



P13G V1.0


- 1.FAN2 & FAN3 CHANGE (FOR 83637)
- 2.CO-LAY ALC655
- 3.CO-LAY AGP EXPERS
- 4.ADD CNR
- 5.CHANGE PWM RDS-ON TO DC-R
- 6.ADD EMI AND FUSE

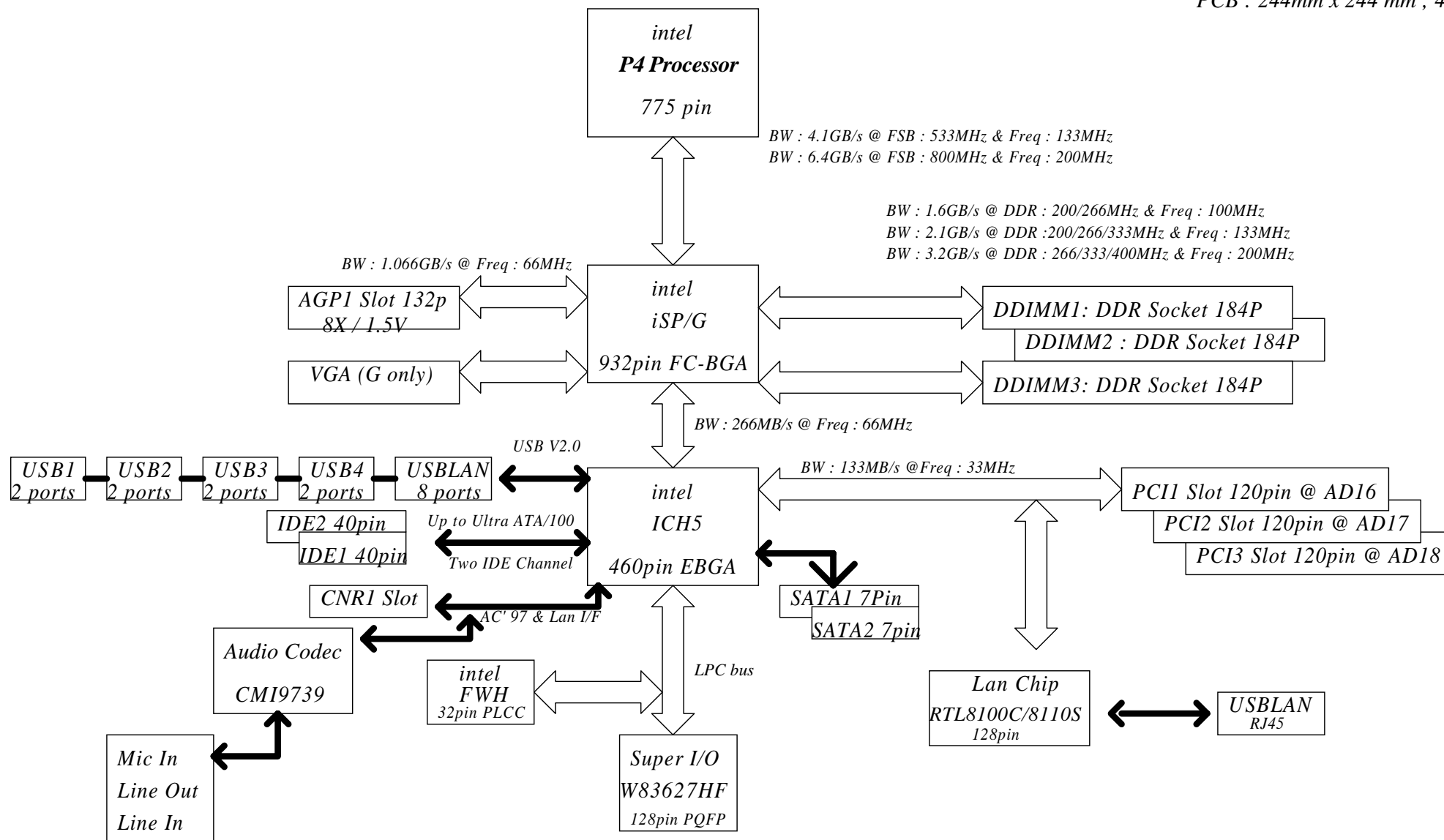
(P4 478P Processor with DDR SDRAM Mainboard)

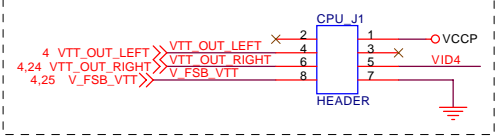
Page Title of Schematic :

Title	Page	Title	Page
Cover Sheet	1		
System Block Diagram	2		
P4 478P Part A	3		
P4 478P Part B	4		
P4 478P Part C	5		
Clock Generator	6		
I845(MCH)Part A	7		
I845(MCH)Part B	8		
I845(MCH)Part C	9		
DDIMM 1&2 (DDR SDRAMs)	10		
DDIMM 3	11		
AGP 8X Slot 1.5V	12		
ICH5 Part A	13		
ICH5 Part B	14		
ICH5 Part C	15		
IDE Connector	16		
USB/FWH	17		
LPC_FDD/KB/M	18		
I/O Ports	19		
H/W Monitor	20		
AC97 Codec	21		
ATX Power & Front Panel	22		
USB Connectors	23		
Vcore DC-DC	24		
MIS DC-DC	25		
PCI Slot 1&2	26		
PCI Slot 3	27		
LAN Power	28		
RTL8110S/8100C	29		
DDR Power	30		

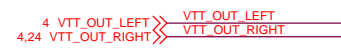
Job	Signature	Date
Schematics Designer	Kelvin	
Layout Company		
Approval		

 Elitegroup Computer Systems		
Title Cover Sheet		
Size Custom	Document Number P13G	Rev 3.1
Date: Thursday, February 17, 2005	Sheet 1	of 31





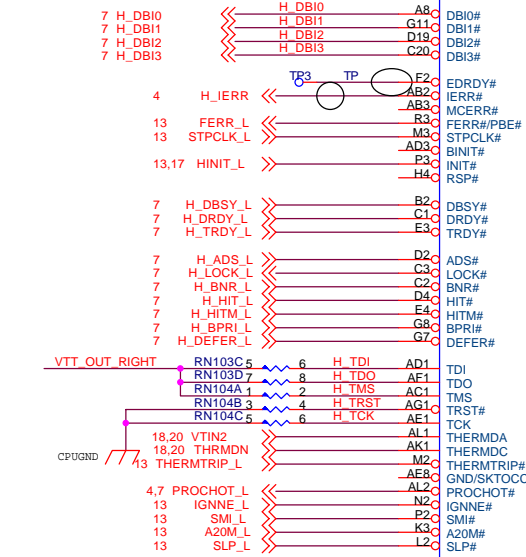
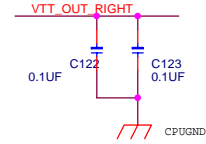
CPU SIGNAL BLOCK



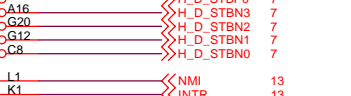
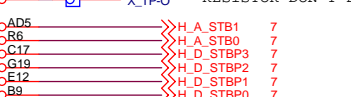
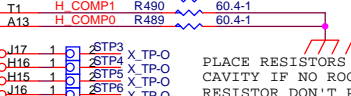
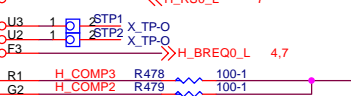
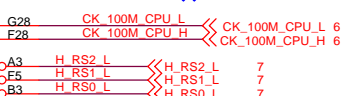
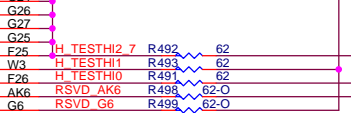
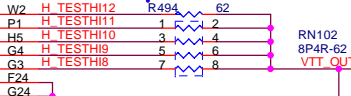
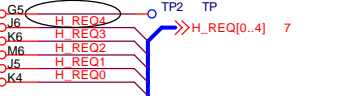
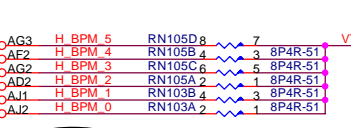
7 H_A[3..31]



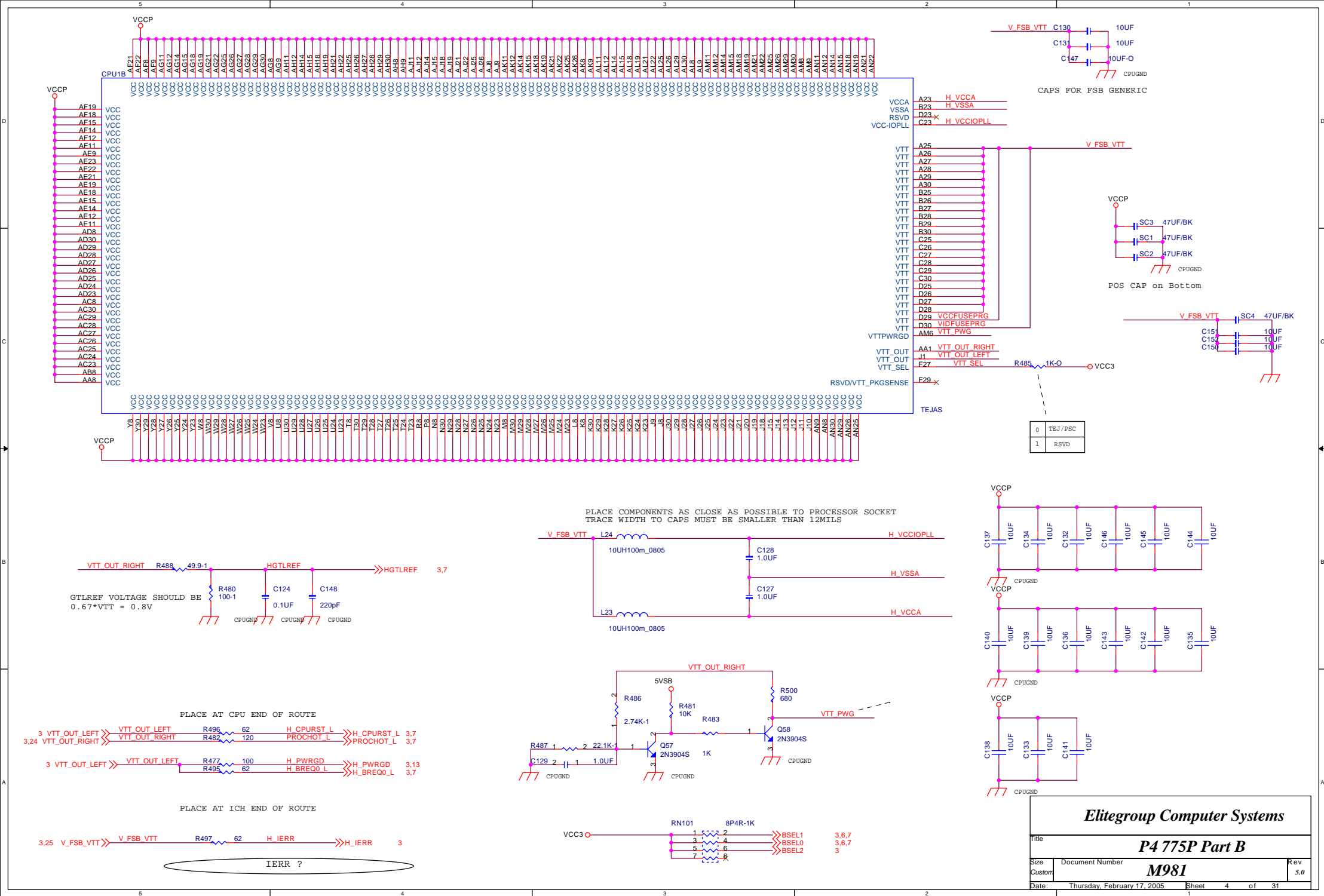
VID[0..5] 24

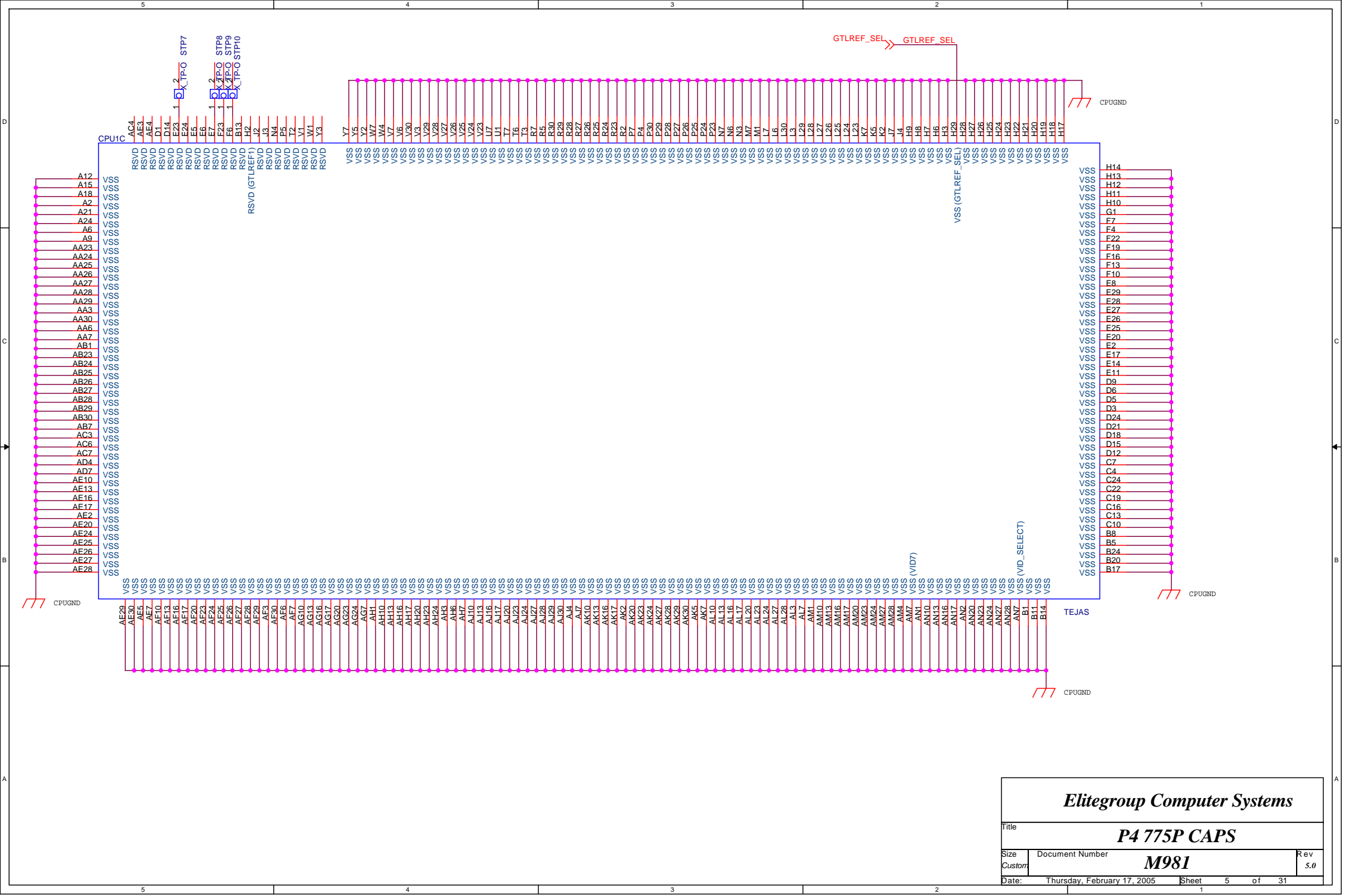


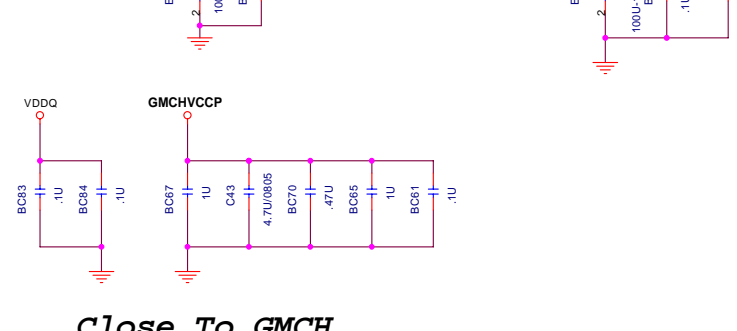
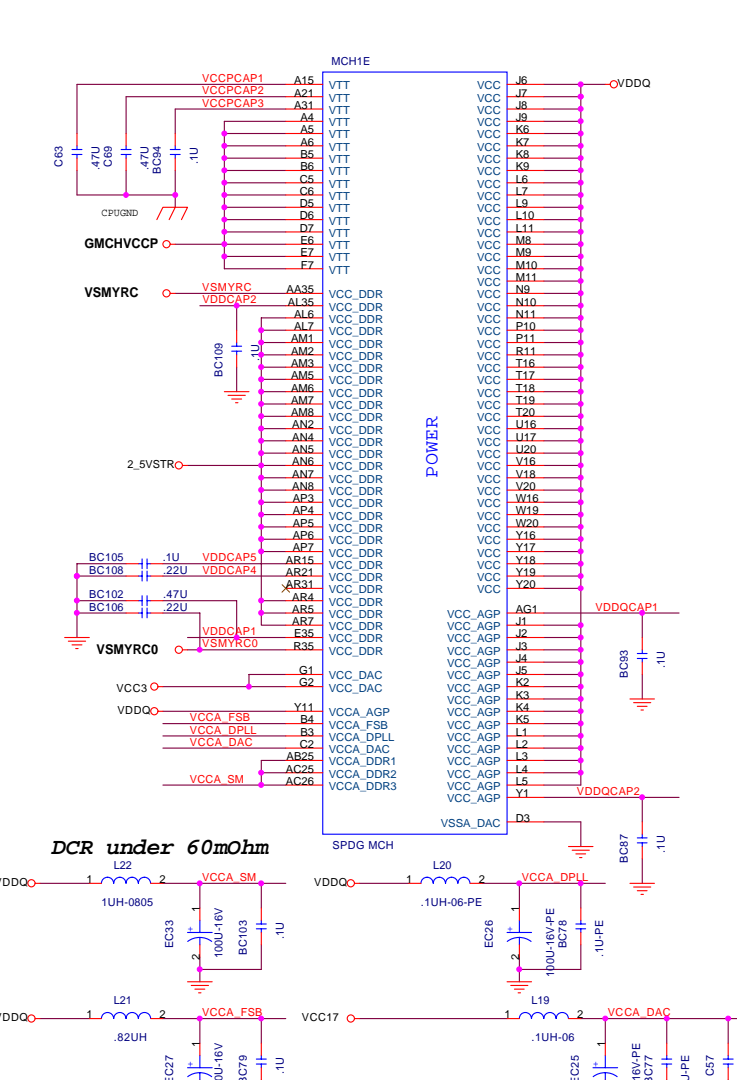
H1 HGTREF HGTREF 4,7

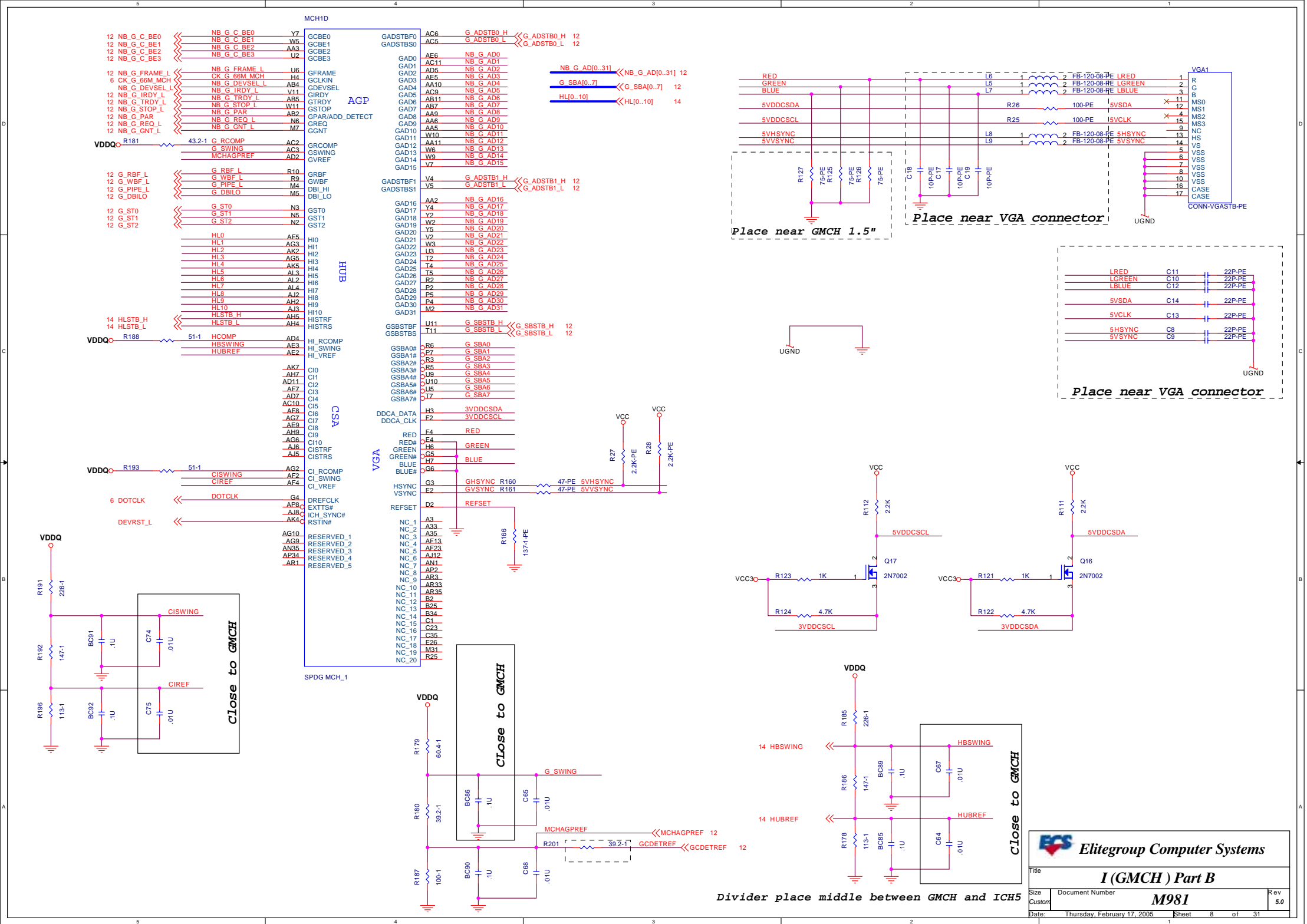


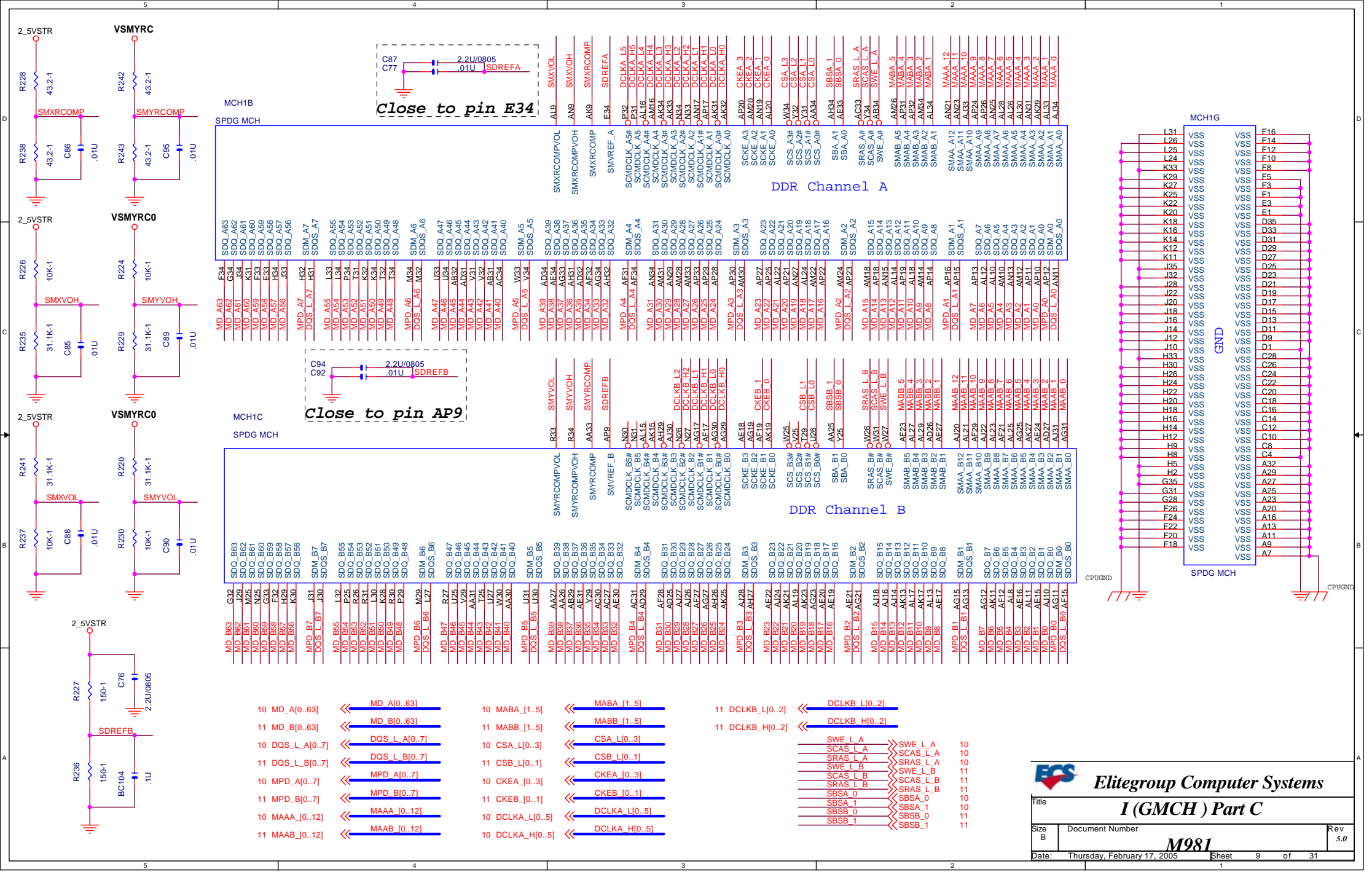
Elitegroup Computer Systems		
Title P4 775P Part A		
Size Custom	Document Number M981	Rev 5.0
Date: Thursday, February 17, 2005	Sheet 3	of 31

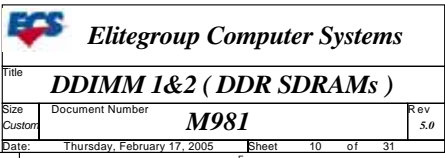


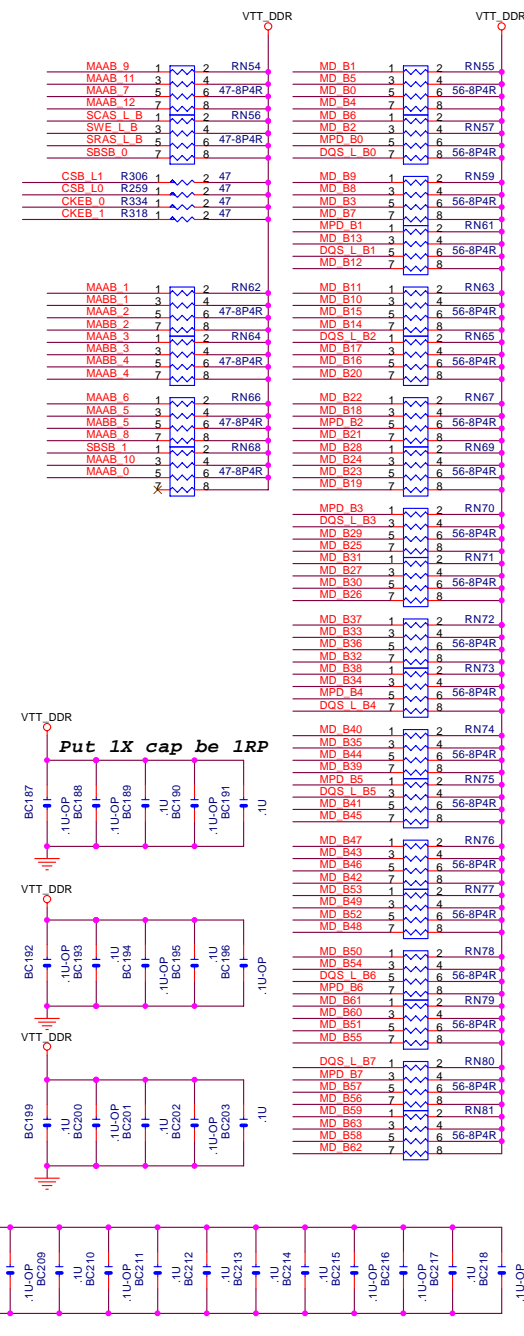


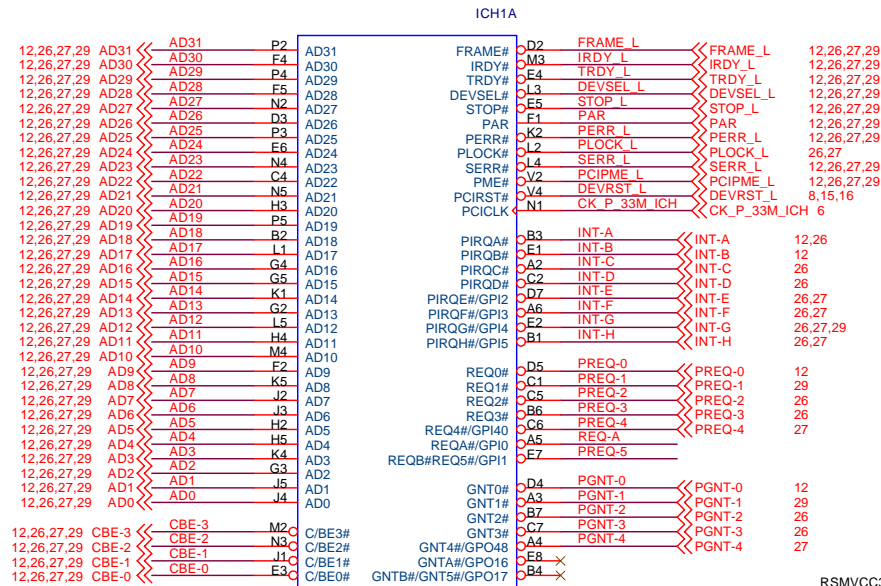












VCCP

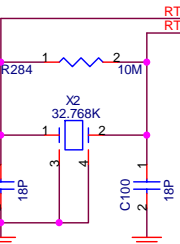
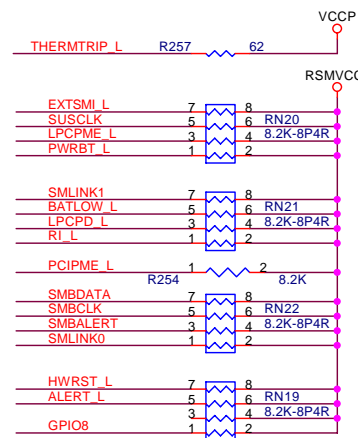
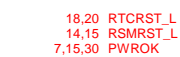
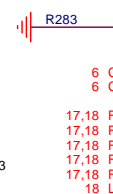
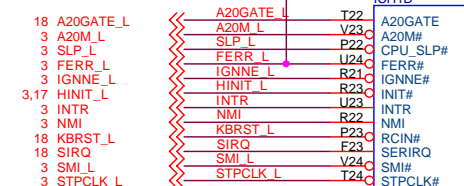
R255

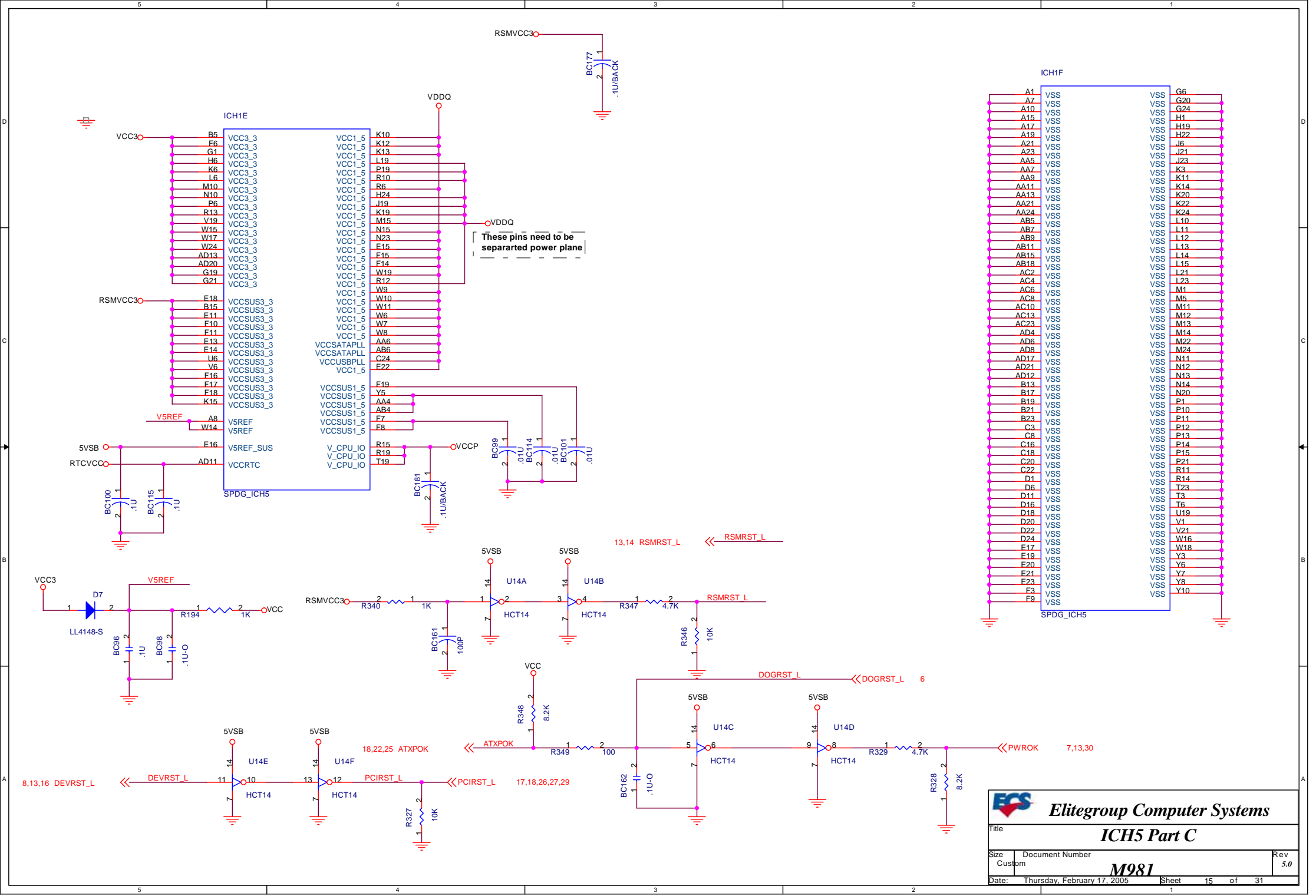
1

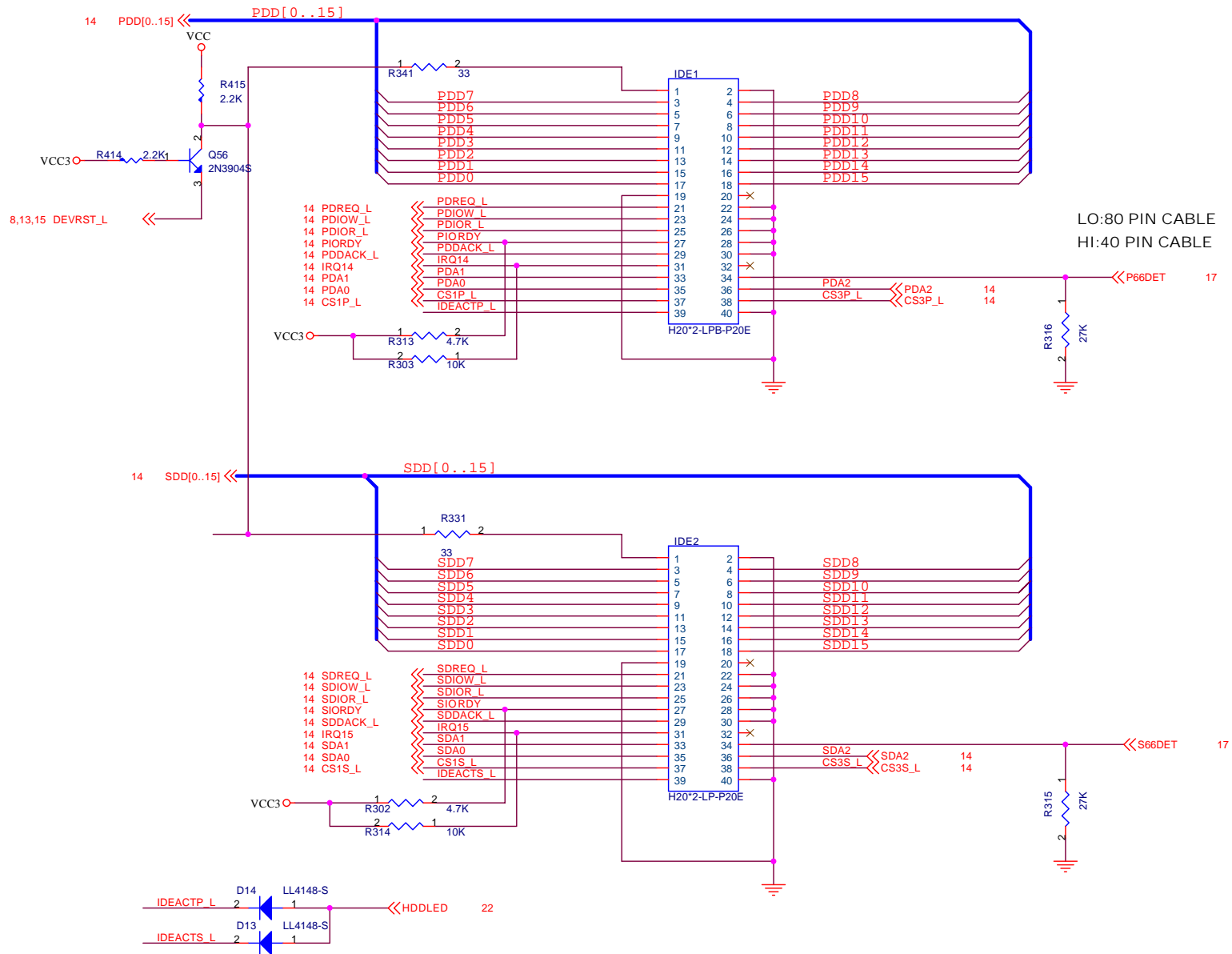
2

62

CLOSE ICH

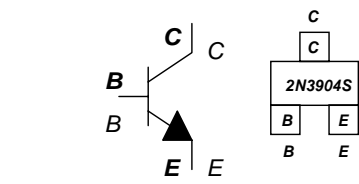


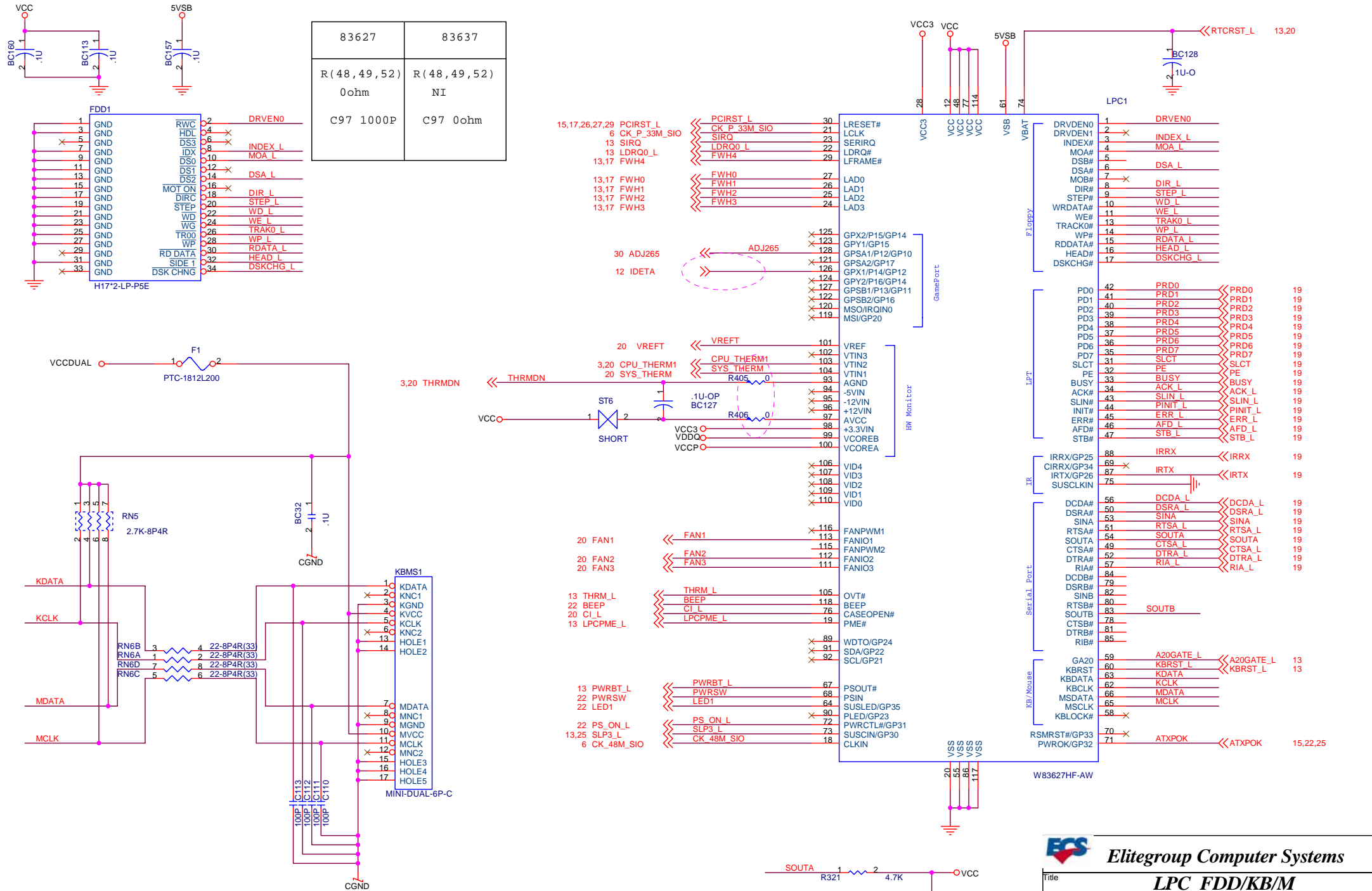




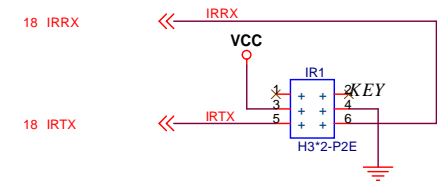
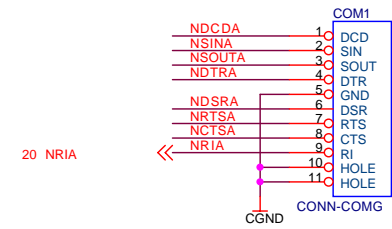
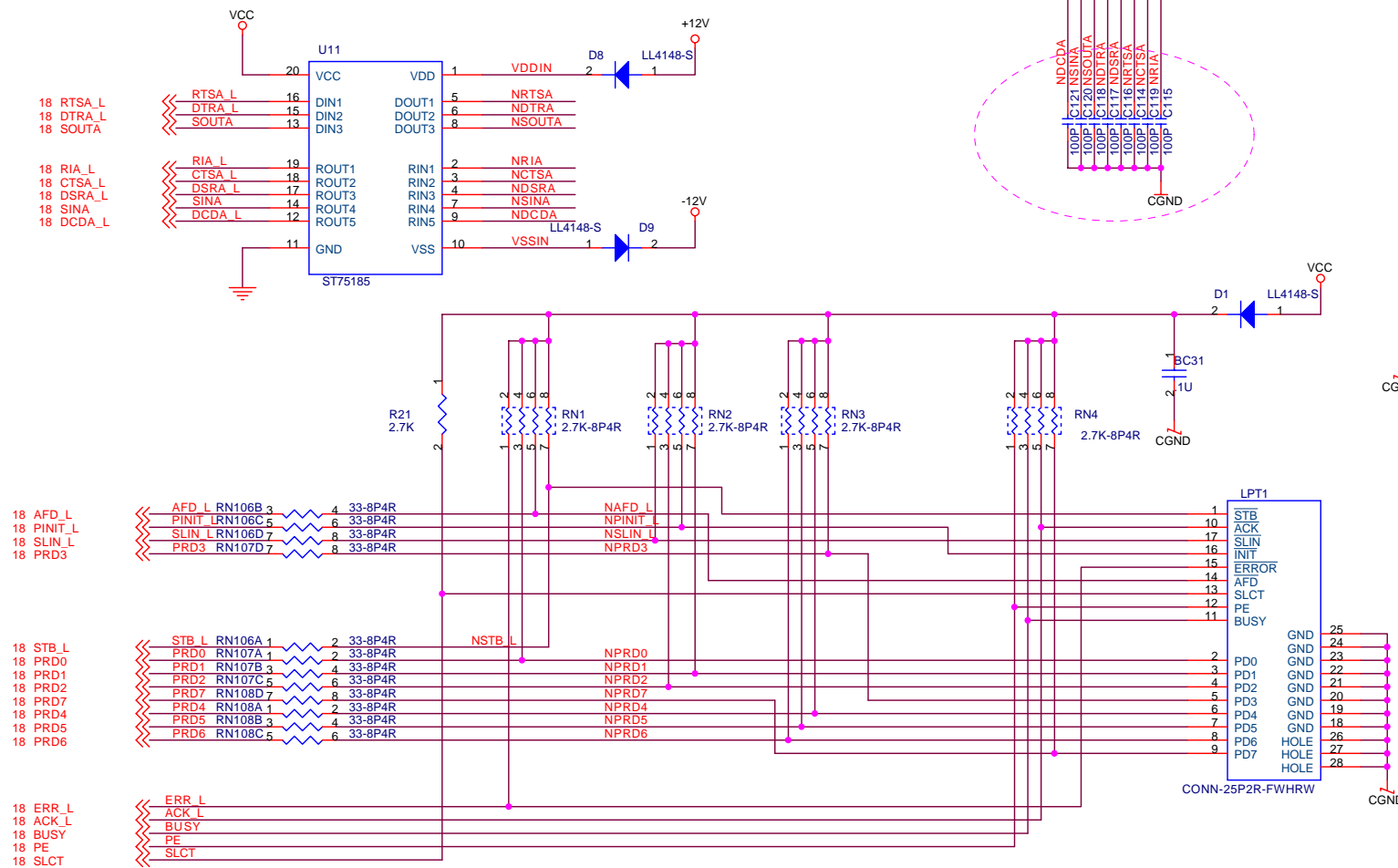
MAX TRACE LENGTH IS 8"

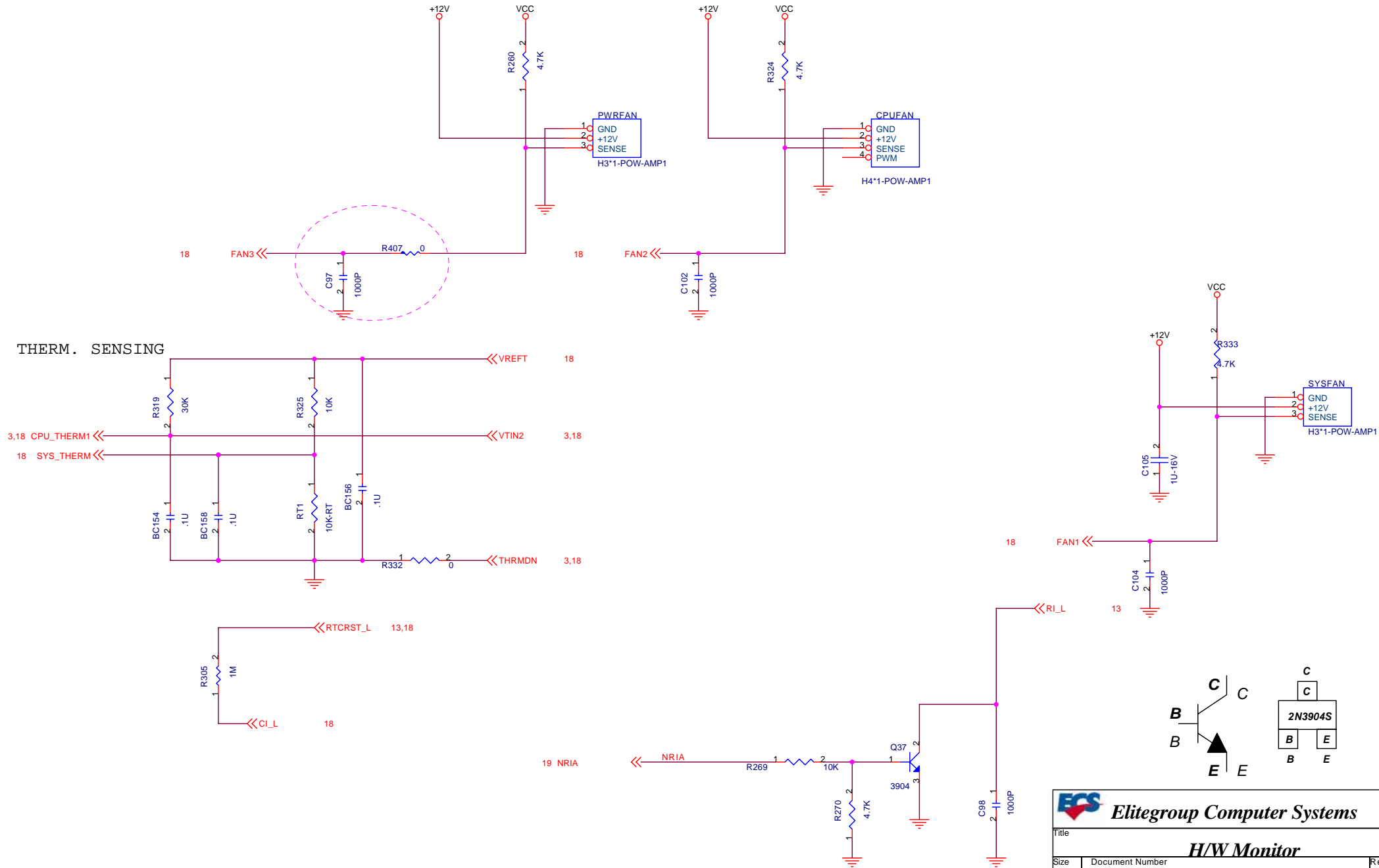
8	7	6	5	4	3	2	1
---	---	---	---	---	---	---	---

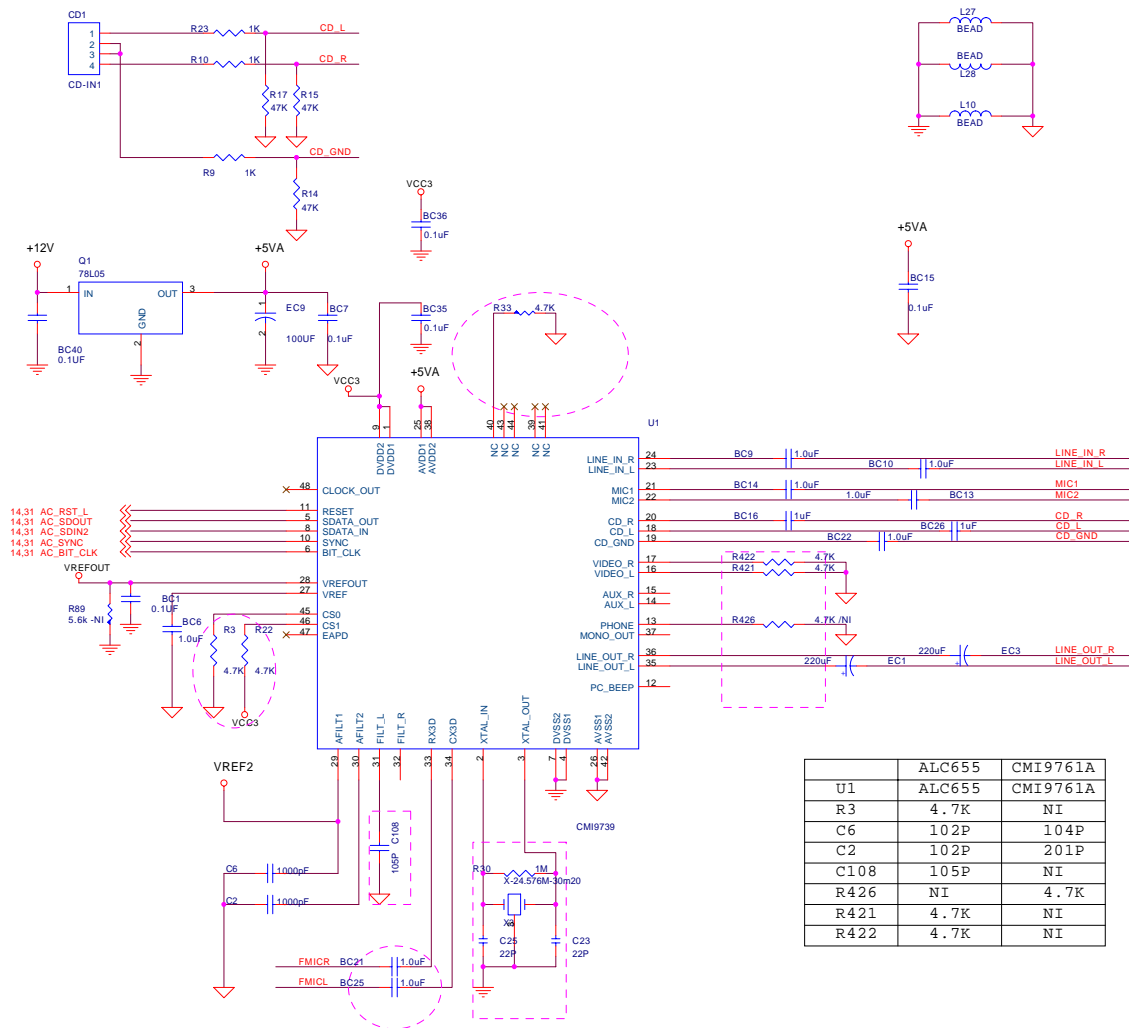




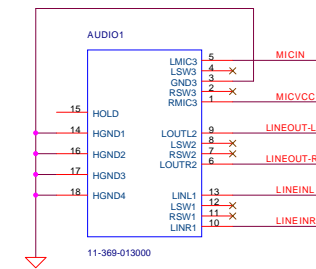
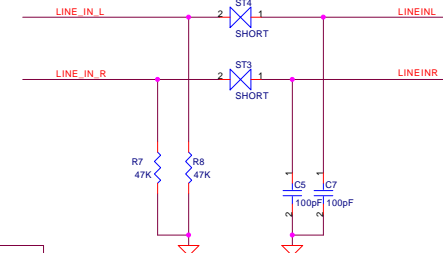
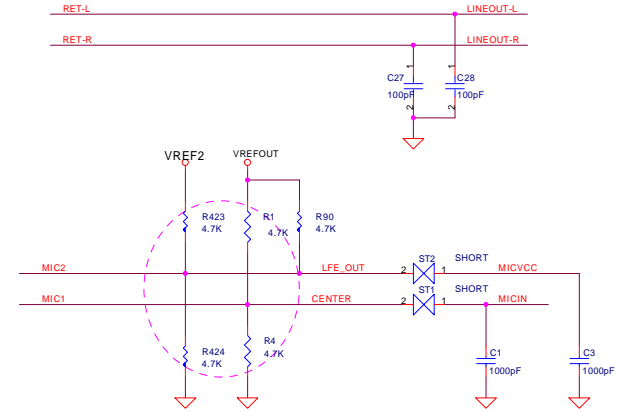
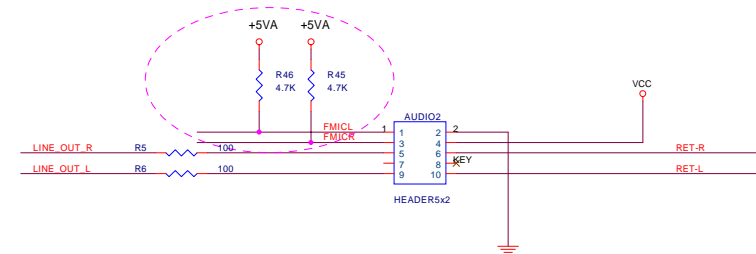
Elitegroup Computer Systems

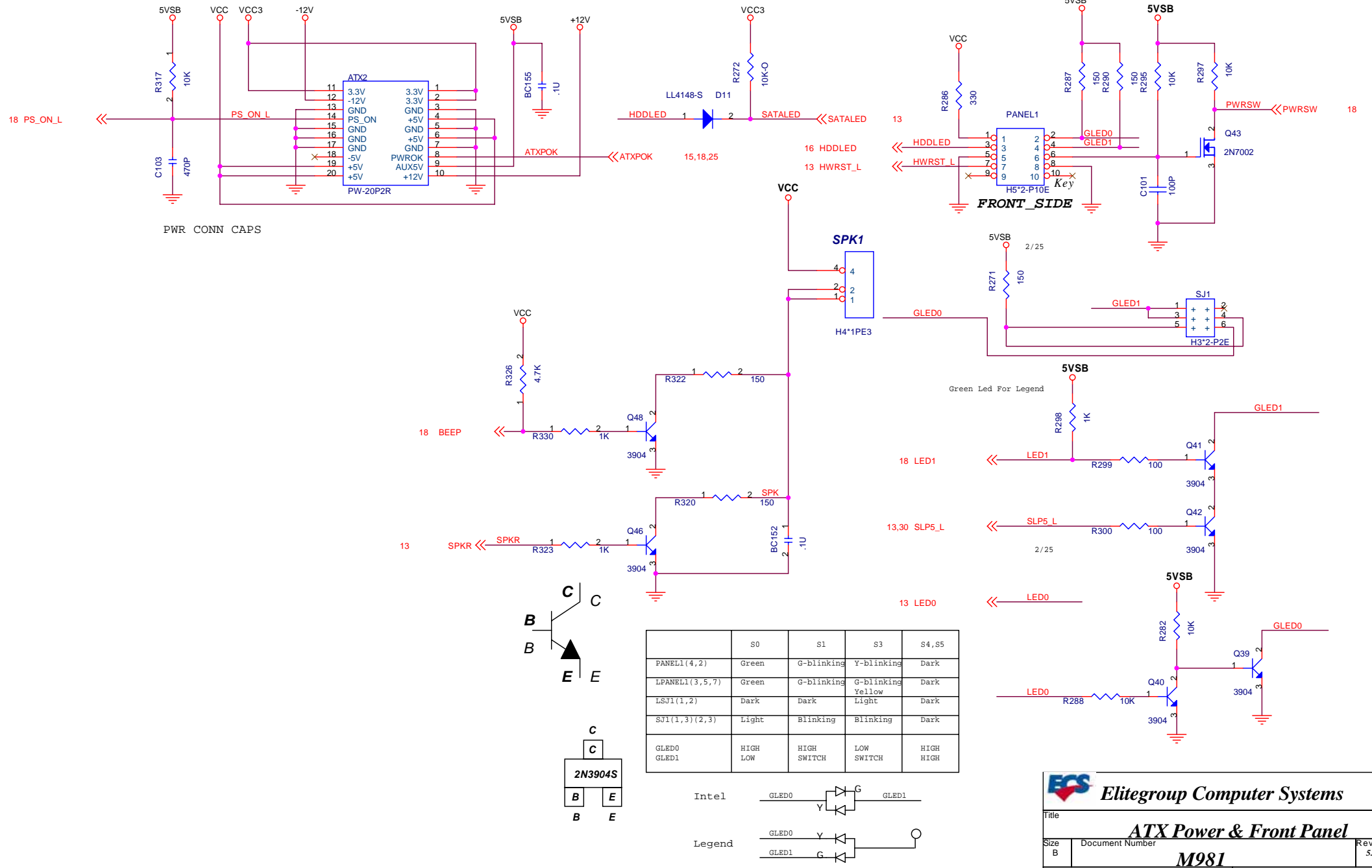


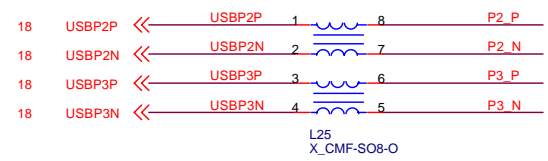
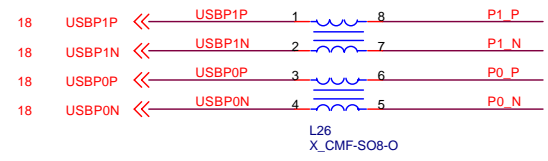
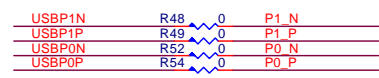
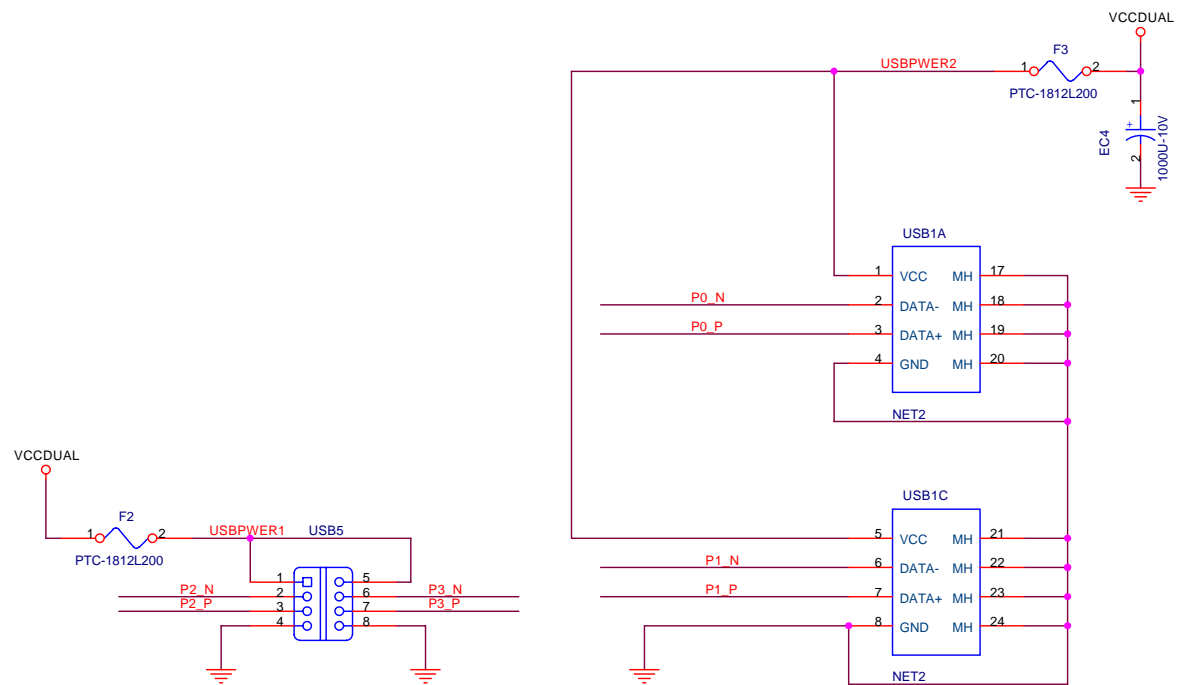


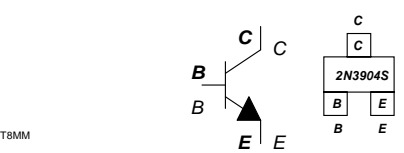
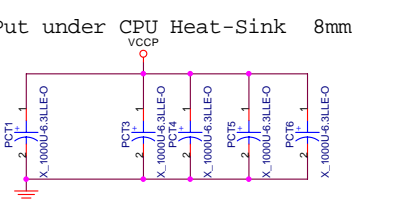
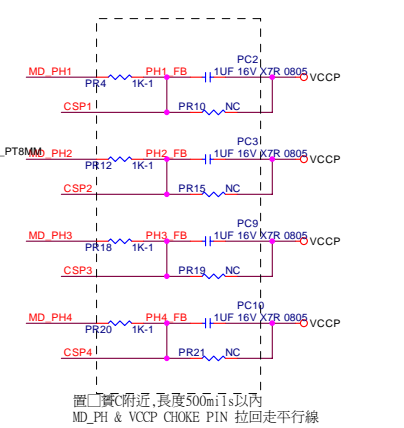
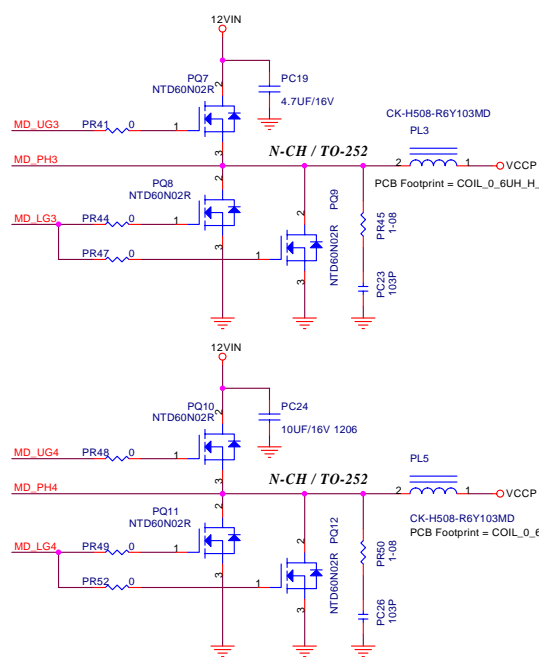
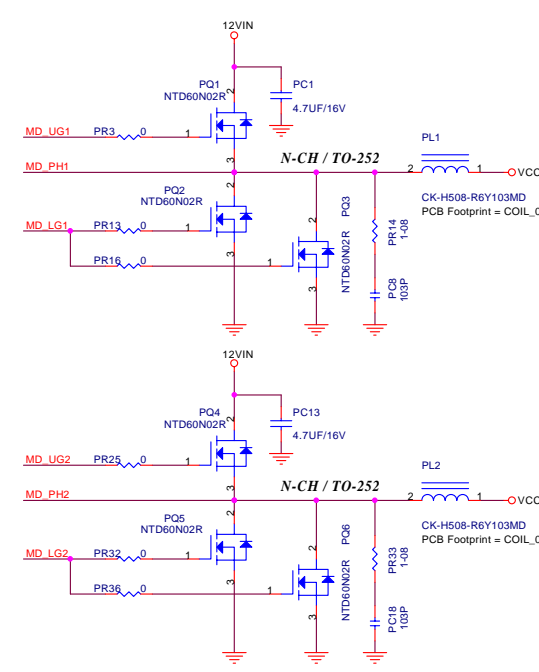
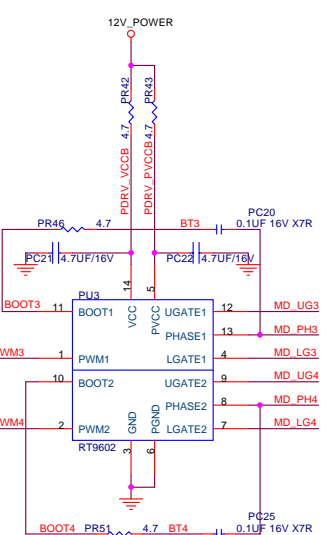
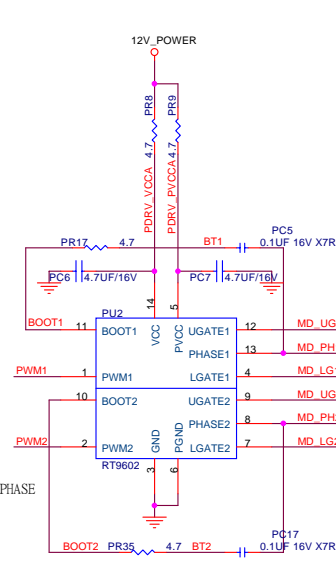
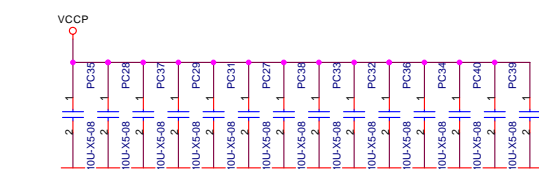
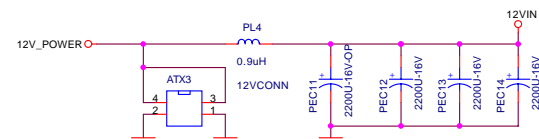
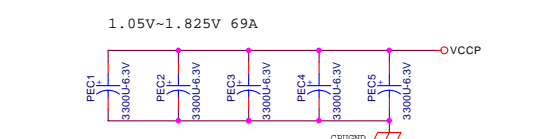
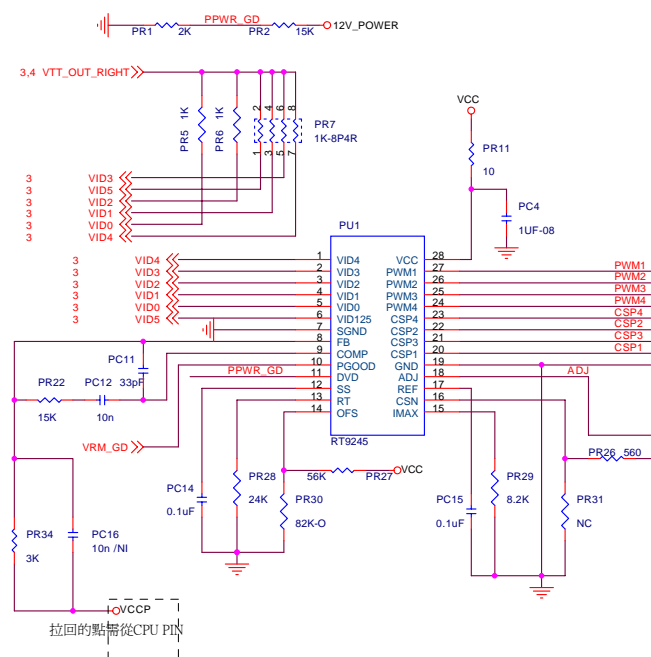


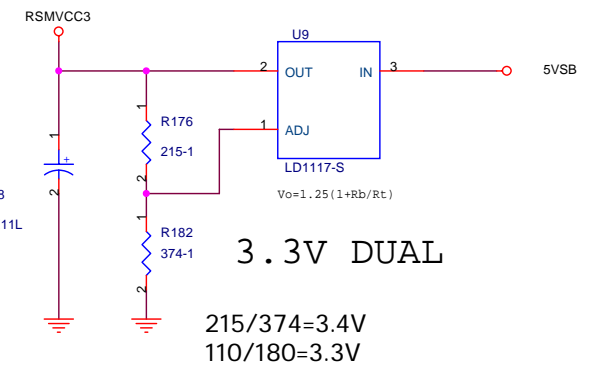
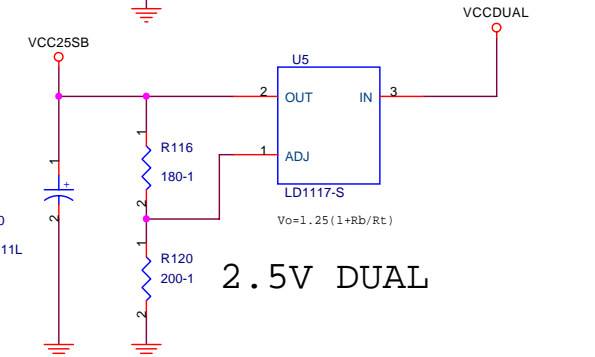
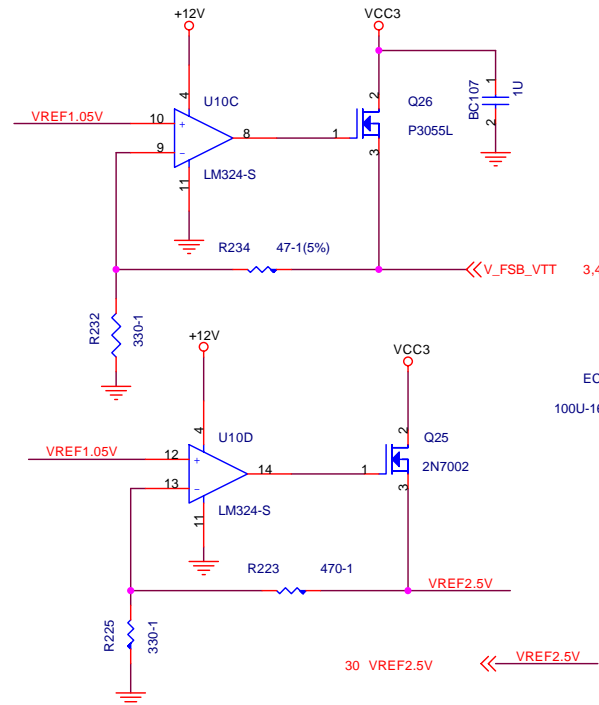
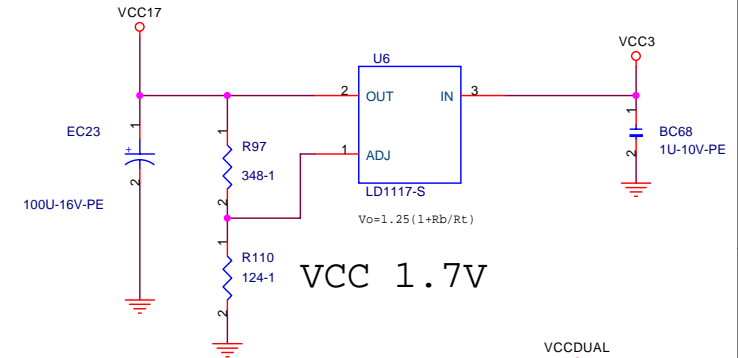
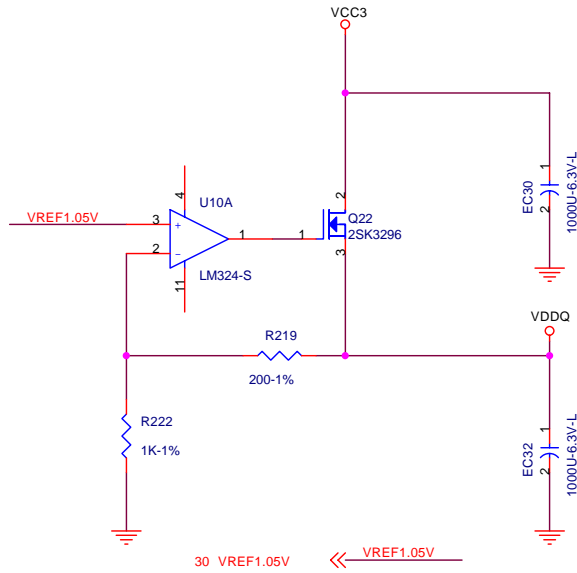
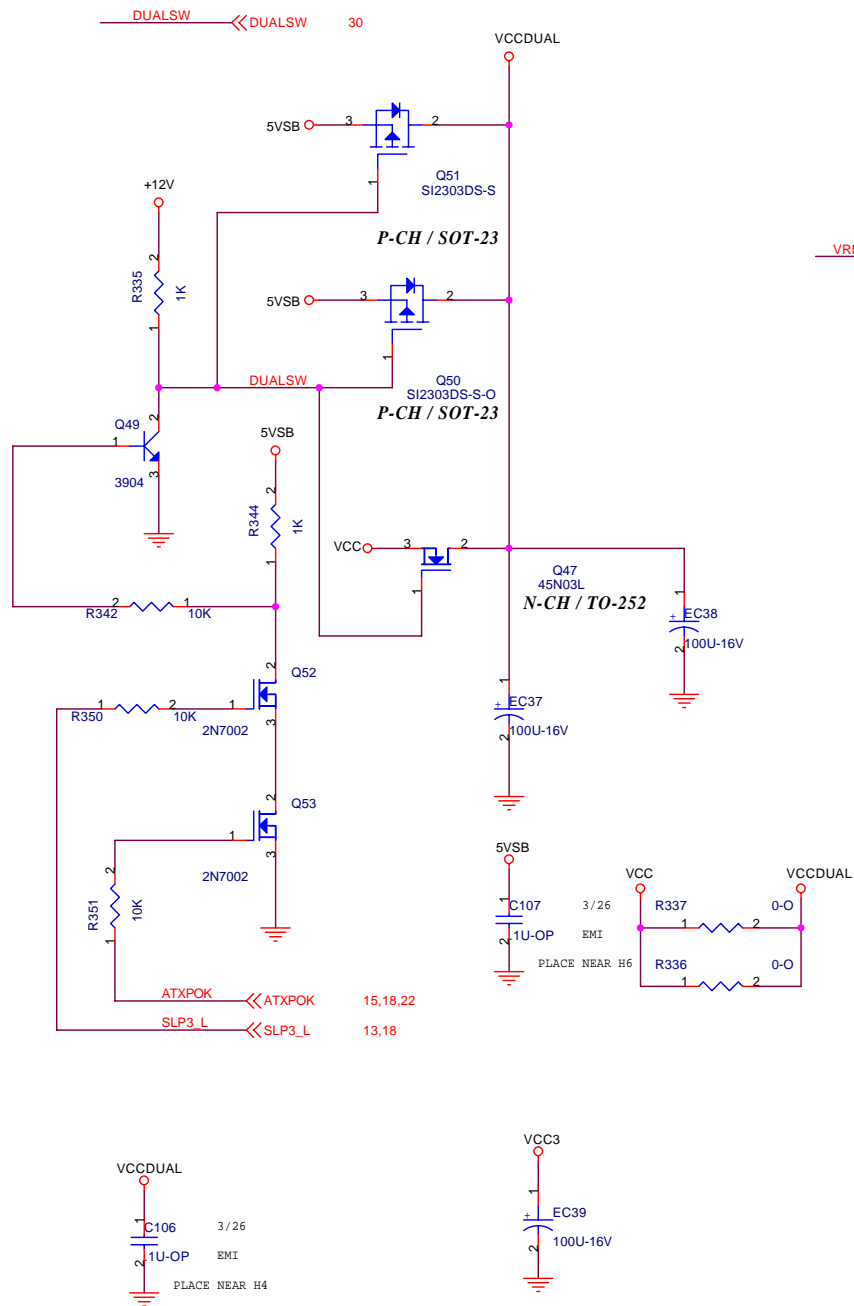
	ALC655	CMI9761A
U1	ALC655	CMI9761A
R3	4.7K	NI
C6	102P	104P
C2	102P	201P
C108	105P	NI
R426	NI	4.7K
R421	4.7K	NI
R422	4.7K	NI





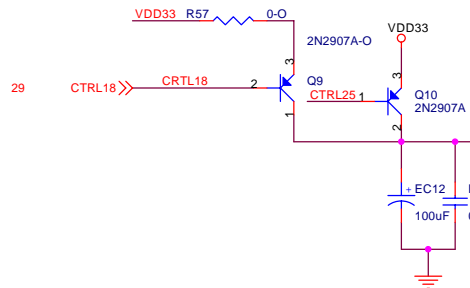
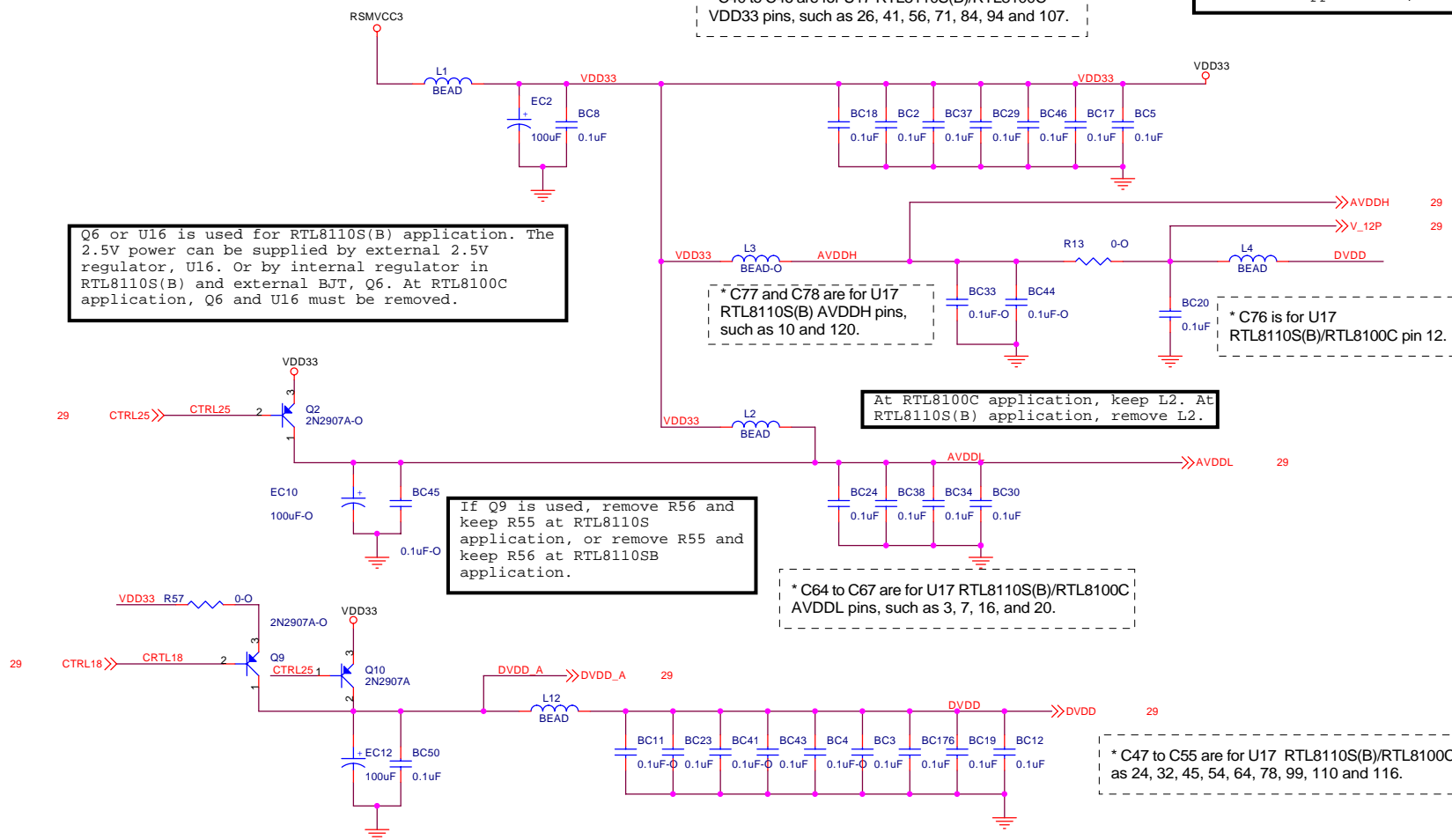






U8 is used for RTL8100C application, U4 and Q8 are used for RTL8110S(B) application.

Q6 or U16 is used for RTL8110S(B) application. The 2.5V power can be supplied by external 2.5V regulator, U16. Or by internal regulator in RTL8110S(B) and external BJT, Q6. At RTL8100C application, Q6 and U16 must be removed.



If U10 is used, R58 and R59 can be set to 2.7K and 1.2K to have 1.8V output power at RTL8110S application, or set to and 10K and 390 to have 1.3V output power at RTL8110SB application.

Q9 or U10 is used for RTL8110S(B) application. The DVDD power can be supplied by external adjustable regulator, U10. Or by internal regulator in RTL8110S(B) and external BJT, Q9. At RTL8100C application, Q9 and U10 must be removed.

