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MS-7610

Version 1.0

CPU:

Intel Conroe (95W Dual core)

System Chipset:

Intel G41 - MCH (North Bridge)
Intel ICH7 (South Bridge)

On Board Chipset:

BIOS -- SPI
HD -- ALC889
LPC Super I/O -- F71889G
LAN-- REALTEK RTL8111D Co-lay RTL8103E
CLOCK -- RTM875-605

Main Memory:

DDR II *2 (Max 4GB)

Expansion Slots:

PCI2.3 SLOT * 3

PCI EXPRESS X1 SLOT *2

PCI EXPRESS X16 SLOT *1

UPI PWM:

Controller: 3 PHASES + APS

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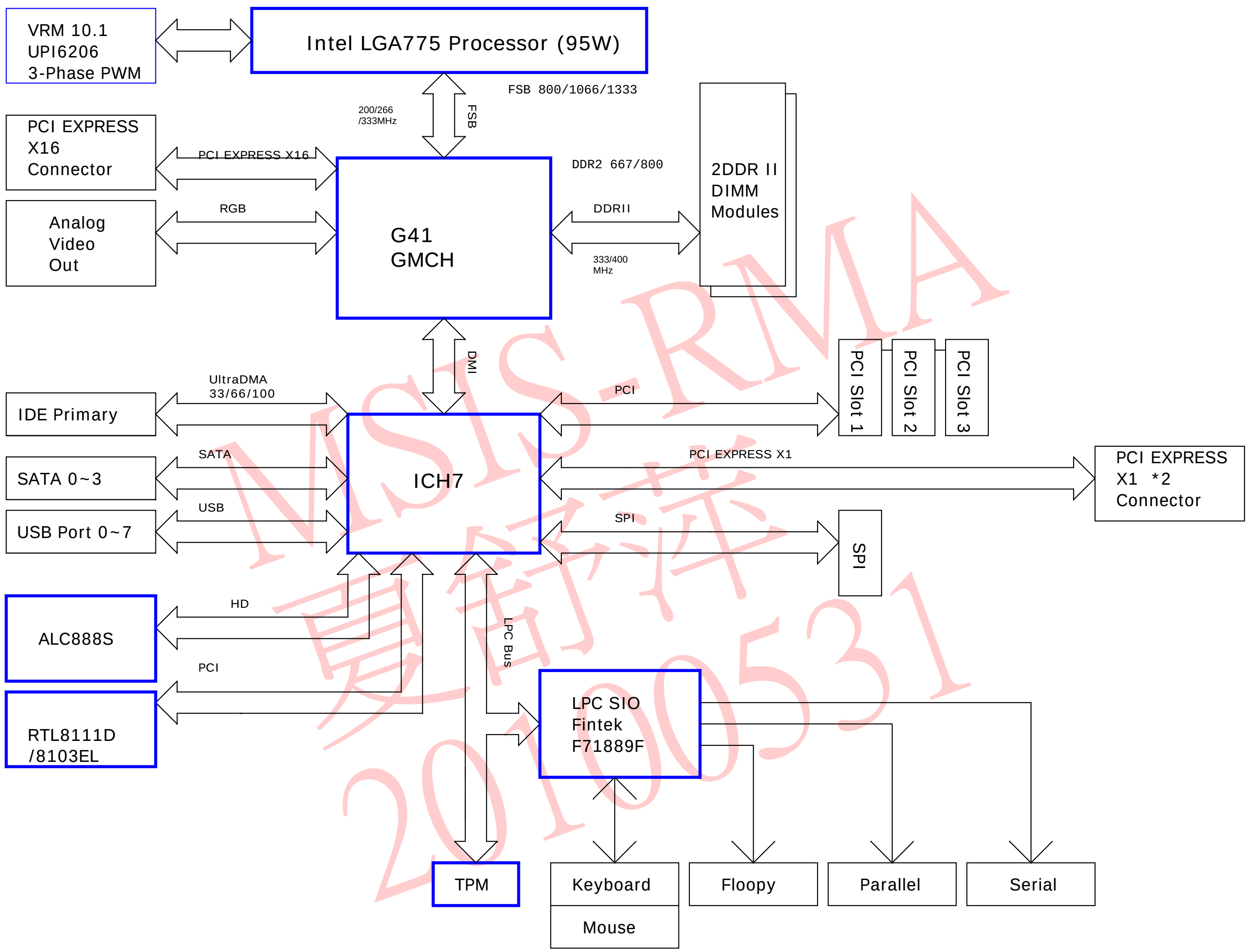
Block Diagram



MSI	MICRO-STAR INT'L CO.,LTD		
	MS-7610		
Size: Custom	Document Description: BLOCK DIAGRAM		Rev: 1.0
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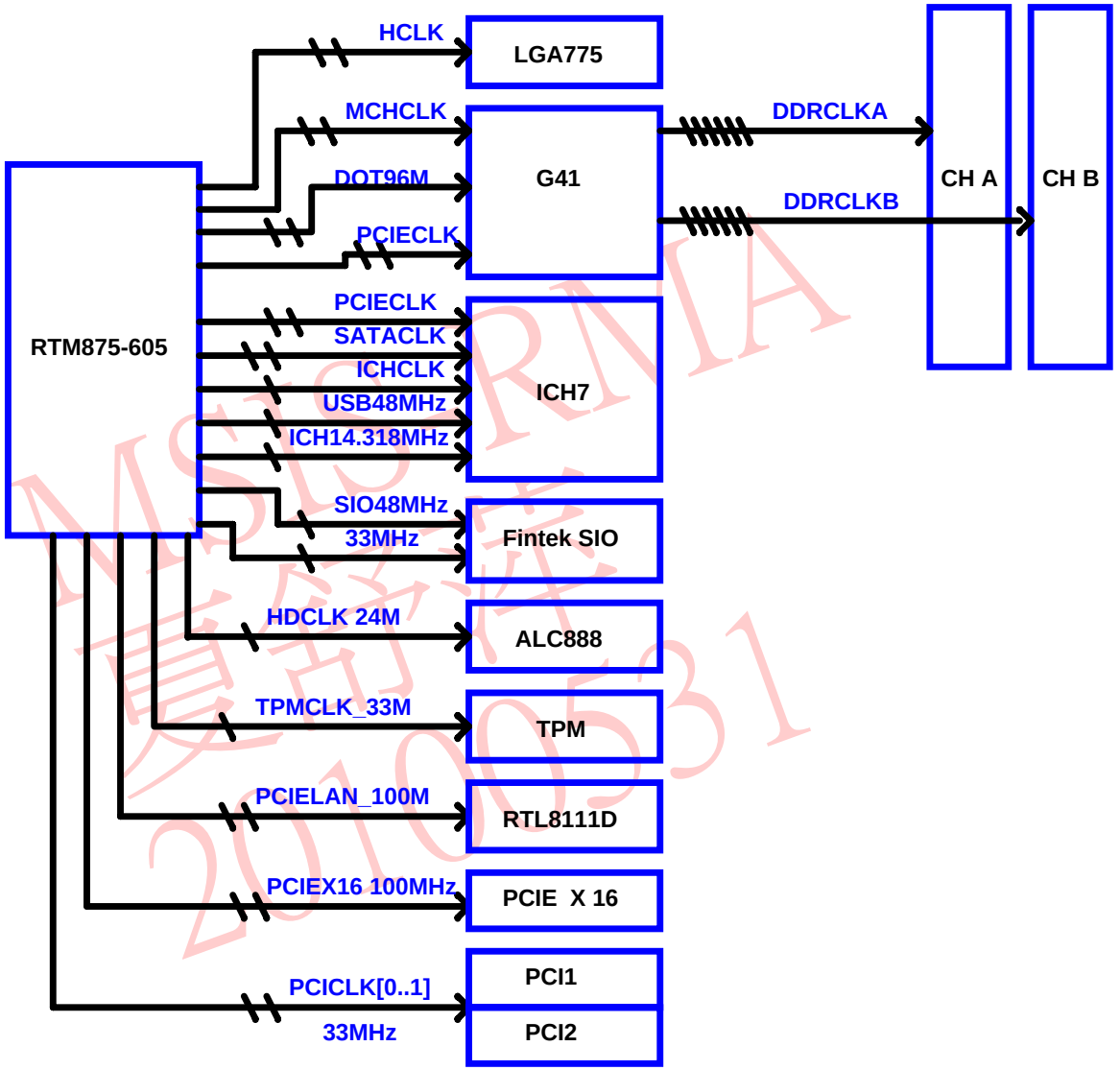
CLOCK MAP



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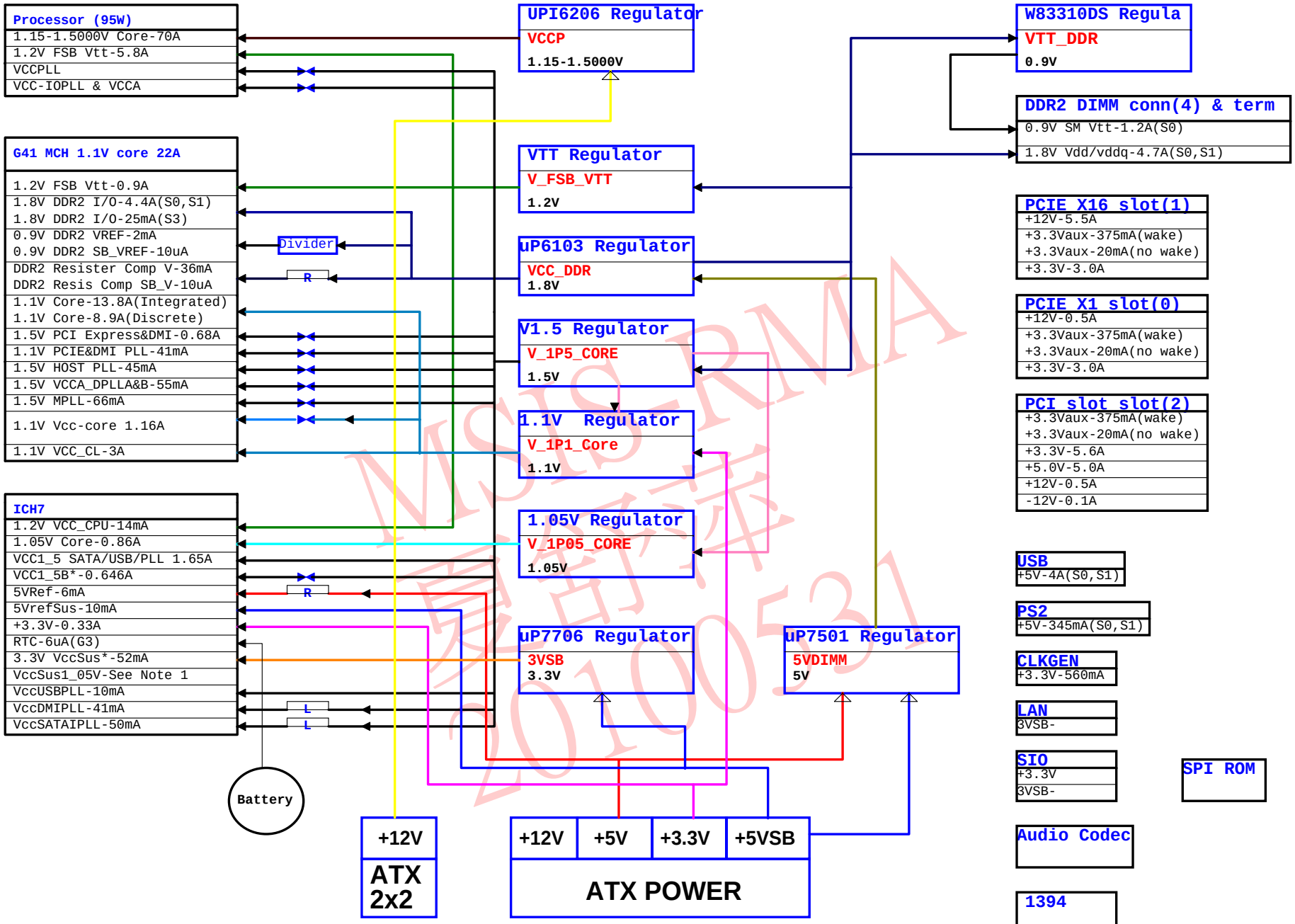
MS-7610		
Size: Custom	Document Description: CLOCK MAP	Rev: 1.0
Date: Monday, December 07, 2009	Sheet 3 of 33	



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MS-7610	
Size: Custom	Document Description: LGA775 - Signal
Rev: 1.0	
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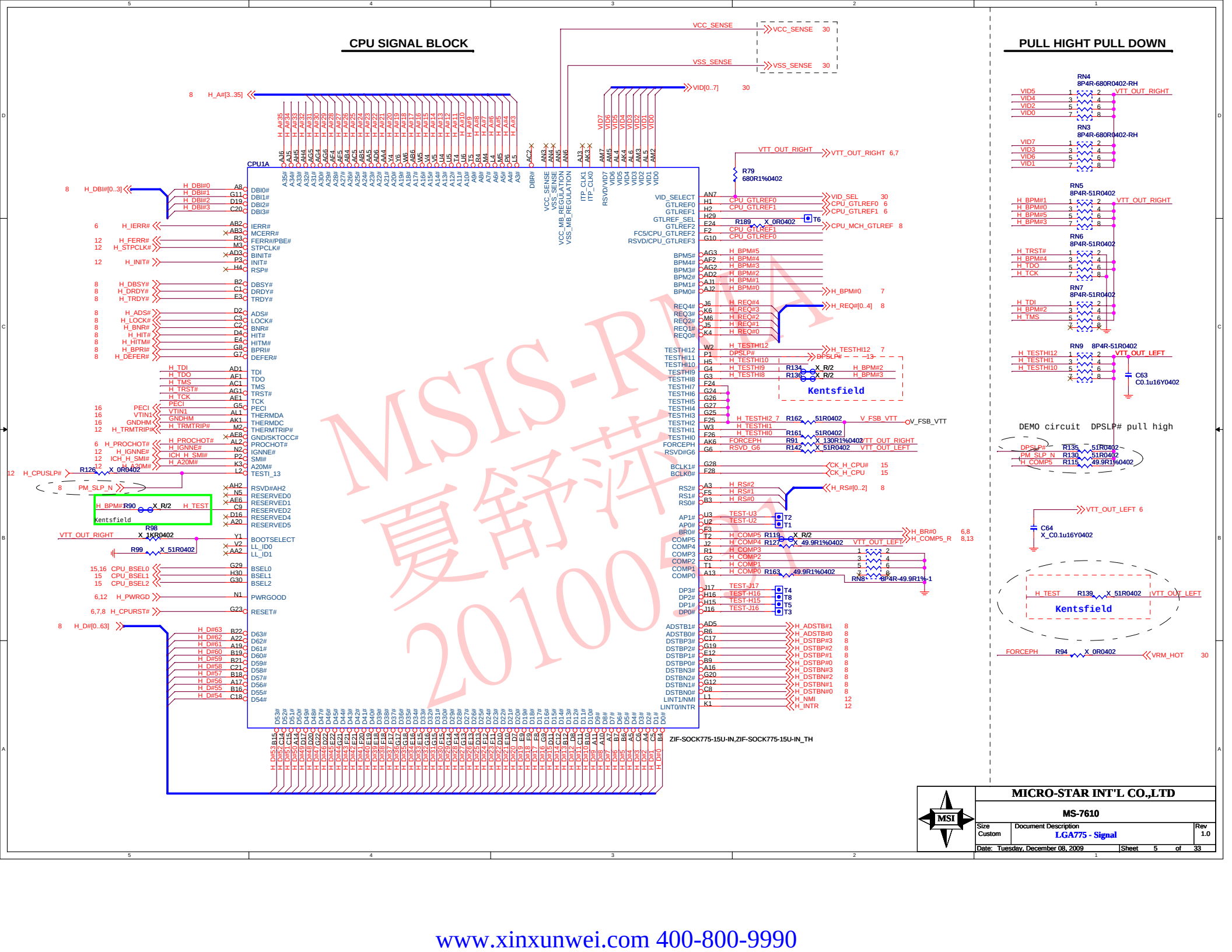
CPU SIGNAL BLOCK
PULL HIGHT PULL DOWN
CPU1A
ZIF-SOCK775-15U-IN,ZIF-SOCK775-15U-IN_TH
Kentsfield
DEMO circuit DPSLP# pull high
MICRO-STAR INT'L CO.,LTD
MS-7610
LGA775 - Signal
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MSIS-RMA
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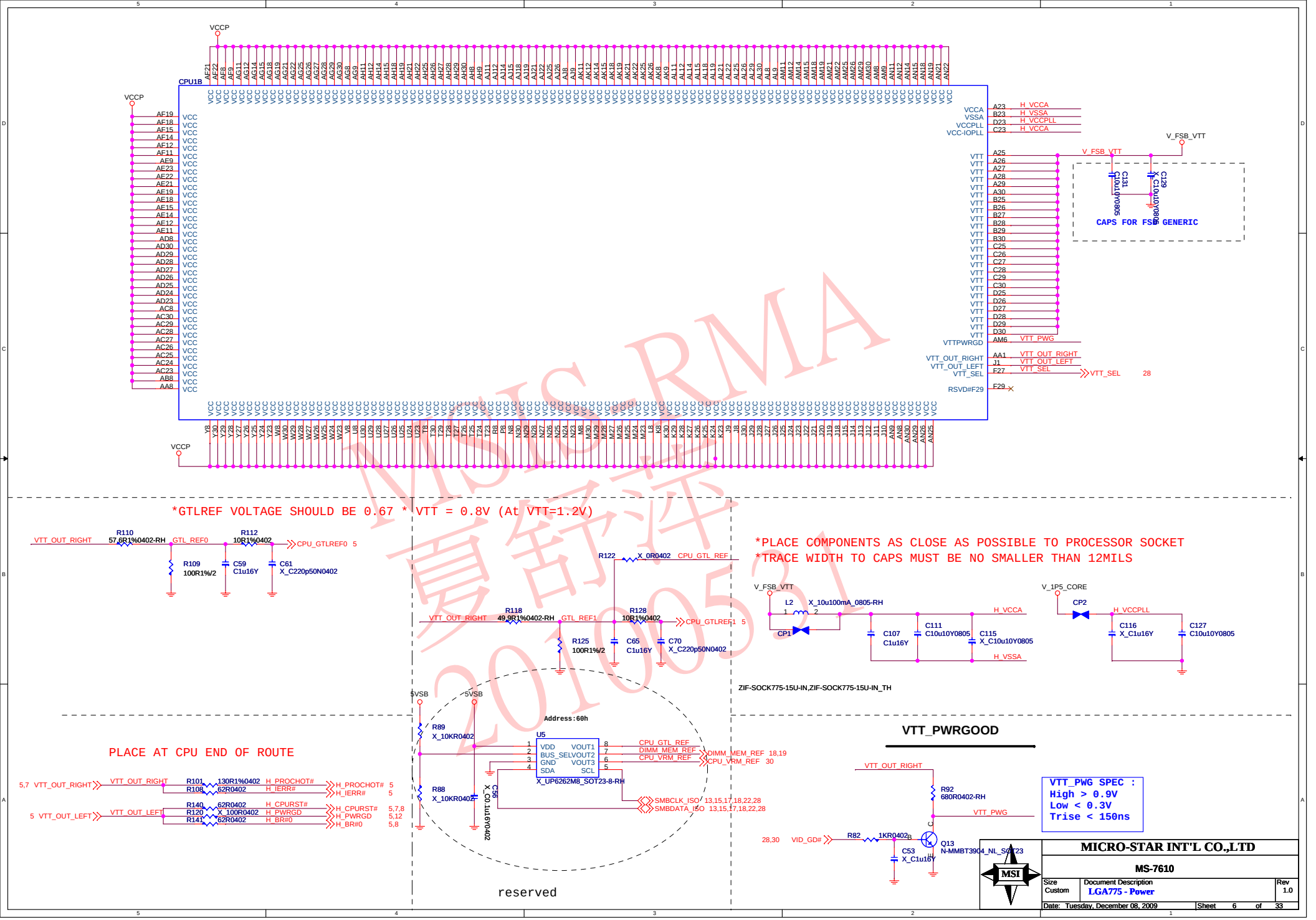

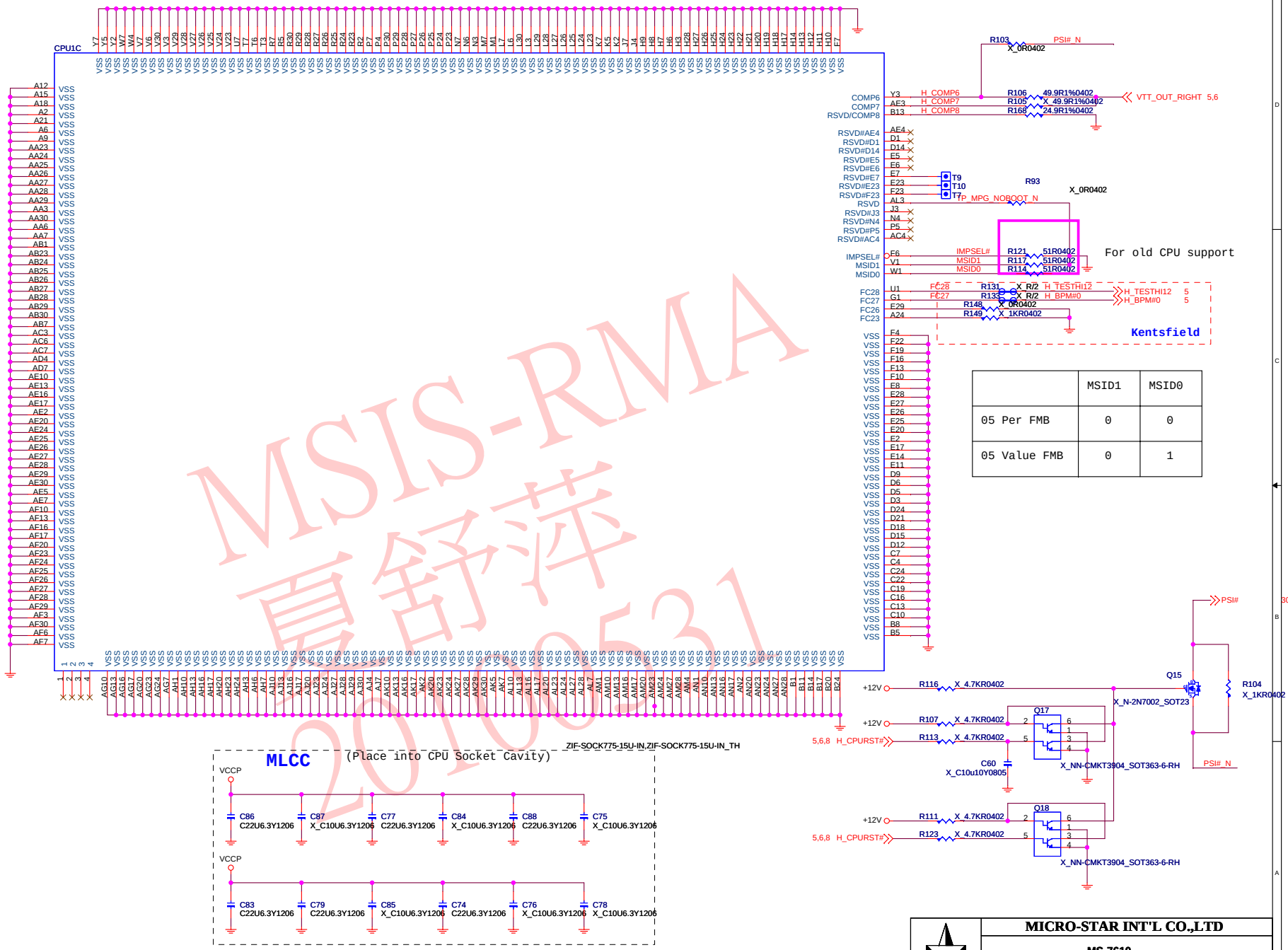

	MSID1	MSID0
05 Per FMB	0	0
05 Value FMB	0	1

MICRO-STAR INT'L CO.,LTD

MS-7610

Size: Custom | Document Description: LGA775 - GND | Rev: 1.0

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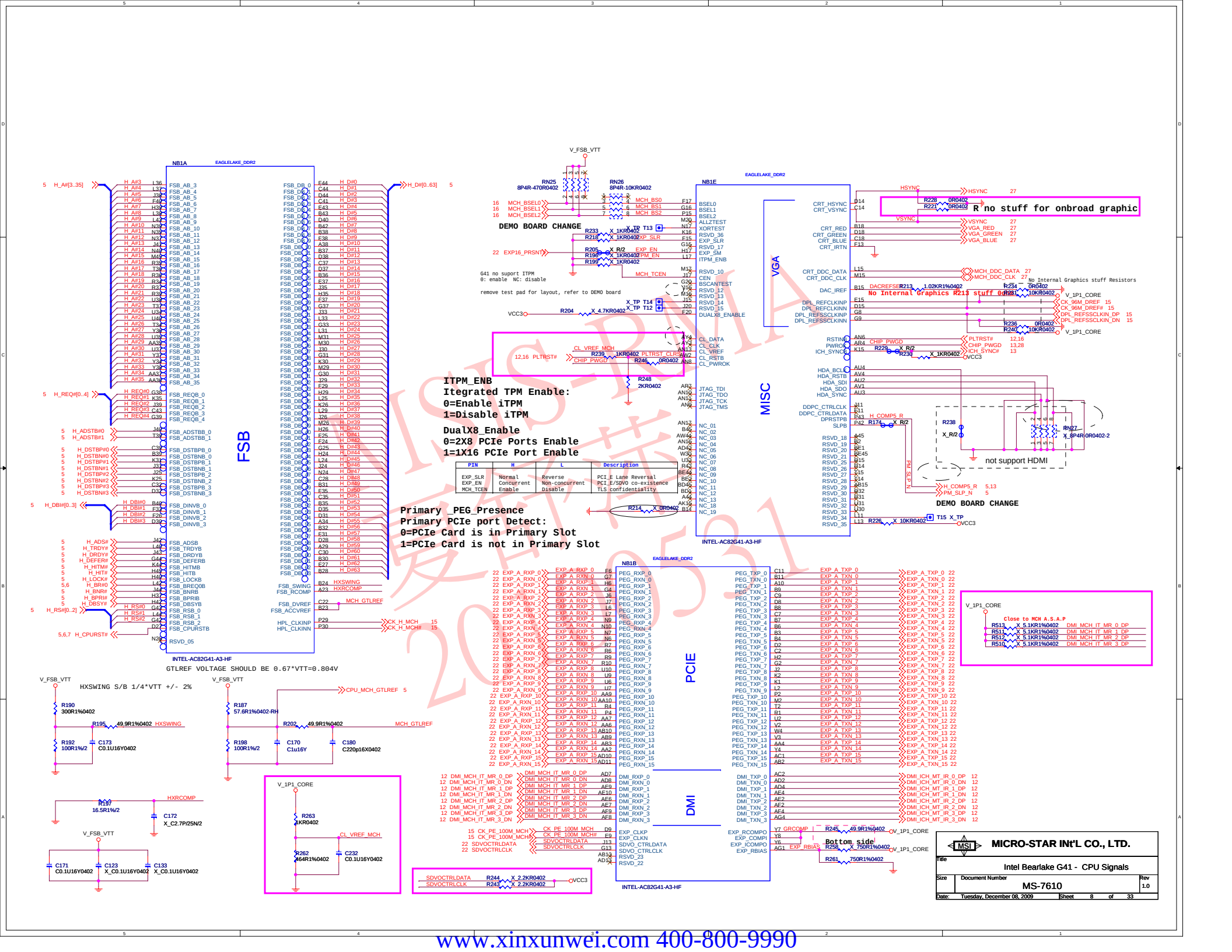

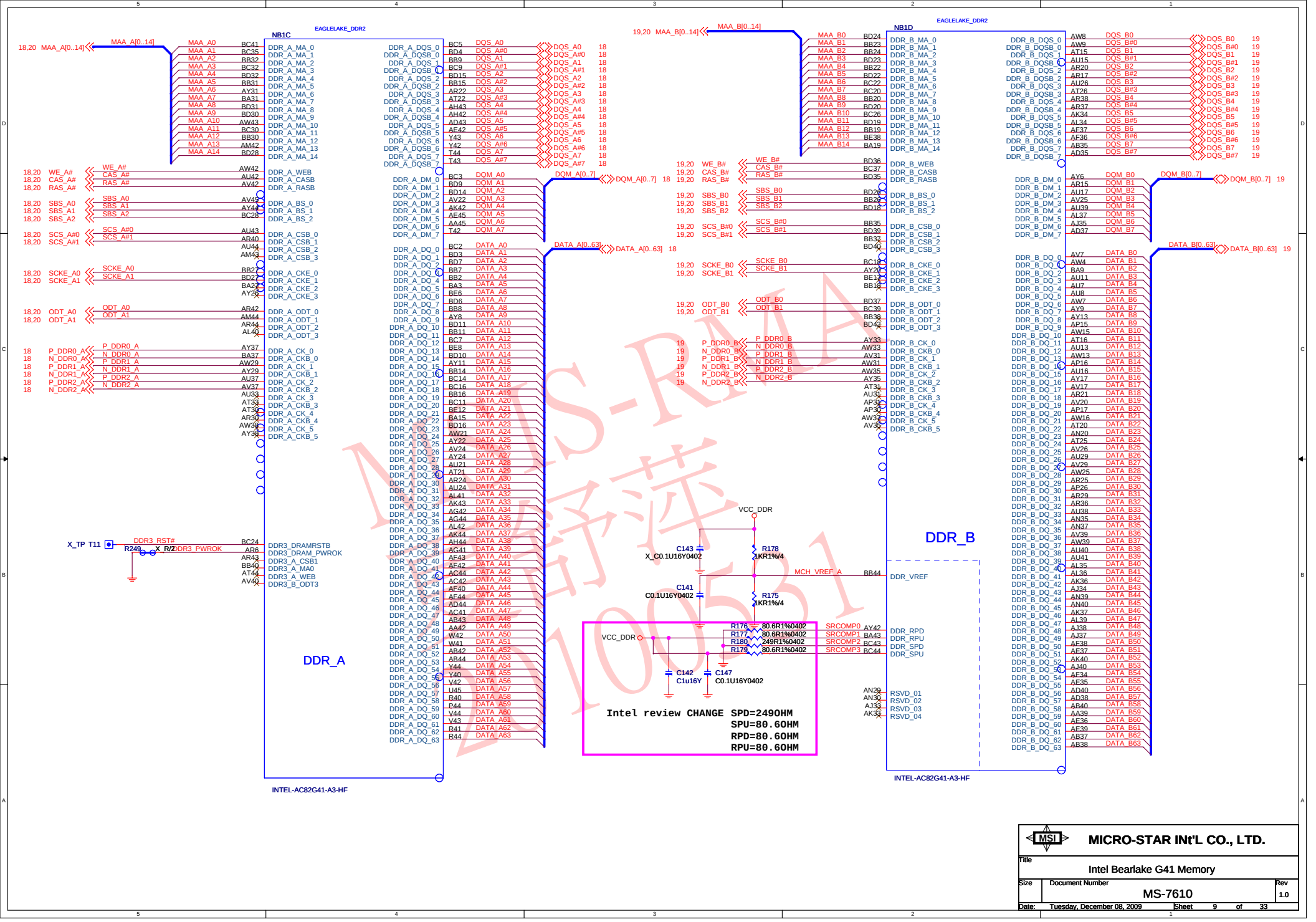

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Title: Intel Bearlake G41 Memory

Size	Document Number	Rev
	MS-7610	1.0

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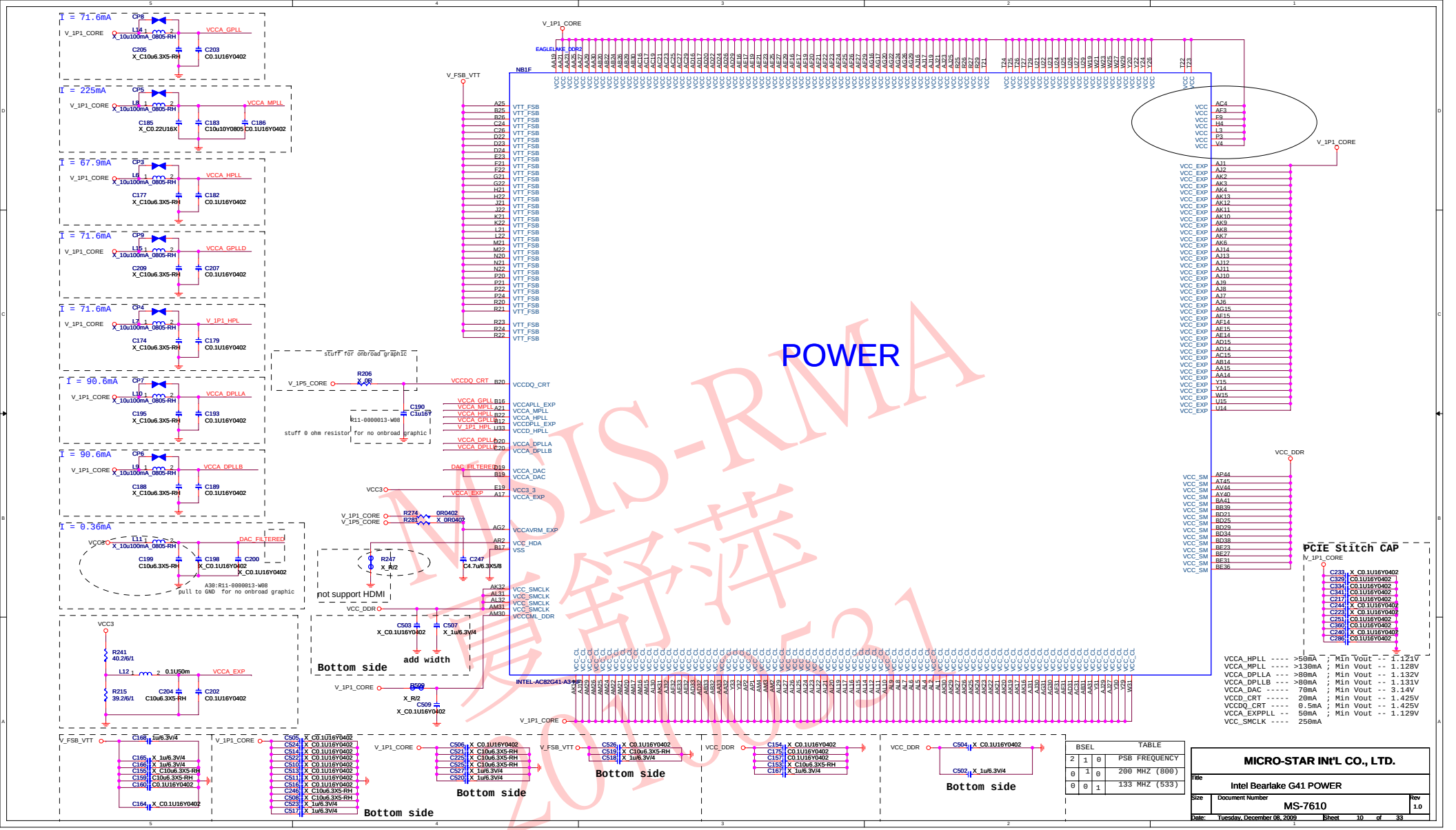
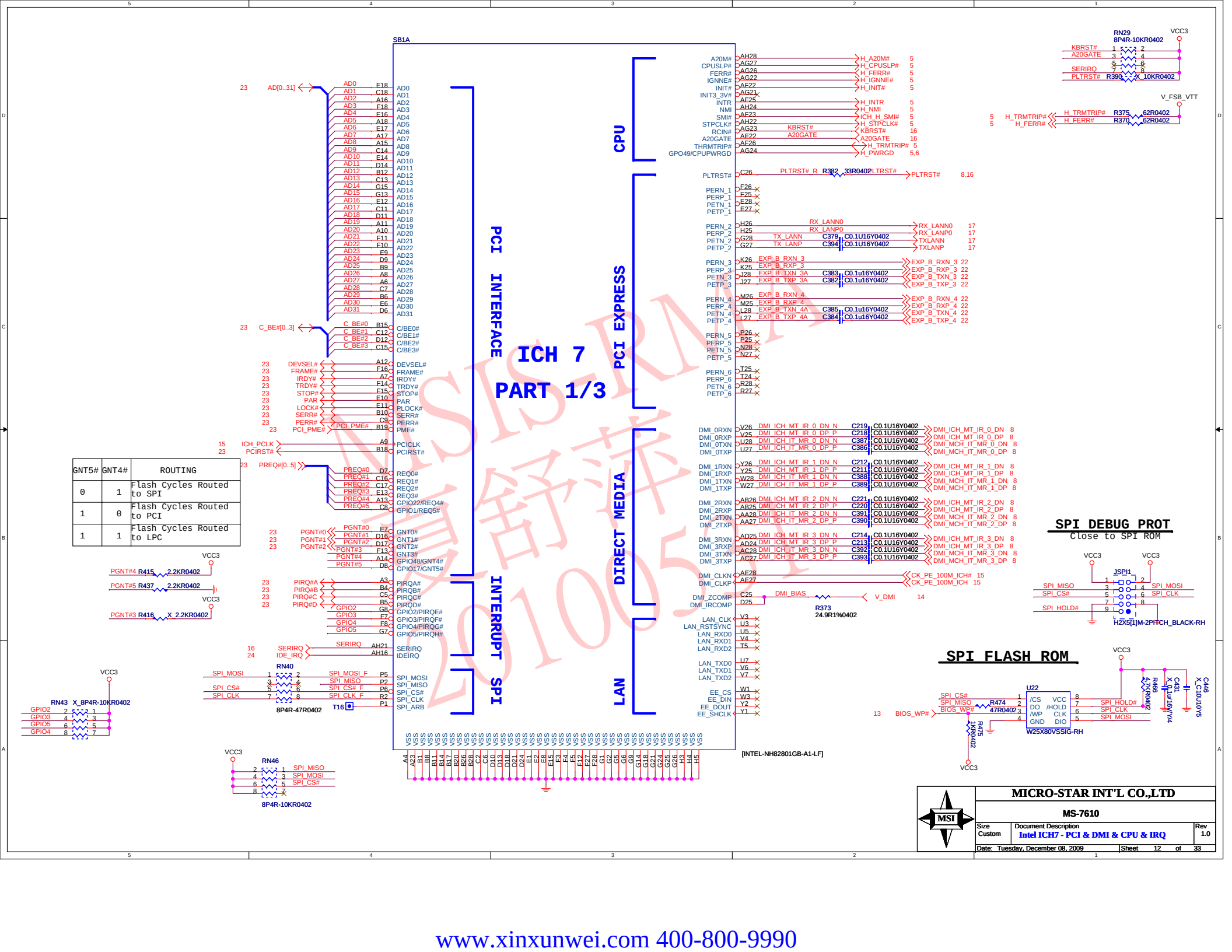


MSI	MICRO-STAR INt'L CO., LTD.		
Title	Intel Bearlake G41 GND		
Size	Document Number	MS-7610	Rev 1.0
Date: Tuesday, December 08, 2009	Sheet 11 of 33		


SB1A
ICH 7
PART 1/3
PCI INTERFACE
INTERRUPT SPI
CPU
PCI EXPRESS
DIRECT MEDIA
LAN
GNT5# GNT4# ROUTING
0 1 Flash Cycles Routed to SPI
1 0 Flash Cycles Routed to PCI
1 1 Flash Cycles Routed to LPC
SPI DEBUG PROT
Close to SPI ROM
SPI FLASH ROM
MICRO-STAR INT'L CO.,LTD
MS-7610
Intel ICH7 - PCI & DMI & CPU & IRQ
Rev 1.0
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[INTEL-NH82801GB-A1-LF]
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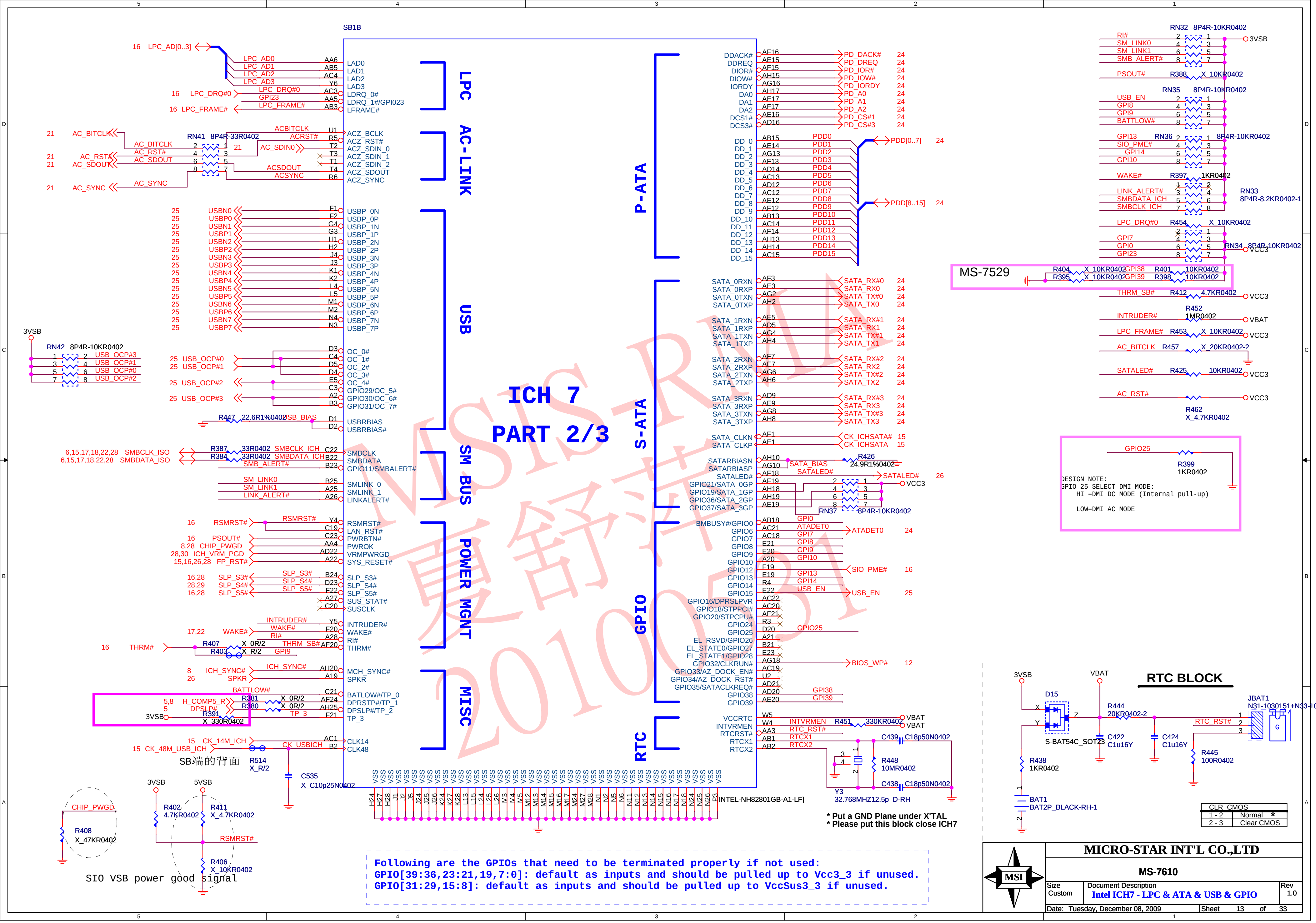

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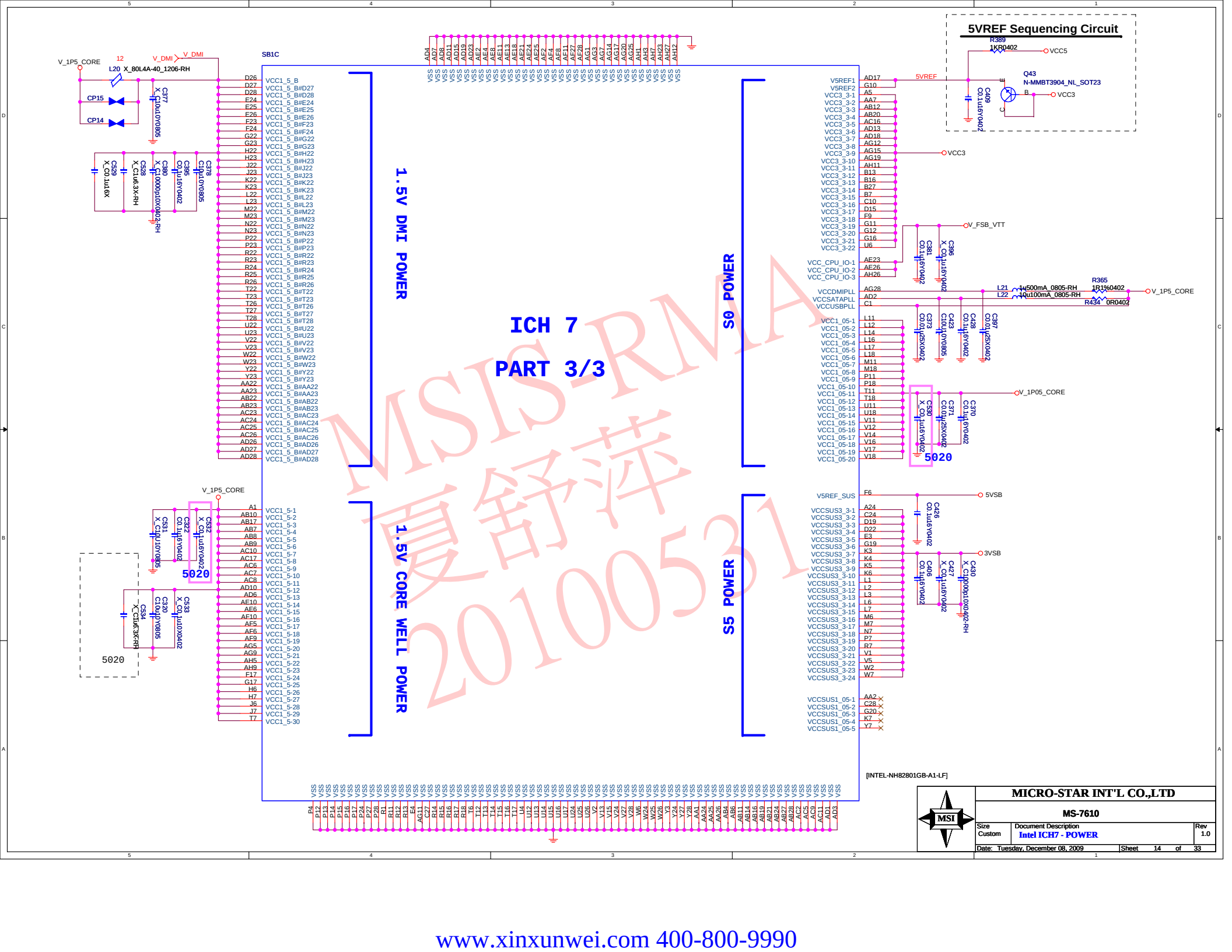

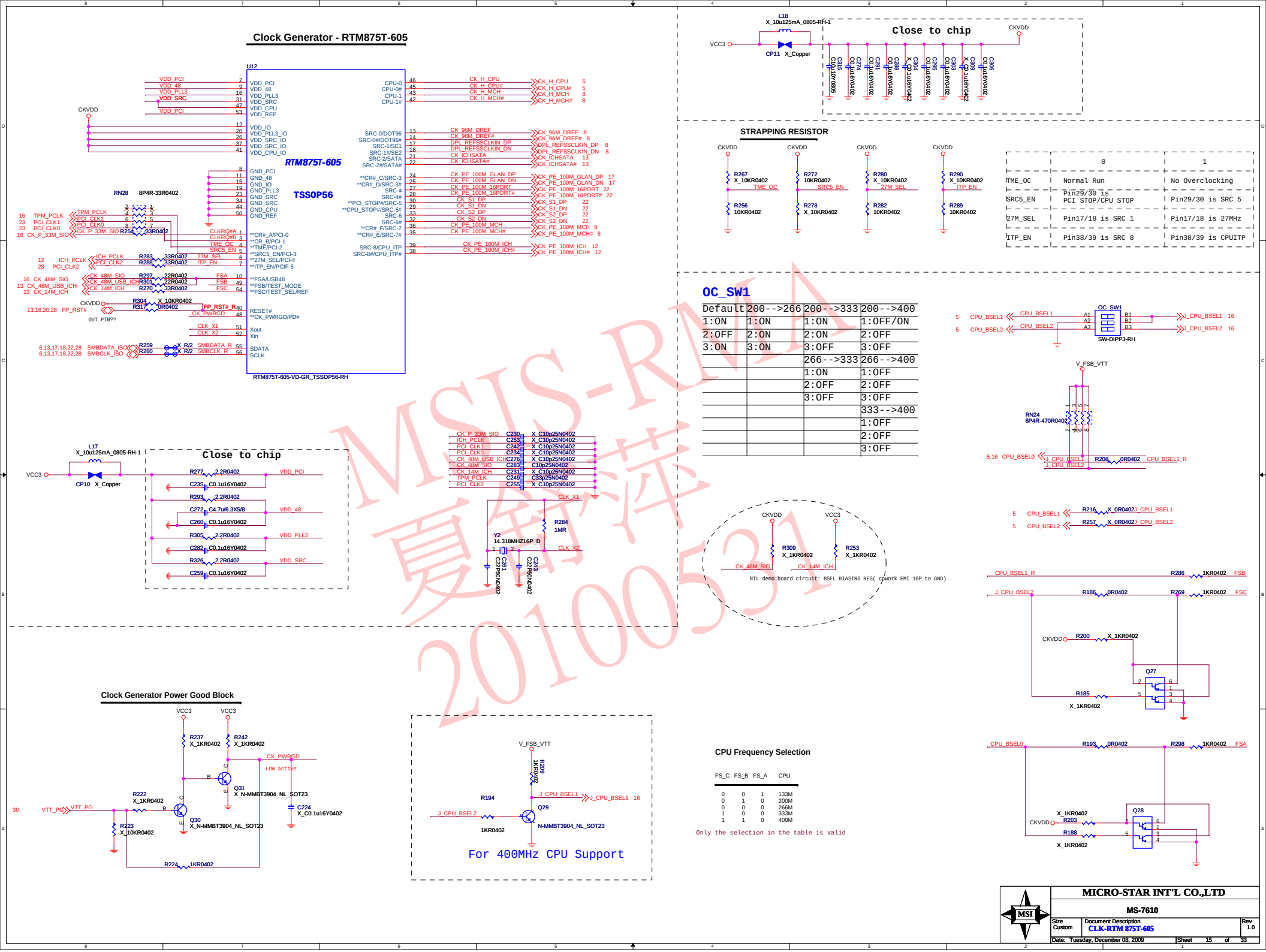

	0	1
ITME_OC	Normal Run	No Overclocking
SRC5_EN	Pin29/30 is PCI STOP/CPU STOP	Pin29/30 is SRC 5
27M_SEL	Pin17/18 is SRC 1	Pin17/18 is 27MHz
ITP_EN	Pin38/39 is SRC 8	Pin38/39 is CPUITP

Default	200-->266	200-->333	200-->400
1:ON	1:ON	1:ON	1:OFF/ON
2:OFF	2:ON	2:ON	2:OFF
3:ON	3:ON	3:OFF	3:OFF
		266-->333	266-->400
		1:ON	1:OFF
		2:OFF	2:OFF
		3:OFF	3:OFF
			333-->400
			1:OFF
			2:OFF
			3:OFF

FS_C	FS_B	FS_A	CPU
0	0	1	133M
0	1	0	200M
0	0	0	266M
1	0	0	333M
1	1	0	400M

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MS-7610		
Size: Custom	Document Description: CLK-RTM 875T-605	Rev: 1.0
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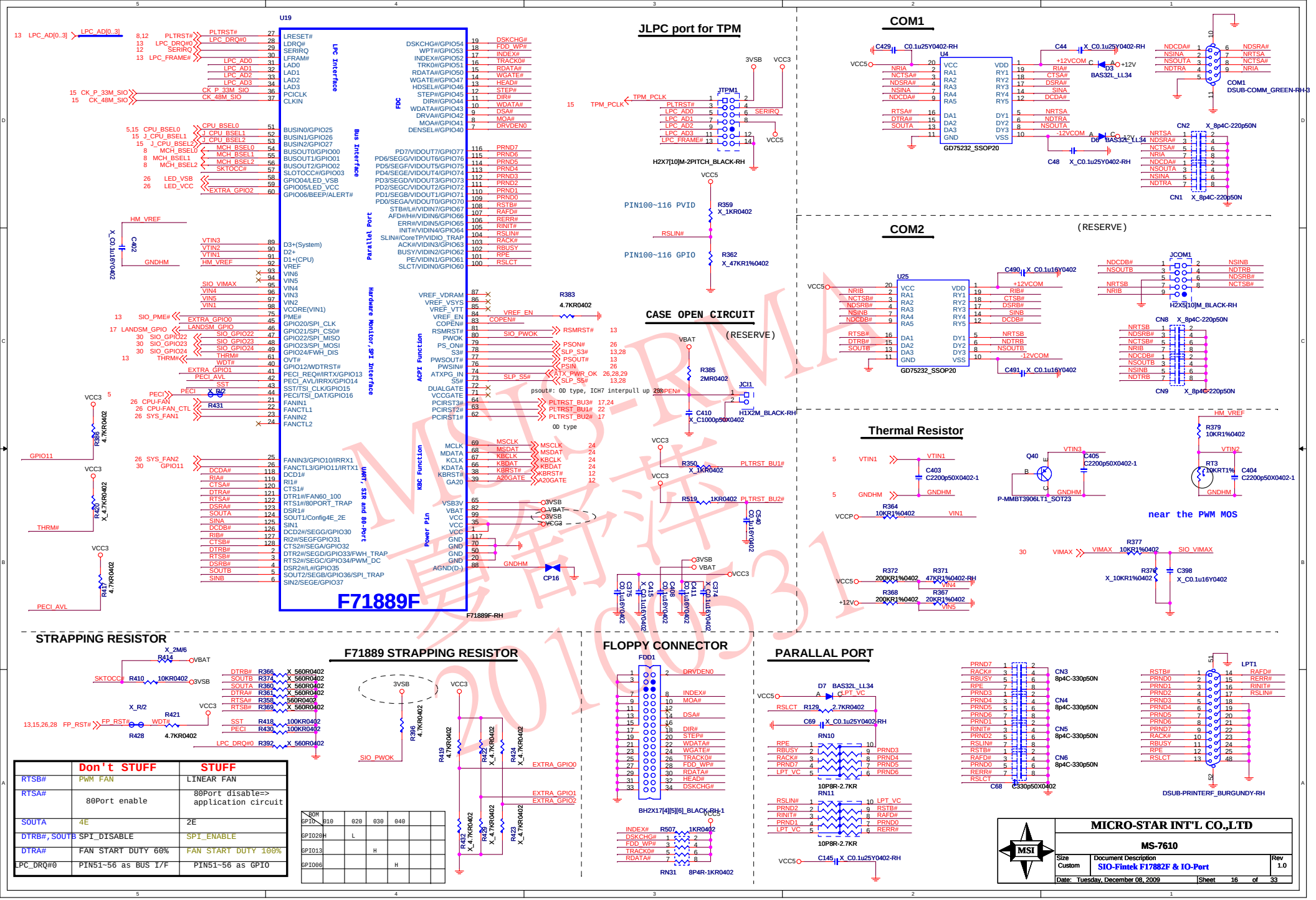
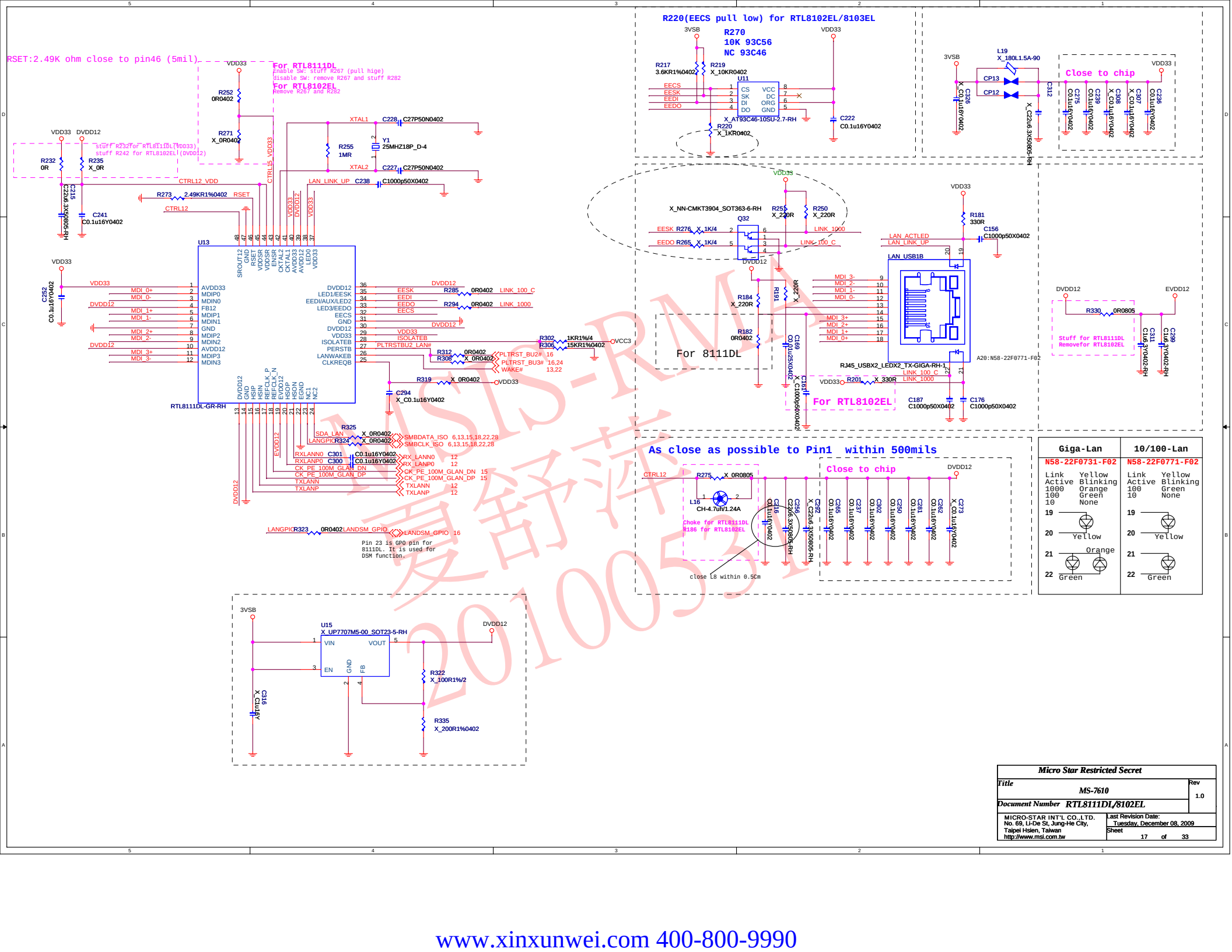
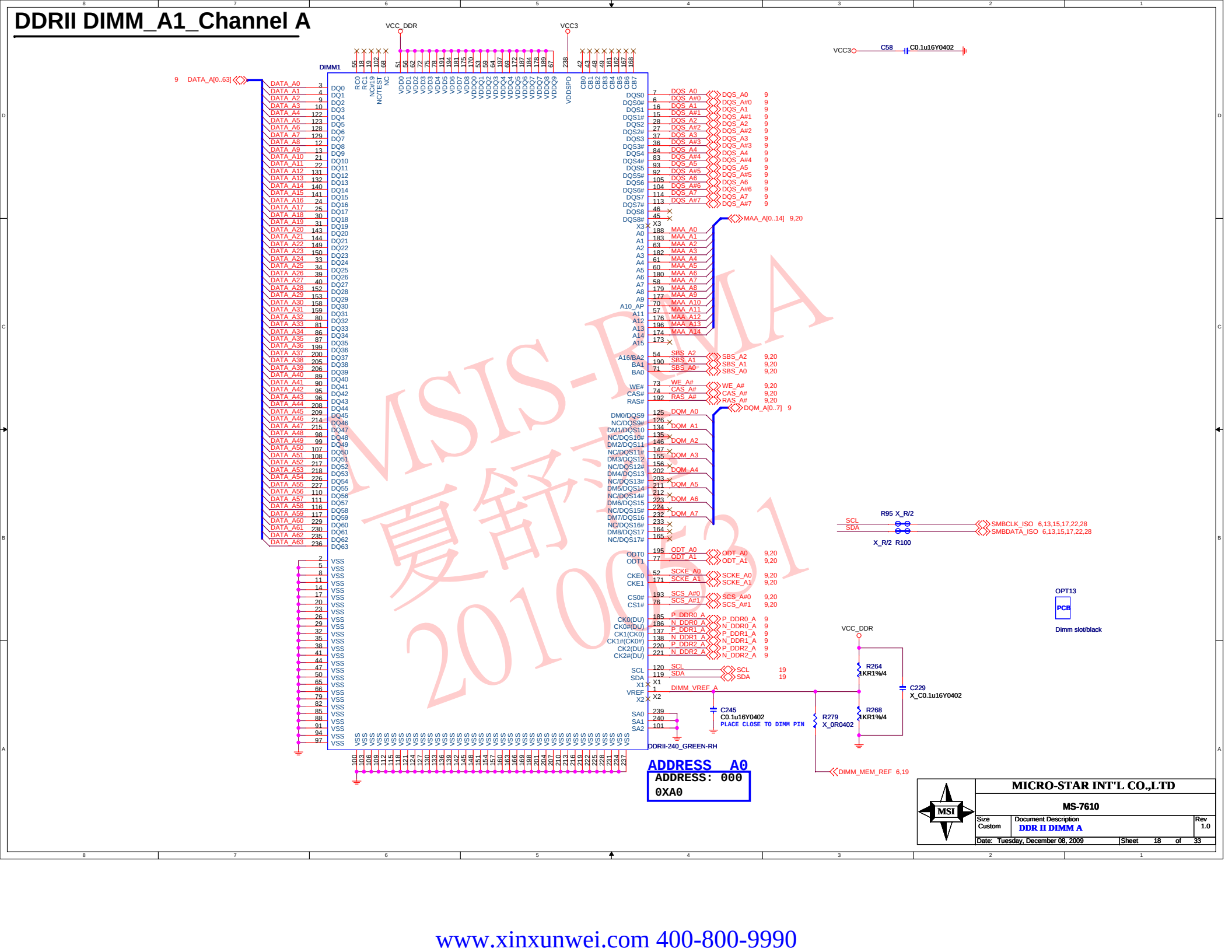


	Don't STUFF	STUFF
RTSB#	PWM FAN	LINEAR FAN
RTSA#	80Port enable	80Port disable=> application circuit
SOUTA	4E	2E
DTRB#,SOUTB	SPI_DISABLE	SPI_ENABLE
DTRA#	FAN START DUTY 60%	FAN START DUTY 100%
LPC_DRQ#0	PIN51~56 as BUS I/F	PIN51~56 as GPIO



DDRII DIMM_A1_Channel A



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Custom	DDR II DIMM A	1.0

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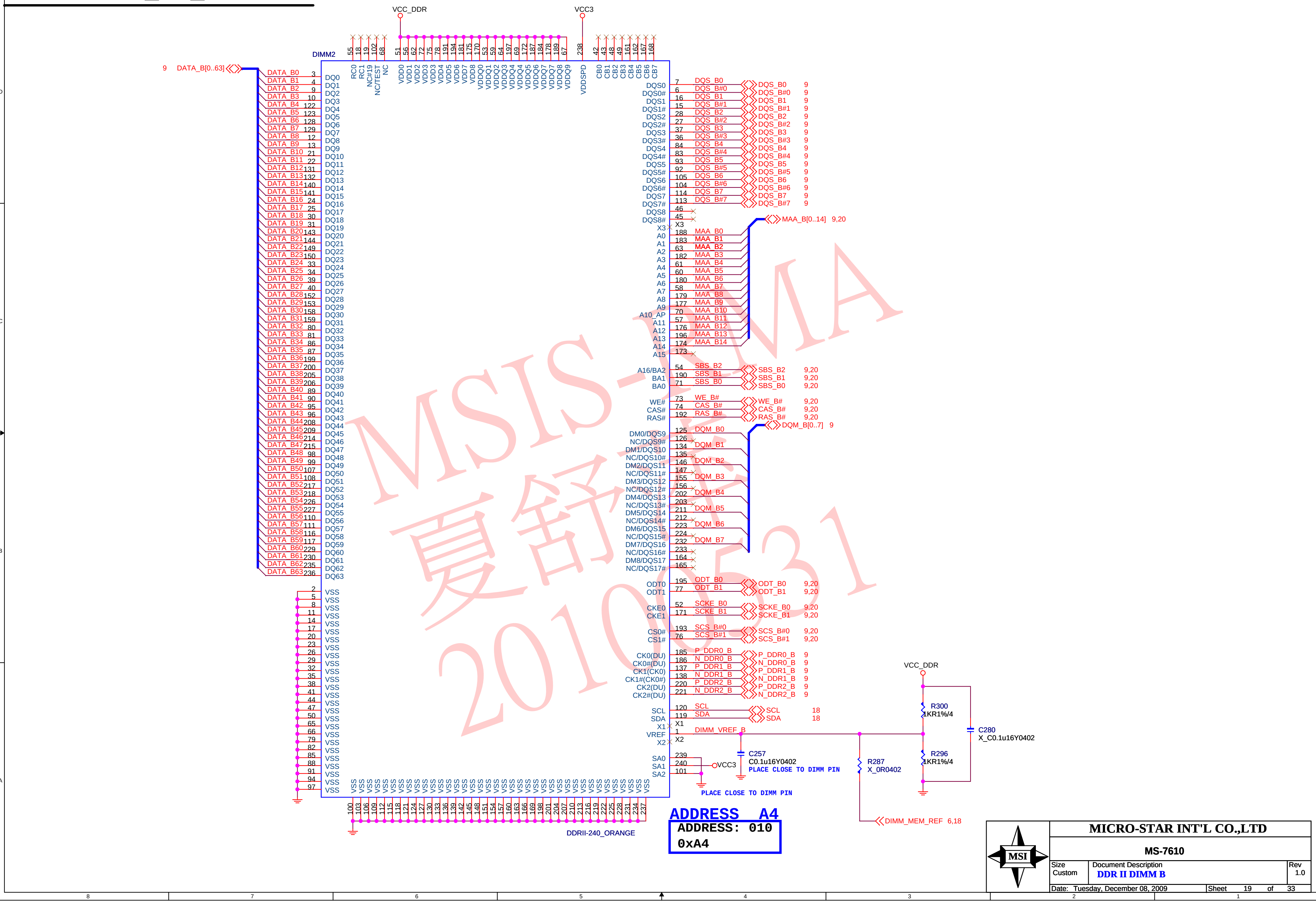
DDRII DIMM_B1_Channel B


VCC_DDR
VCC3
DIMM2
9 DATA_B[0..63]
DATA_B0 … DATA_B63
DQ0 … DQ63
VSS
DQS0 … DQS8#
DQS_B0 … DQS_B#7 9
MAA_B[0..14] 9,20
MAA_B0 … MAA_B14
A0 … A15
A16/BA2 BA1 BA0
SBS_B2 SBS_B1 SBS_B0 9,20
WE# CAS# RAS#
WE_B# CAS_B# RAS_B# 9,20
DQM_B[0..7] 9
DQM_B0 … DQM_B7
ODT0 ODT1
ODT_B0 ODT_B1 9,20
CKE0 CKE1
SCKE_B0 SCKE_B1 9,20
CS0# CS1#
SCS_B#0 SCS_B#1 9,20
P_DDR0_B N_DDR0_B P_DDR1_B N_DDR1_B P_DDR2_B N_DDR2_B 9
SCL SDA 18
DIMM_VREF_B
VREF
SA0 SA1 SA2
VCC3
C257 C0.1u16Y0402
PLACE CLOSE TO DIMM PIN
R287 X_0R0402
R300 1KR1%/4
R296 1KR1%/4
C280 X_C0.1u16Y0402
DIMM_MEM_REF 6,18
PLACE CLOSE TO DIMM PIN
DDRII-240_ORANGE
ADDRESS A4
ADDRESS: 010
0xA4
MSIS-KMA
夏舒宏
20100531
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MS-7610
Size Custom
Document Description DDR II DIMM B
Rev 1.0
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CHANNEL A V_SM_VTT DECOULPING CAPS

VTT_DDR
C92 X_C4.7u6.3X5
C112 X_C4.7u6.3X5

VTT_DDR
C130 X_C0.1u16Y0402
C119 X_C0.1u16Y0402
C101 X_C0.1u16Y0402

VCC_DDR
C139 X_C0.1u16Y0402
C104 X_C0.1u16Y0402

CHANNEL B V_SM_VTT DECOULPING CAPS

VTT_DDR
C135 C4.7u6.3X5

VTT_DDR
C98 X_C0.1u16Y0402
C95 X_C0.1u16Y0402
C126 X_C0.1u16Y0402
C102 X_C0.1u16Y0402

EMI 10/29

VCC_DDR
C122 X_C0.1U16Y0402
C138 X_C0.1U16Y0402
C108 X_C0.1U16Y0402
C93 X_1u/6.3V/4
C97 X_1u/6.3V/4

VTT_DDR

RN18 8P4R-33R0402
MAA_A4 MAA_A3 MAA_A2 MAA_A1 MAA_A7 MAA_A8 MAA_A5 MAA_A6

9,18 SBS_A2
RN20 8P4R-33R0402
SBS_A2 MAA_A12 MAA_A11 MAA_A9

9,18 RAS_A#
9,18 WE_A#
9,18 CAS_A#
RN22 8P4R-33R0402
RAS_A# WE_A# CAS_A# MAA_A13

RN15 8P4R-33R0402
MAA_A14 R164 33R0402

9,18 SBS_A1
RN17 8P4R-33R0402
MAA_A0 SBS_A1 MAA_A10 SBS_A0

9,18 ODT_A1
9,18 SCS_A#1
9,18 ODT_A0
9,18 SCS_A#0
RN13 8P4R-43R0402
ODT_A1 SCS_A#1 ODT_A0 SCS_A#0

9,18 SCKE_A0
9,18 SCKE_A1
SCKE_A0 R167 43R0402
SCKE_A1 R170 43R0402

change RN

9,18 MAA_A[0..14]

VTT_DDR

RN19 8P4R-33R0402
MAA_B4 MAA_B3 MAA_B1 MAA_B2 MAA_B7 MAA_B8 MAA_B6 MAA_B5

9,19 SBS_B2
RN21 8P4R-33R0402
SBS_B2 MAA_B12 MAA_B11 MAA_B9

9,19 RAS_B#
9,19 WE_B#
9,19 CAS_B#
RN23 8P4R-33R0402
RAS_B# WE_B# CAS_B# MAA_B13

RN14 8P4R-33R0402
MAA_B14 R166 33R0402

9,19 SBS_B1
RN16 8P4R-33R0402
MAA_B0 SBS_B1 MAA_B10 SBS_B0

9,19 ODT_B1
9,19 SCS_B#1
9,19 SCS_B#0
9,19 ODT_B0
RN12 8P4R-43R0402
ODT_B1 SCS_B#1 SCS_B#0 ODT_B0

9,19 SCKE_B0
9,19 SCKE_B1
SCKE_B0 R172 43R0402
SCKE_B1 R169 43R0402

change RN

9,19 MAA_B[0..14]

EMI solution(2009/01/14)

12VIN
C43 X_C0.1u16Y0402
C17 X_C0.1u16Y0402

VCC3
C318 X_C0.1u16Y0402
C362 X_C0.1u16Y0402

VCC3
C412 X_C0.1u16Y0402
C457 X_C0.1u16Y0402

+12V
C372 X_C0.1u16Y0402
C366 X_C0.1u16Y0402

3VSB
C485 X_C0.1u16Y0402

VCC5
C464 C0.1u25X

VCC_DDR
C137 X_C0.1u16Y0402
C89 X_C0.1u16Y0402

VCC_DDR
C289 X_1u/6.3V/4
C96 X_1u/6.3V/4
C94 X_1u/6.3V/4
C144 X_1u/6.3V/4
C178 X_1u/6.3V/4
C184 X_1u/6.3V/4

VCC_DDR
C114 1u/6.3V/4
C100 X_1u/6.3V/4
C140 X_1u/6.3V/4
C515 X_1u/6.3V/4
C162 1u/6.3V/4
C109 X_1u/6.3V/4
C208 X_1u/6.3V/4

EMI solution(2009/01/20)

VCC3
C466 X_C0.1u16Y0402

+12V
C465 X_C0.1u16Y0402
C484 X_C0.1u16Y0402
C413 X_C0.1u16Y0402
C321 X_C0.1u16Y0402
C376 X_C0.1u16Y0402

3VSB
C468 X_C0.1u16Y0402
C368 X_C0.1u16Y0402
C421 X_C0.1u16Y0402
C445 X_C0.1u16Y0402
C467 X_C0.1u16Y0402

VCC5
C134 X_C0.1u25X

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Size: Custom
Document Description: DDR II VTT DECOUPLING
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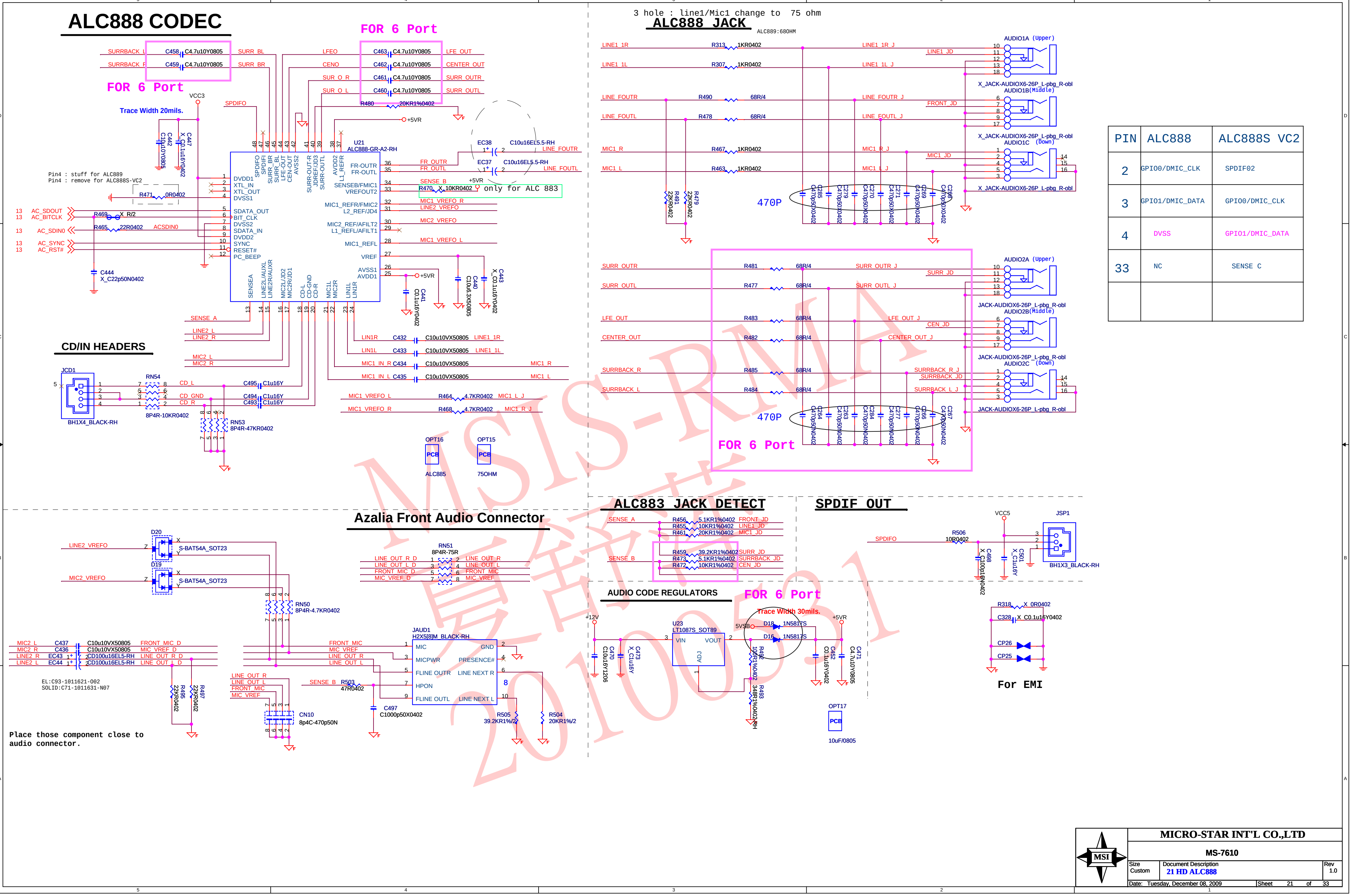
ALC888 CODEC
FOR 6 Port
Trace Width 20mils.
U21
ALC888-GR-A2-RH
Pin4 : stuff for ALC889
Pin4 : remove for ALC888S-VC2
only for ALC 883
3 hole : line1/Mic1 change to 75 ohm
ALC888 JACK
ALC889:680HM
470P
CD/IN HEADERS
JCD1
BH1X4_BLACK-RH
OPT16
PCB
ALC885
OPT15
75OHM
Azalia Front Audio Connector
JAUD1
H2X5[8]M_BLACK-RH
EL:C93-1011621-002
SOLID:C71-1011631-N07
Place those component close to
audio connector.
ALC883 JACK DETECT
SPDIF OUT
JSP1
BH1X3_BLACK-RH
AUDIO CODE REGULATORS
Trace Width 30mils.
U23
LT1087S_SOT89
OPT17
10uF/0805
For EMI
MICRO-STAR INT'L CO.,LTD
MS-7610
Document Description
21 HD ALC888
Rev
1.0
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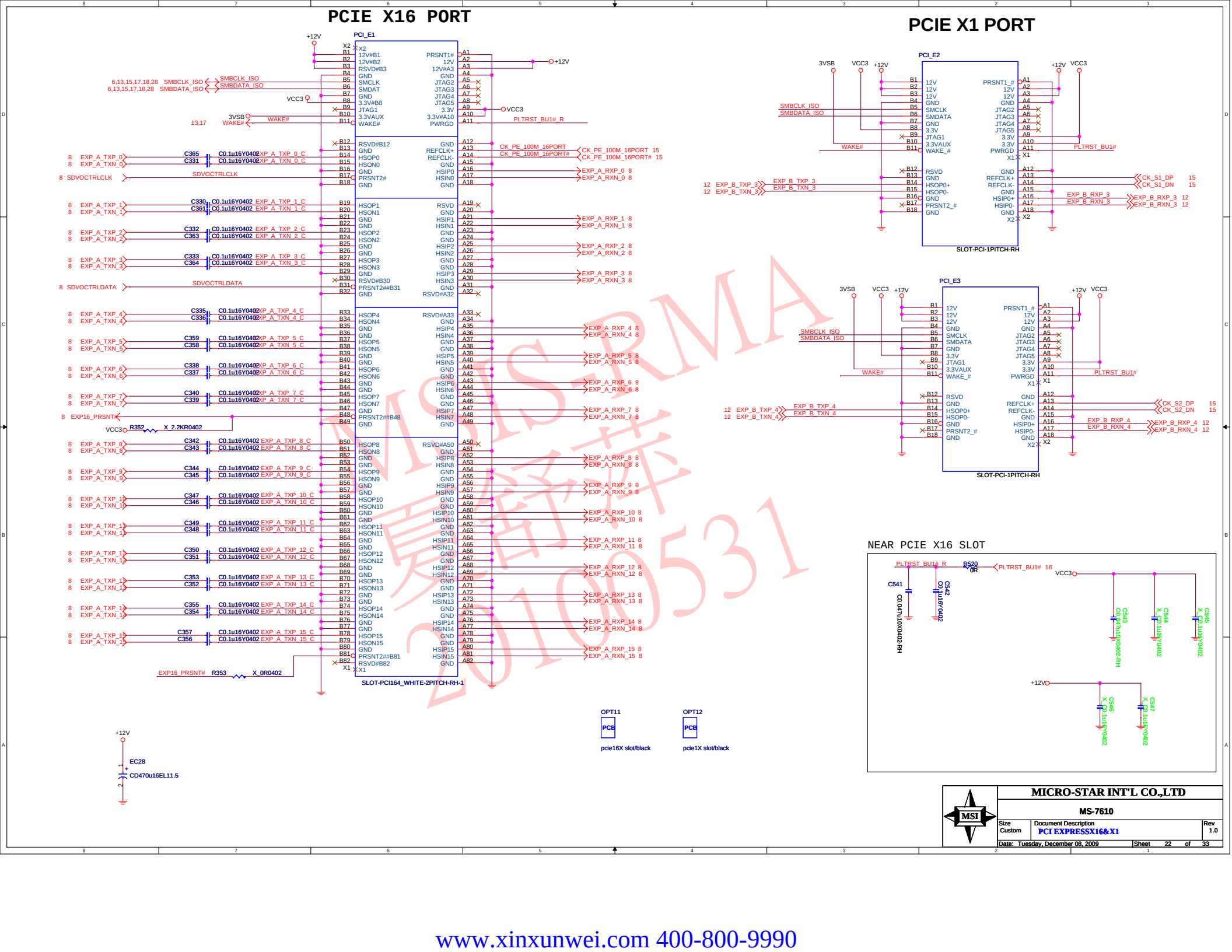
PIN	ALC888	ALC888S VC2
2	GPIO0/DMIC_CLK	SPDIF02
3	GPIO1/DMIC_DATA	GPIO0/DMIC_CLK
4	DVSS	GPIO1/DMIC_DATA
33	NC	SENSE C


PCIE X16 PORT
PCIE X1 PORT
PCI_E1
PCI_E2
PCI_E3
SLOT-PCI164_WHITE-2PITCH-RH-1
SLOT-PCI-1PITCH-RH
NEAR PCIE X16 SLOT
OPT11
PCB
pcie16X slot/black
OPT12
PCB
pcie1X slot/black
MICRO-STAR INT'L CO.,LTD
MS-7610
PCI EXPRESSX16&X1
Rev 1.0
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MSI RMA
20100531
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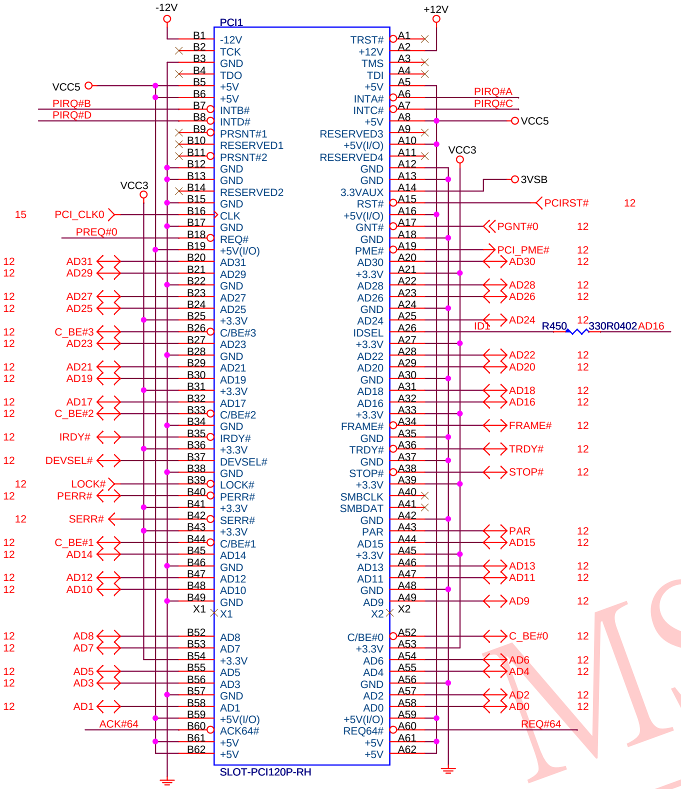
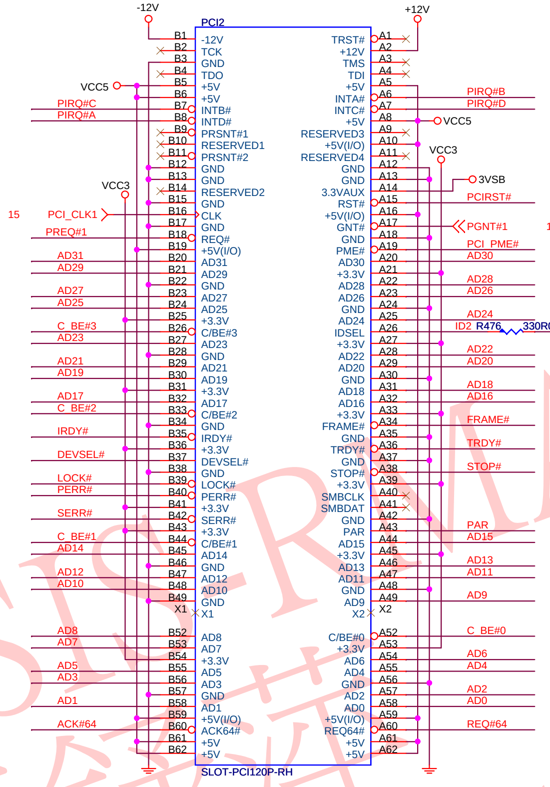
PCI SLOT 1 (PCI VER: 2.2 COMPLY)



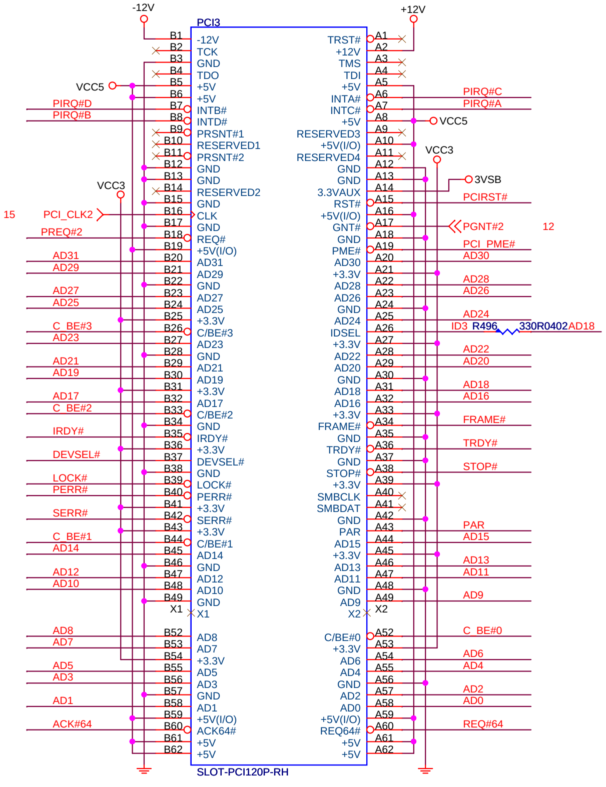
IDSEL = AD16
MASTER = PREQ#0
PIRQ#A

PCI SLOT 2 (PCI VER: 2.2 COMPLY)



IDSEL = AD17
MASTER = PREQ#1
PIRQ#B

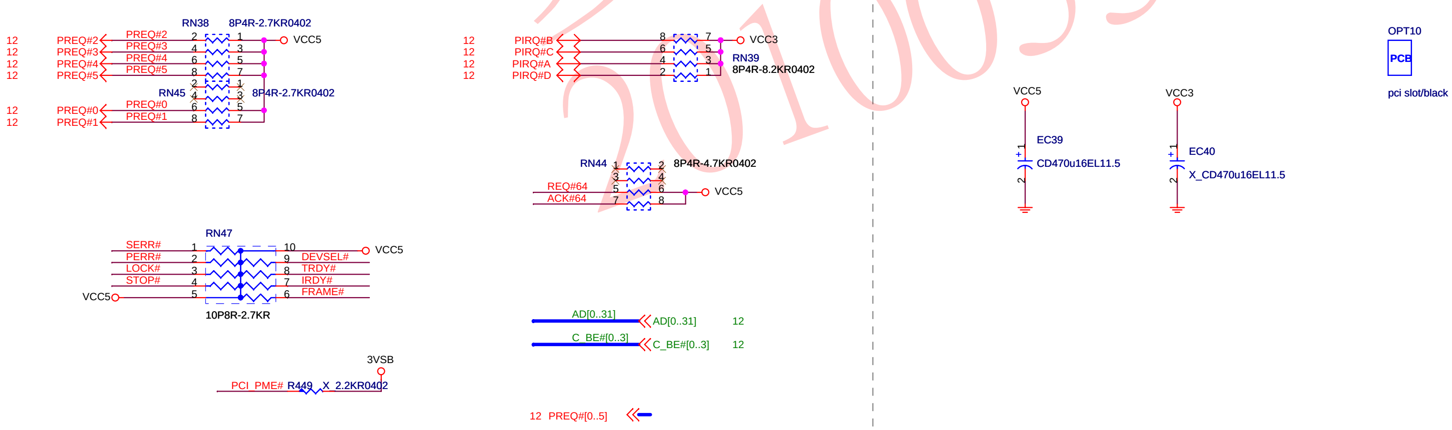
PCI SLOT3 (PCI VER: 2.2 COMPLY)



IDSEL = AD18
MASTER = PREQ#2

PIRQ#C

PCI PULL-UP / DOWN RESISTORS



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MS-7610			
Size: Custom	Document Description: PCI Slot 1 &2		Rev: 1.0
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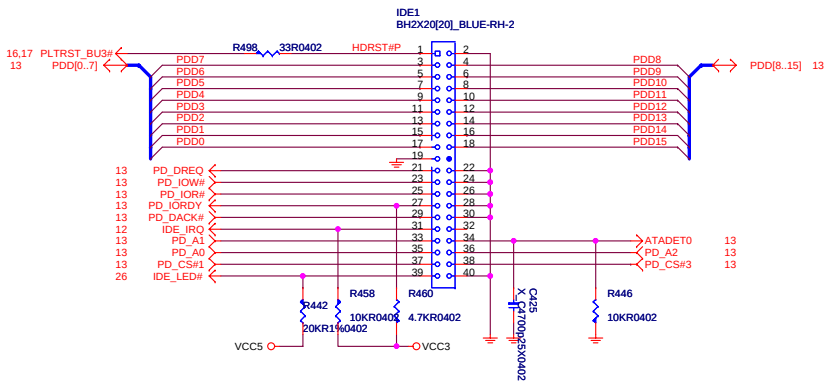
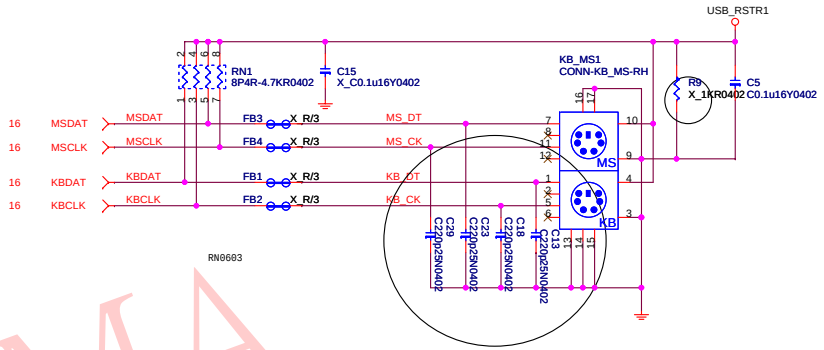
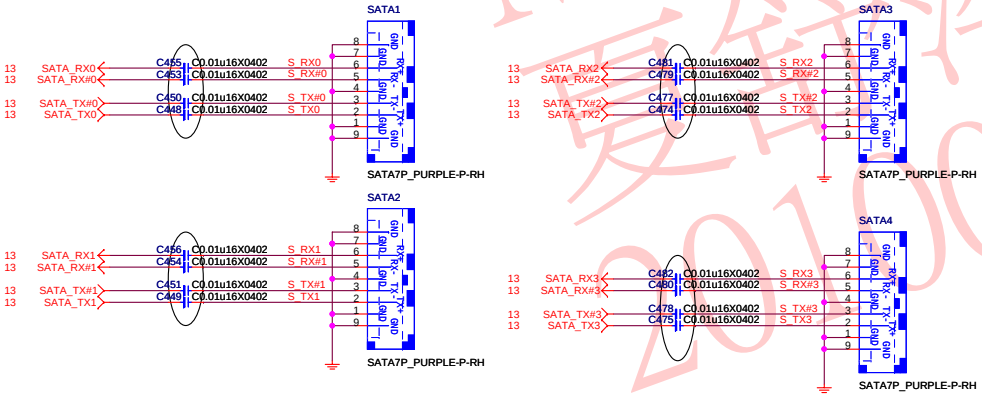
ATA 33/66/100 IDE Connectors



PS2 KEYBOARD & MOUSE CONNECTOR



SERIAL ATA CONNECTOR BLOCK



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Custom	IDE & SATA Connectors	1.0

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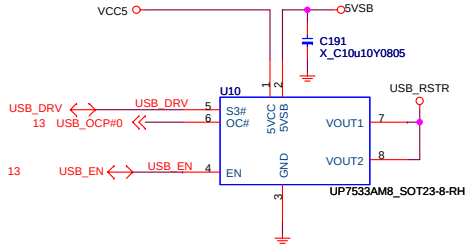
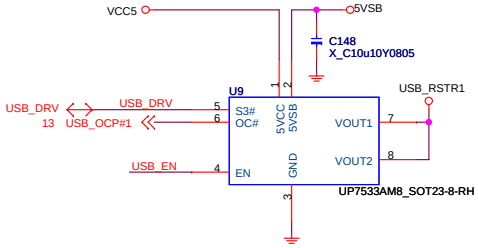
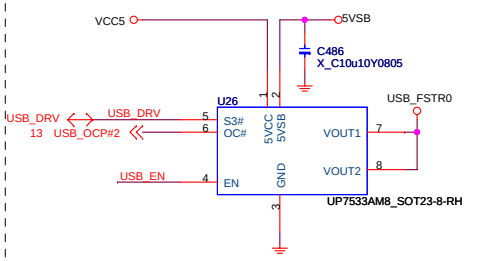
POWER CIRCUIT FOR USB PORT 0,1



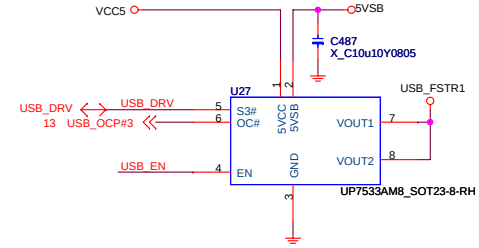
POWER CIRCUIT FOR USB PORT 2,3



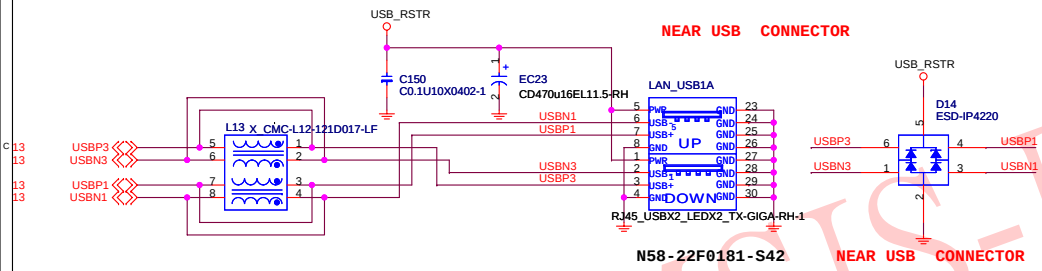
POWER CIRCUIT FOR USB PORT 4,5



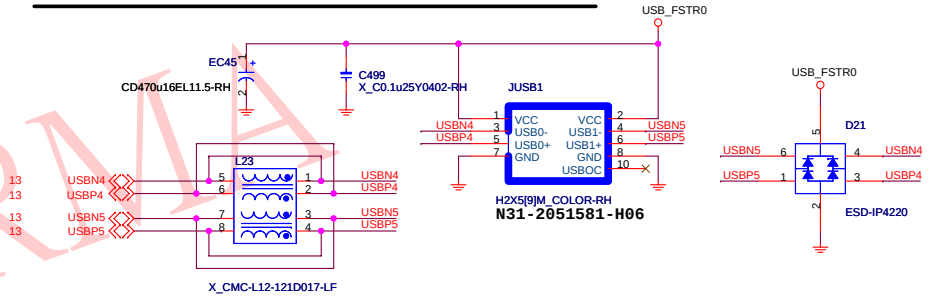
POWER CIRCUIT FOR USB PORT 6,7



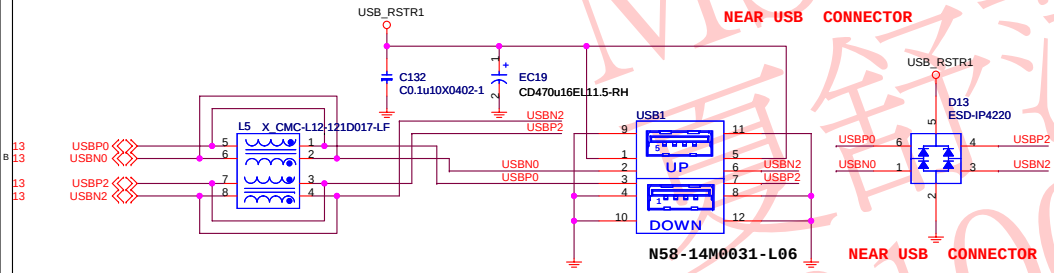
REAR PANEL USB CONNECTOR FOR USB PORT 0,1



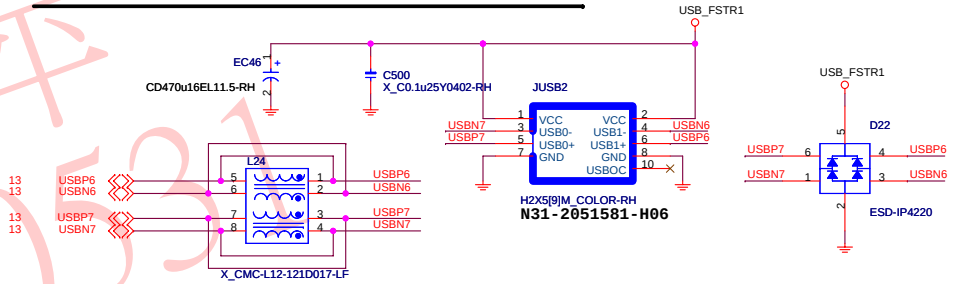
FRONT PANEL USB CONNECTOR FOR USB PORT 4,5



REAR PANEL USB CONNECTOR FOR USB PORT 2,3



FRONT PANEL USB CONNECTOR FOR USB PORT 6,7



MICRO-STAR INT'L CO.,LTD		
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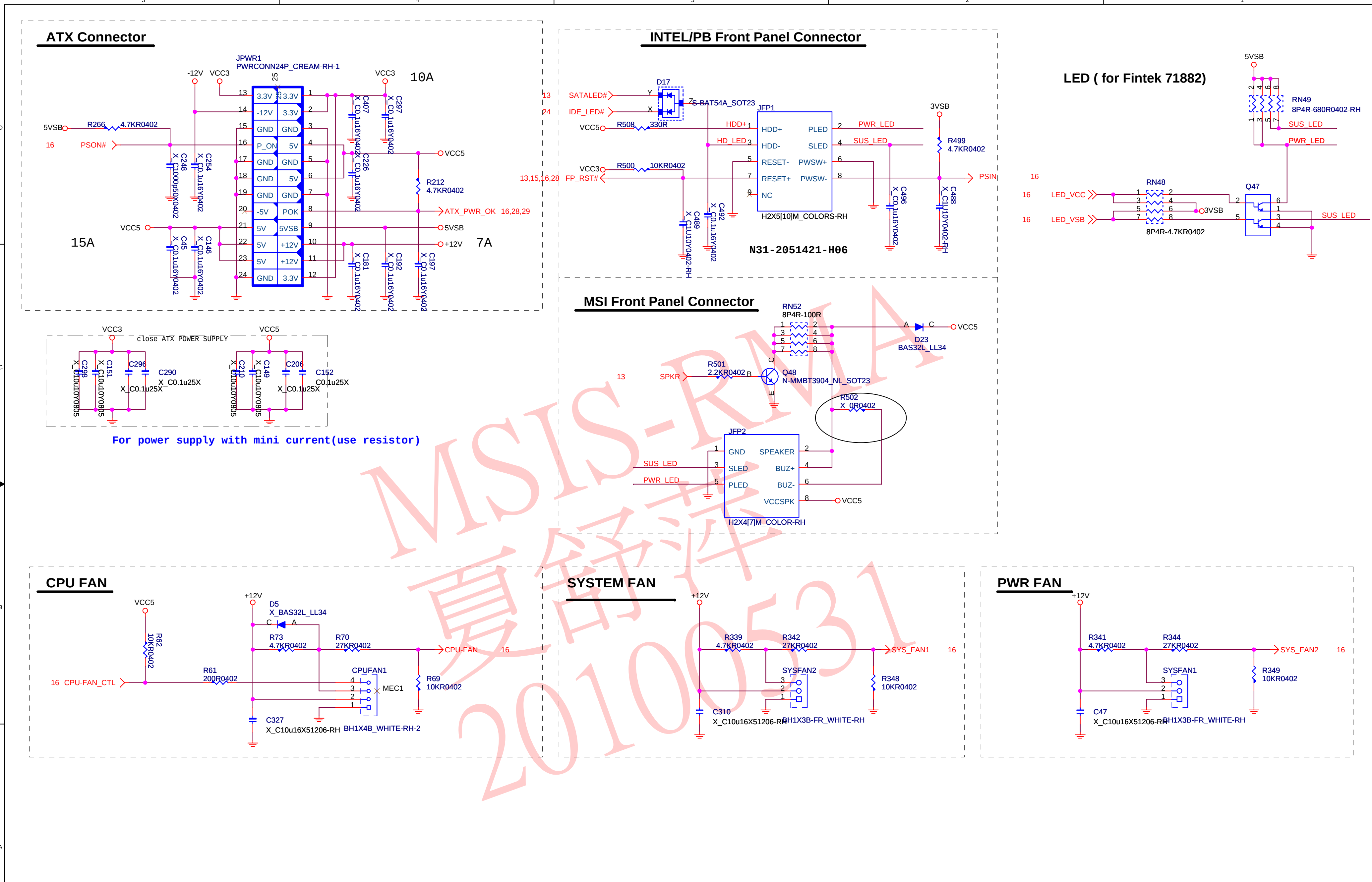
ATX Connector
JPWR1
PWRCONN24P_CREAM-RH-1
10A
15A
7A
close ATX POWER SUPPLY
For power supply with mini current(use resistor)
INTEL/PB Front Panel Connector
JFP1
H2X5[10]M_COLORS-RH
N31-2051421-H06
LED (for Fintek 71882)
MSI Front Panel Connector
JFP2
H2X4[7]M_COLOR-RH
CPU FAN
CPUFAN1
BH1X4B_WHITE-RH-2
SYSTEM FAN
SYSFAN2
BH1X3B-FR_WHITE-RH
PWR FAN
SYSFAN1
BH1X3B-FR_WHITE-RH

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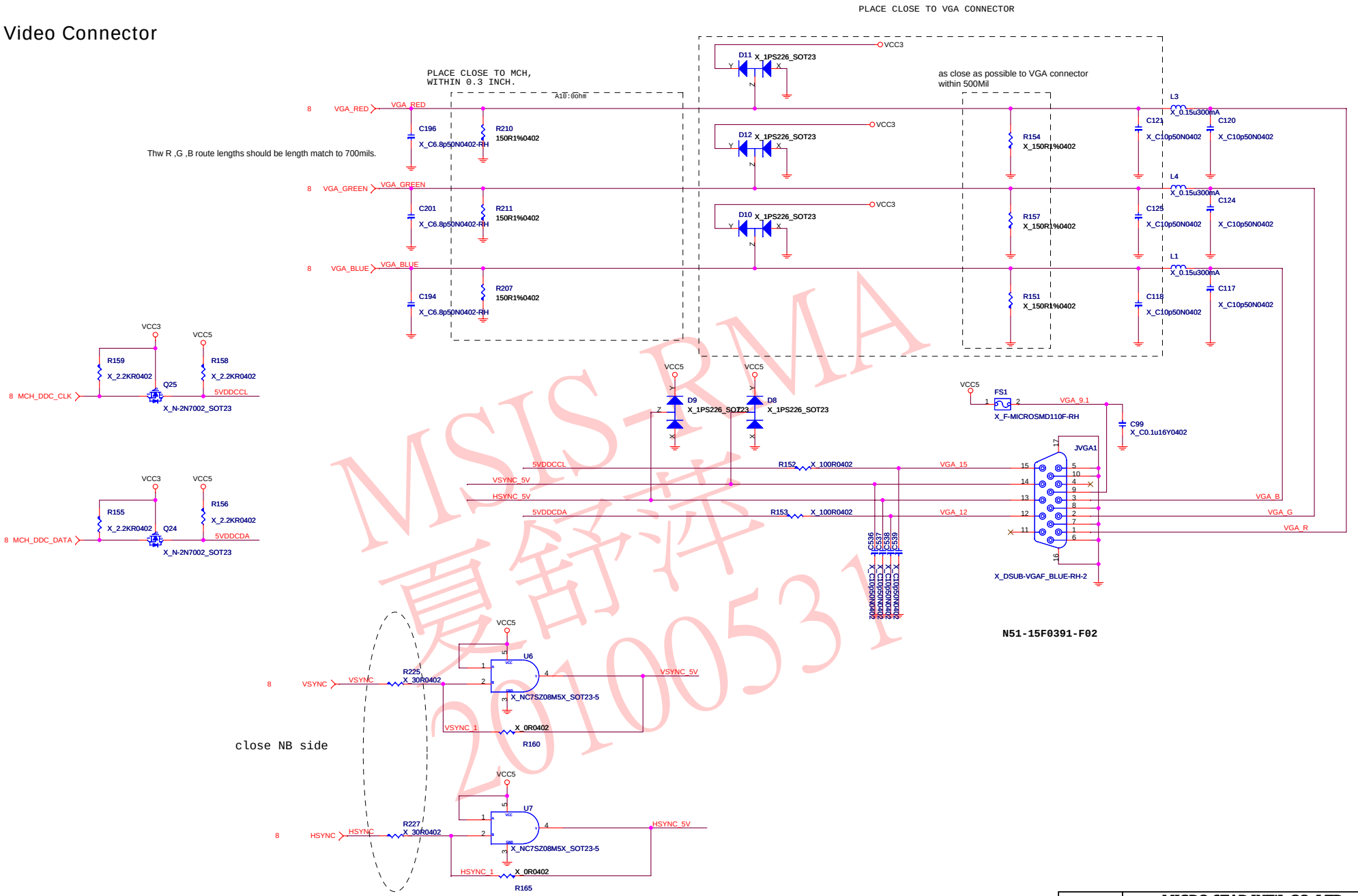
Video Connector



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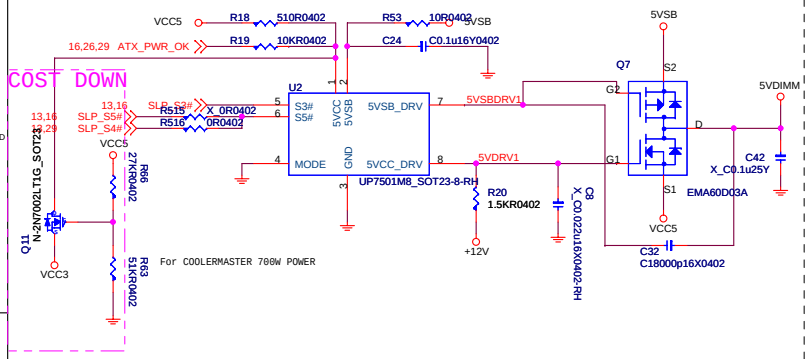
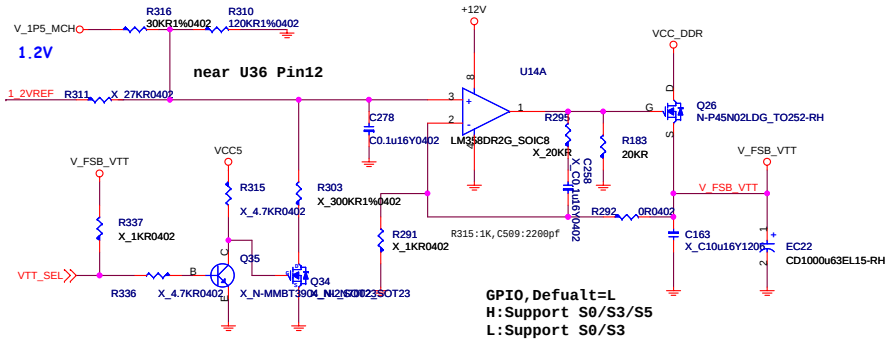
5VDIMM FOR DDR

COST DOWN



1.2V

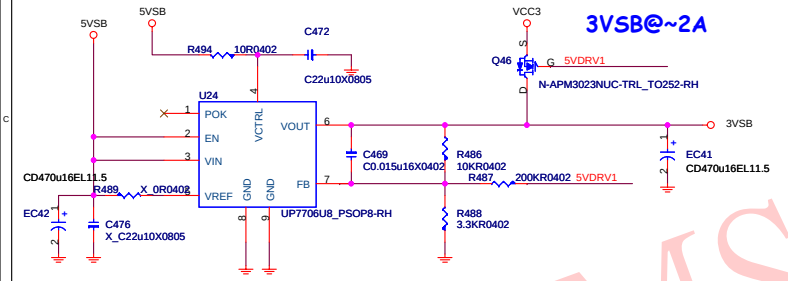
near U36 Pin12



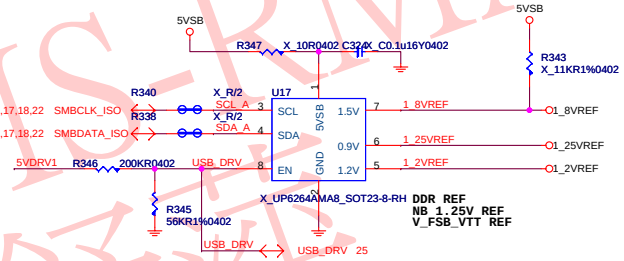
GPIO,Defualt=L
H:Support S0/S3/S5
L:Support S0/S3

VTT_SEL = L	V_FSB_VTT=1.1V	For future KENTSFIELD processor. (FSB1333, Quad-Core)
VTT_SEL = H	V_FSB_VTT=1.2V	For normal processors.

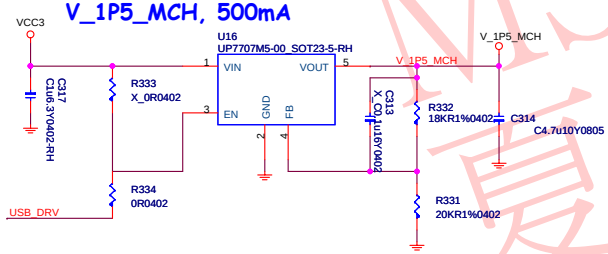
3VSB@~2A

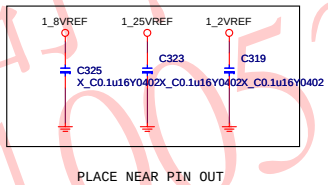


Reference Voltage



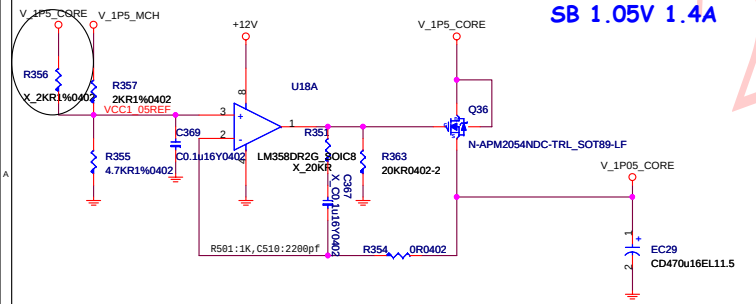
V_1P5_MCH, 500mA

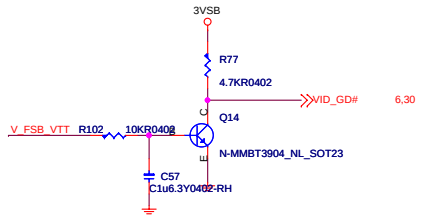


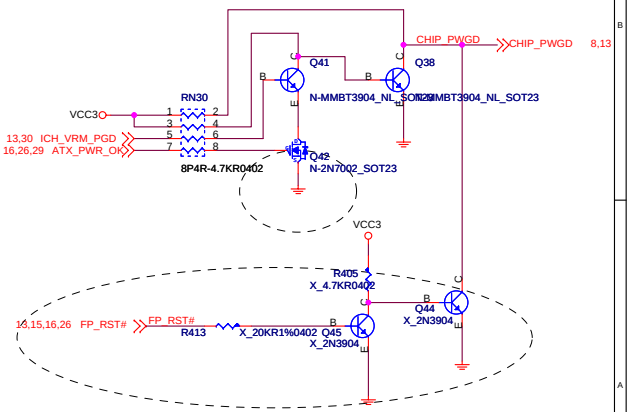


SB 1.05V 1.4A

cost down u7707 UPI







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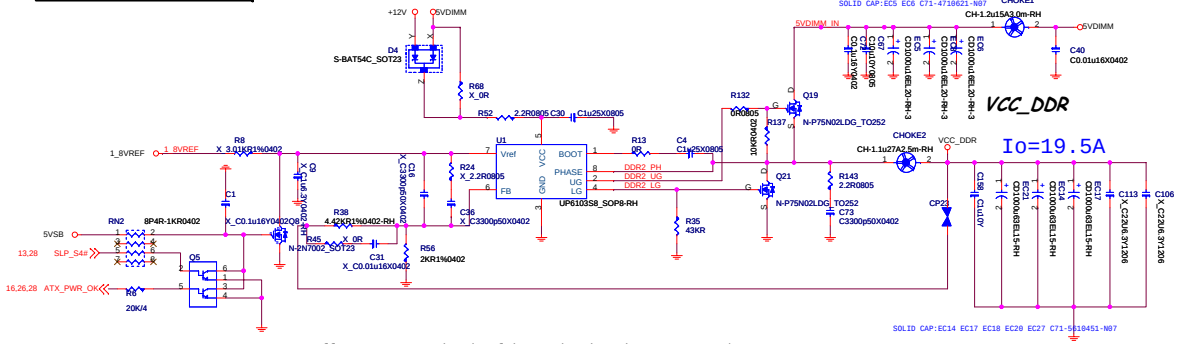
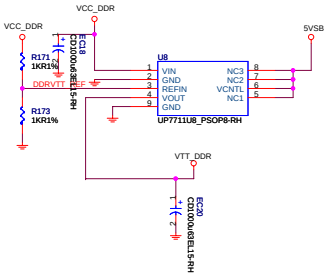
DDR II 1.8V POWER

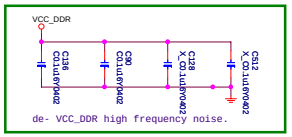


IF stuff UPI6264: use pin7 (Vref is 1.5V), pin 6 is 3.01K &15K ohm

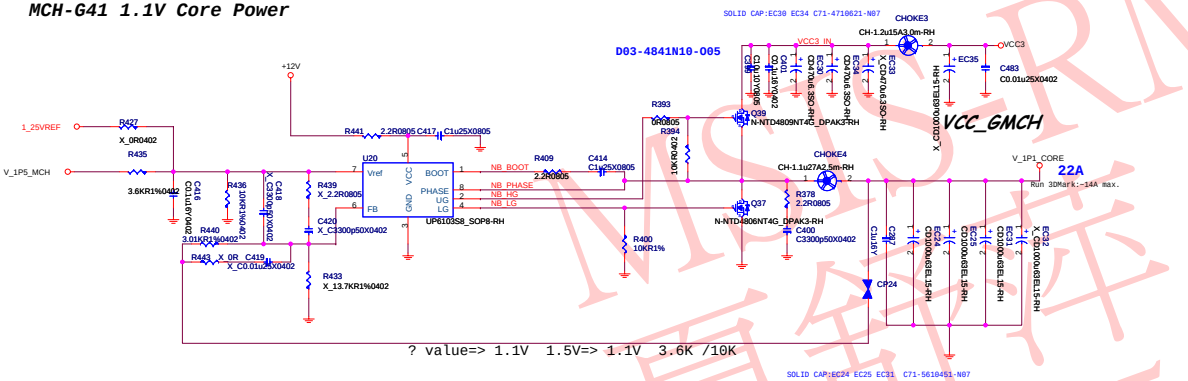
DDR VTT Power

To CPU Copper trace width > 250mils , Fill island behind DIMM > 400mils .





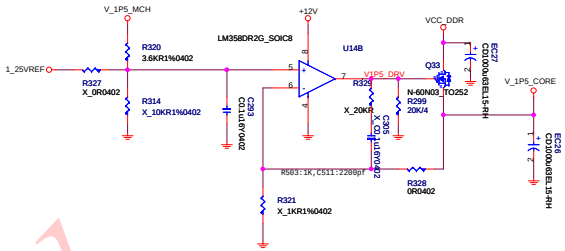
MCH-G41 1.1V Core Power



? value=> 1.1V 1.5V=> 1.1V 3.6K /10K

V_1P5_CORE

SB ~2A@1.5V+1.4A



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	MS-7610	
Size: Custom	Document Description: NB Core Power & DDR Power	Rev: 1.0
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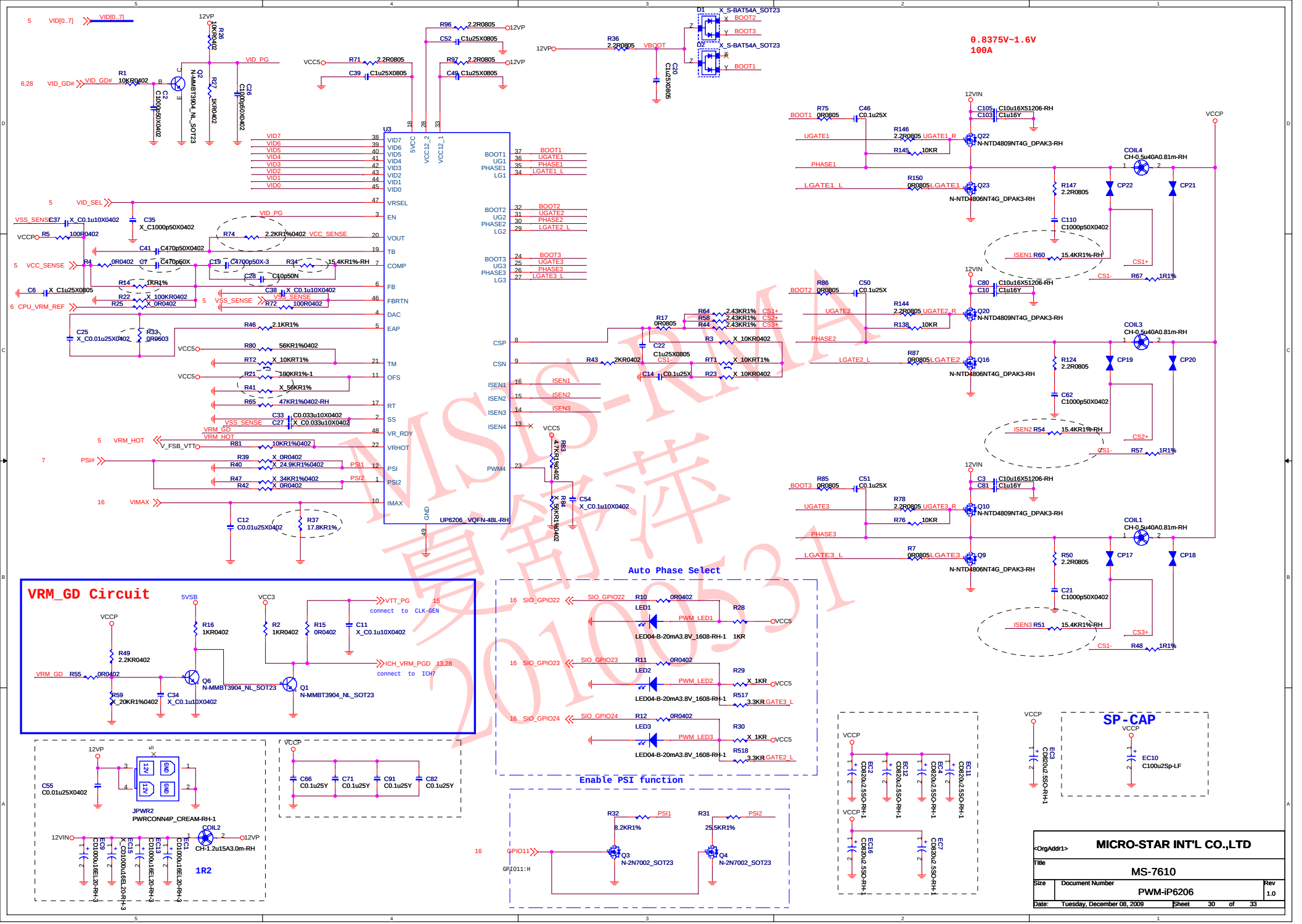
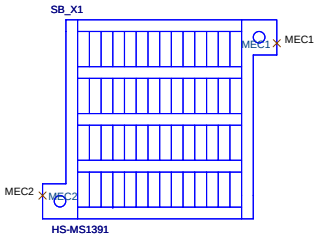
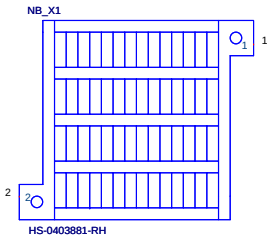


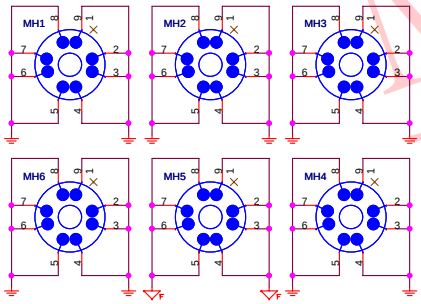
ICH7 HEATSINK



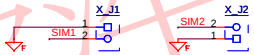
MCH HEATSINK



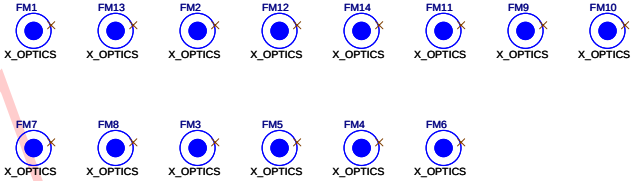
Mounting Holes



Simulation



Optics Orientation Holes



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ICH7

GPIO	Alt Func	PIN	I/O/NC	POWER	PU	SMI	TOL	DEFAULT	SIGNAL NAME
GPIO0	Unmultiplexed	AB18	I/O	CORE	N	Y	3.3V	GPI	GPI0(pull high)
GPIO1	REQ5#	C8	I/O	CORE	N	Y	5V	GPI	PREQ#5
GPIO2	PIRQE#	G8	I/OD	CORE	N	Y	5V	GPI	GPIO2(pull high)
GPIO3	PIRQF#	F7	I/OD	CORE	N	Y	5V	GPI	GPIO3(pull high)
GPIO4	PIRQG#	F8	I/OD	CORE	N	Y	5V	GPI	GPIO4(pull high)
GPIO5	PIRQH#	G7	I/OD	CORE	N	Y	5V	GPI	GPIO5(pull high)
GPIO6	Unmultiplexed	AC21	I/O	CORE	N	Y	3.3V	GPI	ATADET0
GPIO7	Unmultiplexed	AC18	I/O	CORE	N	Y	3.3V	GPI	STRAPPED HI
GPIO8	Unmultiplexed	E21	I/O	Resume	N	Y	3.3V	GPI	STRAPPED HI
GPIO9	Unmultiplexed	E20	I/O	Resume	N	Y	3.3V	GPI	STRAPPED HI
GPIO10	Unmultiplexed	A20	I/O	Resume	N	Y	3.3V	GPI	STRAPPED HI
GPIO11	SMBALERT#	B23	I/O	Resume	N	Y	3.3V	Native	STRAPPED HI
GPIO12	Unmultiplexed	F19	I/O	Resume	N	Y	3.3V	GPI	SIO_PME#
GPIO13	Unmultiplexed	E19	I/O	Resume	N	Y	3.3V	GPI	STRAPPED HI
GPIO14	Unmultiplexed	R4	I/O	Resume	N	Y	3.3V	GPI	STRAPPED HI
GPIO15	Unmultiplexed	E22	I/O	Resume	N	Y	3.3V	GPI	STRAPPED HI
GPIO16	Unmultiplexed	AC22	I/O	CORE	N	N	3.3V	GPO	NC
GPIO17	GNT5#	D8	I/O	CORE	N	N	3.3V	GPO	STRAPPED L
GPIO18	Unmultiplexed	AC20	I/O	CORE	N	N	3.3V	GPO	NC
GPIO19	SATA_1GP	AH18	I/O	CORE	N	N	3.3V	GPI	STRAPPED HI
GPIO20	Unmultiplexed	AF21	I/O	CORE	N	N	3.3V	GPO	NC
GPIO21	SATA_0GP	AF19	I/O	CORE	N	N	3.3V	GPI	STRAPPED HI
GPIO22	REQ4#	A13	I/O	CORE	N	N	3.3V	Native	STRAPPED HI
GPIO23	LDRQ_1#	AA5	I/O	CORE	N	N	3.3V	Native	STRAPPED HI
GPIO24	Unmultiplexed	R3	I/O	Resume	N	N	3.3V	GPO	NC
GPIO25	Unmultiplexed	D20	I/O	Resume	Y	N	3.3V	GPO	GPIO25(high 7507,low 7398)
GPIO26	Unmultiplexed	A21	I/O	Resume	N	N	3.3V	GPO	USB_EN
GPIO27	Unmultiplexed	B21	I/O	Resume	N	N	3.3V	GPO	NC
GPIO28	Unmultiplexed	E23	I/O	Resume	N	N	3.3V	GPO	NC
GPIO29	OC5#	C3	I/O	Resume	N	N	3.3V	GPI	USB_OCP#2
GPIO30	OC6#	A2	I/O	Resume	N	N	3.3V	GPI	USB_OCP#3
GPIO31	OC7#	B3	I/O	Resume	N	N	3.3V	GPI	USB_OCP#3
GPIO32	Unmultiplexed	AG18	I/O	CORE	N	N	3.3V	GPO	BIOS_WP#(fill with 1)
GPIO33	Unmultiplexed	AC19	I/O	CORE	N	N	3.3V	GPO	NC
GPIO34	Unmultiplexed	U2	I/O	CORE	N	N	3.3V	GPO	NC
GPIO35	SATACLKREQ#	AD21	I/O	CORE	N	N	3.3V	GPO	NC
GPIO36	SATA2GP	AH19	I/O	CORE	N	N	3.3V	GPI	STRAPPED HI
GPIO37	SATA3GP	AE19	I/O	CORE	N	N	3.3V	GPI	STRAPPED HI
GPIO38	Unmultiplexed	AD20	I/O	CORE	N	N	3.3V	GPI	STRAPPED HI
GPIO39	Unmultiplexed	AE20	I/O	CORE	N	N	3.3V	GPI	STRAPPED HI
GPIO48	GNT4#	A14	I/O	CORE	N	N	3.3V	Native	STRAPPED HI
GPIO49	CPUPWRGD	AG24	I/O	V_CPU_IO	N	N	V_CPU_IO	Native	H_PWRGD

Following are the GPIOs that need to be terminated properly if not used:
GPIO[39:36,23:21,19,7:0]: default as inputs and should be pulled up to Vcc3_3 if unused.
GPIO[31:29,15:8]: default as inputs and should be pulled up to VccSus3_3 if unused.

SIO Fintek71882FG(CONTINUE)

GPIO	Alt Func	PIN	Usage	Input/Output	NOTES
GPIO0	VIDOUT0	49	MCH_BSEL0	O12	
GPIO1	VIDOUT1	50	MCH_BSEL1	O12	
GPIO2	VIDOUT2	51	MCH_BSEL2	O12	
GPIO3	VIDOUT3	52	NC	O12	
GPIO4	VIDOUT4	53	NC	O12	
GPIO5	VIDOUT5/SIC	54	NC	I/OOD12t	
GPIO6	SLOTOCC#	55	GPO	I/OOD12t	
GPIO7	Turbo1#/WDTRST#	56	WDTRST#	OD12-5v	
GPIO15	LED_VSB/ALERT#	64	LED_VSB	OD12	
GPIO16	LED_VCC/Turbo2#	65	LED_VCC	OD12	
GPIO20	PCIRST1#	74	PCIRST1#	OD12	
GPIO21	PCIRST2#	75	PCIRST2#	O12	
GPIO22	PCIRST3#	76	PCIRST3#	O12	
GPIO23	RSTCON#	77	RSTCON#	OD12	
GPIO24	ATXPG_IN	78	ATXPG_IN	AIN	
GPIO32	PWROK	84	PWROK	OD12	
GPIO26	PWSIN#	80	PWSIN#	INts5v	
GPIO27	PWSOUT#	80	PWSOUT#	OD12	
GPIO30	S3#	82	S3#	INts5v	
GPIO31	PSON#	83	PSON#	OD12-5v	
GPIO33	RSMRST#	85	RSMRST#	OD12	
GPIO40	FANIN3	25	FANIN3	INts5v	
GPIO41	FAN_CTL3	26	FAN_CTL3(NC)	OD12-5v	
GPIO25	PME#	79	PME#	OD12-5v	
GPIO10	SPI_SLK/FANIN4	59	GPIO10(NC)	I/OOD12t	
GPIO11	SPI_CS0#/FANCTL4	60	GPIO11(NC)	I/OOD12t	
GPIO12	SPI_MISO/FANCTL1_1	61	GPIO12(NC)	I/OOD12t	
GPIO13	SPI_MOSI/BEEP	62	BEEP(NC)	OD24	
GPIO14	FWH_DIS/WDTRST#/SPI_CS1#	63	GPIO14	I/OOD12t	
GPIO42	IRTX	27	IRTX	O12	
GPIO43	IRRX	28	IRRX	INts	
GPIO17		66	NC	I/OOD12t	

PCI Config.

DEVICE	MCP1 INT PIN	REQ#/GNT#	IDSEL	CLOCK
PCI1	PIRQ#A PIRQ#B PIRQ#C PIRQ#D	PREQ#0 PGNT#0	AD16	PCI_CLK0
PCI2	PIRQ#B PIRQ#C PIRQ#D PIRQ#A	PREQ#1 PGNT#1	AD17	PCI_CLK1

DDRII DIMM Config.

DEVICE	ADRESS	CLOCK
DIMM A	A0H	P_DDR0_A/N_DDR0_A P_DDR1_A/N_DDR1_A P_DDR2_A/N_DDR2_A
DIMM B	A4H	P_DDR0_B/N_DDR0_B P_DDR1_B/N_DDR1_B P_DDR2_B/N_DDR2_B

JCI1	*Chassis Intrusion*
Open	Normal
(1-2)	Chassis Open

JUMPER SETTING

JBAT1	(1-2)NORMAL	(2-3)CLEAR

Title	BIOS Request Form
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0A Change list:

1. Add pcie x1 *2,add one pci slot
2. change 1P1_core power mode
3. add APS function
4. modify Audio ALC888S circuit for realtek suggestion
5. add OC_SW1
6. add C14 C56 C61 C505 C506 C504 C370 for power supply with mini current(use resistor)
7. Update TO252 footprint to DPAKSGD
8. Add PLTRST#_R,EXP_RBIAS,SCL_A,SDA_A,SDA_LAN net name
9. add Q34 Q37 R315
10. For power:add C536 C509 C510 C511 R504 R315 R501 R591 R500 R503 R502 EC47

1.0 Change list:

1. switch CPU_BSEL0 to J_CPU_BSEL2
2. load power solution
3. add R515 R516 and update new solution for 5VDIMM
4. delete CN7 add C536-539
5. add R517 R518, follow msi-newheader_0216,change JPWR1 JPWR2 JCD1 KB_MS1
6. change EC20 footprint

1.1 Change list:

1. P16 ADD C540 C541 C542 R519 R520 TO AVOID NV9600GSO VGA CARD RUN 3D FAIL.
2. P21 UPDATE CIS ABOUT JSP1
3. P16 SWAP PLTRST_BU2# AND PLTRST_BU1#.
4. Reserve C544 C545 C546 C547 C543

Title: History		
Size: Custom	Document Number: MS-7610	Rev: 1.0
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