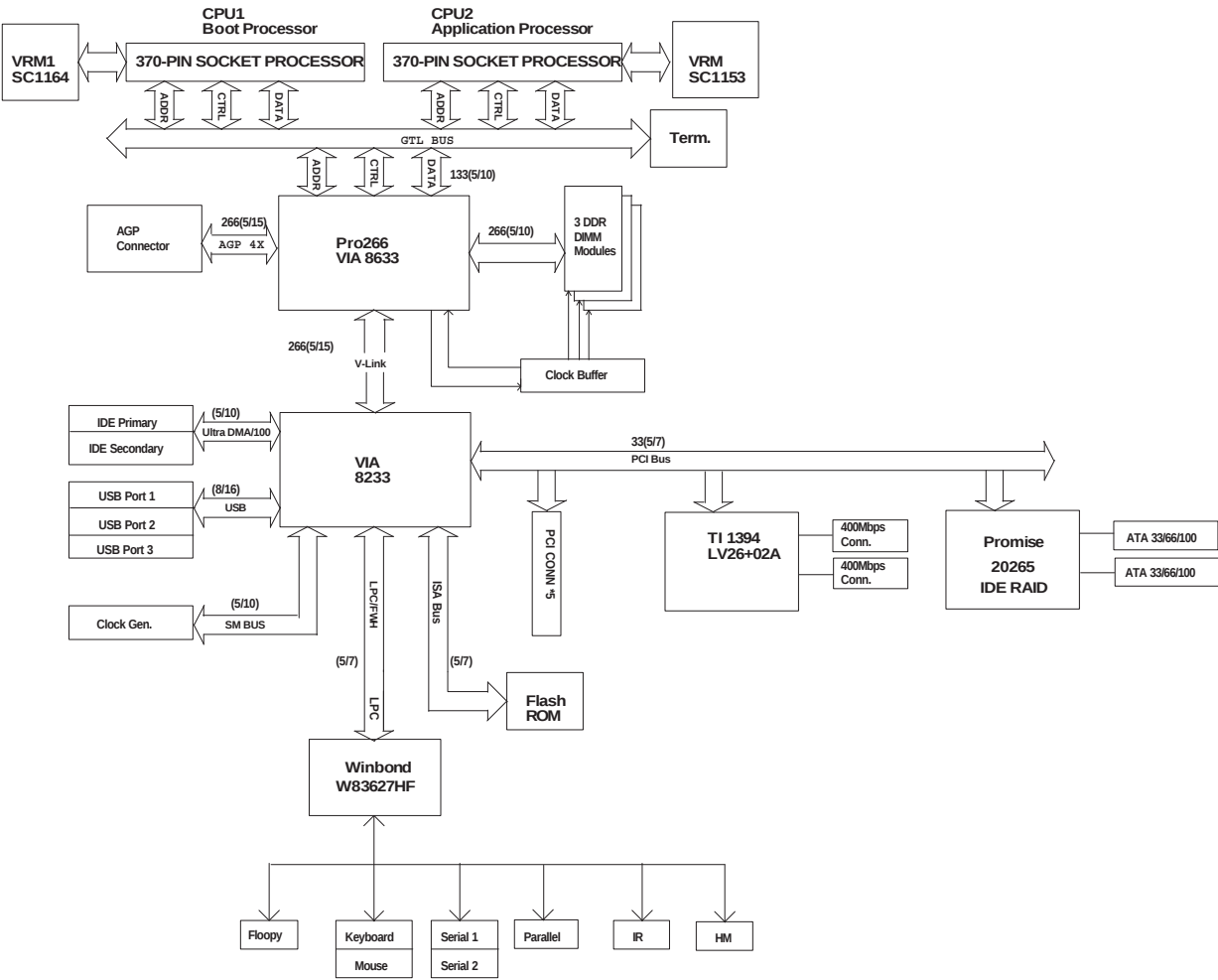


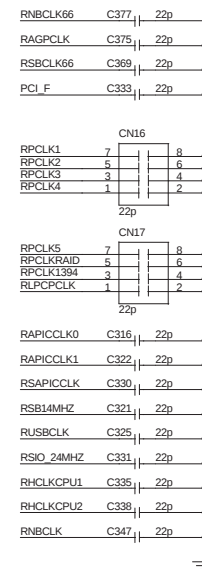
MS-6369 DUAL SOCKET 370 PRO266
AGP*1, DDR DIMM*3, PCI Slot *5
IDE RAID, TI 1394

Cover Sheet	1
Block Diagram	2
Clock Synthesizer	3
370PGA Socket 1	4,5
370PGA Socket 2	6,7
AGTL Termination	8
VT8633	9,10,11
VT8233	12,13,14
DDR DIMM	15,16
DDR Termination	17
DDR Power	18
AGP PRO Conn.	19
PCI SLOT 1~5	20,21,22
ATA100 Connector	23
BIOS & USB Conn.	24
AC97 Codec	25
Audio Amp. & Conn.	26,27
LPC I/O W83627HF	28
Hardware monitor	29
Parallel Port / Serial Port	30

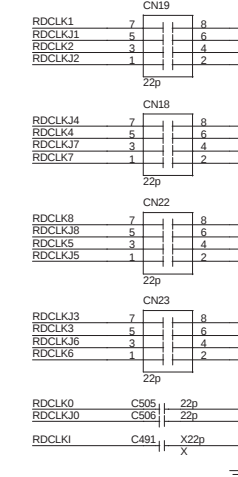
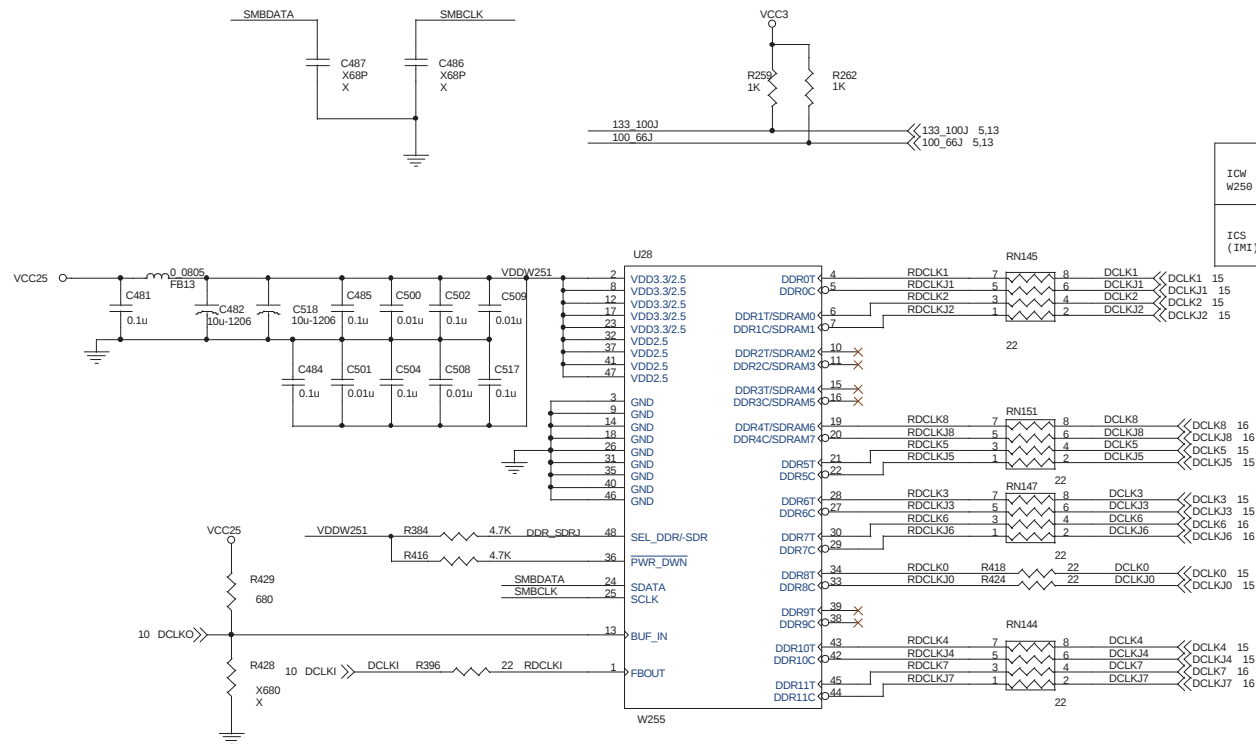
Keyboard/Mouse Connectors	31
Front Panel	32
Smart D-LED	33
System Power	34
SC1164 VRM 8.4	35
SC1153 VRM 8.4	36
CPU Vcore Adj.	37
Promise 20265/20266 PCI IDE RAID	38
ATA100 Connector	39
TI 1394-TSB12LV26	40
TI1394-TSB41LV02A	41
CNR CONN.	42
GPIO Spec.	43
	44
	45

Block Diagram



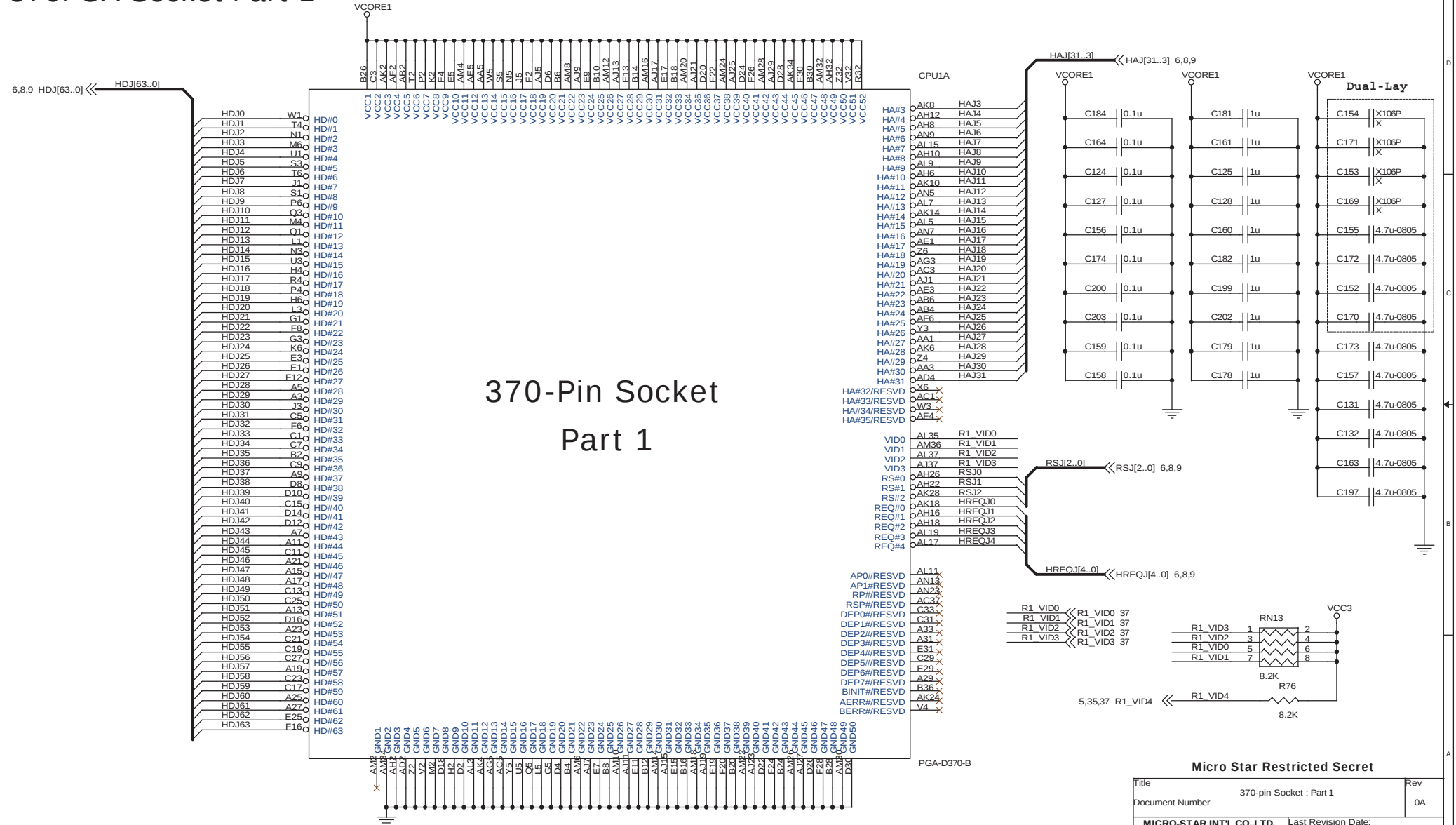


	FS4	FS3	FS2	FS1	FS0	FSB (MHz)	Spread Spec.
ICW w250	0	0	1	0	1	66	OFF
	0	1	1	0	1	100	
	1	0	1	0	1	RESERVED	
	1	1	1	0	1	133	
ICS (IMI)							+/- 0.50%
	1	0	1	0	0	66	
	1	0	1	0	1	100	
	1	0	1	1	0	RESERVED	
	1	0	1	1	1	133	



370PGA Socket Part 1

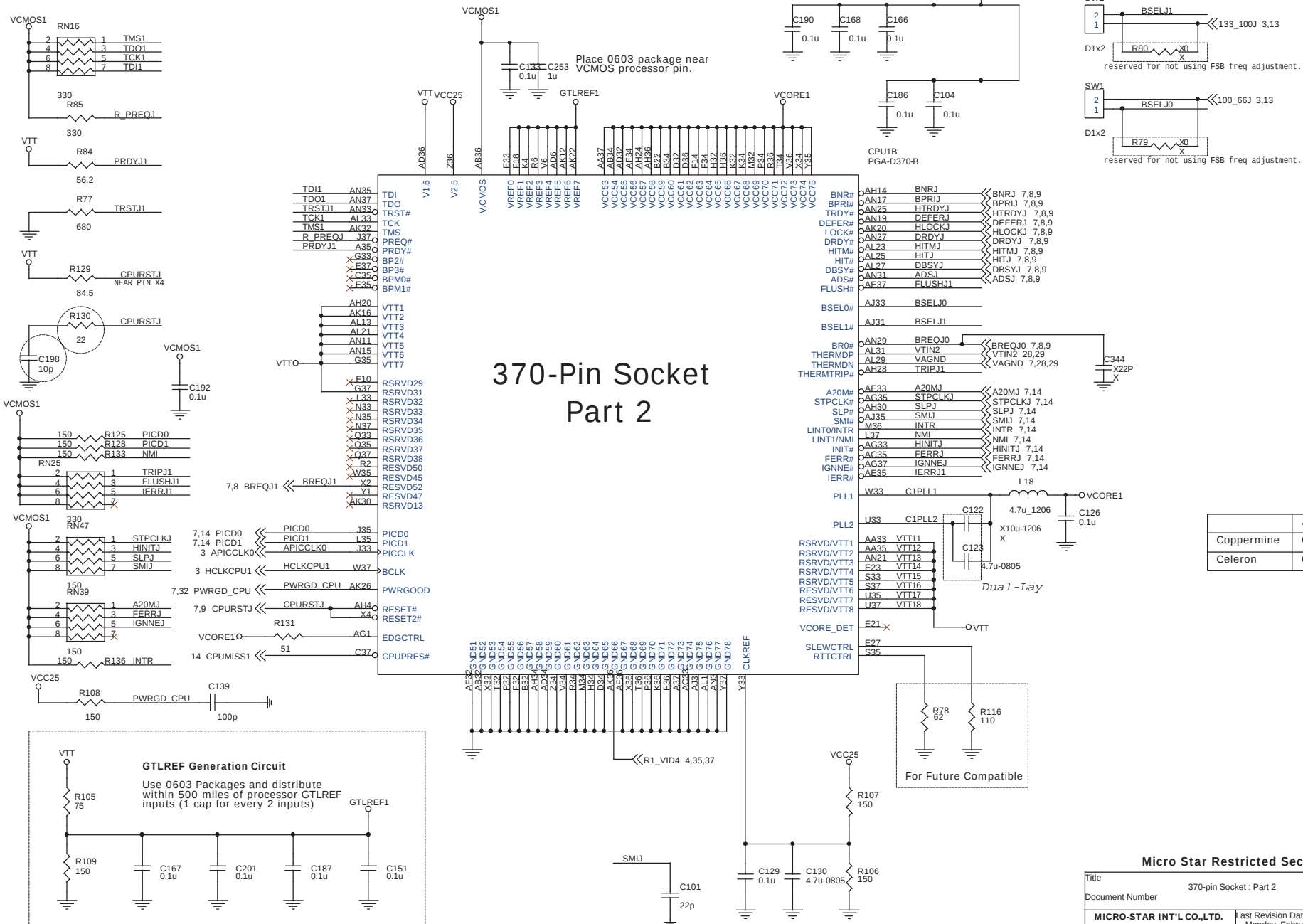
370-Pin Socket Part 1



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No. 69, Li-De St, Jung-He City,		Tuesday, February 13, 2001	
Taipei Hsien, Taiwan		Sheet	
http://www.msi.com.tw		4 of 43	

370PGA Socket Part 2

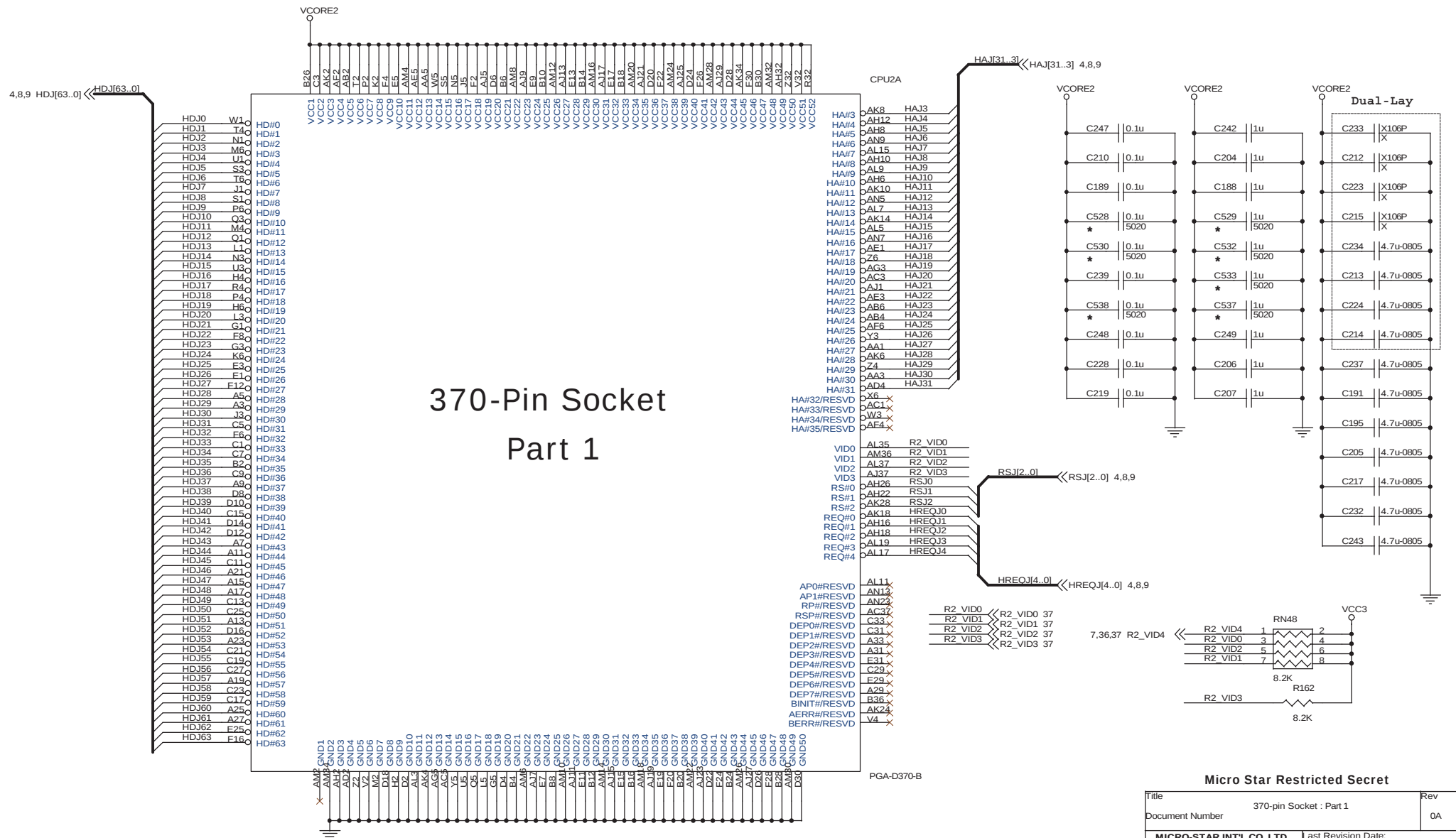


	JVTT1
Coppermine	ON
Celeron	OFF

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No. 69, Li-De St, Jung-Hsue City, Taipei Hsien, Taiwan http://www.msi.com.tw	Sheet 5 of 43	

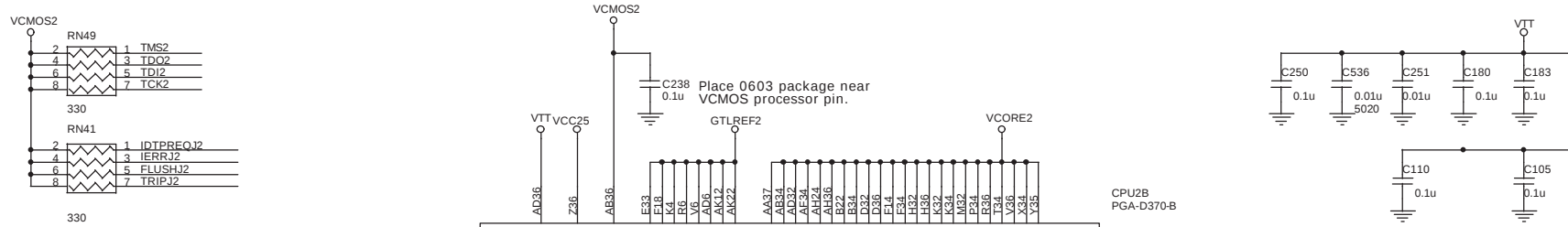
370PGA Socket Part 1



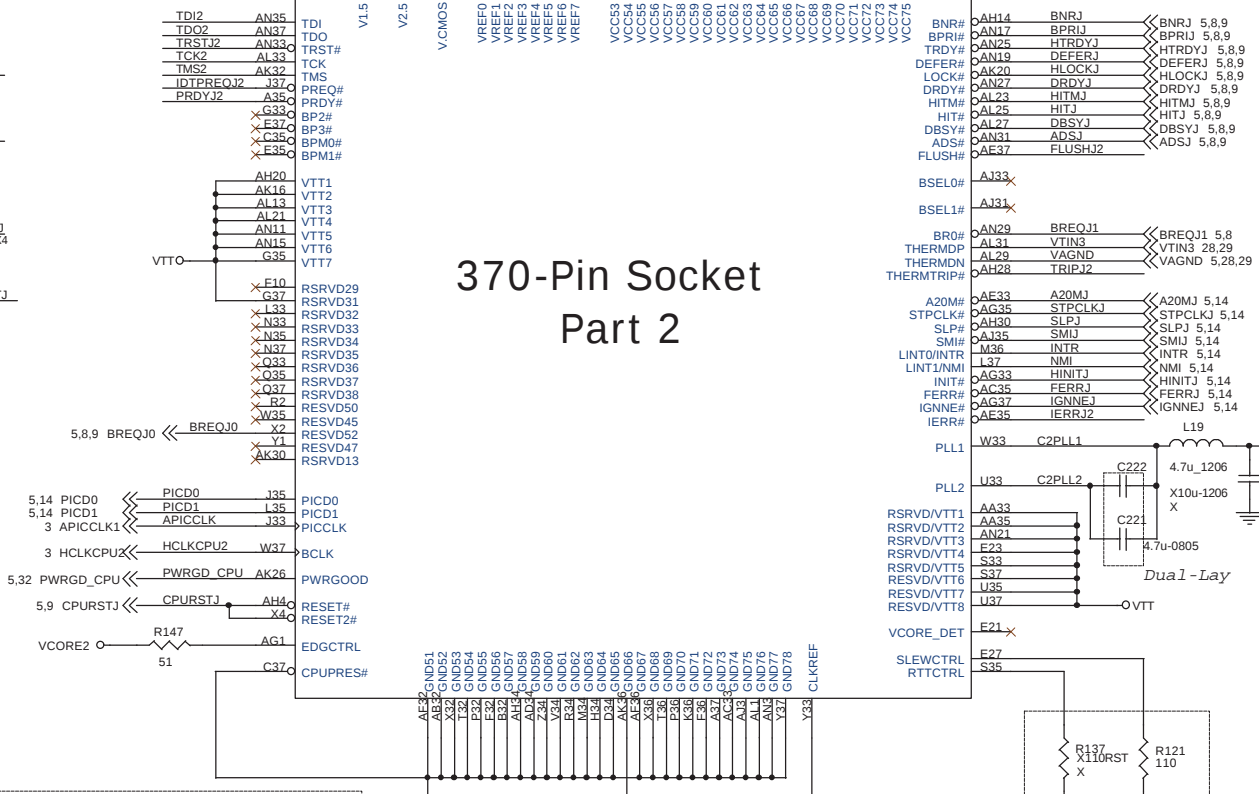
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MICRO-STAR INT'L CO.,LTD. No. 69, Li-De St, Jung-He City, Taipei Hsien, Taiwan http://www.msi.com.tw	Last Revision Date: Tuesday, February 13, 2001	
	Sheet 6 of 43	

370PGA Socket Part 2

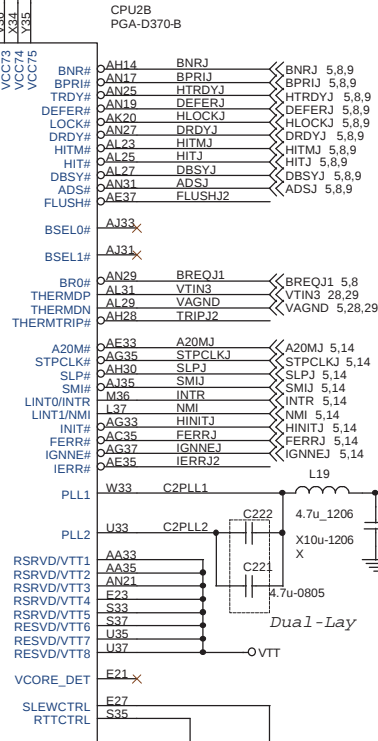
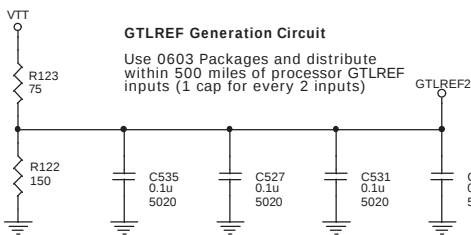


370-Pin Socket Part 2



GTLREF Generation Circuit

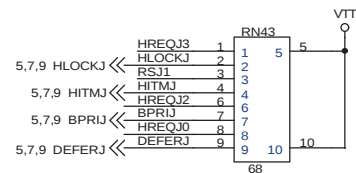
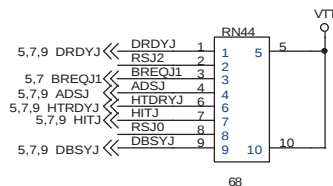
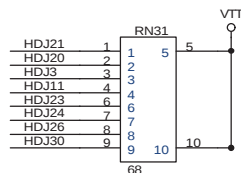
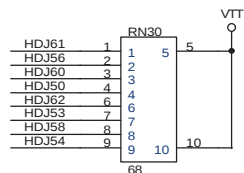
Use 0603 Packages and distribute within 500 miles of processor GTLREF inputs (1 cap per for every 2 inputs)



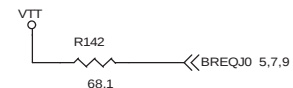
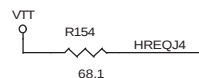
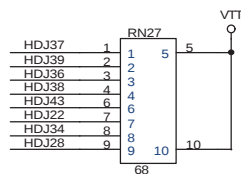
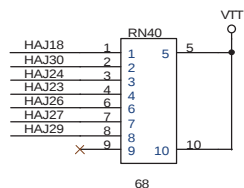
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http://www.msi.com.tw		Sheet
		7 of 43

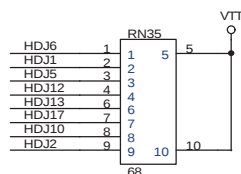
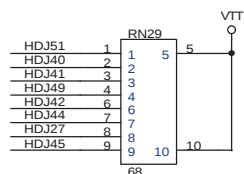
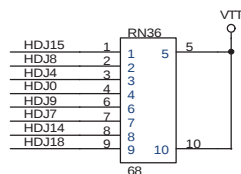
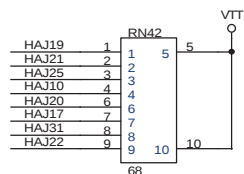
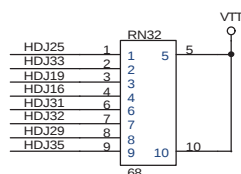
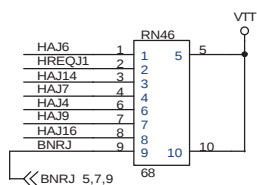
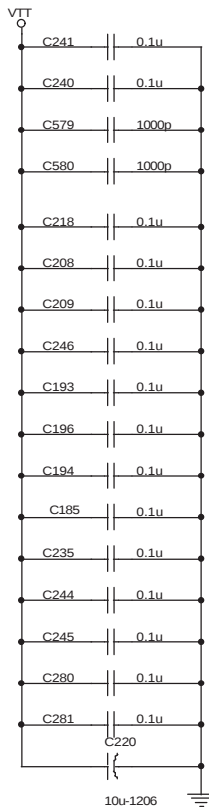
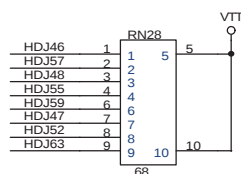
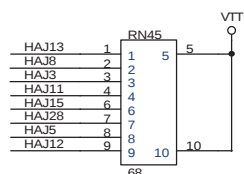
AGTL Termination



HREQJ[4..0] << HREQJ[4..0] 4,6,9
 HDJ[63..0] << HDJ[63..0] 4,6,9
 HAJ[31..3] << HAJ[31..3] 4,6,9
 RSJ[2..0] << RSJ[2..0] 4,6,9

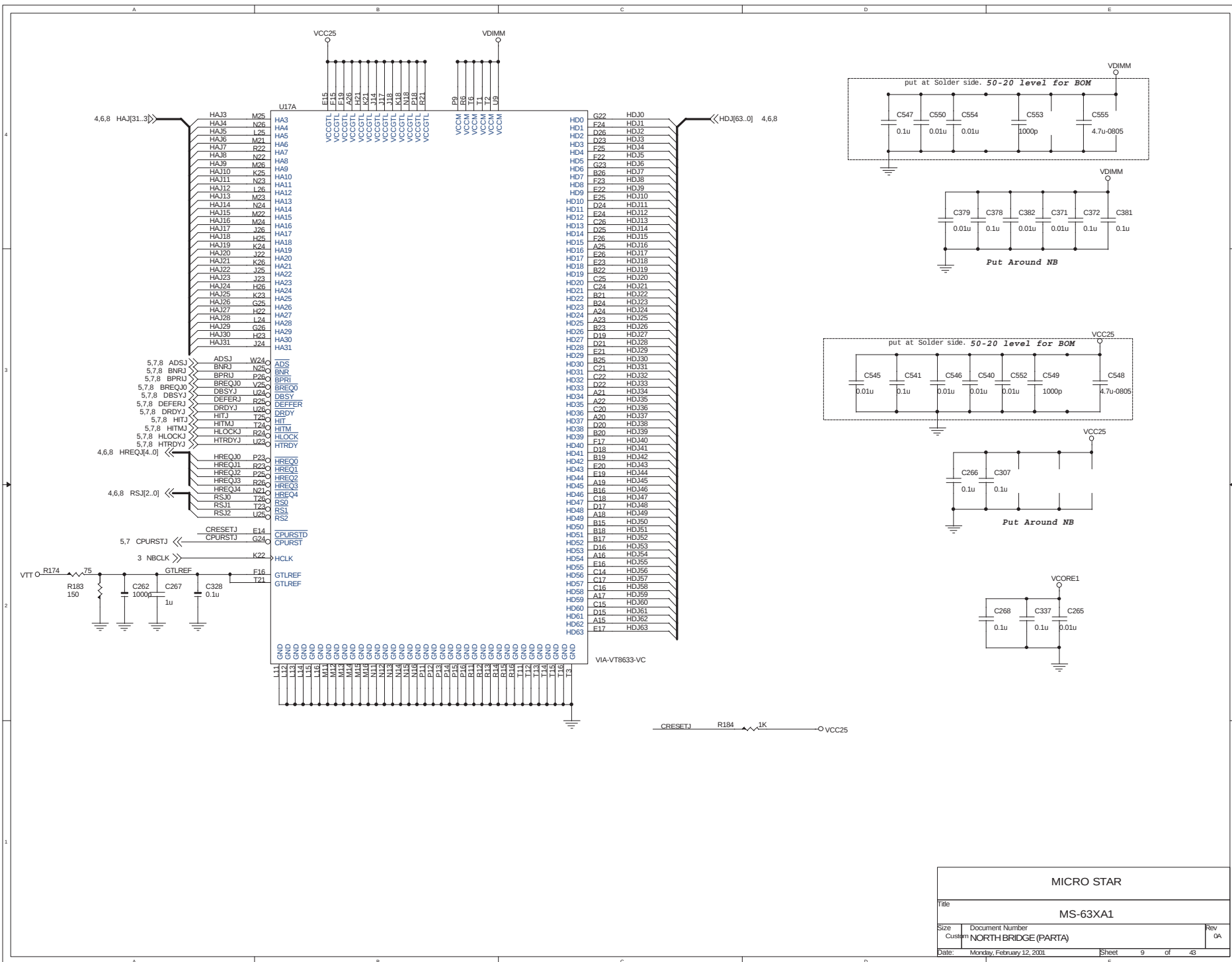


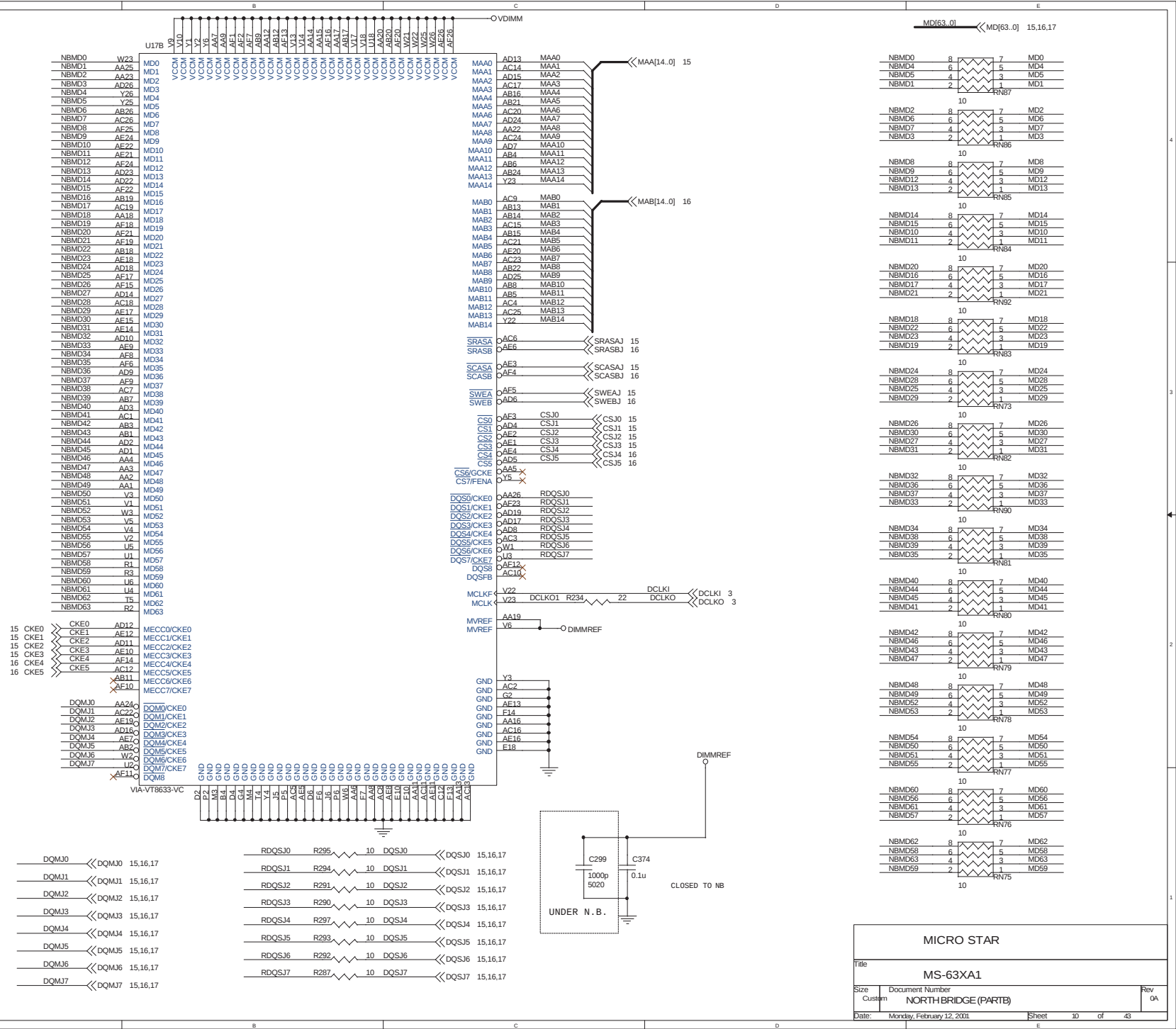
One Cap for Every 10P8R

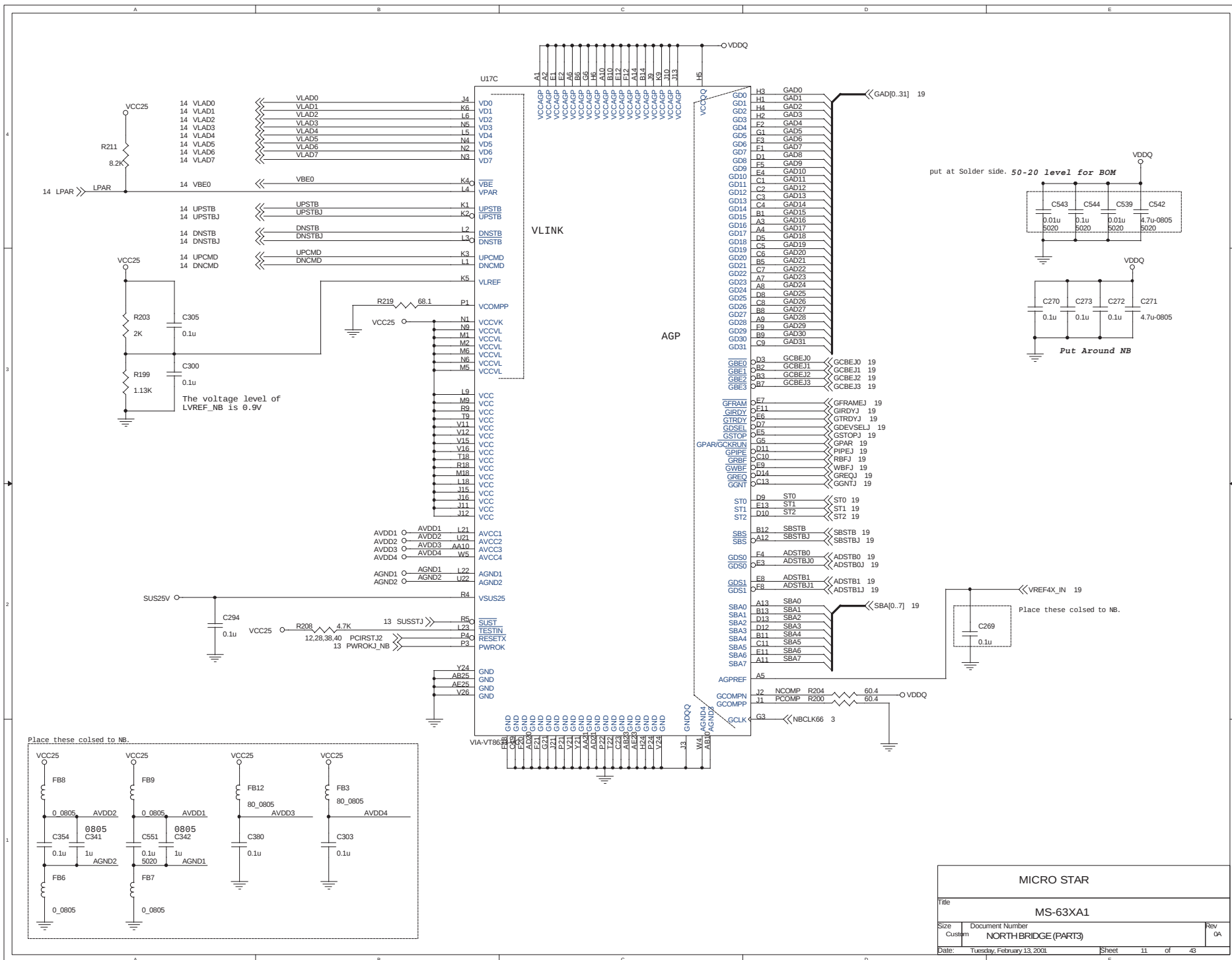


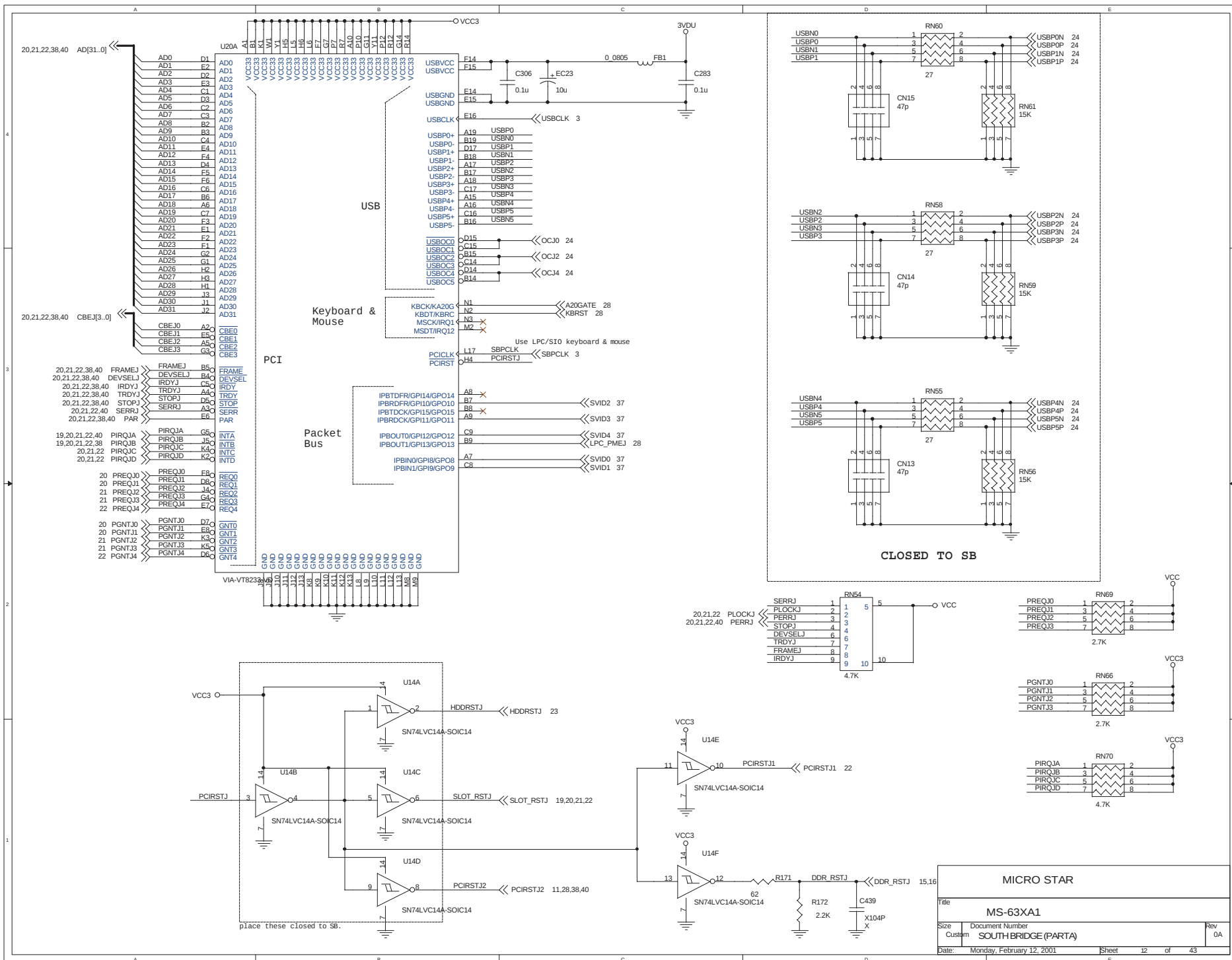
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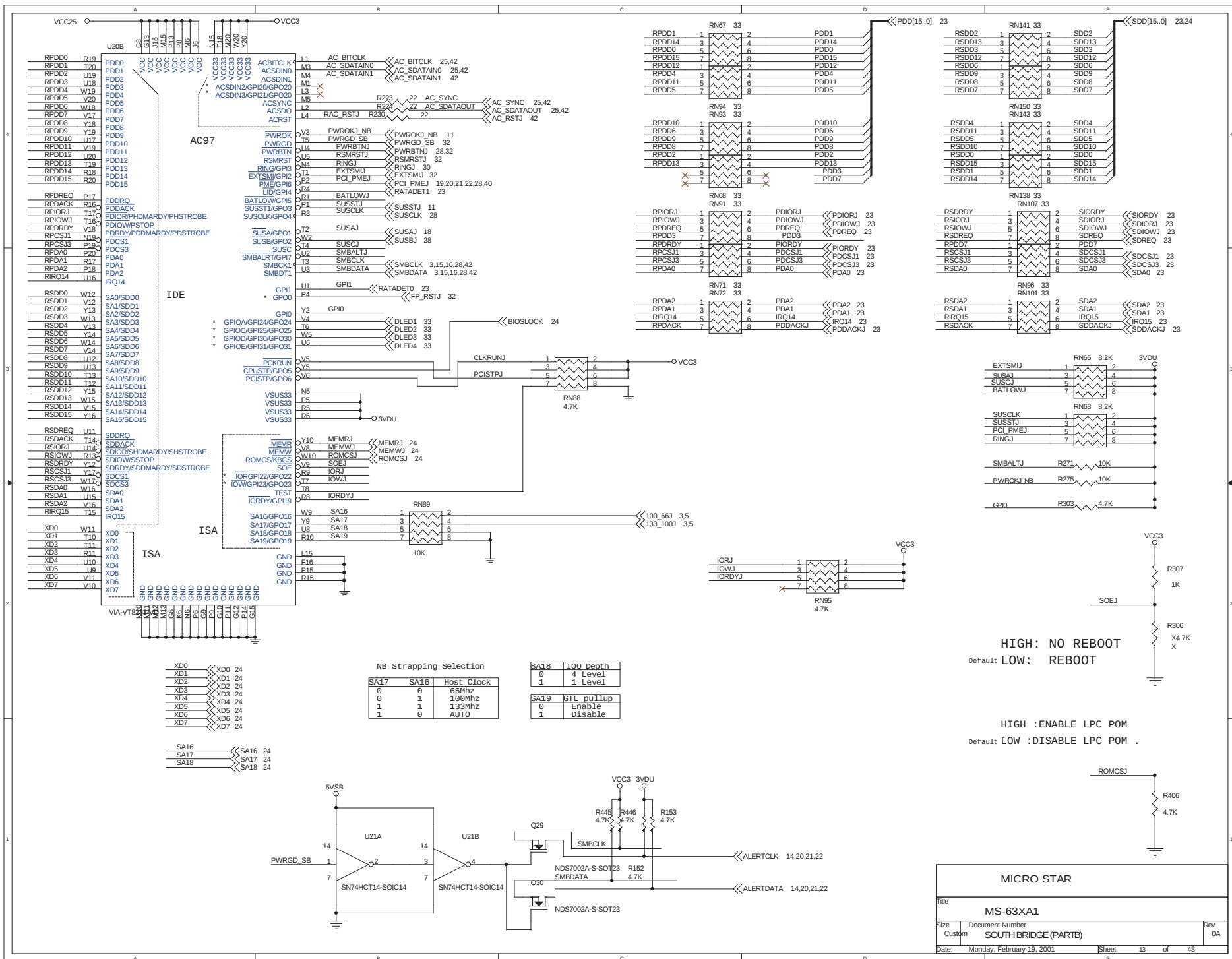
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http://www.msi.com.tw		Sheet
		8 of 43

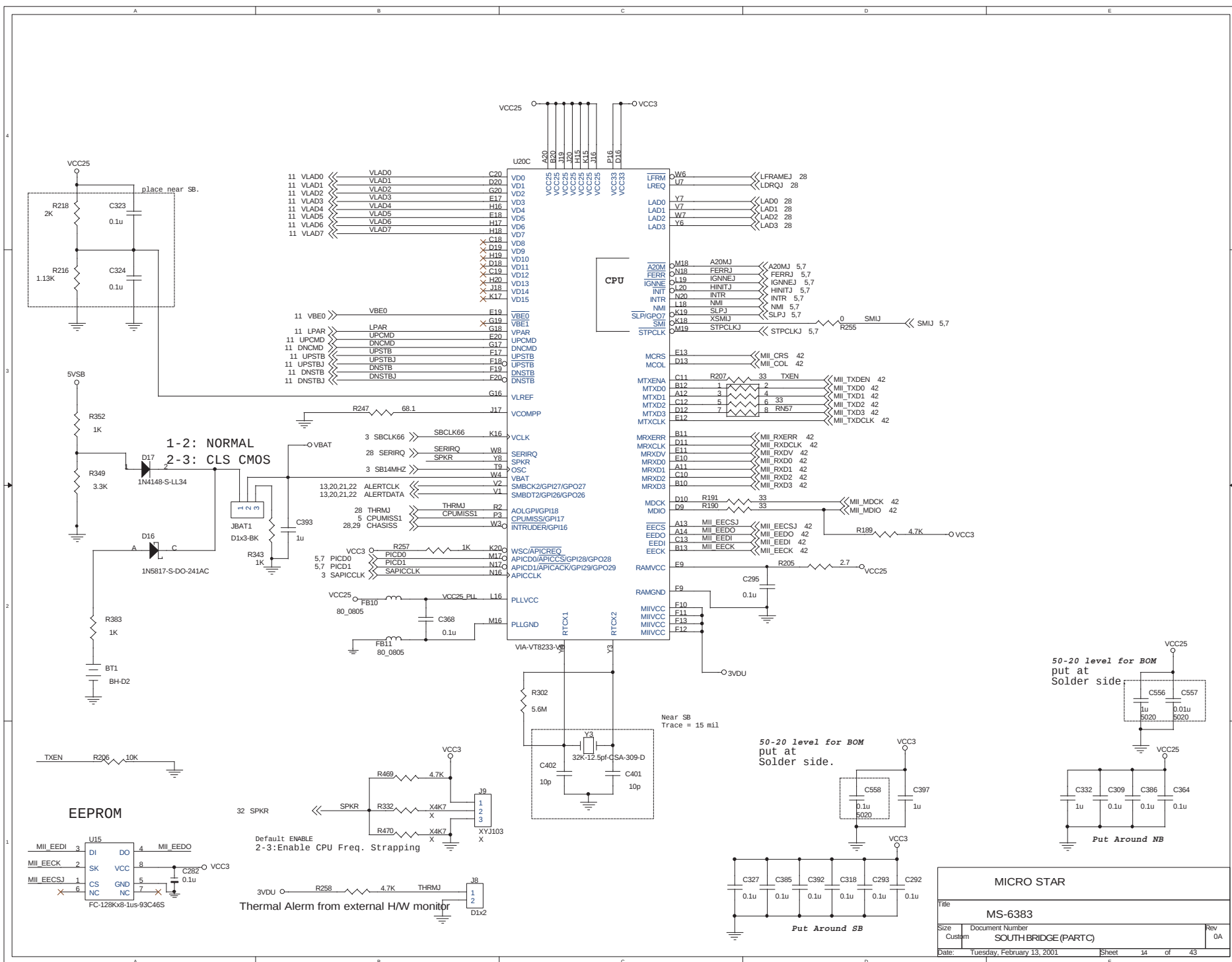


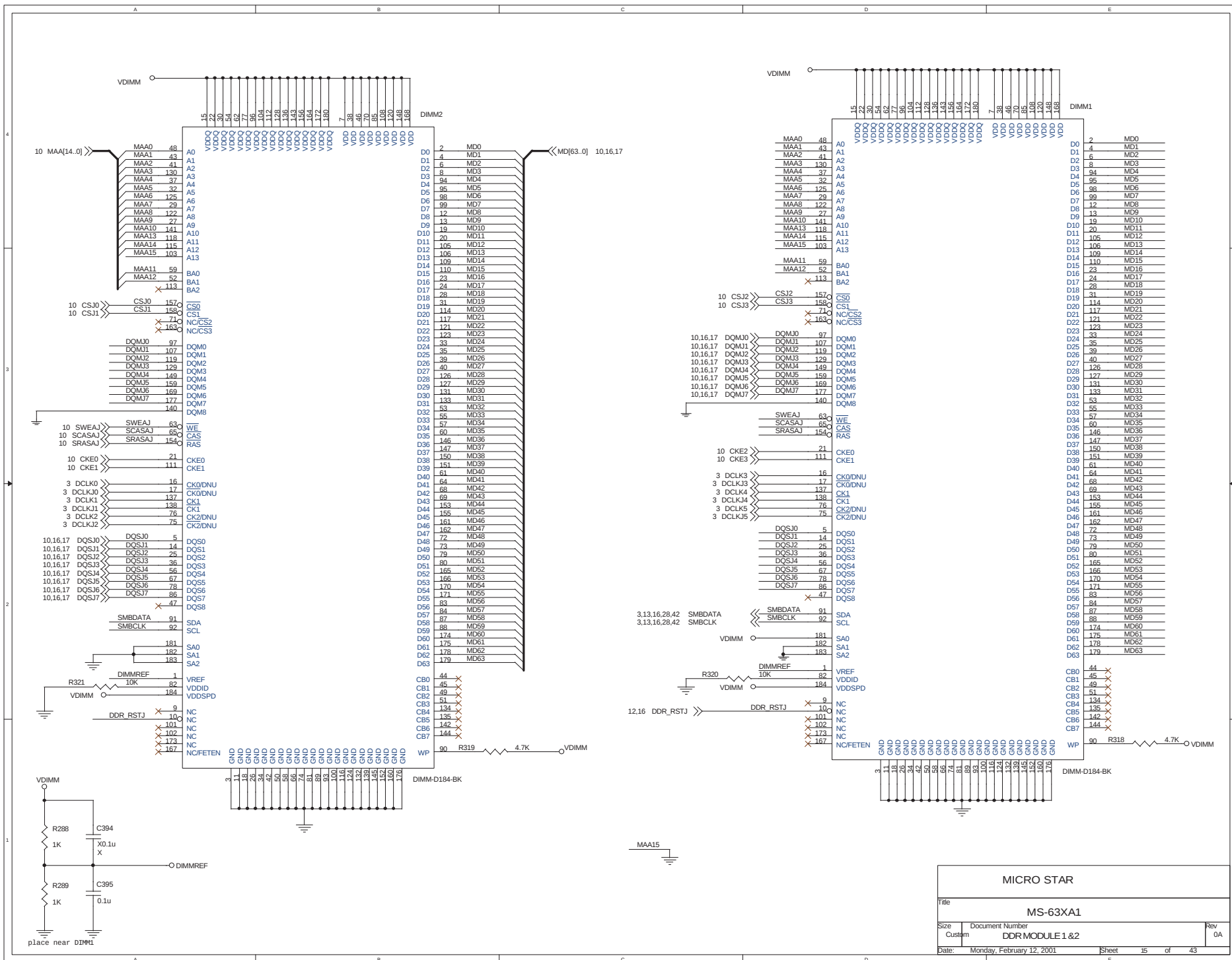


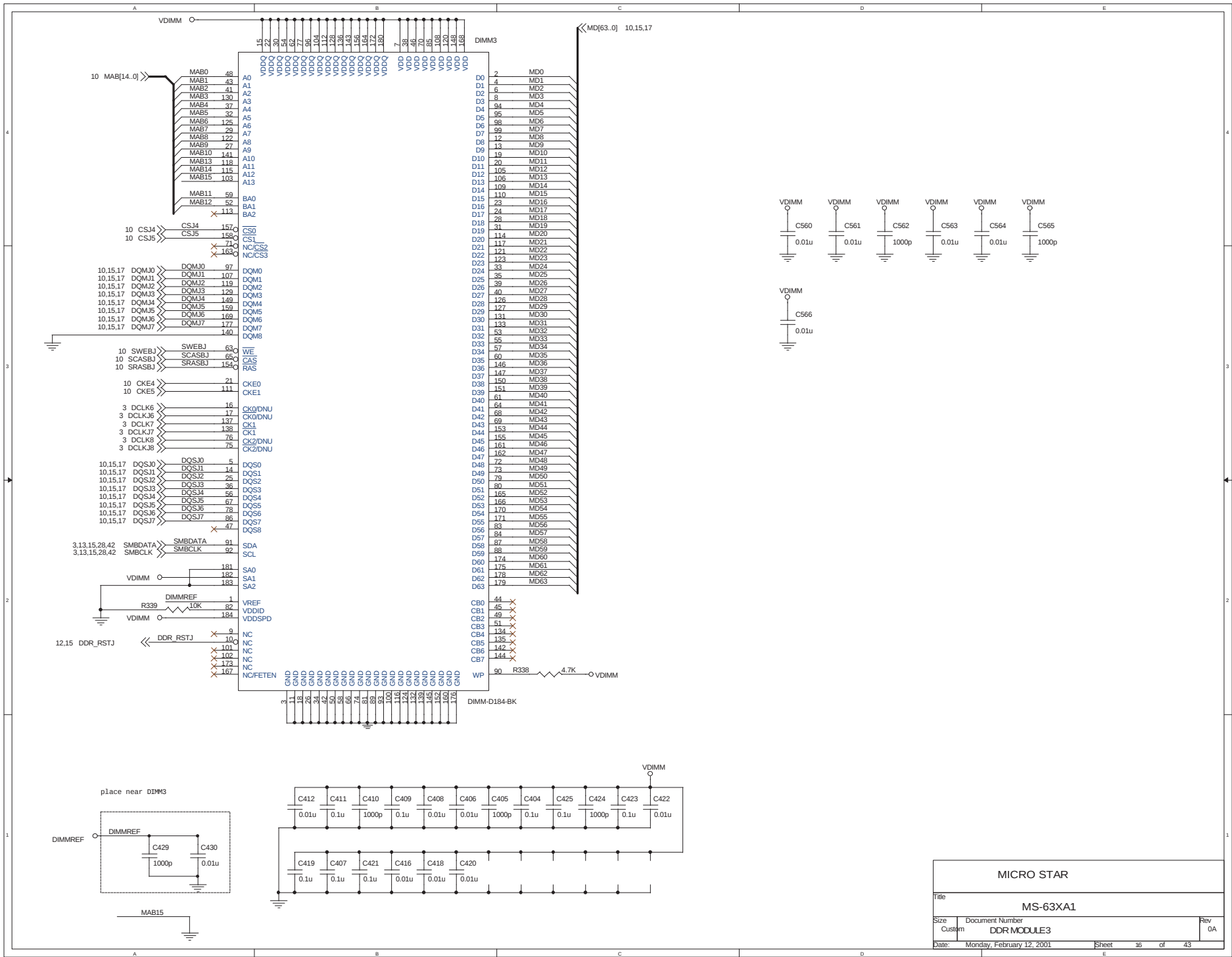




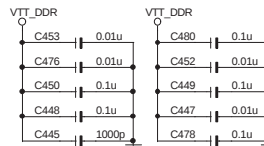
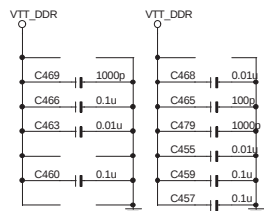
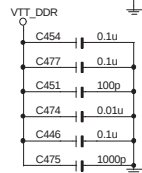
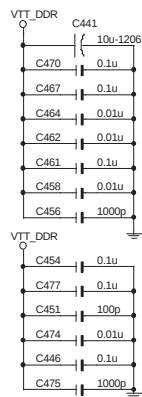




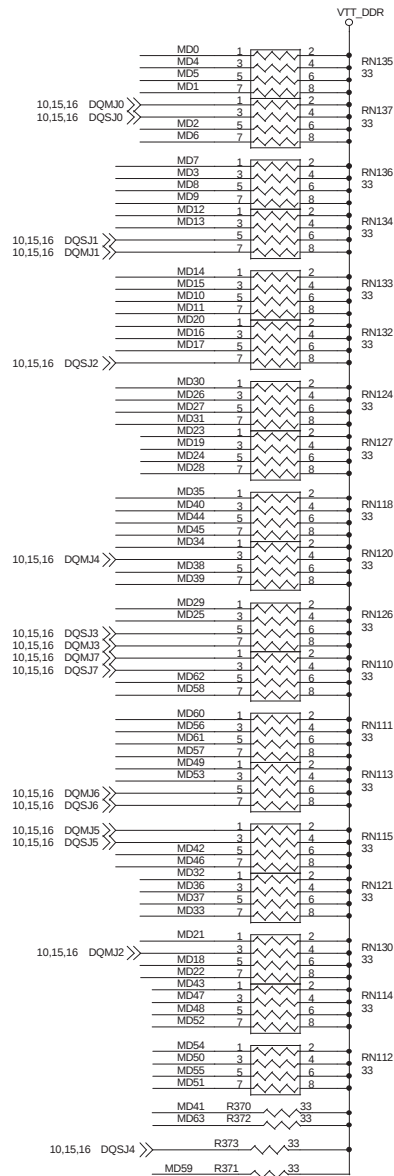
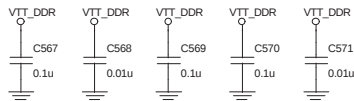
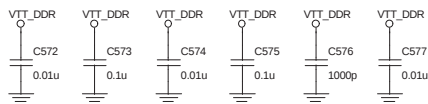




MICRO STAR			
Title		MS-63XA1	
Size	Document Number	Rev	
Custom	DDR MODULE3	0A	
Date:	Monday, February 12, 2001	Sheet	16 of 43



NOTE: Place these decoupling capacitors close to VTT_MEM termination resistors. (one decoupling capacitor for each two R-packs)



MICRO STAR

Title			MS-63XA1
Size	Document Number	DDR TERMINALS	
Custom			Rev 0A
Date:	Monday, February 12, 2001	Sheet 17 of 43	

Title			
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Size	Document Number	Rev	
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Date:	Monday, February 12, 2001	Sheet	18 of 43

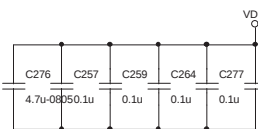
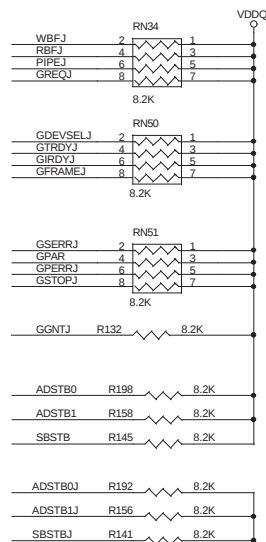
AGP Pro Connector

AGP Pro I_max

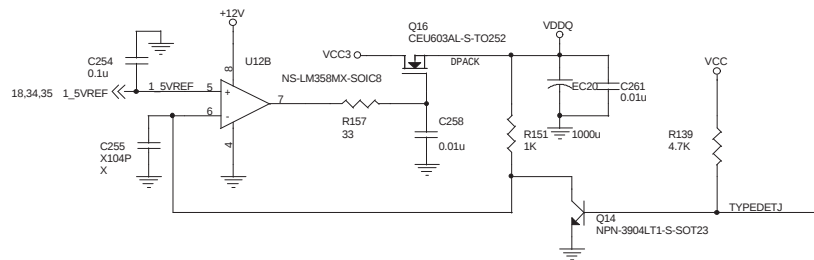
VCC3 7.6A
VCC12 9.2A

11 GAD[0..31] >> GAD[0..31]

11 SBA[0..7] >> SBA[0..7]



TYPEDET#	VDDQ
Low	1.5V
High	3.3V



12,20,21,22,38 PIRQJB

3 AGPCLK 11 GREJ

11 ST0 11 ST2 11 RBFJ

11 SBSTB

3VDDQ

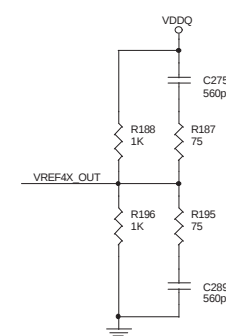
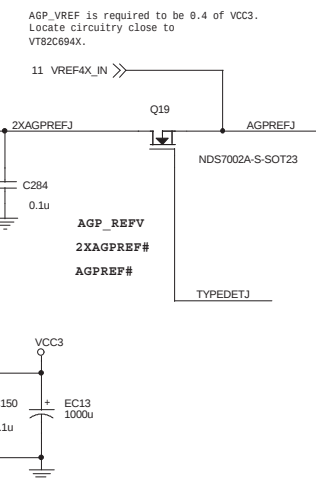
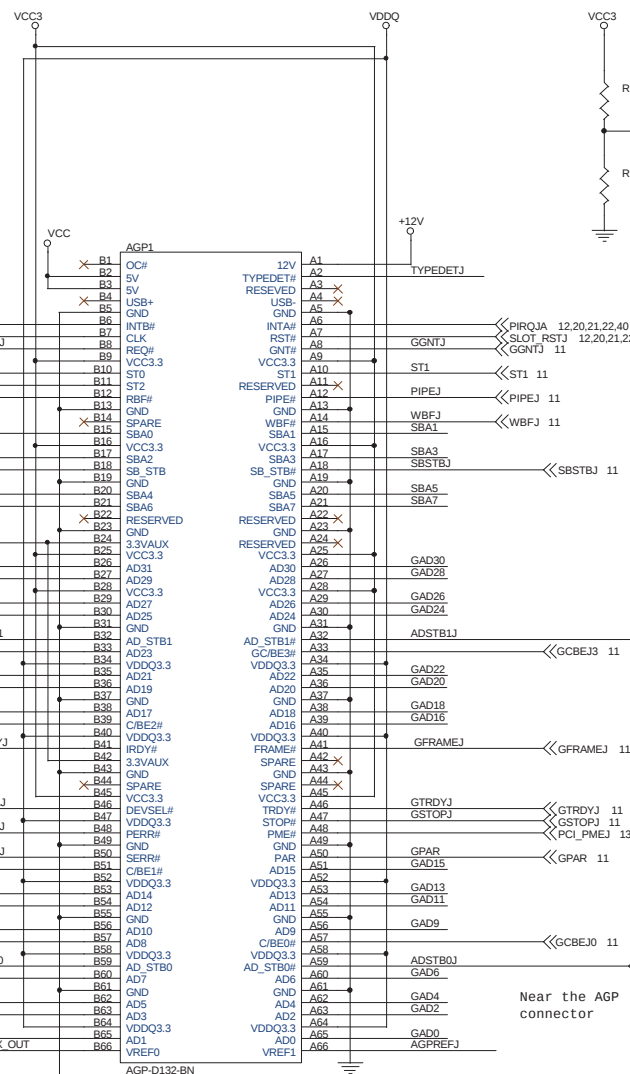
11 ADSTB1

11 GCBEJ2

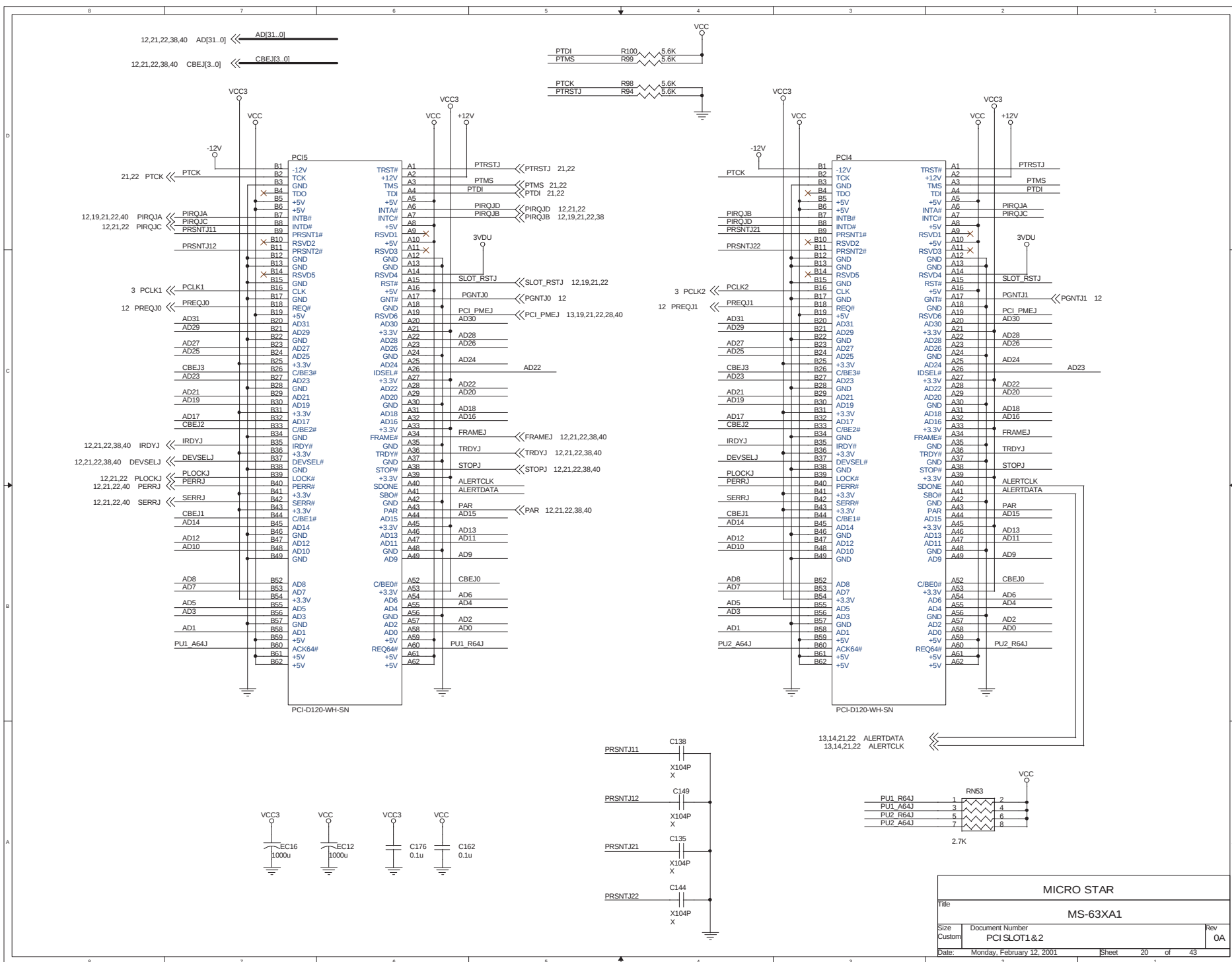
11 GIRDYJ

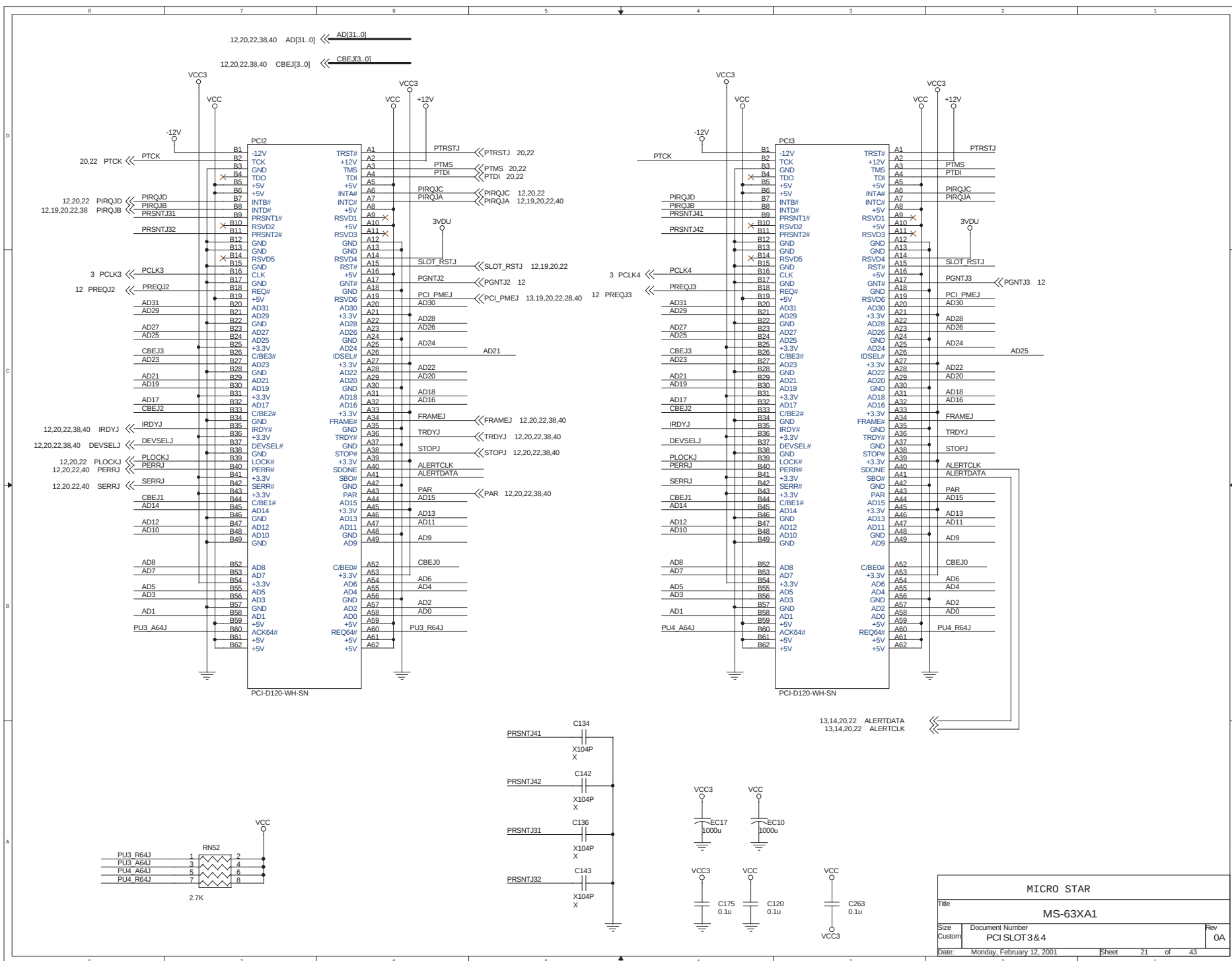
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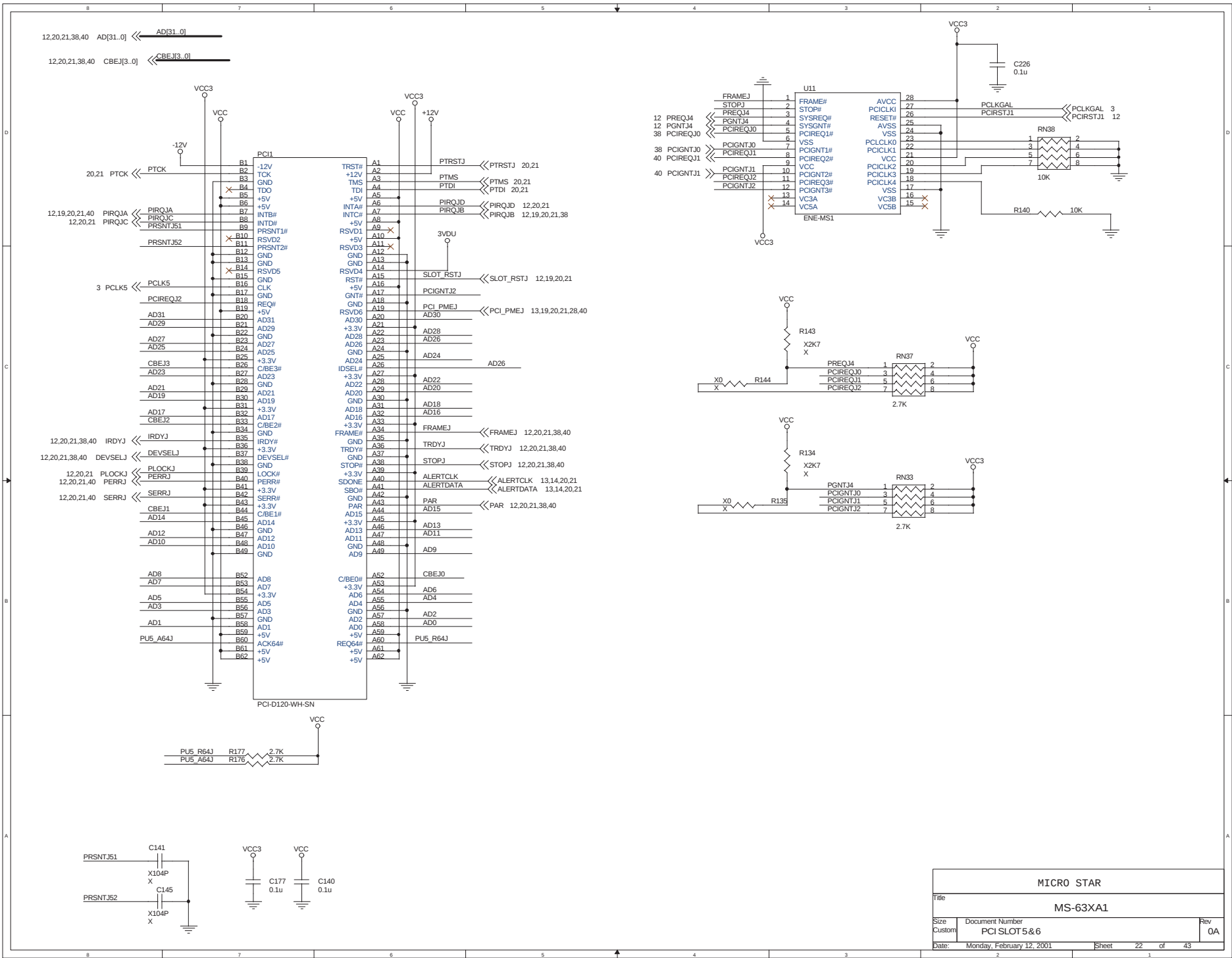
11 ADSTB0



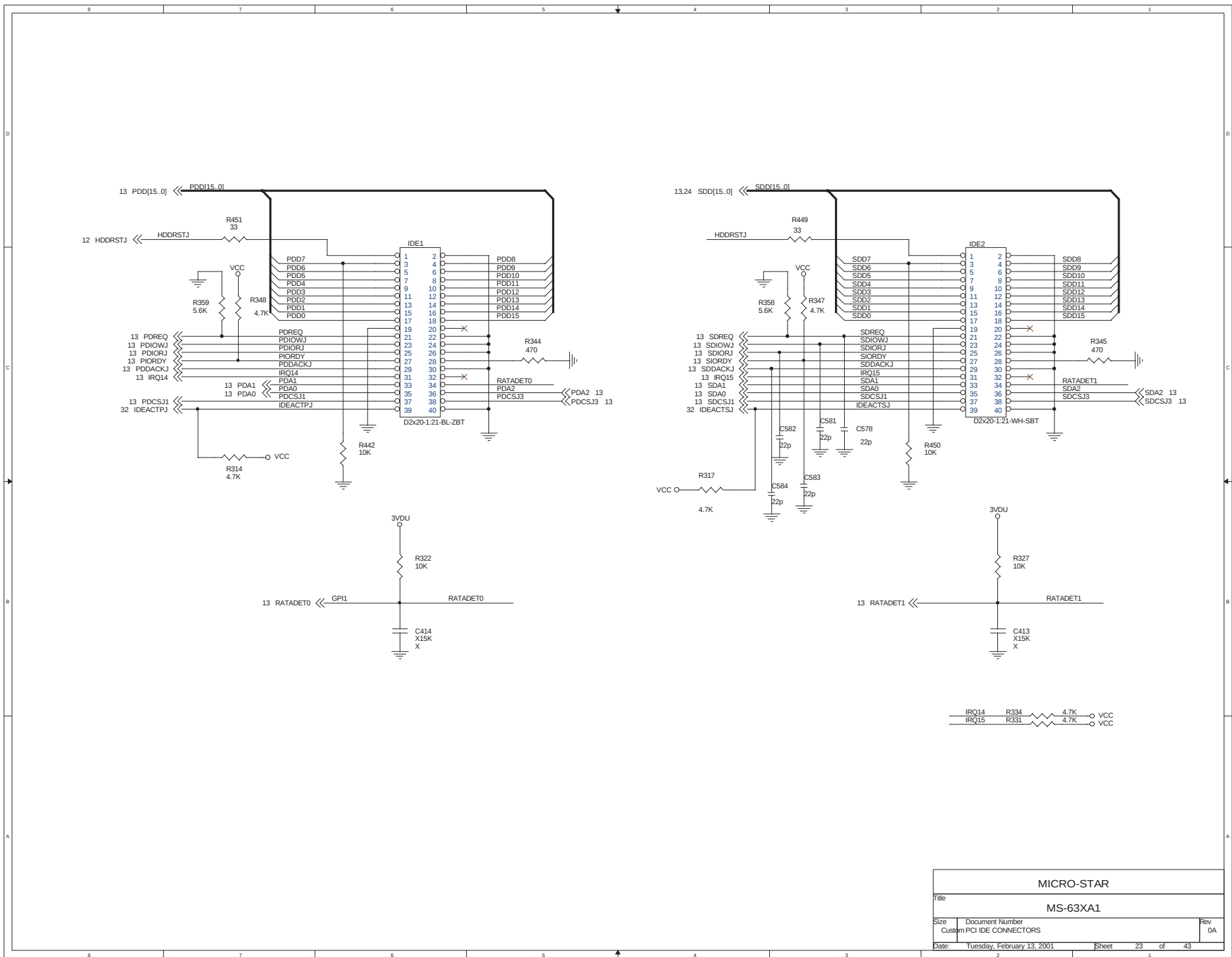
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Date:	Monday, February 12, 2001	Sheet	19 of 43

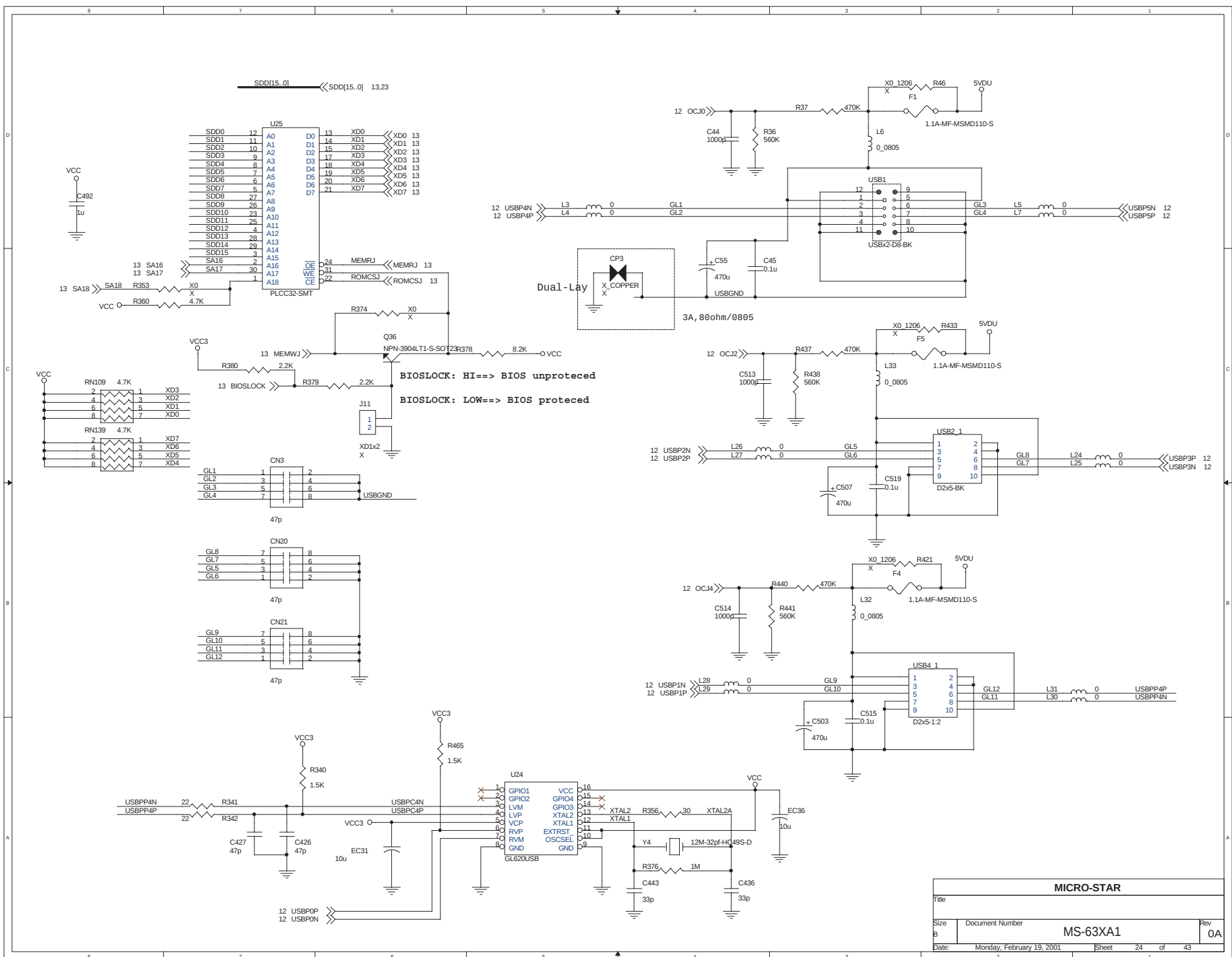


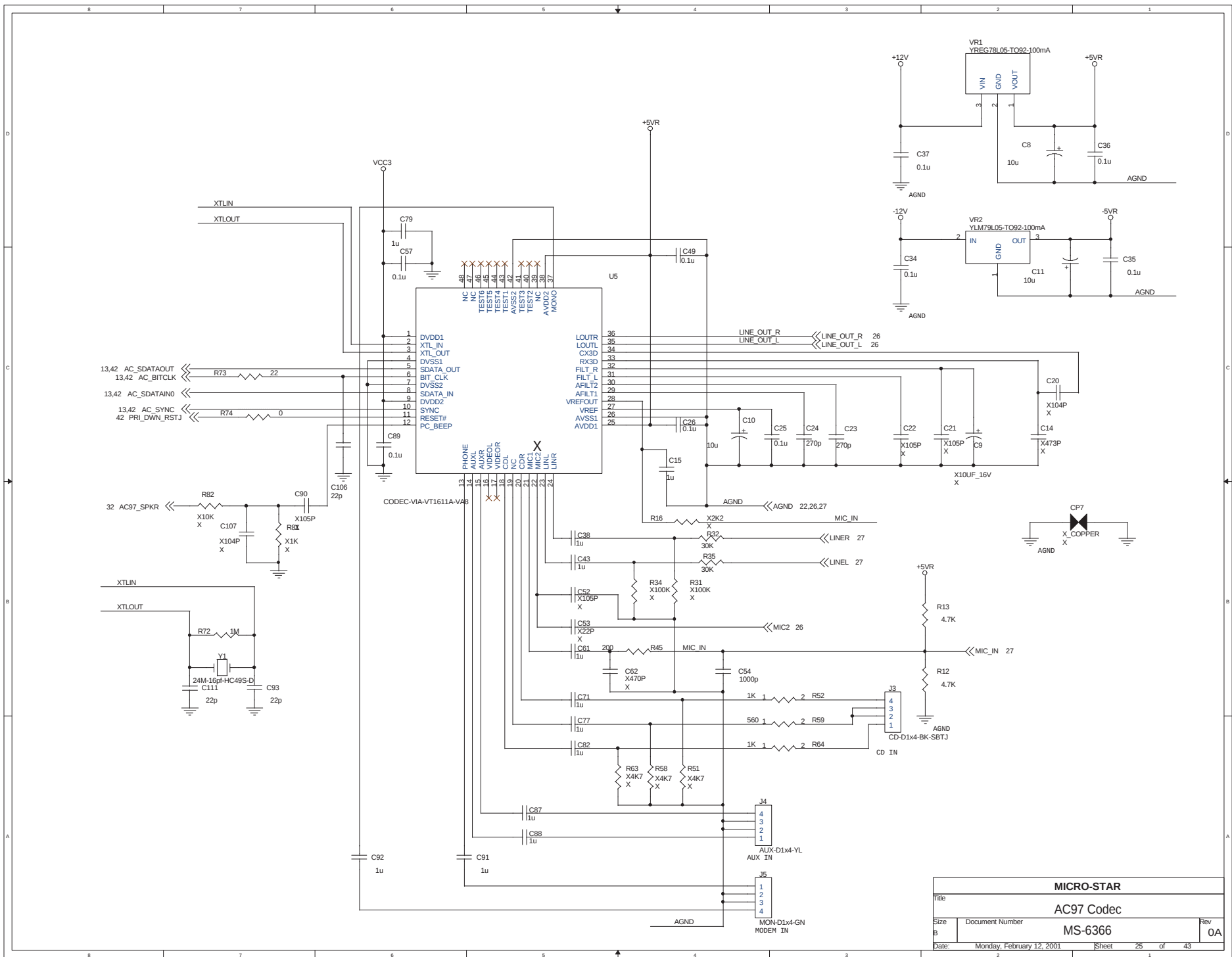




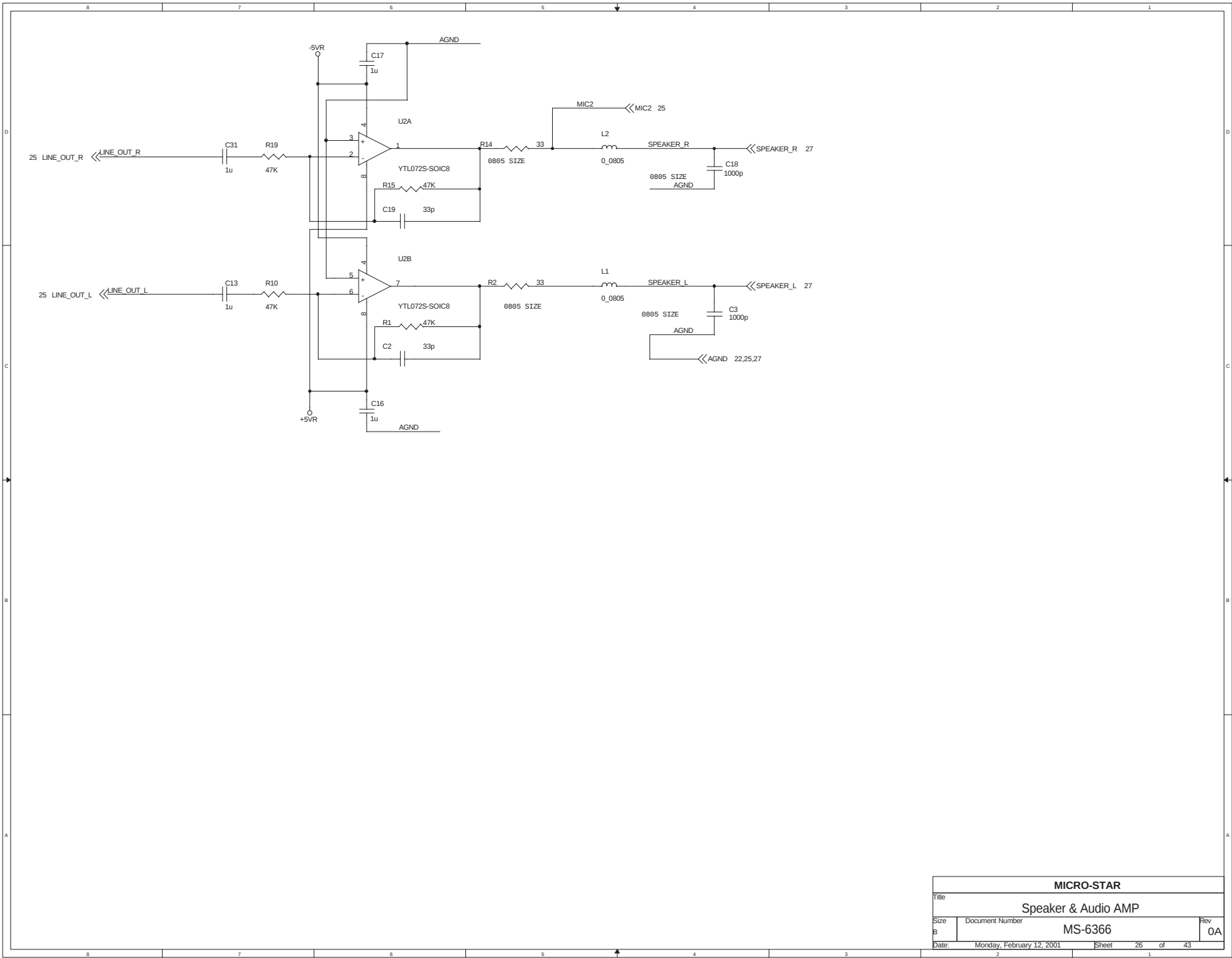
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Size	Document Number	Rev	
Custom	PCI SLOT5&6	0A	
Date:	Monday, February 12, 2001	Sheet	22 of 43



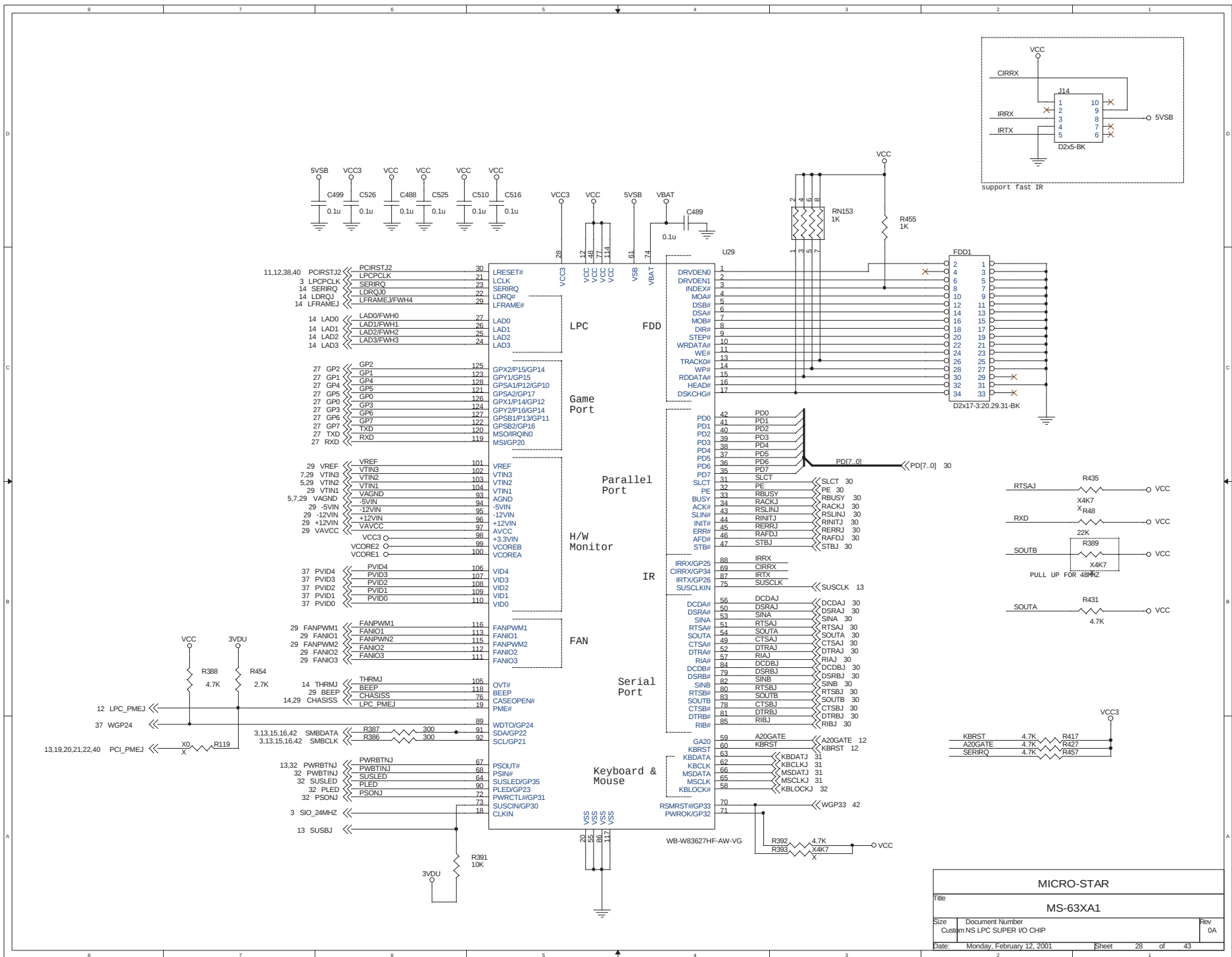




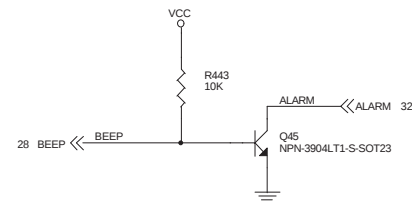
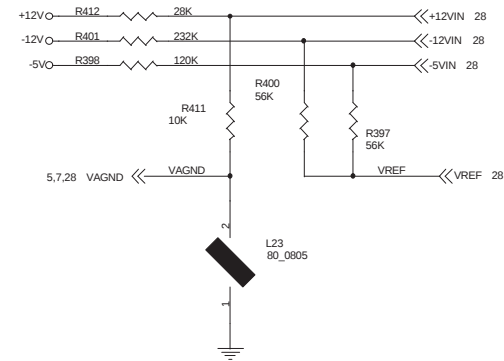
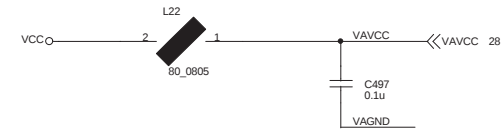
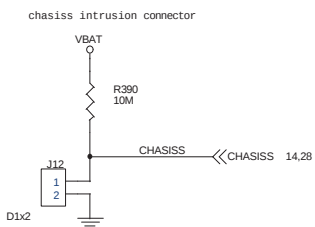
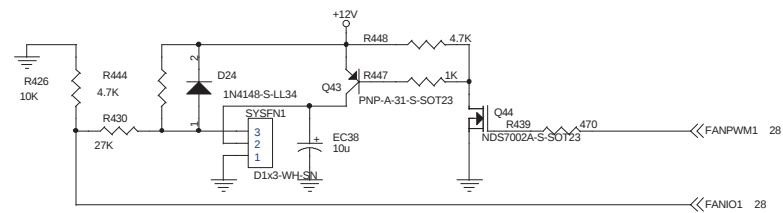
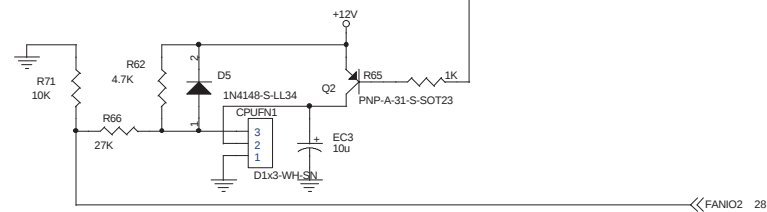
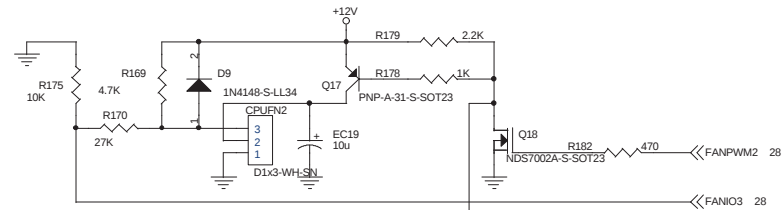
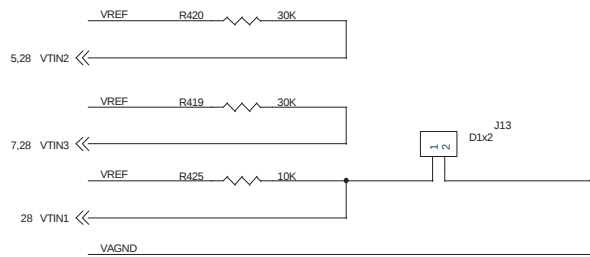
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Size	Document Number	MS-6366	Rev
B			0A
Date:	Monday, February 12, 2001	Sheet	25 of 43



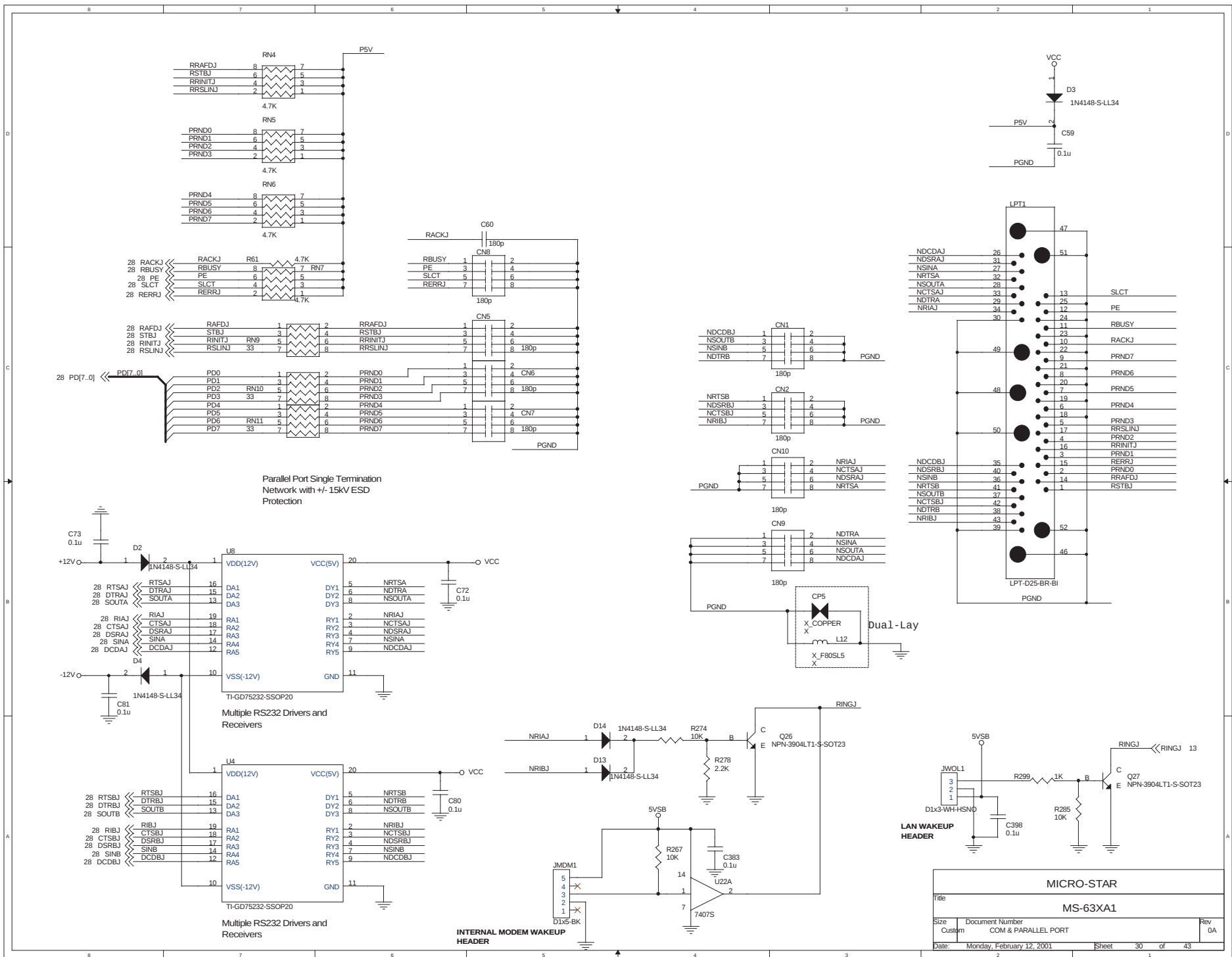
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Title			
Speaker & Audio AMP			
Size	Document Number		Rev
B	MS-6366		0A
Date:	Monday, February 12, 2001	Sheet	26 of 43



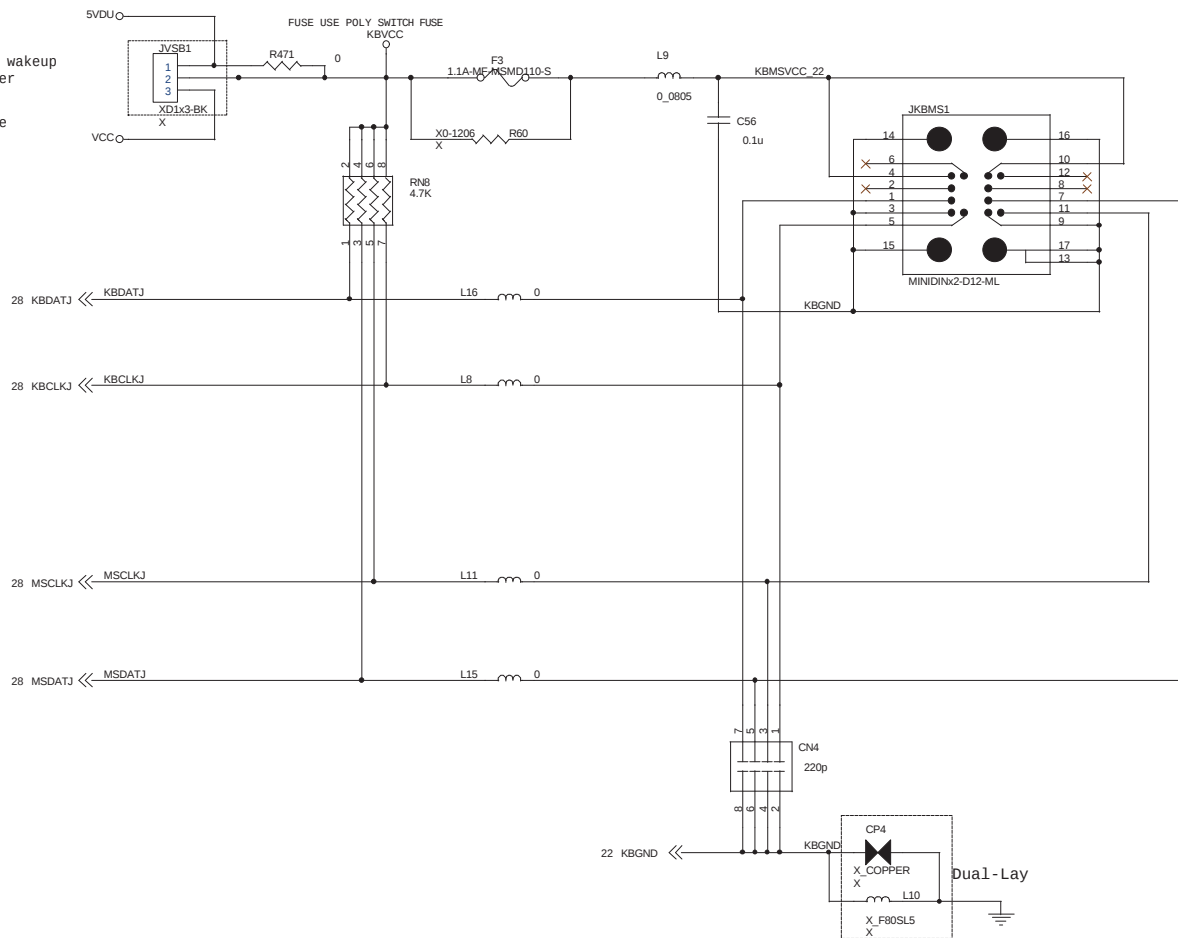
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Title		
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Size	Document Number	Rev
Custom	MS LPC SUPER I/O CHIP	0A
Date:	Monday, February 12, 2001	Sheet 28 of 43



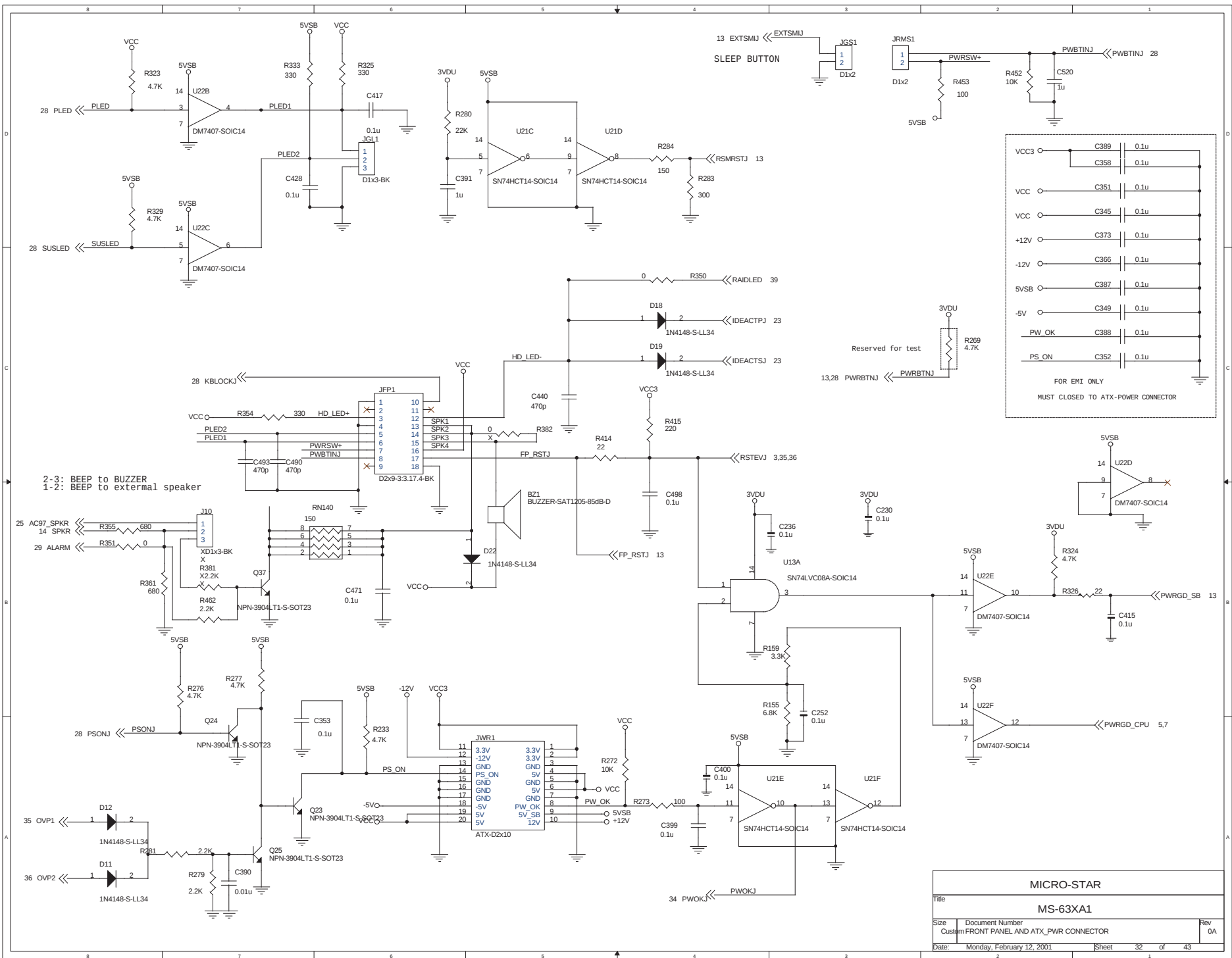
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MS-63XA1		
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Date:	Tuesday, February 13, 2001	Sheet 29 of 43

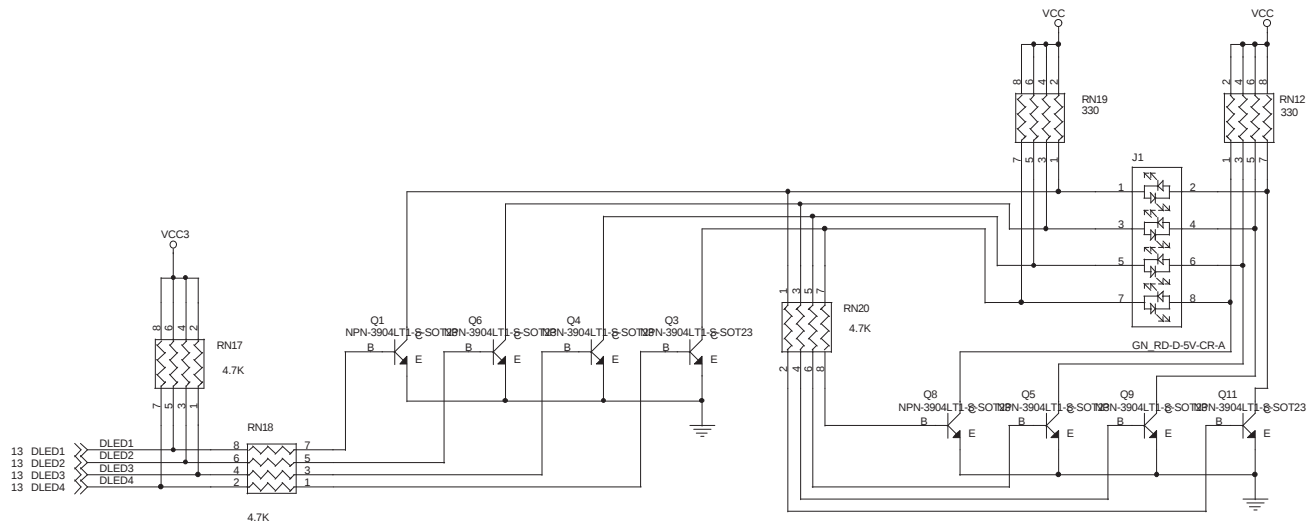


KB password wakeup
enable jumper
1-2: Enable
2-3: Disable

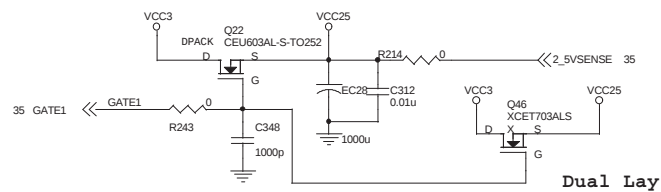
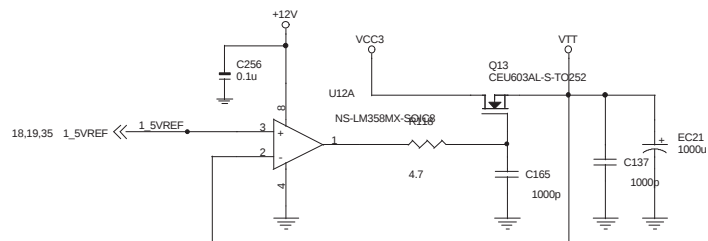


MICRO-STAR		
Title		
MS-63XA1		
Size	Document Number	Rev
Custom	KEYBOARD	0A
Date:	Monday, February 12, 2001	Sheet 31 of 43

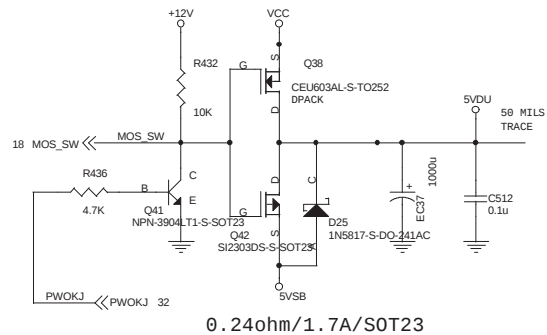
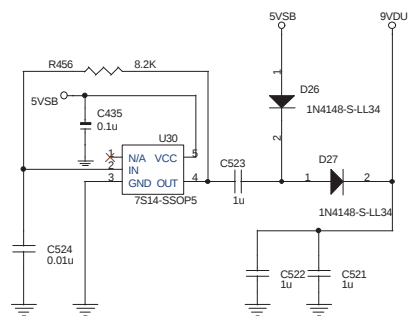




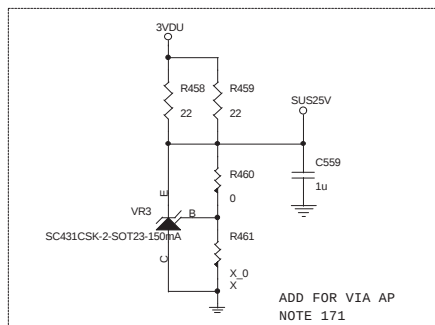
MICRO-STAR		
Title		
MS-63XA1		
Size	Document Number	Rev
Custom	D-LED	0A
Date:	Monday, February 12, 2001	Sheet 33 of 43



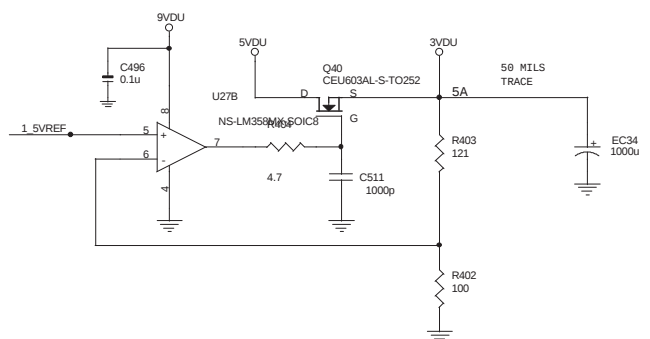
Dual Lay



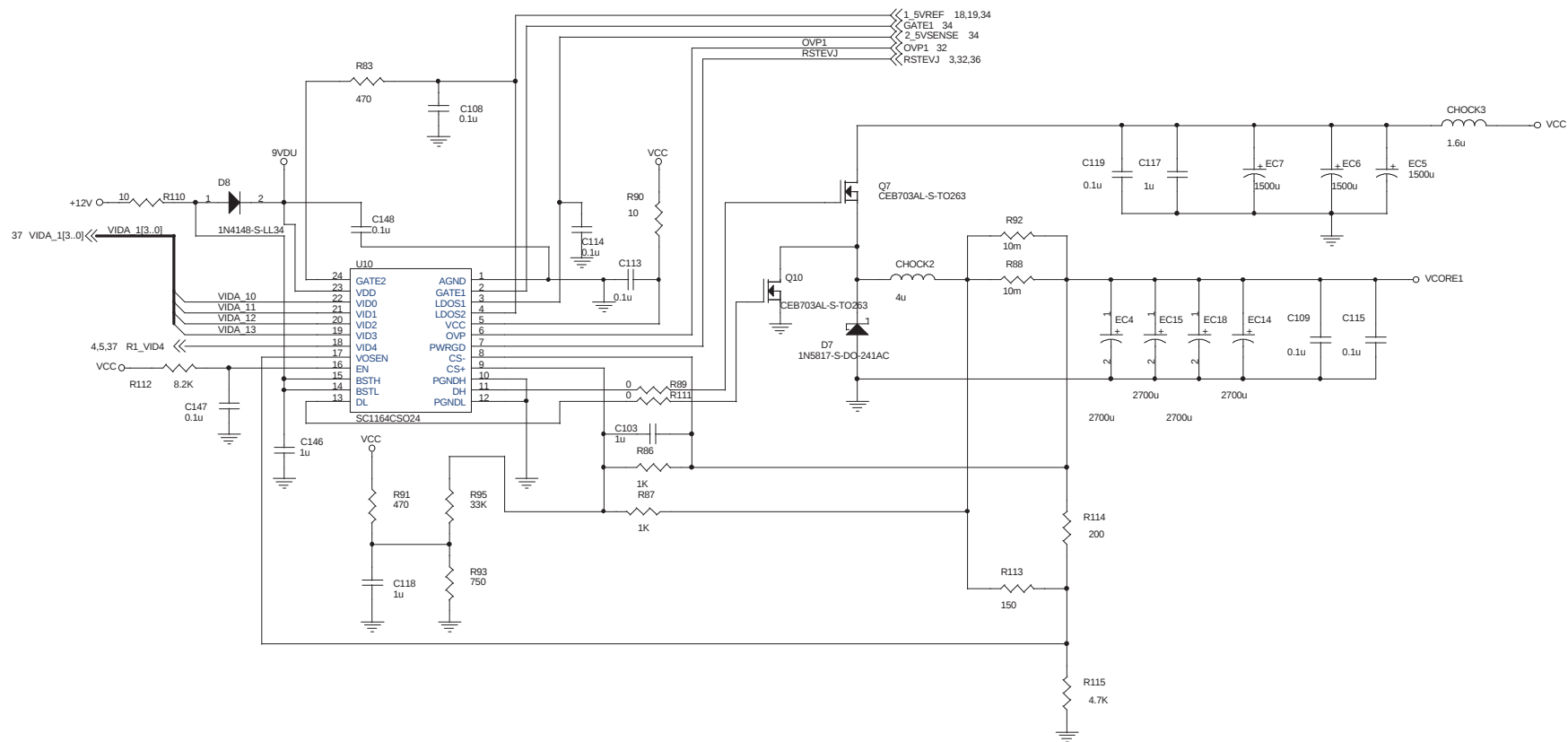
0.24ohm/1.7A/SOT23



ADD FOR VIA AP
NOTE 171



MICRO-STAR			
Title		MS-63XA1	
Size	Document Number	Rev	
Custom	SYSTEM BOARD VOLTAGE REGULATOR	0A	
Date:	Monday, February 12, 2001	Sheet	34 of 43

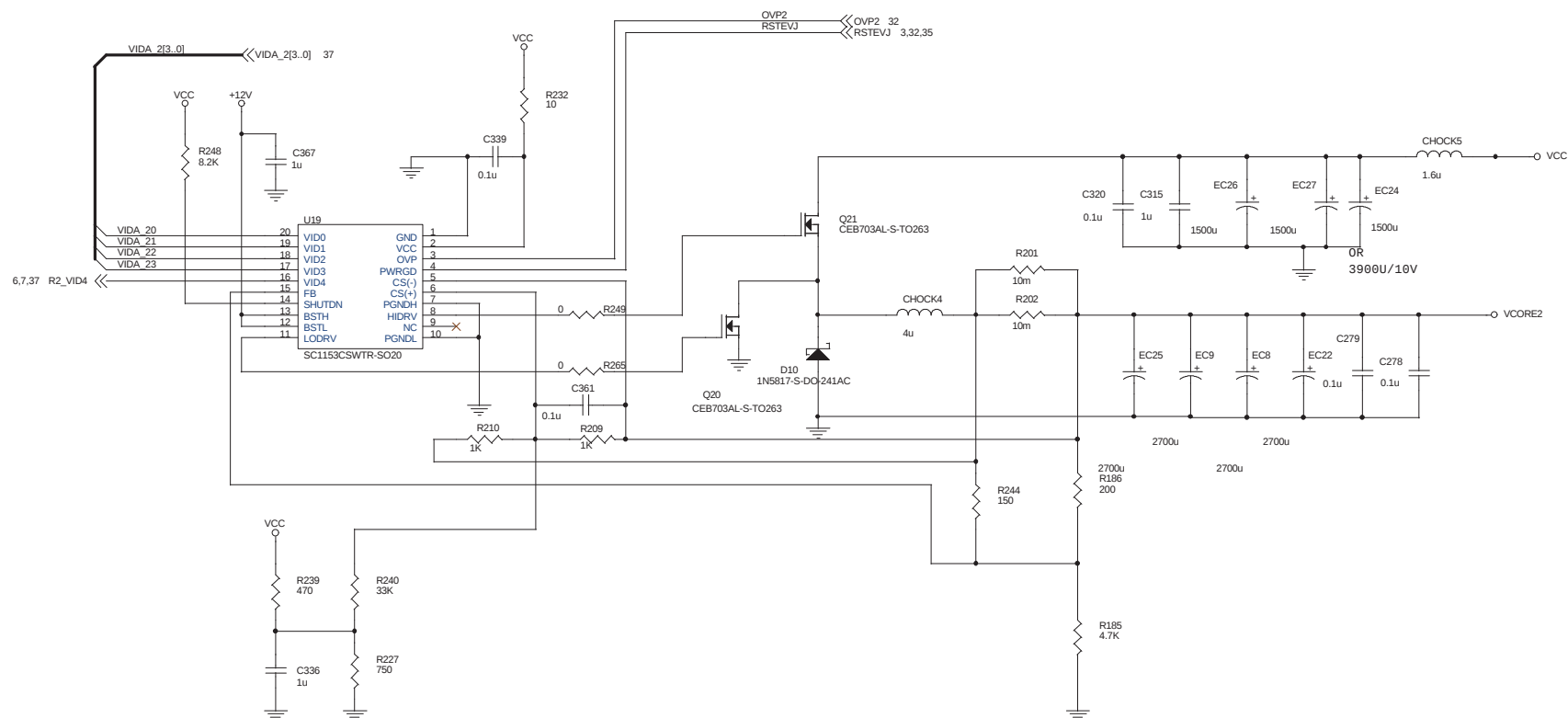


Output Cap. :
 Use Fujitsu 820UF/4V (10*12.5mm) * 3 (Sep=1.2315)
 ESR=12mOHm, RippleCurrent=5.04A

Input Cap.: (Total RippleCurrent=11.1A, Sepc=8.34A)
 Use Rubycon 4700UF/10V * 1
 ESR=15mOHm, RippleCurrent=3.4A (25mm)
 Use Lelon 1500UF/10V (20mm) * 1
 ESR=22mOHm, RippleCurrent=2.15A

To meet Cuppermine 1.133GHz CPU Transient Spec.
 The spec as follow :
 Vcore=1.7V, I_{max}=22A, I_{stpgnt}=2.5A
 V_{tran}(min)=-0.110V, V_{tran}(max)=+0.080V
 I_{ripple}(input)=8.34A

MICRO-STAR		
Title		
MS-63XA1		
Size	Document Number	Rev
B	SWITCH REGULATOR FOR VRM 1	00A
Date:	Monday, February 12, 2001	Sheet 35 of 43



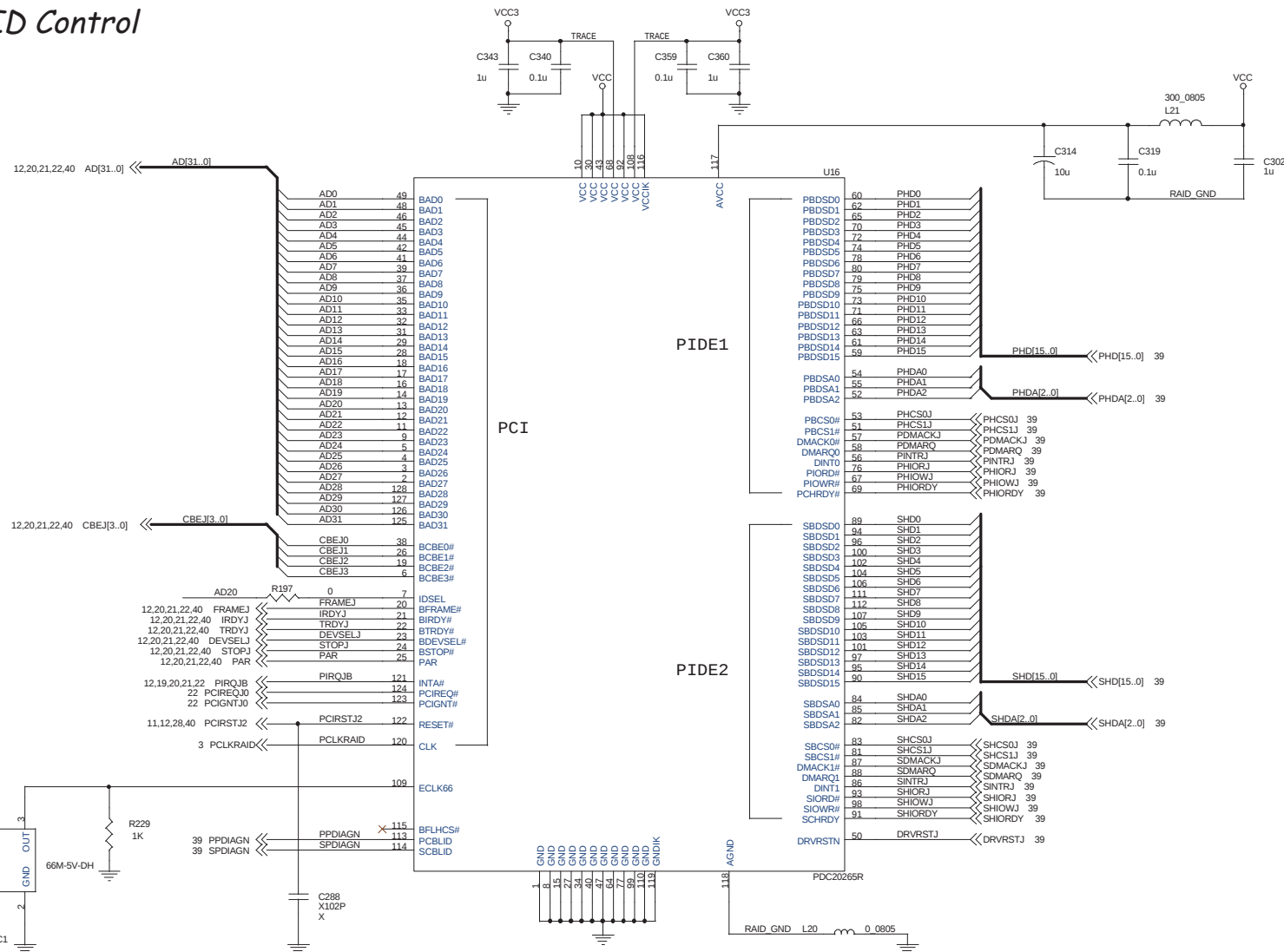
Output Cap. :
 Use Fujitsu 820UF/4V (10*12.5mm) * 3 (Sep=1.2315)
 ESR=12mOHm, RippleCurrent=5.04A

Input Cap.: (Total RippleCurrent=11.1A, Sepec=8.34A)
 Use Rubycon 4700UF/10V * 1
 ESR=15mOHm, RippleCurrent=3.4A (25mm)
 Use Lelon 1500UF/10V (20mm) * 1
 ESR=22mOHm, RippleCurrent=2.15A

To meet Coppermine 1.133GHz CPU Transient Spec.
 The spec as follow :
 Vcore=1.7V, I_{max}=22A, I_{stpgnt}=2.5A
 V_{tran}(min)=-0.110V, V_{tran}(max)=+0.080V
 I_{ripple}(input)=8.34A

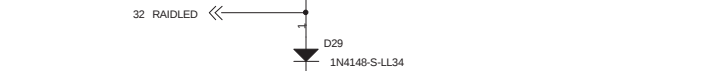
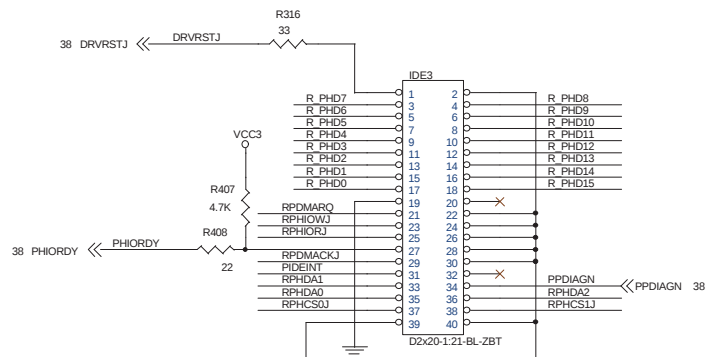
MICRO-STAR		
Title MS-63XA1		
Size B	Document Number SWITCH REGULATOR FOR VRM	Rev 00A
Date: Monday, February 12, 2001	Sheet 36 of 43	1

IDE RAID Control



Micro Star Restricted Secret

Title	IDE RAID Controller	Rev
Document Number	MS-6380	00A
MICRO-STAR INT'L CO.,LTD.		
No. 69, Li-De St, Jung-He City, Taipei Hsien, Taiwan		
http://www.msi.com.tw		
Last Revision Date:		Monday, February 12, 2001
Sheet		of

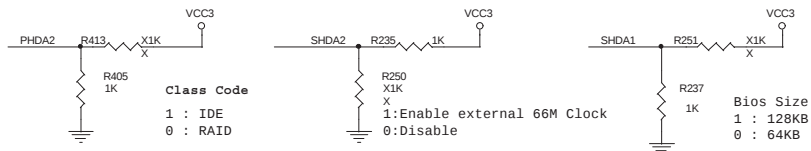


SHDA0 SHDA1 : 1K PULL DOWN
EXTERNAL BIOS ROM SIZE

PHDA2: PULL UP 1K TO VCC
ULTRA66 MODE

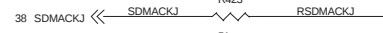
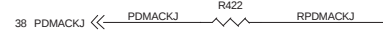
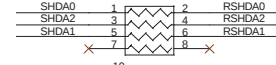
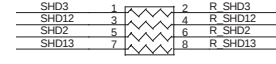
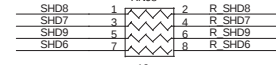
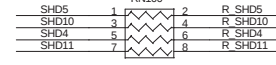
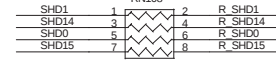
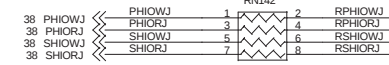
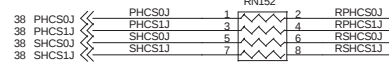
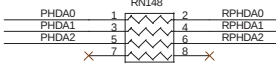
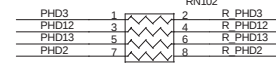
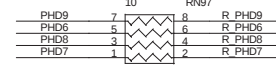
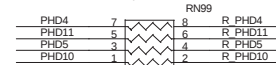
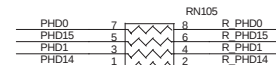
SHDA2:PULL DOWN 1K
FOR INTERNAL PCI CLOCK

VCC3=VCC6=VCC4



Class Code
1 : IDE
0 : RAID

Bios Size
1 : 128KB
0 : 64KB

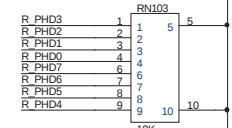
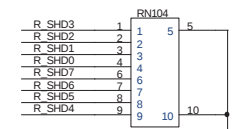
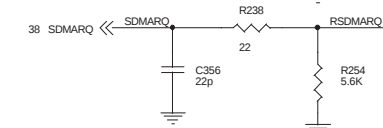
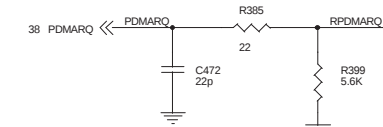
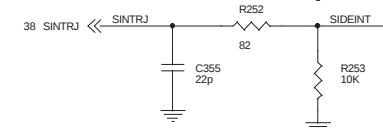
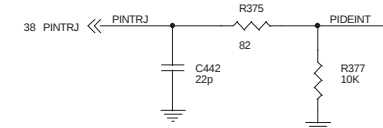
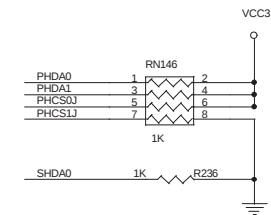


38 PHD[15..0] << PHD[15..0]

38 SHD[15..0] << SHD[15..0]

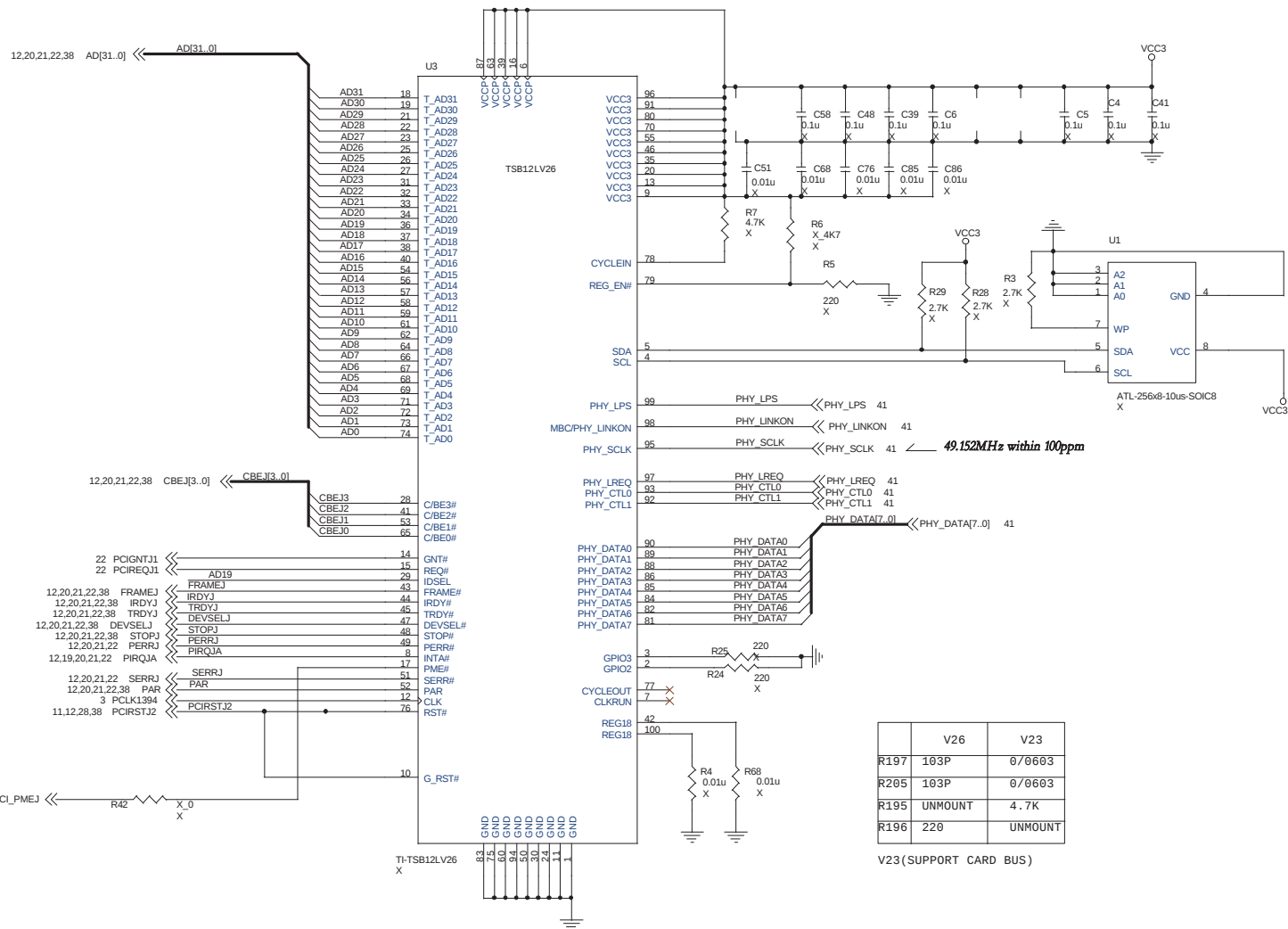
38 PHDA[2..0] << PHDA[2..0]

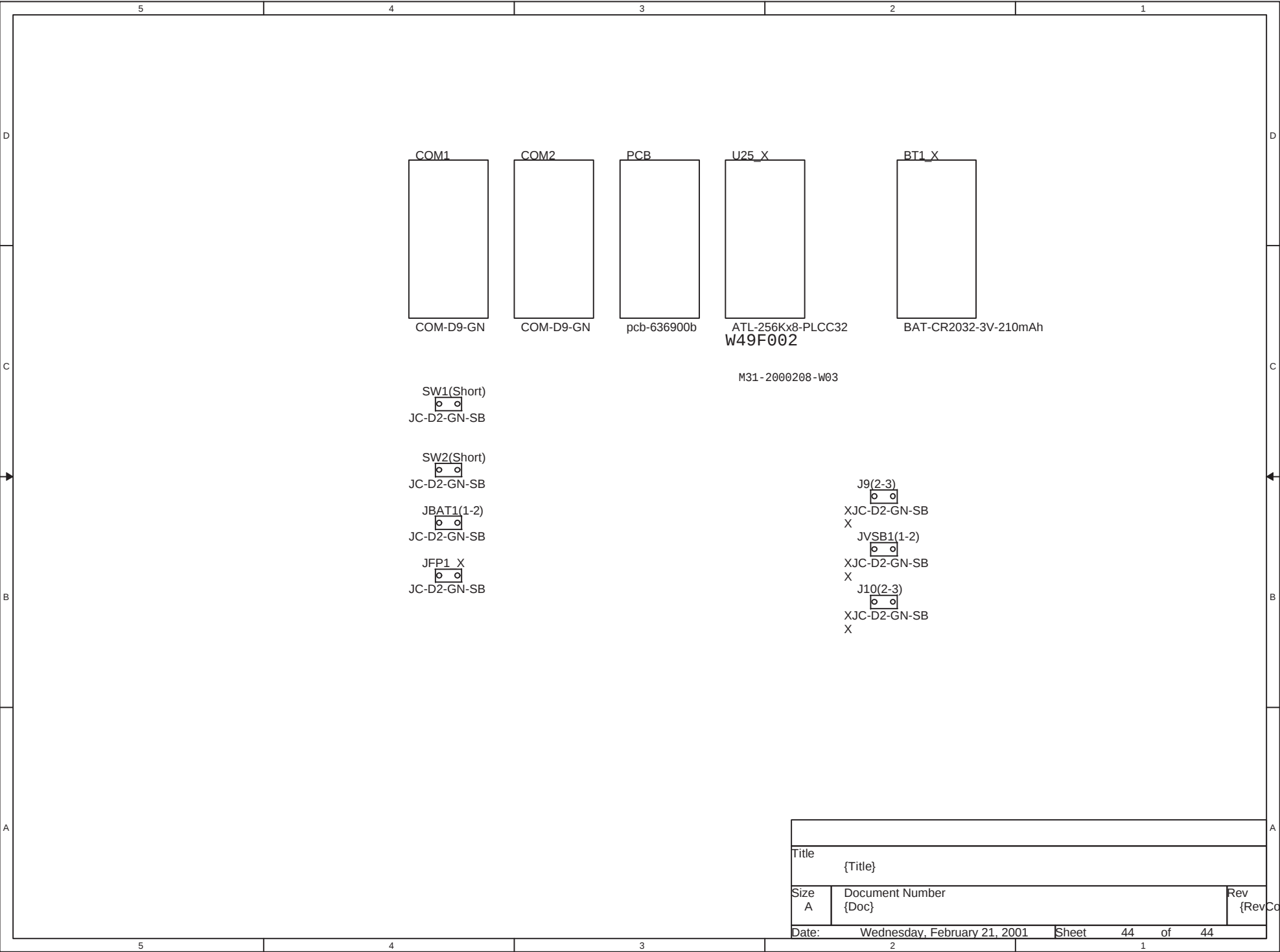
38 SHDA[2..0] << SHDA[2..0]



Micro Star Restricted Secret

Title	IDE RAID Connector	Rev	00A
Document Number	MS-6380		
MICRO-STAR INT'L CO.,LTD.		Last Revision Date:	
No. 69, Li-De St, Jung-He City,		Tuesday, February 13, 2001	
Taipei Hsien, Taiwan		Sheet	
http://www.msi.com.tw		of	





Title			
{Title}			
Size	Document Number		Rev
A	{Doc}		{RevCode}
Date:	Wednesday, February 21, 2001	Sheet	44 of 44