Celebris FX-2 and Digital PC 5100

Product Change Information

Release Date: February 26, 1998

This document details the following for the Celebris FX-2/Digital PC 5100 product change information:

- Introduction
- Product Change Summary
- BIOS Release Summary
- Product Change Release Notes
- BIOS Change Release Notes
- Customer Impact Ratings
- Future Releases

Introduction

This document is meant to provide customers with a synopsis of product changes. The change information will enable customers to evaluate the impact any change has on their environment. All proposed product changes are appraised for impact to daily customer operations. The evaluation includes, but is not limited to such items as; safety, emission requirements, functionality, compatibility, reliability, and the manufacturing process. Recommendations are then made to customer on whether such action needs to be taken. On occasion, emergency changes will be released before they are reflected in this document.

Product Change Summary

The Product Change Summary provides a overview of the “Engineering Change Orders” or ECOs that have been released. This matrix provided the part number, part description, date of release, customer impact, and brief description of the change. At this time, this document only covers Main Logic Board (MLB) and system BIOS changes. Future releases of this document will include ECO information for other critical salable components.

Main Logic Board Change Summary

The Main Logic Board Change Summary provides a overview of the “Engineering Change Orders” or ECOs that have been released for the main logic board. This matrix supplies the part number, part description, date of release, customer impact, and brief description of the change.

At this time, this document accompanies new product releases. Thus there are no ECOs to be documented at this time. Future releases of this document will cover ECOs for the Main Logic Board (MLB).

BIOS Release Notes

The BIOS Release Notes provide more detailed change information on each BIOS release. This information includes a three sections: problem fixed, new features, and compatibility.

Impact Rating

For each product change a customer impact rating is given. The customer impact rating can be one of four ratings: High, Medium, Low, or None.

High A “HIGH” rating indicates that this change has some or significant customer impact. This change may affect functionality or compatibility.

Medium A “MEDIUM” rating indicates that this change may impact some customers or customers using certain configurations. This change will have a minor effect on reliability, functionality, or compatibility.

Low A “LOW” rating indicates that this change will have a minor impact on customers. This change is typically a product improvement and/or enhancement.

None A “NONE” rating indicates that this change has no customer impact.

Future Releases

Future releases will incorporate information for other critical system components. Moving forward, BIOS changes will be separated from the Main Logic Board (MLB) changes. Historically, BIOS releases were tied to MLB revision therefore a change in BIOS version would change the MLB revision. In the future, a BIOS change will be independent and not affect the MLB revision.

System Software CD (EJFIGS)

Rel Date	Kit P/N	Ver.	CD P/N	Change Description
5-2-97	QC-04VAB-HW	1.2	AG-R4W2C -BH	AMI diagnostics revised to (5.21d), PC Care to (1.12b). Also added S3 Refresh utilities for Win 3.11.
TBD	QC-04VAB-HW	1.3	AG-R4W2D -BH	TBD
TBD	QC-04VAB-HW	1.4	AG-R4W2E -BH	TBD
TBD	QC-04VAB-HW	1.5	AG-R4W2F -BH	TBD
1-20-98	QC-04VAB-HW	1.6	AG-R4W2G -BH	AMI diagnostics revised to v531c1, Mouseware97 revised to v7.5(Win95), PC Care revised to v1.12g,ClientWorks revised to v291.932, AltaVista revised to v2.50., PIIX4 IDE revised to v2.02.1 (NT), Power Panel revised to v2.12 (NT),Mouseware for NT revised to v2.3A

System Software CD (Japanese)

Rel Date	Kit P/N	Ver.	CD P/N	Change Description

Startup Diskette (EFIGS)

Rel Date	Kit P/N	Ver.	Disk P/N	Change Description
5-2-97	QC-05JAA-HC	1.1	AK-R3RTD-CA	Initial Release

Diskette (Japanese)

Rel Date	Kit P/N	Ver.	Disk P/N	Change Description
5-2-97	QC-05JJA-HC	1.0	TBD	Initial Release

Product Change Summary

Part Number	Part	Rev	ECO Number	Date	Impact	Change Description
54-25308-02	MLB	C01	5425308/TA001	April 97	Med	Resistor value change
54-25292-02	Riser Card	B01	5425292/PC0009	April 97	Low	Address an assembly issue
FRDAA04-AA	Kernel	A02	FMJ-062/ FRDAA04	May 97	Low	Alternate CD-ROM source
FRDAA04-AD	Kernel	A02	FMJ-062/ FRDAA04	May 97	Low	Alternate CD-ROM source
FRDAA04-AF	Kernel	A02	FMJ-062/ FRDAA04	May 97	Low	Alternate CD-ROM source
FRDAA04-AG	Kernel	A02	FMJ-062/ FRDAA04	May 97	Low	Alternate CD-ROM source
FRDAA04-AH	Kernel	A02	FMJ-062/ FRDAA04	May 97	Low	Alternate CD-ROM source
54-25308-02	MLB	D02	5425308/TA003	May 97	Med	Remove circuit
54-25308-02	MLB	D02	PC0014#02/ 5425308	May 97	Low	Remove components from second reset circuit
----------	Country kits	-------	FMJ-065D/ FRKD01C	May 97	Low	Alternate source for Japanese keyboard
PCD04-A9	Kernel	B01	PC0019/ PCD04/TA001	May 97	Low	hardware change
PCD04-B9	Kernel	B01	PC0019/ PCD04/TA001	May 97	Low	hardware change
54-25320-02	MLB	C01	PC0020/ 5425320/TA001	June 97	Med	Add diode
FR-DJA01-AC	Kernel	D01	MAG-060H/ FRDAA01	June 97	Low	Alternate CD-ROM source
FR-DJA01-AD	Kernel	D01	MAG-060H/ FRDAA01	June 97	Low	Alternate CD-ROM source
54-25308-01	MLB	H02	5425308/TA006	June 97	High	Update Flash BIOS
54-25320-02	MLB	D01	5425320/TA002	June 97	High	Update Flash BIOS
PCD04-A9	Kernel	C01	PC0035/ PCD04/TA002	June 97	Low	Phase in new MLB
PCD04-B9	Kernel	C01	PC0035/ PCD04-TA002	June 97	Low	Phase in new MLB
54-25308-02	MLB	J03	5425308/334/320	July 97	Med	Update Flash BIOS
54-25320-02	MLB	E01	5425308/334/320	July 97	Med	Update Flash BIOS

Product Change Summary

Part Number	Part	Rev	ECO Number	Date	Impact	Change Description
PCD04-A9	Kernel	C01	PC0040/ 5425334/TA002	July 97	Low	Phase in alternate MLB
PCD04-B9	Kernel	C01	PC0040/ 5425334/TA002	July 97	Low	Phase in alternate MLB
5425334-02	MLB	A01	5425334/	TBD	TBD	TBD
54-25334-02	MLB	B01	5425308/334/320	July 97	Med	Update Flash BIOS
54-25334-02	MLB	B01	PC0032/33/34-5425308/334/320	July 97	Med	Update Flash BIOS
54-25334-02	MLB	B02	54-25334-TA003	Jul 97	Low	Component substitution
54-25334-02	MLB	C02	54-25334/	TBD	TBD	TBD
54-25334-02	MLB	C03	54-25334/	TBD	TBD	TBD
54-25334-02	MLB	D02	54-25334/	TBD	TBD	TBD
54-25334-02	MLB	D03	54-25334/	TBD	TBD	TBD
54-25334-02	MLB	E02	54-25334/	TBD	TBD	TBD
54-25334-02	MLB	E03	54-25334/TA013	Jan 98	High	Correction to POST
54-25334-02	MLB	F02	54-25334/TA013	Jan 98	High	Correction to POST
54-25334-02	MLB	F03	54-25334/TA013	Jan 98	High	Correction to POST
54-25334-02	MLB	H02	54-25334/TA015	Feb 98	High	Update Flash BIOS to v1.09
54-25334-02	MLB	J02	54-25334/	Feb 98	Low	1280x1024 video mode enhancement

BIOS Release Summary

BIOS Revision	MLB Revision	ECO Number	Date	Impact	Change Description
1.03	H02	5425308/TA006	June 97	High	Maintenance Release
1.03	D01	5425320-TA002	June 97	High	Maintenance Release
1.04	J03 B01 E01	5425308/334/320	July 97	High	Maintenance Release
1.06	TBD	TBD	Aug 97	High	Maintenance Release
1.08	TBD	TBD	Oct 97	High	Celebris FX-2 and Digital PC 5100

ECO Number 5425308/TA001

Part: Main Logic Board

Revision: 54-25308-02 B01 - C01

Component: Resistor

Severity: Medium

ECO Issue Date: April 23, 1997

Type of Notification: Customer action may be required

Change Description: Change resistor value to correct potential intermittent problem with Secure_on implementation

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Problem Description:

Leakage voltage at +5v may cause secure_on intermittent functional failure. secure_on function may not work or will require extra time to turn on system.

Solution:

Change resistor R79 from 10K to 100K.

Customer Impact/Recommendations:

If the Customer is experiencing start-up problems with the secure_on function, this change notice should be implemented.

ECO Number: 5425292/PC0009

Part: Riser Card

Revision: 54-25292-02 A01 - B01

Component: Wire added to riser card assembly

Severity: Low

ECO Issue Date: April 23, 1997

Type of Notification: No Customer action is required

Change Description: Modification of riser card to address a potential assembly issue

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Problem Description:

After insertion of MLB into the enclosure, a marginal contact of a gold finger occasionally occurs. This may cause a system power on problem.

Solution:

Short J6 pin's 239 and 240 to allow the signal PSON_L to make better contact.

Customer Impact/Recommendations:

There is no customer impact. This condition only occurs when inserting an MLB into the chassis, thus tested, shipping systems are unaffected.

ECO Number: FJM-062/FRDAA04

Part: Kernel

Revision:	**FR-DAA04-AA**	**A01 - A02**
	FR-DAA04-AD	**A01 - A02**
	FR-DAA04-AF	**A01 - A02**
	FR-DAA04-AG	**A01 - A02**
	FR-DAA04-AH	**A01 - A02**

Component: CDROM

Severity: Low

ECO Issue Date: May 2, 1997

Type of Notification: No Customer action required

Change Description: Allow use of alternate source of qualified CDROM

Problem Description:

Allow use of alternate source of qualified CDROM for manufacturing efficiency.

Solution:

Allow use of PCXRN-AK (Toshiba 16X max) as an alternate source of qualified CDROM to PCXRN-AJ (Mitsumi 16X max) for manufacturing efficiency.

Customer Impact/Recommendations:

Customers may receive either the Toshiba or Mitsumi 16X max CDROM in new product.

ECO Number: 5425308/TA003

Part: Main Logic Board

Revision: 54-25308-02 D01 - D02

Component: Passive components

Severity: Medium - only affects certain IDE devices

ECO Issue Date: May 18, 1997

Type of Notification: Customer action may be required

Change Description: Circuit change needed to remove second reset circuit

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Problem Description:

Remove second reset circuit. It is not needed.

Solution:

1. The parts D9, E32, C449, C448, and R258 are not needed because the second reset circuit is not needed.
2. Add zero ohm Resister to provide proper termination to E16, pin 4

Customer Impact/Recommendations:

Customers with previous version MLB's may experience problems with some IDE devices.

ECO Number: PC0014#02/5425308

Part: Main Logic Board

Revision: 54-25308-02 D01 - D02

Component: Various passive components

Severity: Low

ECO Issue Date: May 19, 1997

Type of Notification: No Customer action is required

Change Description: Removal of components associated with the second reset circuit that is not needed

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Problem Description:

1. The parts D9, E32, C449, C448, and R258 are not needed because the second reset circuit is invalid.
2. Add zero ohm resister to provide proper termination to E16, pin 4.

Solution:

Remove unneeded components, add zero ohm resistor.

Customer Impact/Recommendations:

There is no customer impact.

ECO Number: FJM-065D/FRKD01C

Part: Country Kits

Revision: N/A

Component: Keyboard

Severity: Low

ECO Issue Date: May 28, 1997

Type of Notification: No Customer action is required

Change Description: Alternate source of qualified Japanese keyboard

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Problem Description:

Manufacturing requires an alternate source for Japanese keyboards.

Solution:

Allow use of the PCXLA-NY (Chicony) Japanese keyboard for the PCXLA-KY (NMB).

Customer Impact/Recommendations:

Customers purchasing Japanese country kits may receive the alternate keyboard.

ECO Number: PC0019/PCD04/TA001

Part: Kernel

Revision: **PCD04-A9** **A01 - B01**
PCD04-B9 **A01 - B01**

Component: Screw

Severity: Low

ECO Issue Date: May 29, 1997

Type of Notification: No Customer action is required

Change Description: Change screw type for installing micro-switch for manufacturing efficiency

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Problem Description:

There is no functional problem. This change is for manufacturing efficiency.

Solution:

Change micro-switch screws part number from 90-09800-07 to 90-40201-01.

Customer Impact/Recommendations:

There is no customer impact to this change.

ECO Number: PC0020/5425320/TA001

Part: Main Logic Board

Revision: 54-25320-02 B01 - C01

Component: Diode

Severity: Medium

ECO Issue Date: June 3, 1997

Type of Notification: No Customer action is required

Change Description: Addition of a diode to address a potential, intermittent condition

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Problem Description:

Microprocessor testing intermittently fails due to the voltage level of signals between the PIIX4 chip set and the PIC16C63.

Solution:

Add a diode in series to PIC's VDD to decrease Vih (0.8*VDD)'s requirement from 4V to 3.52V.

Customer Impact/Recommendations:

The customer is advised to contact Digital service personnel in the event of intermittent microprocessor operation.

ECO Number: MAG-060H/FRDAA01

Part: Kernel

Revision: **FR-DJA01-AC** **C01 - D01**
FR-DJA01-AD **C01 - D01**

Component: Hard drives and CDROM

Severity: Low

ECO Issue Date: June 4, 1997

Type of Notification: No customer action is required

Change Description: Alternate sources of qualified hard drives and CDROM

Problem Description:

Alternate sources of qualified hard drive and CDROM products needed for manufacturing efficiency.

Solution:

Allow the following substitutions:

- PCXRN-AH (12X Toshiba CDROM) is an acceptable substitute for PCXRN-AI (12X Teac CDROM).
- PCXRA-AN (2.0 GB Quantum HDD) is an acceptable substitute for PCXRA-AP (2.0 GB WD HDD).
- PCXRA-AF (1.2 GB Quantum HDD) is an acceptable substitute for PCXRA-AJ (1.2 GB WD HDD).

Customer Impact/Recommendations:

Customers may receive either source of hard drive or CDROM in future production.

ECO Number: 5425308/TA006

Part: Main Logic Board

Revision: 54-25308-01 F02 - H02

Component: Flash BIOS

Severity: High

ECO Issue Date: June 30, 1997

Type of Notification: Customer action may be required

Change Description: Update to flash BIOS

Problem Description:

1. Support sign on messages for Intel P55C and AMD K6 233MHz.
2. Reduce the count of loop from 10000h to 2000h for detecting if bank 3 SDRAM is installed.
3. Support AMD K5 133/PR-200 sign on message.
4. Force P54C 133 Mhz and below, P54C 166 Mhz and above to use different Core I/O tables for the microprocessor high/low margin value setting.
5. P54C 133 (and below): 3.3V
6. P54C 166 (and above): 3.52V

Change the DMI information as follow:

1. P55C Cpu Max speed: change from 200 to 233
2. AMD K6 Cpu Max speed: change from 200 to 266
3. AMD K6 Processor Family byte: from 19h to 1Ah
4. Change the VGA BIOS sign on message from Porsche (development name) to Celebris (Marketing name).
5. Corrected the condition that when entering setup, moving the cursor to "boot" or "Exit" and pressing F9 (Screen Default) or F10 (Previous Values) causes a system hang.
6. Change AMD K6 CPU sign on from AMD-K6-xxx to AMD-K6/xxx.
7. Change the post sign on message, summary screen and DMI information for AMD-K5 CPU as follows:
   - For post sign on:
     In "Venturis FX-2 5xxx K",
     Change the xxx from AMD-K5 core speed value to AMD-K5 P-Rating value.

Example: Change "Venturis FX-2 5116 K" to "Venturis FX-2 5166 K".

- For Summary Screen:
  In "CPU [xxxMHz]" field,
  Change the xxx from AMD-K5 core speed value to AMD-K5 P-Rating value.
  Example: Change "CPU [116MHz]" to "CPU [166MHz]".

- For DMI CPU speed value information:
  Change the speed value for AMD-K5 from core speed value to P-Rating value.
  Example: change 116MHz to 166MHz.

8. Corrected the condition that caused a system hang during coldboot in test heat chamber.

Solution:

Implement BIOS version 1.03.

Customer Impact/Recommendations:

The Customer is advised to update to the latest BIOS version.

ECO Number: 5425320/TA002

Part: Main Logic Board

Revision: 54-25320-02 C01 - D01

Component: Flash BIOS

Severity: High

ECO Issue Date: June 30, 1997

Type of Notification: Customer action may be required

Change Description: Update to flash BIOS

Problem Description:

1. Support sign on messages for Intel P55C and AMD K6 233MHz.
2. Reduce the count of loop from 10000h to 2000h for detecting if bank 3 SDRAM is installed.
3. Support AMD K5 133/PR-200 sign on message.
4. Force P54C 133 Mhz and below, P54C 166 Mhz and above to use different Core I/O tables for the microprocessor high/low margin value setting.
5. P54C 133 (and below): 3.3V
6. P54C 166 (and above): 3.52V

Change the DMI information as follow:

1. P55C Cpu Max speed: change from 200 to 233.
2. AMD K6 Cpu Max speed: change from 200 to 266.
3. AMD K6 Processor Family byte: from 19h to 1Ah.
4. Change the VGA BIOS sign on message from Porsche (development name) to Celebris (Marketing name).
5. Corrected the condition that when entering setup, moving the cursor to "boot" or "Exit" and pressing F9 (Screen Default) or F10 (Previous Values) causes a system hang.
6. Change AMD K6 CPU sign on from AMD-K6-xxx to AMD-K6/xxx.
7. Change the post sign on message, summary screen and DMI information for AMD-K5 CPU as follows:
   - For post sign on:
     In "Venturis FX-2 5xxx K",
     Change the xxx from AMD-K5 core speed value to AMD-K5 P-Rating value.

Example: Change "Venturis FX-2 5116 K" to "Venturis FX-2 5166 K".

- For Summary Screen:
  In "CPU [xxxMHz]" field,
  Change the xxx from AMD-K5 core speed value to AMD-K5 P-Rating value.
  Example: Change "CPU [116MHz]" to "CPU [166MHz]".

- For DMI CPU speed value information:
  Change the speed value for AMD-K5 from core speed value to P-Rating value.
  Example: change 116MHz to 166MHz.

8. Corrected the condition that caused a system hang during coldboot in test heat chamber.

Solution:

Implement BIOS version 1.03.

Customer Impact/Recommendations:

The Customer is advised to update to the latest BIOS version.

ECO Number: PC0035/PCD04/TA002

Part: Kernel

Revision:	**PCD04-A9**	**B01 - C01**
	PCD04-B9	**B01 - C01**

Component: Main Logic Board

Severity: Low

ECO Issue Date: June 30, 1997

Type of Notification: No Customer action is required

Change Description: Phase in alternative Main Logic Board

Problem Description:

Phase in Main Logic Board 54-25334-02 for existing 54-25308-02 for manufacturing efficiency.

Solution:

Allow use of either Main Logic Board.

Customer Impact/Recommendations:

Customers may receive either Main Logic Boards in new units. Both are acceptable substitutes for each other.

ECO Number: 5425308/334/320

Part: Main Logic Board

Revision:	**54-25308-02**	**H03 - J03**
	54-25334-02	**A01 - B01**
	54-25320-02	**D01 - E01**

Component: Flash BIOS

Severity: Medium

ECO Issue Date: July 2, 1997

Type of Notification: Customer Action may be required

Change Description: Update to Flash BIOS

Problem Description:

Running the Audio tests utility, EOLT.EXE (v 1.12), with MMX 166, BIOS level 1.03, will fail.

Solution:

Implement V1.04 BIOS.

Customer Impact/Recommendations:

The customer is advised to update to the latest version of flash BIOS.

ECO Number: PC0040/5425334/TA002

Part: Kernel

Revision:	**PCD04-A9**	**B01 - C01**
	PCD04-B9	**B01 - C01**

Component: Main Logic Board

Severity: Low

ECO Issue Date: July 2, 1997

Type of Notification: No customer action is required

Change Description: Phase in alternative Main Logic Board

Problem Description:

Phase in Main Logic Board 54-25334-02 for existing 54-25308-02 for manufacturing efficiency.

Solution:

Allow use of either main logic board.

Customer Impact/Recommendations:

Customers may receive either Main Logic Boards in new units. Both are acceptable substitutes for each other.

ECO Number: 5425334/TA003

Part: Main Logic Board

Revision: 54-25334-01 A01 - A02

Component: Graphics Integrated Circuit

Severity: Low

ECO Issue Date: July 25, 1997

Type of Notification: No Customer action is required

Change Description: Phase in of new revision graphics controller

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Problem Description:

No functional problem or change. Phase in revision E of S3 86C785 (Trio 64 V2 GX). USC (Q5EDE) and UMC (P5E3FE) Foundry.

Solution:

Modify assembly documentation to allow the use this graphics chip.

Customer Impact/Recommendations:

There is no customer impact.

ECO Number: 5425334-TA015

Part: 54-25334-02

Revision: F03 - H03

Component: BIOS

Severity: High

ECO Issue Date: Feb-4-1998

Type of Notification: Customer action may be required

Change Description: BIOS update

Problem Description:

Corrected 3 Com ROM boot issue with UDMA H.D.D. installed.
Corrected Fsegment space issue.
Improved PnP configuration data ID with Crystal audio hardware.
Corrected Win95 HCT 7.0 PIRQ issue
Enhanced year 2000 compatability

Solution:

Update to BIOS v1.09

Customer Impact/Recommendations:

Customer is advised to update to the latest BIOS version.

ECO Number: TBD

Part: 54-25320-02

Revision: K02 - L02

Component: Capictors and Inductors

Severity: Low

ECO Issue Date: TBD

Type of Notification: No customer action required

Change Description: Improvement in 1280x1024 video resolution

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Problem Description:

None, specification improvement only

Solution:

production phase in of change.

Customer Impact/Recommendations:

This change has no impact to existing product.

ECO Number: TBD

Part: DIGTIAL PC 5100 Systems

Revision: N/A

Component: Factory Installed Software

Severity: Low

ECO Issue Date: TBD

Type of Notification: Customer action may be required

Change Description: Microsoft NT4.0 Service Pac 3 to be included with the factory installed software.

Problem Description:

None. Software enhancement

Solution:

Incorporate Windows NT4.0 Service Pac 3

Customer Impact/Recommendations:

Upgrade to Service Pac 3 per Microsoft's recommendation.

ECO Number: 54-25334/TA013

Part: 54-25334-02

Revision: (E02 - F02) (E03 - F03)

Component: Main Logic Board

Severity: Low

ECO Issue Date: Jan 22, 1998

Type of Notification: No Customer Action Required

Change Description: Manufacturing yield issue during POST

Problem Description: **Manufacturing yield issue during POST. Very small percentage (less than 1%) of Main Logic Boards failed POST due to crystal oscillator variations.**

Solution: **Modify crystal oscillator circuit to improve yield.**

Customer Impact/Recommendations: **No Customer Action Required. Manufacturing yield issue. Affected product corrected in manufacturing.**