digital

PT08-B

Engineering Drawings

Digital Equipment Corporation

MASTER DRAWING LIST

DWG. NO.	REV. LET.	NO OF SHEETS	TITLE
D-UA-PT08-B-0		1	TELETYPE CONTROL PT08-B
A-PL-PT08-B-0		1	TELETYPE CONTROL PT08-B
D-BS-PT08-A-1	F	1	TELETYPE CONTROL PT08 LOGIC
D-MU-PT08-A-2	B	1	MODULE LOCATION TYPE PT08
A-PL-PT08-A-2	B	1	MODULE LOCATION TYPE PT08
PC-5003979-0-0	C		PRINTED CIRCUIT WIRING
PC-5003980-0-0	C		PRINTED CIRCUIT WIRING
A-SP-PT08-A-4	A	4	ENGINEERING SPECIFICATIONS PT08
A-AL-PT08-B-1		1	TELETYPE INTERFACE ACCESSORY LIST

REVISIONS			
REV.	DATE	CHG. NO.	APP'D.
A	1/67	3	A.R.
B	1/67	4	A.R.
C	4/67	15	A.R.
D	8/67	164	N.W.
E	12/67	42	A.R.
F	4/68	54	A.R.
H	4/68	261	D.O.
J	1/70	00001	L.N.
K	4/70	Misc.64	M.A.
L	6/70	Misc75	R.P.K
M	6/71	PT09A-1	L.N.

DEC FORM NO. DRA 103

DRN. D.REILLY	DATE 11/66
CHK'D.	DATE
ENG.	DATE 1-1-66
PROJ. ENG.	DATE
PROD.	DATE
FIRST USED ON D-UA-PT08-A-0	
SCALE	
SHEET OF	

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE

TELETYPE CONTROL PT08-B
(MTG. IN STD. CAB.)

SIZE	CODE	NUMBER	REV.
A	ML	PT08-B-0	M

DIST.

RCLE — W005 A12 — H F CLK R401 A16 — D D — RCLO
1.2K
F H CLK R401 B04 — D U — TCLO
1.2K

+3.6 SU W705 A03 J — +3.6

G701 CABLE TERM LW66 OR B07 — K IOP1, M IOP2, P IOP4

W011 A08 / W011 A09 / W028 J03 FROM 8/I E40 FROM 8/S ME35 FROM 8
BMB3(1), 3(Ø), 4(1), 4(Ø), 5(1), BMB5(Ø)

W011 B08 / W011 B09 / W028 J04 FROM 8/I D48 FROM 8/S MF35 FROM 8
BMB6(1), 6(Ø), 7(1), 7(Ø), 8(1), BMB8(Ø)

W011 A13 / W011 A14 / W028 J05 FROM 8/I E38 FROM 8/S PE02 FROM 8
IC Ø4, Ø5, Ø6, Ø7, IC Ø8

W005 A12 — U AD
IOT XY2 — AH
IOT XY1 — AN
+3.6 — AJ
RCLO — BS
IOT XY4 — BT
PWR CLEAR — BV
TSO — AF

W706 AB15 TTY RECVR

AN I/O SKIP
AP INT
BL RRE
AR IC11
AT Ø8
AU Ø9
AV 10
BD Ø7
BE Ø6
BF Ø5
BH IC Ø4
BJ RCLE

W011 A06 / W011 A07 / W028 E39 FROM 8/S ME34 FROM 8 J01 FROM 8/I
BAC 4(1), 5(1), 6(1), 7(1), 8(1)

W011 B13 / W011 B14 / W028 E37 FROM 8/S PE02 FROM A J06 FROM 8/I
IC Ø9, IC 10, IC11, I/O SKP, INT, CLR AC

W011 B06 / W011 B07 / W029 B39 FROM 8/S MF34 FROM 8
9(1), 10(1), BAC 11(1), IOP 1, 2, IOP 4, PWR CLR

W070 B03 — W070 FROM TTY OR W02! DB25 FROM DATASET TO USE W070 REMOVE W50, W511, AND CLAMPED LOADS ON "TSO & PSM"
TSO, DPI2, PSM, +10, RRE, DPO2

W005 A12 — V

W511 B01 — E F H D — DPO2 B

W002 B02 — D

W602 A04 — D F R V — DPI2

IOP1 — AH AJ PA — AD AN AP AK PA — AL AM PL IOT XY2 W005 A12 — AF IOT XY1
IOP2 — AU AV PA — AS T IOT XY4 W005 A12 — AR
IOP4 — D.S. W103 A,B11

BM B3(1), BM B3(Ø), BM B4(1), BM B4(Ø), BM B5(1), BM B5(Ø), BM B6(1), BM B6(Ø), BM B7(1), BM B7(Ø), BM B8(1), BM B8(Ø)
BE BF BH BJ BK BL BM BN BP BR BS BT

RECVR(XY)

AH AJ PA — AF IOT XZ1
AD AN AP AK PA — AL M IOT XZ2 W005 A12
AU AV PA — AS S IOT XZ4 W005 A12
AR — D.S. W103 A,B10

BE BF BH BJ BK BL BM BN BP BR BS BT

XMTR(XZ)

IOT XZ2 — AU
IOT XZ1 — AV
TCLO — BD
IOT XZ4 — BE
IOT XY2 — BJ
+3.6 — AJ
PWR CLEAR — BU
BAC 4(1) — BN
BAC 5(1) — BM
BAC 6(1) — BP
BAC 7(1) — BK
BAC 8(1) — BH
BAC 9(1) — BF
BAC 10(1) — BL
BAC11(1) — AT

W707 AB5 TTY XMTR

AD I/O SKP
AH PSM
AL INT
AP CLR AC

W002 B02

W002 B02 — M R P L N U S T

** NOTE 3
DEVICE SELECTOR CODE CAN BE SELECTED BY THE PURCHASER FROM THE FOLLOWING POSSIBILITIES

	RECVR XY	XMTR XZ	LINE
PDP-8	40	41	1
PDP-8/S	42	43	2
	44	45	3
	46	47	4
	11	12	5
PDP 8/S ONLY	03	04	1

* NOTE 2
THIS MODULE CAN HAVE EITHER LOCATION DEPENDING ON WHICH OF THESE TWO SLOTS THE I/O CABLE HAS BEEN INSERTED. ON PDP-8 OR 8/S COMPUTERS WITH OPTIONS OTHER THAN THE PTO8, THE G701 MUST BE INSERTED IN THE I/O DEVICE AT THE END OF THE I/O CABLES IN THE CABLE SLOT THAT PROVIDES I/O BUS EXTENSION FOR IOP'S 1,2,4

NOTE 4:
TO ALLOW IOP4 TO CLEAR THE KEYBOARD FLAG, REFER TO ECO # PTO8A-00001

NOTE1. ALL CABLE PINS C, F, J, L, N, R, U ARE GROUNDED

REVISIONS	REV.	CHK	CHANGE NO.
	A	JH	ECO # 3 1-3-67 Don Roberts
	B		ECO #4 1-10-67 T. Cavicchi Don Roberts 1-11-67
	C	AJ	ECO #15 4-26-67 A. Lemmerhirt Don Roberts 5-1-67
	D		ECO# 164 8-3-67 J. F. Lemieux W. Wurtz 8/13/67
	E		54 A. Lemmerhirt 4-9-68 J. Roberts 4-9-68
	F		PTO8A-00001 F. Williams NARHI Stacy Hosier 12-15-71

DEC FORM NO. DRD 102

QTY.	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

UNLESS OTHERWISE SPECIFIED
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES DECIMALS ± .005 FRACTION'S ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓ REMOVE BURRS AND BREAK SHARP CORNERS
MATERIAL
FINISH

DRN. K. Sicinski DATE 11/1/66
CHK'D. A. Lemmerhirt DATE 12-2-66
ENG. Don Roberts DATE 12-5-66
PROJ. ENG. Don Roberts DATE 12-5-66
PROG. Don Roberts DATE 12-5-66
FIRST USED ON D-UA-PTO8-A-0
SCALE
SHEET 1 OF 1

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE: TELETYPE CONT PTO8 LOGIC

SIZE D | CODE BS | NUMBER PTO8-A-1 | REV. F
DIST.

PASTE-ONS SHOW "F" OPTION

+3.6V TRACK MUST BE THICK

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
			W705	W602	W707	W011	W011	W011	W011	W103		W005	W011	W011	W706	R401																													
A						BAC	BAC	BMB	BMB	04	03		IAC	IAC		03																													
						4-8	4-8	3-5	3-5				4-8	4-8		RCV CLOCK																													
	W511	W002	W070	R401		W011	W011	W011	W011				W011	W011																													
B				04 XMT CLOCK		BAC	BAC	BMB	BMB				IAC	IAC																													
						9-11 + IOP 1,2,4 + IO CLA	9-11 + IOP 1,2,4 + IO CLA	6-8	6-8				9-11 + IO SKP + CLAC + PIR	9-11 + IO SKP + CLAC + PIR																													

MUST HAVE GND GRID

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
B																																											

REVISIONS

REV.	CHANGE NO.	CHK
A	ECO #4 Revised And Reissued Extensive Changes	T. Blake 1-10-67
B	ECO #15	Alan Ricketts 1-11-67
		A. Kennedy 9-26-67
		Alan Ricketts 5-5-67

UNLESS OTHERWISE SPECIFIED	DRN. K. Lukuk	DATE 11/11/66
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30' FINAL SURFACE QUALITY REMOVE BURRS AND BREAK SHARP CORNERS	CHK'D. Maynard	DATE 12/2/66
	ENG. Alan Ricketts	DATE 12/5/66
	PROJ. ENG. Alan Ricketts	DATE 12/5/66
	PROD. Alan Ricketts	DATE 12/5/66
MATERIAL	FIRST USED ON D-UA-PT08-A-0	
FINISH	SCALE	
	SHEET 1 OF 1	

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE

MODULE LOCATION
TYPE PT08

SIZE	CODE	NUMBER	REV.
D	MU	PT08-A-2	B

DIST.

DEC FORM NO. DRD 105

SIZE D CODE MU NUMBER PT08-A-2 REV. B

PARTS LIST

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

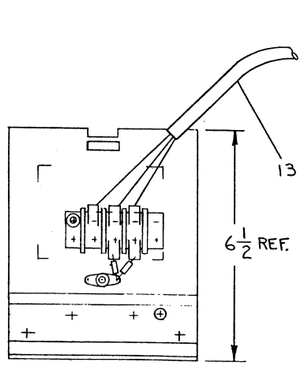
PART NO.	DRWG. NO.	NO. REQD.	DESCRIPTION ITEM — STOCK SIZE — CAT. NO. — MFG.	DEC. STOCK NO.
		1	W705 +3,6 Volt Power Supply	
		2	R401 CLOCK	
		1	W070 TELETYPE CONNECTOR	
		1	W005 Clamped Loads	
		1	W706 TELETYPE RECEIVER	
		2	W103 DEVICE SELECTOR	
		6	W011 SIGNAL CABLE CONNECTOR	
		1	W707 TELETYPE TRANSMITTER	
		6	W028 SIGNAL CABLE CONNECTOR	
		1	W002 CLAMPED LOADS	
		1	G7Ø1 CABLE TERMINATOR	

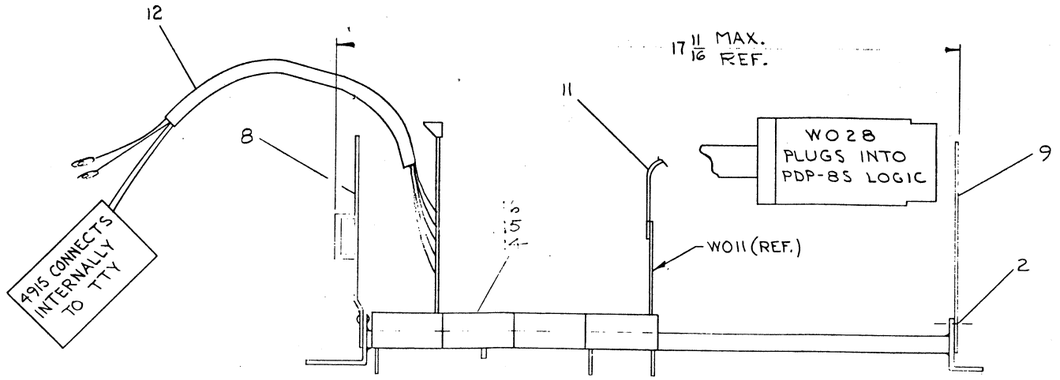
REVISIONS

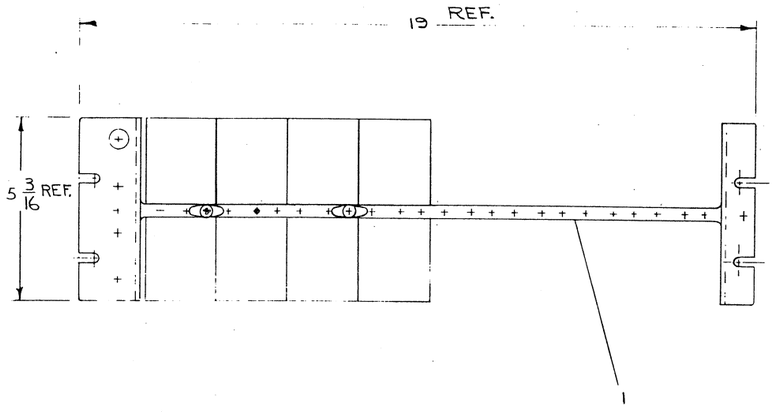
CHANGE NO.	DATE	ENG.
A-15	4/24/67	AR
B-42	12-28-67	PJC

MADE BY K. Gulick	DATE 11/11/66	TITLE MODULE LOCATION TYPE PT08	SIZE A	CODE PL	NUMBER PT08-A-2	REV. B
CHECKED P. Daigneault	DATE 11/23/66	FOR PT08-A	ASSY. NO. D-MU-PT08-A-2		SHEET 1 OF 1	
ENG. Alan Ricketts	DATE 12-5-66					

DEC FORM NO.
DRA 109







REVISIONS		
CHK	CHANGE NO.	REV.
AK	ECO #3371 DELETED #3,4,5,6,7&10 CHG #8,9, DELETED NOTES R. Pisenti 3/29/68	A

DEC FORM NO. DRD 100

UNLESS OTHERWISE SPECIFIED
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 | FRACTIONS ± 1/64 | ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL //

FINISH //

QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST			

DRN. UK Nulsila	DATE 10/28/66	
CHK'D. [illegible]	DATE 12-2-66	
ENG. [illegible]	DATE 12/6/66	
PROJ. ENG. [illegible]	DATE 11/6/66	
PROD. [illegible]	DATE 11/4/66	
FIRST USED ON E-UA-8SCAB-0-0		
SCALE 1/2		
SHEET 1 OF 1		

digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS

TITLE
TELETYPE CONTROL
PT08-B

SIZE	CODE	NUMBER	REV.
D	UA	PT08-B-0	A

DIST.

SIZE D | CODE UA | NUMBER PT08-B-0 | REV. A

PARTS LIST

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PART NO.	DRWG. NO.	NO. REQD.	DESCRIPTION ITEM — STOCK SIZE — CAT. NO. — MFG.	DEC. STOCK NO.
1	A-PL-7005305-0-0	1	PT08-B WIRED ASSY	7005305
2		8	POP RIVER 1/8 DIAx19/64 LG.#AD43ABS U.S.M.C.	90-06509
~~3~~	~~BS-100153-1~~	~~1~~	~~1943 MTG PANEL LABEL (WHITE BACKGROUND)~~	
~~4~~		~~1~~	~~TERM BLOCK #602-3/4ST3 KULKA~~	
~~5~~		~~2~~	~~CAPACITOR 6.8 MFD 35V SPRAGUE~~	
~~6~~		~~1~~	~~TERM. #2116-06-00 SHAKEPROOF~~	
~~7~~	~~C-IA-5402527-0-0~~	~~1~~	~~EYELET 1090 1/8 O.D. x 3/16 LG STIMPSON~~	
8	C-IA-5402527-0-0	1	LEFT END PANEL ASSY	5402527
9	C-MD-5302486-0-0	1	RIGHT END PANEL	5302486-0-0
~~10~~		~~4~~	~~EYELET A-1152,.192 OD x.575 LG.STIMPSON~~	
11	C-IA-7405600-2-0	6	CONNECTOR CABLE 8S-PT08	
12	D-AD-7005288-1-0		CABLE 4915 TO W070	
13	C-AD-7005289-2-0		POWER CORD (PT08-B TO PDP-8S)	
14	SEE MDL		UTILIZATION MODULE LIST	
15	SEE MDL		UTILIZATION MODULE LIST	
16	SEE MDL		WIRING LIST	

REVISIONS

CHANGE NO.	DATE	ENG.
A-3371	3/21 68	
CHG #8&9 DELETED #3,4,5, 6,7,&10		

MADE BY D. Reilly	DATE 11/10/66	TITLE TELETYPE CONTROL PT08-B	SIZE A	CODE PL	NUMBER PT08-B-0	REV. A
CHECKED D. Healy	DATE 11/28/66	FOR	ASSY. NO. D-UA-PT08-B-0		SHEET 1 OF 1	
ENG. D. Nevala	DATE 12/6/66					

DEC FORM NO. DRA 109

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION

DATE 4/4/68

TITLE PTØ8

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE
A	CHANGED SHEET 3	261	——	4-22-68	DO'Connor	4/24/68

ENG	APPD	SIZE	CODE	NUMBER	REV
Norman Wright	N. Wright 4/4/68	A	SP	PT08-A-4	A

ENGINEERING SPECIFICATION — CONTINUATION SHEET

TITLE PTØ8

Ø.Ø OVERALL DESCRIPTION

The PTØ8 is a serial to parallel-parallel to serial converter designed to work between a parallel I/O device and a serial unit such as a Teletype or an asychronous modem.

1.Ø SPECIFICATIONS

The PTØ8 is offered in several configurations as outlined below. Operation is identical within the unit regardless of the configuration specified.

1.1 Options.

1.1.1 PTØ8A

This option is used on the PDP-8/S only, and is a single channel Teletype interface mounted in the base of the Teletype unit.

1.1.2 PTØ8B

Single channel Teletype control, rack mounted.

1.1.3 PTØ8C

Dual Channel Teletype Control, rack mounted

1.1.4 PTØ8F

The PTØ8F is an option that can be installed on a PTØ8B or PTØ8C to adapt the input/output lines of the unit for operation with a modem. Two level conversion modules are added (per channel) that convert DEC levels of 0V and -3V to voltages conforming to EIA Standard RS-232B.

SIZE	CODE	NUMBER	REV
A	SP	PT08-A-4	A

1.1.5 PTØ8FX

The PTØ8FX is an option that can be supplied with the F option that will adapt the unit to crystal clock control.

1.2 Mechanical Packaging

1.2.1 Dimensions

All PTØ8 configurations, with exception of the PTØ8A, are contained in a Standard 1943 mounting panel.

Width	19.Ø inches
Height	5.187 inches
Depth	6.75 inches
Finish	Chromicolt
Power Connections	AMP FASTON
Panel Aid wiring used throught.	

1.2.2 Mounting Requirements

Any standard DEC cabinet or 19 inch mounting panel will accomodate the unit (except PTØ8A).

1.3 Environmental Specifications

1.3.1 Operating temp. range ØºC to 55ºC

1.3.2 Noise immunity ≈1 Volt.

1.4 Power Requirements

Power must be supplied to the unit as follows:

+1ØV	-15V
1.1 AMP	1Ø5 MA
(1.5 AMP	15Ø MA) PTØ8FX only.

1.5 Margins

The unit shall operate satisfactory over the following temp. range:

+1ØV ——— ±2V
-15V ——— ±3V

2.Ø CABLING

2.1 I/O Cables

Six standard I/O cables are required to connect the PTØ8 to the PDP bus.

2.2 Teletype Cable

On units equipped for Teletype Operation, a 12 ft. cable terminated with a WØ7Ø connecter is necessary.

2.3 Data Phone Cable

On units equipped for modem operation, a 25 ft. cable is required. One end terminated with a WØ21 connector, the other end terminated with a hooded data set connector (DB-19604-432).

3.Ø Tests and/or Diagnostics

3.1 Requirements

Maindec 828
Standard PDP-8
Off-line Teletype
Six (6) I/O Cables
One Teletype Cable (12 ft.)

3.2 Procedure

Perform tests as outlined in Maindec 828

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

ACCESSORY LIST

MADE BY / DATE Dee Moran	CHECKED A. DeAngelis / DATE 3-17-70	SECTION
ENG / DATE Rami Susie 3-16-70	PROD 3/17/70 / DATE B Vaillancourt	ISSUED SECT.

LEGEND

D DOCUMENT
DN DOCUMENT CHANGE NOTICE
PA PAPER TAPE ASCII
PB PAPER TAPE BINARY
PM PAPER TAPE READ-IN-MODE

ITEM NO.	DWG NO./PART NO.	DESCRIPTION	QUANTITY/VARIATION
1.	PT08A-1	Prints	1
2.	91-07712	Hook Up Wire	1
3.	90-08851	Hardware Bag	1

KIT CHECK BY _____ DATE _____

INSTALLATION CHECK BY _____ DATE _____

TITLE	ASSY. NO.	SIZE	CODE	NUMBER	REV.	ECO NO
Teletype Interface	SHEET 1 OF 1	A	AL	PT08-B-1		
		DIST.				

DEC FORM NO.
DRA 121

103 cont'd

MASTER DRAWING LIST

DWG. NO.	REV. LET.	NO. OF SHEETS	TITLE
A-ML-7605291-0	////	1	DATASET CONTROL PTO8B WITH "F" OPTION

REVISIONS			
REV.	DATE	CHG. NO.	APP'D.

DRN. N.Crowley	DATE 12/68	
CHK'D.	DATE	
ENG. A.Ricketts	DATE 12/68	
PROJ. ENG. A.Ricketts	DATE 12/68	
PROD.	DATE	
FIRST USED ON		
SCALE		
SHEET 1 OF 1		

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE
DATASET CONTROL
PTO8B WITH "F" OPTION

SIZE	CODE	NUMBER	REV.
A	ML	PTO8B-F	

DIST.

DEC FORM NO.
DRA 103

MASTER DRAWING LIST

DWG. NO.	REV. LET.	NO. OF SHEETS	TITLE
A-PL-7605291-Ø-1	A	1	DATASET CONTROL PTØ8
A-PL-7605291-Ø-2	A	1	MODULE LOCATION TYPE PTØ8
D-MU-7605291-Ø-3		1	MODULE LOCATION TYPE PTØ8
D-LA-7605291-Ø-4		1	DATASET CONTROL PTØ8
D-BS-7605291-Ø-5		1	DATASET CONTROL LOGIC
PC-5Ø3979-Ø-Ø	C		PRINTED CIRCUIT WIRING
PC-5Ø3980-Ø-Ø	C		PRINTED CIRCUIT WIRING
A-SP-PTØ8-A-4	A	4	ENGINEERING SPECIFICATIONS
A-ML-7605294-0-0		1	TELETYPE CONTROL PTØ8-C WITH F OPTIONS
A-ML-7605293-0-0		1	TELETYPE CONTROL PTØ8-C WITH F+X OPTIONS

REVISIONS			
REV.	DATE	CHG. NO.	APP'D.
A	4/68	53	A.R.
B	4/68	261	D.O.
C	4/68	60	A.R.

DRN. C. Cobb	DATE 12-9-67	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHKD. Q. Ricketts	DATE 12-13-67	
ENG. Q. Ricketts	DATE 12-13-67	TITLE DATASET CONTROL PTØ8 LOGIC PTO8-B WITH "F" OPTION
PROJ. ENG. [illegible]	DATE 12-13-67	
PROD. Q. Ricketts	DATE 12-13-67	
FIRST USED ON		
SCALE		
SHEET 1 OF 1		

SIZE	CODE	NUMBER	REV.
A	ML	7605291-Ø-Ø	C

DIST.

DEC FORM NO. EA 103

PARTS LIST

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PART NO.	DRWG. NO.	NO. REQD.	DESCRIPTION ITEM — STOCK SIZE — CAT. NO. — MFG.	DEC. STOCK NO.
1	A-PL-7005305-0-0	1	PT08-B WIRED ASSY	7005305
2		8	POP RIVET 1/8 DIAx19/64 LG.#AD43ABS U.S.M.C.	9006460
3	SS-100153-1	1	1943 MTG PANEL LABEL(WHITE BACKGROUND)	
4		1	TERM BLOCK #602-3/4ST3 KULKA	12-02491
5		2	CAPACITOR 6.8 MFD 35V SPRAGUE	10-05306
6		1	TERM. #2116-06-00 SHAKEPROOF	9006769
7		1	EYELET 1090 1/8 O.D. x 3/16 LG STIMPSON	9006733
8	C-MD-5302485-0-0	1	LEFT END PANEL	5302485
9	C-MD-5302486-0-0	1	RIGHT END PANEL	5302486
10		4	EYELET A-1152,.192 OD x.575 LG.STIMPSON	9006736
11	C-IA-7405600-2-0	6	CONNECTOR CABLE 8S-PT08	74-5600-2
12	C-IA-7005717-0-0	1	DATASET CABLE	7005717
13	C-AD-705289-2-0		POWER CORD (PT08-B TO PDP-8S)	7005289-2
14	SEE MDL		UTILIZATION MODULE LIST	
15	SEE MDL		UTILIZATION MODULE LIST	
16	SEE MDL		WIRING LIST	

REVISIONS		
CHANGE NO.	DATE	ENG.
A-53	4-9-68	QWR
B-3475	4/23 68	RBP
ADDED DEC STOCK NO'S		

MADE BY Adam Ricketts	DATE 12-6-66	TITLE DATASET CONTROL PT08-	SIZE A	CODE PL	NUMBER 7605291-0-1	REV. B
CHECKED Adam Ricketts	DATE 12-6-66	FOR 6	ASSY. NO. D-UA-PT08-B-0		SHEET 1 OF 1	
ENG Adam Ricketts	DATE 12/6/66					

DEC FORM NO. DRA 109

PARTS LIST

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PART NO.	DRWG. NO.	NO. REQD.	DESCRIPTION ITEM — STOCK SIZE — CAT. NO. — MFG.	DEC. STOCK NO.	REVISIONS CHANGE NO.	DATE	ENG.
		1	W705 +3,6 Volt Power Supply		A-60	4-22-68	AwR
		2	R401 CLOCK				
		1	W005 Clamped Loads				
		1	W706 TELETYPE RECEIVER				
		2	W103 DEVICE SELECTOR				
		1	W707 TELETYPE TRANSMITTER				
		1	W002 CLAMPED LOADS				
		1	W602 EIA CONVERTER				
		1	W511 NEG. INPUT CONVERTER				
		1	G-701 CABLE TERMINATOR				

MADE BY Alan Ricketts	DATE 12-5-66	TITLE MODULE LOCATION TREE PT08	SIZE A	CODE PL	NUMBER 760529/-0-2	REV. A
CHECKED Alan Ricketts	DATE 12-5-66	FOR PT08- DATASET CONTROL	ASSY. NO. D-UA-PT08-B-0		SHEET 1 OF 1	
ENG. Alan Ricketts	DATE 12-5-66					

DEC FORM NO. DRA 109

+3.6V TRACK MUST BE THICK

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
			W705	W602	W707	W011	W011	W011	W011	W103	W103	W005	W011	W011	W706	R401																														
A				EIA OUT		BAC 4-8	BAC 4-8	BMB 3-5	BMB 3-5	04	03		IAC 4-8	IAC 4-8		03																														
			W511	W002	W021	R401		W011	W011	W011	W011				W011	W011																														
B			EIA IN		DATA SET CONN.	04		BAC 9-11 + IOP 1,2,4 + IO CLA	BAC 9-11 + IOP 1,2,4 + IO CLA	BMB 6-8	BMB 6-8				IAC 9-11 + IO SKP + CLAC + PIR	IAC 9-11 + IO SKP + CLAC + PIR																																

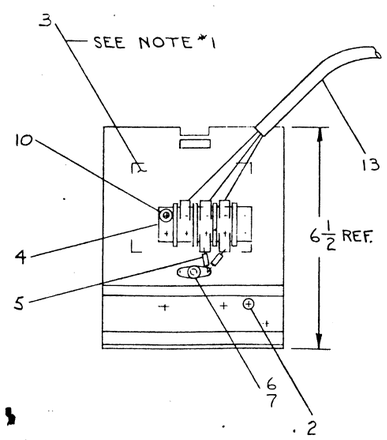
MUST HAVE GND GRID

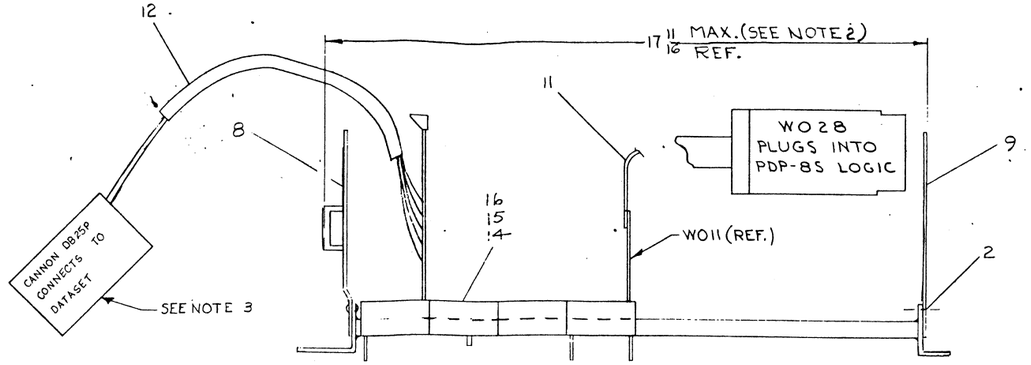
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
B																																												

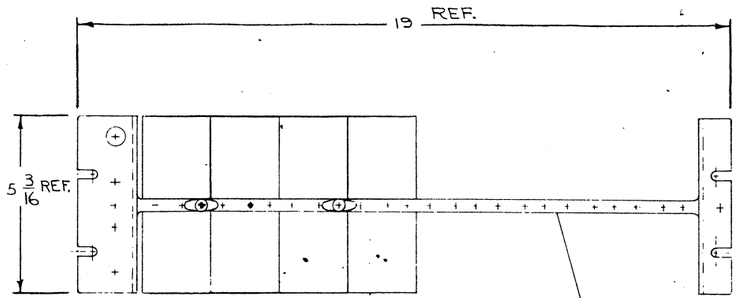
REVISIONS	REV.	CHANGE NO.	CHK

UNLESS OTHERWISE SPECIFIED	DRN D. Cobb	DATE 12-5-66	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30' FINAL SURFACE QUALITY ✓ REMOVE BURRS AND BREAK SHARP CORNERS	CHKD Dan Roberts	DATE 12/5/66	TITLE MODULE LOCATION TYPE PT08
	ENG Dan Roberts	DATE 12/5/66	
	PROJ ENG Dan Roberts	DATE 12/5/66	
MATERIAL —	PROD Dan Roberts	DATE 12/5/66	
FINISH —	FIRST USED ON D-UA-PT08-A-0		SIZE D CODE MU NUMBER 7605291-0-3 REV
	SCALE		DIST.
	SHEET 1 OF 1		

DEC FORM NO. 1105







NOTES:

1. DEC. STICKER TO BE APPLIED TO OUTSIDE SURFACE OF LEFT END PANEL AS SHOWN
2. 17 11/16 REF. DIM TO BE USED BY QUALITY CONTROL ONLY
3. TO INTERFACE INKTRONIC USE CANNON DD25S/CINCH DBM25S REFERENCE TO D-BS-7605291-0-8 REV. 1.

REVISIONS			
CHK	CHANGE NO.	REV.	
[illegible]	7605291-00001	A	

D. PETERSON

QTY.	DESCRIPTION	PART NO.	ITEM NO.

PARTS LIST

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY √
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL —

FINISH —

DRN	E. Cobb	DATE 12-5-66
CK'D	E. Roberts	DATE 12-6-66
ENG	[illegible]	DATE 12-6-66
PROJ. ENG.	Wm. Roberts	DATE 12/6/66
PROD.	Wm. Roberts	DATE 12/6/66

FIRST USED ON

SCALE 1/2

SHEET 1 OF 1

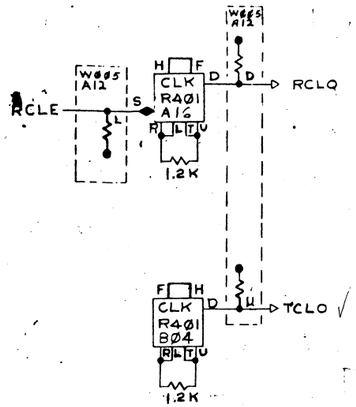
digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

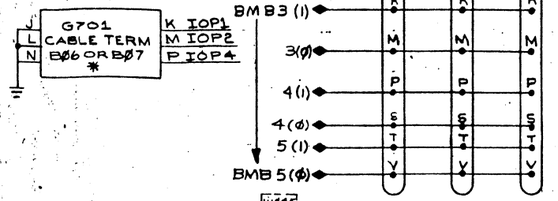
TITLE
DATASET CONTROL
PT08-

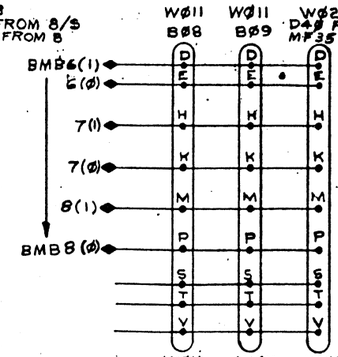
SIZE	CODE	NUMBER	REV.
D	UA	7605291-0-4	A

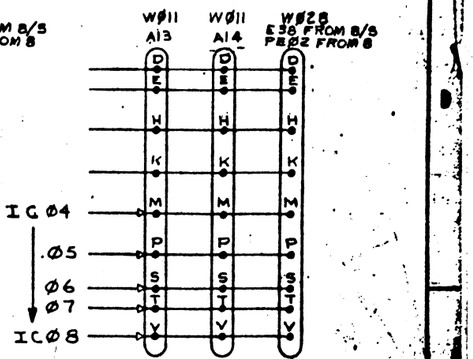
DIST.

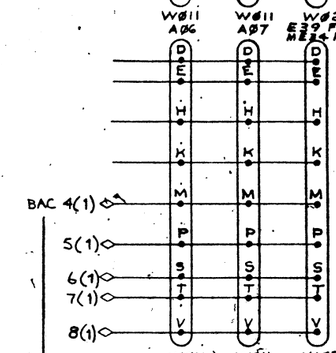
DEC FORM NO. DRD 100

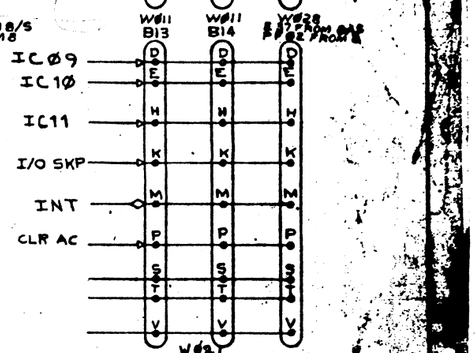




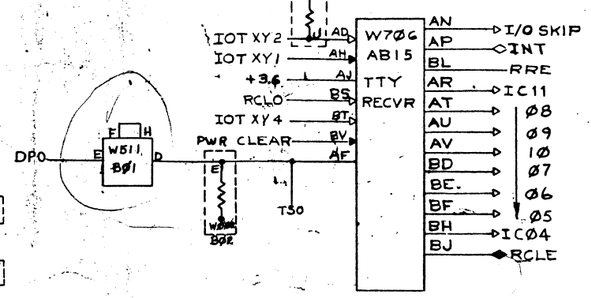


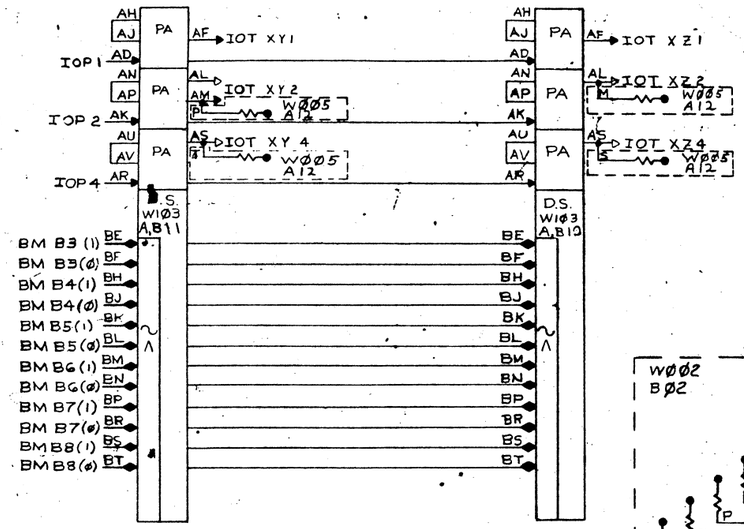


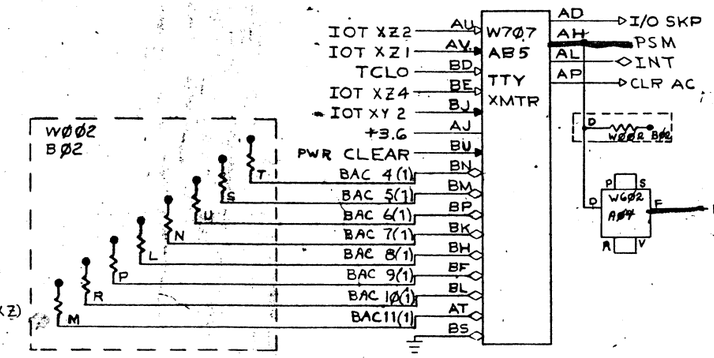




TO USE W070 REMOVE W668, W511 AND CLAMP B03 LOADS ON "TSO" AND "PSM"







* NOTE 2
THIS MODULE CAN HAVE EITHER LOCATION DEPENDING ON WHICH OF THESE TWO SLOTS THE I/O CABLE HAS BEEN INSERTED. ON PDP-8 OR 8/S COMPUTERS WITH OPTIONS OTHER THAN THE PT08, THE G701 MUST BE INSERTED IN THE I/O DEVICE AT THE END OF THE I/O CABLES IN THE CABLE SLOT THAT PROVIDES I/O BUS EXTENSION FOR IOP'S 1,2,4

* * NOTE 3
DEVICE SELECTOR CODE CAN BE SELECTED BY THE PURCHASER FROM THE FOLLOWING POSSIBILITIES

	RECVR XY	XMTR XZ	LINE
PDP-8 PDP-8/S	40	41	1
	42	43	2
	44	45	3
	46	47	4
	11	12	5
PDP 8/S ONLY	03	04	1

NOTE 1 ALL CABLE PINS F, J, L, N, R, U ARE GROUNDED

QTY.	DESCRIPTION	PART NO.	ITEM NO.
	PARTS LIST		

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY ✓
REMOVE BURRS AND BREAK SHARP CORNERS
MATERIAL
FINISH

DRN C. Cobb DATE 12-5-66
CHKD Wm Richetto DATE 12-5-66
ENG Wm Richetto DATE 12-5-66
PROJ ENG Wm Richetto DATE 12-5-66
PROD Wm Richetto DATE 12-5-66
FIRST USED ON

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE DATASET OR TELETYPE CONT PT08 LOGIC

SIZE A CODE D BS NUMBER 760529I-0-S REV
SCALE
SHEET 1 OF 1 DIST.

REVISIONS
REV. CHANGE NO. CHK

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION

DATE 4/4/68

TITLE PTØ8

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE
A	CHANGED SHEET 3	261	——	4-22-68	DO'Connor	4/24/68

ENG	APPD	SIZE	CODE	NUMBER	REV
Norman Wright	N. Wright 4/4/68	A	SP	PTO8-A-4	A

DEC FORM NO. DRA 107

Ø.Ø OVERALL DESCRIPTION

The PTØ8 is a serial to parallel-parallel to serial converter designed to work between a parallel I/O device and a serial unit such as a Teletype or an asychronous modem.

1.Ø SPECIFICATIONS

The PTØ8 is offered in several configurations as outlined below. Operation is identical within the unit regardless of the configuration specified.

1.1 Options.

1.1.1 PTØ8A

This option is used on the PDP-8/S only, and is a single channel Teletype interface mounted in the base of the Teletype unit.

1.1.2 PTØ8B

Single channel Teletype control, rack mounted.

1.1.3 PTØ8C

Dual Channel Teletype Control, rack mounted

1.1.4 PTØ8F

The PTØ8F is an option that can be installed on a PTØ8B or PTØ8C to adapt the input/output lines of the unit for operation with a modem Two level conversion modules are added (per channel) that convert DEC levels of 0V and -3V to voltages conforming to EIA Standard RS-232B.

1.1.5 PTØ8FX

The PTØ8FX is an option that can be supplied with the F option that will adapt the unit to crystal clock control.

1.2 Mechanical Packaging

1.2.1 Dimensions

All PTØ8 configurations, with exception of the PTØ8A, are contained in a Standard 1943 mounting panel.

Width	19.Ø inches
Height	5.187 inches
Depth	6.75 inches
Finish	Chromicolt
Power Connections	AMP FASTON
Panel Aid wiring used throught.	

1.2.2 Mounting Requirements

Any standard DEC cabinet or 19 inch mounting panel will accomodate the unit (except PTØ8A).

1.3 Environmental Specifications

1.3.1 Operating temp. range -Ø°C to 55°C

1.3.2 Noise immunity ≈ 1 Volt.

1.4 Power Requirements

Power must be supplied to the unit as follows:

+1ØV	-15V
1.1 AMP	1Ø5 MA
(1.5 AMP	15Ø MA) PTØ8FX only.

1.5 Margins

The unit shall operate satisfactory over the following temp. range:

+1ØV ——— ±2V
-15V ——— ±3V

2.Ø CABLING

2.1 I/O Cables

Six standard I/O cables are required to connect the PTØ8 to the PDP bus.

2.2 Teletype Cable

On units equipped for Teletype Operation, a 12 ft. cable terminated with a WØ7Ø connecter is necessary.

2.3 Data Phone Cable

On units equipped for modem operation, a 25 ft. cable is required. One end terminated with a WØ21 connector, the other end terminated with a hooded data set connector (DB-19604-432).

3.Ø Tests and/or Diagnostics

3.1 Requirements

Maindec 828
Standard PDP-8
Off-line Teletype
Six (6) I/O Cables
One Teletype Cable (12 ft.)

3.2 Procedure

Perform tests as outlined in Maindec 828

MASTER DRAWING LIST

DWG. NO.	REV. LET.	NO. OF SHEETS	TITLE
A-ML-7605408-0	////	1	DATASET CRYSTAL CONTROL PT08B WITH F & X OPTIONS

REVISIONS			
REV.	DATE	CHG. NO.	APP'D.

DRN. N.Crowley	DATE 12/68	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D.	DATE	
ENG. A.Ricketts	DATE 12/68	TITLE DATASET CRYSTAL CONTROL PT08B WITH F & X OPTIONS
PROJ. ENG. A.Ricketts	DATE 12/68	
PROD.	DATE	
FIRST USED ON		SIZE A · CODE ML · NUMBER PT08B-FX · REV.
SCALE		
SHEET 1 OF 1		DIST.

DEC FORM NO.
DRA 103

MASTER DRAWING LIST

DWG. NO.	REV. LET.	NO. OF SHEETS	TITLE
A-PL-7605291-0-1	A	1	Dataset Control PTØ8
A-PL-7605291-0-7	A	1	Module Location Type PTØ8-FX
D-MU-7605291-0-7	A	1	Module Location Type PTØ8-FX
D-UA-7605291-0-4	A	1	Dataset Control PTØ8
D-BS-7605291-0-8	A	1	Dataset-Crystal Control (PTO8-B with OPTION
PC-5003979-0-0	C		Printed Circuit Wiring
PC-5003980-0-0	C		Printed Circuit Wiring
A-SP-PTO8-A-4	A	4	ENGINEERING SPECIFICATIONS

REVISIONS			
REV.	DATE	CHG. NO.	APP'D.
A	4/68	261	D.O.
B	4/68	61	A.R.
C	7/69	7605291-1	D.P.

DRN. Q. Ricketts	DATE 3/29/68	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D. Q. Ricketts	DATE 3/29/68	
ENG. Q. Ricketts	DATE 3/29/68	
PROJ. ENG. Q. Ricketts	DATE 3/29/68	
PROD. Q. Ricketts	DATE 3/29/68	
FIRST USED ON		
SCALE		
SHEET 1 OF 1		

TITLE

DATASET CRYSTAL CONTROL
PTØ8 LOGIC
(PTO8-B with FX OPTION)

SIZE	CODE	NUMBER	REV.
A	ML	7605408-0	C

DIST.

DEC FORM NO.

PARTS LIST

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

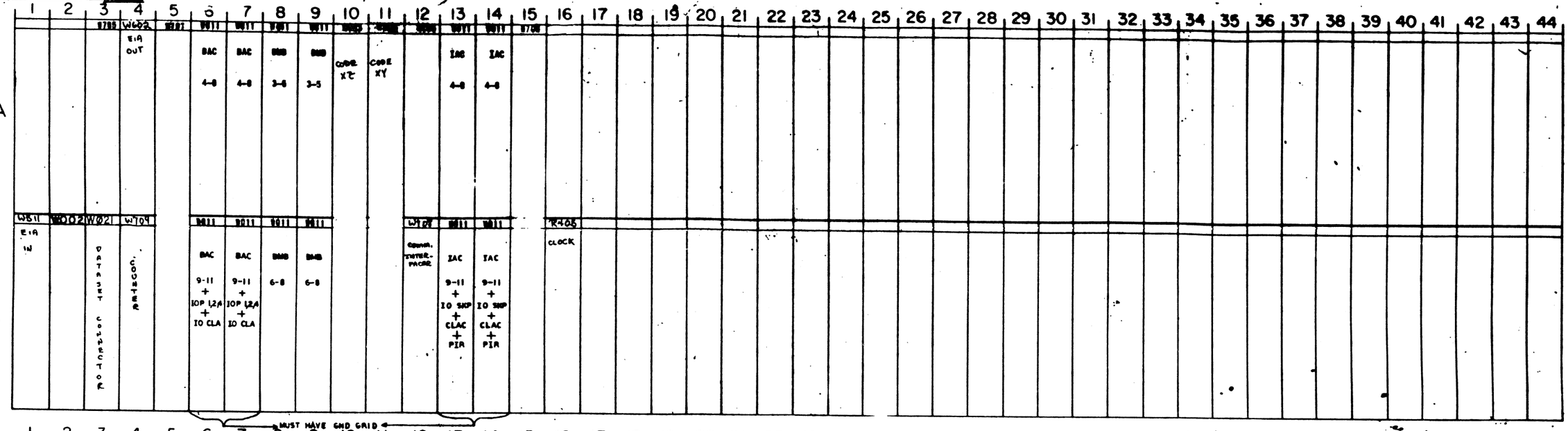
PART NO.	DRWG. NO.	NO. REQD.	DESCRIPTION ITEM — STOCK SIZE — CAT. NO. — MFG.	DEC. STOCK NO.
1	A-PL-7005305-0-0	1	PT08-B WIRED ASSY	7005305
2		8	POP RIVET 1/8 DIAx19/64 LG. #AD43AB5 U.S.M.C.	9006460
3	SS-100153-1	1	1943 MTG PANEL LABEL (WHITE BACKGROUND)	
4		1	TERM BLOCK #602-3/4ST3 KULKA	12-02491
5		2	CAPACITOR 6.8 MFD 35V SPRAGUE	10-05306
6		1	TERM. #2116-06-00 SHAKEPROOF	90 '69
7		1	EYELET 1090 1/8 O.D. x 3/16 LG STIMPSON	9006733
8	C-MD-5302485-0-0	1	LEFT END PANEL	5302485
9	C-MD-5302486-0-0	1	RIGHT END PANEL	5302486
10		4	EYELET A-1152,.192 OD x.575 LG. STIMPSON	9006736
11	C-IA-7405600-2-0	6	CONNECTOR CABLE 8S-PT08	74-5600-2
12	C-IA-7005717-0-0	1	DATASET CABLE	7005717
13	C-AD-705289-2-0		POWER CORD (PT08-B TO PDP-8S)	7005289-2
14	SEE MDL		UTILIZATION MODULE LIST	
15	SEE MDL		UTILIZATION MODULE LIST	
16	SEE MDL		WIRING LIST	

REVISIONS

CHANGE NO.	DATE	ENG.
A-53	4-9-68	Quirk
B-3475	4/23/68	
ADDED DEC STOCK NO'S		

MADE BY Alan Pickett	DATE 12-6-66	TITLE DATASET CONTROL PT08-	SIZE A / CODE PL / NUMBER 7605291-0-1 / REV. B
CHECKED Alan Pickett	DATE 12-6-66	FOR 6	ASSY. NO. D-UA-PT08-B-0
ENG Alan Pickett	DATE 12/6/66		SHEET 1 OF 1

DEC FORM NO. DRA 109



UNLESS OTHERWISE SPECIFIED			
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30' FINAL SURFACE QUALITY 7 REMOVE BURRS AND BREAK SHARP CORNERS	DRN. Q. Rubbett	DATE 3/19/68	EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS
	CHK'D. Q. Rubbett	DATE 3/19/68	TITLE MODULE LOCATION TYPE PT08 - FX
	ENG. Q. Rubbett	DATE 5/31/68	
	PROJ. ENG. Q. Rubbett	DATE 3/31/68	
	MFGR. Q. Rubbett	DATE 5/24/68	
MATERIAL	FIRST USED ON		SIZE D CODE MU NUMBER 7605291-0-7 REV. A
FINISH	SCALE		DIST.
	SHEET 1 OF 1		

REVISIONS	REV
ECO 61	A

PARTS LIST

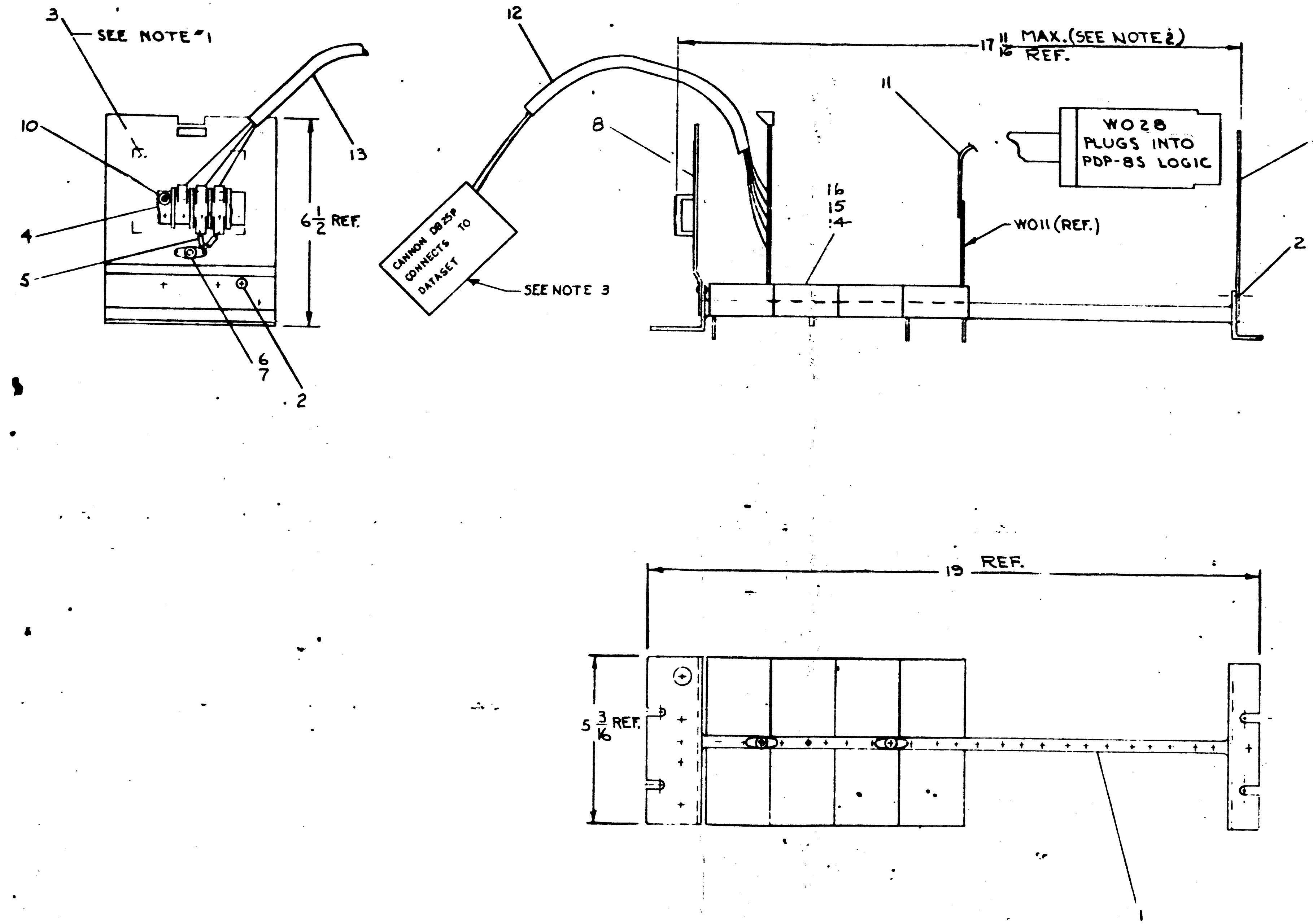
DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

PART NO.	DRWG. NO.	NO. REQD.	DESCRIPTION ITEM — STOCK SIZE — CAT. NO. — MFG.	DEC. STOCK NO.
		1	W705 +3,6 Volt Power Supply	
		1	R405 CLOCK	
		1	W005 Clamped Loads	
		1	W706 TELETYPE RECEIVER	
		2	W103 DEVICE SELECTOR	
		1	W707 TELETYPE TRANSMITTER	
		1	W002 CLAMPED LOADS	
		1	G701 CABLE TERMINATOR	
		1	W511 NEG. INPUT CONVERTER	
		1	W602 EIA CONVERTER	
		1	W708 INTERFACER	
		1	W709 COUNTER * SEE NOTE 3 ON D-BS-760539-0-8	

REVISIONS		
CHANGE NO.	DATE	ENG.
A-61	4-22-64	

MADE BY	DATE 2/6/64	TITLE MODULE LOCATION TYPE PT08-FX	SIZE A	CODE PL	NUMBER 760529I-0-7	REV. A
CHECKED	DATE 3/20/64	FOR	ASSY. NO.		SHEET 1 OF 1	
ENG.	DATE					

DEC FORM NO. DNR 100



NOTES:

1. DEC. STICKER TO BE APPLIED TO OUTSIDE SURFACE OF LEFT END PANEL AS SHOWN
2. 17 11/16 REF. DIM TO BE USED BY QUALITY CONTROL ONLY
3. TO INTERFACE INKTRONIC USE CANNON DD25S/CINCH DBM25S REFERENCE TO D-BS-7605291-0-8 REV. 1.

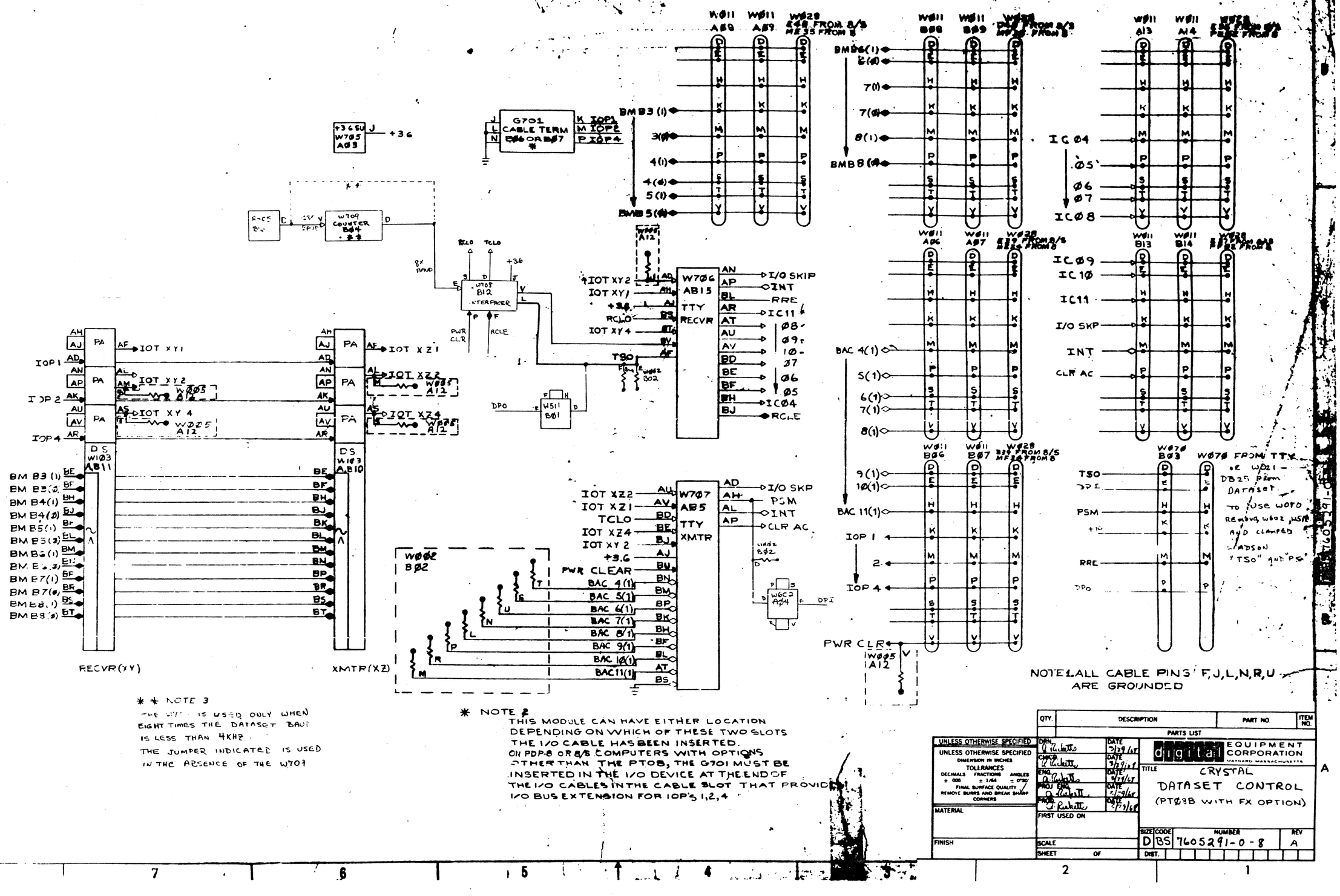
REV.	CHANGE NO.	CHK
A	7605294-000C1	D. PETERSON

[redacted] EQUIPMENT CORPORATION

TITLE: DATASET CONTROL PT08-

SCALE 1/2 SHEET 1 OF 1

D UA 7605291-0-4 REV. A



** NOTE 3
THE W709 IS USED ONLY WHEN EIGHT TIMES THE DATASET BAUD IS LESS THAN 4KHZ.
THE JUMPER INDICATED IS USED IN THE ABSENCE OF THE W709

* NOTE 2
THIS MODULE CAN HAVE EITHER LOCATION DEPENDING ON WHICH OF THESE TWO SLOTS THE I/O CABLE HAS BEEN INSERTED. ON PDP-8 OR 8/S COMPUTERS WITH OPTIONS OTHER THAN THE PT08, THE G701 MUST BE INSERTED IN THE I/O DEVICE AT THE END OF THE I/O CABLES IN THE CABLE SLOT THAT PROVIDES I/O BUS EXTENSION FOR IOP'S 1,2,4

NOTE 1 ALL CABLE PINS F, J, L, N, R, U ARE GROUNDED

REV	ECO
A	261

QTY.	DESCRIPTION	PART NO.	ITEM NO.
	PARTS LIST		

UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS ± .005 FRACTIONS ± 1/64 ANGLES ± 0°30'
FINAL SURFACE QUALITY
REMOVE BURRS AND BREAK SHARP CORNERS
MATERIAL
FINISH

		DATE
DRN.	Q. Ruckette	3/29/68
CHKD.	Q. Ruckette	3/29/68
ENG.	Q. Ruckette	3/29/68
PROJ. ENG.	Q. Ruckette	3/29/68
APPD.	Q. Ruckette	3/29/68
FIRST USED ON		
SCALE		
SHEET OF		

digital EQUIPMENT CORPORATION
MAYNARD MASSACHUSETTS

TITLE CRYSTAL DATASET CONTROL (PT08 WITH FX OPTION)

SIZE	CODE	NUMBER	REV
D	BS	7605291-0-8	A
DIST.			

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

ENGINEERING SPECIFICATION

DATE 4/4/68

TITLE PTØ8

REVISIONS

REV	DESCRIPTION	CHG NO	ORIG	DATE	APPD BY	DATE
A	CHANGED SHEET 3	261	——	4-22-68	DO'Connor	4/24/68

ENG	APPD	SIZE	CODE	NUMBER	REV
Norman Wright	N. Wright 4/4/68	A	SP	PTØ8-A-4	A

DEC FORM NO
DRA 10?

SHEET 1 OF 4

ENGINEERING SPECIFICATION — CONTINUATION SHEET

TITLE PTØ8

Ø.Ø OVERALL DESCRIPTION

The PTØ8 is a serial to parallel-parallel to serial converter designed to work between a parallel I/O device and a serial unit such as a Teletype or an asychronous modem.

1.Ø SPECIFICATIONS

The PTØ8 is offered in several configurations as outlined below. Operation is identical within the unit regardless of the configuration specified.

1.1 Options.

1.1.1 PTØ8A

This option is used on the PDP-8/S only, and is a single channel Teletype interface mounted in the base of the Teletype unit.

1.1.2 PTØ8B

Single channel Teletype control, rack mounted.

1.1.3 PTØ8C

Dual Channel Teletype Control, rack mounted

1.1.4 PTØ8E

The PTØ8E is an option that can be installed on a PTØ8B or PTØ8C to adapt the input/output lines of the unit for operation with a modem. Two level conversion modules are added (per channel) that convert DEC levels of 0V and -3V to voltages conforming to EIA Standard RS-232B.

	SIZE	CODE	NUMBER	REV
	A	SP	PTØ8-A-4	A

DEC FORM NO
DRA 10B

SHEET 2 OF 4

1.1.5 PTØ8FX

The PTØ8FX is an option that can be supplied with the F option that will adapt the unit to crystal clock control.

1.2 Mechanical Packaging

1.2.1 Dimensions

All PTØ8 configurations, with exception of the PTØ8A, are contained in a Standard 1943 mounting panel.

Width	19.Ø inches
Height	5.187 inches
Depth	6.75 inches
Finish	Chromicolt
Power Connections	AMP FASTON
Panel Aid wiring used throught.	

1.2.2 Mounting Requirements

Any standard DEC cabinet or 19 inch mounting panel will accomodate the unit (except PTØ8A).

1.3 Environmental Specifications

1.3.1 Operating temp. range -Ø°C to 55°C

1.3.2 Noise immunity ≃1 Volt.

1.4 Power Requirements

Power must be supplied to the unit as follows:

+1ØV	-15V
1.1 AMP	1Ø5 MA
(1.5 AMP	15Ø MA) PTØ8FX only.

1.5 Margins

The unit shall operate satisfactory over the following temp. ranges:

+1ØV ——— ±2V
-15V ——— ±3V

2.Ø CABLING

2.1 I/O Cables

Six standard I/O cables are required to connect the PTØ8 to the PDP bus.

2.2 Teletype Cable

On units equipped for Teletype Operation, a 12 ft. cable terminated with a WØ7Ø connecter is necessary.

2.3 Data Phone Cable

On units equipped for modem operation, a 25 ft. cable is required. One end terminated with a WØ21 connector, the other end terminated with a hooded data set connector (DB-19604-432).

3.Ø Tests and/or Diagnostics

3.1 Requirements

Maindec 828
Standard PDP-8
Off-line Teletype
Six (6) I/O Cables
One Teletype Cable (12 ft.)

3.2 Procedure

Perform tests as outlined in Maindec 828

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A					W705	R401 RX	W707	W706	W103 TX	W103 RX	IAC 4-8 (8/I J5)		BAC 4-8 (8/I J1)		BMB 3-5 (8/I J3)	
B				W070	W005	R401 TX					IAC 9-11 (8/I J6)		BAC 9-11 (8/I J2)		BMB 6-8 (8/I J4)	

Module location derived from tracing wiring. Unused slots have no connections other than power.