digital

Prioris XL Servers
Product Change Information

Initial Release:	**May 1997**
Current Release	**Jun1998**

This document details the following for the Prioris XL Servers product change information:

- Introduction

- Product Change Summary

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- BIOS Change Release Notes

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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 their potential impact to daily customer operations. This evaluation includes, but is not limited to such items as safety, emission requirements, functionality, compatibility, reliability, and manufacturing process. Recommendations are then made to customers on whether any action needs to be taken. On occasion, emergency changes may be implemented before they are reflected in this document.

Product Change Summary

The Product Change Summary provides a overview of the "Engineering Change Orders" (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 major components.

BIOS Release Summary

The BIOS Release Summary is a subset of information from the Product Change Summary. It is meant to provide an overview of just the BIOS Release history This matrix provides the BIOS release number, date of release, customer impact, and brief description. The brief description either denotes a specific change, maintenance release, and/or new feature support. A maintenance release implies that a series of changes or problem fixes were put in place.

Product Change Release Notes

The Product Change Release Notes provide information on each specific change This information is meant to aid the customer in understanding in more detail what has changed and whether they need to take any action The change descriptions include a change, solution if applicable, and a customer recommendation.

Customer 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 safety, functionality, compatibility, or reliability

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. This type of change can range from a part substitution, documentation change, or yield enhancement.

Future Releases

Future releases of this document will incorporate information for other major system components. 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 changes will be released independently and not affect the MLB revision.

Systems Supported

The information outlined in this document covers the following system variants:

System Variant	Description
590	Pentium 90mhz
5100	Pentium 100mhz
5133	Pentium 133mhz
5166	Pentium 166mhz
5200	Pentium 200mhz
590DP	Pentium 90mhz Dual Processor
5100DP	Pentium 100mhz Dual Processor
5133DP	Pentium 133mhz Dual Processor
5166DP	Pentium 166mhz Dual Processor
5200 DP	Pentium 200mhz Dual Processor

Product Change Summary

Part Number	Part	Old Rev	New Rev	ECO Number	Date	Customer Impact	Change Description
54-23984-01	MLB	B01	B01	5423984-TA002	Feb-95	Medium	BIOS Release V2.01
54-23984-01	MLB	B01	C01	5423984-TA003	Jun-95	Medium	BIOS Release V2.03
54-23984-01	MLB	C01	D01	5423984-TA004	Aug-95	Low	Mitsubishi floppy error fix
54-23984-01	MLB	D01	E01	5423984-TA006	Nov-95	None	Change SCSI Oscillator
54-23984-01	MLB	E01	F01	5423984-TA007	Nov-95	Low	BIOS Release V2.04
54-23984-01	MLB	F01	H01	5423984-TA008	Nov-95	Low	Real-time clock fix
54-23984-01	MLB	H01	H02	5423984-TA009	Dec-95	Low	Component substitution
54-23984-01	MLB	H02	J01	5423984-TA010	Mar-96	Low	BIOS Release V2.05
54-23984-01	MLB	J01	K02	5423984-TA011	Apr-96	Medium	BIOS Release V2.06
54-23984-01	MLB	K02	L02	5423984-TA012	Jul-96	None	BIOS Release V2.07
54-23984-01	MLB	L02	L02	5423984-TA013	Nov-96	Low	Component Substitution
54-23984-01	MLB	L02	L03	5423984-TA014	Dec-96	Low	VGA 5428 EOL
54-23984-01	MLB	L03	L03	5423984-TA015	Jan-97	High	BIOS Release V2.08, component substitution.
54-23984-01	MLB	L03	M03	5423894-TA017	July-97	High	Component Substitution

BIOS Release Summary

BIOS Revision	MLB Revision	ECO Number	Date	Customer Impact	Change Description
2.01	B01	5423984-TA002	Feb-95	Medium	Maintenance Release
2.03	C01	5423984-TA003	Jun-95	Medium	Maintenance Release
2.04	F01	5423984-TA007	Nov-95	Low	Maintenance Release
2.05	J01	5423984-TA010	Mar-96	Low	Maintenance Release
2.06	K02	5423984-TA011	Apr-96	Medium	Maintenance Release
2.07	L02	5423984-TA012	Jul-96	None	Maintenance Release
2.08	L03	5423984-TA015	Jan-97	High	Maintenance Release

ECO Number: 5423984-TA002

Part	Motherboard
Revision	A01 to B01
Component	BIOS
Severity	Medium
ECO Issue Date	Feb 95
Type of Notification	Action may be required
Change Description	BIOS release V2.01

Description

ICA Banyan network card fails
When trying to run the ICA Banyan network card it would hang This was because of the inconsistent memory size configuration between the Pentium Memory controller (PCMC) and the PCI/EISA Controller (ESC) A workaround was put in place to ensure that the memory sizes matched.

New Features

No new features added in this release

Compatibility

This release is backwards compatible on all system variants.

Solution

Upgrade your motherboard to BIOS V2.01, using the BIOS Flash Utility

Customer Impact/Recommendations

In most cases, an upgrade to this revision is not required. It is recommended that you upgrade to this BIOS, if you are using the a Banyan Vines network card (ICA card).

ECO Number: 5423984-TA003

Part	Motherboard
Revision	B01 to C01
Component	BIOS
Severity	Medium
ECO Issue Date	Jun 95
Type of Notification	Action may be required
Change Description	BIOS release V2.03

Problems Fixed

ICA network card under Banyan when memory size = 16MB
The ICA network card would hang under Banyan while running with 16MB memory. The solution was to change the DRAM timing setting to meet Intel's errata

New Features

No new features added in this release.

Compatibility

This release is backwards compatible on all system variants.

Customer Impact/Recommendations:

In most cases, an upgrade to this version of BIOS is not required. If you are using a Banyan ICA network card with only 16MB of memory, it is recommended that you upgrade to this BIOS.

ECO Number: 5423984-TA004

Part	Motherboard
Revision	C01 to D01
Component	Resistor
Severity	Low
ECO Issue Date	
Type of Notification	Action may be required
Change Description	Mitsubishi floppy errors fix.

Description

Write errors would occur on some Mitsubishi 2.88MB floppy disk devices. The problem was found to be due to an inadequate termination scheme on the floppy disk interface The 150 ohm terminating resistor on the floppy interface was causing ringing on the rising edge of the data and clock signals on the floppy interface.

Solution

The solution was to improve the signal quality on the floppy disk interface on the Main Logic Board This required the replacement of terminator Z11, Digital Part Number 13-21767-0B with Digital Part Number 13-16254-0C with a 1K ohm resistor.

Customer Impact/Recommendations:

This change was implemented in the manufacturing process at the factory.

Customer may be affected if using Mitsubishi floppy disk.

ECO Number: 5423984-TA006

Part	Motherboard
Revision	D01 to E01
Component	SCSI Oscillator
Severity	None
ECO Issue Date	Nov 95
Type of Notification	Action may be required
Change Description	Change SCSI Oscillator

Description

Revision C of theAdaptec 7870 SCSI chip was released to manufacturing This new release also required a change in the SCSI oscillator chip from 40Mhz to 42Mhz.

Solution

The solution was to replace the 42mhz oscillator with the 40mhz oscillator.

Customer Impact/Recommendations

No customer impact since this was implemented upon the release of this new version of chip.

ECO Number: 5423984-TA007

Part	Motherboard
Revision	E01 to F01
Component	BIOS
Severity	Low
ECO Issue Date	Nov 95
Type of Notification	Action may be required
Change Description	BIOS release V2.04

Description

Fix for system hang when using Adaptec 1740 and Digiboard MUX controller
The system would hang during power on self-tests (POST) if the system was configured with two Adaptec 1740 SCSI Controllers and one Digiboard MUX controller The two Adaptec controllers were at addresses CC00 and D000 and Digiboard card at D800.

New Features

- Bootable CDROM support was added in this release The onboard Adaptec 7800 SCSI controller BIOS version is 1.22S.01

- Support for Pentium 133 and 166MHz CPU variants was added.

Compatibility

This release is backwards compatible on all system variants.

Solution

Upgrade your motherboard to BIOS V2.04, using the BIOS flash utility.

Customer Impact/Recommendations

In most cases, an upgrade to this version of BIOS is not required. It is recommended that you upgrade to this BIOS if you are using two 1740 SCSI adapters at CC00 and D000 and one Digiboard MUX card at D800

ECO Number: 5423984-TA008

Part	Motherboard
Revision	F01 to H01
Component	Capacitor
Severity	Low
ECO Issue Date	Nov 95
Type of Notification	Action may be required
Change Description	Real Time Clock fix.

Description

The system time would be incorrect after a power-on The Real-Time-Clock (RTC) built-in battery would discharge prematurely resulting in the system time being reset or loss. This issue was only seen in a few isolated situations.

Solution

To resolve this issue, the capacitor at location C224 was removed This change allowed the RTC clock to properly discharge.

Customer Impact/Recommendations

Customer impact is low since only a few isolated incidences of this problem were reported.

ECO Number: 5423984-TA009

Part	Motherboard
Revision	H01 to H02
Component	Hardware
Severity	None
ECO Issue Date	Dec 95
Type of Notification	Action not required
Change Description	Component Substitution

Description

Part substitutions were implemented as cost reduction actions. An unused IC socket was removed and the plastic latch SIMM sockets were substituted with metal latch SIMM sockets.

Solution

Removed the unused IC socket for the keyboard controller chip and substituted metal latch SIMM sockets for plastic latch SIMM sockets.

Customer Impact/Recommendations

There is no customer impact since this was a manufacturing process change.

ECO Number: 5423984-TA010

Part	Motherboard
Revision	H02 to J02
Component	BIOS
Severity	Low
ECO Issue Date	Mar 96
Type of Notification	Action may be required
Change Description	BIOS release V2.05

Description

Fix for Quicklaunch failure to boot on a cold start.
Quicklaunch would not boot after a system cold start The resolution was to clear CMOS addresses 7Eh and 7Fh in Non-Volatile RAM (NVRAM) during a cold boot These locations are used to store information for Quicklaunch.

Solution

Upgrade your motherboard to BIOS V2.05, using the BIOS flash utility.

Customer Impact/Recommendations

It is recommended to upgrade to this release of BIOS for full support of the Quicklaunch tool.

ECO Number: 5423984-TA011

Part	Motherboard
Revision	J02 to K02
Component	BIOS
Severity	Medium
ECO Issue Date	Apr 96
Type of Notification	Action may be required
Change Description	BIOS release V2.06

Description

1. Fix system crash while loading PSM in Netware 4.1 SMP
   When trying to load the platform specific module (DECPSM.NLM) in Netware 4.1 SMP the system would crash.

2. Fix for hang when installing OS/2 Warp with a second host adapter card and onboard SCSI disabled
   When trying to install OS/2 Warp with a host adapter card installed and with the onboard SCSI controller (Adaptec 7850) disabled the system hangs on installation diskette #1 (the second disk). This failure will not allow you to complete the installation of the Operating System.

New Features

No new features added in this release.

Compatibility

This release is backwards compatible on all system variants

Solution

Upgrade your motherboard to BIOS V2.06, using the BIOS flash utility.

Customer Impact/Recommendations

It is recommended that you upgrade to this BIOS, if you are using NetWare 4.1 SMP because the system will crash while loading the Platform Specific Module (DECPSM.NLM).

Also if you are using OS/2 Warp with a host adapter card with the onboard SCSI disabled, the operating system will not install.

ECO Number: 5423984-TA012

Part	Motherboard
Revision	K02 to L02
Component	Multiple
Severity	None
ECO Issue Date	Jul 96
Type of Notification	Action may be required
Change Description	BIOS release V2.07

Description

Not applicable.

New Features

Support was added for Intel Pentium CPU variants 180 and 200 MHz.

Compatibility

This release is backwards compatible on all system variants.

Solution

Upgrade your motherboard to BIOS V2.07, using the BIOS flash utility.

Customer Impact/Recommendations

No customer impact since this release was to add support for new CPU speed variants.

ECO Number: 5423984-TA013

Part	Motherboard
Revision	L02
Component	Benchmarq BQ4287MT
Severity	None
ECO Issue Date	11/26/96
Type of Notification	Action not required
Change Description	Component substitution of Benchmarq BQ4287MT with Dallas DS14287

Description

Not applicable.

Solution

Not applicable.

Customer Impact/Recommendations

None

ECO Number: 5423984-TA014

Part	Motherboard
Revision	L04
Component	Cirrus 5428 Video Controller
Severity	None
ECO Issue Date	12/6/96
Type of Notification	Action not required
Change Description	Change Cirrus 5428 to Cirrus 5429 video controller. Add a capacitor on VVcas3-L line. Update Video BIOS to V1.00a.11 to support 5429 chip.

Description

Not applicable.

Solution

Update BIOS to V1.00a.11 using FLASH utility.

Customer Impact/Recommendations

None.

ECO Number: 5423984-TA015

Part	Motherboard
Revision	L03
Component	BIOS
Severity	High
ECO Issue Date	Jan 97
Type of Notification	Action may be required
Change Description	BIOS release V2.08 and add substitute parts.

Description

BIOS Release V2.08 and add substitute parts

1. *Severity*: Medium
   The user can now enable the internal cache of 2nd CPU.
   Customer impact: The AMI diagnostic would incorrectly show the speed of the 2nd CPU during the "Multi Processor test" prior to the BIOS change.

2. Severity: None.
   Description: The BIOS build date was always fixed at 02/18/94.
   Customer impact: None.

3. *Severity*: None.
   Part substitutionunitrode UC5603DP with UCC5614DP
   Customer impact: None.

New Features

1. Added SCU/BIOS version string for Quick Launch.

Compatibility

1. This release is backward compatible on all system variants.

Solution

Upgrade your motherboard to BIOS V2.08 using the BIOS FLASH utility.

Customer Impact/Recommendations

It is recommended to upgrade to this release of BIOS for full support of the Quick Launch tool.

ECO Number: 5423984-TA017

Part	Motherboard
Revision	M03
Component	PAL (E64)
Severity	High
ECO Issue Date	July 97
Type of Notification	Action required
Change Description	Change PAL E64 from part number 23-202Y3-00 to 23-359Y3-00

Description

System hangs - XLSebring 5xxx DP lock up while floppy copy and memory test.

Compatibility

This release is backward compatible.

Solution

1. Item 109 was PAL component 23-202Y3-00 (E64).
2. Add new PAL component 23-2359Y3-00 (E64). New checksum is 5B8A.

Customer Impact/Recommendations

It is recommended to update the new PAL equation in customer units.