530

Platform : ATX
P54C,P55C,6X86,K5
SIMM : SOCKET 2 X 72 Pins
SIMM :5V - EDO,FPM DRAM
CACHE : ON BOARD 256K/512K PBSRAM/M-CACHE
BIOS : 5V,12V FLASH ROM,2 Mbits FLASH ROM
USB : 2
IO : SMC 37C672
ULTRA DMA 33 IDE PORT X 2

!LINK
!P54C.SCH
!SYSCLK.SCH
!MTXC_A.SCH
!MTXC_B.SCH
!CACHE.SCH
!SIMM.SCH
!PIIX4_A.SCH
!PIIX4_B.SCH
!IDE&USB.SCH
!SUPER_IO.SCH
!COM_PORT.SCH
!BIOS.SCH
!POWER.SCH
!VOLT_REG.SCH
!DECOUP.SCH
!PULLUP.SCH
!RTC_KBC.SCH
!T2_ISA16.SCH

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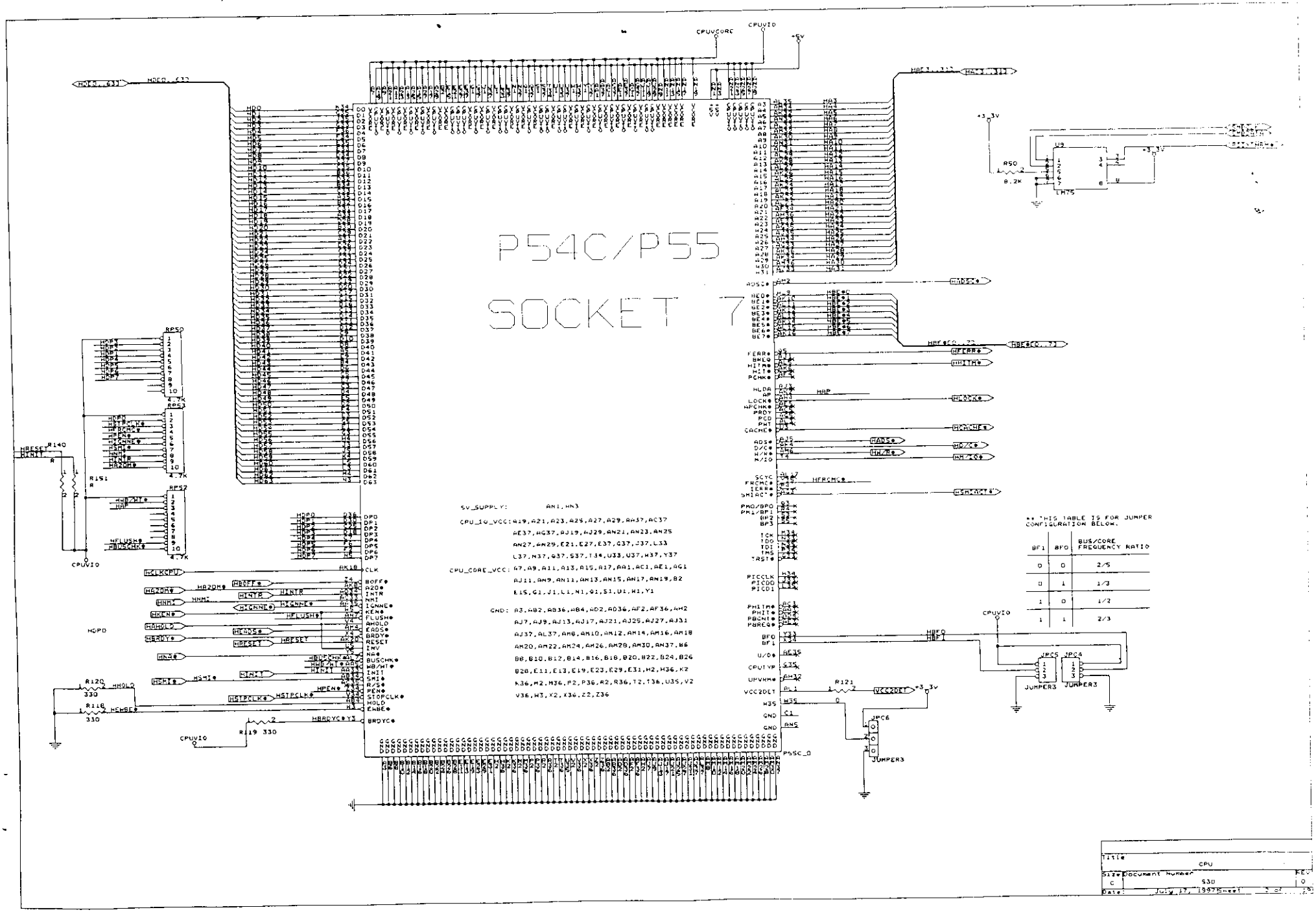
P54C/P55
SOCKET 7
CPUVCORE
CPUVIO
+5V
+3.3V
SV_SUPPLY: AN1,HN3
CPU_IO_VCC: A19,A21,A23,A25,A27,A29,AM37,AC37
AE37,AG37,AJ19,AJ29,AN21,AN23,AN25
AN27,AM29,E21,E27,E37,G37,J37,L33
L37,N37,Q37,S37,T34,U33,U37,W37,Y37
CPU_CORE_VCC: A7,A9,A11,A13,A15,A17,AA1,AC1,AE1,AG1
AJ11,AN9,AN11,AN13,AN15,AN17,AN19,B2
E15,G1,J1,L11,N1,Q1,S1,U1,W1,Y1
GND: A3,AB2,AB36,AB4,AD2,AD36,AF2,AF36,AH2
AJ7,AJ9,AJ13,AJ17,AJ21,AJ25,AJ27,AJ31
AJ37,AL37,AN8,AN10,AN12,AN14,AN16,AN18
AN20,AN22,AN24,AN26,AN28,AN30,AN37,B6
B8,B10,B12,B14,B16,B18,B20,B22,B24,B26
B28,E11,E13,E19,E23,E29,E31,M2,M36,K2
K36,M2,M36,P2,P36,R2,R36,T2,T36,U35,V2
V36,W3,X2,X36,Z2,Z36
** THIS TABLE IS FOR JUMPER CONFIGURATION BELOW.
BF1 BF0 BUS/CORE FREQUENCY RATIO
0 0 2/5
0 1 1/3
1 0 1/2
1 1 2/3
JUMPER3
Title CPU
Size C
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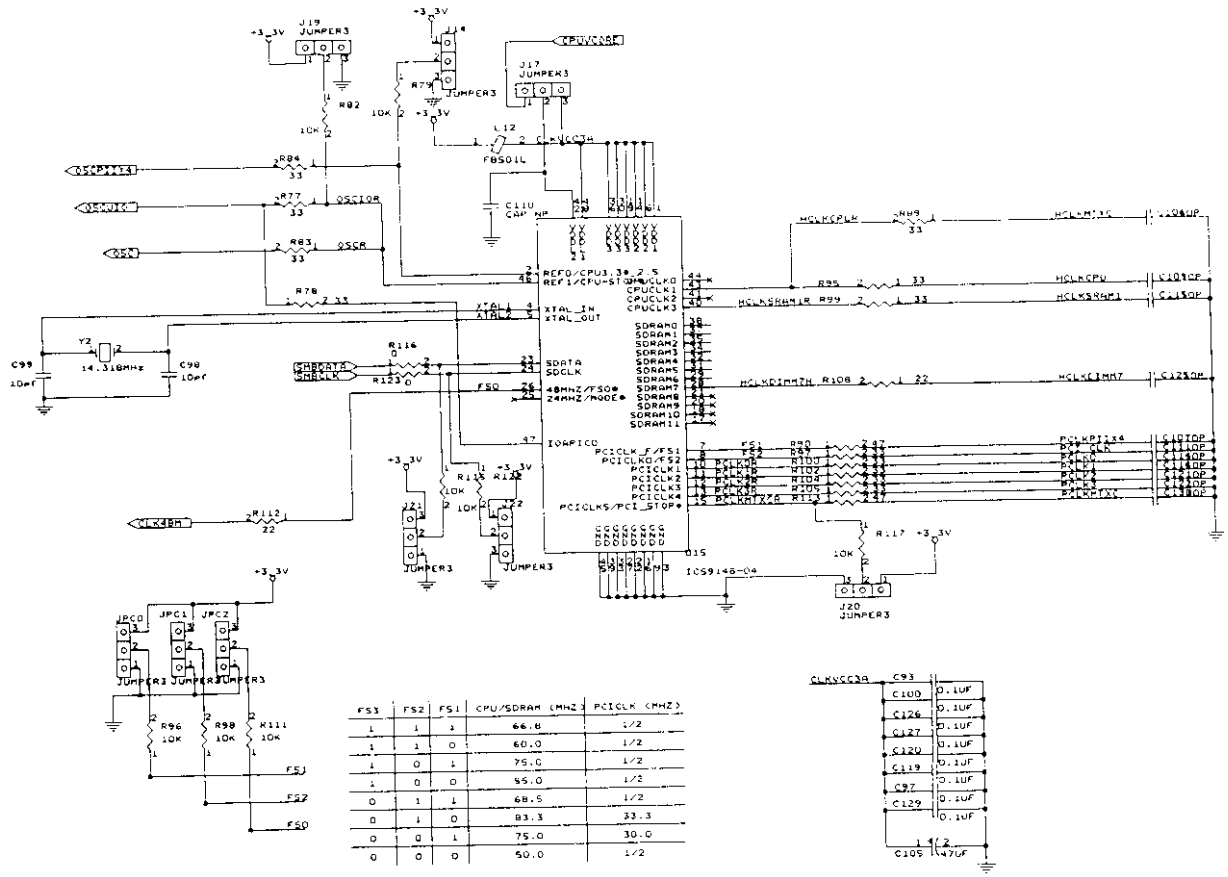

FS3	FS2	FS1	CPU/SDRAM (MHZ)	PCICLK (MHZ)
1	1	1	66.8	1/2
1	1	0	60.0	1/2
1	0	1	75.0	1/2
1	0	0	55.0	1/2
0	1	1	68.5	1/2
0	1	0	83.3	33.3
0	0	1	75.0	30.0
0	0	0	50.0	1/2

Title	CLOCK GEN.	
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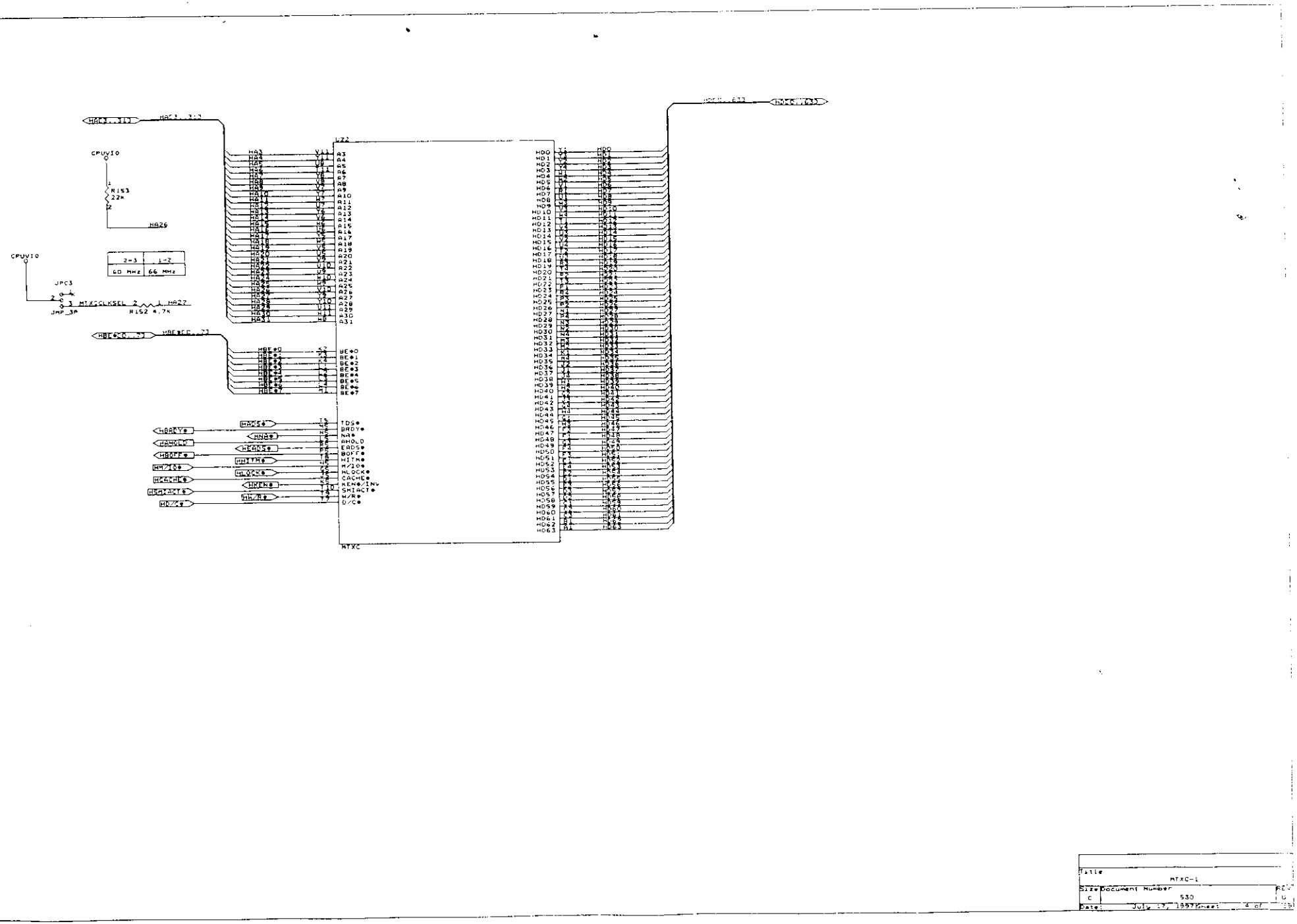

Title	MTXC-L		
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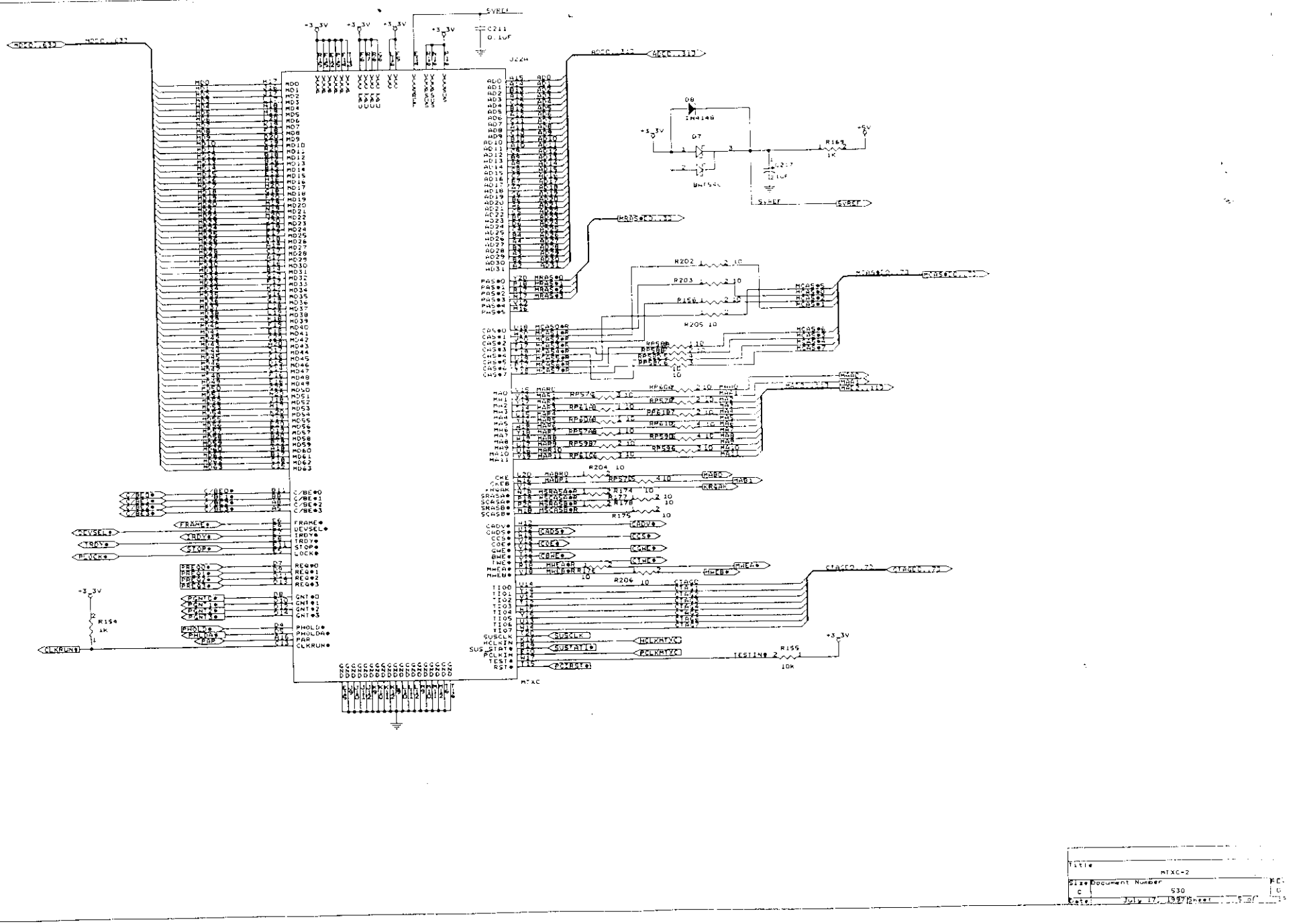
MTXC-2
Document Number
530
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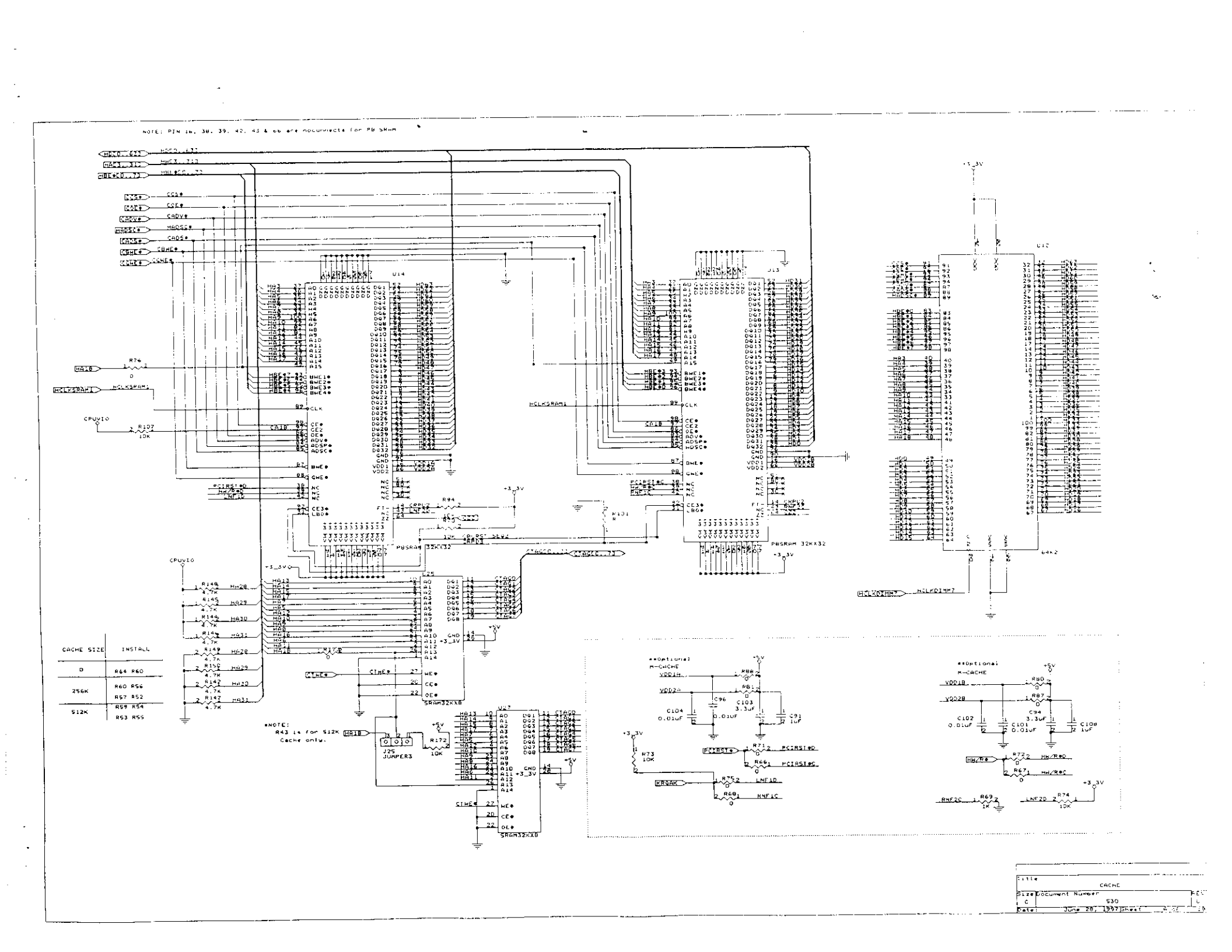

Title			
	CACHE		
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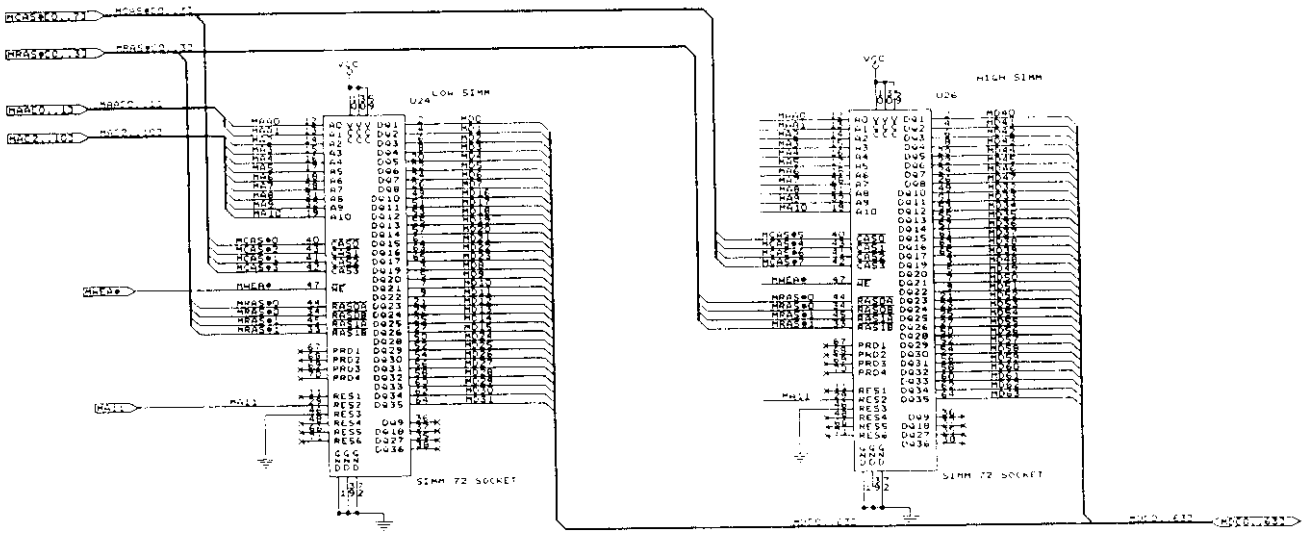
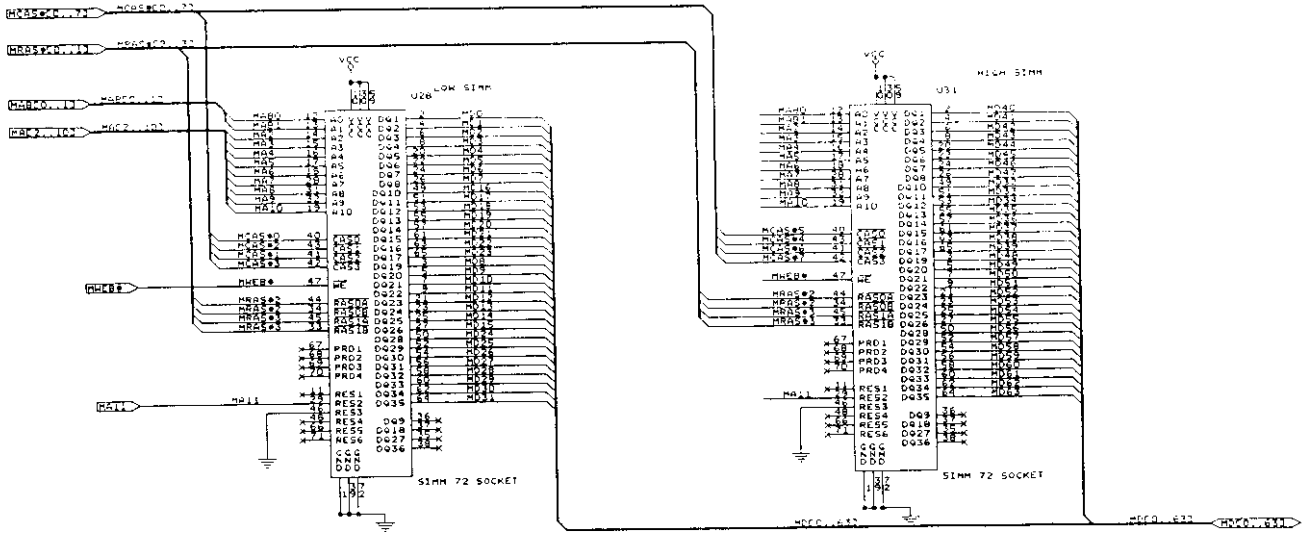
SIMM BANK0



SIMM BANK1



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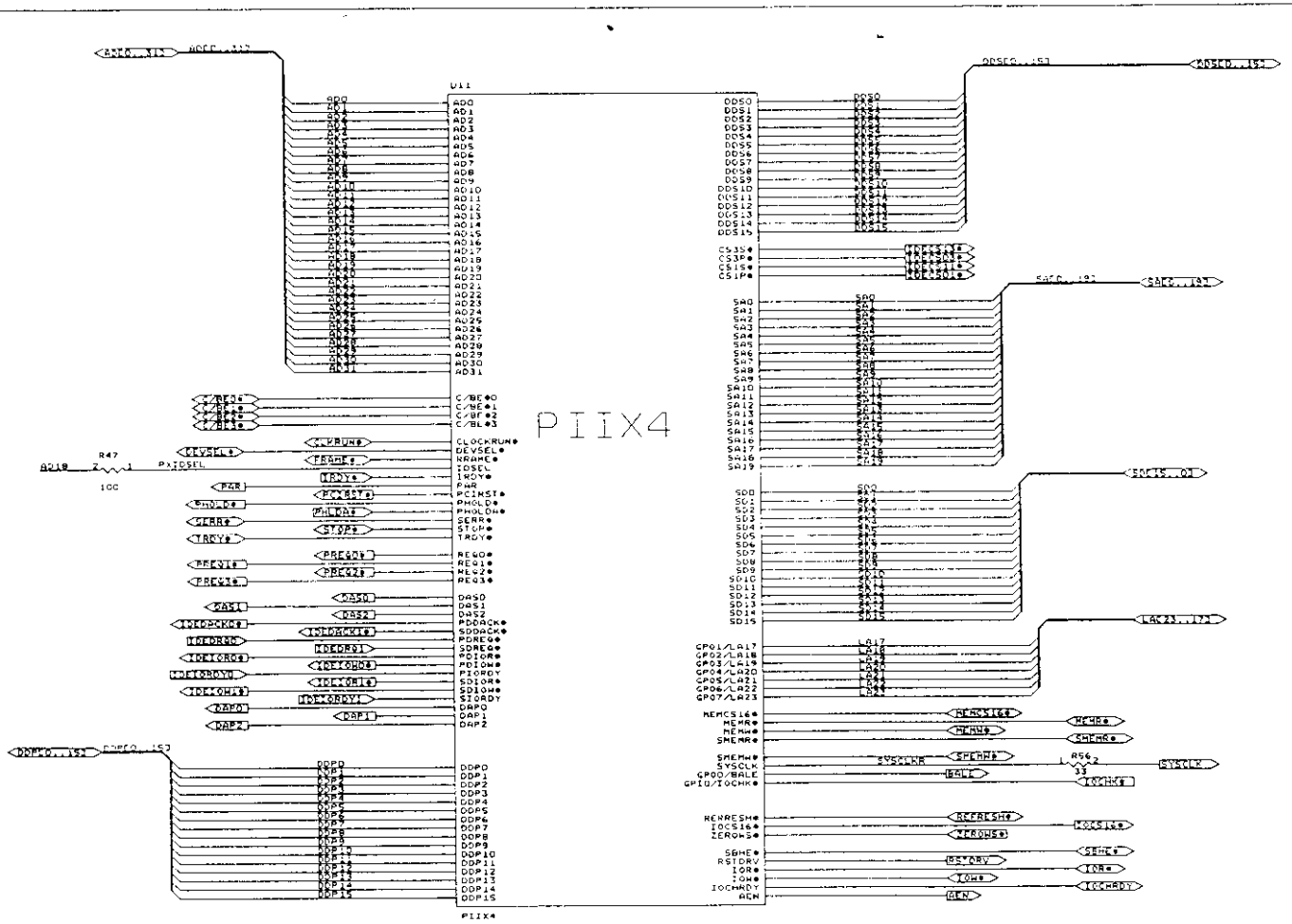

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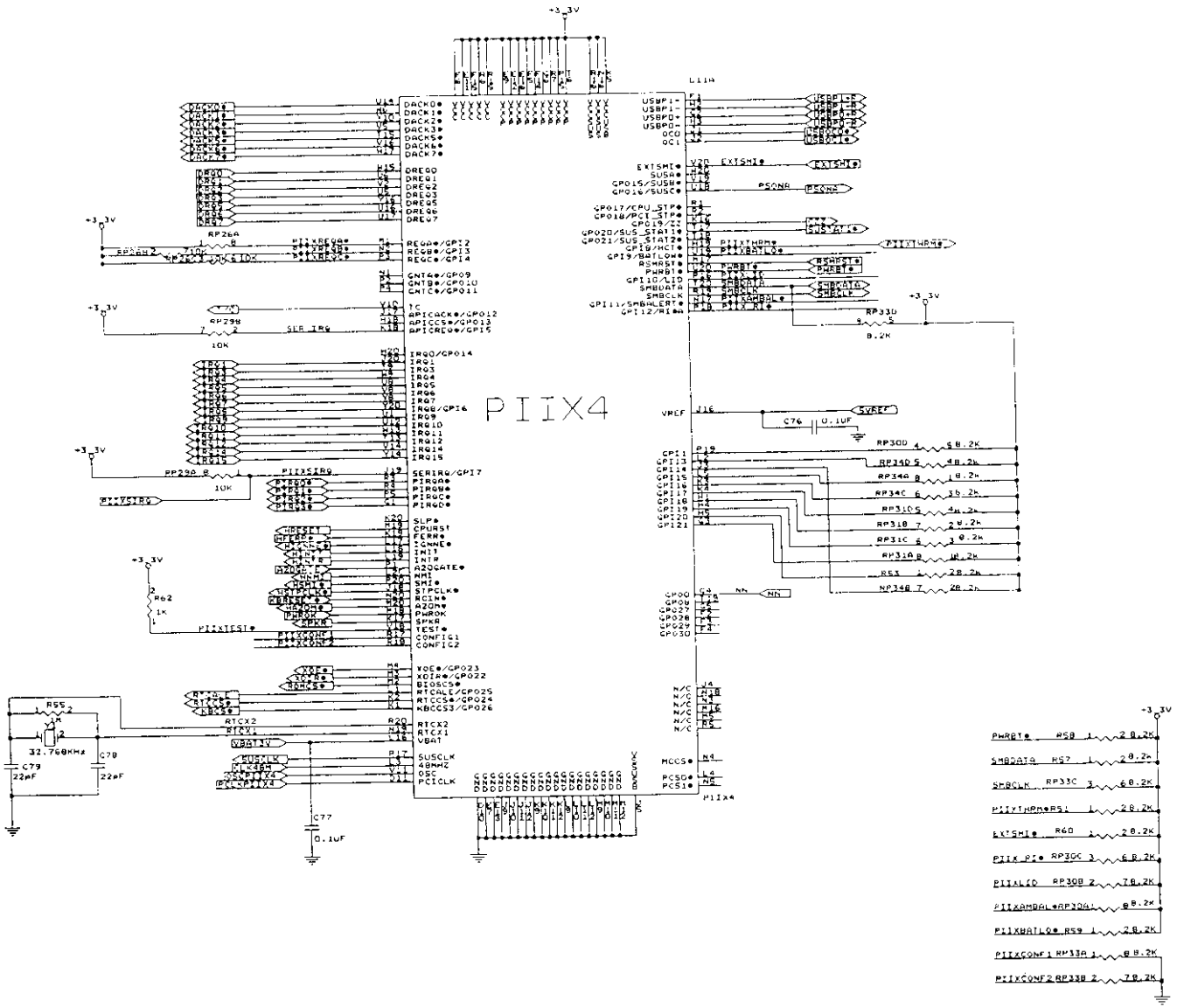
PIIX4
+3.3V
RP26A
8.2K
10K
SLR_IRQ
RP29B
PIIXSTRB
R62
1K
PIIXTEST#
RP30C
8.2K
RP33B
8.2K
RP30B
8.2K
RP33A
8.2K
RP33C
8.2K
R59
8.2K
R60
8.2K
R57
8.2K
RP34B
8.2K
RP34C
8.2K
RP31C
8.2K
RP31B
8.2K
RP31A
8.2K
RP32B
8.2K
RP32A
8.2K
RP33D
8.2K
RP34A
8.2K
RP34D
8.2K
RP32C
8.2K
RP32D
8.2K
RP31D
8.2K
RP30D
8.2K
RP30A
8.2K
RP33C
8.2K
R58
8.2K
R56
8.2K
RP29A
8.2K
RP29C
8.2K
RP29D
8.2K
RP28A
8.2K
RP28B
8.2K
RP28C
8.2K
RP28D
8.2K
RP27A
8.2K
RP27B
8.2K
RP27C
8.2K
RP27D
8.2K
RP26B
8.2K
RP26C
8.2K
RP26D
8.2K
R55
32.768KHz
C79
22pF
C78
22pF
C77
0.1UF
C76
0.1UF
R62
1K
PWRBT#
SMBDATA
SMBCLK
PIIXTHRM#
EXTSMI#
PIIX_PI#
PIIXLID
PIIXAMBAL#
PIIXWATLO#
PIIXCONF1
PIIXCONF2
Title
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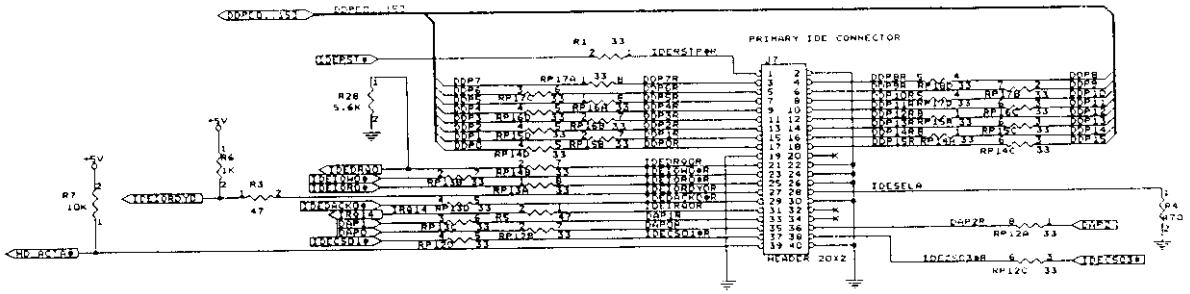
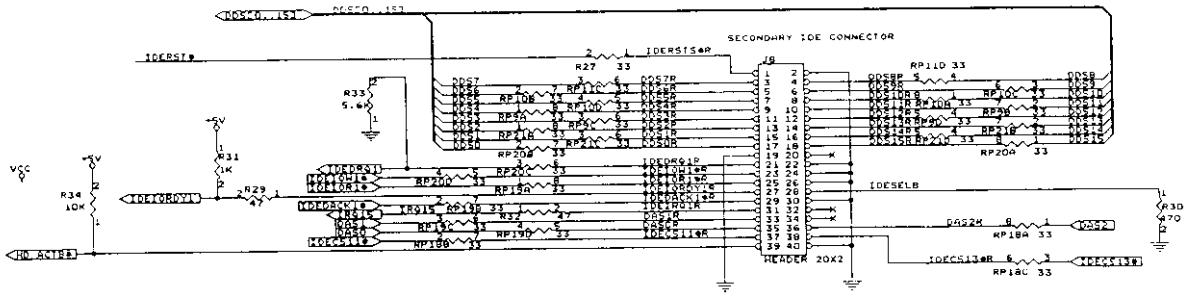
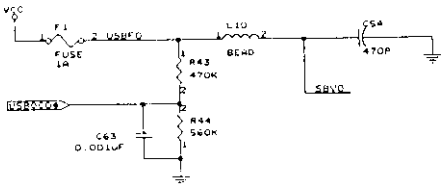
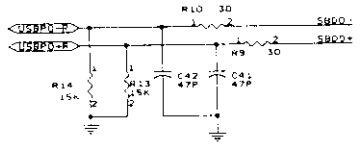
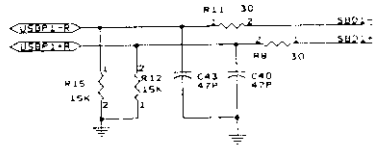
IDE CONNECTORS

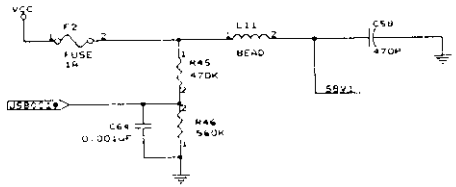


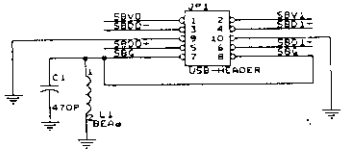












USB CONNECTOR

Title	IDE & USB		
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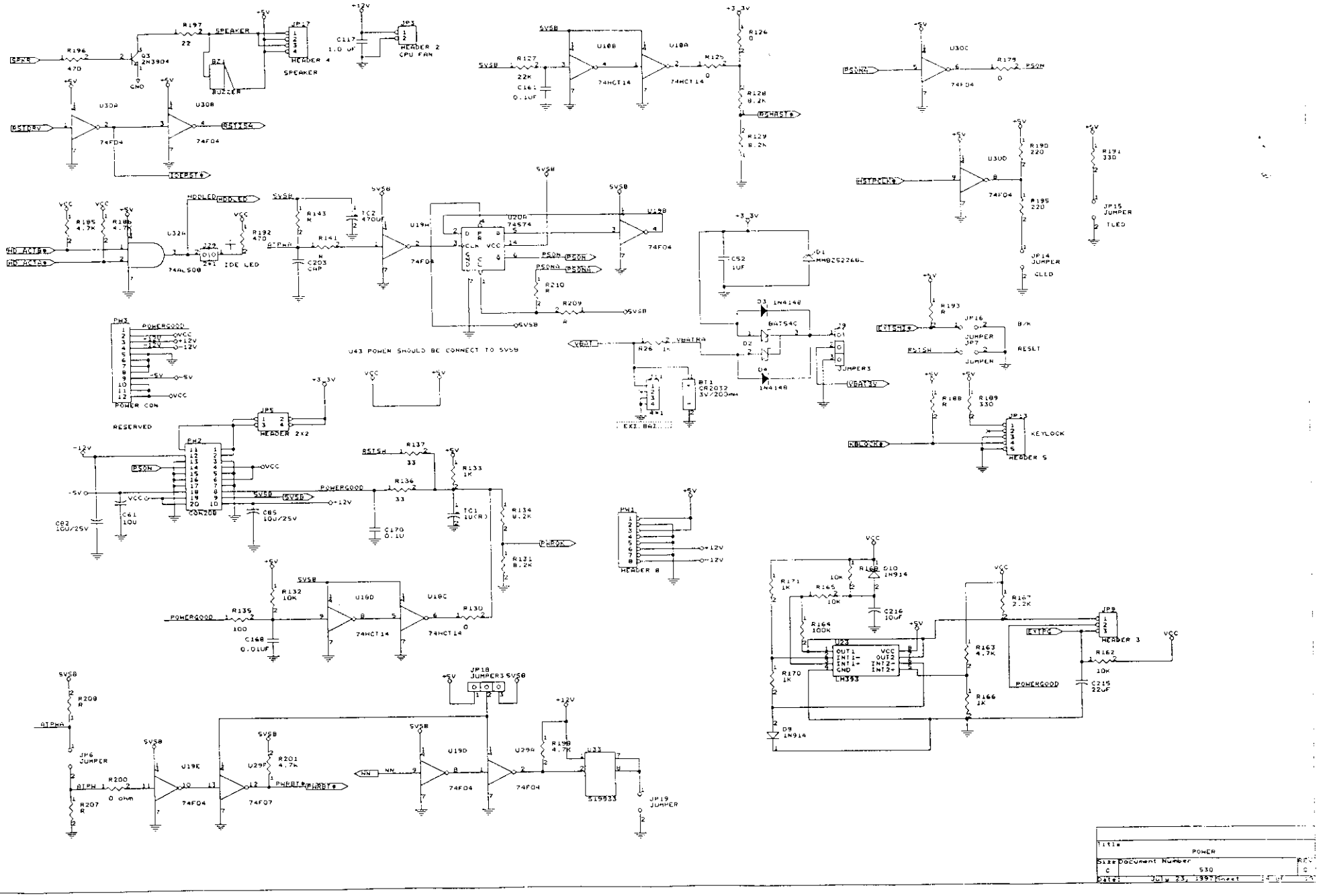
SPKR
R196
470
Q3
2N3904
GND
R197
22
SPEAKER
BZ1
BUZZER
JP17
HEADER 4
SPEAKER
+5V
+12V
C117
1.0 UF
JP1
HEADER 2
CPU FAN
U30A
U30B
74F04
RSTDRV
RSYSRST
ISARST
U30C
PSON
R179
0
PSONN
U30D
R190
220
R195
220
JP14
JUMPER
CLED
R191
330
JP15
JUMPER
TLED
HDLED
HDD_LED
R185
4.7K
R186
4.7K
HD_ACTN
HD_ACTS
74ALS00
R192
470
IDE LED
ATPWR
C203
CAP
R141
R
TC2
470UF
R143
R
U19H
U20A
74S74
U19B
74F04
PSON
PSONA
R210
R
R209
R
5VSB
U33
R126
0
R127
22K
C161
0.1UF
U18B
U18A
74HCT14
R125
0
R128
8.2K
R129
8.2K
PSWRST
+3_3V
C52
1UF
D1
MMBZ52268L
D3 1N4148
D4 1N4148
BAT54C
JUMPER3
VBAT
VBAT3V
BT1
CR2032
3V/200mA
EXT_BAT
R26
1K
R193
R
EXTSW
JP16
JUMPER
JP7
JUMPER
RESET
RSTSW
R188
R
R189
330
JP13
KEYLOCK
HEADER 5
KBLOCKN
PW3
POWERGOOD
POWER CON
RESERVED
JP5
HEADER 2x2
PW2
CON20B
PSON
C82
100U/25V
C61
10U
C85
10U/25V
R137
33
R136
33
R133
1K
TC1
10(R)
C170
0.1U
R134
8.2K
R131
8.2K
PWROK
PW1
HEADER 8
+12V
-12V
R132
10K
U18D
U18C
R135
100
C168
0.01UF
R130
0
JP18
JUMPER3
R208
R
ATPWR
JP6
JUMPER
R207
R
R200
0 ohm
ATPH
U19E
U29F
74F07
R201
4.7K
PWRBT#
PWRBT
U19D
U29A
R198
4.7K
S19933
JP19
JUMPER
R171
1K
R165
10K
R168
510
1N914
C216
10UF
R164
100K
U23
LM393
R163
4.7K
R170
1K
R166
1K
D9
1N914
R167
2.2K
JP9
HEADER 3
EXTPG
R162
10K
C215
22UF
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POWER
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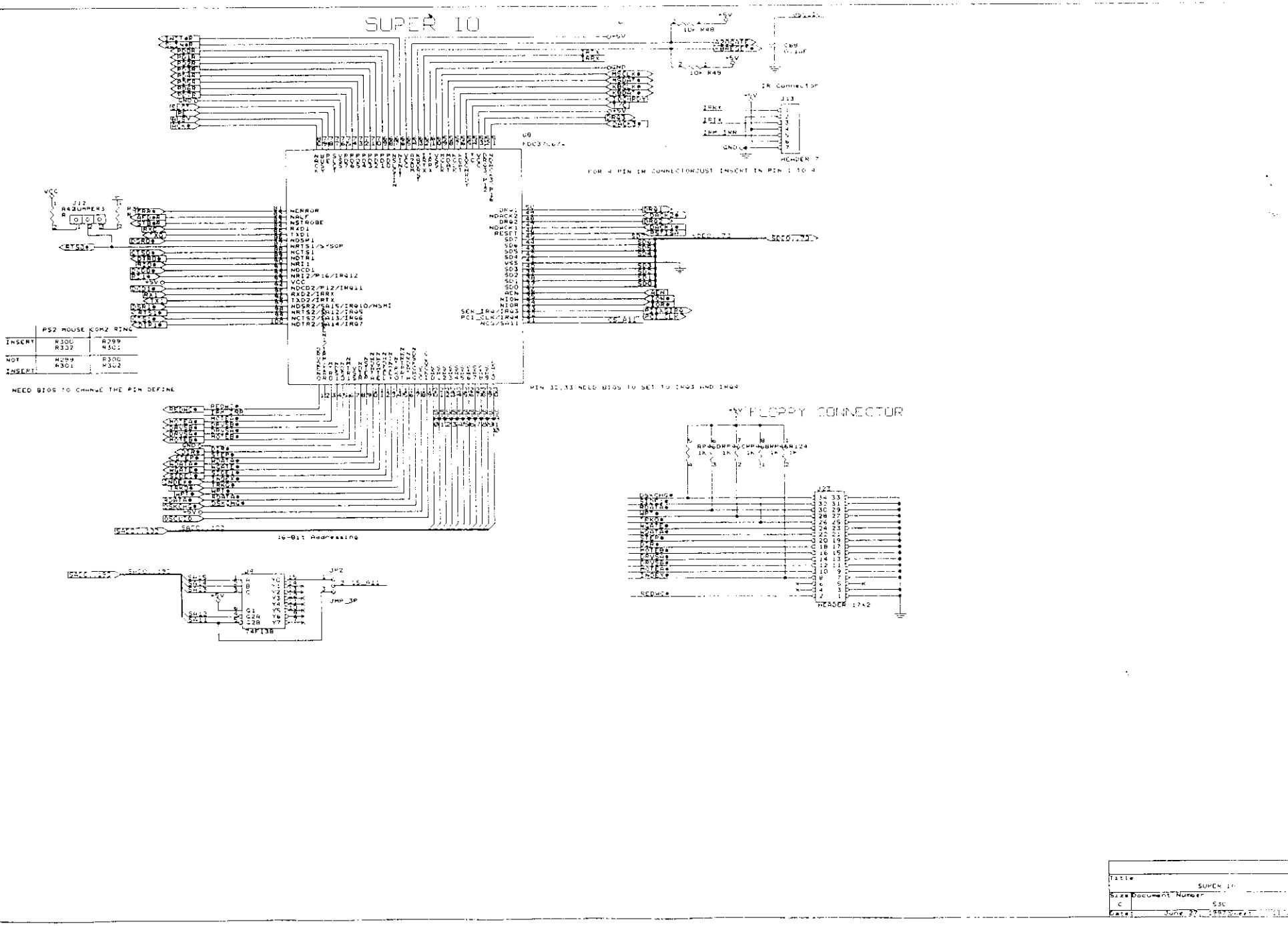

Title	SUPER IO
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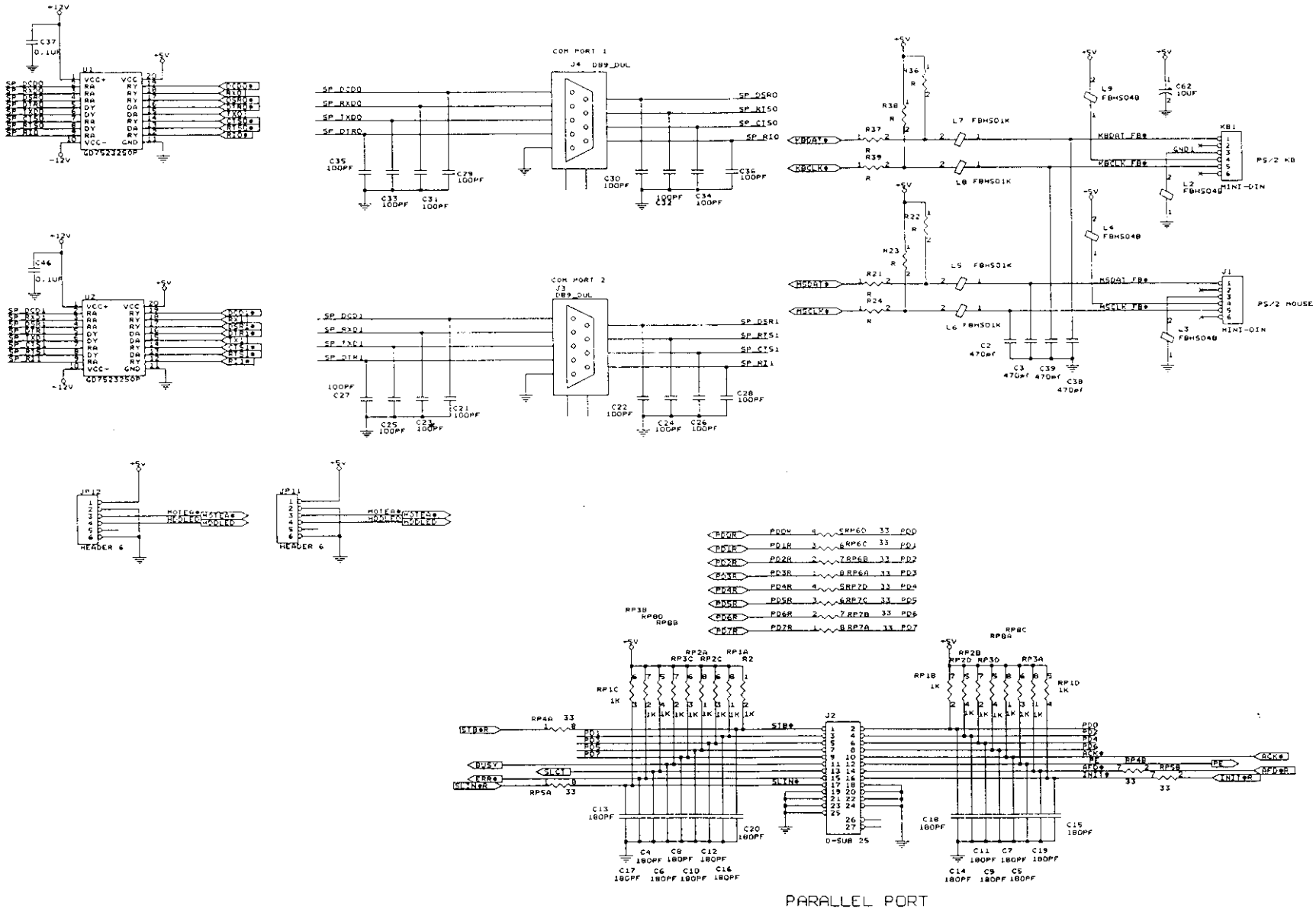

PARALLEL PORT

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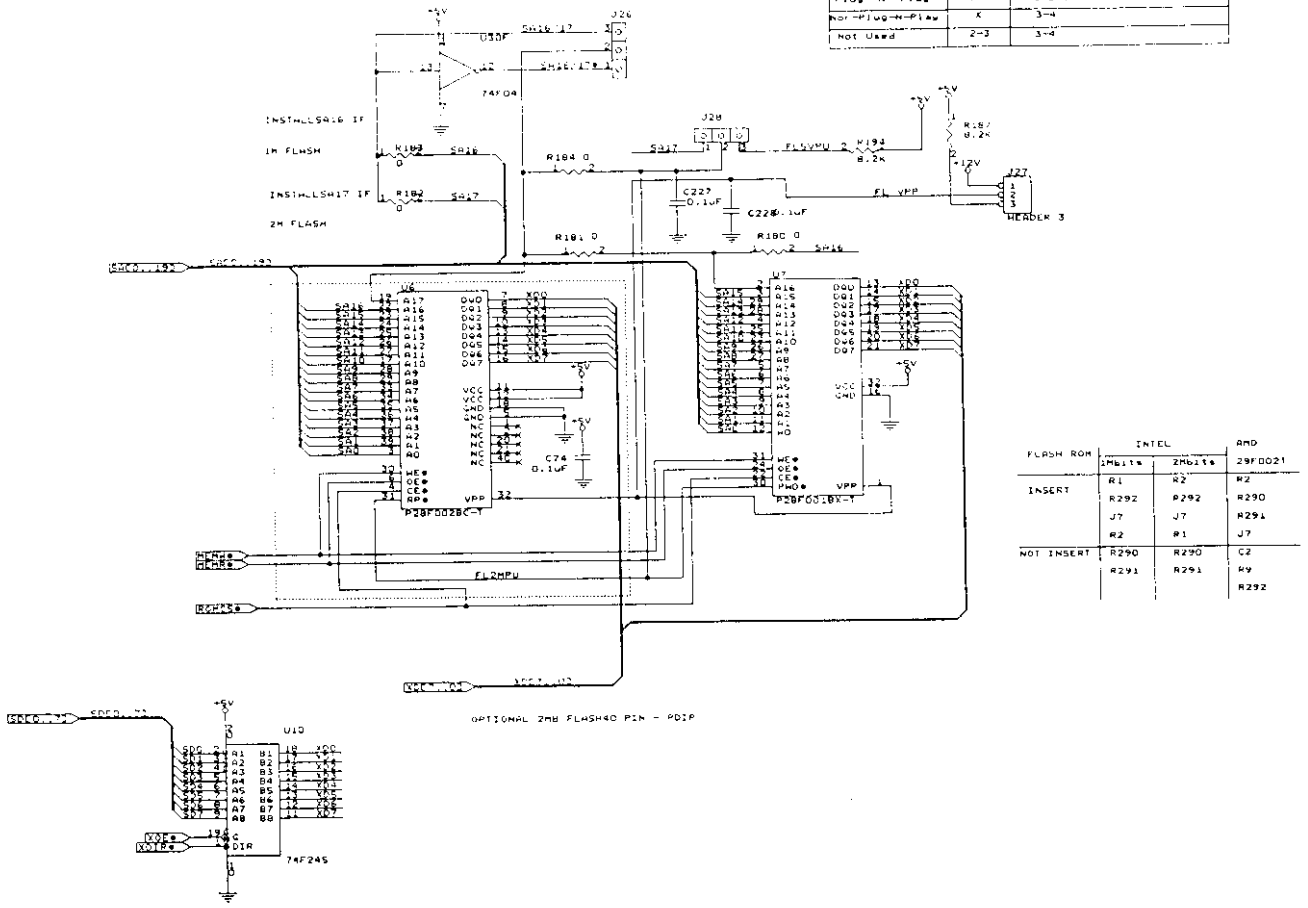
J1

MODE	POS.
NORMAL	2-3
RECOVERY	1-2

Note: The X denotes a don't care.

MODE	J7	J6
Program Device	1-2	1-2
Plug -N- Play	2-3	1-2 (5-6 FOR AMD 2M bits)
Non-Plug-N-Play	X	3-4
Not Used	2-3	3-4



FLASH ROM	INTEL		AMD
	1Mbits	2Mbits	29F0021
INSERT	R1	R2	R2
	R292	R292	R290
	J7	J7	R291
	R2	R1	J7
NOT INSERT	R290	R290	C2
	R291	R291	R9
			R292

Title	BIOS	
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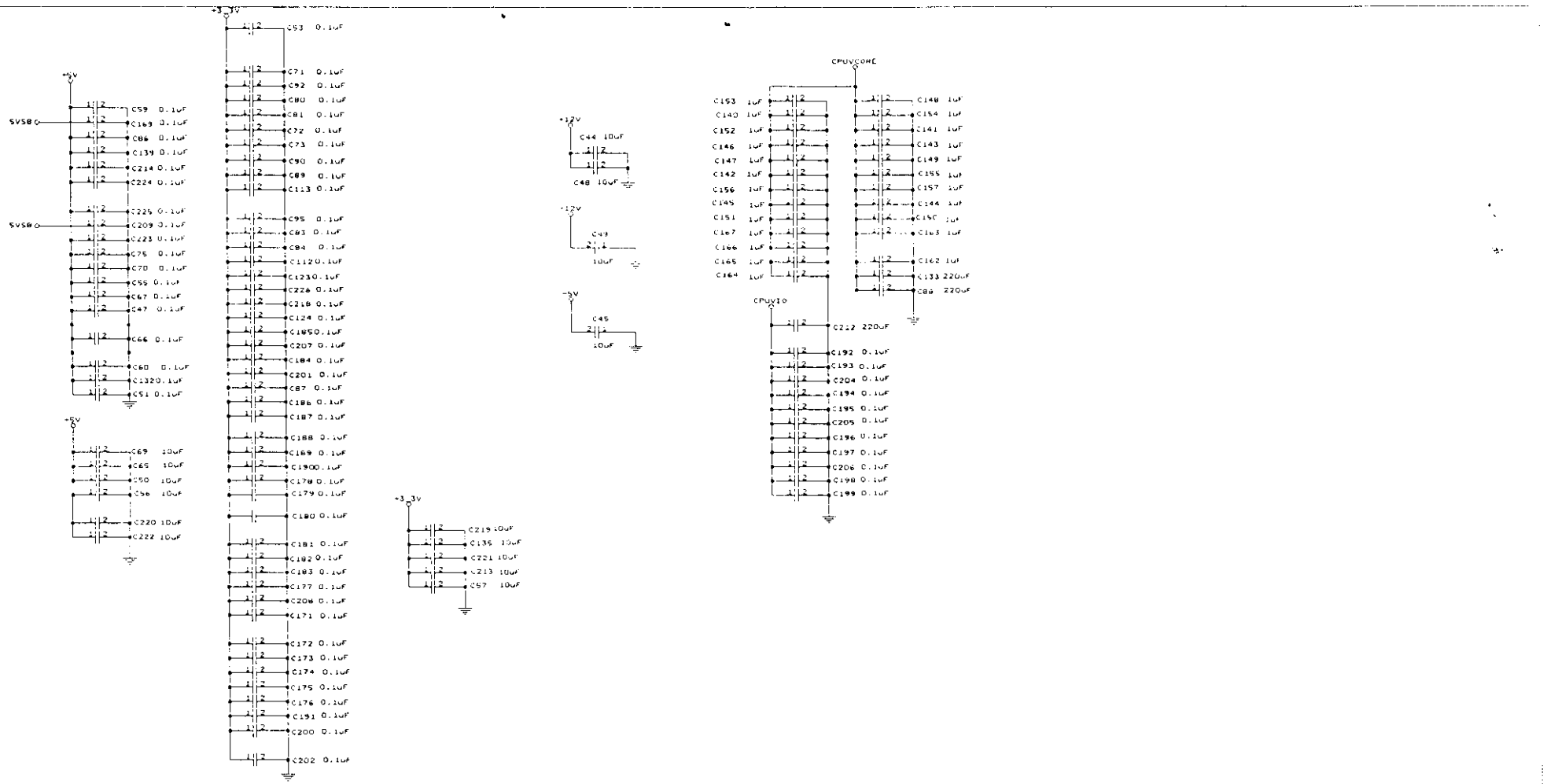

Title	DECOUPLE	
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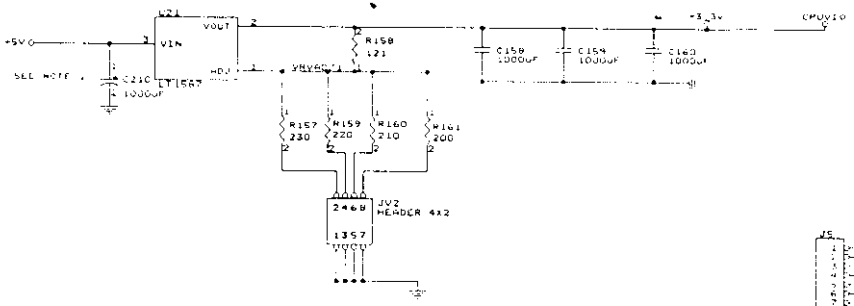

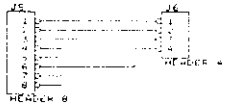

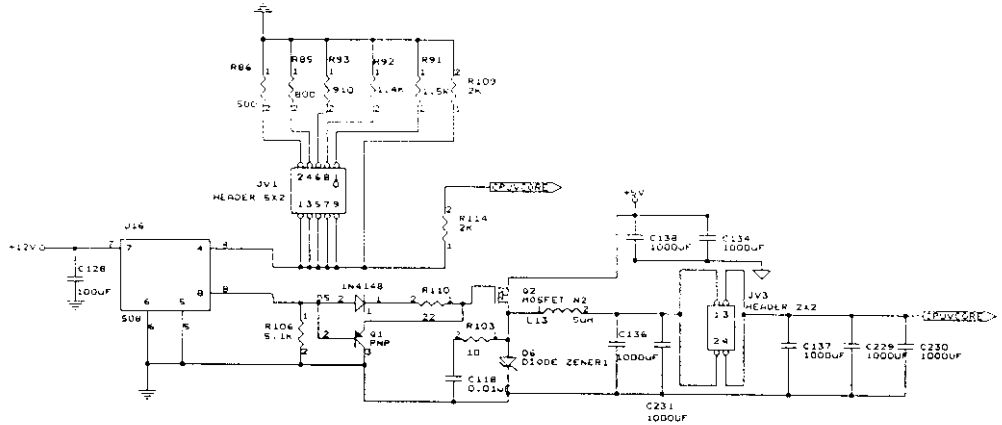

Resistors are implemented as copper traces on inter layers

For 1oz. copper:

Note 1: trace widths are 50 mils, 1.24" long.

Note 2: trace widths are 50 mils, 0.83" long.

Title	CPU VOLTAGE REGULATOR	
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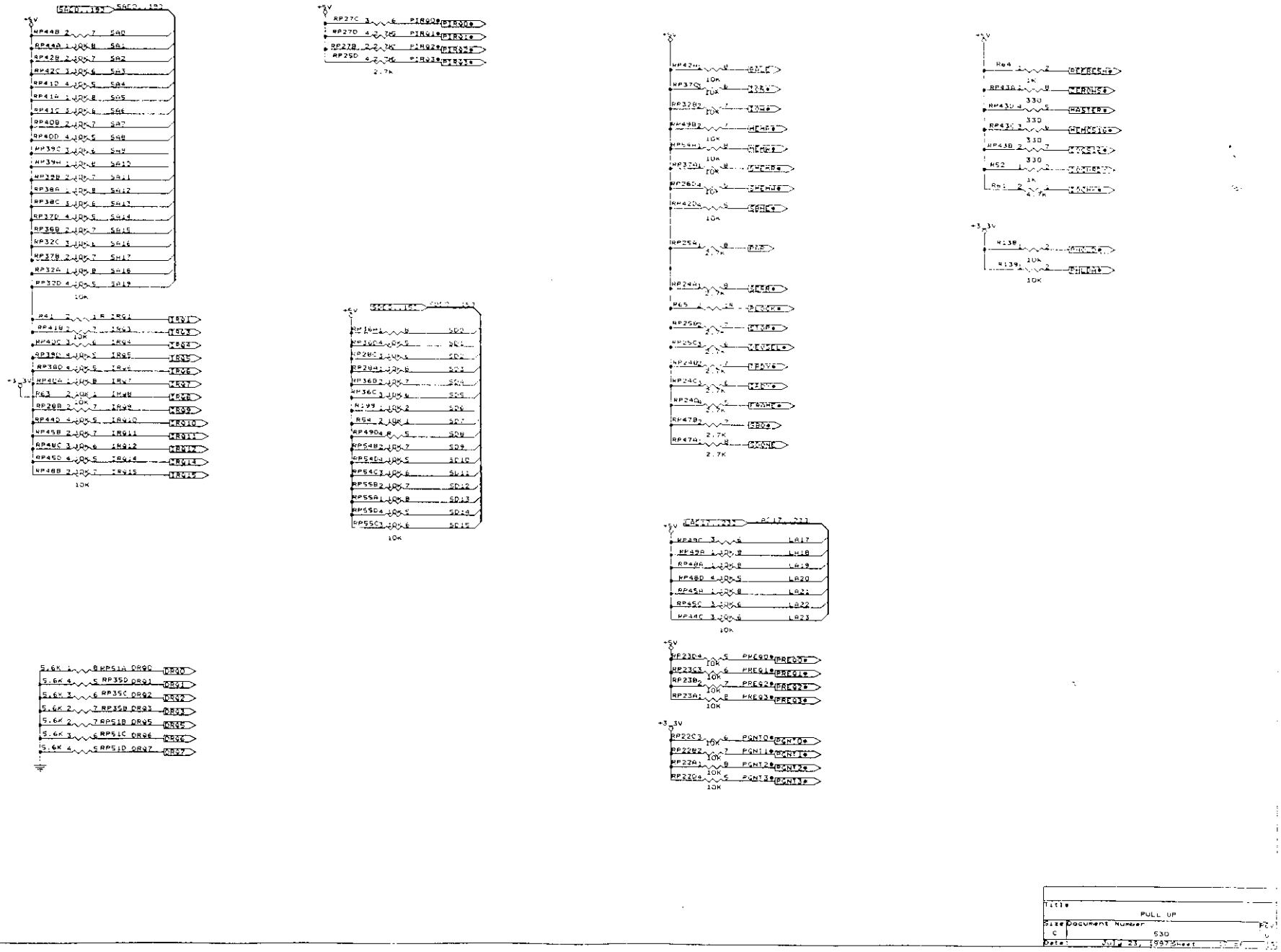
SA[0..19]
SD[0..15]
10K
2.7K
+5V
+3.3V
RP44B 2 7 SA0
RP44A 1 8 SA1
RP42B 2 7 SA2
RP42C 3 6 SA3
RP410 4 5 SA4
RP41A 1 8 SA5
RP41C 3 6 SA6
RP40B 2 7 SA7
RP40D 4 5 SA8
RP39C 3 6 SA9
RP39A 1 8 SA10
RP38B 2 7 SA11
RP38A 1 8 SA12
RP38C 3 6 SA13
RP37D 4 5 SA14
RP36B 2 7 SA15
RP32C 3 6 SA16
RP37B 2 7 SA17
RP32A 1 8 SA18
RP32D 4 5 SA19
R61 2 1 IRQ1 IRQ1
RP41B 2 7 IRQ3 IRQ3
RP40C 3 6 IRQ4 IRQ4
RP39A 4 5 IRQ5 IRQ5
RP38D 4 5 IRQ6 IRQ6
RP40A 1 8 IRQ7 IRQ7
R63 2 10K 1 IRQ8 IRQ8
RP20B 2 7 IRQ9 IRQ9
RP44D 4 5 IRQ10 IRQ10
RP45B 2 7 IRQ11 IRQ11
RP46C 3 6 IRQ12 IRQ12
RP45D 4 5 IRQ14 IRQ14
RP46B 2 7 IRQ15 IRQ15
RP27C 3 6 PIRQ0# PIRQ0#
RP27D 4 5 PIRQ1# PIRQ1#
RP27B 2 7 PIRQ2# PIRQ2#
RP25D 4 5 PIRQ3# PIRQ3#
RP42A 1 8 GATE
RP37C 2 7 A20M#
RP32B 2 7 KBRST#
RP43B 2 7 MEMCS16#
RP43A 1 8 IOCS16#
RP42D 4 5 SPKR
RP37A 1 8 IOCHRDY
RP26B 2 7 AEN
RP42B 4 5 SYSCLK
RP25A 1 8 PZ
RP24A 1 8 REFRQ
R65 1 14 PCICLK
RP25B 2 7 PCIRST#
RP25C 3 6 PCIRSEL
RP24B 2 7 PBDY#
RP24C 3 6 PREQ#
RP24D 4 5 PGNT#
RP47B 2 7 SERR#
RP47A 1 8 PAR
Rp4 1 2 PCIREQSH#
RP43A 1 8 MEMW#
RP43D 4 5 MASTER#
RP43C 3 6 MEMCS16#
RP43B 2 7 IOCS16#
R52 330 IOCHRDY
Rp1 2 4.7K 1K IOCHK#
R138 1 2 PCIRST#
R139 1 2 PCIRSEL
10K
LA[17..23]
RP49C 3 6 LA17
RP49A 1 8 LA18
RP48A 1 8 LA19
RP48D 4 5 LA20
RP45A 1 8 LA21
RP45C 3 6 LA22
RP44C 3 6 LA23
RP23D4 5 PREQ0# PREQ0#
RP23C3 6 PREQ1# PREQ1#
RP23B2 7 PREQ2# PREQ2#
RP23A1 8 PREQ3# PREQ3#
RP22C3 5 PGNT0# PGNT0#
RP22B2 6 PGNT1# PGNT1#
RP22A1 7 PGNT2# PGNT2#
RP22D4 8 PGNT3# PGNT3#
5.6K 1 8 RP51A DRQ0 DRQ0
5.6K 4 5 RP51D DRQ1 DRQ1
5.6K 3 6 RP51C DRQ2 DRQ2
5.6K 2 7 RP51B DRQ3 DRQ3
5.6K 2 7 RP51B DRQ5 DRQ5
5.6K 3 6 RP51C DRQ6 DRQ6
5.6K 4 5 RP51D DRQ7 DRQ7
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