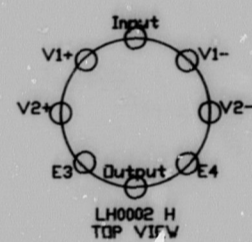
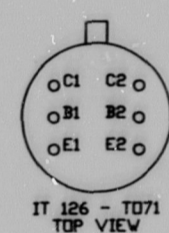


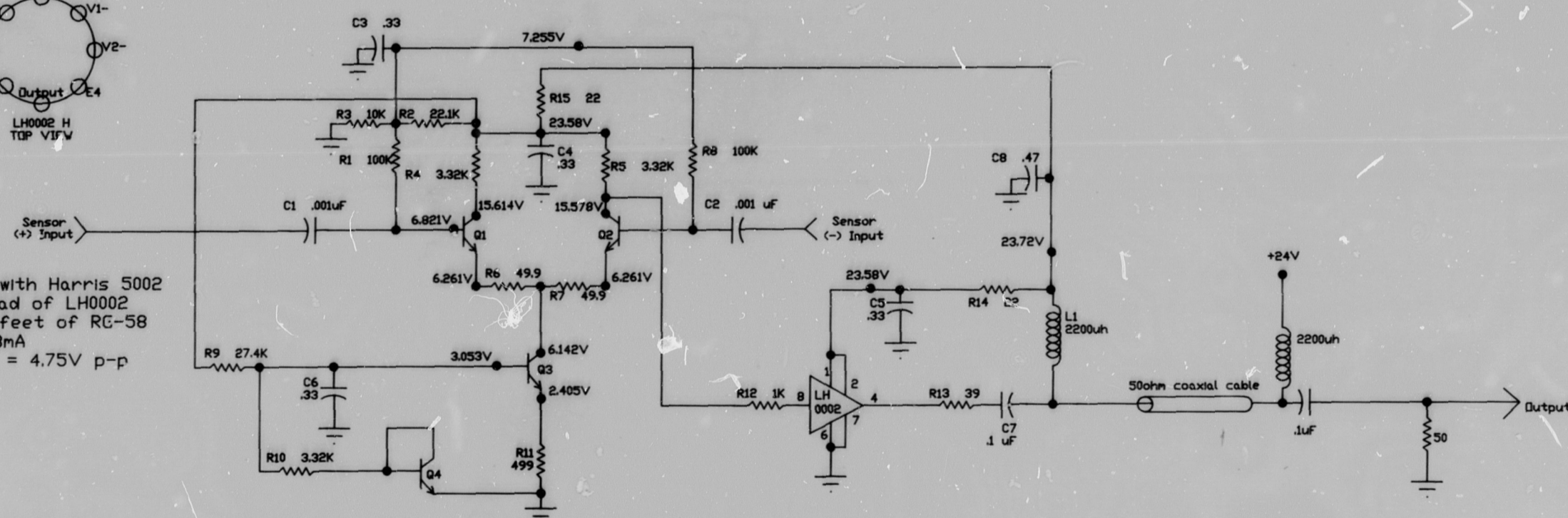
24X



Diff Op Amp without LH0002 Buffer

- Gain = 20 @ 24VDC p.s. $I=6.39mA$
Max. Sig. out = 15.1V p-p into scope high-z
- Gain = 17.6 @ 12VDC p.s. $I=3.12mA$
Max. Sig. out = 6.05V p-p into scope
- Gain = 15.4 @ 9VDC p.s. $I=2.27mA$
Max. Sig. out = 4.84V p-p
- Gain = 10 @ 5VDC p.s. $I=1.1mA$
Max. Sig. out = 2.18V p-p

Diff Op Amp with Harris 5002 Buffer instead of LH0002 through 100 feet of RG-58 @ 24VDC $I=13mA$
Max. Sig. Out = 4.75V p-p



D.C. Current Gain of Q1 and Q2 ≥ 450
 Total Stage Voltage Gain = 22 dB into 50ohms
 Bandwidth (-3dB) = 30kHz - 3.5MHz
 Noise = 4.5uV RMS with 50ohm input
 CMRR = -65dB @ 1MHz
 Input Z = 22K @ 500kHz and 15K @ 1MHz
 $V_{cc} = 24.0V$
 $I_c = 12.5mA$
 Max. Operating Temp. = 125C

REV. NO. 0	
DATE: 14 sep 89	Acoustic Emission
DRWN: TG Marvin	Differential Micro-amp
ENGR: JR Skorpik	
REV.	
FILE: DIFLAMP	
NO. 1 OF 1	DRWG. NO. 0790-01



24X

APPENDIX A

AE/F1/M CHARACTERIZATION ELECTRONICS DRAWINGS

No. 0790-00 THROUGH 0790-17

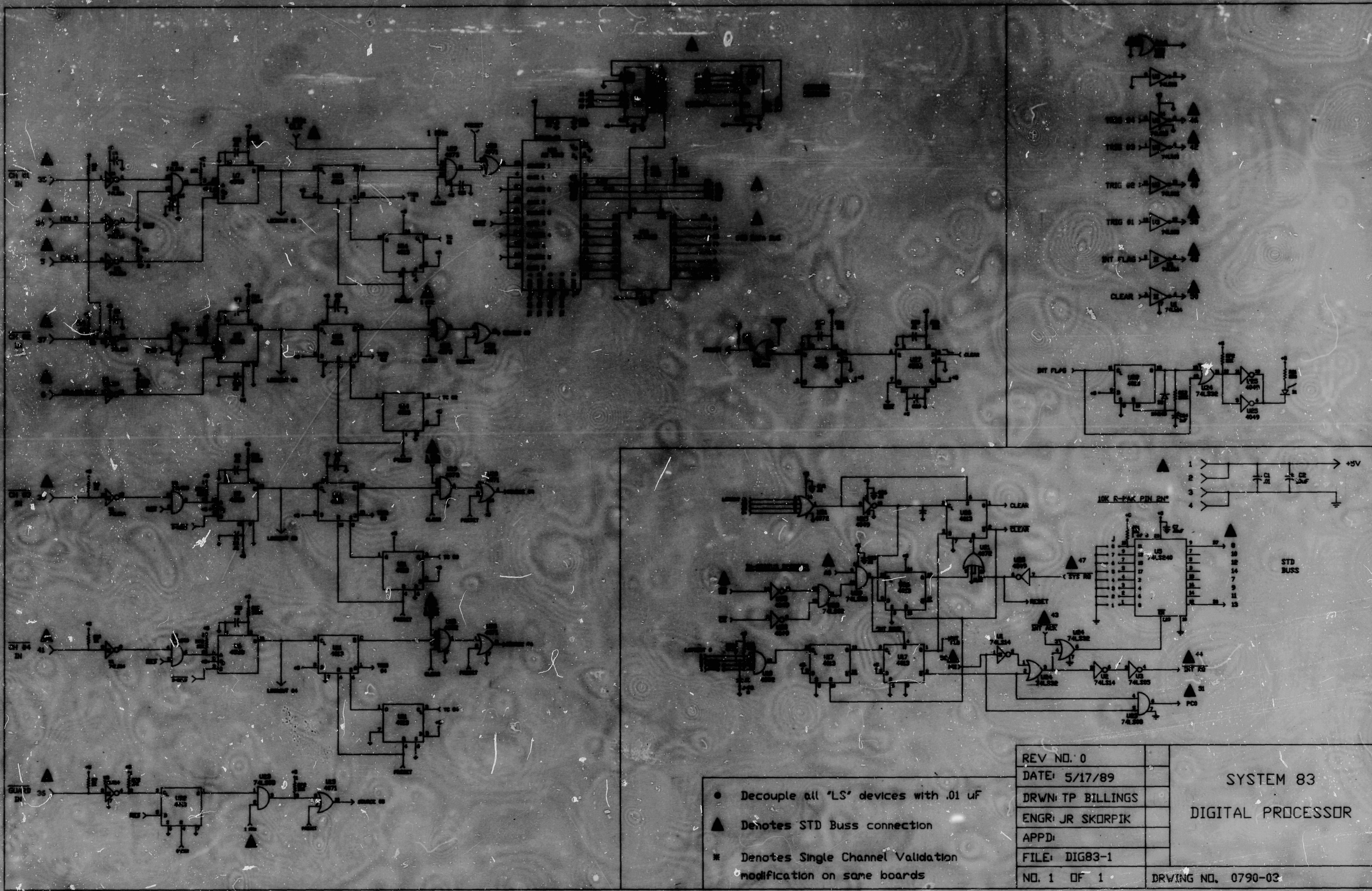
APPENDIX A

AE/FLAW CHARACTERIZATION ELECTRONICS DRAWINGS

No. 0790-00 THROUGH 0790-17

The electronics drawings package consists of 18 drawings detailing hardware from the sensor through the two console racks. The drawings and schematics include:

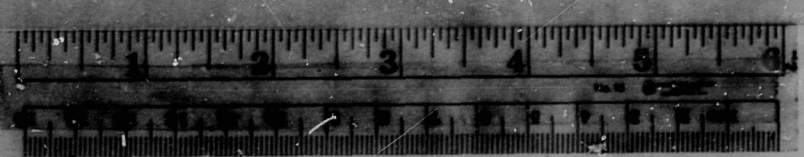
- functional block diagram
- preamps (micro and midamp)
- signal processors (analog and digital)
- signal analyzers (PT/PH and RMS)
- interfaces (cartridge tape and DEC 11/73 computer)
- software I/O flow
- power supplies
- wiring diagrams (parametrics, chassis A and B, fault lights, and front panels)

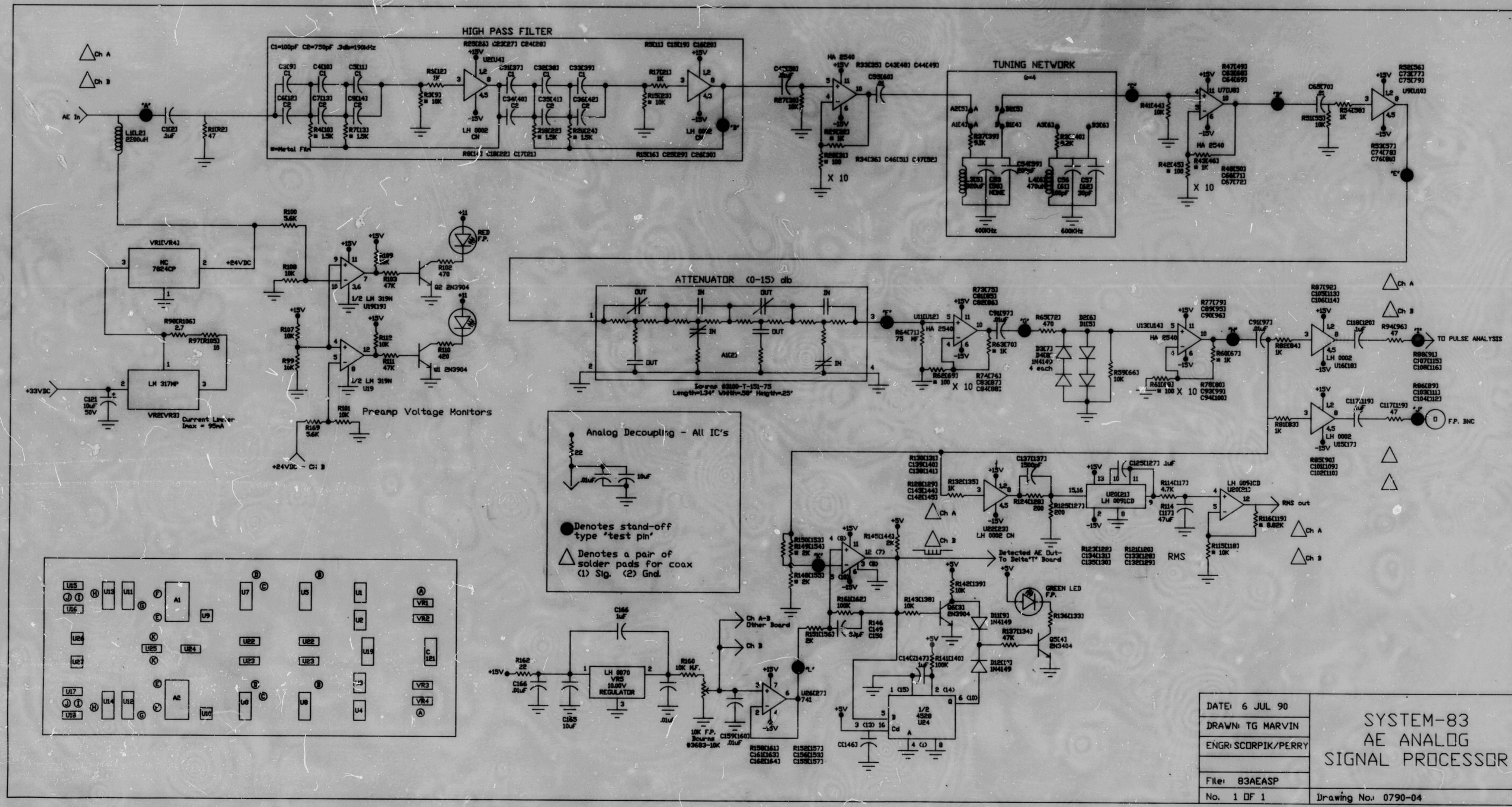


- Decouple all "LS" devices with .01 uF
- ▲ Denotes STD Bus connection
- * Denotes Single Channel Validation modification on some boards

REV NO. 0	
DATE: 5/17/89	
DRWN: TP BILLINGS	
ENGR: JR SKORPIK	
APPD:	
FILE: DIG83-1	
NO. 1 OF 1	DRAWING NO. 0790-03

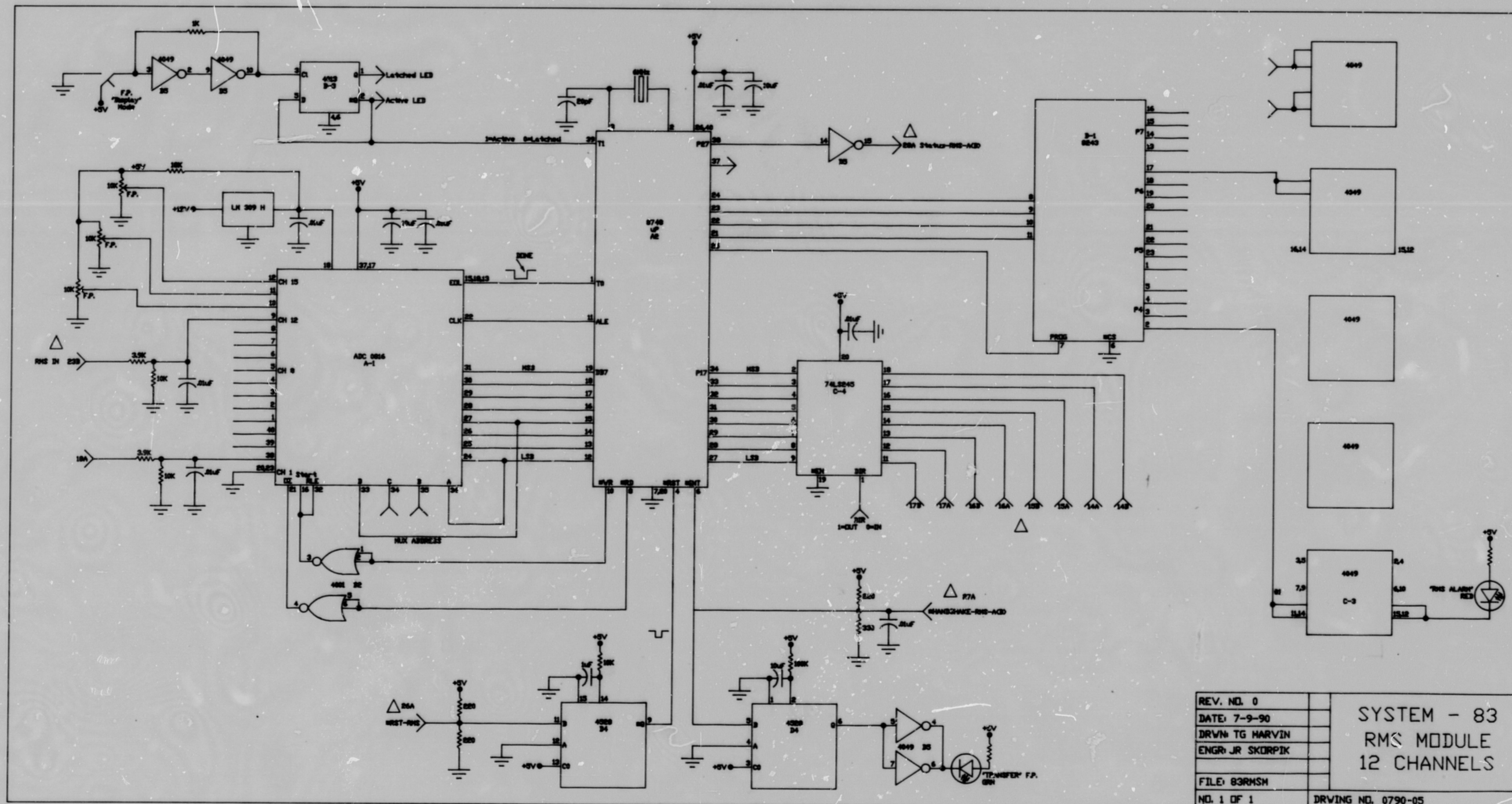
SYSTEM 83
DIGITAL PROCESSOR



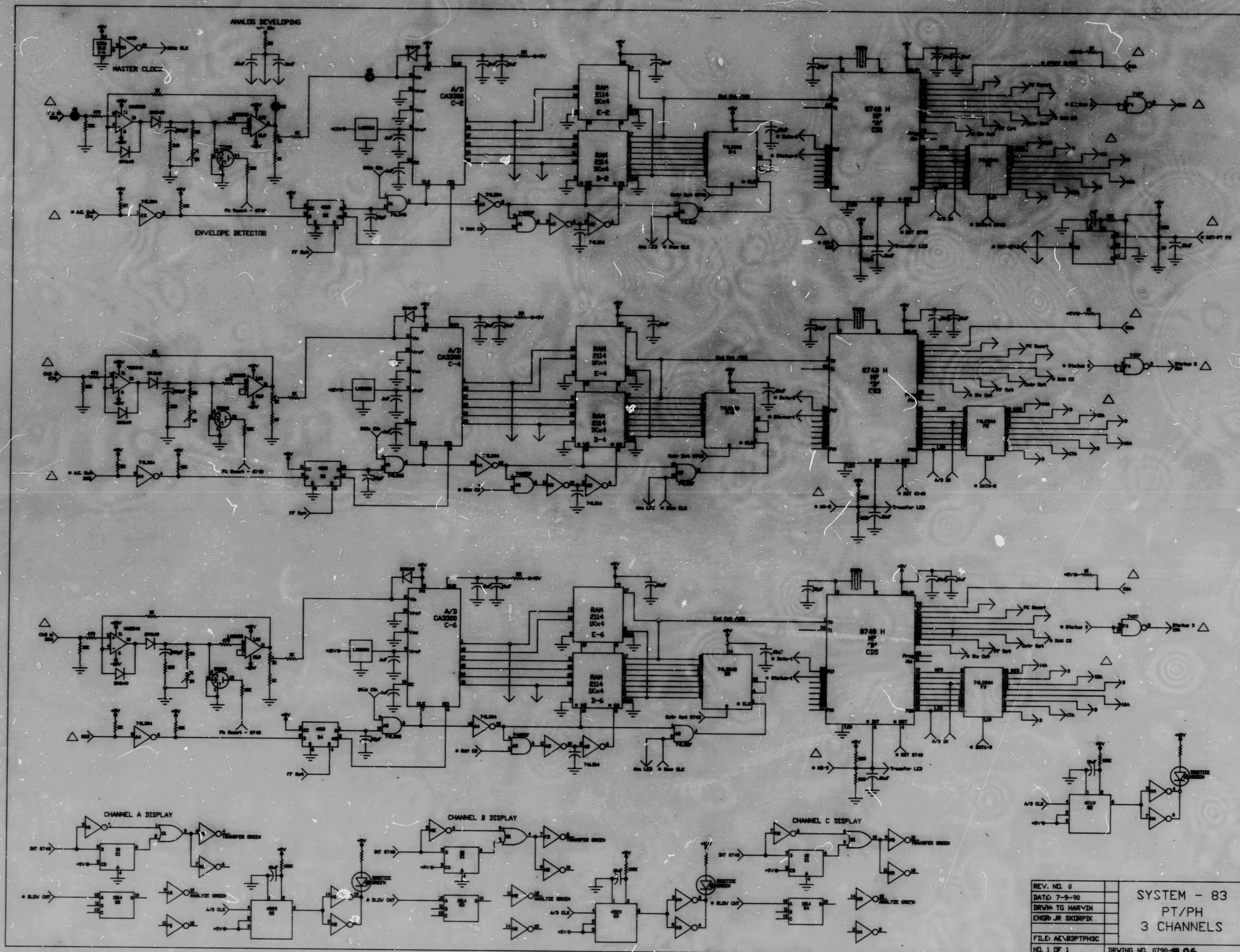


DATE: 6 JUL 90	SYSTEM-83 AE ANALOG SIGNAL PROCESSOR
DRAWN: TG MARVIN	
ENGR: SCORPIK/PERRY	
File: 83AEASP	Drawing No: 0790-04
No. 1 OF 1	



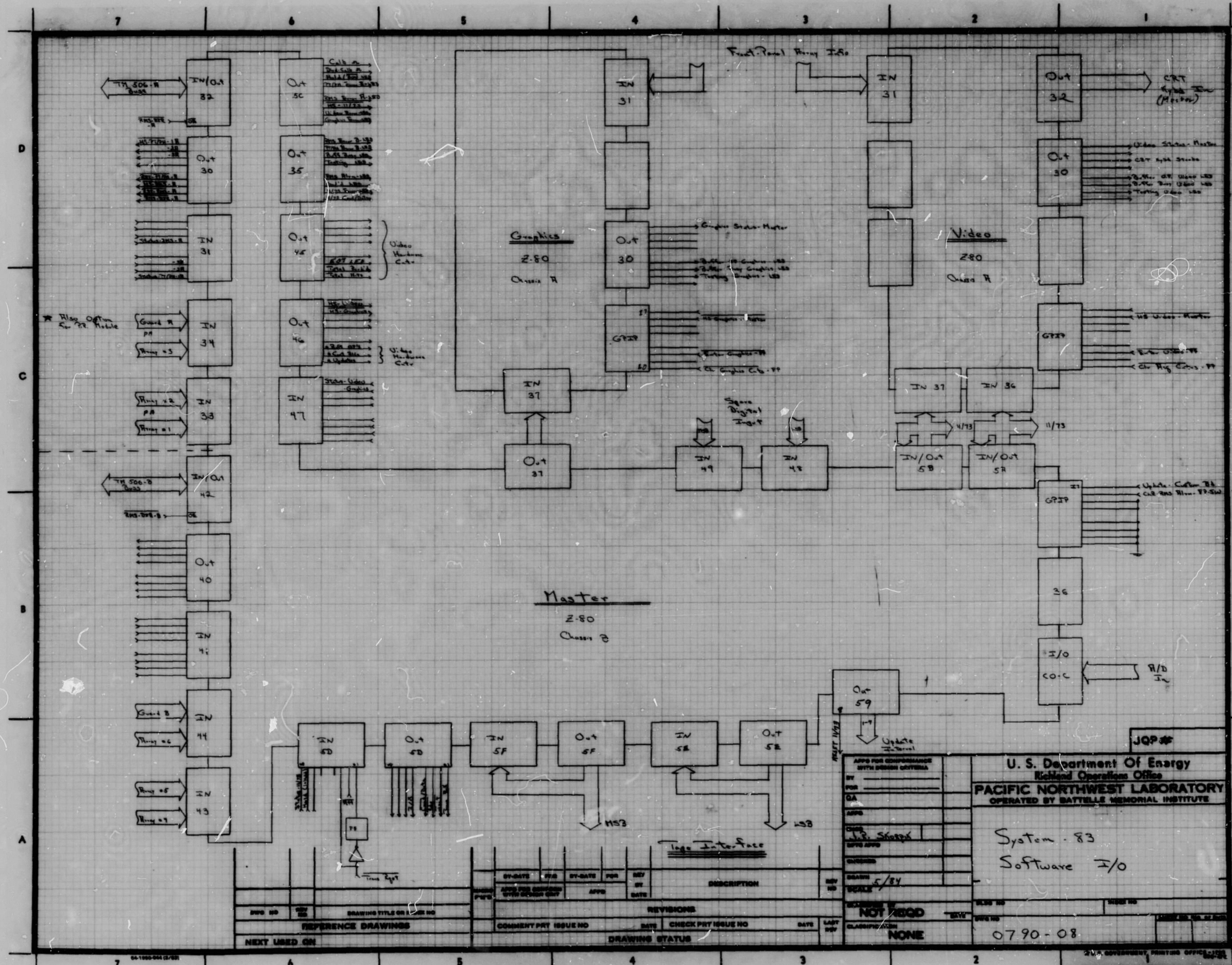


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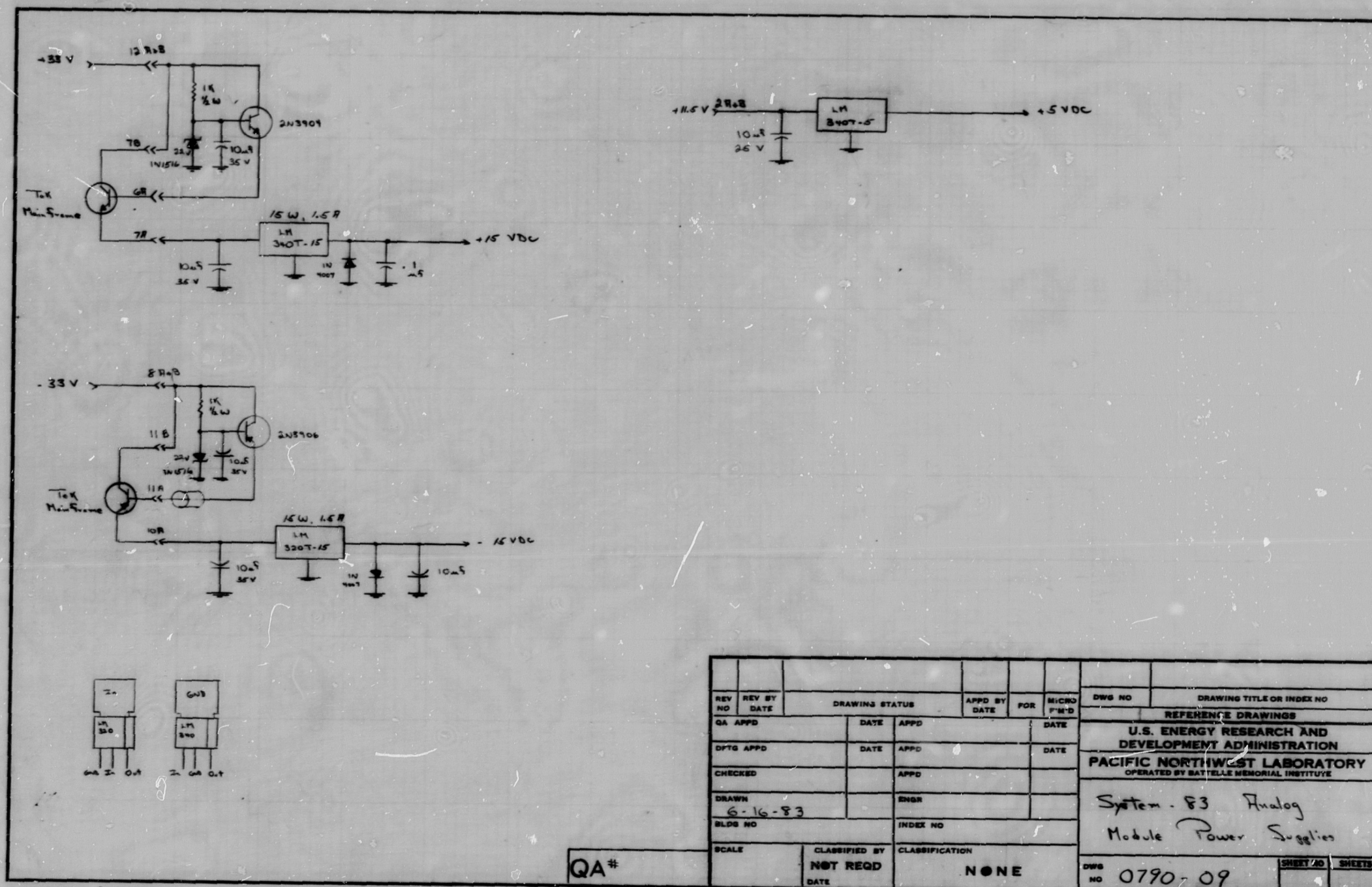
REV. NO. 0	SYSTEM - 83
DATE: 7-9-80	PT/PH
DRWN: TG HARVIN	3 CHANNELS
ENGR: JR SKORPIK	
FILE: AEV83PTPH3C	
NO. 1 OF 1	DRWG NO. 0790-00 06





APPROVED FOR DISSEMINATION WITH RESTRICTION CONTROLS BY: _____ DATE: _____ CLASS: _____ CONTROL: _____ GROUP: _____ CONTROL: _____ GROUP: _____ CONTROL: _____ GROUP: _____		U. S. Department Of Energy Richland Operation Office PACIFIC NORTHWEST LABORATORY OPERATED BY BATTELLE MEMORIAL INSTITUTE	
SYSTEM: System 83 SOFTWARE: I/O		JQP#	
REVISIONS NO. DATE BY DESCRIPTION _____ _____ _____		CLASSIFICATION: NOT READ SECURITY: NONE	
REFERENCE DRAWINGS NO. TITLE OR I.D. NO. _____ _____		DRAWING STATUS COMMENT PRT ISSUE NO. DATE CHECK PRT ISSUE NO. DATE _____ _____	
NEXT USED ON: _____		0790-08	

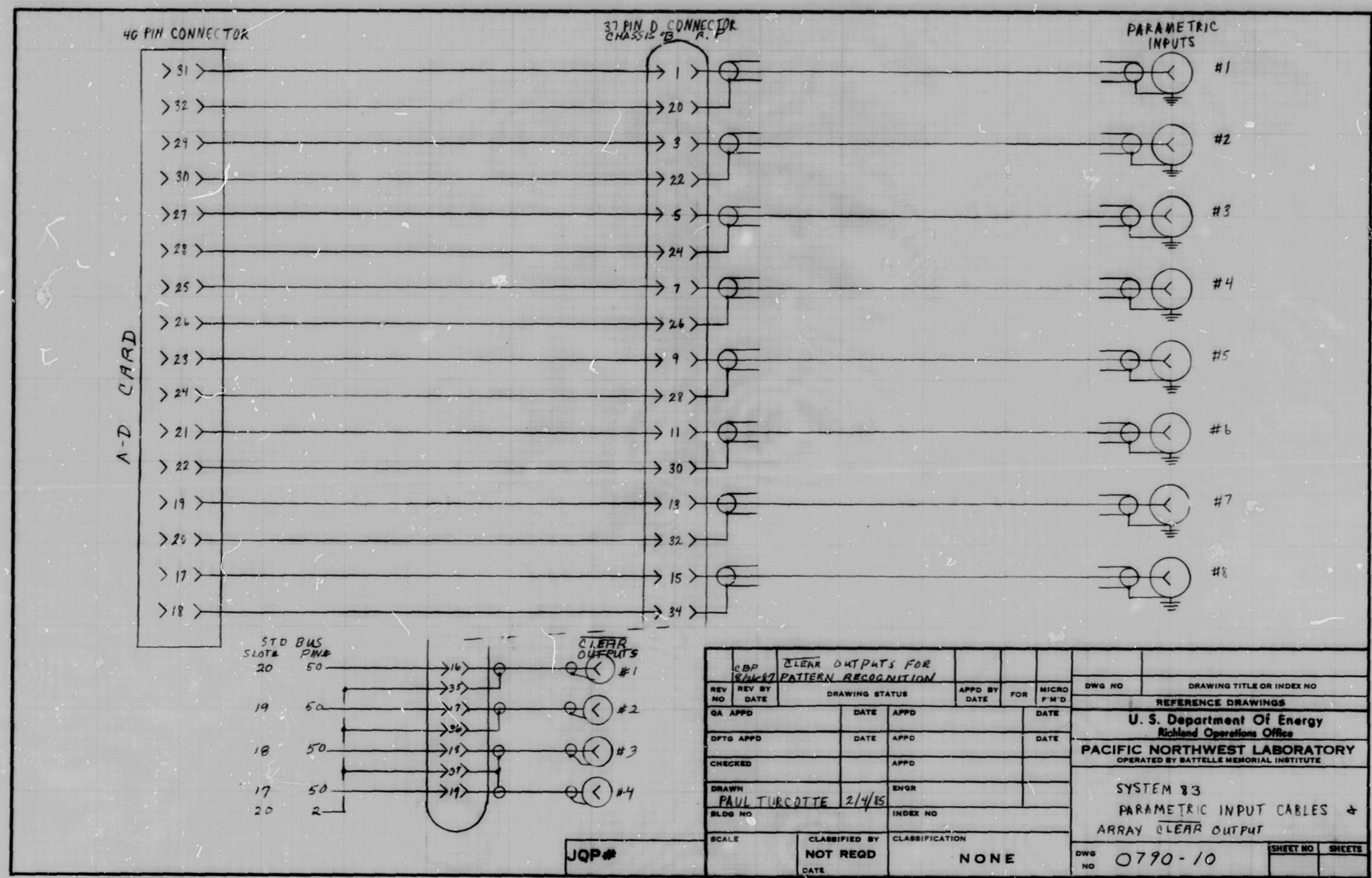


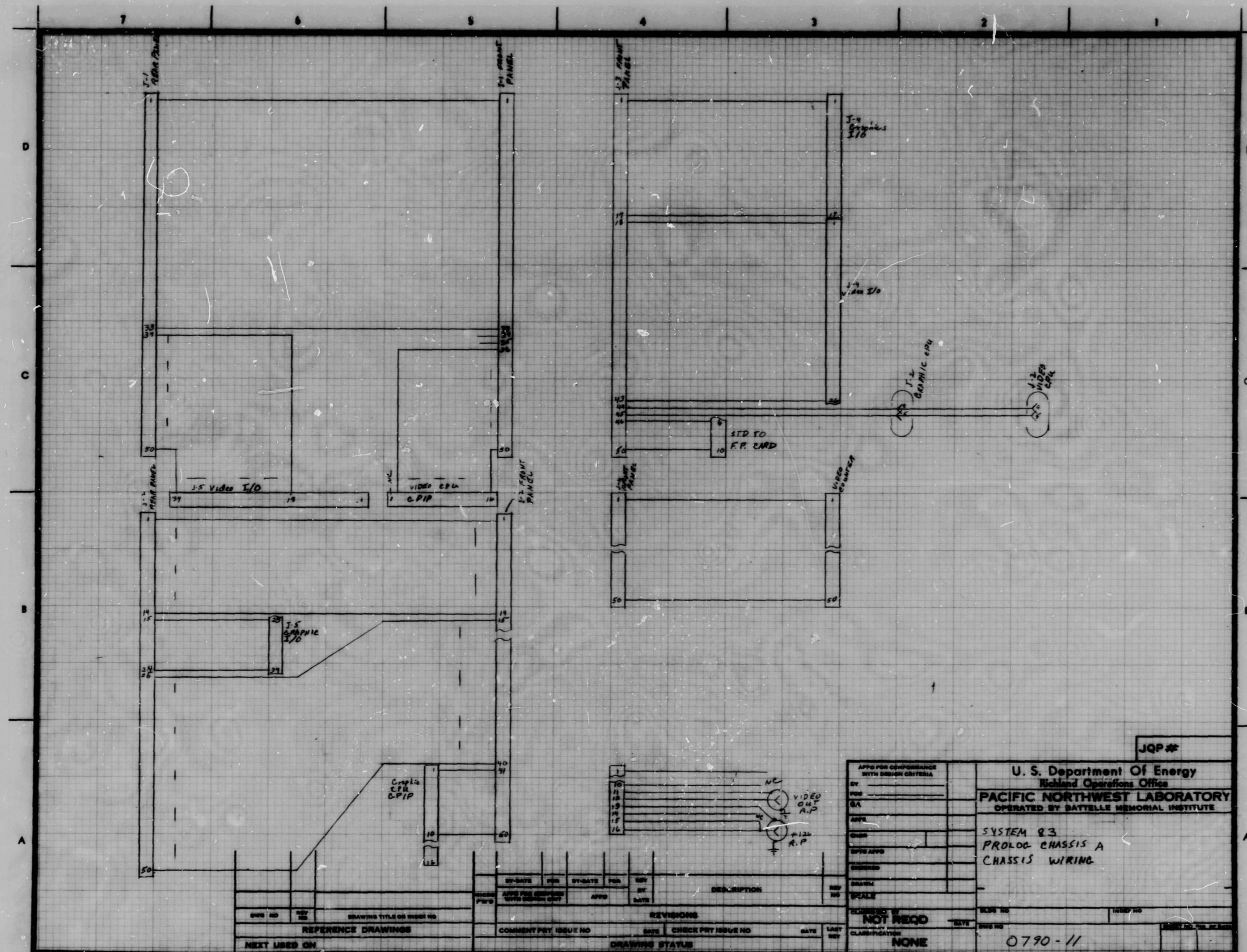


REV NO	REV BY	DATE	DRAWING STATUS	APPRO BY	FOR	DATE	DWG NO	DRAWING TITLE OR INDEX NO
QA	APPD		DATE	APPD		DATE		REFERENCE DRAWINGS
CHECKED				APPD				U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
DRAWN				ENGR				PACIFIC NORTHWEST LABORATORY
SCALE				INDEX NO				OPERATED BY BATTTELLE MEMORIAL INSTITUTE
								System - 83 Analog
								Module Power Supply
								DWG NO 0790-09
								SHEET NO SHEETS



244





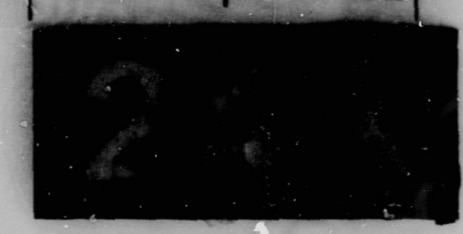
APPROVED FOR CONFORMANCE		DATE		BY	
BY		DATE		BY	
CHK		DATE		BY	
APP		DATE		BY	
ENGR		DATE		BY	
SUPERV		DATE		BY	
DESIGN		DATE		BY	
SCALE		DATE		BY	
CLASSIFICATION		DATE		BY	
NOT RECD		DATE		BY	
NONE		DATE		BY	

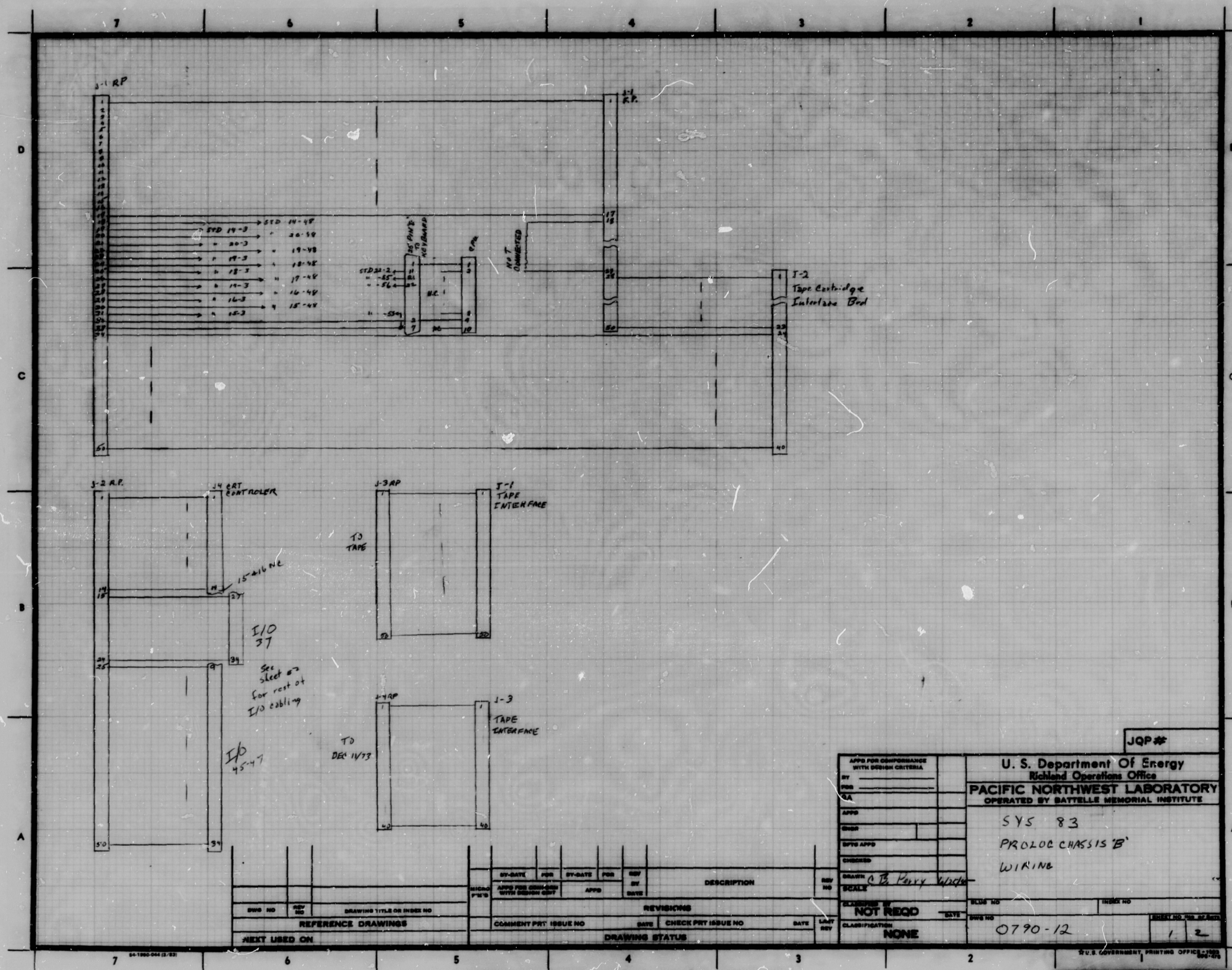
U. S. Department Of Energy
 Richland Operations Office
PACIFIC NORTHWEST LABORATORY
 OPERATED BY BAYTELLE MEMORIAL INSTITUTE

SYSTEM 83
 PROLOG CHASSIS A
 CHASSIS WIRING

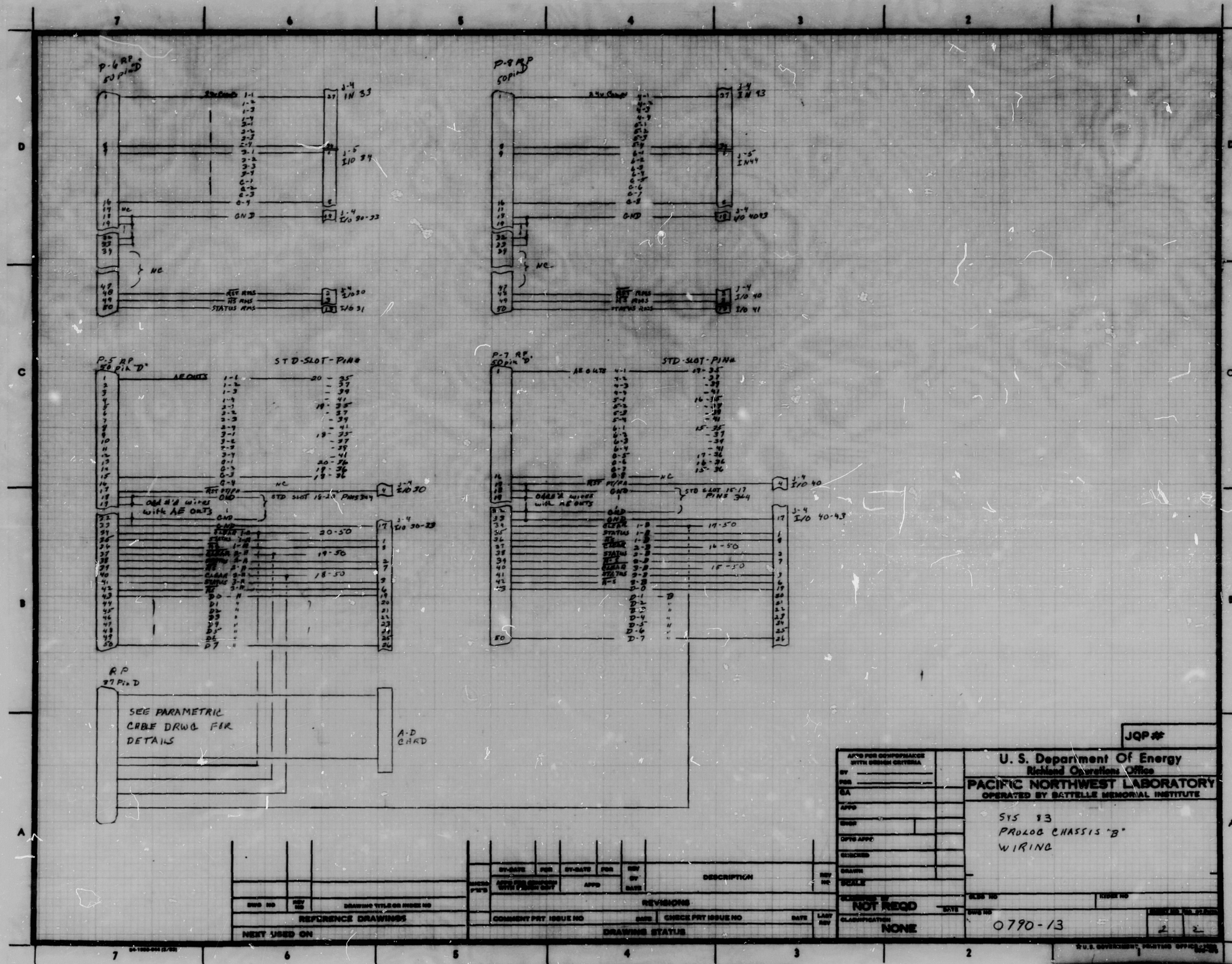
JQP #

0790-11





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JQP#

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 Reactor Operations Office
PACIFIC NORTHWEST LABORATORY
 OPERATED BY BATTTELLE MEMORIAL INSTITUTE

SIS 13
 PROLOG CHASSIS "B"
 WIRING

REV	DATE	DESCRIPTION	BY	CHKD

REFERENCE DRAWINGS

USED ON

REVISIONS

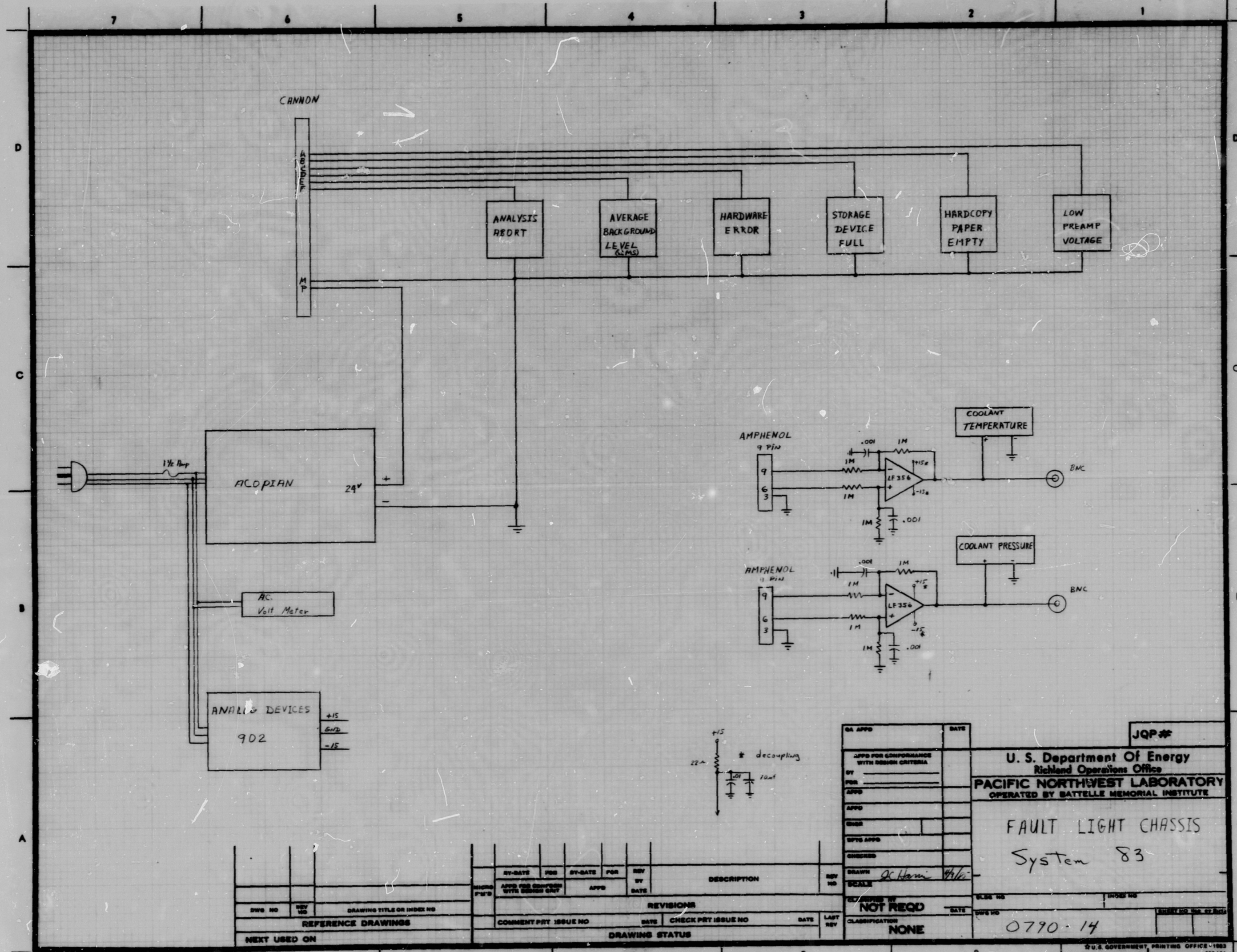
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CLASSIFICATION

NONE

0790-13





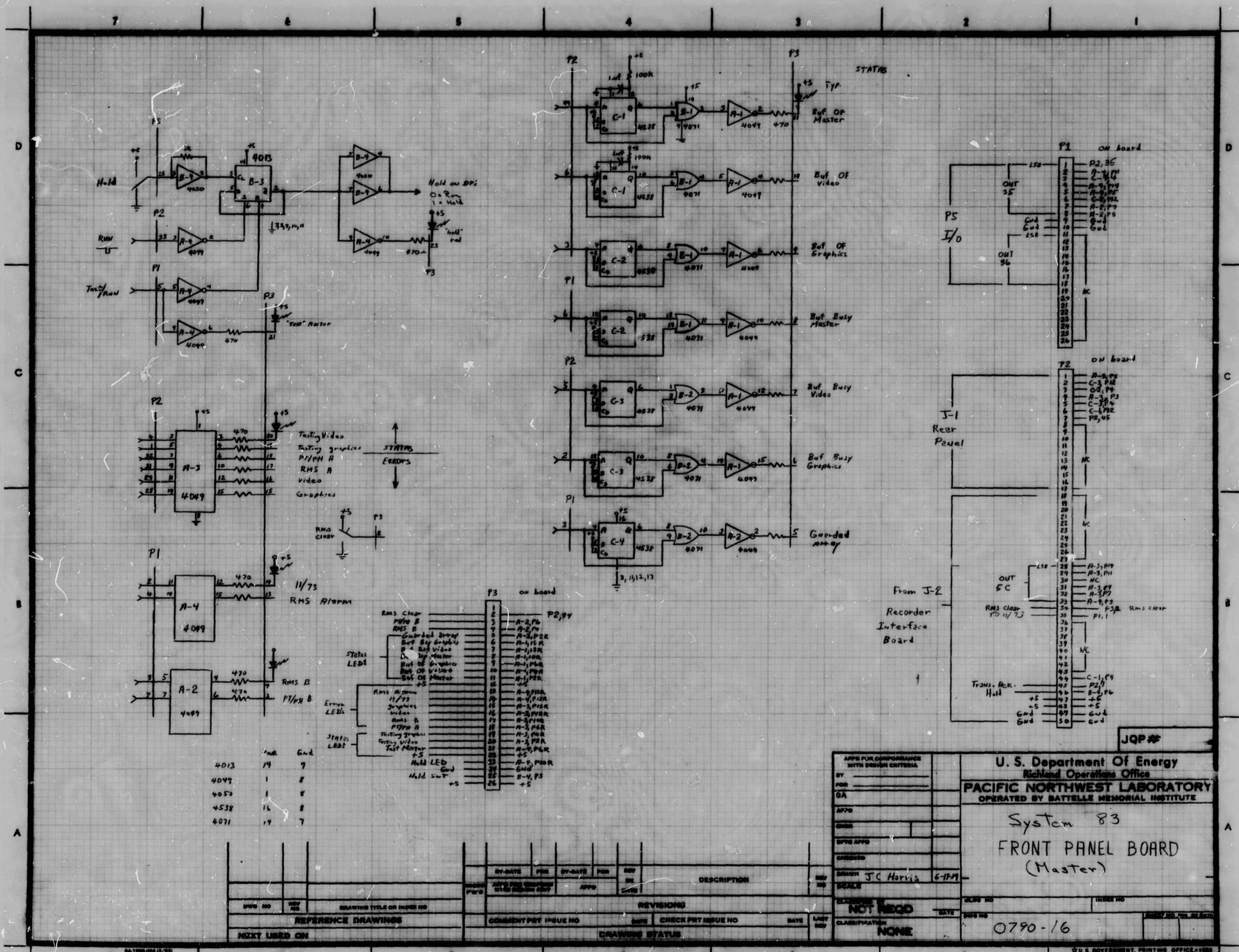
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REV NO	REV	DATE	DESCRIPTION

DATE	
BY	
FOR	
APPD	
CHKD	
DATE	
SCALE	
CLASSIFICATION	NONE
JQP#	
U. S. Department Of Energy Richard Operations Office PACIFIC NORTHWEST LABORATORY OPERATED BY BATTELLE MEMORIAL INSTITUTE	
FAULT LIGHT CHASSIS System 83	
DATE	
SCALE	
CLASSIFICATION	NONE
DATE	0790-14



24



Part No.	Value	Qty
4013	1K	7
4017	1	8
4020	1	8
4021	1K	8
4022	1K	7

Pin	Signal
1	RMS Clear
2	P2/B
3	P2/P
4	P2/P2
5	P2/P2
6	P2/P2
7	P2/P2
8	P2/P2
9	P2/P2
10	P2/P2
11	P2/P2
12	P2/P2
13	P2/P2
14	P2/P2
15	P2/P2
16	P2/P2
17	P2/P2
18	P2/P2
19	P2/P2
20	P2/P2
21	P2/P2
22	P2/P2
23	P2/P2
24	P2/P2
25	P2/P2
26	P2/P2

U.S. Department Of Energy
Richland Operations Office
PACIFIC NORTHWEST LABORATORY
OPERATED BY BATTTELLE MEMORIAL INSTITUTE

System 83
FRONT PANEL BOARD
(Master)

DESIGNED BY J.C. Harris 6-77
CHECKED BY J.C. Harris 6-77
DATE 0790-16
CLASSIFICATION NONE

NOT RECD
0790-16



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