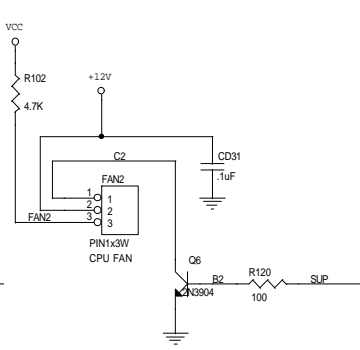
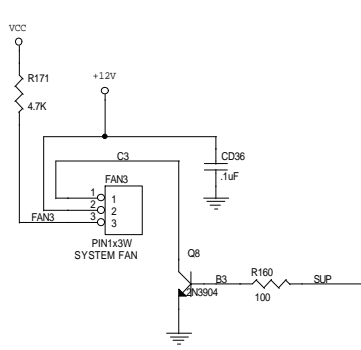
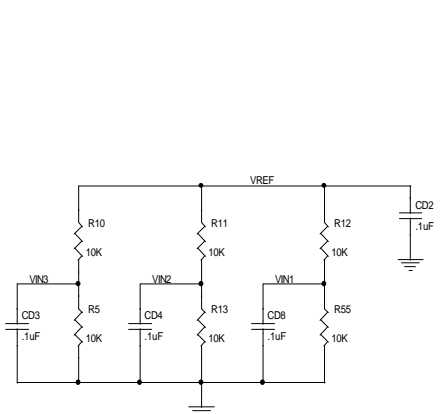
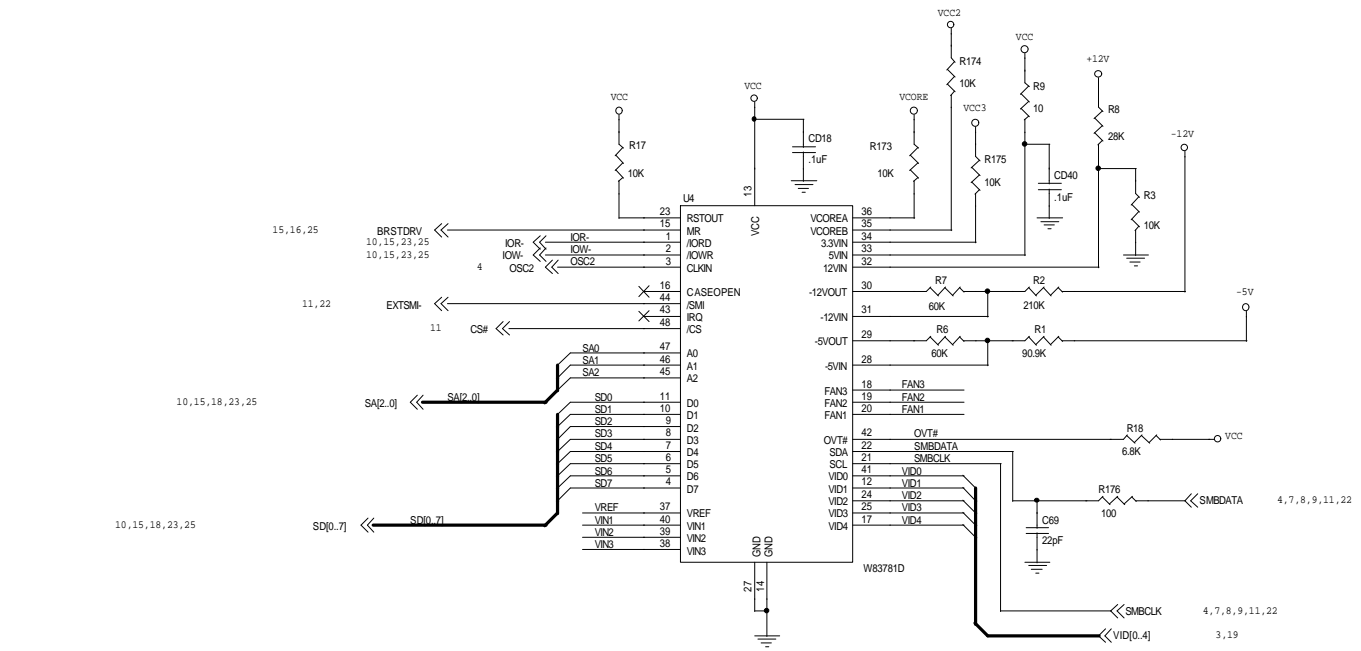


SINGLE CPU 440BX(3 DIMMS) CUSTOMER REFERENCE DESIGN

TITLE	PAGE	COMPONENT	PLACEMENT	PAGE
COVER SHEET	1	CPU SLOT1	JP9	2 , 3
KLAMATH	2 - 3	Clock Generator	U8	4
CLK SYNTHESIZER	4	82443BX	U7	5, 6
PAC(82443BX)	5, 6	PIIX4	U11	10, 11
DIMM1, 2, 3	7, 8, 9	74LVC14	U14	16
PIIX4	10, 11	74HCT14	U12	16, 20
AGP CONN.	12	7407	U16	16
PCI CONN.	13, 14	74HC00	U15	16, 26
ISA CONN.	15	74F32	U10	17
PALEL	16	FLASH BIOS	U6	18
IDE CONN.	17	SC1182CS	U5	19
USB / FLASH BIOS	18	74LVC244	U9	20
DC TO DC COVERTER	19	W83977TF	U3	25
KEYB / MOUSE	20	75C185	U1 , U2	26
CPU FREQUENCE RATE	20	W83781D	U4	27
CHIP GTL TERM. / DC to DC CIRCUITS	21			
PCI/AGP PULLUPS	22			
ISA/PAC DECOUP	23			
VREF PAGE	24			
WINBOND I/O CHIP	25			
SERIAL/FLOPPY	26			
TEMPERATE SENOR	27			

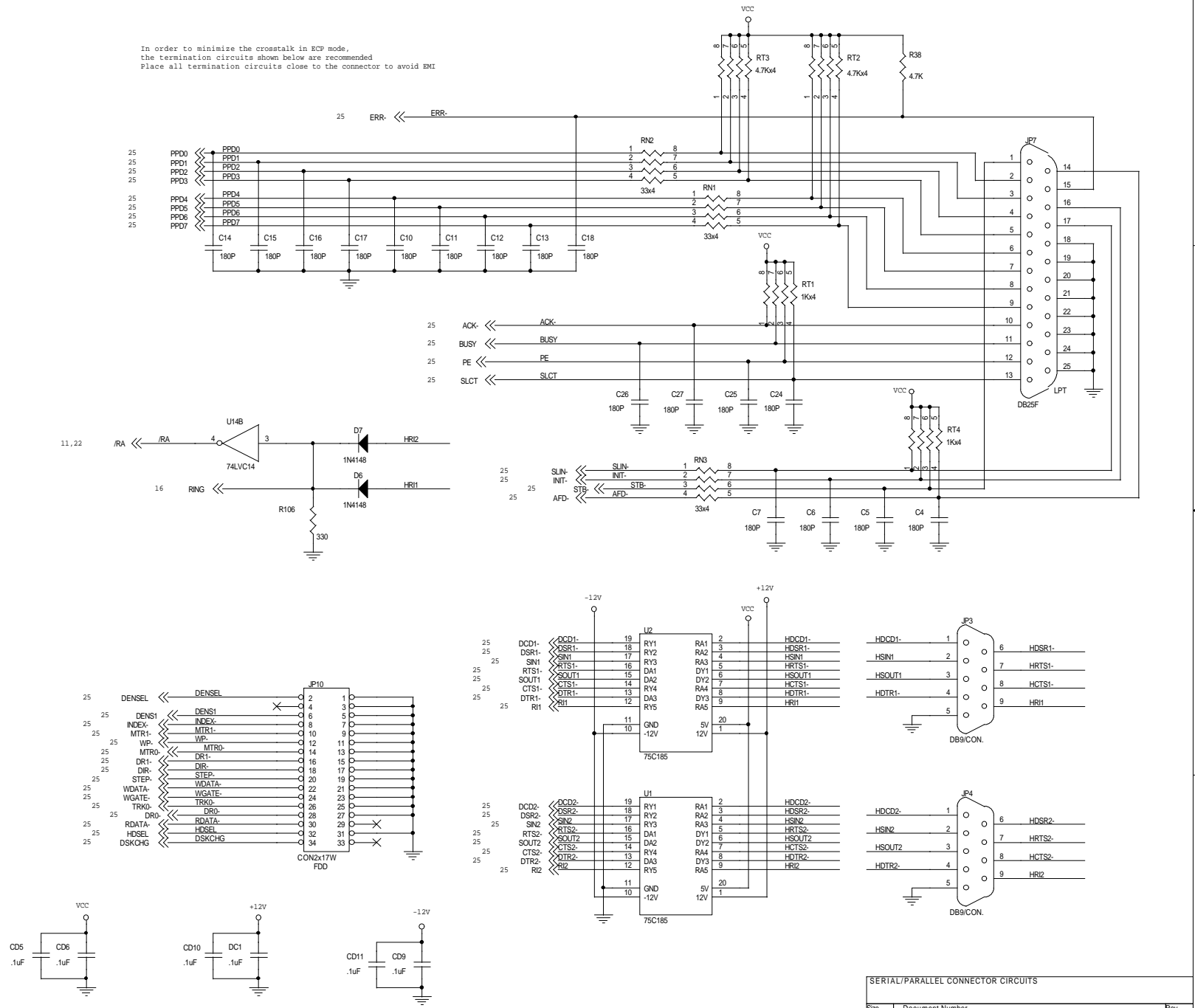
LINK
2.SCH
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13.SCH
14.SCH
15.SCH
16.SCH
17.SCH
18.SCH
19.SCH
20.SCH
21.SCH
22.SCH
23.SCH
24.SCH
25.SCH
26.SCH
27.SCH

COMPONENTS PAGE EXAMPLATION		
Size B	Document Number PRM-0080E1 DTK-ATX	Rev RA
Date: Friday, August 28, 1998	Sheet	1 of 27

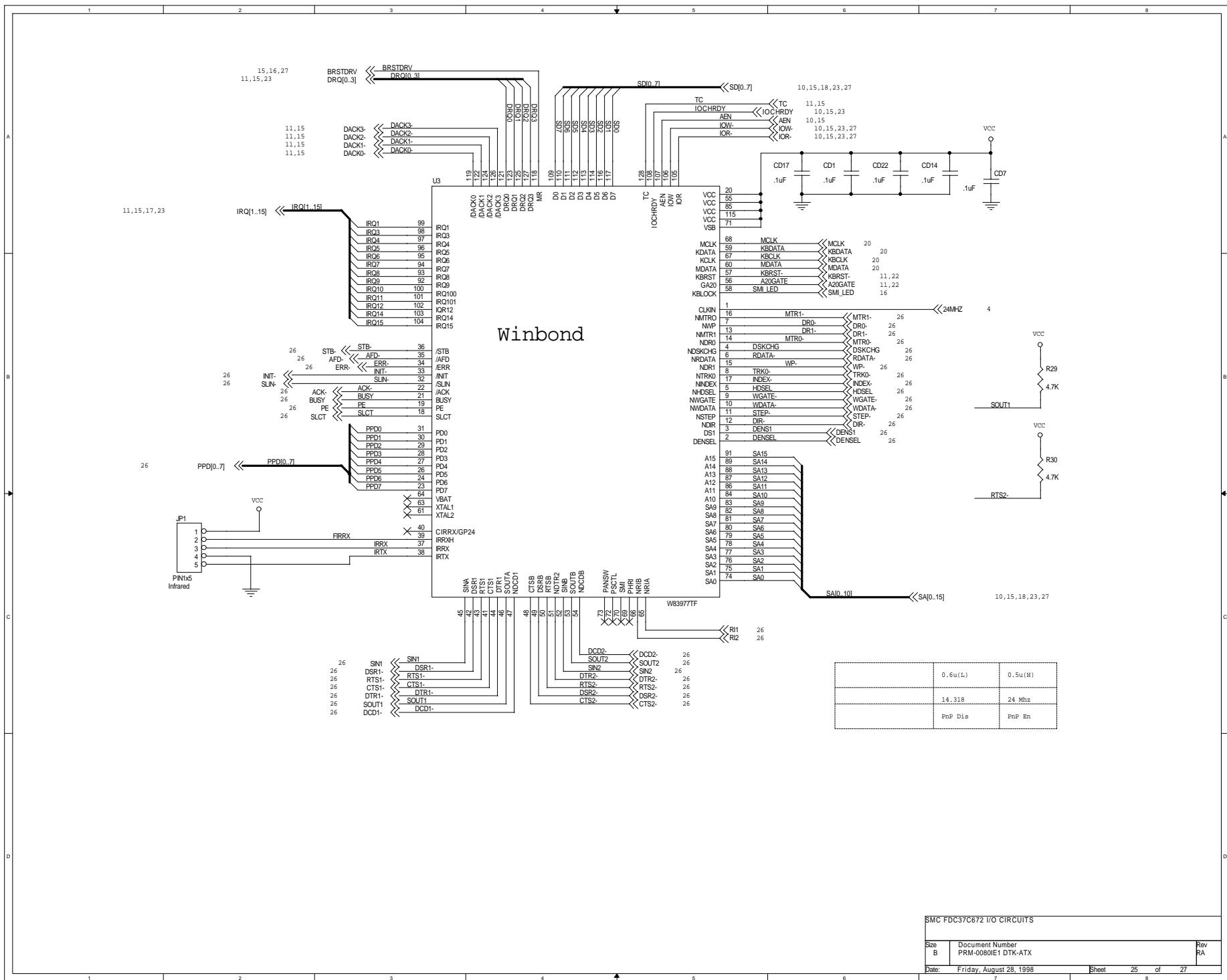


POWER/TEMPERATURE DETECTIVE CIRCUITS		
Size B	Document Number PRM-0080E1 DTK-ATX	Rev RA
Date: Friday, August 28, 1998	Sheet 27	of 27

In order to minimize the crosstalk in ECP mode, the termination circuits shown below are recommended. Place all termination circuits close to the connector to avoid EMI.

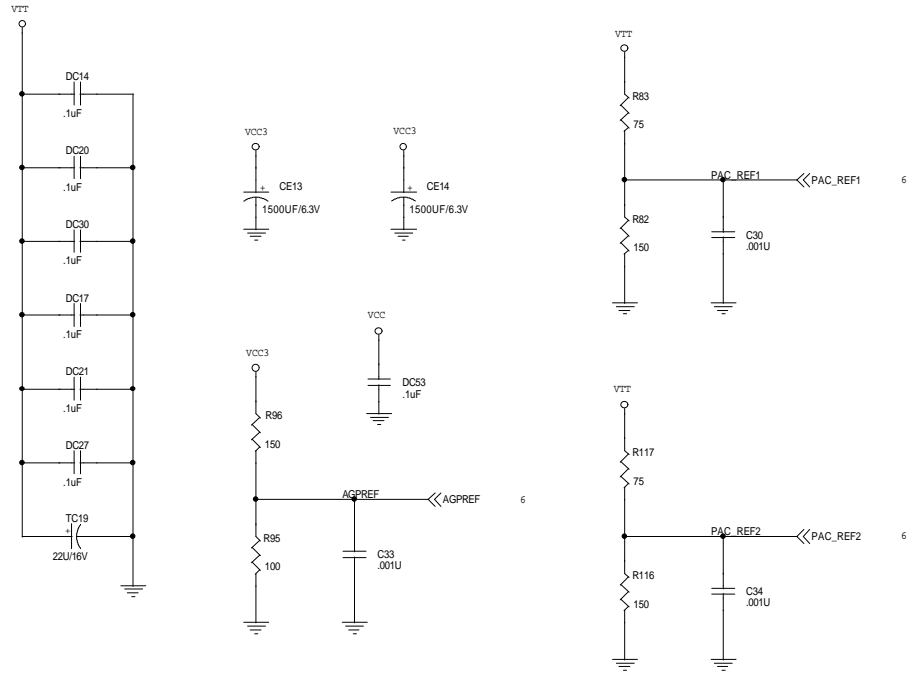


SERIAL/PARALLEL CONNECTOR CIRCUITS		
Size B	Document Number PRM-0080E1 DTK-ATX	Rev RA
Date: Friday, August 28, 1998	Sheet 26	of 27



	0.6u(L)	0.5u(H)
	14.318	24 Mhz
	PnP Dis	PnP Sn

TERMINATION VOLTAGE DECOUPLING

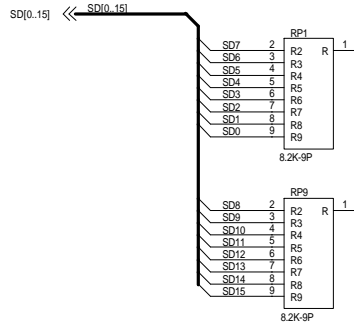


VTT BYPASS CAPACITORS

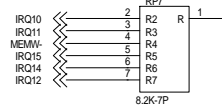
Size B	Document Number PRM-0080E1 DTK-ATX	Rev RA
Date: Friday, August 28, 1998	Sheet 24	of 27

ISA BUS RESISTORS

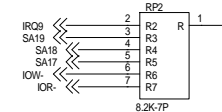
10, 15, 18, 25, 27



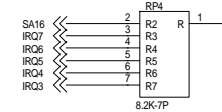
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11, 15, 25
10, 15, 18
11, 15, 17, 25
11, 15, 25



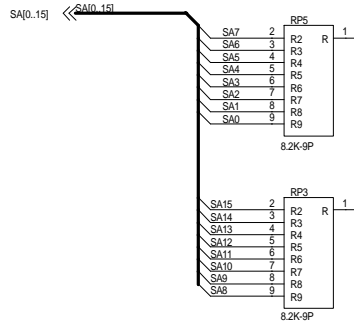
11, 15, 25
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10, 15, 18
10, 15, 25, 27
10, 15, 25, 27



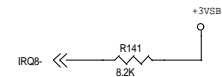
10, 15, 18
11, 15, 25
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11, 15, 25
11, 15, 25
11, 15, 25



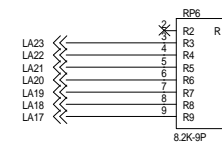
10, 15, 18, 25, 27



11



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10, 15



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10, 15, 25

15

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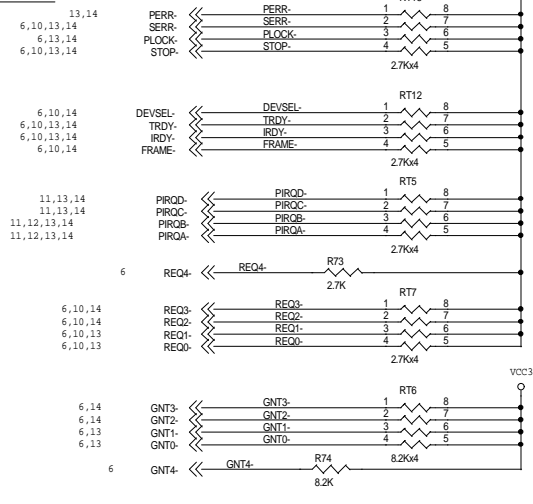
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PULL UPS & PULL DOWNS

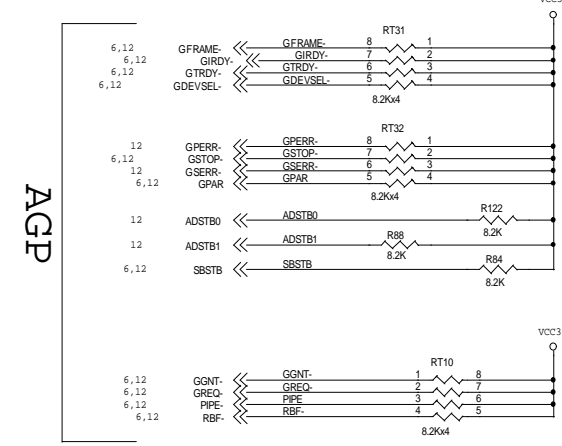
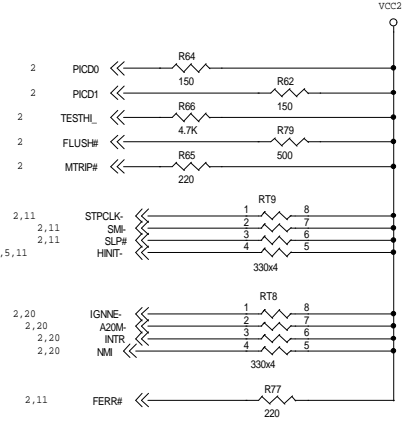
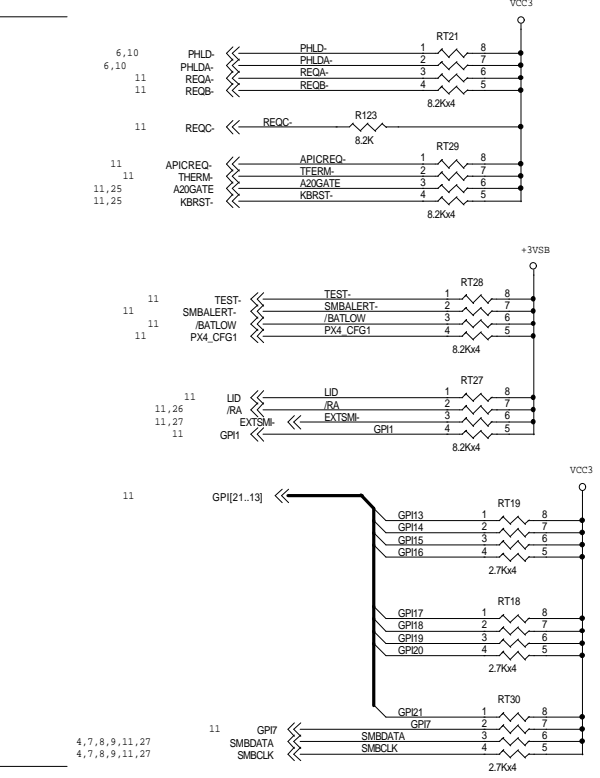
Size	Document Number	Rev
B	PRM-0080E1 DTK-ATX	RA

Date: Friday, August 28, 1998 Sheet 23 of 27

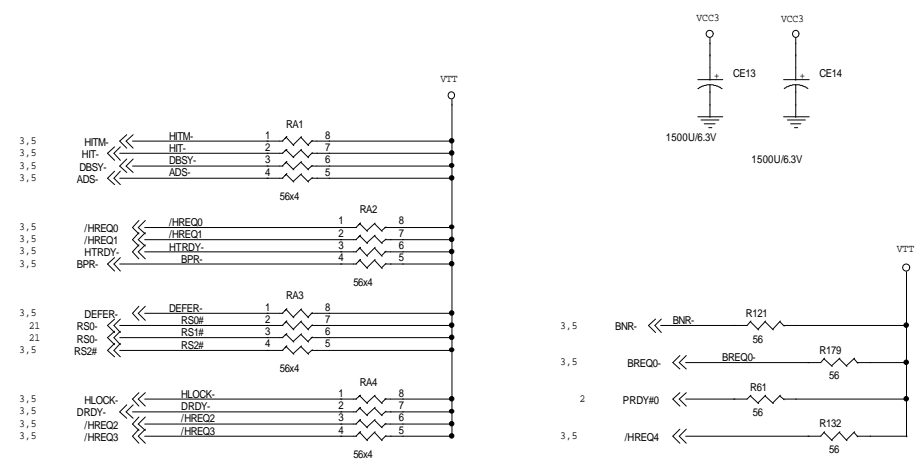
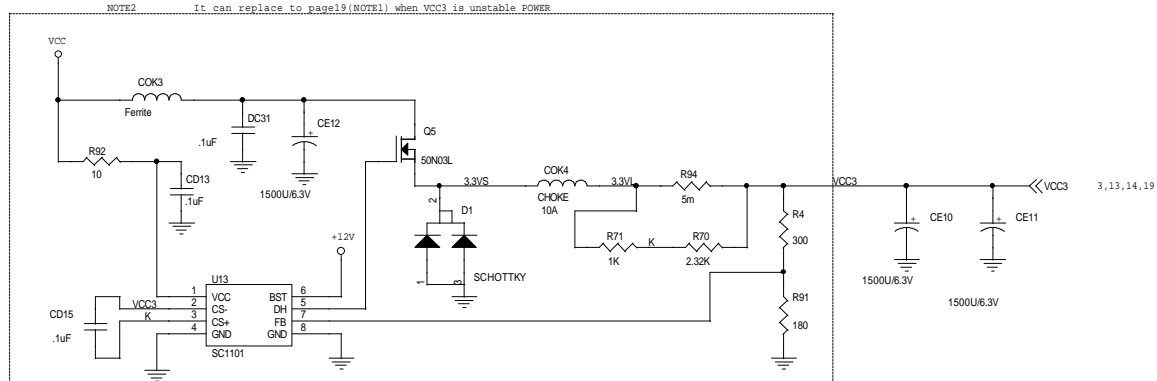
PCI BUS



PIIX4

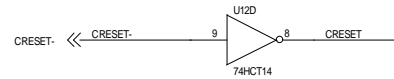
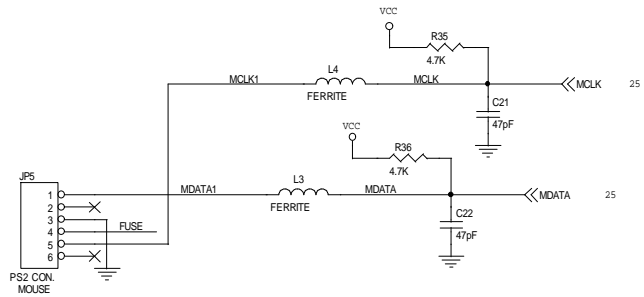
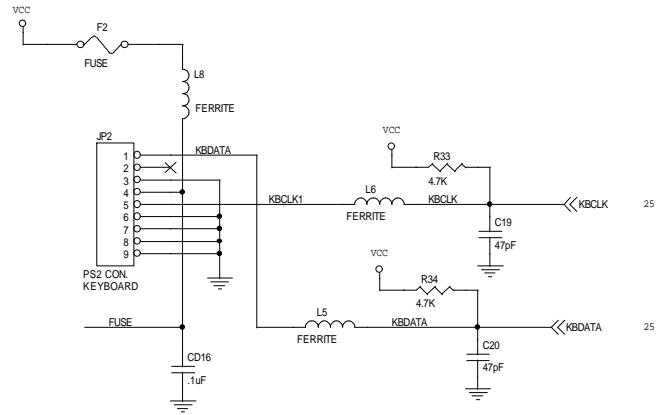


BUS RESISTORS		
Size	Document Number	Rev
B	PRM-0080E1 DTK-ATX	RA
Date:	Friday, August 28, 1998	Sheet 22 of 27



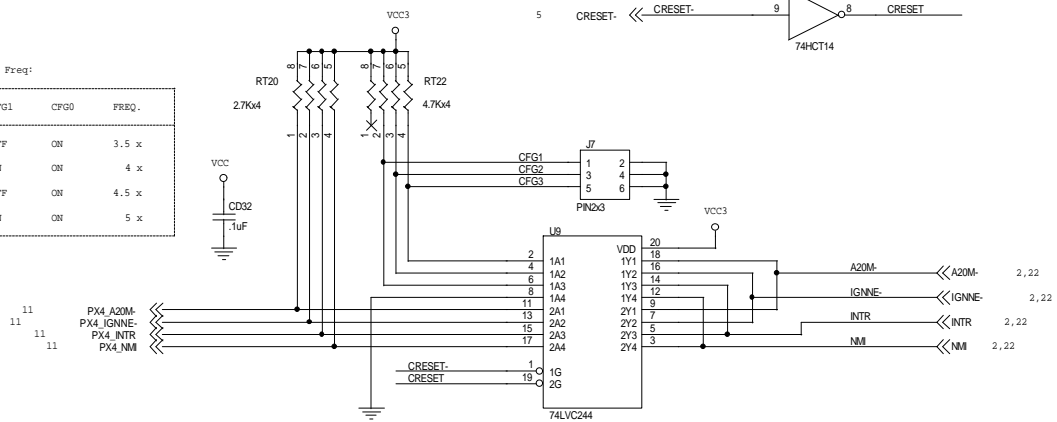
STL TERMINATION FOR 440LX		
Size B	Document Number PRM-0080E1 DTK-ATX	Rev RA
Date: Friday, August 28, 1998	Sheet 21 of 27	

THIS DRAWING CONTAINS INFORMATION WHICH HAS NOT BEEN VERIFIED FOR MANUFACTURING AN END USER PRODUCT.



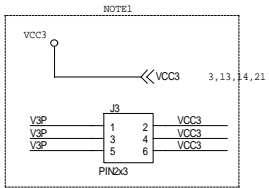
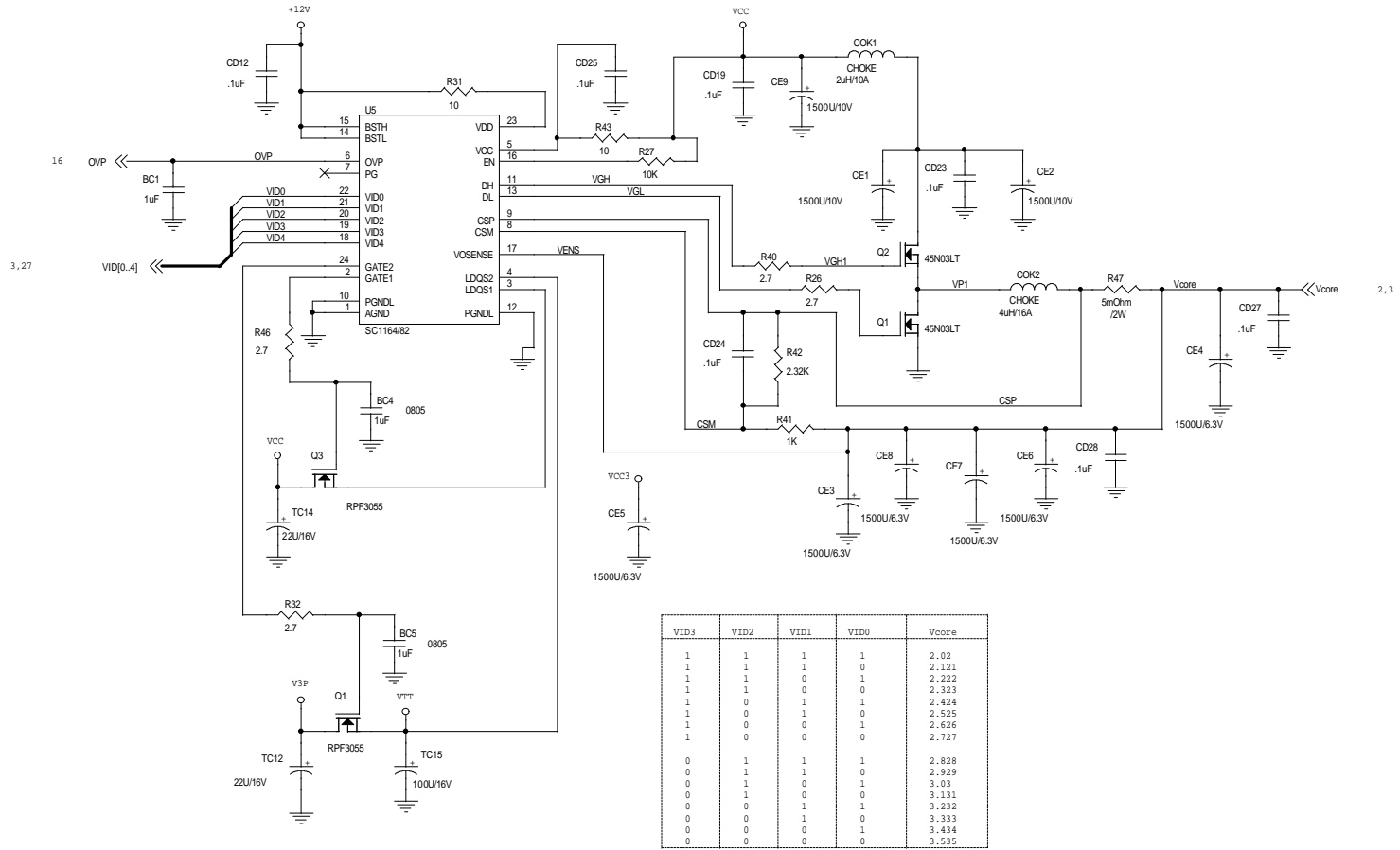
Processor Core Freq:

CFG3	CFG2	CFG1	CFG0	FREQ.
ON	OFF	OFF	ON	3.5 x
OFF	ON	ON	ON	4 x
OFF	ON	OFF	ON	4.5 x
OFF	OFF	ON	ON	5 x



CPU RATE/ KEYBOARD/MOUSE

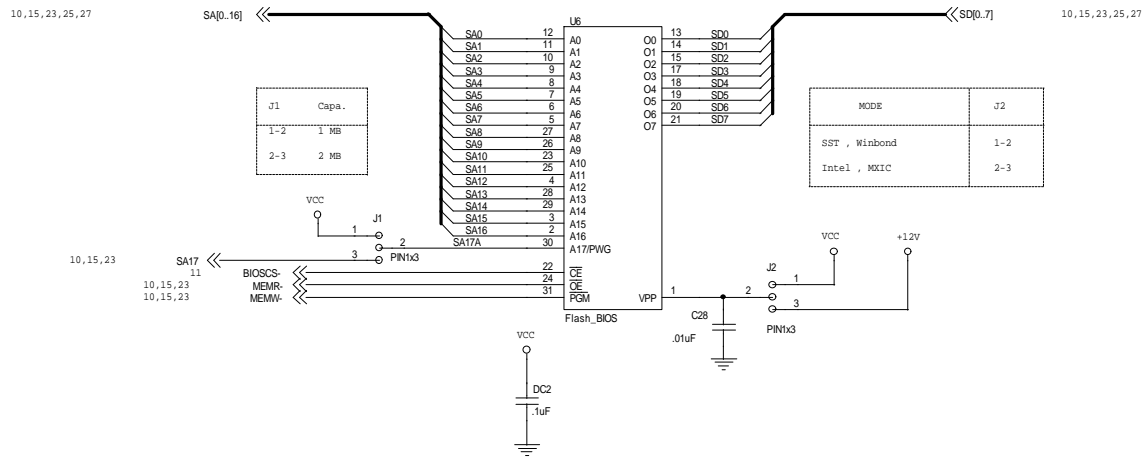
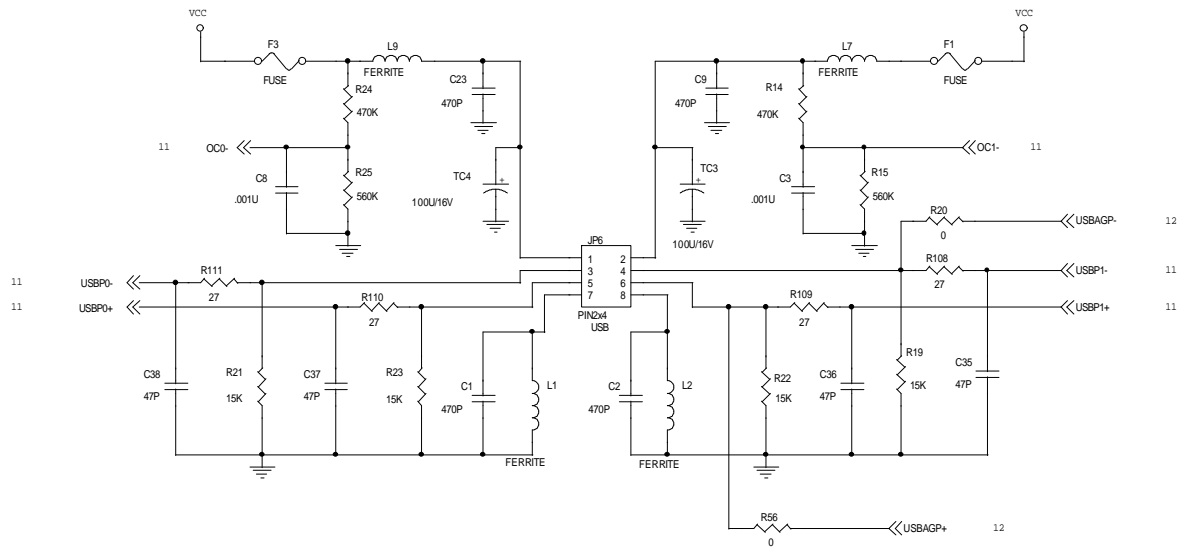
Size B	Document Number PRM-0080E1 DTK-ATX	Rev RA
Date: Friday, August 28, 1998	Sheet 20 of 27	



DASH BOX can change to page21 [NOTE2]

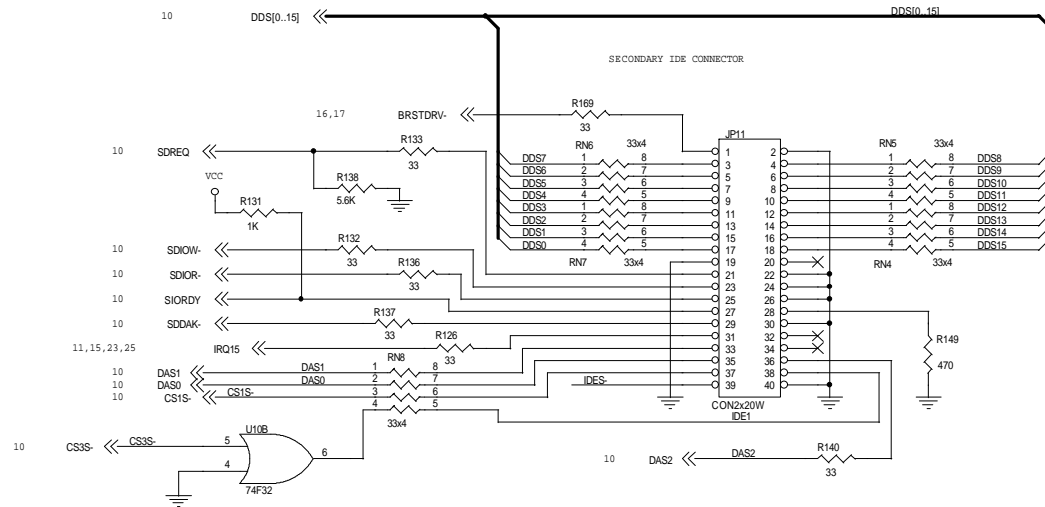
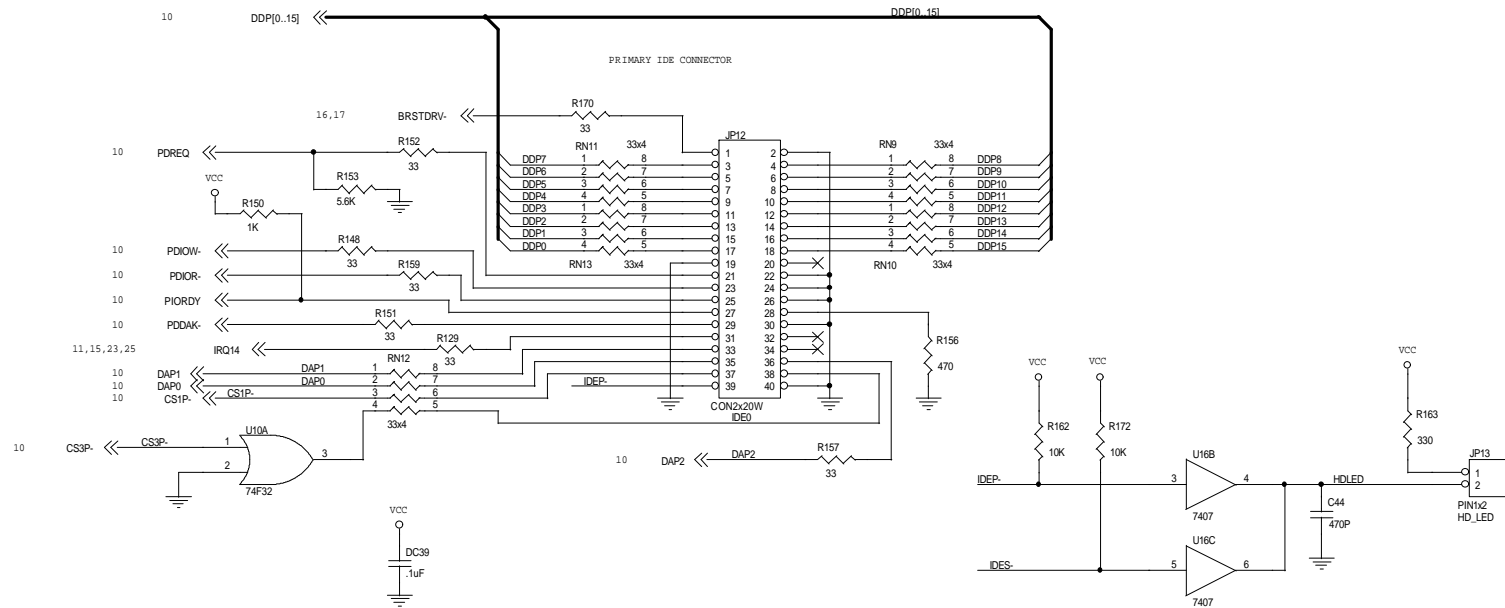
DC to DC CONVERTER CIRCUITS

Size B	Document Number PRM-0080E1 DTK-ATX	Rev RA
Date: Friday, August 28, 1998	Sheet 19 of 27	



USB FOR PIIX4 / FLASH BIOS

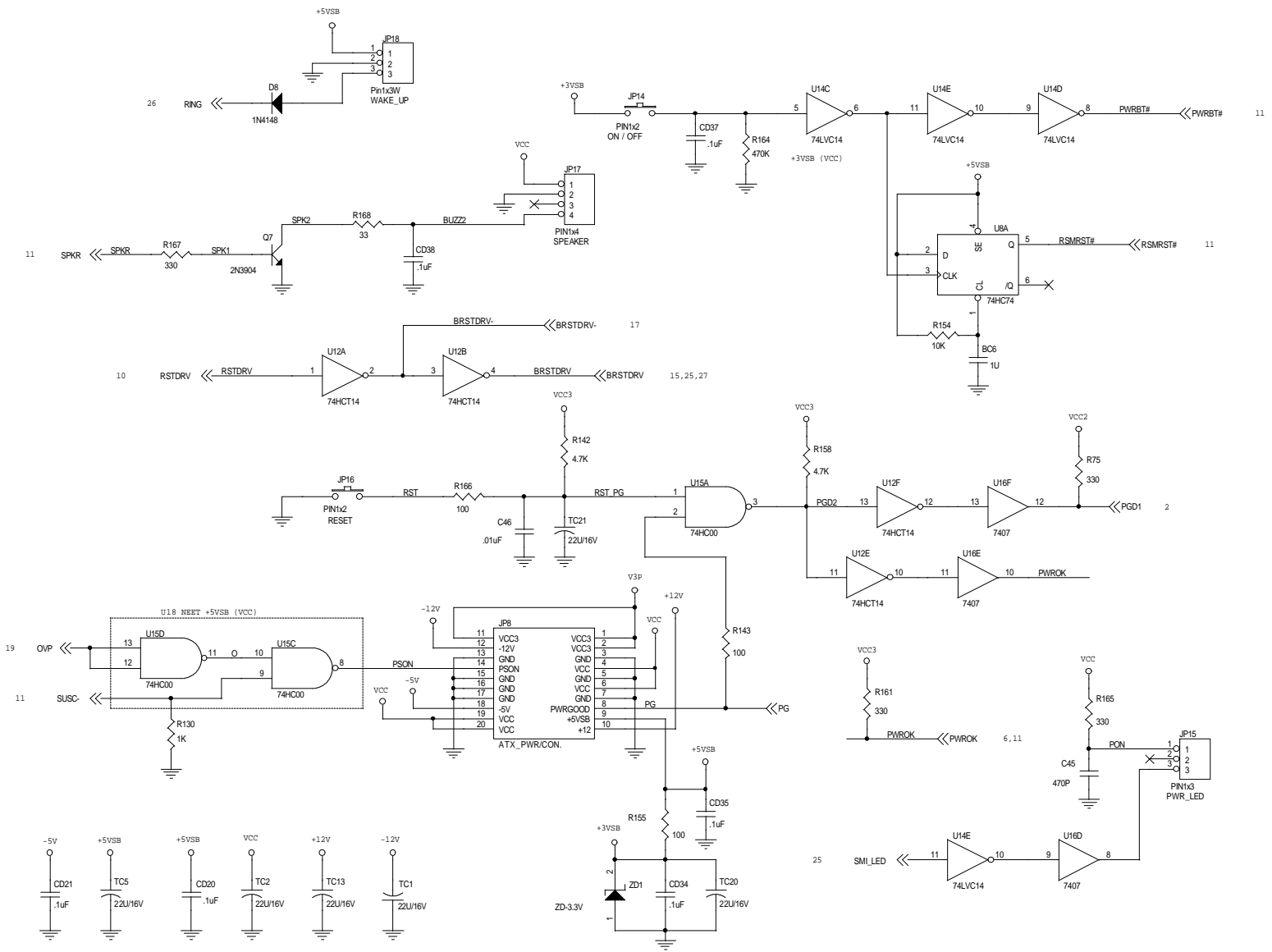
Size B	Document Number PRM-0080E1 DTK-ATX	Rev RA
Date: Friday, August 28, 1998	Sheet 18 of 27	



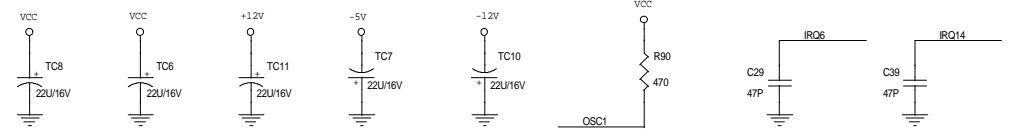
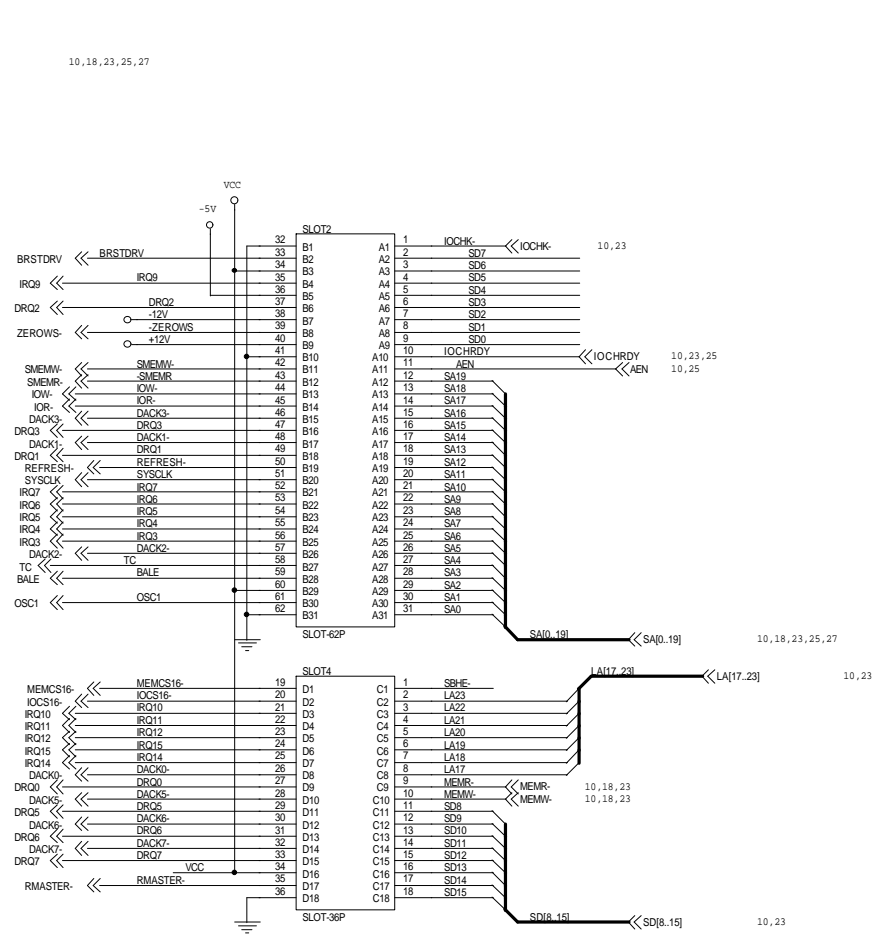
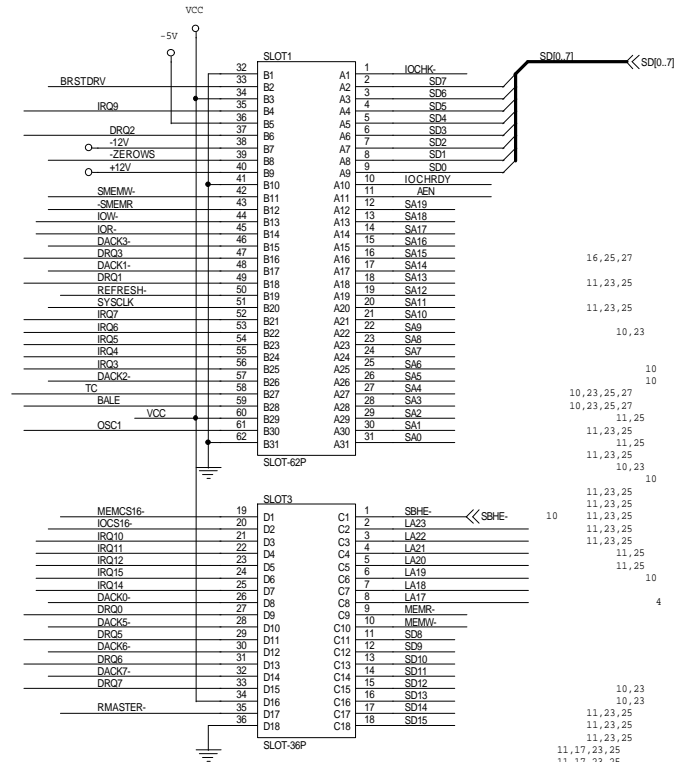
IDE CONNECTORS

PCI IDE CONNECTORS

Size	Document Number	Rev
B	PRM-0080E1 DTK-ATX	RA
Date: Friday, August 28, 1998		Sheet 17 of 27

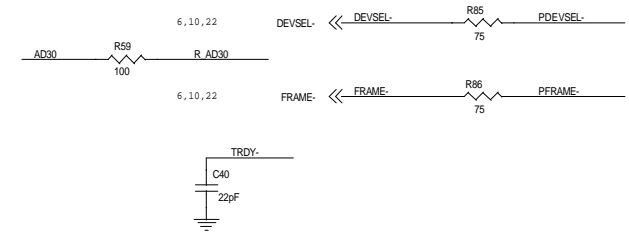
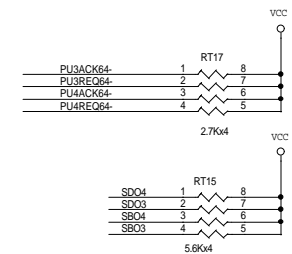
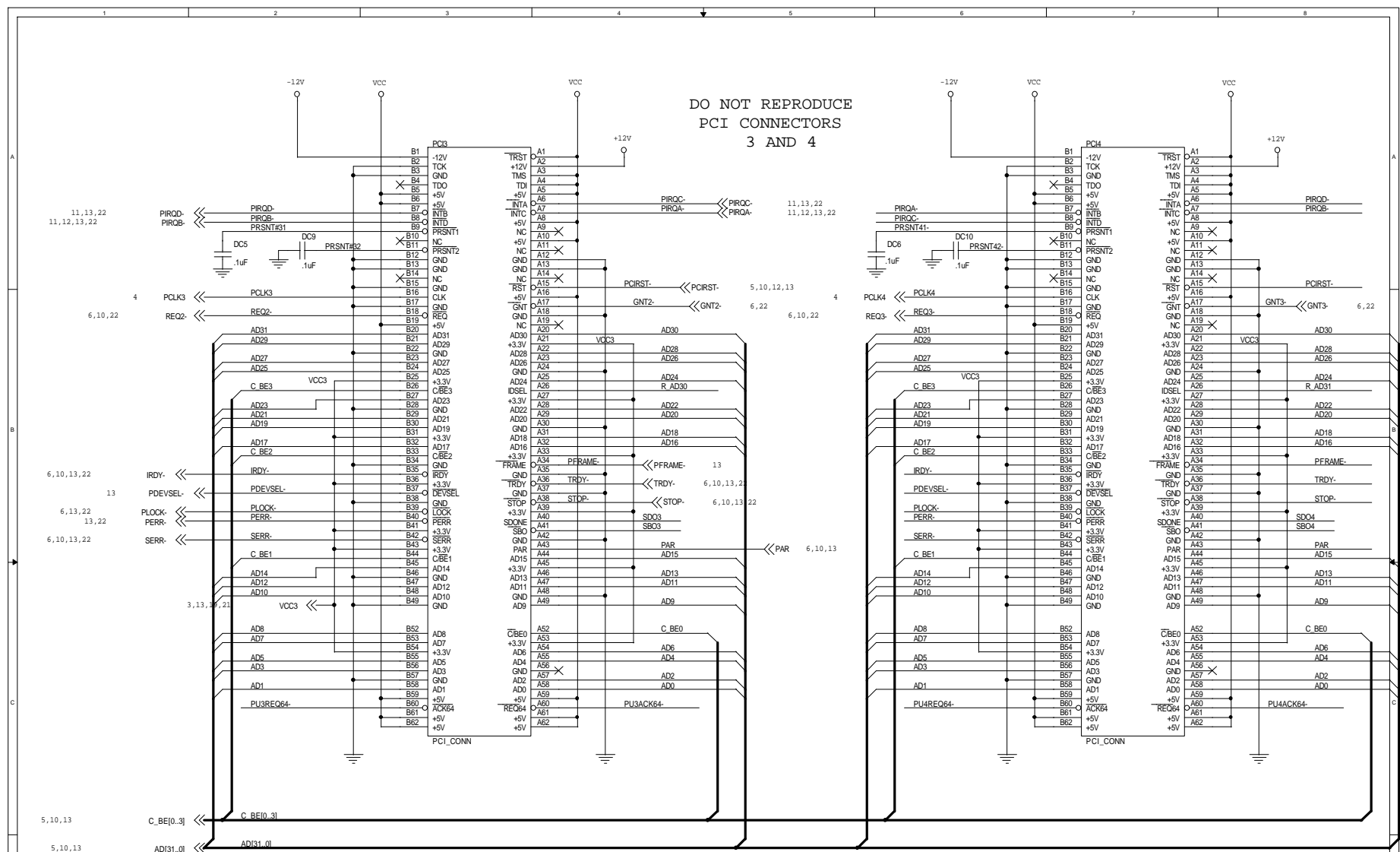


FRONT PANEL		
Size B	Document Number PRM-0080E1 DTK-ATX	Rev RA
Date: Friday, August 28, 1998	Sheet 16	of 27

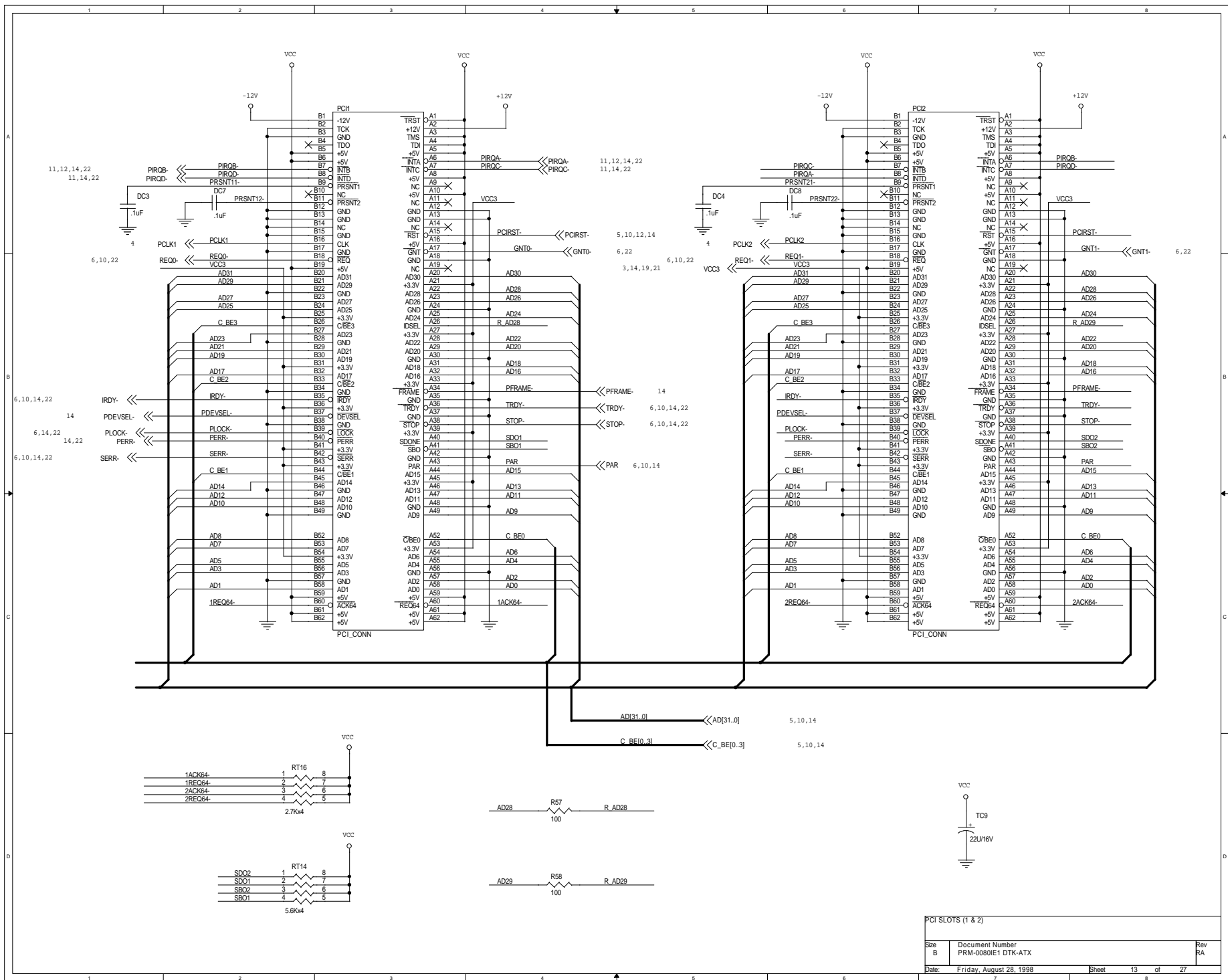


AT-BUS SLOTS		
Size B	Document Number PRM-0080E1 DTK-ATX	Rev RA
Date:	Friday, August 28, 1998	Sheet 15 of 27

DO NOT REPRODUCE
PCI CONNECTORS
3 AND 4

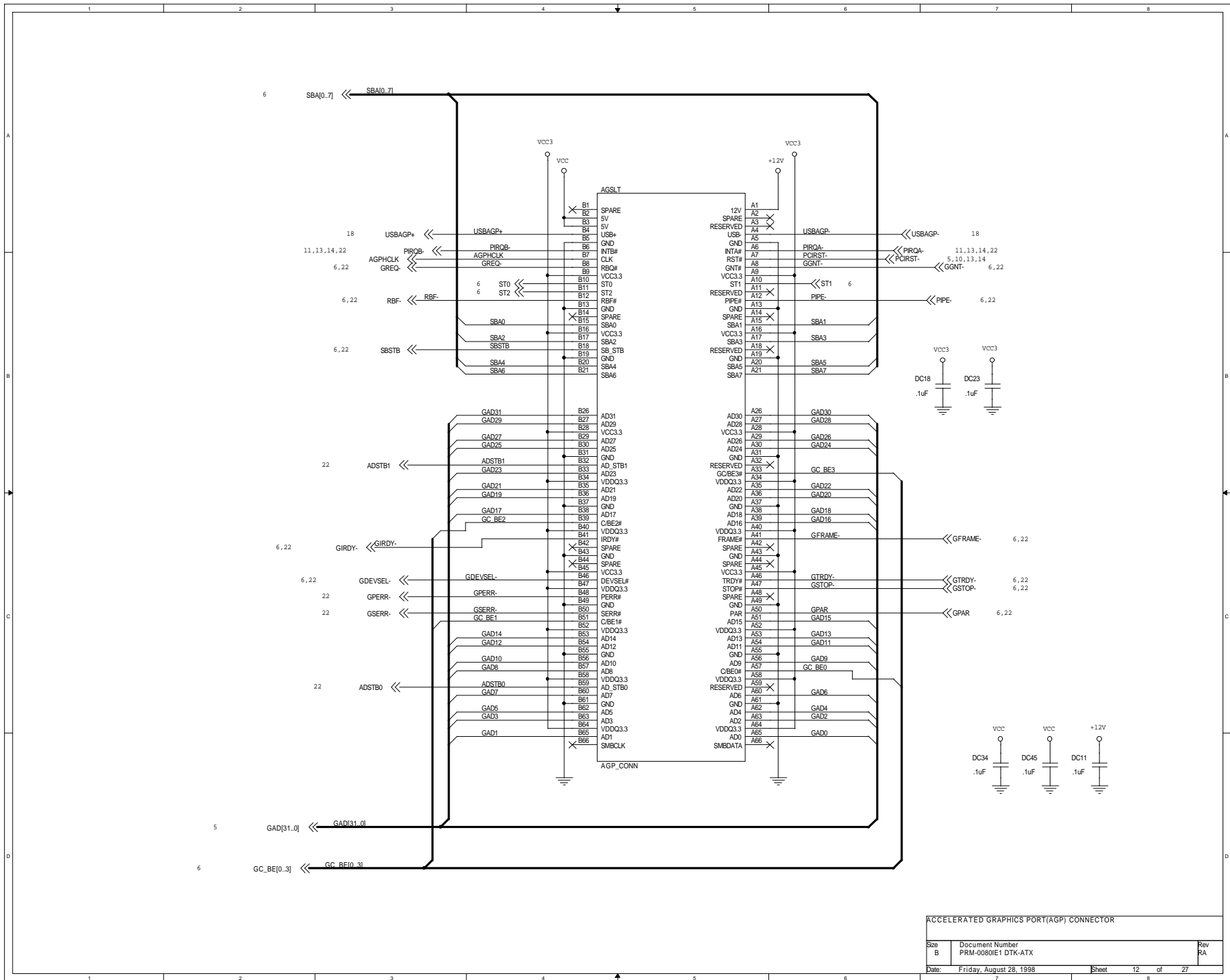


PCI SLOTS (3 & 4)		
Size	Document Number	Rev
B	PRM-0080E1 DTK-ATX	RA
Date:	Friday, August 28, 1998	Sheet 14 of 27



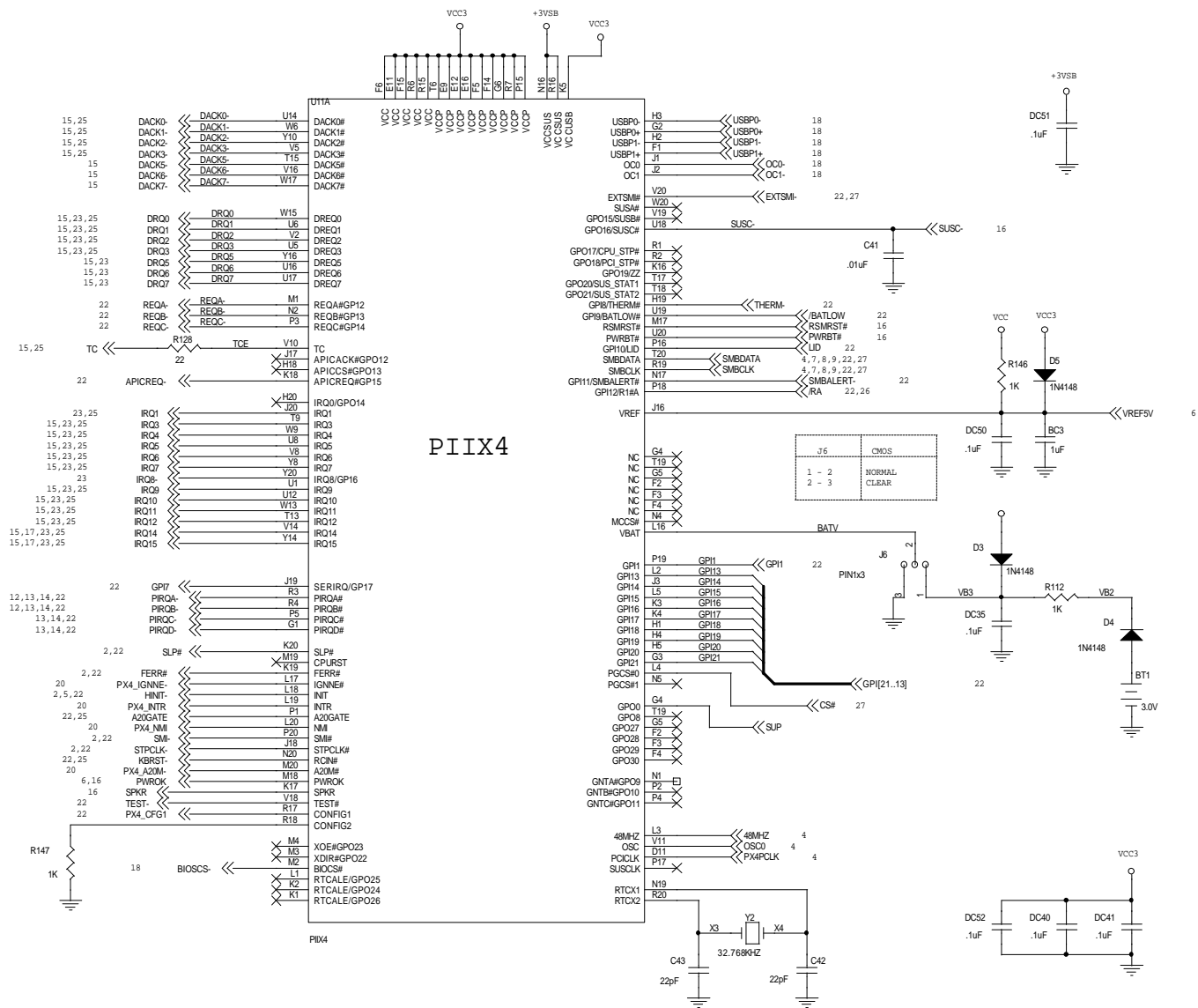
PCI SLOTS (1 & 2)

Size B	Document Number PRM-0080E1 DTK-ATX	Rev RA
Date:	Friday, August 28, 1998	Sheet 13 of 27



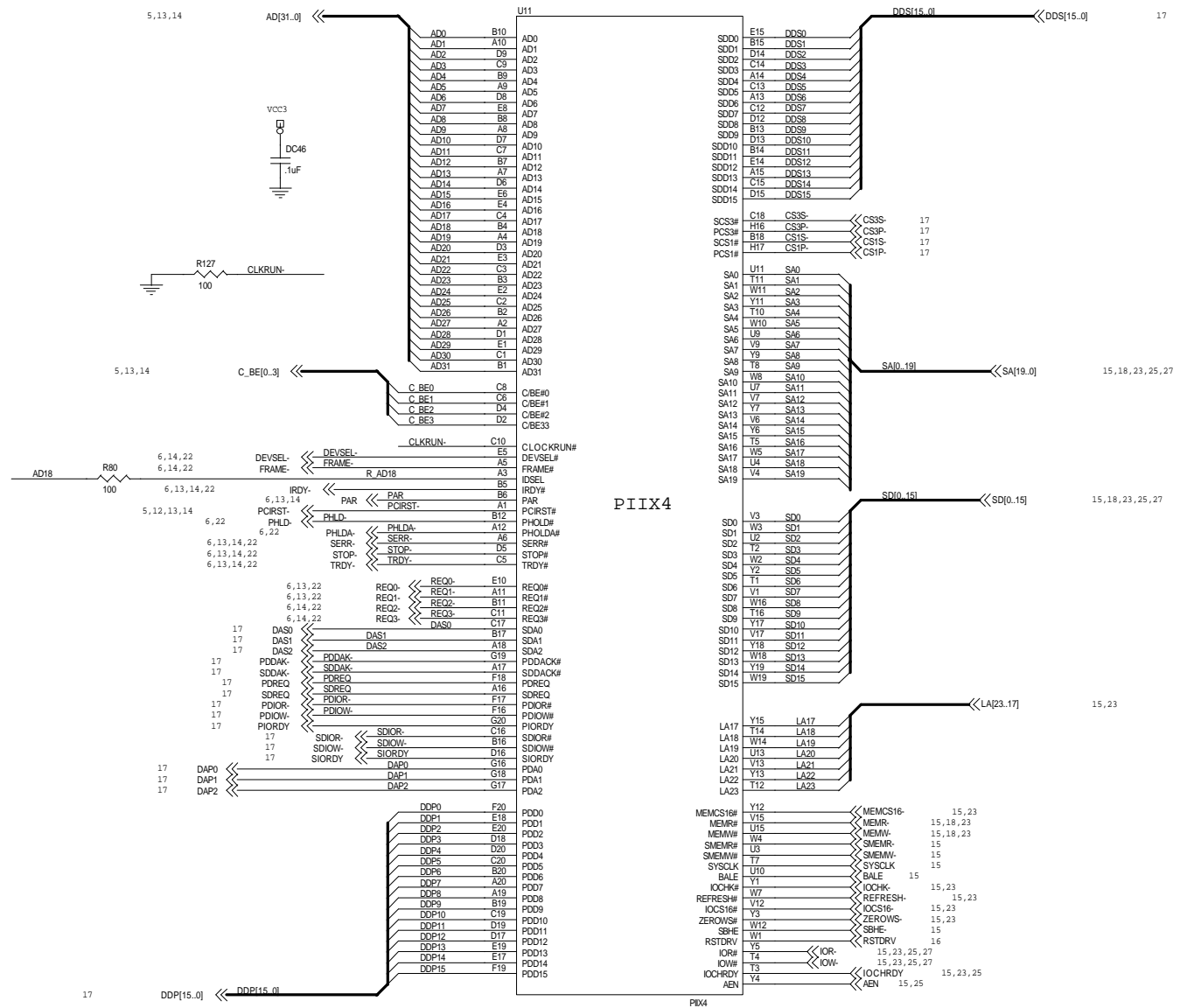
ACCELERATED GRAPHICS PORT(AGP) CONNECTOR

Size B	Document Number PRM-0080E1 DTK-ATX	Rev RA
Date: Friday, August 28, 1998	Sheet 12 of 27	



PIIX4

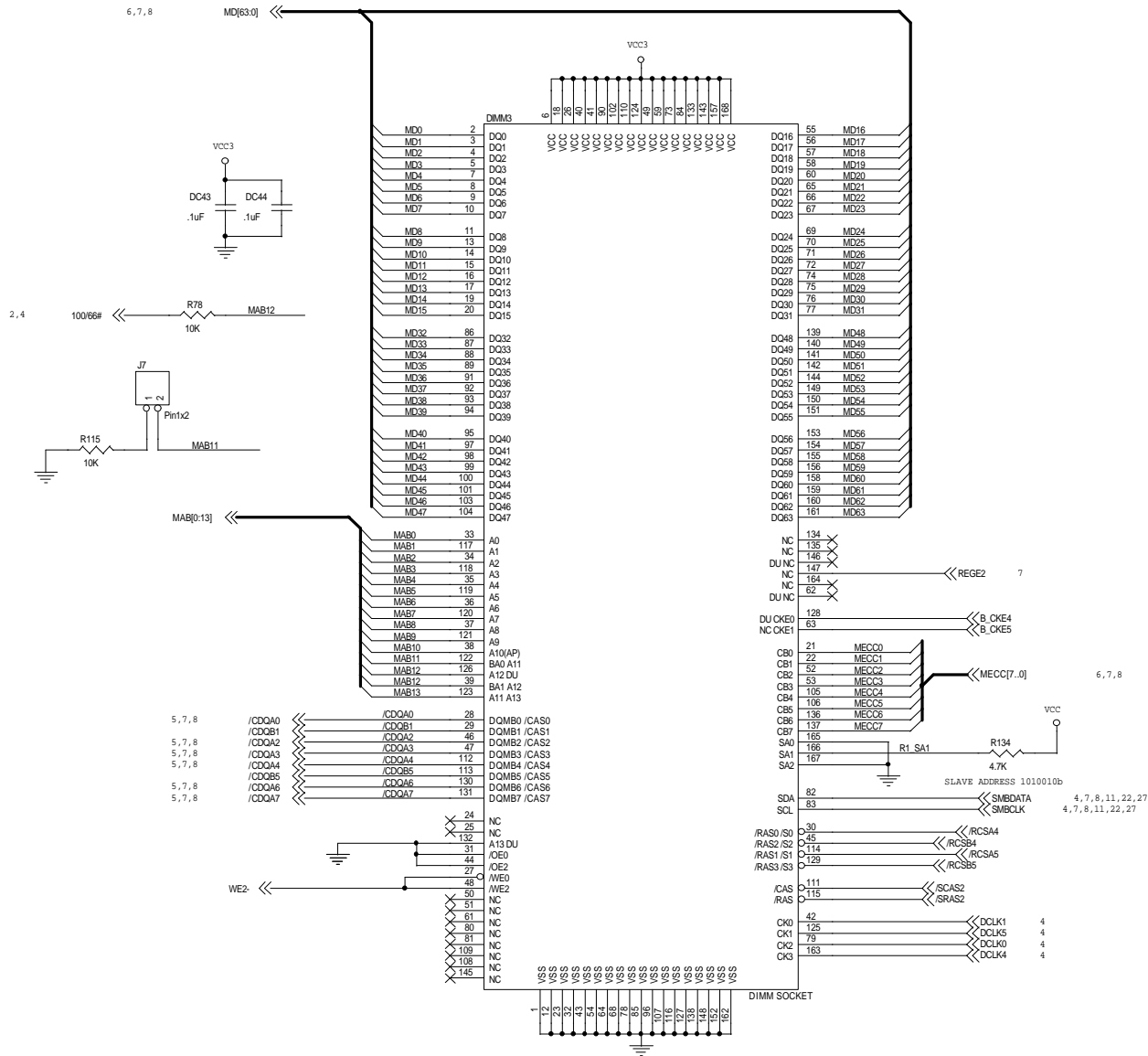
PIIX4 B		
Size B	Document Number PRM-0080E1 DTK-ATX	Rev RA
Date: Friday, August 28, 1998	Sheet 11 of 27	



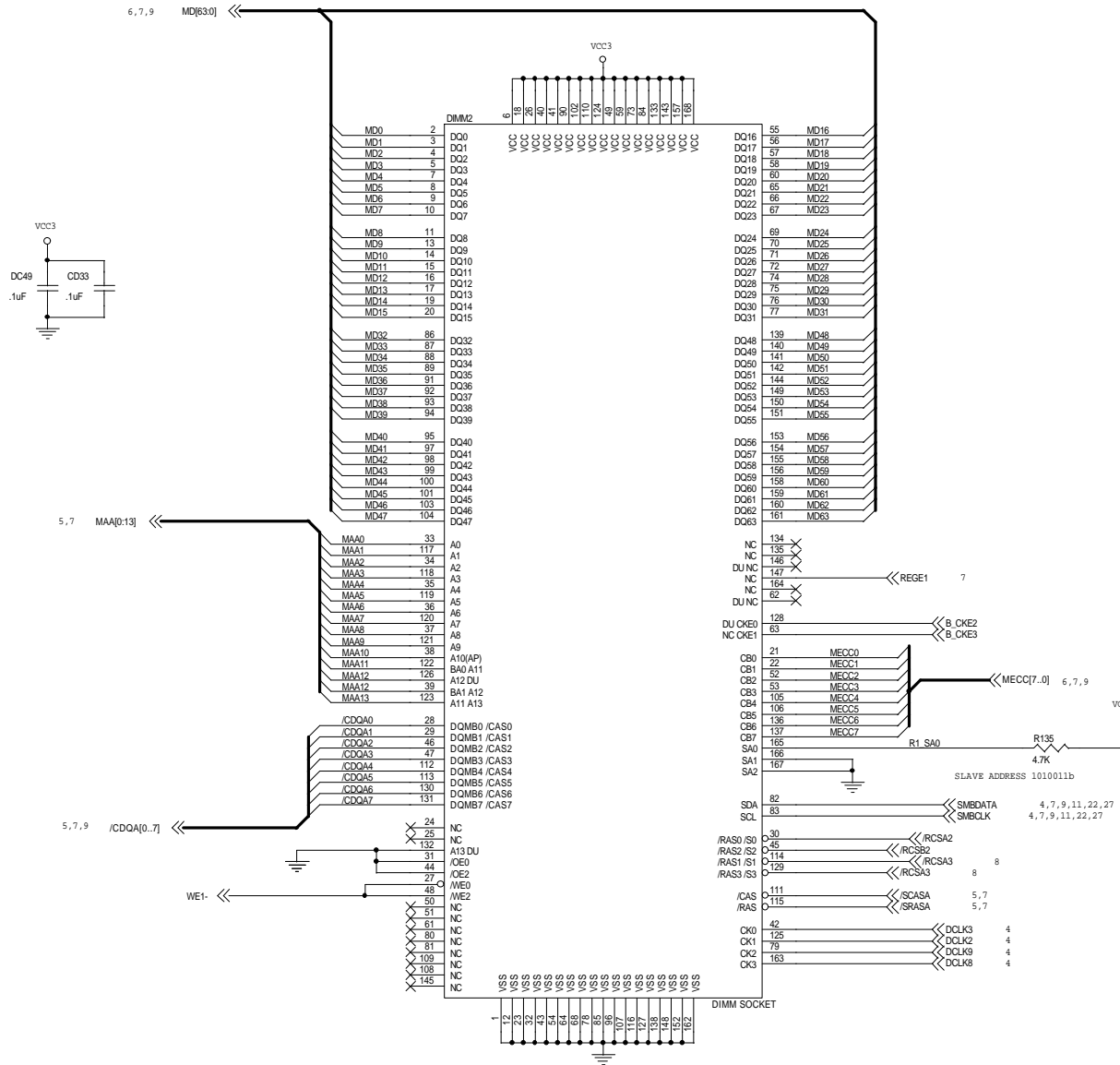
PIX4

PIX4_A		
Size	Document Number	Rev
B	PRM-0080E1 DTK-ATK	RA
Date:	Friday, August 28, 1998	Sheet 10 of 27

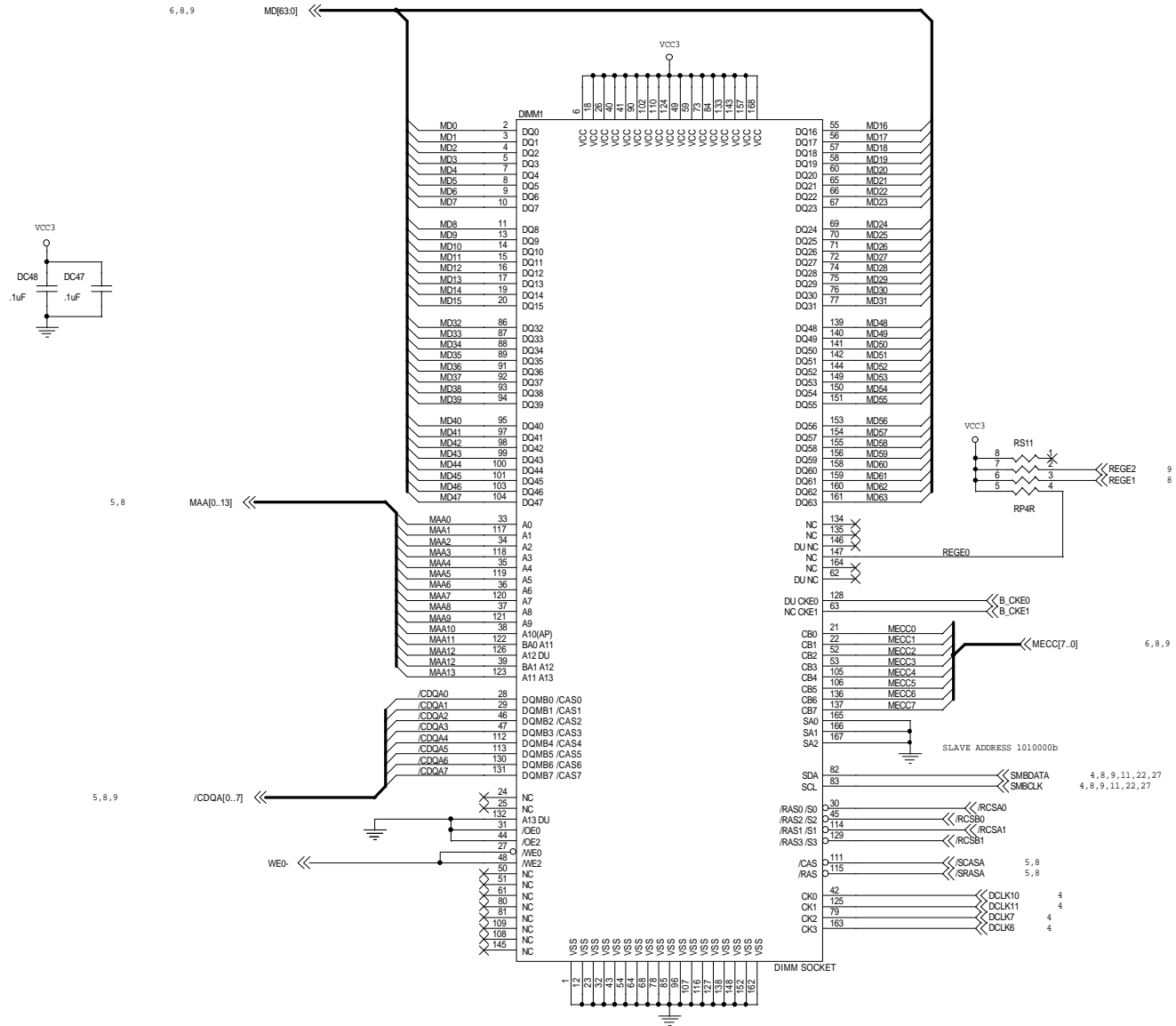
DIMM CONNECTOR 3



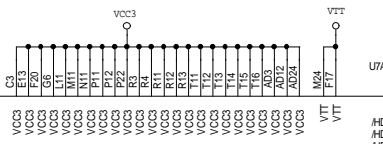
DIMM CONNECTOR 2



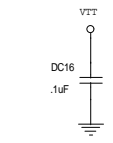
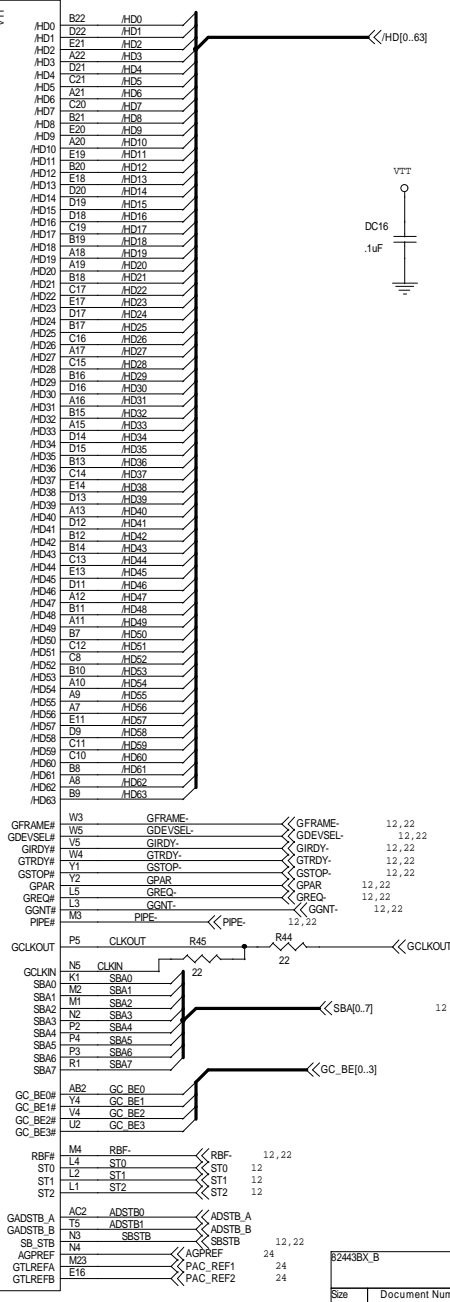
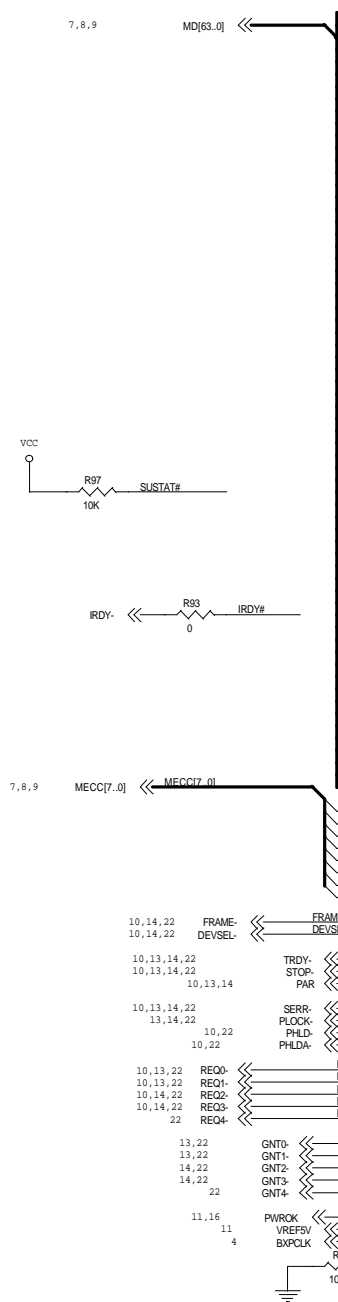
DIMM CONNECTOR 1



1th DIMM SOCKET (BANK0)		
Size	Document Number	Rev
B	PRM-0080E1 DTK-ATX	RA
Date:	Friday, August 28, 1998	Sheet 8 of 27

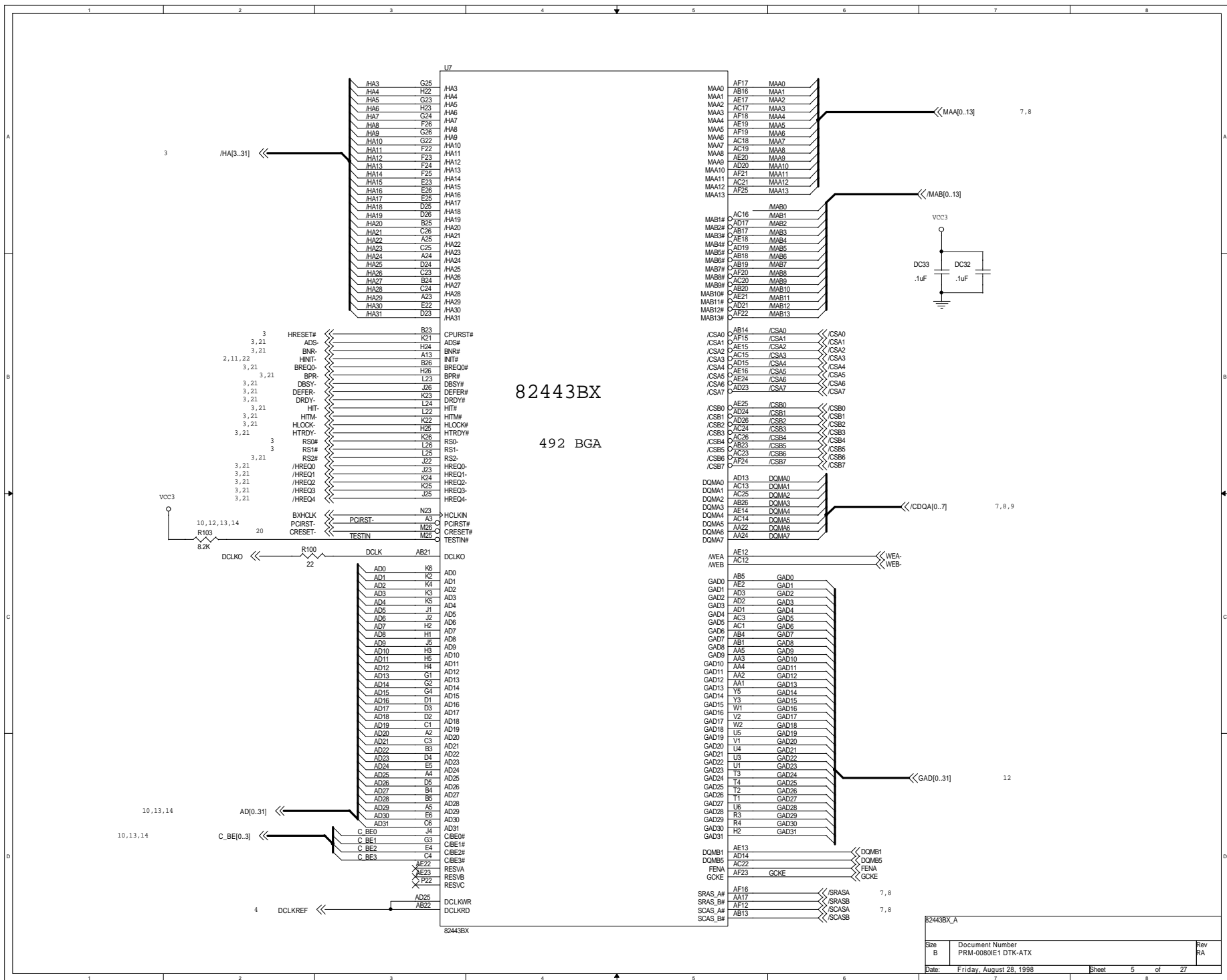


82443BX
492 BGA

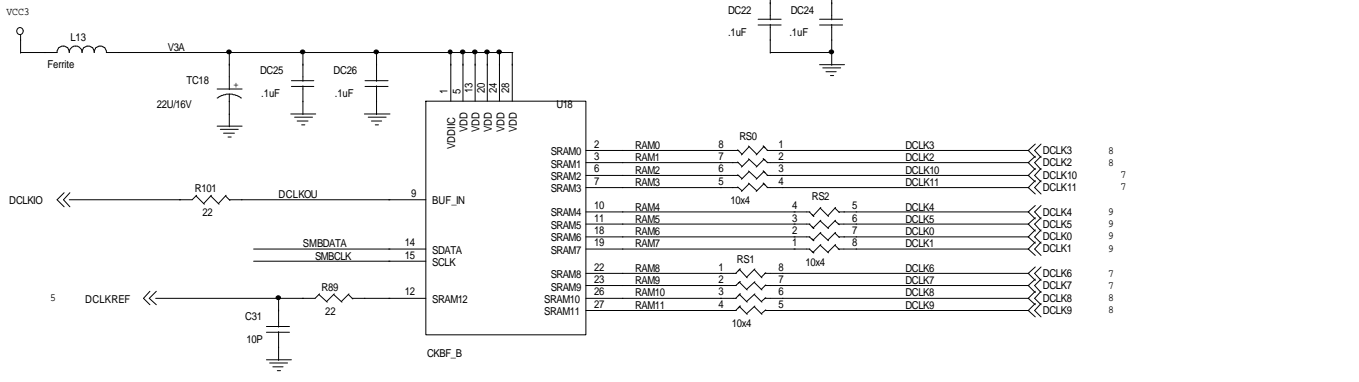
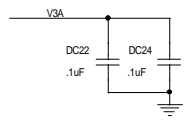
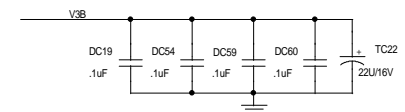
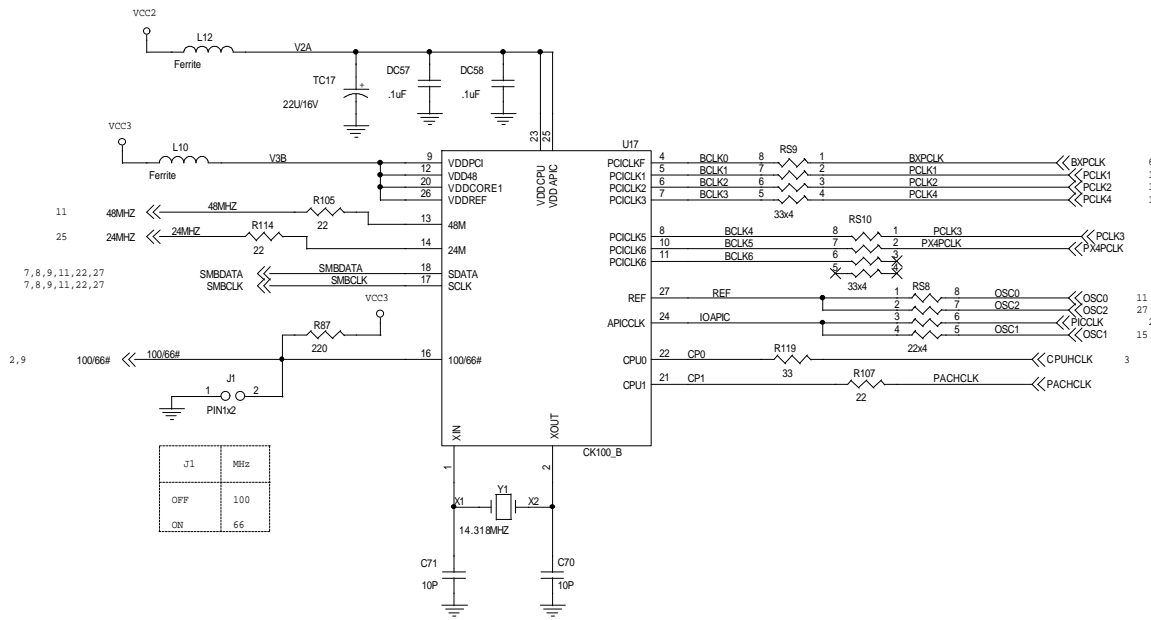


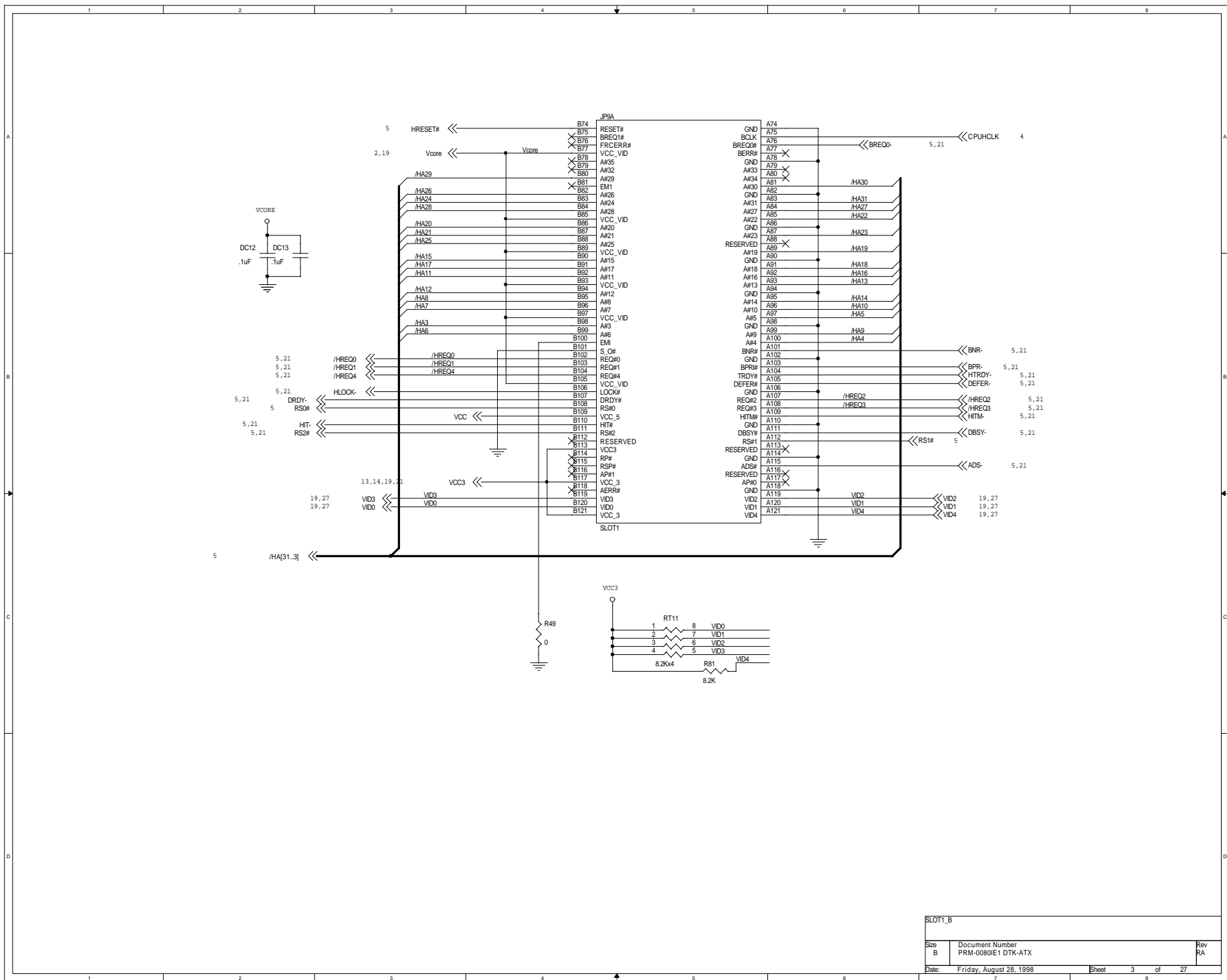
82443BX B

Size B	Document Number PRM-0080E1 DTK-ATX	Rev RA
Date: Friday, August 28, 1998	Sheet 6 of 27	



82443BX_A		
Size	Document Number	Rev
B	PRM-0080E1 DTK-ATX	RA
Date:	Friday, August 28, 1998	Sheet 5 of 27





SLOT1_B		
Size B	Document Number PRM-0080E1 DTK-ATX	Rev RA
Date: Friday, August 28, 1998	Sheet 3 of 27	

