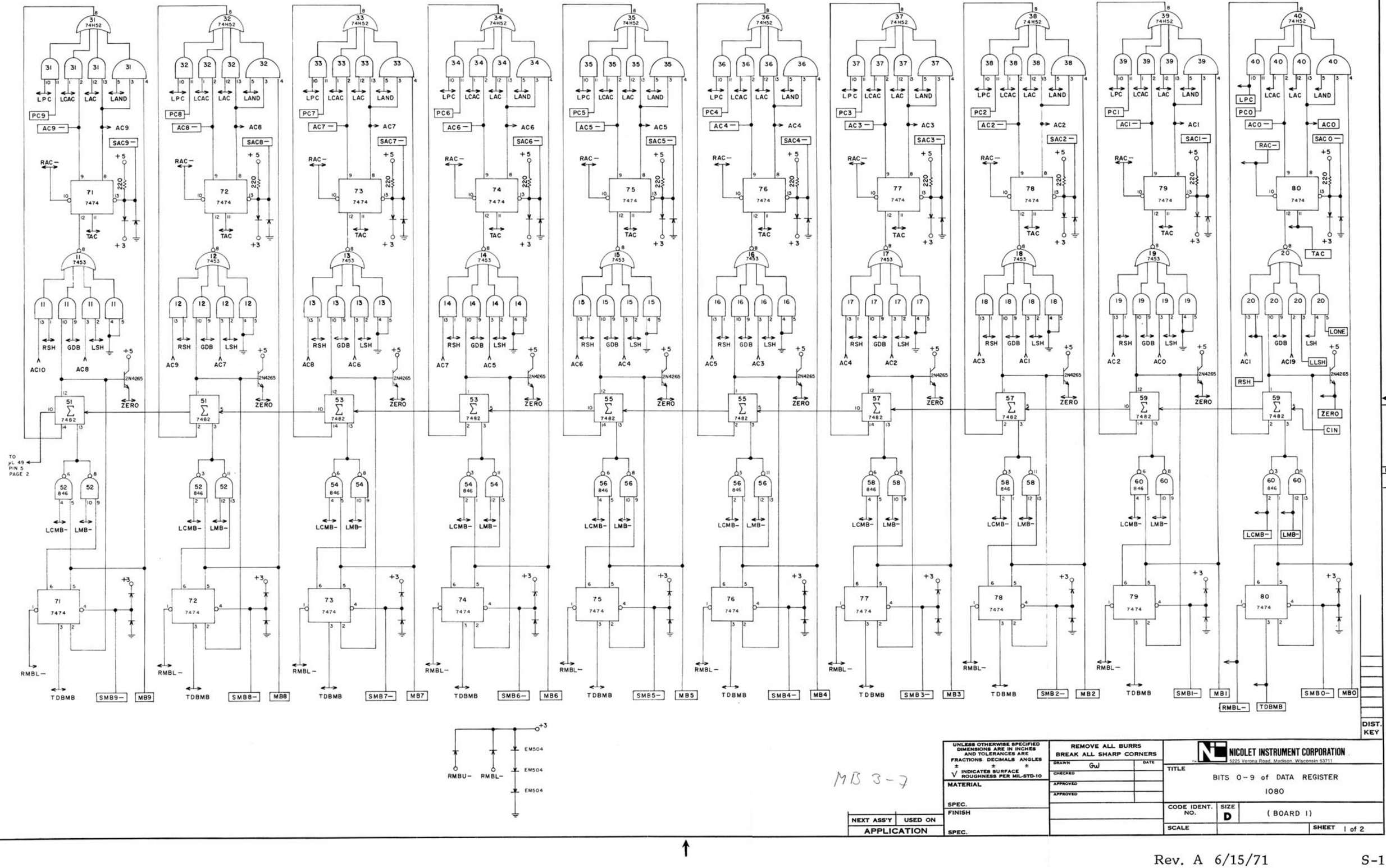
1080 SCHEMATIC INDEX

BNC SERIES SCHEMATIC INDEX

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



MB 3-7

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ±
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10
MATERIAL
SPEC.
FINISH
SPEC.

NEXT ASS'Y	USED ON
APPLICATION	

REMOVE ALL BURRS
BREAK ALL SHARP CORNERS

		DATE
DRAWN	GWJ	
CHECKED		
APPROVED		
APPROVED		

NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

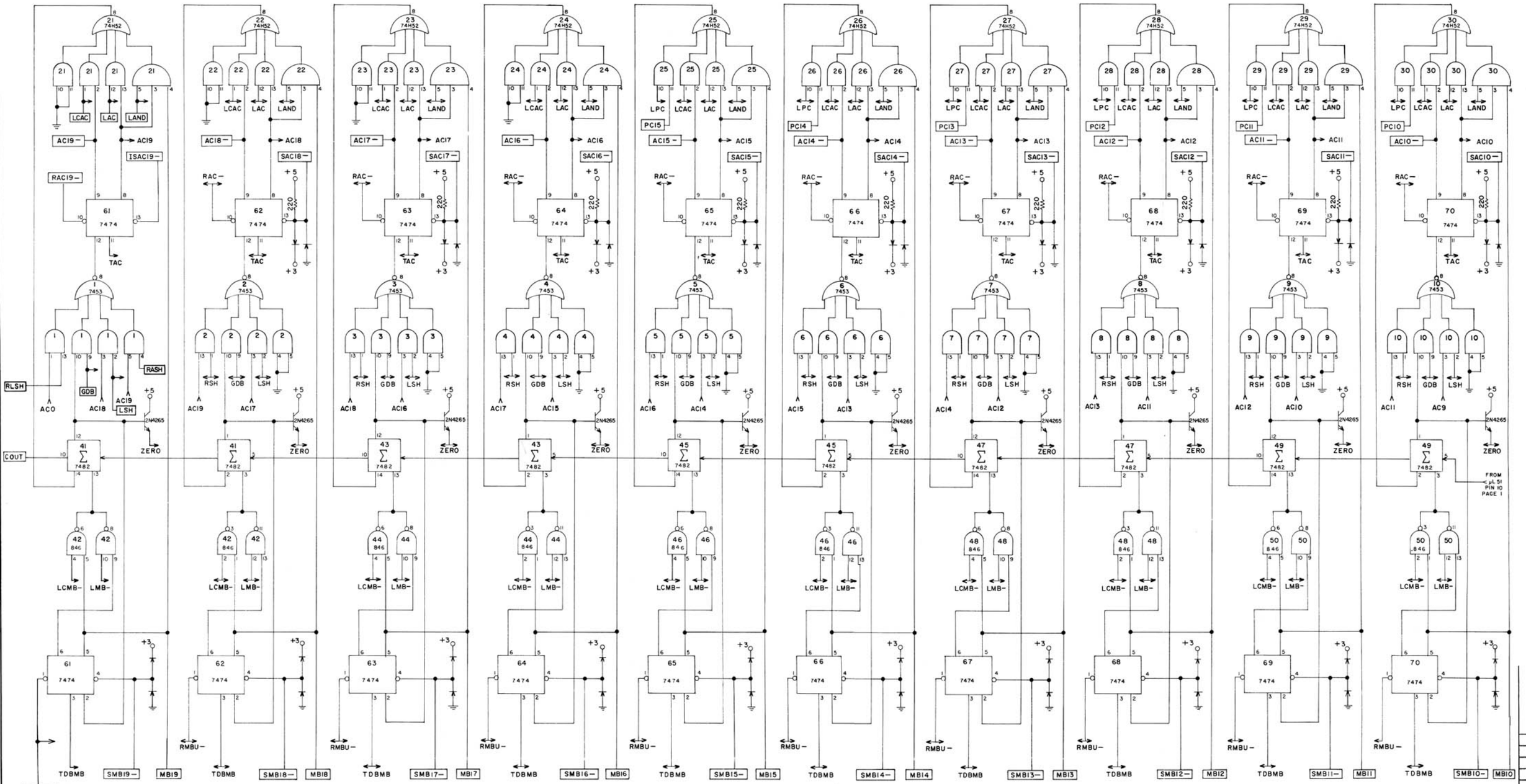
TITLE
BITS 0-9 of DATA REGISTER
1080

CODE IDENT. NO.	SIZE	
	D	(BOARD 1)
SCALE		SHEET 1 of 2

REV.

DIST. KEY

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



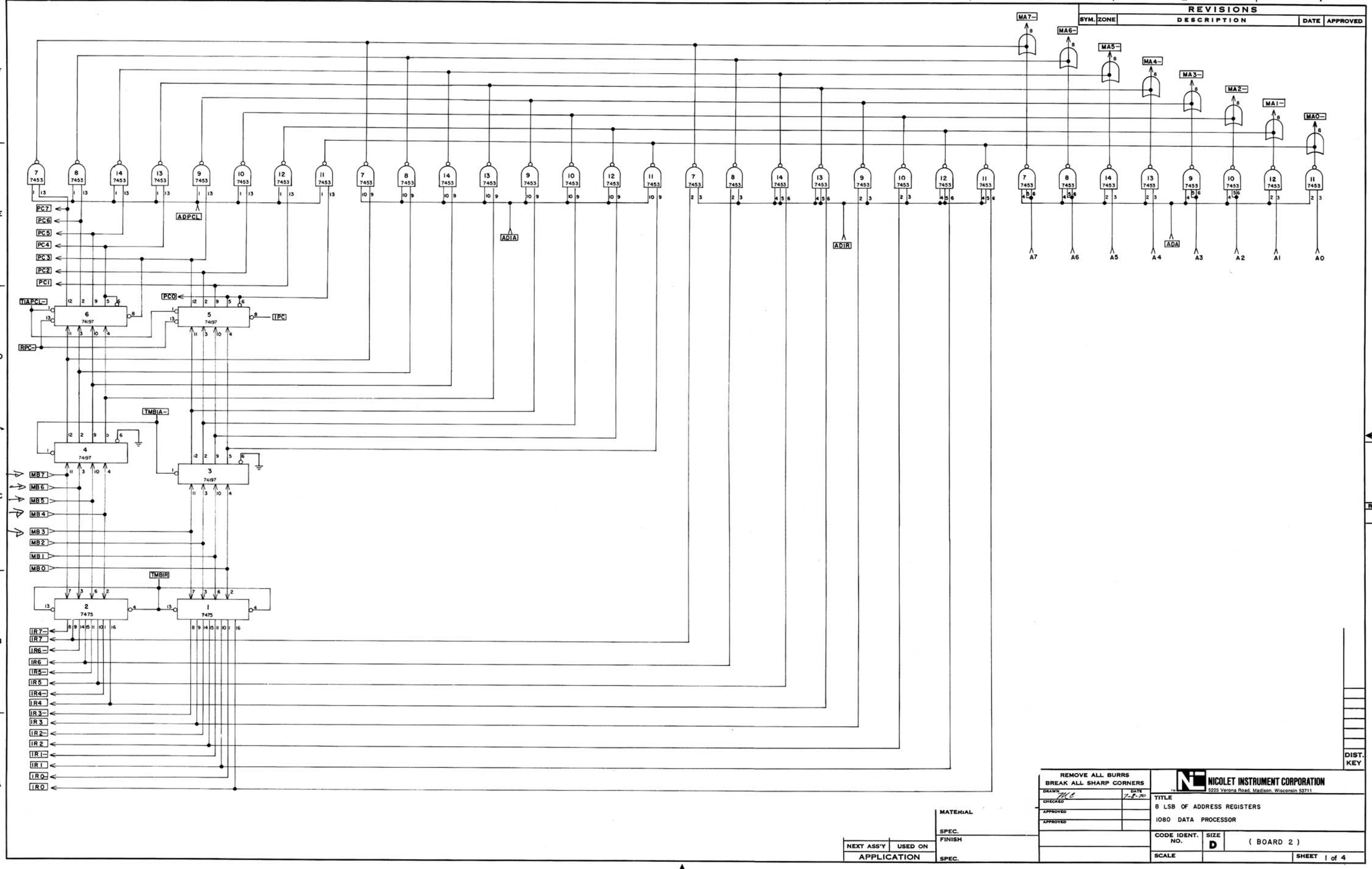
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ±	REMOVE ALL BURRS BREAK ALL SHARP CORNERS
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10	DRAWN GWJ DATE
MATERIAL	CHECKED
SPEC.	APPROVED
FINISH	APPROVED
SPEC.	
NEXT ASS'Y / USED ON APPLICATION	

NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE: BITS 10-19 of DATA REGISTER
1080

CODE IDENT. NO.	SIZE	
	D	(BOARD 1)
SCALE		SHEET 2 of 2

DIST. KEY



REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED

REMOVE ALL BURRS
BREAK ALL SHARP CORNERS

DRAWN	MLC	DATE 7-8-70
CHECKED		
APPROVED		
APPROVED		

MATERIAL
SPEC.
FINISH
SPEC.

NEXT ASS'Y | USED ON
APPLICATION

NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE
8 LSB OF ADDRESS REGISTERS
1080 DATA PROCESSOR

CODE IDENT. NO.
SIZE D
(BOARD 2)
SCALE
SHEET 1 of 4

REV.

DIST. KEY

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED

PCI5
PCI4
PCI3
PCI2
PCI1
PCI0
PC9
PC8
PC7
ADPCU
TIAPCU–
ADPCL
TIAPCL–
ADIA
RPC–
TMBIA–
TMBIR
MB15
MB14
MB13
MB12
MB11
MB10
MB9
MB8
IR15–
IR15
IR14–
IR14
IR13–
IR13
IR12–
IR12
IR11–
IR11
IR10–
IR10
IR9–
IR9
IR8–
IR8
MA15–
MA14–
MA13–
MA12–
MA11–
MA10–
MA9–
MA8–
A14
A13
A12
A11
A10
A9
A8
ADA
ADIR
MA12–
MA13–
MA14–
MA15–
SEL 10
SEL 11
SEL 12
SEL 13
SEL 14
SEL 15
SEL 16
SEL 17
SEL 1
SEL 0
PRIMARILY FOR DATA
PRIMARILY FOR PROGRAMS
STACK
4K
8K
12K
16K
20K
24K
28K
32K
56K
DP
RMBL–
PROT–
IMHER–
READ
22µf 10V
4.7K
22K
2N2484
2N3302
NXMLIT
220
NOTE: SWITCH MAY BE USED TO GIVE WIRED PROGRAM OPERATIONS ACCESS TO "STACK 0"

REMOVE ALL BURRS BREAK ALL SHARP CORNERS		NICOLET INSTRUMENT CORPORATION 5225 Verona Road, Madison, Wisconsin 53711	
DRAWN JKC	DATE 7-8-72	TITLE 8 MSB OF ADDRESS REGISTERS 1080 DATA PROCESSOR	
CHECKED			
APPROVED			
APPROVED			
NEXT ASS'Y: APPLICATION	USED ON	FINISH / SPEC.	CODE IDENT. NO. / SIZE D / (BOARD 2)
			SCALE / SHEET 2 of 4

DIST. KEY

REV.

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED

TRAA

MACRY

AMAS

ARAS

ADD1—

ADD2—

MAS1

MAS2

MAS4

MAS8

MASOF

RAS1

RAS2

RAS4

RAS8

RASOF

CMAS—

CRAS—

8KM—

4KM—

2KM—

1KM—

8KR—

4KR—

2KR—

1KR—

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS ± DECIMALS ± ANGLES ±	REMOVE ALL BURRS BREAK ALL SHARP CORNERS
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10	DRAWN Gul DATE
MATERIAL	CHECKED
SPEC.	APPROVED
FINISH	APPROVED
SPEC.	
NEXT ASS'Y / USED ON: APPLICATION	

NICOLET INSTRUMENT CORPORATION
5225 Verona Road. Madison. Wisconsin 53711

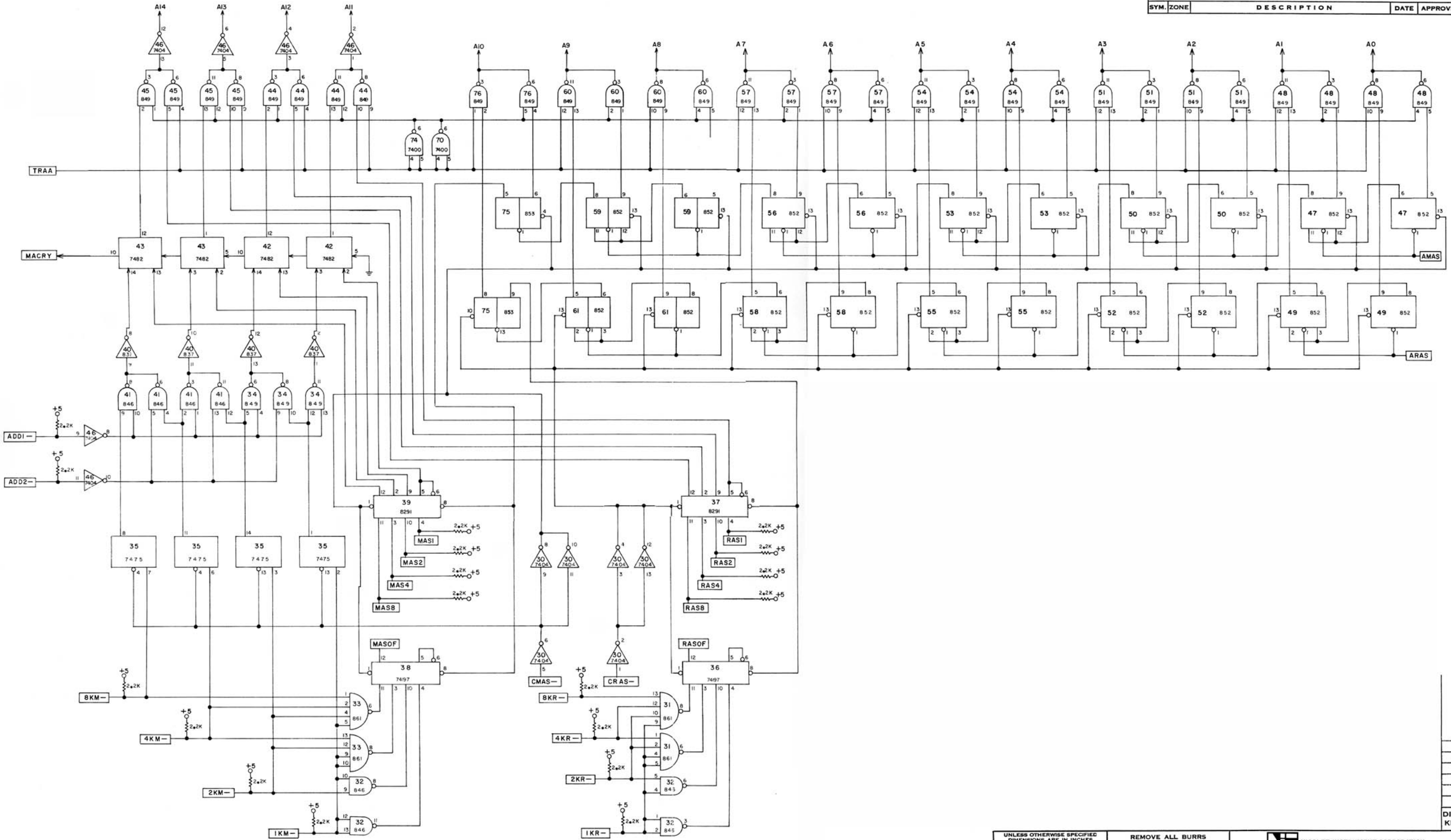
TITLE
MEASURE & READOUT ADDRESS SCALER
FOR MODELS 1081 TO 1085

CODE IDENT. NO.	SIZE	
	D	(BOARD 2)
SCALE		SHEET 3 of 4

REV.

DIST. KEY

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED

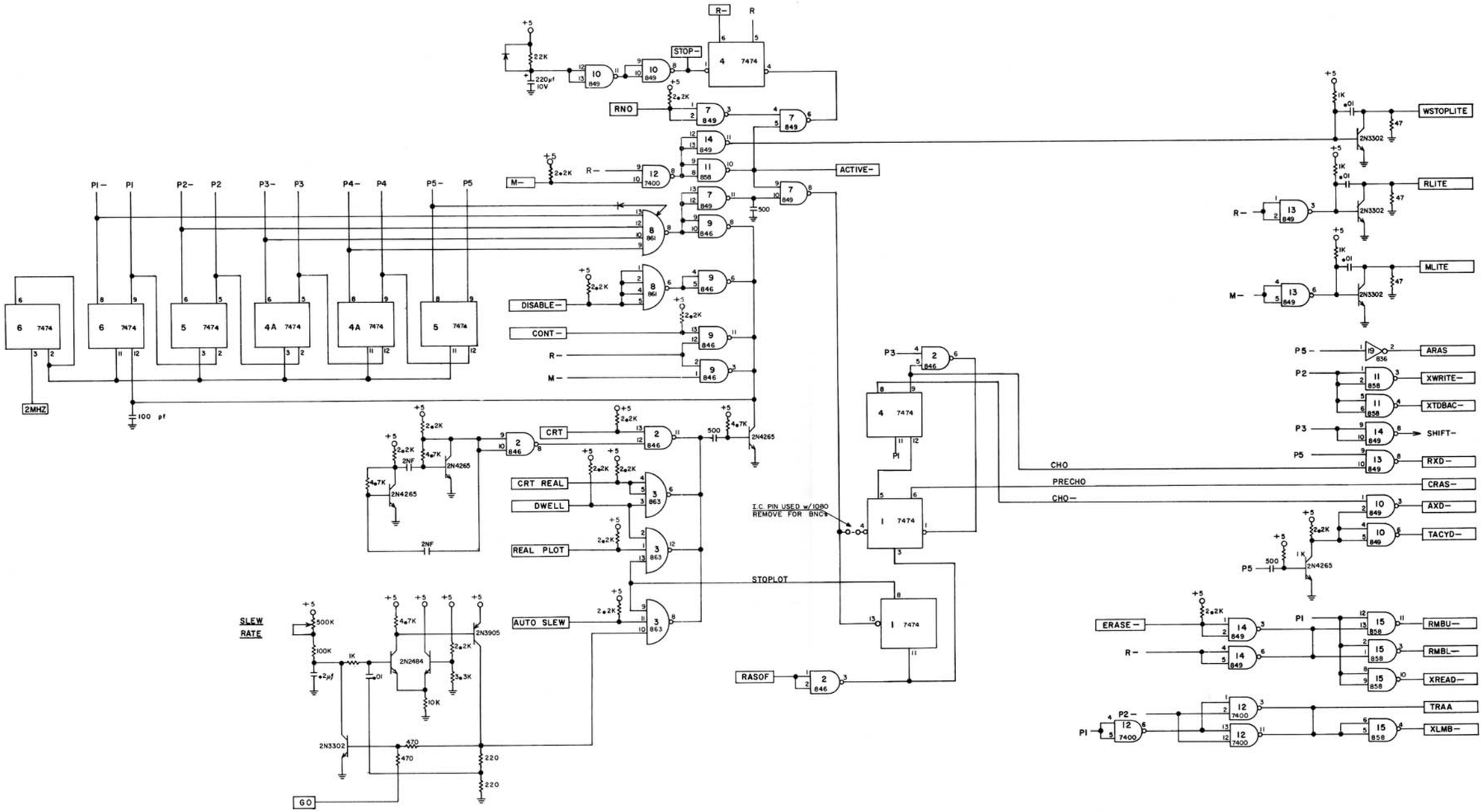


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS ± DECIMALS ± ANGLES ±	REMOVE ALL BURRS BREAK ALL SHARP CORNERS	NICOLET INSTRUMENT CORPORATION 5225 Verona Road, Madison, Wisconsin 53711	
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10	DRAWN	TITLE: MEASURE & READOUT ADDRESS SCALER FOR MODEL 1089	
MATERIAL	CHECKED		
SPEC.	APPROVED		
FINISH	APPROVED	CODE IDENT. NO.	SIZE C / DWG. NO. (BOARD 2)
SPEC.		SCALE	SHEET 4 of 4
NEXT ASS'Y / USED ON: APPLICATION			

REV.

DIST. KEY

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED

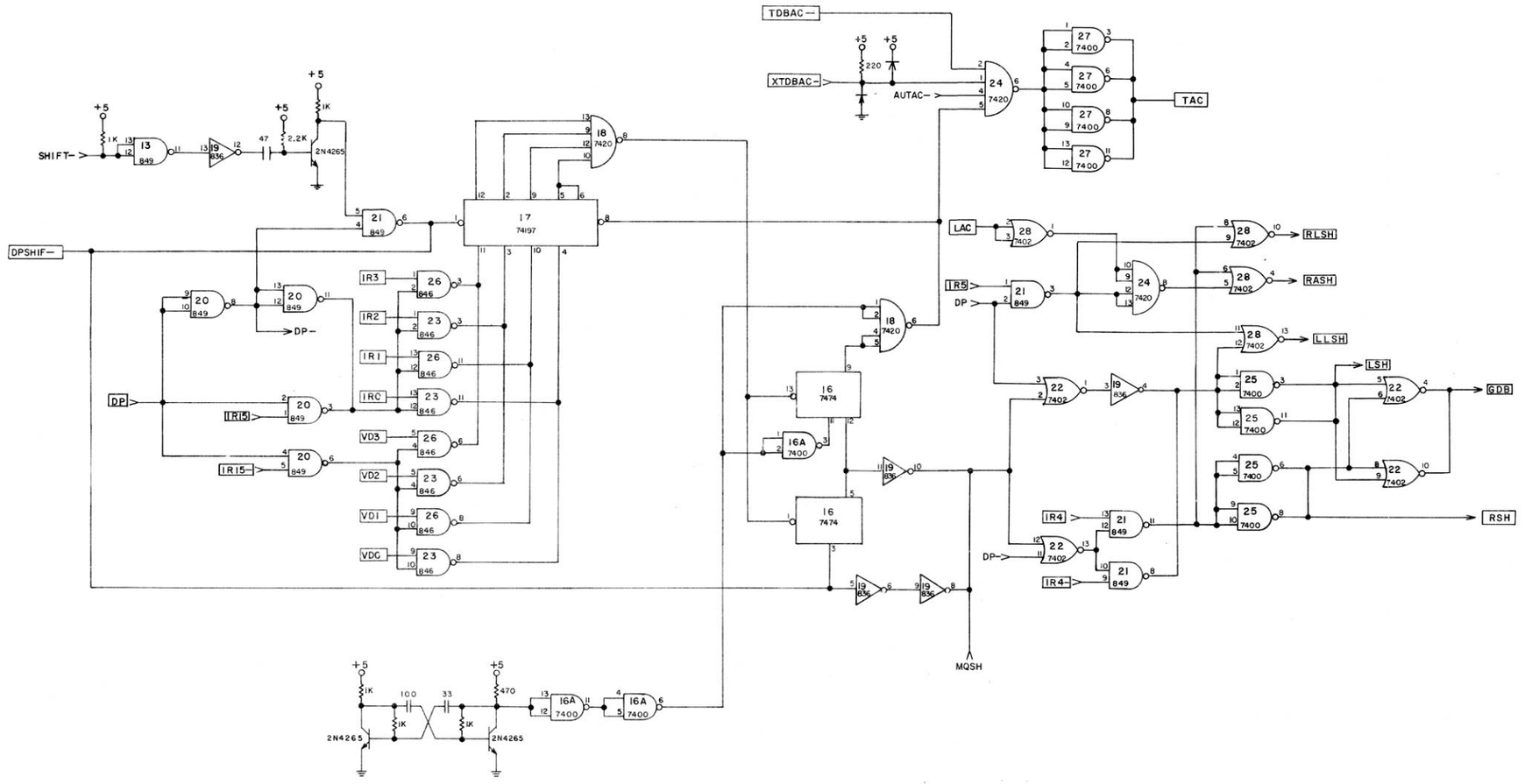


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS ± DECIMALS ± ANGLES ±	REMOVE ALL BURRS BREAK ALL SHARP CORNERS	NICOLET INSTRUMENT CORPORATION 5225 Verona Road, Madison, Wisconsin 53711	
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10	DRAWN / DATE	TITLE	AUTO ARITHMETIC & CONTROL BOARD READOUT CONTROL 1080
MATERIAL	CHECKED		
SPEC.	APPROVED		
FINISH	APPROVED	CODE IDENT. NO.	SIZE D (BOARD 3)
SPEC.		SCALE	SHEET 1 of 4
NEXT ASS'Y / USED ON APPLICATION			

REV.

DIST. KEY

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED

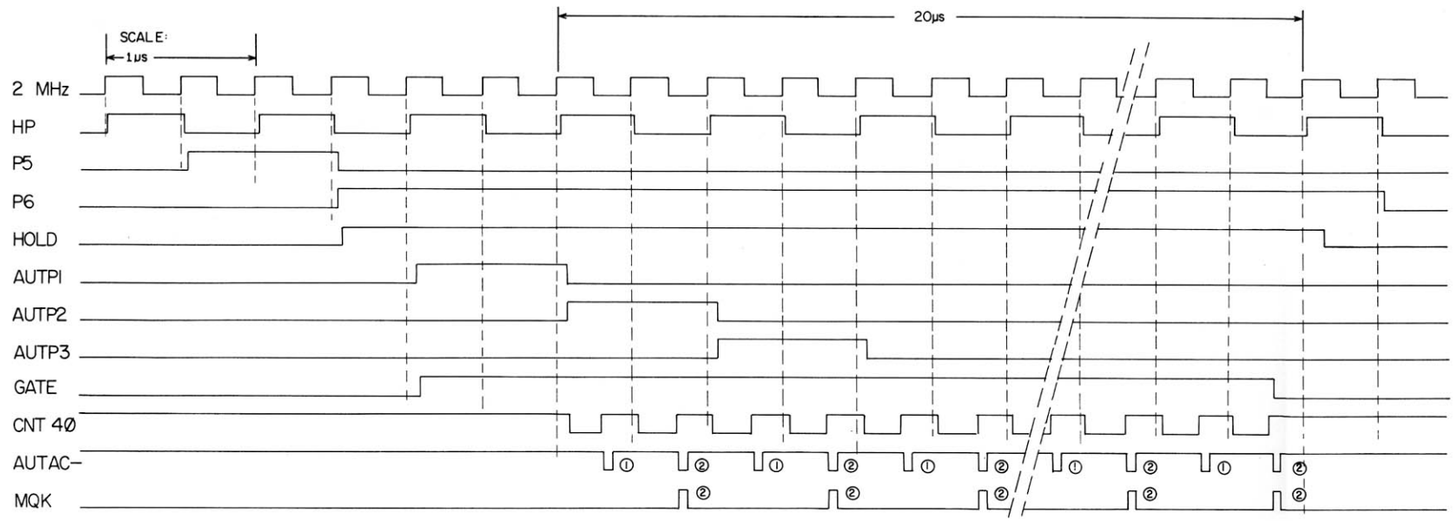


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS ± DECIMALS ± ANGLES ± √ INDICATES SURFACE ROUGHNESS PER MIL-STD-10	REMOVE ALL BURRS BREAK ALL SHARP CORNERS	NICOLET INSTRUMENT CORPORATION 5225 Verona Road, Madison, Wisconsin 53711
MATERIAL SPEC.	DRAWN DATE	TITLE AUTO ARITHMETIC & CONTROL BOARD SHIFT CONTROL 1080
FINISH SPEC.	CHECKED	CODE IDENT. NO. D
NEXT ASS'Y USED ON APPLICATION	APPROVED	SIZE (BOARD 3)
	APPROVED	SCALE SHEET 2 of 4

DIST. KEY

REV.

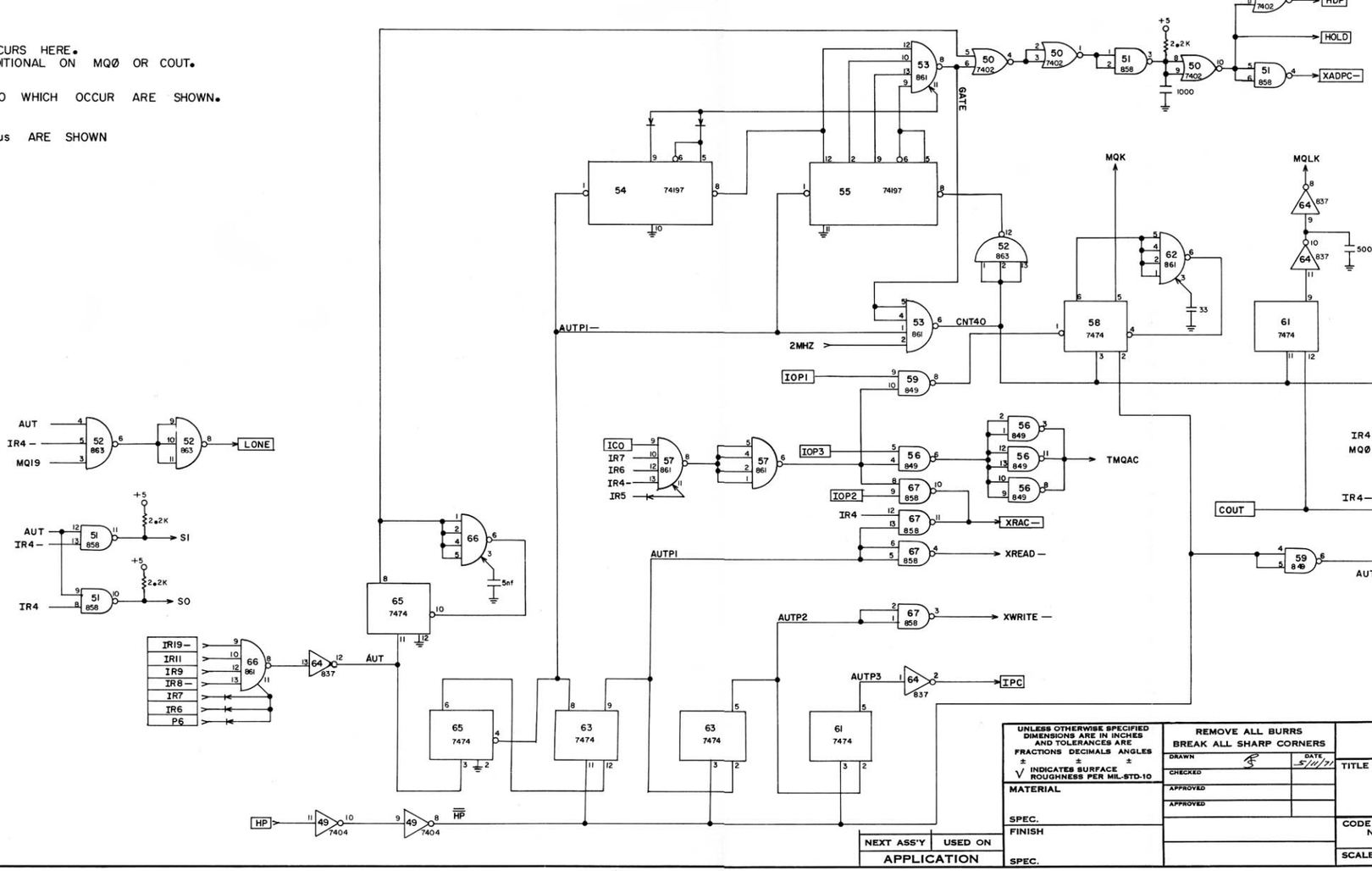
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



① – ADDITION OR SUBTRACTION OCCURS HERE. OCCURRENCE OF PULSE CONDITIONAL ON MQØ OR COUT.

② – SHIFT PULSES. 5 OF THE 20 WHICH OCCUR ARE SHOWN.

NOTE: ONLY 5 OF INDICATED 20µs ARE SHOWN



NEXT ASS'Y	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS ± DECIMALS ± ANGLES ± √ INDICATES SURFACE ROUGHNESS PER MIL-STD-10

MATERIAL

SPEC.

FINISH

SPEC.

REMOVE ALL BURRS
BREAK ALL SHARP CORNERS

		DATE
DRAWN		5/11/71
CHECKED		
APPROVED		
APPROVED		

NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

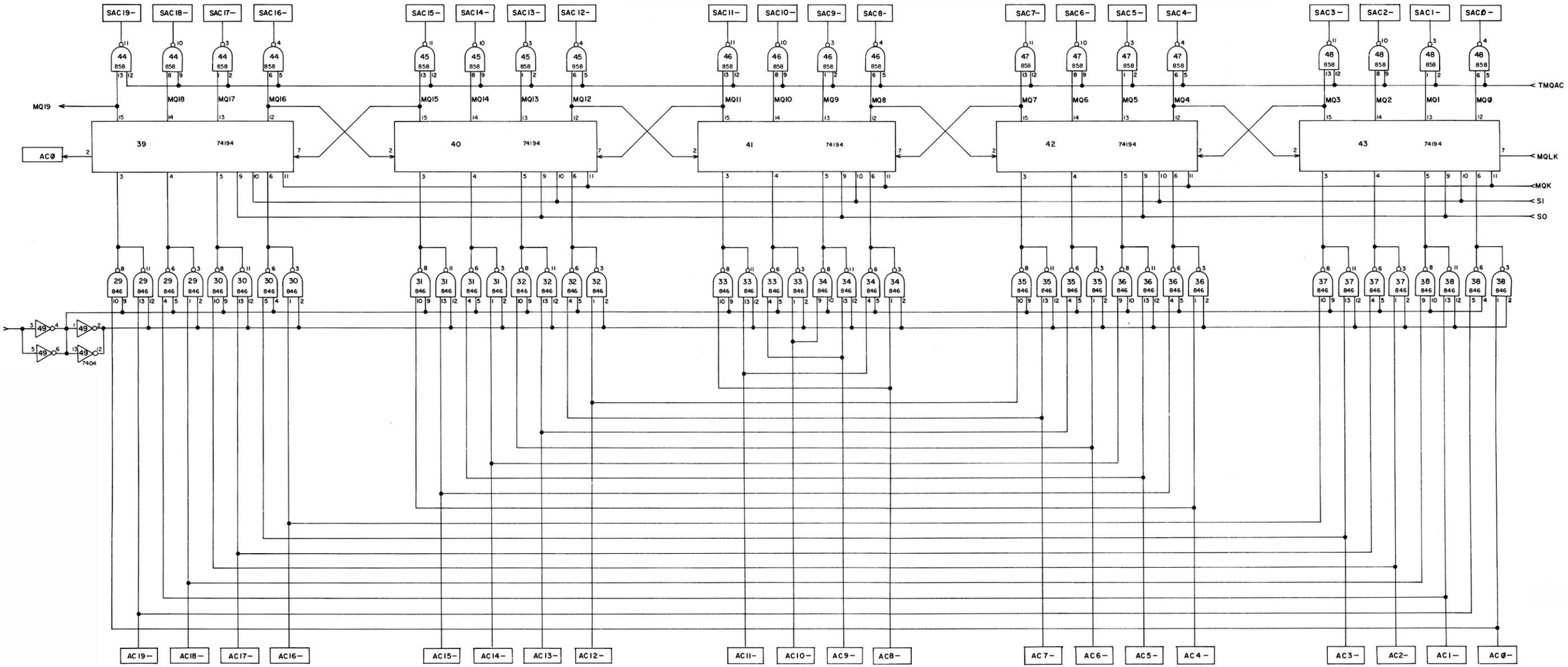
TITLE: AUTO ARITHMETIC & CONTROL BOARD
AUTOMATIC ARITHMETIC
1080

CODE IDENT. NO.	SIZE	
	D	(BOARD 3)
SCALE		SHEET 3 of 4

DIST. KEY

REV.

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED

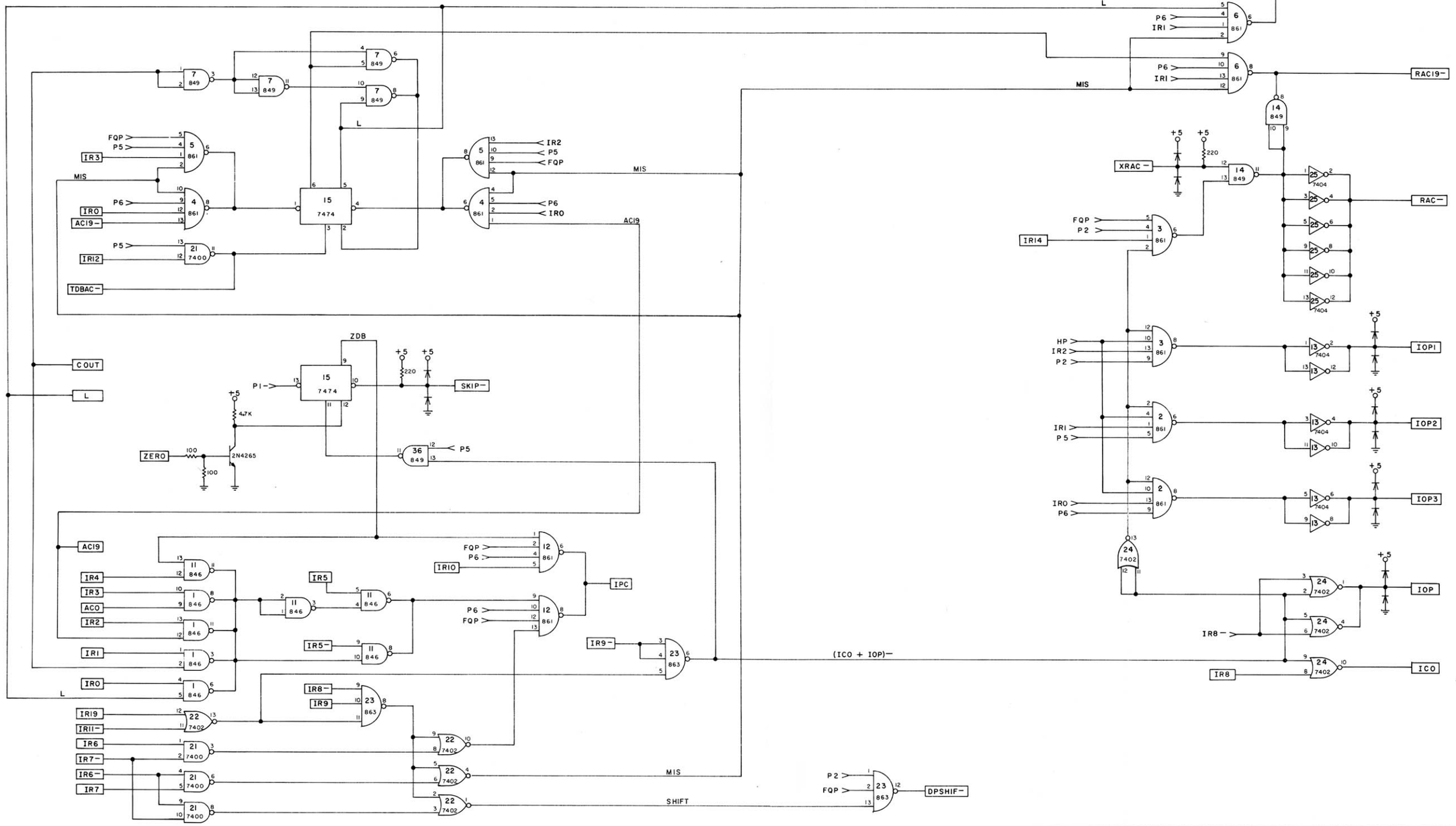


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ± √ INDICATES SURFACE ROUGHNESS PER MIL-STD-10	REMOVE ALL BURRS BREAK ALL SHARP CORNERS	NICOLET INSTRUMENT CORPORATION 5225 Verona Road, Madison, Wisconsin 53711
MATERIAL SPEC. FINISH SPEC.	DRAWN RS DATE 4/14/71; CHECKED; APPROVED; APPROVED	TITLE AUTO ARITHMETIC & CONTROL BOARD MQ REGISTER 1080
NEXT ASS'Y USED ON APPLICATION		CODE IDENT. NO. SIZE D (BOARD 3) SCALE SHEET 4 of 4

REV.

DIST. KEY

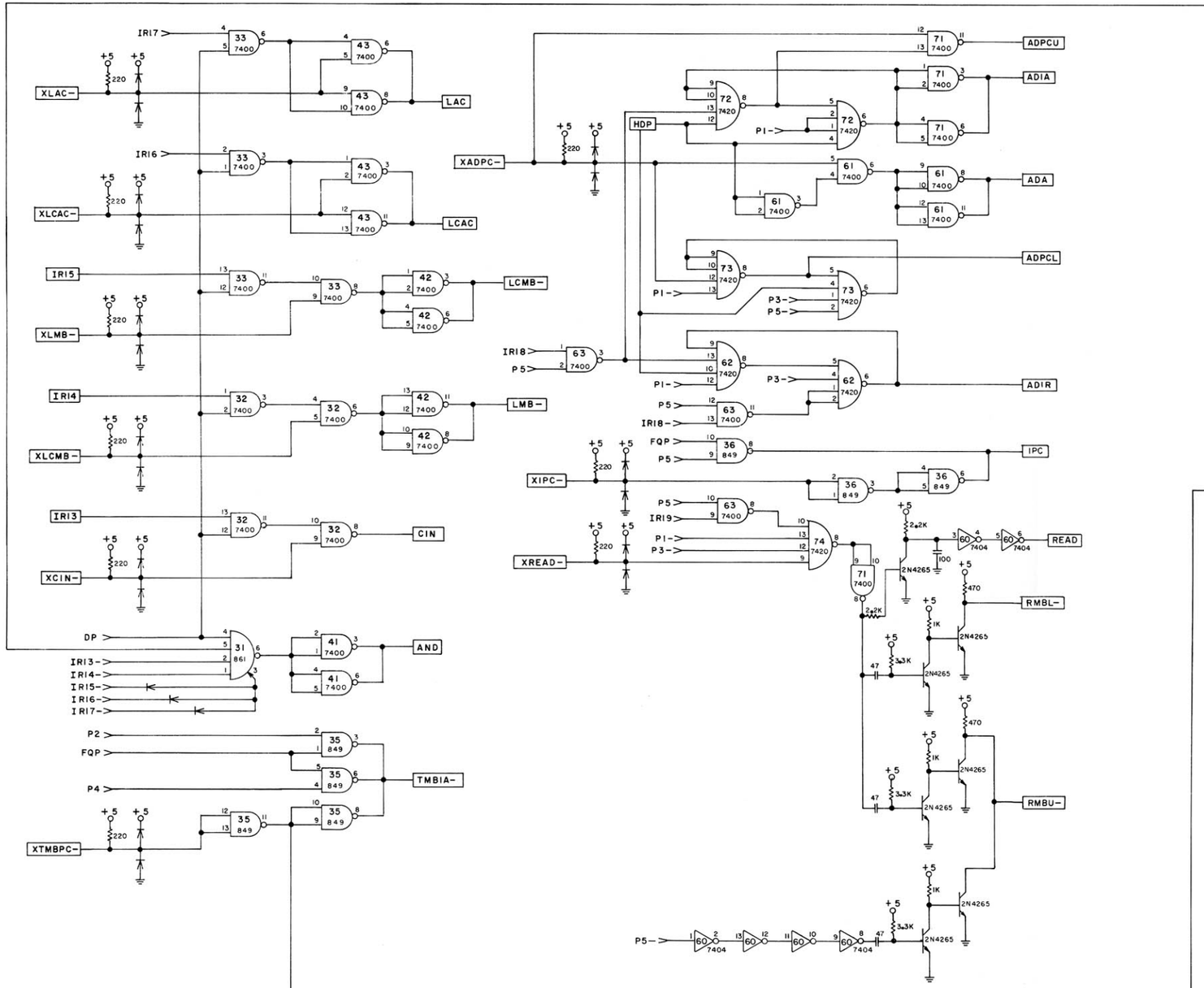
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ± √ INDICATES SURFACE ROUGHNESS PER MIL-STD-10	REMOVE ALL BURRS BREAK ALL SHARP CORNERS	NICOLET INSTRUMENT CORPORATION 5225 Verona Road, Madison, Wisconsin 53711
MATERIAL SPEC.	DRAWN GW DATE	TITLE DATA PROCESSOR CONTROL BOARD (IOP GENERATOR TEST & MIS LOGIC) 1080
FINISH SPEC.	CHECKED	
NEXT ASS'Y USED ON APPLICATION	APPROVED APPROVED	CODE IDENT. NO. SIZE D (BOARD 4)
		SCALE SHEET 1 of 3

DIST. KEY

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS ± DECIMALS ± ANGLES ±	REMOVE ALL BURRS BREAK ALL SHARP CORNERS
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10	DRAWN GW DATE
MATERIAL	CHECKED
SPEC.	APPROVED
FINISH	APPROVED
SPEC.	
NEXT ASS'Y / USED ON	
APPLICATION	

NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

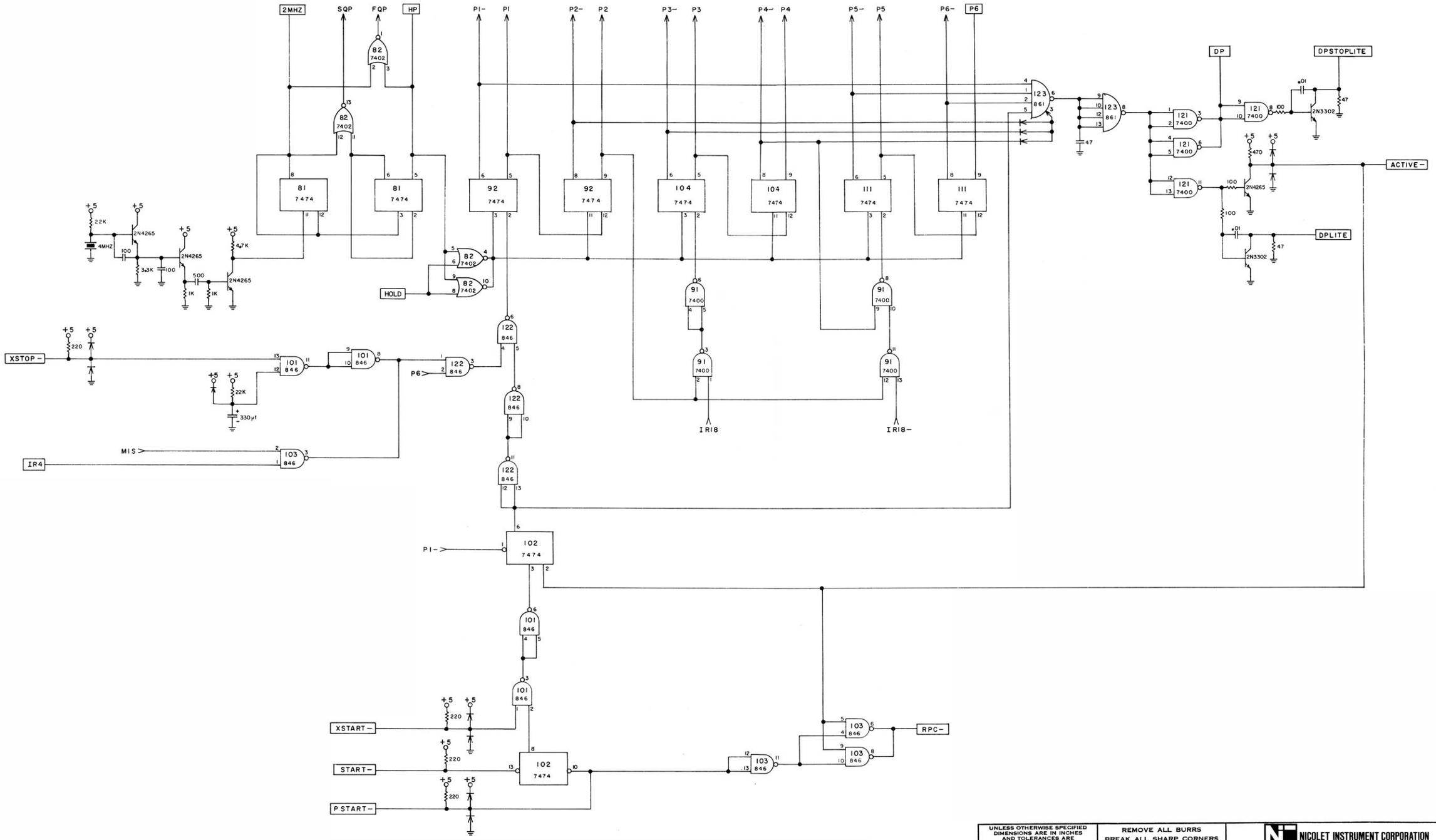
TITLE: DATA PROCESSOR CONTROL BOARD
1080

CODE IDENT. NO. | SIZE D | (BOARD 4)
SCALE | SHEET 2 of 3

DIST. KEY

REV.

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ± V INDICATES SURFACE ROUGHNESS PER MIL-STD-1C	REMOVE ALL BURRS BREAK ALL SHARP CORNERS	NICOLET INSTRUMENT CORPORATION 5225 Verona Road, Madison, Wisconsin 53711
MATERIAL / SPEC. / FINISH / SPEC.	DRAWN GW DATE; CHECKED; APPROVED; APPROVED	TITLE: DATA PROCESSOR CONTROL BOARD (PROGRAM PULSER) 1080
NEXT ASS'Y / USED ON: APPLICATION		CODE IDENT. NO. / SIZE D / (BOARD 4) / SCALE / SHEET 3 of 3

REV.

DIST. KEY

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED

INVERTED PLOTTER OUTPUT FOR VARIAN SPECTROMETERS

PLOTV

IPLOTV

NOTE 1

H ZERO

H GAIN

CRTH

PLOTH

TO REAR PANEL

CLAMP

REED RELAY

VZERO

V GAIN

CRTV

PLOTV

HGND

TO REAR PANEL

PART of 14 BIT DAC OPTION

RYD–

TACYD

SYD–

AC6– AC7– AC8– AC9– AC10– AC11– AC12– AC13– AC14– AC15– AC16– AC17– AC18– AC19–

YPOSDISP–

16KXD 8KXD 4KXD 2KXD 1KXD

TACXD–

AXD

SXD

RXD–

TACXD

XPNDISP–

NOTE
LINK IS IN POSITION 1 FOR 1089
OTHERWISE IN POSITION 2

NOTE 1
RESISTER MAY BE CHANGED TO 24.3K TO GET BIPOLAR OUTPUTS

NOTE 2
THIS RESISTOR SHOULD BE REMOVED IN NON-VARIAN INSTALLATIONS

AC0– BAC0 AC1– BAC1 AC2– BAC2 AC3– BAC3 AC4– BAC4 AC5– BAC5 AC6– BAC6 AC7– BAC7 AC8– BAC8 AC9– BAC9 AC10– BAC10 AC11– BAC11 AC12– BAC12 AC13– BAC13

DIST. KEY

REV.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ±
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10

MATERIAL
SPEC.
FINISH
SPEC.

NEXT ASS'Y | USED ON
APPLICATION

REMOVE ALL BURRS
BREAK ALL SHARP CORNERS

		DATE
DRAWN	GW	
CHECKED		
APPROVED		
APPROVED		

NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE
DISPLAY REGISTERS
1080

CODE IDENT. NO.	SIZE	
	D	(BOARD 5)
SCALE		SHEET 1 of 2

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED

IR3– → 41 7400 → BIR3
IR4– → 43 7404 → BIR4
IR5– → 43 7404 → BIR5
IR6– → 43 7404 → BIR6
IR7– → 41 7400 → BIR7
ACI4– → 37 7404 → BACI4
ACI5– → 37 7404 → BACI5
ACI6– → 37 7404 → BACI6
ACI7– → 38 7404 → BACI7
ACI8– → 38 7404 → BACI8
ACI9– → 38 7404 → BACI9
L → 36 7400 → BL

IR7–, IR6–, IR5–, IR4–, ICØ, IR3– → 42 861 → 51 7402 → 32 849 → AXD–
AXD– → 51 7402 → AXD
COMØØ, IOP1, IOP2, IOP3 → 32 849 → 33 846 → TACYD–
TACYD– → 11 846 → TACYD
32 849 → 3 846 → IZ
IOP3 → 14A 74121 (.05 µf, 1K, +5) → STEP (REAR)
TAXCD– → 33 846 → 33 846 → 33 846 → 22 846 → 22 846 → TAXCD
IOP2 → 52 849 → BACØ
PEN DOWN (REAR) → T1 241893 (470, 330, 43V ZENER) → 51A 7474 → BACØ
CLAMP (REAR) → T2 2N3903 (470, 330) → 51A 7474 → BACI
52 849 → BACI

35A 74121 (1.5 nf) → 35 74121 (5 nf) → INTENSIFY (REAR)

ACTIVE– → 52 846
CAL– → 52 846
52 846 → 34 846 → STOPCAL

RX– → LEFT
MIDX– → MIDDLE HORIZONTAL
SX– → RIGHT
SY → TOP
MIDY → MIDDLE VERTICAL
RY → BOTTOM
EXCLUSIVE (HORIZONTAL)
EXCLUSIVE (VERTICAL)
FRONT PANEL

21 7400 → SXD+
21 7400 → RXD–
RXD– → 23 861 → 23 861 → RYD–
40 7400 → SYD–
39 849 → XPNDISP–
39 849 → YPOSDISP–

TO REAR PANEL

1	CRTH
2	CRTV
3	LPLOTV
4	REAR 1
5	REAR 2
6	REAR 3
7	GND
8	PLOTV
9	GND
10	REAR 4
11	CLAMP
12	PLOTH
13	GND
14	GND
15	STEP
16	INTENSIFY
17	PEN DOWN

(Shown from Solder side)

DIST. KEY

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ± √ INDICATES SURFACE ROUGHNESS PER MIL-STD-10
MATERIAL
SPEC.
FINISH
SPEC.

REMOVE ALL BURRS
BREAK ALL SHARP CORNERS

		DATE
DRAWN	GWJ	
CHECKED		
APPROVED		
APPROVED		

NEXT ASS'Y | USED ON
APPLICATION

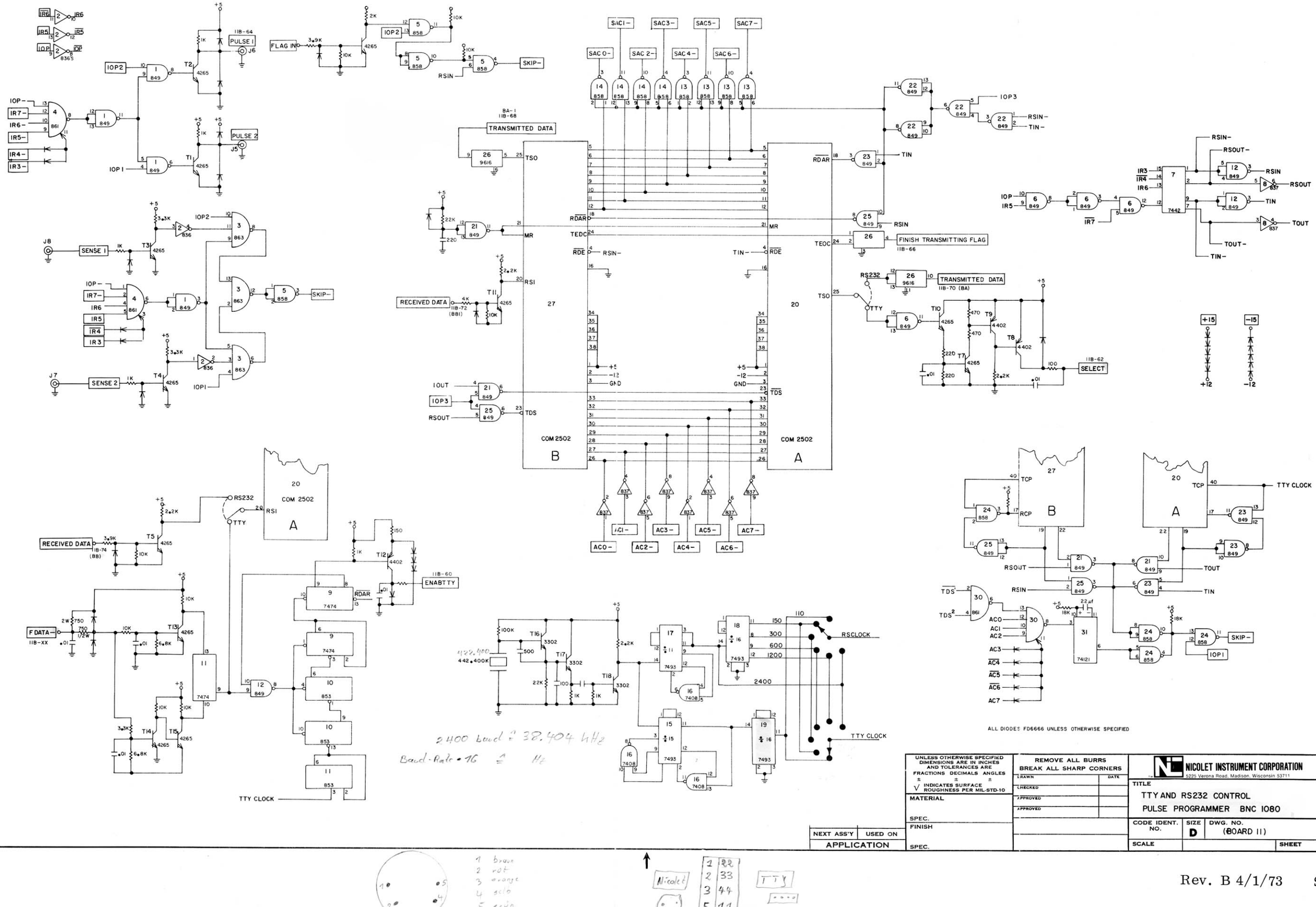
NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE
DISPLAY REGISTER CONTROL BOARD
1080

CODE IDENT. NO. | SIZE D | (BOARD 5)
SCALE | SHEET 2 of 2

2/28/73

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



ALL DIODES FD6666 UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ±
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10
MATERIAL
SPEC.
FINISH
SPEC.

NEXT ASS'Y	USED ON
APPLICATION	

REMOVE ALL BURRS
BREAK ALL SHARP CORNERS

	DATE
DRAWN	
CHECKED	
APPROVED	
APPROVED	

NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE
TTY AND RS232 CONTROL
PULSE PROGRAMMER BNC 1080
3/6/73

CODE IDENT. NO.	SIZE	DWG. NO.
	D	(BOARD 11)

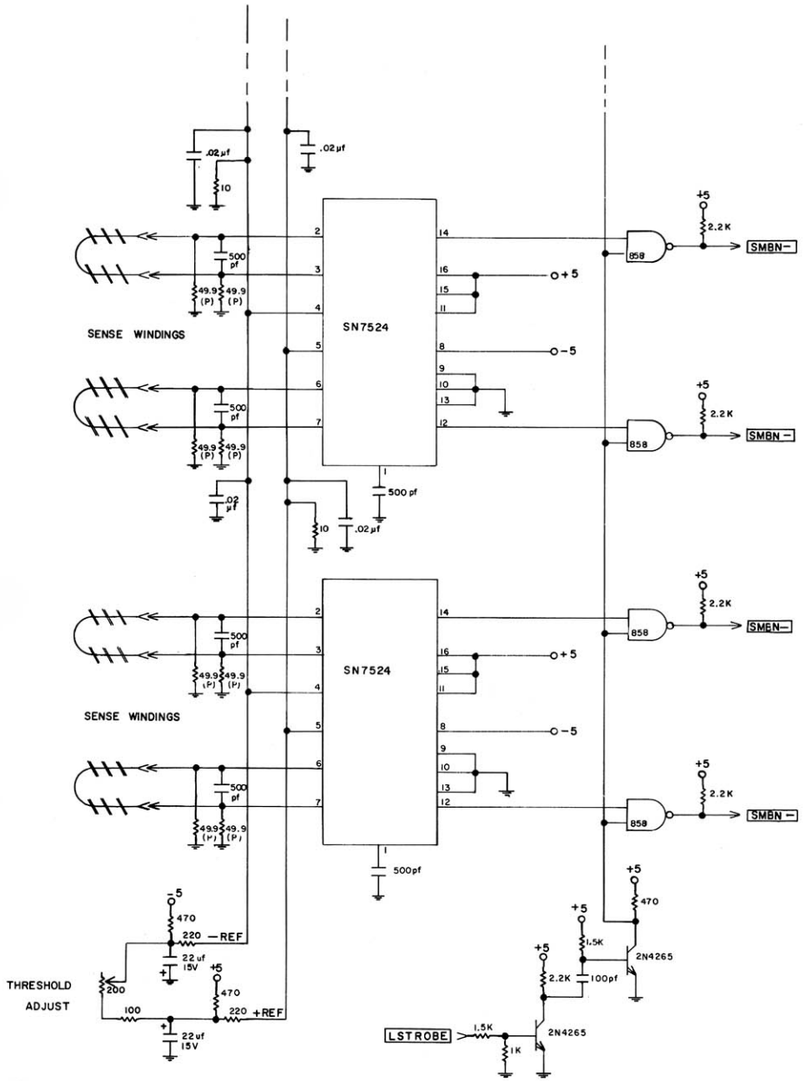
SCALE | SHEET

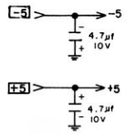
DIST. KEY

REV.

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED

TOTAL OF 20 IDENTICAL
STAGES, 4 SHOWN

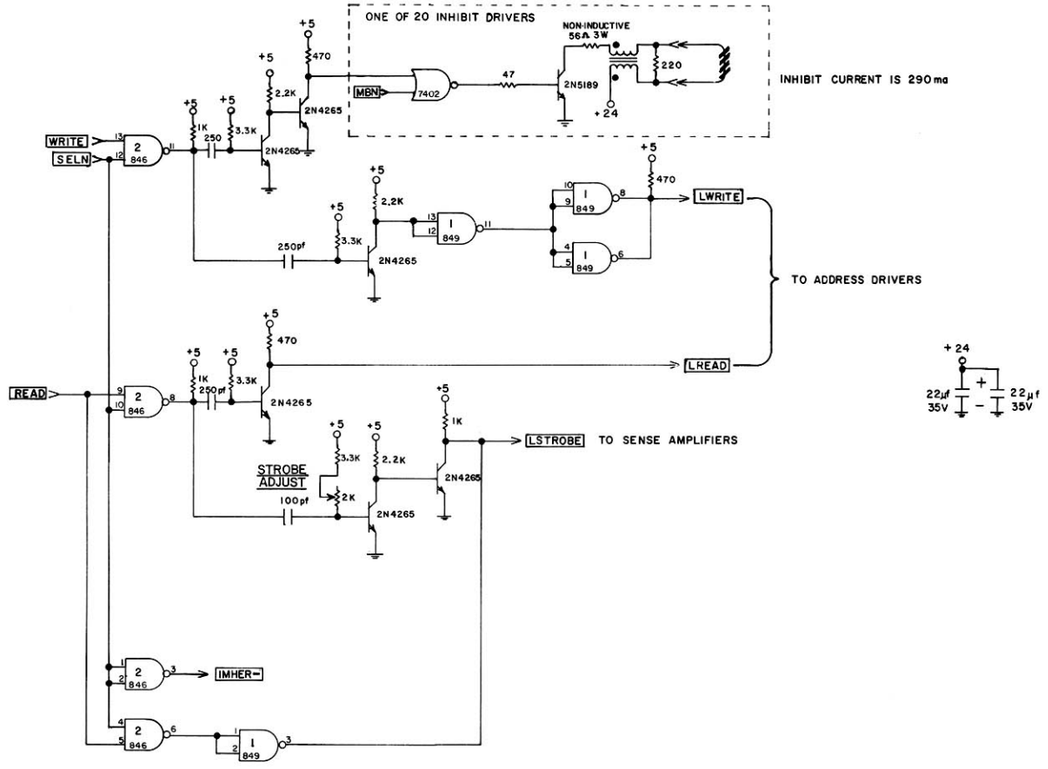




DIST. KEY

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ± INDICATES SURFACE ROUGHNESS PER MIL-STD-10	REMOVE ALL BURRS BREAK ALL SHARP CORNERS	NICOLET INSTRUMENT CORPORATION 5225 Verona Road, Madison, Wisconsin 53711
MATERIAL	DRAWN MC 6-25-70	TITLE SENSE AMPLIFIER 1080
SPEC.	CHECKED	
FINISH	APPROVED	CODE IDENT. NO.
SPEC.	APPROVED	SIZE D MEMORY BOARD 1
NEXT ASS'Y / USED ON: APPLICATION		SCALE / SHEET 1 of 1

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



DIST. KEY

REV.

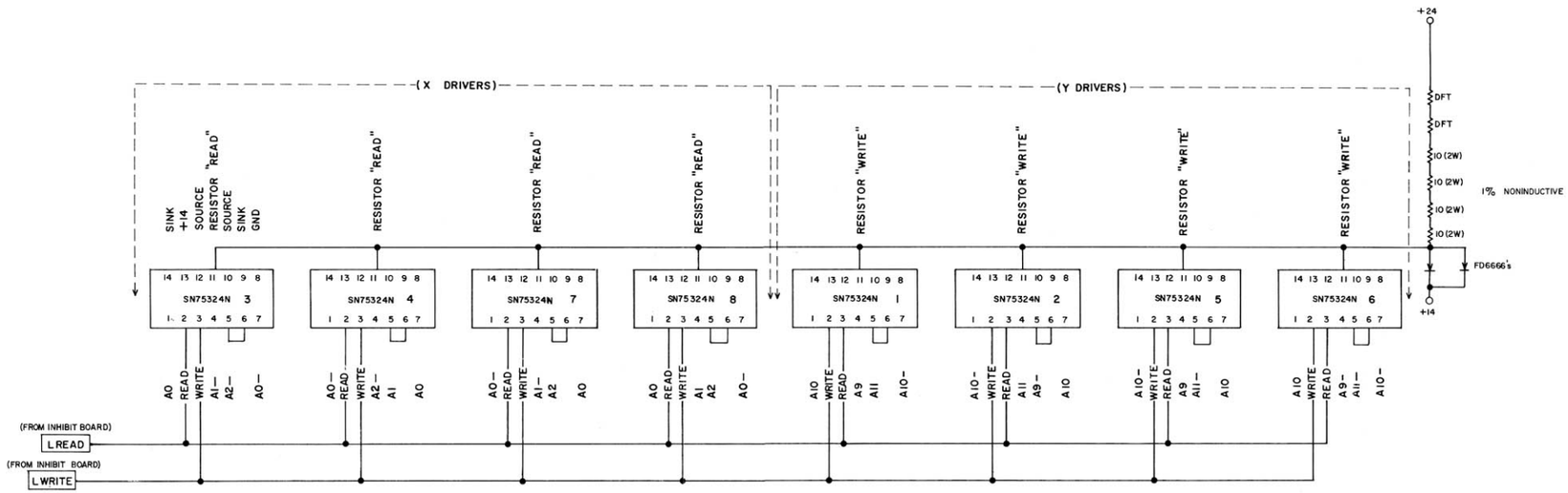
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ± V INDICATES SURFACE ROUGHNESS PER MIL-STD-10	REMOVE ALL BURRS BREAK ALL SHARP CORNERS
MATERIAL	DRAWN MC DATE 6-23-70
SPEC.	CHECKED
FINISH	APPROVED
SPEC.	APPROVED
NEXT ASS'Y / USED ON	
APPLICATION	

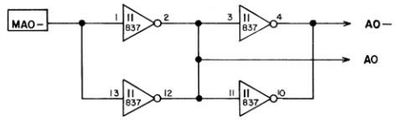
NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

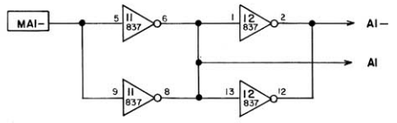
TITLE: INHIBIT DRIVER 1080 MEMORY

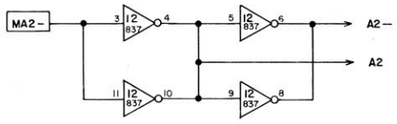
CODE IDENT. NO.	SIZE	
	D	MEMORY BOARD 2
SCALE		SHEET 1 of 1

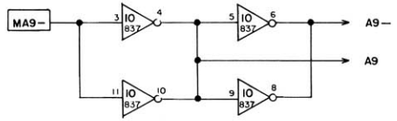
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED

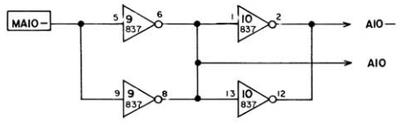


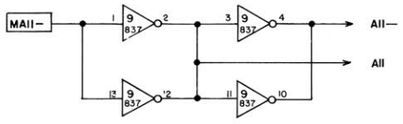


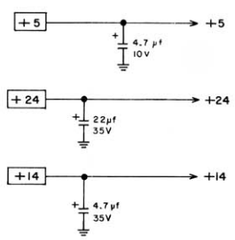










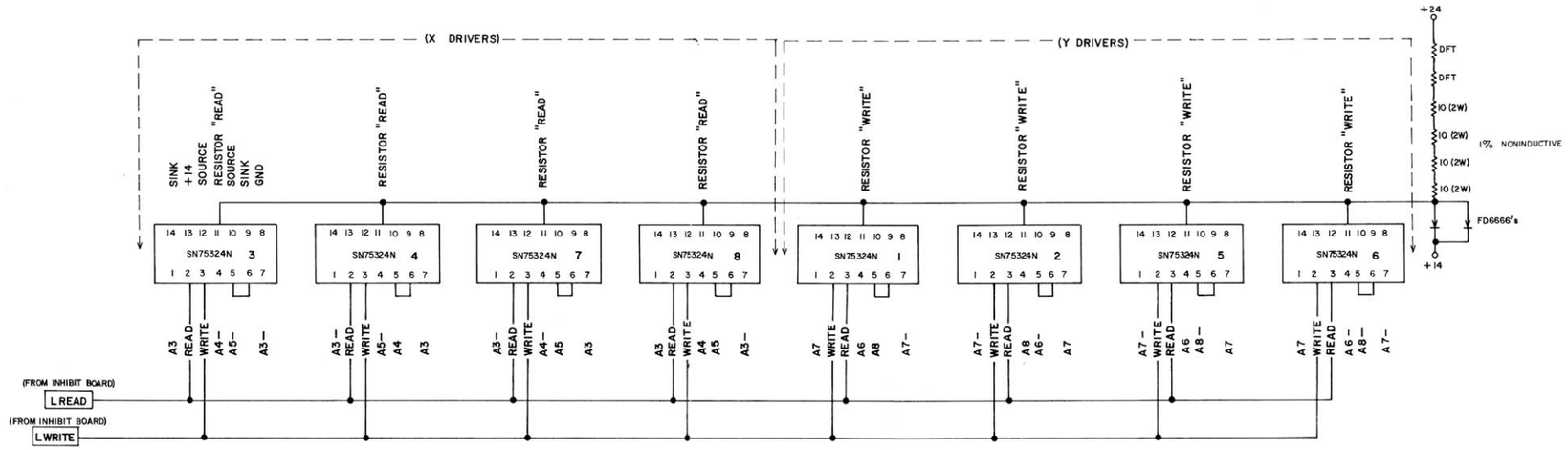


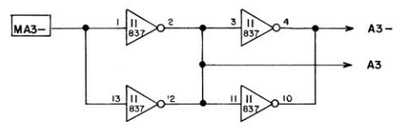
DIST. KEY

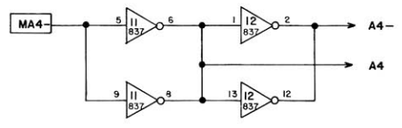
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ± INDICATES SURFACE ROUGHNESS PER MIL-STD-10	REMOVE ALL BURRS BREAK ALL SHARP CORNERS	NICOLET INSTRUMENT CORPORATION 5225 Verona Road, Madison, Wisconsin 53711
MATERIAL	DRAWN / DATE	TITLE: ADDRESS DRIVER FOR MODEL 1080
SPEC.	CHECKED	
FINISH	APPROVED	CODE IDENT. NO. / SIZE: D / MEMORY BOARD 3
SPEC.	APPROVED	SCALE / SHEET 2 of 2

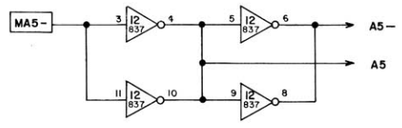
NEXT ASS'Y	USED ON
APPLICATION	

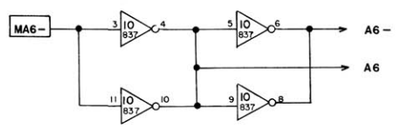
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED

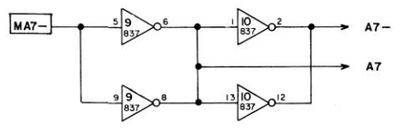


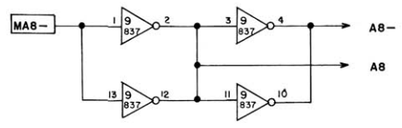


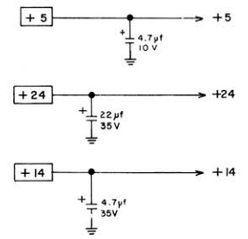












UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ±
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10
MATERIAL
SPEC.
FINISH
SPEC.

NEXT ASS'Y	USED ON
APPLICATION	

REMOVE ALL BURRS
BREAK ALL SHARP CORNERS

	DATE
DRAWN	
CHECKED	
APPROVED	
APPROVED	

NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE
ADDRESS DRIVER FOR MODEL 1080

CODE IDENT. NO.	SIZE	
	D	MEMORY BOARD 6
SCALE		SHEET 1 of 2

REV.

DIST. KEY

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED

SWEEP COUNTER & DISPLAY DESCRIBED ELSEWHERE

AUSWIPE

AAUS—

+5 MLITE

+5 WSTOPLITE

+5 RLITE

MEASURE

STOP

READ

MNO

MNC

STOP—

RNO

RNC

WIRED PROGRAM

CRT

CRTREAL

AUTOSLEW

CLAMP

REALPLOT

DIGOUT—

DIGIN—

CAL—

CAL READOUT

CRT REALTIME

PLOTTER AUTOSLEW

PLOTTER REALTIME

DIGITAL READOUT

DIGITAL READIN

CALIBRATE

EXCLUSIVE

+5 DPSTOPLITE

+5 DPLITE

STOP

START

XSTOP—

PSTART—

START—

STORED PROGRAM

ERASE—

RAUS—

ENABLE

CLEAR MEMORY

CLEAR SWEEP COUNTER

MOMENTARY

ADD

ADD

SUBTRACT

INPUT DATA

EXCLUSIVE

PROT—

PROTECT PROGRAM

LATCHING

1080 ONLY

NXMLITE

+5

STOPCAL

RX

MIDX

SX

SY

MIDY

RY

LEFT

MIDDLE

RIGHT

TOP

MIDDLE

BOTTOM

HORIZONTAL

VERTICAL

EXCLUSIVE

EXCLUSIVE

1080 ONLY

RAS1

RAS2

RAS4

RAS8

0

1K

2K

4K

8K

STARTING

READOUT MEMORY ALLOCATION

1KR—

2KR—

4KR—

8KR—

1K

2K

4K

8K

16K

SIZE

LATCHING

EXCLUSIVE

MAS1

MAS2

MAS4

MAS8

0

1K

2K

4K

8K

STARTING

MEASURE MEMORY ALLOCATION

1KM—

2KM—

4KM—

8KM—

1K

2K

4K

8K

16K

SIZE

LATCHING

EXCLUSIVE

1. 1080 APPLICATION AS SHOWN
2. BNC APPLICATION AS ONE (1) BANK OF SWITCHES w/ SIGNALS IN PARALLEL

1080 ONLY

INPUT—

MEM—

CONT—

INPUT

MEMORY

CONTINUOUS

VIEW

EXCLUSIVE

CW

131K

65K

32K

16K

8K

4K

2K

1K

512

256

128

64

32

16

8

4

CCW

VERTICAL DISPLAY SCALE

CCW

1K

2K

4K

8K

16K

CW

1KXD

2KXD

4KXD

8KXD

16KXD

HORIZONTAL DISPLAY SCALE

+5

2.2K

DISVD—

VDO

VD1

VD2

VD3

REV.

DIST. KEY

NEXT ASS'Y	USED ON		
APPLICATION			

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS ± DECIMALS ± ANGLES ±

√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10

MATERIAL

SPEC.

FINISH

SPEC.

REMOVE ALL BURRS
BREAK ALL SHARP CORNERS

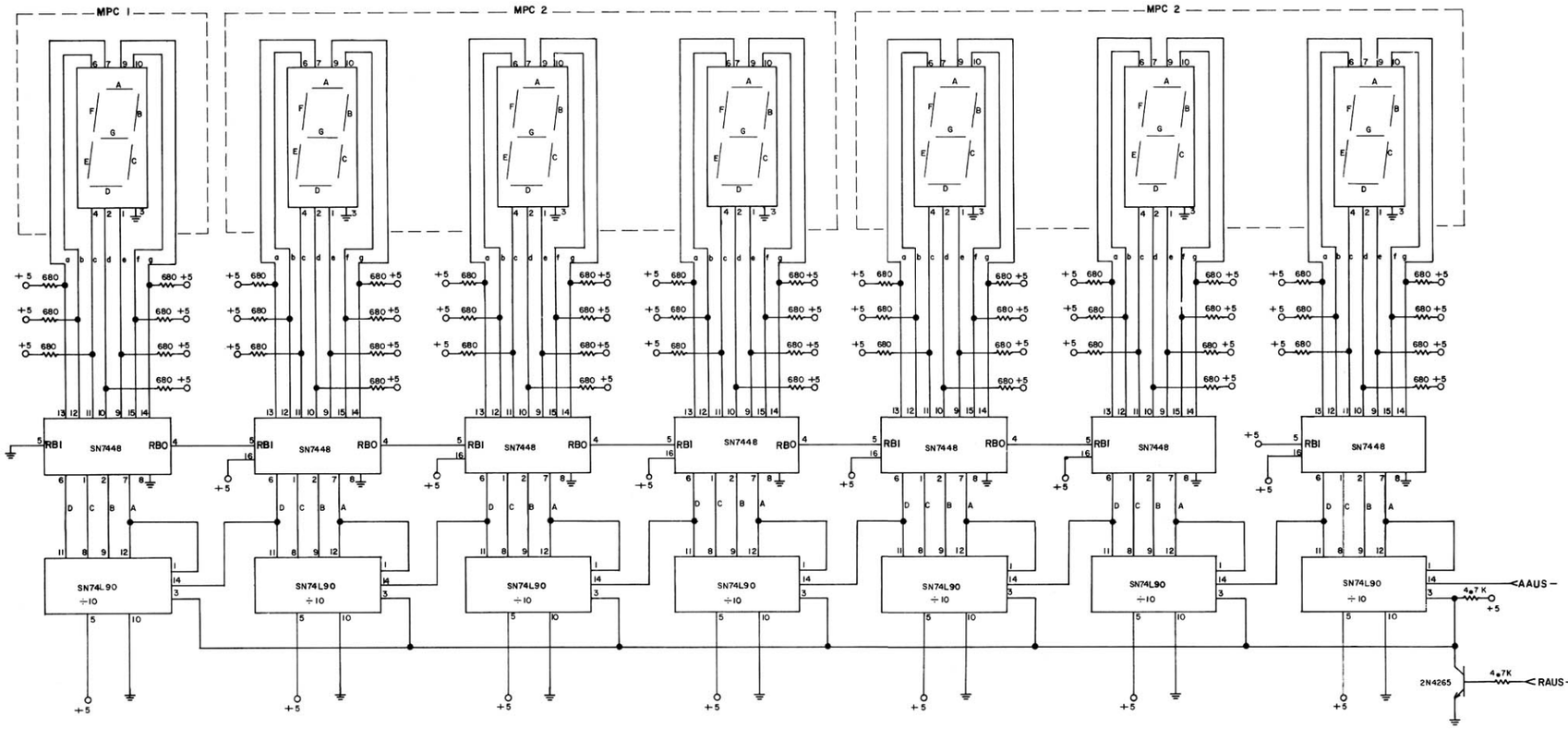
DRAWN	GW	DATE
CHECKED		
APPROVED		
APPROVED		

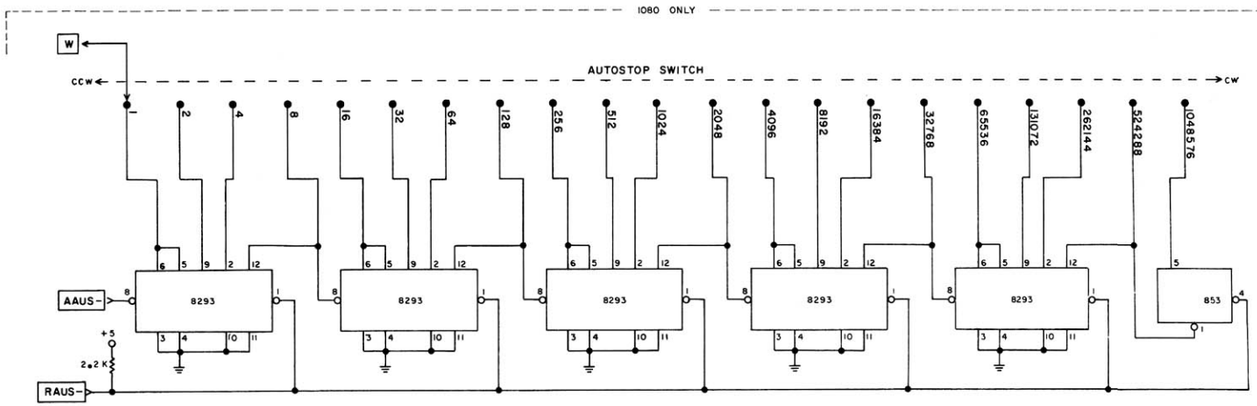
NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE
FRONT PANEL CONTROLS
1080

CODE IDENT. NO.	SIZE	DWG. NO.
	D	
SCALE		SHEET 1 of 1

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



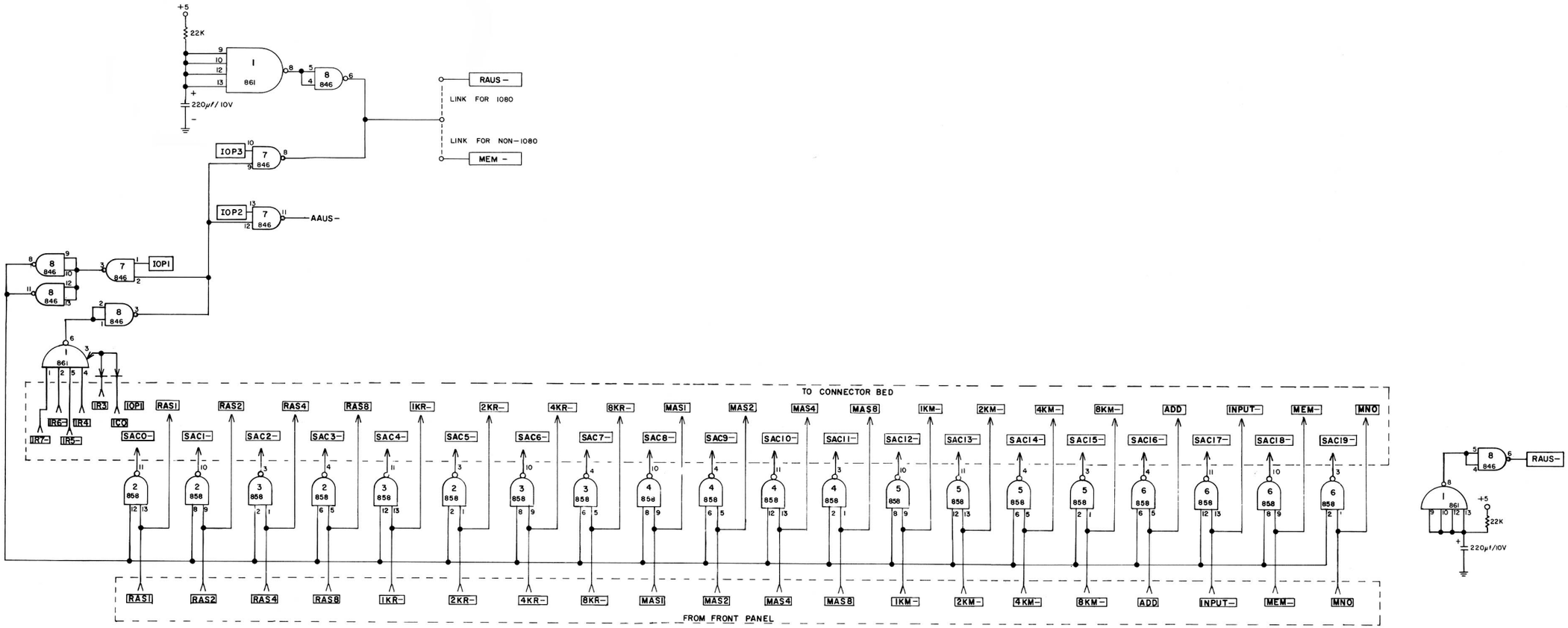


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ± √ INDICATES SURFACE ROUGHNESS PER MIL-STD-10	REMOVE ALL BURRS BREAK ALL SHARP CORNERS	NICOLET INSTRUMENT CORPORATION 5225 Verona Road, Madison, Wisconsin 53711
MATERIAL	DRAWN / DATE	TITLE LOCATED ON FRONT PANEL OF 1080 SEVEN SEGMENT – SEVEN DIGIT DISPLAY COUNTER & DRIVER & AUTOSTOP SCALER
SPEC.	CHECKED	
FINISH	APPROVED	CODE IDENT. NO. / SIZE D / DWG. NO.
SPEC.	APPROVED	SCALE / SHEET
NEXT ASS'Y / USED ON: APPLICATION		

DIST. KEY

10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



DIST. KEY

REV.

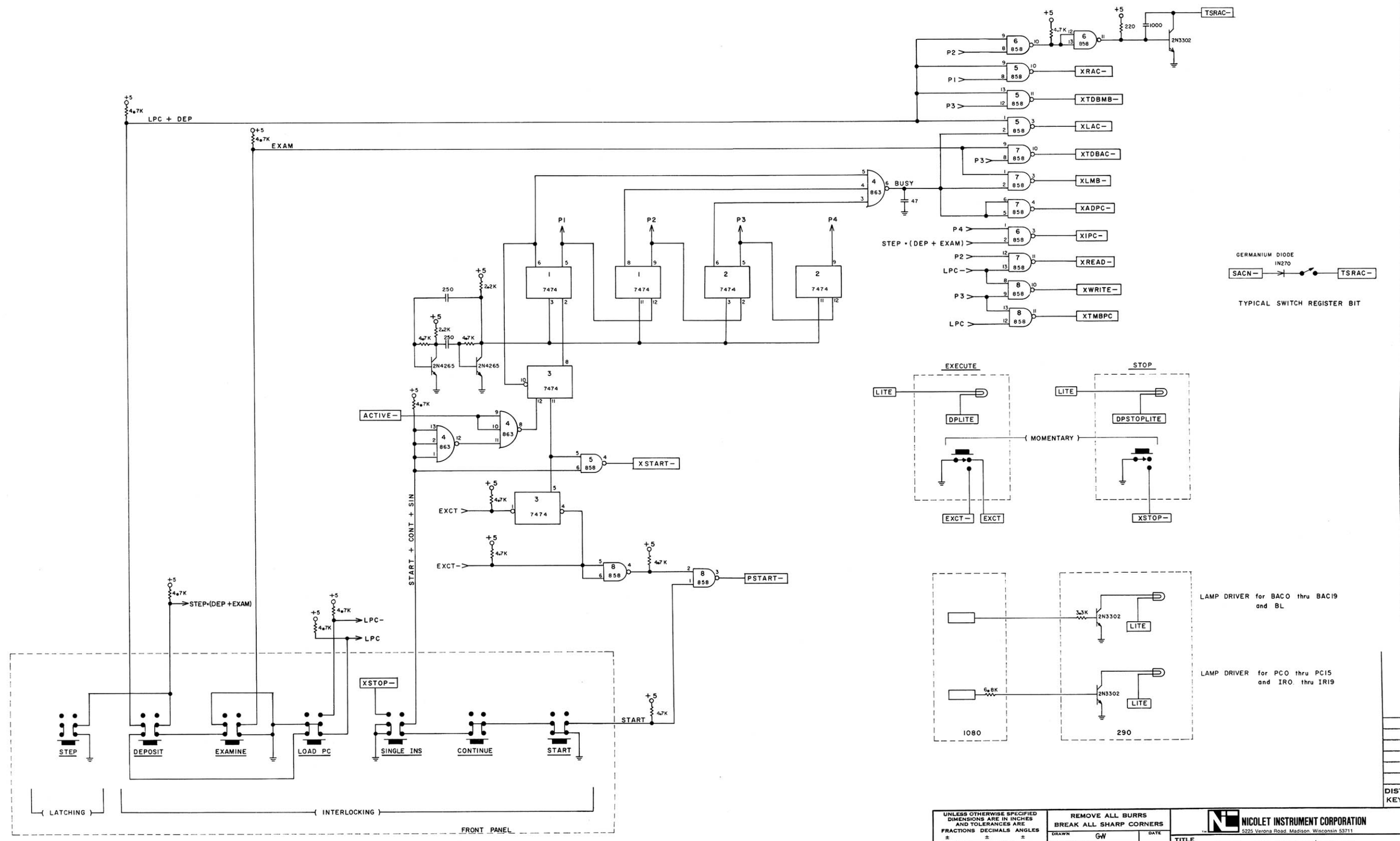
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS ± DECIMALS ± ANGLES ± √ INDICATES SURFACE ROUGHNESS PER MIL-STD-10	REMOVE ALL BURRS BREAK ALL SHARP CORNERS
MATERIAL	DRAWN MO DATE 7-1-70
SPEC.	CHECKED
FINISH	APPROVED
SPEC.	APPROVED
NEXT ASS'Y / USED ON: APPLICATION	

NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE: FRONT PANEL CONNECTOR 1080

CODE IDENT. NO.	SIZE	
	D	(BOARD D2)
SCALE		SHEET 1 of 1

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS ± DECIMALS ± ANGLES ±	REMOVE ALL BURRS BREAK ALL SHARP CORNERS
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10	DRAWN GW DATE
MATERIAL	CHECKED
SPEC.	APPROVED
FINISH	APPROVED
SPEC.	
NEXT ASS'Y / USED ON	
APPLICATION	

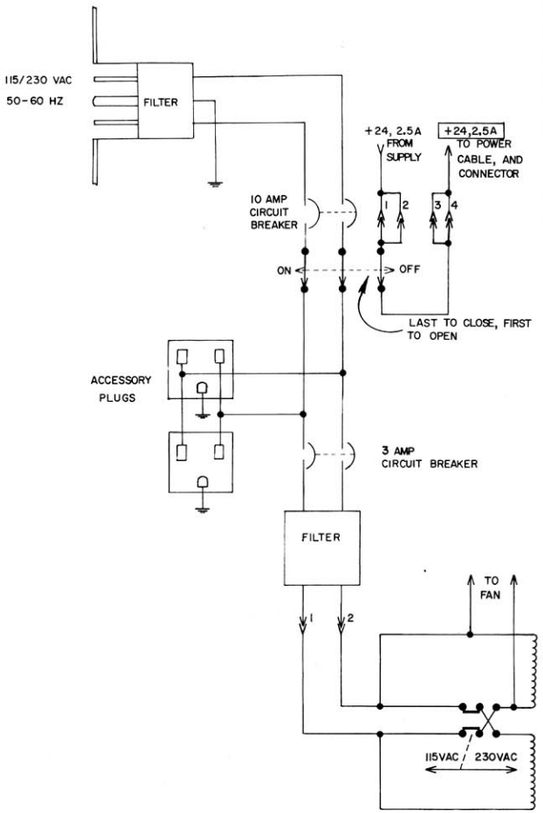
NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE: MODEL 290 DISPLAY/CONTROL

CODE IDENT. NO. | SIZE D | SCALE | SHEET 1 of 1

REV. | DIST. KEY

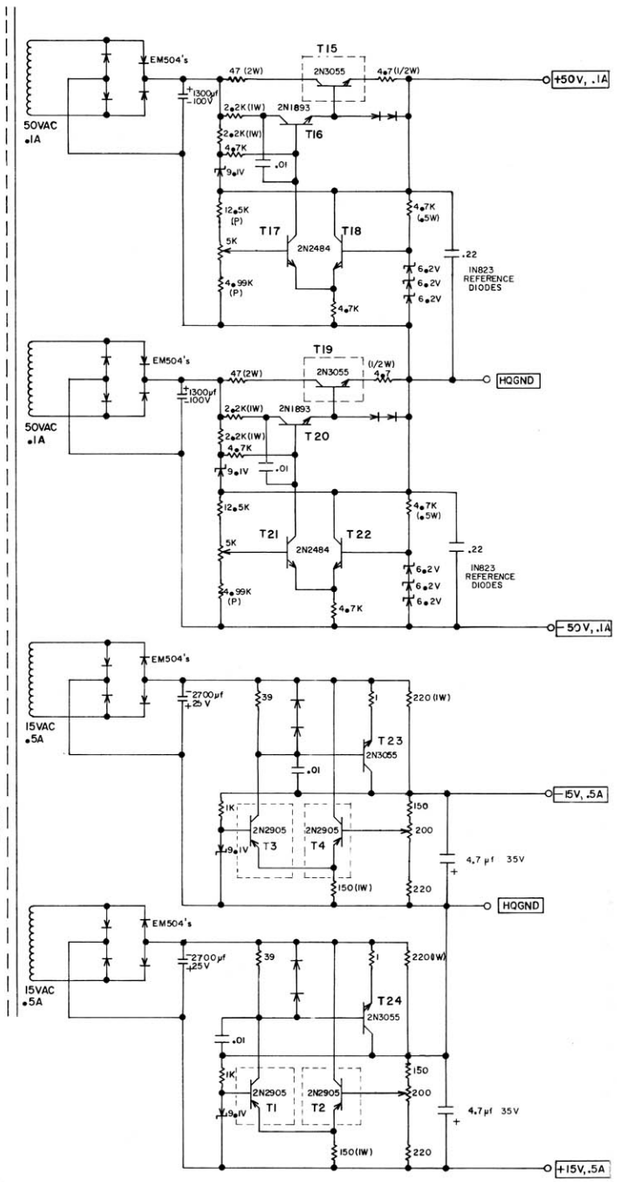
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED

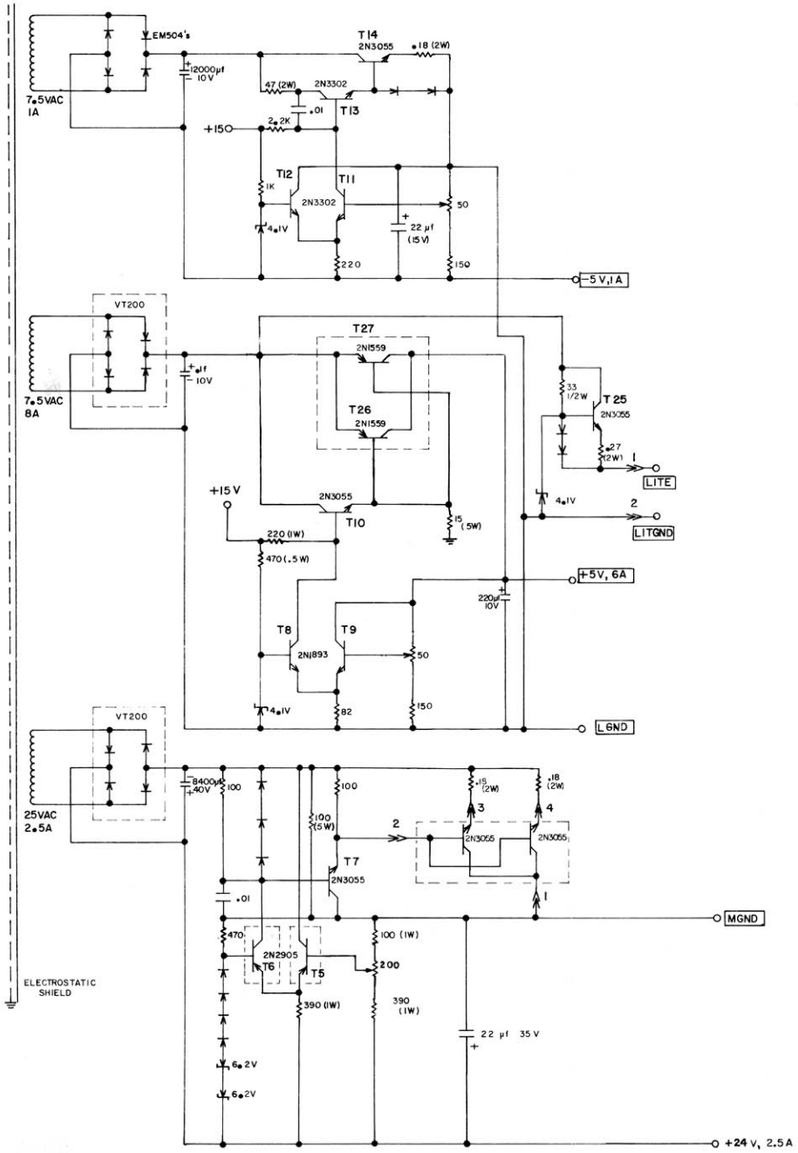


MEMORY DRIVER CLAMP

+14 V

14V (LOCATED ON WIREWRAP BED.)

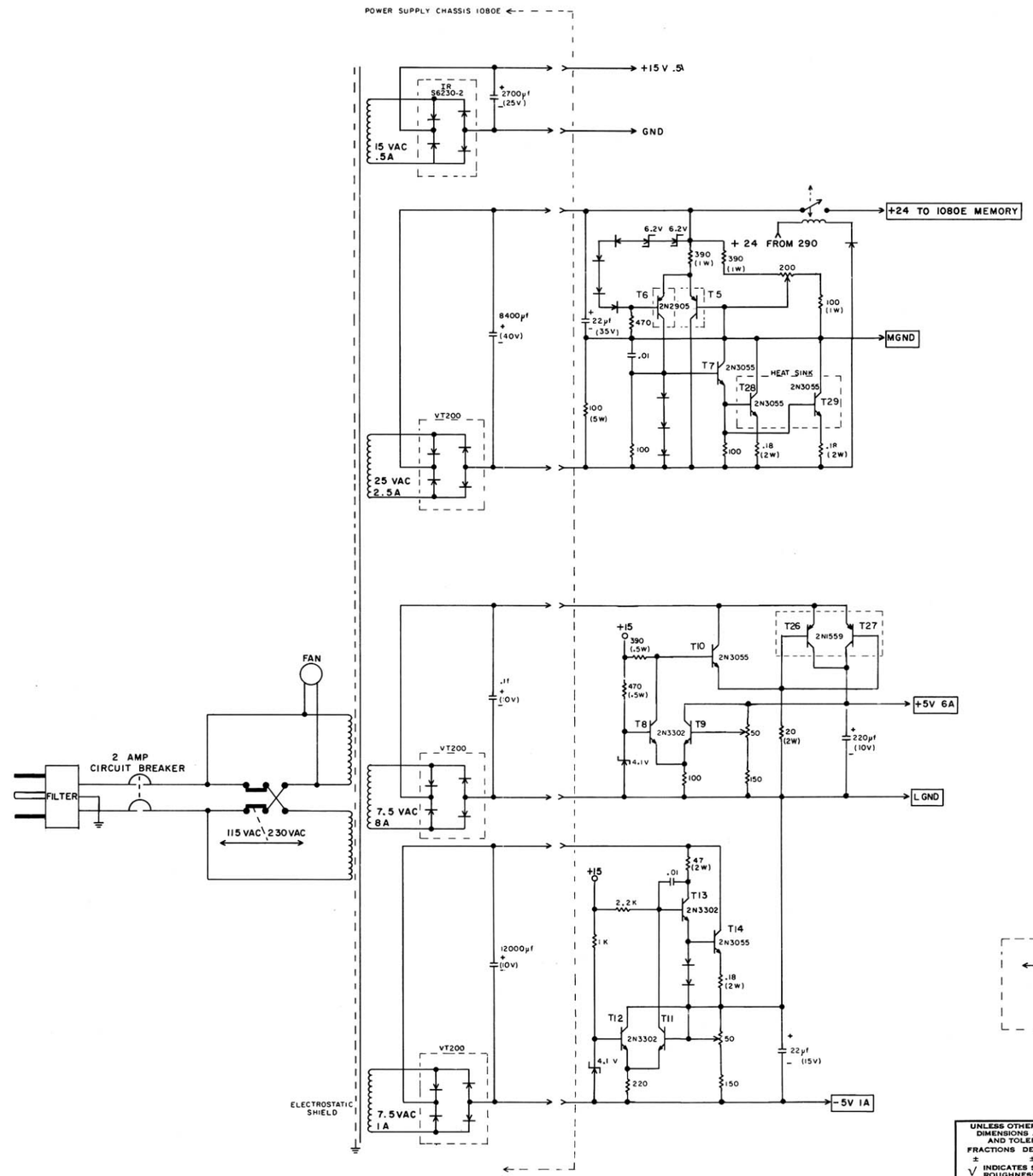




DIST. KEY

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ± V INDICATES SURFACE ROUGHNESS PER MIL-STD-10	REMOVE ALL BURRS BREAK ALL SHARP CORNERS	NICOLET INSTRUMENT CORPORATION 5225 Verona Road, Madison, Wisconsin 53711
MATERIAL SPEC.	DRAWN / CHECKED / APPROVED / APPROVED (DATE)	TITLE: POWER SUPPLY FOR MODEL 1080
FINISH SPEC.		CODE IDENT. NO. / SIZE D
NEXT ASS'Y / USED ON: APPLICATION		SCALE / SHEET 1 of 1

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



DIST. KEY

REV.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ±
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10
MATERIAL
SPEC.
FINISH
SPEC.

REMOVE ALL BURRS BREAK ALL SHARP CORNERS		
DRAWN		DATE
CHECKED		
APPROVED		
APPROVED		

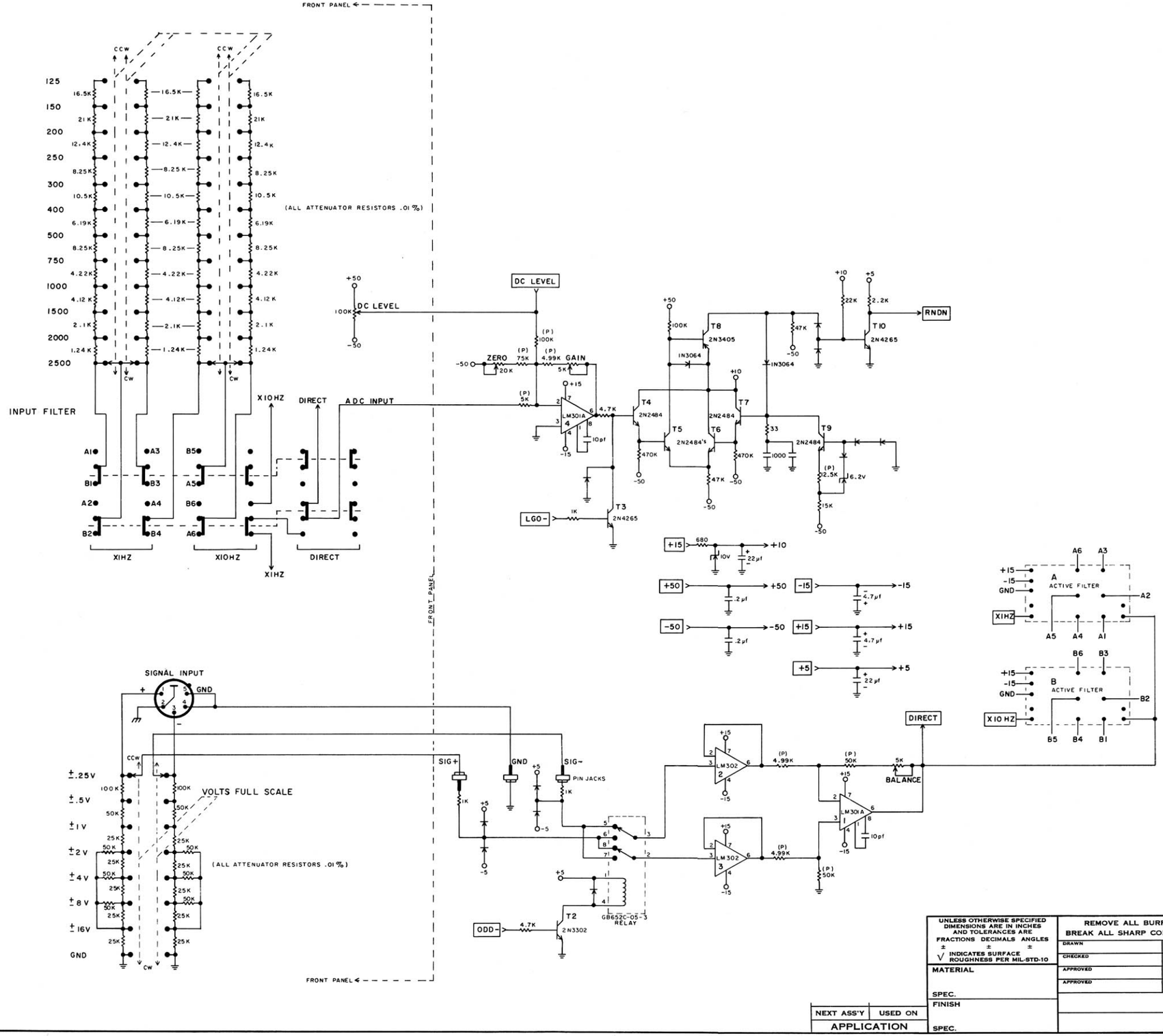
NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE: POWER SUPPLY FOR MODEL 1080E

CODE IDENT. NO.	SIZE	DWG. NO.
	D	
SCALE		SHEET

NEXT ASS'Y	USED ON
APPLICATION	

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



SIGNAL	CONNECTOR PIN	TO
GND	D-1	
+5	D-3	
-5	D-5	
	D-7	
	D-9	
	D-11	
	D-13	
	D-15	
	D-17	
	D-19	
	D-21	
	D-23	
	D-25	
	D-27	
	D-29	
	D-31	
	D-33	
	D-35	
	D-37	
GND	D-39	
	D-41	
	D-43	
	D-45	
	D-47	
	D-49	
	D-51	
	D-53	
	D-55	
	D-57	
DIRECT	D-59	FPB-20
X10HZ	D-61	FPD-18
X1HZ	D-63	FPC-18
	D-65	
	D-67	
+15	D-69	
-15	D-71	
	D-73	
-50	D-75	
	D-77	
+50	D-79	
GND	D-2	
+5	D-4	
-5	D-6	
	D-8	
RNDN	D-10	G-36
	D-12	
	D-14	
	D-16	
	D-18	
LGO-	D-20	H-43
	D-22	
	D-24	
	D-26	
ADC INPUT	D-28	FPA-20
DC LEVEL	D-30	FPA-6
	D-32	
	D-34	
ODD-	D-36	H-34
	D-38	
GND	D-40	
	D-42	
A3	D-44	FPA-17
A2	D-46	FPB-15
A1	D-48	FPB-17
B3	D-50	FPA-16
B2	D-52	FPA-15
A6	D-54	FPA-19
A5	D-56	FPA-18
A4	D-58	FPB-14
B6	D-60	FPB-19
B5	D-62	FPB-18
B1	D-64	FPB-16
B4	D-66	FPA-14
	D-68	
+15	D-70	
-15	D-72	
	D-74	
-50	D-76	
	D-78	
+50	D-80	

REV.

DIST. KEY

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS ± DECIMALS ± ANGLES ±
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10

MATERIAL

SPEC.

FINISH

SPEC.

REMOVE ALL BURRS
BREAK ALL SHARP CORNERS

	DRAWN	DATE
	CHECKED	
	APPROVED	
	APPROVED	

NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

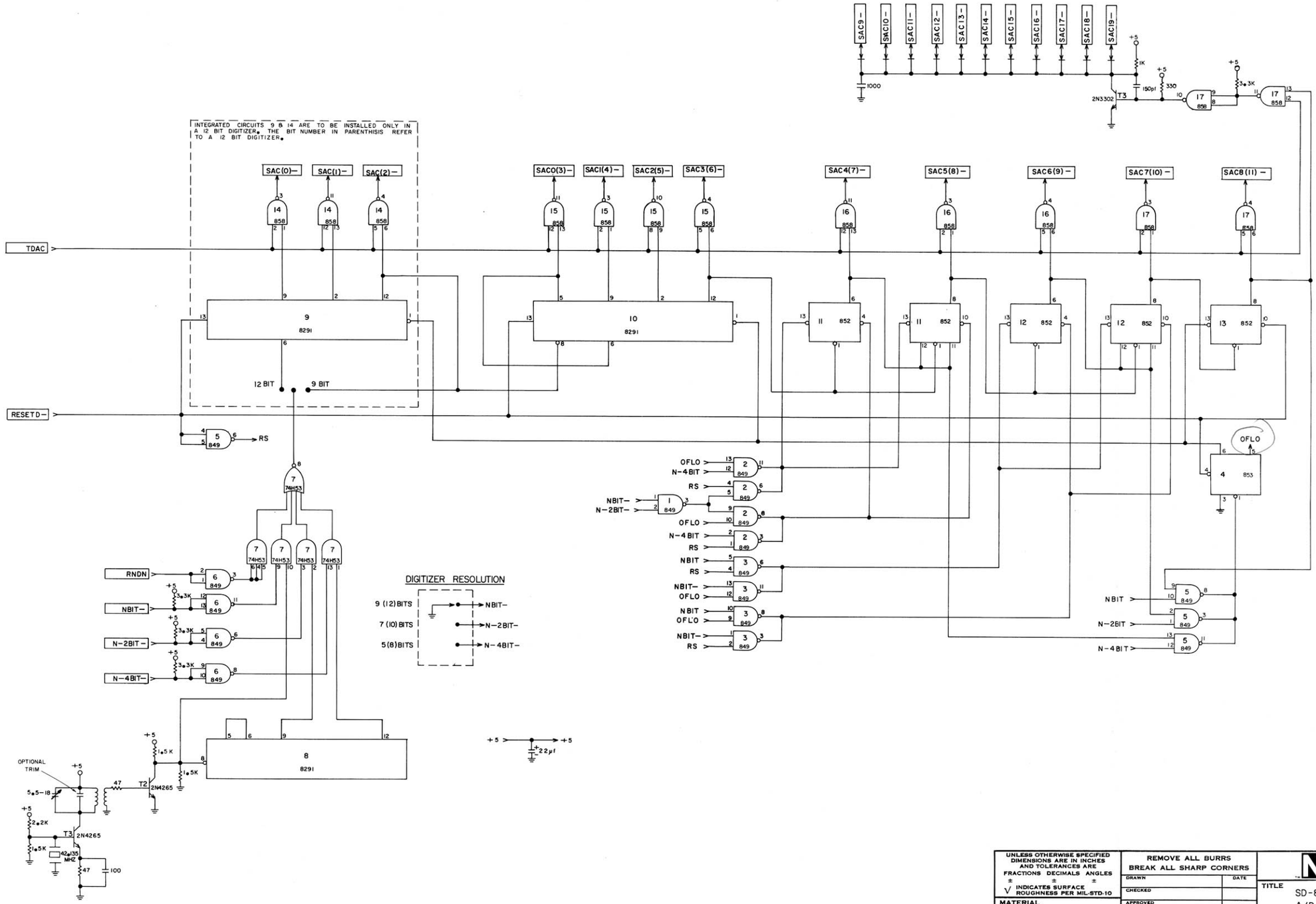
TITLE SD-82 ANALOG/DIGITAL CONVERTER
ANALOG BOARD
BOARD LOCATION "D"

CODE IDENT. NO.	SIZE	DWG. NO.
	D	

SCALE | SHEET

NEXT ASS'Y	USED ON
APPLICATION	

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



SIGNAL	CONNECTOR PIN	TO
GND	G–1	
+5	G–3	
–5	G–5	
	G–7	
	G–9	
	G–11	
	G–13	
	G–15	
	G–17	
	G–19	
	G–21	
	G–23	
	G–25	
	G–27	
	G–29	
SAC19–	G–31	A–40
SAC18–	G–33	A–38
SAC17–	G–35	A–36
SAC16–	G–37	A–34
GND	G–39	GND
SAC 15–	G–41	A–32
SAC 14–	G–43	A–30
	G–45	
	G–47	
	G–49	
	G–51	
	G–53	
	G–55	
TDAC	G–57	H–47
SAC6–	G–59	A–14
SAC5–	G–61	A–12
SAC4–	G–63	A–10
SAC3–	G–65	A–8
	G–67	
+15	G–69	
–15	G–71	
	G–73	
–50	G–75	
	G–77	
+50	G–79	
GND	G–2	
+5	G–4	
–5	G–6	
	G–8	
	G–10	
	G–12	
	G–14	
	G–16	
	G–18	
	G–20	
	G–22	
	G–24	
	G–26	
	G–28	
N–4BIT–	G–30	FPC–20
NBIT–	G–32	FPC–19
N–2BIT–	G–34	FPD–19
RNDN	G–36	D–10
RESETD–	G–38	H–45
GND	G–40	
SAC13–	G–42	A–28
SAC12–	G–44	A–26
SAC11–	G–46	A–24
SAC10–	G–48	A–22
SAC9–	G–50	A–20
SAC8–	G–52	A–18
SAC7–	G–54	A–16
SAC1–	G–56	A–4
SAC2–	G–58	A–6
SAC0–	G–60	A–2
	G–62	
	G–64	
	G–66	
	G–68	
+15	G–70	
–15	G–72	
	G–74	
–50	G–76	
	G–78	
+50	G–80	

REV.

DIST. KEY

NEXT ASS'Y	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS ± DECIMALS ± ANGLES ±
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10

MATERIAL
SPEC.
FINISH
SPEC.

REMOVE ALL BURRS
BREAK ALL SHARP CORNERS

	DATE
DRAWN	
CHECKED	
APPROVED	
APPROVED	

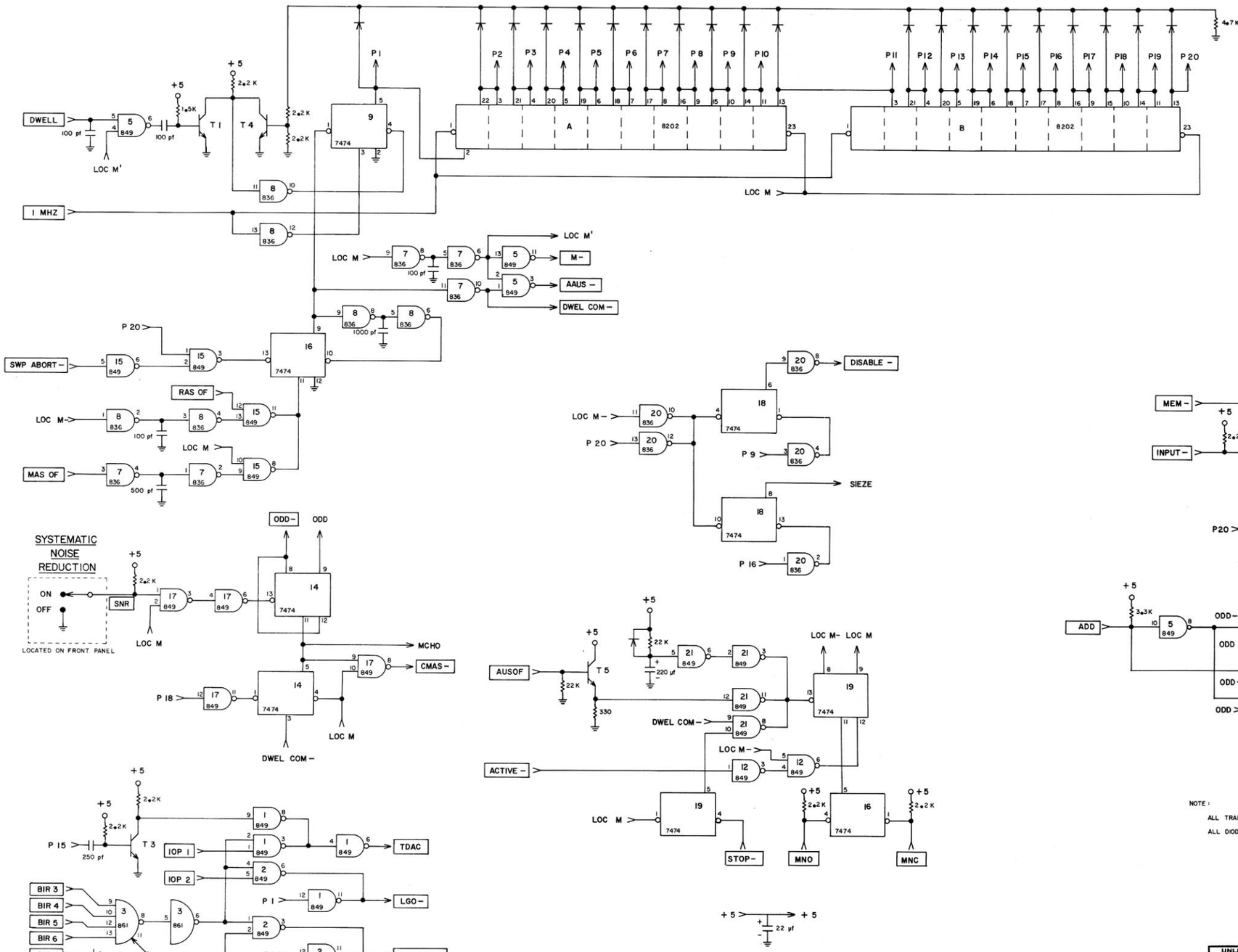
NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE
SD-82 ANALOG TO DIGITAL CONVERTER
A/D DATA SCALER
BOARD LOCATION "G"

CODE IDENT. NO.	SIZE	DWG. NO.
	D	

SCALE | SHEET

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



SIGNAL	CONNECTOR PIN	TO
GND	H - 1	
+ 5	H - 3	
- 5	H - 5	
	H - 7	
	H - 9	
	H - 11	
	H - 13	
	H - 15	
	H - 17	
	H - 19	
	H - 21	
XTDBAC -	H - 23	A - 29
ACTIVE -	H - 25	A - 78
AAUS -	H - 27	A - 70
DWELL	H - 29	A - 17
M -	H - 31	A - 19
XTDBMB -	H - 33	A - 49
	H - 35	
	H - 37	
	H - 39	
I MHZ	H - 41	B - 15
	H - 43	
	H - 45	
	H - 47	
BIR 3	H - 49	A - 57
BIR 4	H - 51	A - 59
BIR 5	H - 53	A - 61
BIR 6	H - 55	A - 63
BIR 7	H - 57	A - 65
ICO	H - 59	A - 64
IOP 3	H - 61	A - 77
IOP 2	H - 63	A - 75
IOP 1	H - 65	A - 66
+ 15	H - 67	
- 15	H - 69	
	H - 71	
- 50	H - 73	
	H - 75	
	H - 77	
+ 50	H - 79	

GND	H - 2	
+ 5	H - 4	
- 5	H - 6	
DWEL COM -	H - 8	B - 14
MNC	H - 10	A - 44
MNO	H - 12	A - 42
AUSOF	H - 14	A - 76
STOP -	H - 16	A - 68
	H - 18	
DISABLE -	H - 20	A - 15
	H - 22	
SNR	H - 24	FPD - 20
CMAS -	H - 26	A - 3
SWP ABORT -	H - 28	B - 16
MASOF	H - 30	A - 5
RASOF	H - 32	A - 7
	H - 34	
ADD	H - 36	A - 46
XWRITE -	H - 38	A - 31
GND	H - 40	
SHIFT -	H - 42	A - 23
INPUT -	H - 44	A - 50
MEM -	H - 46	A - 48
XREAD -	H - 48	A - 27
AXD -	H - 50	A - 9
TACYD -	H - 52	A - 69

XRAC -	H - 54	A - 45
RXD -	H - 56	A - 79
AMAS	H - 58	A - 1
XLMB -	H - 60	A - 25
XLCAC -	H - 62	A - 41
XCIN -	H - 64	A - 37
XLAC -	H - 66	A - 39
	H - 68	
+ 15	H - 70	
- 15	H - 72	
	H - 74	
- 50	H - 76	
	H - 78	
+ 50	H - 80	

NOTE :

ALL TRANSISTORS ARE TYPE 2N4265.

ALL DIODES ARE TYPE FD-6666.

DIST. KEY

REV.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ±
V INDICATES SURFACE ROUGHNESS PER MIL-STD-10
MATERIAL
SPEC.
FINISH
SPEC.

REMOVE ALL BURRS
BREAK ALL SHARP CORNERS

	DRAWN	DATE
	B. C.	
CHECKED		
APPROVED		
APPROVED		

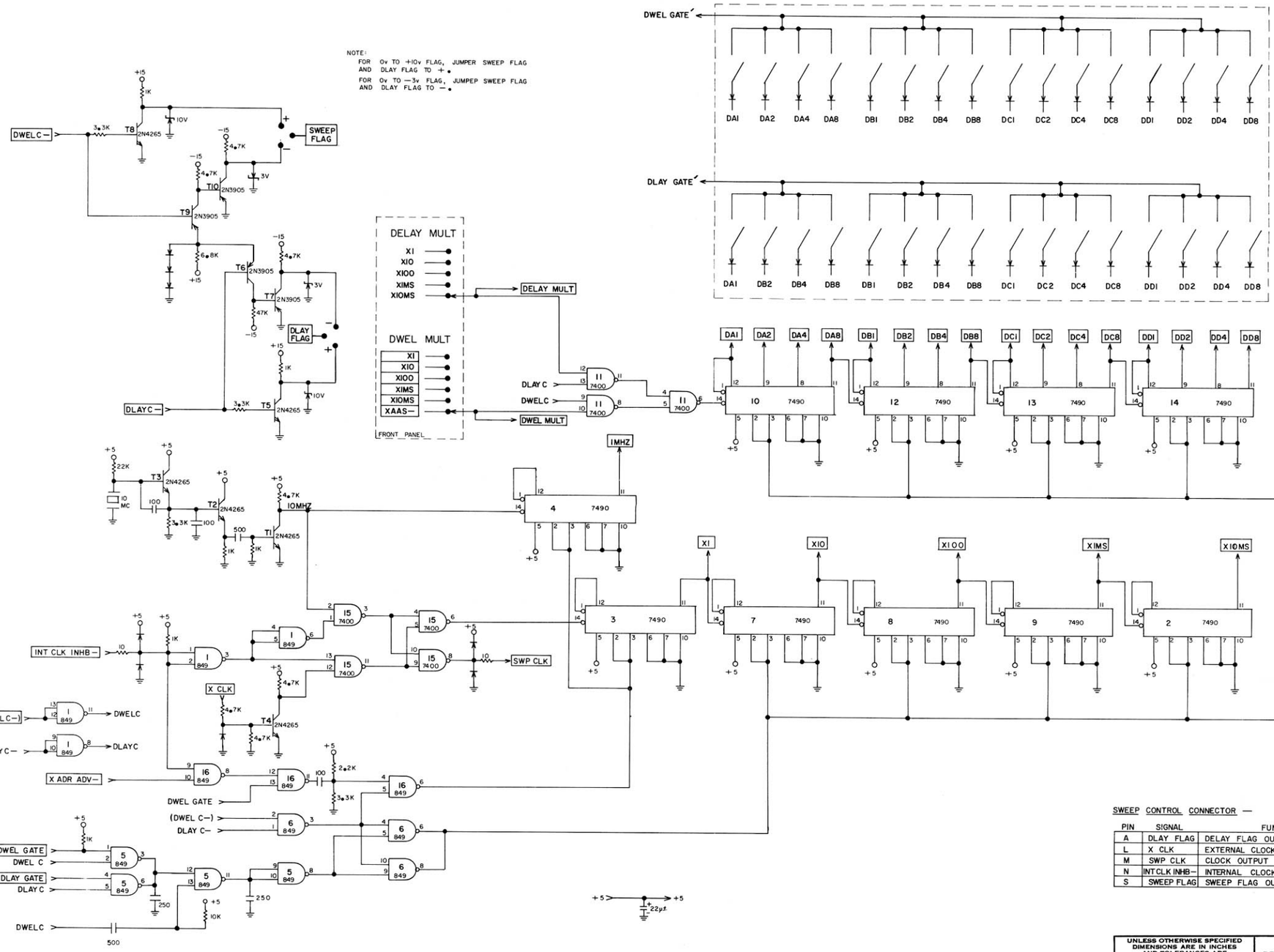
NEXT ASS'Y | USED ON
APPLICATION

NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE SD-82 ANALOG TO DIGITAL CONVERTER
CONTROL LOGIC
BOARD LOCATION "H"

CODE IDENT. NO. | SIZE D | DWG. NO.
SCALE | SHEET

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



SWEEP CONTROL CONNECTOR —

PIN	SIGNAL	FUNCTION
A	DLAY FLAG	DELAY FLAG OUTPUT
L	X CLK	EXTERNAL CLOCK INPUT
M	SWP CLK	CLOCK OUTPUT
N	INTCLK INHB−	INTERNAL CLOCK INHIBIT
S	SWEEP FLAG	SWEEP FLAG OUTPUT

SIGNAL	CONNECTOR PIN	TO
GND	C−1	
+5	C−3	
−5	C−5	
	C−7	
	C−9	
	C−11	
	C−13	
	C−15	
	C−17	
	C−19	
	C−21	
	C−23	
	C−25	
	C−27	
	C−29	
	C−31	
	C−33	
	C−35	
	C−37	
GND	C−39	
X ADR ADV−	C−41	FPA−18
	C−43	
	C−45	
	C−47	
	C−49	
	C−51	
	C−53	
DWEL C−	C−55	H−17
DELAY FLAG	C−57	FPB−18
SWEEPFLAG	C−59	FPC−18
DWEL GATE	C−61	E−66 H−11
DLAY GATE	C−63	H−9
INTCLKINHB−	C−65	FPD−19
	C−67	
+15	C−69	
−15	C−71	
	C−73	
−50	C−75	
	C−75	
+50	C−79	

GND	C−2	
+5	C−4	
−5	C−6	
DD4	C−8	FPA−3
DD2	C−10	FPC−2
DD8	C−12	FPB−3
DD1	C−14	FPB−2
DC4	C−16	FPC−5
DC2	C−18	FPB−5
DC8	C−20	FPA−6
DC1	C−22	FPA−5
DB4	C−24	FPB−8
DB2	C−26	FPA−8
DB8	C−28	FPC−8
DB1	C−30	FPC−7
DELAY MULT	C−32	FPC−15
DWEL MULT	C−34	FPA−16
DA4	C−36	FPB−12
DA2	C−38	FPA−12
GND	C−40	
DA8	C−42	FPC−12
DA1	C−44	FPC−11
SWP CLK	C−46	FPD−17
X100	C−48	FPC−14
X10	C−50	FPB−14
X1	C−52	FPA−14
(DWEL C−)	C−54	H−13
DLAYC−	C−56	E−62 H−8
XIOMS	C−58	FPB−15
XIMS	C−60	FPA−15
IMHZ	C−62	B−15
XCLK	C−64	FPB−18
	C−66	
	C−68	
+15	C−70	
−15	C−72	
	C−74	
−50	C−76	
	C−78	
+50	C−80	

REV.

DIST. KEY

NEXT ASS'Y	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ±
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10

MATERIAL
SPEC.
FINISH
SPEC.

REMOVE ALL BURRS
BREAK ALL SHARP CORNERS

		DATE
DRAWN		
CHECKED		
APPROVED		
APPROVED		

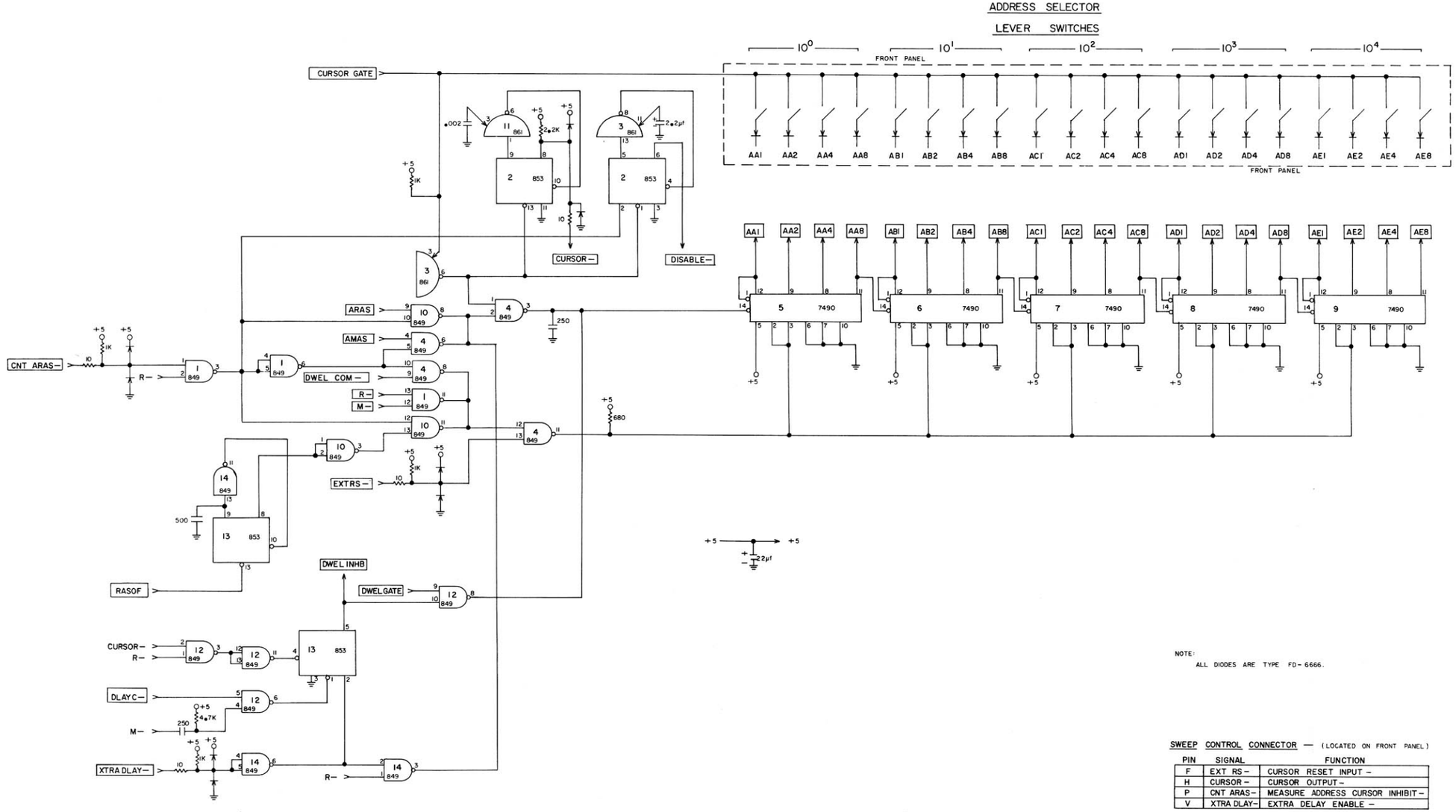
NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE
SW−80 SWEEP CONTROL
FREQ. DIVIDER
BOARD LOCATION "C"

CODE IDENT. NO.	SIZE	DWG. NO.
	D	

SCALE | SHEET

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



SIGNAL	CONNECTOR PIN	TO
GND	E−1	
+5	E−3	
−5	E−5	
	E−7	
	E−9	
	E−11	
	E−13	
	E−15	
	E−17	
	E−19	
	E−21	
	E−23	
	E−25	
	E−27	
	E−29	
	E−31	
RASOF	E−33	A−7
ARAS	E−35	A−11
AA4	E−37	FPA−11
GND	E−39	
	E−41	
	E−43	
	E−45	
	E−47	
	E−49	
	E−51	
	E−53	
	E−55	
CNTARAS−	E−57	FPD−20
R−	E−59	H−15, A−21
	E−61	
	E−63	
XTRADLAY−	E−65	FPD−16
	E−67	
+15	E−69	
−15	E−71	
	E−73	
−50	E−75	
	E−77	
+50	E−79	

GND	E−2	
+5	E−4	
−5	E−6	
AE4	E−8	FPC−1
AE2	E−10	FPB−1
AE8	E−12	FPA−2
AE1	E−14	FPA−1
AD4	E−16	FPB−4
AD2	E−18	FPA−4
AD8	E−20	FPC−4
AD1	E−22	FPC−3
AC4	E−24	FPA−7
AC2	E−26	FPC−6
AC8	E−28	FPB−7
AC1	E−30	FPB−6
AB4	E−32	FPC−9
AB2	E−34	FPB−9
AB8	E−36	FPA−10
AB1	E−38	FPA−9
GND	E−40	
AA2	E−42	FPC−10
AA8	E−44	FPB−11
AA1	E−46	FPB−10
AMAS	E−48	G−62, A−1
DWELCOM−	E−50	G−60,H−7,B−14
EXTRS−	E−52	FPB−20
CURSORGATE	E−54	FPC−13
DISABLE−	E−56	A−15
CURSOR−	E−58	FPC−20
M−	E−60	H−57, A−19
DLAYC−	E−62	H−8, C−56
DWEL INHB	E−64	H−33
DWELGATE	E−66	H−11, C−61
	E−68	
+15	E−70	
−15	E−72	
	E−74	
−50	E−76	
	E−78	
+50	E−80	

NOTE:
ALL DIODES ARE TYPE FD−6666.

SWEEP CONTROL CONNECTOR — (LOCATED ON FRONT PANEL)

PIN	SIGNAL	FUNCTION
F	EXT RS−	CURSOR RESET INPUT −
H	CURSOR−	CURSOR OUTPUT −
P	CNT ARAS−	MEASURE ADDRESS CURSOR INHIBIT −
V	XTRA DLAY−	EXTRA DELAY ENABLE −

REV.

DIST. KEY

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS ± DECIMALS ANGLES ±
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10
MATERIAL
SPEC.
FINISH
SPEC.

REMOVE ALL BURRS
BREAK ALL SHARP CORNERS

	DATE
DRAWN	
CHECKED	
APPROVED	
APPROVED	

NEXT ASS'Y | USED ON
APPLICATION

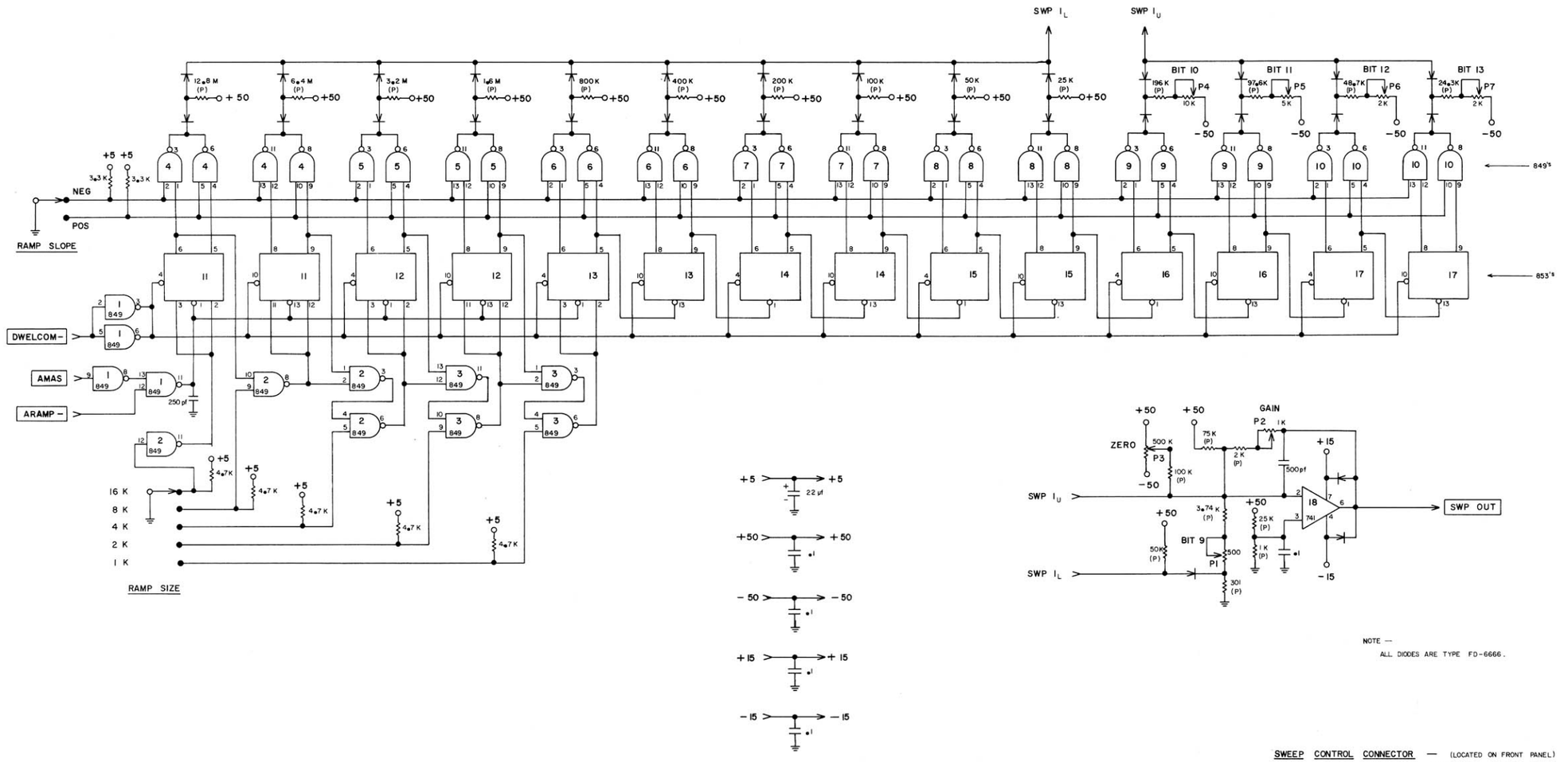
NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE
SW−80 SWEEP CONTROL
ADDRESS CURSOR
BOARD LOCATION "E"

CODE IDENT. NO.	SIZE	DWG. NO.
	D	

SCALE | SHEET

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



CONNECTOR SIGNAL	PIN	TO
GND	G−1	
+5	G−3	
−5	G−5	
	G−7	
	G−9	
	G−11	
	G−13	
	G−15	
	G−17	
	G−19	
	G−21	
	G−23	
	G−25	
	G−27	
	G−29	
	G−31	
	G−33	
	G−35	
	G−37	
GND	G−39	
	G−41	
	G−43	
	G−45	
	G−47	
	G−49	
	G−51	
	G−53	
	G−55	
	G−57	
	G−59	
	G−61	
	G−63	
	G−65	
	G−67	
+15	G−69	
−15	G−71	
	G−73	
−50	G−75	
	G−77	
+50	G−79	
GND	G−2	
+5	G−4	
−5	G−6	
	G−8	
	G−10	
	G−12	
	G−14	
	G−16	
	G−18	
	G−20	
	G−22	
	G−24	
	G−26	
	G−28	
	G−30	
	G−32	
	G−34	
	G−36	
	G−38	
GND	G−40	
	G−42	
	G−44	
	G−46	
	G−48	
	G−50	
	G−52	
	G−54	
	G−56	
ARAMP−	G−58	H−31
DWELCOM−	G−60	B−14, E−50, H−7
AMAS	G−62	A−1, E−48
SWP OUT	G−64	FPA−20
	G−66	
	G−68	
+15	G−70	
−15	G−72	
	G−74	
−50	G−76	
	G−78	
+50	G−80	

NOTE —
ALL DIODES ARE TYPE FD−6666.

SWEEP CONTROL CONNECTOR — (LOCATED ON FRONT PANEL)

PIN	SIGNAL	FUNCTION
E	SWP OUT	SWEEP RAMP OUTPUT

REV.

DIST. KEY

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ±	REMOVE ALL BURRS BREAK ALL SHARP CORNERS
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10	DRAWN B.C. DATE
MATERIAL	CHECKED
SPEC.	APPROVED
FINISH	APPROVED
SPEC.	

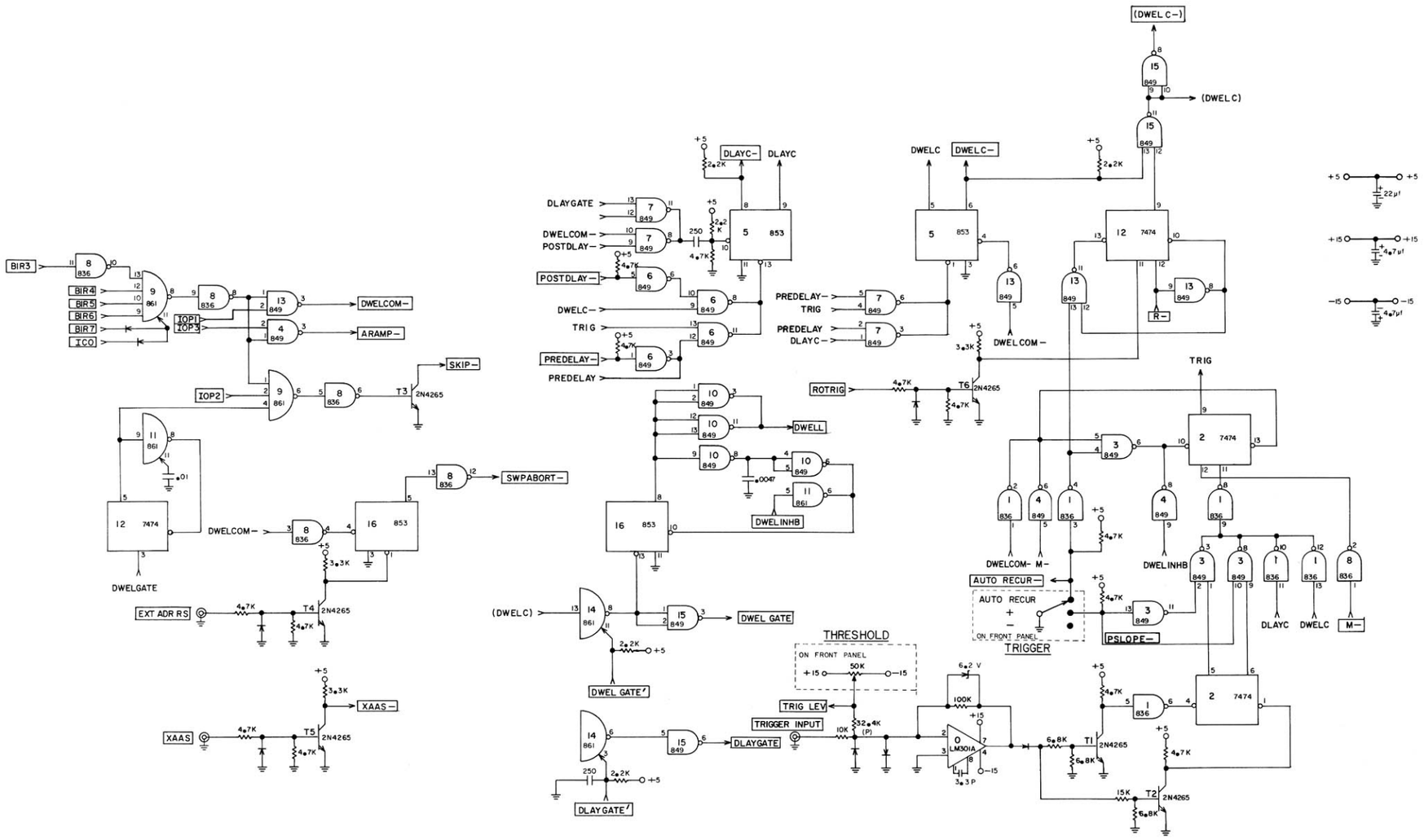
NEXT ASS'Y	USED ON
APPLICATION	

NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE
SW−80 SWEEP CONTROL
RAMP GENERATOR
BOARD LOCATION "G"

CODE IDENT. NO.	SIZE	DWG. NO.
	D	
SCALE		SHEET

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



SIGNAL	CONNECTOR PIN	TO
GND	H–1	
+5	H–3	
–5	H–5	
DWELCOM–	H–7	G–60, E–50, B–14
DLAYGATE	H–9	C–63
DWELGATE	H–11	E–66, C–61
(DWELC–)	H–13	C–54
R–	H–15	E–59, A–21
DWELC–	H–17	C–55
IOPI	H–19	A–66
PREDLAY–	H–21	FPB–16
POSTDLAY–	H–23	FPC–16
PSLOPE–	H–25	FPA–17
AUTO RECUR–	H–27	FPB–17
IOP 3	H–29	A–77
ARAMP–	H–31	G–58
DWEL INHB	H–33	E–64
	H–35	
	H–37	
GND	H–39	
XAAS –	H–41	FPD–14
	H–43	
	H–45	
	H–47	
	H–49	
	H–51	
	H–53	
	H–55	
M–	H–57	E–60, A–19
	H–59	
	H–61	
	H–63	
	H–65	
	H–67	
+15	H–69	
–15	H–71	
	H–73	
–50	H–75	
	H–77	
+50	H–79	

GND	H–2	
+5	H–4	
–5	H–6	
DLAYC–	H–8	E–62 C–56
	H–10	
	H–12	
	H–14	
ROTRIG	H–16	FPD–15
	H–18	
	H–20	
	H–22	
	H–24	
	H–26	
	H–28	
	H–30	
DWELGATE′	H–32	FPA–13
DLAYGATE′	H–34	FPB–13
DWELL	H–36	A–17
	H–38	
GND	H–40	
IOP2	H–42	A–75
BIR7	H–44	A–65
ICO	H–46	A–64
BIR6	H–48	A–63
BIR5	H–50	A–61
BIR4	H–52	A–59
BIR3	H–54	A–57
SWPABORT–	H–56	B–16
SKIP –	H–58	A–33
EXTADRRS	H–60	FPA–19
XAAS	H–62	FPB–19
TRIGINPUT	H–64	FPC–19
TRIGLEV	H–66	FPC–17
	H–68	
+15	H–70	
–15	H–72	
	H–74	
–50	H–76	
	H–78	
+50	H–80	

SWEEP CONTROL CONNECTOR — (LOCATED ON FRONT PANEL)

PIN	SIGNAL	FUNCTION
C	EXT ADR RS	EXTERNAL ADDRESS RESET INPUT
D	TRIG INPUT	TRIGGER INPUT
K	XAAS	EXTERNAL ADDRESS ADVANCE INPUT
U	RO TRIG	REAL TIME READOUT TRIGGER

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ± √ INDICATES SURFACE ROUGHNESS PER MIL-STD-10

REMOVE ALL BURRS
BREAK ALL SHARP CORNERS

MATERIAL
SPEC.
FINISH
SPEC.

	DRAWN	DATE
	CHECKED	
	APPROVED	
	APPROVED	

NEXT ASS'Y | USED ON
APPLICATION

NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE
SW–80 SWEEP CONTROL
CONTROL LOGIC
BOARD LOCATION "H"

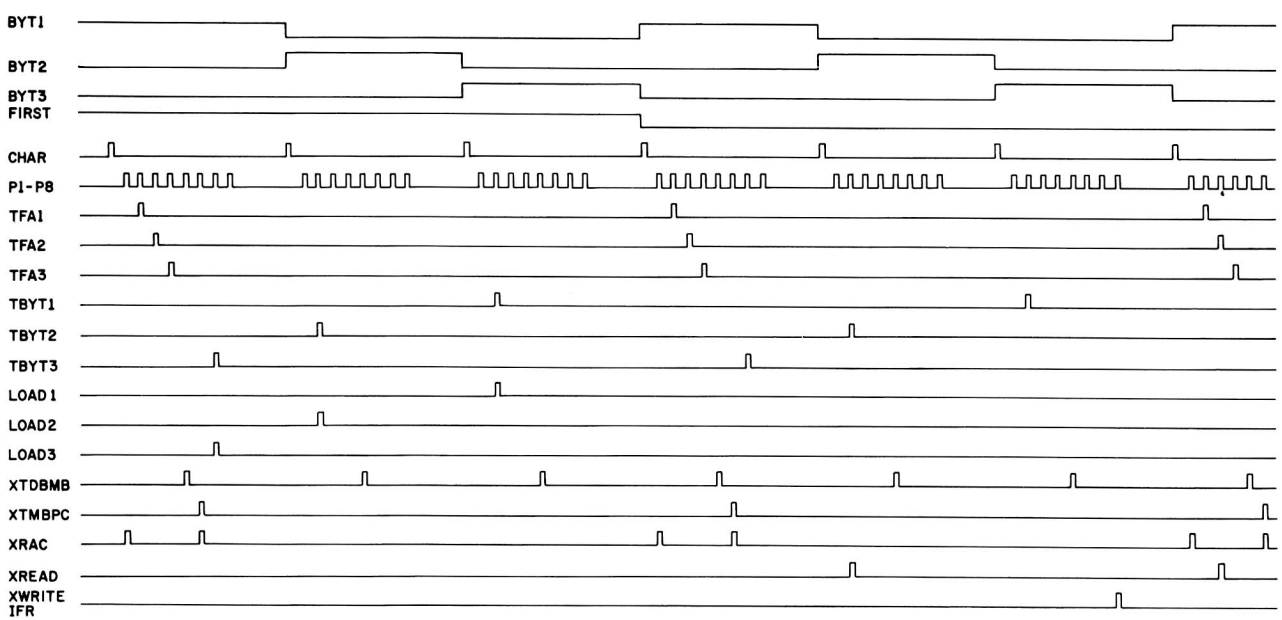
CODE IDENT. NO.	SIZE	DWG. NO.
	D	
SCALE		SHEET

REV.

DIST. KEY

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED

Timing Diagram



General Information

GENERAL SPECIFICATIONS

Description:	High Speed Photo-electric paper tape reader for fanfold tapes
Tapes:	Translucent or opaque without adjustment changes
Speed:	700 CPS (Max.)
Power:	115/230 ± 10%, 50/60 Hz
Physical:	Mounts into lower portion of NIC BNC Series instruments (Optional NIC 297 RM Cabinet available for 19" rack using 7" of vertical space)
Application:	BNC Series system (Optional NIC 297 RM Cabinet allows use with any 1080 or BNC Series system produced)
Operation:	Computer operation using same instructions as older paper tape readers or Binary tapes can be read automatically without intervention of computer
Light Source:	Automotive type 211 (spare included)

LAMP REPLACEMENT:

1. Detach the black panel on the front of the reader by removing the five (5) parametric screws. (Do not remove the central screw.)
2. Replace lamp and re-assemble.

PHOTO TRANSISTOR ARRAY ADJUSTMENT - WITHOUT TESTER

1. Note (measure) the existing voltage across the lamp (approx. 7.5 volts).
2. Lamp voltage is adjusted by the potentiometer on the rear. Turn this control fully counter-clockwise until the lamp is at its minimum brightness.
3. Loosen the two (2) silver screws which hold the photo transistor array.
4. Put a program into the computer using the following two (2) instructions:

   Location 0 44463
   1 0

   (See page 48 of the Programming Manual)
5. Start processor.
6. Without tape in the reader, move photo transistor array until accumulator bits 0 through 7 are lit and tighten the two (2) silver screws.
7. Readjust the lamp voltage to its original value.

PHOTO TRANSISTOR ARRAY ADJUSTMENT USING NICOLET READER TESTER

1. Remove 20 conductor cable from photo transistor array connector and plug in tester cable. Also plug 115/230 power cable into tester.
2. Loosen the two (2) silver screws which hold the photo transistor array.
3. Turn on tester and adjust lamp voltage to 7.5 volts.
4. Without tape in the reader, move array housing until all nine (9) meters read maximally and tighten the two (2) silver screws.
5. Readjust the almp voltage so the highest meter reading is 500 μA.

   IMPORTANT: The least sensitive meter should read no less than the 350 μA while the most sensitive reads 500 μA.

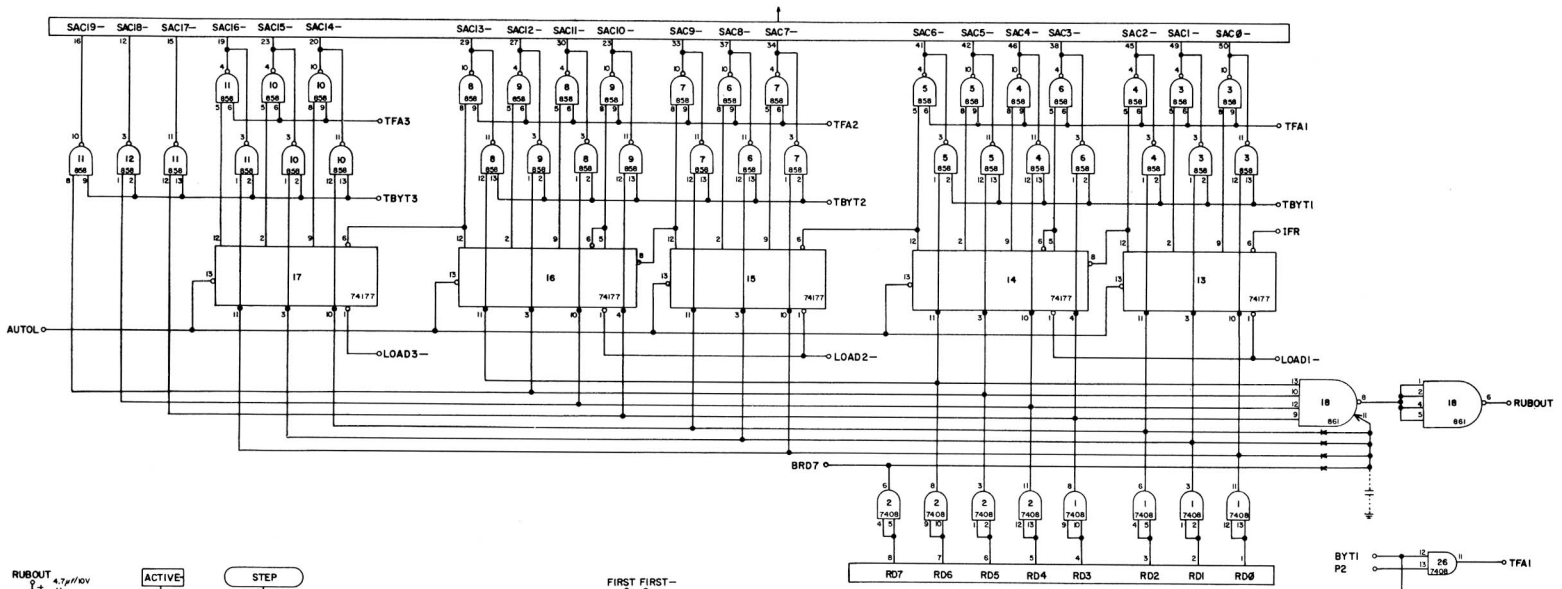
REV.

DIST. KEY

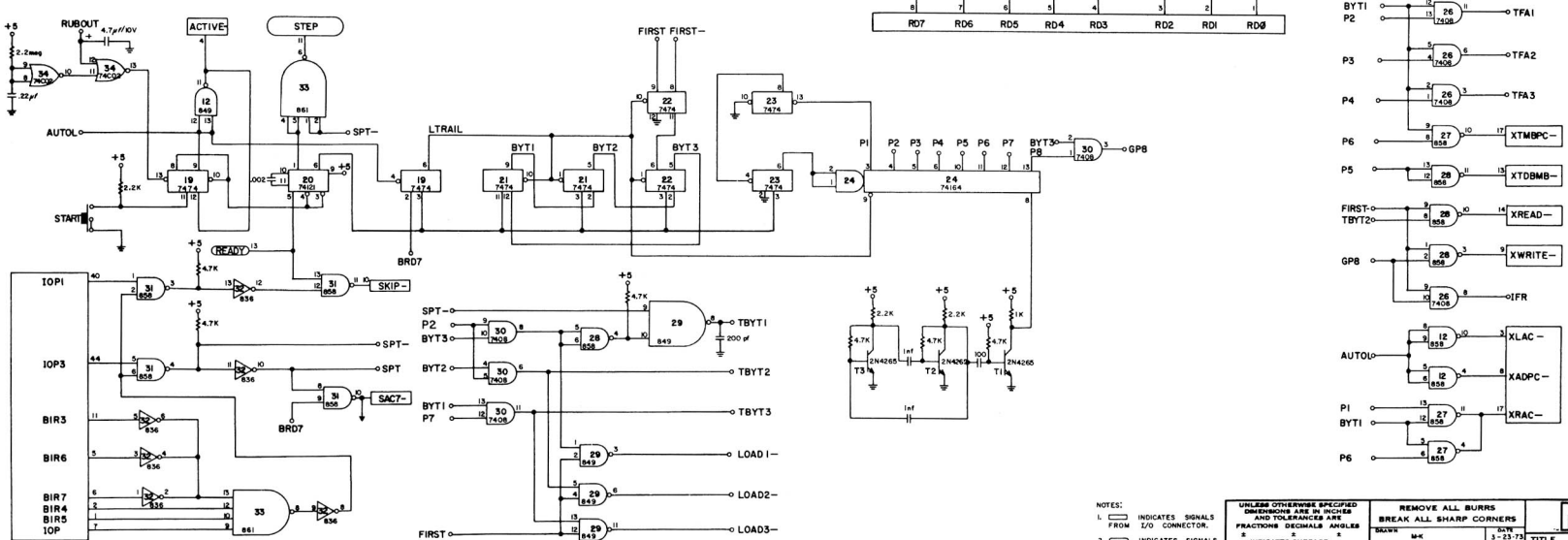
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE: FRACTIONS ± DECIMALS ± ANGLES ±	REMOVE ALL BURRS BREAK ALL SHARP CORNERS	NICOLET INSTRUMENT CORPORATION	
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10	DRAWN / DATE	TITLE	NIC 297 DATA SHEET
MATERIAL	CHECKED		
SPEC.	APPROVED		
FINISH	APPROVED	CODE IDENT. NO.	SIZE D / DWG. NO.
SPEC.		SCALE	SHEET

NEXT ASS'Y	USED ON
APPLICATION	

REVISIONS			
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



TABULATIONS		
SIGNAL	I/O CONN. PIN #	HARDWARE LOADER & BNC
SAC0	1	50
SAC1	3	49
SAC2	5	45
SAC3	7	38
SAC4	9	46
SAC5	11	42
SAC6	13	41
SAC7	15	34
SAC8	17	37
SAC9	19	33
SAC10	21	26
SAC11	23	30
SAC12	25	27
SAC13	27	29
SAC14	29	20
SAC15	31	23
SAC16	33	19
SAC17	35	15
SAC18	37	12
SAC19	41	16
XRAC	43	17
BIR3	44	11
XREAD	45	14
BIR4	46	2
XWRITE	47	9
BIR5	48	1
XLAC	49	3
BIR6	50	5
BIR7	52	6
XTDBMB	53	13
IOP	56	7
XADPC	57	8
IOP1	58	40
XTMBPC	61	18
IOP3	62	44
ACTIVE	64	4
SKIP	66	10



NOTES:
1. ▭ INDICATES SIGNALS FROM I/O CONNECTOR.
2. ▭ INDICATES SIGNALS FROM READER

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ±
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10

MATERIAL
SPEC.
FINISH
SPEC.

REMOVE ALL BURRS
BREAK ALL SHARP CORNERS

DRAWN	M-K	DATE 3-23-73
CHECKED		
APPROVED		
APPROVED		

NEXT ASS'Y | USED ON
APPLICATION

NICOLET INSTRUMENT CORPORATION

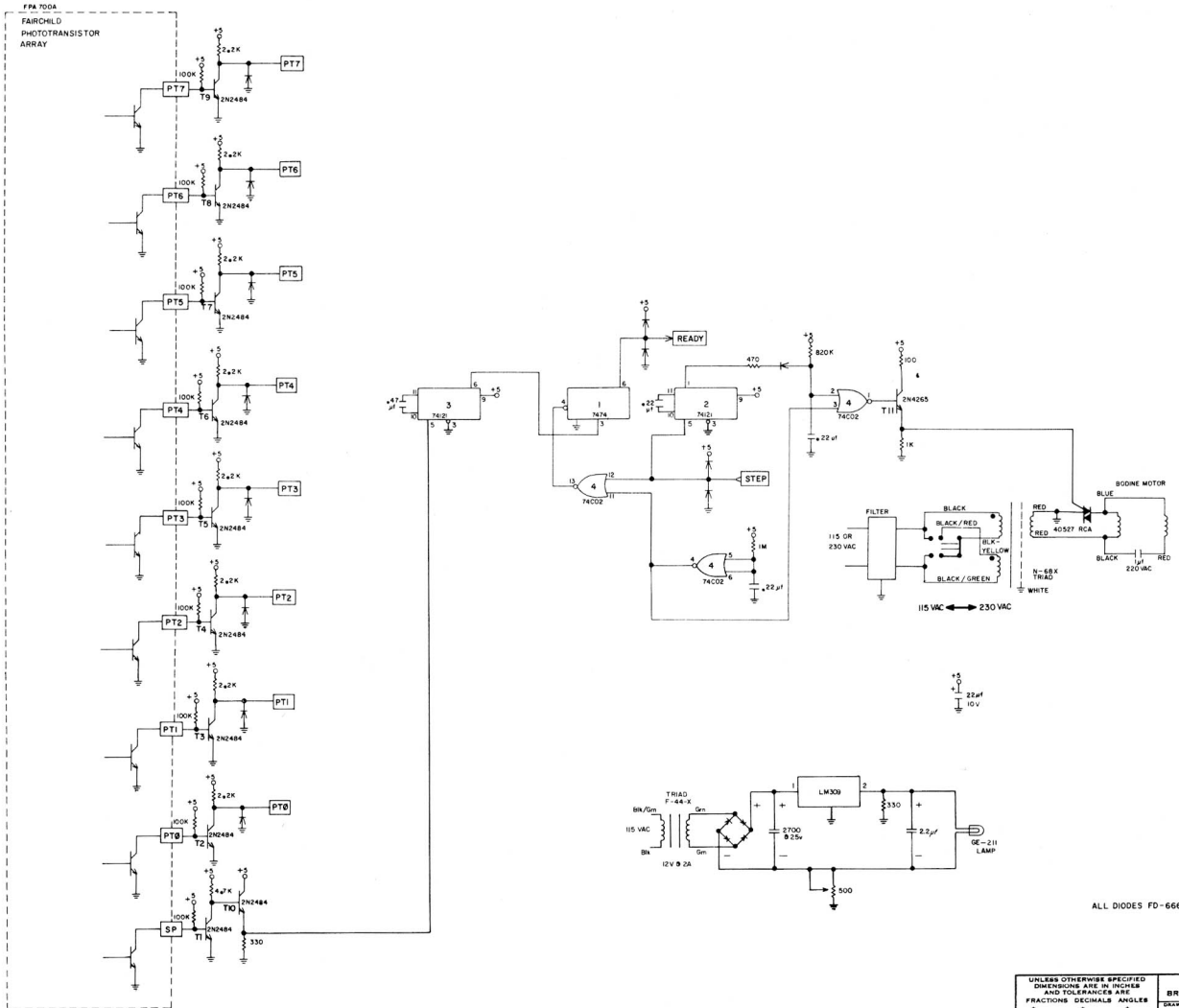
TITLE
HARDWARE LOADER

CODE IDENT. NO.	SIZE	DWG. NO.
	D	
SCALE		SHEET

REV.

DIST. KEY

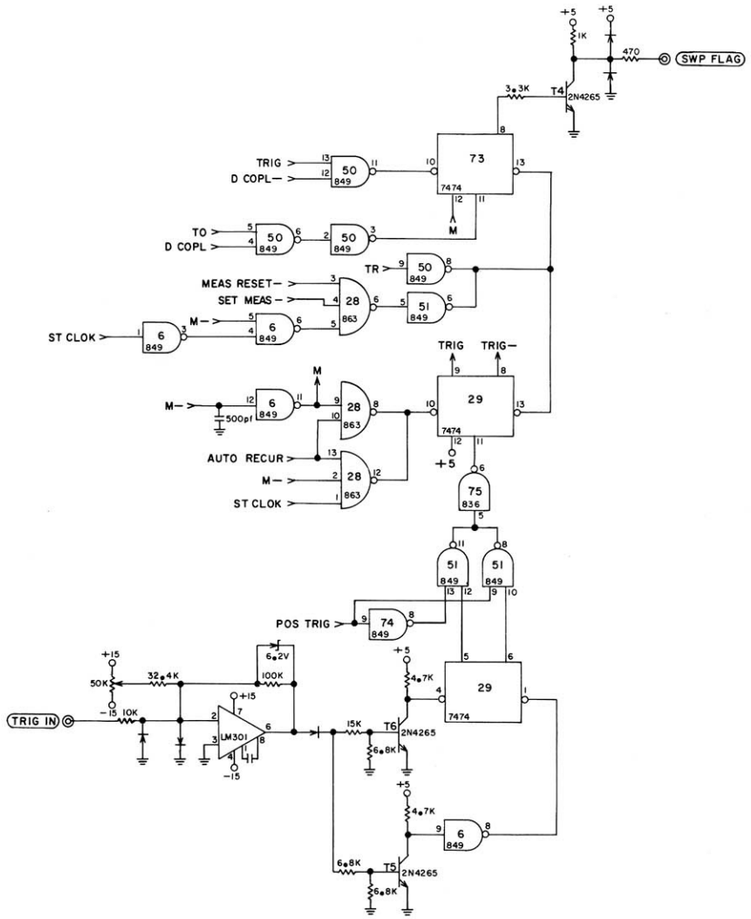
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED

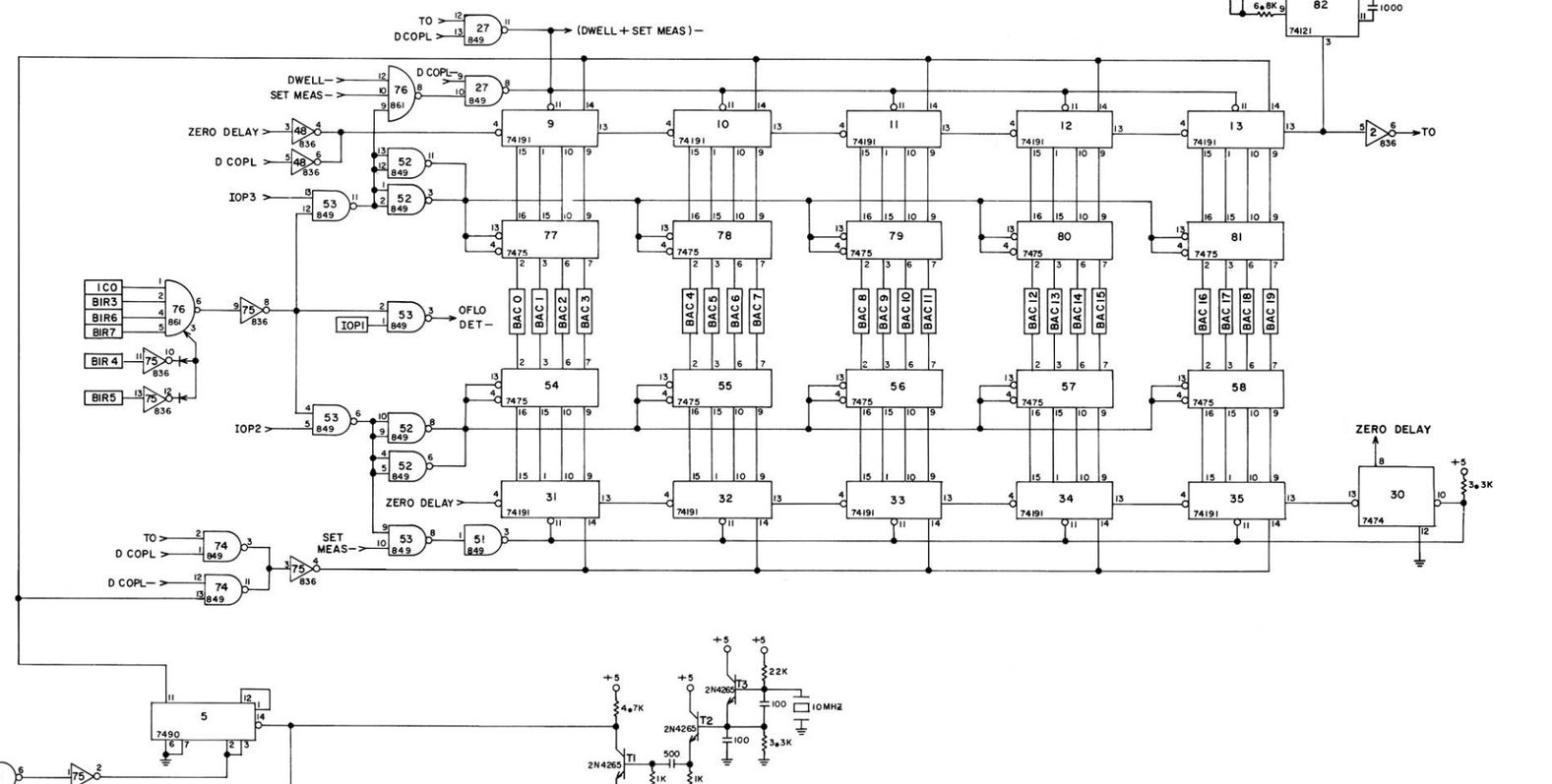


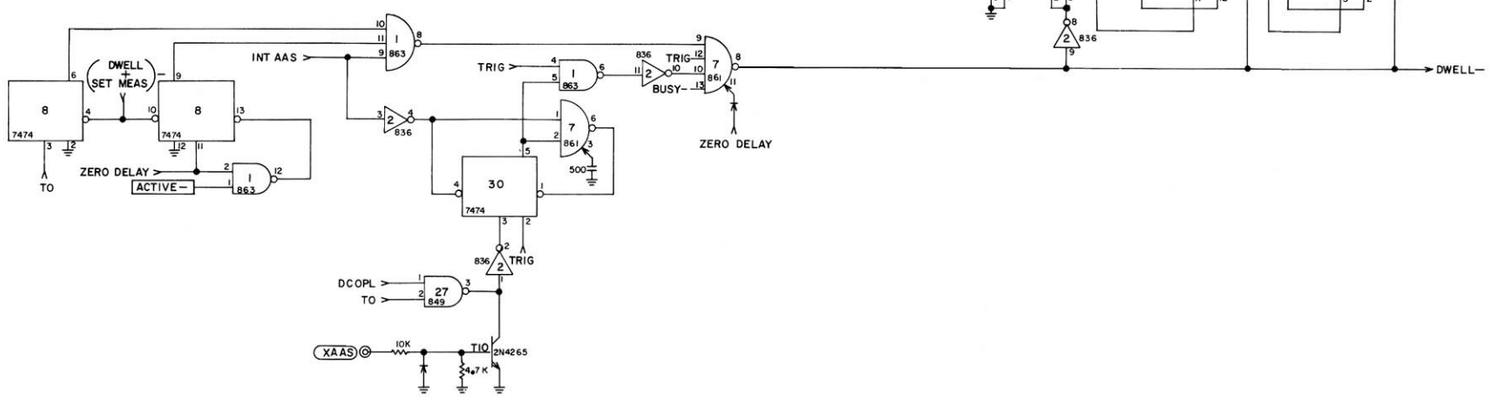
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± ± ± V INDICATES SURFACE ROUGHNESS PER MIL-STD-10	REMOVE ALL BURRS BREAK ALL SHARP CORNERS	NICOLET INSTRUMENT CORPORATION
MATERIAL	DRAWN / DATE	TITLE: HIGH SPEED PAPER TAPE READER (NIC 297)
SPEC.	CHECKED	
FINISH	APPROVED	CODE IDENT. NO.
SPEC.	APPROVED	SIZE: D
NEXT ASS'Y / USED ON		DWG. NO.
APPLICATION		SCALE / SHEET

DIST. KEY

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED







REMOVE ALL BURRS
BREAK ALL SHARP CORNERS

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS ± DECIMALS ± ANGLES ± √ INDICATES SURFACE ROUGHNESS PER MIL-STD-10

MATERIAL

SPEC.

FINISH

SPEC.

NEXT ASS'Y | USED ON

APPLICATION

DRAWN 3-5-73

CHECKED

APPROVED

APPROVED

NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE
SWEEP CONTROL FOR MODEL BNC-12

CODE IDENT. NO.

SIZE D

DWG. NO. (BOARD 7)

SCALE

SHEET 1 OF 2

REV.

DIST. KEY

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED

NOTE;
ALL DIODES FD6666's

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ± V INDICATES SURFACE ROUGHNESS PER MIL-STD-10	REMOVE ALL BURRS BREAK ALL SHARP CORNERS	NICOLET INSTRUMENT CORPORATION 5225 Verona Road, Madison, Wisconsin 53711
MATERIAL	DRAWN 3/9/73	TITLE: SWEEP CONTROL BOARD MODEL BNC-12
SPEC.	CHECKED	
FINISH	APPROVED	
SPEC.	APPROVED	
NEXT ASS'Y / USED ON: APPLICATION		CODE IDENT. NO. / SIZE D / DWG. NO. (BOARD 7)
		SCALE / SHEET 2 of 2

DIST. KEY

REV.

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED

+SIG
-SIG
INPUT SIGNAL A
INPUT SIGNAL B
CONV COMND-
A CONSTANT
B CONSTANT
FRONT PANEL
KA
KB
IPAEN- KA- KB- IPBEN-
PPI-
EOC
EOC-
M-
CONV COMND-
IPAEN-
IPBEN-
IPA
ADDI-
EOC
BACO
LDMX-
DUAL
AMAS
TDAC
BSEL
ASEL
6 BIT
8 BIT
10 BIT
12 BIT
ADC RESOLUTION
PROGRAM CONTROL
DRASEL
DRBSEL
BUF CLOK
CLOK
BT0 BT1 BT2 BT3 BT4 BT5 BT6 BT7 BT8 BT9 BT10 BT11
SAC0- SAC1- SAC2- SAC3- SAC4- SAC5- SAC6-
SAC 7- SAC 8- SAC 9- SAC 10- SAC 11- SAC 12-
SAC 13- SAC 14- SAC 15- SAC 16- SAC 17- SAC 18- SAC 19-
SAC7- SAC8- SAC9- SAC10-
TRD 0 TRD 1 TRD 2 TRD 3 TRD 4 TRD 5 TRD 6 TRD 7
BT11- TDAC
TRHOLD- RECORD- TRFLAG- XAAS TRIG·IN
SWPFLAG REM ADD/SUB REM STOP DWEL CLOK GND

REV.

DIST. KEY

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ± INDICATES SURFACE ROUGHNESS PER MIL-STD-10

MATERIAL
SPEC.
FINISH
SPEC.

NEXT ASS'Y | USED ON
APPLICATION

REMOVE ALL BURRS
BREAK ALL SHARP CORNERS

	DATE
DRAWN	
CHECKED	
APPROVED	
APPROVED	

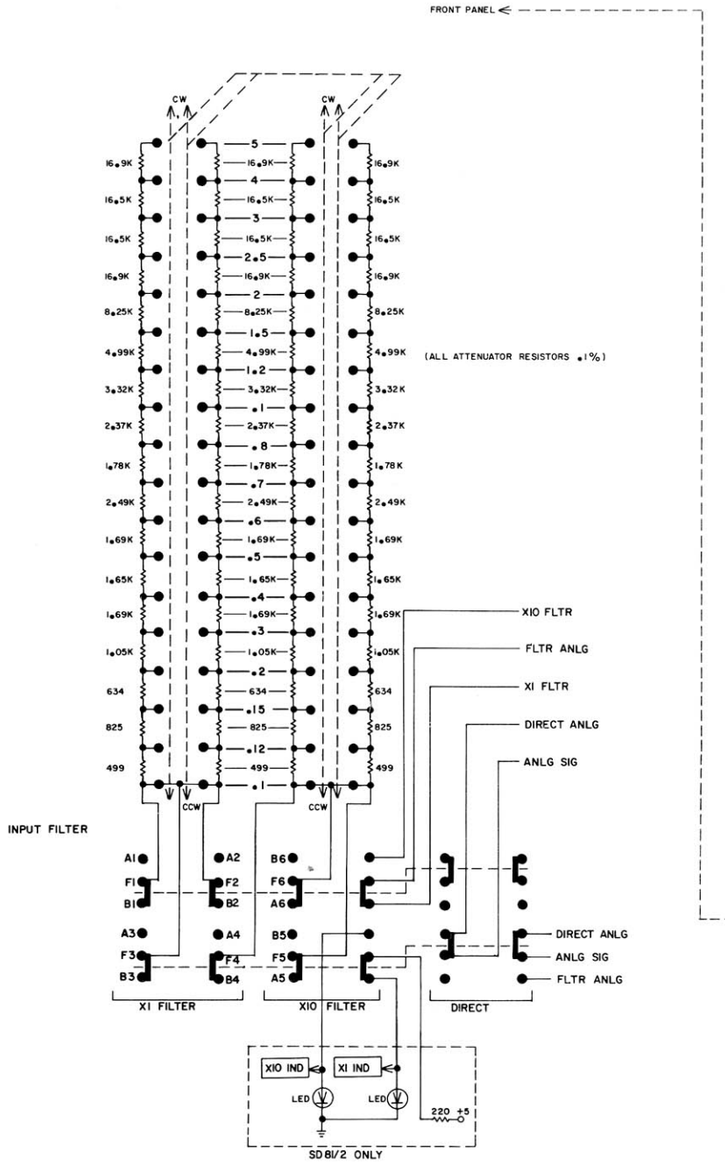
NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE
ANALOG / DIGITAL CONVERTER BOARD
FOR B-NC-12
000-7385-00

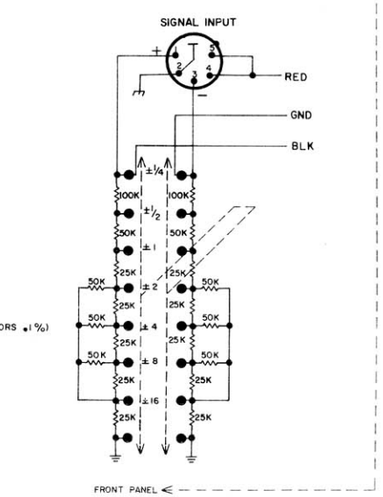
CODE IDENT. NO.	SIZE	DWG. NO.
	D	(BOARD 9)

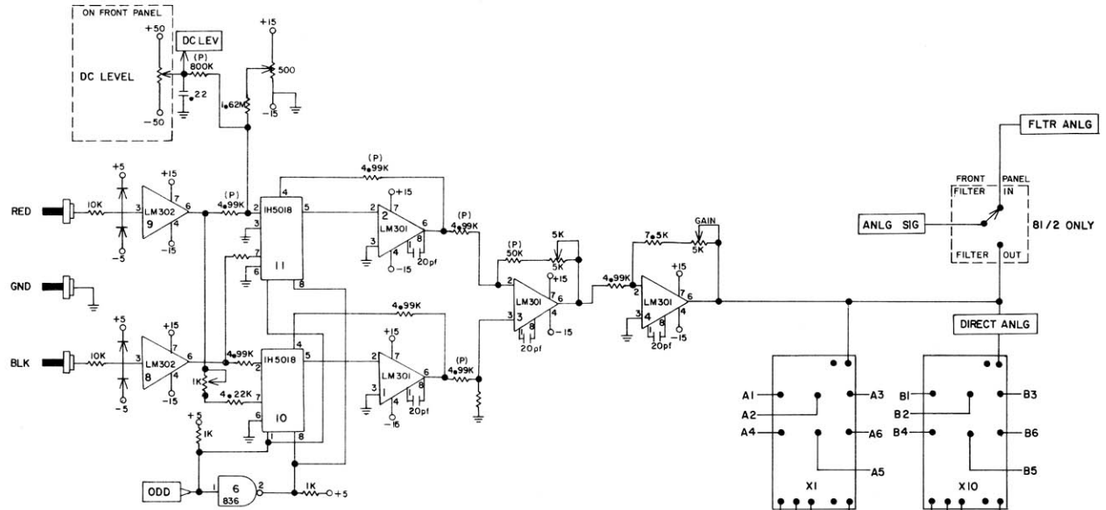
SCALE | SHEET

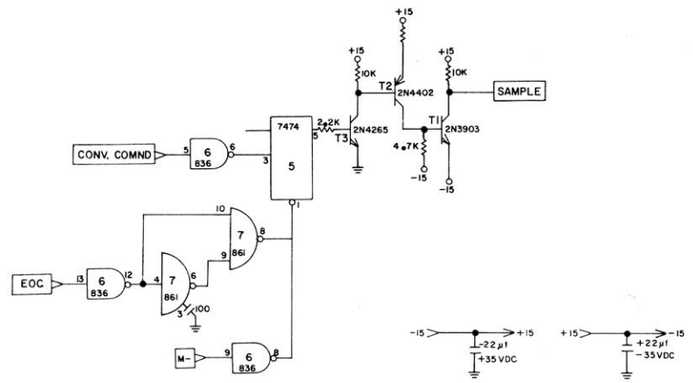
REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



NOTE:
XI AND XIO SWITCHES ARE LOCATED ON THIS BOARD FOR MODEL SD81/2 AND DIRECT SWITCH IS LOCATED ON FRONT PANEL







CONNECTOR SIGNAL	PIN	D to	H to
GND	1		
+5	3		
−5	5		
	7		
F2	9	FPA-2	FPA-19
F3	11	FPA-3	FPA-18
	13		
F6	15	FPB-3	FPB-18
	17		
	19		
FLTR ANLG	21	FPC-8	FPC-14
XIOIND	23	FPC-1	FPC-20
F4	25	FPB-1	FPB-20
F5	27	FPB-2	FPB-19
XIIND	29	FPC-2	FPC-19
	31		
	33		
	35		
	37		
GND	39		
	41		
	43		
	45		
	47		
	49		
	51		
ODD−	53	J-37	J-37
	55		
	57		
	59		
	61		
	63		
	65		
HQ GND	67		
+15	69		
−15	71		
	73		
−50	75		
	77		
+50	79		

GND	2		
+5	4		
−5	6		
DIR ANLG	8	FPB-8	FPB-14
	10		
	12		
	14		
FI	16	FPA-1	FPA-20
	18		
	20		
	22		
	24		
	26		
	28		
	30		
	32		
	34		
DC LEV	36	FPA-9	FPA-12
	38		
GND	40		
	42		
EOC−	44	See note 2	
M−	46	See note 3	
	48		
CONV COMND	50	See note 1	
	52		
SAMPLE	54	L-65	
	56		
	58		
	60		
	62		
	64		
	66		
HQ GND	68		
+15	70		
−15	72		
	74		
−50	76		
	78		
+50	80		

Notes:
1. F-50, L-37, J-7
2. F-24, L-42
3. F-18, J-10, A-19

NEXT ASS'Y	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS ± DECIMALS ± ANGLES ±
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10
MATERIAL
SPEC.
FINISH
SPEC.

REMOVE ALL BURRS
BREAK ALL SHARP CORNERS

	DRAWN	DATE
	CHECKED	
	APPROVED	
	APPROVED	

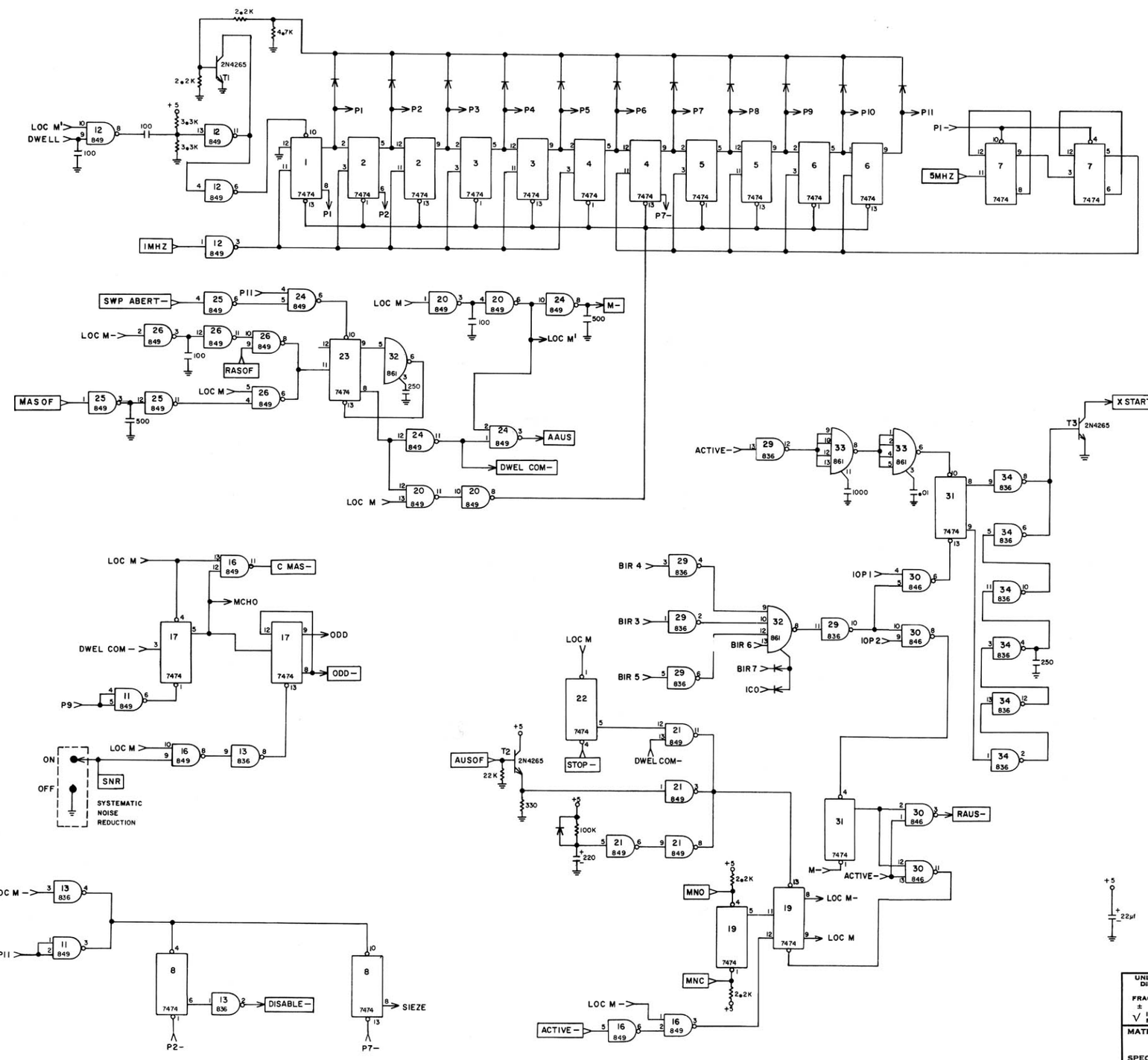
NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE: ANALOG BOARD (D)

CODE IDENT. NO.	SIZE	DWG. NO.
	D	
SCALE		SHEET

DIST. KEY

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



CONNECTOR SIGNAL	PIN	TO
GND	J-1	
+5	J-3	
-5	J-5	
CONVCOMM-	J-7	D-50 L-37
TDAC	J-9	L-18
BIR 7	J-11	A-65
RASOF	J-13	A-7
SWPABERT-	J-15	B-16
MASOF	J-17	A-5
AAUS-	J-19	A-70
IMHZ	J-21	B-15
MNO	J-23	A-42
MNC	J-25	A-44
SNR	J-27	FPD-20
CMAS-	J-29	A-3
	J-31	
	J-33	
	J-35	
ODD-	J-37	
GND	J-39	
	J-41	
DWELCOM-	J-43	B-14
XTDBAC-	J-45	A-29
TACYD-	J-47	A-69
DWELL	J-49	A-17
RXD-	J-51	A-79
DISABLE-	J-53	A-15
5MHZ	J-55	B-13
XLCAC-	J-57	A-41
XRAC-	J-59	A-45
XREAD-	J-61	A-27
XTDBMB-	J-63	A-49
XWRITE-	J-65	A-31
HQGND	J-67	
+15	J-69	
-15	J-71	
	J-73	
-50	J-75	
	J-77	
+50	J-79	

GND	J-2	
+5	J-4	
-5	J-6	
X START	J-8	A-47
M-	J-10	
IOPZ	J-12	A-75
	J-14	
RAUS-	J-16	A-60
IOPI	J-18	A-66
ACTIVE-	J-20	A-78
BIR 6	J-22	A-63
BIR 5	J-24	A-61
BIR 3	J-26	A-57
BIR4	J-28	A-59
ICO	J-30	A-64
AUSOF	J-32	A-76
STOP-	J-34	A-68
	J-36	
	J-38	
GND	J-40	
MEM-	J-42	A-48
SHIFT-	J-44	A-23
AXD-	J-46	A-9
	J-48	
ADD	J-50	
TD	J-52	
INPUT-	J-54	
P11	J-56	
INHAMAS-	J-58	
XCIN-	J-60	A-37
XLAC-	J-62	A-39
XLMB-	J-64	A-25
AMAS	J-66	A-1
HQ GND	J-68	
+15	J-70	
-15	J-72	
	J-74	
-50	J-76	
	J-78	
+50	J-80	

REV.

DIST. KEY

NEXT ASS'Y	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS ± DECIMALS ± ANGLES ± √ INDICATES SURFACE ROUGHNESS PER MIL-STD-10

MATERIAL

SPEC.

FINISH

SPEC.

REMOVE ALL BURRS BREAK ALL SHARP CORNERS

	DRAWN	DATE
	CHECKED	
	APPROVED	
	APPROVED	

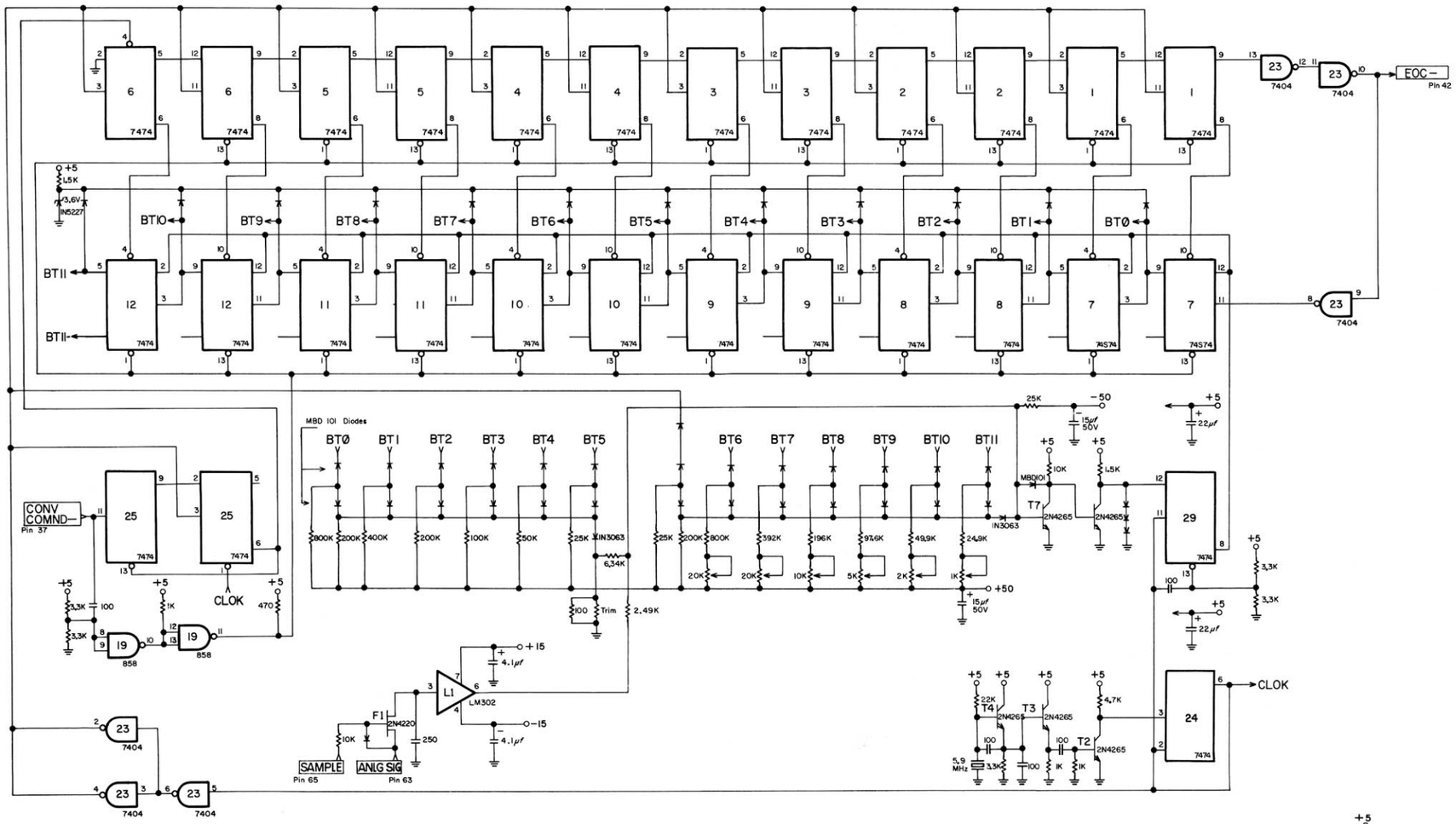
NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

TITLE: SD-81 CONTROL BOARD (J)

CODE IDENT. NO.	SIZE	DWG. NO.
	D	

SCALE | SHEET

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



CONNECTOR

SIGNAL	PIN	TO
GND	1	
+5	3	
−5	5	
	7	
	9	
	11	
	13	
	15	
	17	
	19	
	21	
	23	
	25	
	27	
	29	
	31	
	33	
SAC10−	35	A−22
CONV COMND−	37	D−50 & J−7
GND	39	
	41	
	43	
	45	
	47	
	49	
	51	
	53	
	55	
	57	
	59	
	61	
ANLG SIG	63	FPA−20
SAMPLE	65	D−54
	67	
+15	69	
−15	71	
	73	
−50	75	
	77	
+50	79	

GND	2	
+5	4	
−5	6	
	8	
	10	
	12	
A SEL	14	FPD−19
B SEL	16	FPC−20
TDAC	18	J−9
SAC0−	20	A−2
SAC1−	22	A−4
SAC2−	24	A−6
SAC3−	26	A−8
SAC4−	28	A−10
SAC5−	30	A−12
SAC6−	32	A−14
SAC7−	34	A−16
SAC8−	36	A−18
SAC9−	38	A−20
GND	40	
EOC−	42	D−44
SAC11−	44	A−24
SAC12−	46	A−26
SAC13−	48	A−28
SAC14−	50	A−30
SAC15−	52	A−32
SAC16−	54	A−34
SAC17−	56	A−36
SAC18−	58	A−38
SAC19−	60	A−40
	62	
	64	
	66	
	68	
+15	70	
−15	72	
	74	
−50	76	
	78	
+50	80	

DIST. KEY

NEXT ASS'Y	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ± INDICATES SURFACE ROUGHNESS PER MIL-STD-10

MATERIAL

SPEC.

FINISH

SPEC.

REMOVE ALL BURRS BREAK ALL SHARP CORNERS

DRAWN	DATE
CHECKED	
APPROVED	
APPROVED	

NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

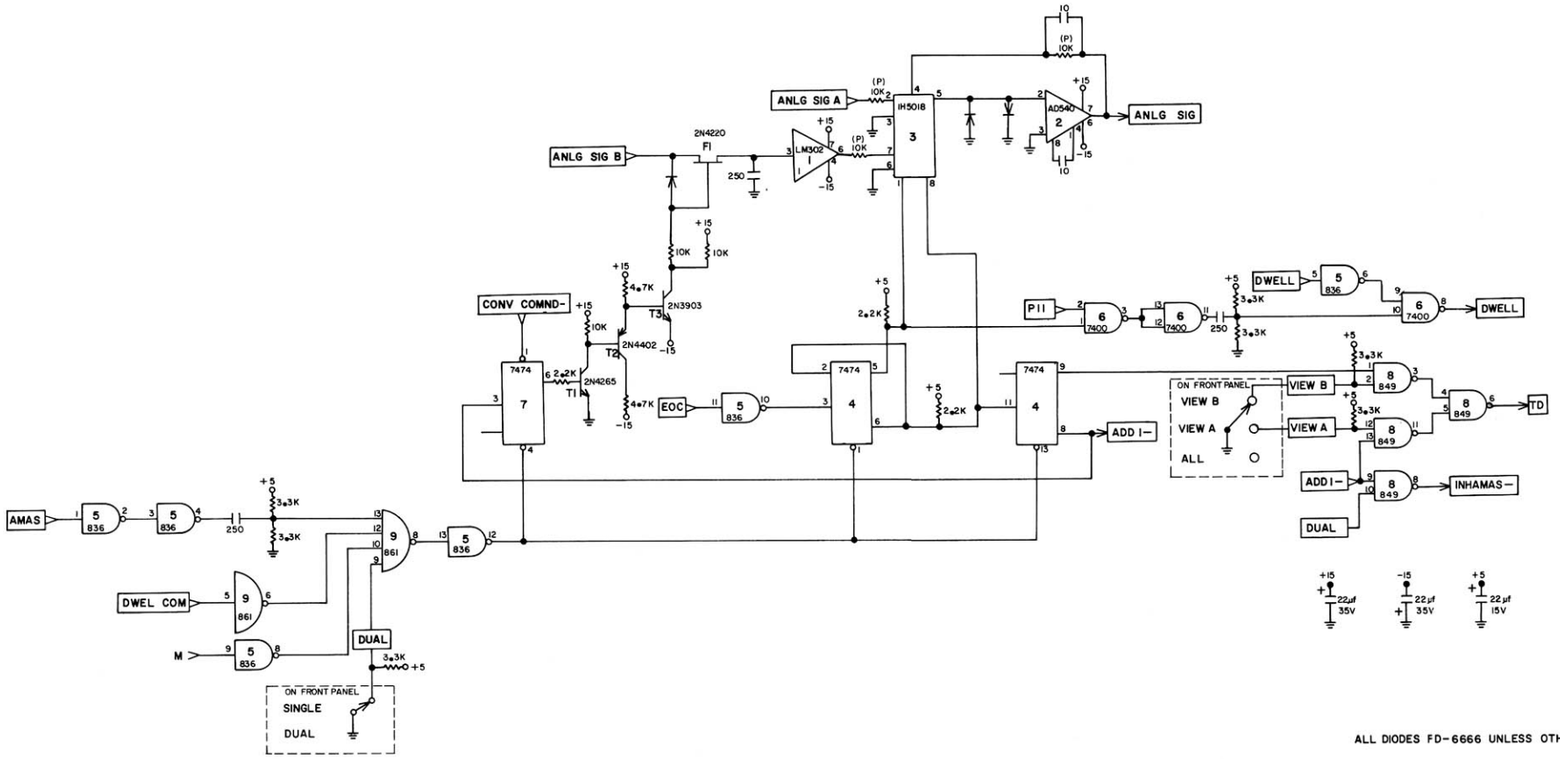
TITLE

DIGITAL BOARD (L)

CODE IDENT. NO.	SIZE	DWG. NO.
	D	

SCALE | SHEET

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED



CONNECTOR SIGNAL	PIN	TO
GND	F-1	
+5	F-3	
	F-5	
	F-7	
	F-9	
	F-11	
	F-13	
	F-15	
	F-17	
	F-19	
	F-21	
	F-23	
	F-25	
	F-27	
	F-29	
	F-31	
	F-33	
	F-35	
	F-37	
GND	F-39	
	F-41	
	F-43	
	F-45	
	F-47	
	F-49	
	F-51	
	F-53	
	F-55	
	F-57	
	F-59	
	F-61	
	F-63	
	F-65	
	F-67	
+15	F-69	
-15	F-71	
	F-73	
	F-75	
	F-77	
	F-79	
GND	F-2	
+5	F-4	
	F-6	
P11	F-8	J-56
DWELL	F-10	J-49
DWELL	F-12	A-17
AMAS	F-14	J-66
DWELL COM	F-16	J-43 B-14
M-	F-18	D-46 J-10 A-19
DUAL	F-20	FPA-4
	F-22	
EOC-	F-24	D-44 L-42
VIEW B	F-26	FPB-11
TD	F-28	J-52
	F-30	
	F-32	
	F-34	
	F-36	
	F-38	
GND	F-40	
INHAMAS-	F-42	J-58
ADD I-	F-44	A-72
VIEW A	F-46	FPA-11
ANLGSIG A	F-48	
CONVCOMND-	F-50	L-37 J-7 D-50
	F-52	
	F-54	
ANLG SIG	F-56	L-63
ANLG SIG B	F-58	FPA-14
	F-60	
	F-62	
	F-64	
	F-66	
	F-68	
+15	F-70	
-15	F-72	
	F-74	
	F-76	
	F-78	
	F-80	

ALL DIODES FD-6666 UNLESS OTHERWISE SPECIFIED

REV.

DIST. KEY

NEXT ASS'Y	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS ± DECIMALS ± ANGLES ± √ INDICATES SURFACE ROUGHNESS PER MIL-STD-10

MATERIAL

SPEC.

FINISH

SPEC.

REMOVE ALL BURRS BREAK ALL SHARP CORNERS

DRAWN | DATE

CHECKED

APPROVED

APPROVED

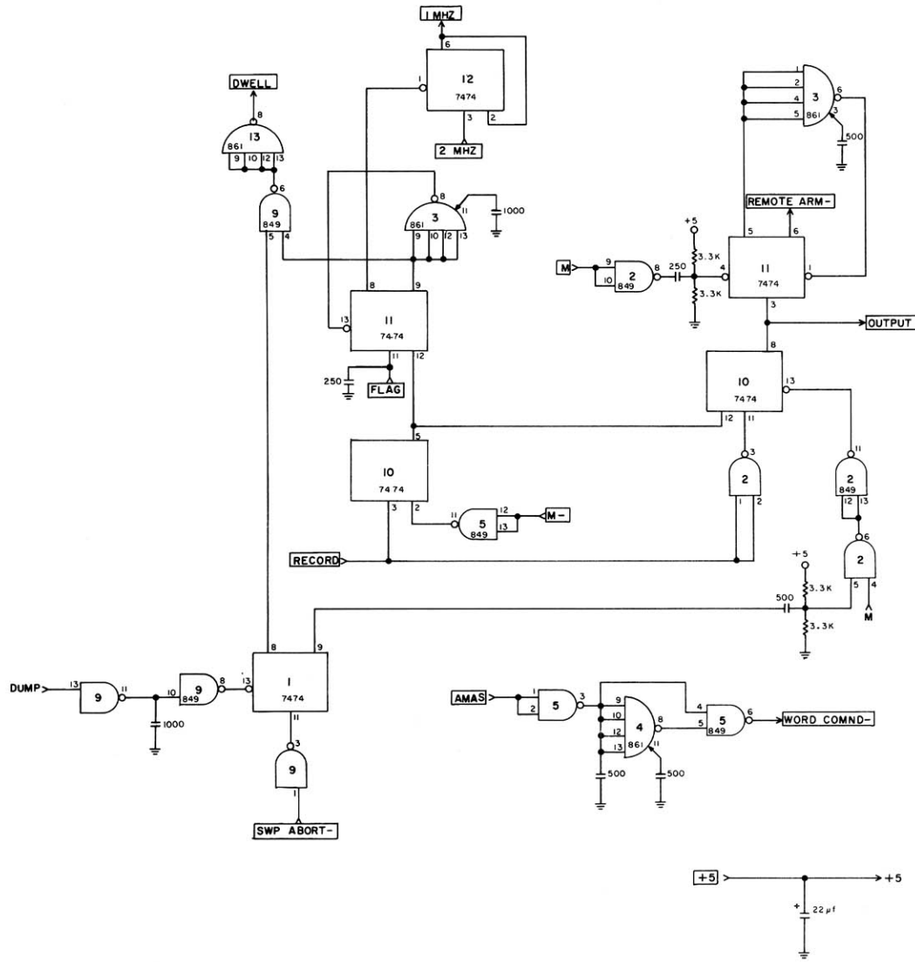
NICOLET INSTRUMENT CORPORATION
5225 Verona Road, Madison, Wisconsin 53711

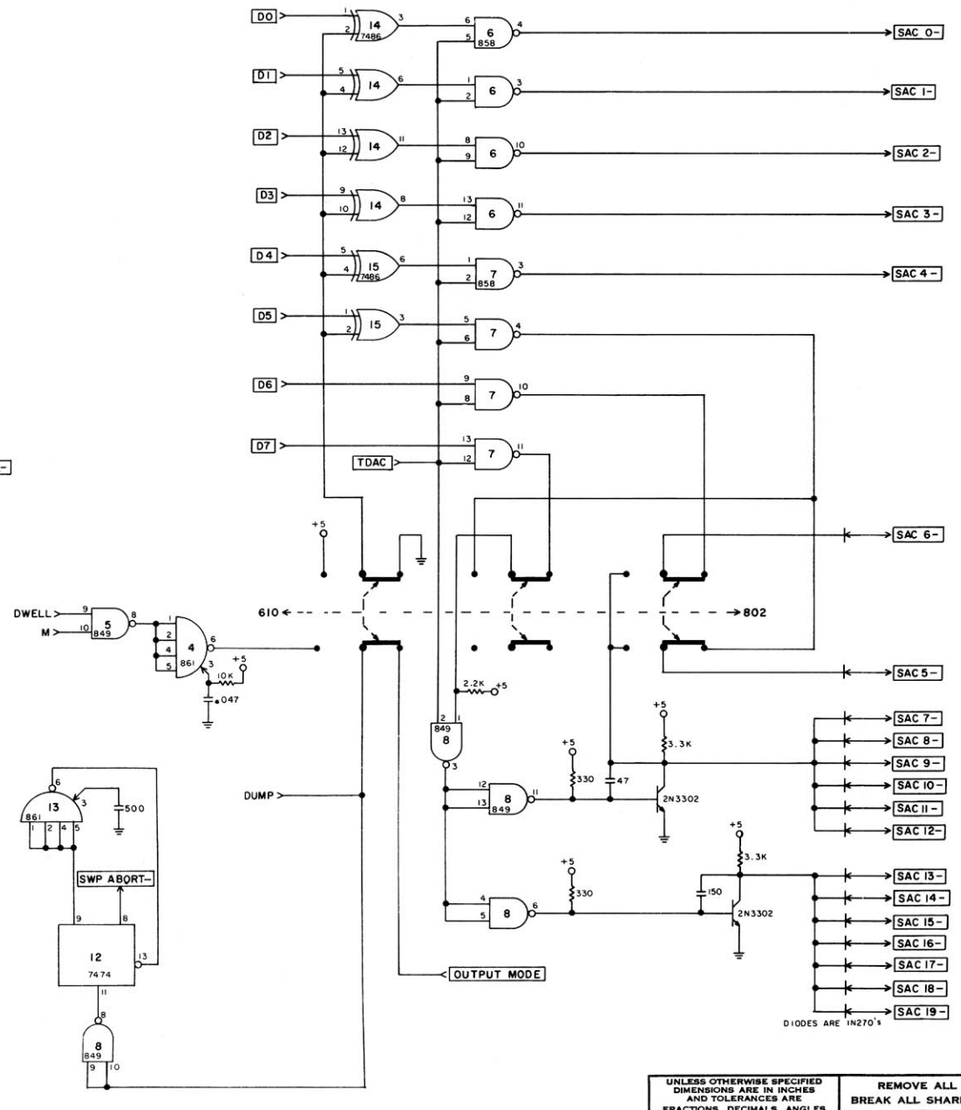
TITLE
SD 81/2 MULTIPLEXER
BOARD LOCATION "F"

CODE IDENT. NO.	SIZE	DWG. NO.
	D	

SCALE | SHEET

REVISIONS				
SYM.	ZONE	DESCRIPTION	DATE	APPROVED





NOTE;
SEE S-29 FOR CONTROL LOGIC

DIST. KEY

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND TOLERANCES ARE FRACTIONS DECIMALS ANGLES ± ± ±	REMOVE ALL BURRS BREAK ALL SHARP CORNERS	NICOLET INSTRUMENT CORPORATION 5225 Verona Road, Madison, Wisconsin 53711
√ INDICATES SURFACE ROUGHNESS PER MIL-STD-10	DRAWN / DATE	TITLE: 1080/BIOMATION TRANSIENT RECORDER INTERFACE FOR SD-88 (L)
MATERIAL SPEC.	CHECKED	
FINISH SPEC.	APPROVED	CODE IDENT. NO. / SIZE D / DWG. NO.
NEXT ASS'Y / USED ON APPLICATION	APPROVED	SCALE / SHEET