

PDP 11/34

DOOL

PROCESSOR TYPE PDP-11 FAMILY

11/34-00001 CODE: P DD: *
APR 76 - PROBLEM: Current drawing package for the PDP-11/34 documents only the DM and DN machine configurations. There are also no Field Maintenance Print Set drawings called out in the package.
CORRECTION: Obsolete the present PDP-11/34 Unit Assembly drawing package and provide replacements. These new prints include Field Maintenance Print Set, Drawing Directory, and Unit Assembly drawings for all 11/34 configurations (DC, DD, HC, HD, LC, LD, MC, MD, LH, LJ, DH, DJ, MD, MJ, HH, HJ, LM, LN, DM, DN, MM, MN, HM, and HN).
IN-PLANT EFFECTIVITY: Documentation change only. All old Drawing Directories and Unit Assembly drawings should be obsoleted immediately and replaced.

11/34-00002 CODE: P DD: A
MAY 76 - PROBLEM: An ECO to the KY11-LA Operator's Console, to cure a power fail problem, affects the PDP-11/34 documentation.
CORRECTION 1: Document the effect of the KY11-LA on the 5.25 and 10.5 inch variations of the PDP-11/34.
CORRECTION 2: Correct documentation errors.
IN-PLANT EFFECTIVITY: Documentation change only.

11/34-R0003 CODE: F
FEB 77 - PROBLEM: There is no SACK TIMEOUT circuitry in PDP-11/34 systems containing an M7266 at CS revision "A" thru "E". If these systems contain certain bus-requesting (NPR or BR) peripherals, they may hang in a state where a BUS GRANT is sent by the processor, but the peripheral neither passes the GRANT nor returns BUS SACK.

CORRECTION: M8264 NO SACK TIMEOUT module must be incorporated into all PDP-11/34 systems containing any M7266 at CS revision "A" thru "E". The M8264 module is a Quad SPC which must be installed in Slot 3 of the DD11-P processor backplane.
IN-PLANT EFFECTIVITY: (August 76) This ECO must be implemented on all PDP-11/34 machines from FA & T back through assembly.
FIELD EFFECTIVITY: Every PDP-11/34 in the field must have an M8264 in slot CDEF3.
QUICK CHECK: In slot 3C thru 3F there is an M8264
Time to Install and Test: 0.5 hr.
Documentation: \$5.00; Parts price undetermined at date of FCO release
The DEC on-site labor charge will be the time required to install and test the FCO at the then-current hourly rate.
Kit Contents: (PF1848 5\$*) FCO and PARTS

11/34-00004 CODE: D DD: B
OCT 76 - PROBLEM: Present PDP-11/34 configurations do not support the RK06 or RPO6 and require two M9301 versions (M9301-YA and M9301-YB) to support all popular peripherals.
CORRECTION: Delete M9301-YA and M9301-YB bootstrap modules from all PDP-11/34 configurations and replace them with an M9301-YF bootstrap terminator.
IN-PLANT EFFECTIVITY: Begin inserting M9301-YF bootstraps in all PDP-11/34 configurations on or before April 1, 1977. Do not scrap any M9301-YA or M9301-YB modules. Use existing stock of M9301-YA and M9301-YB modules for PDP 11/04 systems.

11/34-00005 CODE: M DD: C
DEC 76 - PROBLEM 1: Bezel difficult to install
CORRECTION 1: Change mounting hardware of bezel to facilitate assembly.
PROBLEM 2: Air filter difficult to remove for replacement
CORRECTION 2: Change procedure for installation and removal of air filter
PROBLEM 3: BA11-K box does not sit flush with other equipment.
CORRECTION 3: Redesign console mounting bracket for the KY11-LA
CORRECTION 4: Connector decal call-out corrected.
IN-PLANT EFFECTIVITY: Phase-in to all new hardware orders placed after December 31, 1976; no rework or scrap.

PDP11/34-00006 CODE: D DD: D
MAR 77 - PROBLEM SYMPTOM: decals are lifting off the box.
PROBLEM 1: Slides are interfering with decals in their present location when the unit is tilted or extended.
CORRECTION 1: Relocate decals to the louvered section of the chassis above the slides.
PROBLEM 2: UL and NFPA decals are called out at both BA11-K and processor levels.
CORRECTION 2: Delete UL and NFPA decals from processor level
IN-PLANT EFFECTIVITY: Immediately in all new builds.

PROCESSOR TYPE PDP-11 FAMILY

PROCESSOR

11/34-80007 CODE: F DD: E
OCT 77 - PROBLEM SYMPTOMS: +5 volt and ± 15 volt regulators may be severely damaged.
CORRECTION 1: Restate Note 5 on drawing E-UA-11/34-0-0 sheet 1 of 3 to read: when the DD11-PK is used with a BA11-K expansion box without battery back-up (i.e., no H785 or H7850), install jumpers from -15 to -15B, +15 to +15B, and +5 to +5B. This will provide power to the MOS memory voltage rails.
PROBLEM 2: It is possible to interconnect two regulated +5V supplies when installing FP11-AU on older 11/34's.
CORRECTION 2: On drawing E-UA-11/34-0-0 sheet 1 of 3. Add as note 15: BA11-K's that use the 5410864-YA-1 power distribution (i.e., 11/34A 11/34 with FP11-AU, and some 11/04's) and have one DD11-CK (or an additional DD11-DK) can only have the +5 to +5B jumper in one of the backpanels. If two of the backpanels have the jumper in, the +5V regulators may be interconnected together. Typically this jumper is in the first backpanel, but it may be placed in one of the other backpanels if deemed necessary for power requirements.
IN-PLANT EFFECTIVITY: (May 1977) Immediate.
FIELD EFFECTIVITY: Update the Field Maintenance Print Set, using the revised print package, in every site where there is a PDP 11/34.
QUICK CHECK: Drawing E-UA-11/34-0-0, sheet 1 of 3, is at revision "H".
Time to Install and Test: N/A hr.
Documentation: \$5.00. Parts: \$
The DEC on-site labor charge will be the time required to install and test the FCO at the then-current hourly rate.

PDP-11/34-00008 CODE: D DD: F
JUN 77 - PROBLEM 1: Presently used shipping bracket is too expensive.
CORRECTION 1: Use new shipping bracket 74-13659.
PROBLEM 2: Decal locations not shown on 5.25" box
CORRECTION 2: Add view showing decal locations.
CORRECTION 3: To ensure integrity of front console add bearing strips
IN-PLANT EFFECTIVITY: (1) All brackets ordered after July 11, 1977 will be new style. Use existing stock, do not scrap. (2) Documentation change only. (3) Phase-in to all new builds by August 21, 1977

FCCO'S

digital

FIELD CHANGE ORDER

FCO PDP-11/34 R 0003 PAGE 1 of 2
Level of Urgency (LOU)

STATUS LOU	PCO EXPENSE RESPONSIBILITY		
	WARRANTY	K	PER CALL
Mandatory	DIGITAL		
Required			CUST
Specification			CUST
Improvement			CUST
Hardware Option	PURCHASEABLE OPTION		
Cosmetic	CUST	CUST	CUST

ESTIMATED TIME TO INSTALL and TEST (on-site)
(Travel time not included)
0.5
DECIMAL HOURS

INSTALLATION CHARGE NUMBER
(For Field Service reporting)
FCR- 11/34
AUG 76

APPLICABILITY

EVERY PDP-11/34 IN THE FIELD MUST HAVE AN M8264 IN SLOT C3, D3, E3, F3.

On-site FCO installation, by DEC, will be in accordance with both APPLICABILITY and the above FCO EXPENSE RESPONSIBILITY matrix.

QUICK CHECK (To determine if FCO has been installed)

IN SLOT 3 C THRU F THERE IS AN M8264

LAST PREVIOUS FCO's NONE

RELATED OR PREREQUISITE FCO's / MCO's

SPECIAL TEST EQUIPMENT, TOOLS, or SUPPLIES
(Not included in the Field Retrofit Kit)

FCO KIT CHARGES (United States and Canada only)

KIT ITEM	DOCUMENTATION	PARTS	OTHER
	<input checked="" type="checkbox"/> FCO <input type="checkbox"/> PARTS	\$5.00	**

Parts charges are as of FCO release date and are subject to change

PARTS AVAILABILITY DATE UNDETERMINED

LOGISTICS CODING (PF1848 5\$**) (400)(400)(50)

LOGISTICS REVIEW

QTY	PART NUMBER	DESCRIPTION
1	M8264	MODULE

** PARTS PRICE UNDETERMINED AT DATE OF FCO RELEASE

*** FIELD SERVICE LOGISTICS WILL INCLUDE, IN THE PARTS KIT, CIRCUIT SCHEMATIC DRAWINGS WHICH CORRESPOND TO THE REVISION LEVEL OF THE MODULE THAT IS SHIPPED.

(1-77)(50)(50)(ETC.)

NOTES:

APPROVED - Field Service Product Support

William Apperlee
WILLIAM APPERLEE

DISTRIBUTION CODING

- To all Field Offices
- To Regional Offices

LIST 11
FDQ 300

SPO

P

M

IKQ 50 350

APPROVED - Technical Documentation

Al Finney 2-15
FCO RELEASE DATE

FEBRUARY 18, 1977

digital**ENGINEERING
CHANGE ORDER**
 ORIGINATOR John Bloem
 TEL EXT 3018 DATE 8/19/76
 LOCATION ML21-1/EB1
 COST CENTER NO. 39A

 FCO PDP-11/34-R0003
 PAGE 2
PROBLEM There is no SACK TIMEOUT circuitry in PDP 11/34 systems containing an M7266 Rev. A thru Rev. E module. If these systems contain certain Bus Requesting (NPR or BR) peripherals, they may hang in a state where a BUS GRANT was sent by the processor, but the peripheral neither passed the GRANT nor returned BUS SACK.
M98-0039A-66812
CORRECTION M8264 NO SACK TIMEOUT module must be incorporated in all PDP 11/34 systems containing any M7266 Rev. A thru Rev. E. ~~In systems whose space constraints will not allow the inclusion of the M8264, the M7266 can be retrofitted with the NO SACK TIMEOUT changes specified in a forthcoming ECO to the M7266.~~

The M8264 module is a Quad SPC which must be installed in Slot 3 of the DD11-P processor backplane.

BREAK-IN/EFFECTIVITY

This ECO must be implemented on all PDP 11/34 machines from F. A. & T. back through assembly. Machines currently in the field should be updated to this ECO only when the error situation described above occurs.

QUICK-CHECK

Systems containing an M7266 Rev. A thru Rev. E module must also include M8264 SACK TIMEOUT module.

TEST
 UNIT TO BE CHANGED
 PDP 11/34
 Field Maint.
 Print Sets

 PRODUCT FAMILIES
 AFFECTED

11/34

TYPE OF ECO
 HARDWARE
 SOFTWARE
 PURCHASE
 SPEC.
**FIELD SERVICE
AFFECTED**
 YES NO

 D. P. R. DISTR.

 L. O. U. CODE
WHERE USED

11/34

ITEM NO.	DOCUMENT/PART NO.	OLD REV	NEW REV	DESCRIPTION OF CHANGE /DISPOSITION OF MATERIAL
1	B-TC-11/34-0-1	A	B	Update per this ECO.
2	B-TC-11/34-0-2	A	B	Update per this ECO.
3	E-UA-11/34-0-0	B	C	Update per this ECO.
4	C-PL-11/34-0-0	B	C	Update per this ECO.
5	M8264	-	-	(No Sack Time Out) Add qty of 1 to all variations

APPROVAL SIGNATURE (TYPE NAME and SIGN)
 PROJECT ENGR. John Bloem *John E. Bloem*

 ENG. MGR. John Sofio *John Sofio*

 TEL. EXT. 3018 COST CENTER NO. 39A

 DISC. PROJ. NO. E20-07846 DATE 8/19/76

 COORD. NO. 100509 REF. NO. ME
REVIEW SIGNATURES (SEE INSTRUCTIONS FOR APPLIC.)

FIELD SERVICE _____

DIAGNOSTIC ENGR. _____

MARY BULLOCK 8-31-76


digital

FIELD CHANGE ORDER

FCO PDP 11/34 5 0007 PAGE 1 of 1
Level of Urgency (LOU)

APPLICABILITY

UPDATE THE FIELD MAINTENANCE PRINT SET, USING THE REVISED PRINT PACKAGE, IN EVERY SITE WHERE THERE IS A PDP 11/34.

THE FOLLOWING NOTES HAVE BEEN ADDED TO DRAWING E-UA-11/34-0-0, SHEET 1 OF 3, REVISION "H".

- CHANGE NOTE 5 ON SHEET 1 TO READ AS FOLLOWS:
WHEN THE DD11-PK IS USED WITH A BA11-K EXPANSION BOX WITHOUT BATTERY BACK-UP (I.E., NO H785 OR H7850), INSTALL THE THREE JUMPERS SHOWN:
A) -15 TO -15B
B) +15 TO +15B
C) +5 TO +5B (SEE NOTE 15)
USE #20 INSULATED BUS WIRE ON SIDE 2. THIS WILL PROVIDE POWER TO THE MOS MEMORY VOLTAGE RAILS.
- ADD AS NOTE 15 ON SHEET 1 THE FOLLOWING:
BA11-K'S THAT USE THE 5410864-YA-1 POWER DISTRIBUTION (I.E., 11/34A, 11/34 WITH FP11-AU, AND SOME 11/04'S) AND HAVE ONE DD11-CK (OR AN ADDITIONAL DD11-DK) CAN ONLY HAVE THE +5 TO +5B JUMPER IN ONE OF THE BACKPANELS. IF TWO OF THE BACKPANELS HAVE THE JUMPER IN, THE +5V REGULATORS MAY BE CONNECTED TOGETHER. TYPICALLY THIS JUMPER IS IN THE FIRST BACKPANEL, BUT IT MAY BE PLACED IN ONE OF THE OTHER BACKPANELS IF DEEMED NECESSARY FOR POWER REQUIREMENTS.

STATUS LOU	FCO EXPENSE RESPONSIBILITY		
	WARRANTY	K	PER CALL
Mandatory	DIGITAL		
Required			CUST
Specification			CUST
Improvement			CUST
Hardware Option	PURCHASABLE OPTION		
Cosmetic	CUST	CUST	CUST

ESTIMATED TIME TO INSTALL and TEST (on-site) (Travel time not included)
N/A
DECIMAL HOURS

FCR - 11/34
FP11-A
DD11-C
DD11-D
DD11-P
MAY '77

On-site FCO installation, by DFC, will be in accordance with both APPLICABILITY and the above FCO EXPENSE RESPONSIBILITY matrix.

QUICK CHECK (To determine if FCO has been installed)
DRAWING E-UA-11/34-0-0, SHEET 1 OF 3, IS AT REVISION "H".

LAST PREVIOUS FCO: R03
RELATED OR PREREQUISITE FCOs / MCOs

FCO KIT CHARGES (United States and Canada only)

KIT ITEM	DOCUMENTATION	PARTS	OTHER
	<input checked="" type="checkbox"/> FCO <input checked="" type="checkbox"/> PRINTS \$5.00	NONE	

Parts charges are as of FCO release date and are subject to change
PARTS AVAILABILITY DATE _____
LOGISTICS CODING _____ (2K) (0) (2K)

LOGISTICS REVIEW _____
QTY PART NUMBER DESCRIPTION

PROBLEM SYMPTOMS: +5 VOLT AND ± 15 VOLT REGULATORS MAY BE SEVERELY DAMAGED.

ORDER BY THIS NUMBER	KIT INCLUDES	
	FCO PRINTS	PARTS
FA-02026-00	X	X
FA-02026-01	X	
FA-02026-02		X

APPROVED - Field Service Product Support
Bill Ruppelle
BILL RUPPERLEE

DISTRIBUTION CODING
 To all Field Offices
 To Regional Offices
LIST 11
IDQ 300
LKO 2000
2300

APPROVED - Technical Documentation
Al Kimmel
FCO RELEASE DATE
SEPTEMBER 30, 1977

FCO 11/34-S0007

REVISED PRINT PACKAGE

SEPTEMBER 9, 1977

THIS PACKAGE INCLUDES SELECTED PRINTS WHICH ARE SPECIFICALLY REQUIRED IN THE FIELD FOR FCO IMPLEMENTATION AND/OR FOR THE UPDATING OF THE CUSTOMER PRINT SET (FIELD MAINTENANCE PRINT SET) TO THE PROPER REVISION LEVEL FOR THE FCO.

DRAWING	SHEET	REVISION
E-UA-11/34-0-0	1 OF 3	"H"

DISTRIBUTION CODING (E20-07846) (121713)		SPO-
<input type="checkbox"/> All Field Offices	List 11	LSC FA-02026-02
<input checked="" type="checkbox"/> Regional Offices	FDO 45	LKO 2000
<input type="checkbox"/>	P 1-24	M 10-3-77 2045

TECH. TIPS

digital	FIELD SERVICE TECHNICAL MANUAL				Option or Designator PDP 11/34 SYSTEM
	12 Bit <input type="checkbox"/>	16 Bit <input checked="" type="checkbox"/>	18 Bit <input type="checkbox"/>	36 Bit <input type="checkbox"/>	PROCESSOR

Title M9302 TERMINATOR (CAUTION)					Tech Tip PDP 11/34 Number TT-1
All	Processor Applicability		Author Howard Janke	Rev 0	Cross Reference
11/04	11/34		Approval John Woelbern	Date 4/26/76	

The M9302 terminator used in the 11/34 can be the cause of disaster. This terminator positively will not work in a Modified Unibus slot. The Modified Unibus uses some of the Unibus Ground Lines as voltage rails (to accomodate SPC memories). Insertion of the M9302 into a Modified Unibus slot will short ground and power.

The Modified Unibus slots are:

- DD11-C A & B of slots 2 and 3
- DD11-D A & B of slots 2 thru 8
- DD11-P A & B of slots 2 thru 8

The M9302 should always be the last item on the Unibus. If an existing option is removed from a middle slot, a grant continuity card must be put in its place.

DO NOT MOVE THE M9302 TERMINATOR.

Title MM11-D/DP MEMORY BACKPLANE					Tech Tip PDP 11/34 Number TT-2
All	Processor Applicability		Author William Aupperlee	Rev g	Cross Reference
			Approval William Dimbat	Date 8-4-76	

This Tech Tip is for cross reference purposes only.

Title M9301-YA/YB SET UP AND CONSIDERATIONS					Tech Tip PDP 11/34 Number TT-3
All	Processor Applicability		Author Howard Janke	Rev g	Cross Reference
			Approval John Woelbern	Date 8-4-76	

This Tech Tip is for cross reference purposes only.

Title NOISE PROBLEM WITH H777 IN THE BALL BOX					Tech Tip PDP 11/34 Number TT-4
All	Processor Applicability		Author Bill Aupperlee	Rev g	Cross Reference
11/04/34			Approval John Woelbern	Date 10-13-76	

This Tech Tip is for cross reference purposes only.

Title DD11/DF Power Harness Error (BA11-F Box)				Tech Tip Number PDP11/34-TT-5	
All Processor Applicability		Author Robert Brassard Rev 0		Cross Reference	
11		Approval J. Woelbern Date 1/4/77		DD11-TT-4	

This tech tip is for cross reference only.

Title SILK SCREEN DECALS				Tech Tip Number PDP 11/34-TT-6	
Author WM. AUPPERLEE		F.S. Office MAYNARD Date 5/12/77		Revision 0	
All Processor Applicability		Mgr./Sup. JOHN WOELBERN Date 5/12/77		Cross Reference	
11		Approval: Date			

SOME 11/04'S AND 11/34'S HAVE ARRIVED AT CUSTOMER SITES WITH THE WRONG SILK SCREEN, I.E. A 11/04 HAS THE 11/34 SILK SCREEN, PRESENTLY THERE EXISTS A ADHESIVE BACKED DECAL THAT CAN BE PLACED OVER THE SILK SCREEN. THE PART #'S FOR THE ADHESIVE BACKED DECALS ARE AS FOLLOWS.

11/04	36-13359-00
11/34	36-13359-01

Title POOR SOLDER CONNECTIONS ON EXPANDER BACKPLANES				Tech Tip Number PDP 11/34-TT-7	
Author WM. AUPPERLEE		F.S. Office MAYNARD Date 5/12/77		Revision 0	
All Processor Applicability		Mgr./Sup. JOHN WOELBERN Date 5/12/77		Cross Reference	
		Approval: Date		DD11-TT-5	

THIS TECH TIP IS FOR CROSS REFERENCE ONLY.

Title LOSS OF -9V ON-BOARD REGULATOR ON KY11-LB				Tech Tip Number 11/34-TT-8	
Author POWDERLY/AUPPERLEE		F.S. Office MAYNARD Date 8/7/77		Revision 0	
All Processor Applicability		Mgr./Sup. Date		Cross Reference	
11/34 34A 04		Approval: J. WOELBERN Date 8/7/88		KY11-TT-5	

THIS TECH TIP IS FOR CROSS REFERENCE ONLY.

FCR

PDP11/34
PDP11/34 PROCESSOR
FCO Cross Reference

A Chronological Listing of Field Retrofit FCO's Which Must Be
Considered in the Field Installation and Maintenance of This Option/Module/Power Supply

• Indicates FCO Conjunction Must Be Considered With Prior FCO

- 1 M7015-A0002 JAN 73
QUICK SYNOPSIS
Bits picked up in DMA data transfer. Disables
C01 during Data/Bus times
QUICK CHECK
Etch cut between E17 pin 5 and E17 pin 6
NEW REVISION
Rework etch "B" and "C" to CS "E"
- 2 M7015-B0004 SEP 73
QUICK SYNOPSIS
ADD's 80 nsec R/C delay to select lines for
RSTS11
QUICK CHECK
Wire ADD from bottom of R63 to E17 pin 6
NEW REVISION
Rework etch "B" and "C" to CS "E"
- 3 M7014YA-B0003 MAR 74
QUICK SYNOPSIS
GT44 hangs when restarted in Vector Normal-
ize Routine
QUICK CHECK
Wire ADD from E33 pin 9 to feed-thru near
E50 pin 1
NEW REVISION
Rework etch B to CS C
- 4 M7014YA-C0005 JAN 75
QUICK SYNOPSIS
Grant Line reflections cause double grants
QUICK CHECK
180 ohm terminator R90 at E73 pin 5
NEW REVISION
Rework etch B to CS E
- 5 M7867-R0001 JUL 76
QUICK SYNOPSIS
Allows module installation on a DD11-D back-
plane
QUICK CHECK
Jumper wire on CB2
NEW REVISION
Rework etch "D" to CS "D"
COMPATIBILITY
M7867 must be at CS "D" or later when in-
stalled on a DD11-D backplane
- 6 M7014YA-S0006 NOV 76
QUICK SYNOPSIS
DPC can not be loaded by a MOV instruction
using an 11/34
QUICK CHECK
IC 7402 ADD'ed as E83
NEW REVISION
Rework etch B to CS F
COMPATIBILITY
M7014-YA must be at Revision F or later
when VT11 is used with PDP11/04 or 11/34
- 7 DD11D-R0004 NOV 76
QUICK SYNOPSIS
Eliminates noise on INIT and NPR lines
QUICK CHECK
Twisted-pair on A04A1
NEW REVISION
Rework to Wire List A
- 8 DD11P-R0003 NOV 76
QUICK SYNOPSIS
Eliminates noise on INIT and NPR lines
QUICK CHECK
Twisted pair on A04A1
NEW REVISION
Rework to Wire List B
- 9 DR11B-S0015 NOV 76
QUICK SYNOPSIS
Bus hangs with NPG and BR5 asserted. Fails
MAINDEC-11-DZDRB
QUICK CHECK
Wire ADD E03K2 to E02U1
- 10 M7265-S0002 NOV 76
QUICK SYNOPSIS
Prevents glitching on data lines after receipt of
SSYN
QUICK CHECK
E112 is a 74S64 IC
NEW REVISION
Exchange with CS D or later
COMPATIBILITY
When DH11 is used on PDP11/34, M7277
must be at CS K and M7265 at CS D or later

**PDP11/34
PDP11/34 PROCESSOR
FCO Cross Reference**

**A Chronological Listing of Field Retrofit FCO's Which Must Be
Considered in the Field Installation and Maintenance of This Option/Module/Power Supply**

• Indicates FCO Conjunction Must Be Considered With Prior FCO

- | | |
|---|--|
| <p>11 5411800-S0001 NOV 76
QUICK SYNOPSIS
Strengthens programmer's console keypad
QUICK CHECK
Presence of 70-13177 Keyboard support
NEW REVISION
Rework etch C to CS C</p> | <p>16 M7266-S0004 JAN 77
QUICK SYNOPSIS
Inability to process a HALT INSTRUCTION
QUICK CHECK
Wire ADD E19 pin 7 to pin 7
NEW REVISION
Rework etch B to CS D and CS B1</p> |
| <p>12 M7277-R0008 NOV 76
QUICK SYNOPSIS
Required for DH11 use on PDP11/34 systems
QUICK CHECK
9802 IC ADD'ed as E2
NEW REVISION
Exchange. new CS K
COMPATIBILITY
M7277 must be at etch C CS K or later when
DH11 is used on PDP11/34 systems</p> | <p>17 M7015-S0007 JAN 77
QUICK SYNOPSIS
Logic change allows interrupt requests to be
deferred until BG level is dropped.
QUICK CHECK
IC 314 ADD'ed as E38
NEW REVISION
Exchange with CS H1
COMPATIBILITY
M7015 must be at CS H1 in LPS11's that
cannot be placed at end of the unibus</p> |
| <p>13 M7822-S0009 DEC 76
QUICK SYNOPSIS
Data bit 8 is gated only at, or previous to,
SSYNC assertion during a DATIP
QUICK CHECK
Wires ADD'ed at E8 and E71
NEW REVISION
Rework etch C, D, E to CS M</p> | <p>18 M7867-R0002 FEB 77
QUICK SYNOPSIS
Transmitter hang in an illegal ROM state
QUICK CHECK
Wire ADD from E83 pin 7 to E83 pin 11. E48
is ROM 23345A2
NEW REVISION
Rework etch D to CS F</p> |
| <p>14 M7856-S0002 JAN 77
QUICK SYNOPSIS
Allows transmit and receive at high baud rate
QUICK CHECK
Jumper E48 pin 4 to E45 pin 4
NEW REVISION
Rework etch D to CS E</p> | <p>19 5411497-S0001 MAR 77
QUICK SYNOPSIS
Corrects Power Fail sequencing when KY11-
LA is used on BA11-K.
QUICK CHECK
Etch cut between TB4 and TB5
NEW REVISION
Rework etch E to CS E</p> |
| <p>15 11/34-R0003 JAN 77
QUICK SYNOPSIS
ADDs "NO SACK TIME-OUT" Module
(M8264) to 11/34
QUICK CHECK
M8264 in slot 3 C, D, E, F</p> | |

**PDP11/34
PDP11/34 PROCESSOR
FCO Cross Reference**

**A Chronological Listing of Field Retrofit FCO's Which Must Be
Considered in the Field Installation and Maintenance of This Option/Module/Power Supply**

• Indicates FCO Conjunction Must Be Considered With Prior FCO

20 M7822-S0011 JUL 77

QUICK SYNOPSIS

Requires relocation of R52 to prevent break-
age

QUICK CHECK

D864 ADD'ed across R29 located between
E53 and E47

NEW REVISION

Rework etch C, D and E to CS P

22 DD11C-S0003 DEC 77

QUICK SYNOPSIS

Defines in the Field Maintenance Print Set the
correct backplane wiring for +5 volt regu-
lators

QUICK CHECK

Drawing D-IA-7011528-0-0, sheet 1 of 1, is
at revision C

21 M7060-R0001 JUL 77

QUICK SYNOPSIS

LK11/PDP11/34, A Compatibility

QUICK CHECK

Wire ADD'ed to feed-thru to left of E31 pin 1

NEW REVISION

Rework etch "B" to CS "B"

COMPATIBILITY

M7060 must be CS B or later to run on an
11/34, A

11 M7014YA-R0008 AUG 77

QUICK SYNOPSIS

Eliminates relative point distortion

QUICK CHECK

Wire ADD E80 pin 1 to E81 pin 10

NEW REVISION

Rework etch C to CS J

13 11/34-S0007 SEP 77

QUICK SYNOPSIS

Defines in the Field Maintenance Print Set the
correct backpanel wiring of +5 volt and ± 15
volt regulators

QUICK CHECK

Drawing E-UA-11/34-0-0, sheet 1 of 3 is at
revision "H"

24 FP11AU-S0002 OCT 77

QUICK SYNOPSIS

Defines in the Field Maintenance Print Set the
correct backplane wiring of +5 volts

QUICK CHECK

Sheets 1 and 2 of drawing D-MU-FP11-AU-1
are at revision "A"

PDP 1 1/34A

DOOL

PROCESSOR TYPE PDP-11 FAMILY

PROCESSOR

11/34A-00001 CODE: D

FEB 77

CORRECTION: Change BA11-L variation descriptions from "MOS only" to "CORE/MOS", items 10, 11, 12 and 13 on drawing C-PL-1134A-O-D.

IN-PLANT EFFECTIVITY: Documentation update only

11/34A-00002 CODE: D

MAR 77

CORRECTIONS: Add console cable, 7011411-2J, to the 11/34A Print Set. This cable is used to connect the KY11-LA to the H785/H7850 battery backup regulator.

IN-PLANT EFFECTIVITY: Phase-in on or before April 15, 1977.

11/34A-00003 CODE: D

APR 77 - PROBLEM 1: Slides are interfering with decals in their present location when the unit is tilted or extended.

CORRECTION 1: Relocate decals to the louvered section of the chassis above the slides.

PROBLEM 2: UL and UFPA decals are called out at both BA11-K and processor levels

CORRECTION 2: Delete UL and NFPA decals from processor level.

PROBLEM 3: Reference designations J13-J16 do not conform to changes made on Power Distribution Board 54-10864.

CORRECTION 3: Change reference designations to P13-P16.

PROBLEM 4: KY11-LA and LB bezels are difficult to assemble to the main chassis. (on 10.5" only)

CORRECTION 4: Create new bracketry to fasten bezel to chassis.

PROBLEM 5: Air filters require excessive time to change. The finished unit protrudes out of the cabinet .38" causing esthetic problems. (on 10.5" only)

CORRECTION 5: Create new bracketry allowing equipment slides to fasten on to opposite side of cabinet rails.

IN-PLANT EFFECTIVITY: All units shipped from AG Aguadilla and Galway on or before July 11, 1977 have new bracket RY. Westminster, Kanata, Galway and AYR, all units shipped from FA&T areas on or before July 11, 1977.

11/34A-80004 CODE: F

OCT 77 - PROBLEM SYMPTOMS: +5 volt and ± 15 volt regulators may be severely damaged.

PROBLEM: When installing FP11-AU on older 11/34's it's possible to interconnect two regulated +5V supplies.

CORRECTION: On drawing E-UA-11/34A-O-D sheet 1 of 3. Restate Note 5 to read: when the DD11-PK is used with a BA11-K expansion box without battery back-up install jumpers from -15 to -15B, +15 to +15B and +5 to +5B. Add note 16: BA11-K's that use the 5410864-YA-1 Power distribution (i.e., 11/34A, 11/34 with FP11-AU, and some 11/04's) and have one DD11-CK (or an additional DD11-DK) can only have the +5 to +5V jumper in one of the backpanels. If two of the backpanels have the jumper in, the +5V regulators may be interconnected

IN-PLANT EFFECTIVITY: (May 1977) Documentation change only

FIELD EFFECTIVITY: Update the Field Maintenance Print Set, using the Revised Print Package, in every site where there is a PDP-11/34A.

COMPATIBILITY: When an FP11-AU is installed on an 11/34, this FCO must be incorporated.

Time to Install and Test: N/A hr.

Documentation: \$5.00. **Parts:** NONE

The DEC on-site labor charge will be the time required to install and test the FCO at the then-current hourly rate.

FCO KIT ORDERING:

FA-02025-00: FCO and PRINTS

FA-02025-01: FCO only

FA-02025-02: PRINTS only

FCCO'S

digital

FIELD CHANGE ORDER

FCO PDP 11/34A S 0004 PAGE 1 of 1
Level of Urgency (LOU)

STATUS LOU	FCO EXPENSE RESPONSIBILITY		
	WARRANTY	E	PER CALL
Mandatory	DIGITAL		
Required			CUST
Specification			CUST
Improvement			CUST
Hardware Option	PURCHASEABLE OPTION		
Cosmetic	CUST	CUST	CUST

ESTIMATED TIME TO INSTALL and TEST (on-site) (Travel time not included)
N/A
DECIMAL HOURS

11/34A
FP11-A
DD11-C } FCR
DD11-D
DD11-E

On-site FCO installation, by DEC, will be in accordance with both APPLICABILITY and the above FCO EXPENSE RESPONSIBILITY matrix.

MAY '77

QUICK CHECK (To determine if FCO has been installed)

DRAWING E-UA-1134A-0-0, SHEET 1 OF 3, AT REVISION 'D'

LAST PREVIOUS FCO: NONE

RELATED OR PREREQUISITE FCOs / MCOs

FCO KIT CHARGES (United States and Canada only)

KIT ITEM	DOCUMENTATION	PARTS	OTHER
<input checked="" type="checkbox"/> FCO <input checked="" type="checkbox"/> PRINTS	\$5.00	NONE	

Parts charges are as of FCO release date and are subject to change

PARTS AVAILABILITY DATE: _____

LOGISTICS CODING: (400) (0) (400)

LOGISTICS REVIEW _____

QTY PART NUMBER DESCRIPTION

ORDER BY THIS NUMBER	KIT INCLUDES	
	FCO	PRINTS PARTS
FA-02025-00	X	X
FA-02025-01	X	
FA-02025-02		X

APPLICABILITY

UPDATE THE FIELD MAINTENANCE PRINT SET, USING THE REVISED PRINT PACKAGE, IN EVERY SITE WHERE THERE IS A PDP 11/34A.

THE FOLLOWING NOTES HAVE BEEN ADDED TO DRAWING E-UA-1134A-0-0, SHEET 1 OF 3, REVISION 'D':

- CHANGE NOTE 5 ON SHEET 1 TO READ AS FOLLOWS:
WHEN THE DD11-PK IS USED WITH A BA11-K EXPANSION BOX WITHOUT BATTERY BACK-UP (I.E., NO H785 OR H7850), INSTALL THE THREE JUMPERS SHOWN:
A) -15 TO -15B
B) +15 TO +15B
C) +5 TO +5B (SEE NOTE 16)
USE #20 INSULATED BUS WIRE ON SIDE 2. THIS WILL PROVIDE POWER TO THE MOS MEMORY VOLTAGE RAILS.
- ADD AS NOTE 16 ON SHEET 1 THE FOLLOWING:
BA11-K'S THAT USE THE 5410864-YA-1 POWER DISTRIBUTION (I.E., 11/34A, 11/34 WITH FP11-AU, AND SOME 11/04'S) AND HAVE ONE DD11-CK (OR AN ADDITIONAL DD11-DK) CAN ONLY HAVE THE +5 TO +5B JUMPER IN ONE OF THE BACKPANELS. IF TWO OF THE BACKPANELS HAVE THE JUMPER IN, THE +5V REGULATORS MAY BE CONNECTED TOGETHER. TYPICALLY THIS JUMPER IS IN THE FIRST BACKPANEL, BUT IT MAY BE PLACED IN ONE OF THE OTHER BACKPANELS IF DEEMED NECESSARY FOR POWER REQUIREMENTS.

PROBLEM SYMPTOMS: +5 VOLT AND ± 15 VOLT REGULATORS MAY BE SEVERELY DAMAGED.

COMPATIBILITY NOTE: WHEN AN FP11-AU IS INSTALLED ON AN 11/34, THIS FCO MUST BE INCORPORATED.

APPROVED - Field Service Product Support

William J. Aupperlee

WILLIAM AUPPERLEE

DISTRIBUTION CODING

- To all Field Offices
- To Regional Offices

LIST 11
FDU 300

P
M

LKQ 400

700

APPROVED - Technical Documentation

Al Kimmel

FCO RELEASE DATE
SEPTEMBER 30, 1977

FCO 11/34A-50004

REVISED PRINT PACKAGE

SEPTEMBER 9, 1977

THIS PACKAGE INCLUDES SELECTED PRINTS WHICH ARE SPECIFICALLY REQUIRED IN THE FIELD FOR FCO IMPLEMENTATION AND/OR FOR THE UPDATING OF THE CUSTOMER PRINT SET (FIELD MAINTENANCE PRINT SET) TO THE PROPER REVISION LEVEL FOR THE FCO.

DRAWING	SHEET	REVISION
E-UA-11/34A-0-0	1 OF 3	"D"

DISTRIBUTION CODING(E20-07846) (121714)		SPO.
<input type="checkbox"/> All Field Offices	Lot 11	LSC FA-02025-02
<input checked="" type="checkbox"/> Regional Offices	FDO 45	LKO 400
<input type="checkbox"/>	P 9-24	M 10-3-77
		445

FCR

**PDP 11/34A
PROCESSOR
FCO Cross Reference**

**A Chronological Listing of Field Retrofit FCO's Which Must Be
Considered in the Field Installation and Maintenance of This Option/Module/Power Supply**

*** Indicates FCO Conjunction Must Be Considered With Prior FCO**

- | | |
|--|--|
| <p>1 H745-D0004 AUG 72
QUICK SYNOPSIS
Prevents memory loss during power turn-off
QUICK CHECK
C12 is 15 mfd
NEW REVISION
Rework etch E to CS F</p> | <p>2 M7015-S0007 JAN 77
QUICK SYNOPSIS
Logic change allows interrupt requests to be deferred until BG level is dropped
QUICK CHECK
IC 314 ADD'ed as E38
NEW REVISION
Exchange with CS H1
COMPATIBILITY
M7015 must be at CS H1 in LPS11's that cannot be placed at the end of the unibus</p> |
| <p>2 M7015-A0002 JAN 73
QUICK SYNOPSIS
Bits picked up in DMA data transfer; disables C01 during Data/Bus times
QUICK CHECK
Etch cut between E17 pin 5 and E17 pin 6
NEW REVISION
Rework etch B and C to CS E</p> | <p>2 11/34A-S0004 SEP 77
QUICK SYNOPSIS
Defines in the Field Maintenance Print Set the correct backplane wiring for +5 volt and ± 15 volt regulators
QUICK CHECK
Drawing E-UA-1134A-0-0, sheet 1 of 3, at Revision D
COMPATIBILITY
When an FP11-AU is installed on an 11/34, this FCO must be installed</p> |
| <p>2 M7015-B0004 SEP 73
QUICK SYNOPSIS
ADD's 80 nsec R/C delay to select lines for RSTS11
QUICK CHECK
Wire ADD from bottom of R63 to E17 pin 6
NEW REVISION
Rework etch B and C to CS E</p> | <p>2 H754-S0015 OCT 77
QUICK SYNOPSIS
Loss of H754 power and recovery after powering down and up, nuisance crowbar condition
QUICK CHECK
Capacitor C7 changed from 01 mfd to 22 mfd
NEW REVISION
Rework etch J to CS S</p> |
| <p>2 H754-D0006 APR 74
QUICK SYNOPSIS
Relocates -5V adjustment potentiometer for easier adjustment. (In-plant, new etch H at CS H)
QUICK CHECK
Presence of pot adjacent to +20V pot at front of the module</p> | <p>2 DD11C-S0003 DEC 77
QUICK SYNOPSIS
Defines in the Field Maintenance Print Set the correct backplane wiring for +5 volt regulators
QUICK CHECK
Drawing D-IA-7011528-0-0, sheet 1 of 1, is at revision C</p> |
| <p>2 H745-S0015 SEP 74
QUICK SYNOPSIS
Transitory line voltage failures trip +15V crowbar circuit needlessly
QUICK CHECK
C12, R24, D2 and D7 DELETED
NEW REVISION
Rework etch E to CS S</p> | |

**PDP 11/34A
PROCESSOR
FCO Cross Reference**

**A Chronological Listing of Field Retrofit FCO's Which Must Be
Considered in the Field Installation and Maintenance of This Option/Module/Power Supply**

• Indicates FCO Conjunction Must Be Considered With Prior FCO

10 M8265-S0003 DEC 77

QUICK SYNOPSIS

Defines in the Field Maintenance Print Set the
correct pin designations for J1

QUICK CHECK

Sheets 2 and 6 of drawing D-CS-M8265-0-1
are at Revision C

NOTE:

The following FCR's are to be considered for
this FCR: KD11-E; KY11-LA; DD11-P;
BA11-K

IV