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FIELD CHANGE ORDER	NUMBER: FR-830xx-0001 FR-832xx-0001 FR-842xx-0001
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APPLICABILITY: This "0"coded FCO applies to some Celebris Pentium systems that may demonstrate problems when certain ISA bus network adapter cards are installed. This FCO should only be ordered or implemented upon determination that the customer's product is exhibiting the symptoms described below. This FCO incorporates ECO 5423544-TA006. It is suggested that while installing this FCO, that you also update the system BIOS to V1.03 using the utilities diskette AK-QAR5E-CA which may be obtained from SSB or by using files that may be copied over the net. A pointer is included below.

CELEBRIS 560	CELEBRIS 590	CELEBRIS FP 590
FR-830xx-xx xx-xx = all variants	FR-832xx-xx 	FR-842xx-xx

PROBLEM & SYMPTOM: The Celebris 560, Celebris 590 and Celebris FP 590 may have marginal signal integrity on the IRQ, RESET, and certain address lines of the ISA bus when certain network adapter cards are installed. The failure is exhibited by the network adapter card itself failing diagnostics, failure to obtain/maintain a network connection, or intermittent floppy read/write errors. Network adapter cards observed to demonstrate the network problems include 3COM 3C509 rev. F, G, and H and Intel EtherExpress Pro. Cards observed to demonstrate the floppy read/write errors include the 3C509B Proteon 1392, and NE2000.

SOLUTION: When applicable, replace the main logic board with a 54-23544-04 Rev J01 or later main logic board (MLB).

QUICK CHECK: Run the applicable network card diagnostics for a minimum of 1000 cycles. For the floppy problem, run Qaplus floppy test. 1 cycle should be sufficient to show the problem. BIOS revision appears on screen during power self test as "Celebris 5xx Version x.xx".

PRE/CO-REQUISITE FCO:N/A	MFIT HRS .75
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TOOL/TEST EQUIPMENT: Field Service Maintenance Tool Kit
(NO SPECIAL TOOL ARE REQUIRED)

FCO PARTS INFORMATION

FCO KIT NO.	DESCRIPTION OF CONTENTS
EQ-01711-01	54-23544-04 MOTHER BOARD REV J01 OR GREATER
FA-05048-01	FCO INSTALLATION DOCUMENT

APPROVALS

TECH. ENGINEER Frank Medrick	ENG. BUSINESS MGR. John Elsbee	DS LOGISTICS George Simko	DS PRODUCT SAFETY Robert Brister
IDC PUBLISHING Diane MacDonald	PARTS AVAILABILITY January 16 1995	FCO REVISION A	FCO RELEASE DATE January 16,1995

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Use ALL ESD safety precautions to prevent DOA's on material in kit. (Include the following caution statements and instructions for setting up the Velostat Kit or using an ESD module box, depending on the FCO)

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*****
*                               C A U T I O N                               *
*                               *                                           *
* The module, as with all modules, contain electrostatic                 *
* discharge sensitive devices (ESDS). The use of the Velostat             *
* Kit or ESD module box is essential to prevent damage which             *
* may not be noticed immediately.                                         *
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Setting 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 on the cabinet.
- d. Attach the wrist strap to either wrist and the alligator clip to a convenient portion of the mat.
- e. Remove the module from it's CPU option slot and place it on the mat.

Or:

- e. Remove the module from the spares kit and lay it on the velostat mat.

*
 *
 * 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.
 *

INSTRUCTIONS FOR INSTALLING FCO (tbd)

REFERENCE:

Detailed information and specific illustrations are contained in the Celebris 560/590/FP 590 User's Guide. Order Number: ER-830WW-UA

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PROCEDURE

1. Turn off power to the system and all external devices. Remove all cables from the rear of the enclosure.
2. Unlock and remove the top cover of the enclosure. See User's Guide Figures 4-1 to 4-3.
3. Remove and store all modules/cards from the expansion slots on the riser card. See User's Guide Figure 4-5.
4. Remove the riser card and mounting bracket.
5. Unlatch the power supply assembly and rotate away from the main logic board (MLB). The assembly will latch in the up position. See User's Guide Figure 4-25.
6. Disconnect the DC power cables (2), FDD cable (1) and IDE HDD cables (2) from the MLB. See User's Guide Figures 4-32 & 4-33.
7. Note the three yellow/black cables at the front of the MLB. The yellow wire on the connector is toward the rear of the MLB when correctly installed. J31, POWER LED, is a 3-pin connector. J37, HD LED, is a 2-pin connector. J32, SPKR CONN, is a 4-pin connector. Disconnect all three cables.
8. Remove the 54-23544-04 MLB from the Kit and place it next to the open enclosure.
9. Note which ZIF socket has the CPU installed. Unlatch the same ZIF socket on the new MLB. See User's Guide Figure 4-6 & 4-7.

10. Unlatch the ZIF socket containing the CPU and note the CPU's orientation. Carefully remove the CPU from the socket and install it in the previously identified socket on the new MLB. Latch the socket.
11. Transfer the regulator card (Celebris 590/FP 590) or jumper card (Celebris 560) from the old MLB to the new MLB. The voltage regulator card will require the transfer of the plastic stand-offs (3) too. See User's Guide Figure 4-6.
12. Transfer the cache SIMM from the old MLB to the new MLB. See User's Guide Figure 4-8.
13. If applicable, transfer the socketed video DRAMS (2) from the old MLB to the new MLB. See User's Guide Figure 4-6 & 4-12.
14. Transfer the memory SIMMs from the Old MLB to the new MLB. See User's Guide 4-9 & 4-10.
15. Remove and set aside the eight screws holding the old MLB to the bottom of the enclosure.

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16. Move the old MLB towards the front of the enclosure until the EMI shield on the I/O connectors clears the shelf on the rear of the enclosure. Lift the front of the MLB up and remove it from the enclosure.

17. Reverse the procedure to install the new MLB. Make sure the yellow/black cables are not trapped under the board.

18. Align the MLB's mounting holes with the stand-offs. Install the eight screws.

19. Install the keyed DC power cables (2), the FDD cable (1) and the IDE HDD cables (2).

20. Install the yellow/black cables on J31, J32 and J37.

21. Install the riser card and bracket.

22. Install the option modules in the expansion slot(s) on the riser card. See User's Guide Figure 4-15.

23. Release the power supply assembly's latch and rotate the power supply back into the down/closed position. Re-latch closed.

24. Replace and lock the top cover of the enclosure. See User's Guide Figure 4-34.

- 25. Connect the external cables and power cords.
- 26. Turn on the system. The BIOS setup will have to be updated for the system's configuration. The system will re-boot after saving the BIOS setup.
- 27. Using the appropriate software, confirm that the card passes the diagnostic test.

3C509: Diagnostic Configuration and Test

Intel EtherExpress PRO: SoftSet2 Test

NE2000, 3C509B or P1392: Qaplus floppy test

28. To update the BIOS to V1.03 follow the instructions below.

29. Insert the systems utility diskette created from the Getting Started screen and make sure the following files are in the Upgrade directory:

- MINIDOS.SYS
- PHLASH.EXE
- DEVTBLS.DAT
- PHLASH.INI
- CELEBRIS.ROM
- MAKEBOOT.EXE
- MAKECRD.EXE

30. Create the same directory on your hard disk drive and then copy the above files to it.

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- 31. Insert a blank formatted diskette into drive A.
- 32. From drive C: type MAKECRD. This copies the files to drive A.
- 33. Remove the crisis recovery diskette from drive A and store it in a safe place.

Recommended Flash Update Instructions

W A R N I N G

Record any CMOS settings that you may have changed (those you want to

make sure would appear on the system after BIOS update). This may include hard disk settings different from what the hard disk auto-detection selected, COMM ports that have been disabled or changed from the factory default settings, etc. If in doubt, record it.

If you have unique Plug and Play information entered via the ISA configuration utility (either WINICU or ICU), run the ICU and save a snapshot of the configuration so that it can be restored later. Both CMOS settings and unique Plug and Play information will be cleared by the flash update process.

The utilities diskette AK-QAR5E-CA may be ordered from SSB by email or by phone. Send email to WMOIS::SDCISO or SDCISO@WMO. Include your badge #, cost center, mailstop, and software number AK-QAR5E-CA. Or call DTN 264-3030 for Americas and AP or 822-4476 for Europe.

Here is a pointer to an online copy of the system utilities diskette referred to as part number AK-QAR5E-CA. Please copy and download sysutils-short.zip if you need quick access to AK-QAR5E-CA. Sysutils.zip is the complete system utilities distribution file, including mouse utilities, but the expanded files take up 10KB more space than is available on a 1.44MB diskette hence the "-short" version. Use the "-d" switch in PKUNZIP to recreate the directory structure.

The release.not release notes are for Digital Internal Use Only.

PCBUHD::TECH\$ROOT:[CELE.586.UTIL.UTILV103]

BUILD.DOC;1	2/4	15-DEC-1994 10:21:30.00	(RE,RWED,RE,RE)
CMDUTILS.ZIP;1	1287/1288	15-DEC-1994 10:22:14.00	(RE,RWED,RE,RE)
README.TXT;1	5/8	6-JAN-1995 11:33:41.00	(RE,RWED,RE,RE)
README2.TXT;1	2/4	6-JAN-1995 11:07:13.00	(RE,RWED,RE,RE)
RELEASE.NOT;1	5/8	15-DEC-1994 10:22:56.00	(RE,RWED,RE,RE)
SYSUTILS-SHORT.ZIP;1	1321/1324	6-JAN-1995 11:44:59.00	(RE,RWED,RE,RE)
SYSUTILS.ZIP;1	2310/2312	6-JAN-1995 11:45:41.00	(RE,RWED,RE,RE)

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34. Reboot the system and use the <F2> key to enter setup.

35. Disable both internal and external cache under "Memory and Cache" settings. This is recommended but flash updates have been

known to work even if these settings are left enabled. Play it safe.

36. Disable power management under "Power" settings. Again, this is recommended but flash updates have been known to work even if these settings are left enabled. Play it safe.

37. Boot from a minimal DOS diskette and bypass config.sys using the <F5> key when DOS begins to load. You may boot from hard disk if you wish, again bypassing config.sys.

38. Insert the System Utilities diskette AK-QAR5E-CA.

39. Change the default directory to \upgrade

40. Use the following command to perform the flash update:

PHLASH /E

The "/E" is needed to clear any Plug and Play information from the FLASH ROM. Duplicate information may be retained if not cleared out prior to the flash update.

41. When the flash process is completed, the system will reboot. Be sure to remove the system utilities diskette.

42. As the system reboots, use the <F2> key to enter setup. Re-enter the CMOS information that you previously saved.

43. Save and Exit from setup.

44. Restore your ICU settings, if required.

45. Remove the systems utility diskette.

46. Rerun diagnostics to ensure that system is still functional.

47. Digital field engineers should report this FCO activity on their LARS from per the attached instructions.

48. AWSP engineers should submit their normal claim form for reimbursement

*****FOR DIGITAL INTERNAL REPORTING ONLY *****

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LARS

CATEGORY F USA APA EUROPE

Activity - Coverage Code

(a)Contract	W	U	K	
Warranty	W	U	W	
Inhouse				A
Invoiced per Call				F
(b)IN-DEC Contract	K	U		
Non Contract/Non Warranty	F	F		
(c)RTD/Off-site Agreement	F	U		
Hardware Segment Code	111	111		
Product Line	007	007		
BBC Code for K,W,A				111
BBC Code for F				031
	CELEBRIS	CELEBRIS	CELEBRIS	
	560	590	FP 590	
DEC OPTION	830xx-xx	832xx-xx	842xx-xx	

xx = all variants

Option ID	X	N/A	N/A	
Type of Call	M	M		
Request Type				I
Action Taken	D	D	Y	
Quality Codes				M,L,J,R,X,A,Y,Z
Fail Area-Module FCO	FR-830xx-0001	FR-830xx-0001	FR-830xx-0001	
FCO-Comments	FR-832xx-0001	FR-832xx-0001	FR-832xx-0001	
	FR-842xx-0001	FR-842xx-0001	FR-842xx-0001	
Material Used	EQ-01711-01	EQ-01711-01	EQ-01711-01	

(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 "F".

FCO CHARGING INFORMATION

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	CUS	CUS	CUS	CUS	CUS