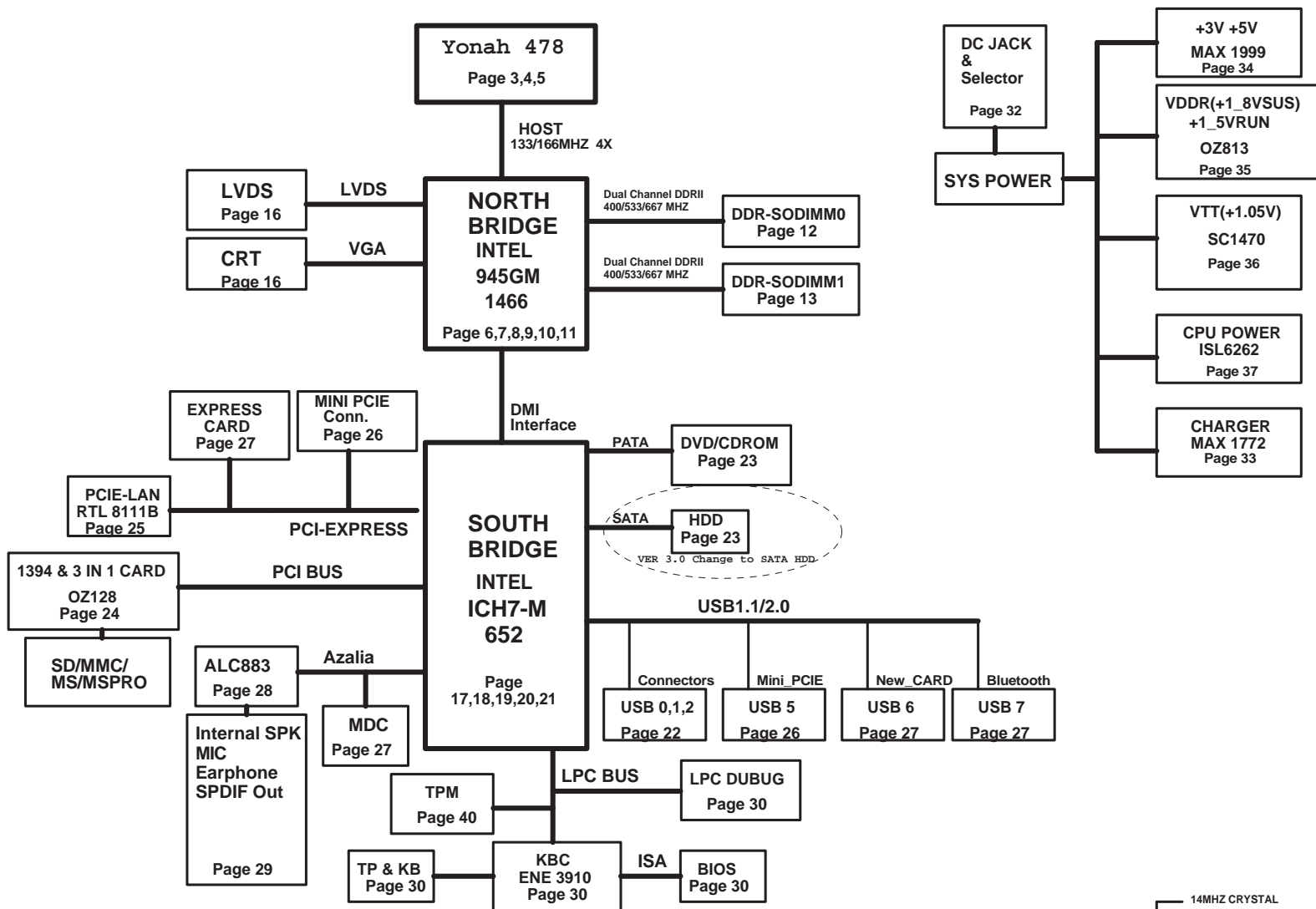


- 01:BLOCK DIAGRAM  
 02:PLATFORM  
 03:Yonah-1 CPU (HOST BUS)  
 04:Yonah-2 CPU (POWER/GND)  
 05:Yonah-3  
 06:i945GM-1 (HOST)  
 07:i945GM-2 (DMI/VGA)  
 08:i945GM-3 (DDR)  
 09:i945GM-4 (Power-1)  
 10:i945GM-5 (Power-2)  
 11:i945GM-6 (GND)  
 12:DDR2\_SODIMMO  
 13:DDR2\_SODIMM1  
 14:DDR2\_Termination  
 15:Clock GEN (ICS954301)  
 16:CRT & LVDS Connect  
 17:ICH7-M-1 (CPU,LPC,SATA,Azalia)  
 18:ICH7-M-2 (PCI)  
 19:ICH7-M-3 (GPIO,SMBUS)  
 20:ICH7-M-4 (USB,DMI,PCIE)  
 21:ICH7-M-5 (Power & GND)  
 22:USB2.0 CON / LED /SW  
 23:HDD & CDROM Connect  
 24:OZ128 (Card read & 1394)  
 25:RTL8111B (PCI-E Giga LAN)  
 26:MINIPCI-EXPRESS Connect  
 27:NewCard & MDC Connect  
 28:ALC883(Audio) & APA2031 (AMP)  
 29:SPK & HP & MIC  
 30:ENE3910(KBC)  
 31:PWRGD & FAN  
 32:M\_Battery Select  
 33:M\_Battery Charger  
 34:M\_System Power  
 35:M\_VDDR +1.5V  
 36:M\_VTT  
 37:M\_CPU Power  
 38:Screw  
 39:Change History  
 40:TPM SLB 9635  
 41:ME P/N  
 42:EMI Suggest  
 43:EMI Suggest2



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REV	3.1	0.A	0.A	0.A	0.A	0.A	0.B	0.A	0.A	0.A	0.A	0.A	0.A	0.A	3.0	0.B	3.0	0.A	3.0	0.A
DATE	6/26	11/15	11/15	11/15	11/15	12/8	11/15	11/15	11/15	11/15	11/15	11/15	11/15	11/15	4/20	12/8	4/20	11/15	4/20	11/15




PAGE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
REV	3.0	0.A	3.0	0.B	0.B	0.B	0.B	3.1	3.1	0.A	0.A	0.A	0.A	0.B	0.B	0.B	0.A	3.0	0.B	0.A	3.1	0.A	
DATE	4/20	11/15	4/20	12/8	12/8	12/8	12/8	6/26	6/26	11/15	11/15	11/15	11/15	12/8	12/8	12/8	11/15	4/20	12/8	11/15	6/26	11/15	

PCB:P30-1057131-D05,昆穎  
 P30-1057131-T53,健鼎

Voltage Rails

Voltage	Description	Control Signal
PWR_SRC	AC ADAPTER OR BATTERY IN	
VHCORE	Core Voltage for Processor	RUNPWROK
VTT	1.05 rail for Processor & 945GM I/O	+5VRUN
+1_5VRUN	1.5V switched power rail(off in S3-S5)	+5VRUN
+2_5VRUN	2.5V powe rail CRT AND LVDS (off in S3-S5)	+3VRUN
+3VRUN	3.3V switched power rail(off in S3-S5)	RUND
+5VRUN	5.0V switched power rail(off in S3-S5)	RUND
SMDDR_VTERM	0.9V DDR Termination voltage (off in S4-S5)	PM_SLP_S4-
+1_8VSUS	1.8V power rail DDR (off in S4-S5)	PM_SLP_S4-
+3VSUS	3.3V power rail (off in S4-S5)	SUSD
+5VSUS	5.0V power rail (off in S4-S5)	SUSD
+3VALW	3.3V always on power rail	PWR_SRC
+5VALW	5.0V always on power rail	PWR_SRC

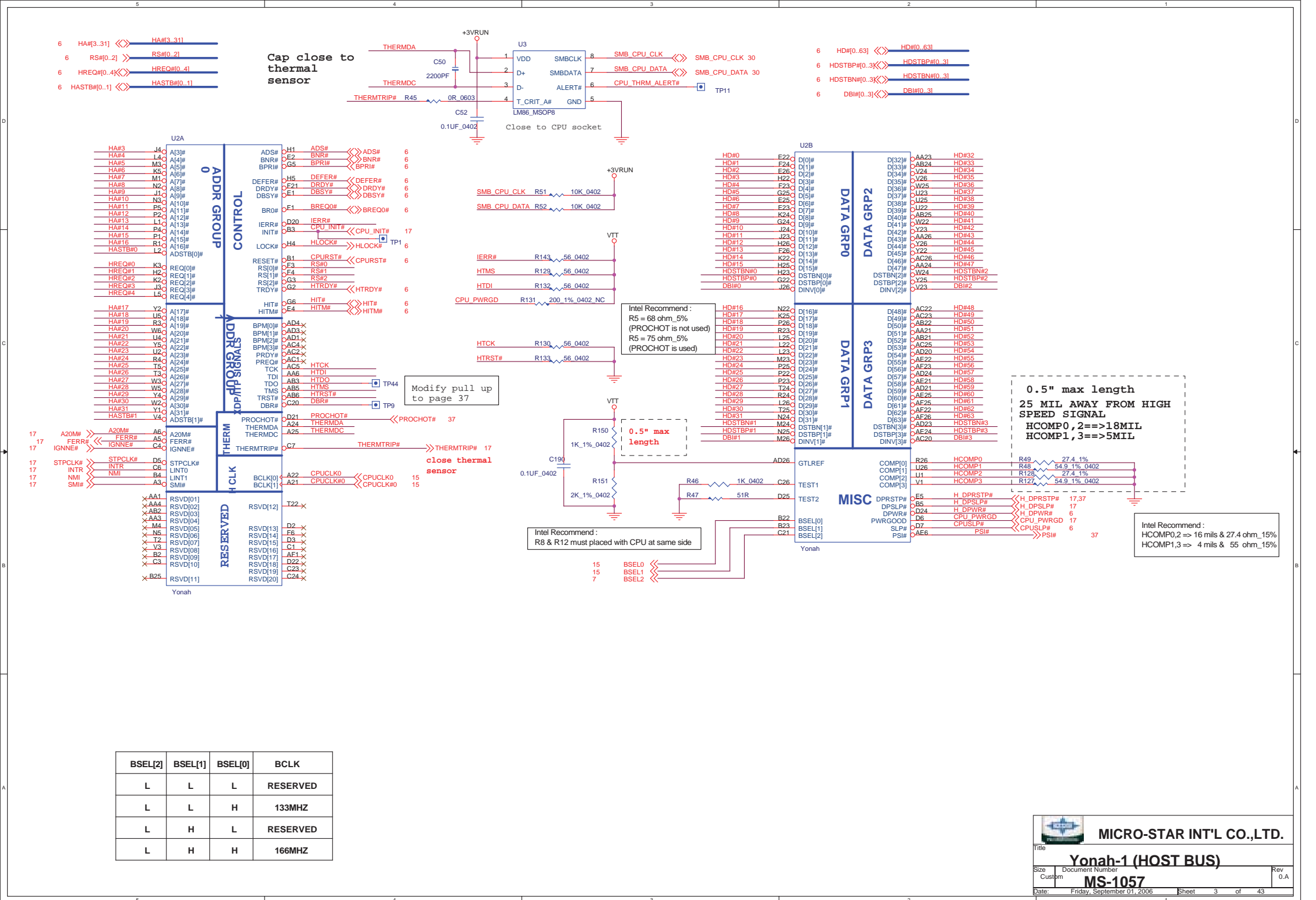
Voltage	Description	Control Signal
+V5_AUDIO	5.0V Power rail Audio codec(off in S3-S5)	+5VSUS

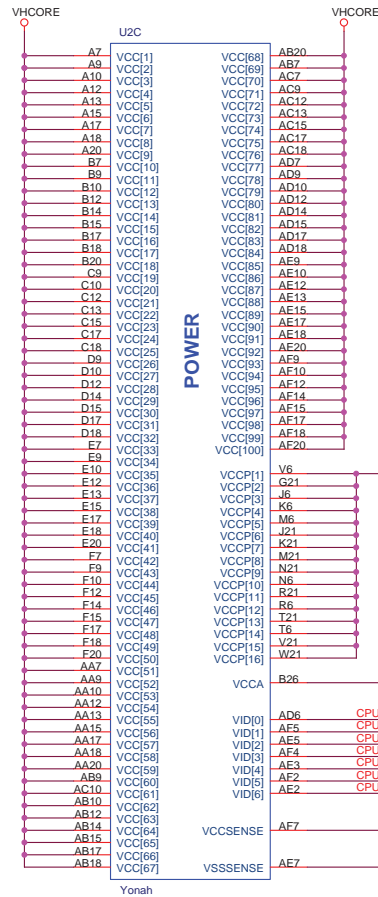
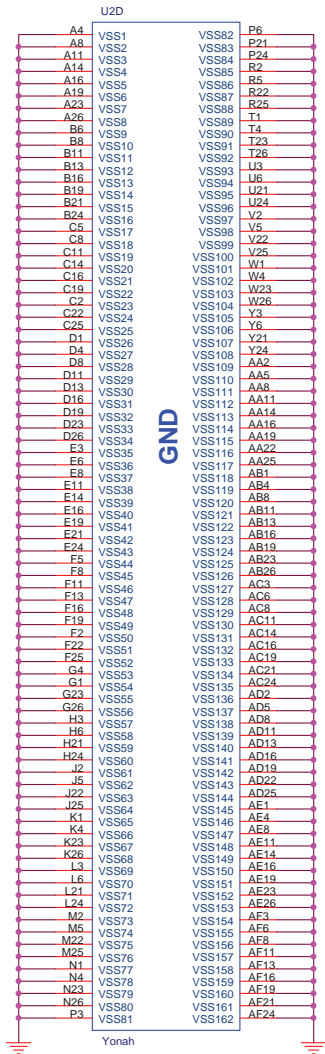
 GND	DIGTIAL GROUD	
 AGND	AUDIO GND	
 PGND	POWER Analogy GND	

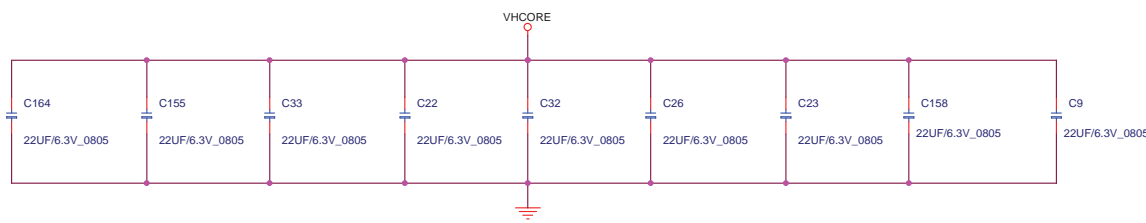
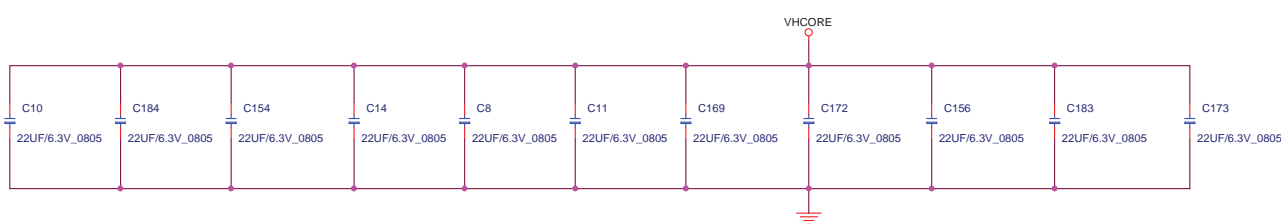
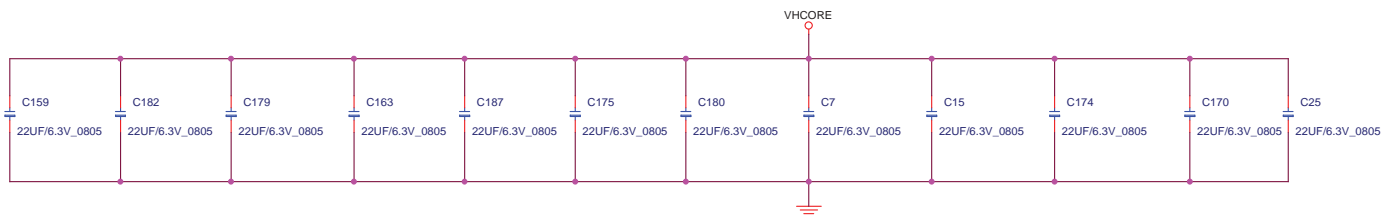
POWER STATES

STATE \ SIGNAL	SLP_S3#	SLP_S4#	SLP_S5#	+V*ALWAYS	+V*SUS	+V*RUN	Clocks
Full ON	HIGH	HIGH	HIGH	ON	ON	ON	ON
S1M(Power On Suspend)	HIGH	HIGH	HIGH	ON	ON	ON	LOW
S3( Suspend to RAM)	LOW	HIGH	HIGH	ON	ON	OFF	OFF
S4( Suspend to Disk)	LOW	LOW	HIGH	ON	OFF	OFF	OFF
S5 / Soft OFF	LOW	LOW	LOW	ON	OFF	OFF	OFF

Note : WHEN AC MODE , System turn on then +V\*SUS will always keep high

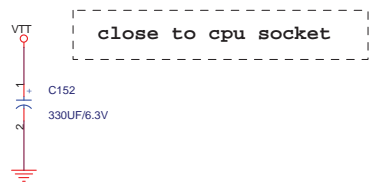






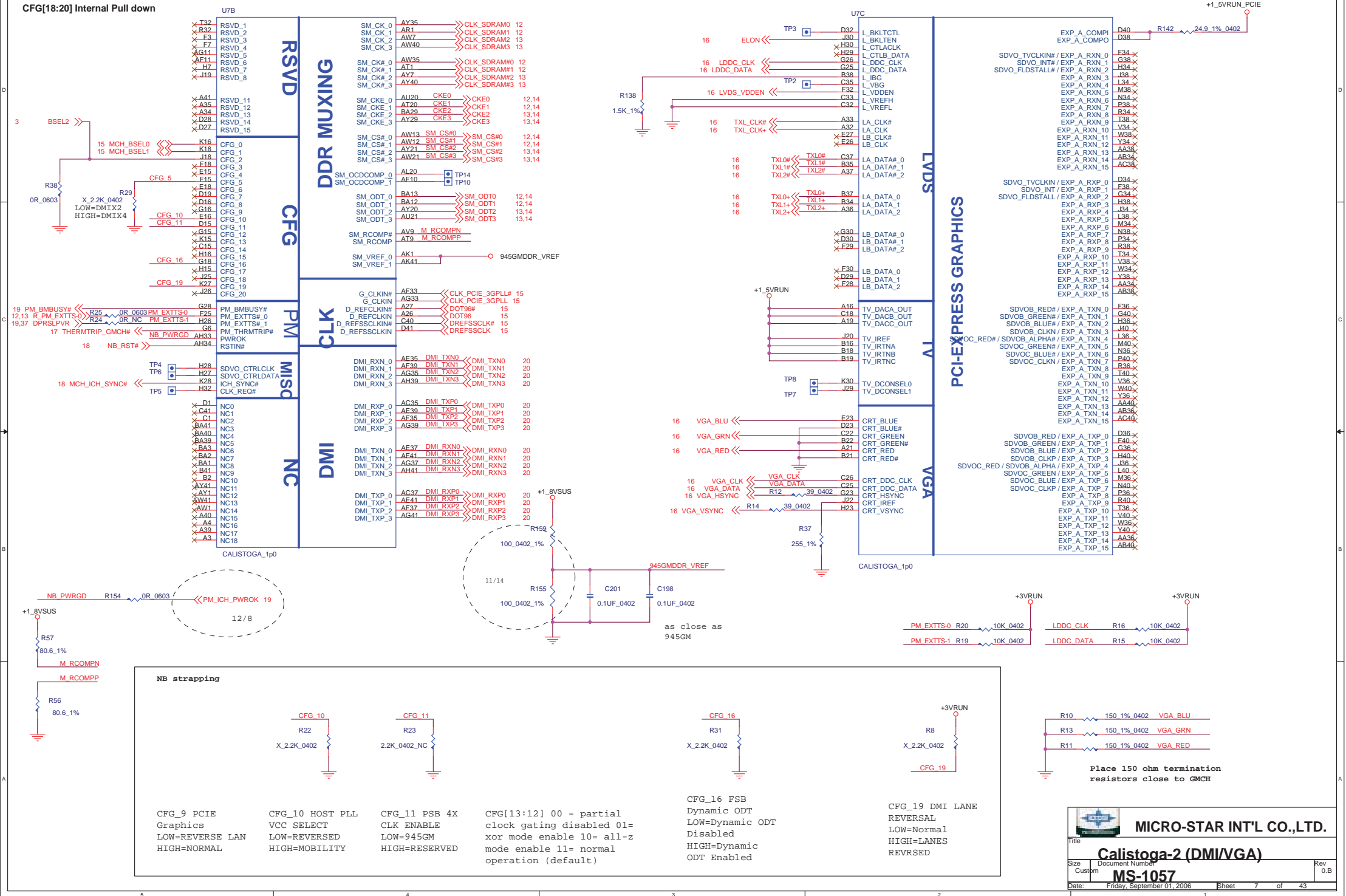
Intel Recommend :  
 1. 6 x 330uF (ESL = 0.8nH)  
 20 x 22uF

MSI RD Recommend :  
 Maybe can steal 10 x 22uF





**CFG[18:20] Internal Pull down**





12 SA\_MD[0..63] <<>>

SA MD0 AJ35  
SA MD1 AJ34  
SA MD2 AM31  
SA MD3 AM33  
SA MD4 AJ36  
SA MD5 AK35  
SA MD6 AI31  
SA MD7 AJ32  
SA MD8 AN35  
SA MD9 AP33  
SA MD10 AR31  
SA MD11 AP31  
SA MD12 AN38  
SA MD13 AM36  
SA MD14 AM34  
SA MD15 AN33  
SA MD16 AK32  
SA MD17 AL27  
SA MD18 AM26  
SA MD19 AN24  
SA MD20 AK28  
SA MD21 AL28  
SA MD22 AM24  
SA MD23 AP26  
SA MD24 AP23  
SA MD25 AL22  
SA MD26 AP21  
SA MD27 AN20  
SA MD28 AL23  
SA MD29 AP24  
SA MD30 AP20  
SA MD31 AT21  
SA MD32 AR12  
SA MD33 AR14  
SA MD34 AP13  
SA MD35 AP12  
SA MD36 AT13  
SA MD37 AT12  
SA MD38 AL14  
SA MD39 AL12  
SA MD40 AK9  
SA MD41 AN7  
SA MD42 AK8  
SA MD43 AK7  
SA MD44 AP9  
SA MD45 AN9  
SA MD46 AT5  
SA MD47 AL5  
SA MD48 AY2  
SA MD49 AW2  
SA MD50 AP1  
SA MD51 AN2  
SA MD52 AV2  
SA MD53 AT3  
SA MD54 AN1  
SA MD55 AL2  
SA MD56 AG7  
SA MD57 AF9  
SA MD58 AG4  
SA MD59 AFB  
SA MD60 AG9  
SA MD61 AH6  
SA MD62 AF4  
SA MD63 AFB

CALISTOGA\_1p0

DDR SYSTEM MEMORY A

SA\_BS\_0  
SA\_BS\_1  
SA\_BS\_2

SA\_DM\_0  
SA\_DM\_1  
SA\_DM\_2  
SA\_DM\_3  
SA\_DM\_4  
SA\_DM\_5  
SA\_DM\_6  
SA\_DM\_7

SA\_DQS\_0  
SA\_DQS\_1  
SA\_DQS\_2  
SA\_DQS\_3  
SA\_DQS\_4  
SA\_DQS\_5  
SA\_DQS\_6  
SA\_DQS\_7

SA\_MA\_0  
SA\_MA\_1  
SA\_MA\_2  
SA\_MA\_3  
SA\_MA\_4  
SA\_MA\_5  
SA\_MA\_6  
SA\_MA\_7  
SA\_MA\_8  
SA\_MA\_9  
SA\_MA\_10  
SA\_MA\_11  
SA\_MA\_12  
SA\_MA\_13

SA\_CAS#  
SA\_RAS#  
SA\_RCVENIN#  
SA\_RCVENOUT#  
SA\_WE#

AI12 SA BS#0  
AV14 SA BS#1  
BA20 SA BS#2

AJ33 SA DM0  
AM35 SA DM1  
AL28 SA DM2  
AN22 SA DM3  
AM14 SA DM4  
AL9 SA DM5  
AR3 SA DM6  
AH4 SA DM7

AK33 SA DQS0  
AT33 SA DQS1  
AN28 SA DQS2  
AM22 SA DQS3  
AN12 SA DQS4  
AN8 SA DQS5  
AP3 SA DQS6  
AG5 SA DQS7

AK32 SA DQS#0  
AI33 SA DQS#1  
AN27 SA DQS#2  
AM21 SA DQS#3  
AM12 SA DQS#4  
AL8 SA DQS#5  
AN3 SA DQS#6  
AH5 SA DQS#7

AY16 SA MA0  
AI14 SA MA1  
AW16 SA MA2  
BA16 SA MA3  
BA17 SA MA4  
AI16 SA MA5  
AV17 SA MA6  
AW17 SA MA7  
AT16 SA MA8  
AI13 SA MA9  
AT17 SA MA10  
AV20 SA MA11  
AV12 SA MA12  
AV12 SA MA13

AY13 SA CAS#  
AW14 SA RAS#  
AK23 SA RCVENIN#  
AK24 SA RCVENOUT#  
AY14 SA WE#

SA\_BS#[0..2] 12,14

SA\_DM#[0..7] 12

SA\_DQS#[0..7] 12

SA\_DQS#[0..7] 12

SA\_MA#[0..13] 12,14

SA\_CAS# 12,14

SA\_RAS# 12,14

TP12

TP15

SA\_WE# 12,14

13 SB\_MD[0..63] <<>>

SB MD0 AK39  
SB MD1 AJ37  
SB MD2 AP39  
SB MD3 AR41  
SB MD4 AJ38  
SB MD5 AK38  
SB MD6 AN41  
SB MD7 AP41  
SB MD8 AT40  
SB MD9 AV41  
SB MD10 AU38  
SB MD11 AV38  
SB MD12 AP38  
SB MD13 AR40  
SB MD14 AW38  
SB MD15 AY38  
SB MD16 BA39  
SB MD17 AY38  
SB MD18 AR36  
SB MD19 AP36  
SB MD20 BA36  
SB MD21 AU36  
SB MD22 AP35  
SB MD23 AP34  
SB MD24 AY33  
SB MD25 BA33  
SB MD26 AT31  
SB MD27 AU29  
SB MD28 AU31  
SB MD29 AW31  
SB MD30 AY29  
SB MD31 AW29  
SB MD32 AM19  
SB MD33 AL19  
SB MD34 AP14  
SB MD35 AN14  
SB MD36 AN17  
SB MD37 AM16  
SB MD38 AP15  
SB MD39 AL15  
SB MD40 AJ11  
SB MD41 AH10  
SB MD42 AJ9  
SB MD43 AN10  
SB MD44 AK13  
SB MD45 AH11  
SB MD46 AK10  
SB MD47 AJ8  
SB MD48 BA10  
SB MD49 AW10  
SB MD50 BA4  
SB MD51 AW4  
SB MD52 AY10  
SB MD53 AY9  
SB MD54 AW5  
SB MD55 AY5  
SB MD56 AV4  
SB MD57 AR5  
SB MD58 AK4  
SB MD59 AK3  
SB MD60 AT4  
SB MD61 AK5  
SB MD62 AJ5  
SB MD63 AJ3

CALISTOGA\_1p0

U7E

SB\_DQ0  
SB\_DQ1  
SB\_DQ2  
SB\_DQ3  
SB\_DQ4  
SB\_DQ5  
SB\_DQ6  
SB\_DQ7  
SB\_DQ8  
SB\_DQ9  
SB\_DQ10  
SB\_DQ11  
SB\_DQ12  
SB\_DQ13  
SB\_DQ14  
SB\_DQ15  
SB\_DQ16  
SB\_DQ17  
SB\_DQ18  
SB\_DQ19  
SB\_DQ20  
SB\_DQ21  
SB\_DQ22  
SB\_DQ23  
SB\_DQ24  
SB\_DQ25  
SB\_DQ26  
SB\_DQ27  
SB\_DQ28  
SB\_DQ29  
SB\_DQ30  
SB\_DQ31  
SB\_DQ32  
SB\_DQ33  
SB\_DQ34  
SB\_DQ35  
SB\_DQ36  
SB\_DQ37

DDR SYSTEM MEMORY B

SB\_BS\_0  
SB\_BS\_1  
SB\_BS\_2

SB\_DM\_0  
SB\_DM\_1  
SB\_DM\_2  
SB\_DM\_3  
SB\_DM\_4  
SB\_DM\_5  
SB\_DM\_6  
SB\_DM\_7

SB\_DQS\_0  
SB\_DQS\_1  
SB\_DQS\_2  
SB\_DQS\_3  
SB\_DQS\_4  
SB\_DQS\_5  
SB\_DQS\_6  
SB\_DQS\_7

SB\_MA\_0  
SB\_MA\_1  
SB\_MA\_2  
SB\_MA\_3  
SB\_MA\_4  
SB\_MA\_5  
SB\_MA\_6  
SB\_MA\_7  
SB\_MA\_8  
SB\_MA\_9  
SB\_MA\_10  
SB\_MA\_11  
SB\_MA\_12  
SB\_MA\_13

SB\_CAS#  
SB\_RAS#  
SB\_RCVENIN#  
SB\_RCVENOUT#  
SB\_WE#

AT24 SB BS#0  
AV23 SB BS#1  
AY28 SB BS#2

AK36 SB DM0  
AR38 SB DM1  
AT36 SB DM2  
BA31 SB DM3  
AL17 SB DM4  
AH8 SB DM5  
BA5 SB DM6  
AN4 SB DM7

AM39 SB DQS0  
AT39 SB DQS1  
AU35 SB DQS2  
AP29 SB DQS3  
AR16 SB DQS4  
AR10 SB DQS5  
AR7 SB DQS6  
AN5 SB DQS7

AM40 SB DQS#0  
AU39 SB DQS#1  
AT35 SB DQS#2  
AP29 SB DQS#3  
AP16 SB DQS#4  
AT10 SB DQS#5  
AT7 SB DQS#6  
AP5 SB DQS#7

AY23 SB MA0  
AW24 SB MA1  
AY24 SB MA2  
AR28 SB MA3  
AT27 SB MA4  
AT28 SB MA5  
AU27 SB MA6  
AV28 SB MA7  
AV27 SB MA8  
AW27 SB MA9  
AV24 SB MA10  
BA27 SB MA11  
AY27 SB MA12  
AR23 SB MA13

AR24 SB CAS#  
AU23 SB RAS#  
AK18 SB RCVENIN#  
AK18 SB RCVENOUT#  
AR27 SB WE#

SB\_CAS# 13,14

SB\_RAS# 13,14

TP13

TP16

SB\_WE# 13,14

SB\_BS#[0..2] 13,14

SB\_DM#[0..7] 13

SB\_DQS#[0..7] 13

SB\_DQS#[0..7] 13

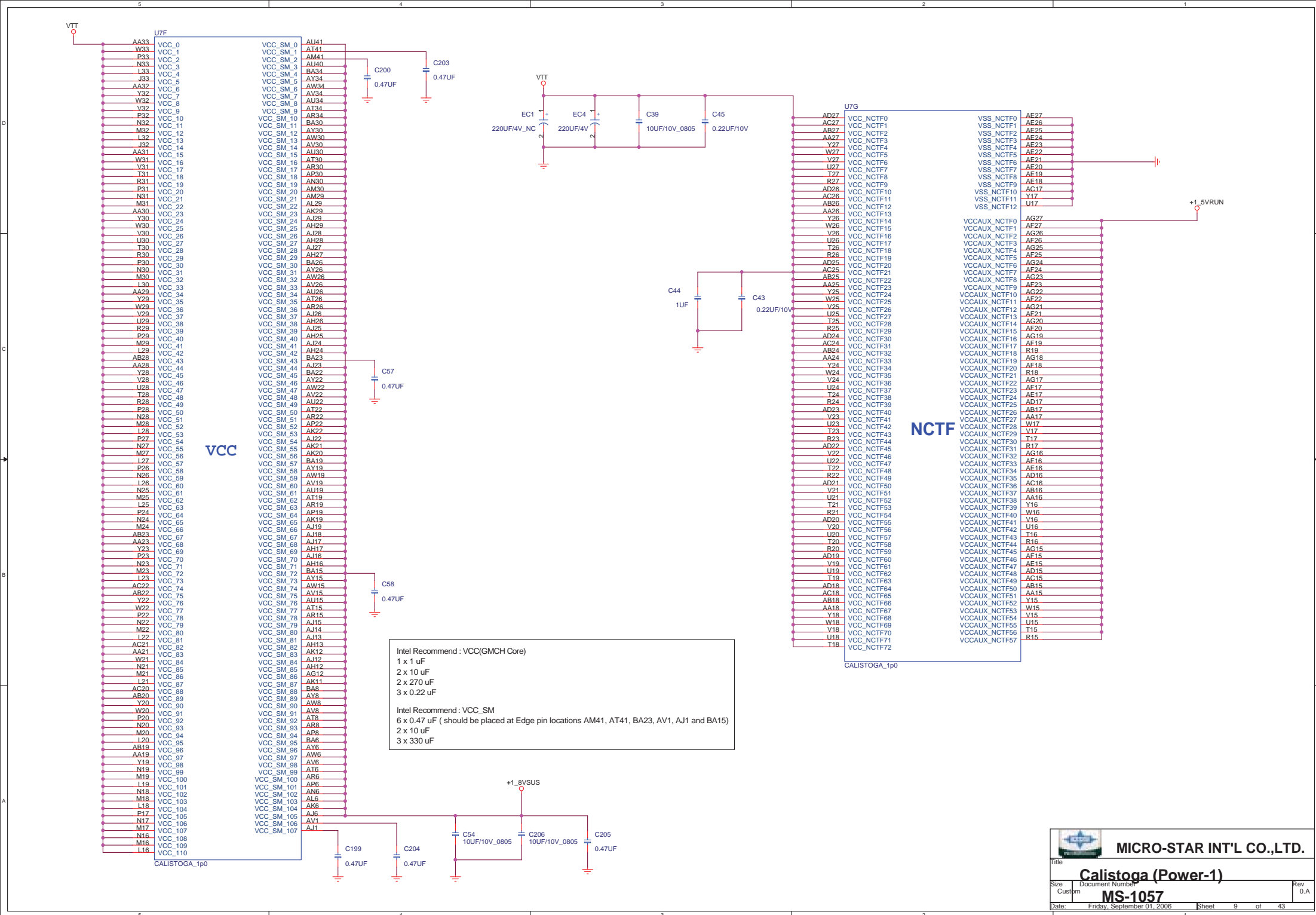
SB\_MA#[0..13] 13,14

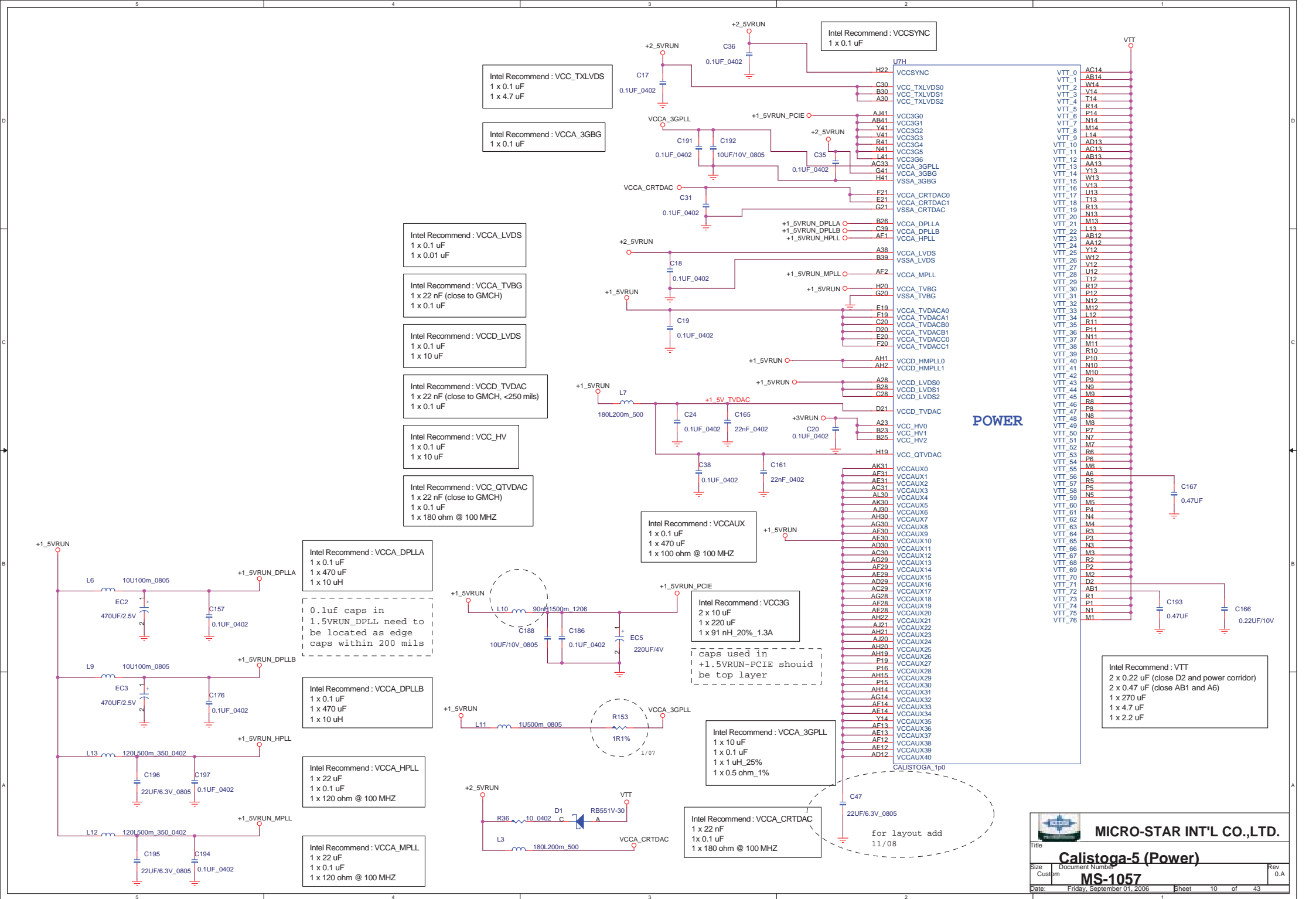


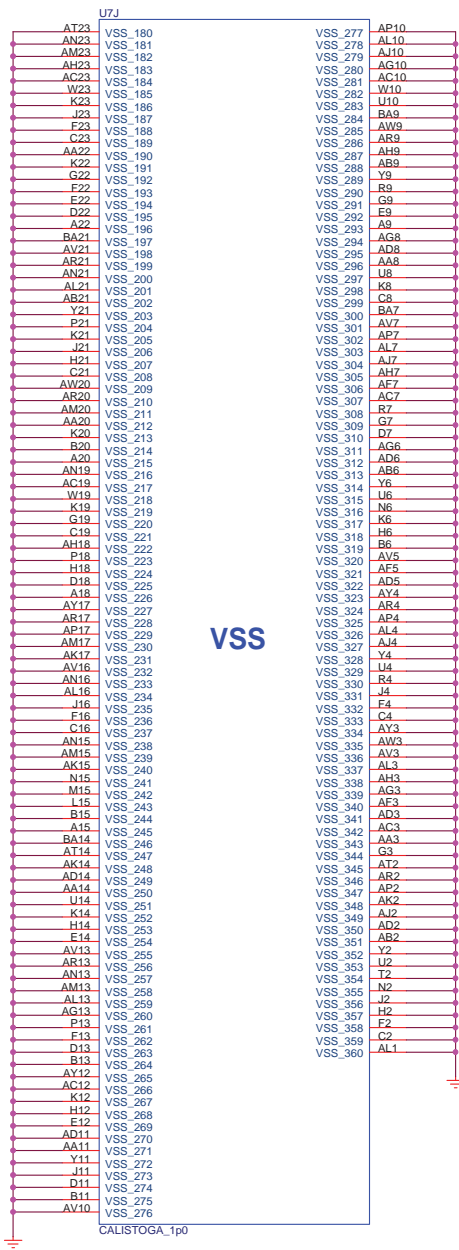
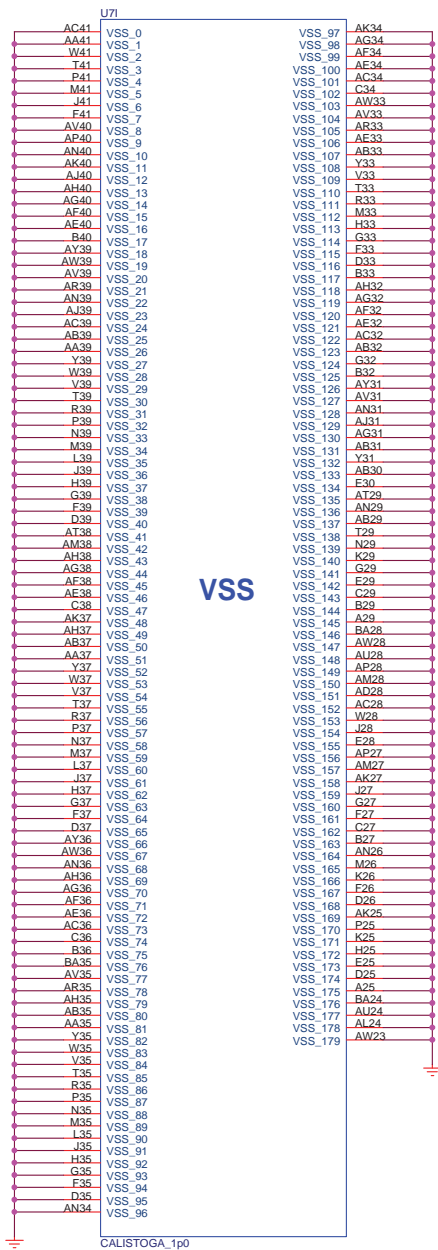
MICRO-STAR INT'L CO.,LTD.

Title		Calistoga-3 (DDR)		Rev	
Size	Custom	Document Number	MS-1057		0.A
Date:	Friday, September 01, 2006	Sheet	8	of	43









SA MD0	5	DO0	A0	102	SA MA0
SA MD1	7	DO1	A1	101	SA MA1
SA MD2	17	DO2	A2	100	SA MA2
SA MD3	19	DO3	A3	99	SA MA3
SA MD4	4	DO4	A4	98	SA MA4
SA MD5	6	DO5	A5	97	SA MA5
SA MD6	14	DO6	A6	94	SA MA6
SA MD7	16	DO7	A7	92	SA MA7
SA MD8	23	DO8	A8	93	SA MA8
SA MD9	25	DO9	A9	91	SA MA9
SA MD10	35	DO10	A10/AP	105	SA MA10
SA MD11	37	DO11	A11	90	SA MA11
SA MD12	20	DO12	A12	89	SA MA12
SA MD13	22	DO13	A13	116	SA MA13
SA MD14	36	DO14	A14	86	X
SA MD15	38	DO15	A15	84	X
SA MD16	43	DO16	A16_BA2	85	SA BS#2
SA MD17	45	DO17			
SA MD18	55	DO18	BA0	107	SA BS#0
SA MD19	57	DO19	BA1	106	SA BS#1
SA MD20	44	DO20	SA#	110	SM CS#0
SA MD21	46	DO21	S#	115	SM CS#1
SA MD22	56	DO22	CK0	30	CLK SDRAM0
SA MD23	58	DO23	CK0#	32	CLK SDRAM#0
SA MD24	61	DO24	CK1	164	CLK SDRAM1
SA MD25	63	DO25	CK1#	166	CLK SDRAM#1
SA MD26	73	DO26	CKE0	79	CKE0
SA MD27	75	DO27	CKE1	80	CKE1
SA MD28	62	DO28	CAS#	113	SA CAS#
SA MD29	64	DO29	RAS#	108	SA RAS#
SA MD30	74	DO30	WE#	109	SA WE#
SA MD31	76	DO31	SA0	198	SA SA0
SA MD32	123	DO32	SA1	200	SA SA1
SA MD33	125	DO33	SCL	197	RUN SMBCLK
SA MD34	135	DO34	SDA	195	RUN SMBDATA
SA MD35	137	DO35			
SA MD36	124	DO36	ODT0	114	SM ODT0
SA MD37	126	DO37	ODT1	119	SM ODT1
SA MD38	134	DO38			
SA MD39	136	DO39	DM0	10	SA DM0
SA MD40	141	DO40	DM1	26	SA DM1
SA MD41	143	DO41	DM2	52	SA DM2
SA MD42	151	DO42	DM3	67	SA DM3
SA MD43	153	DO43	DM4	130	SA DM4
SA MD44	140	DO44	DM5	147	SA DM5
SA MD45	142	DO45	DM6	170	SA DM6
SA MD46	152	DO46	DM7	185	SA DM7
SA MD47	154	DO47			
SA MD48	157	DO48	DQS0	13	SA DQS0
SA MD49	159	DO49	DQS1	31	SA DQS1
SA MD50	173	DO50	DQS2	51	SA DQS2
SA MD51	175	DO51	DQS3	70	SA DQS3
SA MD52	158	DO52	DQS4	131	SA DQS4
SA MD53	160	DO53	DQS5	148	SA DQS5
SA MD54	174	DO54	DQS6	169	SA DQS6
SA MD55	176	DO55	DQS7	188	SA DQS7
SA MD56	179	DO56	DQS#0	11	SA DQS#0
SA MD57	181	DO57	DQS#1	29	SA DQS#1
SA MD58	189	DO58	DQS#2	49	SA DQS#2
SA MD59	191	DO59	DQS#3	68	SA DQS#3
SA MD60	180	DO60	DQS#4	129	SA DQS#4
SA MD61	182	DO61	DQS#5	146	SA DQS#5
SA MD62	192	DO62	DQS#6	167	SA DQS#6
SA MD63	194	DO63	DQS#7	186	SA DQS#7

CN4A

DDR2-STD-5.2H

SA MD[0..63] <<> SA\_MD[0..63] 8  
 SA DM[0..7] <<> SA\_DM[0..7] 8  
 SA DQS[0..7] <<> SA\_DQS[0..7] 8  
 SA DQS#0..7 <<> SA\_DQS#[0..7] 8  
 SA MA[0..13] <<> SA\_MA[0..13] 8,14  
 SA BS#0..21 <<> SA\_BS#[0..21] 8,14

+3VRUN

C212

2.2UF/6.3V

C213

0.1UF\_0402

SMDR\_VREF

SMDR\_VREF

C59

2.2UF/6.3V

C67

0.1UF\_0402

SA SA0

R60

10K 0402

SA SA1

R61

10K 0402

Layout note: Place capacitors between and  
 near DDR connector if possible.

+1.8VSUS

2/17

C66

0.1UF\_0402

C69

0.1UF\_0402

C65

0.1UF\_0402

C64

0.1UF\_0402

+1.8VSUS

2/17

C61

2.2UF/6.3V

C72

2.2UF/6.3V

C63

2.2UF/6.3V

C62

2.2UF/6.3V

C70

2.2UF/6.3V

2/17

+1.8VSUS

112

111

117

96

95

118

81

82

87

103

88

104

199

83

120

50

69

163

1

203

204

47

133

183

77

12

48

184

78

71

72

121

122

196

193

8

VDD1

VDD2

VDD3

VDD4

VDD5

VDD6

VDD7

VDD8

VDD9

VDD10

VDD11

VDD12

VDDSPD

NC1

NC2

NC3

NC4

NCTEST

VREF

GND0

GND1

VSS1

VSS2

VSS3

VSS4

VSS5

VSS6

VSS7

VSS8

VSS9

VSS10

VSS11

VSS12

VSS13

VSS14

VSS15

VSS16

VSS17

VSS18

VSS19

VSS20

VSS21

VSS22

VSS23

VSS24

VSS25

VSS26

VSS27

VSS28

VSS29

VSS30

VSS31

VSS32

VSS33

VSS34

VSS35

VSS36

VSS37

VSS38

VSS39

VSS40

VSS41

VSS42

VSS43

VSS44

VSS45

VSS46

VSS47

VSS48

VSS49

VSS50

VSS51

VSS52

VSS53

VSS54

VSS55

VSS56

VSS57

VSS58

VSS59

VSS60

VSS61

VSS62

VSS63

VSS64

VSS65

VSS66

VSS67

VSS68

VSS69

VSS70

VSS71

VSS72

VSS73

VSS74

VSS75

VSS76

VSS77

VSS78

VSS79

VSS80

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VSS128

VSS129

VSS130

VSS131

VSS132

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VSS138

VSS139

VSS140

VSS141

VSS142

VSS143

VSS144

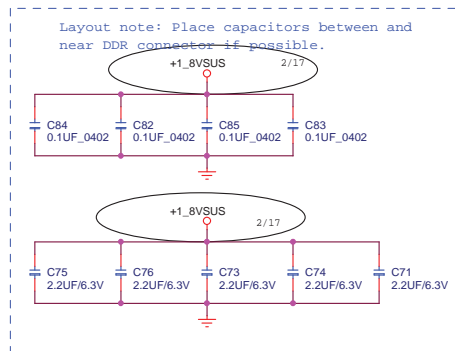
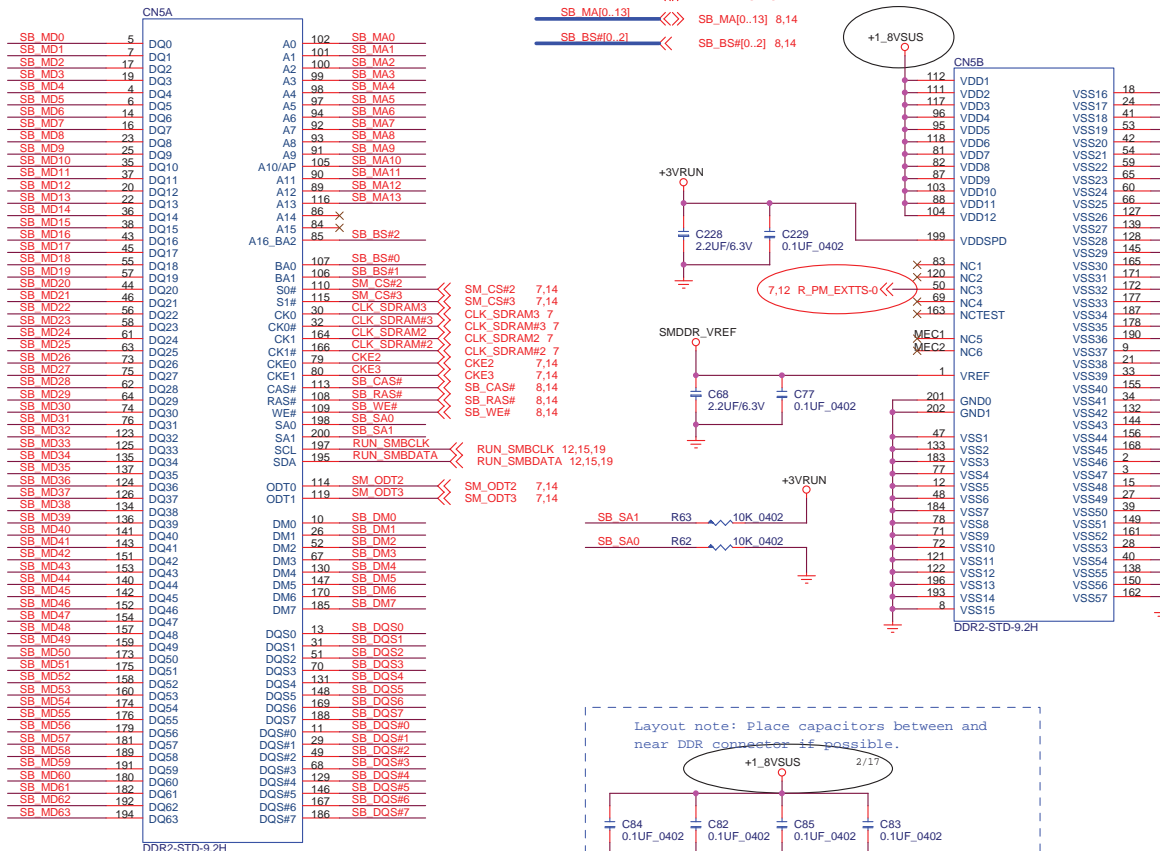
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VSS146

VSS147

VSS148

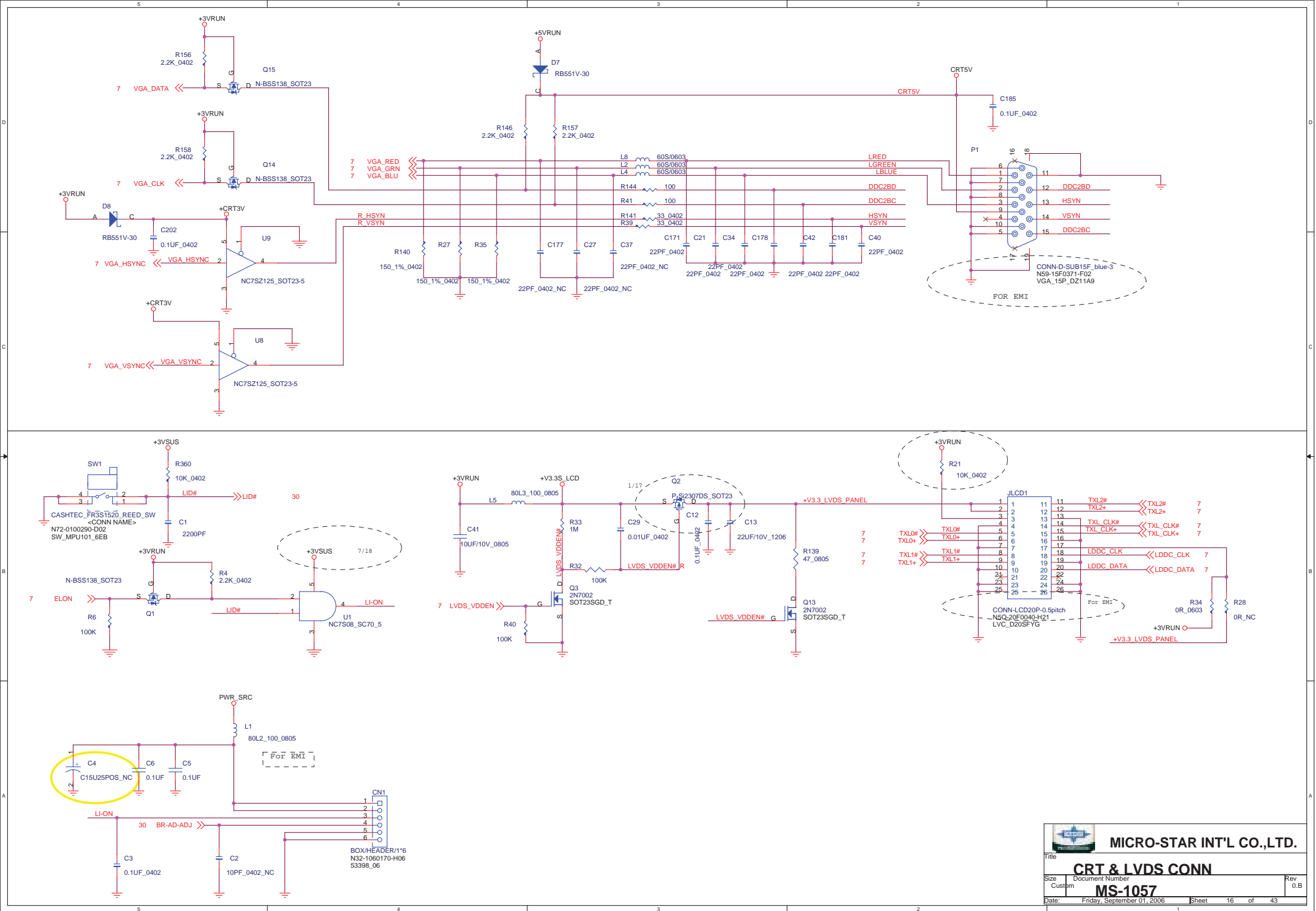
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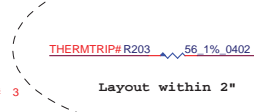
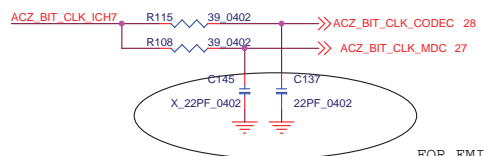


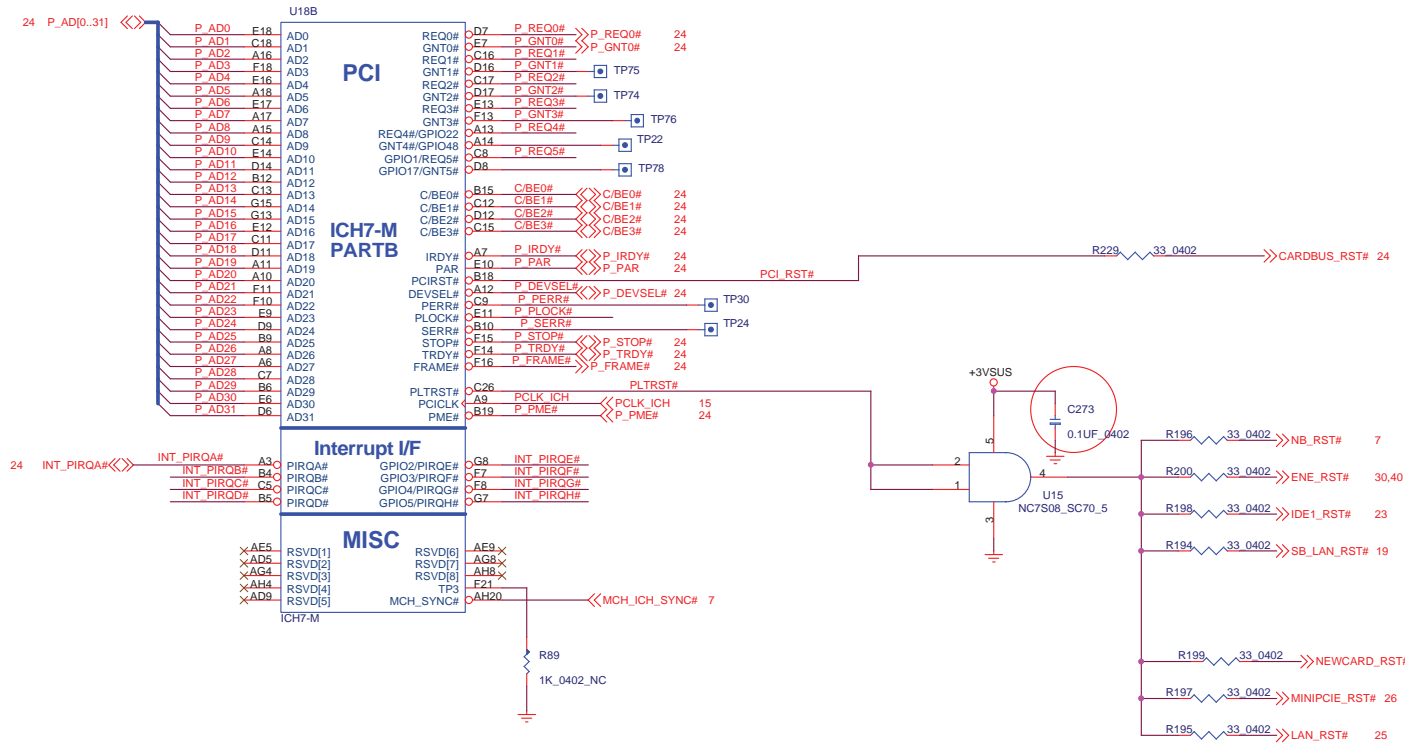
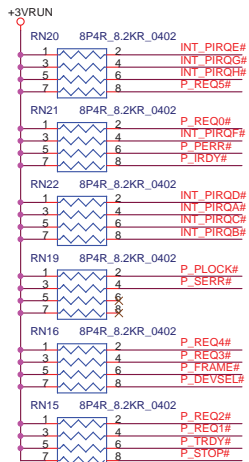




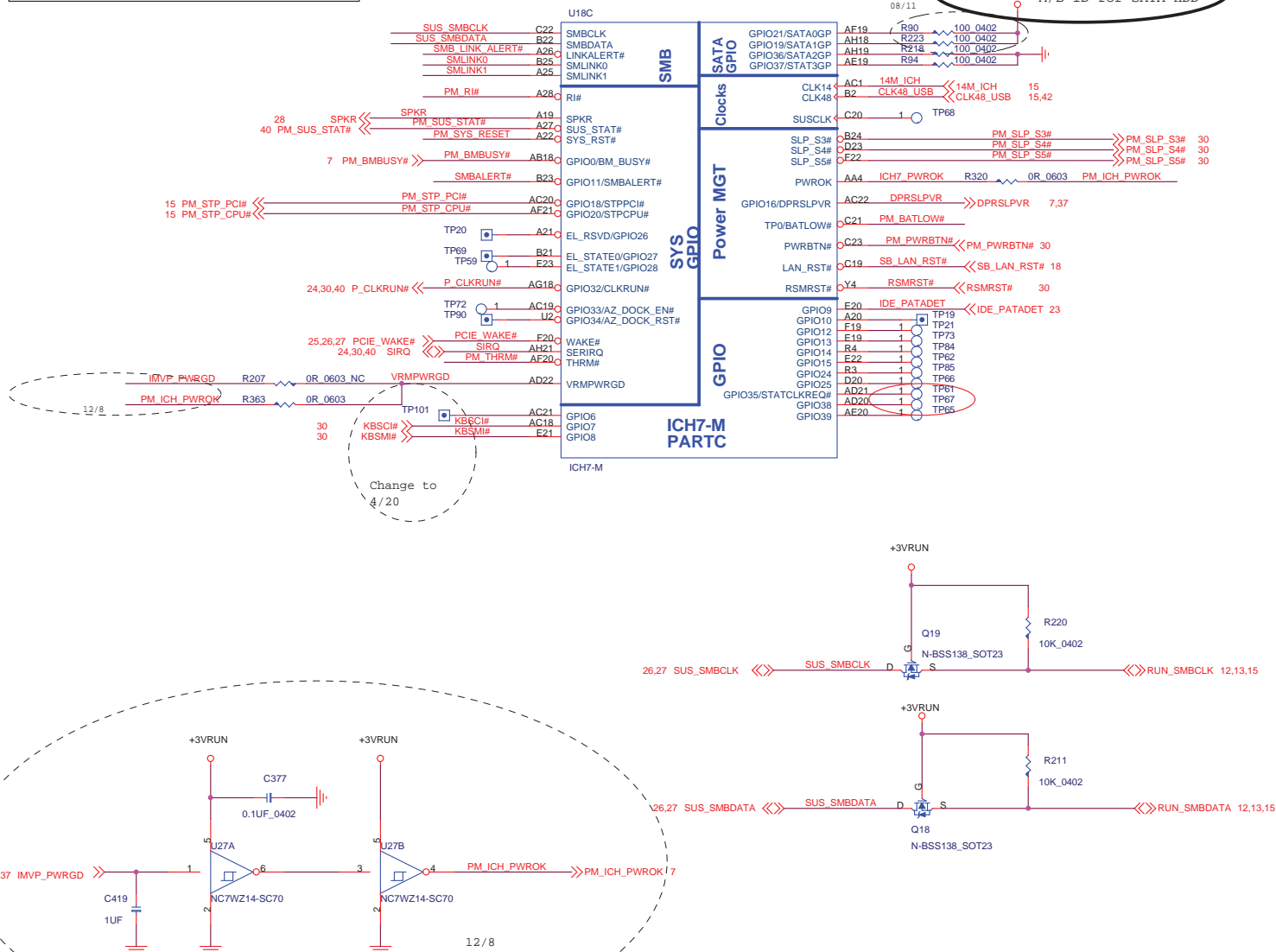
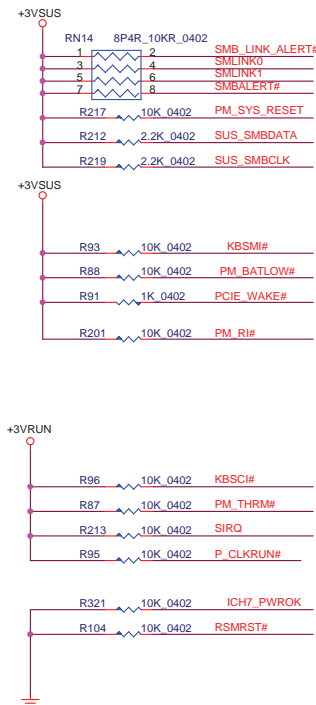




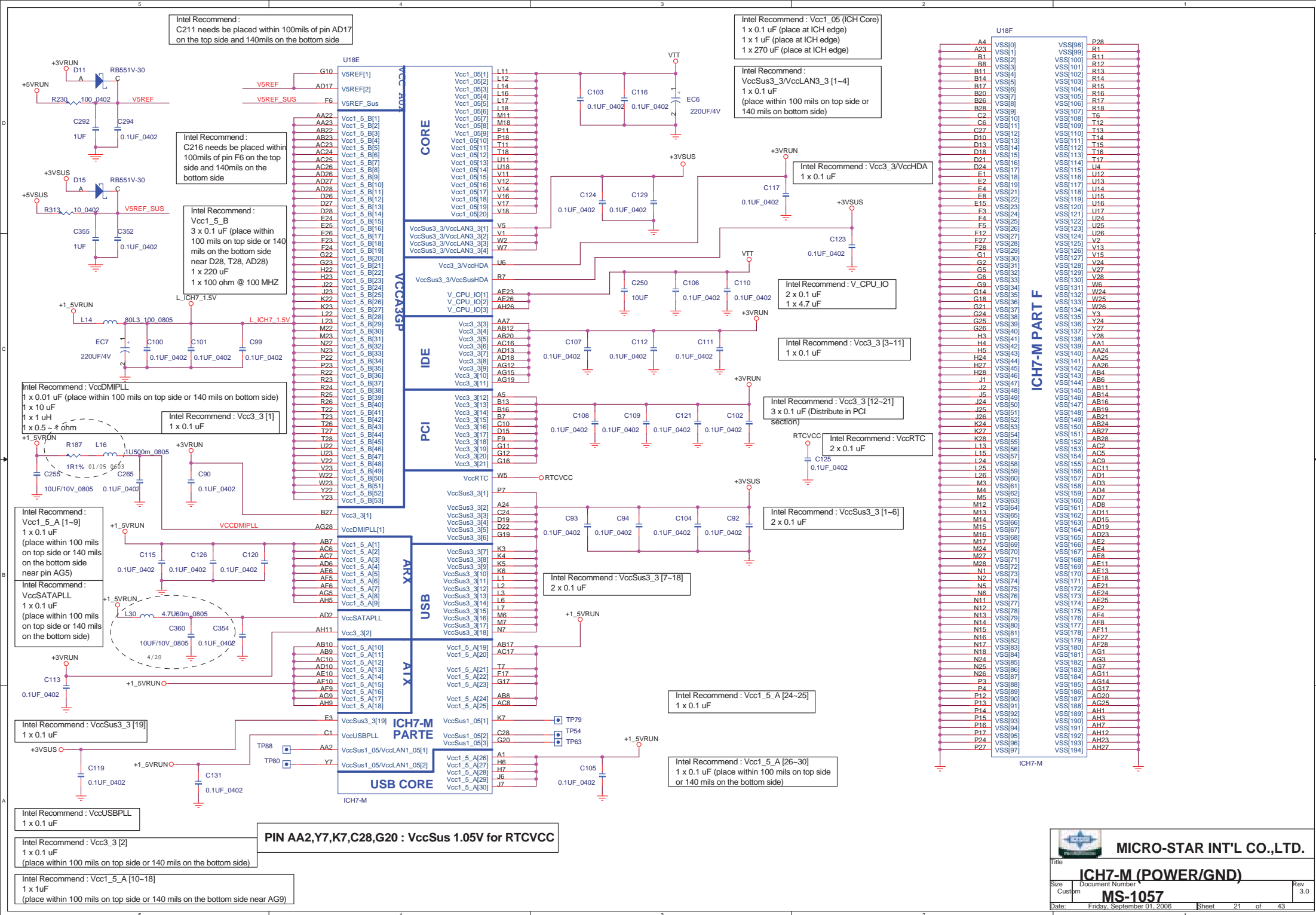




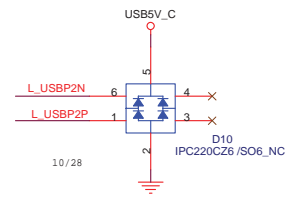
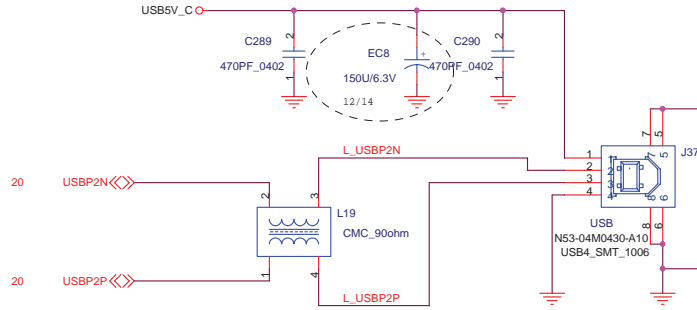
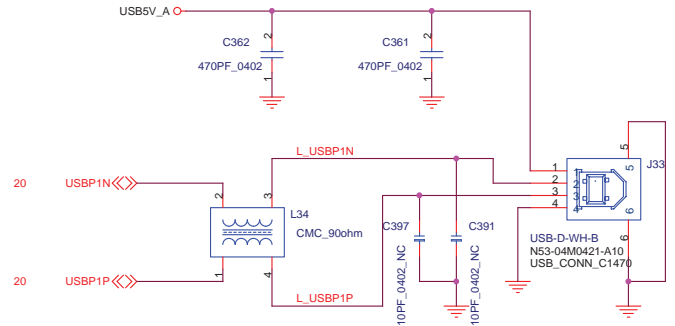
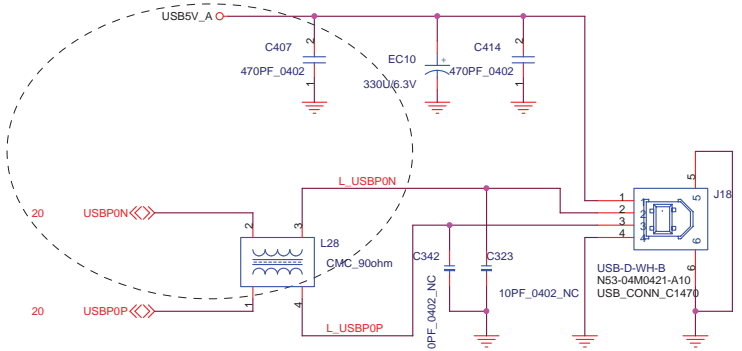
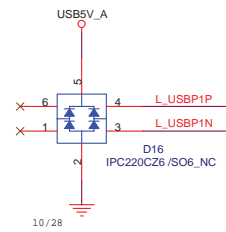
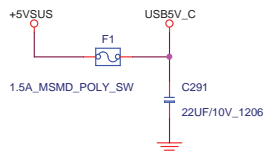
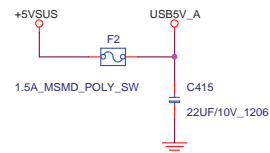
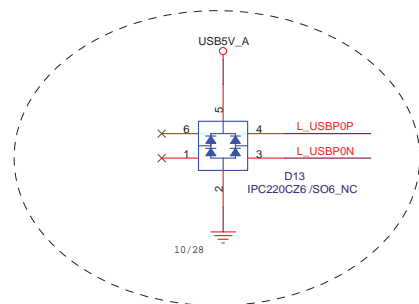
# PIN AC20,AF21 : Internal Pull-Up Resistor



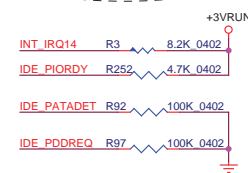
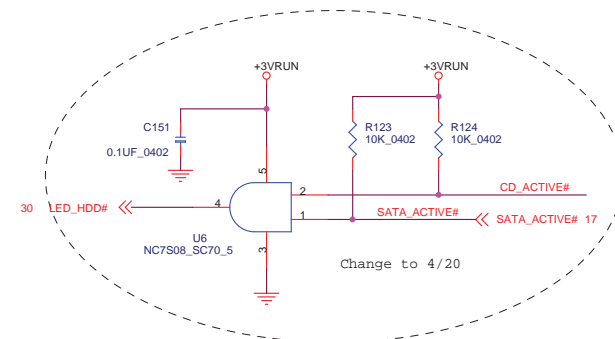
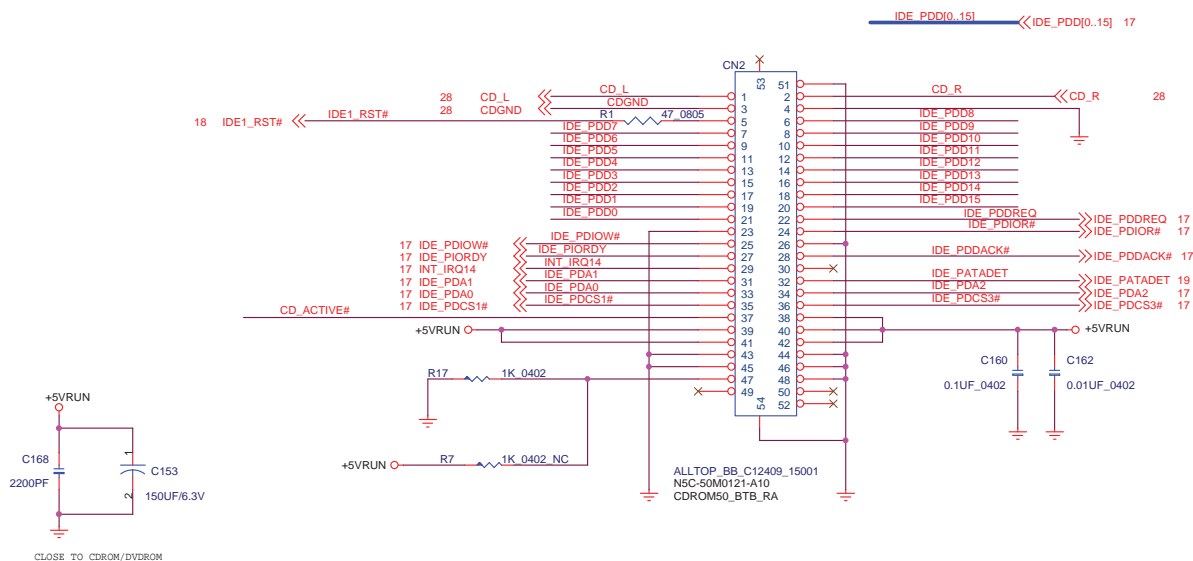
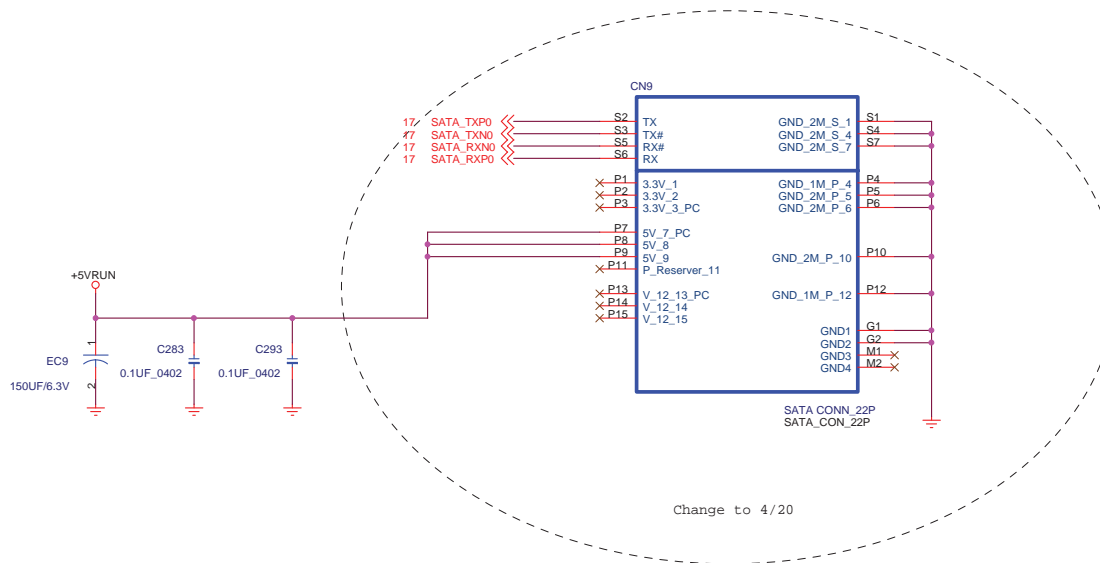


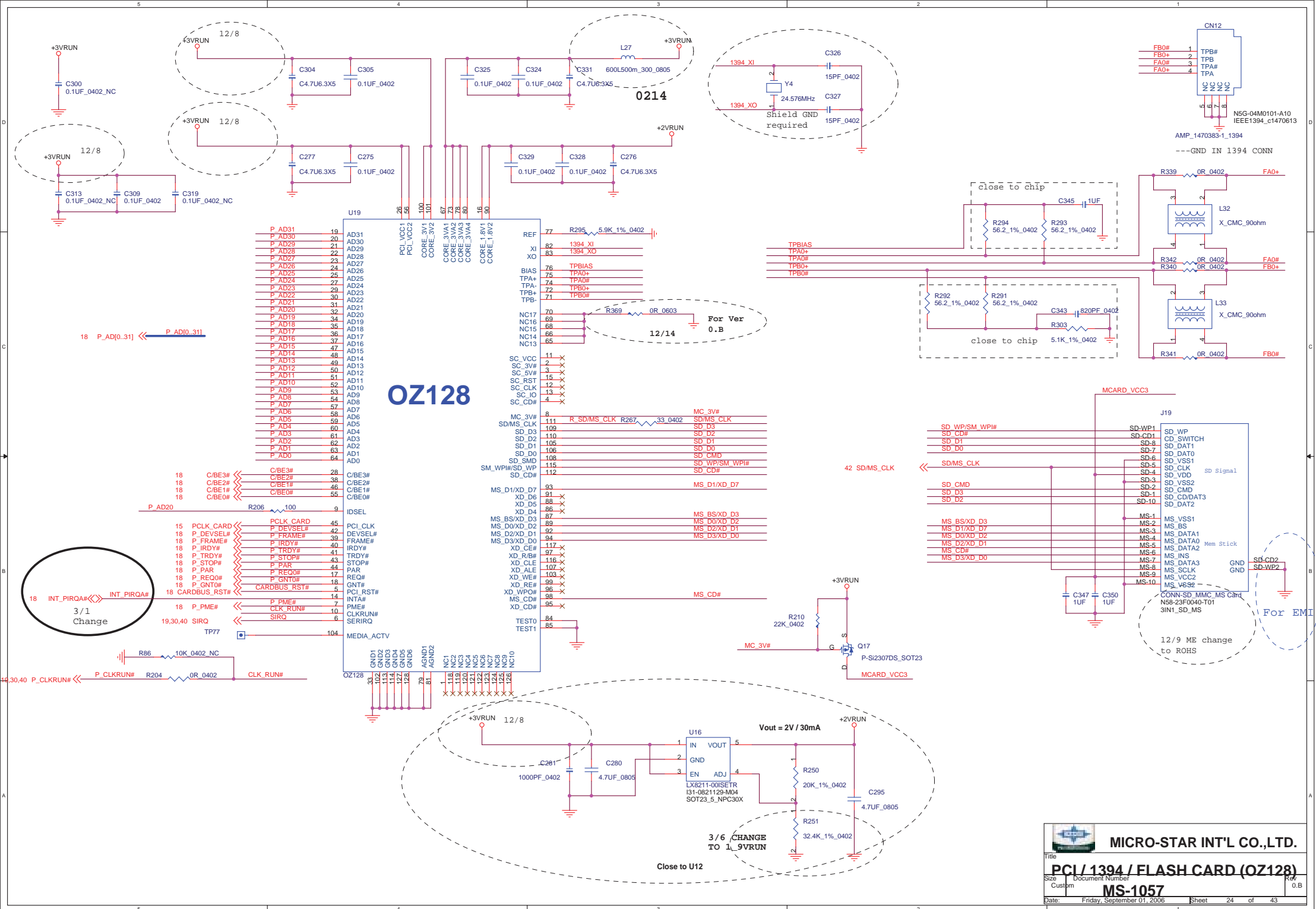
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3.

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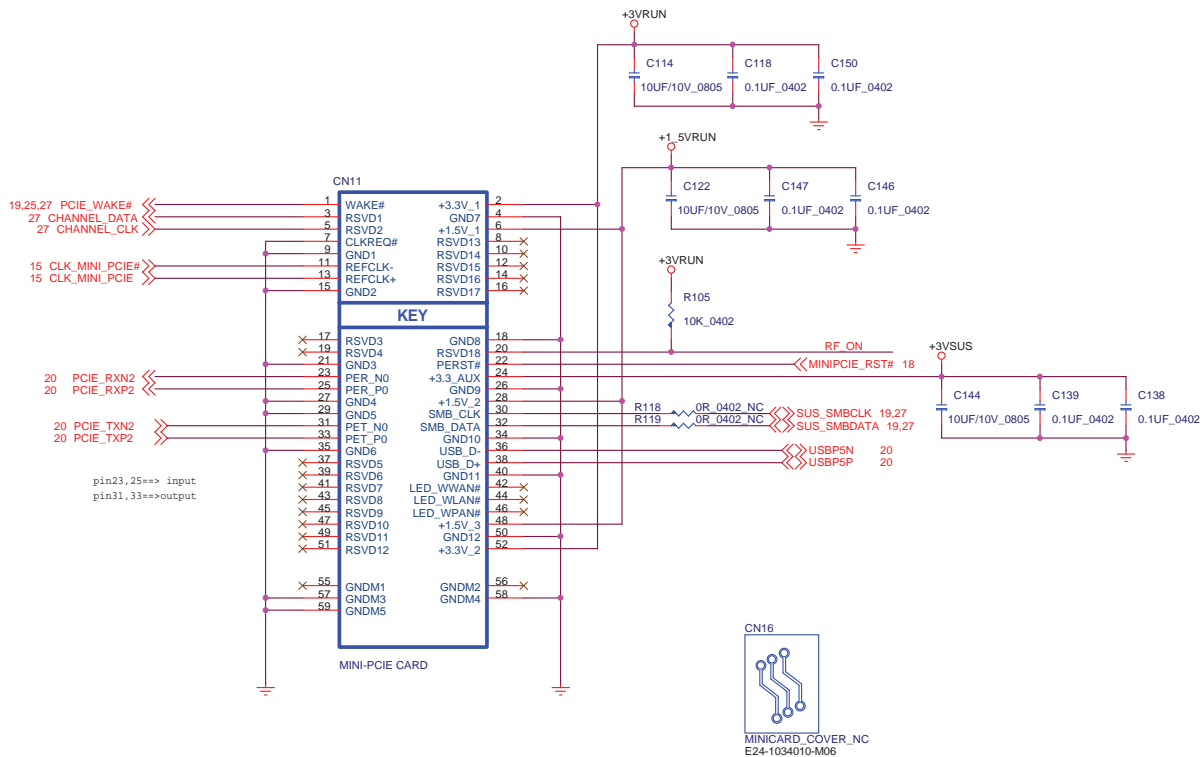




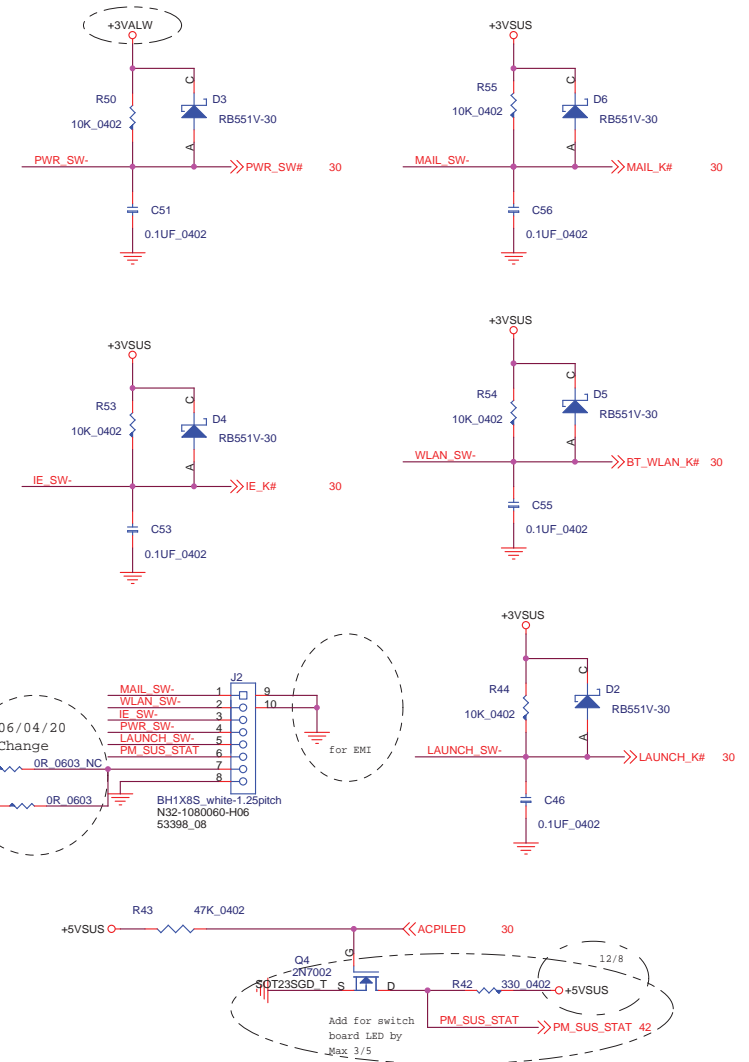
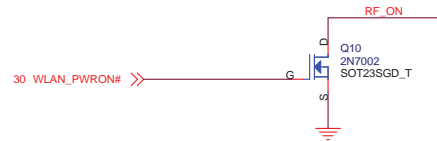


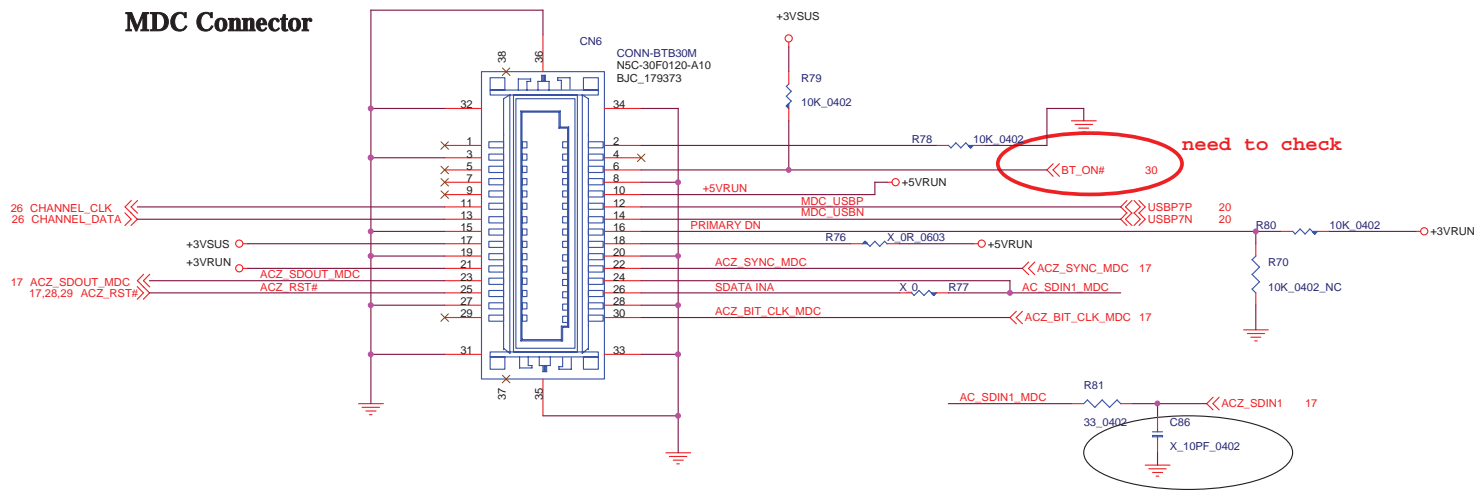
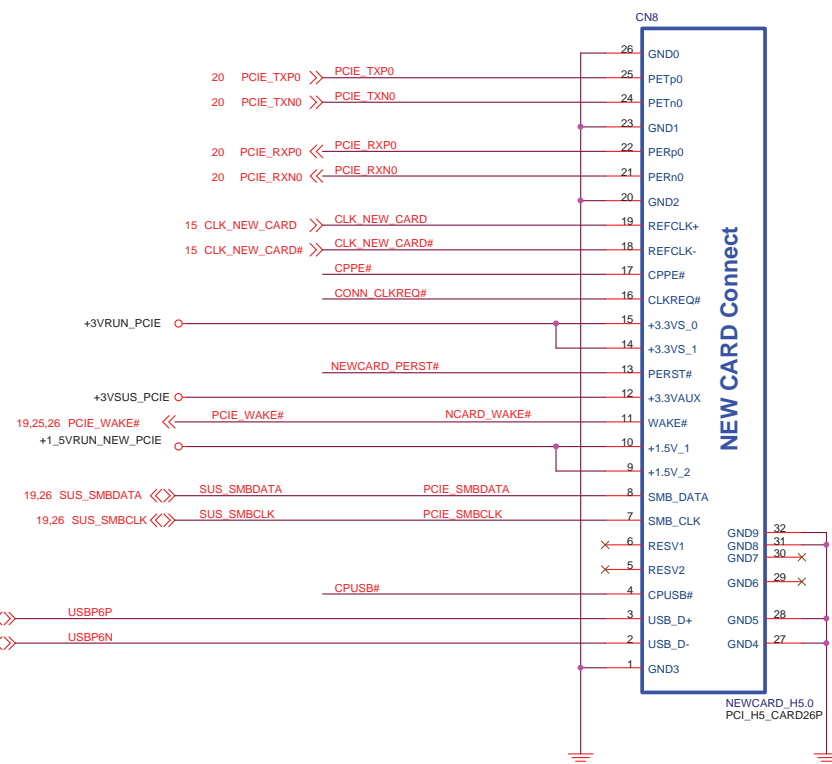
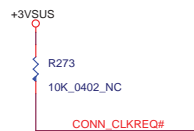







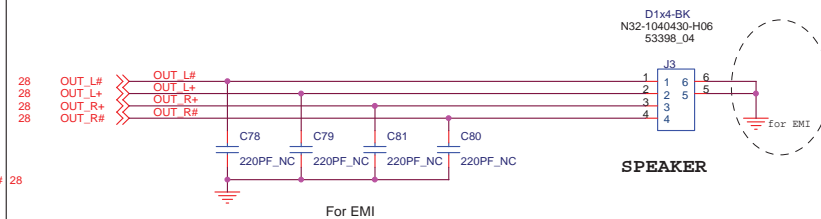
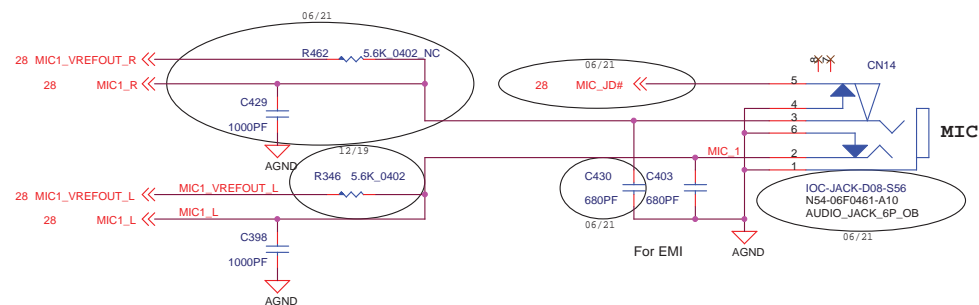
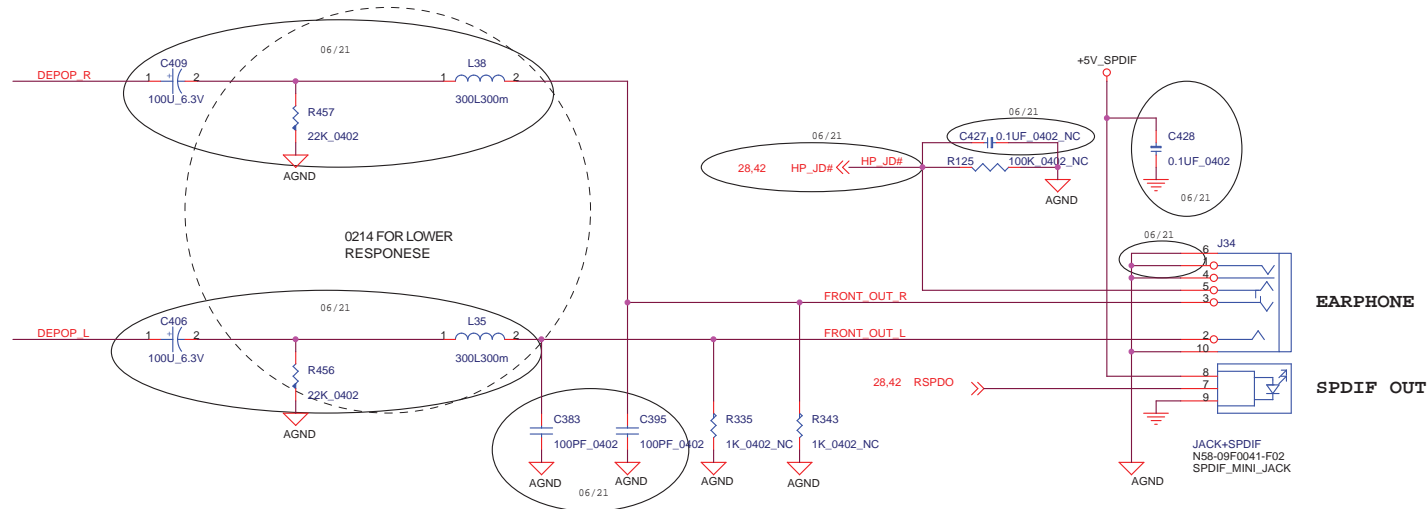
### RF\_ON/OFF Control



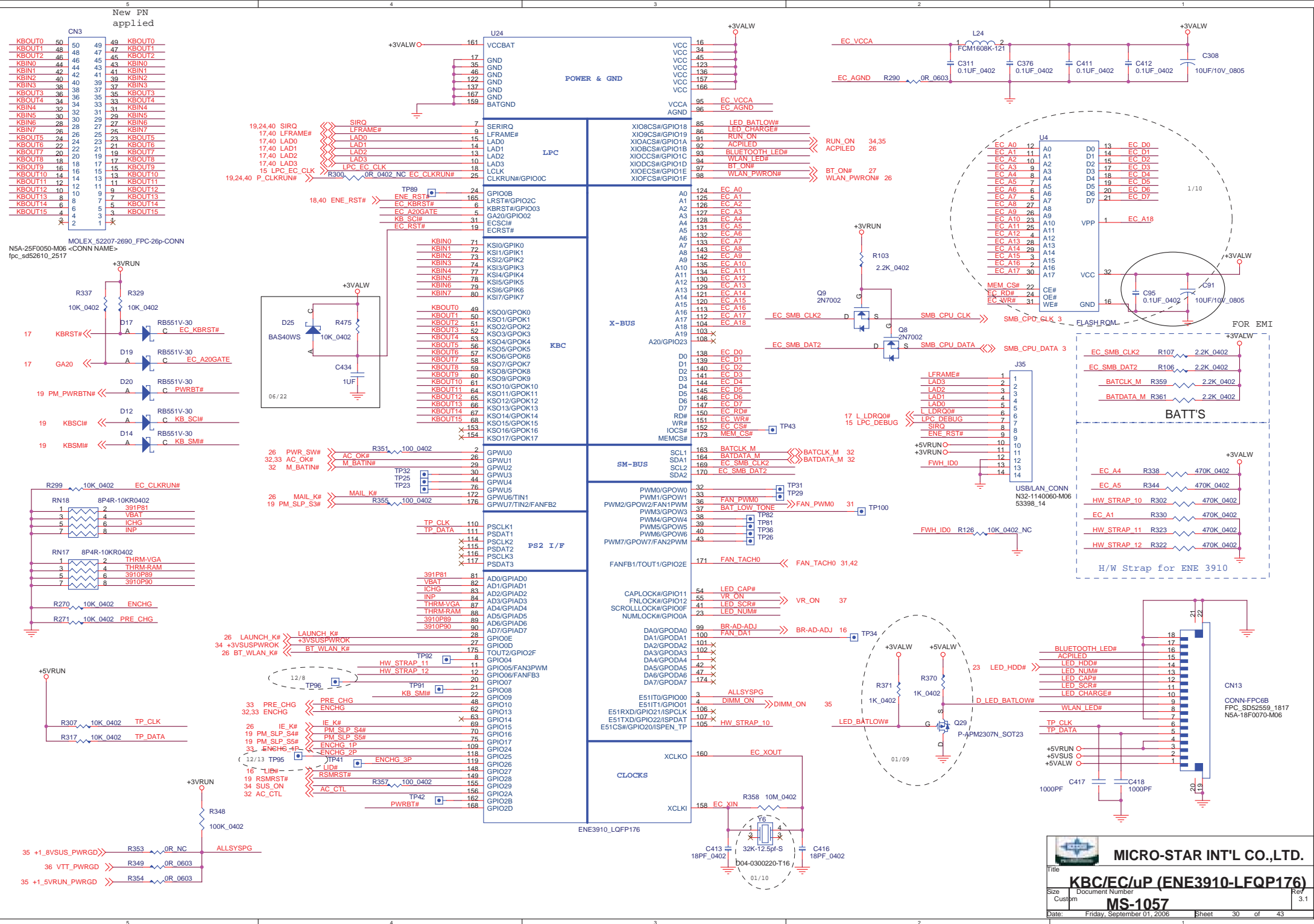


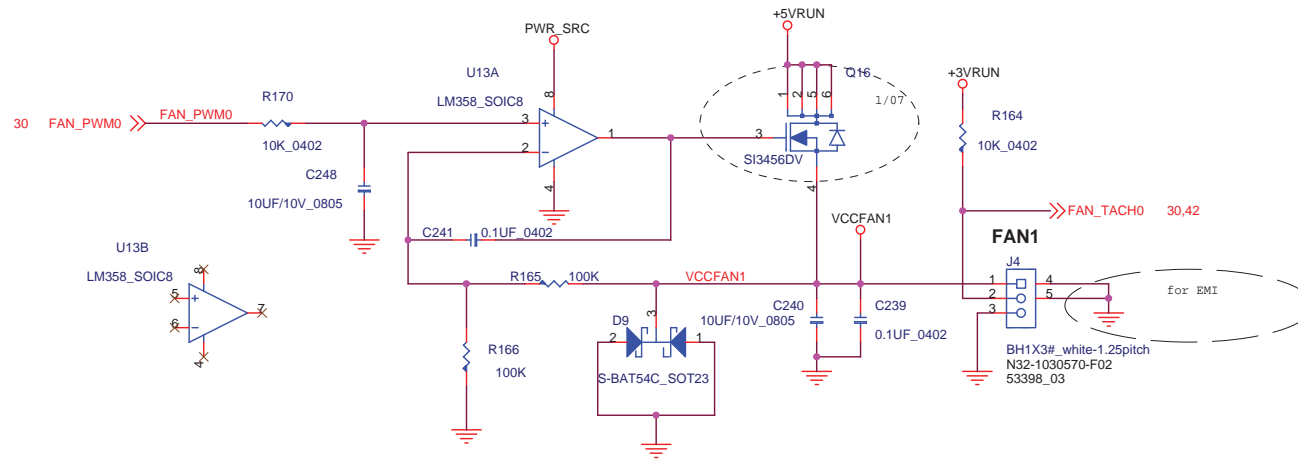
		<b>MICRO-STAR INT'L CO.,LTD.</b>	
<b>Title</b>			
<b>NEW CARD &amp; MDC CONN</b>			
<b>Size</b> Custom	<b>Document Number</b> <b>MS-1057</b>	<b>Rev</b> 0.B	
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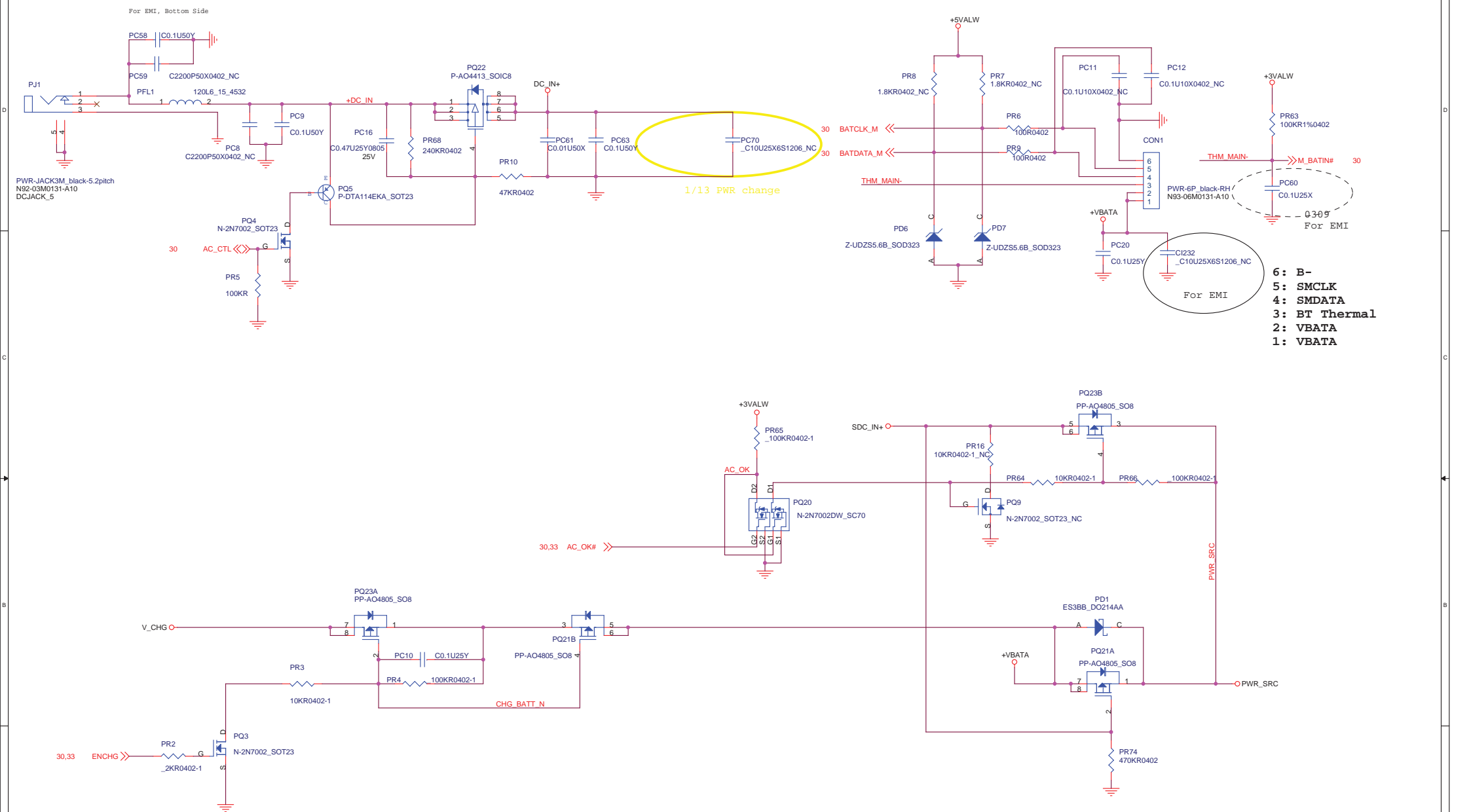


















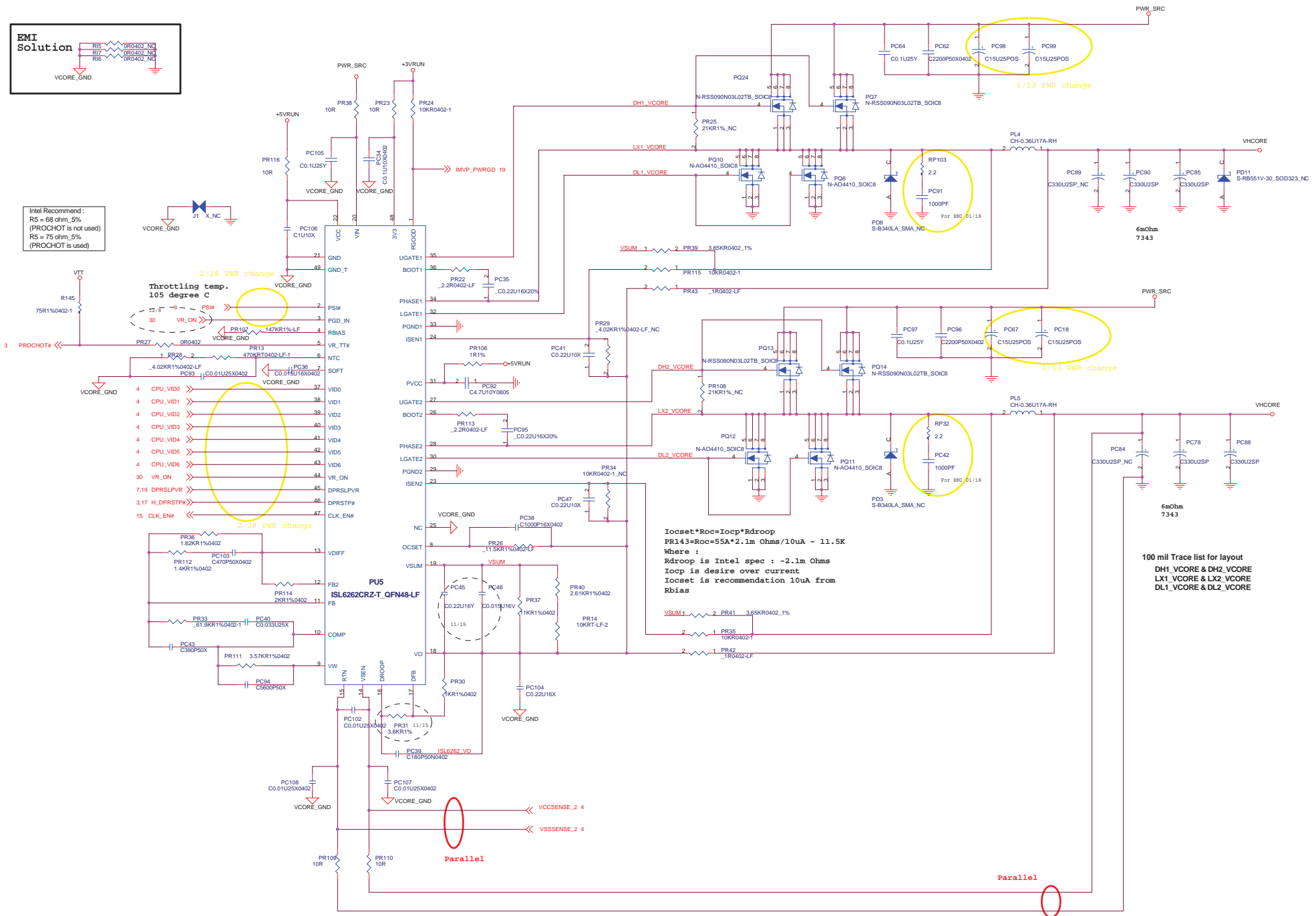




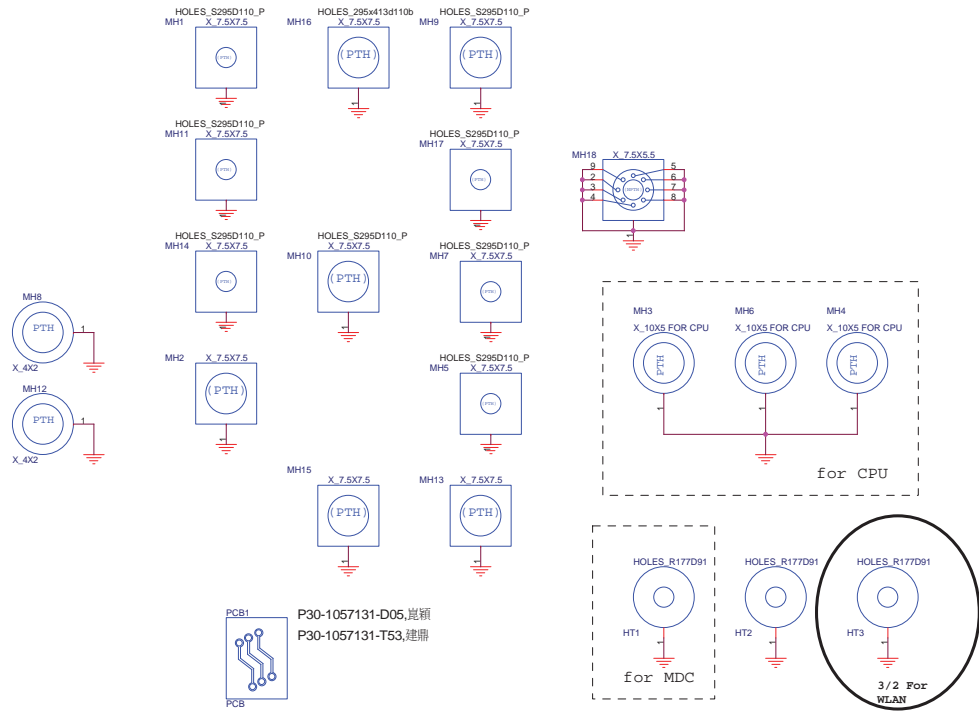
### EMI Solution

The diagram shows a circuit for EMI solution. It features three resistors labeled RJ5, RJ7, and RJ6 connected in parallel between a signal line and VCORE\_GND. The signal line is connected to three OR0402 NC components.

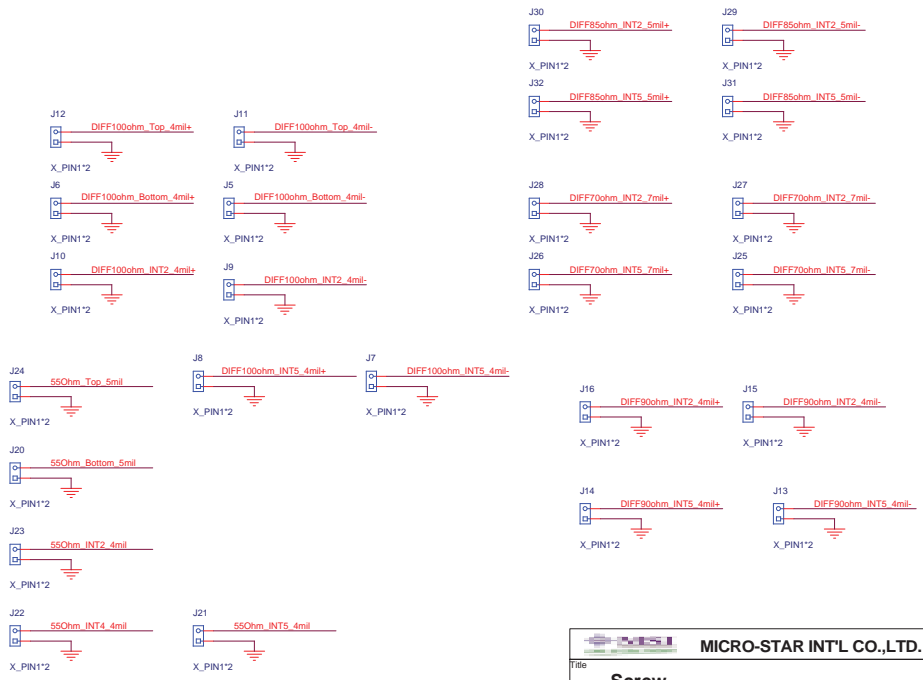
Intel Recommend :
R5 = 68 ohm_5%
(PROCHOT is not used)
R5 = 75 ohm_5%
(PROCHOT is used)




100 mil Trace list for layout



P30-1057131-D05,崑崙  
P30-1057131-T53,建鼎



Ver.	date	change note	Ver.	date	
0A	05/06/07 by C.J.	modify footprint and check pin define with footprint : J6 on page 30. CON2 on page22(add pin 16 and 17)  modify net name : PM_RSMRST#(SUSPWROK) on page 19. CPU_A20GATE(GA20) on page 17. H_RCIN#(KBRST#) on page 17. ACZ_SDOUT_MDC(ACZ_SDOUT_MDC) on page28. SYNC(ACZ_SYNC_MDC) on page 28. BIT_CLK2 (ACZ_BIT_CLK_MDC) on page 28.	3.0	06/05/04 by KILL	modify PN SHD2,ML12,ML23,ML24 and ML22 on page41
	05/06/08 by C.J.	modify CN10.Pin7 from reverse to SMBCLK, Pin8 from SMBCLK to SMBDATA, Pin9 from SMBDATA to +1.5VRUN_PCIE on page 28.  modify J1.PIN1from USB5V_A to GND, J1.PIN4 from GND to USB5V_A on page 22.  modify CN8 on page 26.		06/05/10 by KILL	(1) modify PN Q1,Q14,Q15,Q18,Q19,Q20 (2) modify PN U8,U9,U14,PU4,PU1 to be ROHS (3) modify PN PL1,PL3,PL6,PL7,PL8,PL9 to be ROHS (4) modify PN J35,ML20,SC1,SC2, SC7,SC8,SC9,WIRE2 to be ROHS (5) modify PN L15,L24,L25,PC144 PC155,PC156,PC157,PC67,PC77 PC98,PC99,PC18,PC4 to be ROHS
	05/06/10 by C.J.	update power solution.		06/05/29 by KILL	(1) modify PN U25 to I34-0301109-A30
	12/08	Page7 R154 Change to PM_ICH_PWROK		06/06/06 by KILL	(1) Change vendor SC1,SC2,SC7,SC8,SC9
	12/08	Page15 Modify R244,R245 R261 ,R262,R225,C297 to NC		06/06/16 by KILL	(1) Change PQ20,PQ25,PQ26,PQ30 PN
0B	12/08	Page 17: Sata HDD Change to PATA ,SO U18.AF3,AE3,AF7,AE7,AF1,AE1,AH10,AG10 to GND U18.AG2,AH2 pin NC Del C130,C127,C132,C134,R227,R283,R272	3.1	06/06/21 by Chester	(1) Page 28 (Audio change to Vista) Modify C366,C367,C388,C387,R296,C344 R311,U22,U23  Delete R289,R301,R281,R280,R326,R285 R334,R286  Add C425,C426,R458,R459,R460,R461,  (2) Page 29 (Audio change to Vista) Modify C409,C406,L38,L35,C383,C395,CN14  Add R457,R456,C427,C428,R463,R464, Q37,Q38,Q39,Q40,R462,C429,C430, R468,D22,R471,C432,Q34,R467, R465,Q32,C431,Q33,R466,D23,D24, R472,Q36,Q35,R470,C433,R473,R474  (3) Page 19 (Audio change to Vista) Modify R90,R223  (4) Page 30 (Modify KBC Reset Circuit) Delete U25,C369  Add R475,D25,C434  (5) Page 42 (Audio change to Vista) Modify CI82
	12/08	Page 19:ADD C419 ,R363 and HDD_DET pin.			
	12/13	Page 21:Del L30,C360			
	12/14	Page 22:EC8 Change to 150UF/6.3V			
	12/13	Page 23:SATA HDD Change to PATA Connent.			
2.0	02/28	Del R248,R98,R249,R231,R73,R74,R75,R64,R65,R67,R66, R345,PR67,PR102,PR105,PR101,PR100,PR99,PR98 ,PR97,PR96,PR95,PR94,PR93,PR92,PR91 0hm			
3.0	06/04/20	1. Page 23:PATA HDD Change to SATA HDD. (1) Add CN9 SATA HDD Connector (2) Delete CN15 PATA HDD Connector (3) Change to CD-ROM Cable selete R7 1K ohm NC R17 1K ohm set. (4) For SATA LED Add U6 7S_08_SC70_5 Add R123 ,R124 10K_0402 ohm Add C151 0.1UF_0402 Delete Q28 2N7002  (5) Page 17 Add C130 ,C127,C132,C134 3900 PF (6) Page 17 Add R277,R283 1K_1%_0402 ohm (7) Page 17 Add R272 24.9_1%_0402 ohm (8) Page 21 Add L30 4.7Uh_0805 & C360 10uF/10V_0805 2. R90 100 Ohm Modify to +3VRUN For M/B ID choose to SATA HDD 3. R43 47K Ohm Change to 0402 Size. 4. R1 47 Ohm Change to 0805 Size. 5. Delete to R352 0_0805 Ohm . 6. R17 1K Ohm Change to 0402 Size. 7. R319 1M Ohm Change to 0603 Size. 8. Add R373,R374 0 Ohm 0603 Size.	3.1	06/08/11 by KILL	(1) modify R90,R223 10k PULL-HIGH  (2) modify C358 10UF CHANGE TO 0.47UF/0805  (3) modify PR18 CHANGE TO 28.7K1%_0402 FOR 90W
			3.1	06/08/18 by KILL	change PR18 to 42.2k1%_0402 for 65w and 90 w

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Date:

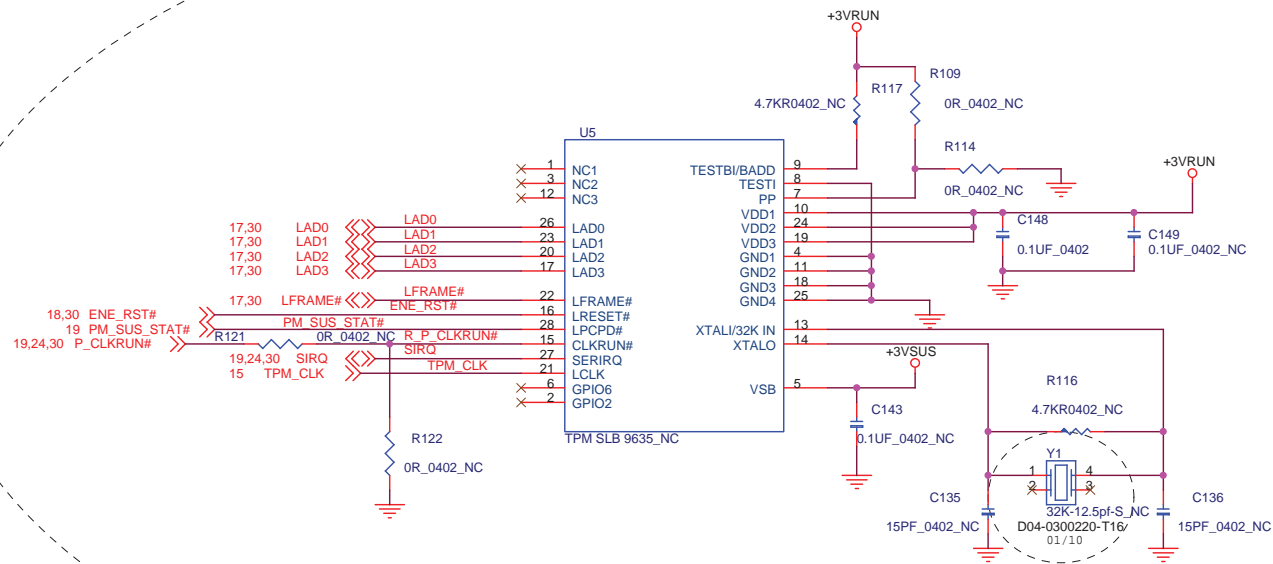
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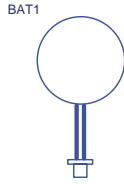


ALL NC 12/8



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TPM(SLB 9635 TT 1.2)				
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BAT1  
RTC\_BAT  
D06-0100300-H04



SC1  
VGASC  
E42-5040501-H29



SC2  
VGASC  
E42-5040501-H29



SHD2  
VGA SHIELDING  
E2M-2110211-Y28



SC9  
M2X4  
E43-1203003-H29

Close MDC



SC7  
M2X4  
E43-1205003-H29



SC8  
M2X4  
E43-1205003-H29

Close new card

change to  
MDC+Bluetooth



MDC1  
MDCASSB  
S58-2800021-Q09



BIOS\_LABEL  
G51-LA01678-A09

0126



ML24  
NB MYLAR  
E26-1057020-G40



ML23  
NB MYLAR  
E26-1057010-G40



ML16  
BLUETOOTH MYLAR  
E26-1012090-SE2



ML12  
CONDUCTIVE GASKET FOR RJ11  
E2Y-X006311-CA7



ML22  
HDD  
MYLAR  
HDD\_MYLAR  
E26-1057030-G40

ME 01/18  
Modify



ML25  
DDRMYLAR\_1\_NC  
E26-1057060-F49



ML26  
DDRMYLAR\_2\_NC  
E26-1057050-F49



ML27  
DDRMYLAR\_3  
E2P-2141211-G40

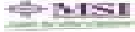


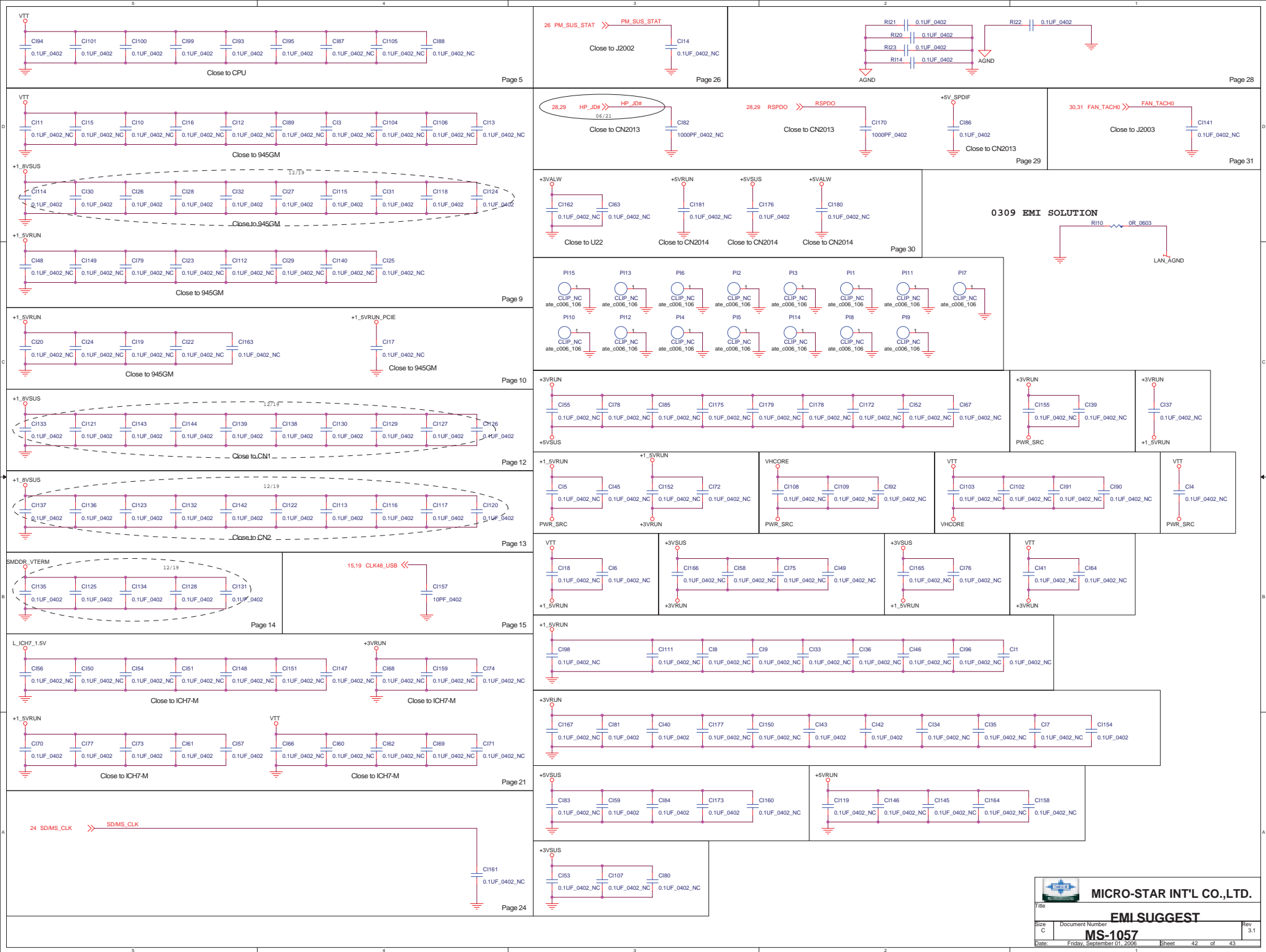
WIRE1  
MDCWIRE  
K10-3002073-H39



WIRE2  
BLUETOOTH-WIRE  
S79-1800330-Y01

change to  
Bluetooth  
Antenna

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Title

Size

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EMI SUGGEST

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