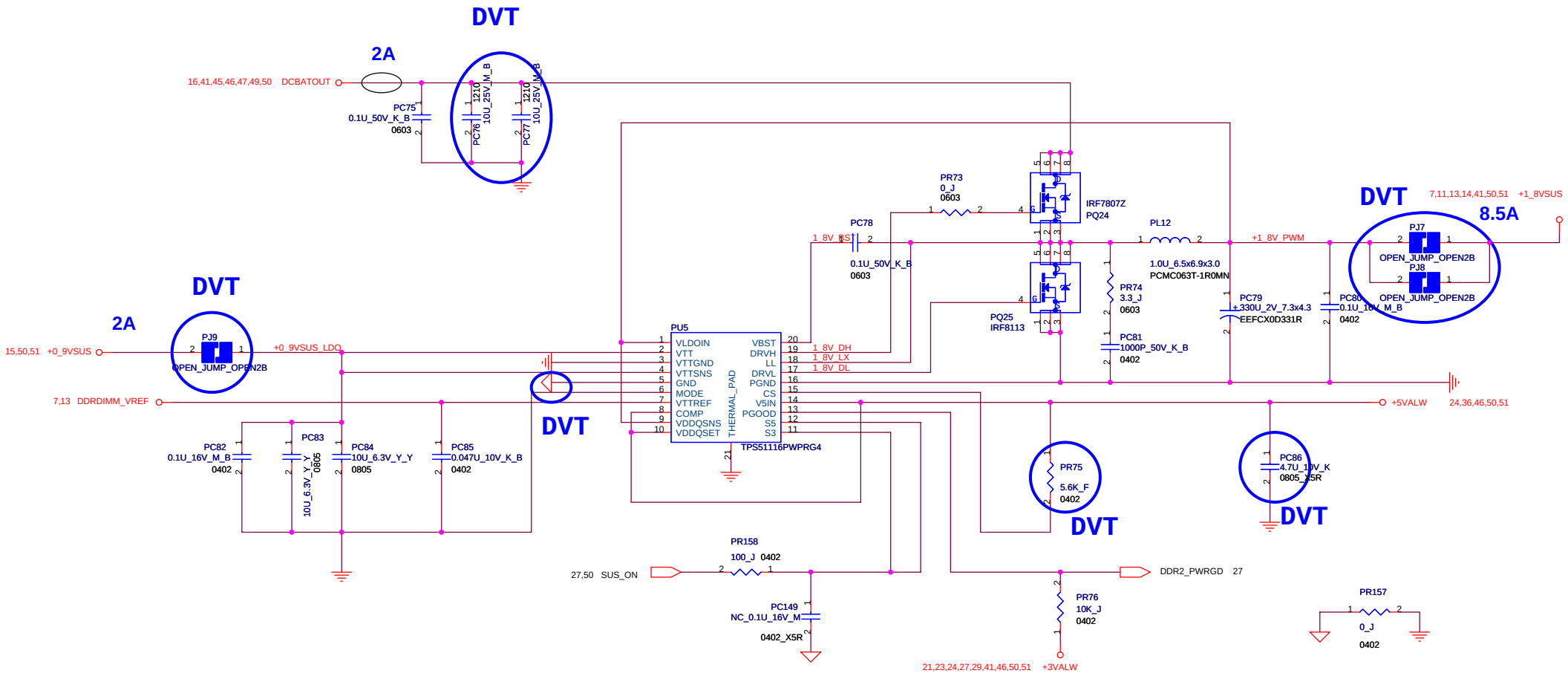
FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	D/D Power-JAM	
Size A3	Document Number MS70-1-01	Rev 0.30
Date: Tuesday, June 13, 2006	Sheet 46 of 55	



Setting +1_5VRUN OCP trigger point to 10.5A

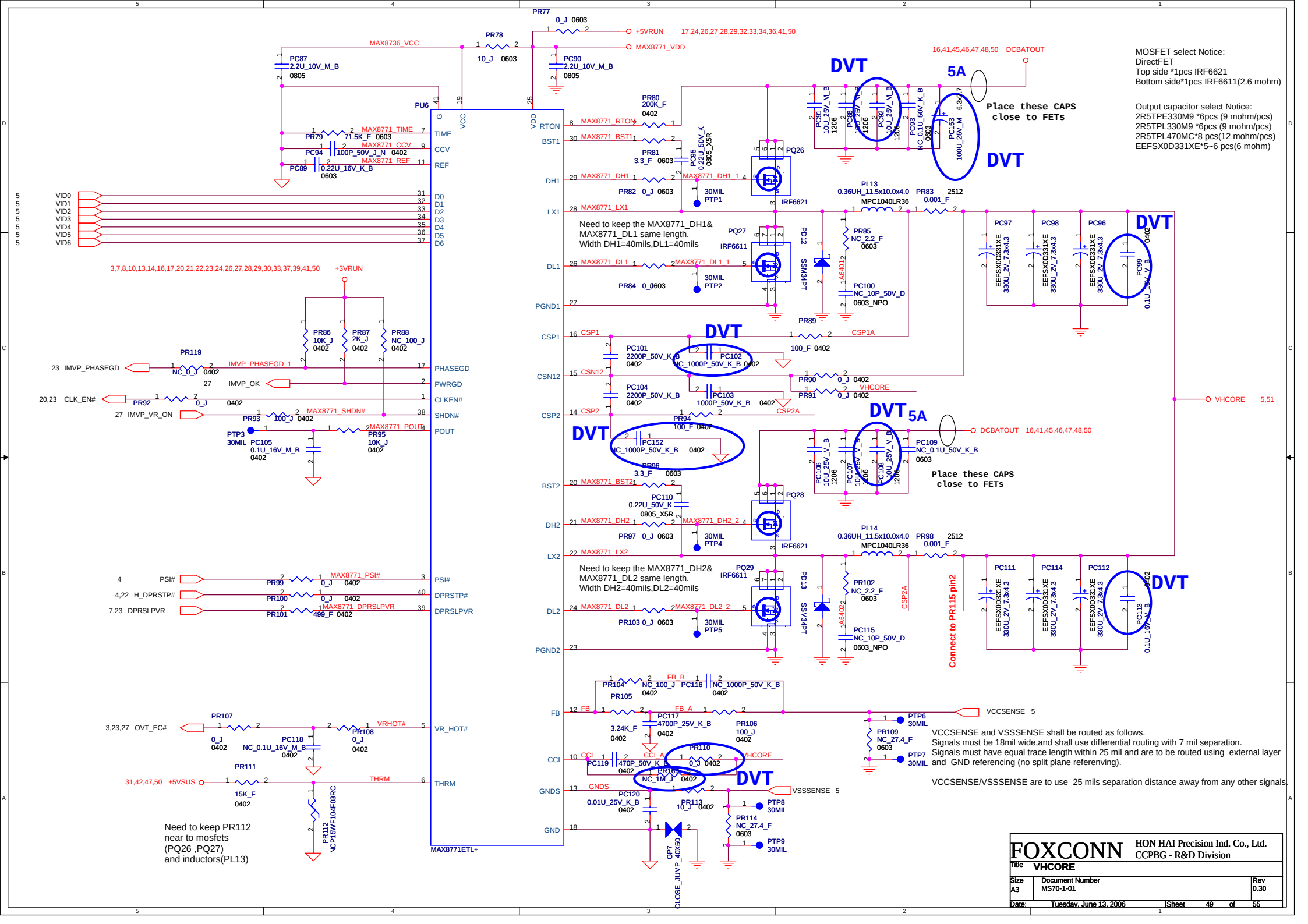
Setting +1_05VRUN OCP trigger point to 12.8A

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 0.30
Date: Tuesday, June 13, 2006	Sheet 47 of 55	



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 0.30
Date: Tuesday, June 13, 2006	Sheet 48 of 55	


PR77 0_J 0603
+5VRUN 17,24,26,27,28,29,32,33,34,36,41,50
MAX8736_VCC
PR78 10_J 0603
MAX8771_VDD
PC87 2.2U_10V_M_B 0805
PC90 2.2U_10V_M_B 0805
PU6
VCC
VDD
DVT
5A
16,41,45,46,47,48,50 DCBATOUT
Place these CAPS close to FETs
MOSFET select Notice:
DirectFET
Top side *1pcs IRF6621
Bottom side*1pcs IRF6611(2.6 mohm)
Output capacitor select Notice:
2R5TPE330M9 *6pcs (9 mohm/pcs)
2R5TPL330M9 *6pcs (9 mohm/pcs)
2R5TPL470MC*8 pcs(12 mohm/pcs)
EEFSX0D331XE*5~6 pcs(6 mohm)
PR80 200K_F 0402
PR79 71.5K_F 0603
PR94 0_J 0402
PC94 100P_50V_J_N 0402
PC89 0.22U_16V_K_B 0603
PR81 3.3_F 0603
PC95 0.22U_50V_K 0805_X5R
PQ26
PR82 0_J 0603
30MIL PTP1
IRF6621
PL13 0.36UH_11.5x10.0x4.0 MPC1040LR36
PR83 2512 0.001_F
PQ27 IRF6611
PR84 0_0603
PR85 NC_2.2_F 0603
PC100 NC_10P_50V_D 0603_NPO
PR89
PC97 PC98 PC96 PC99
EEFSX0D331XE 330U_2V_7.3x4.3
0.1U_16V_M_B
PR86 10K_J 0402
PR87 2K_J 0402
PR88 NC_100_J 0402
PR119 NC_0_J 0402
IMVP_PHASEGD_1
PR92 0_J 0402
PR93 100_J 0402
MAX8771_SHDN#
PTP3 30MIL
PC105 0.1U_16V_M_B 0402
PR95 10K_J 0402
PC101 2200P_50V_K_B 0402
PC102 NC_1000P_50V_K_B 0402
PR90 0_J 0402
PR91 0_J 0402
VHCORE
PC104 2200P_50V_K_B 0402
PC103 1000P_50V_K_B 0402
PR96 3.3_F 0603
PC152 NC_1000P_50V_K_B 0402
PR97 0_J 0603
PC110 0.22U_50V_K 0805_X5R
PQ28
PR98 2512 0.001_F
PL14 0.36UH_11.5x10.0x4.0 MPC1040LR36
PQ29 IRF6611
PR103 0_J 0603
PR102 NC_2.2_F 0603
PC115 NC_10P_50V_D 0603_NPO
PC109 NC_0.1U_50V_K_B 0603
PC106 PC107 PC108 10U_25V_M_B 1206
PC111 PC114 PC112 PC113
Connect to PR115 pin2
PR104 NC_100_J 0402
PC116 NC_1000P_50V_K_B 0402
PR105 3.24K_F 0402
PC117 4700P_25V_K_B 0402
PR106 100_J 0402
PR107 0_J 0402
PC118 NC_0.1U_16V_M_B 0402
PR108 0_J 0402
PR110 0_J 0402
PC119 470P_50V_K_B 0402
PR109 NC_27.4_F 0603
PTP6 30MIL
PTP7 30MIL
PR111 15K_F 0402
PR112 NCP15WF104F03RC
PR169 NC_1M_J 0402
PC120 0.01U_25V_K_B 0402
PR113 10_J 0402
PR114 NC_27.4_F 0603
PTP8 30MIL
PTP9 30MIL
GP7 CLOSE_JUMP_40X50
VID0 VID1 VID2 VID3 VID4 VID5 VID6
3,7,8,10,13,14,16,17,20,21,22,23,24,26,27,28,29,30,33,37,39,41,50 +3VRUN
23 IMVP_PHASEGD
27 IMVP_OK
20,23 CLK_EN#
27 IMVP_VR_ON
4 PSI#
4,22 H_DPRSTP#
7,23 DPRSLPVR
3,23,27 OVT_EC#
31,42,47,50 +5VSUS
VCCSENSE 5
VSSSENSE 5
VHCORE 5,51
Need to keep the MAX8771_DH1& MAX8771_DL1 same length.
Width DH1=40mils,DL1=40mils
Need to keep the MAX8771_DH2& MAX8771_DL2 same length.
Width DH2=40mils,DL2=40mils
Need to keep PR112 near to mosfets (PQ26 ,PQ27) and inductors(PL13)
VCCSENSE and VSSSENSE shall be routed as follows.
Signals must be 18mil wide,and shall use differential routing with 7 mil separation.
Signals must have equal trace length within 25 mil and are to be routed using external layer and GND referencing (no split plane referenving).
VCCSENSE/VSSSENSE are to use 25 mils separation distance away from any other signals.
MAX8771ETL+
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title VHCORE
Size A3
Document Number MS70-1-01
Rev 0.30
Date: Tuesday, June 13, 2006
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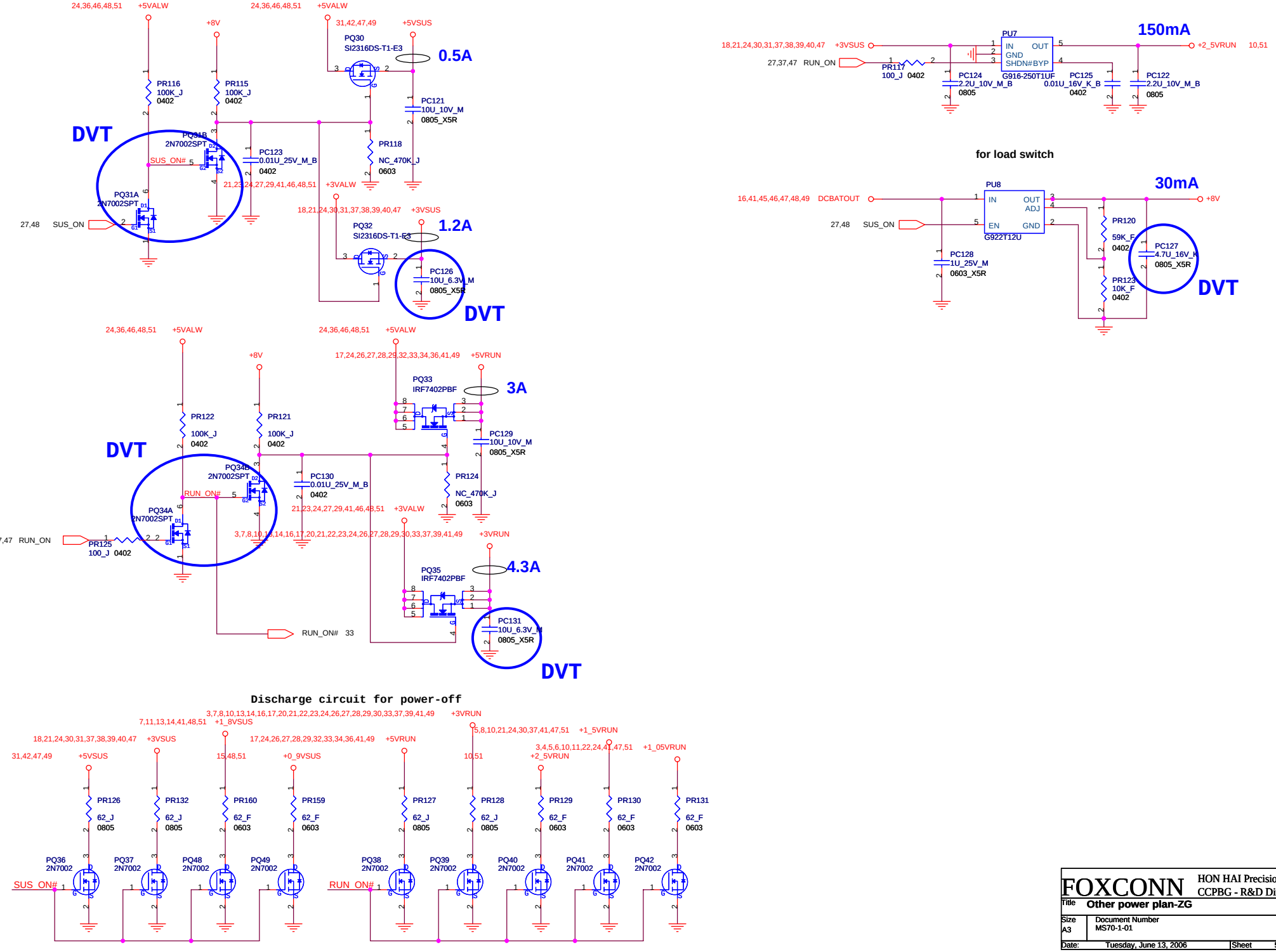
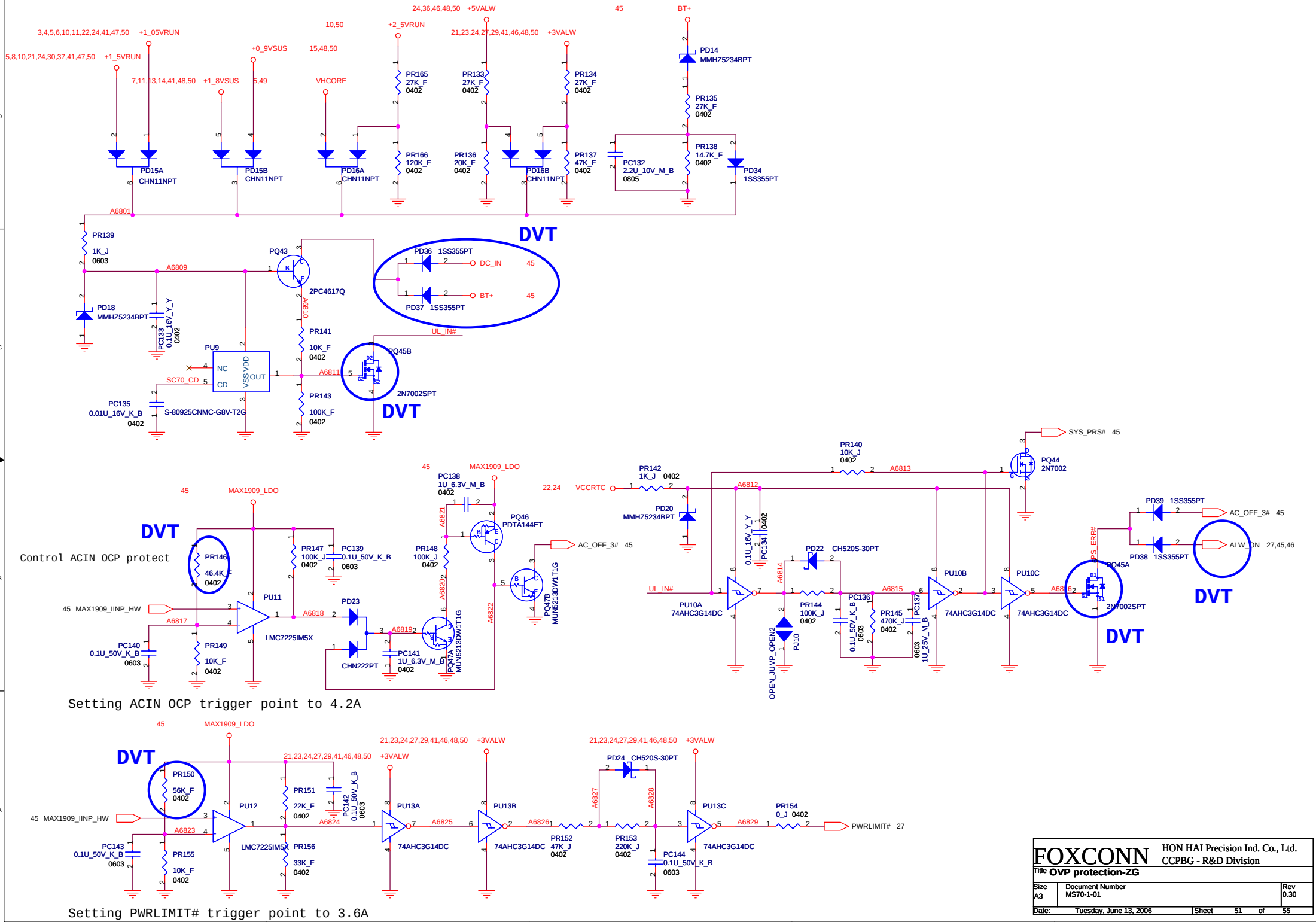


FOXCONN	HON HAI Precision Ind. Co., Ltd. CCPBG - R&D Division	
Title	Other power plan-ZG	
Size A3	Document Number MS70-1-01	Rev 0.30
Date: Tuesday, June 13, 2006	Sheet 50 of 55	


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
10,50
15,48,50 VHCORE
+2_5VRUN
24,36,46,48,50 +5VALW
21,23,24,27,29,41,46,48,50 +3VALW
45 BT+
PD15A CHN11NPT
PD15B CHN11NPT
PD16A CHN11NPT
PD16B CHN11NPT
PR165 27K_F 0402
PR166 120K_F 0402
PR133 27K_F 0402
PR136 20K_F 0402
PR134 27K_F 0402
PR137 47K_F 0402
PD14 MMHZ5234BPT
PR135 27K_F 0402
PR138 14.7K_F 0402
PD34 1SS355PT
PC132 2.2U_10V_M_B 0805
A6801
PR139 1K_J 0603
A6809
PD18 MMHZ5234BPT
PC133 0.1U_16V_Y_Y 0402
PQ43 2PC4617Q
A6810
PR141 10K_F 0402
PD36 1SS355PT
DC_IN 45
PD37 1SS355PT
BT+ 45
DVT
UL_IN#
PQ45B 2N7002SPT
DVT
PU9 S-80925CNMC-G8V-T2G
SC70_CD
PC135 0.01U_16V_K_B 0402
A6811
PR143 100K_F 0402
45 MAX1909_LDO
DVT
Control ACIN OCP protect
PR146 46.4K_F 0402
PU11 LMC7225IM5X
45 MAX1909_IINP_HW
A6817
PR149 10K_F 0402
PC140 0.1U_50V_K_B 0603
PR147 100K_J 0402
PC139 0.1U_50V_K_B 0603
A6818
PD23 CHN222PT
A6819
PC141 1U_6.3V_M_B 0402
PQ47A MUN5213DW1T1G
PC138 1U_6.3V_M_B 0402
PQ46 PDTA144ET
A6821
PR148 100K_J 0402
A6820
A6822
PQ47B MUN5213DW1T1G
AC_OFF_3# 45
22,24 VCCRTC
PR142 1K_J 0402
PD20 MMHZ5234BPT
PR140 10K_J 0402
A6812
A6813
PQ44 2N7002
SYS_PRS# 45
PC134 0.1U_16V_Y_Y 0402
PD22 CH520S-30PT
A6814
UL_IN#
PU10A 74AHC3G14DC
PJ10 OPEN_JUMP_OPEN2
PR144 100K_J 0402
PC136 0.1U_50V_K_B 0603
A6815
PR145 470K_J 0402
PC137 0603 1U_25V_M_B
PU10B 74AHC3G14DC
PU10C 74AHC3G14DC
A6816
PD39 1SS355PT
AC_OFF_3# 45
PD38 1SS355PT
ALW_ON 27,45,46
PS_ERR#
PQ45A 2N7002SPT
DVT
DVT
Setting ACIN OCP trigger point to 4.2A
45 MAX1909_LDO
DVT
PR150 56K_F 0402
45 MAX1909_IINP_HW
PU12 LMC7225IM5X
A6823
PR155 10K_F 0402
PC143 0.1U_50V_K_B 0603
21,23,24,27,29,41,46,48,50 +3VALW
PR151 22K_F 0402
PC142 0.1U_50V_K_B 0603
A6824
PR156 33K_F 0402
PU13A 74AHC3G14DC
A6825
PU13B 74AHC3G14DC
A6826
PR152 47K_J 0402
PD24 CH520S-30PT
A6827
A6828
PR153 220K_J 0402
PC144 0.1U_50V_K_B 0603
PU13C 74AHC3G14DC
A6829
PR154 0_J 0402
PWRLIMIT# 27
Setting PWRLIMIT# trigger point to 3.6A
FOXCONN
HON HAI Precision Ind. Co., Ltd.
CCPBG - R&D Division
Title OVP protection-ZG
Size A3
Document Number MS70-1-01
Rev 0.30
Date: Tuesday, June 13, 2006
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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

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