

6 System Schematic Diagrams and PCB Silkscreen

6-1 System Main Board

6-1-1 Schematic Diagrams

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38> ..	TEST POINTS
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41> ..	1394 CONT

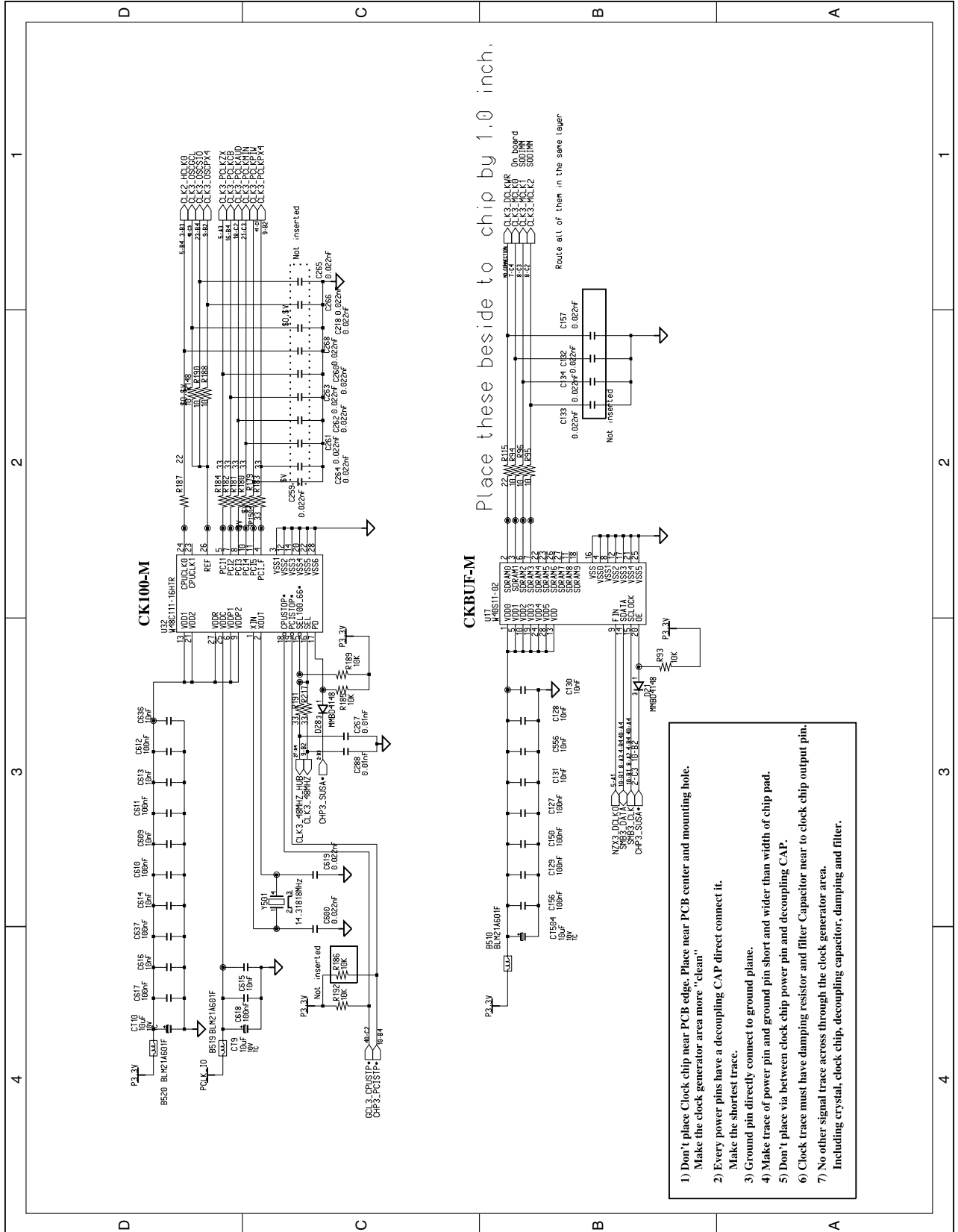
MAVERICK

CPU : MP III
Chip Set : 443BX-100M
Remarks : MAVERICK PLUS

Model Name : M@verick
PBA Name : BAXX-XXXXXX
PCB Code :
Dev. Step :
Revision :
T.R. Date : 2001/2/15

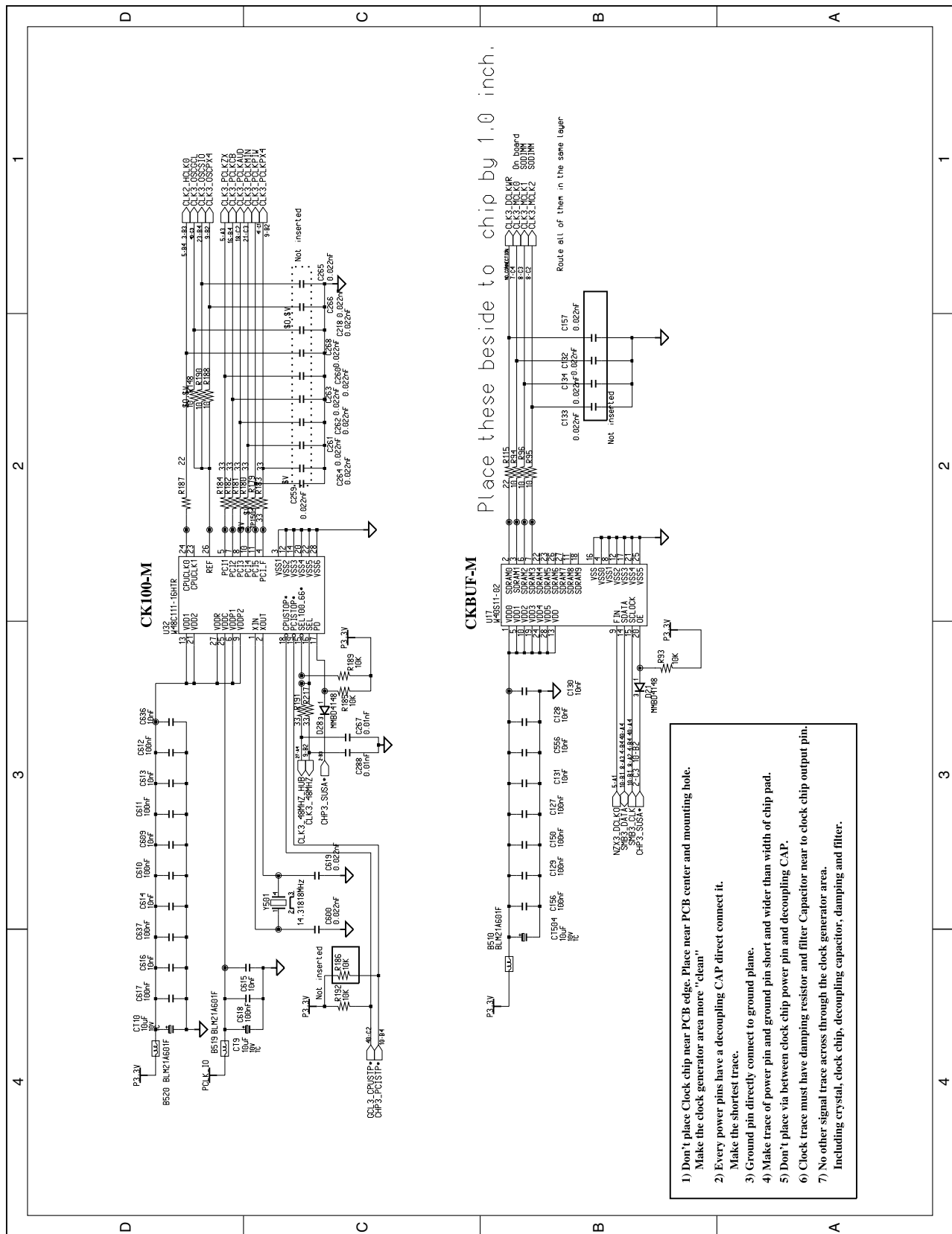
DRAW	CHECK	APPROVAL

6-1-1(a) System Main Board Schematic Sheet 2 of 41(Clock Generator)



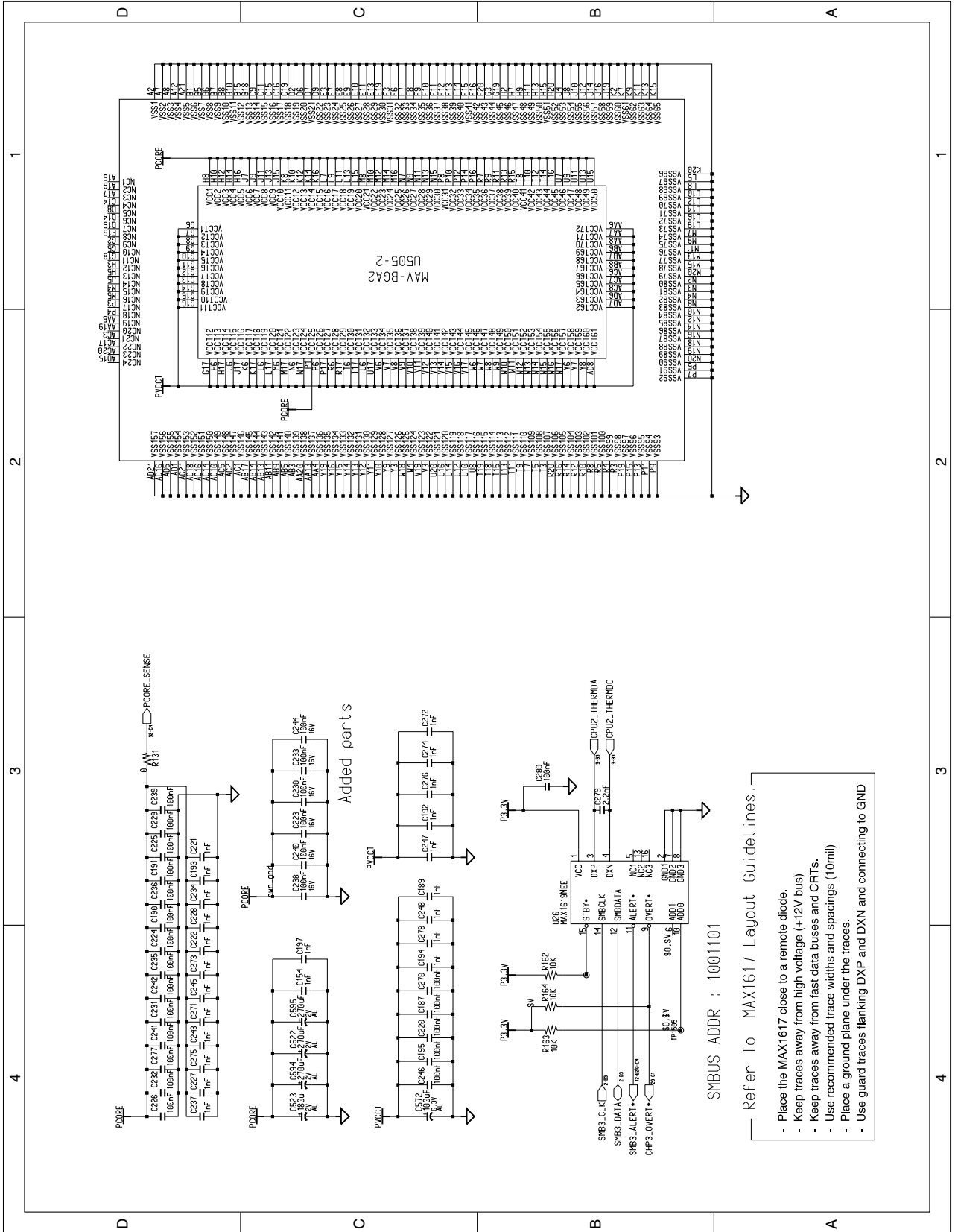
- 1) Don't place clock chip near PCB edge. Place near PCB center and mounting hole.
Make the clock generator area more "clean"
- 2) Every power pins have a decoupling CAP direct connect it.
Make the shortest trace.
- 3) Ground pin directly connect to ground plane.
- 4) Make trace of power pin and ground pin short and wider than width of chip pad.
- 5) Don't place via between clock chip power pin and decoupling CAP.
- 6) Clock trace must have damping resistor and filter Capacitor near to clock chip output pin.
- 7) No other signal trace across through the clock generator area.
Including crystal, clock chip, decoupling capacitor, damping and filter.

6-1-1(b) System Main Board Schematic Sheet 3 of 41(PIII Coppermine)



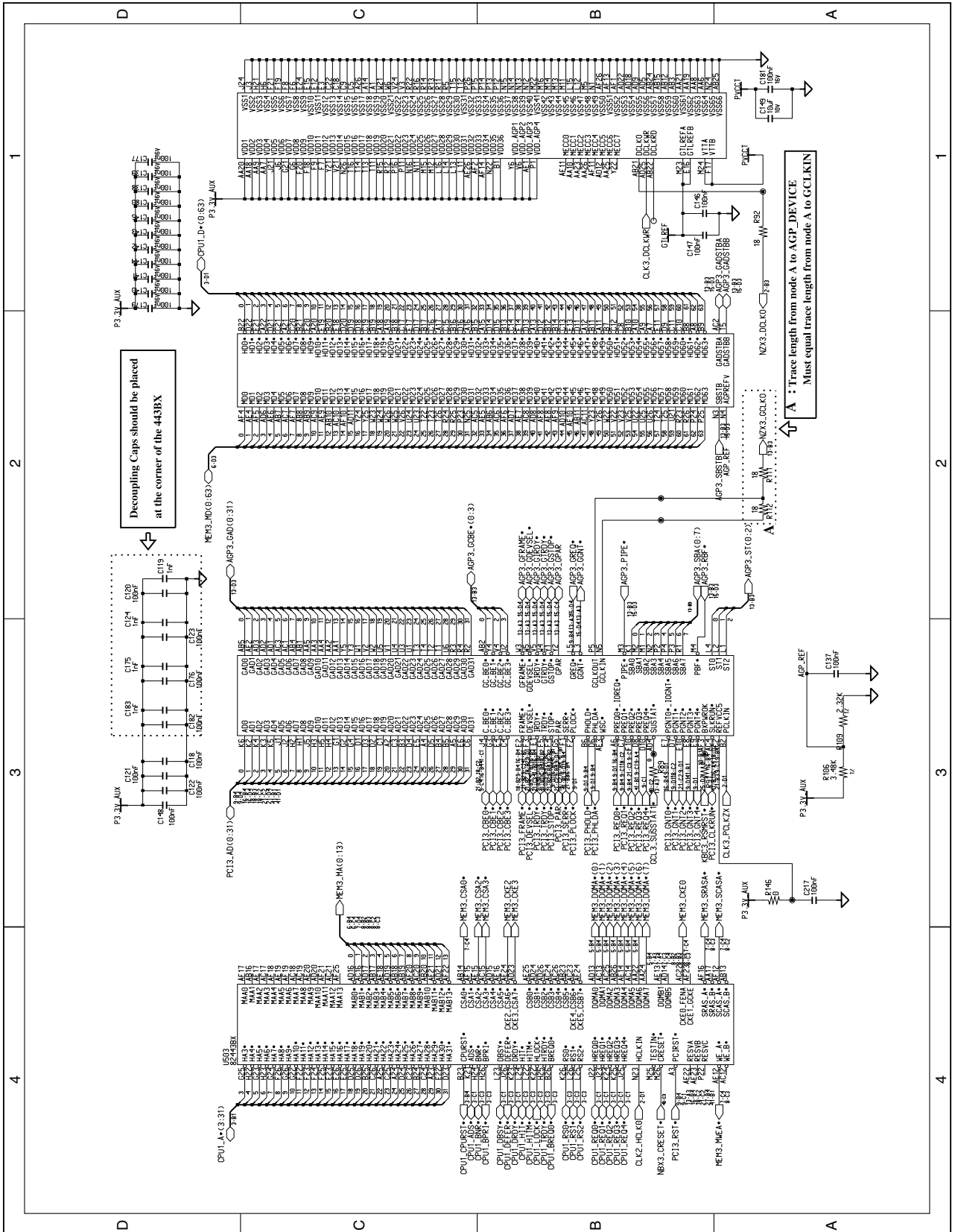
- 1) Don't place Clock chip near PCB edge. Place near PCB center and mounting hole. Make the clock generator area more "clean"
- 2) Every power pins have a decoupling CAP direct connect it. Make the shortest trace.
- 3) Ground pin directly connect to ground plane.
- 4) Make trace of power pin and ground pin short and wider than width of chip pad.
- 5) Don't place via between clock chip power pin and decoupling CAP.
- 6) Clock trace must have damping resistor and filter Capacitor near to clock chip output pin.
- 7) No other signal trace across through the clock generator area. Including crystal, clock chip, decoupling capacitor, damping and filter.

6-1-1(c) System Main Board Schematic Sheet 4 of 41(PIII Coppermine)

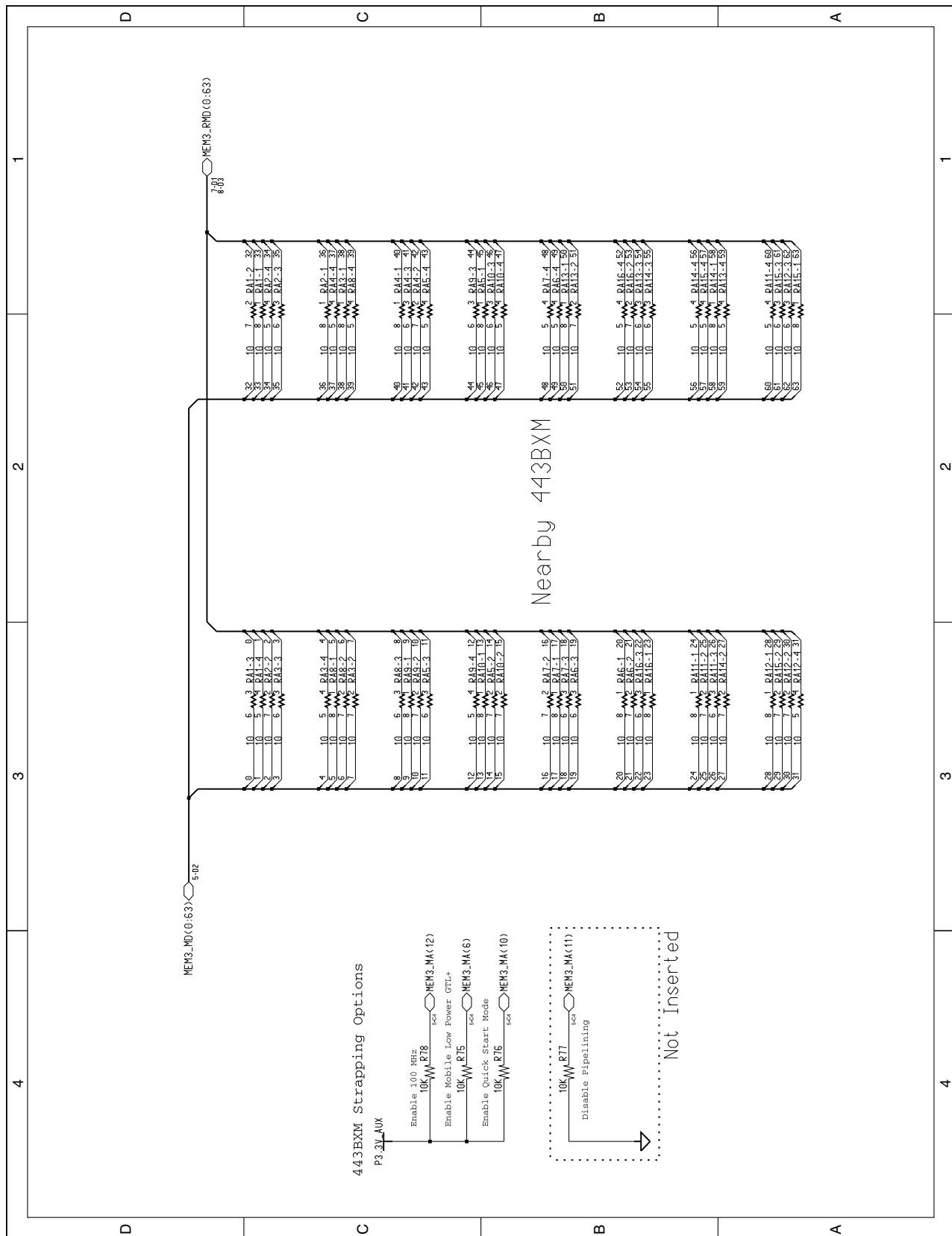


- Refer To MAX1617 Layout Guidelines.
- Place the MAX1617 close to a remote diode.
 - Keep traces away from high voltage (+12V bus)
 - Keep traces away from fast data buses and CRTs.
 - Use recommended trace widths and spacings (10mil)
 - Place a ground plane under the traces.
 - Use guard traces flanking DXP and DXN and connecting to GND

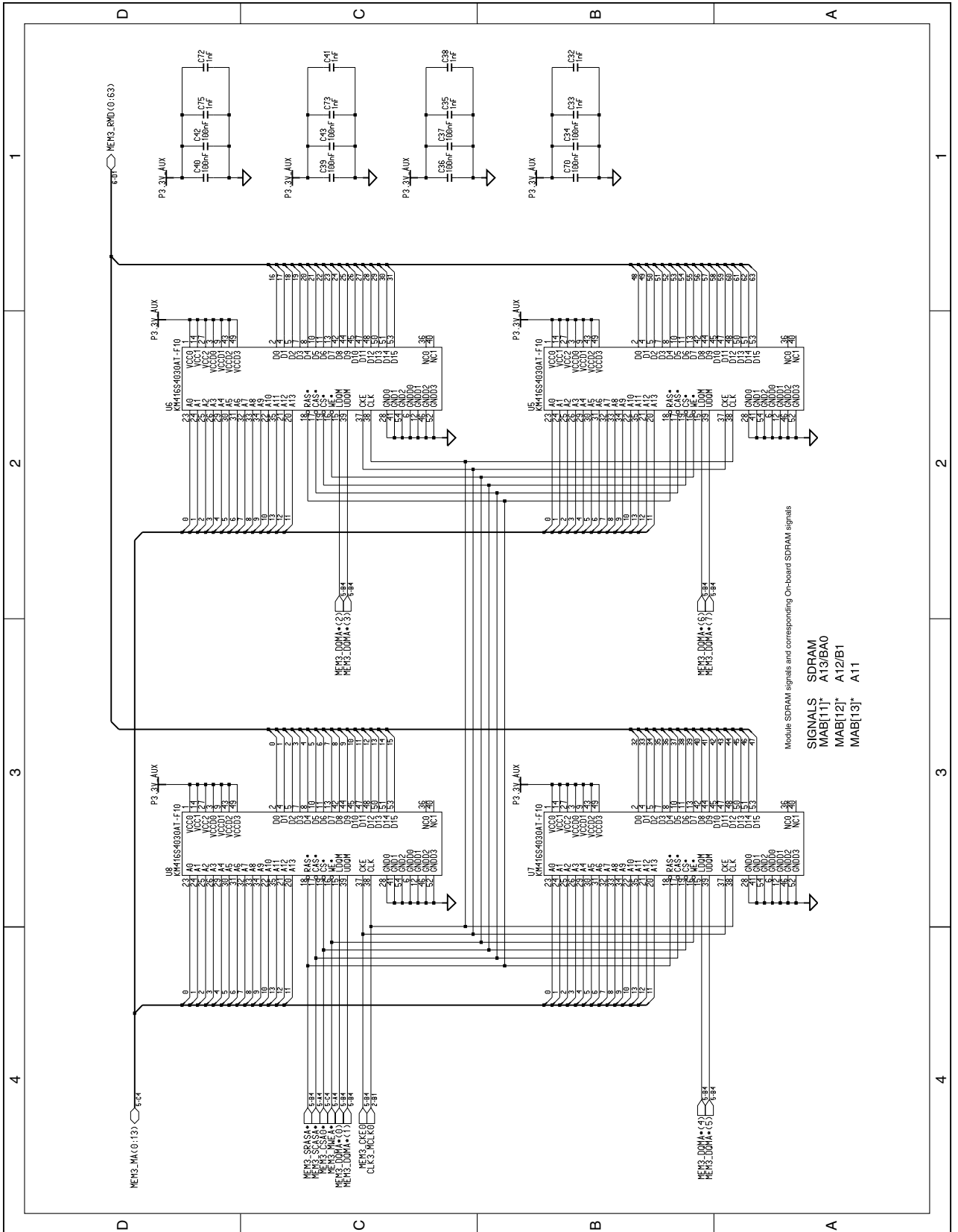
6-1-1(d) System Main Board Schematic Sheet 5 of 41(443BX)



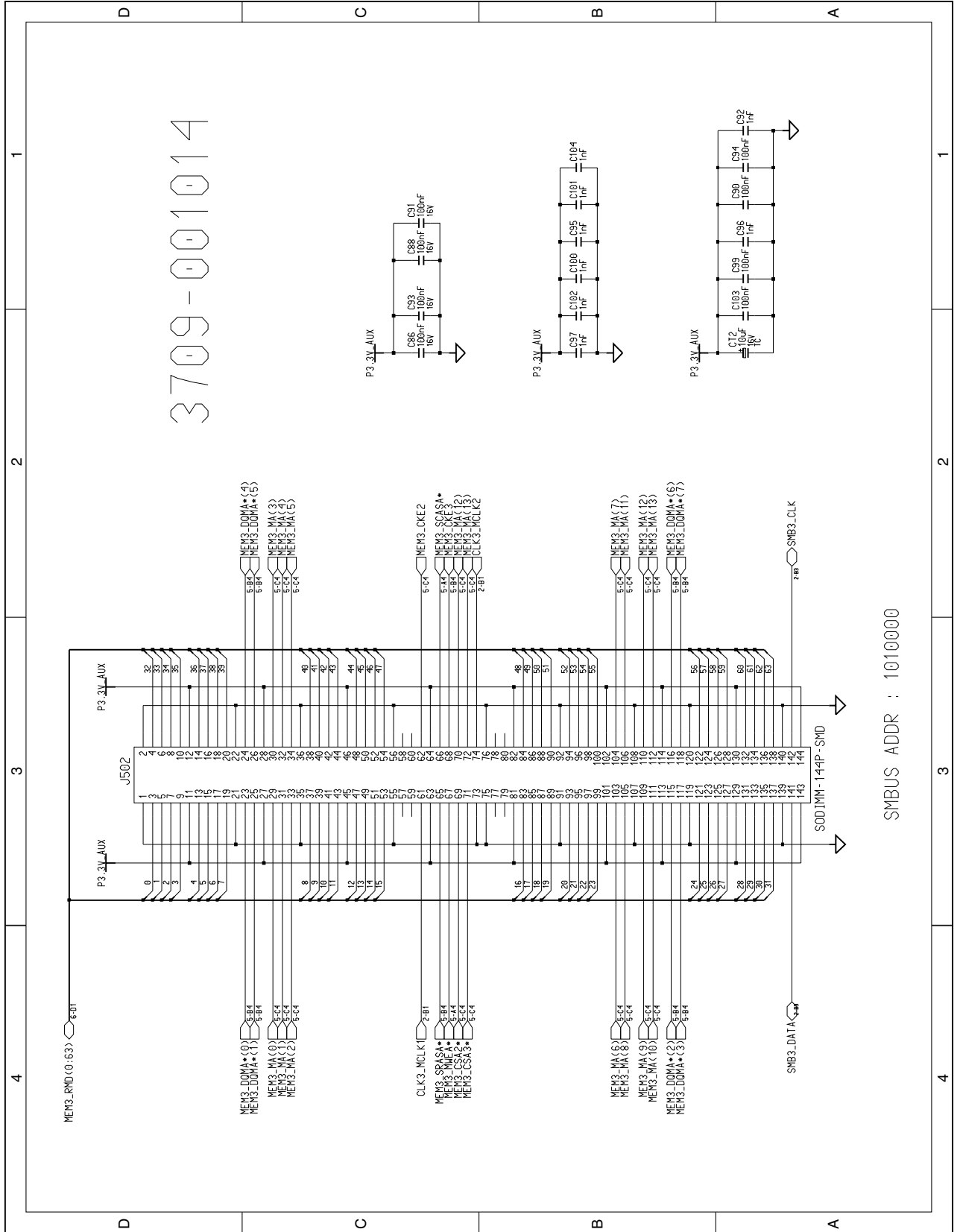
6-1-1(e) System Main Board Schematic Sheet 6 of 41(Damping Resistor)



6-1-1(f) System Main Board Schematic Sheet 7 of 41(On B'd Memory[64MB])

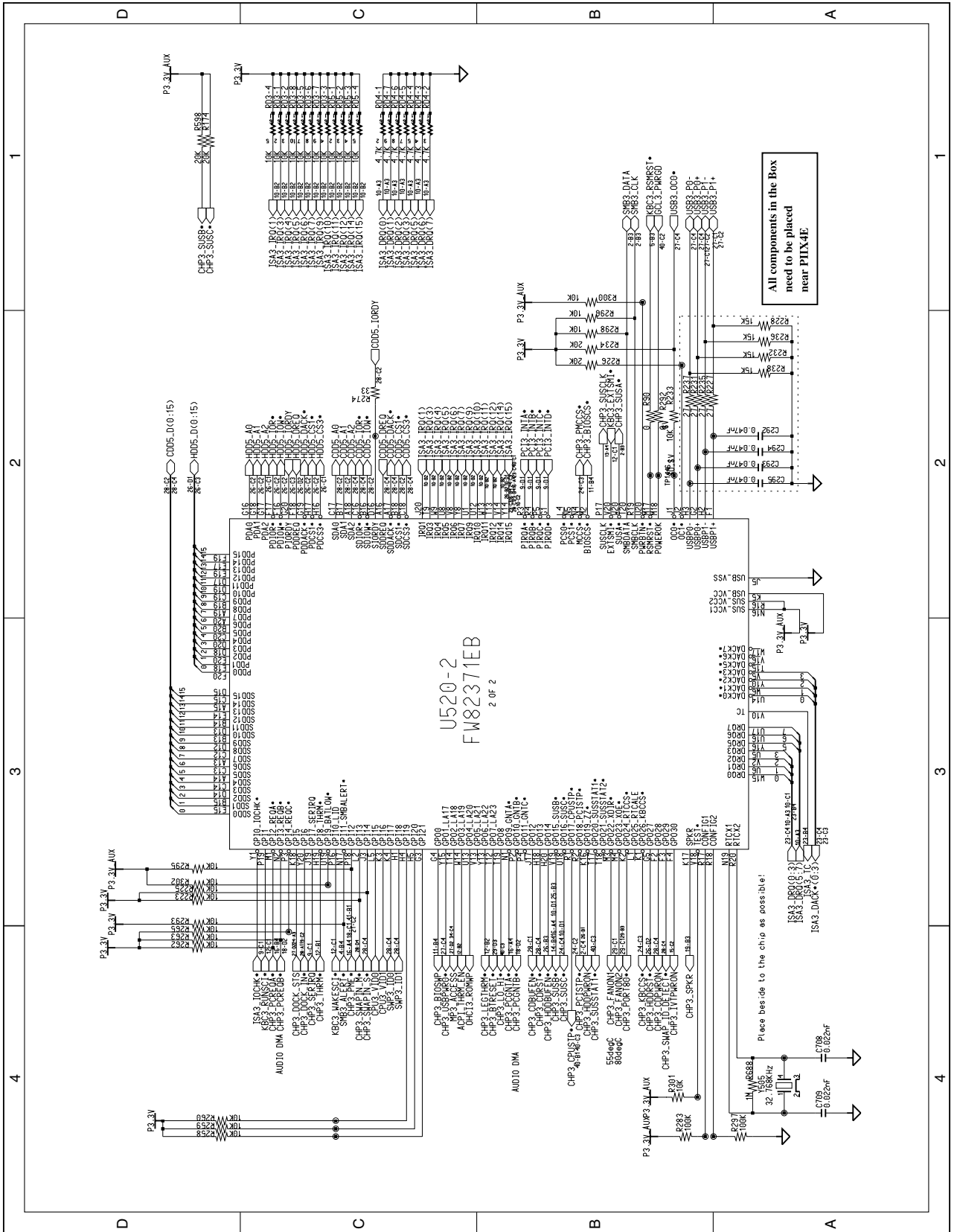


6-1-1(g) System Main Board Schematic Sheet 8 of 41(SODIMM 144P)

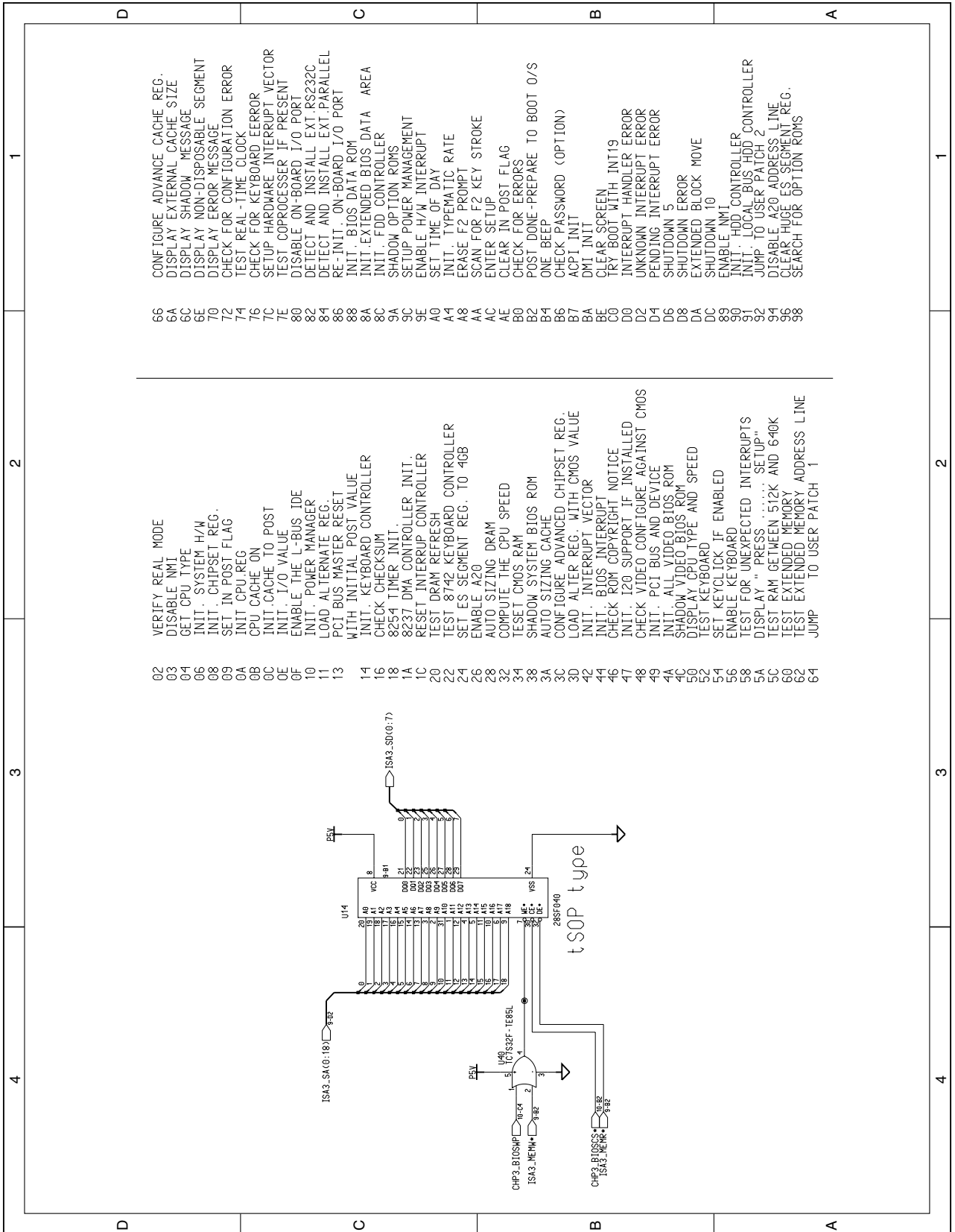


SMBUS_ADDR : 1010000

6-1-1(i) System Main Board Schematic Sheet 10 of 41(PIIX4-2)



6-1-1(j) System Main Board Schematic Sheet 11 of 41(FLASH ROM)



6-1-1(k) System Main Board Schematic Sheet 12 of 41(PIIX4 Resource Table)

PIIX4 Resource Table

PCI BUS Request(BX)

0	CARDBUS
1	AUDIO
2	MINI PCI
3	1394
4	RESERVED

IDSEL

PIIX4E	AD 18
CardBus	AD 19
Audio	AD 23
Modem/LAN	AD 24
1394	AD 25

Programmable Interrupt Request

INTA*	MINIPCI(IRQ11)
INTB*	CARDBUS/1394(IRQ11)
INTC*	AUDIO/1394(IRQ10)
INTD*	USB(IRQ10)

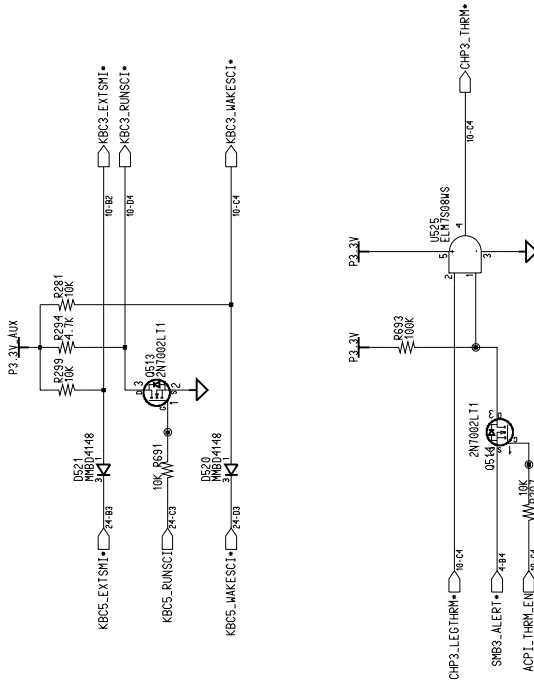
PC/PCI DMA Request

PREQA*	CardBus
PREQB*	Audio(N.C)

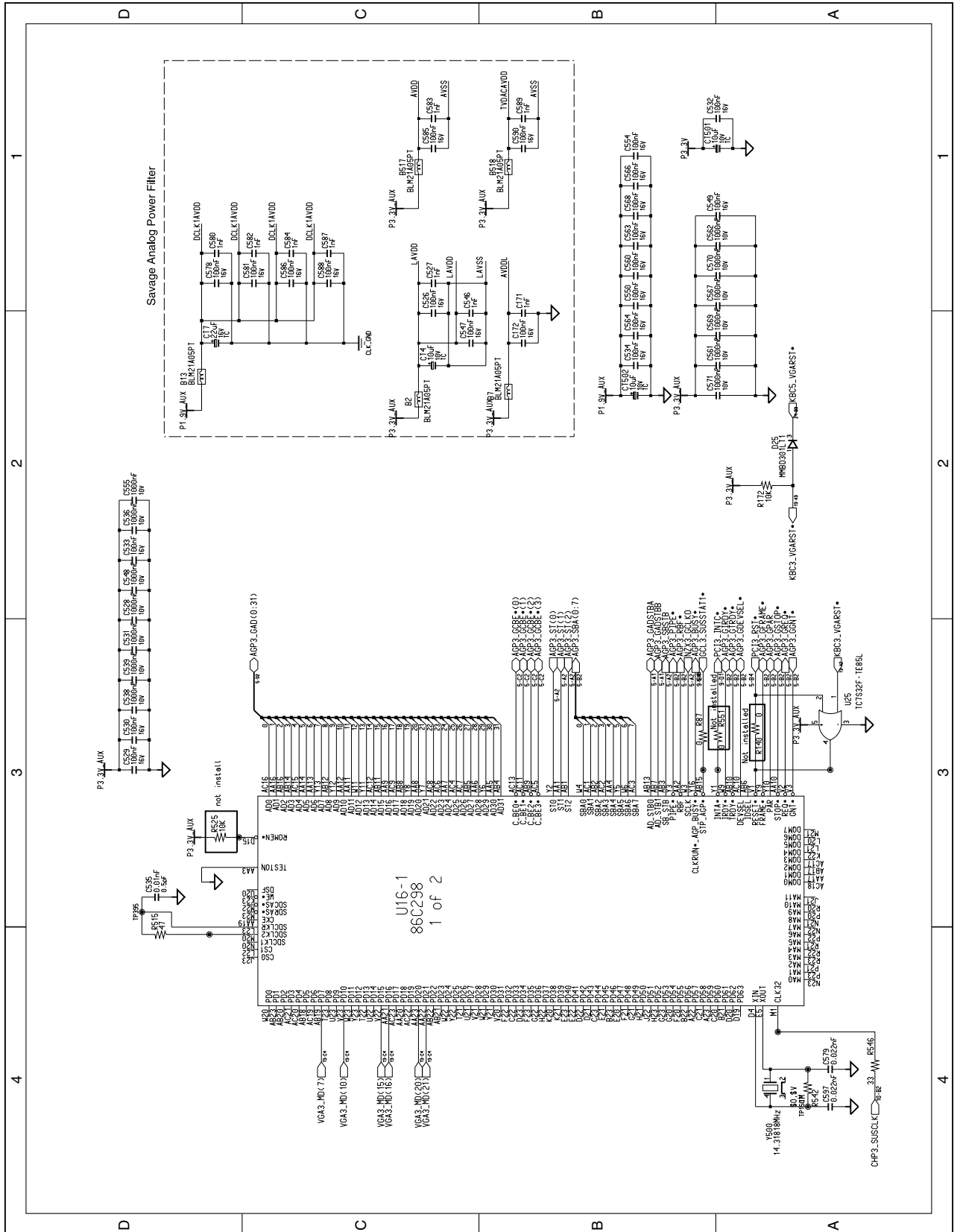
Audio Controller operates as PCI BUS Master and doesn't use DMA.

PCI BUS Request(PIIX)

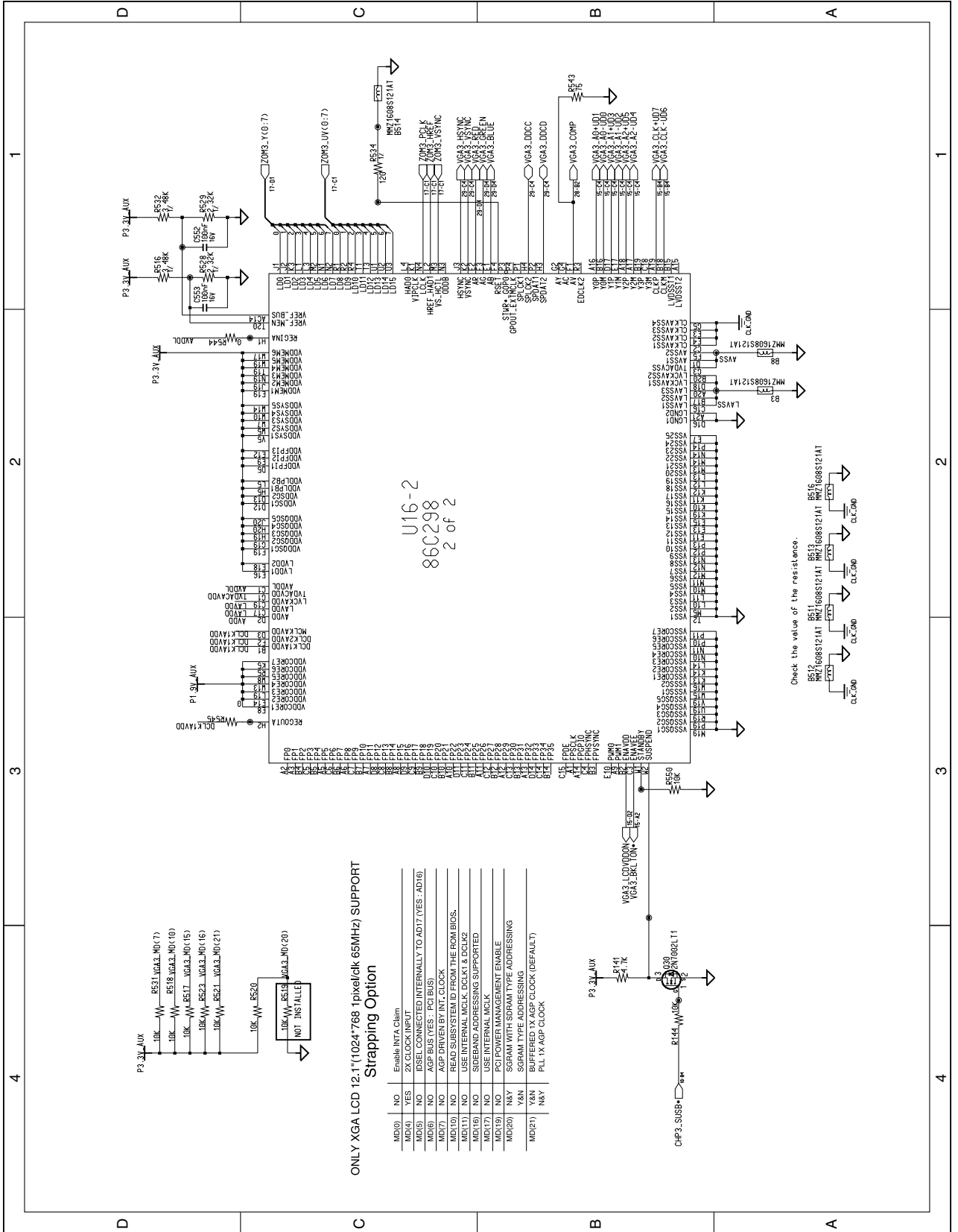
0	AGP
1	CARDBUS
2	AUDIO
3	MINIPCI ,1394



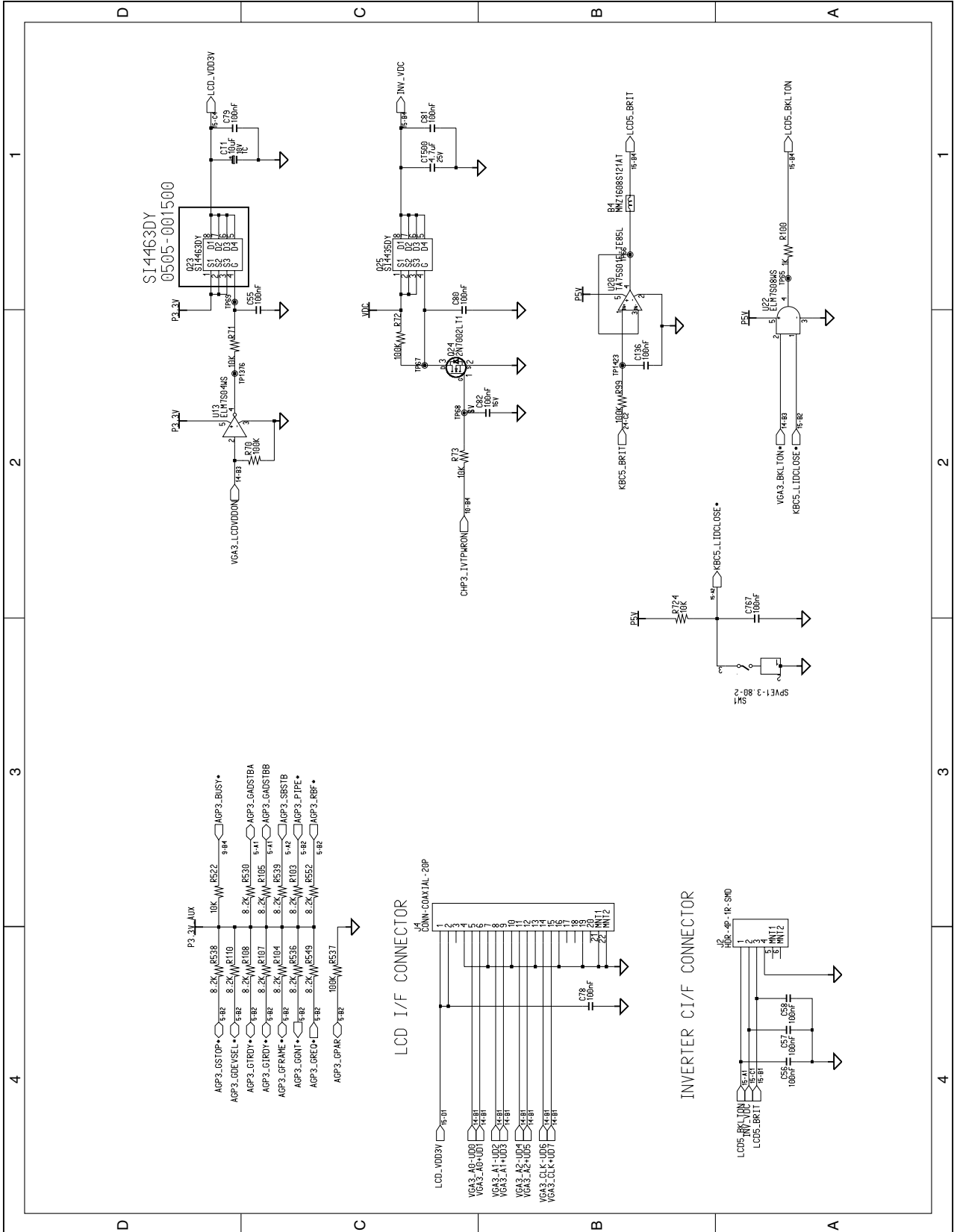
6-1-1(I) System Main Board Schematic Sheet 13 of 41(S3 Savage ix-1)



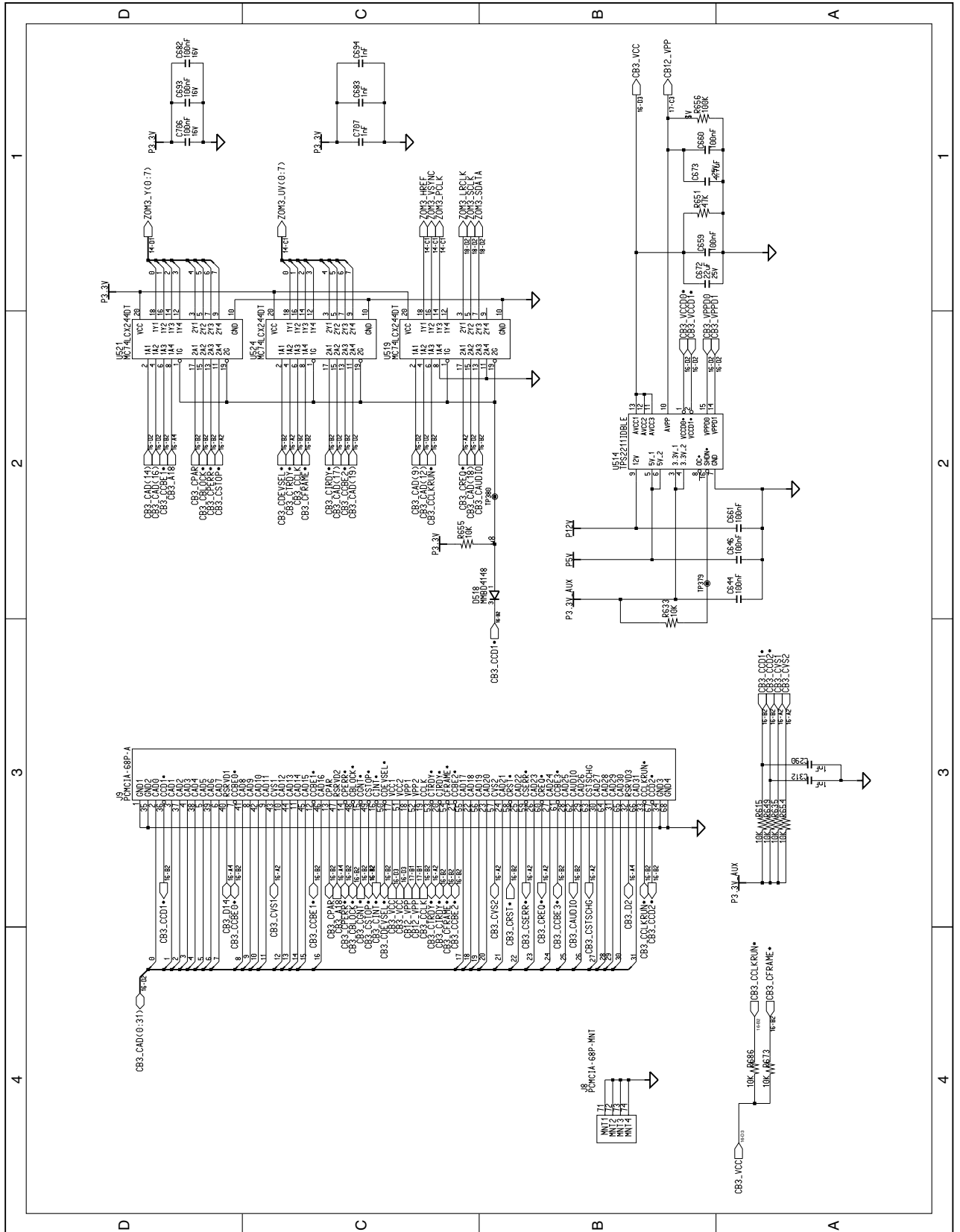
6-1-1(m) System Main Board Schematic Sheet 14 of 41(S3 Savage ix-2)



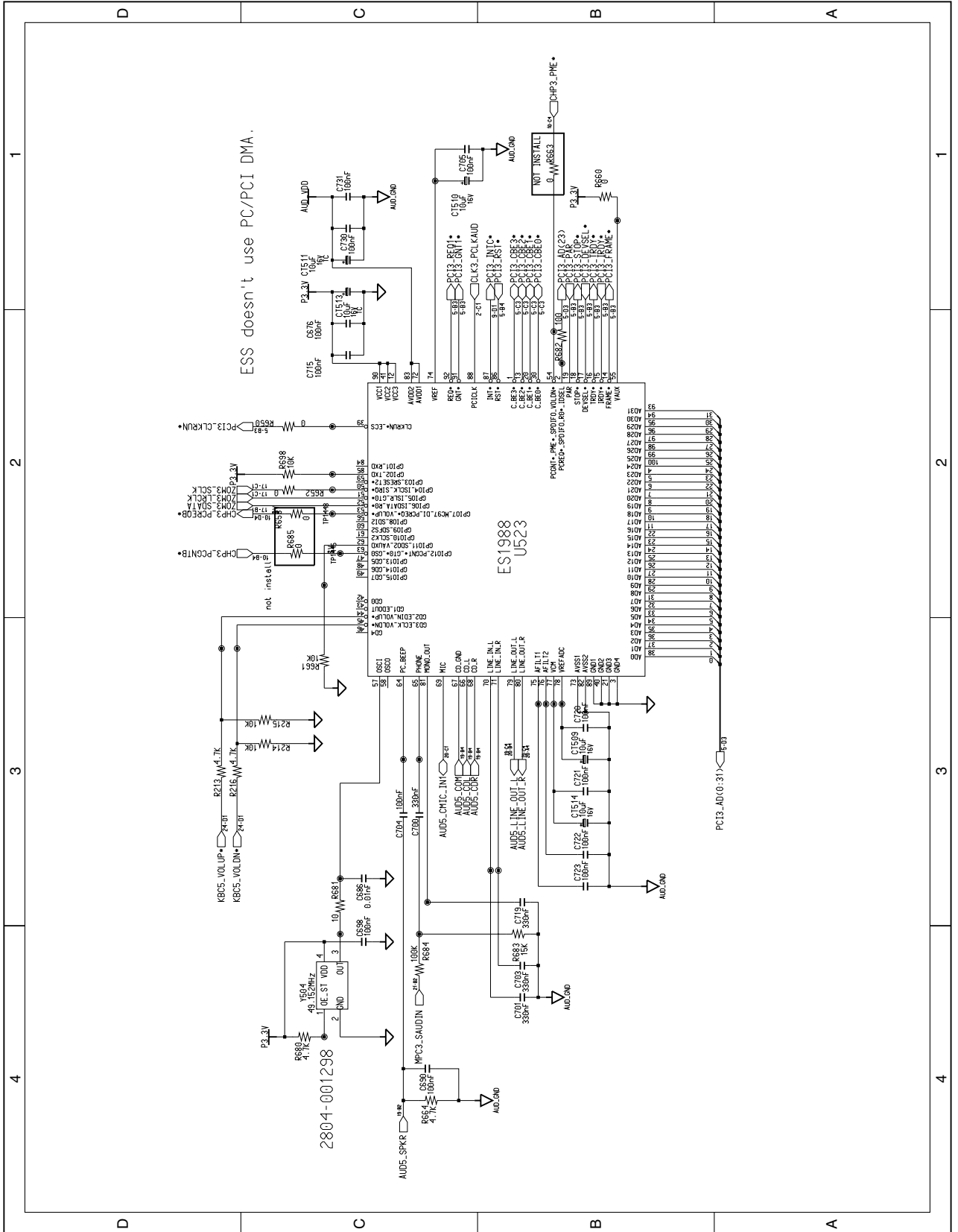
6-1-1(n) System Main Board Schematic Sheet 15 of 41(LCD VGA logics)



6-1-1(p) System Main Board Schematic Sheet 17 of 41(CardBus Socket & Power)



6-1-1(q) System Main Board Schematic Sheet 18 of 41(PCI Audio Controller)



6-1-1(r) System Main Board Schematic Sheet 20 of 41(Audio Speaker out.)

