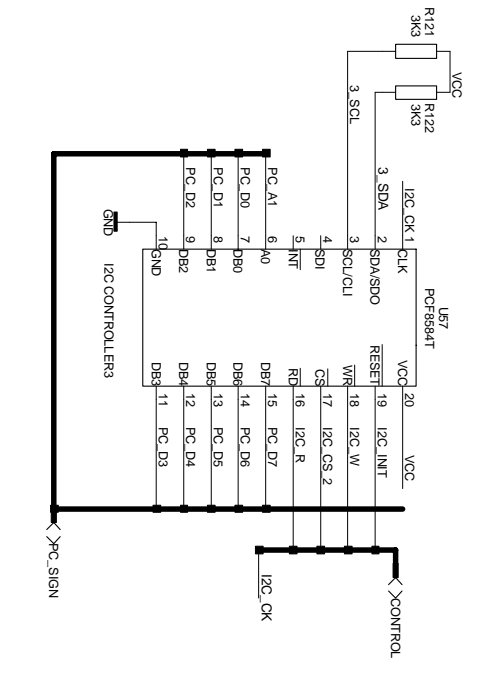
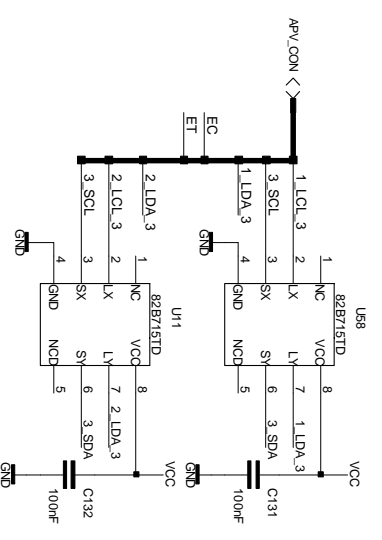


REV: B	DATE: 11.11.00	ENG: F.BEIBEL
REV: A	DATE: 14.07.00	ENG: V.COMMICHAU
PROJECT: CMS APV CONTROLLER		
COMPANY: III.PHYSIKALISCHES INSTITUT RWTH AACHEN		
ADDRESS: HUYSKENSWEG		
CITY: D-52074 AACHEN		
COUNTRY: GERMANY		
INITIAL	12.04.99	PAGE: 1 OF: 22

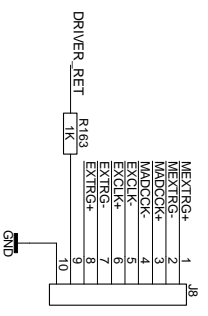
BOARD NO.: 747

PROJECT: CMSAPV00

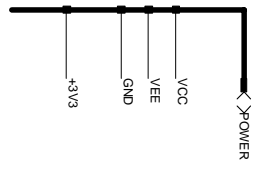
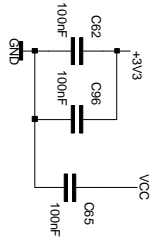
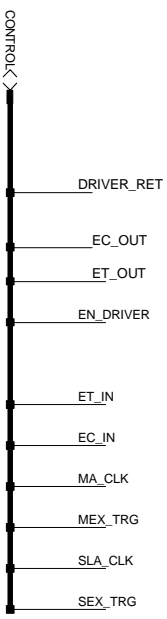
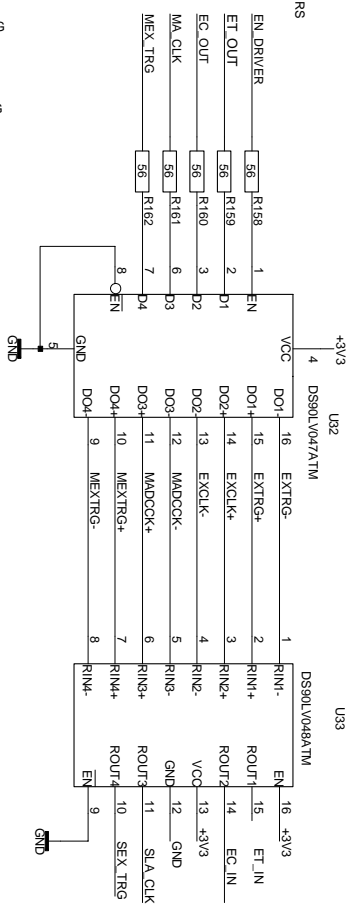
31.10.2000



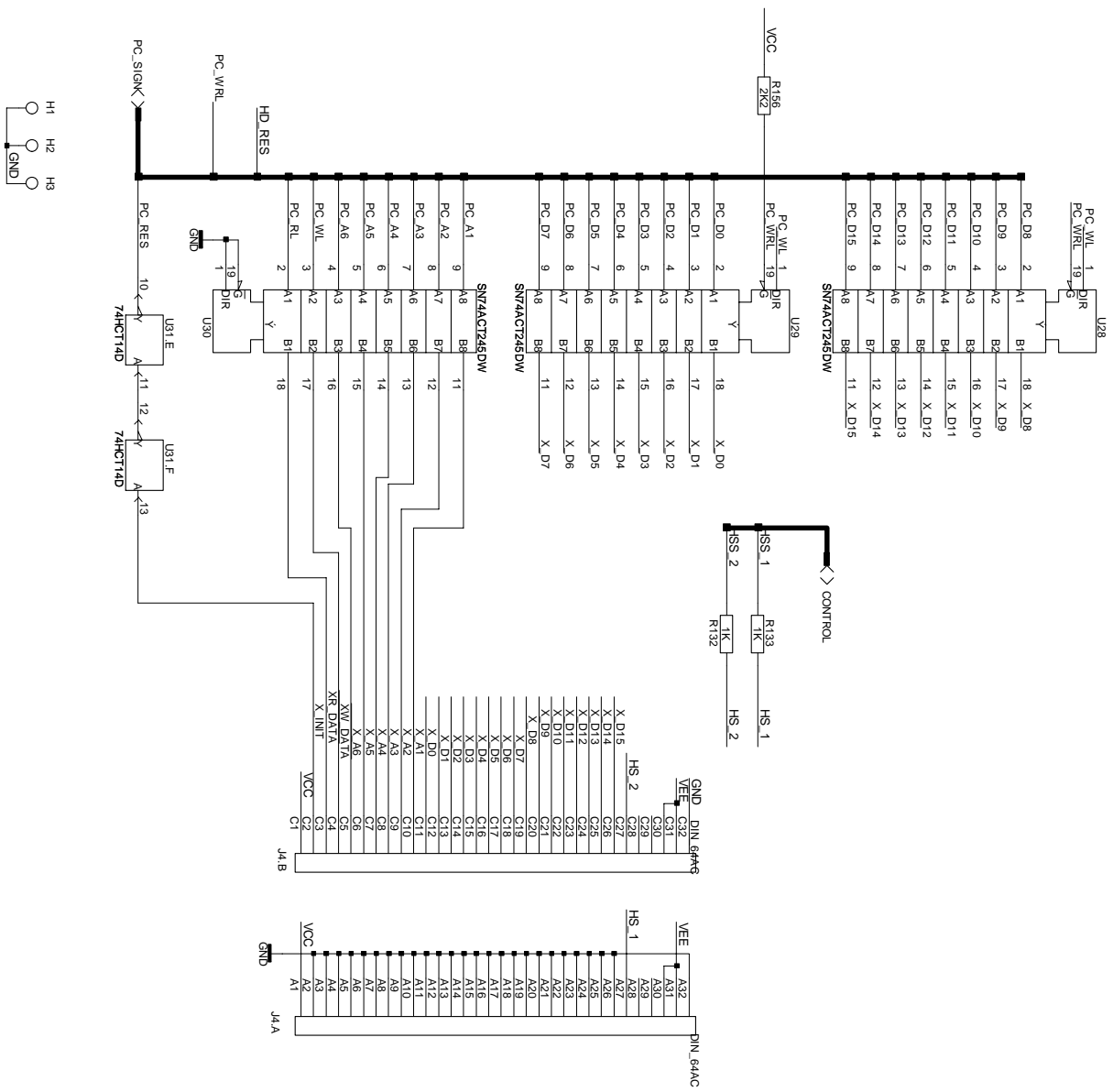
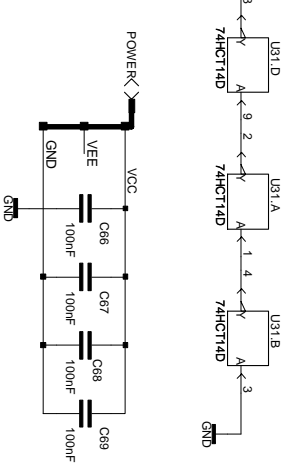
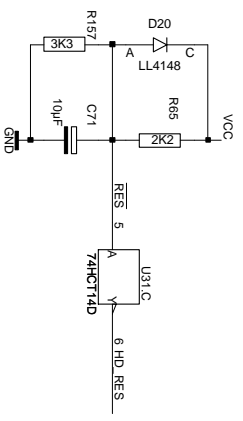
LINK FOR EXTERNAL CLOCKS AND TRIGGERS



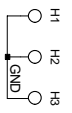
DRIVER ACTIVE IN MASTER MODE

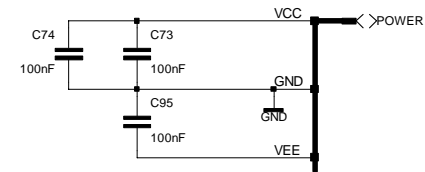
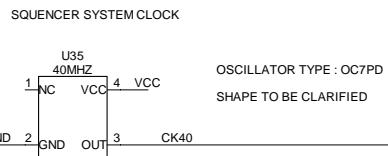
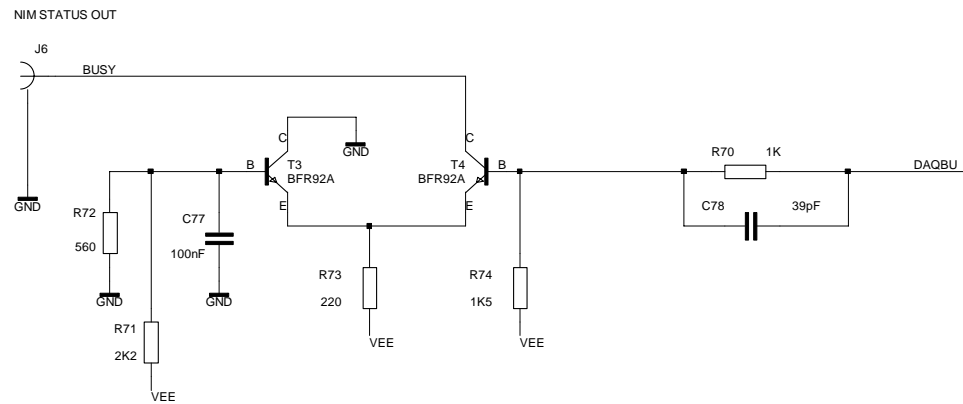
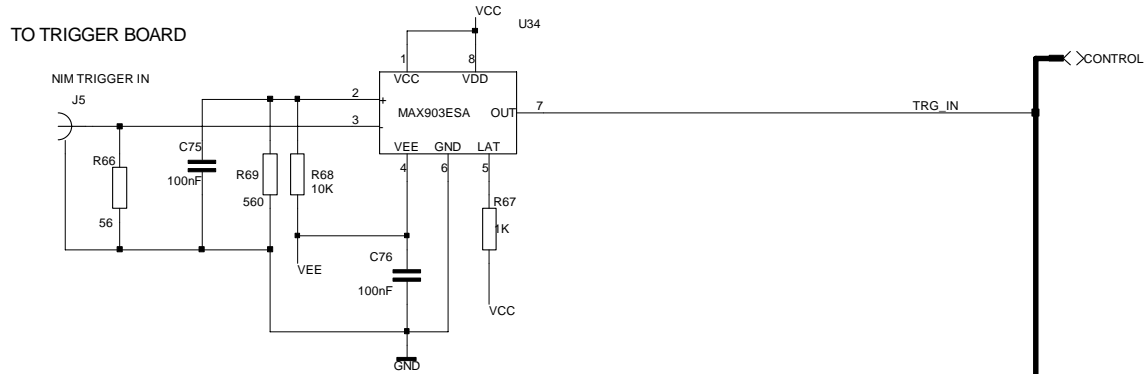


REV. B	DATE: 31.10.00	ENG: F.BRISSEL
REV. A	DATE: 14.07.00	ENG: V.COMMICHAU
PROJECT: CMSAPV CONTROLLER 747		
COMPANY: III. PAYSERKAUSCHES INSTITUT RWTH AACHEN		
ADDRESS: HILDESHEIMER		
CITY: D-52074 AACHEN		
COUNTRY: GERMANY		
INITIAL	12.04.99	PAGE: 4 OF: 22



REV: 2	DATE: 31.10.00	ENG: F.BEISSEL
REV: A	DATE: 10.05.00	ENG: V.COMMICHAU
PROJECT: OMSAPV CONTROLLER		NO.: 747
COMPANY: III. PHYSIKALISCHES INSTITUT RWTH AACHEN		
ADDRESS: HILDEBRUNNENWEG		
CITY: D-52074 AACHEN		
COUNTRY: GERMANY		
INITIAL	12.04.99	PAGE: 3 OF: 22

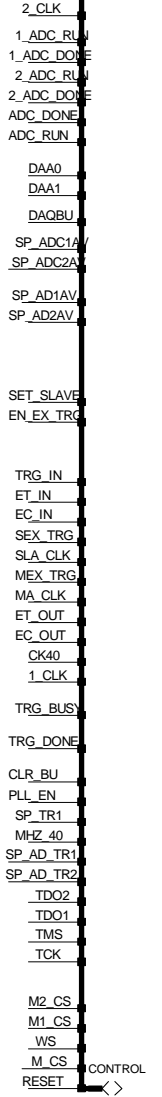
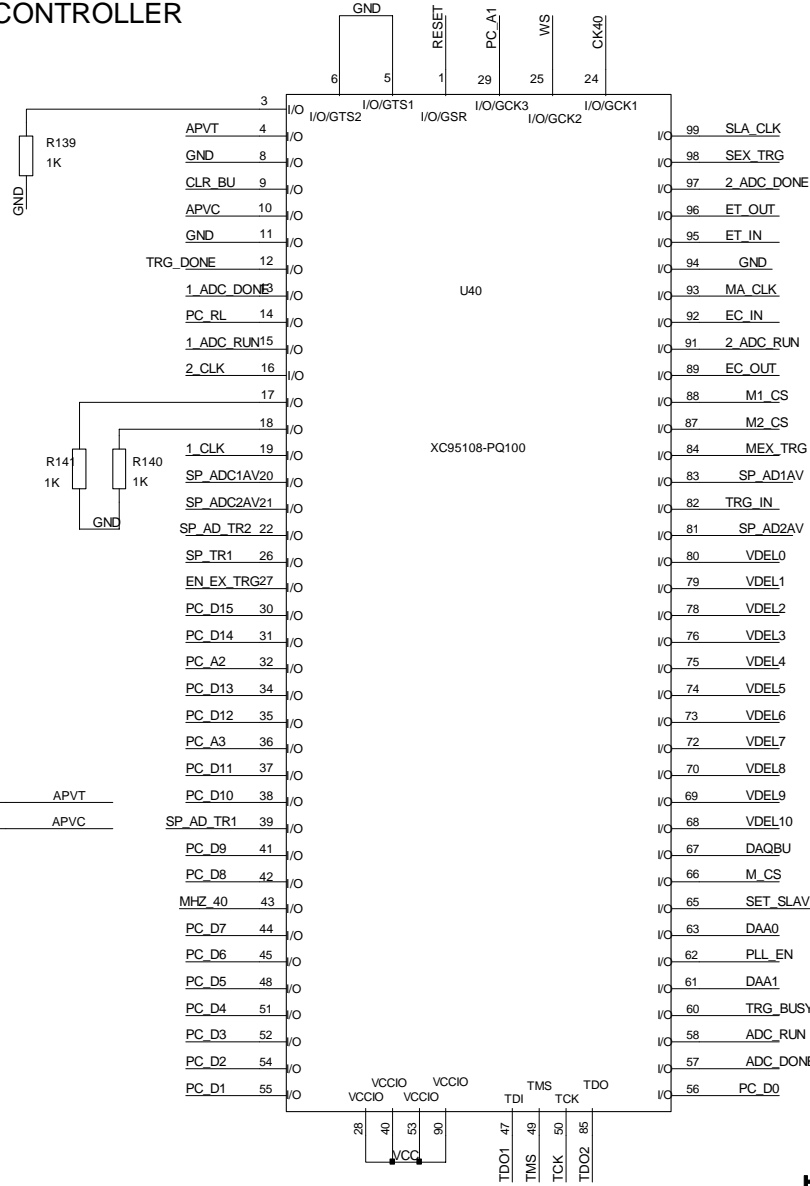
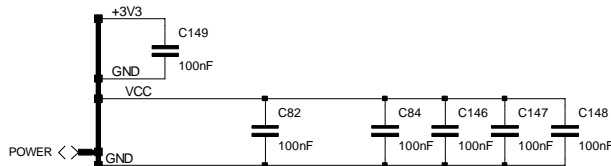
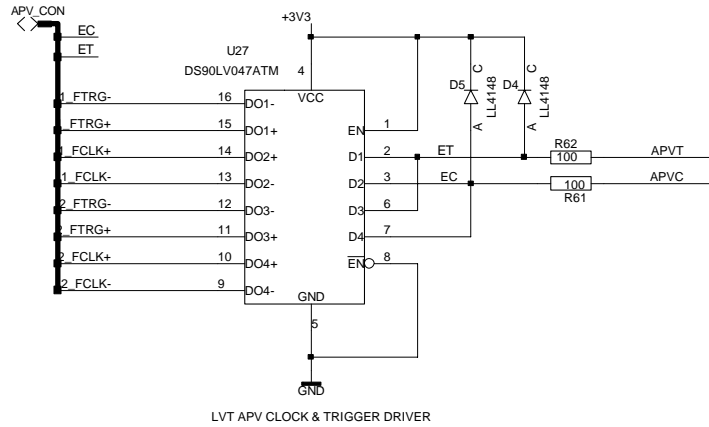
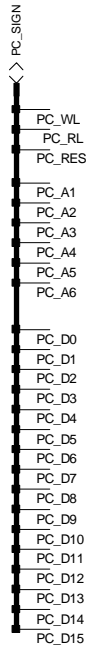




REV: B	DATE: 10.12.00	ENG: F.BEIßEL
REV: A	DATE: 11.05.00	ENG: V.COMMICHAU
PROJECT: CMSAPV CONTROLLER		NO.: 747
COMPANY: III. PHYSIKALISCHES INSTITUT RWTH AACHEN		
ADDRESS: HUYSKENSWEG		
CITY: D-52074 AACHEN		
COUNTRY: GERMANY		
INITIAL	12.04.99	PAGE: 5 OF: 22

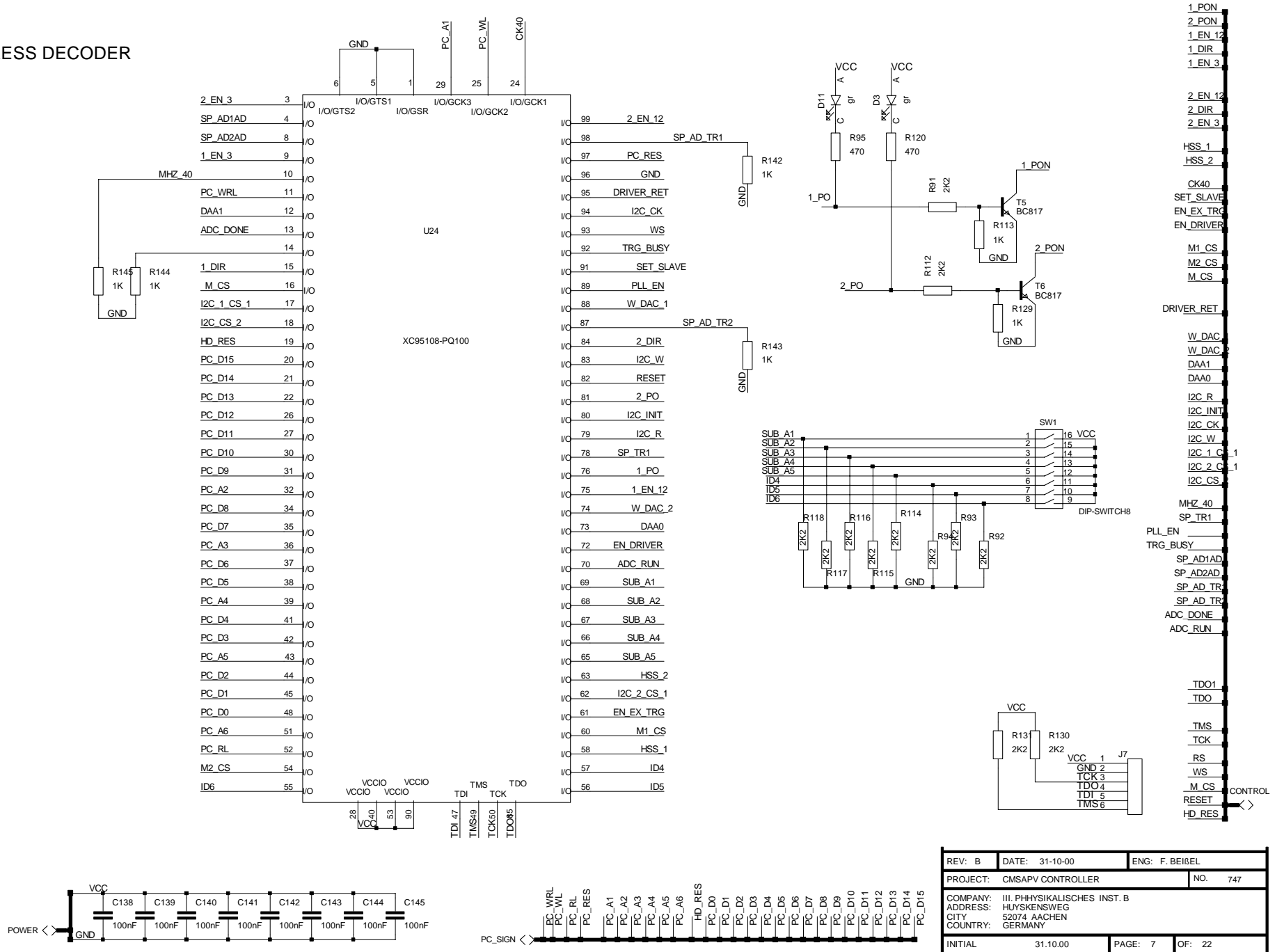
APV AND TRIGGER CONTROLLER

FADC CLOCK ADJUST

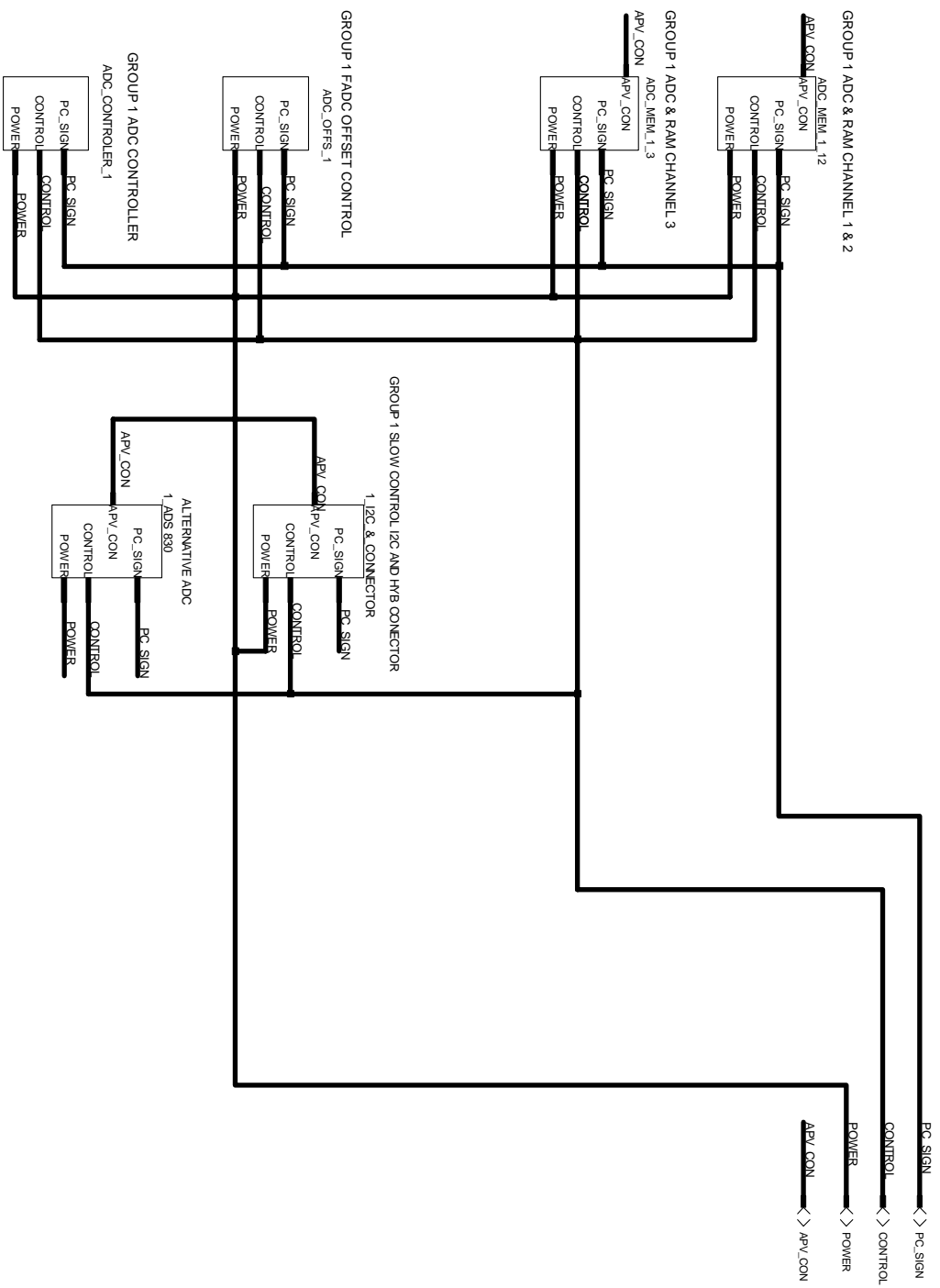


REV: B	DATE: 31-10-00	ENG: F.BEI8EL
PROJECT: CMSAPV CONTROLLER	NO. 747	
COMPANY: III. PHYSIKALISCHES INST. B		
ADDRESS: HUYSKENSWEG		
CITY: 52074 AACHEN		
COUNTRY: GERMANY		
INITIAL	31.10.00	PAGE: 6 OF: 22

ADDRESS DECODER

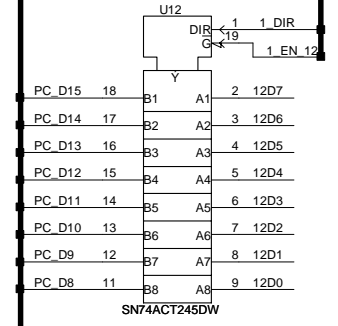
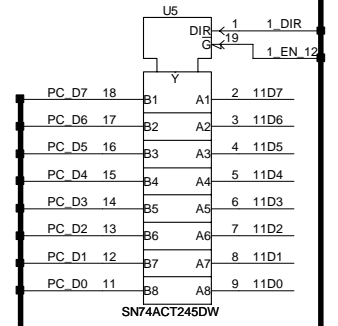
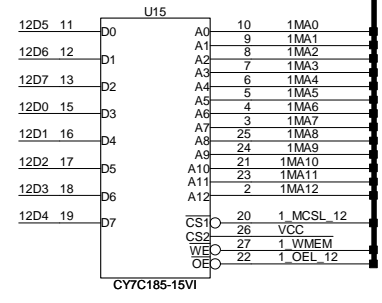
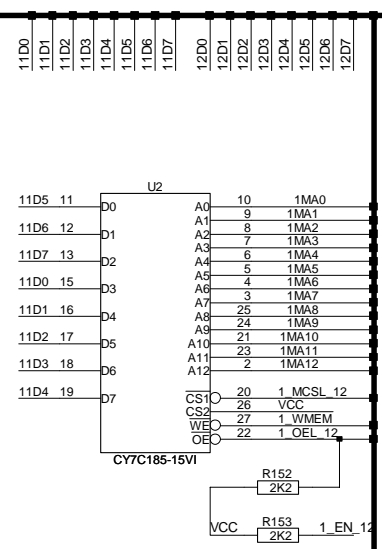
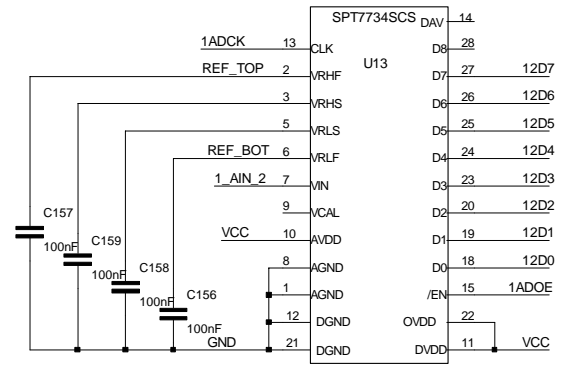
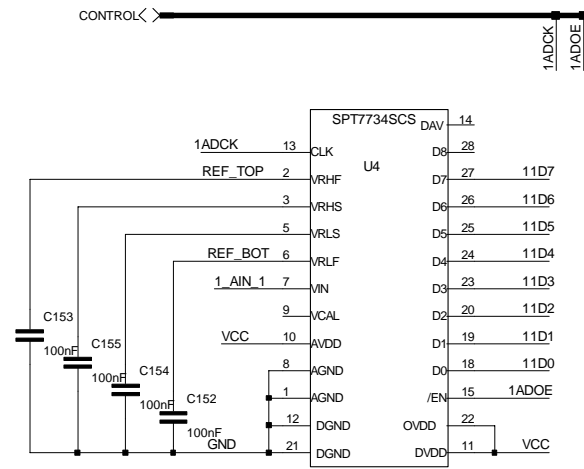
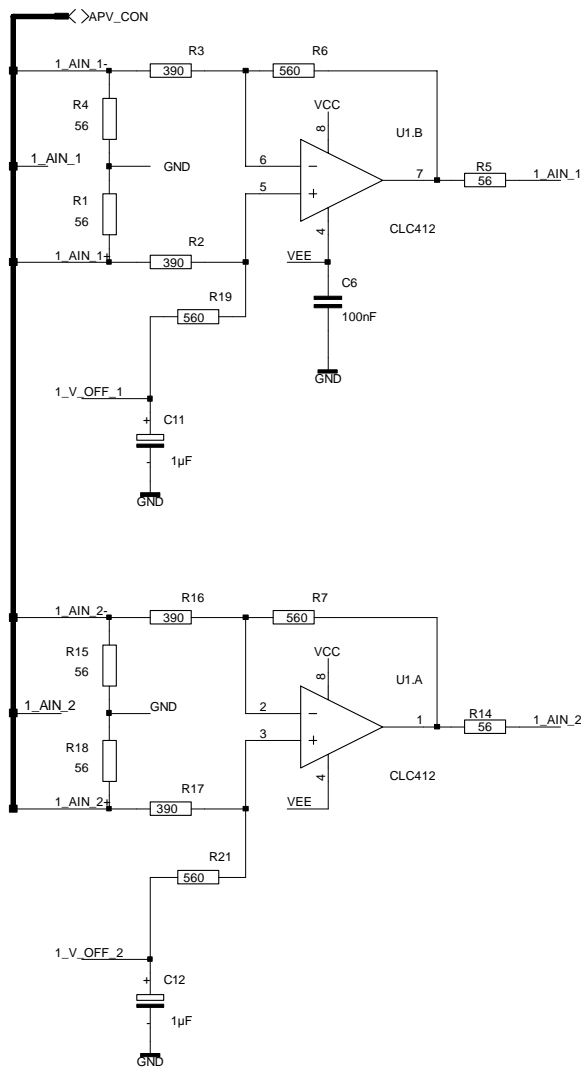


REV: B	DATE: 31-10-00	ENG: F. BEIßEL
PROJECT: CMSAPV CONTROLLER		NO. 747
COMPANY: III. PHYSIKALISCHES INST. B		
ADDRESS: HUYSKENSWEG		
CITY: 52074 AACHEN		
COUNTRY: GERMANY		
INITIAL	31.10.00	PAGE: 7 OF: 22

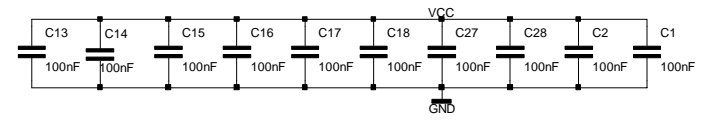
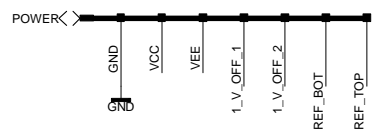


REV: B	DATE: 11.11.00	ENG: F.BEIDEL
PROJECT: CMS/APV CONTROLLER		NO. 747
COMPANY: ILL. PHYSIKALISCHES INST. B		
ADDRESS: HUYSKENSWEG		
CITY: 52074 AACHEN		
COUNTRY: GERMANY		
INITIAL: 11.11.00	PAGE: 8	OF: 22

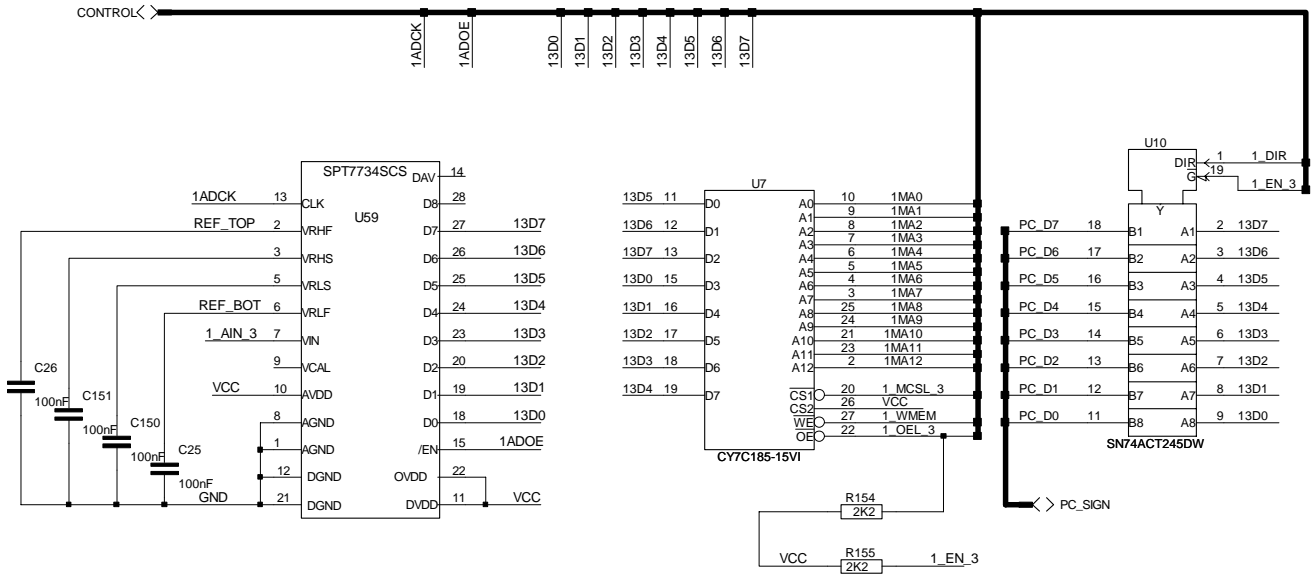
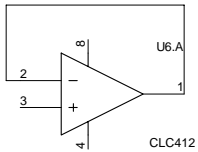
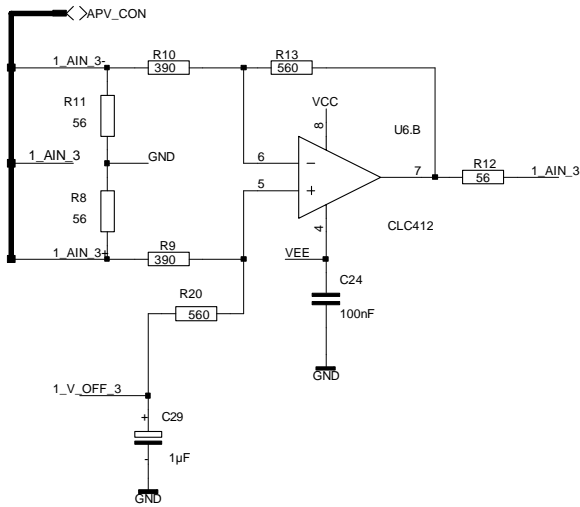
GROUP 1 FADC CHANNELS 1 & 2



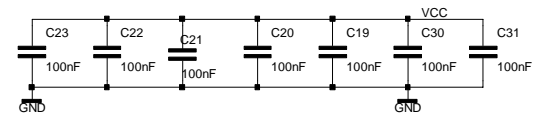
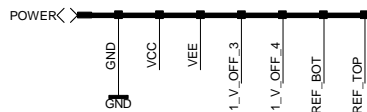
REV: B	DATE: 31.10.00	ENG: F.BEIßEL
REV: A	DATE: 10.05.00	ENG: V.COMMICHAU
PROJECT: CMSAPV CONTROLLER		NO.: 747
COMPANY: III. PHYSIKALISCHES INSTITUT RWTH AACHEN		
ADDRESS: HUYSKENSWEG		
CITY: D-52074 AACHEN		
COUNTRY: GERMANY		
INITIAL	12.04.99	PAGE: 9 OF: 22



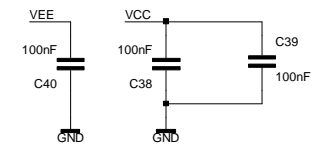
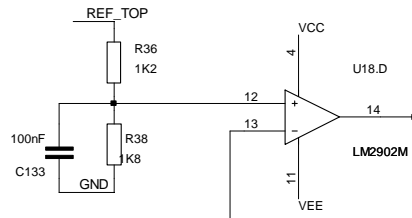
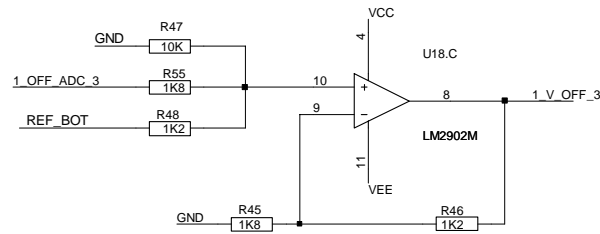
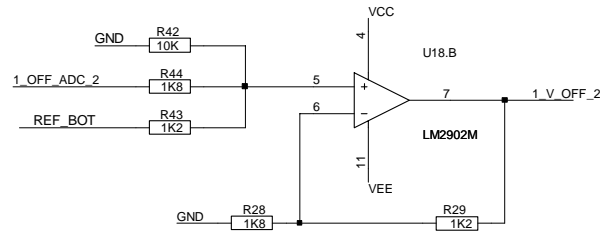
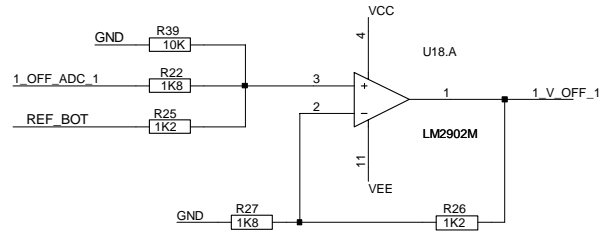
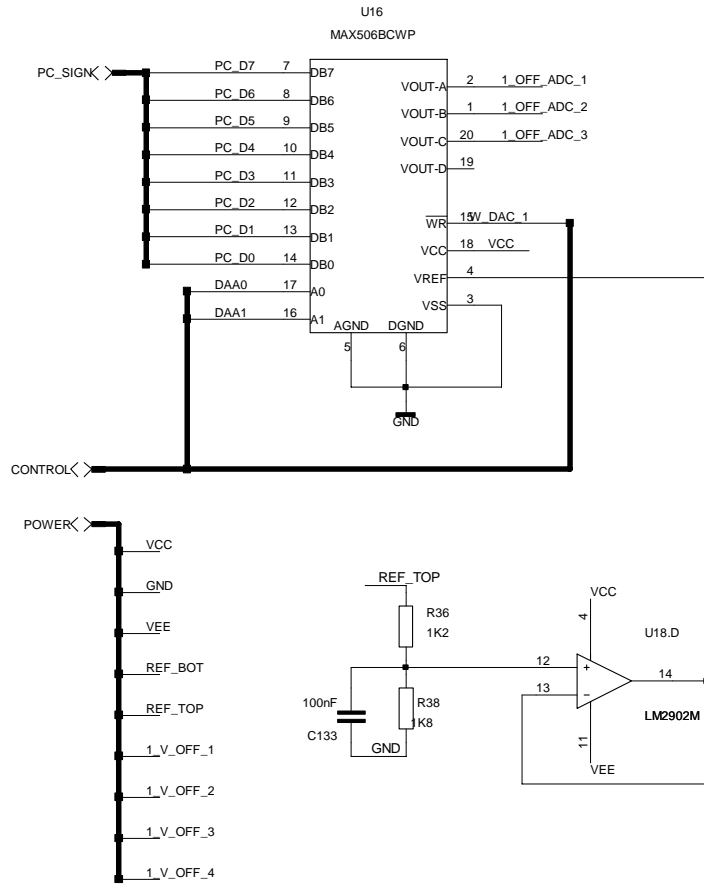
GROUP 1 FADC CHANNEL 3



REV: B	DATE: 31.10.00	ENG: F.BEISSEL
REV: A	DATE: 10.05.00	ENG: V.COMMICHAU
PROJECT: CMSAPV CONTROLLER	NO.: 74/	
COMPANY: III. PHYSIKALISCHES INSTITUT RWTH AACHEN		
ADDRESS: HUYSKENSWEG		
CITY: D-52074 AACHEN		
COUNTRY: GERMANY		
INITIAL	12.04.99	PAGE: 10 OF: 22



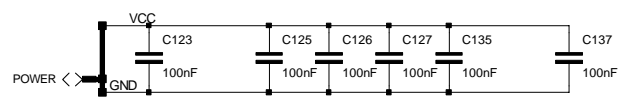
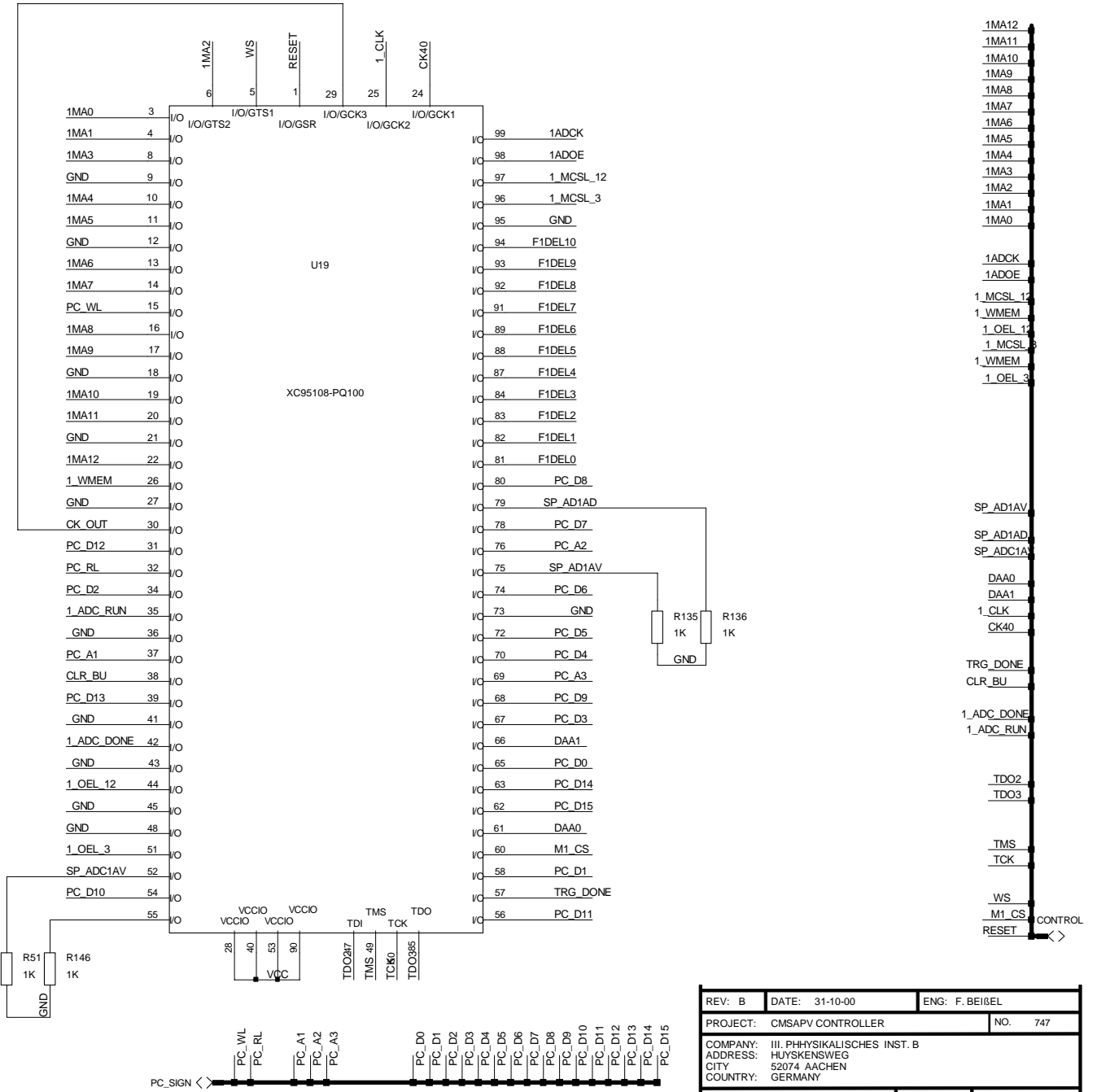
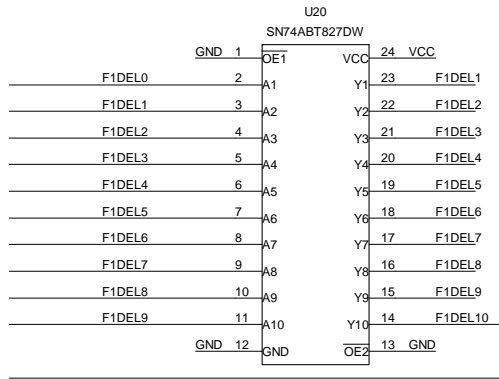
GROUP 1 OFFSET



REV: B	DATE: 11.11.00	ENG: F.BEIßEL
REV: A	DATE: 27.04.00	ENG: V.COMMICHAU
PROJECT: CMSAPV CONTROLLER	NO.: 747	
COMPANY: III. PHYSIKALISCHES INSTITUT RWTH AACHEN		
ADDRESS: HUYSKENSWEG		
CITY: D-52074 AACHEN		
COUNTRY: GERMANY		
INITIAL	12.04.99	PAGE: 11 OF: 22

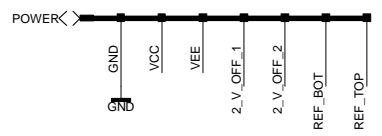
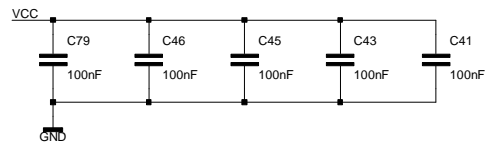
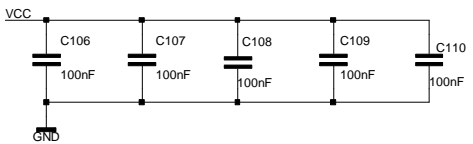
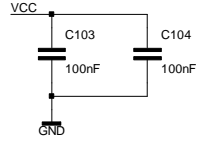
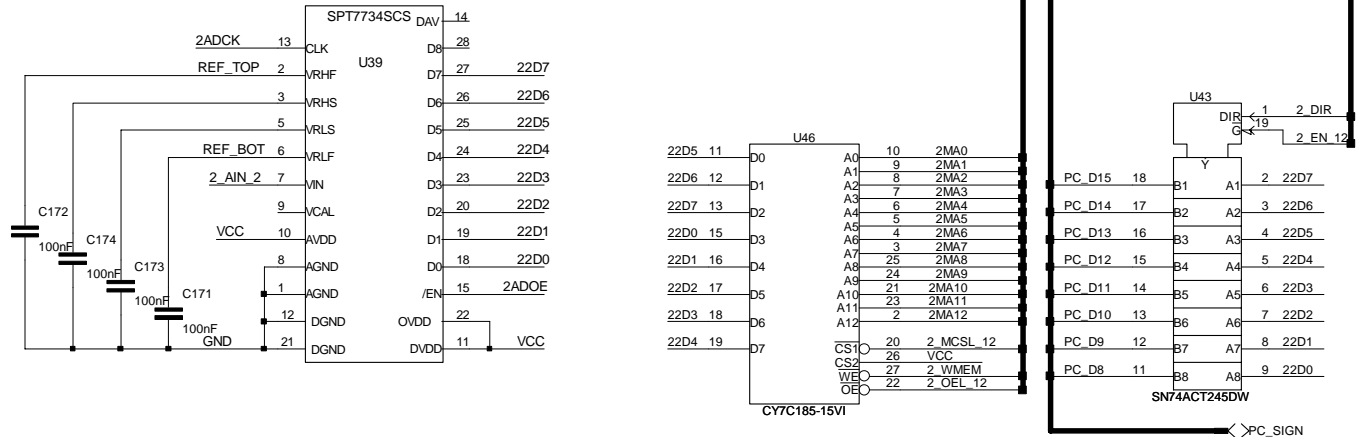
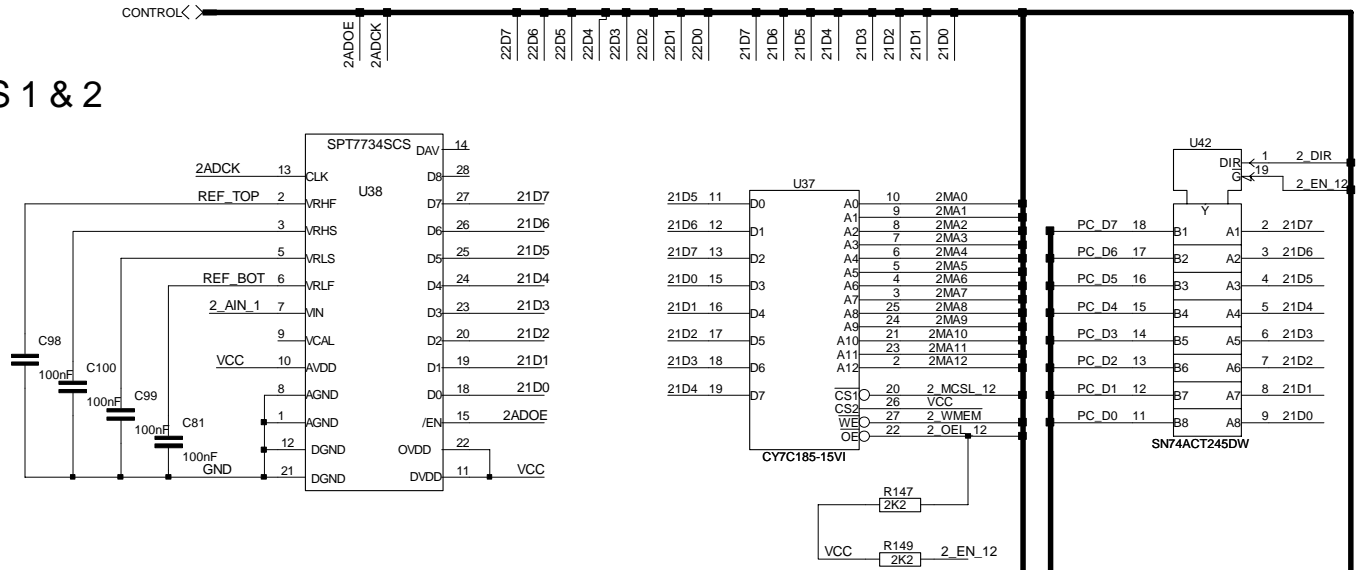
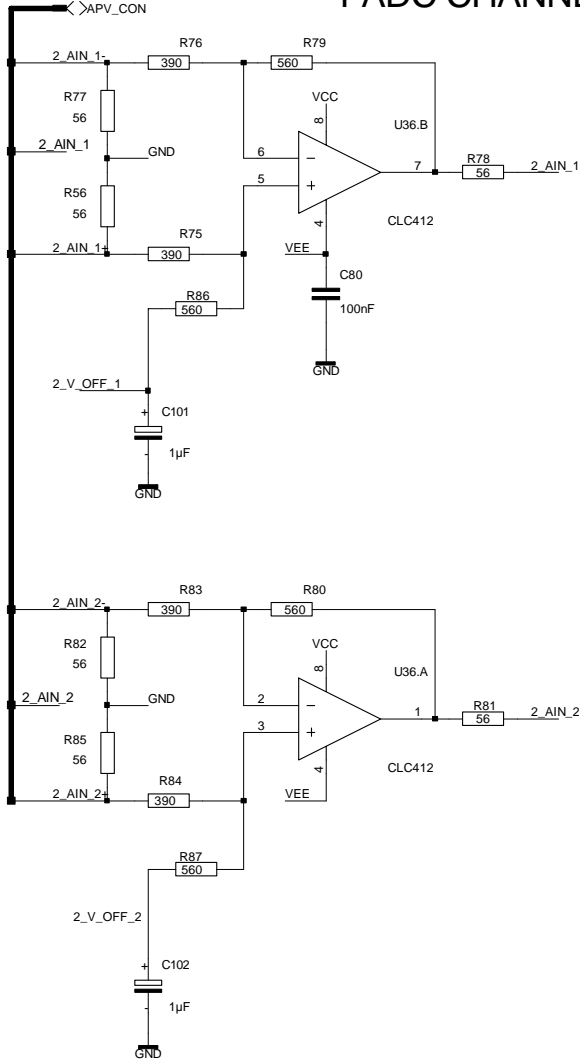
ADC GROUP 1 CONTROLLER

FADC CLOCK ADJUST (OPTIONAL)



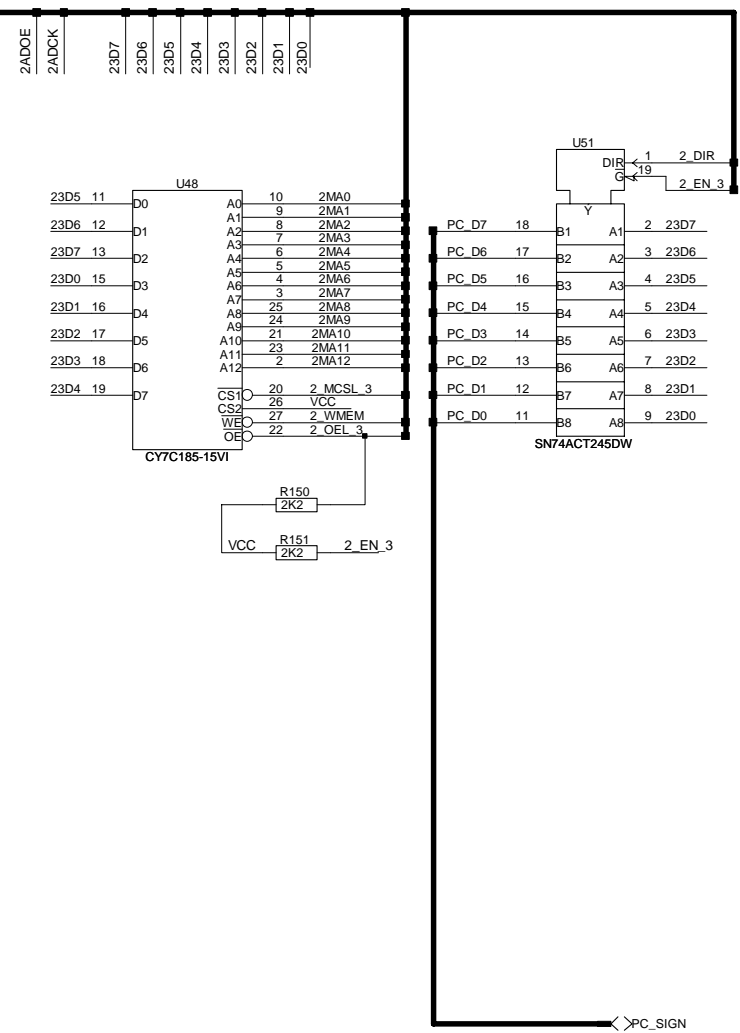
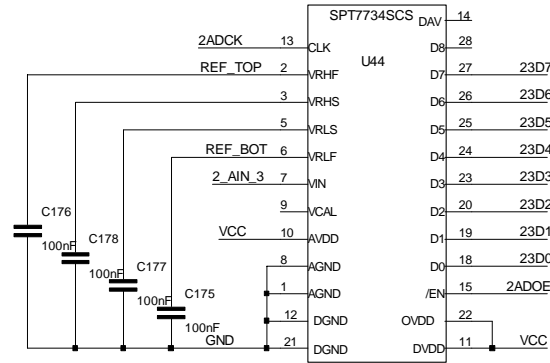
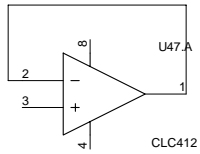
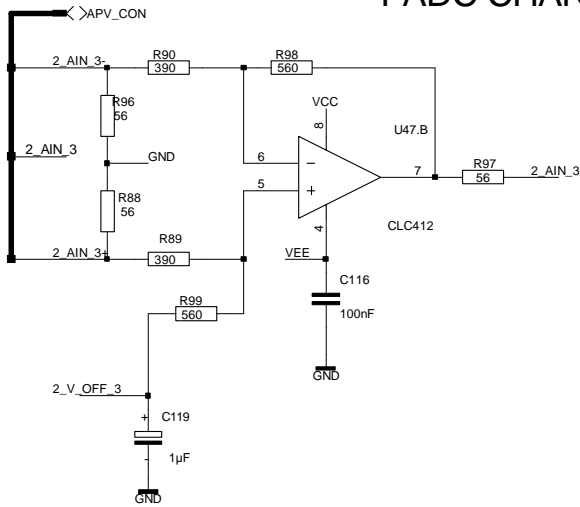
REV: B	DATE: 31-10-00	ENG: F. BEISEL
PROJECT: CMSAPV CONTROLLER		NO. 747
COMPANY: III. PHYSIKALISCHES INST. B		
ADDRESS: HUYSKENSWEG		
CITY: 52074 AACHEN		
COUNTRY: GERMANY		
INITIAL	31.10.00	PAGE: 12 OF: 22

GROUP 2 FADC CHANNELS 1 & 2

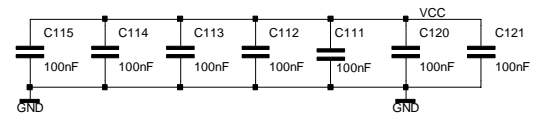
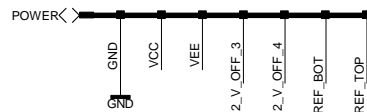


REV: B	DATE: 31.10.00	ENG: F.BEIBEL
REV: A	DATE: 10.05.00	ENG: V.COMMICHAU
PROJECT: CMSAPV CONTROLLER		NO.: 747
COMPANY: III. PHYSIKALISCHES INSTITUT RWTH AACHEN		
ADDRESS: HUYSKENSWEG		
CITY: D-52074 AACHEN		
COUNTRY: GERMANY		
INITIAL	12.04.99	PAGE: 17 OF: 22

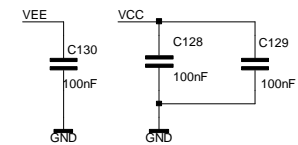
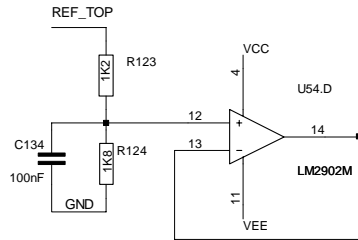
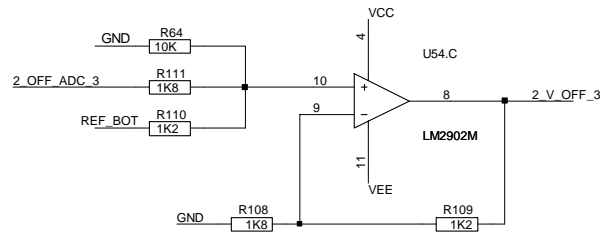
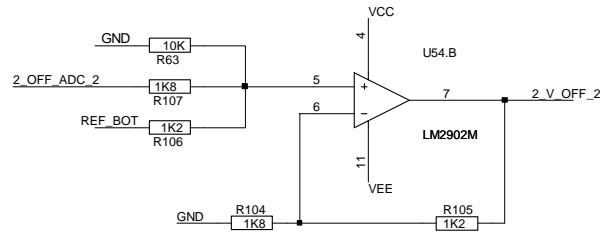
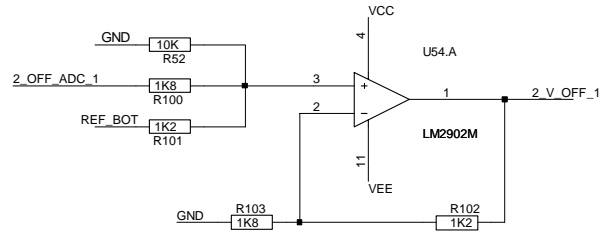
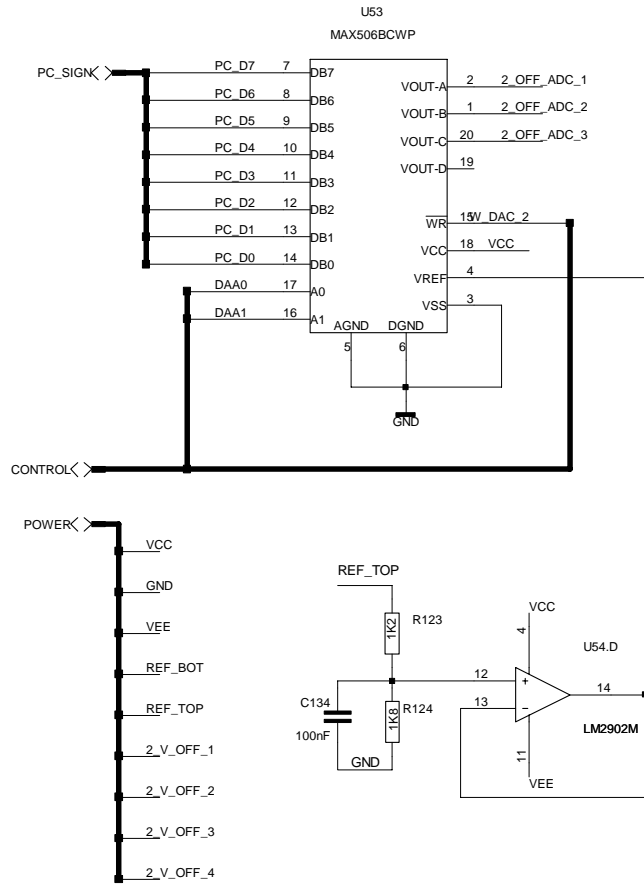
GROUP 2 FADC CHANNEL 3



REV: B	DATE: 31.10.00	ENG: F.BEIBEL
REV: A	DATE: 10.05.00	ENG: V.COMMICHAU
PROJECT: CMSAPV CONTROLLER		NO.: 747
COMPANY: III. PHYSIKALISCHES INSTITUT RWTH AACHEN		
ADDRESS: HUYSKENSWEG		
CITY: D-52074 AACHEN		
COUNTRY: GERMANY		
INITIAL	12.04.99	PAGE: 18 OF: 22

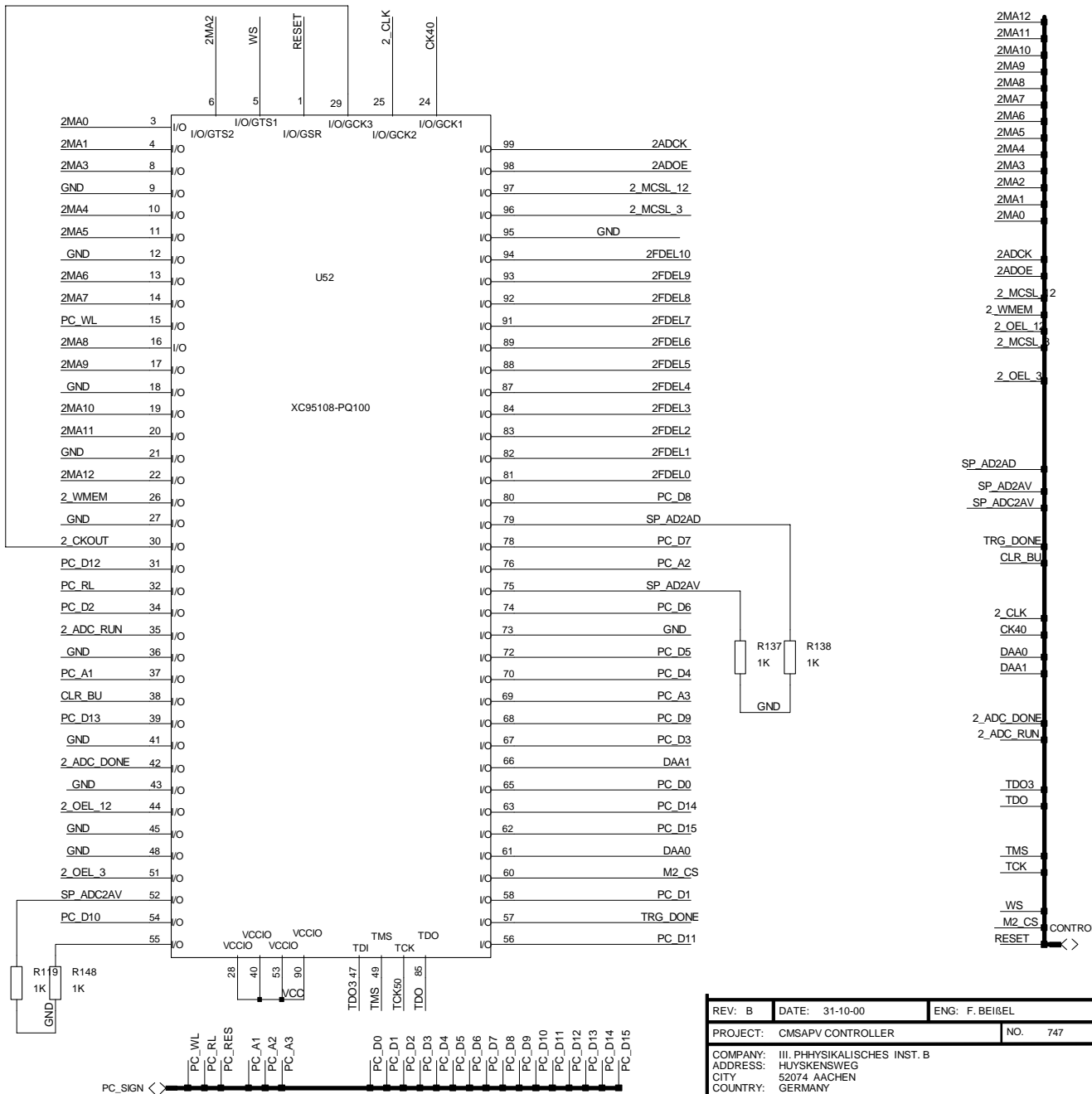
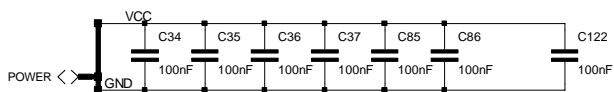
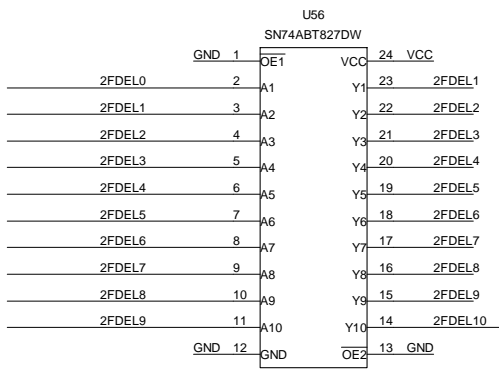


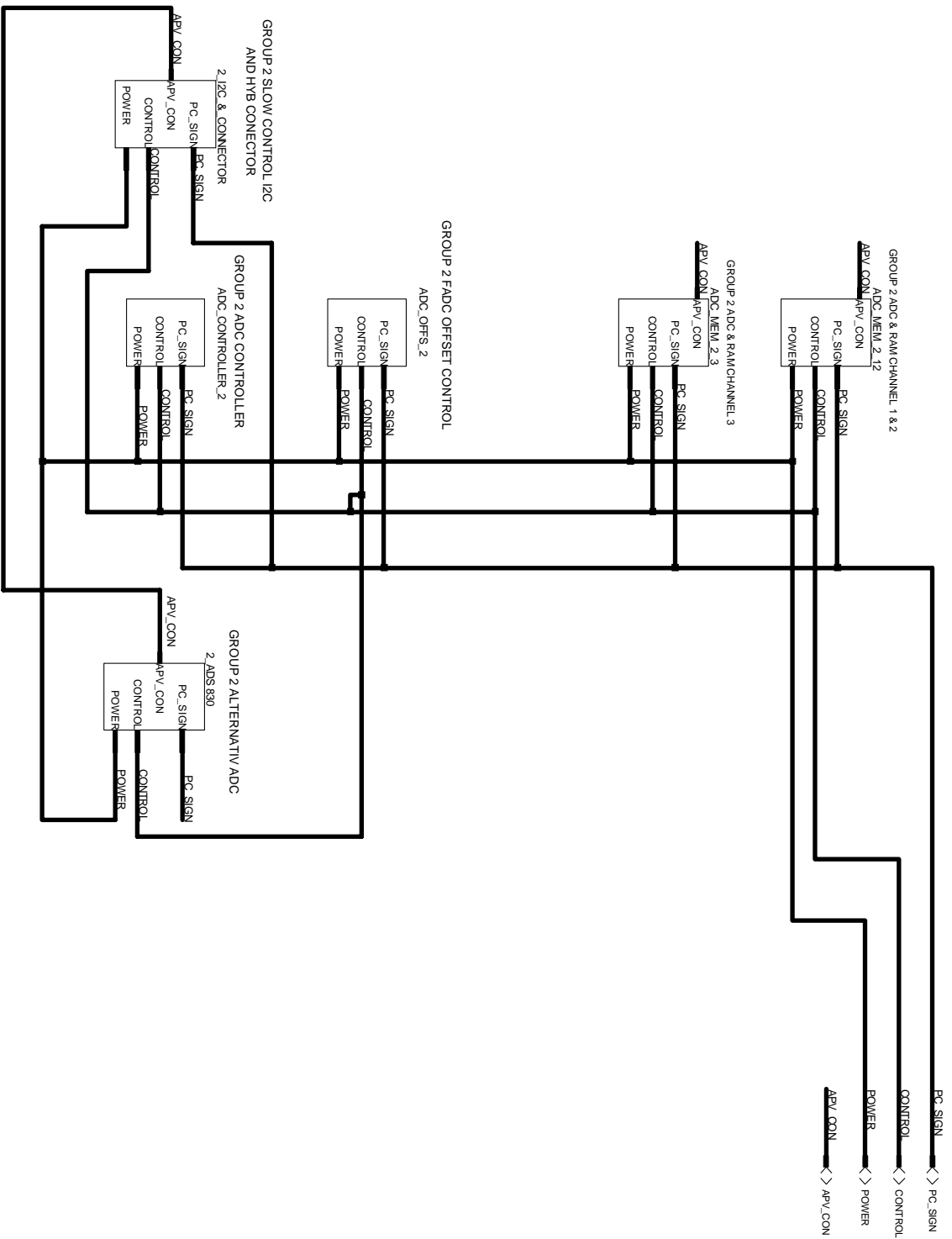
GROUP 2 OFFSET



REV: B	DATE: 11.11.00	ENG: F.BEIßEL
REV: A	DATE: 27.04.00	ENG: V.COMMICHAU
PROJECT: CMSAPV CONTROLLER	NO.:747	
COMPANY: III.PHYSIKALISCHES INSTITUT RWTH AACHEN	ADDRESS: HUYSKENSWEG	
CITY: D-52074 AACHEN	COUNTRY: GERMANY	
INITIAL	12.04.99	PAGE: 19 OF: 22

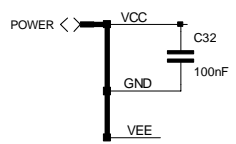
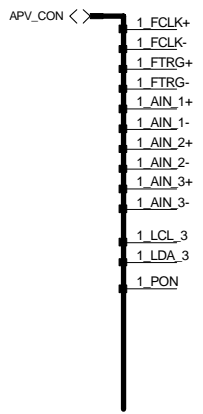
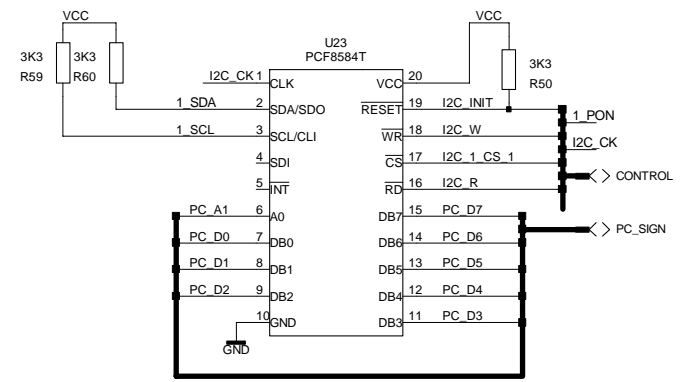
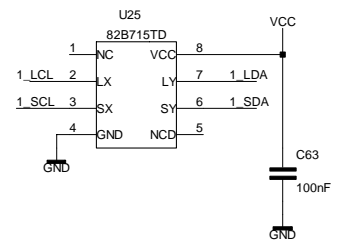
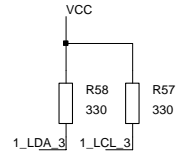
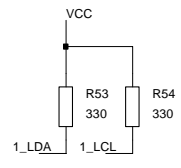
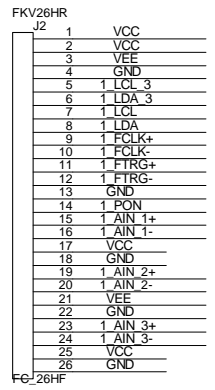
FADC CLOCK ADJUST





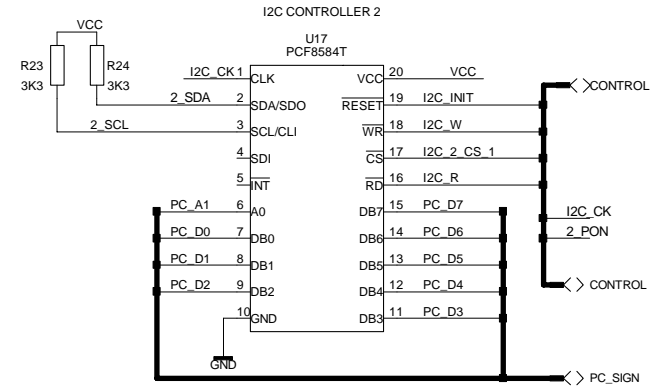
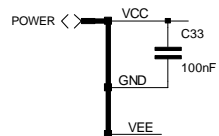
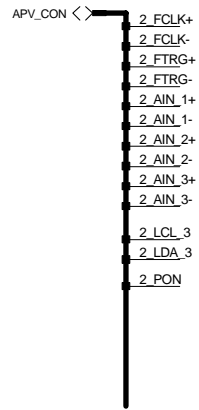
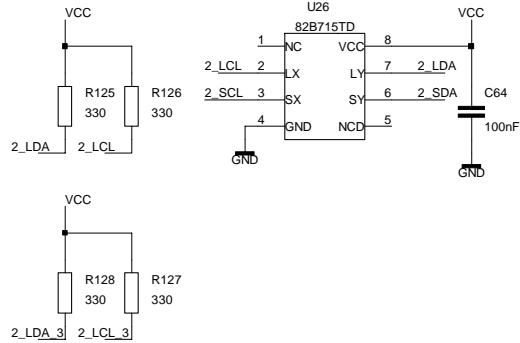
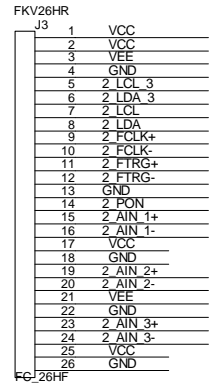
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PROJECT: CMSAPV CONTROLLER			
COMPANY: III. PHYSIKALISCHES INST. B			
ADDRESS: HUYSENSWEG			
CITY: 52074 AACHEN			
COUNTRY: GERMANY			
INITIAL	11.11.00	PAGE: 16	OF: 22

1. CONNECTOR TO APV FRONTEND ADAPTER 1



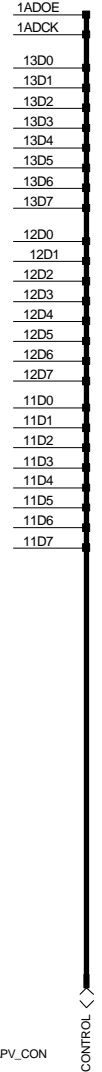
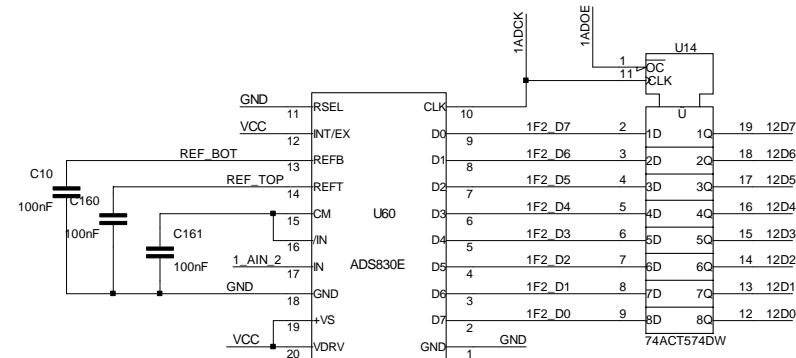
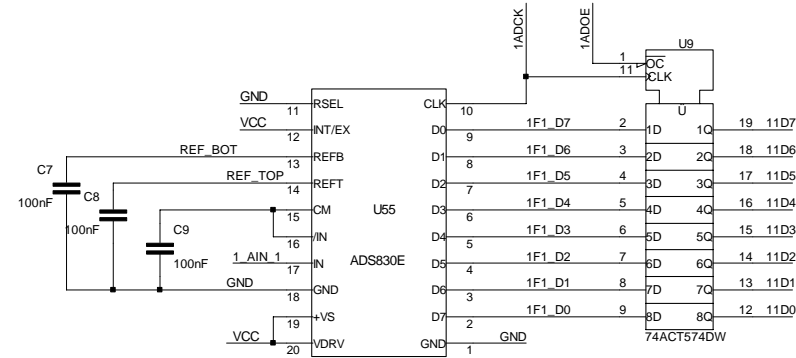
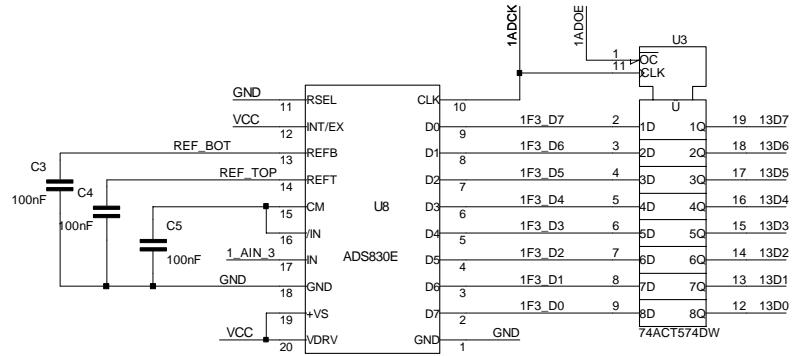
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PROJECT: CMSAPV CONTROLLER	NO. 747	
COMPANY: III. PHYSIKALISCHES INST. B		
ADDRESS: HUYSKENSWEG		
CITY: 52074 AACHEN		
COUNTRY: GERMANY		
INITIAL	11.11.00	PAGE: 13 OF: 22

CONNECTOR TO APV FRONTEND 2



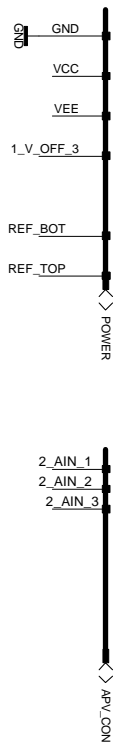
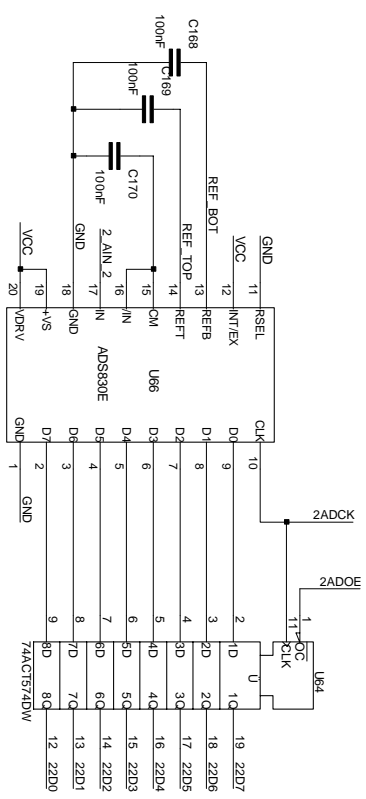
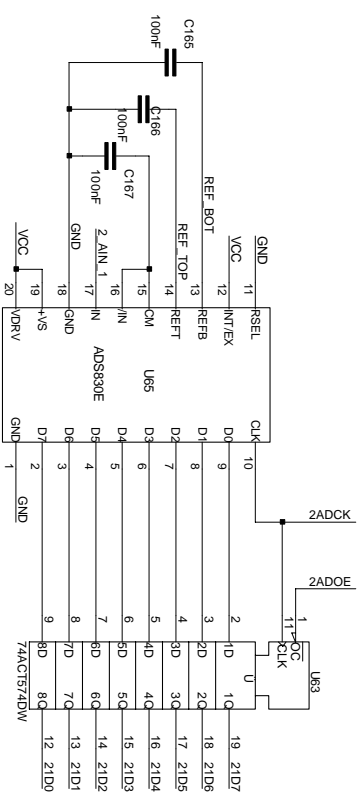
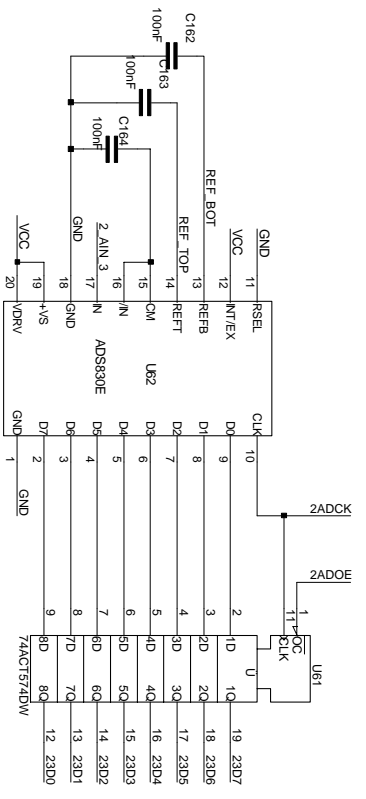
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PROJECT: CMSAPV CONTROLLER	NO. 747	
COMPANY: III. PHYSIKALISCHES INST. B		
ADDRESS: HUYSKENSWEG		
CITY: 52074 AACHEN		
COUNTRY: GERMANY		
INITIAL	11.11.00	PAGE: 21 OF: 22

ALTERNATIVE ADC GROUP 1



REV: B	DATE: 11.11.00	ENG: F. BEIßEL
PROJECT: CMSAPV CONTROLLER	NO. 747	
COMPANY: III. PHHYSIKALISCHES INST. B		
ADDRESS: HUYSKENSWEG		
CITY: 52074 AACHEN		
COUNTRY: GERMANY		
INITIAL	11.11.00	PAGE: 14 OF: 22





REV.: B	DATE: 11.11.00	ENG.: F. BEHREL
PROJECT: CMSAPV/CONTROLLER	NO. 747	
COMPANY: III. PHYSIKALISCHES INST. B		
ADDRESS: LUTSKENSWEG		
COUNTRY: GERMANY		
INITIAL	11.11.00	PAGE: 22 OF: 22