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MS-7174H1

Version 0A

Intel (R) Grantsdale (GMCH) + ICH6 Chipset
Intel Tejas & Prescott LGA775 Processor

CPU:

Intel Prescott Celeron D 350J (3.2GHz), P4 550J (3.4GHz)

System Chipset:

Intel Grantsdale - GMCH (North Bridge)
Intel ICH6 (South Bridge)

On Board Chipset:

BIOS -- FWH FLASH 4Mb
AC97 AUDIO -- ALC880
LPC Super I/O -- SMSC47M997
LAN -- Intel 82562
1394 -- VIA VT-6307
CLOCK -- Cypress CY28416

Main Memory:


2 CHANNEL DDR II * 1 (Max 2GB)

Expansion Slots:

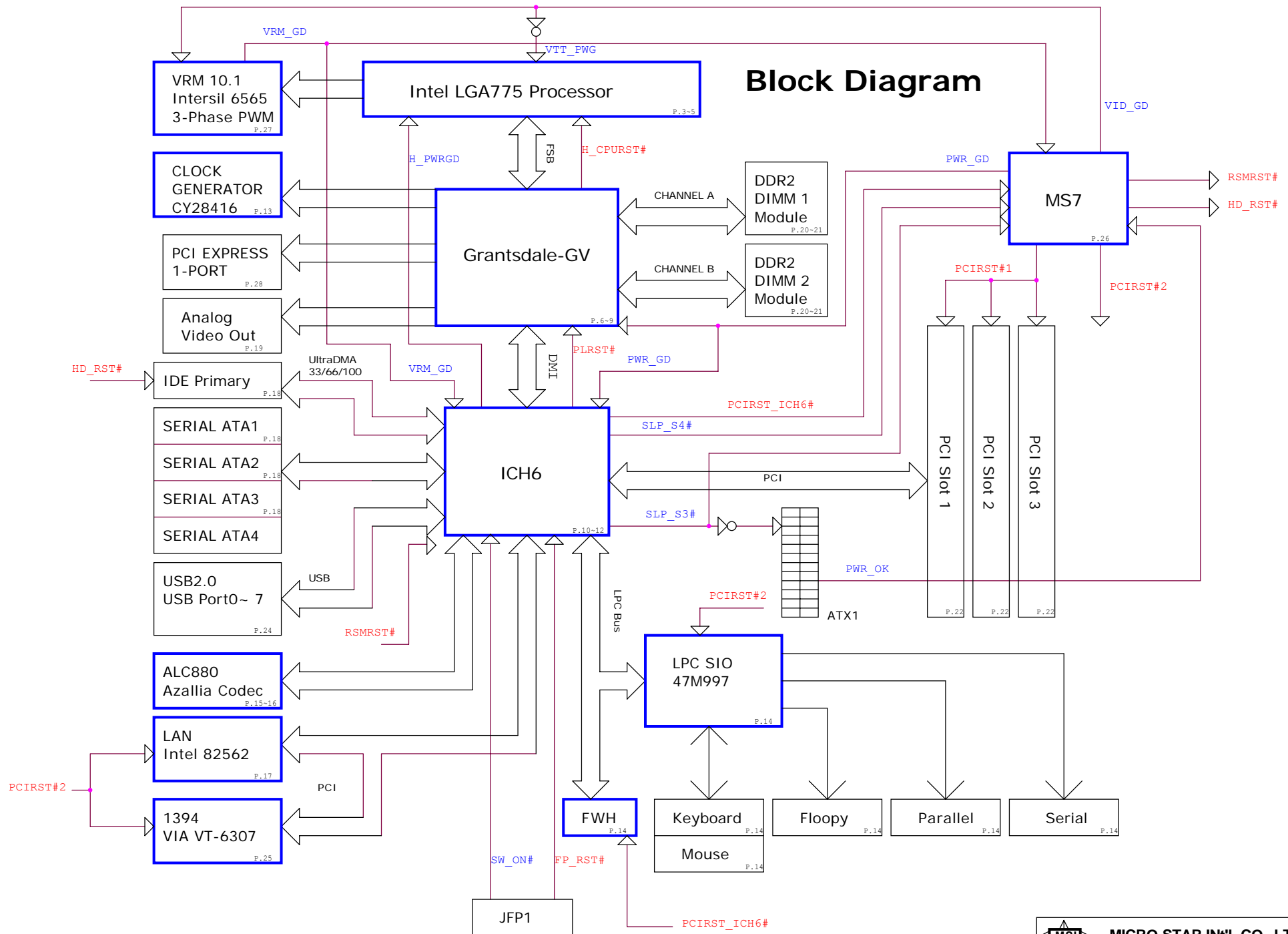
PCI 2.3 SLOT * 3

Intersil PWM:

Controller: INTERSIL 6565 3PHASE
Driver: HIP6614 + HIP6612

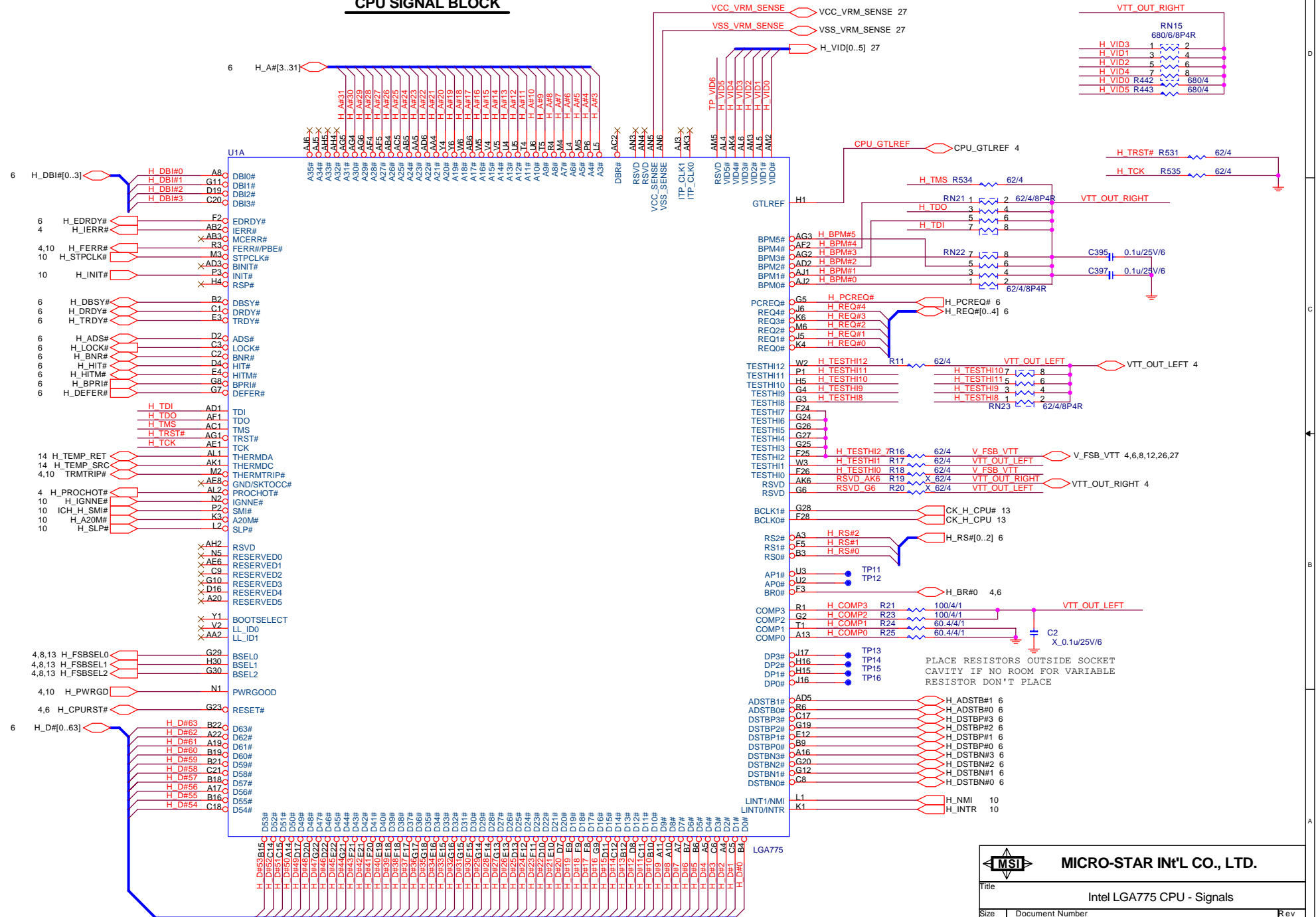
		MICRO-STAR INT'L CO., LTD.	
Title COVER SHEET			
Size	Document Number		Rev
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Block Diagram



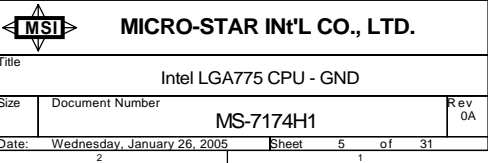
CPU SIGNAL BLOCK

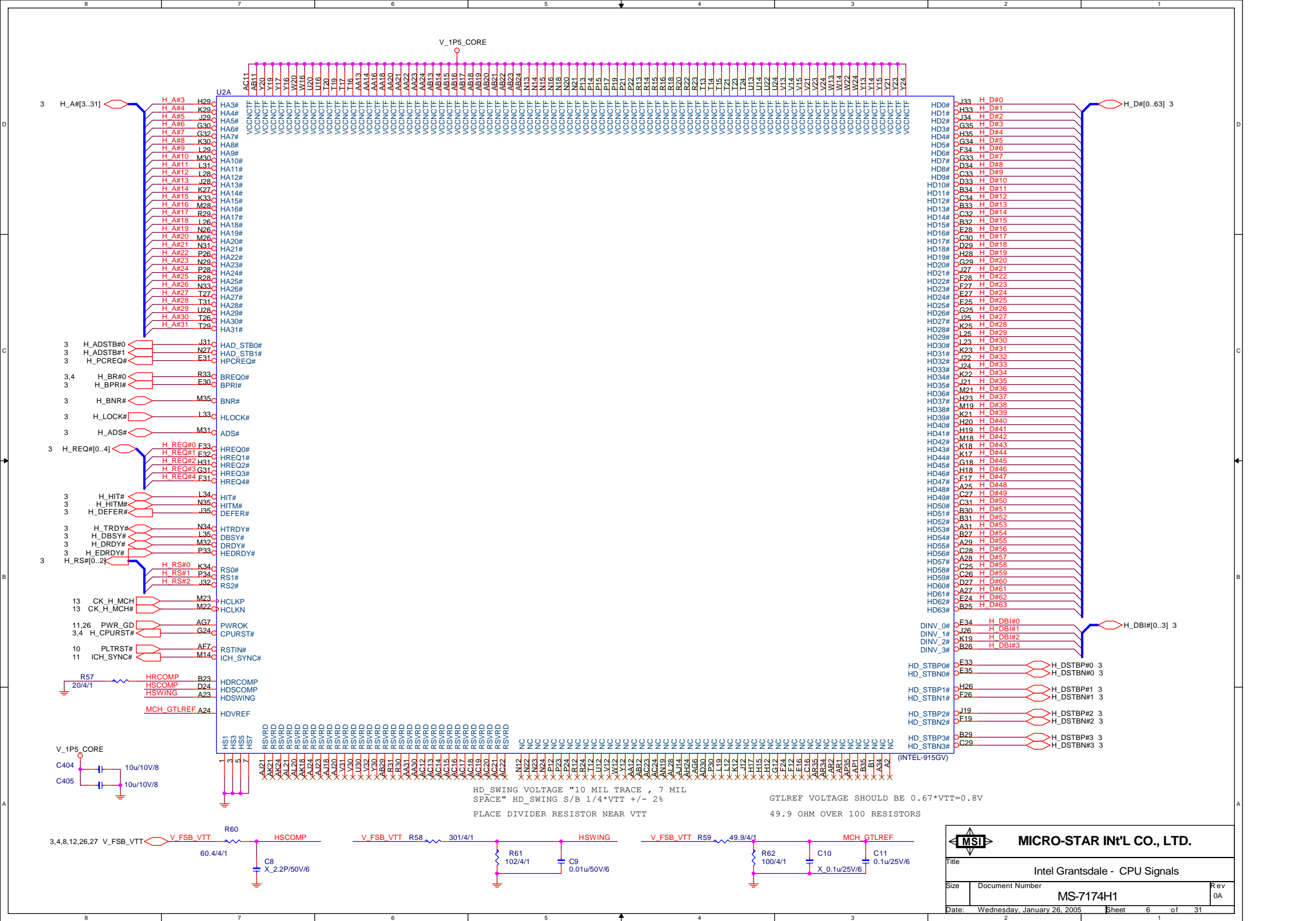
VID Pull-Up Resistor

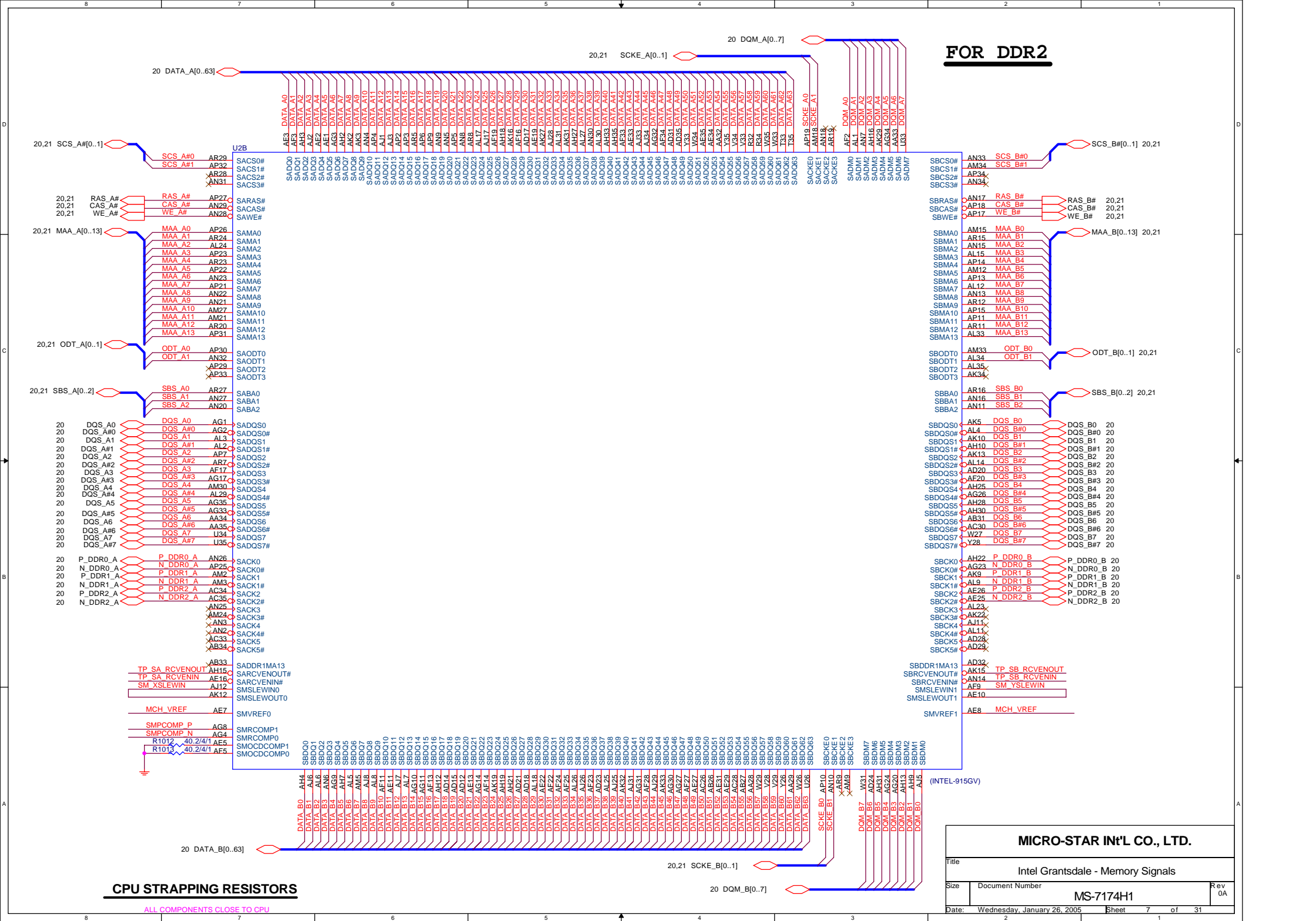


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Title			Intel LGA775 CPU - Signals	
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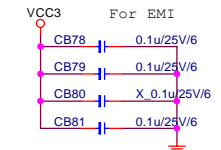
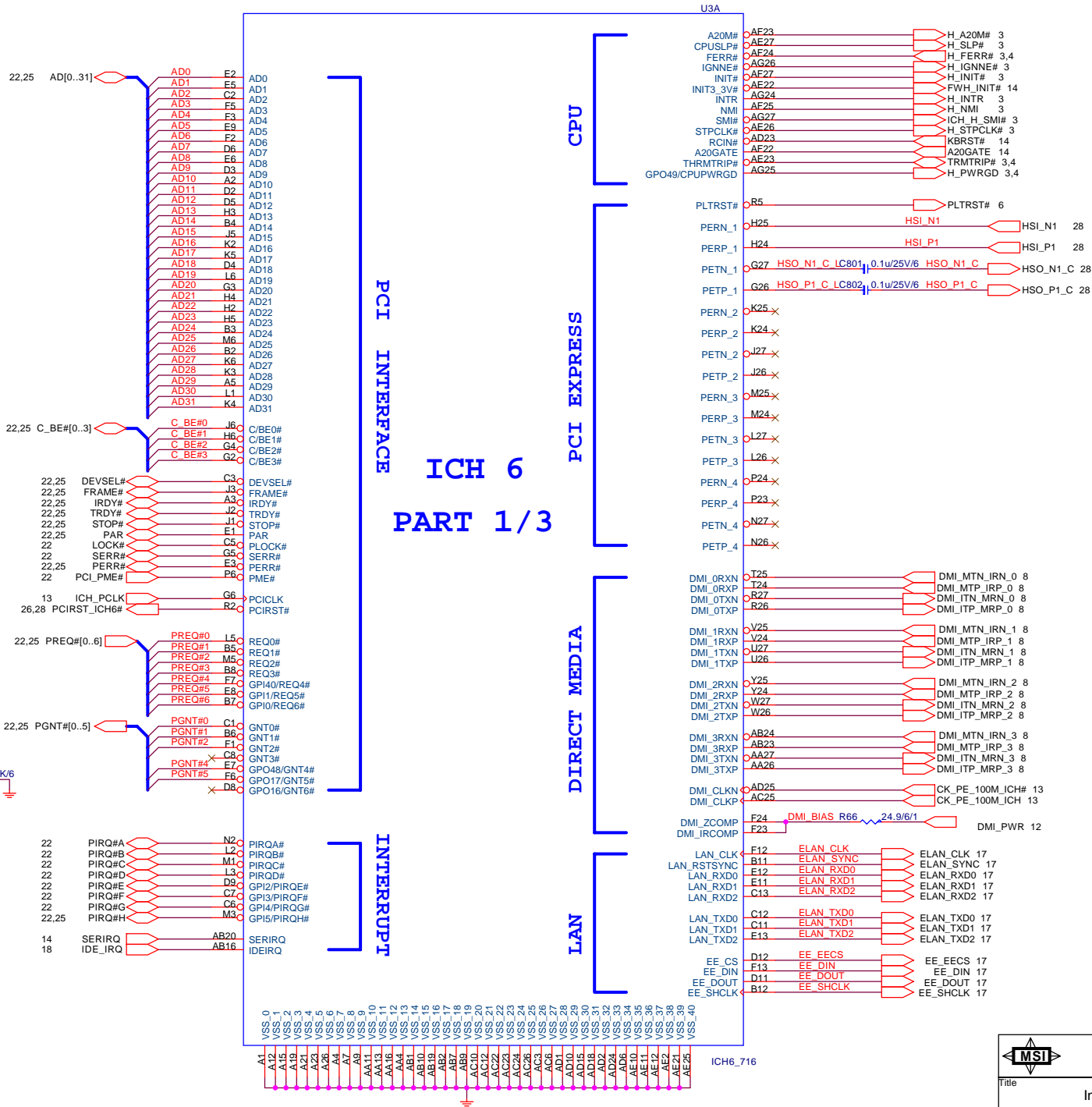








		MICRO-STAR INT'L CO., LTD.	
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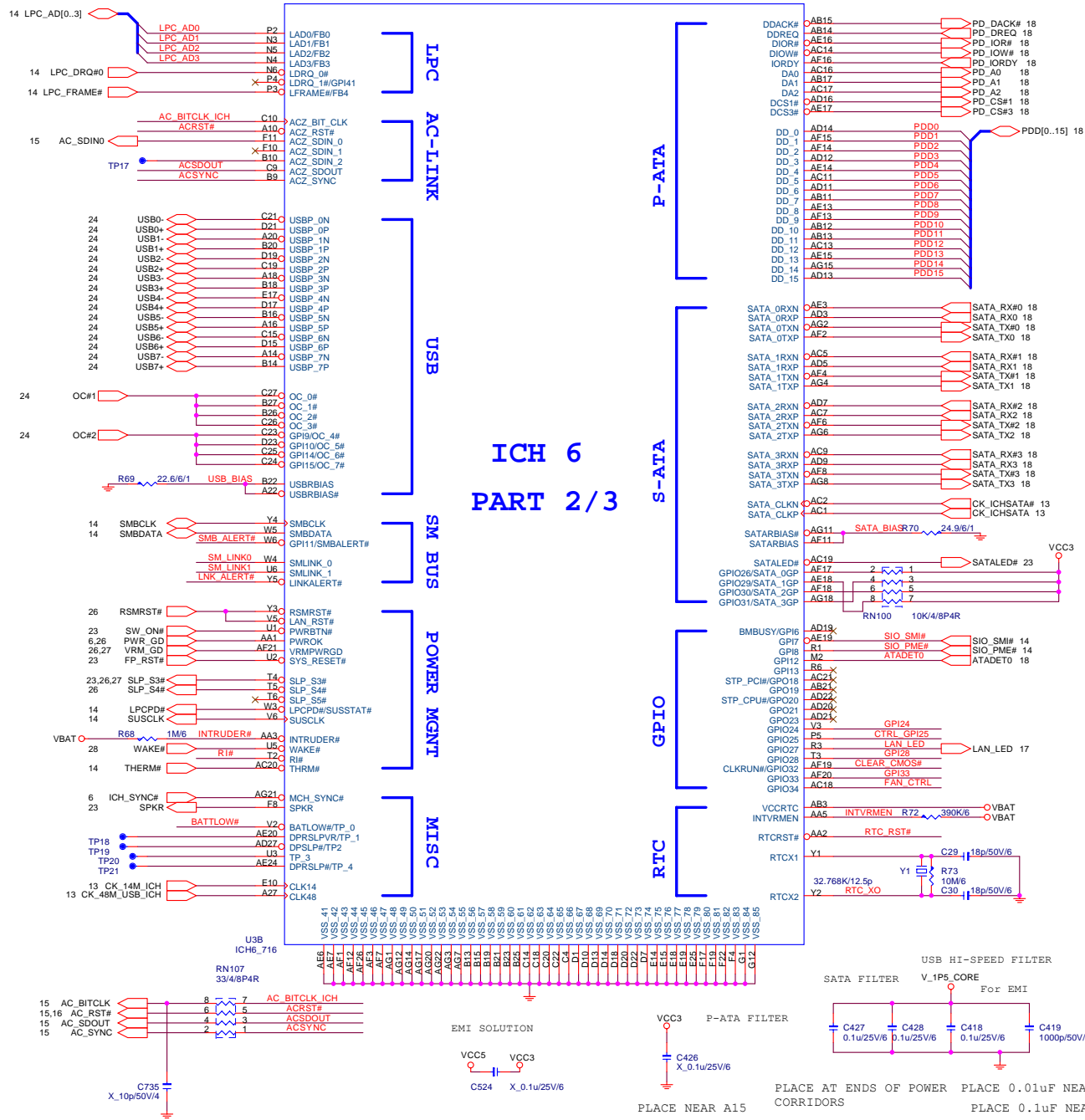


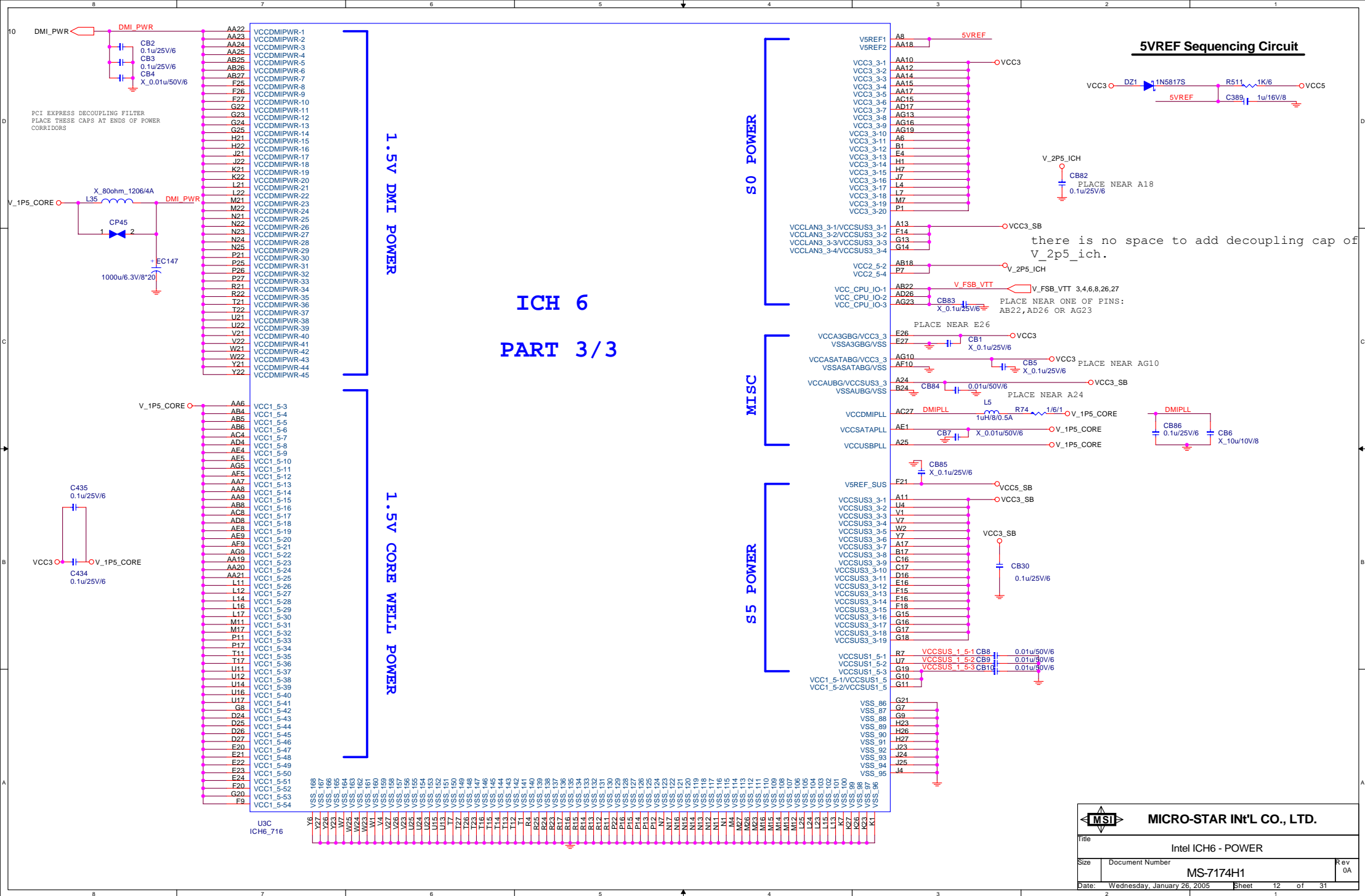
PLACE 1 EACH NEAR A3 & F1
PLACE REMAINDER ANUWHERE



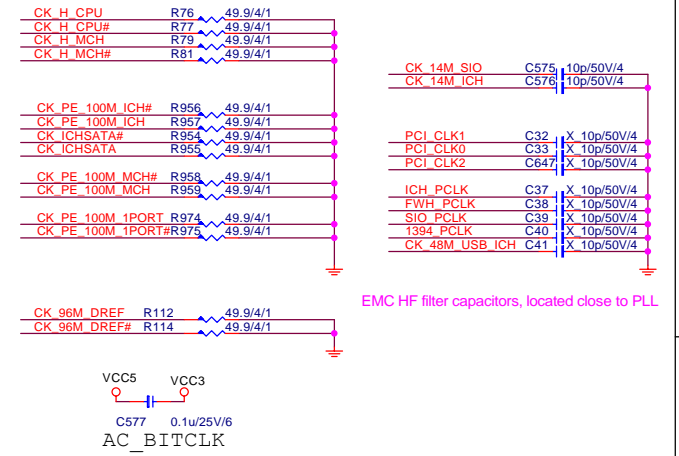
MICRO-STAR INT'L CO., LTD.

Title		Intel ICH6 - PCI & DMI & CPU & IRQ	
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Trace length less than 0.5inches

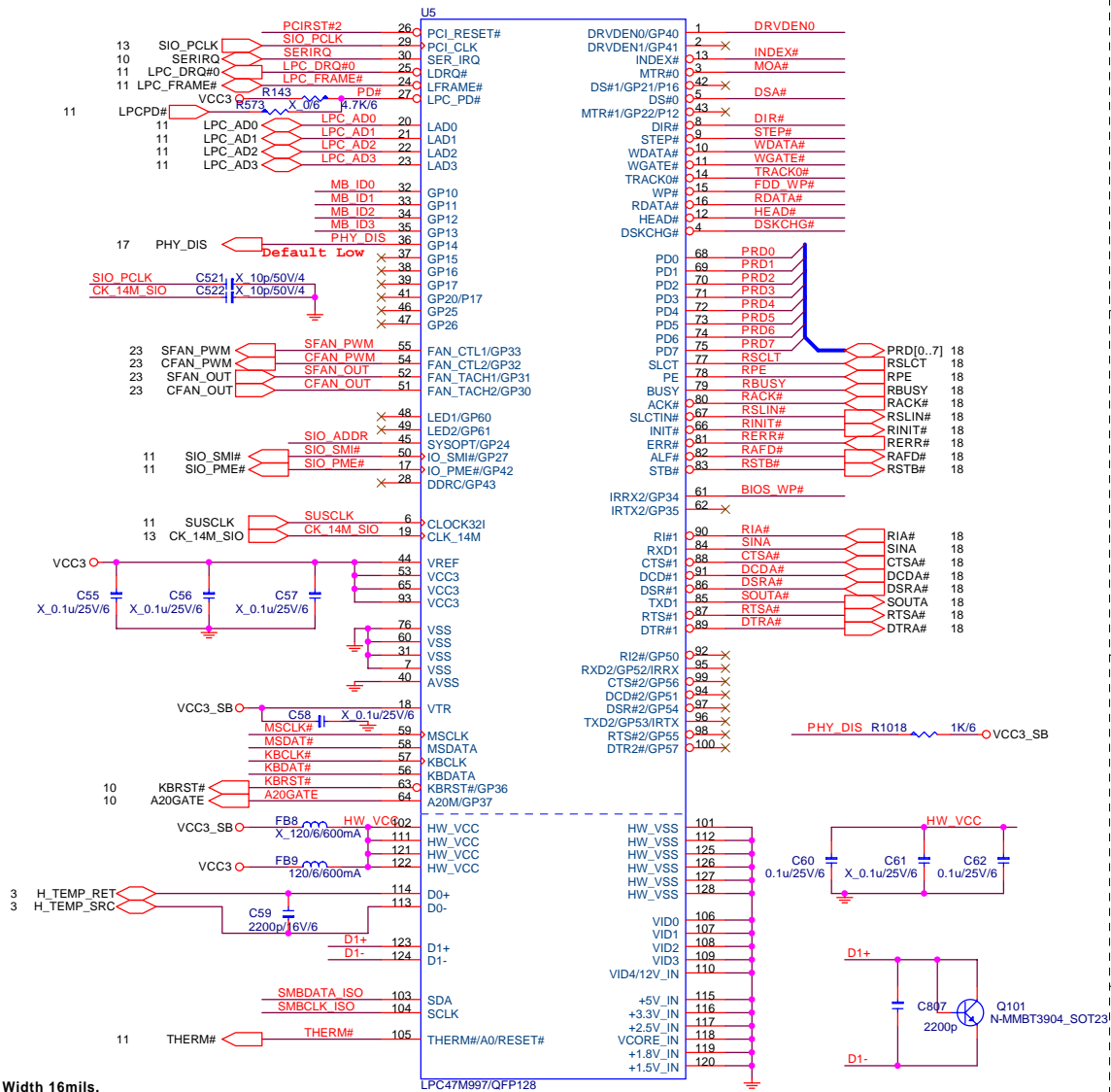


3,4,8 H_FSBSEL1 7 8 FSB
3,4,8 H_FSBSEL2 5 6 FSC
3,4,8 H_FSBSEL0 3 4 CK_14M_R
1K/4/8P4R

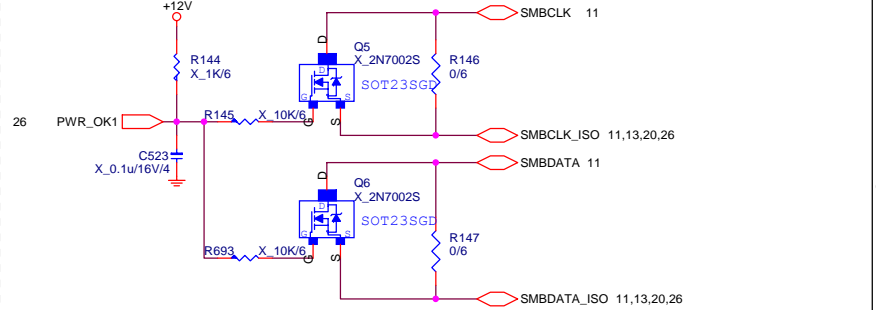
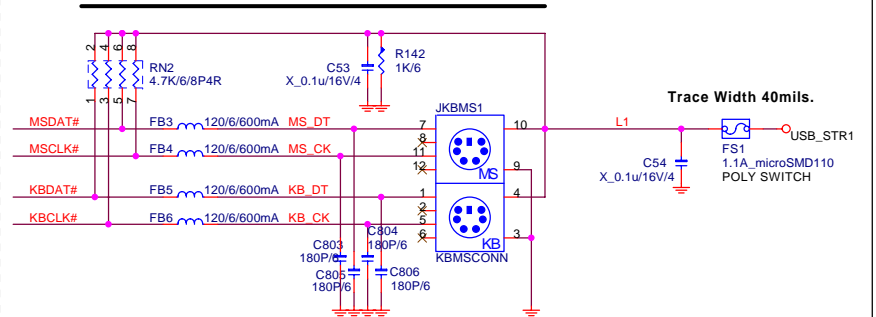


Title			
Clock Generator - CY28416			
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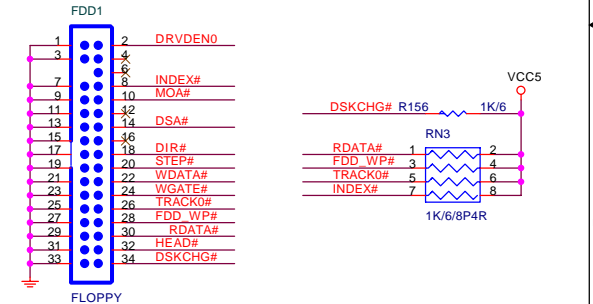
LPC SUPER I/O 47M997



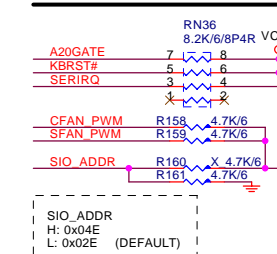
PS2 KEYBOARD & MOUSE CONNECTOR



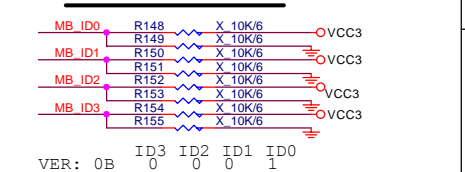
FLOPPY CONNECTOR



STRAPPING RESISTOR



M/B Revision ID



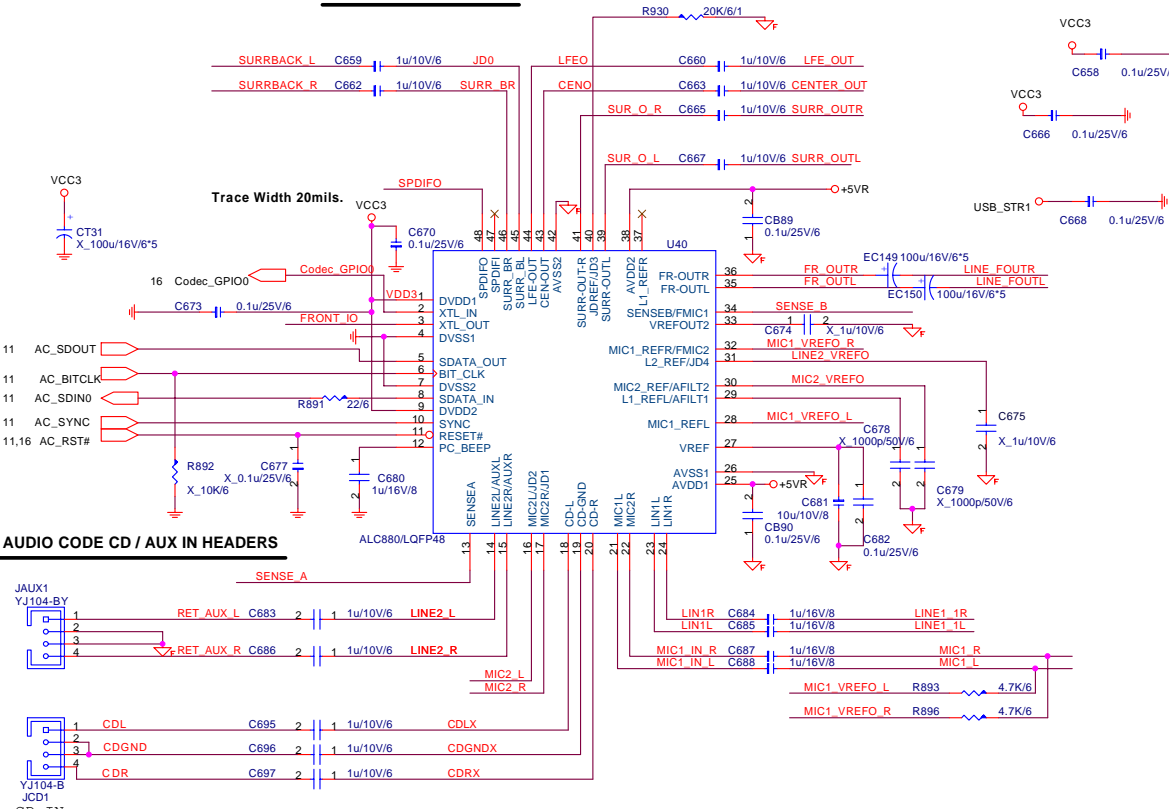
MSI MICRO-STAR INT'L CO., LTD.

Title: **LPC SUPER I/O & FWH & CONNECTORS**

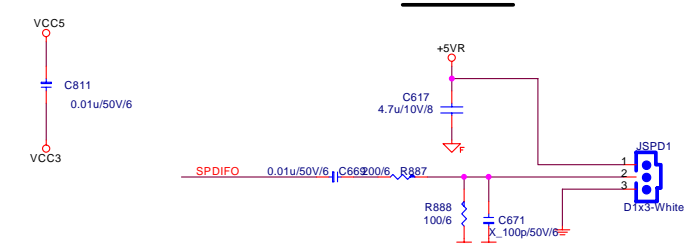
Size: Document Number **MS-7174H1** Rev 0A

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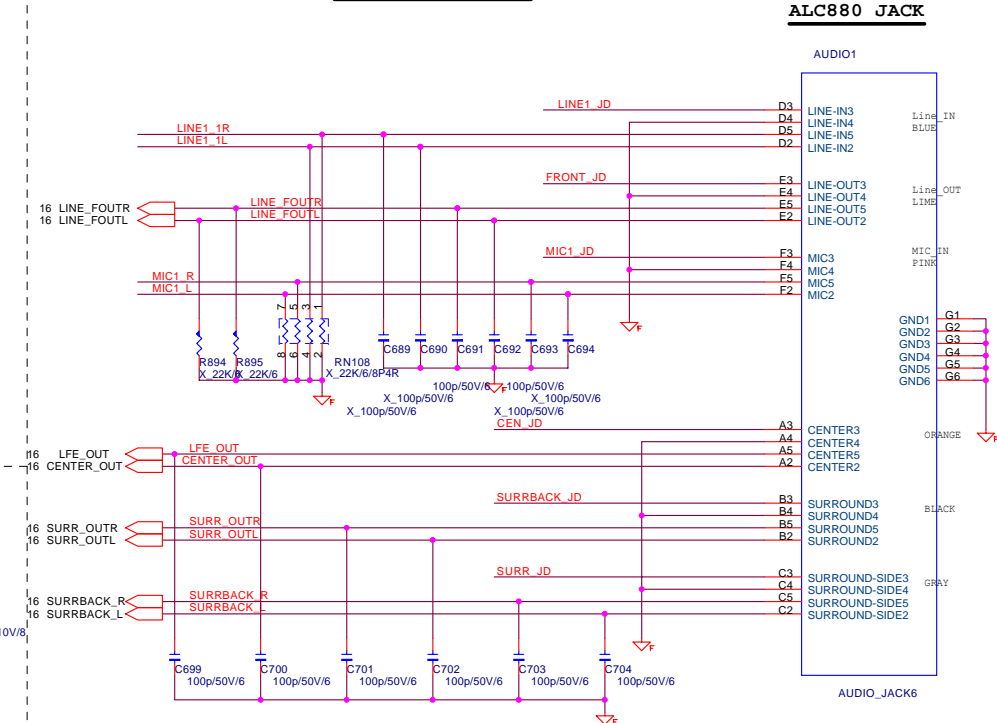
ALC880 CODEC



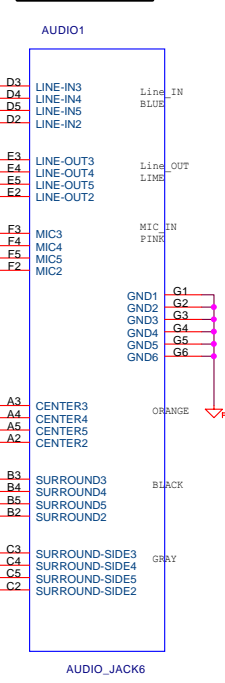
SPDIF OUT



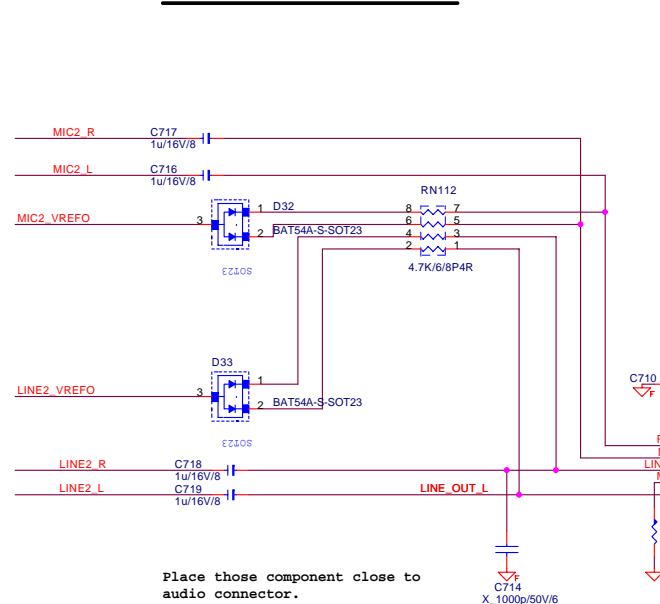
Rear audio jack



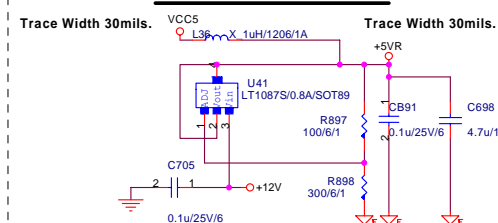
ALC880 JACK



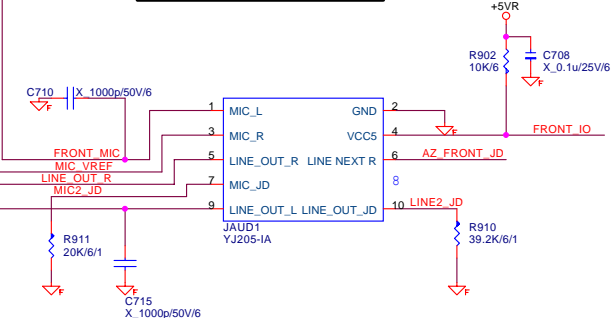
Speaker Out Decoupling



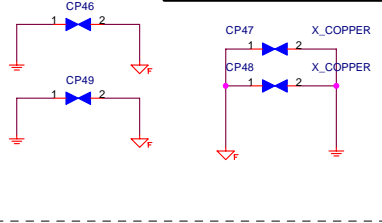
AUDIO CODE REGULATORS



Azalia Front Audio Connector

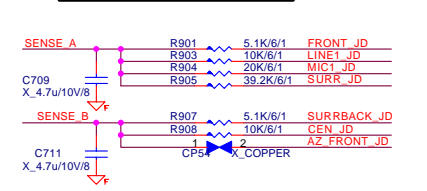


EMI Solution



DECOUPLING CAPACITOR

ALC880 JACK DETECT

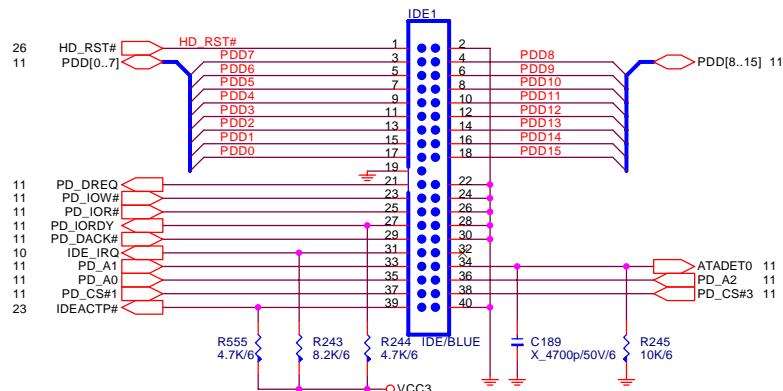


Micro Star Restricted Secret

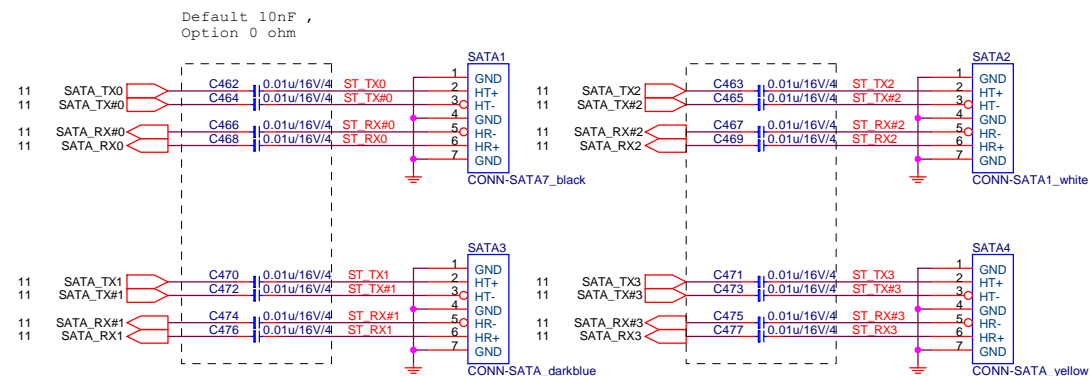
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Document Number	MS-7174H1		
MICRO-STAR INT'L CO.,LTD.	Last Revision Date:		
No. 69, Li-De St, Jung-He City, Taipei Hsien, Taiwan	Wednesday, January 26, 2005		
http://www.msi.com.tw	Sheet	15	of 31

Place those component close to audio connector.

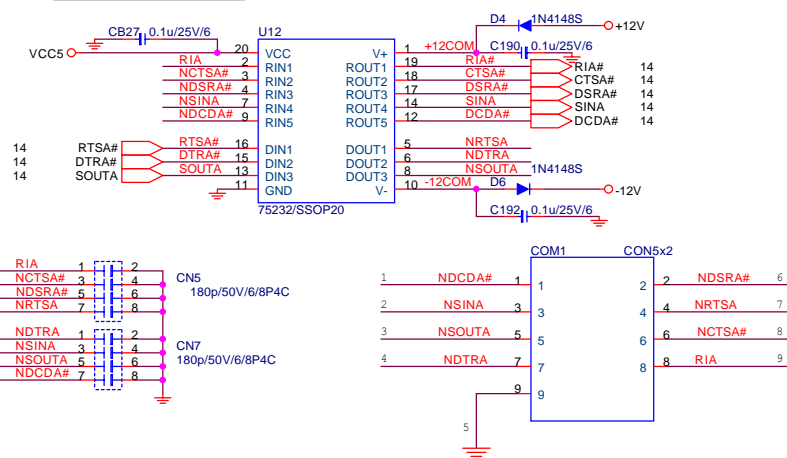
PRIMARY IDE BLOCK



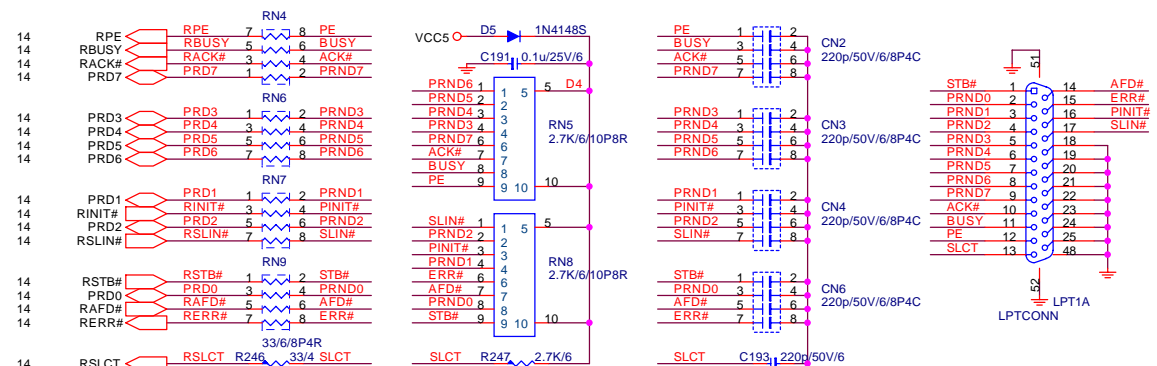
SERIAL ATA CONNECTOR BLOCK



SERIAL PORT 1



PARALLAL PORT



MICRO-STAR INT'L CO., LTD.

Title LAN & ATA IDE & COM1 & LPT CONNECTORS

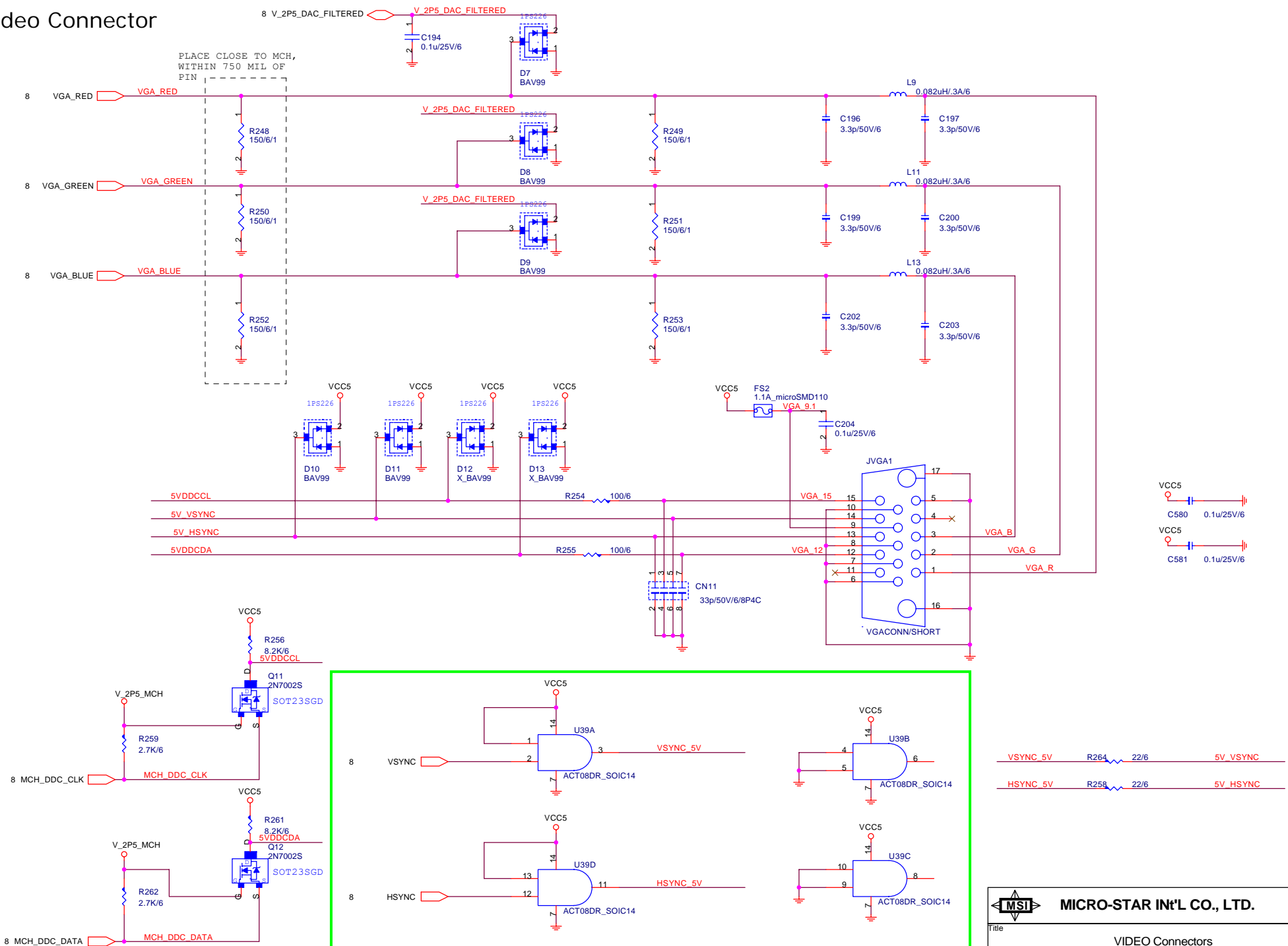
Size Document Number

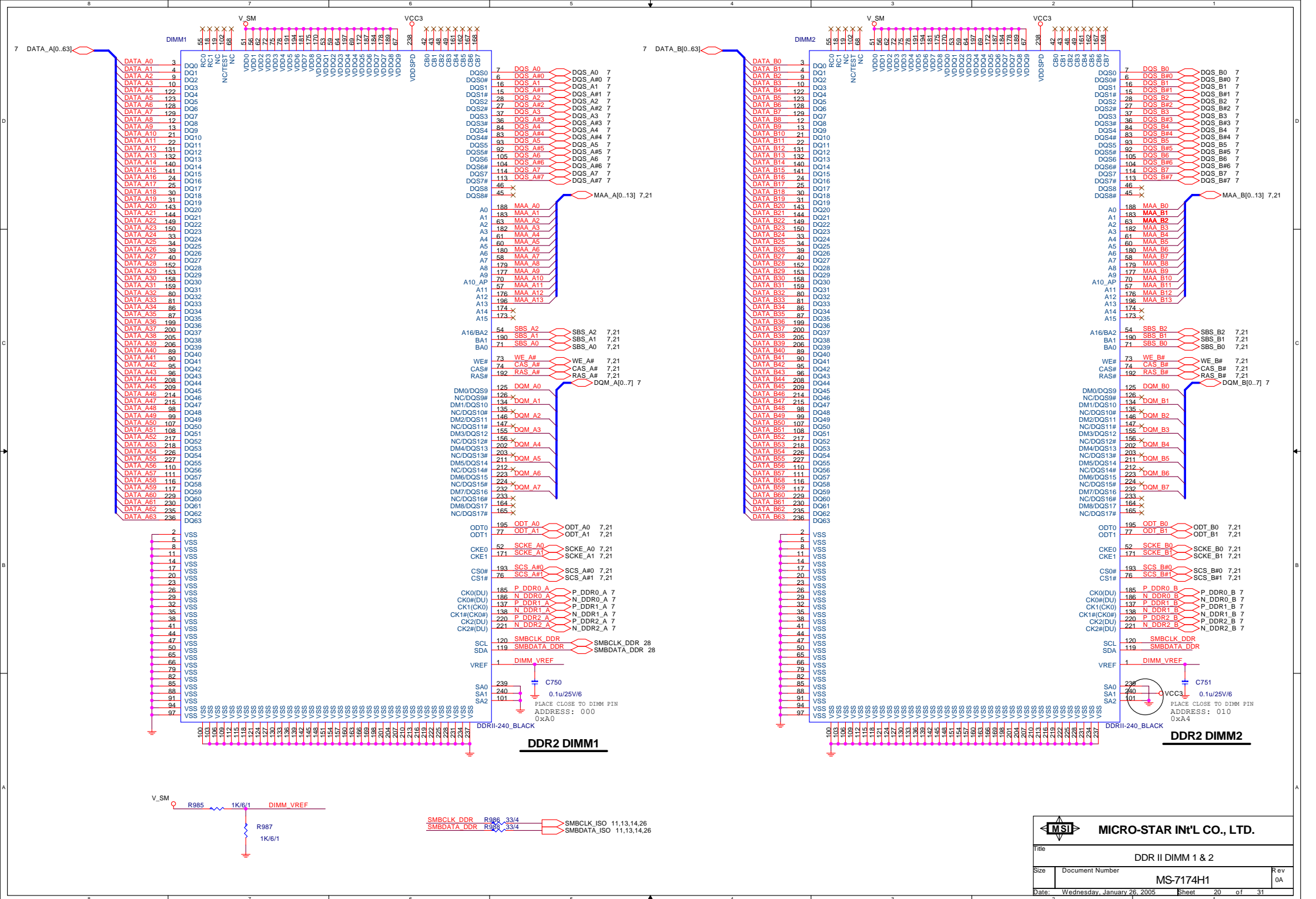
MS-7174H1

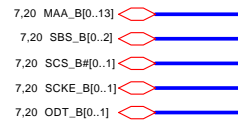
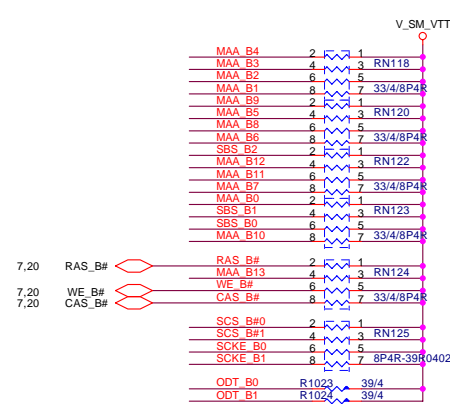
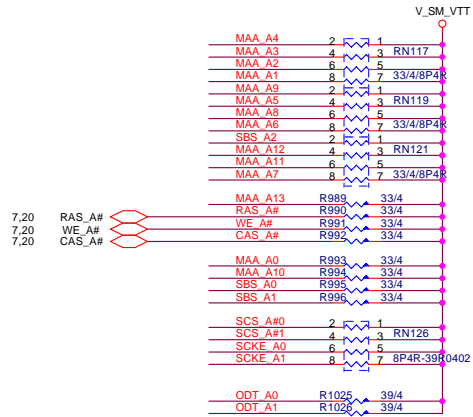
Rev 0A

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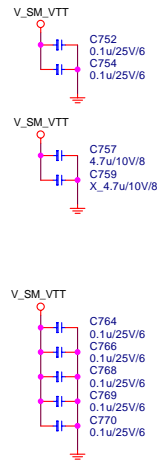
Video Connector



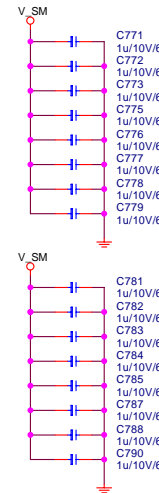
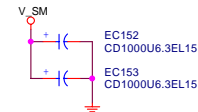
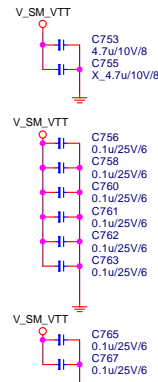




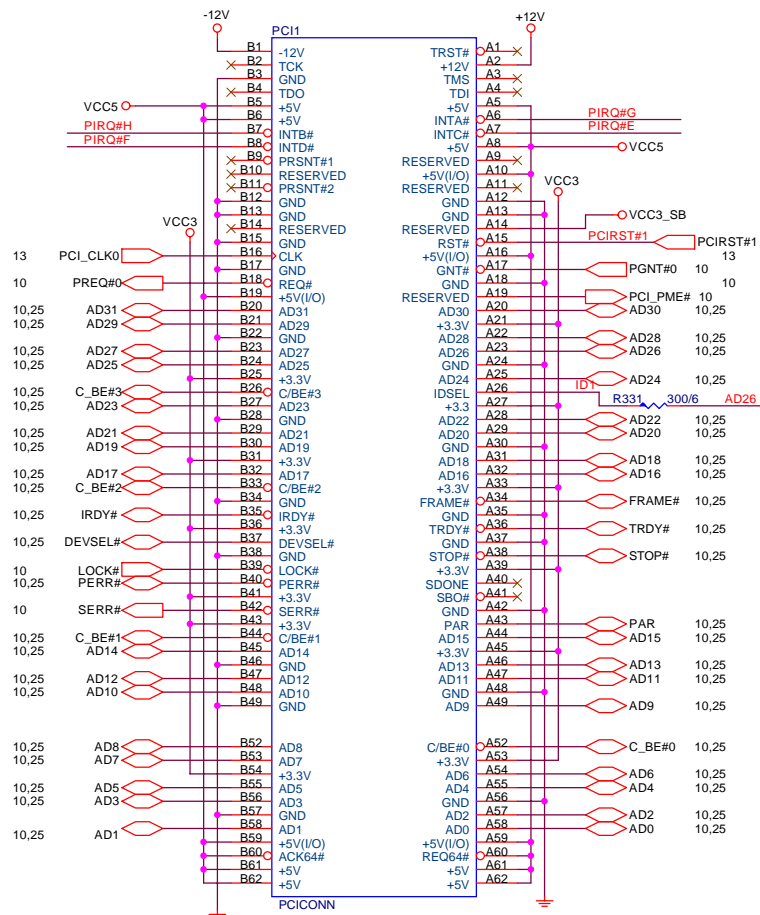
CHANNEL A V_SM_VTT DECOUPLING CAPS



CHANNEL B V_SM_VTT DECOUPLING CAPS

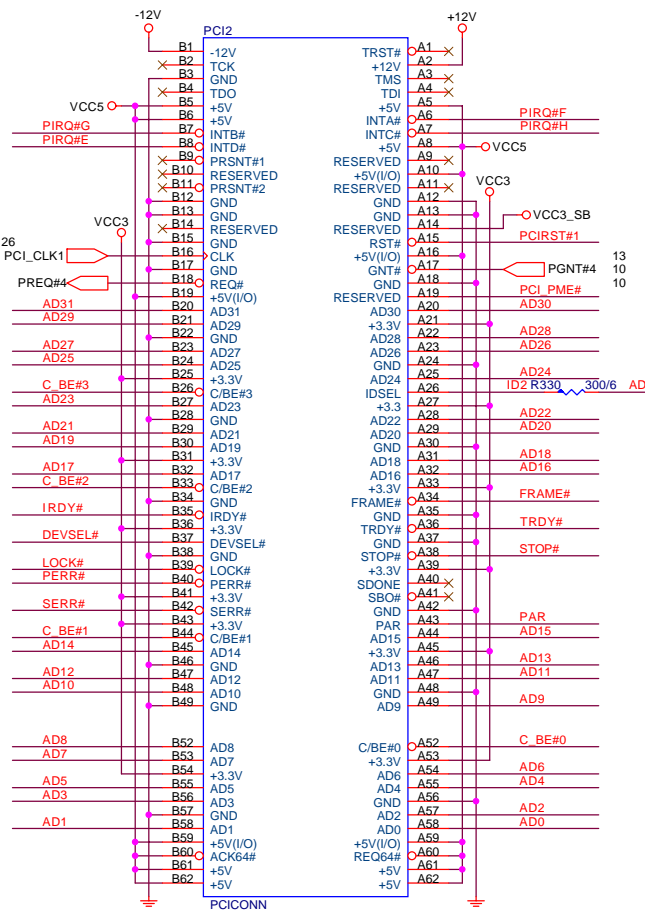


PCI SLOT 1 (PCI VER: 2.2 COMPLY)



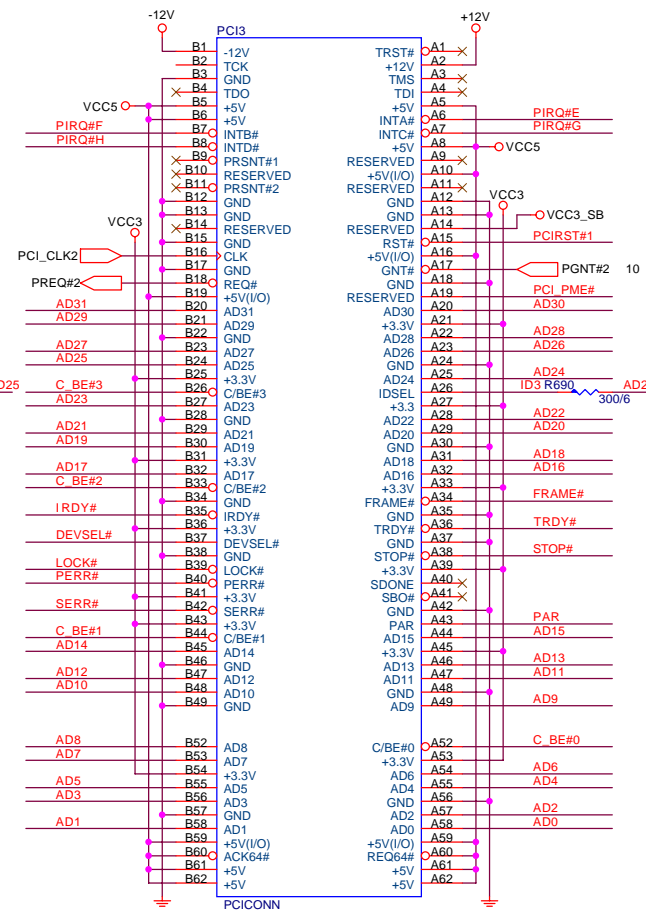
IDSEL = AD26
MASTER = PREQ#0
PIRQ#G

PCI SLOT 2 (PCI VER: 2.2 COMPLY)



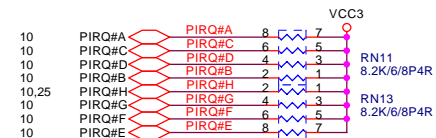
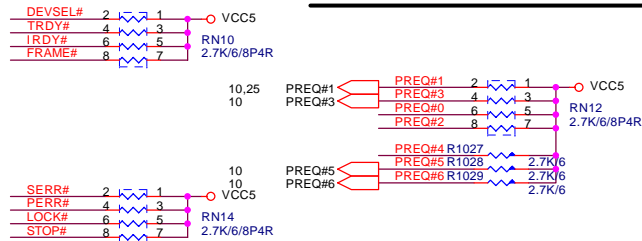
IDSEL = AD25
MASTER = PREQ#4
PIRQ#F

PCI SLOT 3 (PCI VER: 2.2 COMPLY)

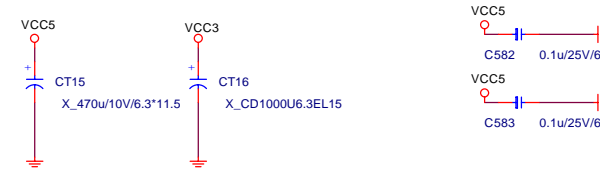


IDSEL = AD28
MASTER = PREQ#2
PIRQ#E

PCI PULL-UP / DOWN RESISTORS



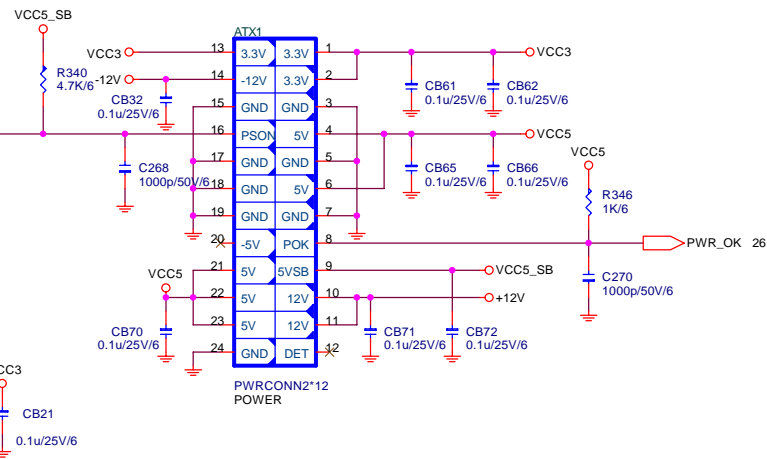
PCI SLOT DECOUPLING CAPACITORS



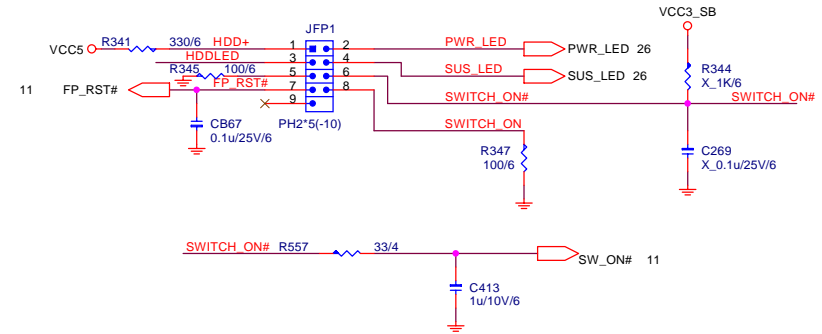
MICRO-STAR INT'L CO., LTD.

Title		PCI 1 & 2 & 3 Slots	
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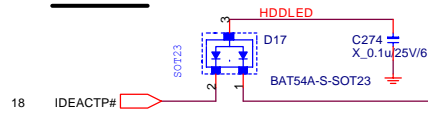
ATX CONNECTOR



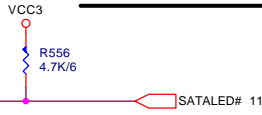
Intel Front Panel



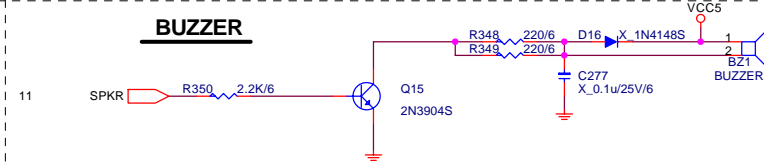
IDE LED



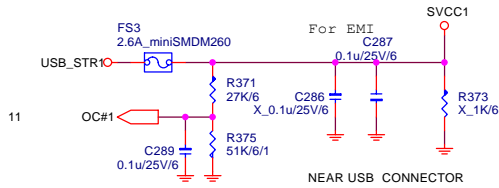
SERIAL ATA LED



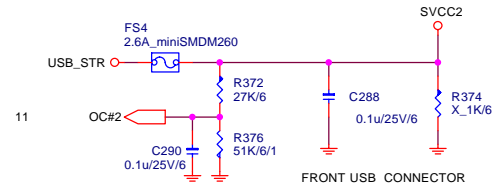
BUZZER



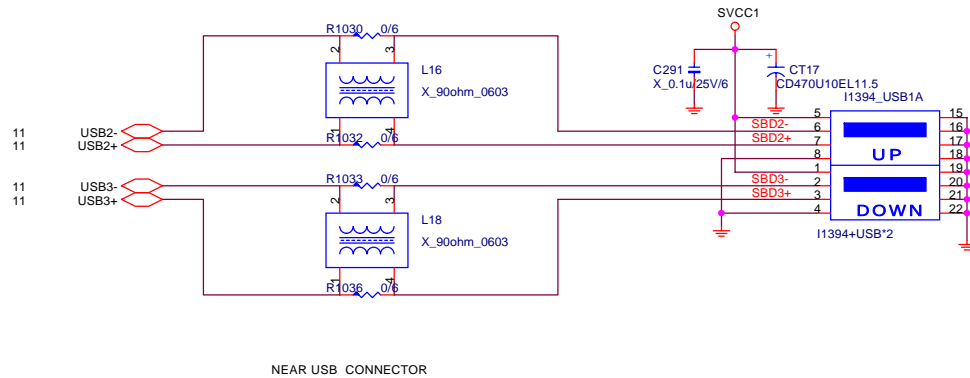
POWER CIRCUIT FOR USB PORT 0,1,2,3



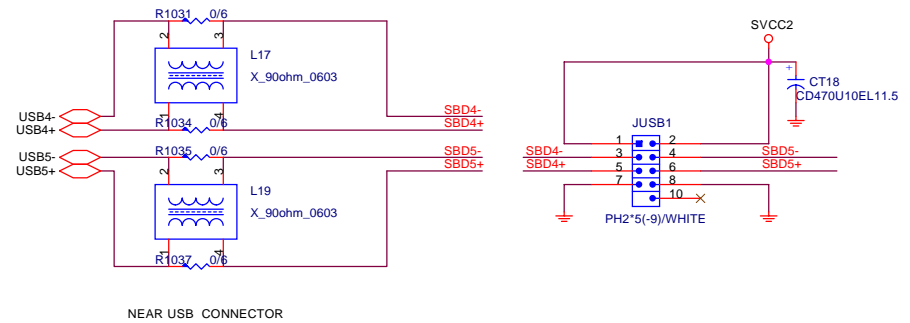
POWER CIRCUIT FOR USB PORT 4,5,6,7



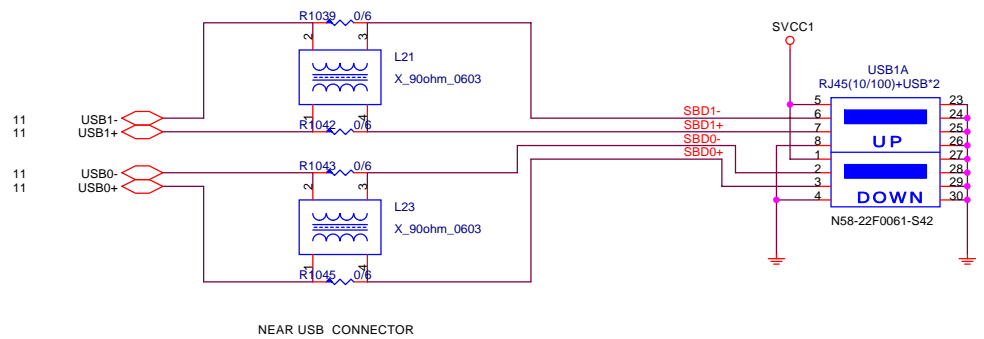
REAR PANEL USB CONNECTOR FOR USB PORT 0,1



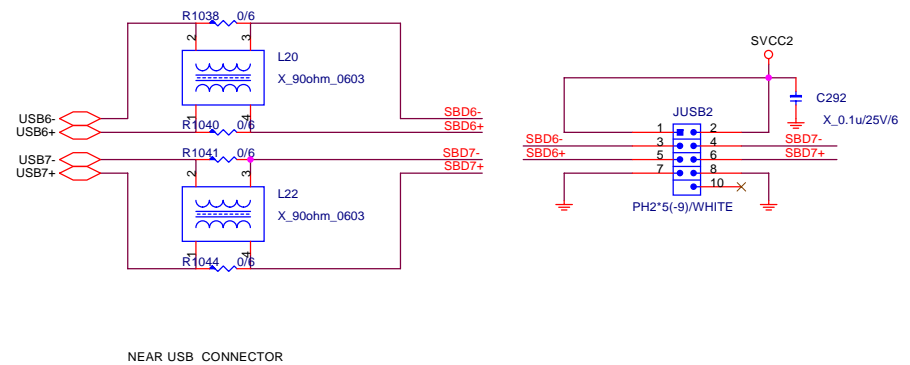
FRONT PANEL USB CONNECTOR FOR USB PORT 4,5



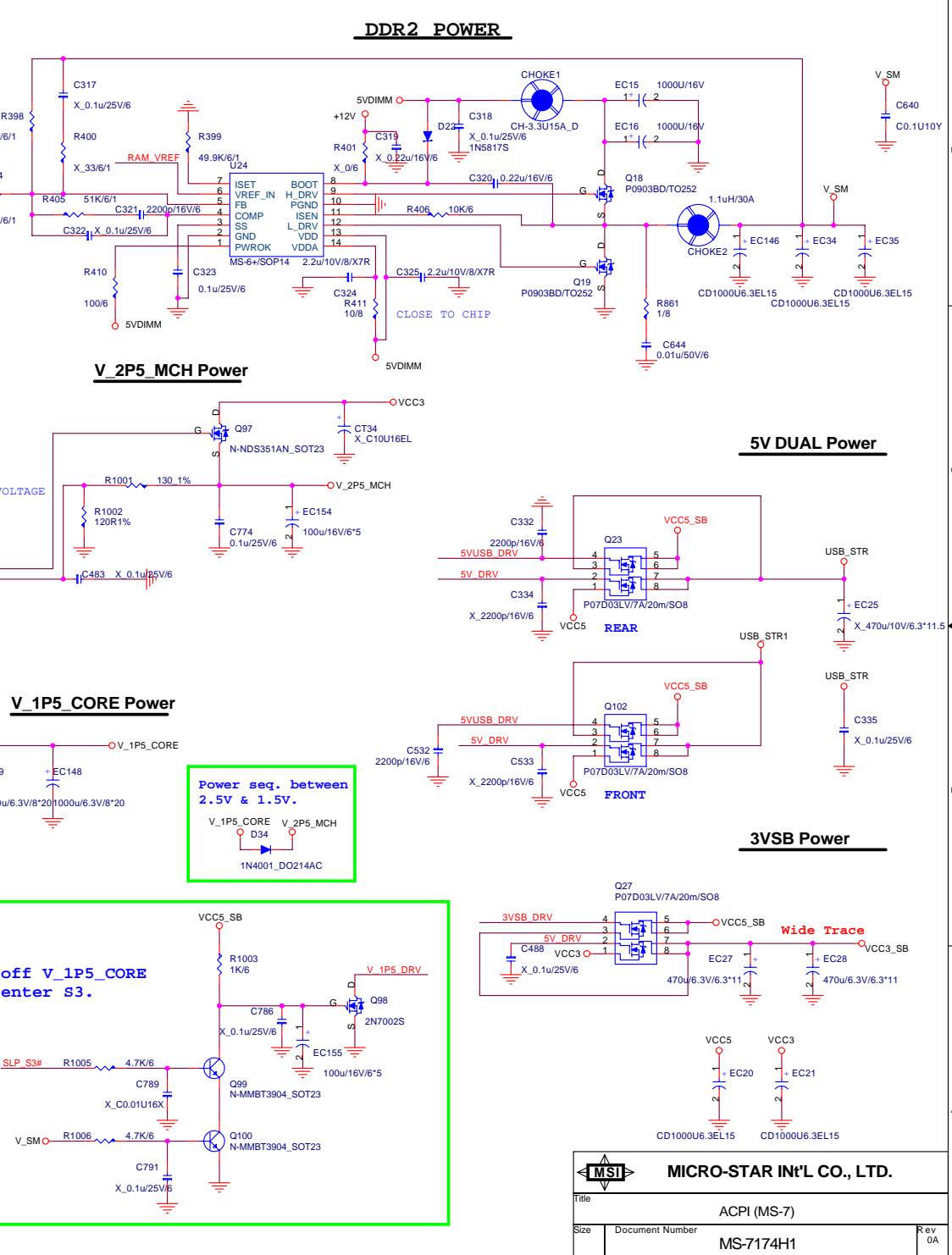
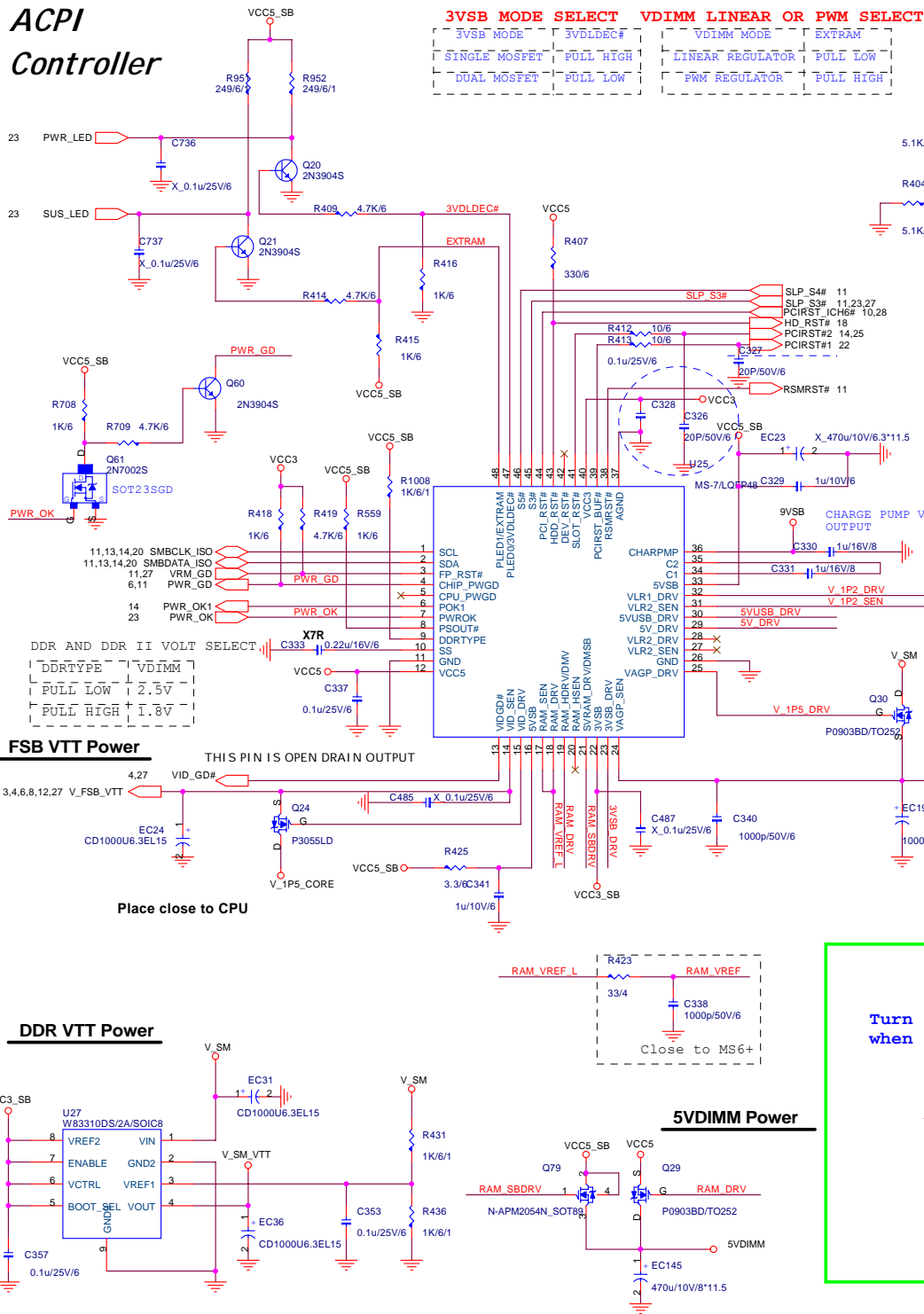
REAR PANEL USB CONNECTOR FOR USB PORT 2,3

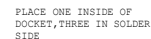


FRONT PANEL USB CONNECTOR FOR USB PORT 6,7



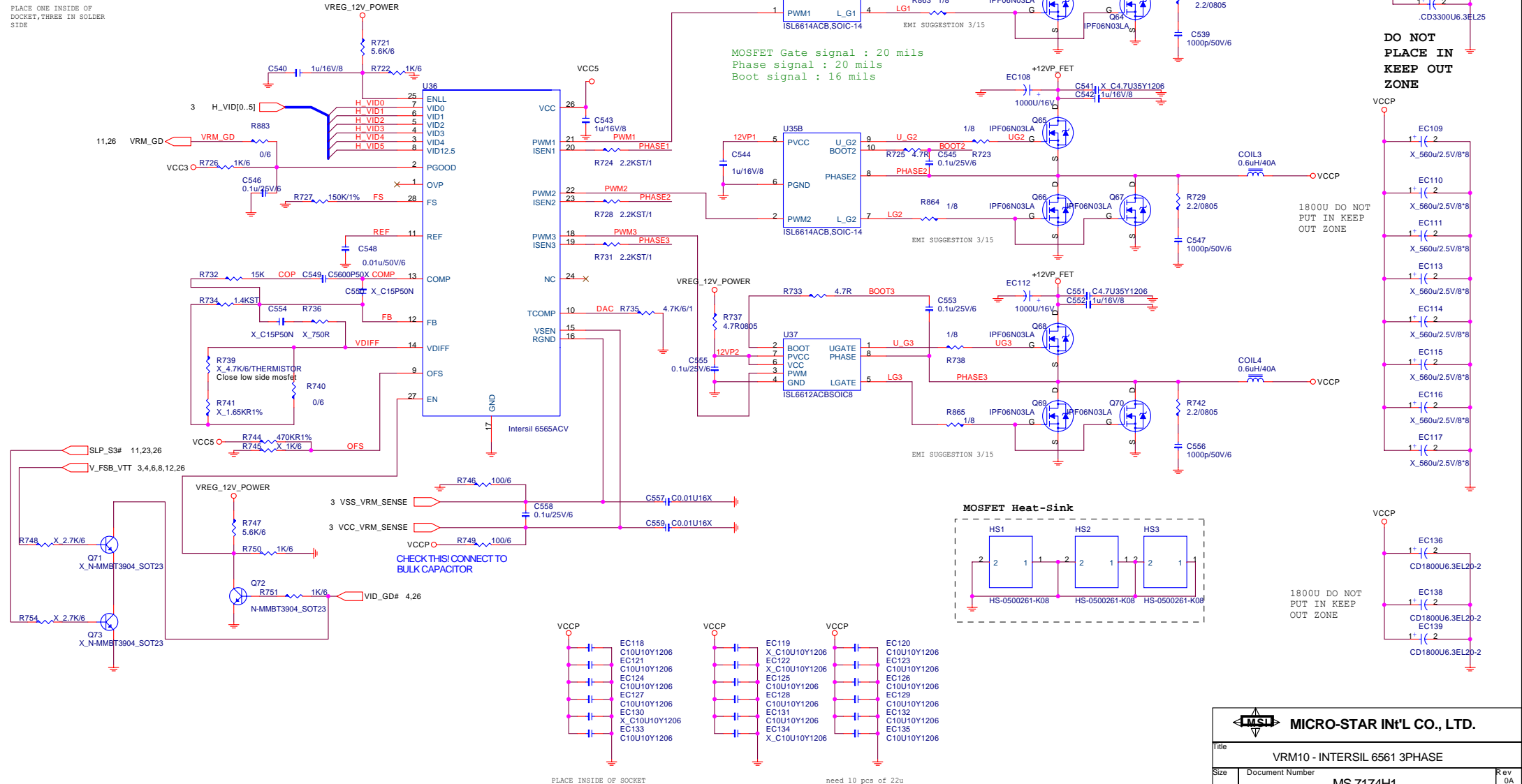
ACPI Controller



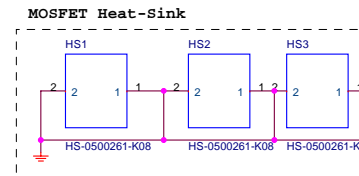


Voltage Regular Module

PLACE ONE INSIDE OF
DOCKET, THREE IN SOLDER
SIDE



need 10 pcs of 22u



► MICRO-STAR INT'L CO., LTD.

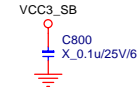
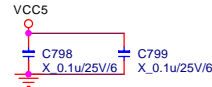
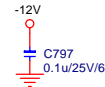
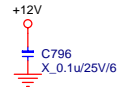
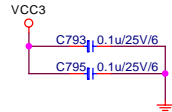
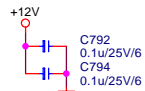
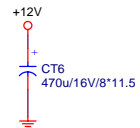
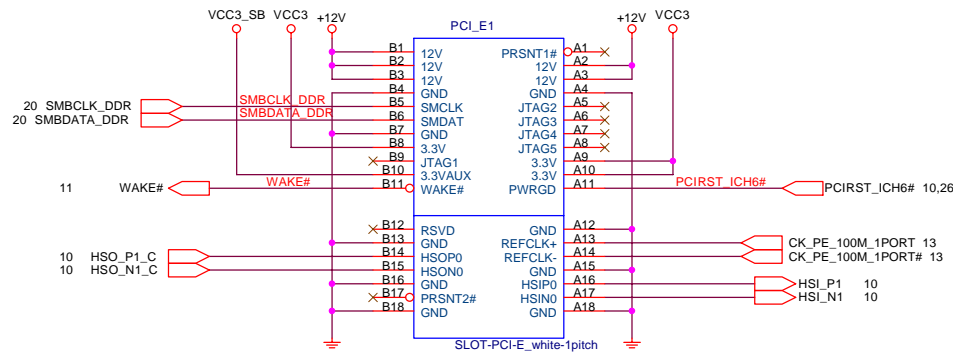
Title	VRM10 - INTERSIL 6561 3PHASE
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PCI EXPRESS 1-PORT



ICH6

GPIO Pin	Type	Function
GPIO 0	I	PREQ6# (multifunction pin)
GPIO 1	I	PREQ5# (multifunction pin)
GPIO 2	I	PIRQ#E (multifunction pin)
GPIO 3	I	PIRQ#F (multifunction pin)
GPIO 4	I	PIRQ#G (multifunction pin)
GPIO 5	I	PIRQ#H (multifunction pin)
GPIO 6	I	Unused (multifunction pin)
GPIO 7	I	SIO_SMI# (multifunction pin)
GPIO 8	I	SIO_PME# (multifunction pin)
GPIO 9	I	OC#2 (multifunction pin)
GPIO 10	I	OC#2 (multifunction pin)
GPIO 11	I	Unused (multifunction pin)
GPIO 12	I	ATADETO
GPIO 13	I	Unused (multifunction pin)
GPIO 14	I	OC#2 (multifunction pin)
GPIO 15	I	OC#2 (multifunction pin)
GPIO 16	O	PGNT6# (multifunction pin)
GPIO 17	O	PGNT5# (multifunction pin)
GPIO 18	O	Unused (multifunction pin)
GPIO 19	O	Unused (multifunction pin)
GPIO 20	O	Unused (multifunction pin)
GPIO 21	O	Unused (multifunction pin)
GPIO 22	OD	Unused (multifunction pin)
GPIO 23	O	Unused (multifunction pin)
GPIO 24	I/O	GPI24 (multifunction pin)
GPIO 25	I/O	CTRL_GPI25 (multifunction pin)
GPIO 27	I/O	LAN_LED (multifunction pin)
GPIO 28	I/O	Password Clear(Active low)
GPIO 32	I/O	CLEAR_CMOS# (multifunction pin)
GPIO 33	I/O	GPI33 (multifunction pin)
GPIO 34	I/O	FAN_CTRL (multifunction pin)
GPIO 40	I	PREQ#4 (multifunction pin)
GPIO 41	I	Unused (multifunction pin)
GPIO 48	O	PGNT#4 (multifunction pin)
GPIO 49	OD	H_PWRGD (multifunction pin)

PCI Config.

DEVICE	MCP1 INT Pin	REQ#/GNT#	IDSEL	CLOCK
PCI Slot 1	PIRQG PIRQH PIRQE PIRQF	PCI_REQ#0 PCI_GNT#0	AD26	PCICLK0
PCI Slot 2	PIRQF PIRQG PIRQH PIRQE	PCI_REQ#4 PCI_GNT#4	AD25	PCICLK1
PCI Slot 3	PIRQE PIRQF PIRQG PIRQH	PCI_REQ#2 PCI_GNT#2	AD28	PCICLK2
1394	PIRQH	PCI_REQ#1 PCI_GNT#1	AD24	1394_PCLK

DDR DIMM Config.

DEVICE	ADDRESS	CLOCK
DIMM 1	AOH	MCLK_A0/MCLK_A#0 MCLK_A1/MCLK_A#1 MCLK_A2/MCLK_A#2
DIMM 2	A4H	MCLK_B0/MCLK_B#0 MCLK_B1/MCLK_B#1 MCLK_B2/MCLK_B#2

JUMPER SETTING

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

JPWD1	PASSWORD CLEAR
Short	Normal
OPEN	CLEAR PASSWORD

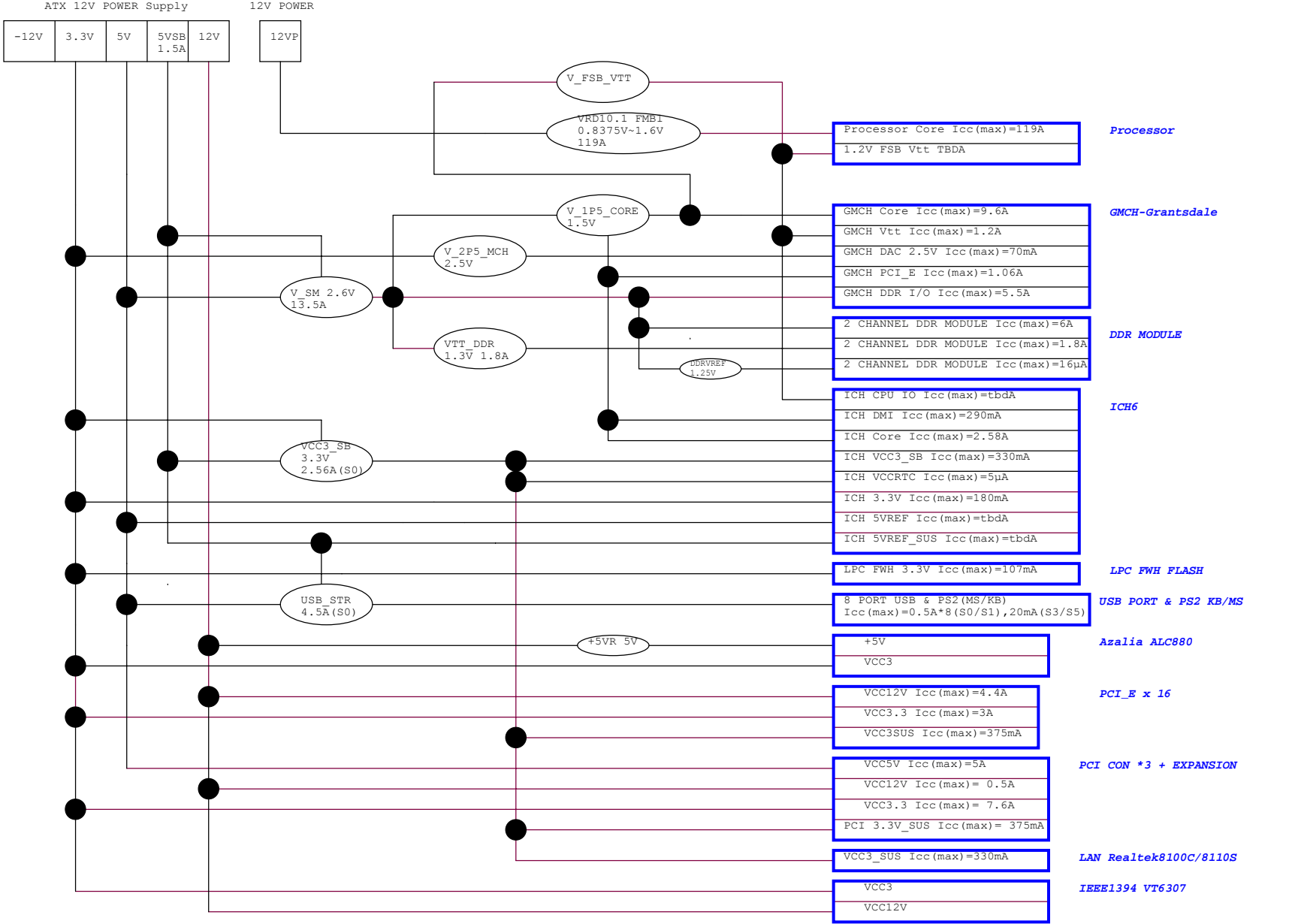
PCI RESET DEVICE

Signals	Target
PCIRST#1	PCI_E, PCI 1-3, LAN, 1394
PCIRST#2	Super I/O,PCI EXTENDER
PCIRST_ICH6#	Northbridge , FWH
HDDRST#	Primary, Scndary IDE

SIO

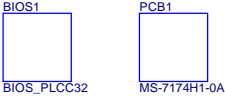
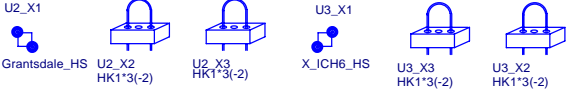
PIN NAME	USAGE	Input/Output	NOTES
GPIO34	BIOS_WP#	OUTPUT	BIOS Write Protect
GPIO35	2X12_DET	INPUT	2x12 Power Conn Detect

POWER DELIVERY MAP



MANUAL PART

HEAT SINK




MSI MICRO-STAR INT'L CO., LTD.

Title POWER DELIVERY MAP & MANUAL PART

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