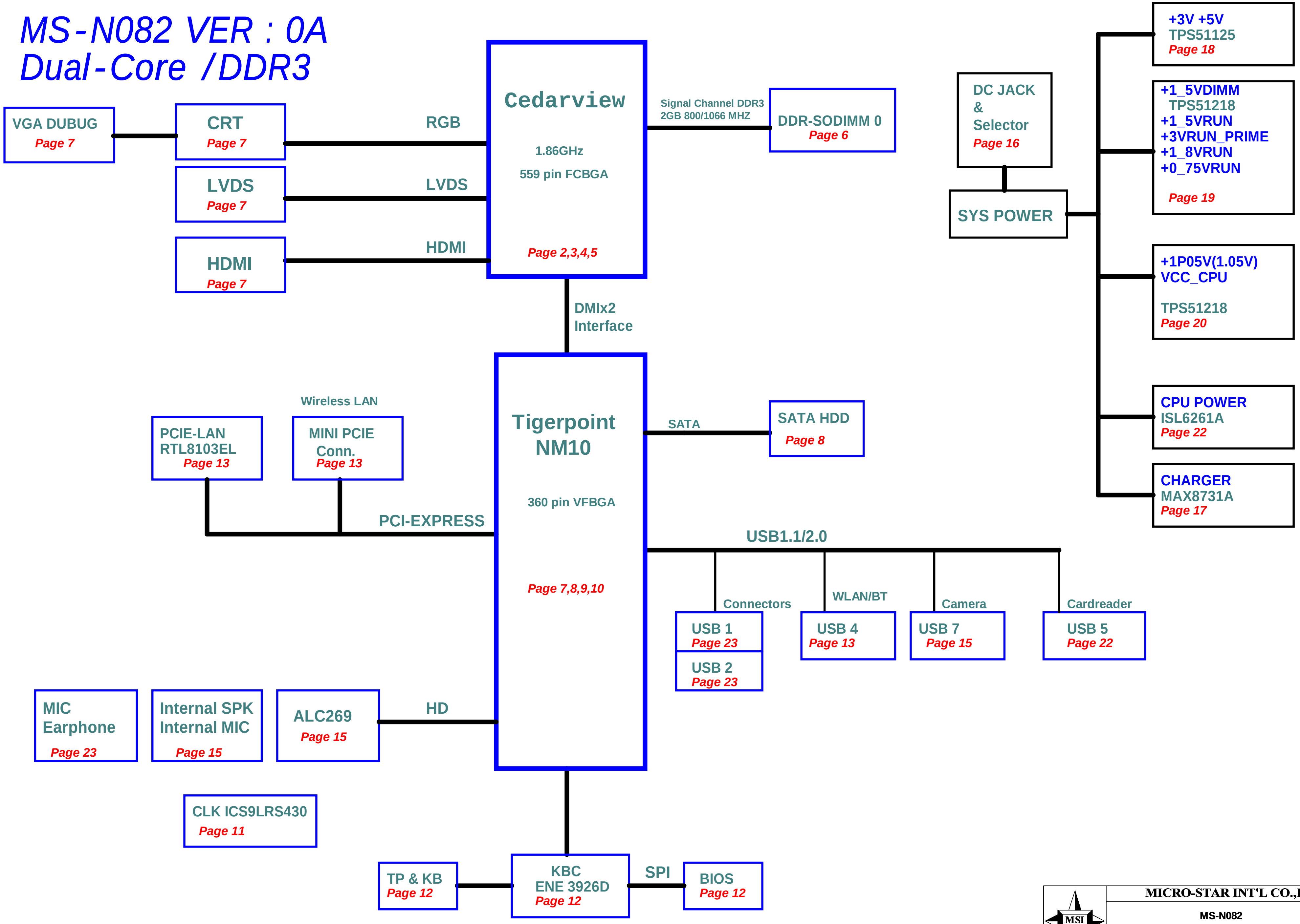
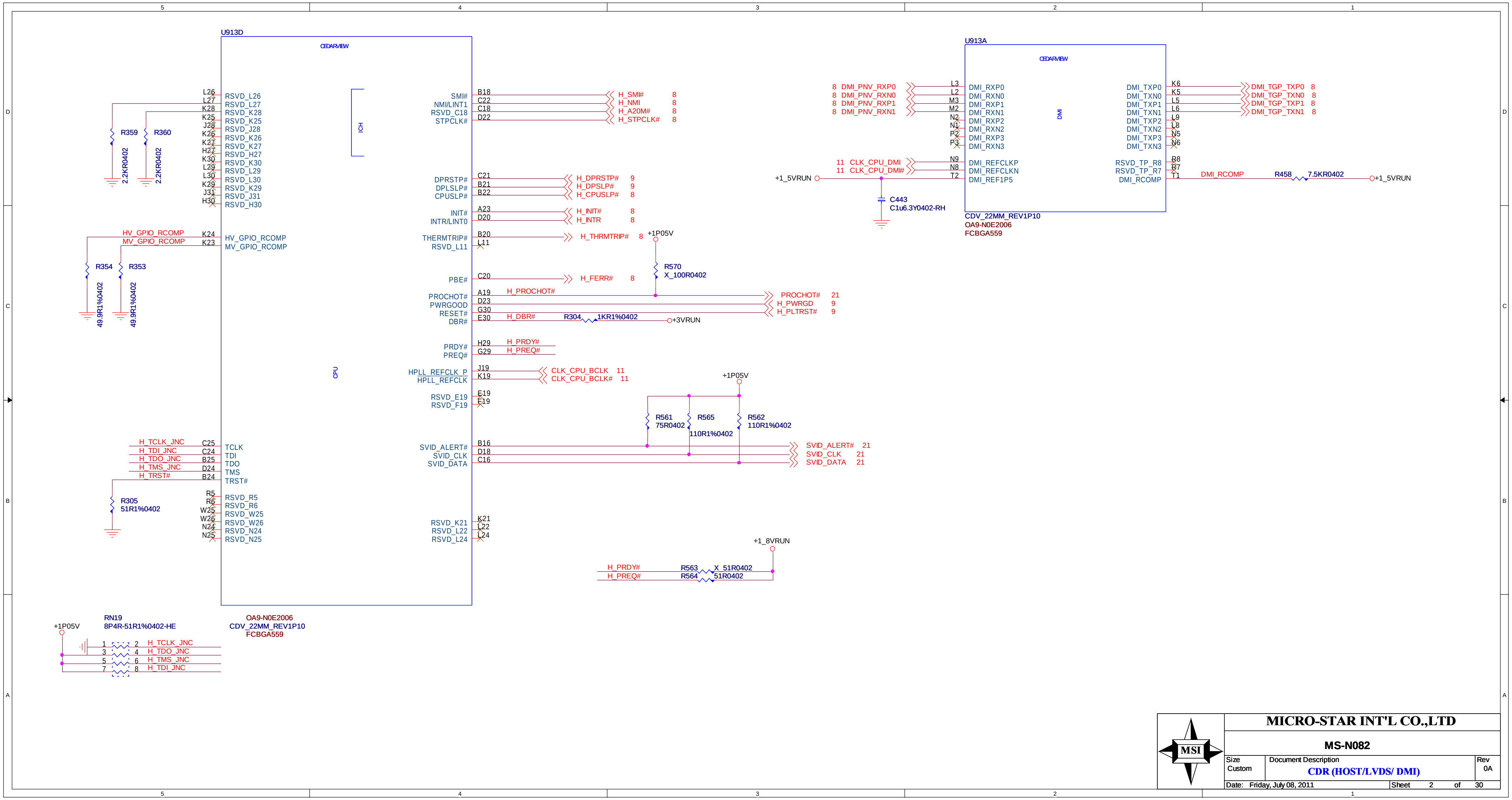
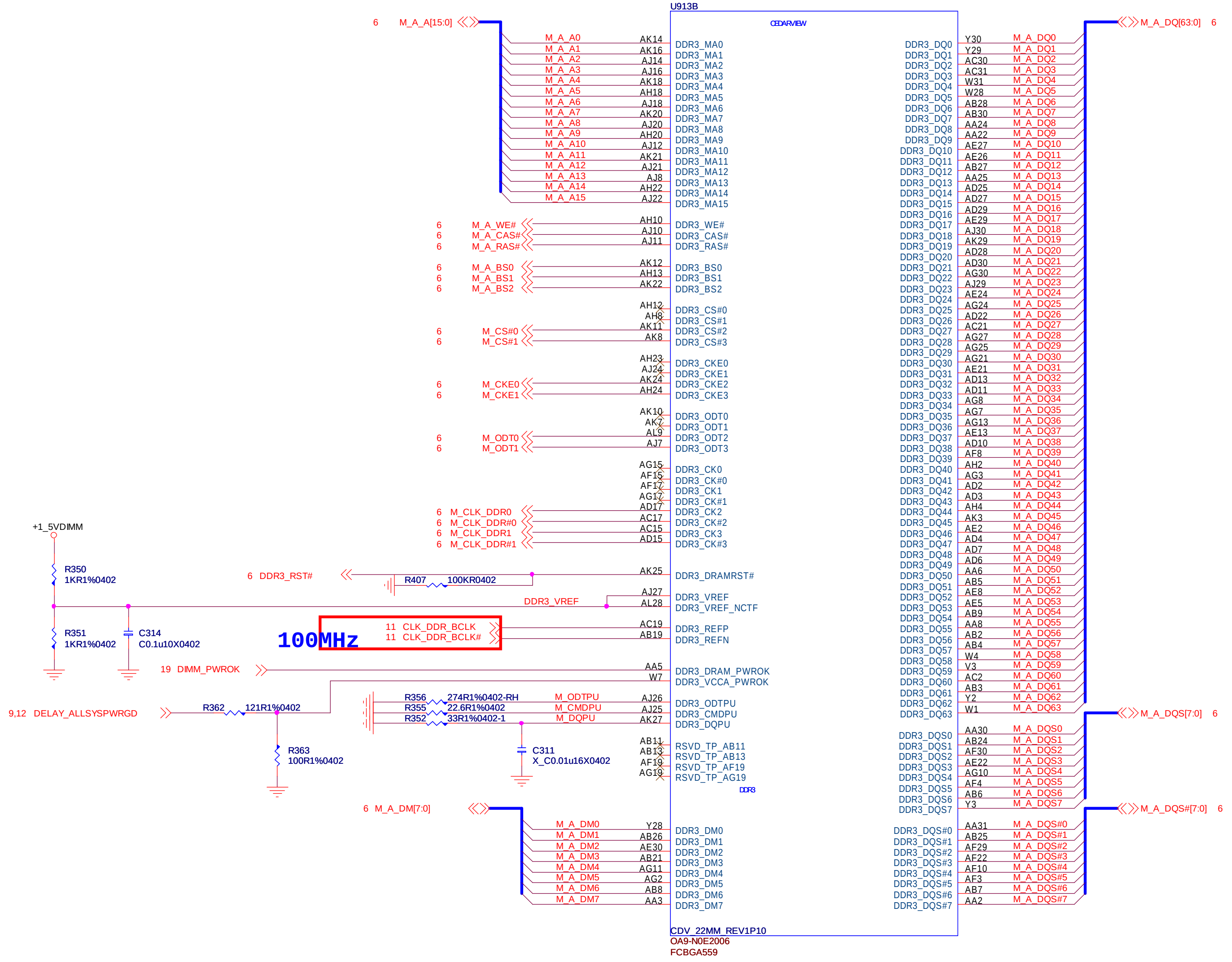
MS-N082 VER : 0A
Dual-Core /DDR3



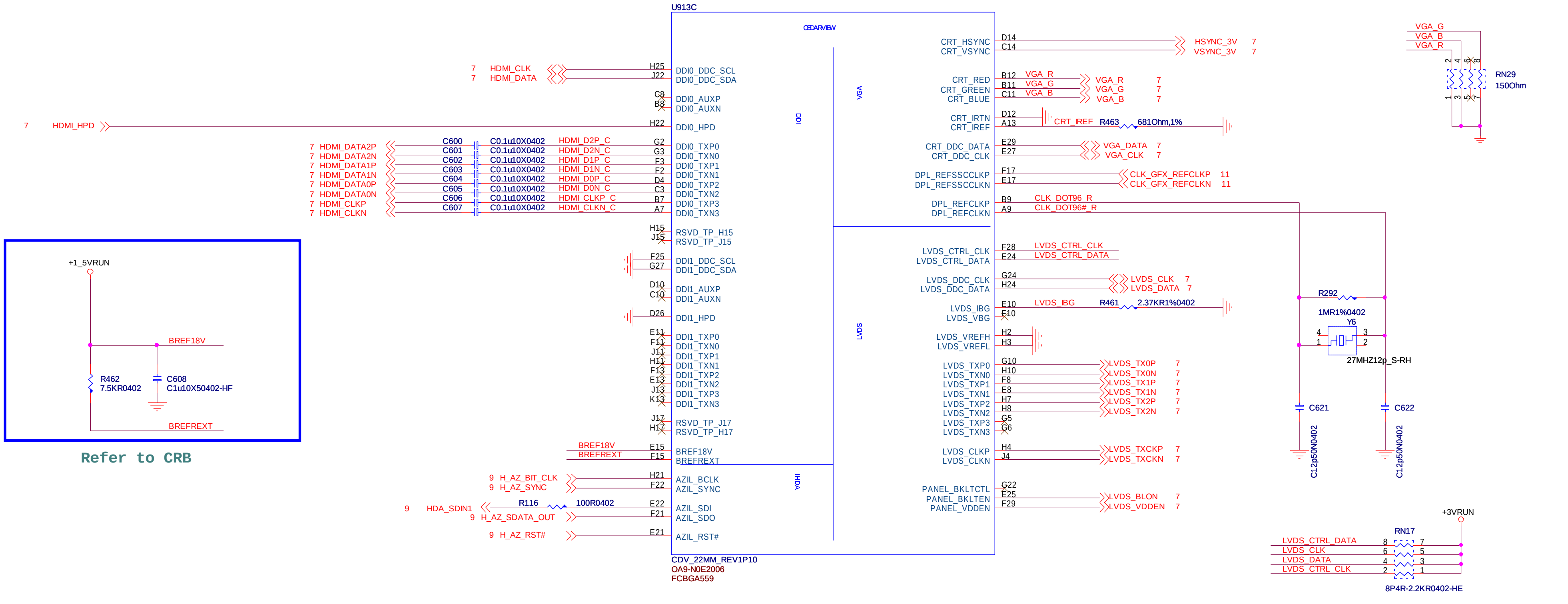
MICRO-STAR INT'L CO.,LTD			
MS-N082			
Size: Custom	Document Description: BLOCK DIAGRAM		Rev: 0A
Date: Tuesday, May 24, 2011	Sheet 1 of 30		



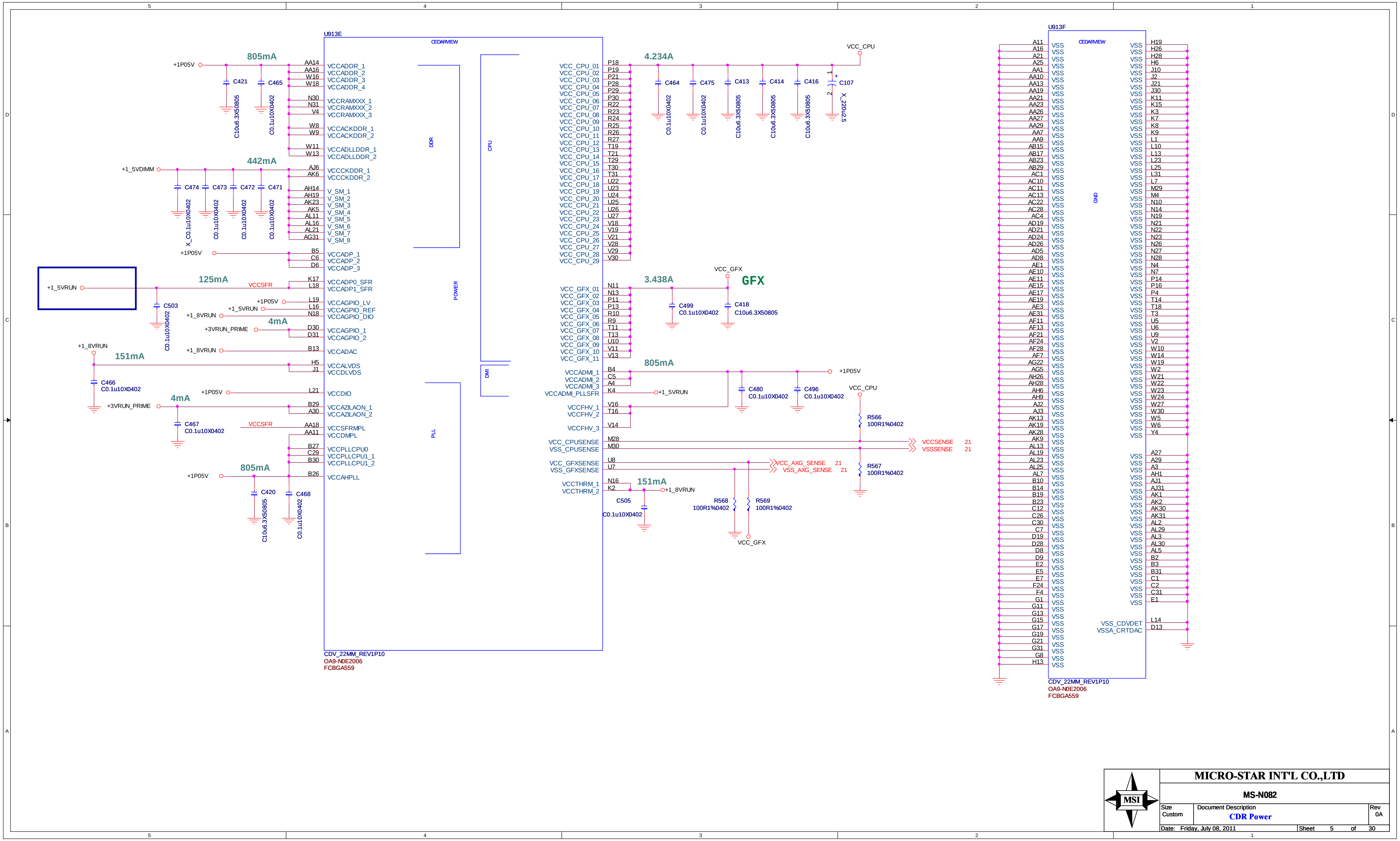
MICRO-STAR INT'L CO.,LTD		
MS-N082		
Size: Custom	Document Description: CDR (HOST/LVDS/ DMI)	Rev: 0A
Date: Friday, July 08, 2011	Sheet 2 of 30	



MICRO-STAR INT'L CO.,LTD		
MS-N082		
Size: Custom	Document Description: CDR(DDR /VGA/ MISC)	Rev: 0A
Date: Friday, July 08, 2011	Sheet 3 of 30	



MICRO-STAR INT'L CO.,LTD		
MS-N082		
Size: Custom	Document Description: CDR Power	Rev: 0A
Date: Friday, July 08, 2011	Sheet 4 of 30	


U913E
CEDARVIEW
805mA
+1P05V
C421
C465
C10u6.3X50805
C0.1u10X0402
VCCADDR_1
VCCADDR_2
VCCADDR_3
VCCADDR_4
VCCRAMXXX_1
VCCRAMXXX_2
VCCRAMXXX_3
VCCACKDDR_1
VCCACKDDR_2
VCCADLLDDR_1
VCCADLLDDR_2
442mA
+1_5VDIMM
C474
C473
C472
C471
VCCCKDDR_1
VCCCKDDR_2
V_SM_1
V_SM_2
V_SM_3
V_SM_4
V_SM_5
V_SM_6
V_SM_7
V_SM_8
VCCADP_1
VCCADP_2
VCCADP_3
+1_5VRUN
125mA
VCCSFR
C503
VCCADP0_SFR
VCCADP1_SFR
VCCAGPIO_LV
VCCAGPIO_REF
VCCAGPIO_DIO
+1_8VRUN
+3VRUN_PRIME
4mA
VCCAGPIO_1
VCCAGPIO_2
VCCADAC
151mA
C466
C0.1u10X0402
VCCALVDS
VCCDLVDS
VCCDIO
C467
VCCAZILAON_1
VCCAZILAON_2
VCCSFRMPL
VCCDMPL
VCCPLLCPU0
VCCPLLCPU1_1
VCCPLLCPU1_2
VCCAHPLL
C420
C468
DDR
CPU
POWER
DMI
PLL
CDV_22MM_REV1P10
OA9-N0E2006
FCBGA559
4.234A
VCC_CPU
C464
C475
C413
C414
C416
C107
X_220u2.5
VCC_CPU_01 … VCC_CPU_29
VCC_GFX
GFX
3.438A
C499
C0.1u10X0402
C418
C10u6.3X50805
VCC_GFX_01 … VCC_GFX_11
805mA
VCCADMI_1
VCCADMI_2
VCCADMI_3
VCCADMI_PLLSFR
C480
C496
VCCFHV_1
VCCFHV_2
VCCFHV_3
R566
100R1%0402
VCC_CPUSENSE
VSS_CPUSENSE
VCCSENSE 21
VSSSENSE 21
VCC_GFXSENSE
VSS_GFXSENSE
VCC_AXG_SENSE 21
VSS_AXG_SENSE 21
R567
100R1%0402
151mA
VCCTHRM_1
VCCTHRM_2
C505
C0.1u10X0402
R568
100R1%0402
R569
100R1%0402
U913F
CEDARVIEW
GND
VSS
VSS_CDVDET
VSSA_CRTDAC
CDV_22MM_REV1P10
OA9-N0E2006
FCBGA559
MSI
MICRO-STAR INT'L CO.,LTD
MS-N082
Size
Custom
Document Description
CDR Power
Rev
0A
Date: Friday, July 08, 2011
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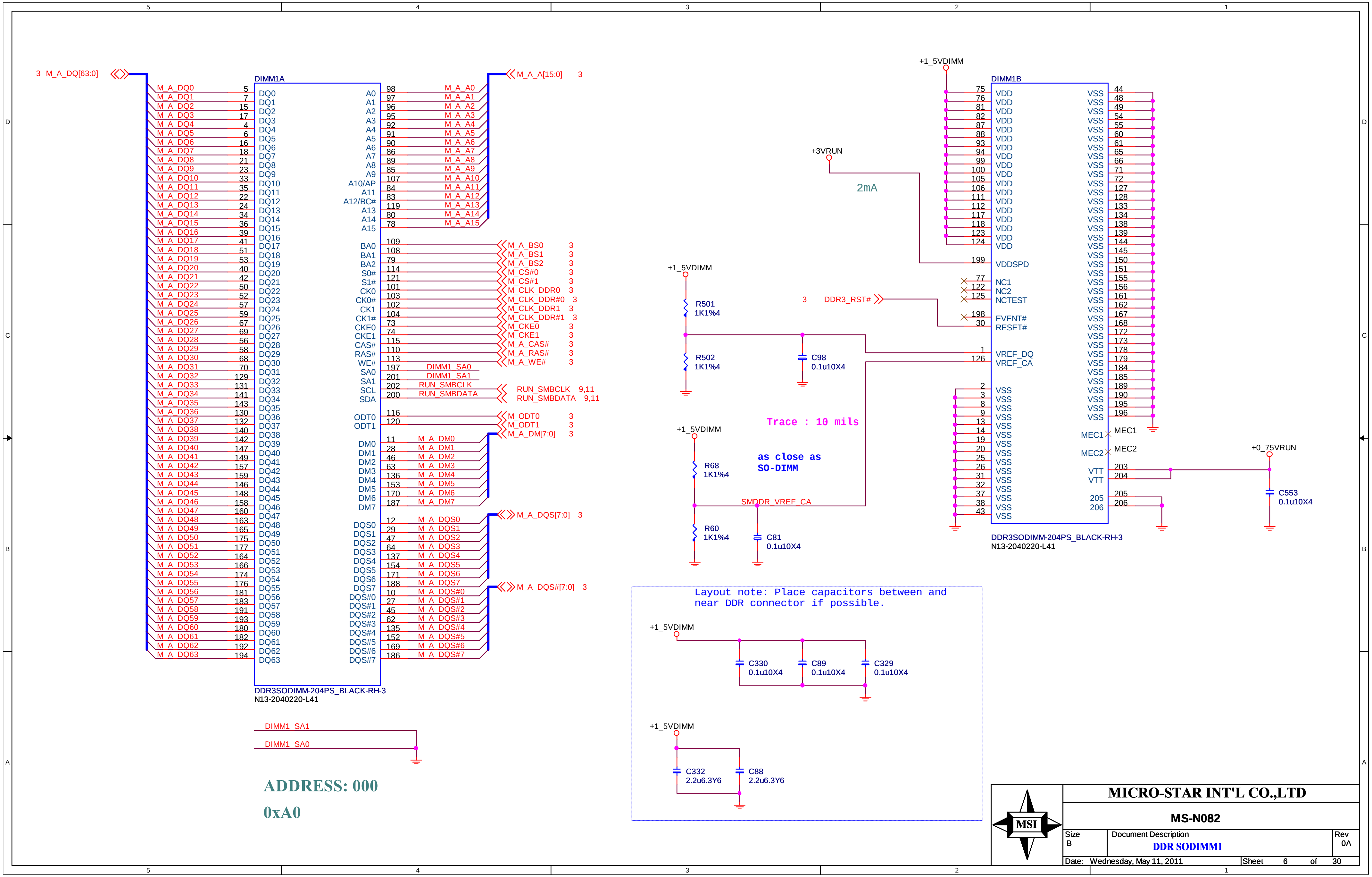

3 M_A_DQ[63:0]
DIMM1A
DQ0 … DQ63
M_A_DQ0 … M_A_DQ63
A0 … A9, A10/AP, A11, A12/BC#, A13, A14, A15
M_A_A[15:0] 3
M_A_A0 … M_A_A15
BA0 BA1 BA2 S0# S1# CK0 CK0# CK1 CK1# CKE0 CKE1 CAS# RAS# WE# SA0 SA1 SCL SDA ODT0 ODT1
M_A_BS0 3
M_A_BS1 3
M_A_BS2 3
M_CS#0 3
M_CS#1 3
M_CLK_DDR0 3
M_CLK_DDR#0 3
M_CLK_DDR1 3
M_CLK_DDR#1 3
M_CKE0 3
M_CKE1 3
M_A_CAS# 3
M_A_RAS# 3
M_A_WE# 3
DIMM1_SA0
DIMM1_SA1
RUN_SMBCLK 9,11
RUN_SMBDATA 9,11
M_ODT0 3
M_ODT1 3
DM0 … DM7
M_A_DM[7:0] 3
M_A_DM0 … M_A_DM7
DQS0 … DQS7
M_A_DQS[7:0] 3
M_A_DQS0 … M_A_DQS7
DQS#0 … DQS#7
M_A_DQS#[7:0] 3
M_A_DQS#0 … M_A_DQS#7
DDR3SODIMM-204PS_BLACK-RH-3
N13-2040220-L41
DIMM1_SA1
DIMM1_SA0
ADDRESS: 000
0xA0
+1_5VDIMM
DIMM1B
VDD
VSS
VDDSPD
NC1
NC2
NCTEST
EVENT#
RESET#
VREF_DQ
VREF_CA
MEC1
MEC2
VTT
+3VRUN
2mA
3 DDR3_RST#
R501 1K1%4
R502 1K1%4
C98 0.1u10X4
Trace : 10 mils
R68 1K1%4
as close as SO-DIMM
SMDDR_VREF_CA
R60 1K1%4
C81 0.1u10X4
+0_75VRUN
C553 0.1u10X4
DDR3SODIMM-204PS_BLACK-RH-3
N13-2040220-L41
Layout note: Place capacitors between and near DDR connector if possible.
C330 0.1u10X4
C89 0.1u10X4
C329 0.1u10X4
C332 2.2u6.3Y6
C88 2.2u6.3Y6
MICRO-STAR INT'L CO.,LTD
MS-N082
Size B
Document Description
DDR SODIMM1
Rev 0A
Date: Wednesday, May 11, 2011
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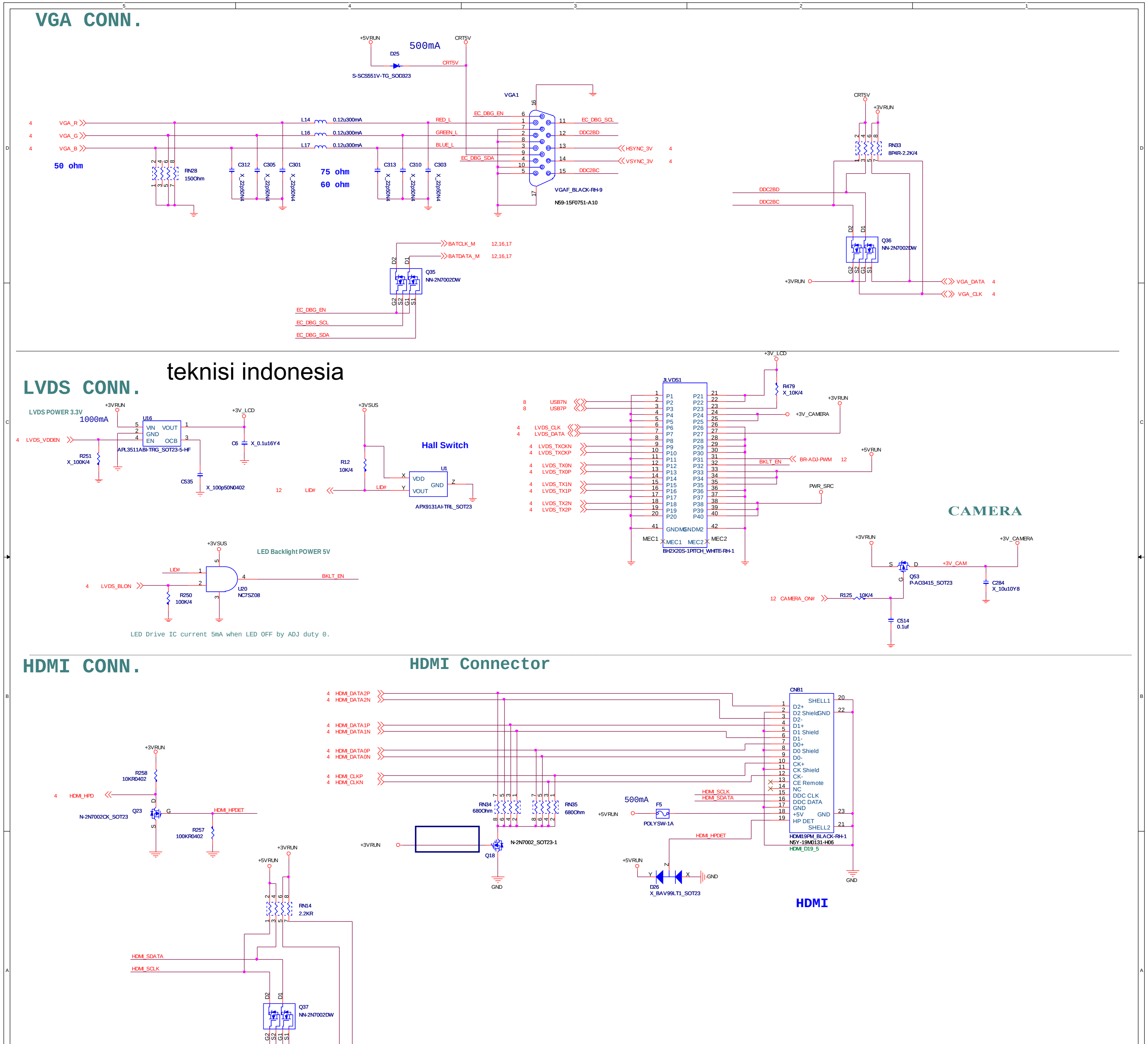

MICRO-STAR INT'L CO.,LTD

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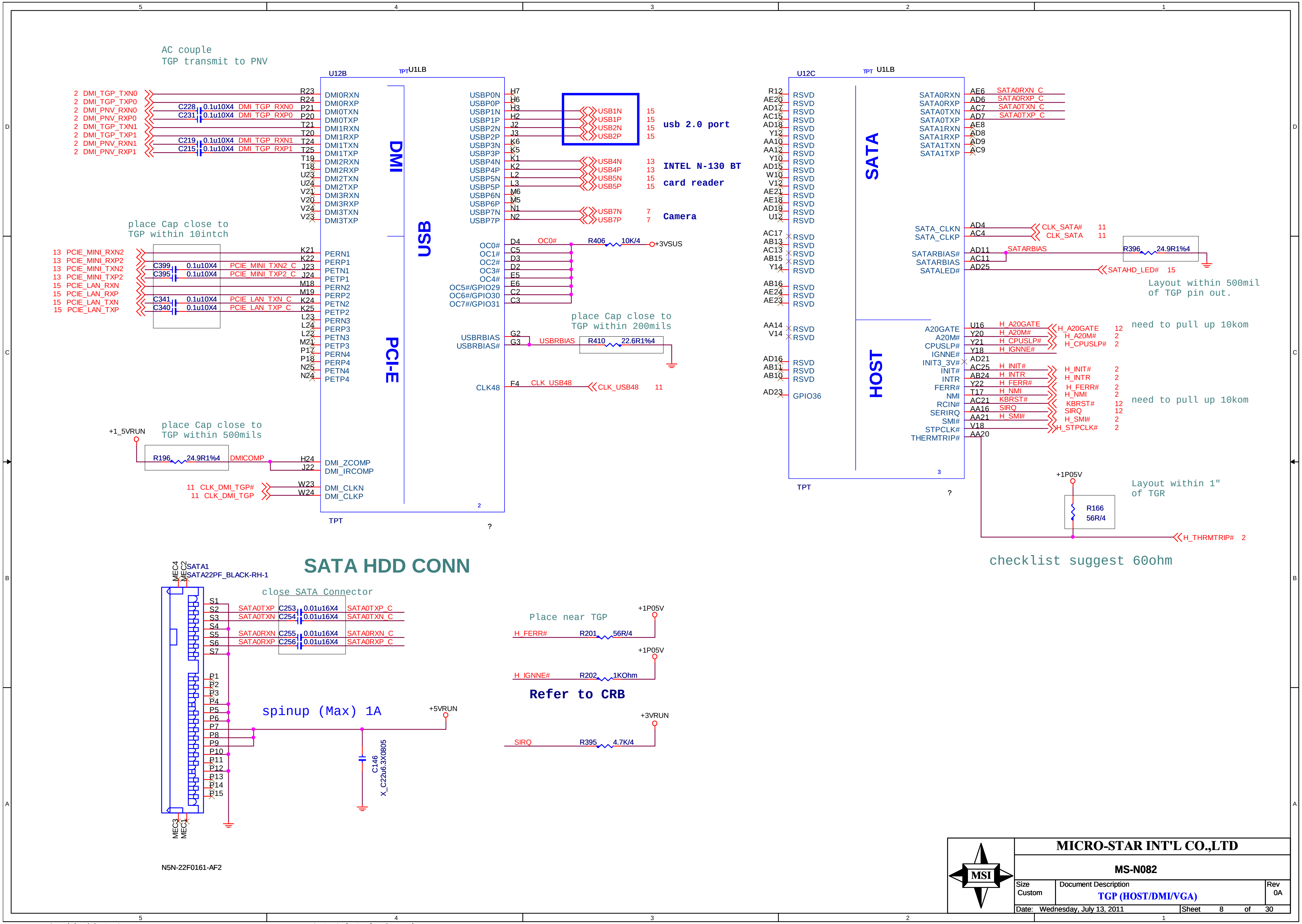
Size	Document Description	Rev
Custom	CRT, LVDS CONN	0A

Date: Monday, July 11, 2011 Sheet 7 of 30


AC couple
TGP transmit to PNV
U12B
U1LB
DMI
USB
PCI-E
place Cap close to
TGP within 10intch
place Cap close to
TGP within 500mils
usb 2.0 port
INTEL N-130 BT
card reader
Camera
place Cap close to
TGP within 200mils
U12C
SATA
HOST
Layout within 500mil
of TGP pin out.
need to pull up 10kom
need to pull up 10kom
Layout within 1"
of TGR
checklist suggest 60ohm
SATA HDD CONN
SATA1
SATA22PF_BLACK-RH-1
close SATA Connector
spinup (Max) 1A
Place near TGP
Refer to CRB
N5N-22F0161-AF2
MICRO-STAR INT'L CO.,LTD
MSI
MS-N082
Size
Custom
Document Description
TGP (HOST/DMI/VGA)
Rev
0A
Date: Wednesday, July 13, 2011
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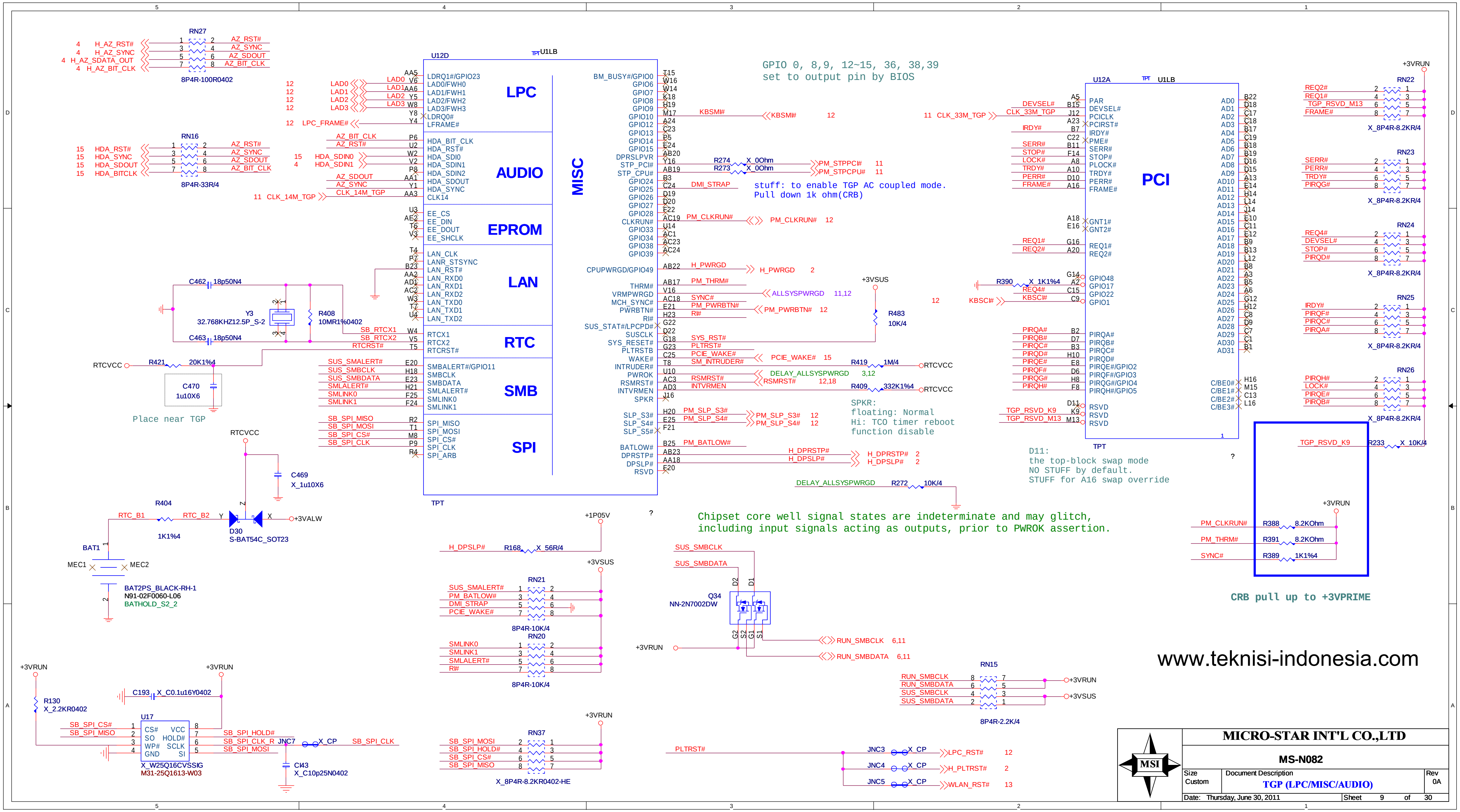
GPIO 0, 8,9, 12~15, 36, 38,39
set to output pin by BIOS
U12D
LPC
AUDIO
EPROM
LAN
RTC
SMB
SPI
MISC
PCI
U12A
stuff: to enable TGP AC coupled mode.
Pull down 1k ohm(CRB)
SPKR:
floating: Normal
Hi: TCO timer reboot
function disable
D11:
the top-block swap mode
NO STUFF by default.
STUFF for A16 swap override
Place near TGP
Chipset core well signal states are indeterminate and may glitch,
including input signals acting as outputs, prior to PWROK assertion.
CRB pull up to +3VPRIME
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MICRO-STAR INT'L CO.,LTD
MS-N082
Size
Custom
Document Description
TGP (LPC/MISC/AUDIO)
Rev
0A
Date: Thursday, June 30, 2011
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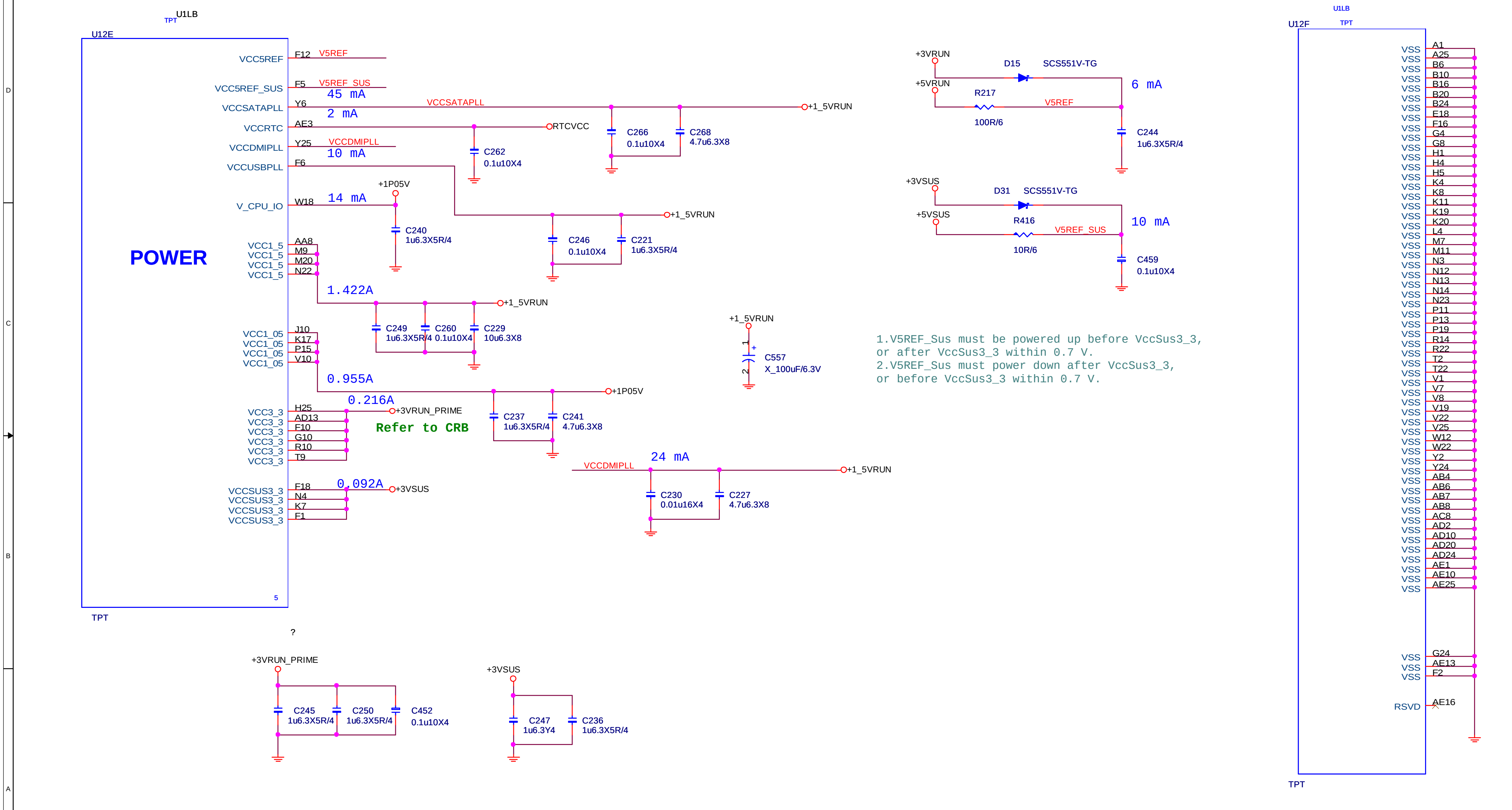

1.V5REF_Sus must be powered up before VccSus3_3,
or after VccSus3_3 within 0.7 V.
2.V5REF_Sus must power down after VccSus3_3,
or before VccSus3_3 within 0.7 V.

MICRO-STAR INT'L CO.,LTD		
MS-N082		
Size: Custom	Document Description: TGP Power	Rev: 0A
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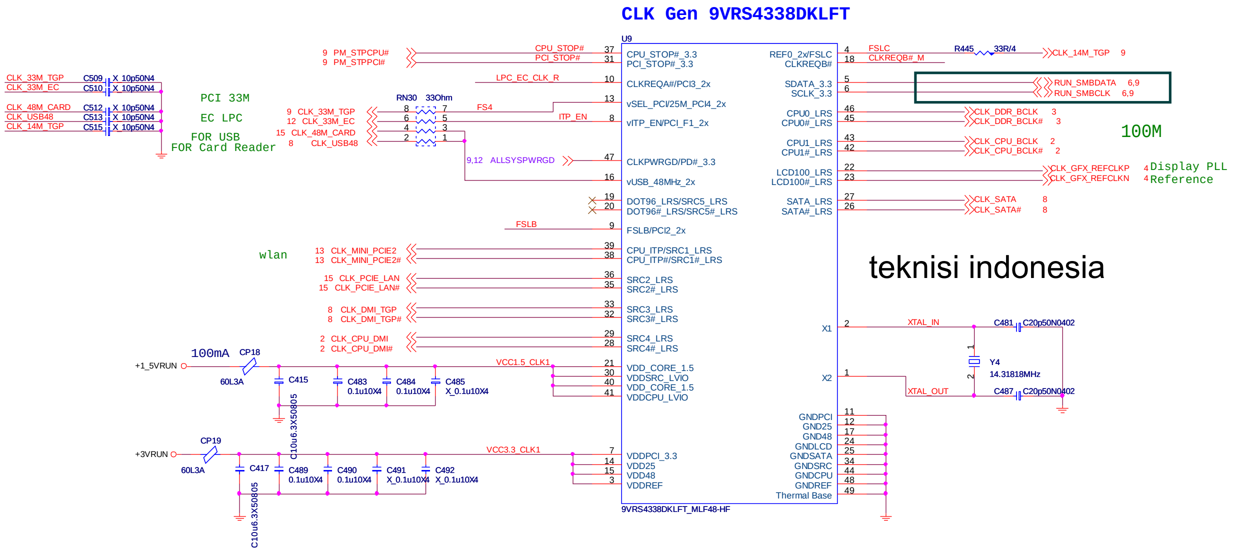

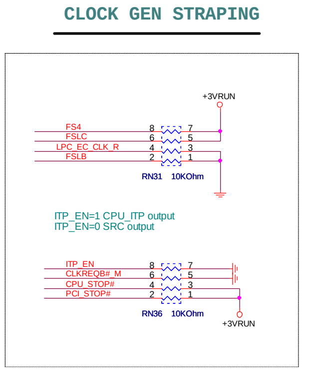

CPU PLL Spread Frequency Selection Table

Center Spread	SS1	SS0	FSLC	FSLB	BCLK
L	L	L	H	L	100MHZ
L	L	L	L	L	133MHZ
L	L	L	L	H	166MHZ
L	L	L	H	H	200MHZ

MICRO-STAR INT'L CO.,LTD

MS-N082

Size: C | Document Description: CLK GEN_4338D | Rev: 0A

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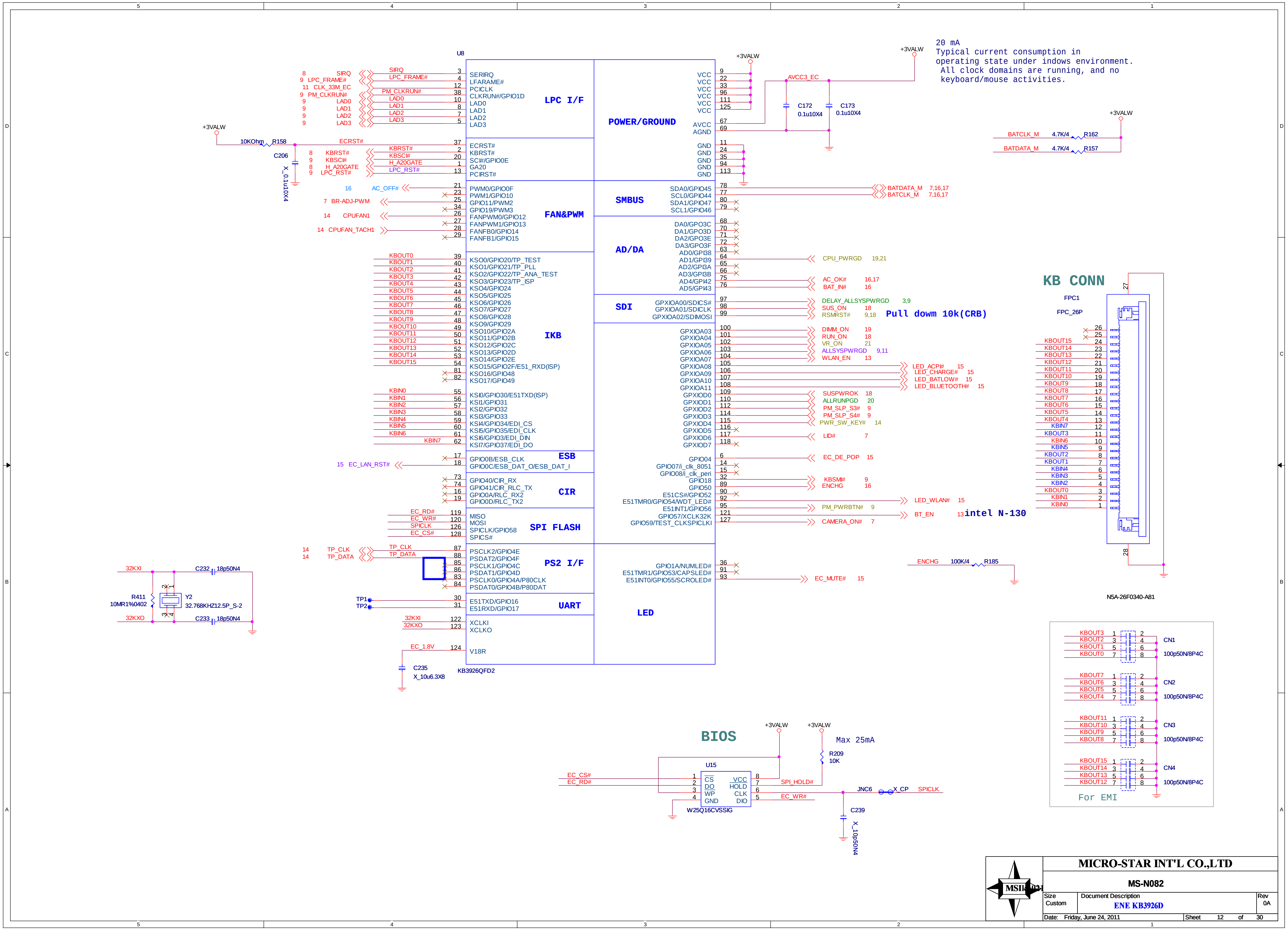
U8
KB3926QFD2
LPC I/F
POWER/GROUND
SMBUS
FAN&PWM
AD/DA
SDI
IKB
ESB
CIR
SPI FLASH
PS2 I/F
UART
LED
20 mA
Typical current consumption in
operating state under indows environment.
All clock domains are running, and no
keyboard/mouse activities.
KB CONN
FPC1
FPC_26P
N5A-26F0340-A81
Pull down 10k(CRB)
intel N-130
BIOS
U15
W25Q16CVSSIG
Max 25mA
For EMI
MICRO-STAR INT'L CO.,LTD
MS-N082
Size
Custom
Document Description
ENE KB3926D
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0A
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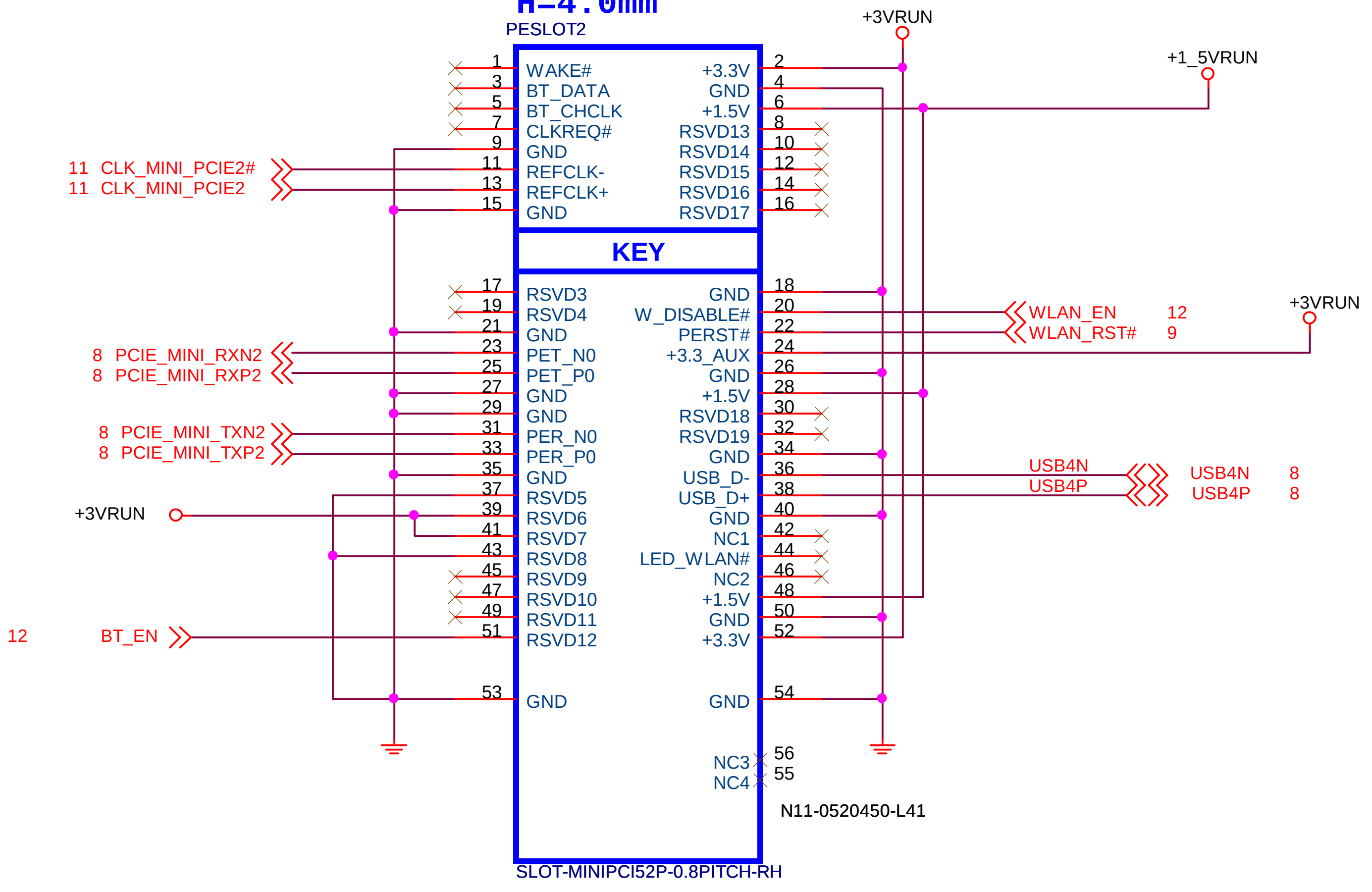
Mini PCIE

Wireless LAN

+3VRUN, 1.5A

+1_5VRUN, 0.5A

H=4.0mm



MICRO-STAR INT'L CO.,LTD

MS-N082

Size	Document Description	Rev
A	Mini PCIE slots	0A

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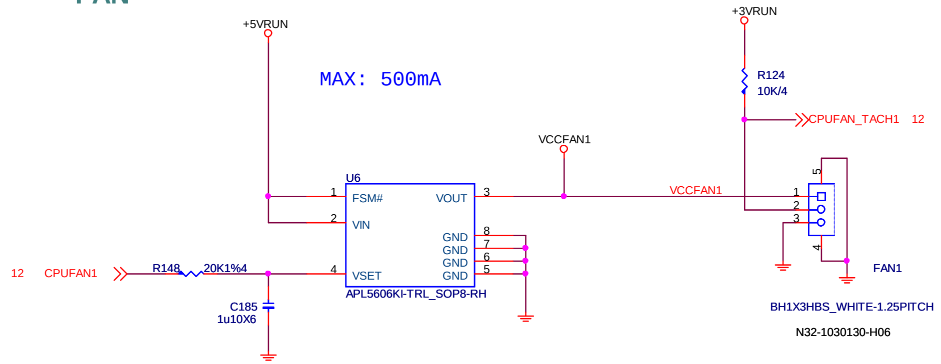
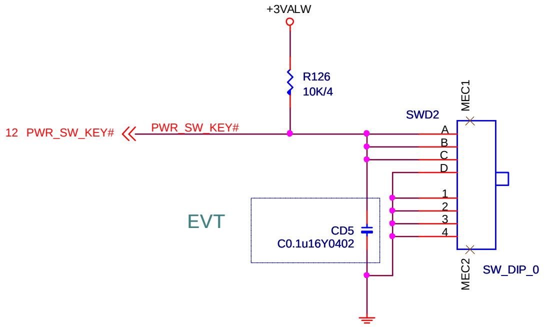
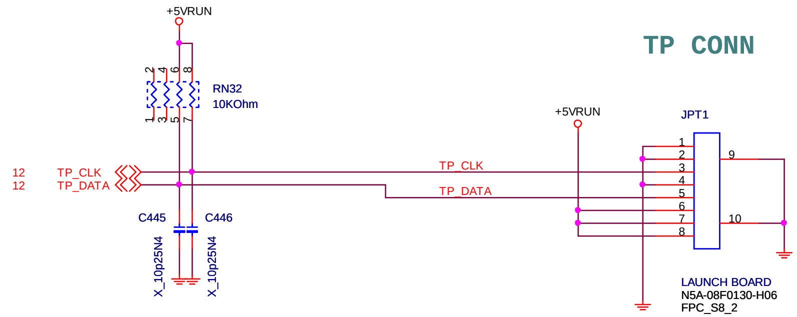
FAN



POWER SWITCH



TP CONN



MICRO-STAR INT'L CO.,LTD		
MS-N082		
Size: Custom	Document Description: BT/CAMERA/USB/FAN/TP	Rev: 0A
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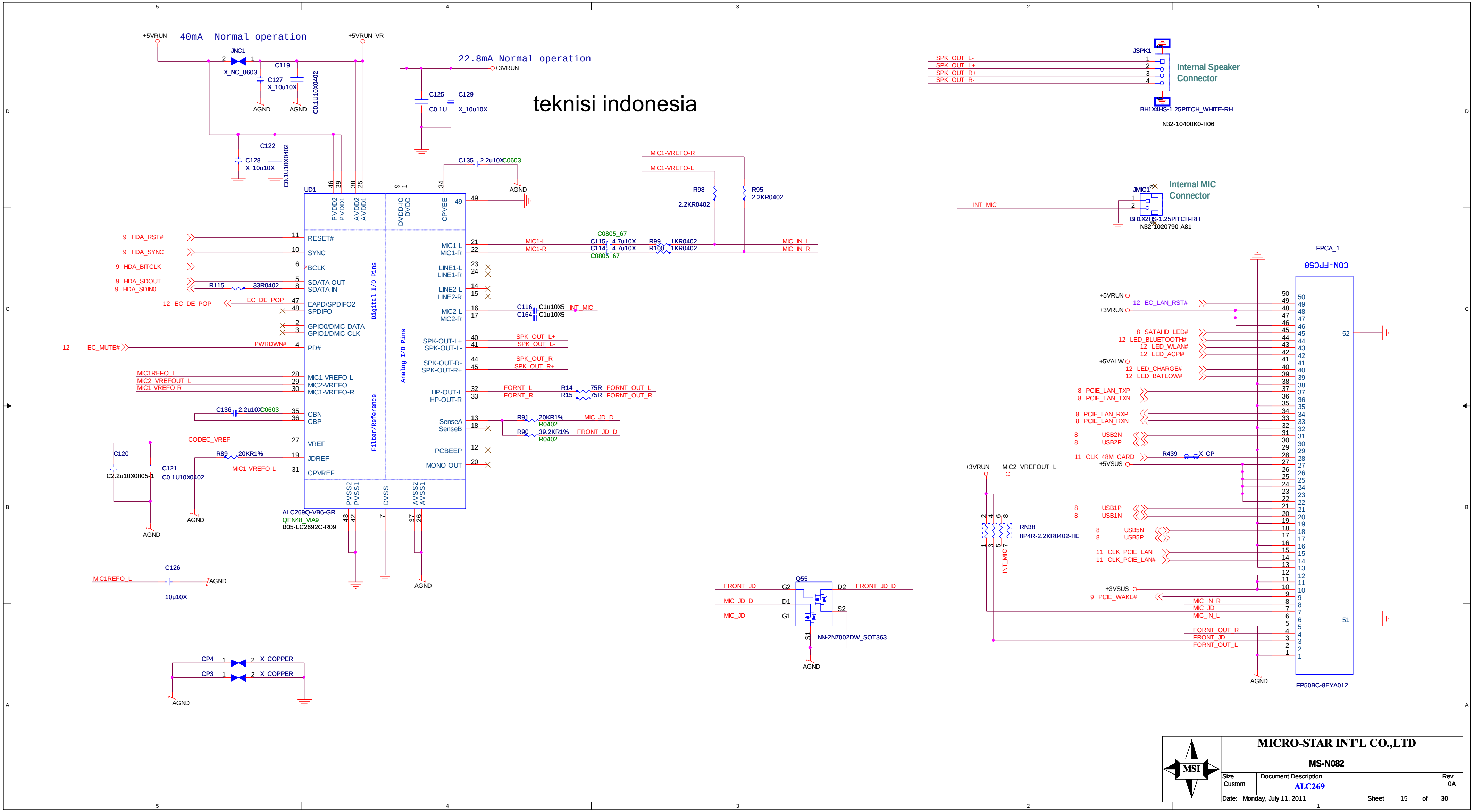
40mA Normal operation
22.8mA Normal operation
teknisi indonesia
+5VRUN
+5VRUN_VR
+3VRUN
JNC1
X_NC_0603
C119
C127
X_10u10X
C0.1U10X0402
C125
C129
C0.1U
X_10u10X
C122
C128
C135
2.2u10X0603
AGND
UD1
PVDD2
PVDD1
AVDD2
AVDD1
DVDD-IO
DVDD
CPVEE
RESET#
SYNC
BCLK
SDATA-OUT
SDATA-IN
EAPD/SPDIFO2
SPDIFO
GPIO0/DMIC-DATA
GPIO1/DMIC-CLK
PD#
MIC1-VREFO-L
MIC2-VREFO
MIC1-VREFO-R
CBN
CBP
VREF
JDREF
CPVREF
Digital I/O Pins
Analog I/O Pins
Filter/Reference
MIC1-L
MIC1-R
LINE1-L
LINE1-R
LINE2-L
LINE2-R
MIC2-L
MIC2-R
SPK-OUT-L+
SPK-OUT-L-
SPK-OUT-R-
SPK-OUT-R+
HP-OUT-L
HP-OUT-R
SenseA
SenseB
PCBEEP
MONO-OUT
PVSS2
PVSS1
DVSS
AVSS2
AVSS1
ALC269Q-VB6-GR
QFN48_VIA9
B05-LC2692C-R09
9 HDA_RST#
9 HDA_SYNC
9 HDA_BITCLK
9 HDA_SDOUT
9 HDA_SDIN0
R115 33R0402
12 EC_DE_POP
EC_DE_POP
12 EC_MUTE#
PWRDWN#
MIC1REFO_L
MIC2_VREFOUT_L
MIC1-VREFO-R
C136 2.2u10X0603
CODEC_VREF
C120
C2.2u10X0805-1
C121
C0.1U10X0402
R89 20KR1%
MIC1-VREFO-L
C126
10u10X
MIC1REFO_L
CP4 X_COPPER
CP3 X_COPPER
MIC1-VREFO-R
MIC1-VREFO-L
R98
2.2KR0402
R95
2.2KR0402
C0805_67
C115 4.7u10X
C114 4.7u10X
R99 1KR0402
R100 1KR0402
MIC_IN_L
MIC_IN_R
C116 C1u10X5
C164 C1u10X5
INT_MIC
SPK_OUT_L+
SPK_OUT_L-
SPK_OUT_R-
SPK_OUT_R+
FORNT_L
FORNT_R
R14 75R
R15 75R
FORNT_OUT_L
FORNT_OUT_R
R91 20KR1%
R0402
MIC_JD_D
R90 39.2KR1%
FRONT_JD_D
SPK_OUT_L-
SPK_OUT_L+
SPK_OUT_R+
SPK_OUT_R-
JSPK1
Internal Speaker Connector
BH1X4HS-1.25PITCH_WHITE-RH
N32-10400K0-H06
JMIC1
Internal MIC Connector
BH1X2HS-1.25PITCH-RH
N32-1020790-A81
Q55
FRONT_JD
MIC_JD_D
MIC_JD
NN-2N7002DW_SOT363
FPCA_1
CON-FPC50
12 EC_LAN_RST#
+5VALW
8 SATAHD_LED#
12 LED_BLUETOOTH#
12 LED_WLAN#
12 LED_ACPI#
12 LED_CHARGE#
12 LED_BATLOW#
8 PCIE_LAN_TXP
8 PCIE_LAN_TXN
8 PCIE_LAN_RXP
8 PCIE_LAN_RXN
USB2N
USB2P
11 CLK_48M_CARD
R439 X_CP
+5VSUS
MIC2_VREFOUT_L
RN38
8P4R-2.2KR0402-HE
USB1P
USB1N
USB5N
USB5P
11 CLK_PCIE_LAN
11 CLK_PCIE_LAN#
+3VSUS
9 PCIE_WAKE#
MIC_IN_R
MIC_JD
MIC_IN_L
FORNT_OUT_R
FRONT_JD
FORNT_OUT_L
FP50BC-8EYA012
MICRO-STAR INT'L CO.,LTD
MSI
MS-N082
Size Custom
Document Description
ALC269
Rev 0A
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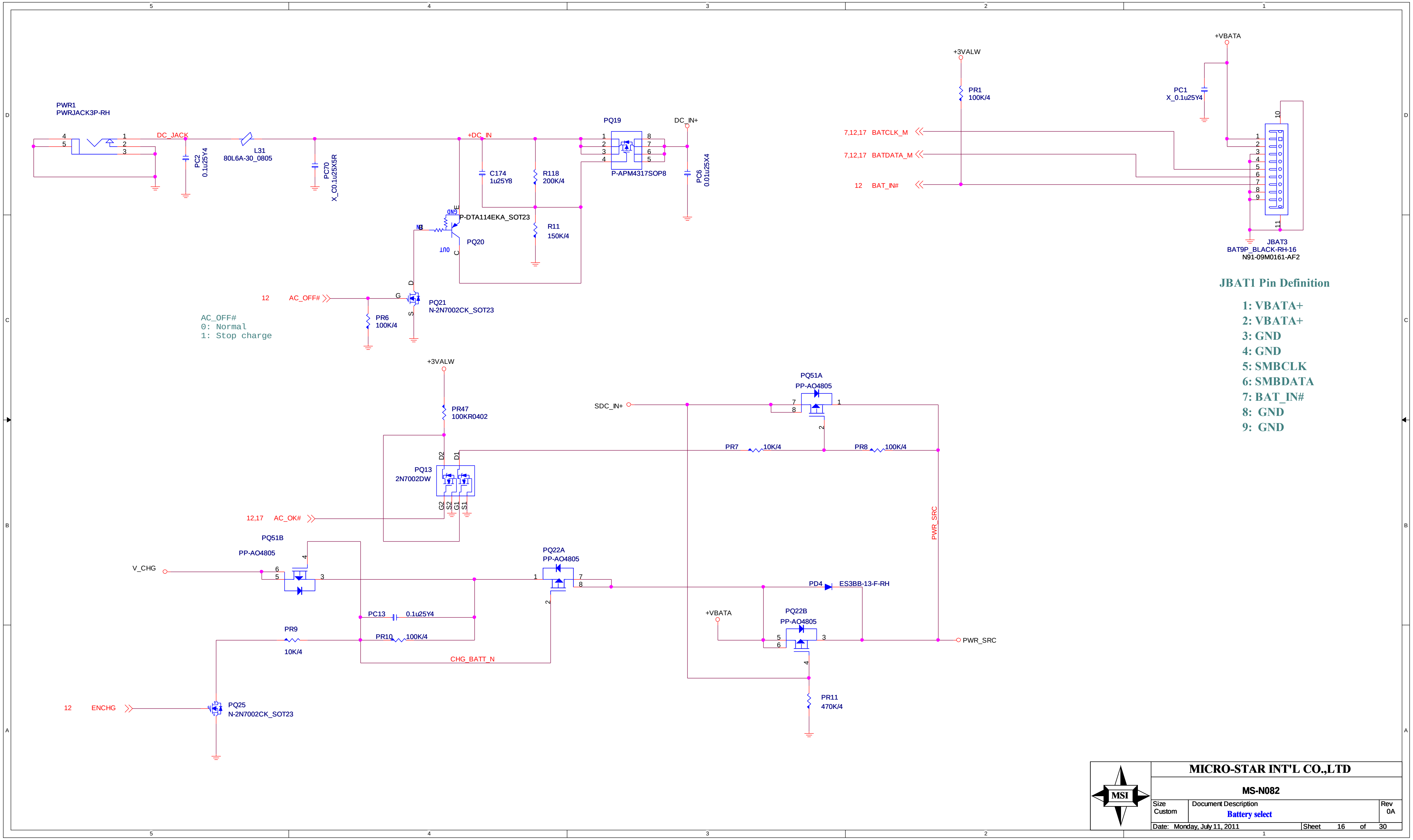
PWR1
PWRJACK3P-RH
DC_JACK
L31
80L6A-30_0805
PC2
0.1u25Y4
PC70
X_C0.1u25X5R
+DC_IN
C174
1u25Y8
R118
200K/4
R11
150K/4
PQ19
P-APM4317SOP8
DC_IN+
PC6
0.01u25X4
P-DTA114EKA_SOT23
PQ20
12 AC_OFF#
PR6
100K/4
PQ21
N-2N7002CK_SOT23
AC_OFF#
0: Normal
1: Stop charge
+3VALW
PR47
100KR0402
PQ13
2N7002DW
12,17 AC_OK#
SDC_IN+
PQ51A
PP-AO4805
PR7 10K/4
PR8 100K/4
PWR_SRC
PQ51B
PP-AO4805
V_CHG
PQ22A
PP-AO4805
PC13 0.1u25Y4
PR9
10K/4
PR10 100K/4
CHG_BATT_N
PD4 ES3BB-13-F-RH
+VBATA
PQ22B
PP-AO4805
PWR_SRC
PR11
470K/4
12 ENCHG
PQ25
N-2N7002CK_SOT23
+3VALW
PR1
100K/4
+VBATA
PC1
X_0.1u25Y4
7,12,17 BATCLK_M
7,12,17 BATDATA_M
12 BAT_IN#
JBAT3
BAT9P_BLACK-RH-16
N91-09M0161-AF2
JBAT1 Pin Definition
1: VBATA+
2: VBATA+
3: GND
4: GND
5: SMBCLK
6: SMBDATA
7: BAT_IN#
8: GND
9: GND
MICRO-STAR INT'L CO.,LTD
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Battery select
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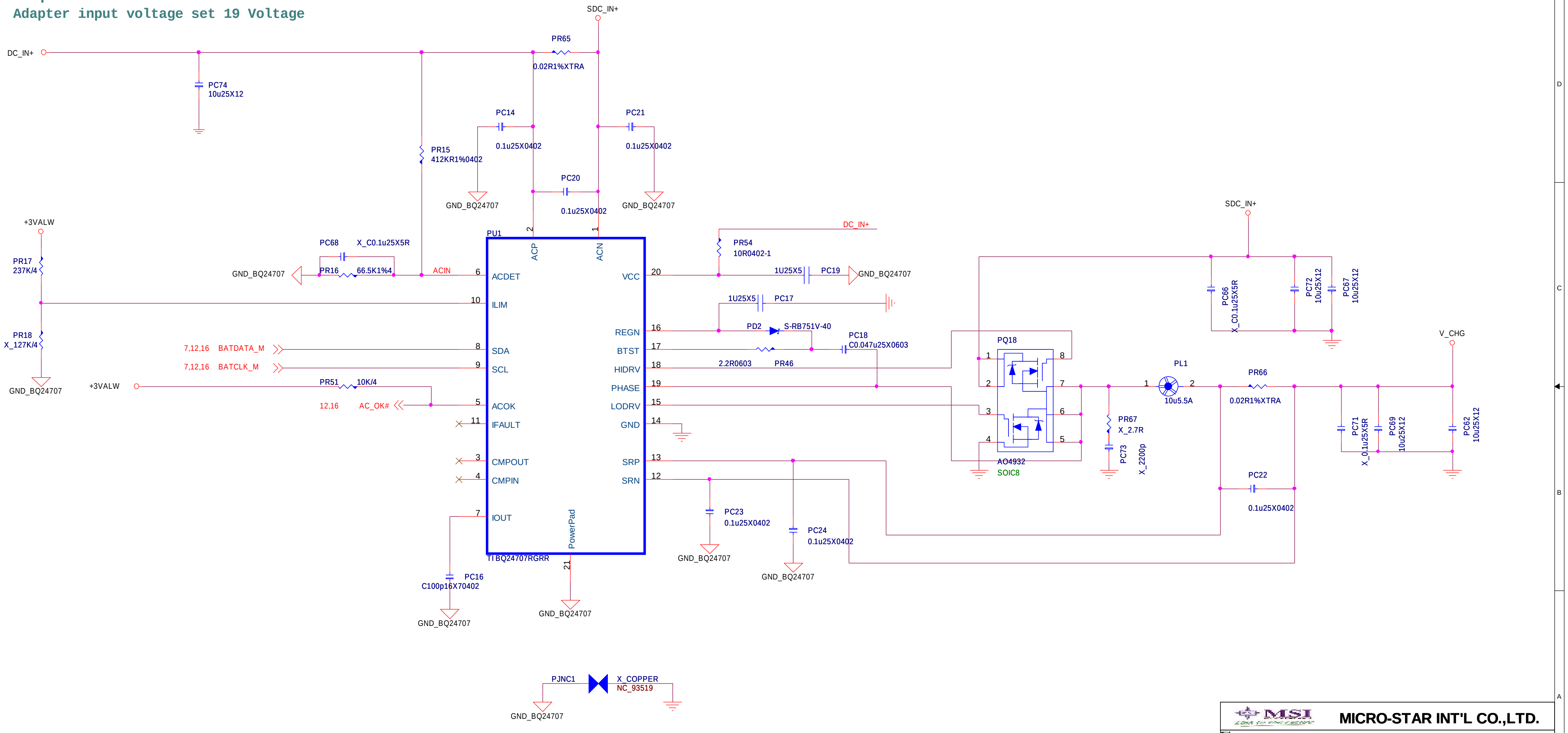
Adapter= 65 W
Adapter input voltage set 19 Voltage



MICRO-STAR INT'L CO.,LTD.

Title	Charger	
Size: Custom	Document Number: MS-N082	Rev: 0A
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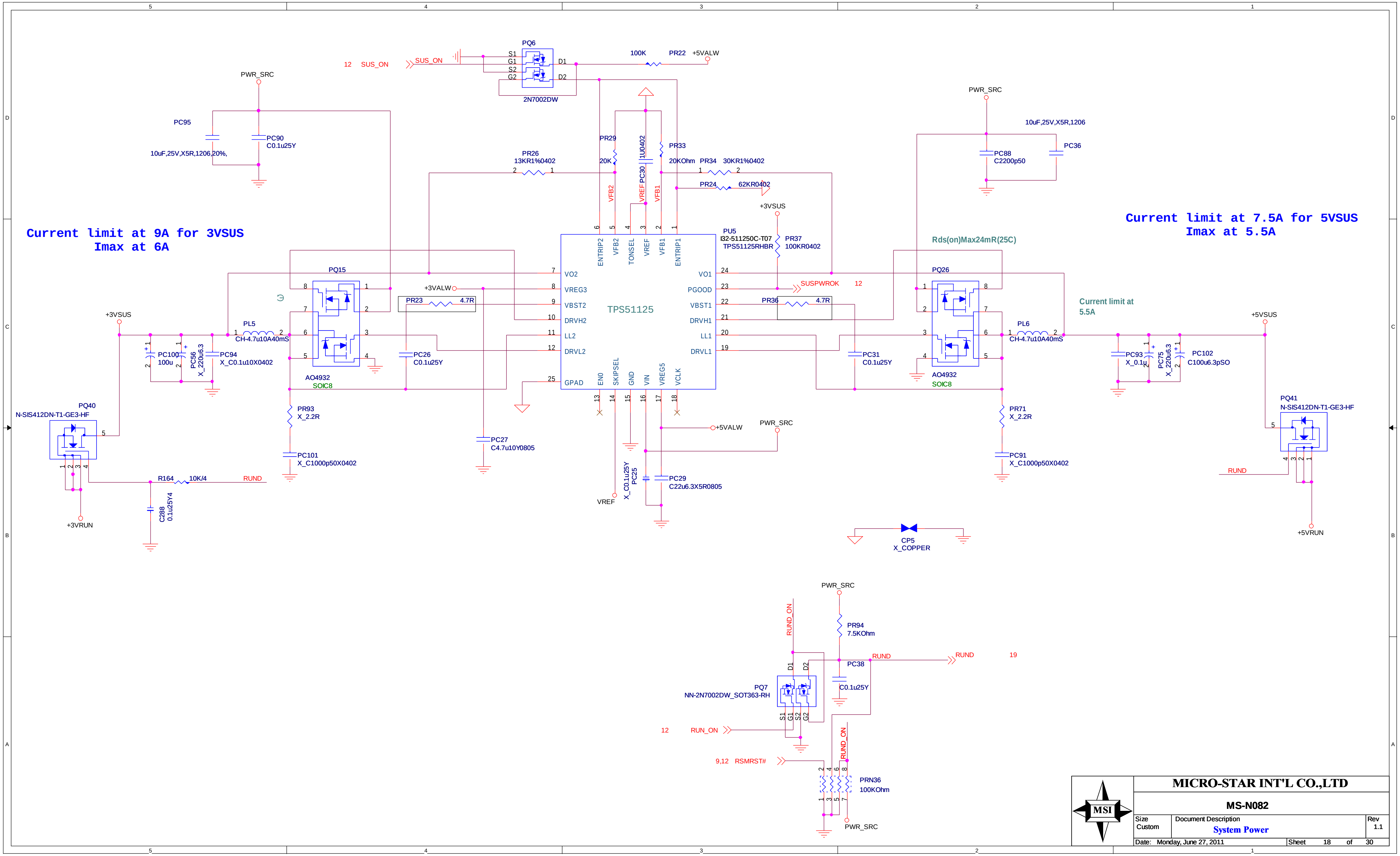
Current limit at 9A for 3VSUS
Imax at 6A
Current limit at 7.5A for 5VSUS
Imax at 5.5A
Rds(on)Max24mR(25C)
Current limit at 5.5A
TPS51125
PU5
I32-511250C-T07
TPS51125RHBR
PQ6
2N7002DW
PQ15
AO4932
SOIC8
PQ26
AO4932
SOIC8
PQ40
N-SIS412DN-T1-GE3-HF
PQ41
N-SIS412DN-T1-GE3-HF
PQ7
NN-2N7002DW_SOT363-RH
PRN36
100KOhm
CP5
X_COPPER
SUS_ON
SUSPWROK
RUND
RUN_ON
RSMRST#
PWR_SRC
+5VALW
+3VALW
+3VSUS
+5VSUS
+3VRUN
+5VRUN
MICRO-STAR INT'L CO.,LTD
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Custom
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1.1
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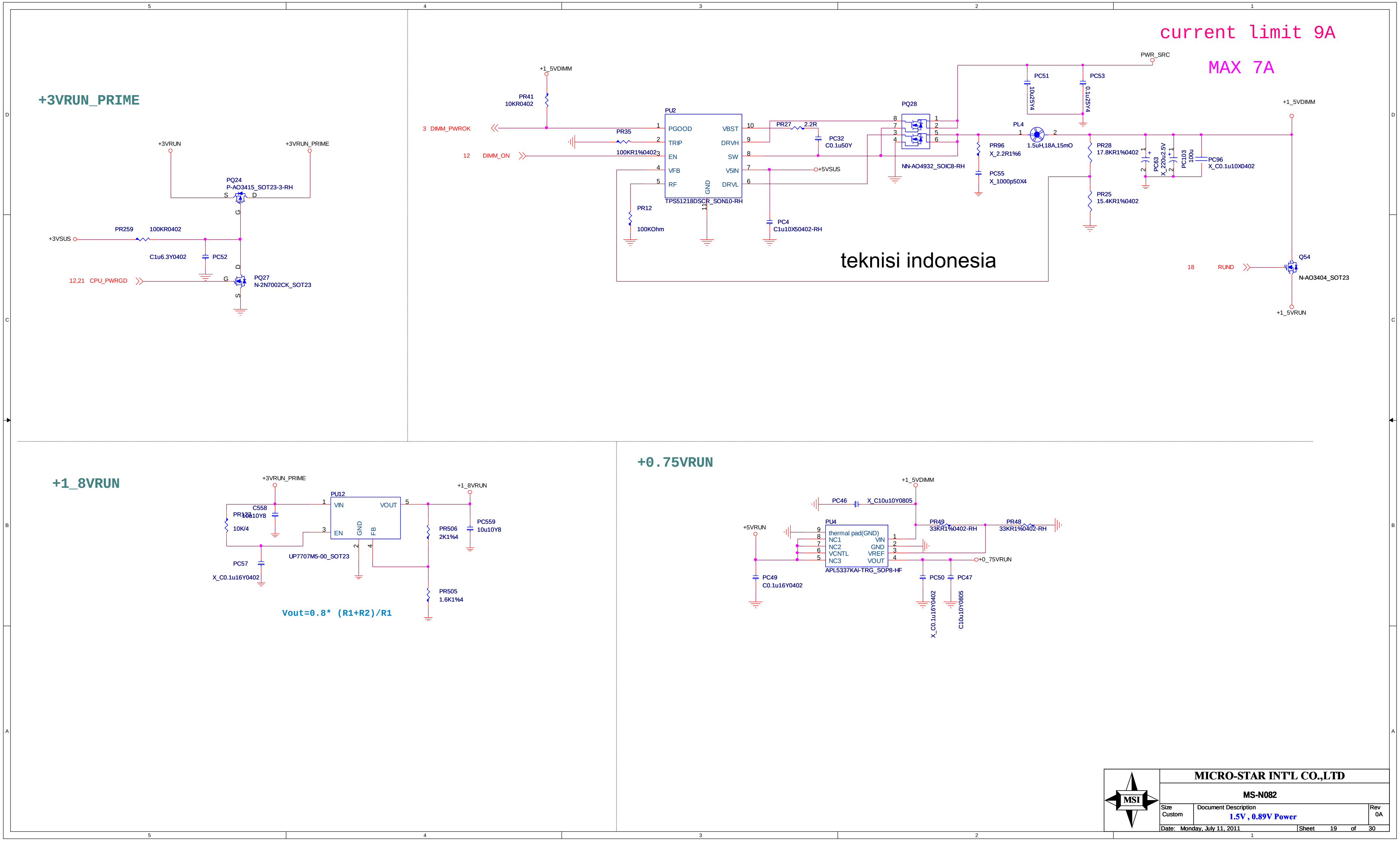
current limit 9A
MAX 7A
+3VRUN_PRIME
+3VRUN
+3VRUN_PRIME
PQ24
P-AO3415_SOT23-3-RH
+3VSUS
PR259
100KR0402
C1u6.3Y0402
PC52
12,21 CPU_PWRGD
PQ27
N-2N7002CK_SOT23
+1_5VDIMM
PR41
10KR0402
3 DIMM_PWROK
PR35
100KR1%0402
12 DIMM_ON
PU2
PGOOD
TRIP
EN
VFB
RF
VBST
DRVH
SW
V5IN
DRVL
GND
TPS51218DSCR_SON10-RH
PR12
100KOhm
PR27
2.2R
PC32
C0.1u50Y
+5VSUS
PC4
C1u10X50402-RH
PQ28
NN-AO4932_SOIC8-RH
PWR_SRC
PC51
10u25Y4
PC53
0.1u25Y4
PL4
1.5uH,18A,15mO
PR96
X_2.2R1%6
PC55
X_1000p50X4
PR28
17.8KR1%0402
PR25
15.4KR1%0402
PC83
X_220u2.5V
PC103
100u
PC96
X_C0.1u10X0402
+1_5VDIMM
teknisi indonesia
18 RUND
Q54
N-AO3404_SOT23
+1_5VRUN
+1_8VRUN
+3VRUN_PRIME
PU12
VIN
VOUT
EN
GND
FB
C558
10u10Y8
PR122
10K/4
PC57
X_C0.1u16Y0402
UP7707M5-00_SOT23
+1_8VRUN
PC559
10u10Y8
PR506
2K1%4
PR505
1.6K1%4
Vout=0.8* (R1+R2)/R1
+0.75VRUN
+1_5VDIMM
PC46
X_C10u10Y0805
+5VRUN
PU4
thermal pad(GND)
NC1
NC2
VCNTL
NC3
VIN
GND
VREF
VOUT
APL5337KAI-TRG_SOP8-HF
PR49
33KR1%0402-RH
PR48
33KR1%0402-RH
+0_75VRUN
PC49
C0.1u16Y0402
PC50
X_C0.1u16Y0402
PC47
C10u10Y0805
MSI
MICRO-STAR INT'L CO.,LTD
MS-N082
Size
Custom
Document Description
1.5V , 0.89V Power
Rev
0A
Date: Monday, July 11, 2011
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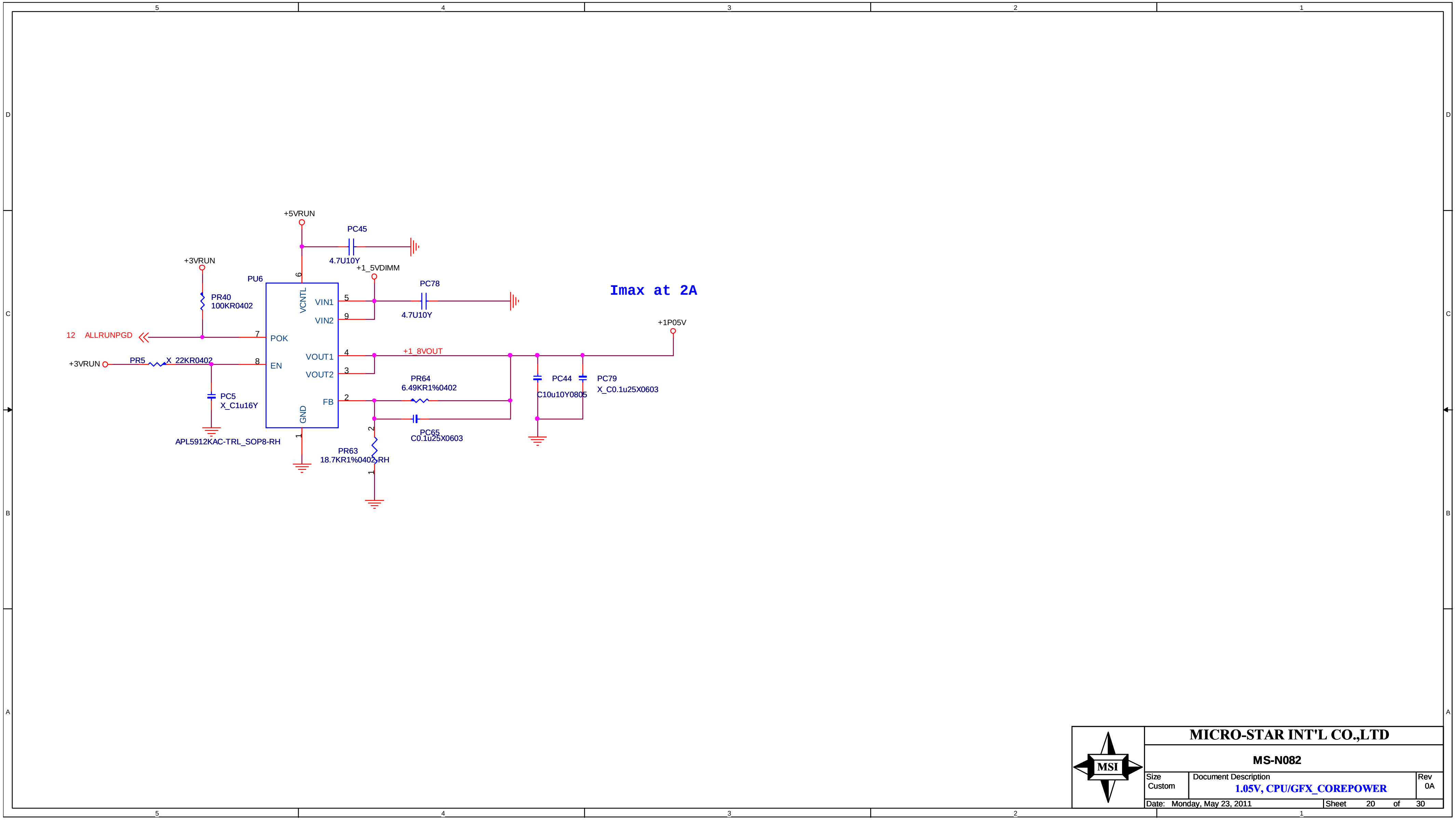
+5VRUN
PC45
4.7U10Y
+3VRUN
+1_5VDIMM
PU6
PC78
PR40
100KR0402
VCNTL
VIN1
VIN2
4.7U10Y
Imax at 2A
+1P05V
12 ALLRUNPGD
POK
+3VRUN
PR5
X_22KR0402
EN
VOUT1
VOUT2
+1_8VOUT
PR64
6.49KR1%0402
PC44
PC79
C10u10Y0805
X_C0.1u25X0603
PC5
X_C1u16Y
FB
GND
PC65
C0.1u25X0603
APL5912KAC-TRL_SOP8-RH
PR63
18.7KR1%0402_RH
MICRO-STAR INT'L CO.,LTD
MSI
MS-N082
Size
Custom
Document Description
1.05V, CPU/GFX_COREPOWER
Rev
0A
Date: Monday, May 23, 2011
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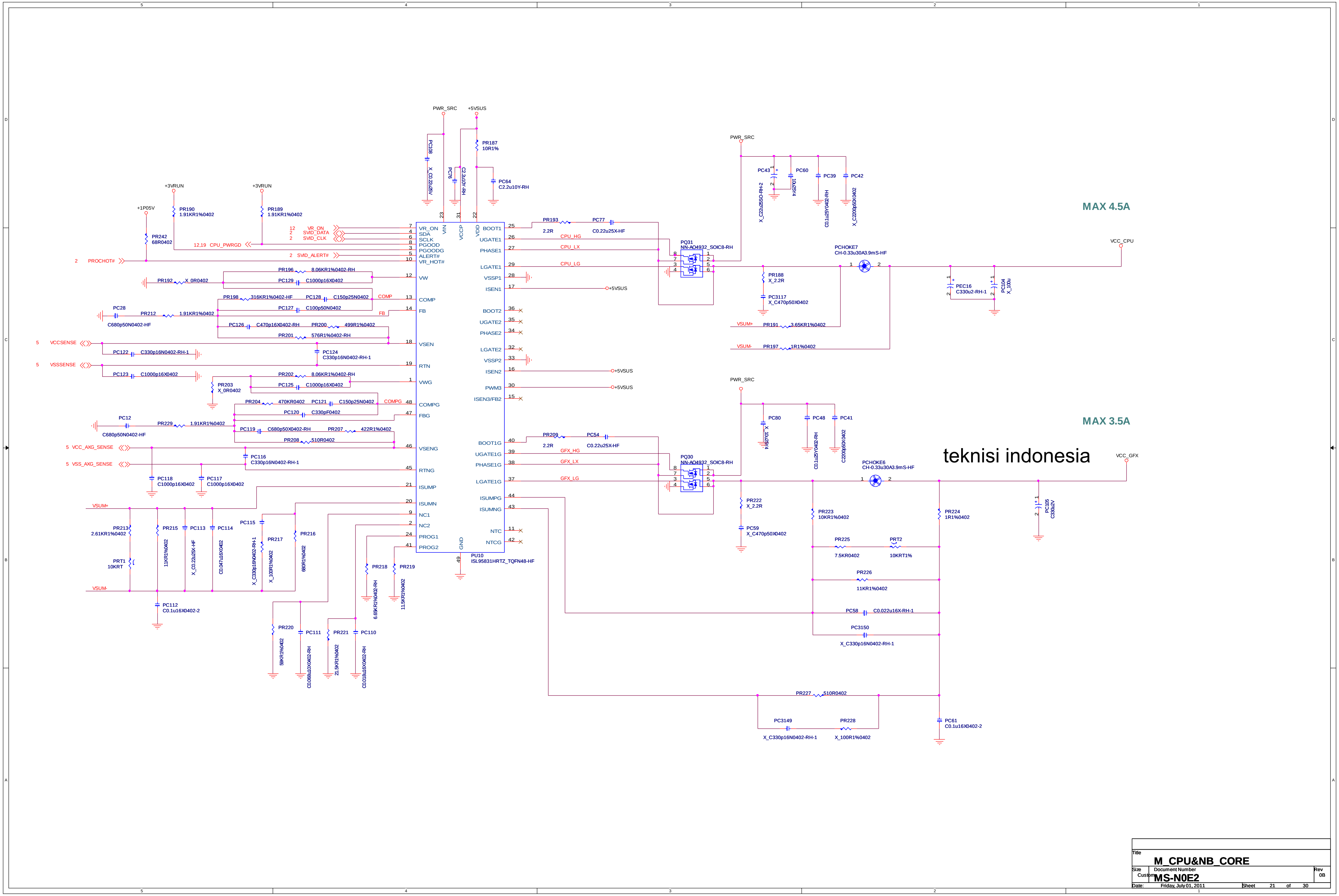
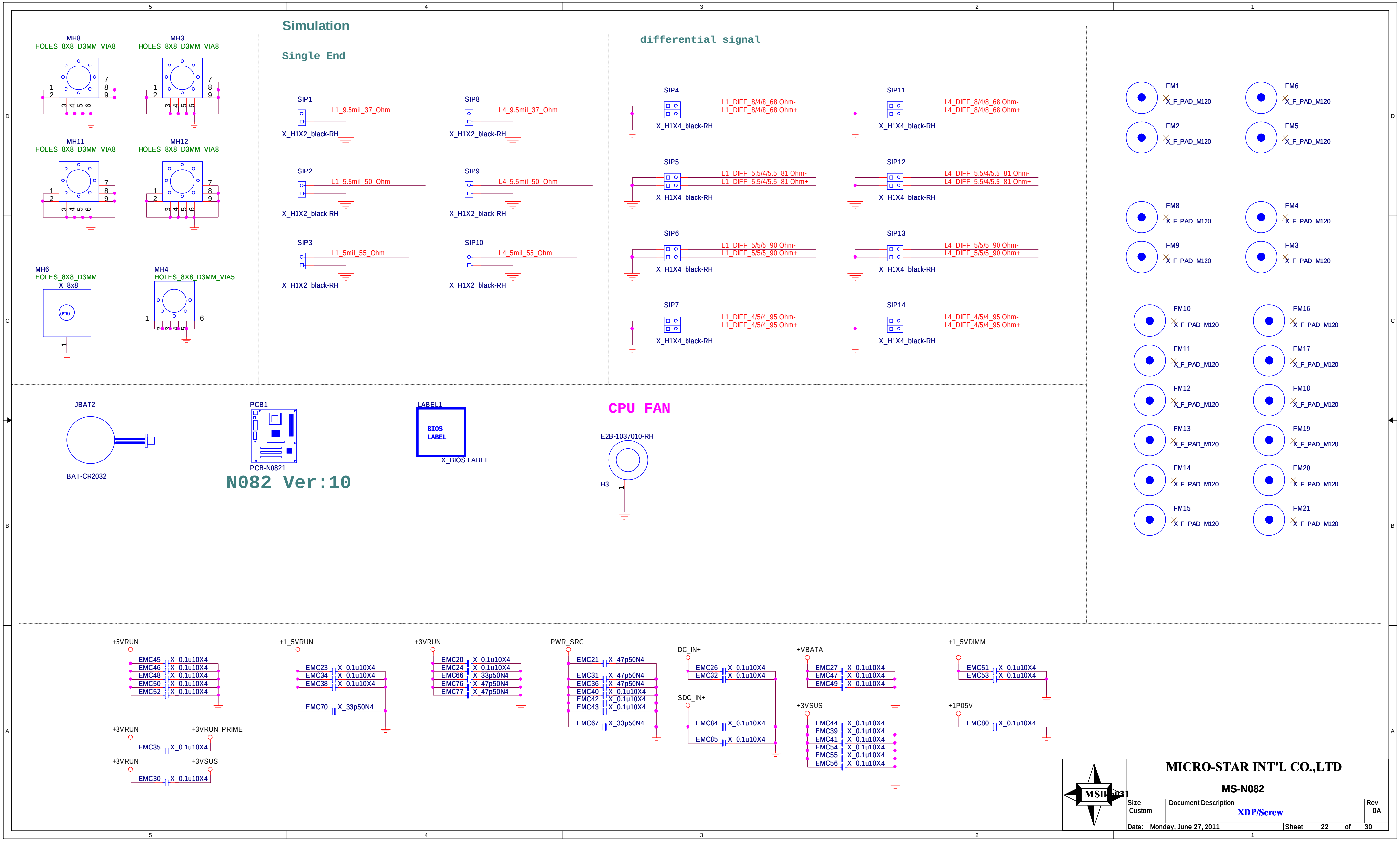


Title: M_CPU&NB_CORE

Size: Custom | Document Number: MS-N0E2 | Rev: 0B

Date: Friday, July 01, 2011 | Sheet 21 of 30


Simulation
Single End
differential signal
MH8
HOLES_8X8_D3MM_VIA8
MH3
HOLES_8X8_D3MM_VIA8
MH11
HOLES_8X8_D3MM_VIA8
MH12
HOLES_8X8_D3MM_VIA8
MH6
HOLES_8X8_D3MM
X_8x8
MH4
HOLES_8X8_D3MM_VIA5
SIP1
L1_9.5mil_37_Ohm
X_H1X2_black-RH
SIP8
L4_9.5mil_37_Ohm
X_H1X2_black-RH
SIP2
L1_5.5mil_50_Ohm
X_H1X2_black-RH
SIP9
L4_5.5mil_50_Ohm
X_H1X2_black-RH
SIP3
L1_5mil_55_Ohm
X_H1X2_black-RH
SIP10
L4_5mil_55_Ohm
X_H1X2_black-RH
SIP4
L1_DIFF_8/4/8_68 Ohm-
L1_DIFF_8/4/8_68 Ohm+
X_H1X4_black-RH
SIP11
L4_DIFF_8/4/8_68 Ohm-
L4_DIFF_8/4/8_68 Ohm+
X_H1X4_black-RH
SIP5
L1_DIFF_5.5/4/5.5_81 Ohm-
L1_DIFF_5.5/4/5.5_81 Ohm+
X_H1X4_black-RH
SIP12
L4_DIFF_5.5/4/5.5_81 Ohm-
L4_DIFF_5.5/4/5.5_81 Ohm+
X_H1X4_black-RH
SIP6
L1_DIFF_5/5/5_90 Ohm-
L1_DIFF_5/5/5_90 Ohm+
X_H1X4_black-RH
SIP13
L4_DIFF_5/5/5_90 Ohm-
L4_DIFF_5/5/5_90 Ohm+
X_H1X4_black-RH
SIP7
L1_DIFF_4/5/4_95 Ohm-
L1_DIFF_4/5/4_95 Ohm+
X_H1X4_black-RH
SIP14
L4_DIFF_4/5/4_95 Ohm-
L4_DIFF_4/5/4_95 Ohm+
X_H1X4_black-RH
FM1 FM6 FM2 FM5 FM8 FM4 FM9 FM3
FM10 FM16 FM11 FM17 FM12 FM18 FM13 FM19 FM14 FM20 FM15 FM21
X_F_PAD_M120
JBAT2
BAT-CR2032
PCB1
PCB-N0821
N082 Ver:10
LABEL1
BIOS
LABEL
X_BIOS LABEL
CPU FAN
E2B-1037010-RH
H3
+5VRUN
EMC45 X_0.1u10X4
EMC46 X_0.1u10X4
EMC48 X_0.1u10X4
EMC50 X_0.1u10X4
EMC52 X_0.1u10X4
+3VRUN
+3VRUN_PRIME
EMC35 X_0.1u10X4
+3VRUN
+3VSUS
EMC30 X_0.1u10X4
+1_5VRUN
EMC23 X_0.1u10X4
EMC34 X_0.1u10X4
EMC38 X_0.1u10X4
EMC70 X_33p50N4
+3VRUN
EMC20 X_0.1u10X4
EMC24 X_0.1u10X4
EMC66 X_33p50N4
EMC76 X_47p50N4
EMC77 X_47p50N4
PWR_SRC
EMC21 X_47p50N4
EMC31 X_47p50N4
EMC36 X_47p50N4
EMC40 X_0.1u10X4
EMC42 X_0.1u10X4
EMC43 X_0.1u10X4
EMC67 X_33p50N4
DC_IN+
EMC26 X_0.1u10X4
EMC32 X_0.1u10X4
SDC_IN+
EMC84 X_0.1u10X4
EMC85 X_0.1u10X4
+VBATA
EMC27 X_0.1u10X4
EMC47 X_0.1u10X4
EMC49 X_0.1u10X4
+3VSUS
EMC44 X_0.1u10X4
EMC39 X_0.1u10X4
EMC41 X_0.1u10X4
EMC54 X_0.1u10X4
EMC55 X_0.1u10X4
EMC56 X_0.1u10X4
+1_5VDIMM
EMC51 X_0.1u10X4
EMC53 X_0.1u10X4
+1P05V
EMC80 X_0.1u10X4
MSI
MICRO-STAR INT'L CO.,LTD
MS-N082
Size
Custom
Document Description
XDP/Screw
Rev
0A
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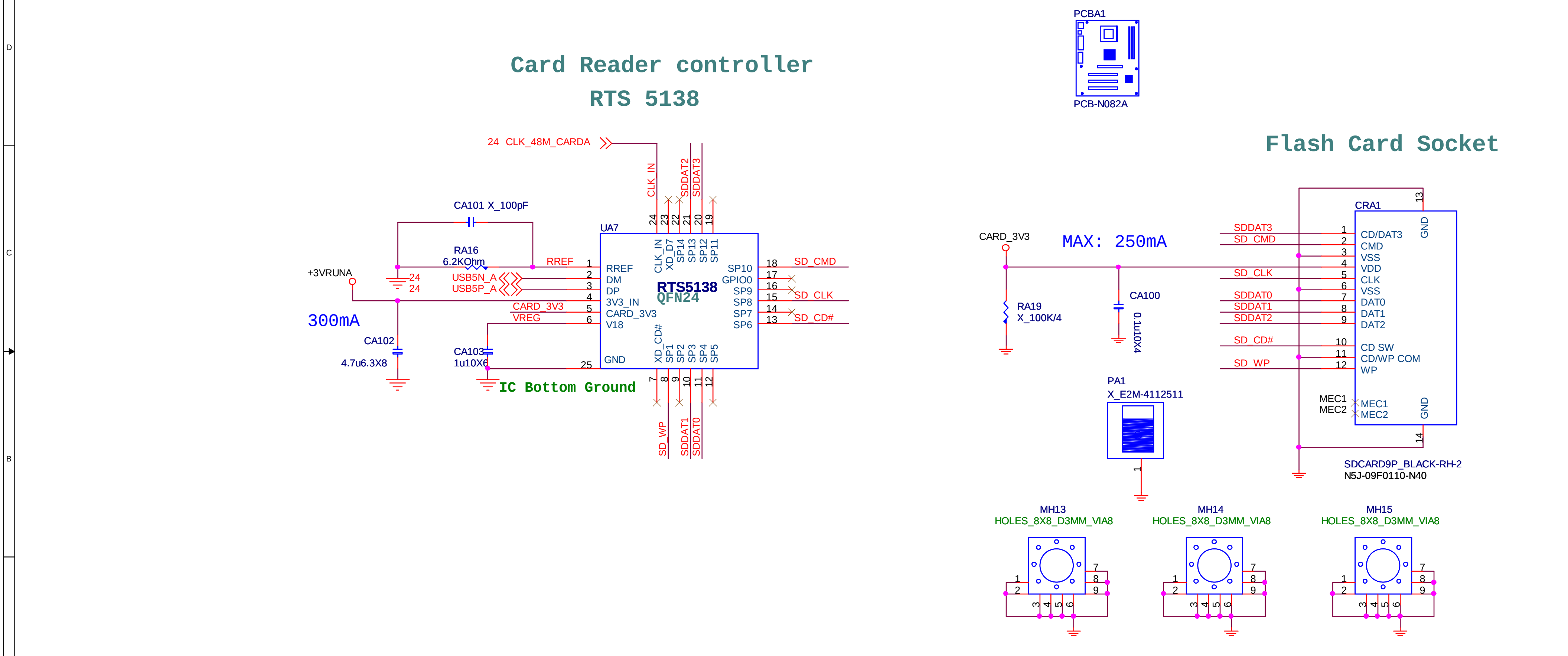

MSI

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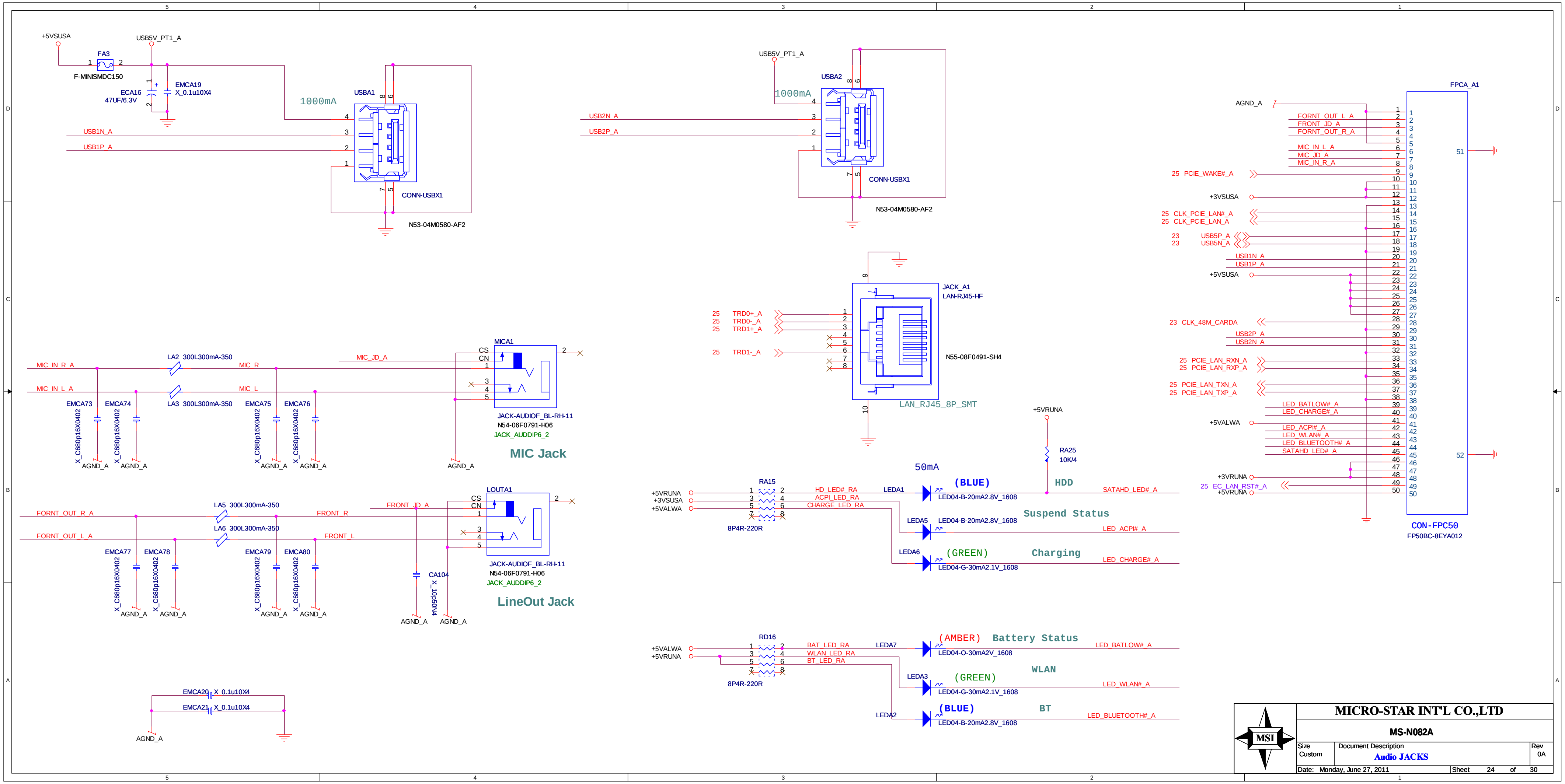
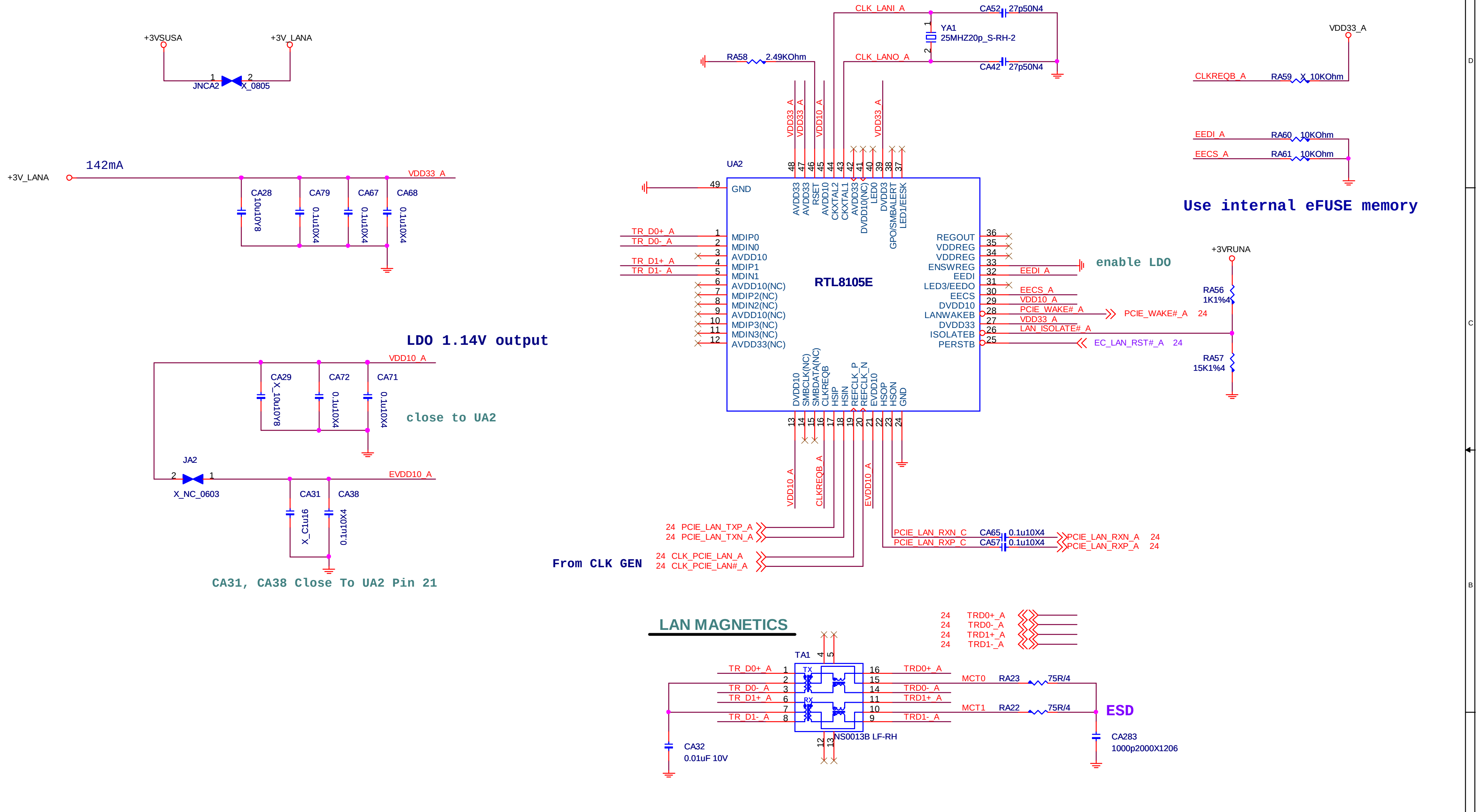
Size	Document Description	Rev
Custom	CardReader RTS5138	0A

Date: Monday, June 27, 2011 | Sheet 23 of 30

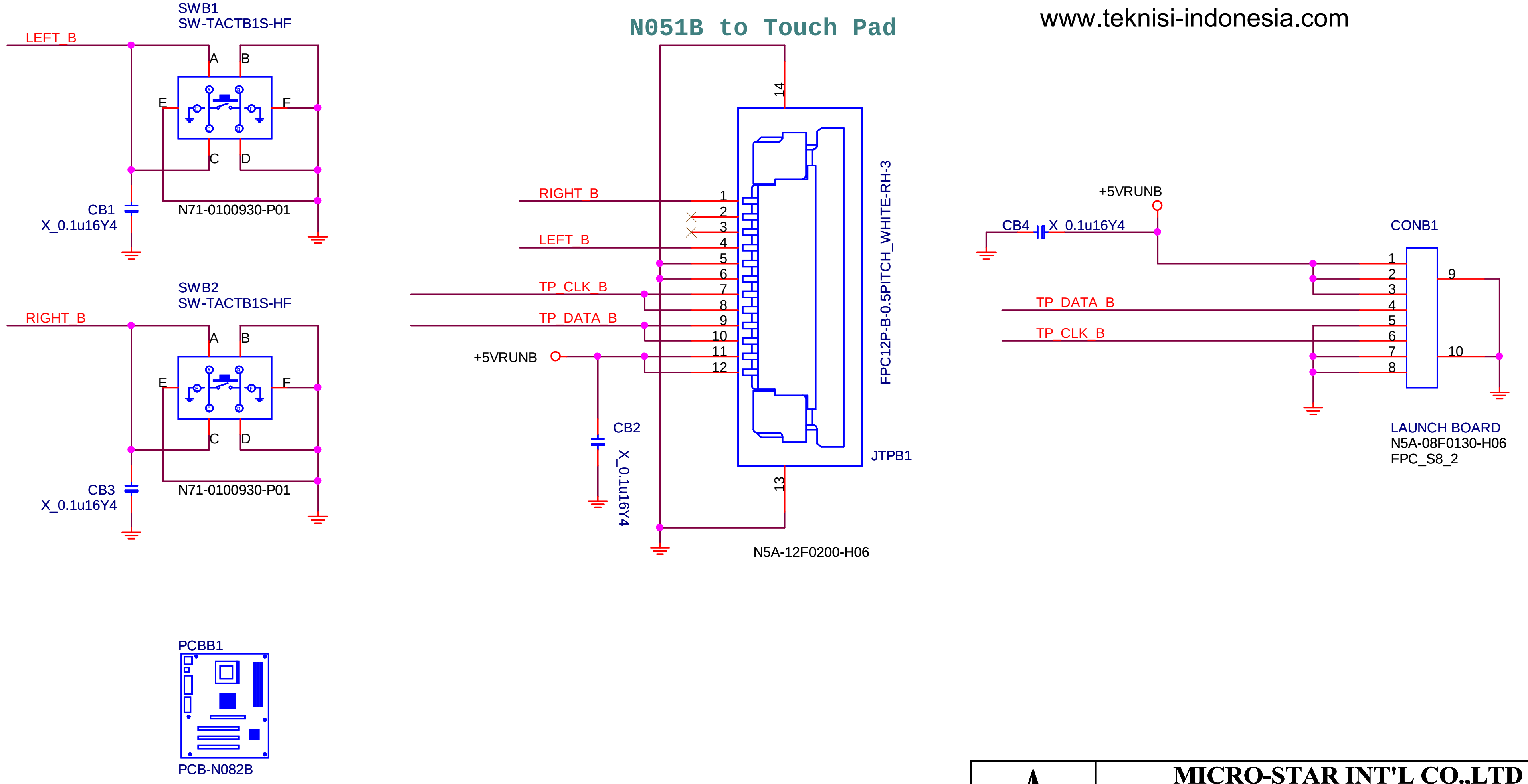


MICRO-STAR INT'L CO.,LTD		
MS-N082A		
Size: Custom	Document Description: Audio JACKS	Rev: 0A
Date: Monday, June 27, 2011	Sheet 24 of 30	

RTL8105E-VL 10/100M LAN



MICRO-STAR INT'L CO.,LTD		
MS-N082A		
Size Custom	Document Description LAN_RTL8105E	Rev 0A
Date: Thursday, June 16, 2011	Sheet 25 of 30	



MICRO-STAR INT'L CO.,LTD

MS-N082B

Size	Document Description	Rev
Custom	TouchPad Board	0A

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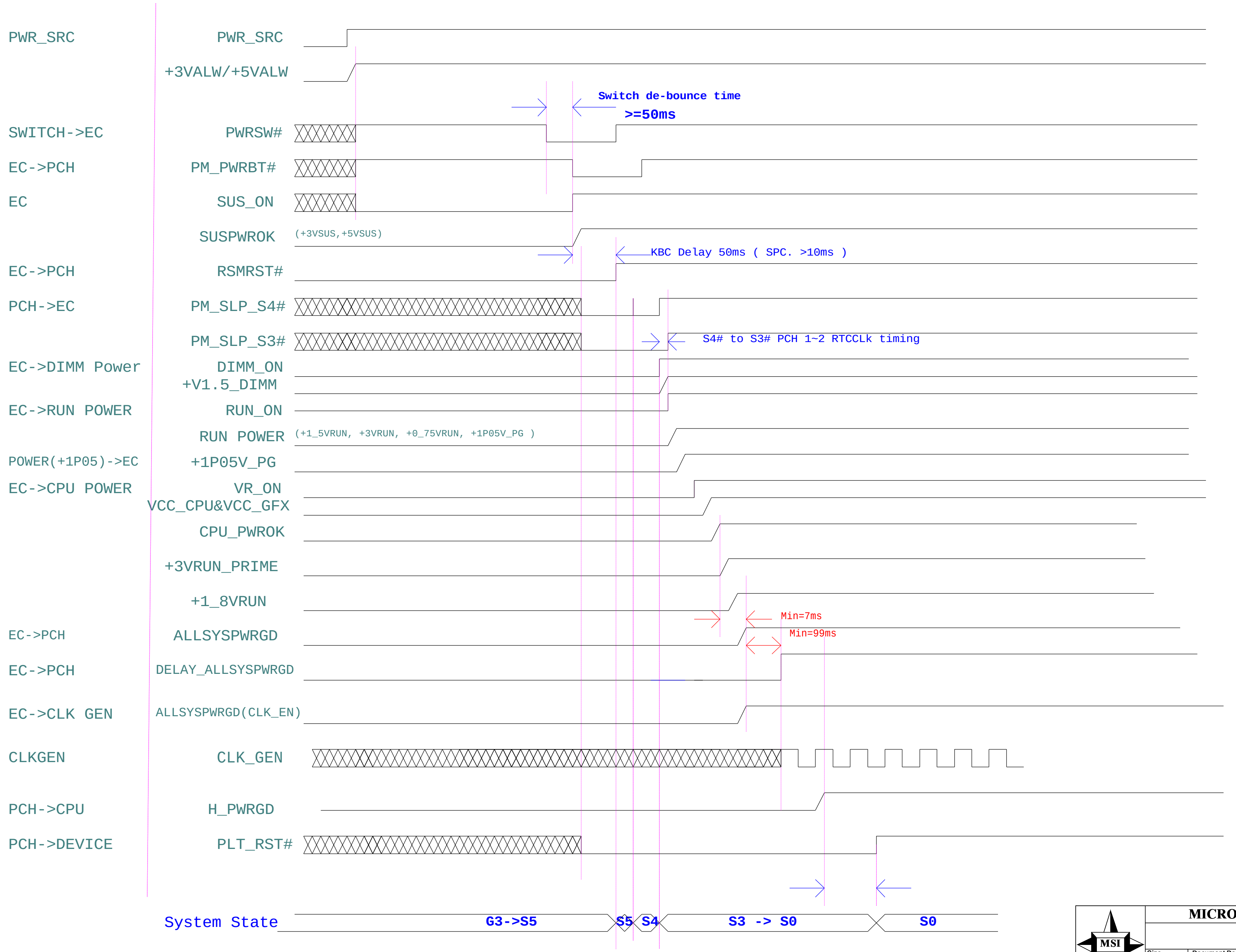
Cedar Trail Power on Sequence DC mode



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MS-N082		
Size: Custom	Document Description: Power on sequence	Rev: 0A
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0A

5/3:
1. Swap PCIE Lan and Wlan
2. Lan remove RA63
3. Audio add JNC1
4. Add EMI solution
5. Audio codec change from VB5 to VB6
6. Lan change ISOLATE power from VDD33 to +3VRun
7. Audio add R99,R100

5/4:
1. Audio Jack, add EMCA20, EMCA21

5/7:
1. Cpu power, add PR242

5/9:
1. Cpu power, PGOOD, PGOODG pull up power from 3VSUS to 3VRUN
2. SPI ROM, add RN37
3. Swap GPIO PIRQH# and LOCK#, PIRQB# and IRDY#
4. Remove PR73,
5. SPI ROM, pull up pin swap

5/11:
1. LID Switch power from 3VRUN to 3VSUS
2. HOLE MH4 from VIA8 to VIA5
3. Modify PC43 P/N
4. Cpu power, add PC104, PC105

5/12:
1. del C2, EMC25, PEC12
2. del PR52, PR53

5/13:
1. Audio, add Q55, R101, R102

5/16:
1. modify U15,PQ21,PQ25 P/N

5/18:
1. R390不上件

5/13:
1. CPU power, PC104不上件，PEC16上件
2. VTT power, PC45， PC65上件

0B

6/16:
1. KBC, Swap signal CPUPWRGD and ALLSYSPWRGD
2. KBC crystal, add 10M resistance
3. HDMI 3VRUN change to 5VRUN
4. 0.75VRUN, 5VSUS change to +5VRUN
5. 3VRUNPRIME, 0.1uf change to 1uf
   3VRUN change to 3VSUS
6. PWRSW# add a cap
7. Remove LANPWR_ON
8. USB, 5VRUN change to 5VSUS
9. AUDIO,PCH--CPU 33ohm-->100ohm
10. LVDS_EN add 100kohm

6/17:
1. Modify MH6 footpirnt
2. Modify power P/N
3. Swap BTB pin define

6/20:
1.Change bios rom P/N
2.Change cpu P/N

07/01:
1.Change PC105 P/N
2. Remove C6 and PC42

07/08:
1.Change CPU p/n from B1 STEPPING to B2 STEPPING

07/11:
1.+3VCAMERA Q53 from D03-0640219-I08 to D03-0341509-A68
2.Charger PQ21,PQ25 from D03-0700219-R06 to D03-07002F9-N47
3.+3VRUN_PRIME PQ27 from D03-0700299-F09 to D03-07002F9-N47
4.HDMI Q23 from D03-0700299-F09 to D03-07002F9-N47
5.AUDIO Q55 from D03-7002D10-D07 to D03-7002D20-P15

07/13:
1.Remove C146

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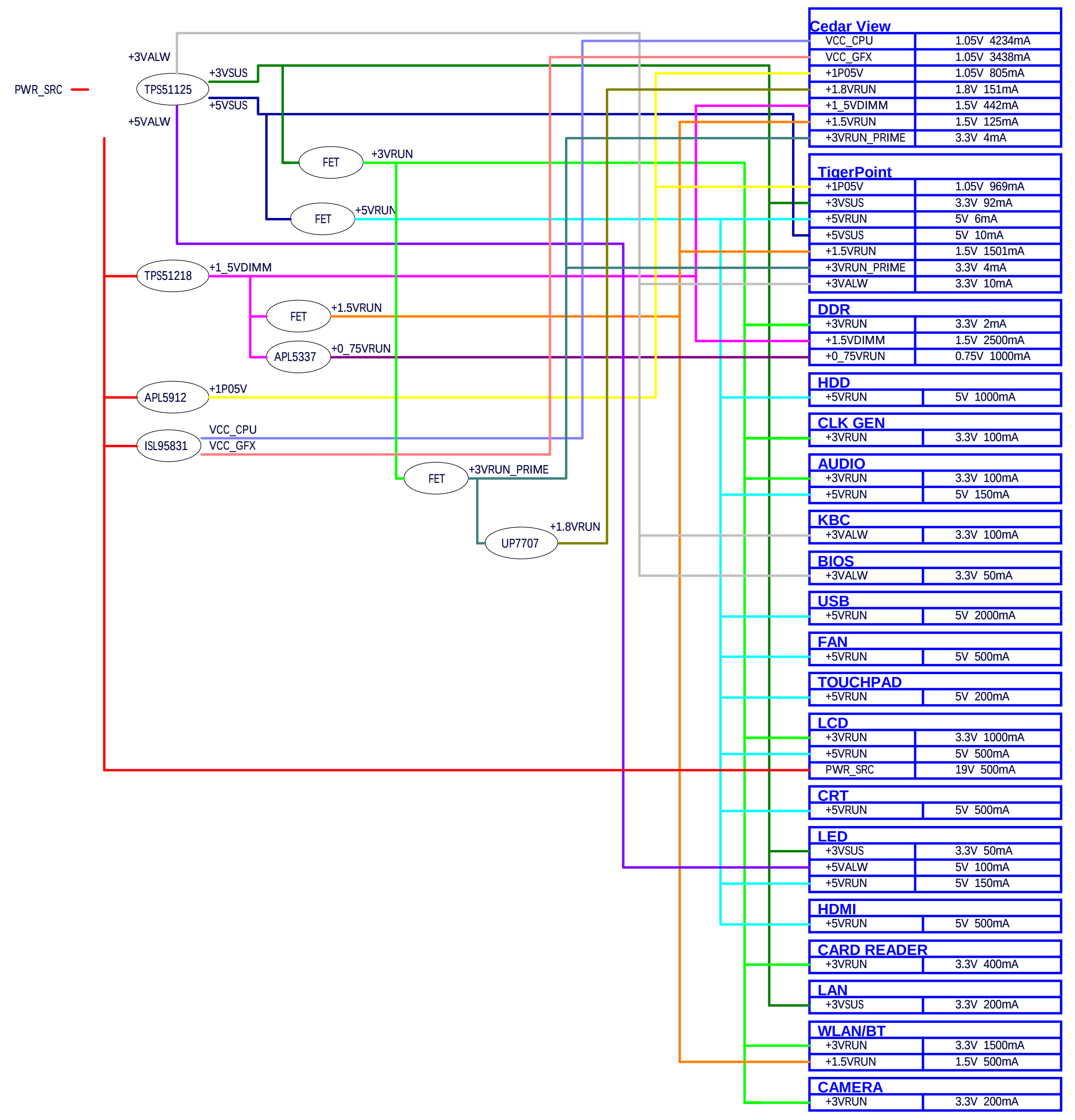
MS-N082		
Size: Custom	Document Description: Change History	Rev: 0A
Date: Wednesday, July 13, 2011	Sheet 28 of 30	

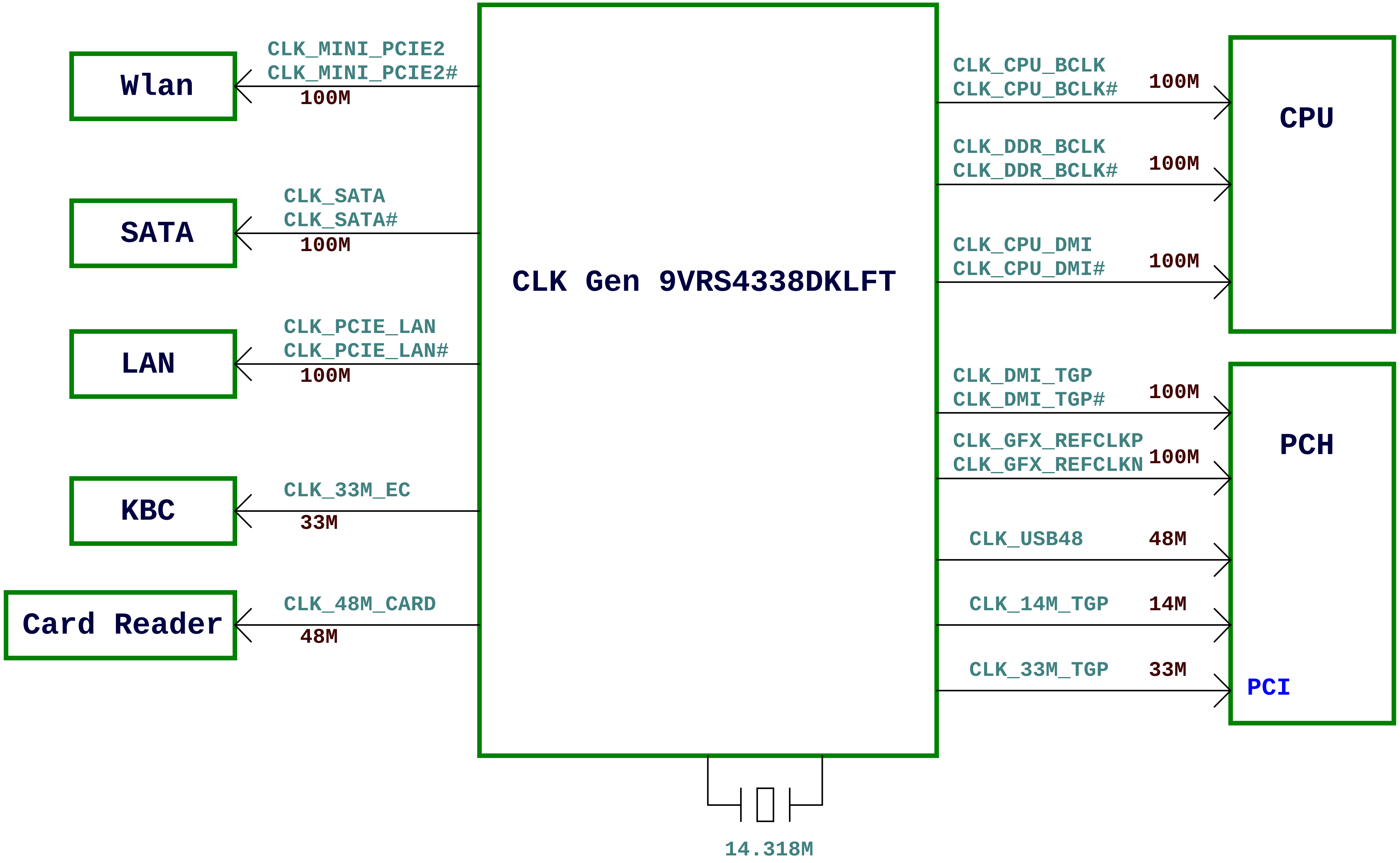


MICRO-STAR INT'L CO.,LTD

MS-N082

Size	Document Description	Rev
Custom	Power delivery	0A

Date: Wednesday, May 11, 2011 Sheet 29 of 30



MICRO-STAR INT'L CO.,LTD

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Size	Document Description	Rev
A	Power delivery	0A

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