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NEC:ROPROS

MS-7410 uATX

Version: 10



CPU: Intel, Socket 775 (Intel Core 2 Duo Processors, Intel Pentium D Processors, Intel Pentium 4 Processors, Intel Celeron D Processors)--
65-95 watts Intel Core 2 Duo, Pentium D, Celeron D

System Chipset:

Intel Bearlake - G (G33) (North Bridge)
Intel ICH9 Series (South Bridge)
ROPROS-MA use ICH9 / **ROPROS-VS use ICH9DH**

On Board Device:

CLOCK Gen -- SLG84516BT CLK Gen.
LPC Super I/O -- SCH5617
LAN -- Broadcom-BCM5787M **LAN -- INTEL 82566 (Support ViiV)**
HD Audio Codec -- ALC262 VER:C2
TPM - SLB9635

Main Memory:





Dual-channel DDR-II * 4

Expansion Slots:

PCI EXPRESS X16 SLOT *1
PCI EXPRESS X1 SLOT * 1
PCI SLOT * 2

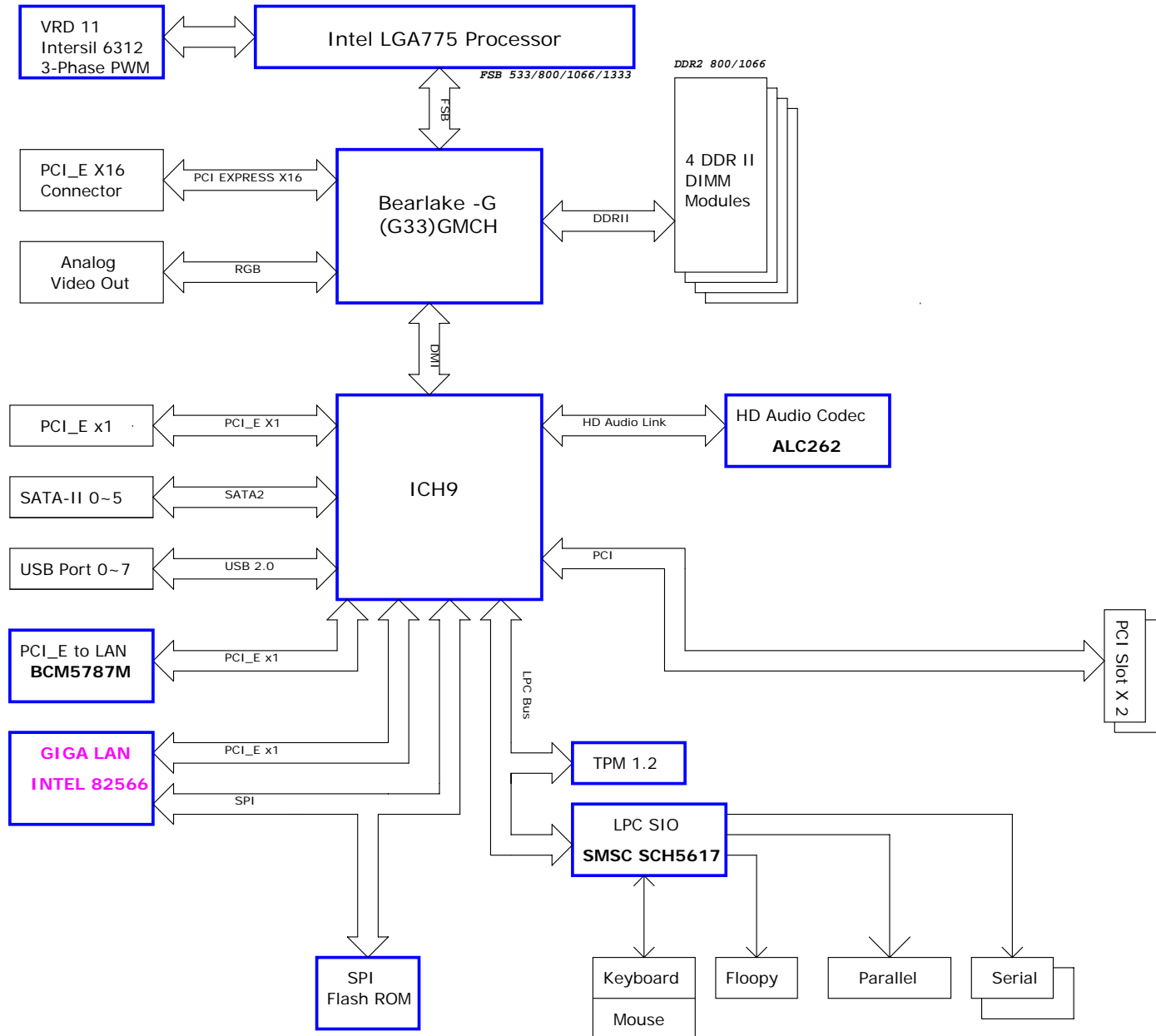
PWM: VRD11 Intersil 6312 3Phase

How to distinguish the different SKU

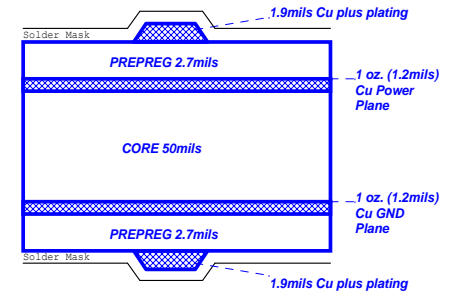
	BLUE Color which mean all model need use
	ORANGE Color which mean ROPROS-MA use
	PINK Color which mean ROPROS-VS
	BROWN Color which mean the part reserve

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Block Diagram



Board Stack-up (1080 Prepreg Considerations)



Single End 50ohm Top/Bottom : 4mils
 USB2.0 - 90ohm : 15/7.5/4.5/7.5/15
 SATA - 95ohm : 15/8/4/8/15
 LAN - 100ohm : 15/10/4/10/15
 PCIe - 95ohm : 15/8/4/8/15

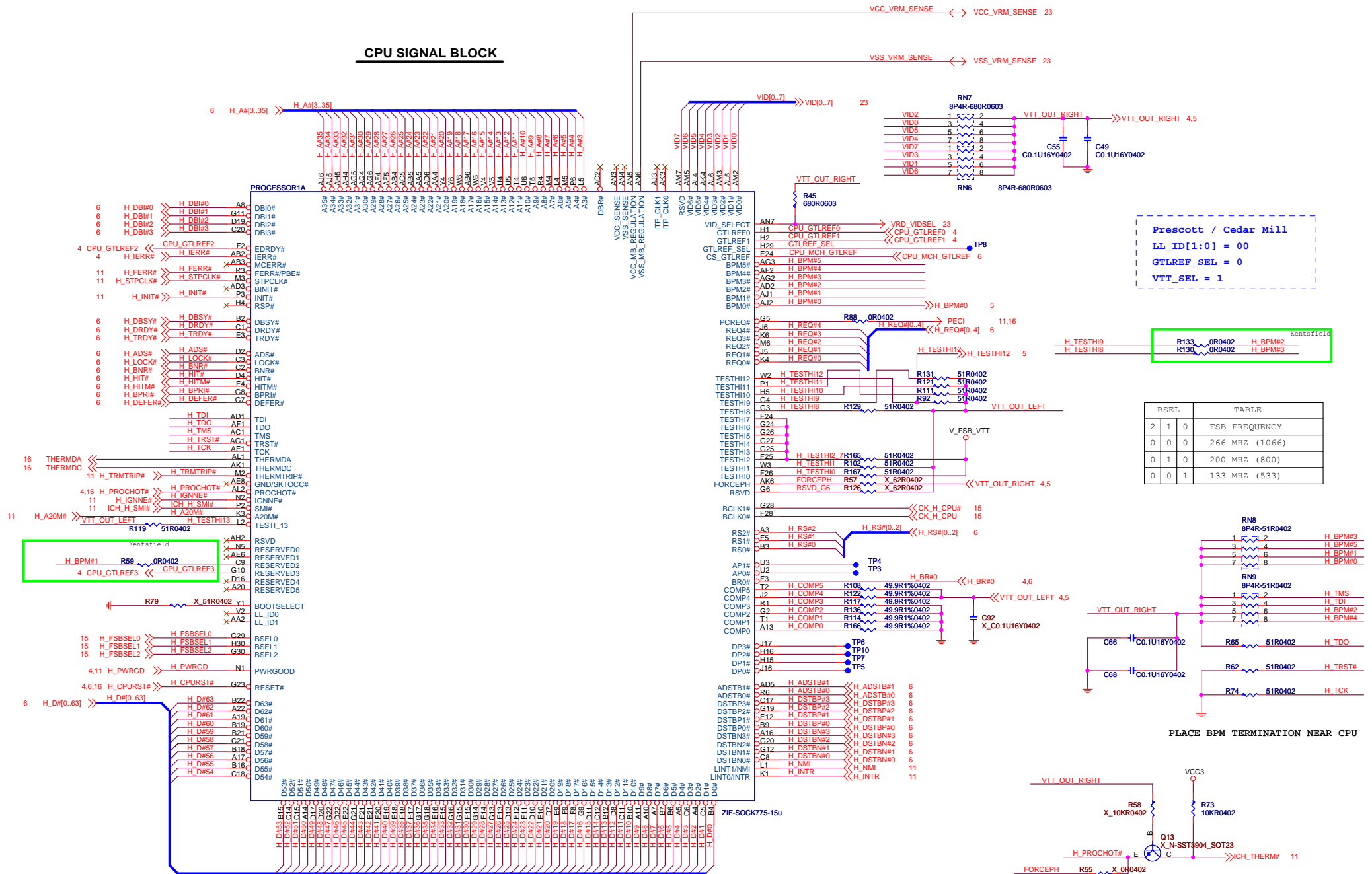


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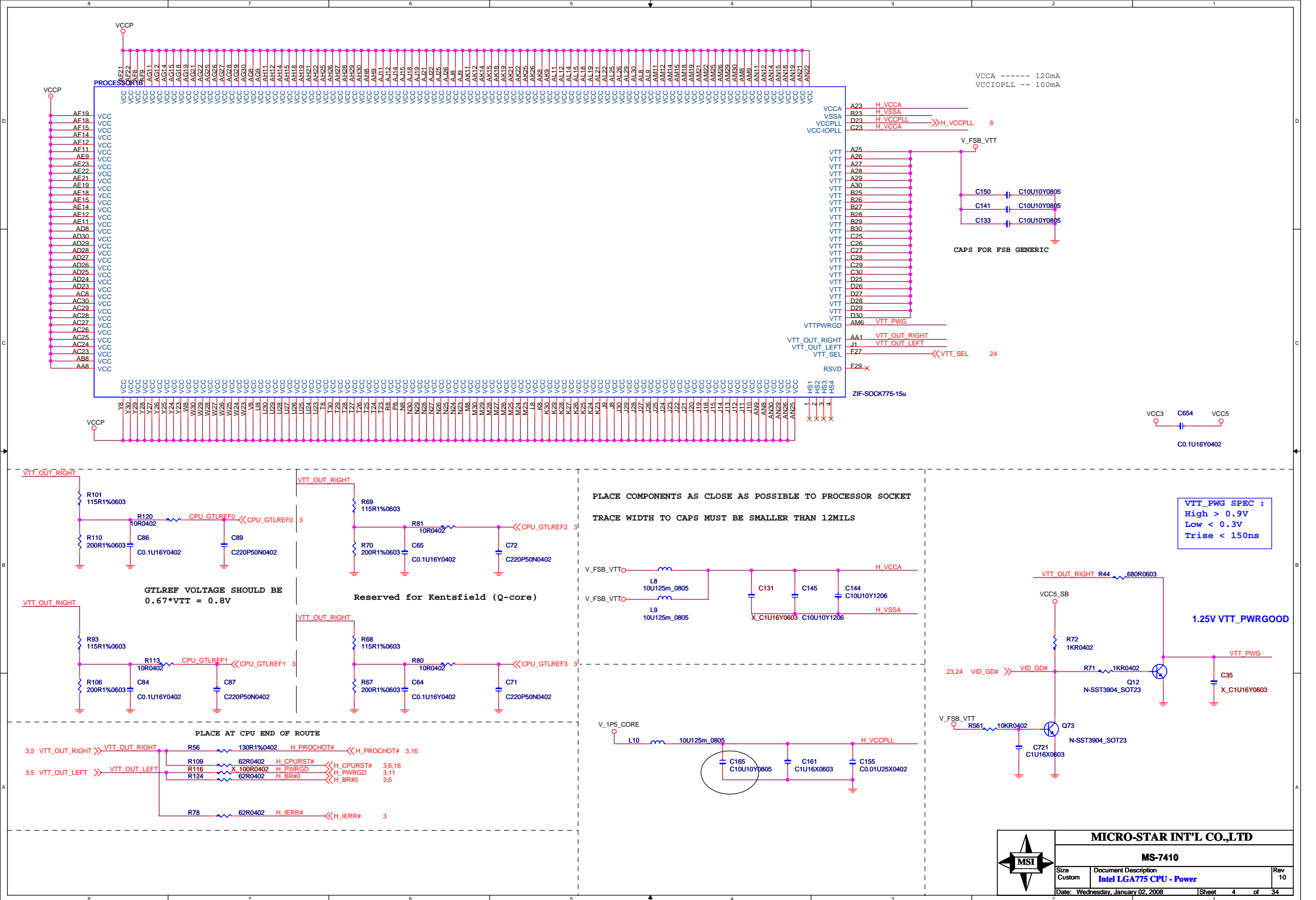
CPU SIGNAL BLOCK



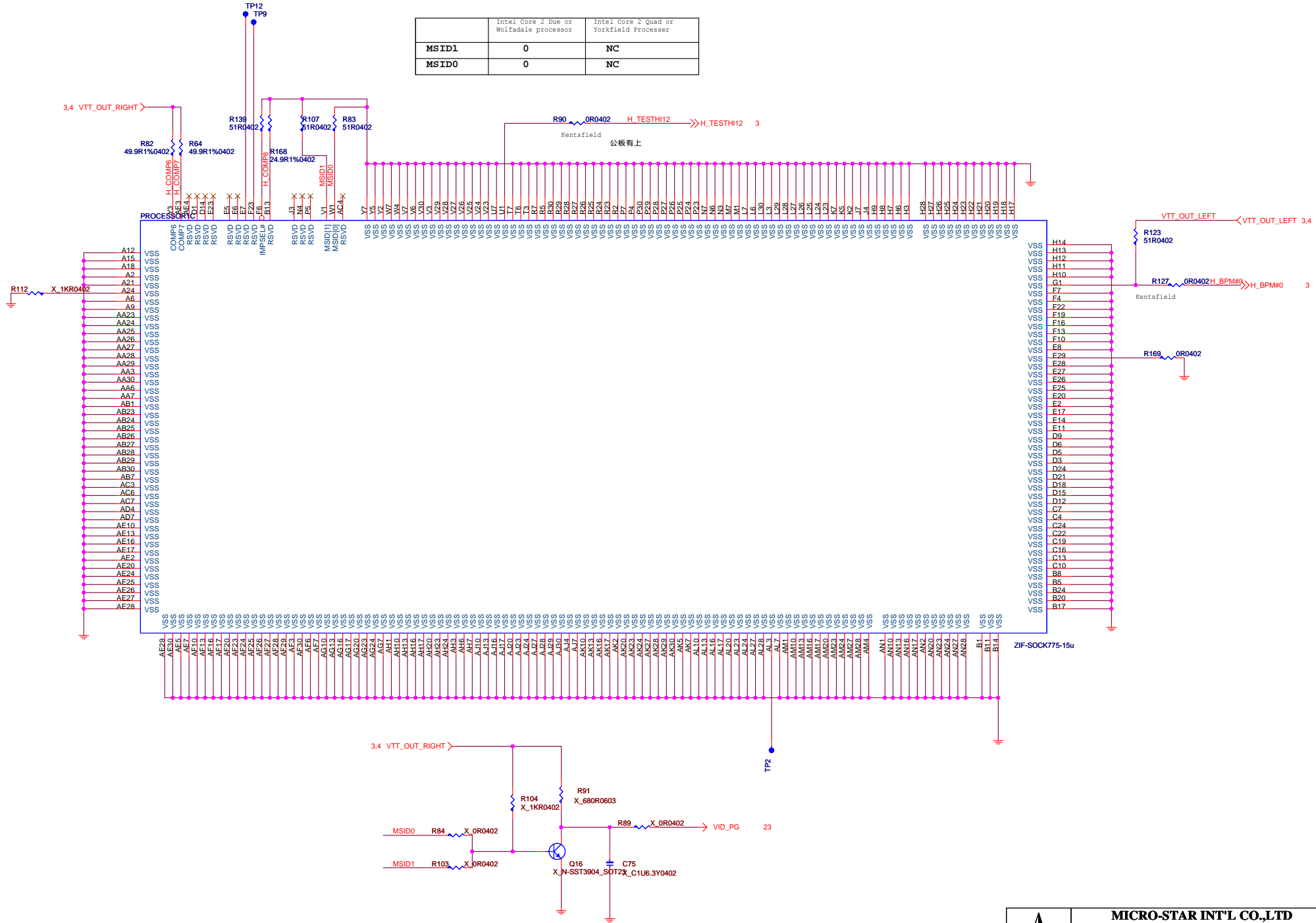
MICRO-STAR INT'L CO.,LTD

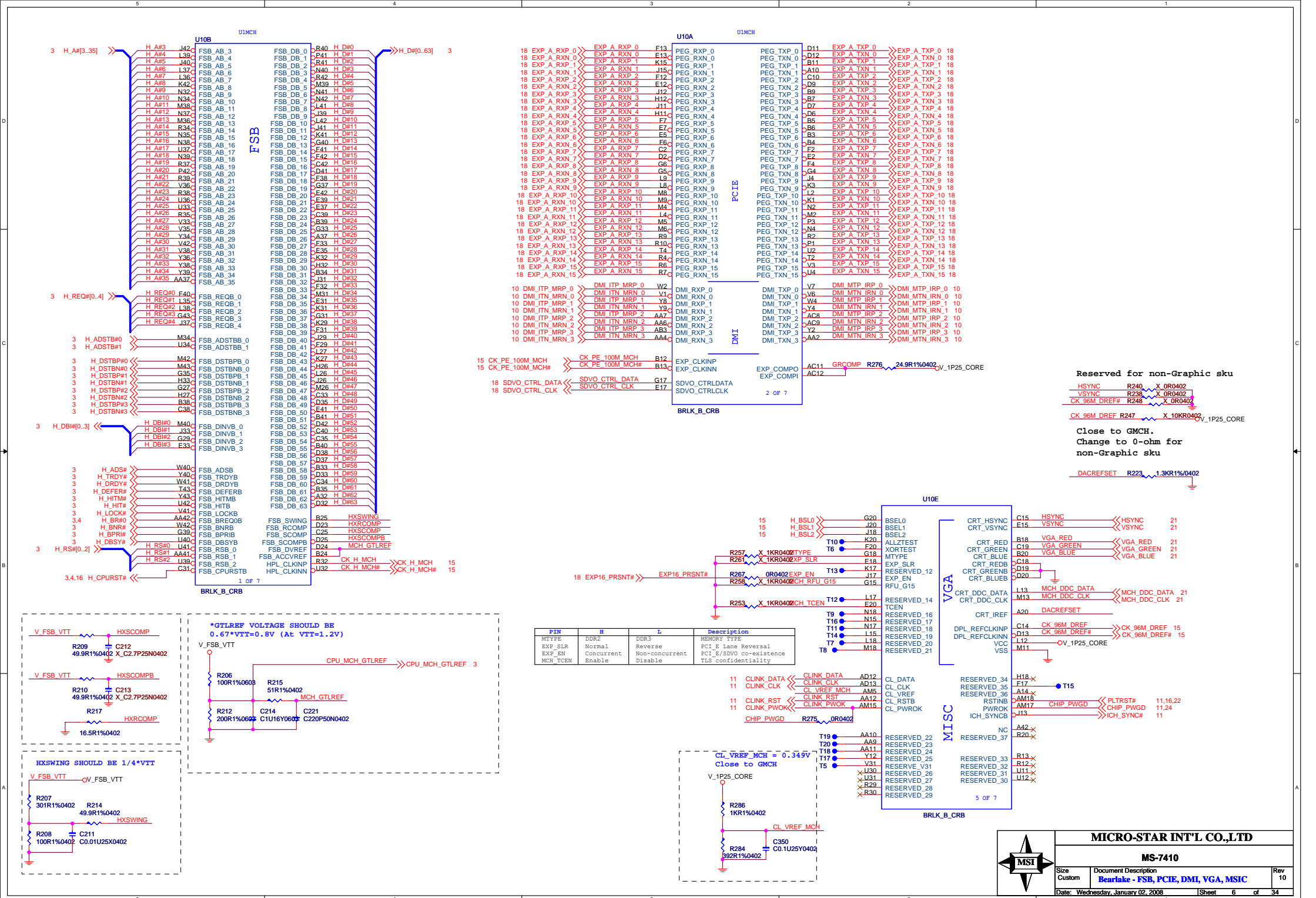
MS-7410

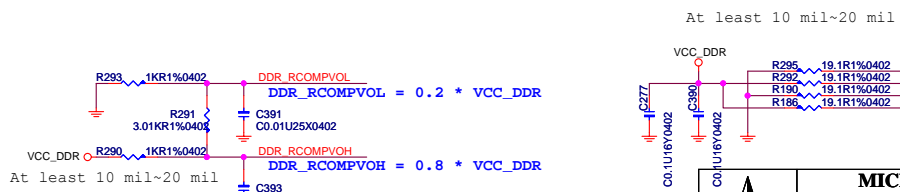
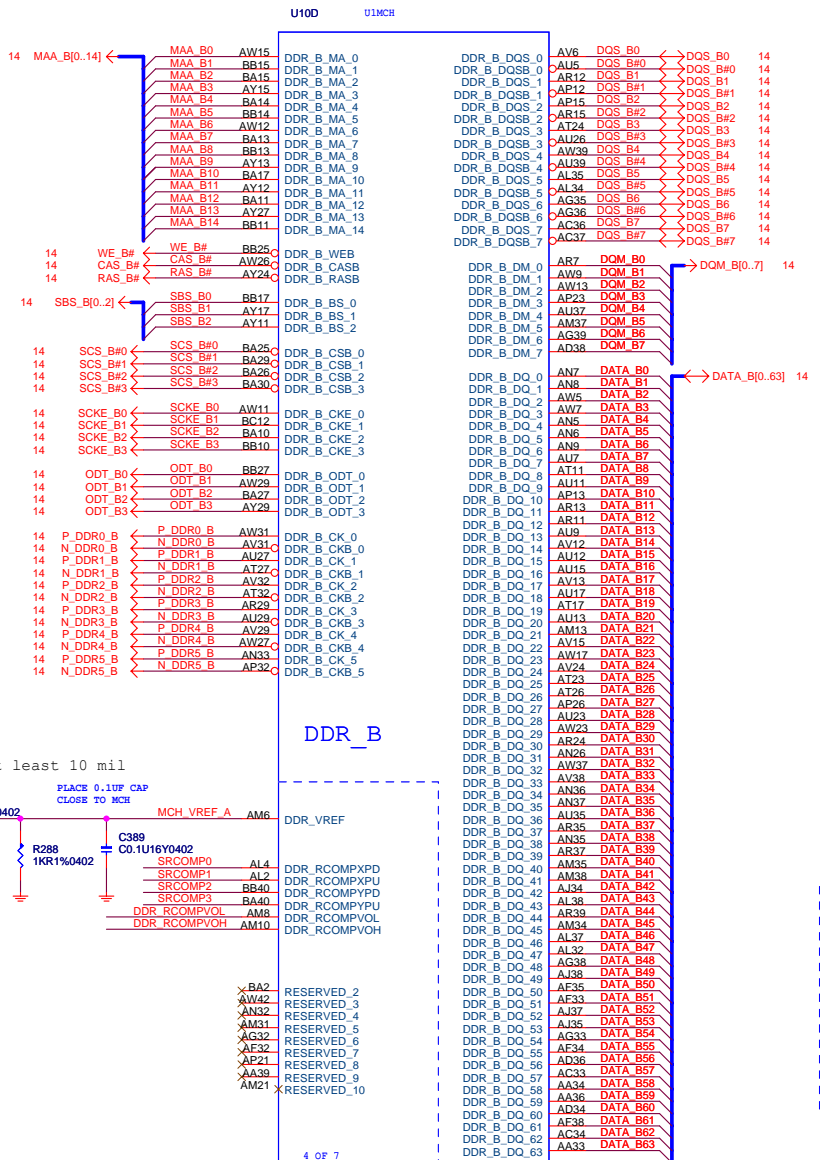
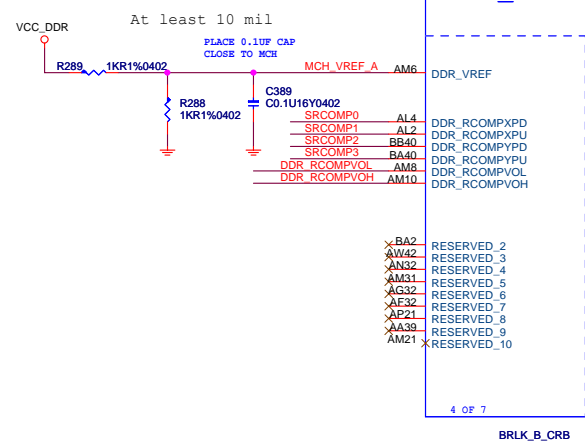
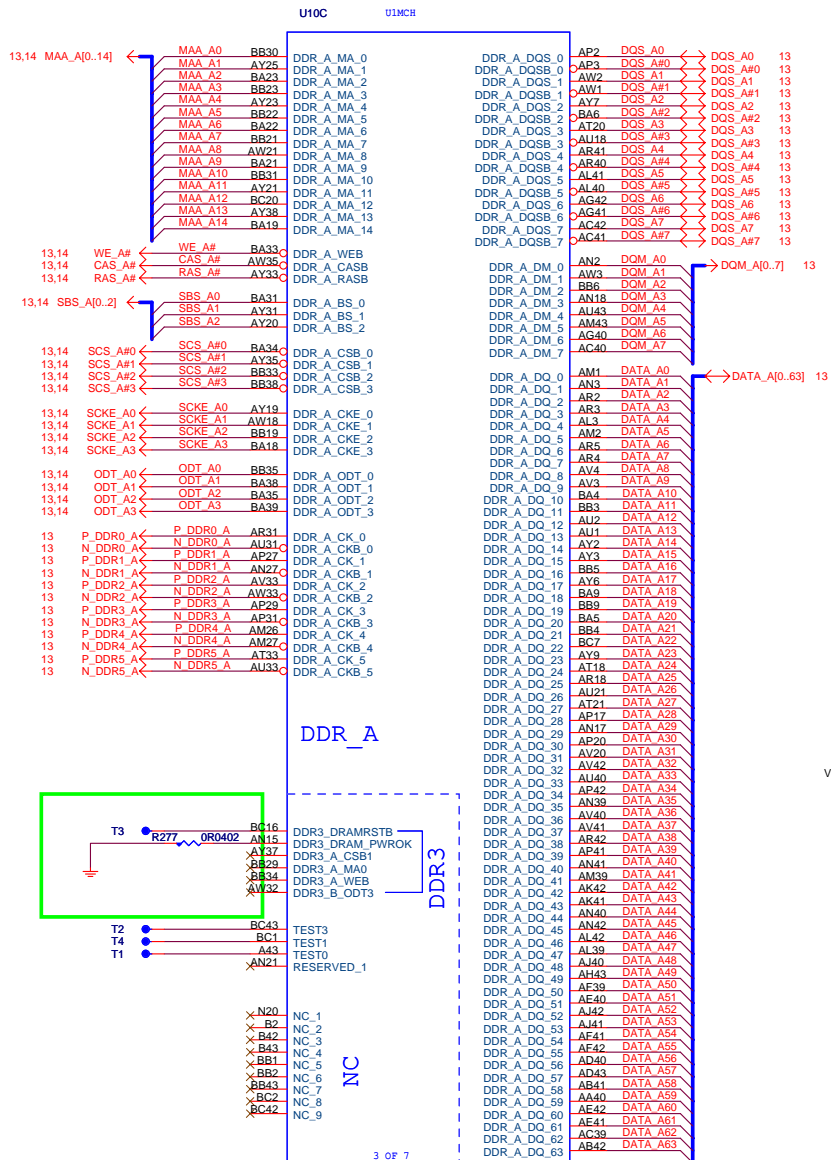
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	Intel Core 2 Due or Wolfdale processor	Intel Core 2 Quad or Yorkfield Processor
MSID1	0	NC
MSID0	0	NC







MSI

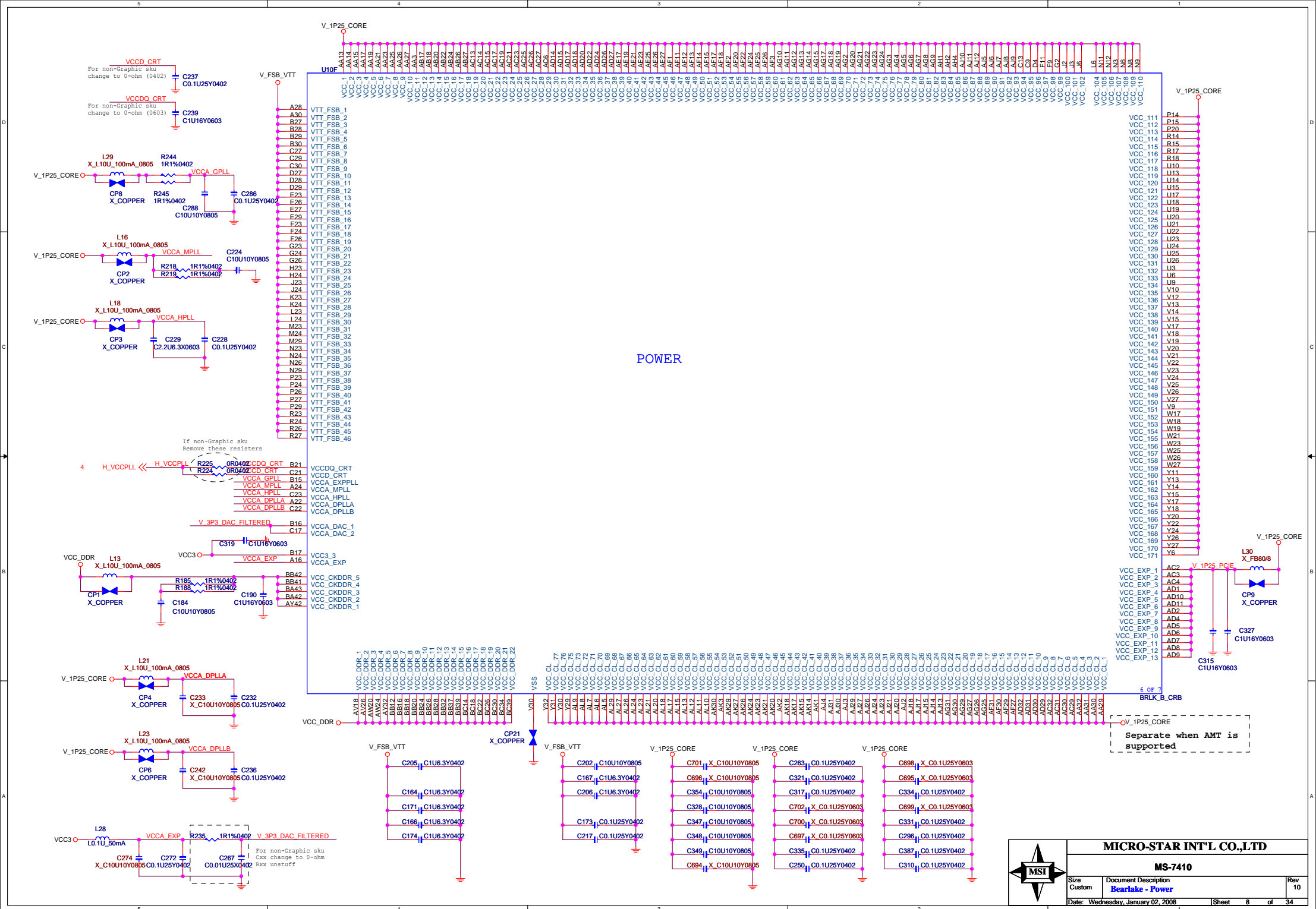
MICRO-STAR INT'L CO.,LTD

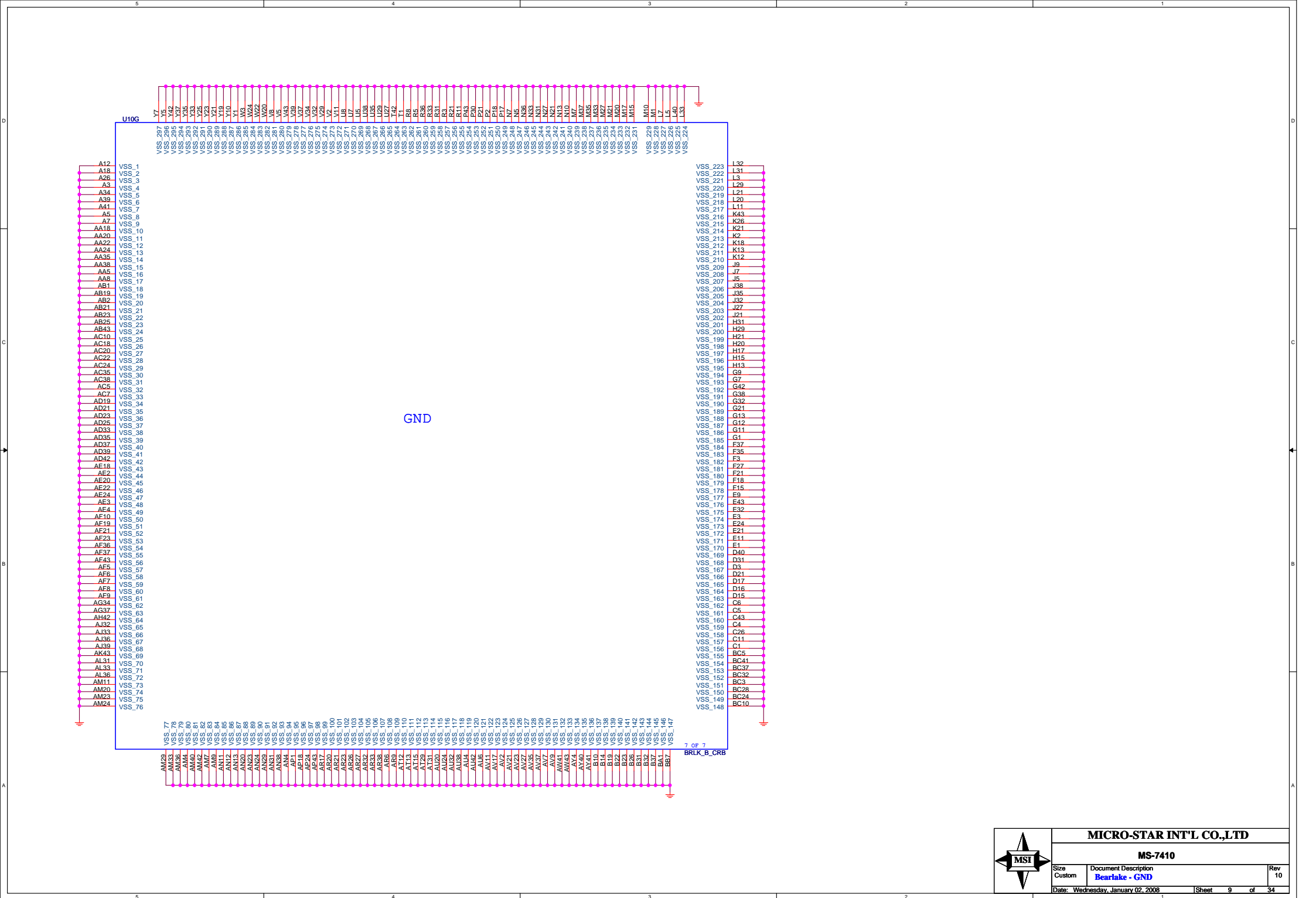
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Bearlake - Memory

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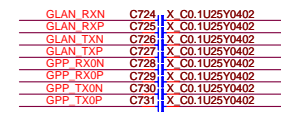
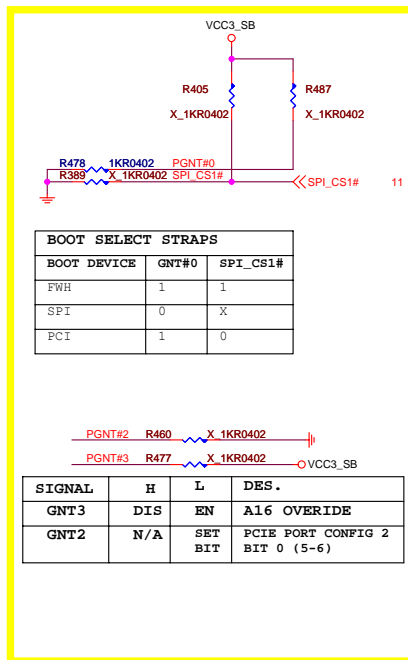
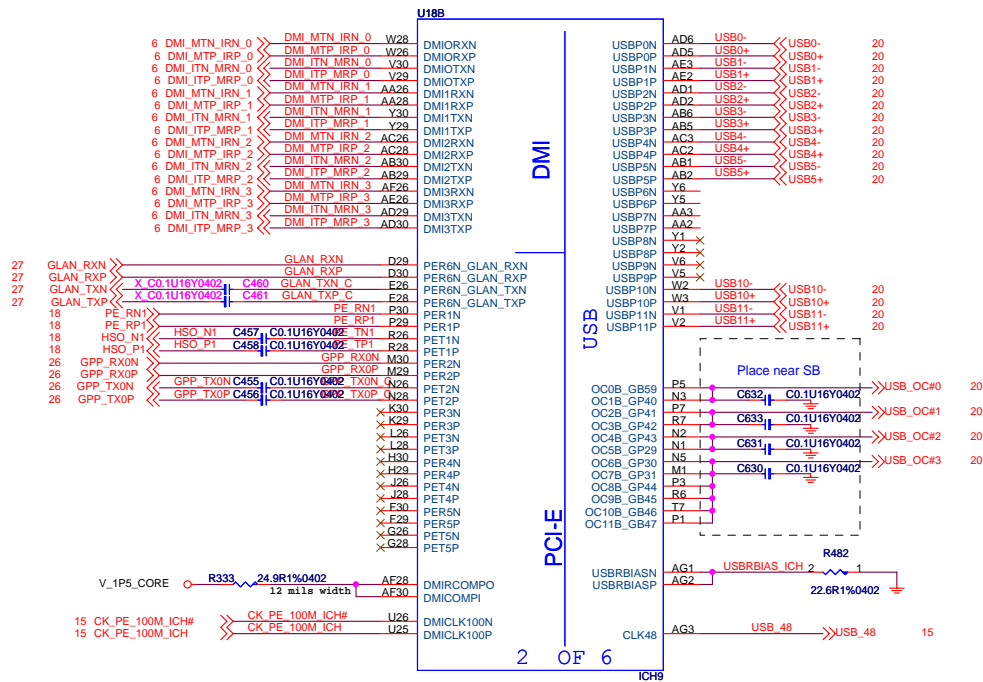
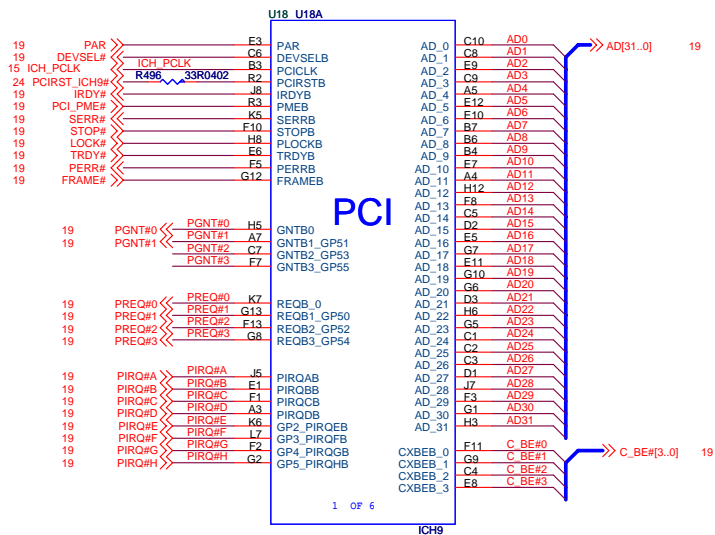


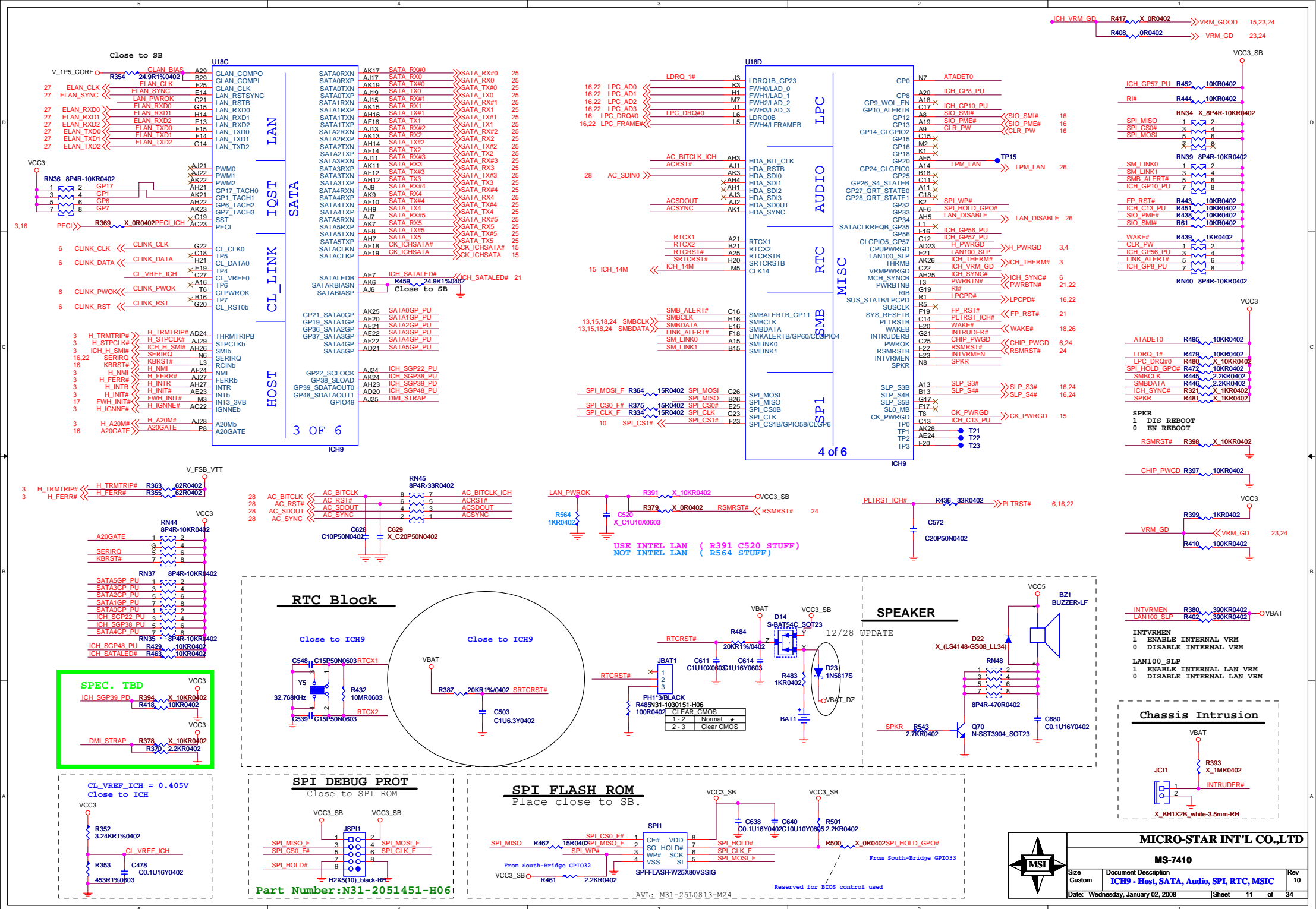
MICRO-STAR INT'L CO.,LTD

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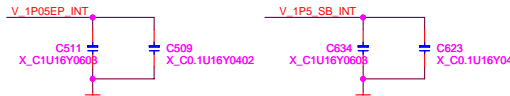
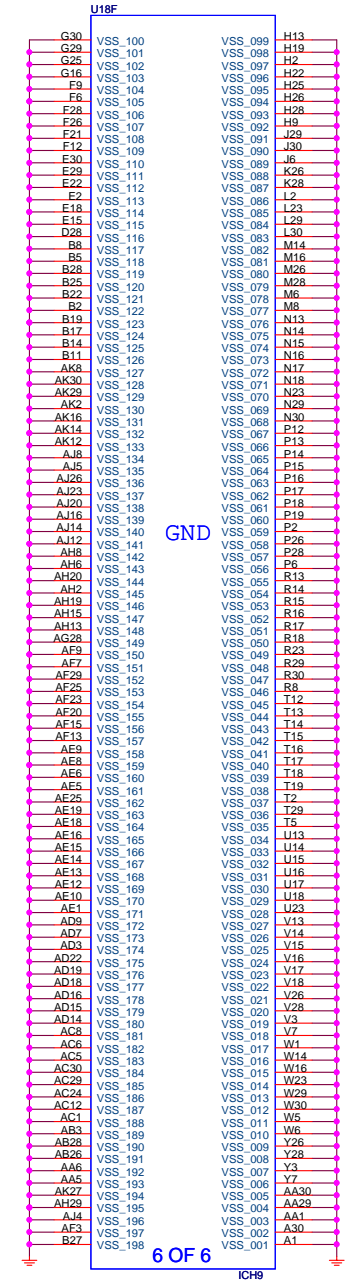
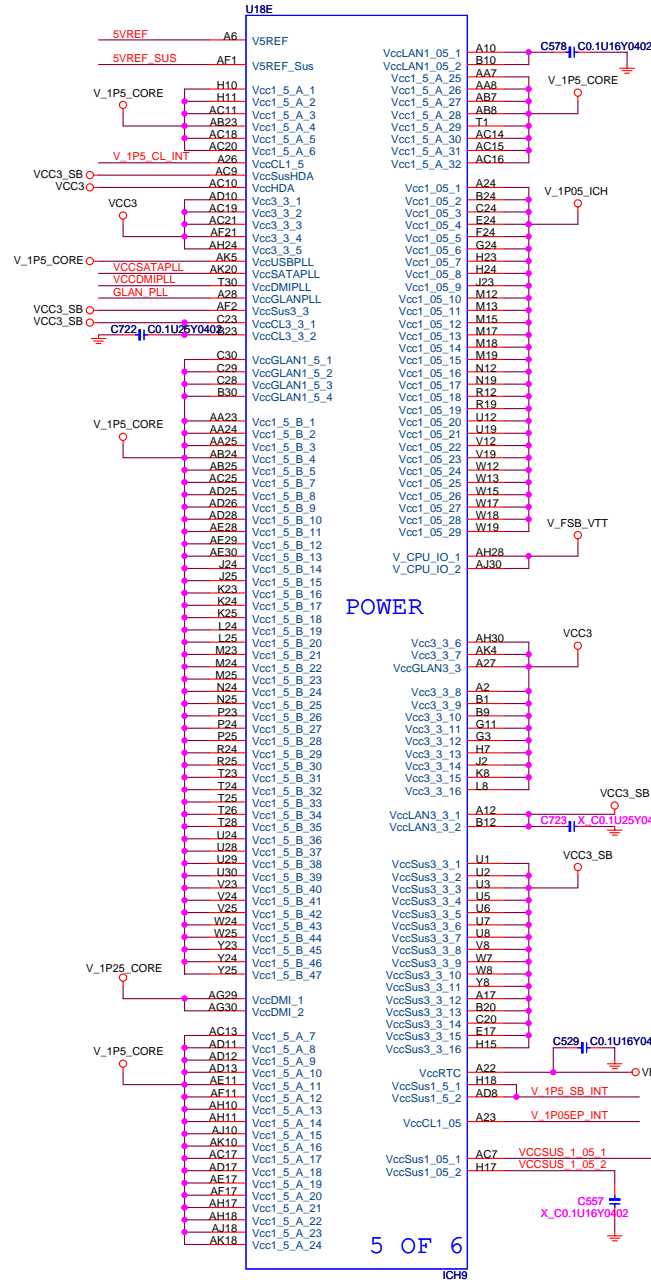
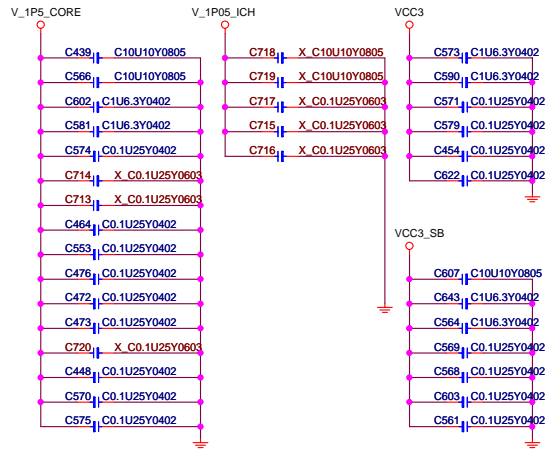
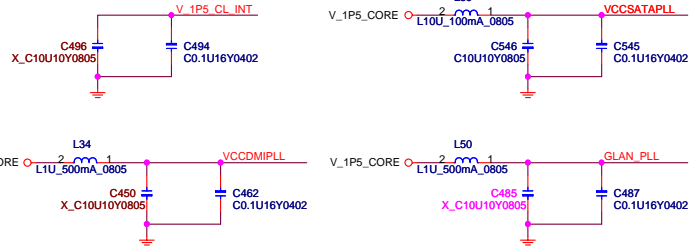
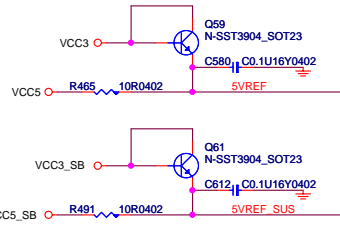
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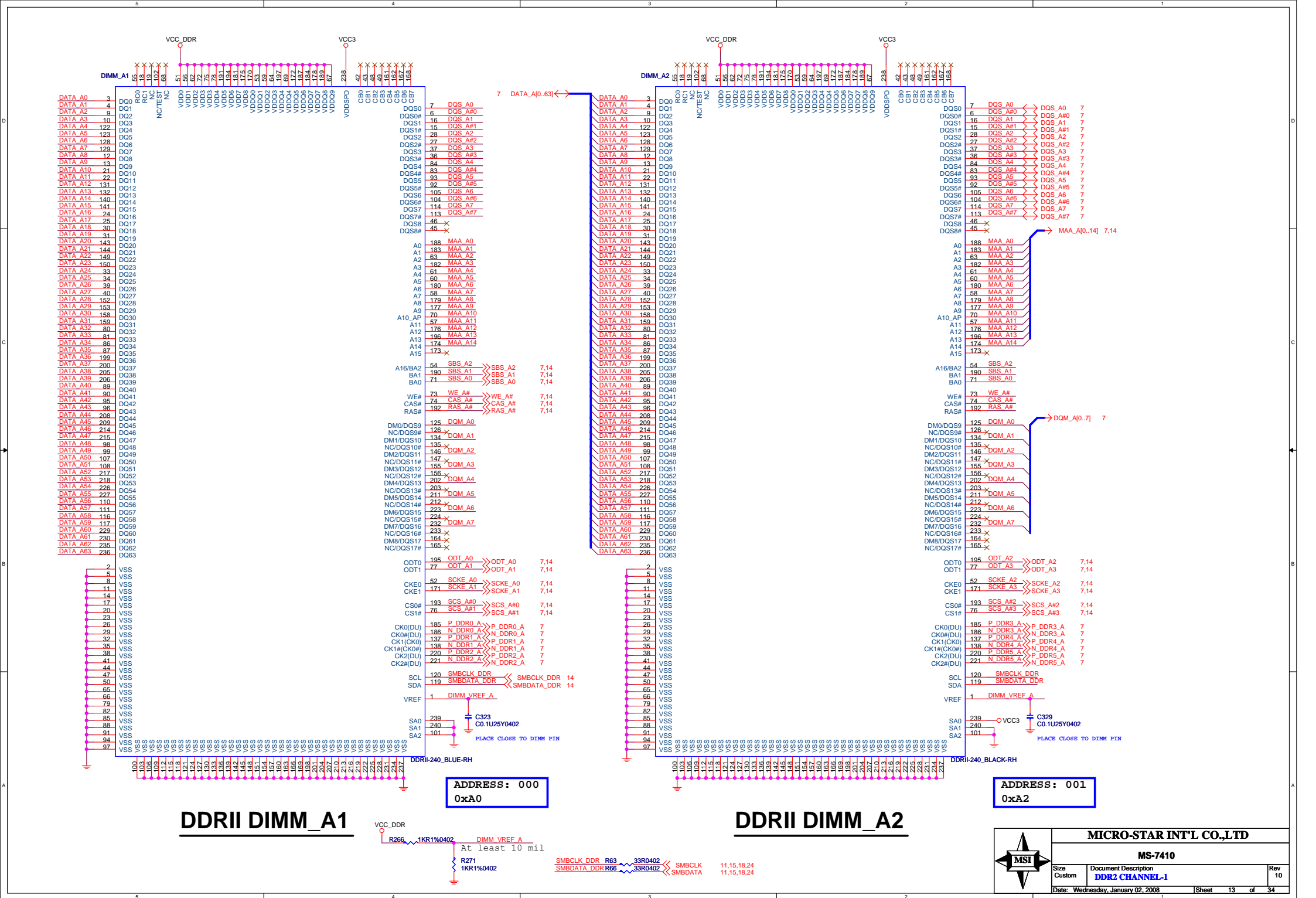




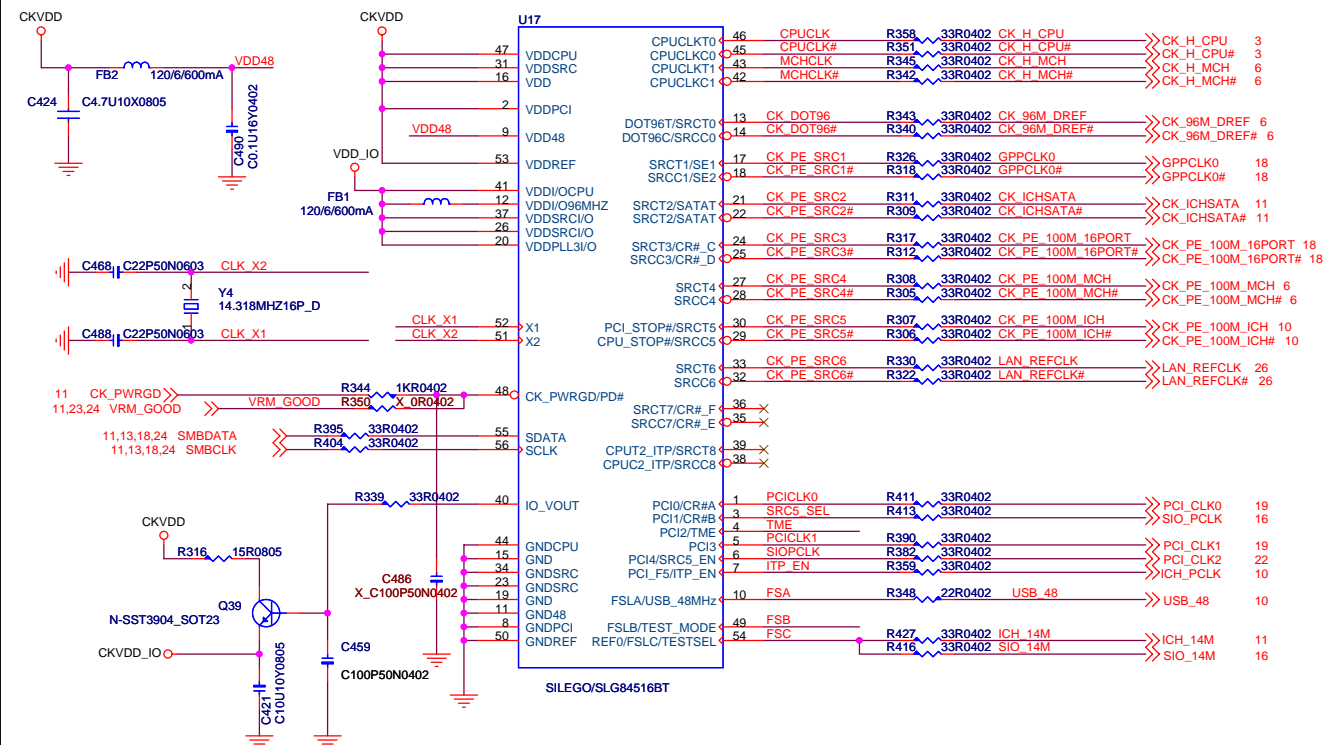
5VREF & 5VREF_SUS Sequencing Circuit

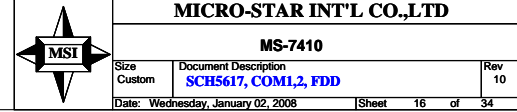


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Custom	ICH9 - Power, GND	10
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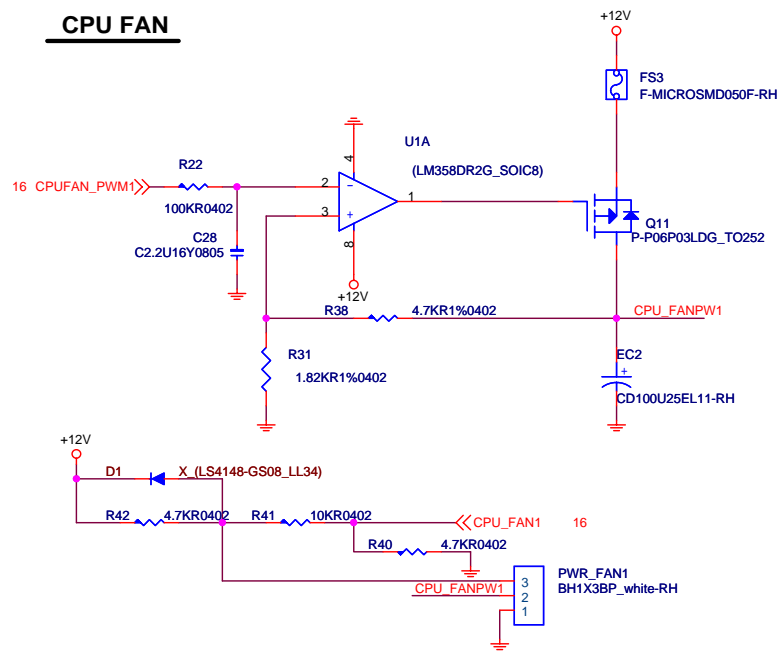


Clock Generator -SILEGO/SLG84516BT

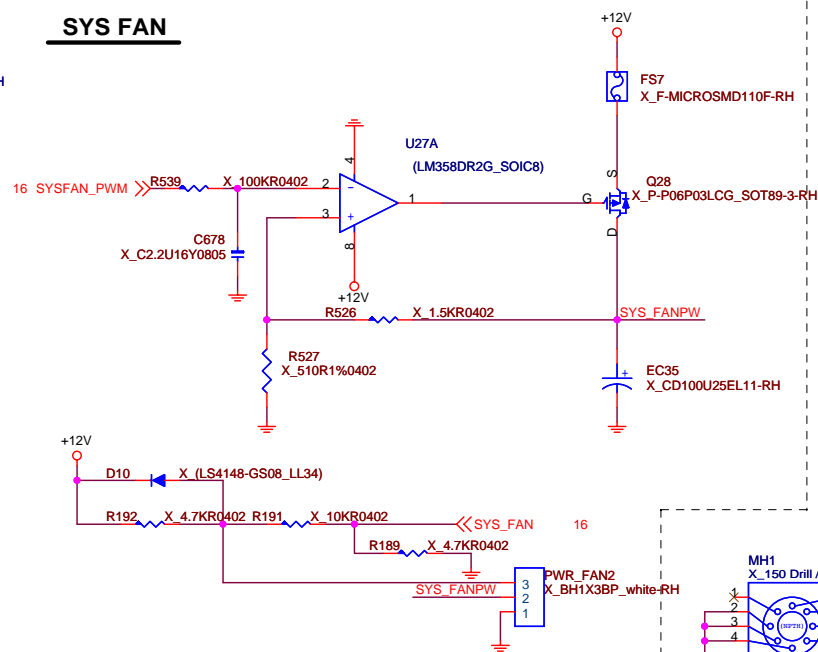




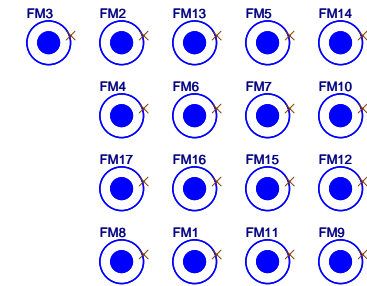
CPU FAN



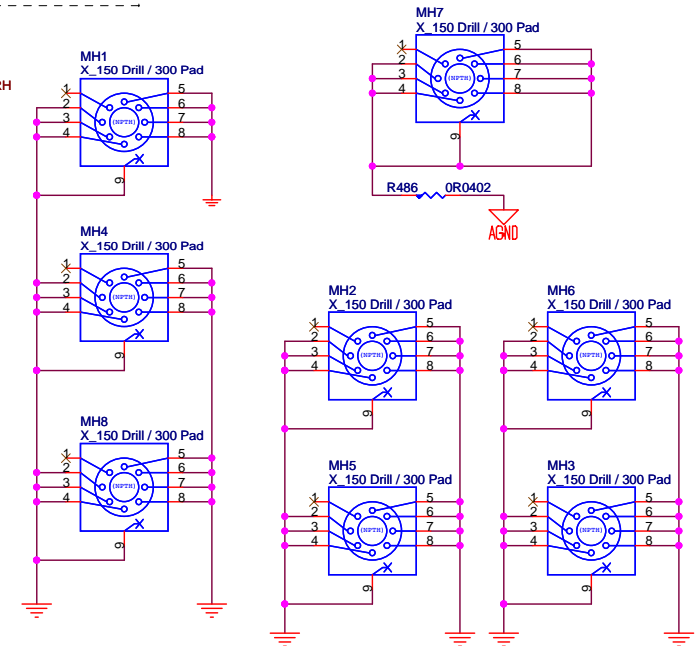
SYS FAN



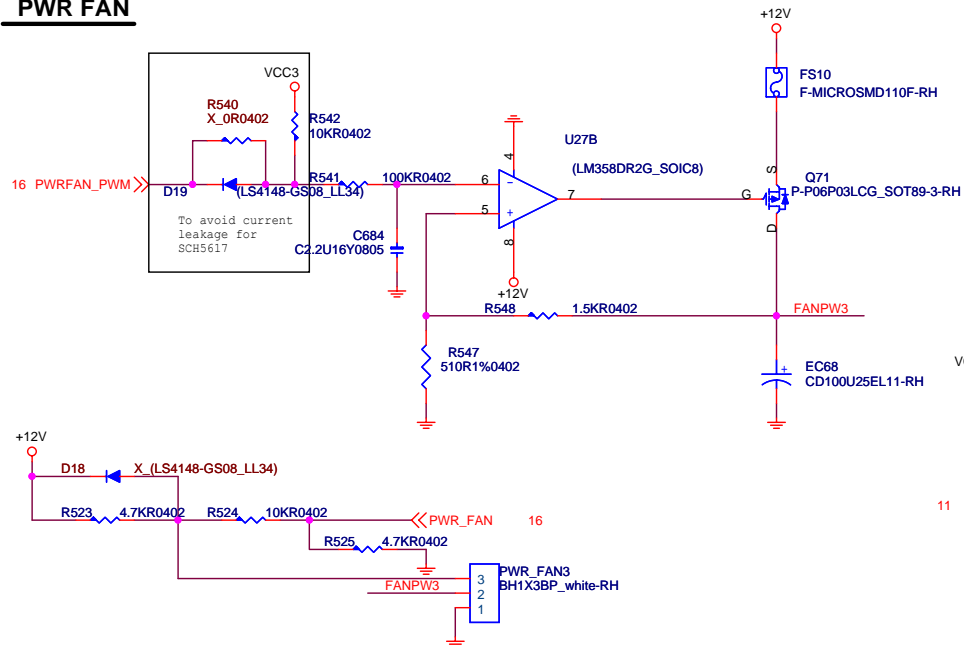
Optical Fiducial Marks




Mounting Holes



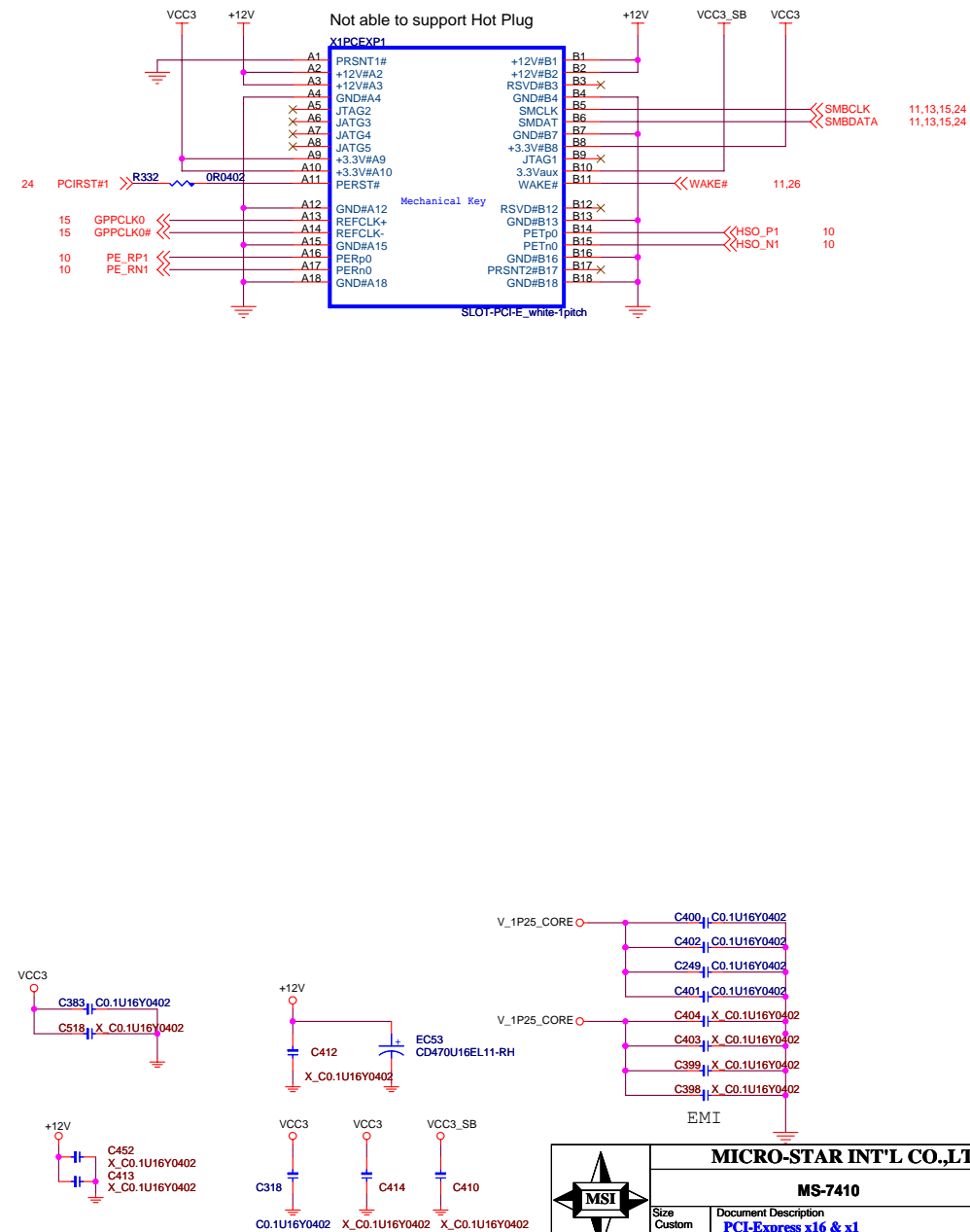
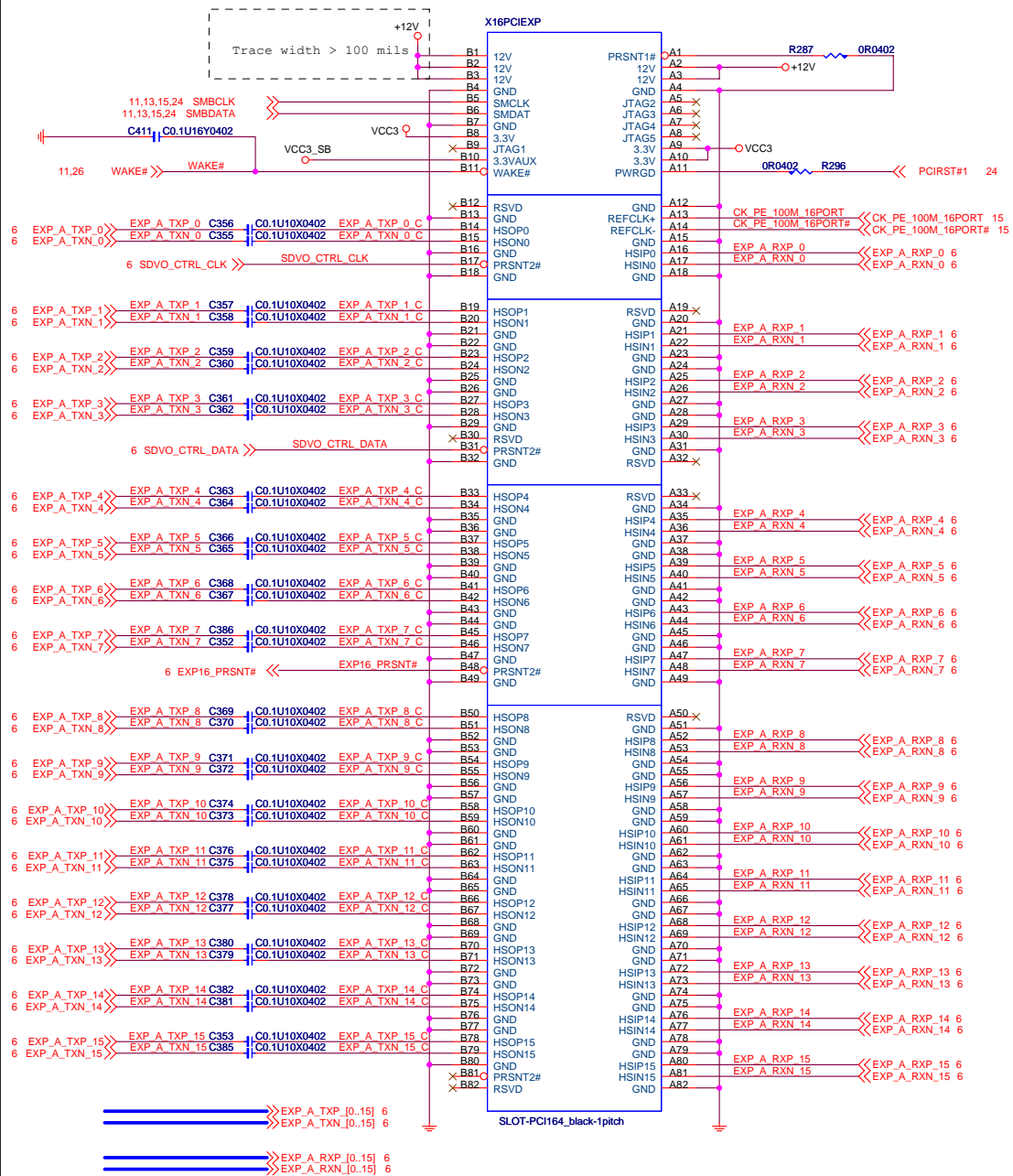
PWR FAN



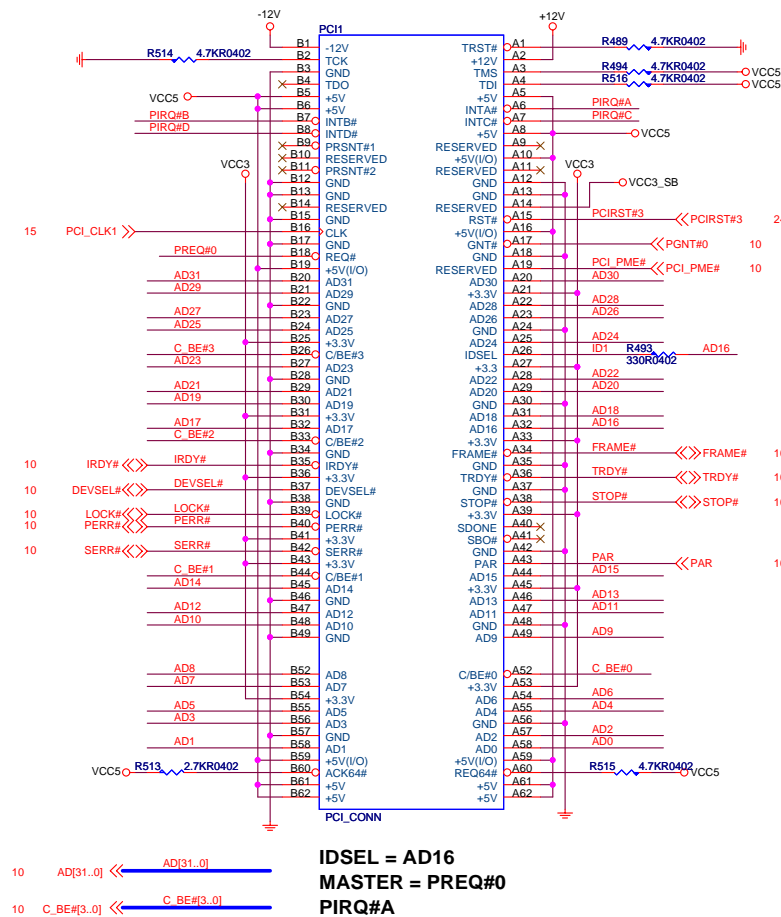
11 FW_H_INIT# >> FW_H_INIT# R492 X 10KR0402 VCC3

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	Size B	Document Description	Rev 10
	CPU/SYS/PWR FAN		
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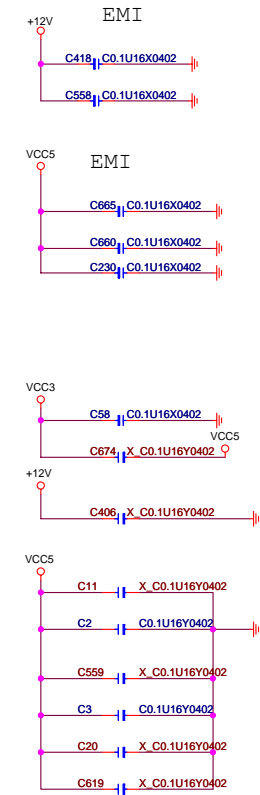
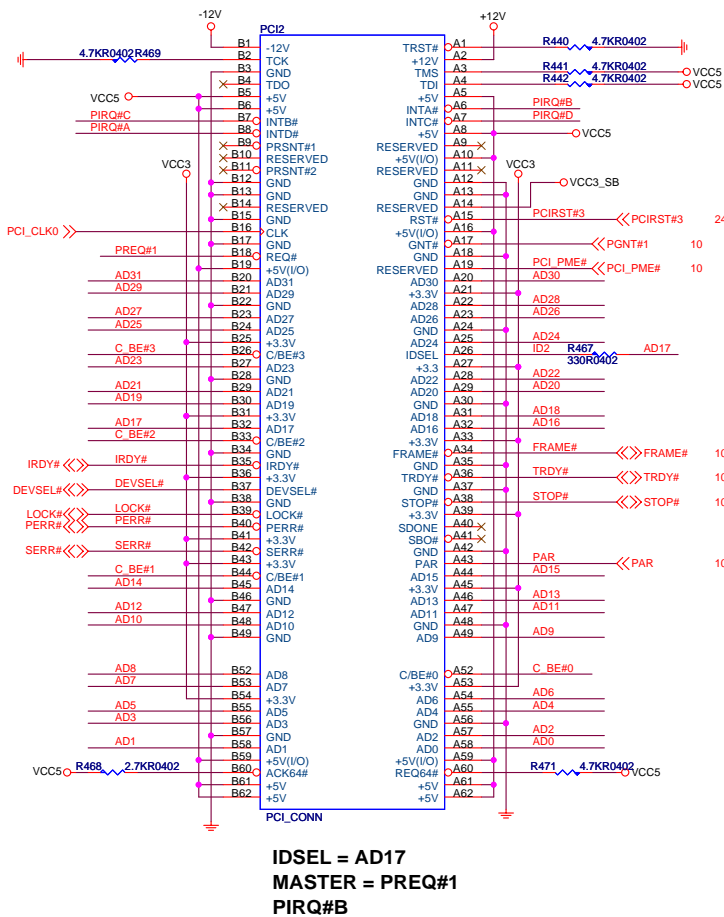
PCI EXPRESS 16-PORT



PCI SLOT 1 (PCI VER: 2.2 COMPL)



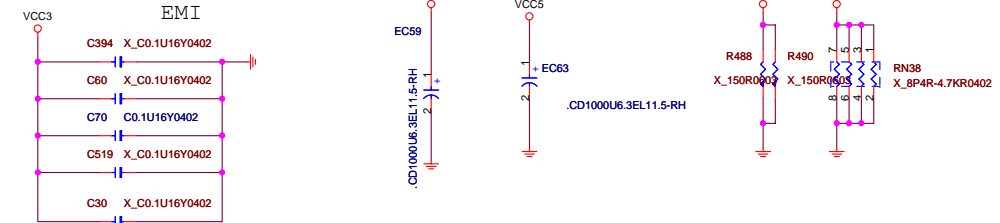
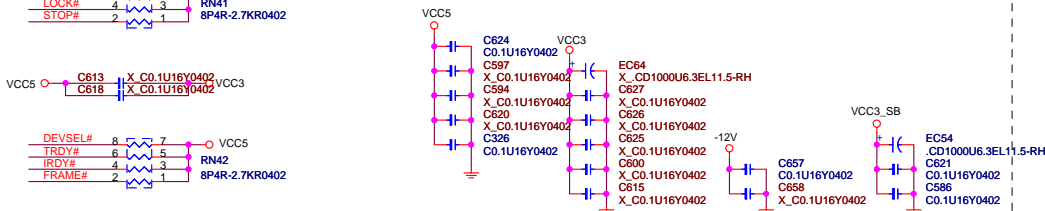
PCI SLOT 2 (PCI VER: 2.2 COMPL)



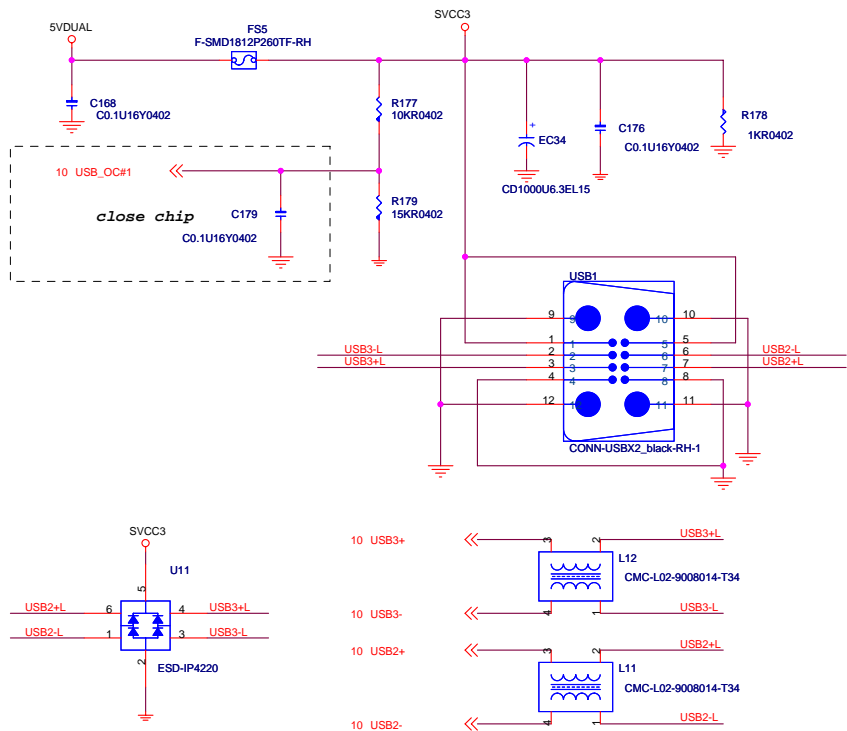
PCI PULL-UP / DOWN RESISTORS



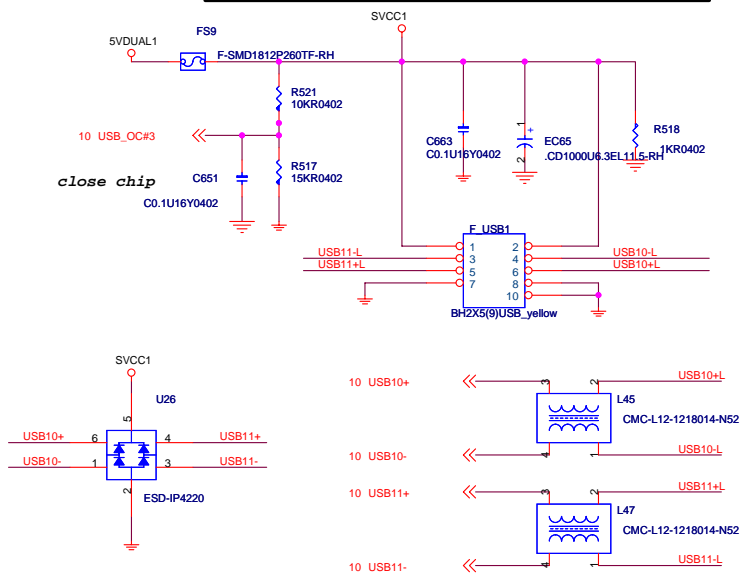
PCI SLOT DECOUPLING CAPACITORS



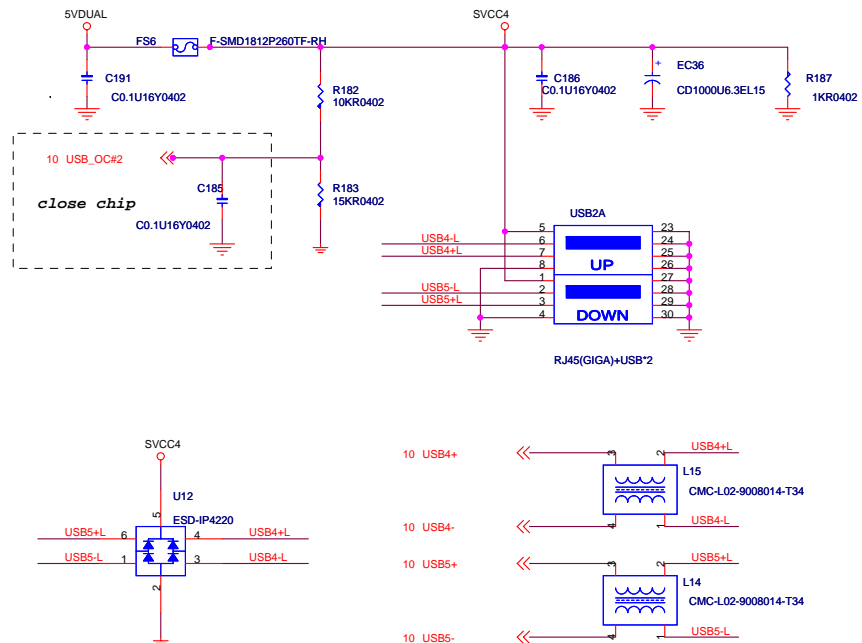
REAR PANEL USB CONNECTOR FOR USB PORT 2,3



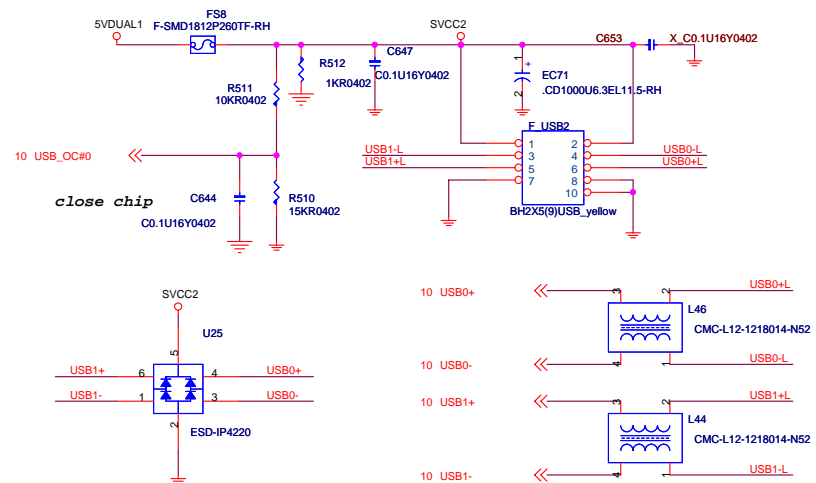
Front USB PORT 10,11 (right angel type)



REAR PANEL USB CONNECTOR FOR USB PORT 4,5



Memory card reader USB CONNECTOR FOR USB PORT 0,1

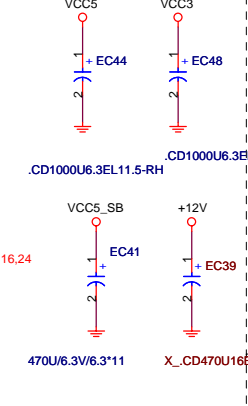
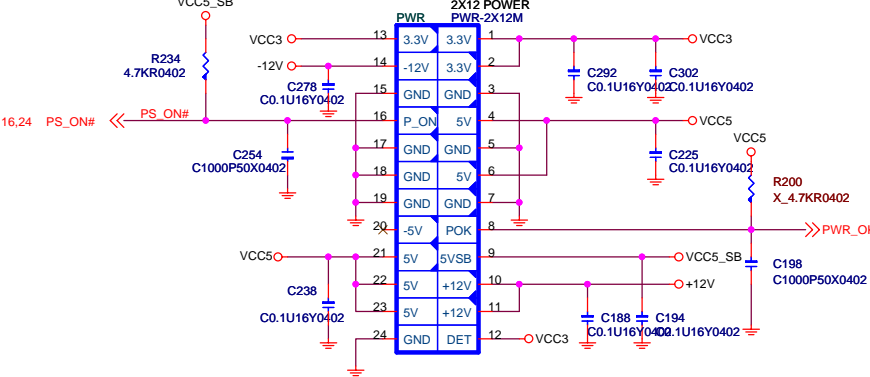


MICRO-STAR INT'L CO.,LTD

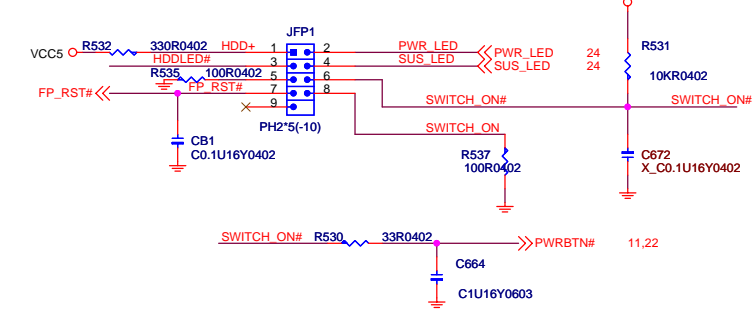
MS-7410

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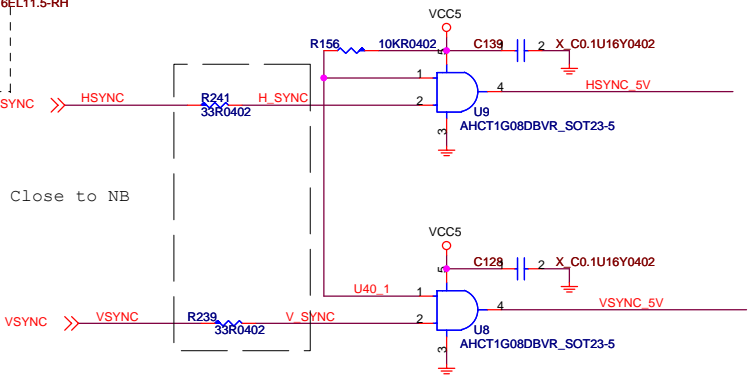
ATX Connector



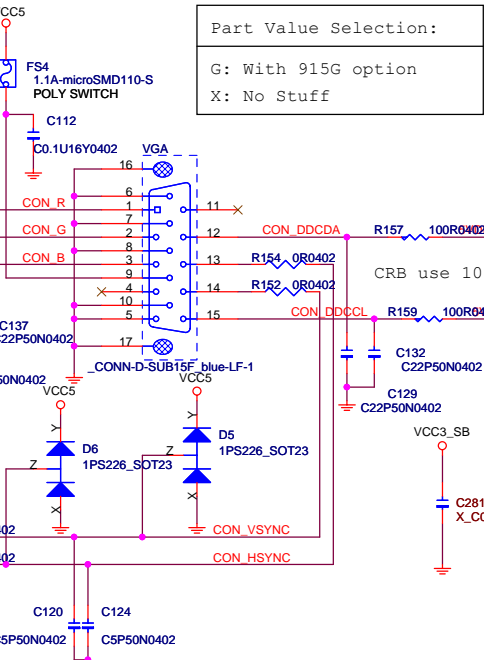
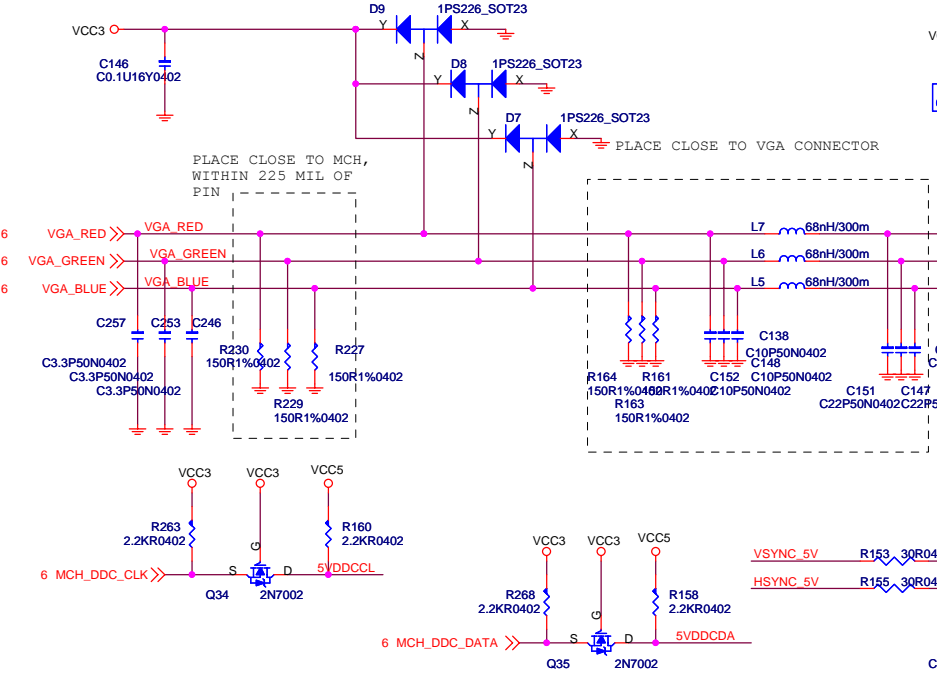
Intel Front Panel



IDE LED

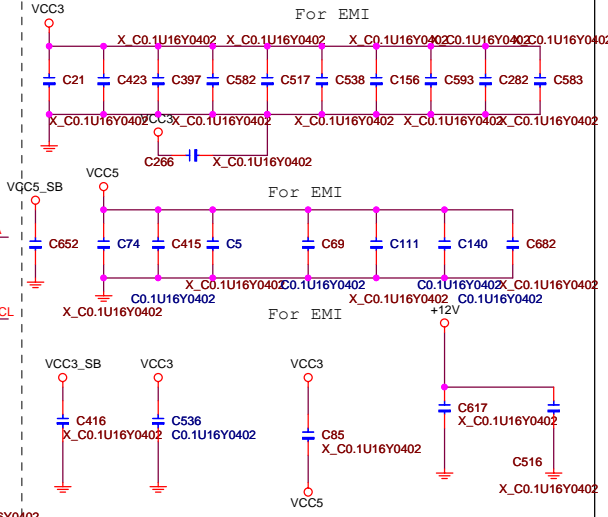


Video Connector



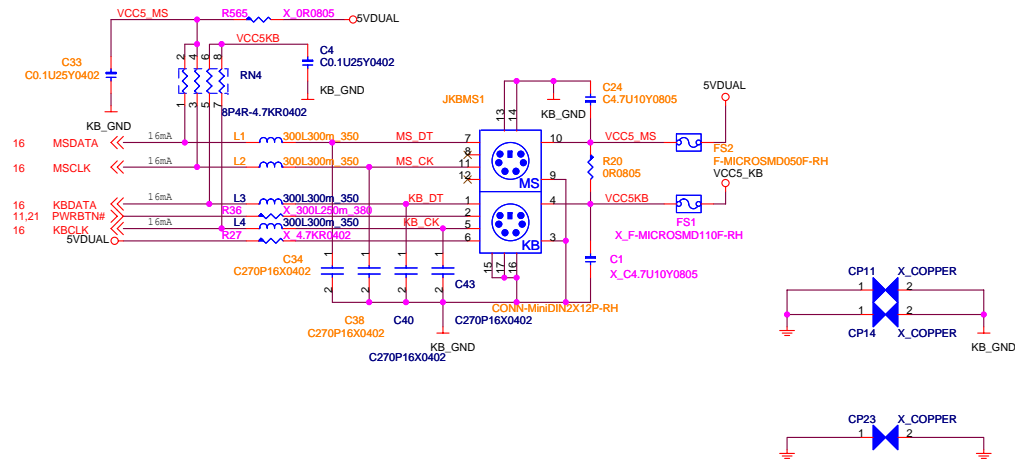
Part Value Selection:

G:	With 915G option
X:	No Stuff



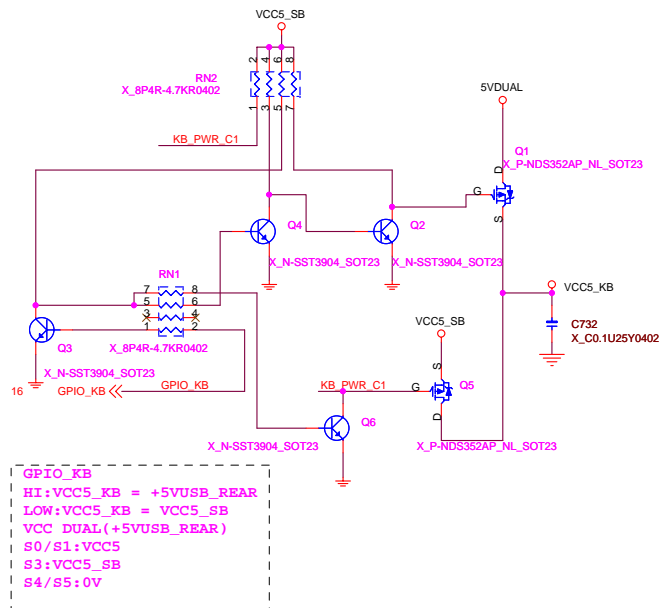
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MS-7410			
Size Custom	Document Description	Rev 10	
ATX, Front Panel & VGA Conn			
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PS2 KEYBOARD & MOUSE CONNECTOR

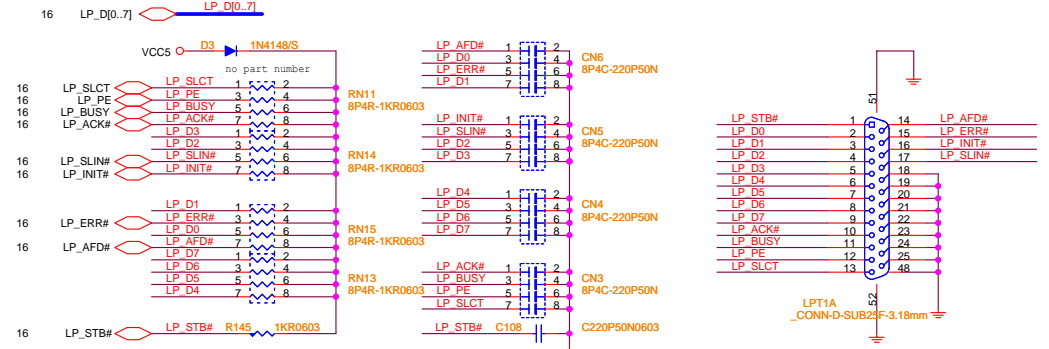


	FS2	R20	C24	L1	L2	C33	C33	C34	C38	FS1	C1	R27	R36
ROPROS-MA	V	V	V	V	V	V	V	V	V	X	X	X	X
ROPROS-VS	X	X	X	X	X	X	X	X	X	V	V	V	V
ROPROS-NECCA	V	V	V	V	V	V	V	V	V	X	X	X	X

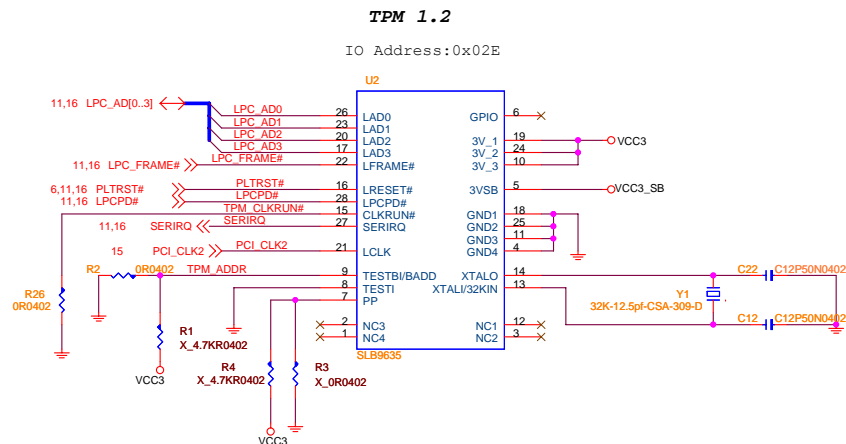
K/B Power supply function for ROPROS-VS



PARALLAL PORT

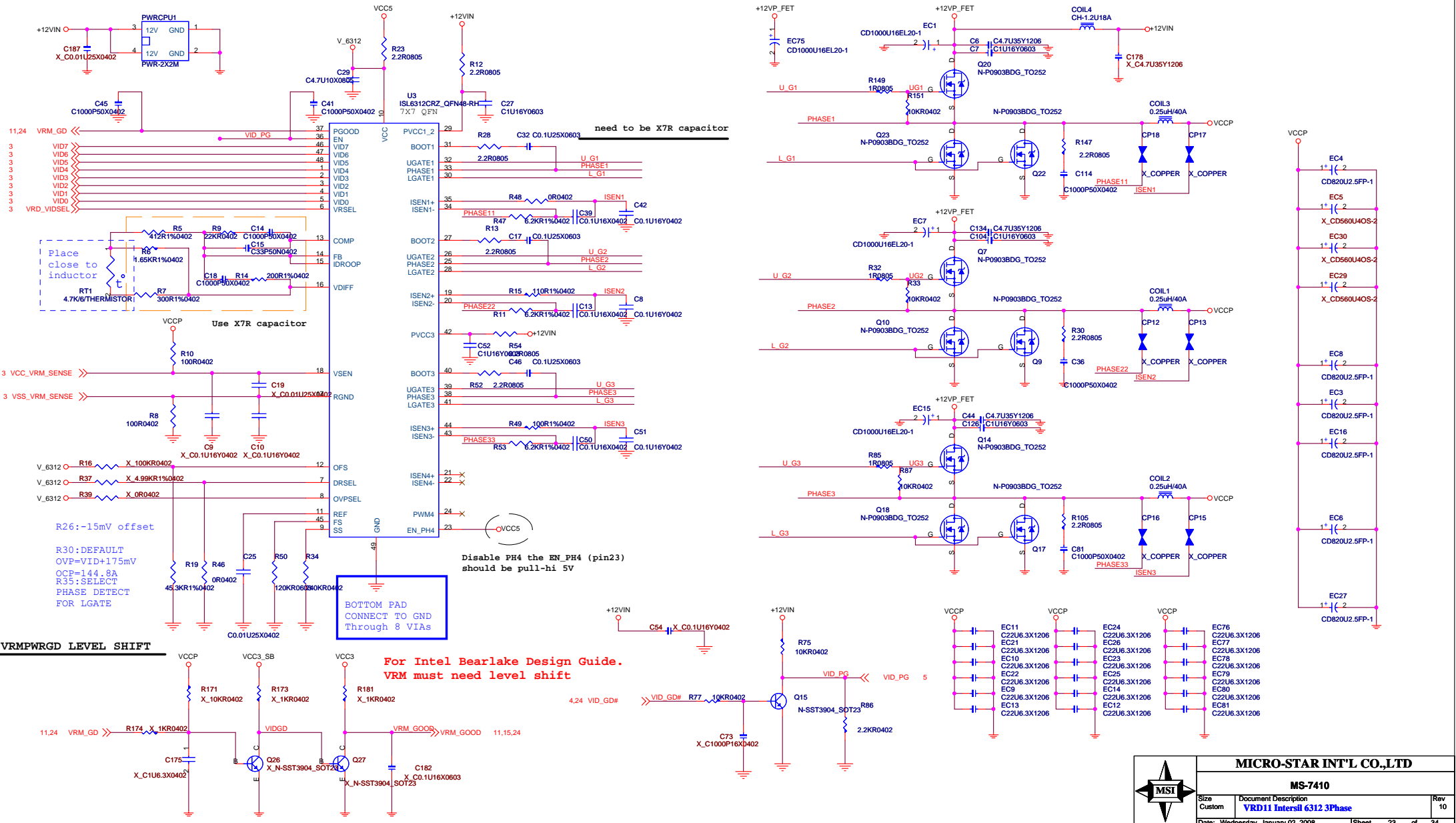


T.P.M FOR ROPROS-MA



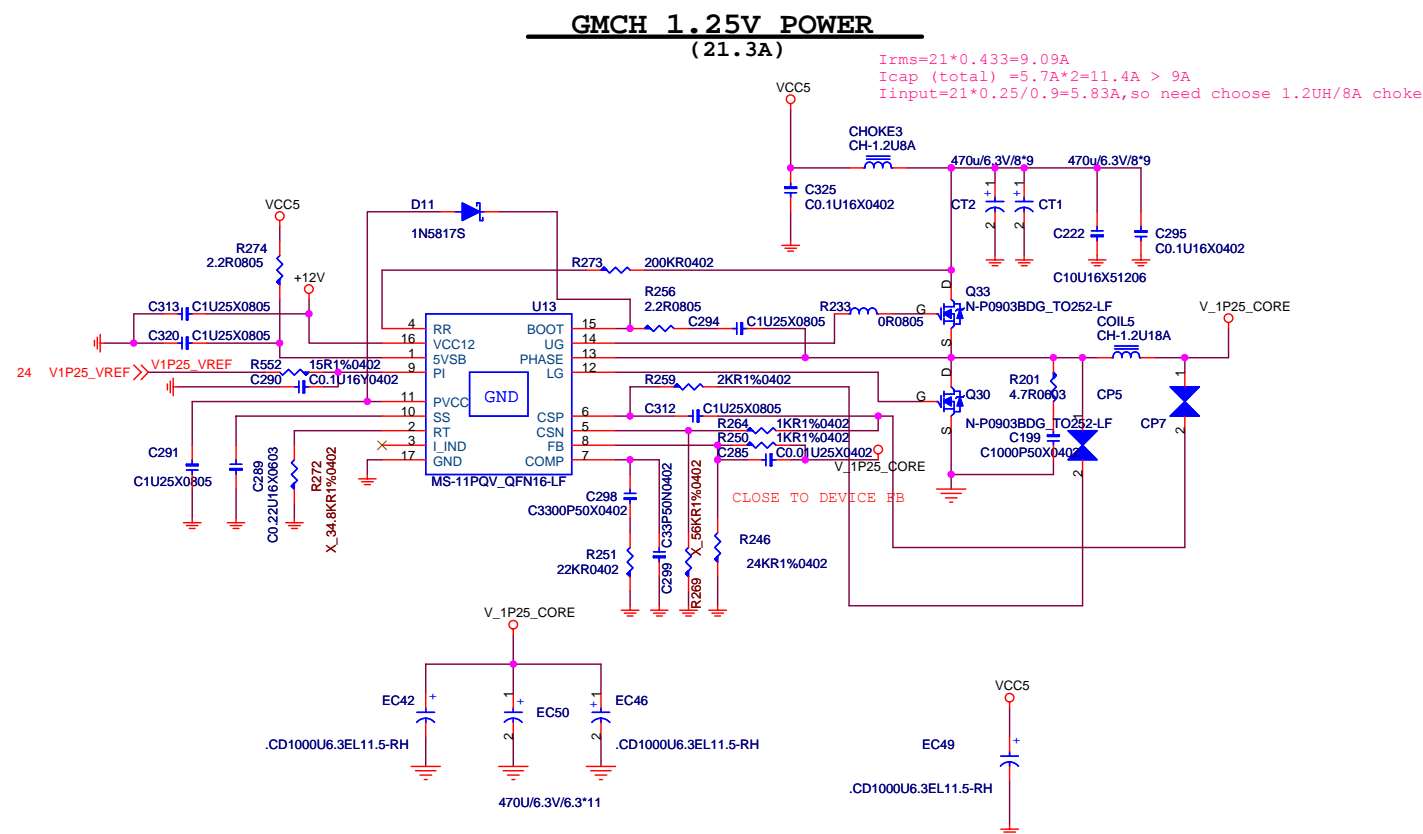
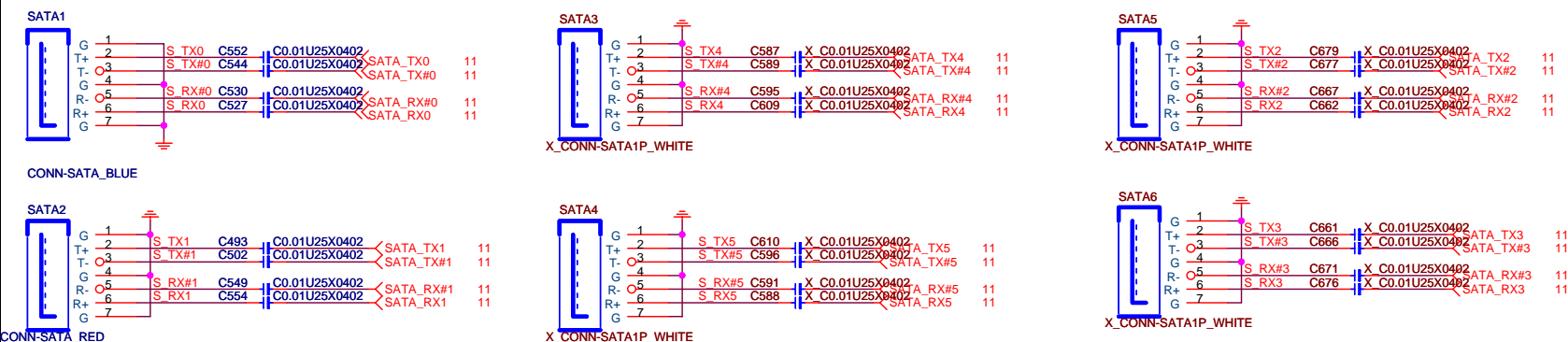
Voltage Regular Module

N-P0903BDG_TO252	mosfet/n-channel, P0903BDG, SMT/TO252, Rds(on)=9.5mA(10V/25A), Vgs(on)=1~3V, Id=50A, Ciss=1800pf, Qg=50nC, Vds=25V, Vgs=±20V, RoHS compliance
P75N02LDG/TO252	mosfet/n-channel, P75N02LDG, SMT/TO252, Rds(on)=7mΩ (@10V, 30A), Vgs(on)=1~3V, Id=75A, Ciss=5000pf, Qg=140nC, Vds=25V, Vgs=±20V, RoHS compliance
C100U2SP	ESR<13mΩ, Ripple cur.<2.7A, LC<12uA, 105C
CD560U4OS-2	CAP, OS-CON, 560u/4V, Dip-2/8*9/3.5mm, ESR<7mohm, Ripplecur.=6100mA, Lc. <500uA, SPEC series, RoHS compliance
1800UF/6.3V	ESR<12mΩ, Ripplecur<2350mA, 105C, longlife change from 2000hrs to 3000hrs ,KZJ series
0.25uH/40A	, IND CHOKE, 0.25uH, 20%, DIP/8.5mm, 40A, 0.6mOhm, , , PEW, FERRITE, SQUARE, RoHS COMPLIANCE
CH-1.1U25A-LF	IND CHOKE, 1.1uH, 20%, DIP/9mm, 25A, 1.4mOhm, 5.5T, 0.9mmx3, PEW, IRON,, LEAD FREE
CD1000U16EL20-2	CAP, EL, 1000u, 16V, Dip-8x20/3.5mm, 20%, 12mOhm, 2350mA, 105C, 3000hrs, RoHS COMPLIANCE



10A

SERIAL ATA CONNECTOR BLOCK **SATA1&SATA2 FOR ROPROS-MAVS USE**



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MS-7410

	Size B
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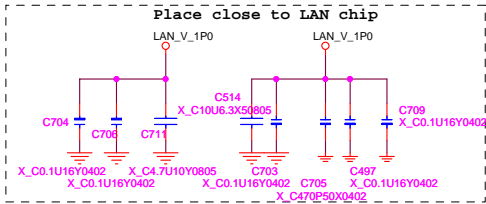
Document Description
SATA&V 1P25 CORE

Rev	10
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LAN - NINEVEH (ROPROS-VS)



10 GLAN_RXP
10 GLAN_RXN
10 GLAN_TXP
10 GLAN_TXN

GLAN_RXP C495 X_C0.1U16Y0402 GLAN_RXP_C H2
GLAN_RXN C504 X_C0.1U16Y0402 GLAN_RXN_C J2
GLAN_TXP GLAN_TXN C705 X_C0.1U16Y0402
GLAN_TXN X_C470P50X0402

VCC3_SB
R385 X_OR0603 N 1P0 CTRL
LAN_1P8 CTRL B2

GLAN_RCOMP_DP G7
GLAN_RCOMP_DN H7
RBIAS_P E7
RBIAS_NNC E6

RSVD_J6/NC J6
RSVD_J7/NC J7

KBIAS_P/RBIAS100 G7
KBIAS_N/RBIAS10 H7

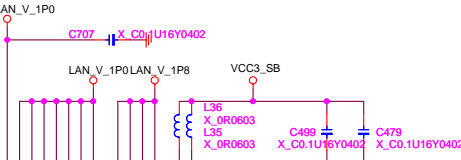
RBIAS_P E7
RBIAS_NNC E6

THERM_D_P/NC A2
THERM_D_N/NC A3

IEEE_TEST_P/NC A7
IEEE_TEST_N/NC B7

JTAG_TCK/ISOL_TCK G1
JTAG_TDI/ISOL_T1 H1

JTAG_TDO/TOUT G3
JTAG_TMS/ISOL_EXEC G2



U36
B1 LAN_V_1P0
B2 LAN_V_1P0
B3 LAN_V_1P0
B4 LAN_V_1P0
B5 LAN_V_1P0
B6 LAN_V_1P0
B7 LAN_V_1P0
B8 LAN_V_1P0
B9 LAN_V_1P0
B10 LAN_V_1P0
B11 LAN_V_1P0
B12 LAN_V_1P0
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B14 LAN_V_1P0
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B99 LAN_V_1P0
B100 LAN_V_1P0

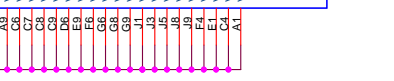
MDI_PLUS0/TDP B8 LAN MDI0_DP
MDI_MINUS0/TDN B9 LAN MDI0_DN
MDI_PLUS1/RDP D8 LAN MDI1_DP
MDI_MINUS1/RDN D9 LAN MDI1_DN
MDI_PLUS2/NC F8 LAN MDI2_DP
MDI_MINUS2/NC F9 LAN MDI2_DN
MDI_PLUS3/NC H8 LAN MDI3_DP
MDI_MINUS3/NC H9 LAN MDI3_DN

JTXD0 D1 ELAN_TXD0 11
JTXD1 D2 ELAN_TXD1 11
JTXD2 D3 ELAN_TXD2 11
JRXD0 D4 ELAN_RXD0 11
JRXD1 D5 ELAN_RXD1 11
JRXD2 D6 ELAN_RXD2 11
JKCLK/JCLK E3 ELAN_SYNC 11
JRSTSYNC E4 ELAN_SYNC 11

LED0/LINK_UP# A4 LED_LINK 11
LED1/ACT_LED# A5 LED_1G 11
LED2/SPEED_LED# A6 LED_100 11
XTAL1/X1 H6 XTAL1 11
XTAL2/X2 H5 XTAL2 11

TEST_EN B6 LAN_TESTEN R331 X_100R0402
JORDAN_EN/NC B5 MODE_SEL R331 X_100R0402
RSVD_A6/ADV10-LAN_DIS# C6
RSVD_C5/NC C5

VSSA/VS A8
VSSA/VS A9
VSSA/VS B0
VSSA/VS B1
VSSA/VS B2
VSSA/VS B3
VSSA/VS B4
VSSA/VS B5
VSSA/VS B6
VSSA/VS B7
VSSA/VS B8
VSSA/VS B9
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VSSA/VS B97
VSSA/VS B98
VSSA/VS B99
VSSA/VS B100



XTAL1 X449 X_C27P50N0603
XTAL2 X471 X_C27P50N0603
Y3 X_25MHZ18P_D4
R338 X_30R0402

LAN CONNECTOR

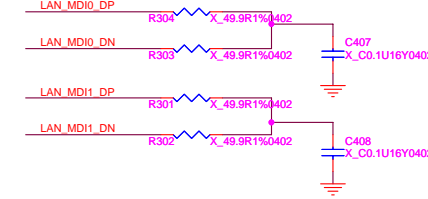
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LAN MDI0_DN R560 X_OR0402 TR_D0- 26
LAN MDI1_DP R561 X_OR0402 TR_D1+ 26
LAN MDI1_DN R562 X_OR0402 TR_D1- 26
LAN MDI2_DP R563 X_OR0402 TR_D2+ 26
LAN MDI2_DN R564 X_OR0402 TR_D2- 26
LAN MDI3_DP R565 X_OR0402 TR_D3+ 26
LAN MDI3_DN R566 X_OR0402 TR_D3- 26

LED_LINK R242 X_OR0402 ACT_LED# 26
LED_100 R243 X_OR0402 100_LED# 26
LED_1G R244 X_OR0402 10_G_LED# 26

ACT_LED	Link_LED
S0: LOW	S0: LOW
S1/S3/S4/S5: HIGH	S5: HIGH
	S1/S3/S4: WOL EN-->LOW
	WOL DIS-->HIGH



Place close to LAN chip



GLAN_RCOMP_DP R323 X_1.5KR1%0402 GLAN_RCOMP_DN
RBIAS_P R319 X_1.4KR1%0402

LAN MDI2_DP R297 X_49.9R1%0402
LAN MDI2_DN R298 X_49.9R1%0402

LAN MDI3_DP R299 X_49.9R1%0402
LAN MDI3_DN R300 X_49.9R1%0402

ELAN_CLK C512 X_C22P50N0402

ELAN_SYNC C512 X_C22P50N0402

ELAN_SYNC C512 X_C22P50N0402

ELAN_SYNC C512 X_C22P50N0402

ELAN_SYNC C512 X_C22P50N0402

ELAN_SYNC C512 X_C22P50N0402

ELAN_SYNC C512 X_C22P50N0402

ELAN_SYNC C512 X_C22P50N0402

ELAN_SYNC C512 X_C22P50N0402

ELAN_SYNC C512 X_C22P50N0402

ELAN_SYNC C512 X_C22P50N0402

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ELAN_SYNC C512 X_C22P50N0402



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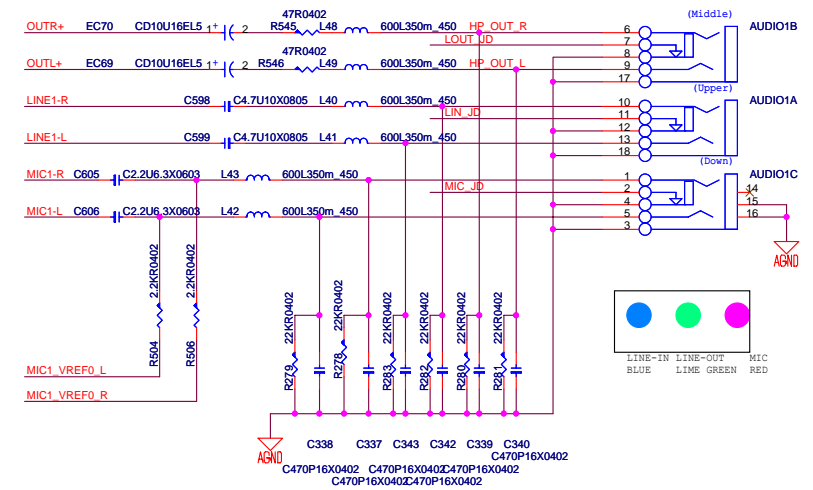
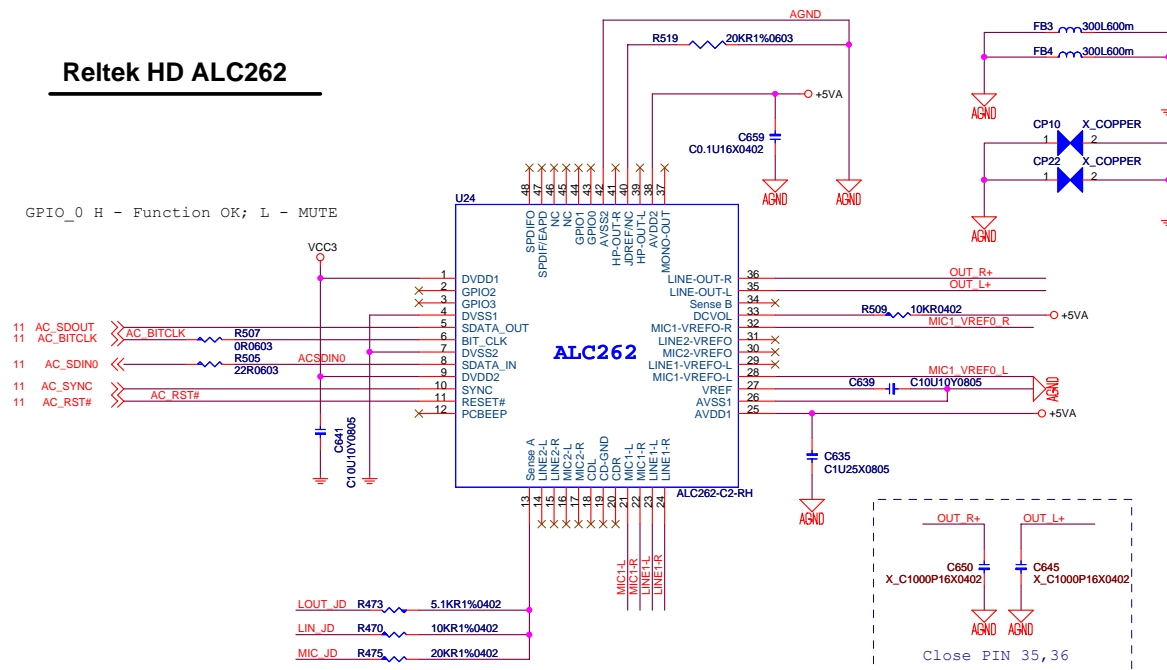
MS-7410

Size	Document Description	Rev
Custom	LAN-NINEVEH 82566	10

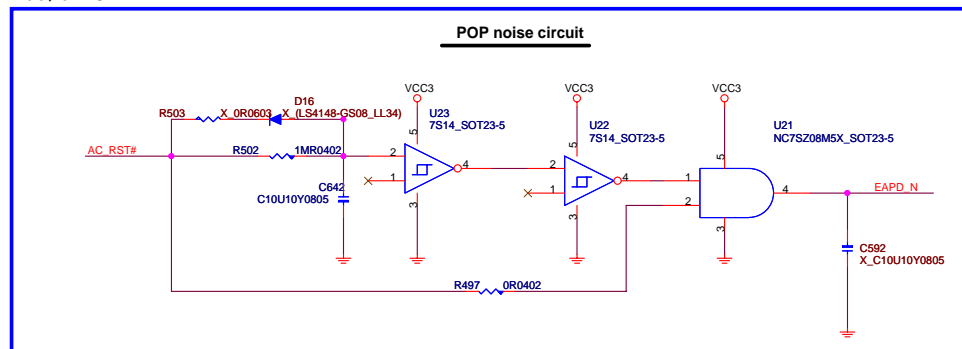
Date: Wednesday, January 02, 2008 Sheet 27 of 34

Reltek HD ALC262

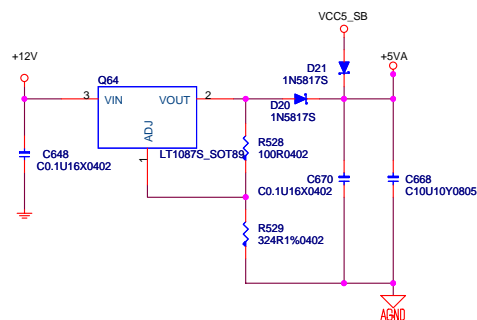
GPIO_0 H - Function OK; L - MUTE



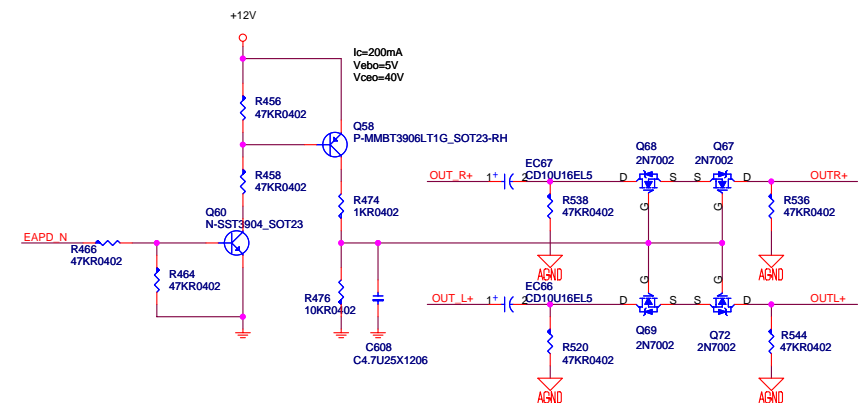
08/01 UPDATE



AUDIO CODE REGULATORS



Smooth pop noise circuit for Line-out



MICRO-STAR INT'L CO.,LTD

MS-7410

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ICH9

GPIO	Alt Func	Pin	I/O/NC	Power	PÜ	Tol	Default	Signal Name or condition		
GPIO[0]	ATADET0	N7	I/O	Vcc3	Y	3.3	INPUT	ATADET0	PULL HIGH	10K
GPIO[1]	PULL HIGH	AK21	I/O	Vcc3	Y	3.3	INPUT	PULL HIGH	10K	
GPIO[2]	PIRQ#E	K6	I/O	Vcc3	Y	3.3	INPUT	PULL HIGH	8.2K	
GPIO[3]	PIRQ#F	L7	I/O	Vcc3	Y	3.3	INPUT	PULL HIGH	8.2K	
GPIO[4]	PIRQ#G	F2	I/O	Vcc3	Y	3.3	INPUT	PULL HIGH	8.2K	
GPIO[5]	PIRQ#H	G2	I/O	Vcc3	Y	3.3	INPUT	PULL HIGH	8.2K	
GPIO[6]	PULL HIGH	AH22	I/O	Vcc3	Y	3.3	INPUT	PULL HIGH	10K	
GPIO[7]	PULL HIGH	AK23	I/O	Vcc3	Y	3.3	INPUT	PULL HIGH	10K	
GPIO[8]	ICH GP8 PU	A20	I/O	Vcc3SB	Y	3.3	INPUT	PULL HIGH	10K	
GPIO[9]	SIO SMI#	A18	NC	Vcc3	N	3.3	WOL EN	NC		
GPIO[10]	ICH GP10 PU	C17	I/O	Vcc3SB	Y	3.3	INPUT	PULL HIGH	10K	
GPIO[11]	SMB ALERT#	C16	I/O	Vcc3SB	Y	3.3	SMB ALERT#	PULL HIGH	10K	
GPIO[12]	NC	A8	NC	Vcc3SB	N	3.3	OUTPUT	SIO SMI#		
GPIO[13]	SIO PME#	A19	I/O	Vcc3SB	Y	3.3	INPUT	SIO PME#		
GPIO[14]	CLR PW	A9	I/O	Vcc3SB	Y	3.3	INPUT	PULL HIGH	10K	
GPIO[15]	NC	C15	NC	Vcc3SB	Y	3.3	STP PCI#	NC		
GPIO[16]	NC	M2	NC	Vcc3	Y	3.3	OUTPUT	NC		
GPIO[17]	PULL HIGH	AH21	I/O	Vcc3	Y	3.3	INPUT	PULL HIGH	10K	
GPIO[18]	NC	K1	NC	Vcc3	N	3.3	OUTPUT	NC		
GPIO[19]	SATA1GP PU	AE20	I/O	Vcc3	Y	3.3	INPUT	PULL HIGH	10K	
GPIO[20]	NC	AF5	NC	Vcc3	N	3.3	OUTPUT	NC		
GPIO[21]	SATA0GP PU	AK25	I/O	Vcc3	Y	3.3	INPUT	PULL HIGH	10K	
GPIO[22]	ICH SGP22 PU	AJ24	I/O	Vcc3	Y	3.3	INPUT	PULL HIGH	10K	
GPIO[23]	LDRQ 1#	J3	I/O	Vcc3	Y	3.3	LDRQ 1#	PULL HIGH	10K	
GPIO[24]	LPM LAN	A14	NC	Vcc3SB	N	3.3	OUTPUT	LPM LAN		
GPIO[25]	NC	B18	NC	Vcc3SB	N	3.3	STP CPU#	NC		
GPIO[26]	NC	C11	NC	Vcc3SB	N	3.3	S4 STATE#	NC		
GPIO[27]	NC	A11	NC	Vcc3SB	N	3.3	QRT STATE0	NC		
GPIO[28]	NC	G18	NC	Vcc3SB	N	3.3	QRT STATE1	NC		
GPIO[29]	USB OC#2	N1	I/O	Vcc3SB	Y	3.3	OC#2	USB OC#2		
GPIO[30]	USB OC#3	N5	I/O	Vcc3SB	Y	3.3	OC#3	USB OC#3		
GPIO[31]	USB OC#3	M1	I/O	Vcc3SB	Y	3.3	OC#3	USB OC#3		
GPIO[32]	SPI WP#	K2	I/O	Vcc3	N	3.3	OUTPUT	SPI WP#		
GPIO[33]	SPI HOLD GPO#	AF6	I/O	Vcc3	N	3.3	OUTPUT	SPI HOLD GPO#		
GPIO[34]	LAN DISABLE	AH5	I/O	Vcc3	N	3.3	OUTPUT	LAN DISABLE		
GPIO[35]	NC	L1	NC	Vcc3	N	3.3	OUTPUT	NC		
GPIO[36]	SATA2GP PU	AE21	I/O	Vcc3	Y	3.3	INPUT	SATA2GP PU		
GPIO[37]	SATA3GP PU	AE22	I/O	Vcc3	Y	3.3	INPUT	SATA3GP PU		
GPIO[38]	ICH SGP38 PU	AK24	I/O	Vcc3	Y	3.3	INPUT	ICH SGP38 PU		
GPIO[39]	ICH SGP39 PD	AH23	I/O	Vcc3	Y	3.3	SDATAOUT0	ICH SGP39 PD		
GPIO[40]	USB OC#0	N3	I/O	Vcc3SB	Y	3.3	OC#0	USB OC#0		
GPIO[41]	USB OC#1	P7	I/O	Vcc3SB	Y	3.3	OC#1	USB OC#1		
GPIO[42]	USB OC#1	R7	I/O	Vcc3SB	Y	3.3	OC#1	USB OC#1		
GPIO[43]	USB OC#2	N2	I/O	Vcc3SB	Y	3.3	OC#2	USB OC#2		
GPIO[44]	USB OC#3	P3	I/O	Vcc3SB	Y	3.3	OC#3	USB OC#3		
GPIO[45]	USB OC#3	R6	I/O	Vcc3SB	Y	3.3	OC#3	USB OC#3		
GPIO[46]	USB OC#3	T7	I/O	Vcc3SB	Y	3.3	OC#3	USB OC#3		
GPIO[47]	USB OC#3	P1	I/O	Vcc3SB	Y	3.3	OC#3	USB OC#3		
GPIO[48]	ICH SGP48 PD	AD20	I/O	Vcc3	Y	3.3	SDATAOUT1	PULL HIGH	10K	
GPIO[49]	DMI STRAP	AJ25	I/O	Vcc3	N	3.3	OUTPUT	PULL LOW	2.2K	
GPIO[50]	PREQ#1	G13	I/O	Vcc5	Y	5.5	PREQ#1	PULL HIGH	2.7K	
GPIO[51]	PGNT#1	A7	I/O	Vcc3	N	3.3	PGNT#1	PGNT#1		
GPIO[52]	PREQ#2	F13	I/O	Vcc5	Y	5.5	PREQ#2	PULL HIGH	2.7K	
GPIO[53]	PGNT#2	C7	I/O	Vcc3	N	3.3	PGNT#2	STRAP PIN		
GPIO[54]	PREQ#3	G8	I/O	Vcc5	Y	5.5	PREQ#3	PULL HIGH	2.7K	
GPIO[55]	PGNT#3	F7	I/O	Vcc3	N	3.3	PGNT#3	STRAP PIN		
GPIO[56]	ICH GP56 PU	F16	I/O	Vcc3SB	Y	3.3	GPIO SEL	PULL HIGH	10K	
GPIO[57]	ICH GP57 PU	C12	I/O	Vcc3SB	Y	3.3	INPUT	PULL HIGH	10K	
GPIO[58]	SPI CS1#	F23	I/O	Vcc3SB	Y	3.3	SPI CS1#	SPI CS1#		
GPIO[59]	USB OC#0	P5	I/O	Vcc3SB	Y	3.3	OC#0	USB OC#0		
GPIO[60]	LINK ALERT#	F18	I/O	Vcc3SB	Y	3.3	LINK ALERT#	LINK ALERT#		

SIO SCH5617

PIN NAME	PIN#	USAGE	Input/Output
GP76	53	GPIO_KB	OUTPUT
GP42	27	SIO_SMI#	OUTPUT
GP41	77	SIO_PME#	OUTPUT

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#D PIRQ#C PIRQ#A	PREQ#1 PGNT#1	AD17	PCI_CLK1

DDRII DIMM Config.

DEVICE	ADDRESS	CLOCK
DIMM 1	A0H	MCLK_A0/MCLK_A#0 MCLK_A1/MCLK_A#1 MCLK_A2/MCLK_A#2
DIMM 2	A2H	MCLK_A1/MCLK_A#3 MCLK_A2/MCLK_A#4 MCLK_A2/MCLK_A#5
DIMM 3	A4H	MCLK_B0/MCLK_B#0 MCLK_B2/MCLK_B#1 MCLK_B1/MCLK_B#2
DIMM 4	A6H	MCLK_B0/MCLK_B#3 MCLK_B1/MCLK_B#4 MCLK_B2/MCLK_B#5

JUMPER SETTING

JBAT1	(1-2) NORMAL	(2-3) CLEAR
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MS-7410

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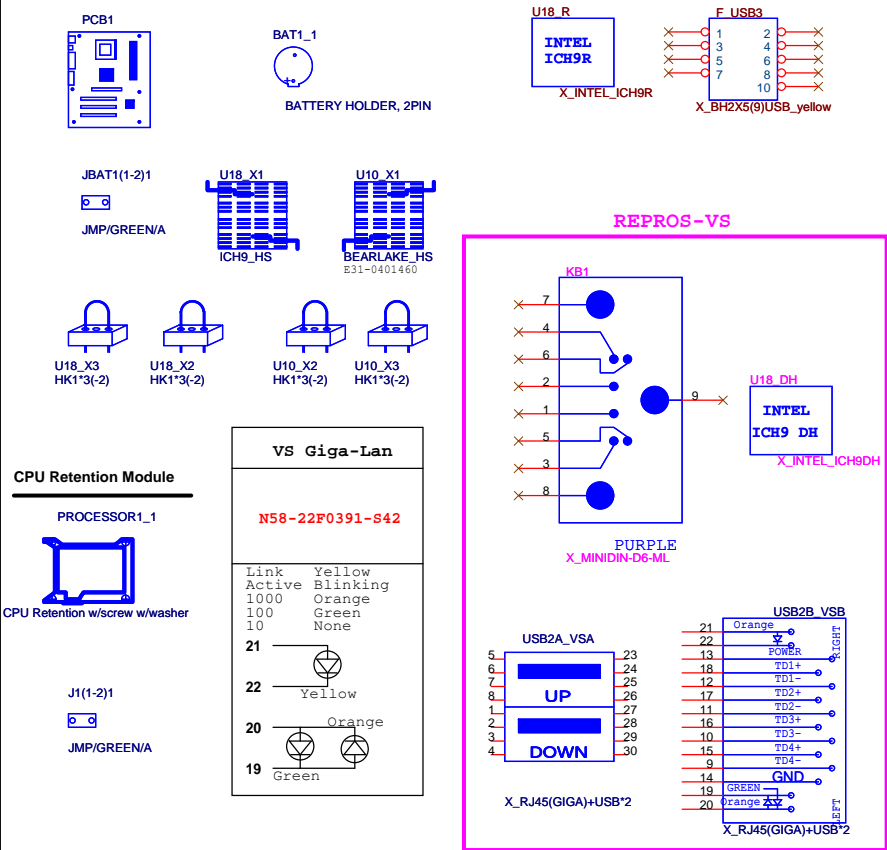
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Date: Wednesday, January 02, 2008

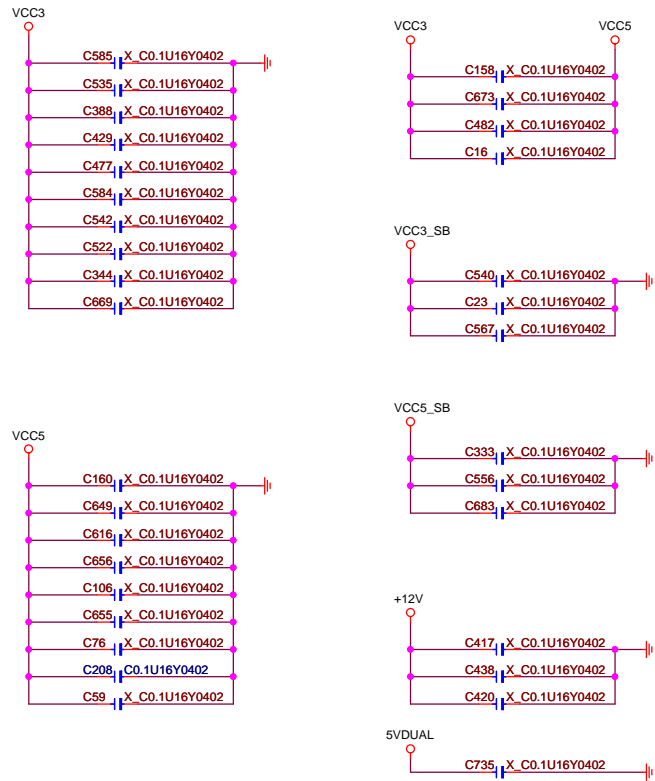
Rev 10

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MANUAL PART

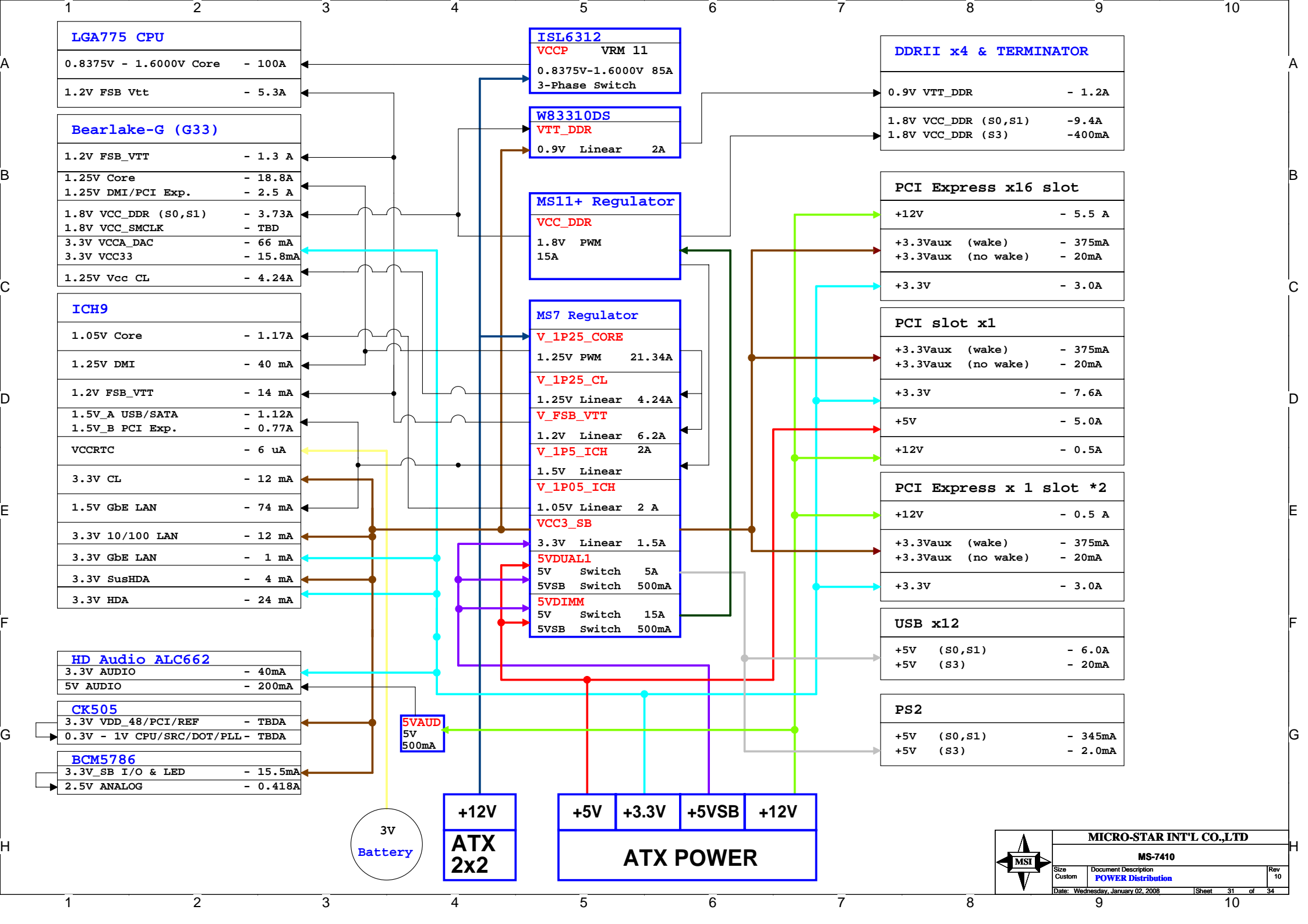


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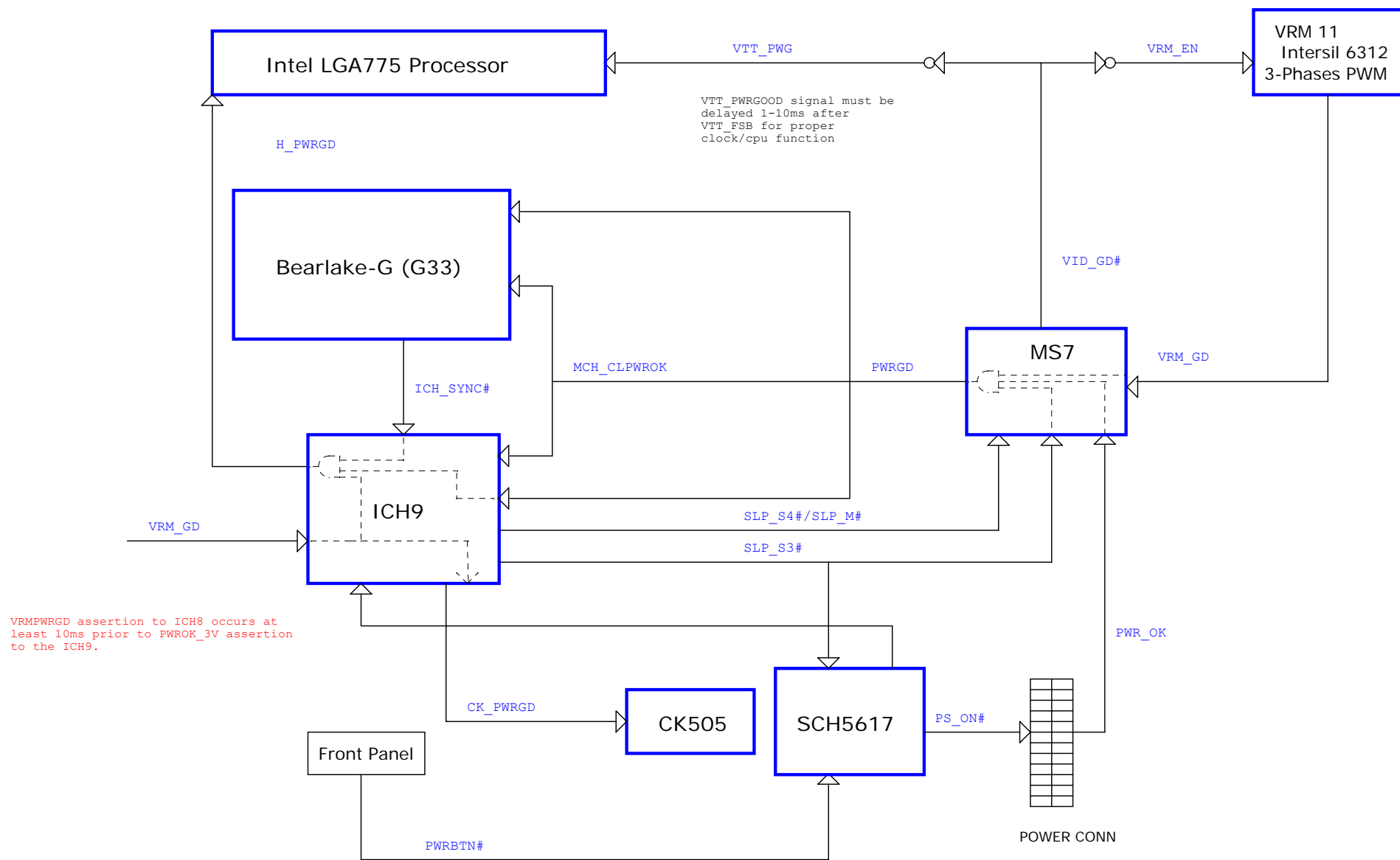


Model option table

Model type	Function	BOM Config	ERP BOM No.
MS7410-MA	INTEL G33 + ICH9 + Broadcom Giga Lan		
MS7410-VS	INTEL G33 + ICH9DH + Intel 82566 Giga Lan		

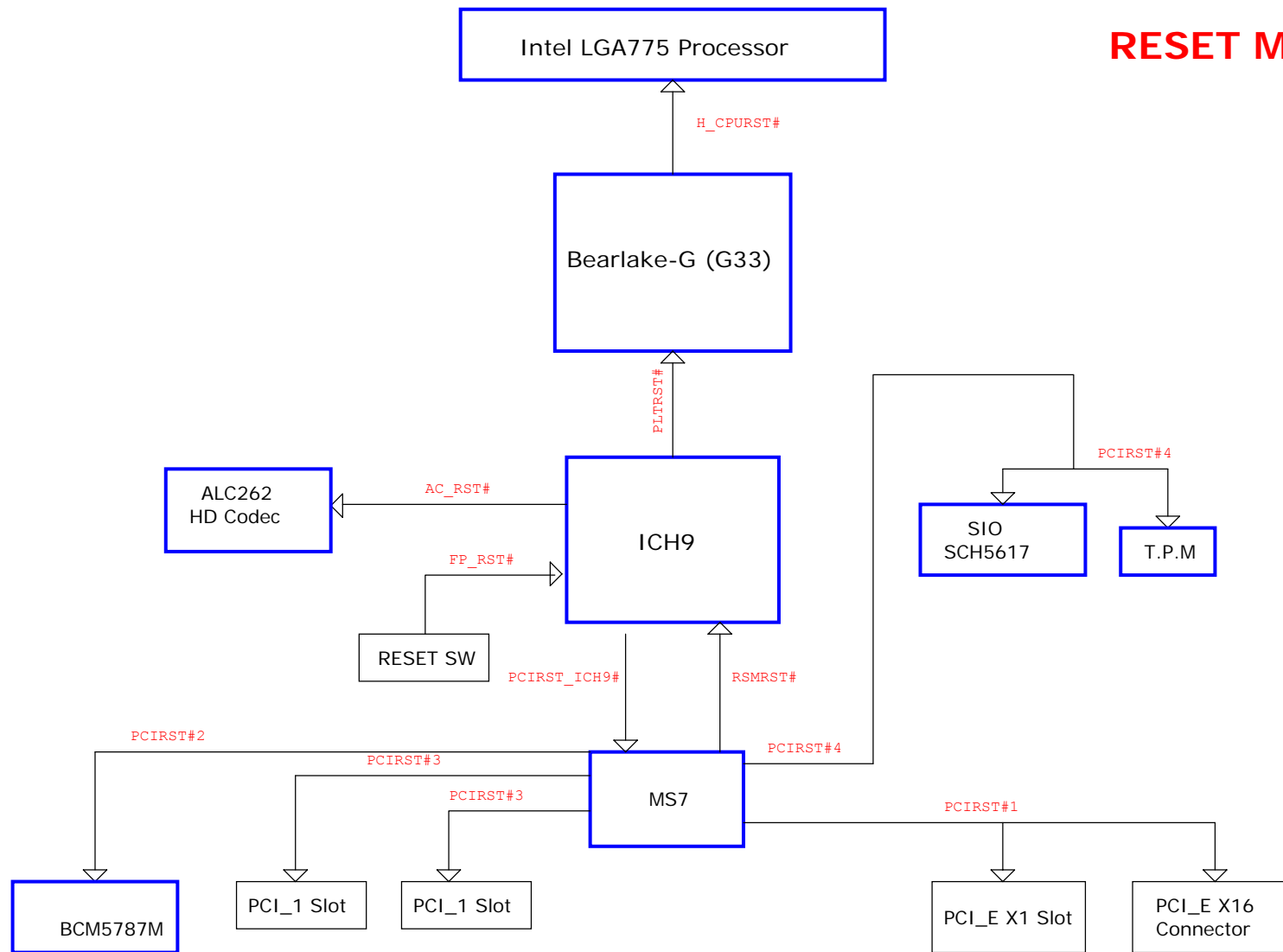


PWROK MAP



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RESET MAP



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Change Note

Ver:0A

2007/09/06

- 1.PAGE 4:Add R561 C721 Q73 for VTT SEL control circuit
- 2.PAGE 11:change the net name of SATA2.3&SATA4.5 to avoid confuse
- 3.PAGE 11: add R564 pull-down resister to LAN_PWROK ,when not use intel lan ,the LAN_PWROK need tied to gnd
- 4.PAGE 12: To change the net of VccCL3_3&VccLAN3_3 power source form VCC3 to VCC3_SB for INTEL LAN W/O F/T
- 5.PAGE 20:Front_USB1&Front_USB2 PIN5 tied to gnd for MCR Device use
- 6.PAGE 22:change VCC5_MS power rail to 5VDUAL to avoid MS have voltage when enter S5 state
- 7.PAGE 24:change VTT_SEL control circuit to follow up 7400 design
- 8.PAGE10& PAGE20:change USB PORT from6&7 port to 10&11 port
- 9.PAGE23:remove EC18 ,add EC76~EC81 for CPU power quility

Ver:0B

2007/11/05

- 1.PAGE 17:Change PWR&SYS resister vaule for FAN linear control circuit
- 2.PAGE 18:Change +12V EL CAP from 1000uf/6.3v to 470uf/16v
- 3.PAGE 21:Change D-SUB RGB Filter vaule for EMI
- 4.PAGE 24:Change PWR&SUS LED power resource from VCC5_SB to 5VDUAL1
- 5.PAGE 11:Reserve D22 for BEEP Noise
- 6.PAGE 11:Modify R387&C503 value of Exrernal RTC Circuit


2007/12/07

- 1.PAGE 1&2&31&32&33:revised north Bridge name form Bearlake- Q to &Bearlake- G (G33)
- 2.PAGE 3:stuff R119 for Wolfdale CPU support
- 3.PAGE 11:unstuff R369 for only one system host allowed on a PECI physical link

Ver:0C

2007/12/31

- 1.PAGE 11:Modify SMSC VBAT power source form VBAT to VBAT_DZ
- 2.PAGE 14:Add C105&C110 (10uf cap) to reduce VTT power ripple current
- 3.PAGE 16:Modify SMSC PECI_READY from FSB_VTT to H_CPURST# for SMSC request to voidl PCEI value incorrect
- 4.PAGE 20:Changed front USB command-mode filter (L44-L47) from 90 ohm to 120 ohm for EMI suggestion

			MICRO-STAR INT'L CO.,LTD		
			MS-7410		
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		History			
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