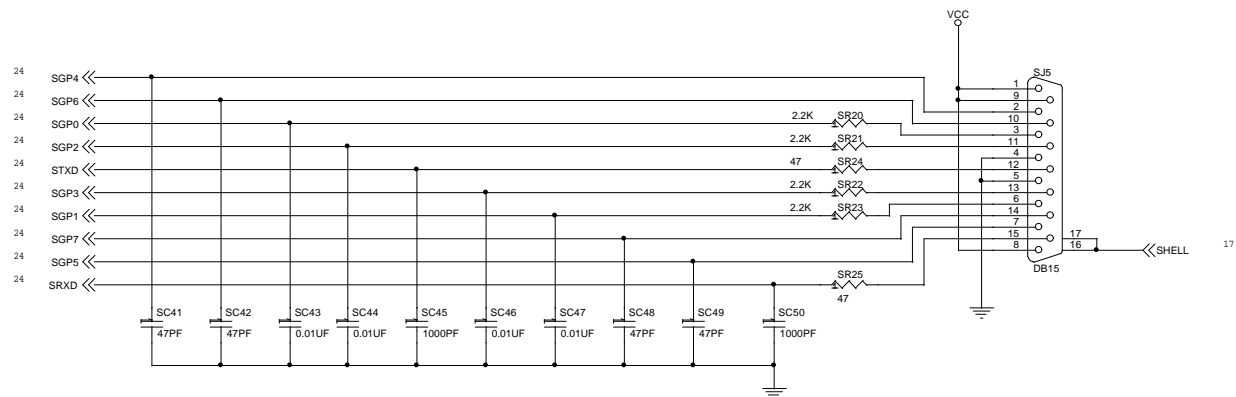
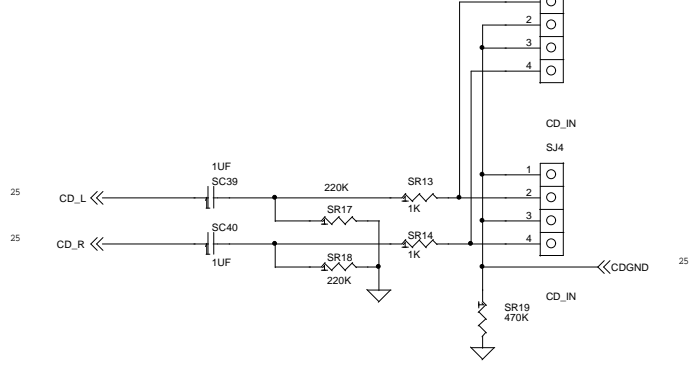
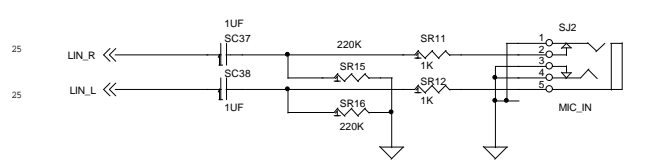
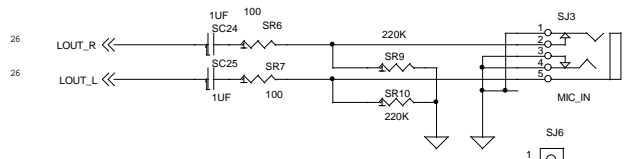
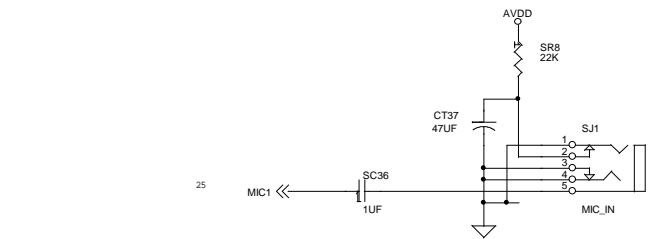


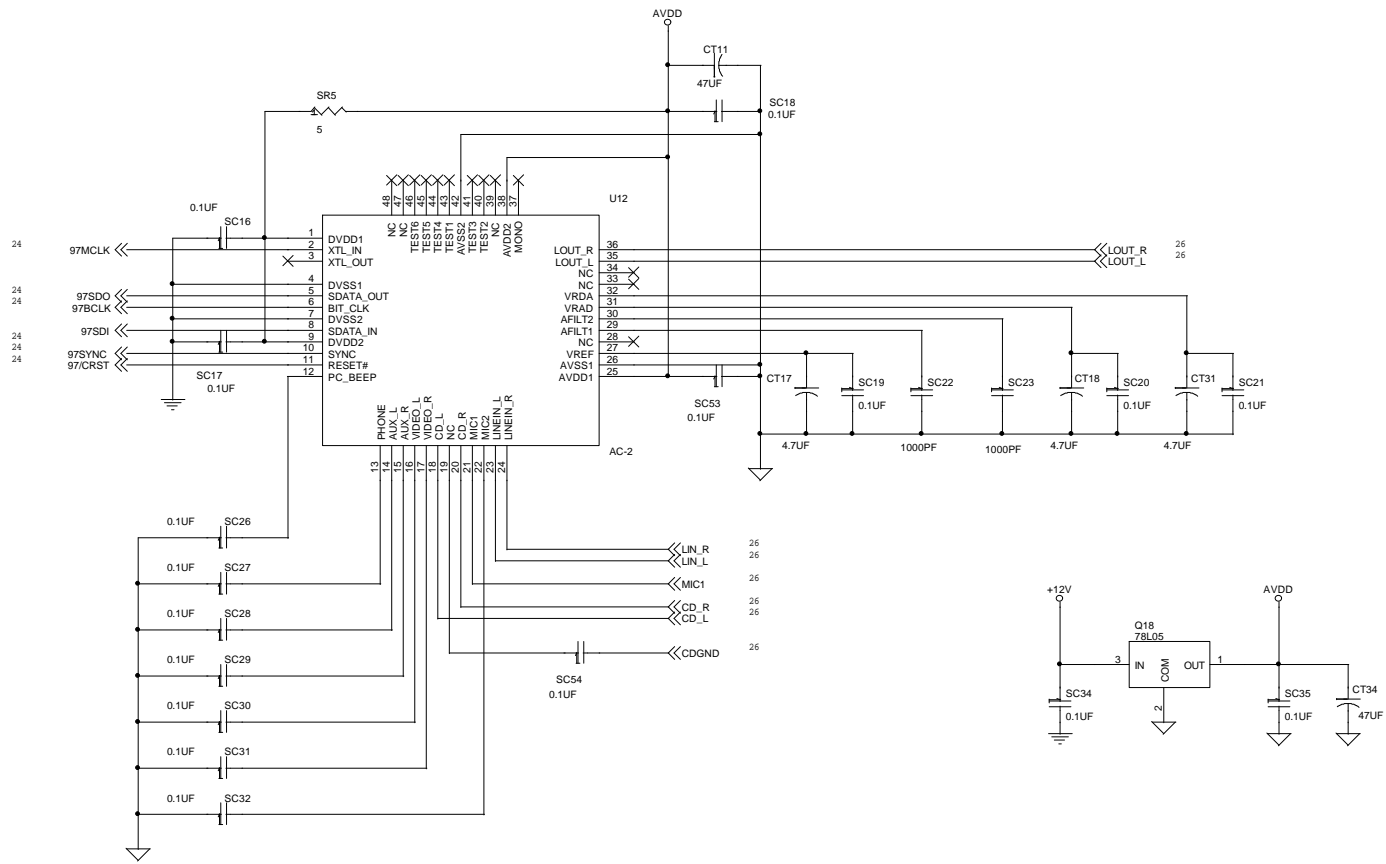
- 113K
- 2A.SCH
- 3A.SCH
- 4A.SCH
- 5A.SCH
- 6A.SCH
- 7A.SCH
- 8A.SCH
- 9A.SCH
- 10A.SCH
- 11A.SCH
- 12A.SCH
- 13A.SCH
- 14A.SCH
- 15A.SCH
- 16A.SCH
- 17A.SCH
- 18A.SCH
- 19A.SCH
- 20A.SCH
- 21A.SCH
- 22A.SCH
- 23A.SCH
- 24A.SCH
- 25A.SCH
- 26A.SCH

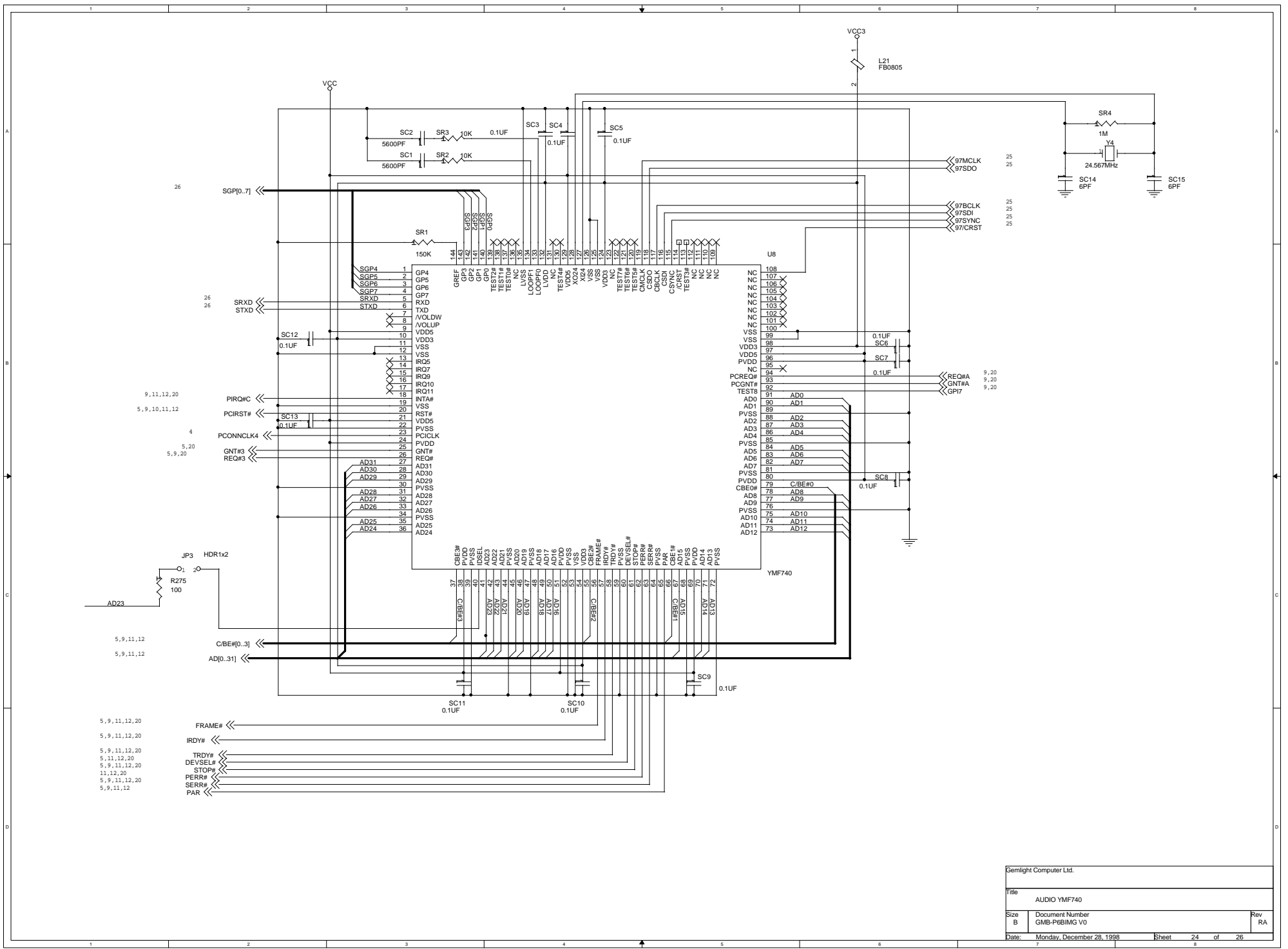
GMB-P6BIMG V0 RA
G1A-0-01 V0.01

Gemight Computer Ltd.			
Title BLOCK DIAGRAM			
Size C	Document Number GMB-P6BIMG V0	Rev RB	
Date Monday, December 28, 1998	Sheet 1	of 26	

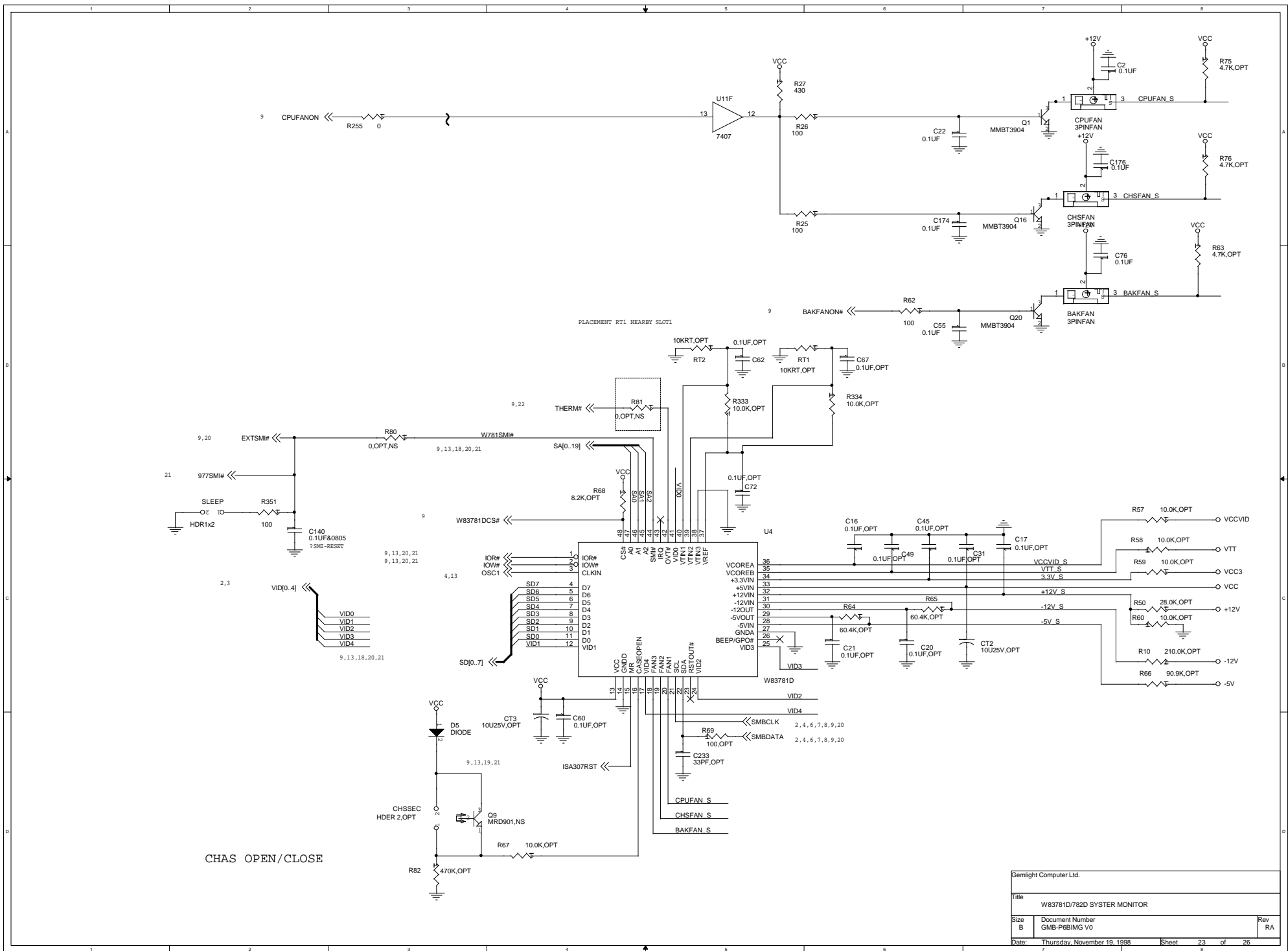


Semlight Computer Ltd.		
Title AC-2 I/O & GAME PORTS		
Size B	Document Number GMB-P&B/ING V0	Rev RB
Date: Monday, December 28, 1998	Sheet 26	of 26



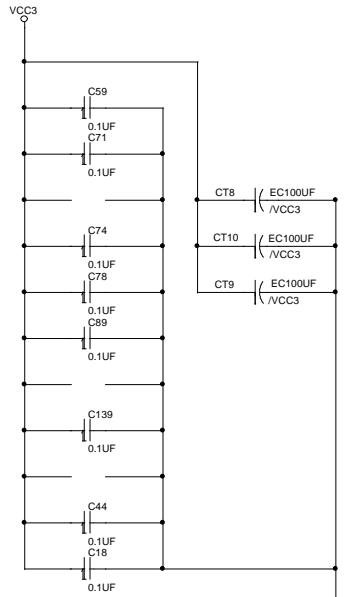


Semlight Computer Ltd.		
Title AUDIO YMF740		
Size B	Document Number GMB-P6B/INC V0	Rev RA
Date: Monday, December 28, 1998	Sheet 24	of 26

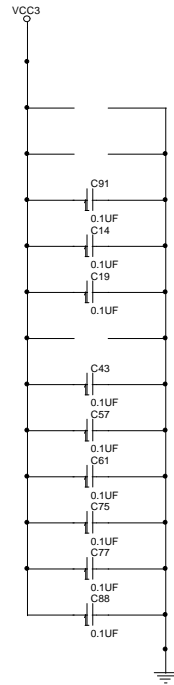


Semlight Computer Ltd.			
Title W83781D/782D SYSTEM MONITOR			
Size	Document Number	Rev	
B	GMB-P6B/IMG V0	23	RA
Date:	Thursday, November 19, 1998	Sheet	of 26

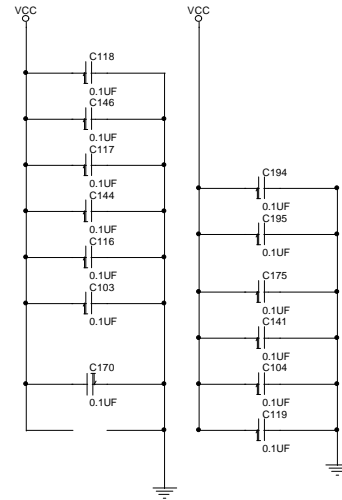
DIMM DECOUPLING



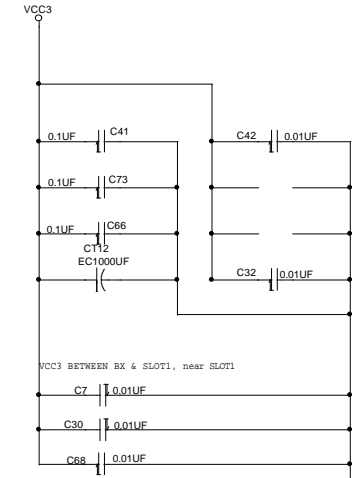
3.3V DECOUPLING



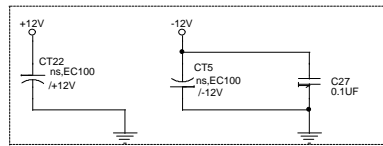
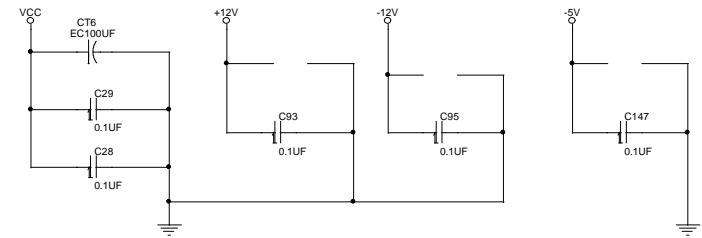
5V DECOUPLING
TTL & IC



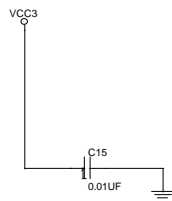
BX DECOUPLING (2X4CORN)



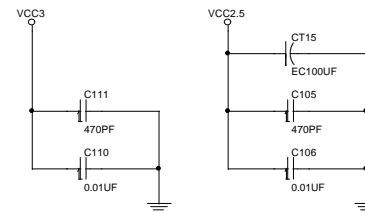
POWER DECOUPLING



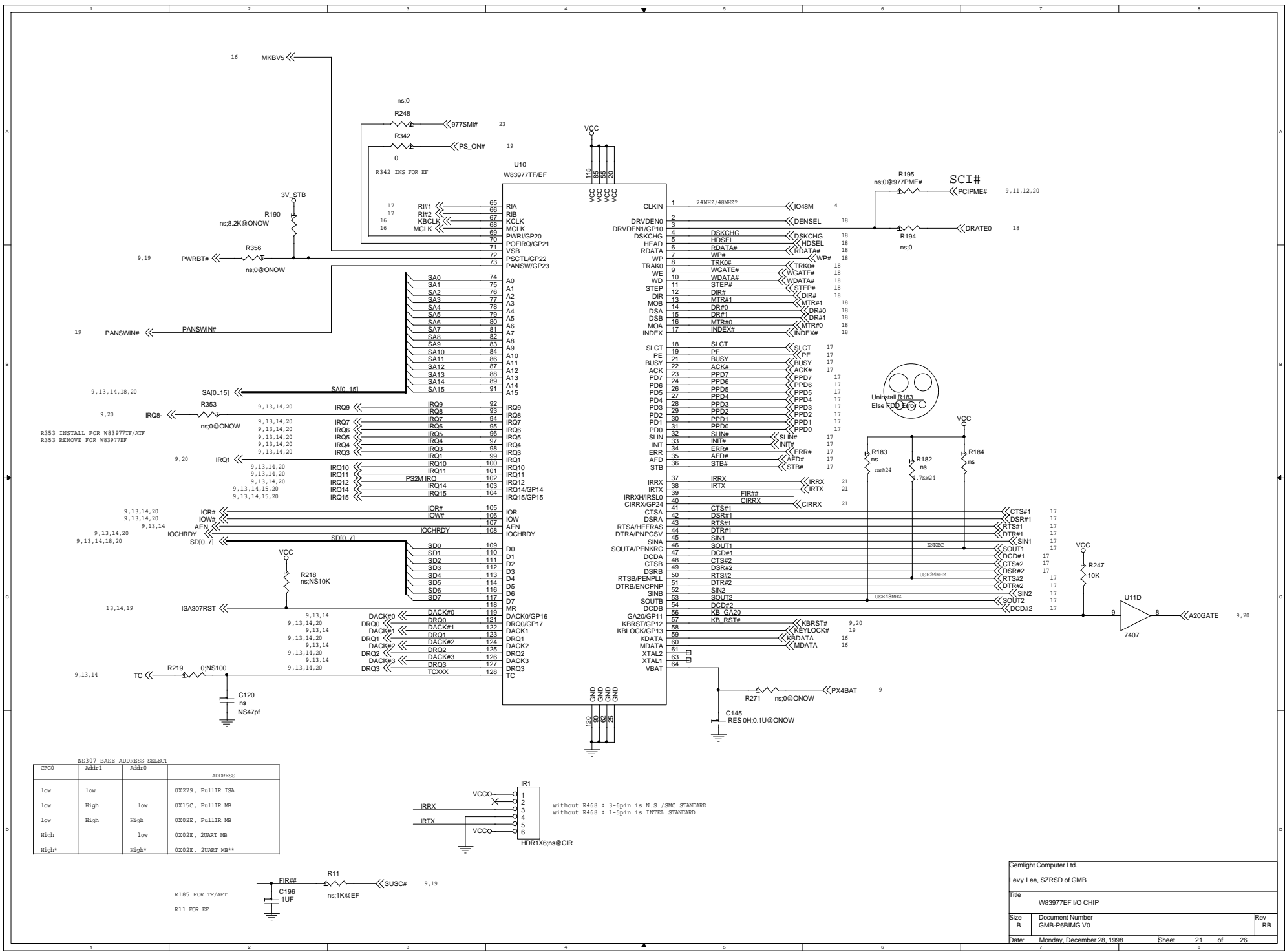
CKBF DECOUPLING



CK100 DECOUPLING

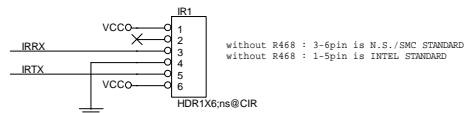


Gemlight Computer Ltd.		
Levy Lee, SZRSD of GMB		
Title 443BX DIMM VCC3/VCC/CLOCK/VTT Decoupl		
Size B	Document Number GMB-P&B/INC V0	Rev RA
Date: Monday, December 28, 1998	Sheet 22	of 23

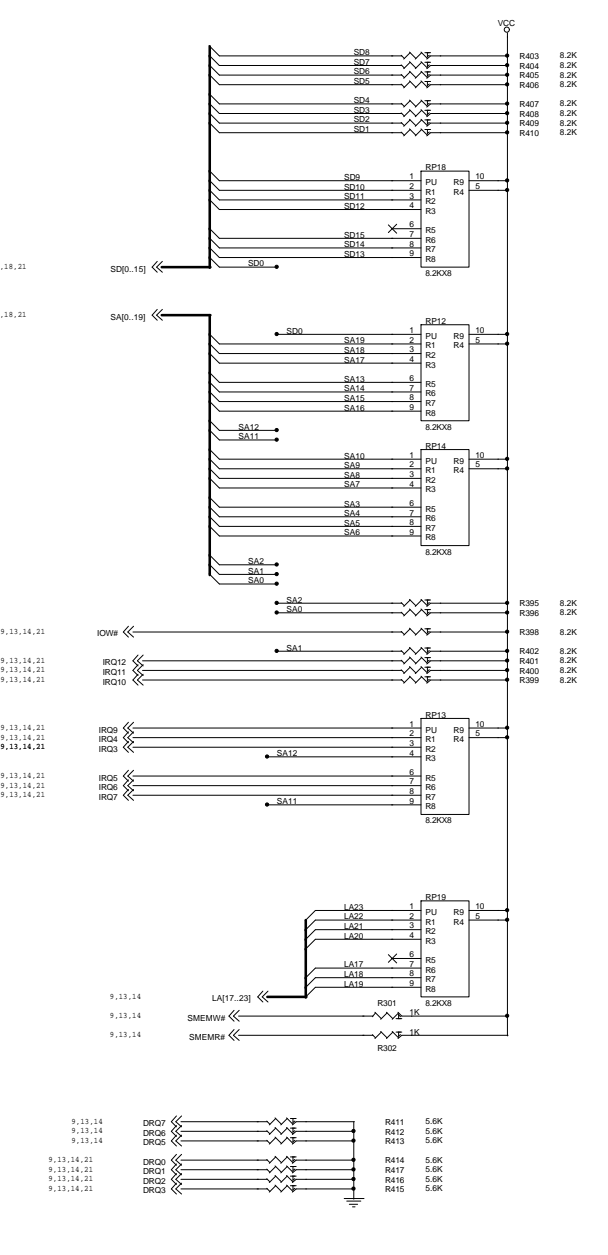
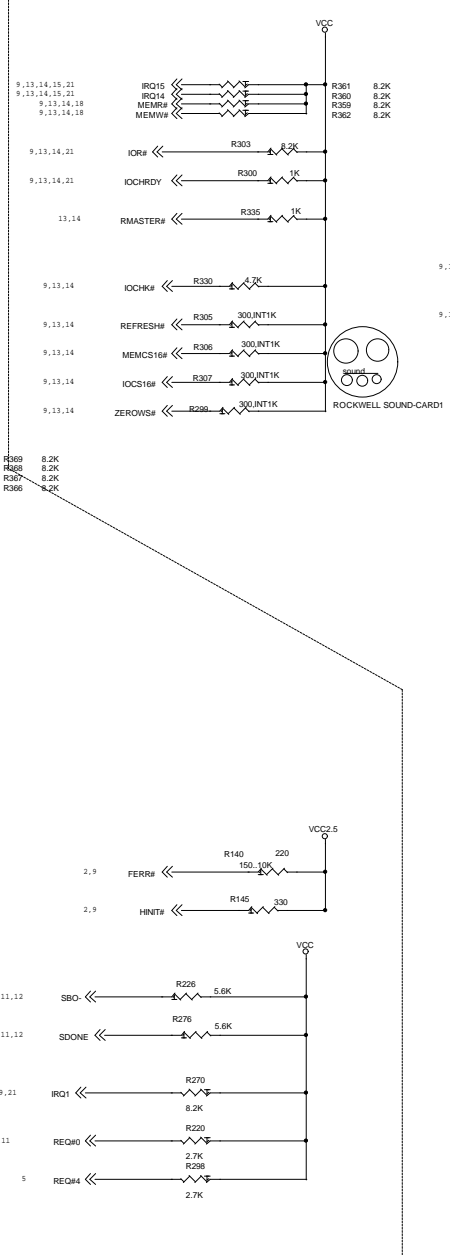
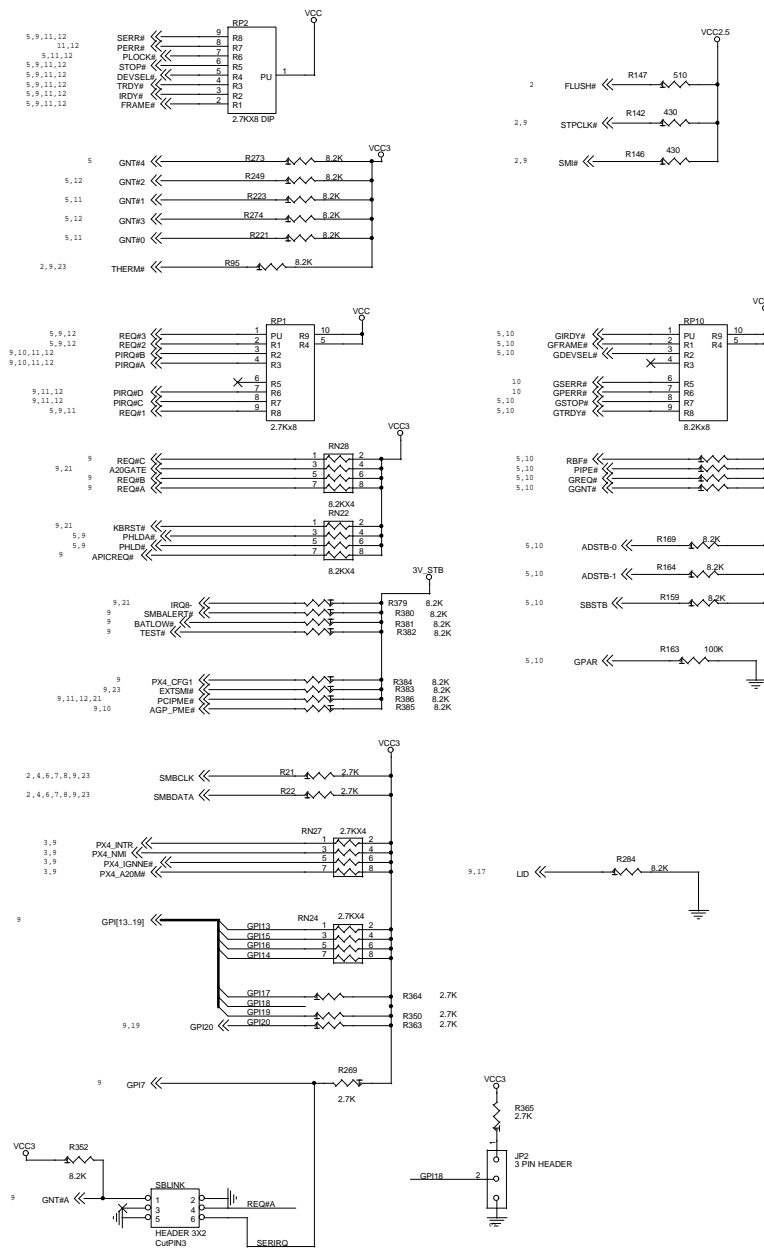


NS307 BASE ADDRESS SELECT

CPGO	Addr1	Addr0	ADDRESS
low	low	low	0X279, FullIR ISA
low	High	low	0X15C, FullIR MB
low	High	High	0X02E, FullIR MB
High	low	low	0X02E, 2UART MB
High*	High*	High*	0X02E, 2UART MB**



Semlight Computer Ltd.		
Levy Lee, SZRSD of GMB		
Title W83977F I/O CHIP		
Size B	Document Number GMB-P8B/ING V0	Rev RB
Date: Monday, December 28, 1998	Sheet 21	of 26



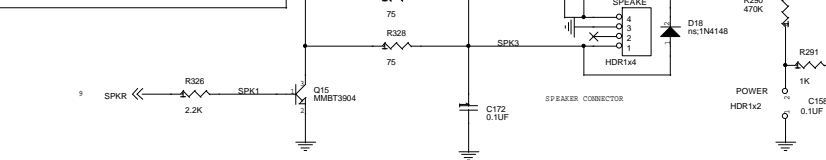
CHANGE Page.20 pullup/down option to other GPI pin

Gemight Computer Ltd.			
Title: PIIX4 PCI ISA AGP CPU Terminator			
Size: C	Document Number: GMB-PBIMG V0	Rev: RA	
Date: Thursday, November 19, 1998	Sheet: 20	of 26	

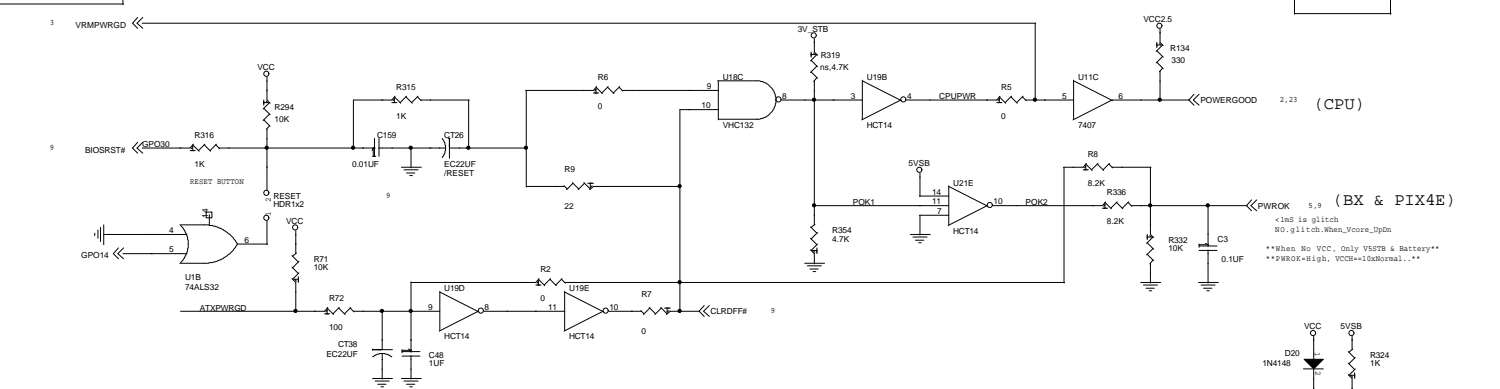
POWER SUPPLY



SPEAKER CONN.

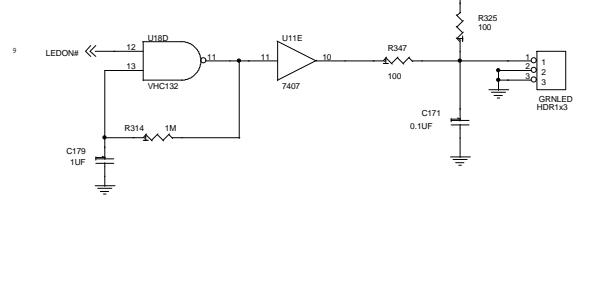
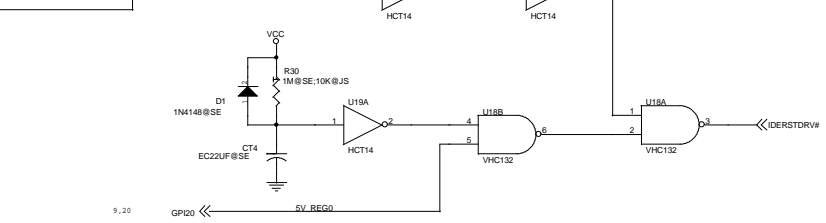


RESET



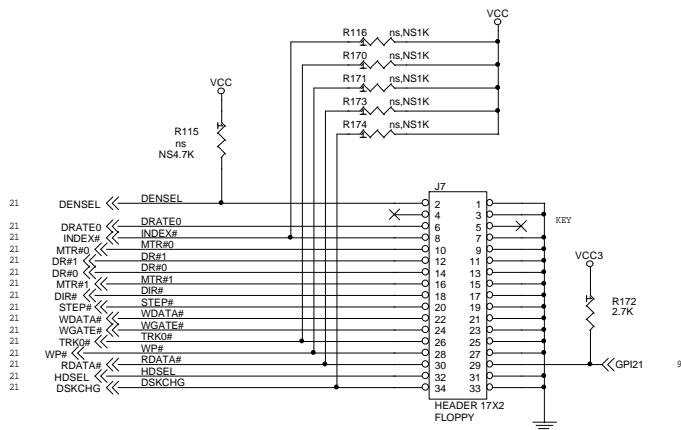
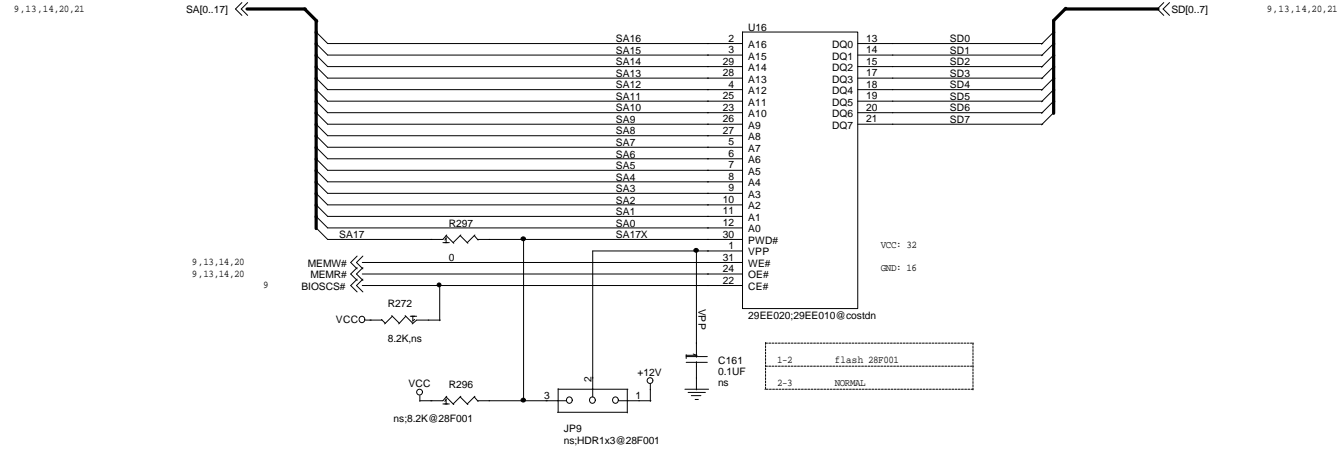
@SE:AT SpieZ
@JS:AT JmpSET

IDE-RESET



Gemight Computer Ltd.			
Title: POWER, SPEAKER, HDLED			
Size: C	Document Number: GMB-P8BIMG V0	Rev: RA	
Date: Monday, December 28, 1998	Sheet: 19	of: 26	

FLASH BIOS

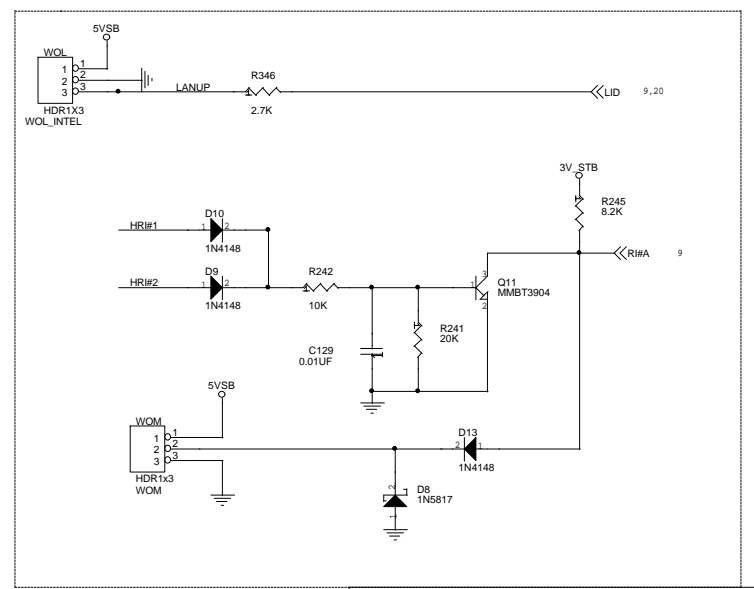
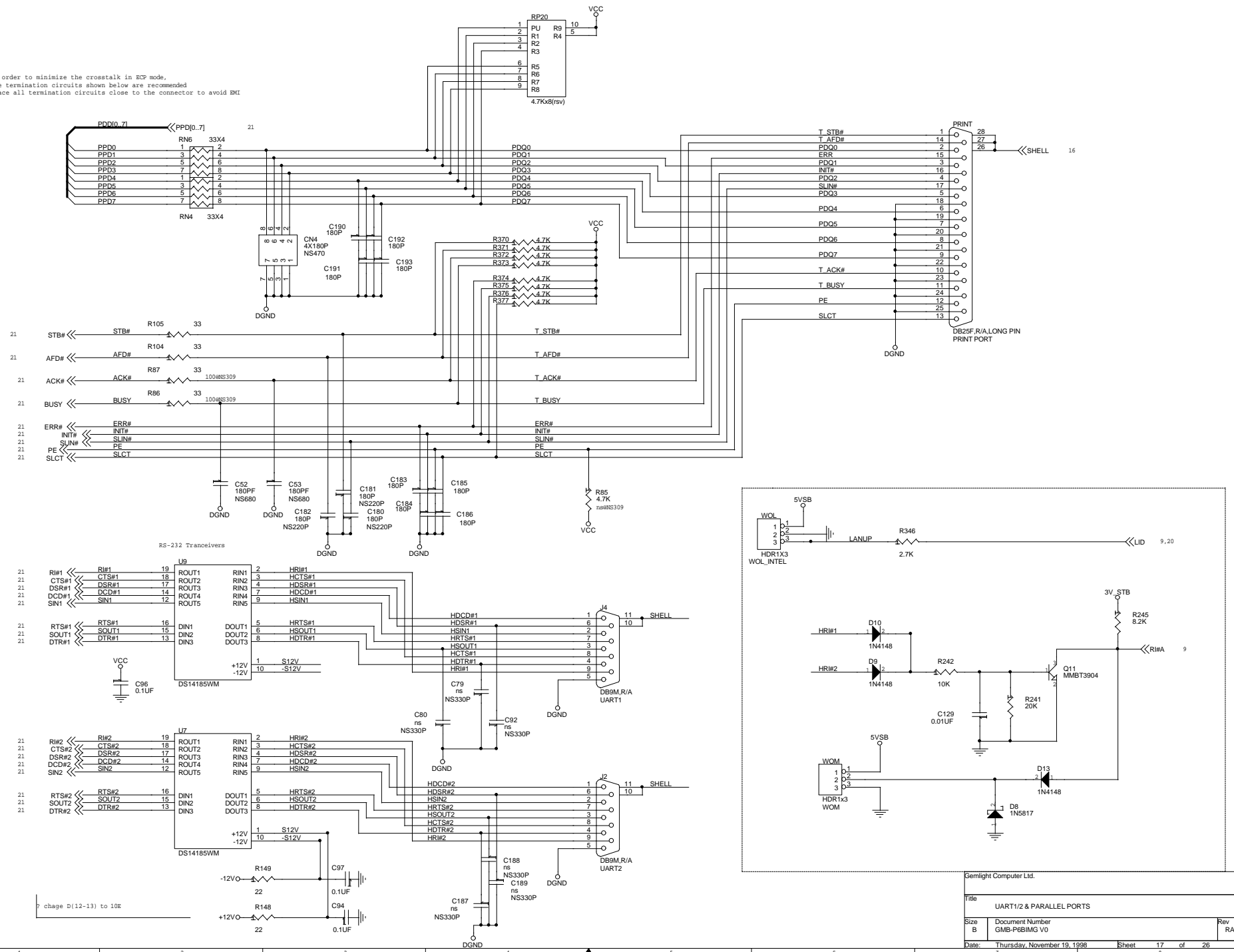


* Connected to GPI21 of the PIIX4 for BIOS detection of a floppy drive.

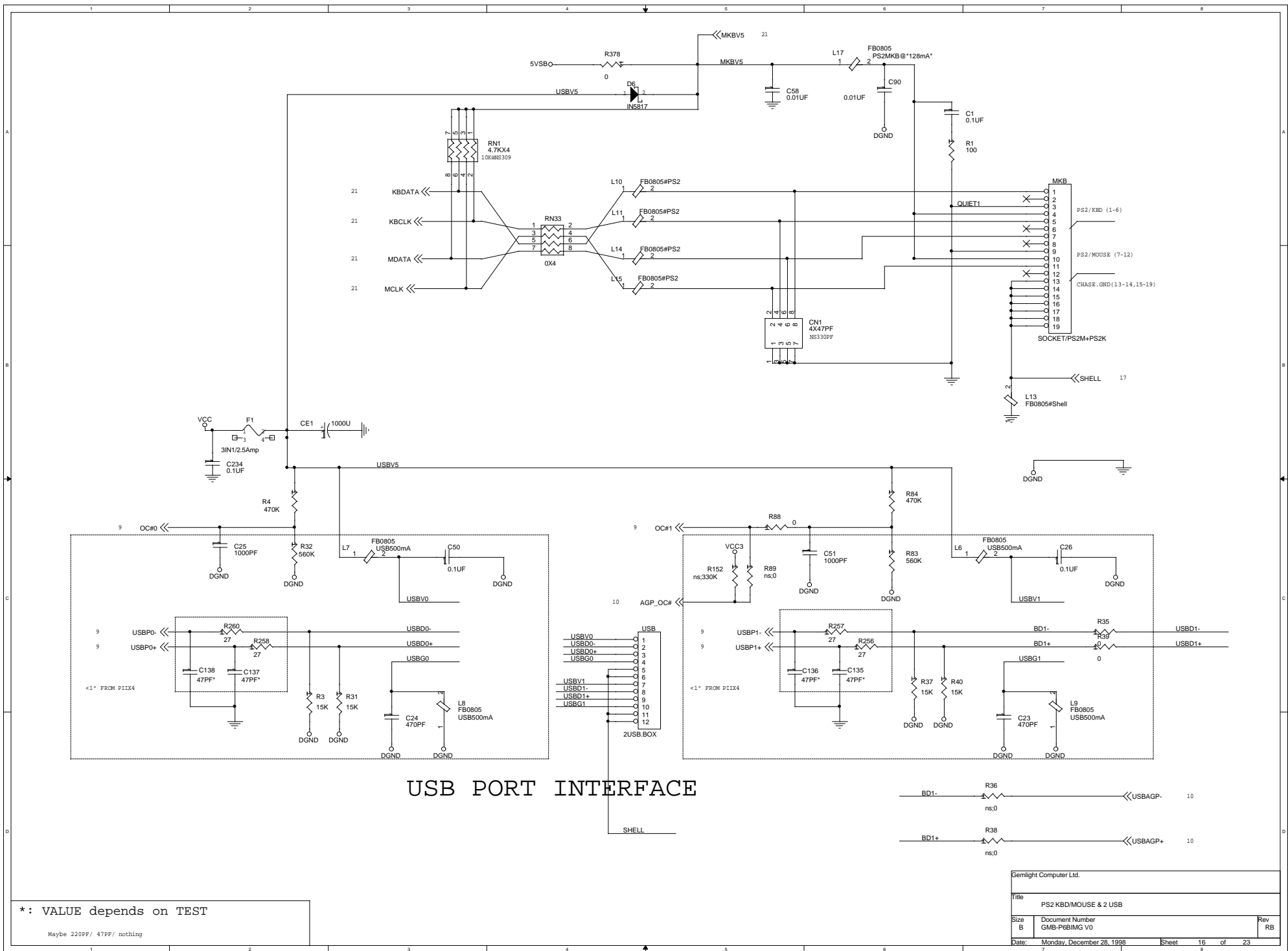
Media Sense and DRATE Options
Determined by Floppy Drive Model
and Preference of System Designer

Semlight Computer Ltd.		
Title FLOPPY & FLASH BIOS		
Size B	Document Number GMB-P6B/INC V0	Rev RA
Date: Thursday, November 19, 1998	Sheet 18	of 26

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.



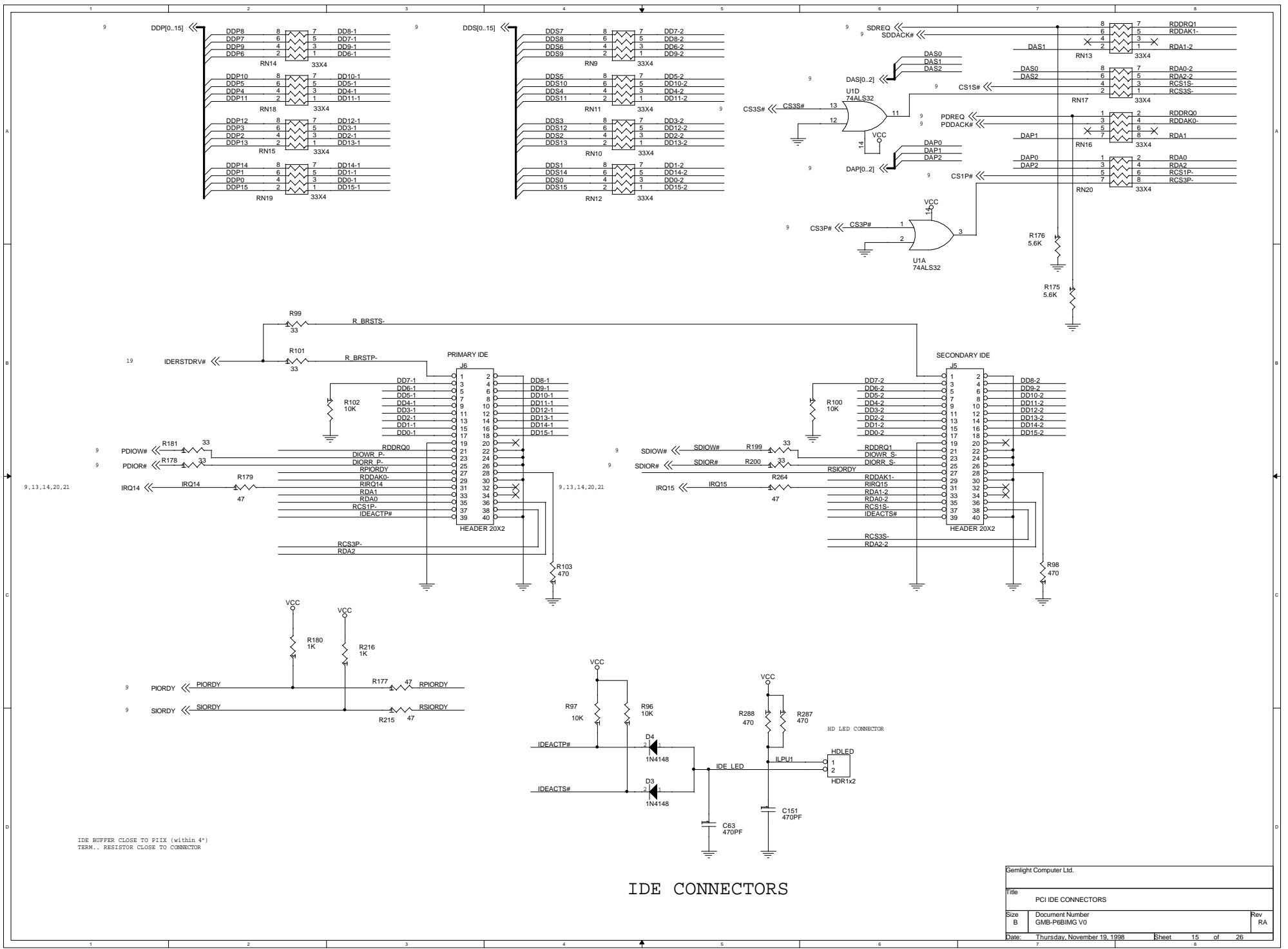
Semilight Computer Ltd.		
Title UART1/2 & PARALLEL PORTS		
Size B	Document Number GMB-P&B/ING V0	Rev RA
Date: 7	Thursday, November 19, 1998	Sheet 17 of 26



USB PORT INTERFACE

*: VALUE depends on TEST
 Maybe 220PF/ 47PF/ nothing

Semlight Computer Ltd.		
Title PS2 KBD/MOUSE & 2 USB		
Size B	Document Number GMB-P8B/INC V0	Rev RB
Date: Monday, December 28, 1998	Sheet 16	of 23

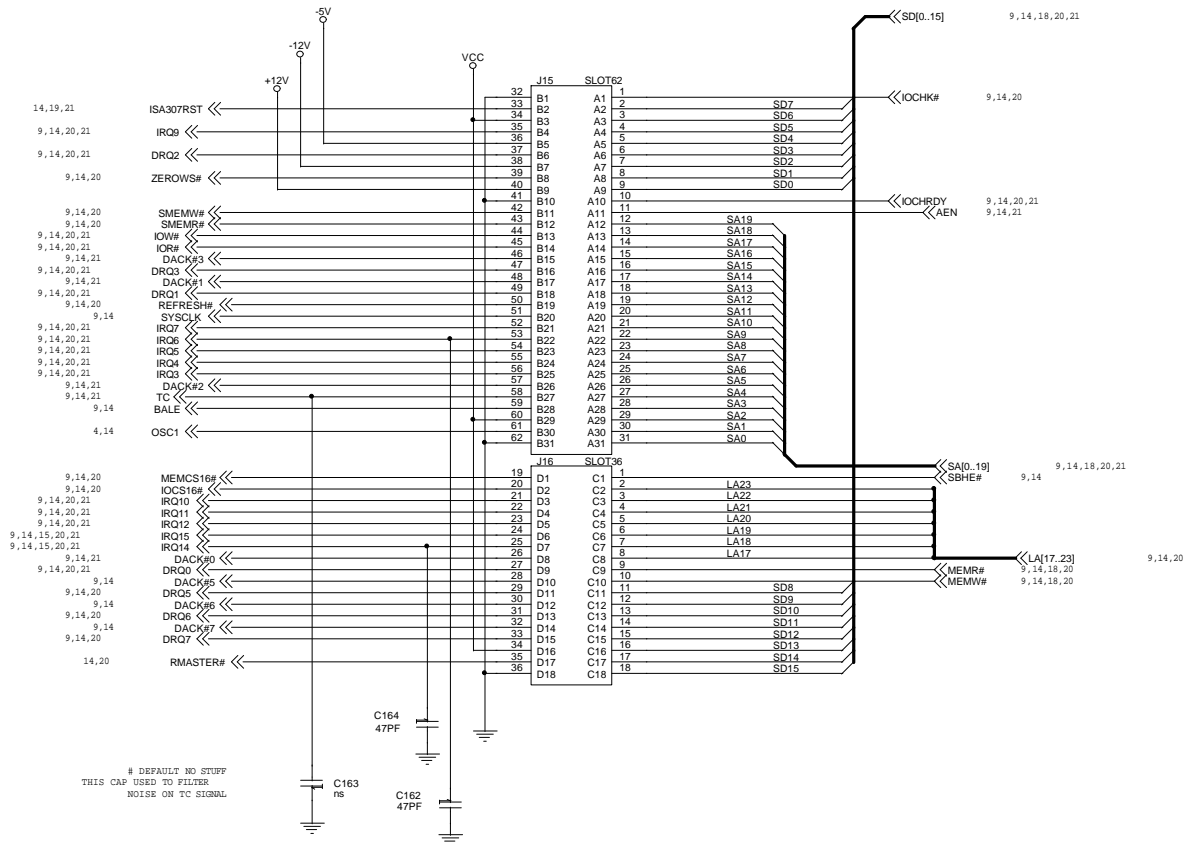


IDE BUFFER CLOSE TO PIIX (within 4")
 TERM. RESISTOR CLOSE TO CONNECTOR

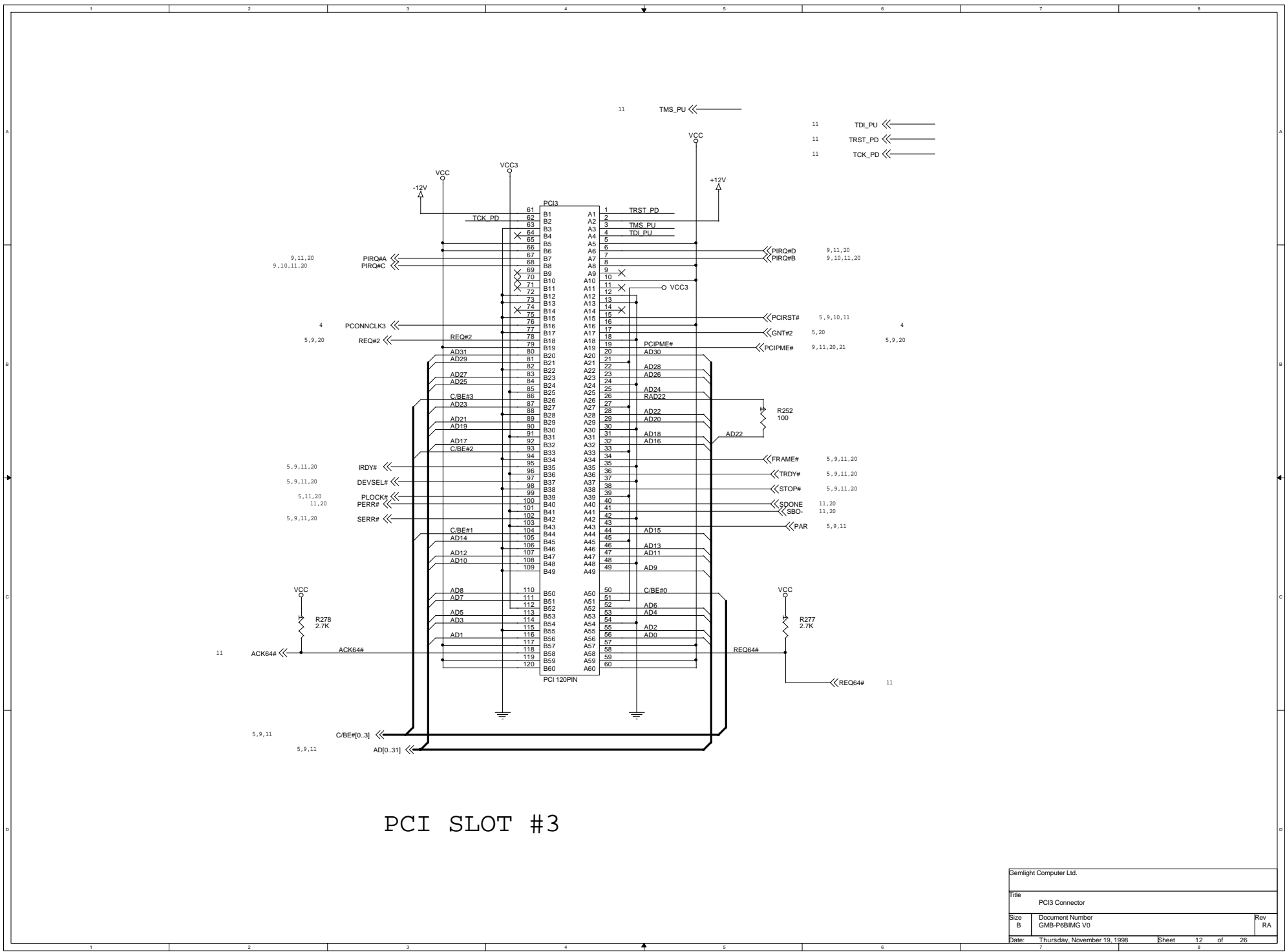
IDE CONNECTORS

Semlight Computer Ltd.		
Title: PCI IDE CONNECTORS		
Size B	Document Number: GMB-P6B/INC V0	Rev RA
Date: Thursday, November 19, 1998	Sheet 15	of 26

ISA SLOT 1

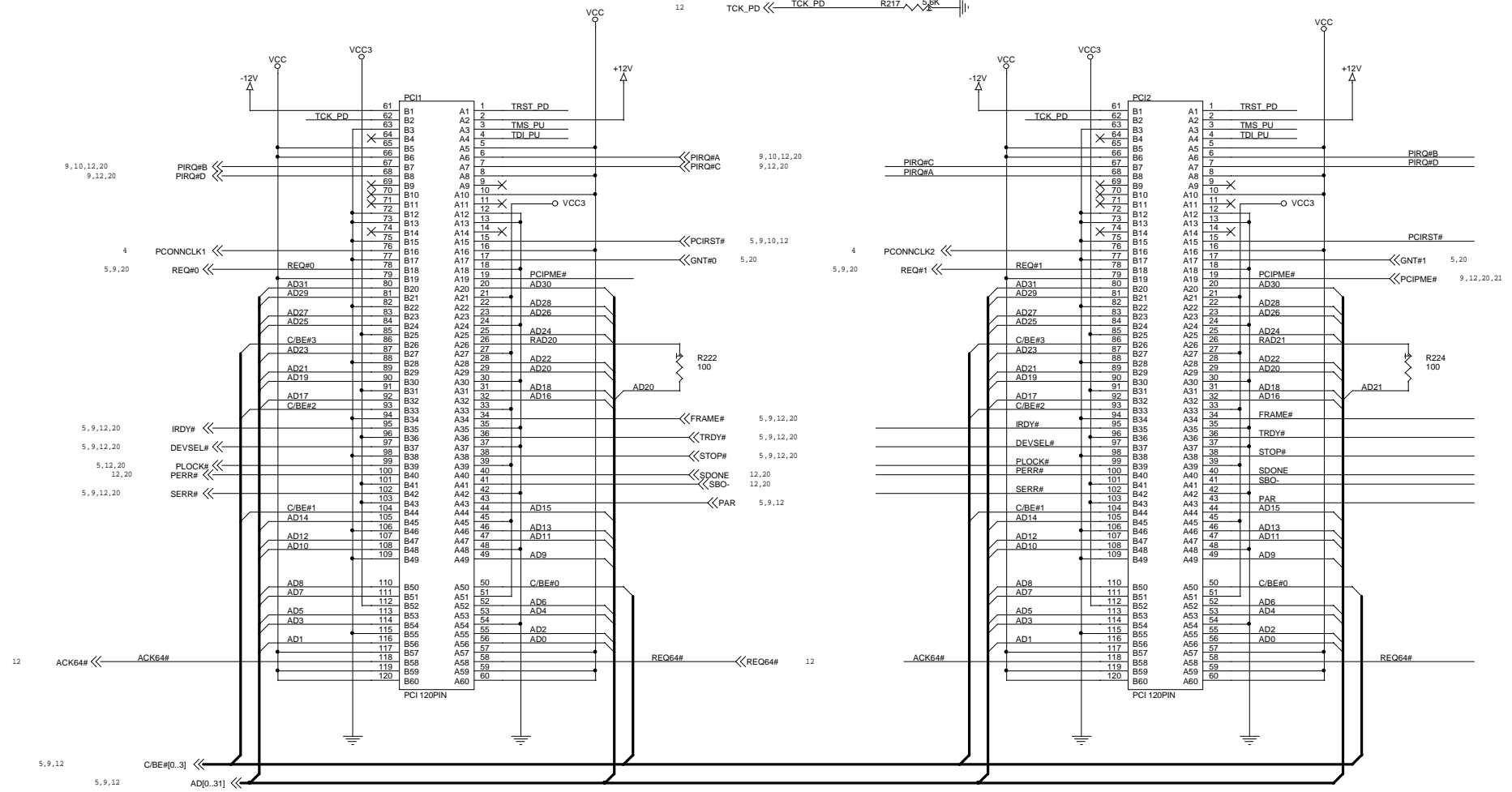
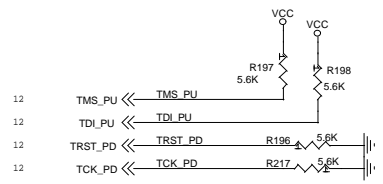


DEFAULT NO STUFF
THIS CAP USED TO FILTER
NOISE ON TC SIGNAL



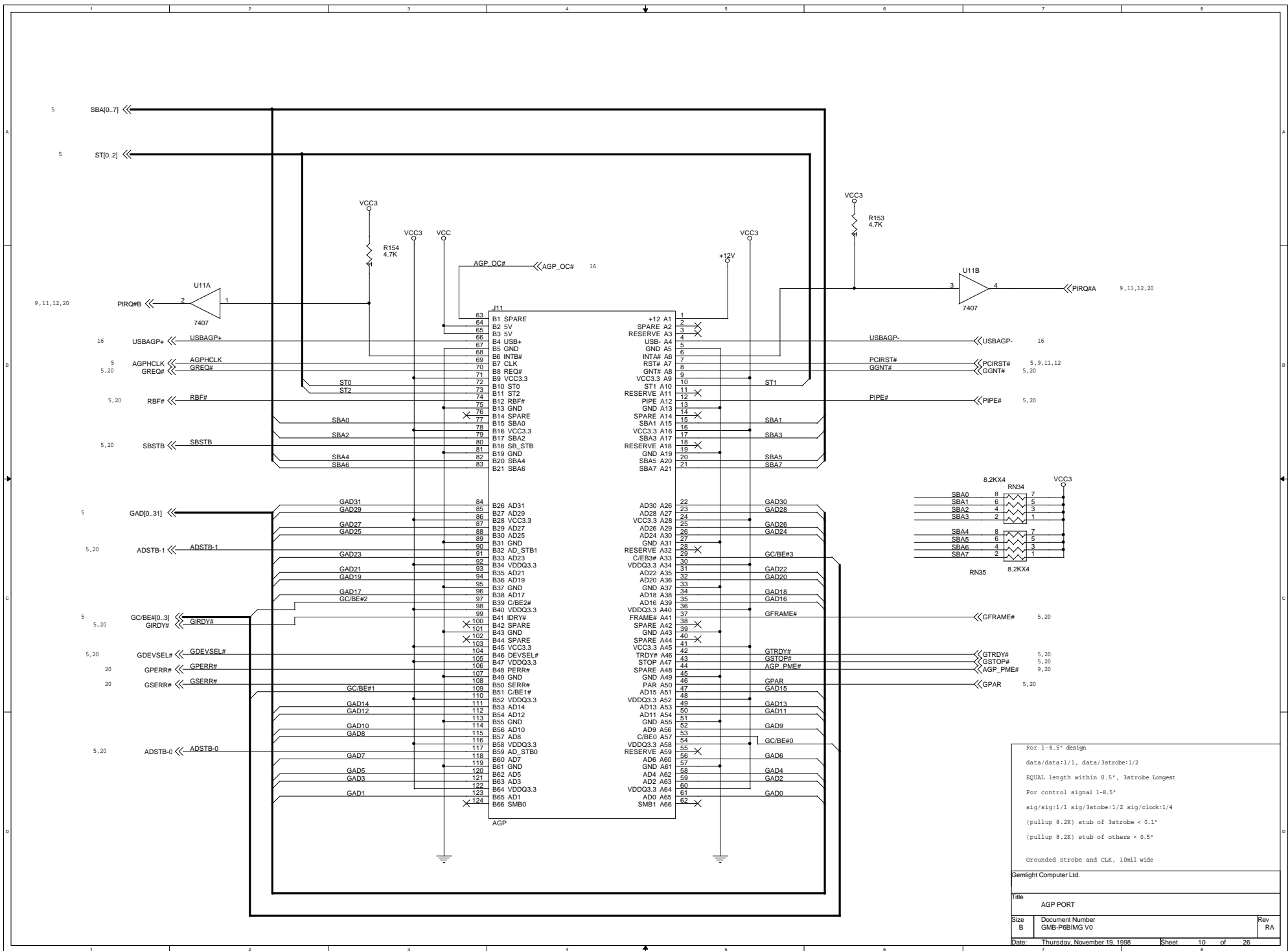
PCI SLOT #3

Semlight Computer Ltd.		
Title PCI3 Connector		
Size B	Document Number GMB-P6B/ING V0	Rev RA
Date: Thursday, November 19, 1998	Sheet 12	of 26



PCI SLOTS #1 & #2

Semlight Computer Ltd.		
Title: PCI1 & 2 Connectors		
Size B	Document Number: PCI1 & PCI2 connectors	Rev RA
Date: Thursday, November 19, 1998	Sheet 11	of 26

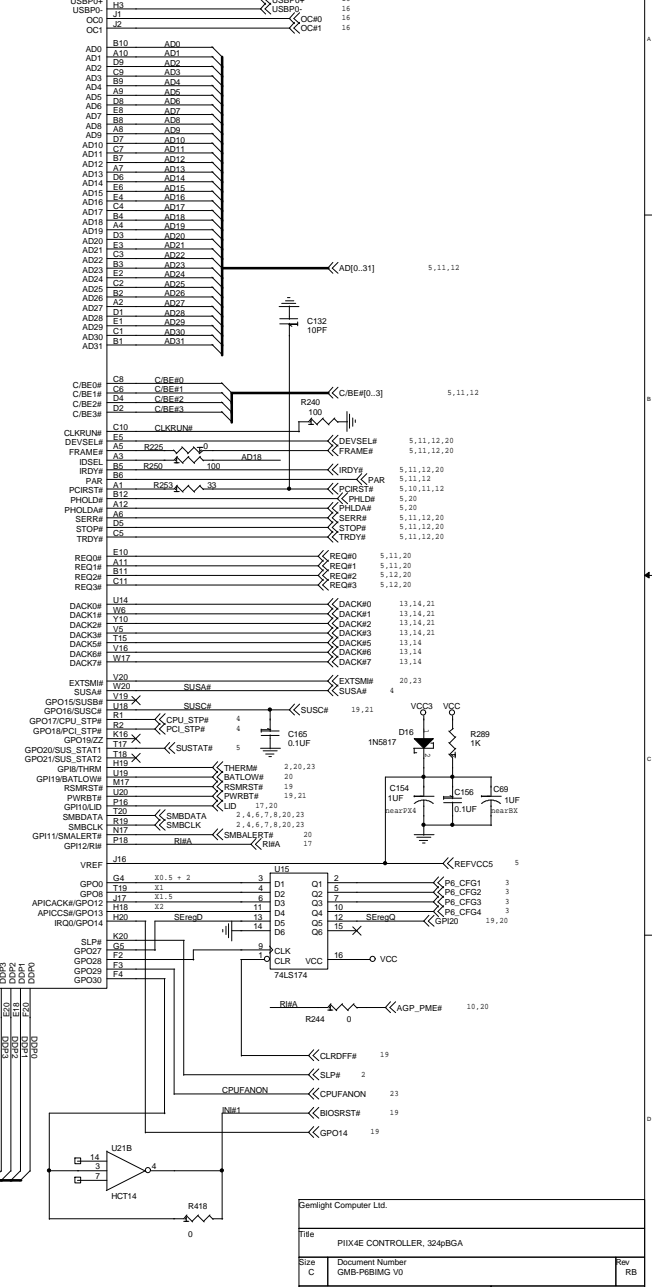
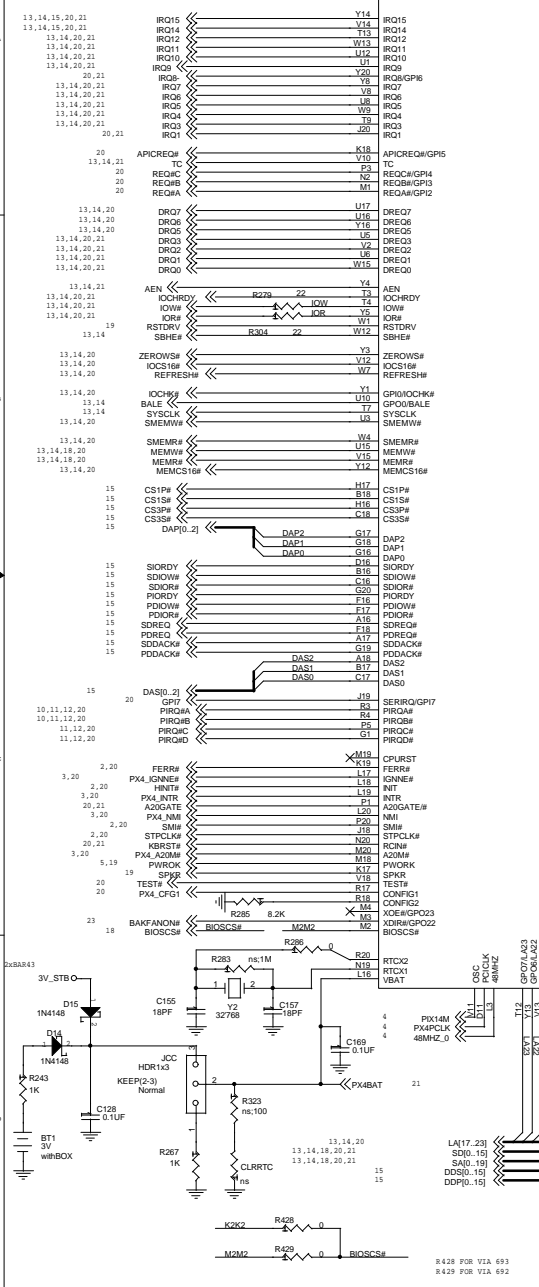
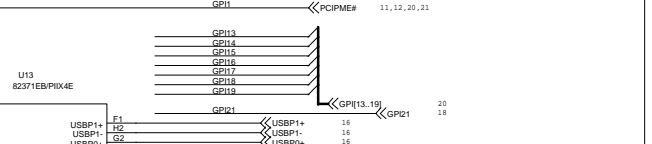
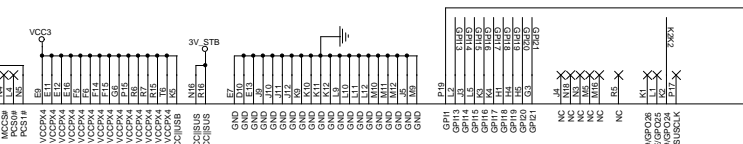


For 1-4.5" design
 data/data:1/1, data/3stroke:1/2
 BQUAL length within 0.5", 3stroke longest
 For control signal 1-8.5"
 sig/sig:1/1 sig/3stroke:1/2 sig/clock:1/4
 (pullup 8.2K) stub of 3stroke < 0.1"
 (pullup 8.2K) stub of others < 0.5"
 Grounded Strobe and CLK, 10mil wide

Semlight Computer Ltd.		
Title AGP PORT		
Size B	Document Number GMB-PGB/IMG V0	Rev RA
Date: Thursday, November 19, 1998	Sheet 10	of 26

```

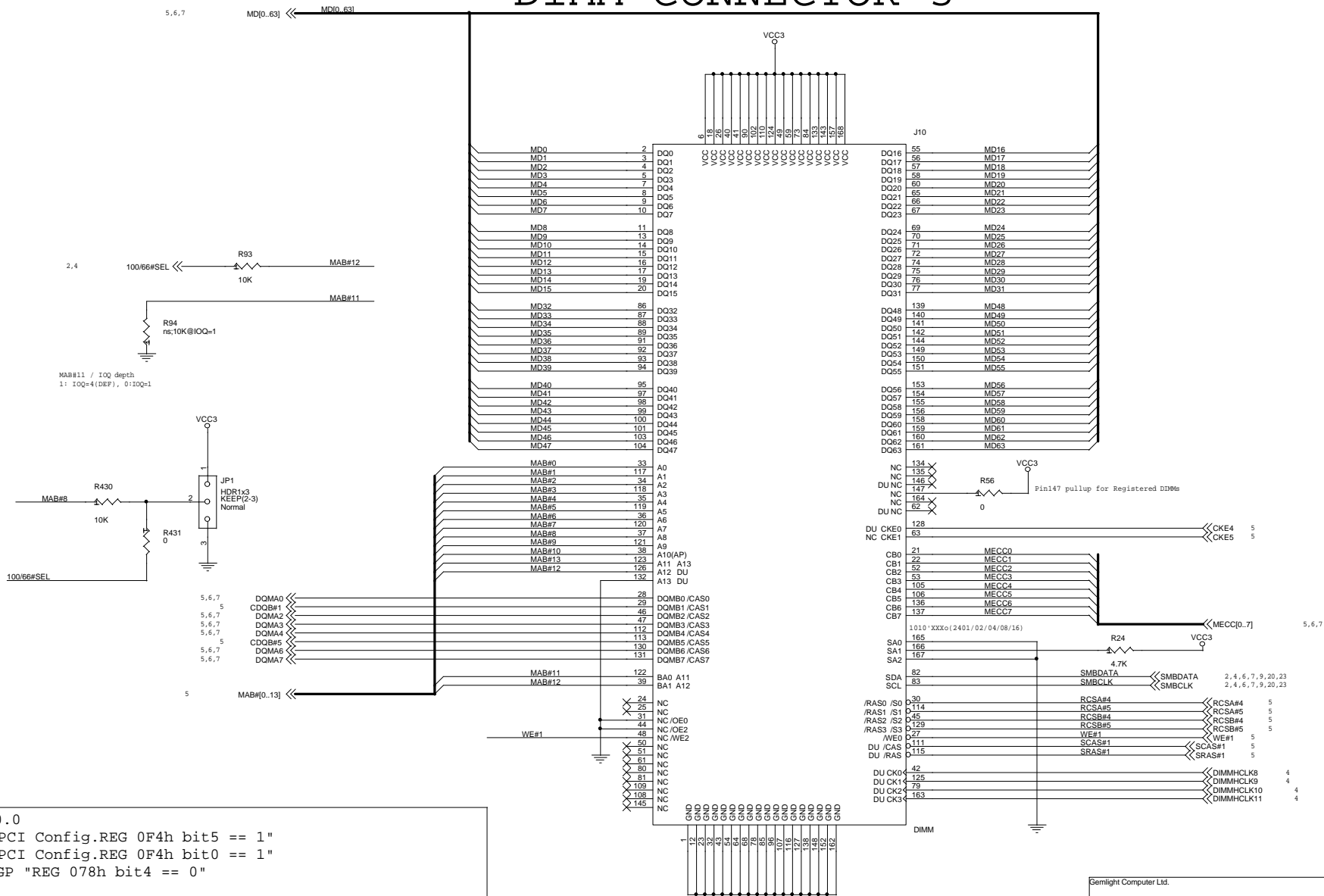
EP0R31=0 (No GPIO1)
EP0R10=15=1
EP0R14=0
EP0R13=0=1
reg. PMBase=34,35,36,37
inst.t. 0. but. 7FFFFFFF
  
```



PIIX4

FAR FROM BX, used it first

DIMM CONNECTOR 3

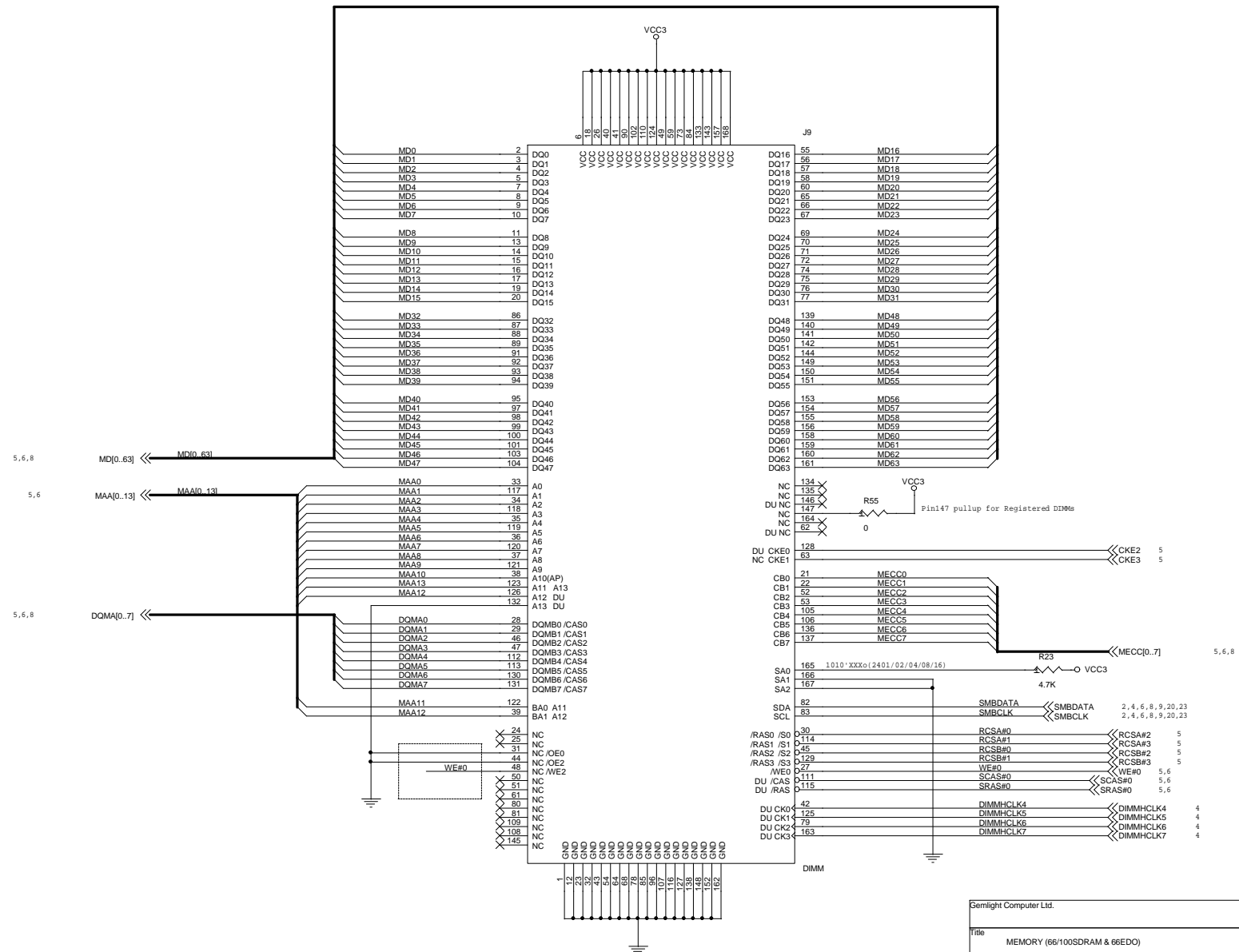


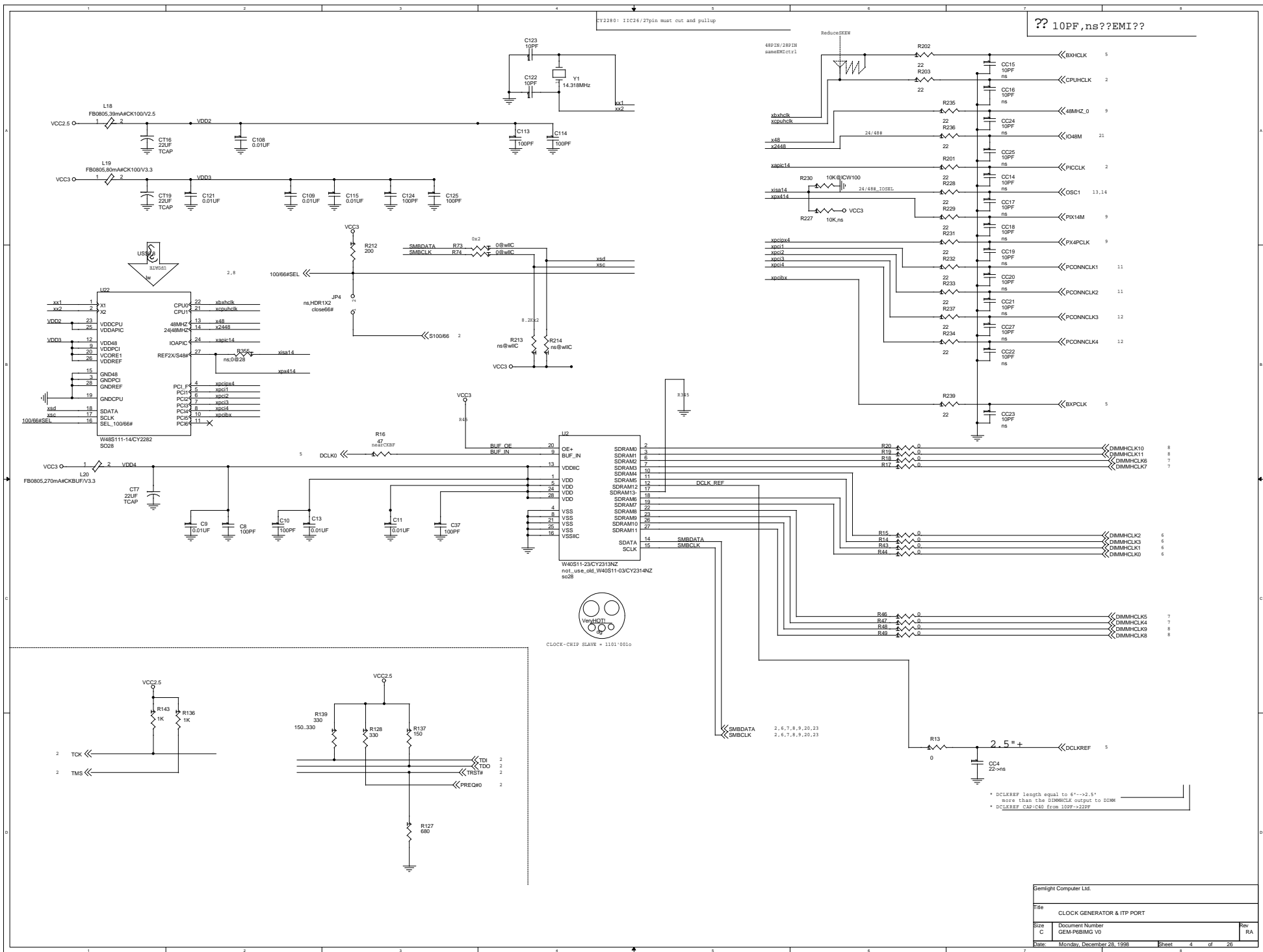
ERRATA v0.0

- 1) set "PCI Config.REG 0F4h bit5 == 1"
- 2) set "PCI Config.REG 0F4h bit0 == 1"
- 3) set AGP "REG 078h bit4 == 0"

MIDDLE

DIMM CONNECTOR 1





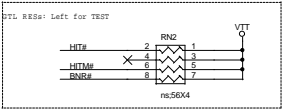
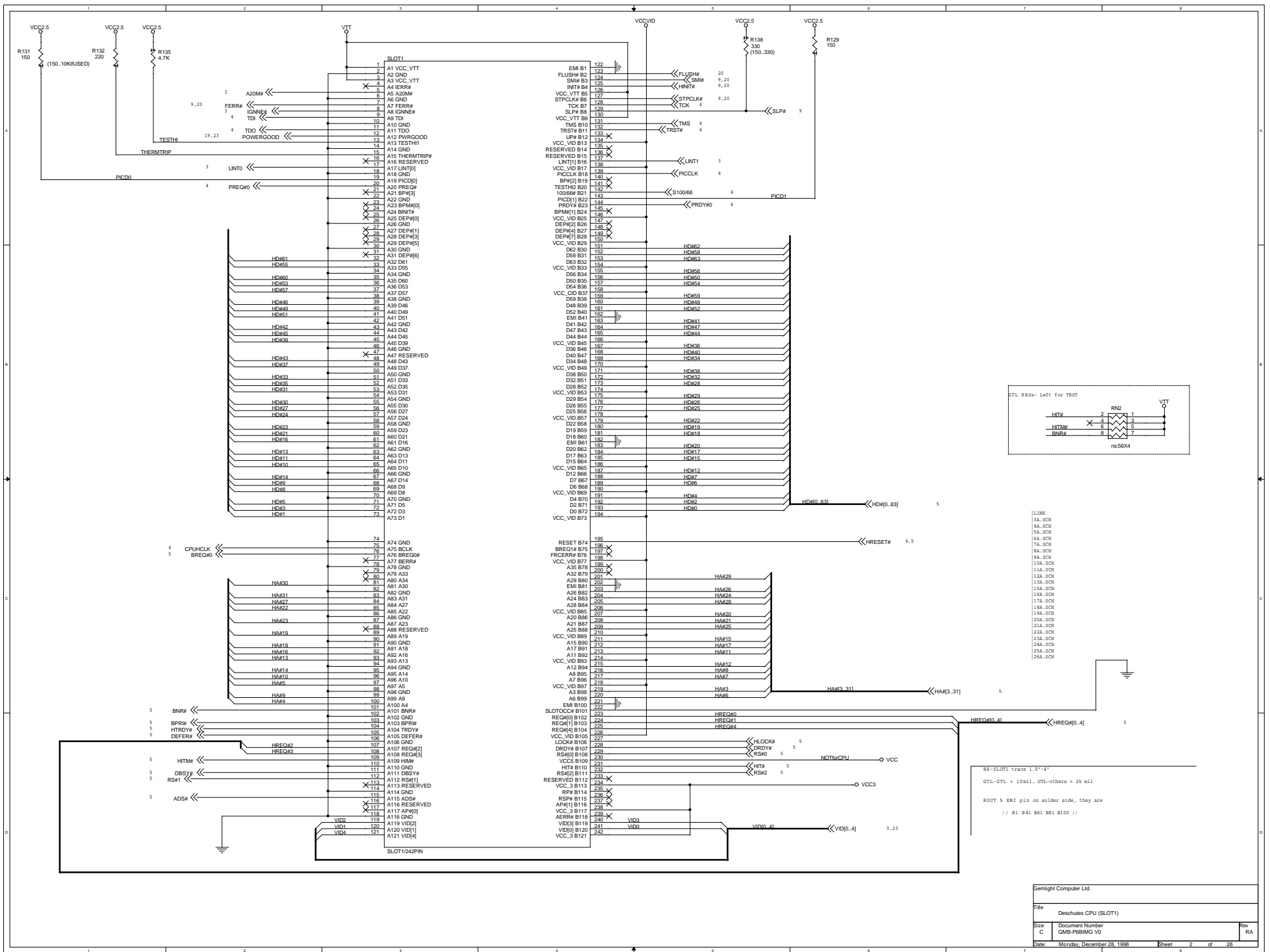
?? 10PF, ns?? EMI??

CY2280: IIC26/27pin must out and pullup

Reduce EMI

* DCLKREF length equal to 6" → 2.5' more than the DIMMHCLK output to DIM8
 * DCLKREF CAB-c40 from 10PF → 23PF

Gemight Computer Ltd.			
Title CLOCK GENERATOR & ITP PORT			
Size C	Document Number GEM-PSBIMG V0	Rev RA	
Date Monday, December 28, 1998	Sheet 4	of 26	



BX-SLOT1 trace 1.5*4"
 GTL-GTL > 10m1, GTL-others > 25 msl
 ROUT 5 EM1 pin on solder side, they are
 // B1 B41 B61 B81 B100 //

Gemmright Computer Ltd.	
Title	Deschutes CPU (SLOT1)
Size	Document Number
C	GMB-P8BIMG.VD
Date:	Monday, December 28, 1998
Sheet	2 of 26
Rev	RA