DIGITAL	FCO	CATEGORY [O]	PAGE 1 OF 4

FIELD CHANGE ORDER   NUMBER: KN430-O005

APPLICABILITY: This "O" coded FCO should be installed in all DEC4000
Model 610 which contain part rev below H1 or H2 for FRU B2101-AA.

This FCO incorporates ECO No. B2101-TWO001.

PROBLEM & SYMPTOM: Previous revision FRU could experience mail box time
out, Parity Errors, and NOACK problem. This will result in system crash.
O/S error logger will show "Read Parity Errors". O/S error logger could
also show other errors like: Mailbox timeout, no acknowledge, and read
data parity errors. At console level, type "show error cpu0 | grep RD_PAR"
and "show error cpu0 | grep NOACK". Non zero error count will confirm Parity
Errors and NOACK problems.

SOLUTION: Install B2101-AA part revision H1 or H2.

QUICK CHECK: Look for B2101-AA part revision H1 or H2 in I/O backplane slot
          or at console prompt type "show fru" and return. Check the
       HW rev under I/O option.

PRE/COREQUISITE FCO:	MFIT HRS
N/A	2.0

TOOL/TEST EQUIPMENT: Field service maintenance tool kit.

FCO PARTS INFORMATION

FCO KIT NO.	DESCRIPTION OF CONTENTS	EQ KIT VARIATION APPLICABILITY
EQ-01682-01	1 B2101-AA I/O Module, Part Rev H1 or H2	
FA-05019-01	1 Field Application (FA) Document	

FCO CHARGING INFORMATION (See Last Page)

APPROVALS

TECH. ENGINEER Bharat S. Shah	ENG. BUSINESS MGR. Mike Collins	DS LOGISTICS Barry Weinstein	DS PRODUCT SAFETY Robert Brister
	PARTS AVAILABILITY	FCO REVISION A	FCO RELEASE DATE

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|   |   |   |   |   |   |   | |    |            FCO   KN430-O005
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|   |   |   |   |   |   |   | |    |            PAGE 2 OF 4
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Field Installation Synopsis
----

1. Shut down the operating system: Have the customer notify all affected
   system users and shutdown the operating system.

2. Halt the system: Once the operating system has been shutdown, press
   the Halt button on the operator control panel (OCP) and leave the
   HALT button in halt position.

3. Set up velostat kit

   a. Unfold the VELOSTAT mat to full size (24" x 24").
   b. Attach the 15 foot ground cord to the VELOSTAT snap fastener on
the mat.
   c. Attach the alligator clip end of the ground cord to a good ground.
   d. Attach the wrist strap to either wrist and the alligator clip
to a convenient portion of the mat.

```
   ********************************************************************
   *    C A U T I O N    *
   *           *
   * If using a module in an ESD box, insure wrist strap is    *
   * connected to the box and the box is connected to chassis       *
   * of the device being upgraded.                *
   ********************************************************************
```

4. Note down the environmental variables using "show"
   command on the worksheet that is attached to this FCO.

5. Note down console version and ethernet address by executing command
   "show config".

6. Power down the system: Turn off the DC ON/OFF switch on the OCP,
   turn off the AC circuit breaker at the rear of the system, and
   finally pull out the power cord from the electrical outlet.

7. Open the back cover.

8. Locate I/O module. Undo two captive screws at the top and bottom of
   the module which secure the I/O module.

9. Disconnect Console cable, Modem cable(if present), Ethernet cable
   (if present) from the I/O module handle.

10 Unseat I/O module and remove it from the backplane and place it on
   the anti-static work mat.

           FIELD APPLICATION DOCUMENT (FA), Continuation Page

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   | | | | | | | | | FCO KN430-0005
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11 Remove the 2 socketed Ethernet Station ID ROMs, labeled
   "Enet Adrs" from the removed I/O board.

12 Remove the new module from EQ-01682-01 and perform step 11.

13 Install ROMS removed from the old module onto the new module.

14 Install ROMS removed from the new module onto the old module.

15 Install new module into its backplane slot. Secure the module
   with the two screws.

16 Connect Console cable, Modem cable(if present), Ethernet cable(if
   present) to new I/O module handle.

17 Plug the power cord into the power source. Turn on the AC circuit
   breaker at the rear and then turn the DC ON/OFF switch on the OCP to
   "ON" position

18 Check the console firmware revision and ethernet address by executing
   command "show conf" Compare this revision with removed I/O module
   console firmware revision. If it is below removed board revision then
   update the firmware using the CD ROM shipped to customer. Compare
   ethernet address, if ethernet address is different then rectify this
   problem by changing Ethernet ROMS from the removed board until address
   matches.

19 Execute "show fru" command and make sure the new I/O module and
   its appropriate revision reported in the table.

20 System verification test: Observe console terminal for correct power
   up sequence. If the power up sequence is correct and no errors are
   indicated then go to next step. If the power up self test indicate
   an error refer to the "DEC 4000 AXP Model 600 Series Service Guide",
   P/N EK-KN430-SV, for troubleshooting information.

21 Run the whole system diagnostic by executing command "test" at
   the console prompt.

22 Set the environmental variables to their original value using
   command : set[-default][-integer]-[string]envar value

Examples:

```
>>> set bootdef_dev eaz0
>>> set boot_osflags 0,1
```

23 Reboot the System: Place system in "RUN" mode(Halt switch "OUT")
   and type "BOOT" at the console prompt. The system will initiate
   the boot sequence from the default boot device.

FIELD APPLICATION DOCUMENT (FA), Continuation Page

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24 Clean-Up: Tag the FRU as indicated below :

                Part #   B2101-AA
Revision   Insert Part Revision from FRU here
Reason for return FCO
Comments   FCO #

25 Package the FRU into the container from the kit and return it
   through normal logistics channels.

26 Report this FCO activity on the LARS form in the "Fail Area/
    Module/FCO/Comments" column as follows: FCO KN430-O005
    (See the following LARS example).

LARS

CATEGORY O	USA	GIA	EUROPE
Activity –			
(a)Contract	W	U	K
Warranty	W	U	W
(b)IN-DEC Contract	K	U	A
Non Contract/Non Warranty	F	F	F
(c)RTD/Off-site Agreement	F	U	F
Hardware Segment Code	111	111	111
Product Line	031	031	031
DEC Option	B2101	B2101	B2101
Option ID	X	N/A	N/A
Type of Call	M	M	M
Action Taken	D	D	I/V
Fail Area-Module-FCO-Comments	KN430-O005	KN430-O005	KN430-O005
Material Used	EQ-01682-01	EQ-01682-01	EQ-01682-01

   (a) Warranty Optimum, Warranty Standard and Warranty Basic (on-site)
       Agreements; * Note material (only) free of charge for all customers.
   (b) Applies to IN-DEC Area Only

(c) RTD=Return to Digital or Off-site Agreements; If Field Engineer
    On-site, use Activity Code "O".

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|                       FCO CHARGING INFORMATION                      |
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|        WARRANTY/CONTRACT       | |          NONWARRANTY/NONCONTRACT              |
|_____| |_____|
|    ON-SITE    |    OFF-SITE    | |    ON-SITE    |    OFF-SITE    |  MATERIAL ONLY  |
|_____|_____| |_____|_____|_____|
|TRAVEL/|  EQ   |        |  EQ   | |TRAVEL/|  EQ   |        |  EQ   |ORDER-ADMIN,HANDLING|
|INSTALL|  KIT  |INSTALL |  KIT  | |INSTALL|  KIT  |INSTALL |  KIT  |PKG,SHIPPING & EQ KIT|
|_____|_____|_____|_____| |_____|_____|_____|_____|_____|
|  DEC  |  DEC  |  DEC   |  DEC   | | CUST  | CUST  |  CUST  | CUST  |     CUST      |
|_____|_____|_____|_____| |_____|_____|_____|_____|_____|
```

WORKSHEET

ENVIRONMENT VARIABLE FACTORY DEFAULT   CUSTOMER DEFINED VALUE

"auto_action",   "BOOT"

"bootdef_dev"   "NULL" FIS process
    defines device with OS.

"boot_file"   "NULL"

"boot_osflags" "NULL"

"boot_reset"   "OFF"

"dump_dev"   "ON"

"enable_audit" "ON"

"char_set"   "0"

"language"   "36"   (English)

"password"   "NULL"

"interleave"   "default"

"cpu_enabled"   "0xFF" All processors
    present enabled.

"screen_mode"   "OFF" FIS process
    sets to ON.

"def_term"   "local"

"tta_merge"   "0"

"tta*_baud"   "9600"

"tta*_halts"   "2" for tta2
  "0" for tta1

 ENVIRONMENT VARIABLE FACTORY DEFAULT   CUSTOMER DEFINED VALUE

"ncr*_setup"   "AUTO 7"

"scsnode"   "NULL"

"scssystemid"   "65534"

"scssystemidh" "0"

"enable_servers" "OFF"

"fis_name"   "NULL"

"sys_serial_num" "NULL" FIS process
    writes System Serial #!

"ez*0_def_inetaddr" "NULL"

"ez*0_def_ginetaddr" "NULL"

"ez*0_def_sinetaddr"   "NULL"

```
"ez*0_def_inetfile"   "NULL"

"ez*0_inet_init"   "BOOTP"

"ez*0_bootp_server"   "NULL"

"ez*0_bootp_file"   "NULL"

"ez*0_protocols"   "MOP"

"ez*0_bootp_tries"   "3"

"ez*0_arp_tries"   "3"

"ez*0_tftp_tries"   "3"

"ez*0_rm_boot"   "0 or disable"

"ez*0_rm_boot_passwd"          "00_00000000_00000000."

"tt_allow_login"   "1"
```