

# JOHANNUS

*SCHEMATIC DIAGRAMS*

*S W E L I N C K I I*

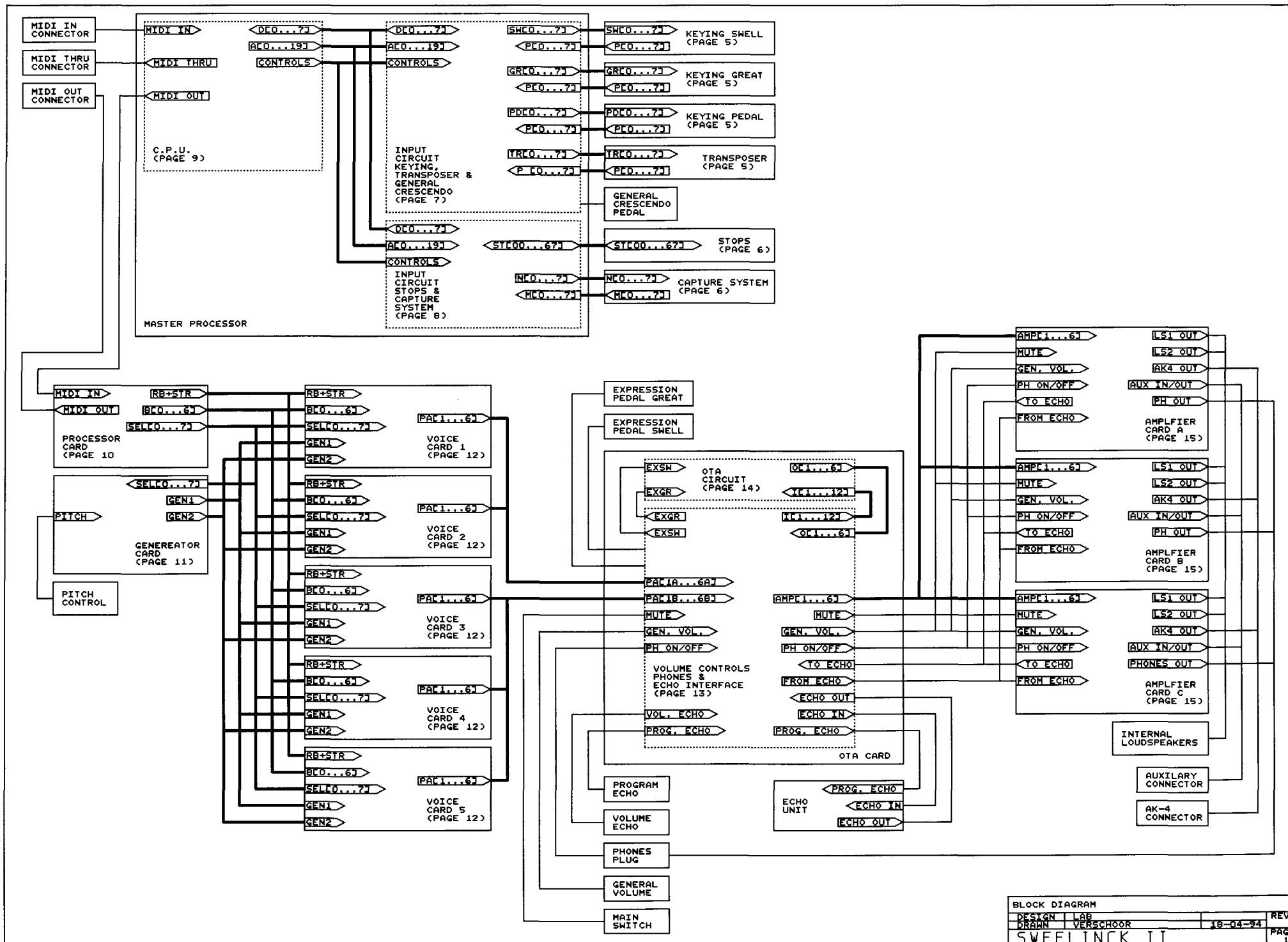
ALTERATIONS RESERVED

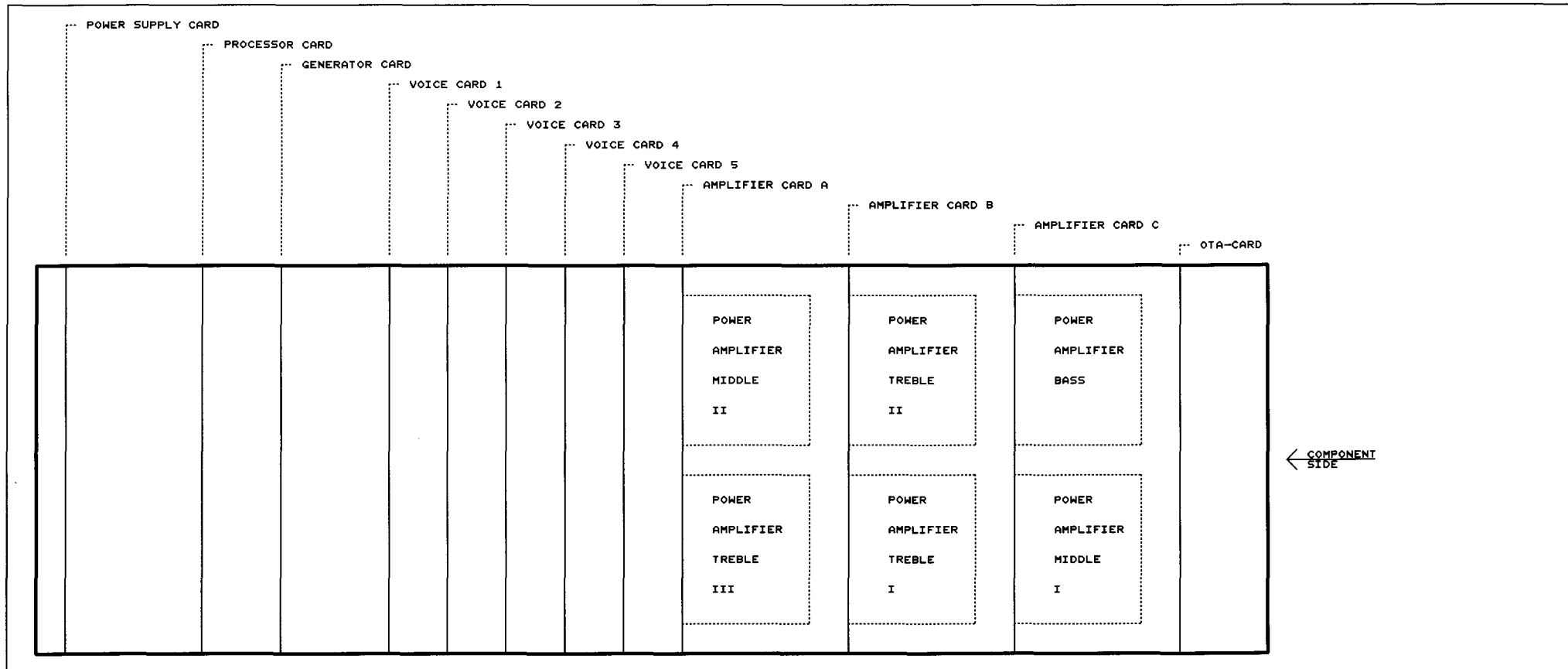
JOHANNUS Orgelbouw b.v.

Morsestraat 28 - 6716 AH Ede - Tel. (08380) 37403 - Fax (08380) 22238

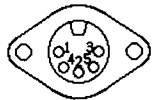
# C O N T E N T S

1. BLOCK DIAGRAM
2. POSITION DIAGRAM CARDS (TOPVIEW) & EXTERNAL CONNECTIONS (mounted on the rearside of the organ)
3. PINNING BUS CARD CONNECTORS
4. TRANSFORMER CONNECTIONS & POWER SUPPLY
5. SCANNING KEYING & TRANSPOSER
6. STOP-BANK & SWITCH-BANK CAPTURE SYSTEM
7. INPUT CIRCUIT SCANNING KEYING, TRANSPOSER & GENERAL CRESCENDO CIRCUIT (master processor)
8. INPUT CIRCUIT STOPS & CAPTURE SYSTEM (master processor)
9. C.P.U. (master processor)
10. PROCESSOR CARD
11. GENERATOR CARD
12. VOICE CARD
13. VOLUMECONTROLS; HEADPHONES CONNECTIONS & ECHO INTERFACE (ota card)
14. EXPRESSION PEDAL CIRCUIT (ota card)
15. AMPLIFIER CARD
16. POSITION DIAGRAM ADJUSTMENTS  
INTERNAL POTENTIOMETERS



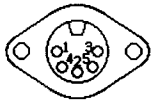


1. NOT CONNECTED
2. NOT CONNECTED
3. NOT CONNECTED
4. +5V MIDI IN
5. MIDI IN



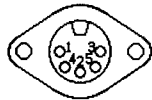
MIDI IN

1. NOT CONNECTED
2. NOT CONNECTED
3. NOT CONNECTED
4. +5V MIDI THRU
5. MIDI THRU



MIDI THRU

1. NOT CONNECTED
2. NOT CONNECTED
3. NOT CONNECTED
4. +5V MIDI OUT
5. MIDI OUT



MIDI OUT

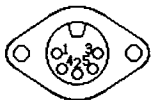
SOLDERING SIDE VIEW

1. AK-4 OUT CHANNEL A
2. GROUND
3. NOT CONNECTED
4. AK-4 OUT CHANNEL B
5. NOT CONNECTED



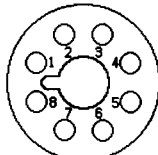
AK-4  
OUT

1. AUX OUT CHANNEL A
2. GROUND
3. AUX IN CHANNEL A
4. AUX OUT CHANNEL B
5. AUX IN CHANNEL B



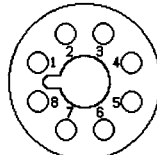
AUX  
IN/OUT

1. - MIDDLE II AMPLIFIER
2. + MIDDLE II AMPLIFIER
3. - TREBLE I AMPLIFIER
4. + TREBLE I AMPLIFIER
5. - TREBLE II AMPLIFIER
6. + TREBLE II AMPLIFIER
7. - TREBLE III AMPLIFIER
8. + TREBLE III AMPLIFIER



LS OUT A

1. - BASS AMPLIFIER
2. + BASS AMPLIFIER
3. - MIDDLE I AMPLIFIER
4. + MIDDLE I AMPLIFIER



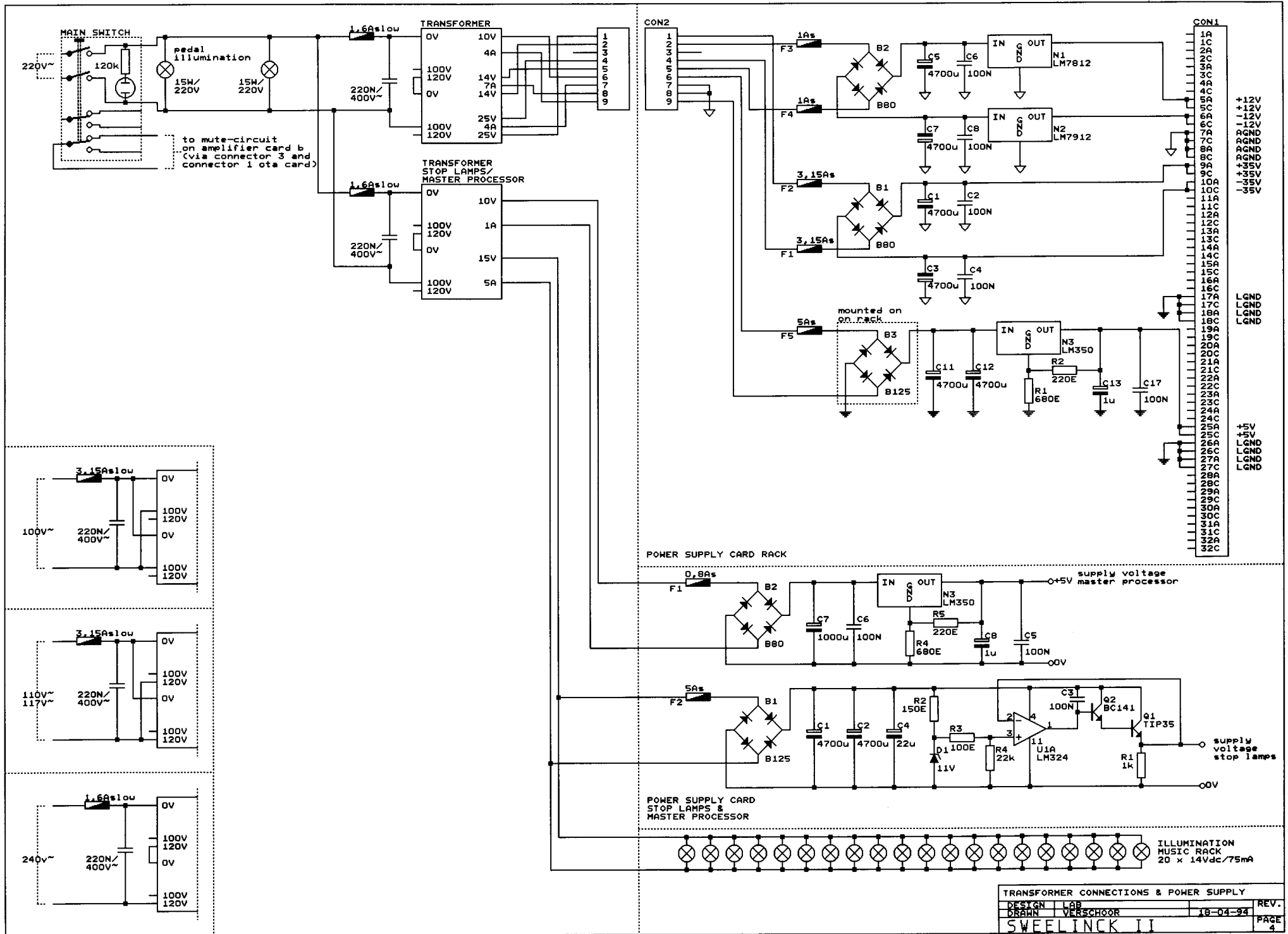
LS OUT B

(OPTIONAL)

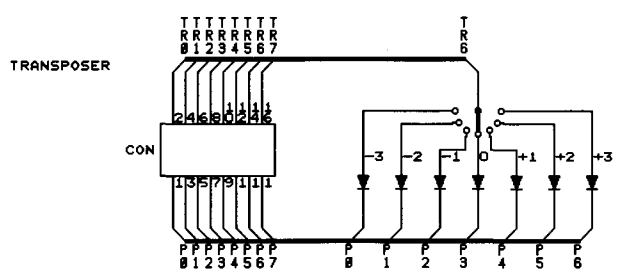
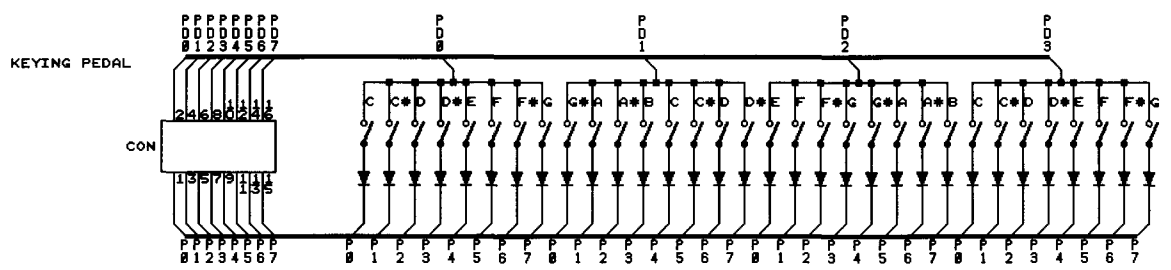
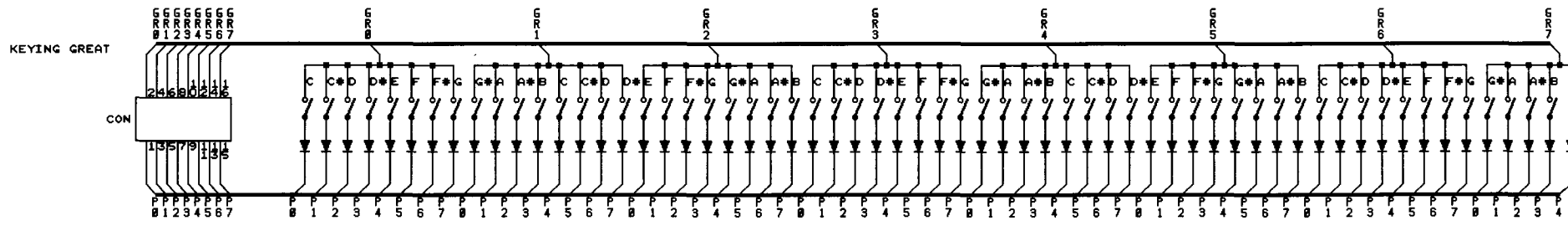
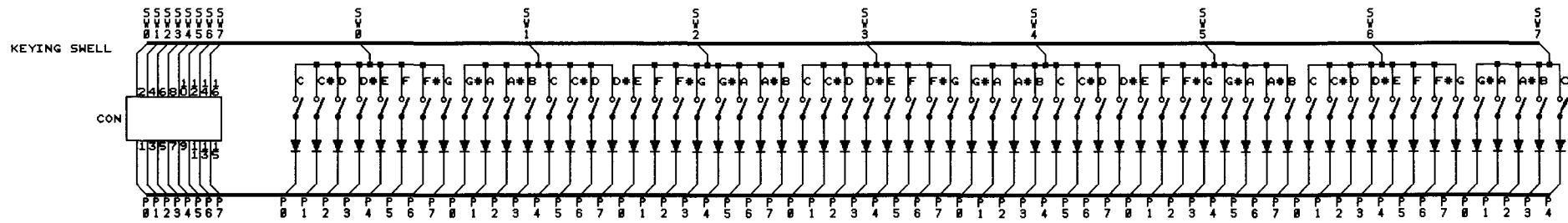
POSITION DIAGRAM CARDS (TOPVIEW) &  
EXTERNAL CONNECTIONS (mounted on the  
rearside of the organ)

DESIGN	LAB	REV.
DRAWN	VERSCHOOR	18-04-94
SWEELINCK II		PAGE 2



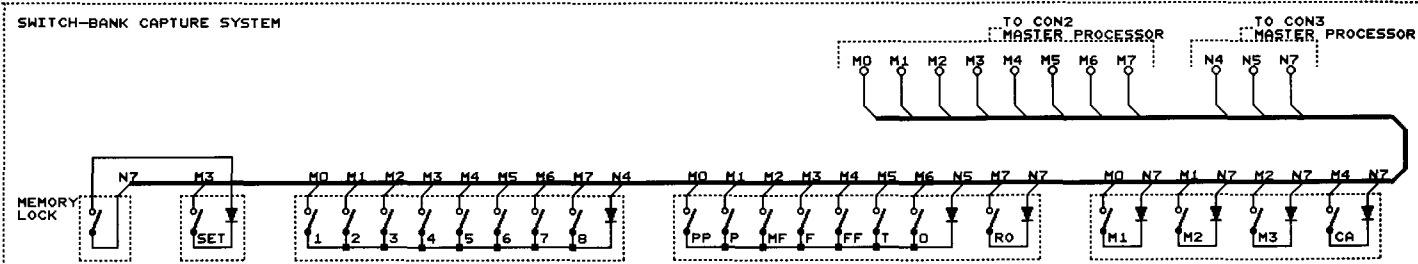
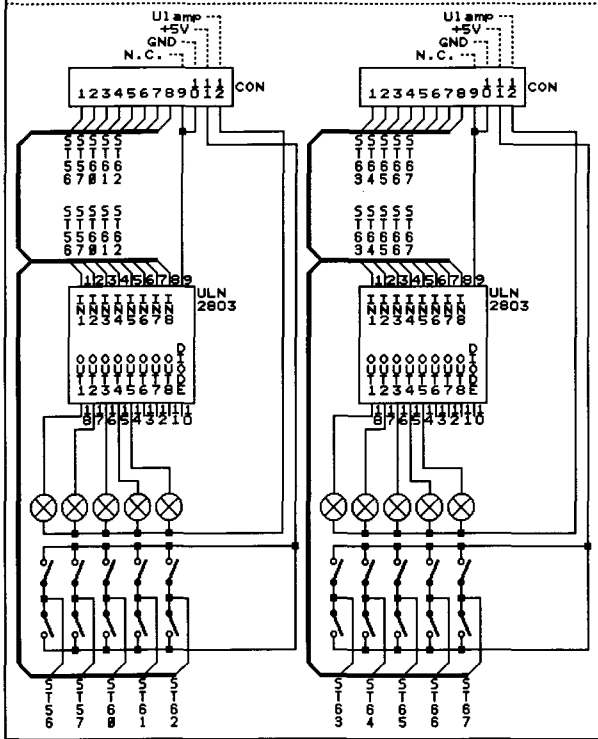
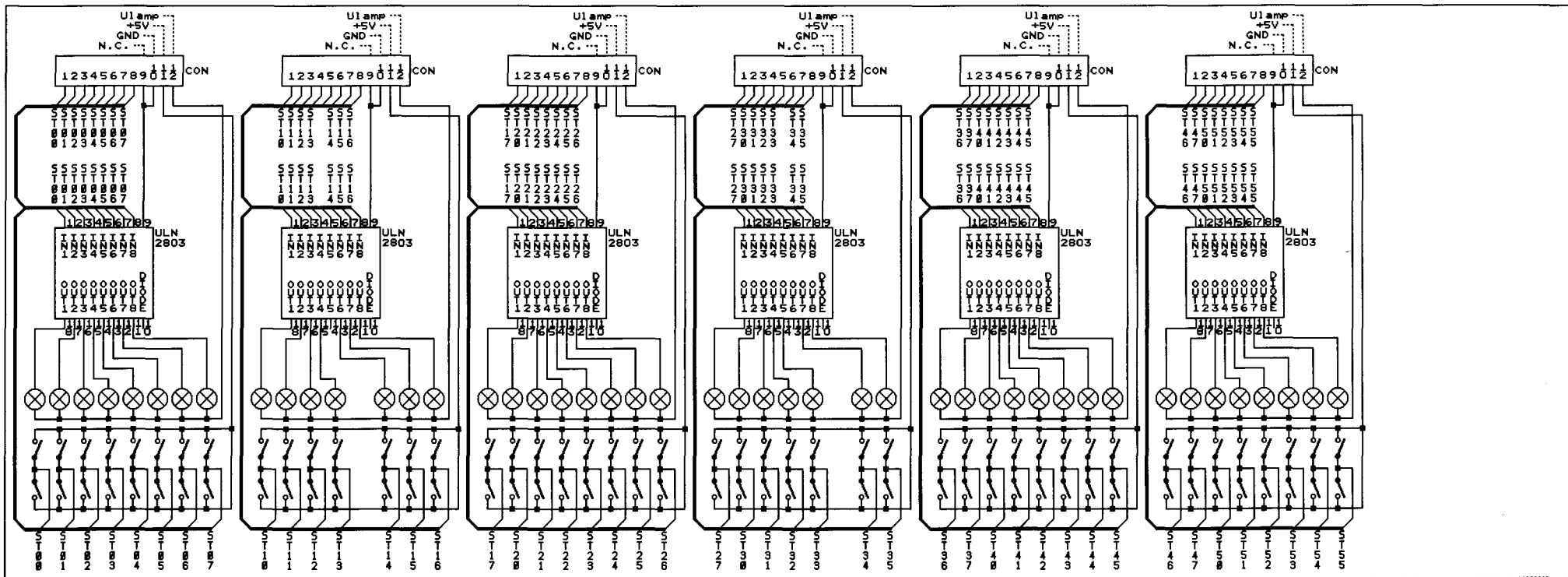


TRANSFORMER CONNECTIONS & POWER SUPPLY			
DESIGN	LAB	REV.	
DRAHN	VERSCHOOR	18-04-94	PAGE 4
SWEELINCK II			



ALL CONNECTORS: TO MASTER PROCESSOR  
 ALL DIODES: 1N4148

SCANNING KEYING & TRANSPOSER		
DESIGN	LAB	REV.
DRAWN	VERSCHOOR	18-04-94
SWEELINCK II		PAGE 5



- STOPLIST
- PEDAL**
- ST00 = DOUBLE BASS 16"
  - ST01 = SUBBASS 16"
  - ST02 = OCTAVE 8"
  - ST03 = GEDACKT 8"
  - ST04 = CHORALBASS 4"
  - ST05 = BASSFLUTE 4"
  - ST06 = OPEN FLUTE 2"
  - ST07 = MIXTURE III
  - ST10 = BOMBARDE 32"
  - ST11 = CONTRA TRUMPET 16"
  - ST12 = TRUMPET 8"
  - ST13 = CLARION 4"
- GREAT**
- ST14 = BOURDON 16"
  - ST15 = OPEN DIAPASON 8"
  - ST16 = ROHRFLUTE 8"
  - ST17 = GAMBA 8"
  - ST20 = OCTAVE 4"
  - ST21 = SALICIONAL 4"
  - ST22 = OPEN FLUTE 4"
  - ST23 = SUPERFLUTE 2 2/3"
  - ST24 = SUPEROCTAVE 2"
  - ST25 = FLUTE 2"
  - ST26 = LARIGOT 1 1/3"
  - ST27 = CORNET IV
  - ST30 = SEQUALTER II
  - ST31 = MIXTURE V-VII
  - ST32 = CONTRA TRUMPET 16"
  - ST33 = TRUMPET 8"

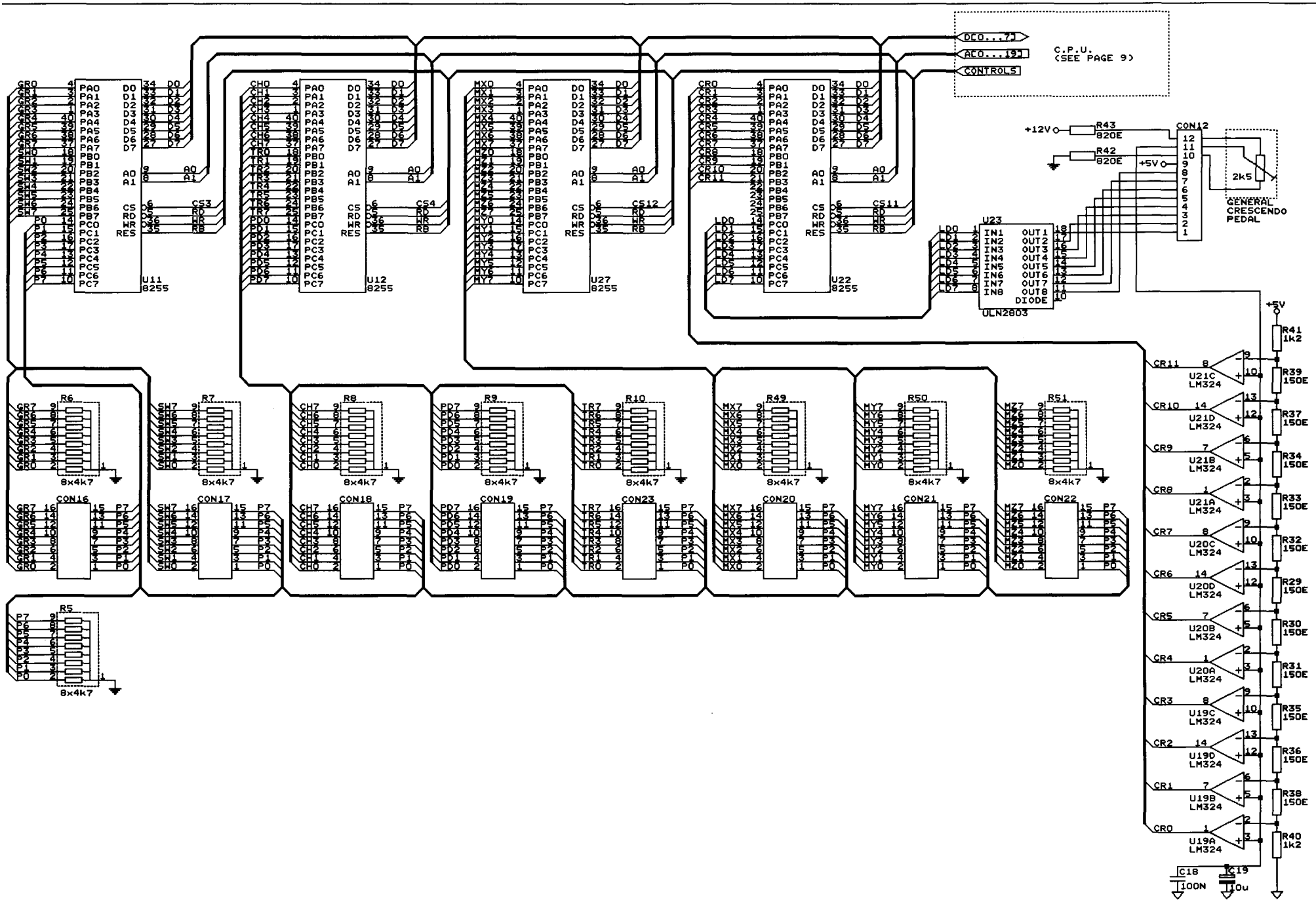
- SWELL**
- ST34 = QUINTATON 16"
  - ST35 = OPEN DIAPASON 8"
  - ST36 = STOPPED FLUTE 8"
  - ST37 = VIOLA 8"
  - ST40 = CELESTE 8"
  - ST41 = OCTAVE 4"
  - ST42 = VIOLON 4"
  - ST43 = ROHRFLUTE 4"
  - ST44 = FLUTE TWELFTH 2 2/3"
  - ST45 = WALDFLUTE 2"
  - ST46 = TIERCE 1 3/5"
  - ST47 = NAZARD 1 1/3"
  - ST50 = SIFFLUTE
  - ST51 = RAUSCHPEIFE III-V
  - ST52 = CYMBAL II-III
  - ST53 = CROMORNE 8"
  - ST54 = VOX HUMANA 8"
  - ST55 = OBOE 8"
- ACCESSORIES**
- ST56 = SWELL TO GREAT
  - ST57 = GREAT TO PEDAL
  - ST60 = SWELL TO PEDAL
  - ST61 = TREMULANT GREAT
  - ST62 = TREMULANT SWELL
  - ST63 = CHORUS
  - ST64 = MANUAL BASS
  - ST65 = MIDI TO GREAT (CHAN. 1)
  - ST66 = MIDI TO SWELL (CHAN. 2)
  - ST67 = MIDI TO PEDAL (CHAN. 3)

ALL CONNECTORS: TO MASTER PROCESSOR

ALL STOPLAMPS: 14Vdc/75mA

STOP-BANK & SWITCH-BANK CAPTURE SYSTEM			
DESIGN	LAB		REV.
DRAWN	VERSCHOOR	18-04-94	PAGE
SWEELINCK II			6

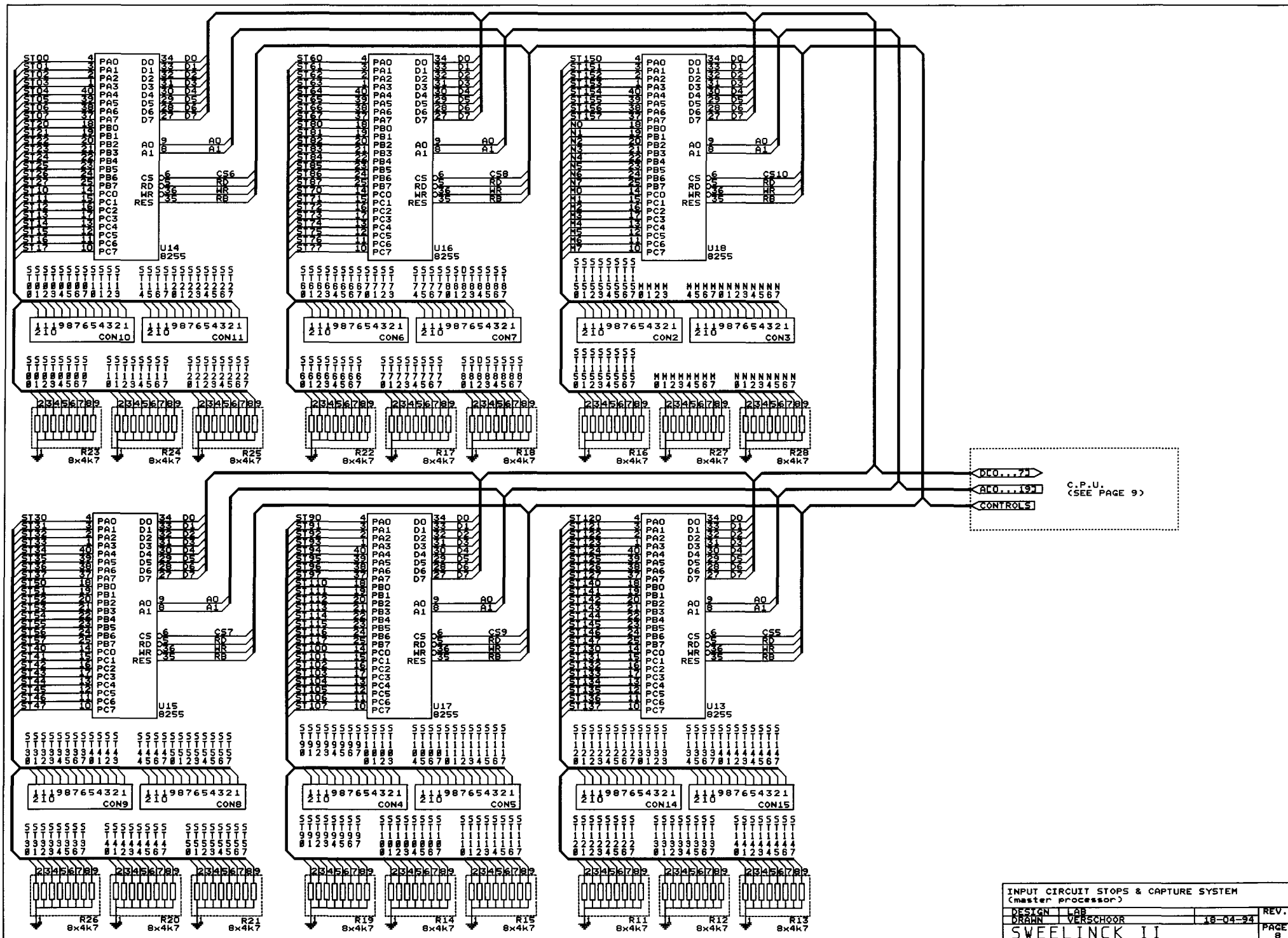




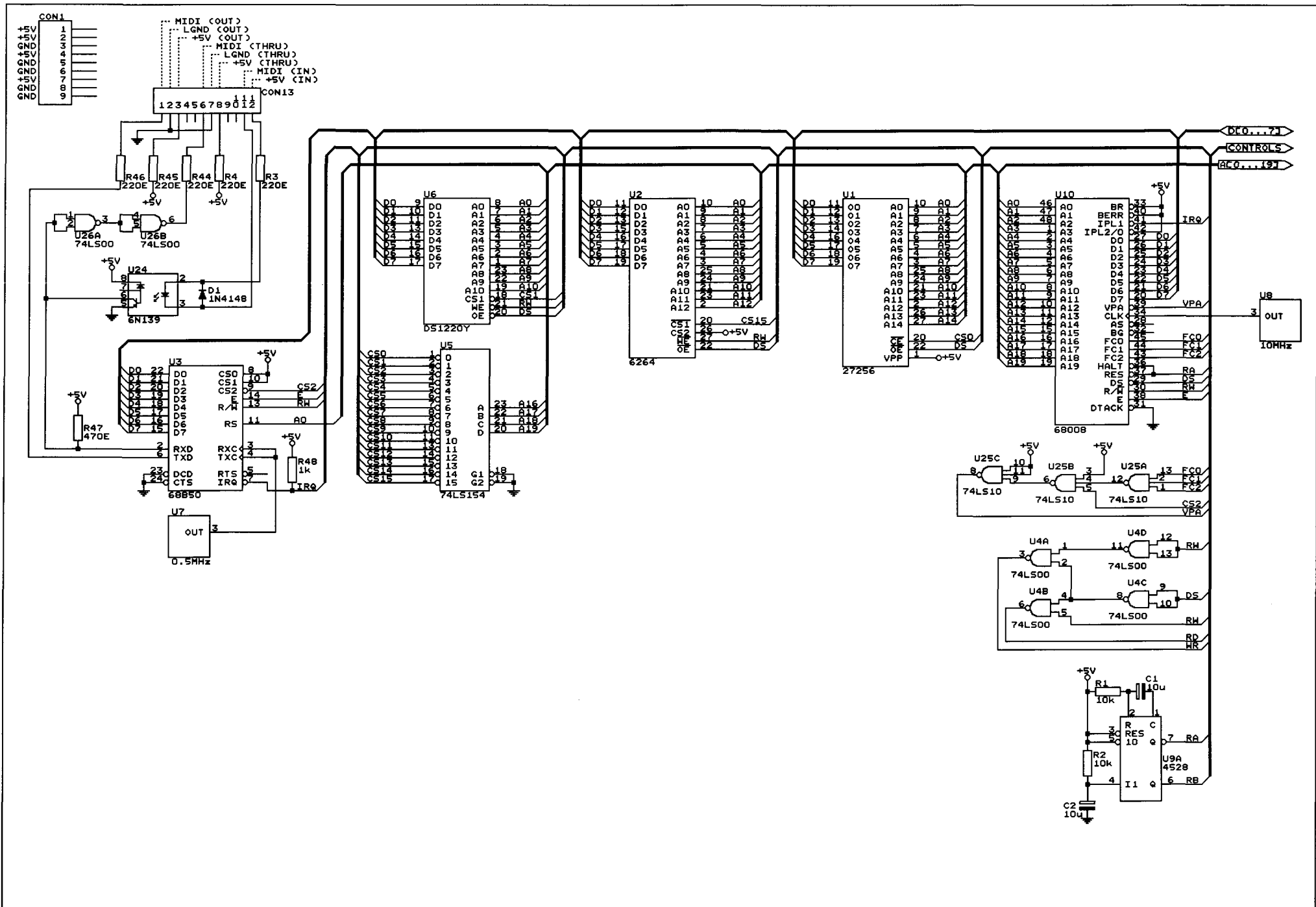
INPUT CIRCUIT SCANNING KEYING, TRANSPOSER & GENERAL CRESCENDO CIRCUIT (master processor)

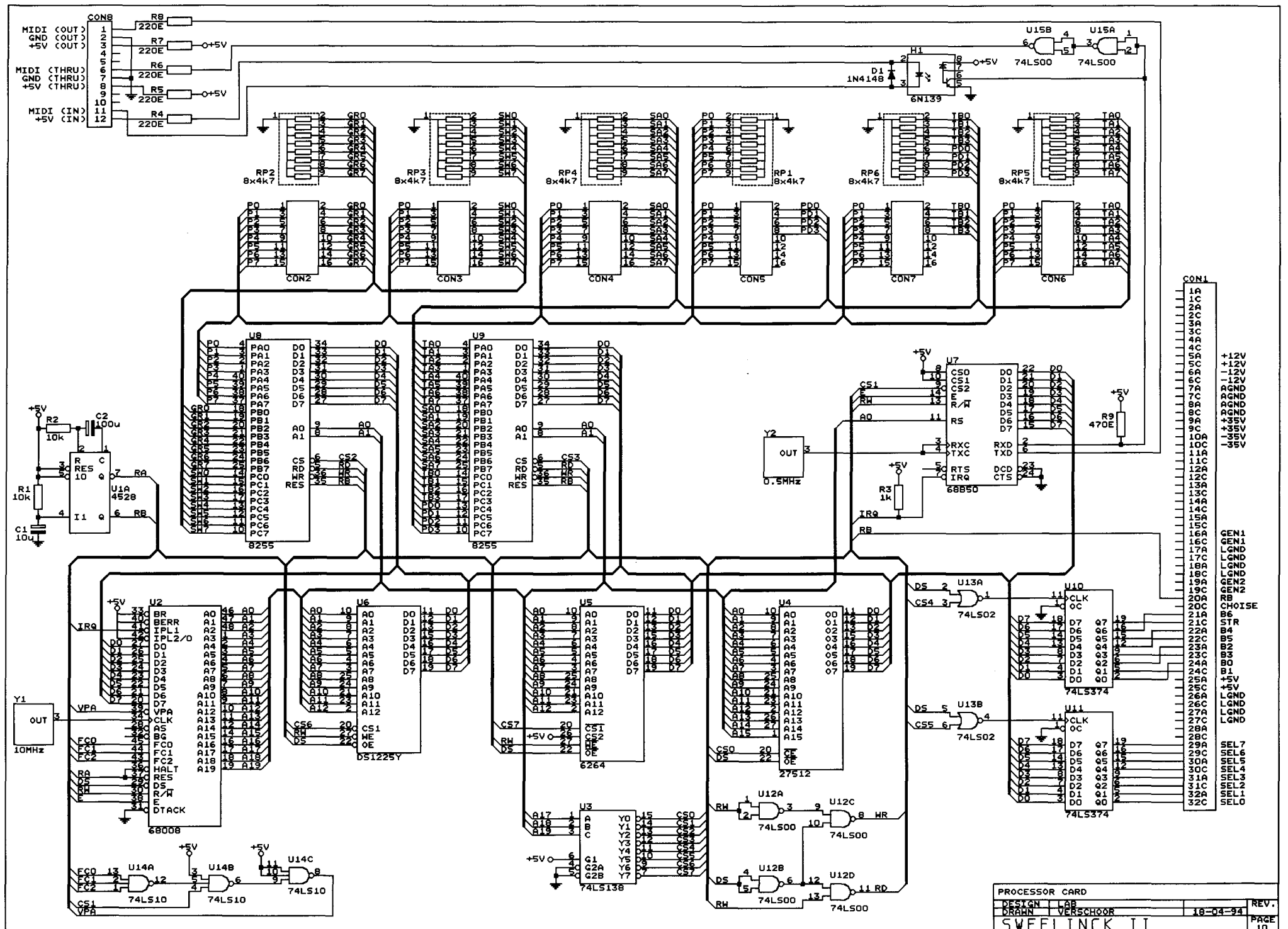
DESIGN	LAB	REV.
DRAHN	VERSCHOOR	18-04-94

SWEELINCK II PAGE 7

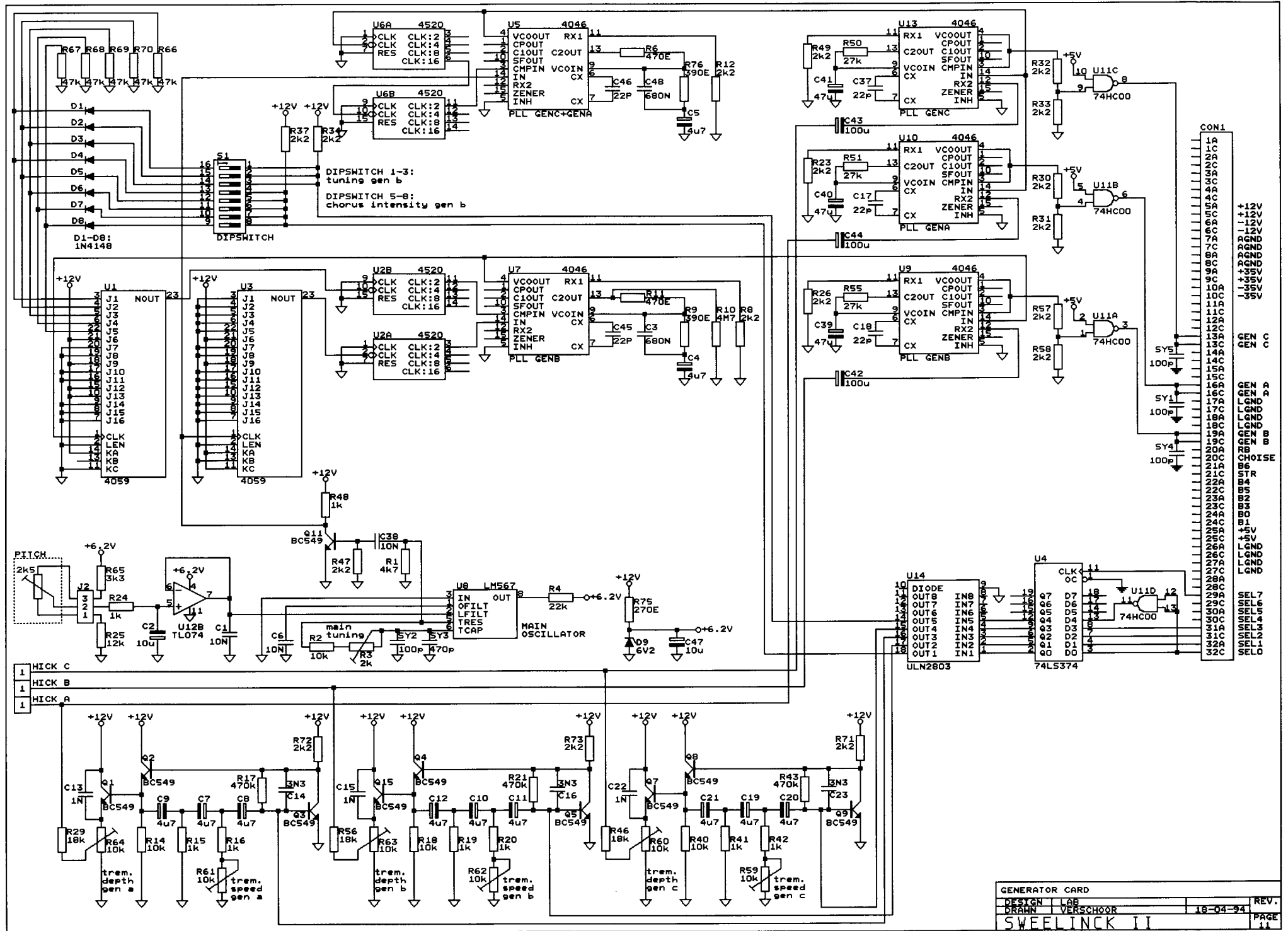


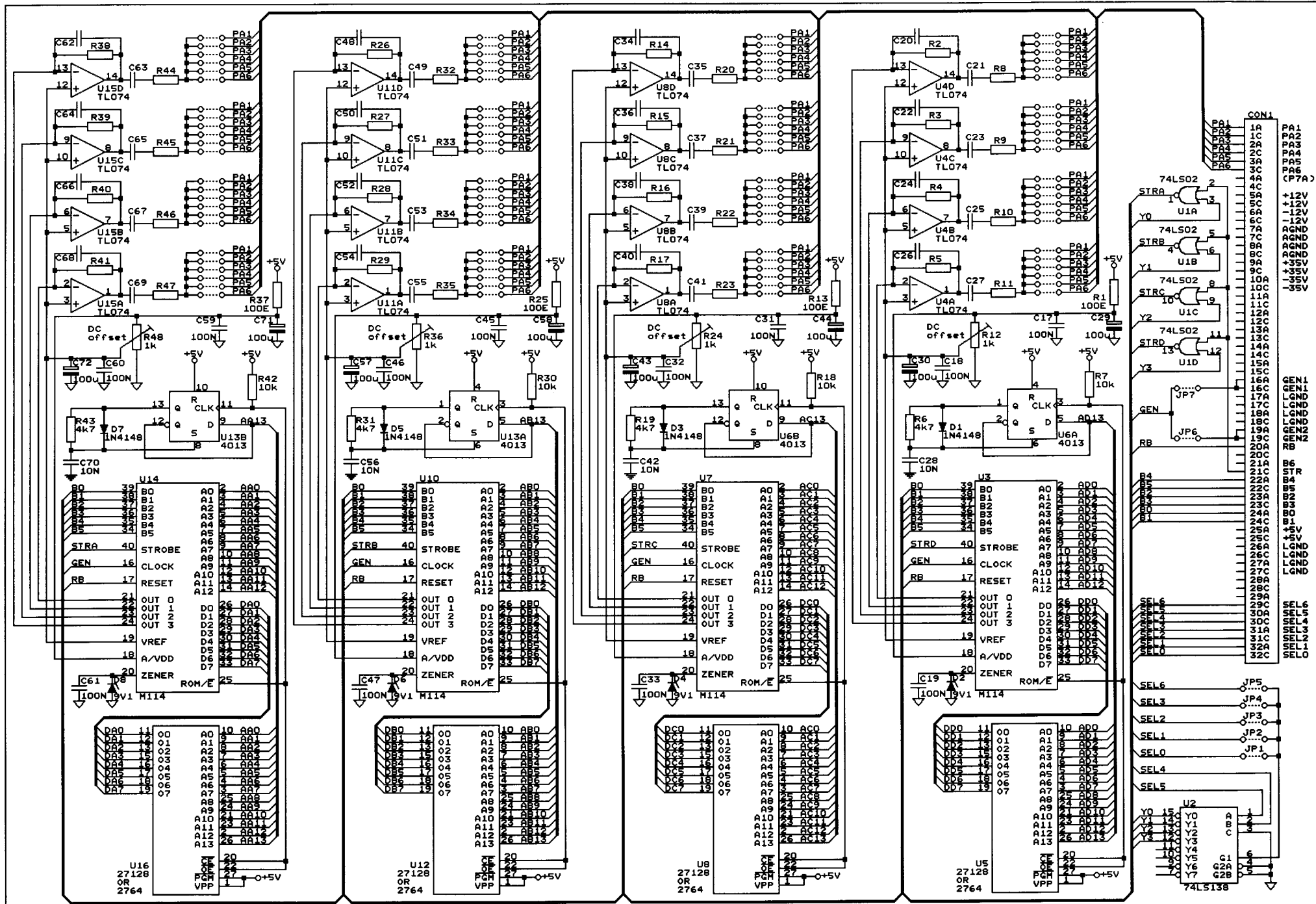
C.P.U.  
(SEE PAGE 9)



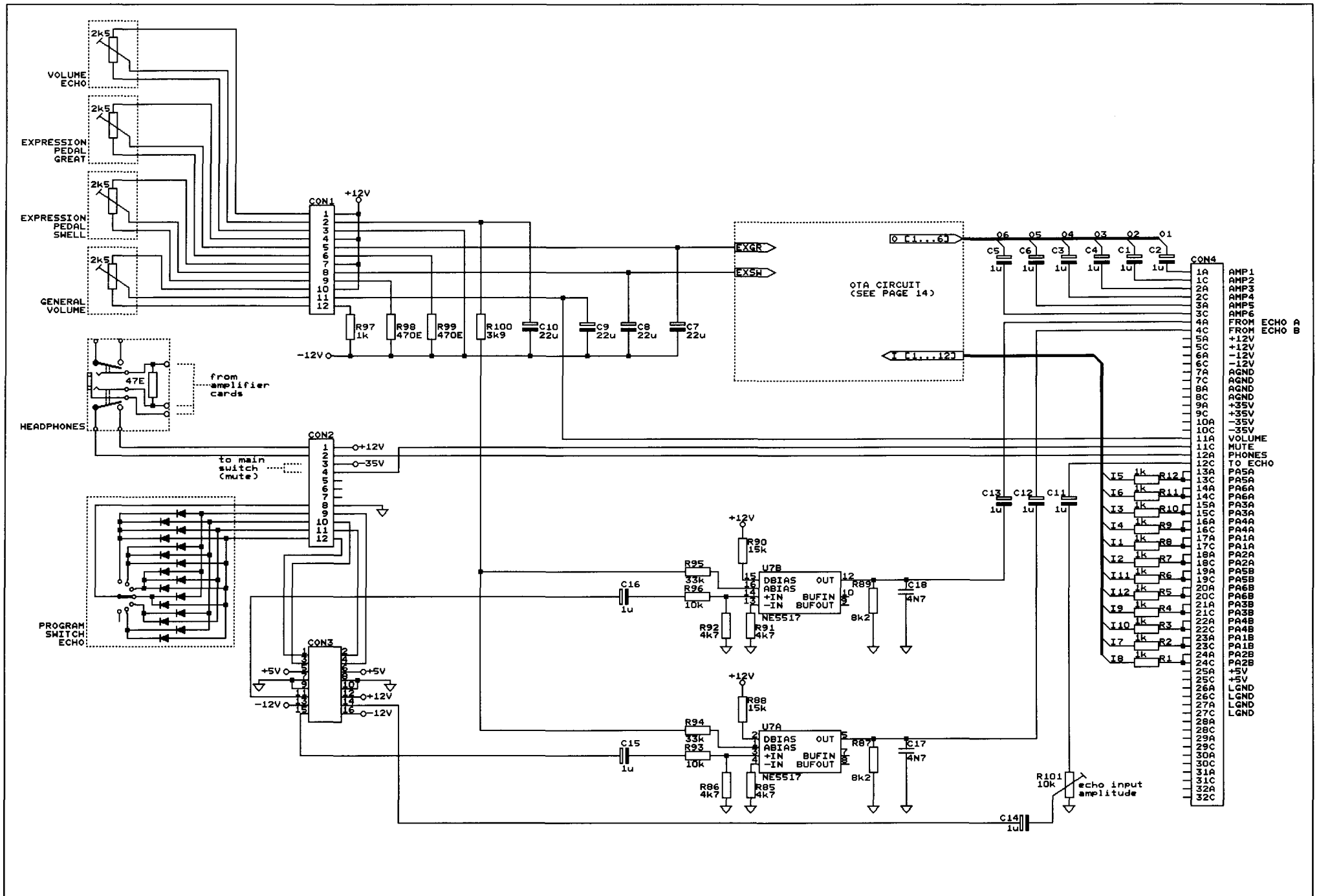


PROCESSOR CARD			REV.
DESIGN	LAB	18-03-94	
DRAWN	VERSCHOOR		PAGE 10
SWEELINCK II			





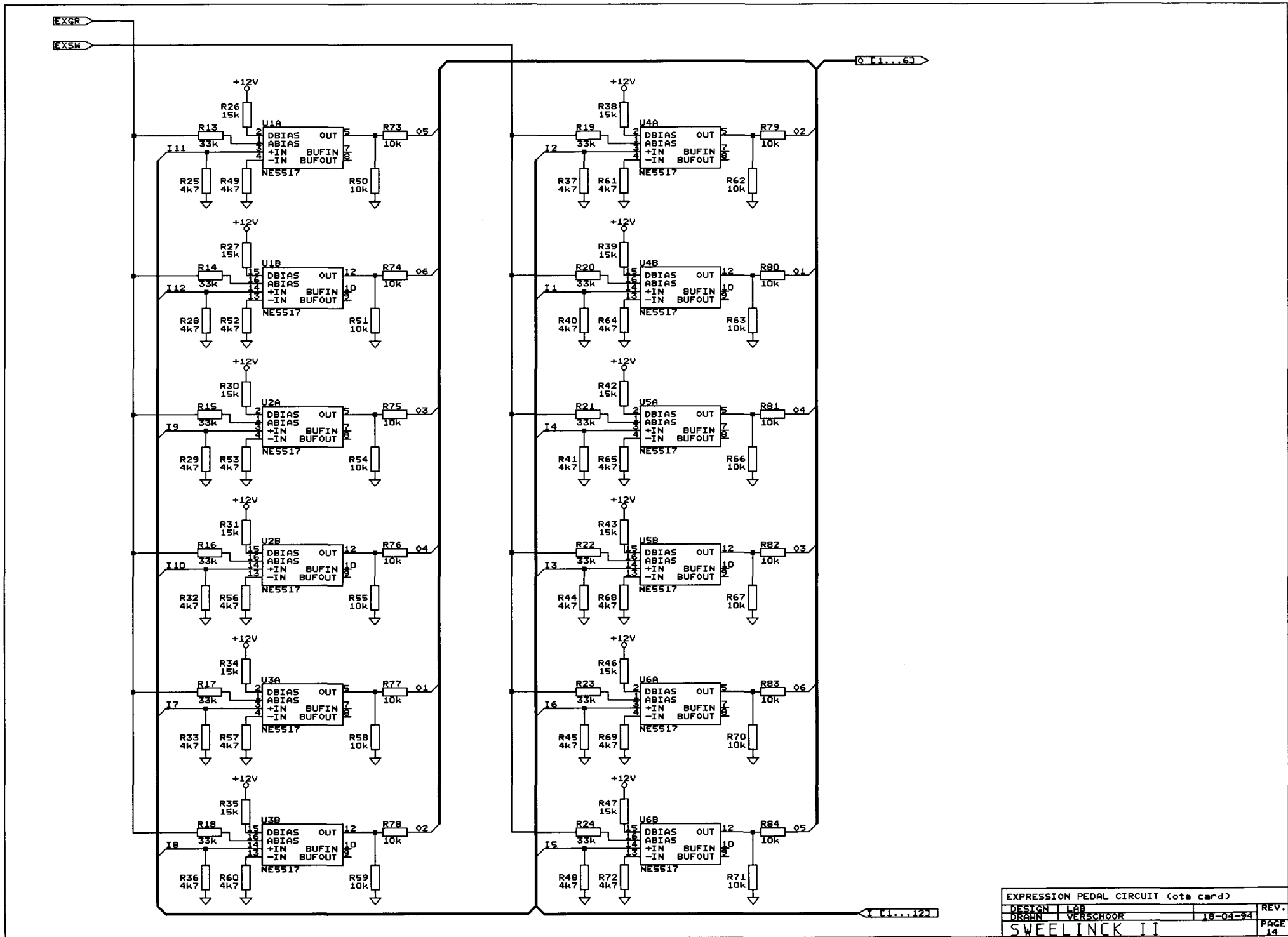
NOTE: IF FOR U5, U8, U12 OR U16 A 2764 EPROM IS PLACED INSTEAD OF A 27128 EPROM, THE U13 AND U13 (U6 AND U13) USED FOR SWITCHING THE UPPER 8K ROM AND THE LOWER 8K ROM, IS NOT NECESSARY.



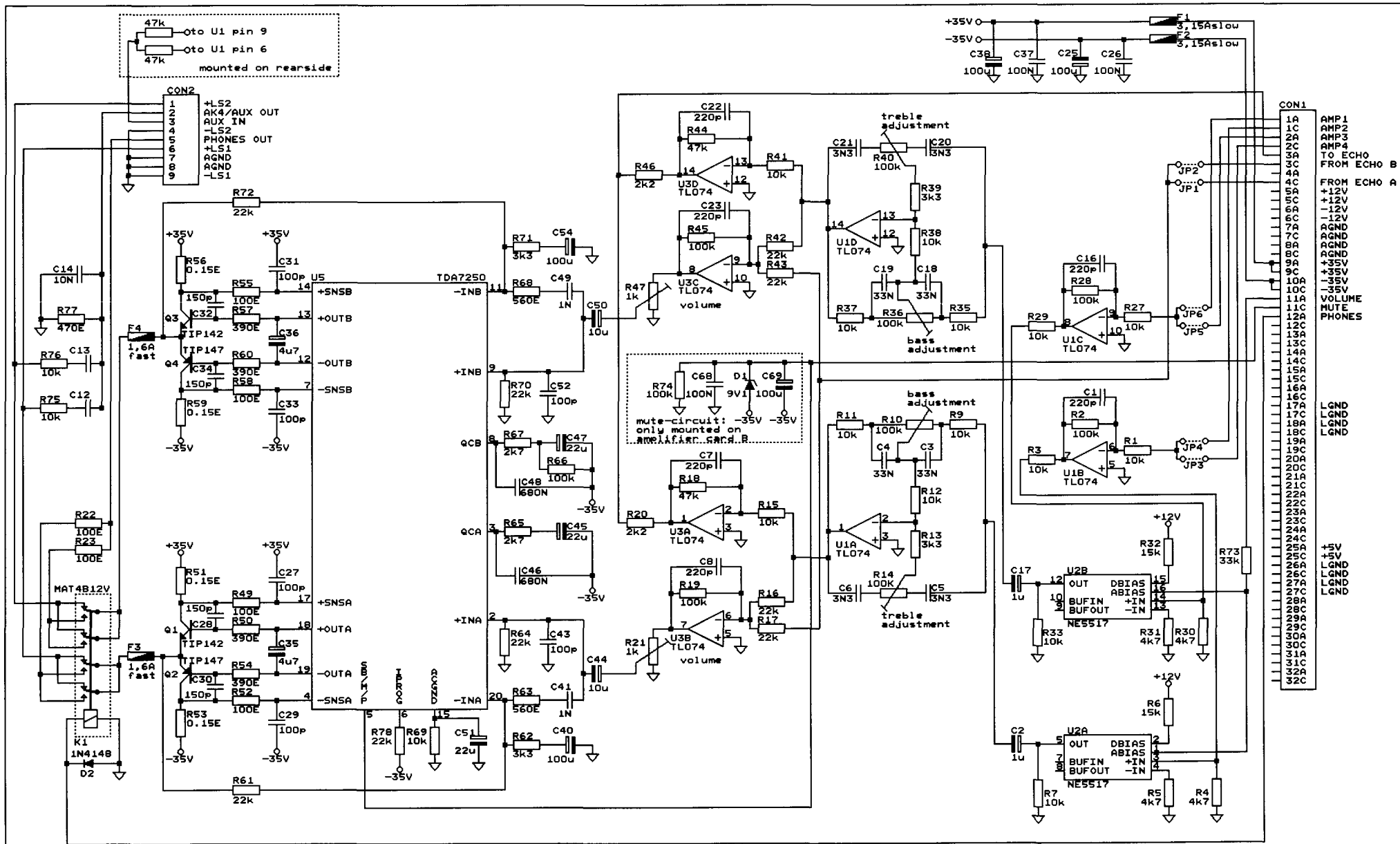
VOLUME CONTROLS; HEADPHONES CONNECTIONS & ECHO INTERFACE (ota card)

DESIGN	LAB		REV.
DRAWN	VERSCHOOR	18-04-94	PAGE 13

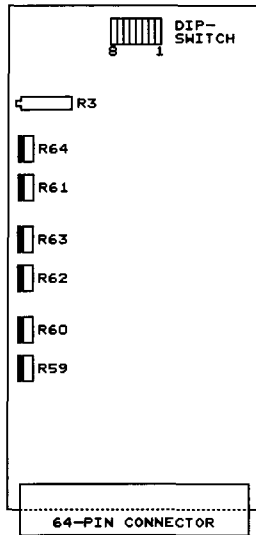
SWEELINCK II





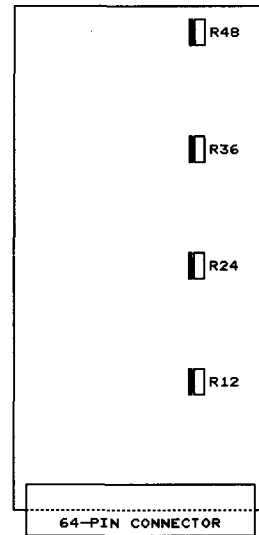


GENERATOR CARD  
(COMPONENT-SIDE VIEW)



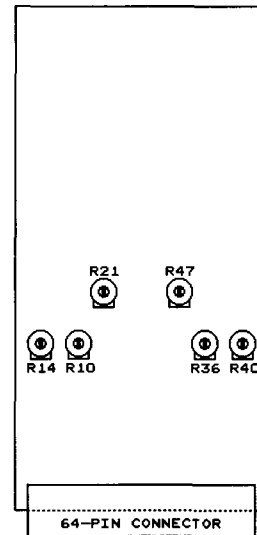
- R3 = MAIN TUNING
- R64 = TREMULANT DEPTH GREAT
- R61 = TREMULANT SPEED GREAT
- R63 = TREMULANT DEPTH SWELL
- R62 = TREMULANT SPEED SWELL
- R60 = TREMULANT DEPTH CHOIR
- R59 = TREMULANT SPEED CHOIR
- DS1-DS3 = TUNING SWELL
- DS4-DS8 = CHORUS INTENSITY SWELL

VOICE CARD  
(COMPONENT-SIDE VIEW)



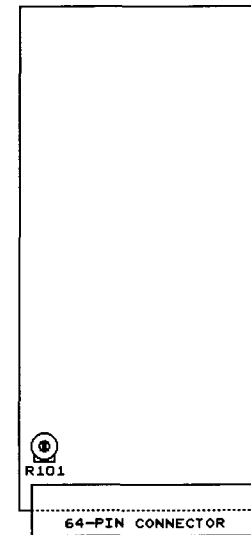
- R12 = DC-OFFSET VOICE D  
(DISTORSION VOICE D)
  - R24 = DC-OFFSET VOICE C  
(DISTORSION VOICE C)
  - R36 = DC-OFFSET VOICE B  
(DISTORSION VOICE B)
  - R48 = DC-OFFSET VOICE A  
(DISTORSION VOICE A)
- NOTE: R12-R24-R36-R48 ARE NOT  
FOR CHANGING VOLUMES!!  
TURNING THESE POTENTIOMETERS  
WILL GIVE DISTORSION!!

AMPLIFIER CARD  
(COMPONENT-SIDE VIEW)



- R10 = BASS LEFT AMPLIFIER
- R14 = TREBLE LEFT AMPLIFIER
- R21 = VOLUME LEFT AMPLIFIER
- R36 = BASS RIGHT AMPLIFIER
- R40 = TREBLE RIGHT AMPLIFIER
- R47 = VOLUME RIGHT AMPLIFIER

OTA CARD  
(COMPONENT-SIDE VIEW)



- R101 = INPUT AMPLITUDE ECHO