



DIGITAL Server 3000 Series Product Change Information

Initial Release:	May 1997
Current Release	May 1998

This document details the following for the DIGITAL Server 3000 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 enables 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 an overview of the "Engineering Change Orders" or ECOs that have been released. This matrix provides 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, 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
3100 1200 /256	Pentium Pro 200 MHZ
3105 1200 /512	Pentium Pro 200MHZ
3200 2266 /512	Pentium II 266 MHZ
3100 1200 /256 MP	Pentium Pro 200 MHZ Multiple Processor
3105 1200 /512 MP	Pentium Pro 200MHZ Multiple Processor
3200 2266 /512 MP	Pentium II 266 MHZ Multiple Processor

Product Change Summary

Part Number	Part	Old Rev	New Rev	ECO Number	Date	Customer Impact	Change Description
54-24580-01	MLB	E03	E03	5424580-TA010	May 97	High	BIOS release V1.03 for DS3100
54-24580-01	MLB	E03	E03	5424580-TA011	June 97	High	BIOS release V1.04 for DS3100
54-24580-01	MLB	E03	E03	5424580-TA012	June 97	High	BIOS release V1.05 for DS3100
54-24580-01	MLB	E03	F03	5424580-TA013	Aug 97	High	Add RC circuit on MLB (Rev E03 etch) for DS3100
54-24580-01	MLB	F03	H03	5424580-TA014	Aug 97	None	Component EOL for DS3100
54-25302-02	TRM	—	A01	5425302-TA001	Aug 97	None	Terminator card for DS3200
54-24580-01	MLB	H03	H03	5424580-TA015	Aug 97	High	BIOS release V2.00 for DS3100/DS3200
54-24580-01	MLB	H03	J03	5424580-TA016	Sept 97	High	Component change for DS3100
54-24580-01	MLB	E01 J03	E02 J04	5424580-TA017	Sept 97	High	Component classification for DS3100
54-24580-01	MLB	E02 J04	E04 J05	5424580-TA018	Sept 97	High	Component phase in for DS3100
PCB40-A9	Krnl	A01	B01	PCB40-TA001	Sept 97	High	Component replacement for DS3100
PCB44-A9	Krnl	A01	B01	PCB44-TA001	Sept 97	High	Component replacement for DS3100
54-25304-01	CPU	B01	B01	5425304-TA001	Sept 97	High	Component change for DS3200
54-25304-01	CPU	B01	B01	5425304-TA002	Sept 97	None	CPU component designation for DS3200
54-25304-01	CPU	B01	B01	5425304-TA003	Sept 97	None	Document correction for DS3200
54-25302-02	Term Card		A01	5425302-TA001	Sept 97	None	New variation for DS3100
54-24580-01	MLB	J05	J06	5424580-TA019	Oct 97	High	Relay-out MLB for DS3100
54-24580-02	MLB	A01	A01	5424580-TA020	Oct 97	High	New MLB Variation for DS3100
54-24580-01	MLB	E03/ J06/	E03/ J06/	5424580-TA021	Oct 97	Low	BIOS release V2.01 for DS3100/DS3200

54-24580-02		A01	A01					
PCB40-A9	Krnl.	A02	B02	PCB40-TA002	Oct 97	High	Component phase in for DS3100	
PCB44-A9	Krnl.	B01	C01	PCB44-TA002	Oct 97	High	Component phase in for DS3100	
54-25304-02	Term Card	A01	B01	5425302-TA002	Oct 97	High	New variation for DS3200	
PCB40-A9	Krnl.	B02	C02	PCB40-TA003	Nov 97	High	Regulatory Label for DS3100	
PCB40-A9	Krnl.	C02	D02	PCB40-TA004	Nov 97	Medium	Update for re-branding for DS3100	
54-25436-01	PWB	A01	A01	5425436-TA002	Jan 98	None	Backplane module update for DS3105R, DS3200R, DS3205R	
54-24580-01/02	MLB	E04, J05, J06, A01	E04, J05, J06, A01	5424580-TA022	Dec 97	High	BIOS release V3.00 for DS3100, DS3105, DS3200, DS3105R, DS3200R	
54-24580-01/02	MLB	E04, J05, J06, A01	E04, J05, J06, A01	5424580-TA023	Dec 97	High	BIOS release V3.01 for DS3100, DS3105, DS3200, DS3105R, DS3200R	
54-24580-01/02	MLB	E04, J05, J06, A01	E04, J05, J06, A01	5424580-TA024	Feb 98	High	BIOS release V3.02 for DS3100, DS3105, DS3200, DS3105R, DS3200R	
70-32723-01/02	CPU Mod	A01	B01	70-32723-TA001	Dec 97	Low	New CPU card for DS3200/ DS3105R/ DS3200R	
70-32723-01/02	CPU Mod	B02	B02	70-32723-TA002	Feb 98	Low	Phase in C1 step CPU for DS3200, DS3105R, DS3200R	
70-32735-01/02	CPU Mod	A01	A02	70-32735-TA001	Feb 98	Low	Phase in C1 step CPU for DS3105R, DS3200R, DS3205R, DS3205	
54-24580-01 54-24580-01 54-24580-01 54-24580-02	MLB	E04 J05 J06 A01	E04 J05 J06 A01	5424580-TA026	Apr 98	High	BIOS release V 3.03 for DS3100, DS3105, DS3200	
54-25440-01	Dual CPU Mod	A01	A02	5425440-TA001	Apr 98	Medium	Improved CPU Retention Assembly for DS3200	

BIOS Release Summary

BIOS Revision	MLB Revision	ECO Number	Date	Customer Impact	Change Description
V1.03	E03	5424580-TA010	May 97	High	Maintenance release
V1.04	E03	5424580-TA011	June 97	High	Product fix
V1.05	E03	5424580-TA012	June 97	High	Product fix
V2.00	H03	5424580-TA015	Aug 97	High	Product fix
V2.01	All revs.	5424580-TA021	Oct 97	Low	Product fix
V3.00	E04, J05, J06, A01	5424580-TA022	Dec 97	High	Product fix
V3.01	E04, J05, J06, A01	5424580-TA023	Dec 97	High	Product fix
V3.02	E04, J05, J06, A01	5424580-TA024	Feb 98	High	Product fix
V3.03	E04, J05, J06, A01	5424580-TA026	Apr 98	High	Product fix

ECO Number: 5424580-TA010

Part	Motherboard
Revision	E03
Component	BIOS
Severity	High
ECO Issue Date	May 97
Type of Notification	Action required
Change Description	BIOS upgrade to V1.03 for DS3100

Description

1. **Severity:** High

Description: When Pentium Pro CPU with L2 more than 256K is detected, the message "Cache SRAM Failed" is displayed. The message "Cache SRAM unsupported" should display.

Symptom: None

Customer Impact: None

Solution

System BIOS version of 23-318Z2-00 is changed from V1.02 to V1.03.

Compatibility

N/A

Customer Impact/Recommendations:

None

ECO Number: 5424580-TA011

Part	Motherboard
Revision	E03
Component	BIOS
Severity	High
ECO Issue Date	June 97
Type of Notification	Action may be required
Change Description	BIOS Release V1.04 for DS3100

Description

Severity: High

Description: Monitor flickering problem.

Symptom: Monitors flicker when connected to onboard Trio32 VGA chip.

Customer Impact: Customers' monitors will not function normally.

Solution

Upgrade System BIOS to Version V1.04

Compatibility

This release is backwards compatible on all system variants.

Customer Impact/Recommendations:

It is **STRONGLY** recommended to upgrade to this version of BIOS if the onboard VGA chip is S3 Trio32.

ECO Number: 5424580-TA012

Part	Motherboard
Revision	E03
Component	BIOS
Severity	High
ECO Issue Date	June 97
Type of Notification	Action may be required
Change Description	BIOS Release V1.05 for DS3100

Description

Severity: High

Description: Specification change - Pentium Pro processor with L2 cache size more than 256KB is to be supported.

Symptom: System is halted if Pentium Pro processor with L2 cache size more than 256KB is installed

Customer Impact: System is halted.

Solution

Upgrade your Main Logic Board (MLB) to BIOS V1.05.

Compatibility

This release is backwards compatible on all system variants.

Customer Impact/Recommendations:

It is strongly recommended to upgrade to this version of BIOS if the user's system is equipped with the Pentium Pro processor with L2 cache over 256KB. BIOS V1.05 requires SCU V1.01 or greater.

ECO Number: 5424580-TA013

Part	Motherboard
Revision	E01 and F03
Component	BIOS
Severity	High
ECO Issue Date	August 97
Type of Notification	Action not required
Change Description	Add RC circuit on MLB for DS3100

Description

Severity: High

Description: Does not self power after a power failure.

Symptom: Does not self power after a power failure, it requires that someone physically recycle the power switch.

Customer Impact: No customer impact since this change was implemented during the manufacturing process.

Solution

Add RC circuit to your Main Logic Board (MLB).

Compatibility

N/A

Customer Impact/Recommendations:

No customer impact since this change was implemented during the manufacturing process.

ECO Number: 5424580-TA014

Part	MLB
Revision	H03
Component	Graphics Accelerator
Severity	None
ECO Issue Date	Aug 97
Type of Notification	Action not required
Change Description	End of life for Graphics Accelerator for DS3100

Description

Severity: N/A

Description: Graphics Accelerator (21-43696-01) is going to end of life.

Symptom: N/A

Solution

21-40815-06 (TRIO64V+) will replace 21-43696-01.

Compatibility

N/A

Customer Impact/Recommendations:

No customer impact since this change is implemented in the manufacturing process.

ECO Number: 5425302-TA001

Part	TRM (terminator card)
Revision	A01
Component	Terminator card
Severity	None
ECO Issue Date	Aug 97
Type of Notification	Action not required
Change Description	New terminator card to allow for assembly for DS3200

Description

Severity: N/A

Description: It is impossible to assemble the terminator card with bracket on Firebird.

Symptom: N/A

Solution

Add new variation 54-25302-02 for the terminator card without bracket.

Compatibility

N/A

Customer Impact/Recommendations:

No customer impact since this change is implemented in the manufacturing process.

ECO Number: 5424580-TA015

Part	MLB
Revision	H03
Component	BIOS
Severity	High
ECO Issue Date	Aug 97
Type of Notification	Action may be required
Change Description	BIOS release V2.00 for DS3100/DS3200

Description

Severity: High

Problem: Firebird CPU module is not supported.

Symptom: Pentium II processor and DIMM are not configured correctly when Firebird CPU module is installed.

Solution

Upgrade your Main Logic Board (MLB) to BIOS V2.00

Compatibility

This release is backward compatible on all system variants.

Customer Impact/Recommendations:

It is strongly recommended to upgrade to this version of BIOS if User's system is to be equipped with Firebird CPU module.

ECO Number: 5424580-TA016

Part	MLB
Revision	J03
Component	MLB
Severity	High
ECO Issue Date	Sept 97
Type of Notification	Action not required
Change Description	Component change for DS3100

Description

Severity: High

Problem: The VGA power source RC circuit contains a resistor that is too large and causes the RAM DAC test to fail when the phase is in Trio64V+. Trio64V requires more current than Trio32. The resistor value for Trio64V must be smaller than that for Trio32 which will reduce the drop voltage.

Solution

At location R394 delete the 10 ohm resistor and add a 5.1 ohm resistor

Customer Impact/Recommendations:

No customer impact since the change was implemented during the manufacturing process.

ECO Number: 5424580-TA017

Part	MLB
Revision	E02/J04
Component	MLB
Severity	High
ECO Issue Date	Sept 97
Type of Notification	Action not required
Change Description	Component classification for DS3100

Description

Severity: High

Problem: 93C46 (Serial EEPROM 1024 BITS-IN 8 pin) has wrong classification (21 class)

Solution

Correct the 93C46 classification to 23 class.

Customer Impact/Recommendations:

No customer impact since the change was implemented during the manufacturing process.

ECO Number: 5424580-TA018

Part	MLB
Revision	E04/J05
Component	MLB
Severity	High
ECO Issue Date	Sept 97
Type of Notification	Action not required
Change Description	Component phase in for DS3100

Description

Severity: High

Change description: Phase in new SCSI terminator (UCC5614DP) to provide enhanced reliability.

Solution

1. Delete 19-39217-61 (UC5603DP) and add 21-44010-61 (UC5C5614DP) in the KPL.
2. Change note in KPL:
 - WAS - 19-39217-61 (Unitrode UC5603DP) can be substituted by 19-43778-02 (Unitrode UC5612DP) or 21-44010-01 (Unitrode UCC5614DP).
 - IS - 21-44010-01 (Unitrode UC5614DP) can be substituted by 19-43778-02 (Unitrode UC5612DP) or 19-39217-61 (Unitrode UCC5603DP).

Customer Impact/Recommendations:

No customer impact since the change was implemented during the manufacturing process.

ECO Number: PCB40-TA001

Part	Building Block
Revision	B
Component	SCSI Terminator
Severity	High
ECO Issue Date	Sept 97
Type of Notification	Action not required
Change Description	Component replacement for DS3100

Description

Severity: High

Change description: The SCSI terminator (12-41768-02) on Skagit causes amber LED light on SBB.

Solution

1. Delete the SCSI terminator (12-41768-02).
2. Add the SCSI terminator (12-41768-03).

Customer Impact/Recommendations:

A Field Blitz will be issued to alert MCA of the symptom and resolution of this problem.

ECO Number: PCB44-TA001

Part	Building Block
Revision	B
Component	SCSI Terminator
Severity	High
ECO Issue Date	Sept 97
Type of Notification	Action not required
Change Description	Component replacement for DS3100

Description

Severity: High

Change description: The SCSI terminator (12-41768-02) on Firebird causes amber LED light on SBB.

Solution

1. Delete the SCSI terminator (12-41768-02).
2. Add the SCSI terminator (12-41768-03).

Customer Impact/Recommendations:

A Field Blitz will be issued to alert MCA of the symptom and resolution of this problem.

ECO Number: 5425304-TA001

Part	CPU
Revision	B01
Component	CPU
Severity	High
ECO Issue Date	Sept 97
Type of Notification	Action not required
Change Description	Component change for DS3200

Description

Severity: High

Problem: System can not boot due to VRM failure.

Solution

Changed R18 from 330 ohm (13-40998-37) to 4.7K ohm (13-40998-65).

Customer Impact/Recommendations:

No customer impact since the change was implemented during the manufacturing process.

ECO Number: 5425304-TA002

Part	CPU
Revision	B01
Component	CPU
Severity	None
ECO Issue Date	Sept 97
Type of Notification	Action not required
Change Description	Component designation incorrect for DS3200

Description

Severity: N/A

Problem: Location R18 and C28 are printed with wrong reference designator. Location R18 is printed with C28 and location C28 is printed with R18.

Solution

Update the silkscreen to call out right reference designator for R18 and C28.

Customer Impact/Recommendations:

None

ECO Number: 5425304-TA003

Part	CPU
Revision	B01
Component	CPU
Severity	None
ECO Issue Date	Sept 97
Type of Notification	Action not required
Change Description	Document update for DS3200

Description

Severity: N/A

Problem: On the UA drawing, it shows incorrect default frequency multiple (3.5X) on SW1 default setting. The correct default Frequency multiple should be 4X not 3.5X.

Solution

Update the UA drawing to correct the frequency multiple of SW1 default setting to 4X.

Customer Impact/Recommendations:

None

ECO Number: 5425302-TA001

Part	Terminator card
Revision	A01
Component	Terminator
Severity	None
ECO Issue Date	Sept 97
Type of Notification	Action not required
Change Description	New component variation for DS3100

Description

Severity: None

Problem: It is impossible to assemble the Terminator card with the bracket on Pocono or Firebird products.

Solution

Add a new variation 54-25302-02 for the terminator card without the bracket.

Customer Impact/Recommendations:

No customer impact since the change was implemented during the manufacturing process.

ECO Number: 5424580-TA019

Part	MLB
Revision	J06
Component	MLB
Severity	High
ECO Issue Date	Oct 97
Type of Notification	Action not required
Change Description	Relay-out the MLB for DS3100

Description

Severity: High

Change description: Manufacturing is suffering from rework on the Skagit MLB.

Solution

Relay-out the MLB and eliminate all of the reworks on the Skagit MLB. The revision of 50-24579-01 is H01.

Customer Impact/Recommendations:

No customer impact since the change was implemented during the manufacturing process.

ECO Number: 5424580-TA020

Part	MLB
Revision	A01
Component	MLB
Severity	High
ECO Issue Date	Oct 97
Type of Notification	Action not required
Change Description	MLB variation change from 01 to 02 for DS3100

Description

Severity: High

Change description: N/A

Solution

Create a new variation -02 with H01 etch and update as follows:

1. Location E79: 21-44085-12 (21143PC) to replace 21-44085-10 (21143PA)
2. Location E81 (EPROM): 23-024N6-00 replaces 23-022N6-00

Note: In order to phase in 21143PC the Enet Card is changed from 54-24576-01 (NS Chip) to 54-25310-01 (ML669x) at Kernel level.

Customer Impact/Recommendations:

54-24580-01 MLB can only use the 54-24576-01 ENET card. 54-24580-02 MLB can only use the 54-25310-01 ENET card.

ECO Number: 5424580-TA021

Part	MLB
Revision	E03 /J05/J06 /A01
Component	BIOS
Severity	Low
ECO Issue Date	Oct 97
Type of Notification	Action may be required
Change Description	Fix BIOS problem in DS3100/DS3200

Description

Severity: Low

Change description: BIOS Release V2.01

Problem: The message "EISA Configuration Error" shows at all times when the capacity of the main memory is greater than 512MB.

Symptom: After running SCU the message "EISA Configuration Error" still displays.

Solution

Modify code to fix this bug.

Customer Impact/Recommendations:

Upgrade to BIOS V2.01 if more than 512MB of memory is installed.

ECO Number: PCB40-TA002

Part	Kernal
Revision	A02 - B02
Component	ENET card
Severity	High
ECO Issue Date	Oct 97
Type of Notification	Action not required
Change Description	Component phase in for DS3100

Description

Severity: High

Change description: Phase in new ENET card 54-25310-01 to consist with ENET controller 21143PC and for a cost reduction.

Solution

1. Replace 54-24576-01 with 54-25310-01.
2. Replace 54-24580-01 with 54-24580-02 and add a note that states "54-24580-01 and 54-25310-01 can be substituted by a pair that consists of 54-24580-01 and 54-24576-01".
3. Phase in MLB 54-24580-02 with H01 etch revision for implementing ENET controller 21143PC (refer to ECR SK0045#01 for MLB change.)

Customer Impact/Recommendations:

The 54-24580-02 MLB and 54-25310-01 ENET card require a minimum of V3.4 Quick Launch for customer shipments.

ECO Number: PCB44-TA002

Part	Kernal
Revision	C01
Component	ENET card
Severity	High
ECO Issue Date	Oct 97
Type of Notification	Action not required
Change Description	Component phase in for DS3100

Description

Severity: High

Change description: Phase in new ENET card 54-25310-01 to consist with ENET controller 21143PC and for a cost reduction.

Solution

1. Replace 54-24576-01 with 54-25310-01.
2. Replace 54-24580-01 with 54-24580-02 and add a note that states "54-24580-01 and 54-25310-01 can be substituted by a pair that consists of 54-24580-01 and 54-24576-01".
3. Phase in MLB 54-24580-02 with H01 etch revision for implementing ENET controller 21143PC (refer to ECR SK0045#01 for MLB change.)

Customer Impact/Recommendations:

The 54-24580-02 MLB and 54-25310-01 ENET card require a minimum of V3.4 Quick Launch for customer shipments.

ECO Number: 5425302-TA002

Part	Terminator card
Revision	B01
Component	Terminator
Severity	Low
ECO Issue Date	Oct 97
Type of Notification	Action not required
Change Description	New component variation for DS3200

Description

Severity: Low

Problem: It is not easy to insert or withdraw the terminator module from the CPU slot connector.

Solution

Add a plastic handle on the PCB edge to make inserting and removing the module from the CPU slot connector easy.

Customer Impact/Recommendations:

No customer impact since the change was implemented during the manufacturing process.

ECO Number: PCB40-TA003

Part	Kernel
Revision	C02
Component	Kernel
Severity	High
ECO Issue Date	Nov 97
Type of Notification	Action not required
Change Description	Regulatory Label for DS3100

Description

The Taiwan regulatory label needs to be marked CNS mark by January 1, 1998 to meet re-branding requirements.

Severity: High

Problem: N/A

Solution

Change Taiwan regulatory label, 36-48239-01, revision from B01 to C01.

Customer Impact/Recommendations:

No customer impact since the change was implemented during the manufacturing process.

ECO Number: PCB40-TA004

Part	Kernel
Revision	D02
Component	Kernel
Severity	Medium
ECO Issue Date	Nov 97
Type of Notification	Action not required
Change Description	Part number change for re-branding for DS3100

Description

Change part number of the labels and Doc. Kit for re-branding.

Severity: Medium

Problem: N/A

Solution

Part	Current P/N	New P/N
• LED code label	36-48211-01	36-48211-03
• Left side label	36-48212-01	36-48212-05
• Doc Kit	QC-04TAA-GZ	QC-06EAA-GZ
• Nameplate	74-51963-01	74-51963-03
• Canada Reg. label	36-43278-22	36-43278-28
• UK Reg. Label	36-43278-23	36-43278-29
• Aust. Reg. Label	-----	36-43278-30

Change Note:

- Gen:** 36-48239-02 label, regulatory, assembled in Japan, 36-48239-03 label, regulatory, assembled in Singapore.
- Gen:** 36-43278-22 label, regulatory, skagit, built in Canada. 36-43278-23 label, regulatory, Skagit made in U.K..
- Gen:** Different variant for different MFG sites. 36-43278-28 for Canada, 36-43278-29 for U.K., 36-43278-30 for Australia

Delete: 36-46548-01 and 35-46548-02

Customer Impact/Recommendations:

No customer impact since this change was implemented during the manufacturing process.

ECO Number: 5425436-TA002

Part	Backplane module
Revision	A01
Component	Backplane module
Severity	None
ECO Issue Date	Jan 97
Type of Notification	Action not required
Change Description	Update Backplane module

Description

Add some parameters to Monza's backplane for impedance control

Severity: None

Problem: N/A

Solution

Add note to MD drawing.

Note: The following parameters are for reference only.

Er=4.5
Trace thickness: 2.0+/-0.4 mils, i.g. [1.6, 2.4]
Trace width: [5, 5.5] mils
Prepreg: (7628x2) [14.5 , 15] mils
Max. Z0 @Trace width: 5.0 Z0=97.4756
Trace thickness: 1.6
Prepreg: 15
Min. Z0 @Trace width: 5.5 Z0=91.46
Trace thickness: 2.4
Prepreg: 14.5

Customer Impact/Recommendations:

No customer impact since the change is a documentation change only

ECO Number: 5424580-TA022

Part	MLB
Revision	E04, J05, J06, A01
Component	MLB
Severity	High
ECO Issue Date	Dec 97
Type of Notification	Action may be required
Change Description	BIOS Release V3.01 for DS3100, DS3105, DS3200, DS3105R, DS3200R

Description

System BIOS is changed from V2.01 to V3.00.

Severity: High

Problem:

1. When system warm boot in POST, the pink string error message appears: 8031 Fail, default model name used. System ID fail, default model name used. (SEVERITY HIGH)
2. Pentium II 300MHz processor is displayed as 299MHz in SCU. (SEVERITY LOW)
3. CPU patch code for pentium II C1 stepping is not available. (SEVERITY HIGH)
4. Workaround: Skagit/Firebird/Monza system failed to pass the Windows 9x HCT test. (SEVERITY HIGH)

Symptom:

1. After warm booting, the Monza Pentium Pro system several times, the 8031 fails.
2. None
3. CPU patch code for Pentium II C1 stepping was not loaded.
4. Skagit/Firebird/Monza system failed to pass the Windows 9x HCT test with "Unsupported I/O" error.

Solution:

Upgrade MLB to BIOS V3.00 to correct following:

1. Phase in 8031 download code V3.00.00.
2. Fix the CMOS value that is to be read by SCU.
3. Add CPU patch code for Pentium II C1 stepping.
4. The information reported by DEVICE NODES from BIOS were wrong, so "Unsupported I/O" of windows 9x HCT does not pass. At the present several I/O ports are reserved to pass the test.

Compatibility:

This release is backward compatible on all system variants.

Customer Impact/Recommendations:

It is strongly recommended to upgrade to this version of BIOS.

ECO Number: 5424580-TA023

Part	MLB
Revision	E04, J05, J06, A01
Component	MLB
Severity	High
ECO Issue Date	Dec 97
Type of Notification	Action may be required
Change Description	BIOS Release V3.01 for DS3100, DS3105, DS3200, DS3105R, DS3200R

Description

SCSI BIOS has problem at Terminator.

Severity: High

Problem: SCSI BIOS V1.32.02 has a problem at terminator.

Symptom: Some terminator selections in SCSISelect do not work.

Solution: Use the last version of SCSI BIOS (V1.26S1.01).

Upgrade MLB to BIOS V3.02.

Compatibility:

This release is backward compatible on all system variants.

Customer Impact/Recommendations:

It is strongly recommended to upgrade to this version of BIOS.

ECO Number: 5424580-TA024

Part	MLB
Revision	E04, J05, J06, A01
Component	MLB
Severity	High
ECO Issue Date	Feb 98
Type of Notification	Action may be required
Change Description	BIOS Release V3.02 for DS3100, DS3105, DS3200, DS3105R, DS3200R

Description

Flickering problem when using certain monitor types.

Severity: High

Problem: Flickering problem when using certain monitor types.

Solution

Upgrade MLB to BIOS V3.02.

Compatibility:

This release is backward compatible on all system variants.

Customer Impact/Recommendations:

It is strongly recommended to upgrade to this version of BIOS.

ECO Number: 70-32723-TA001

Part	CPU
Revision	B01
Component	CPU
Severity	Low
ECO Issue Date	Dec 97
Type of Notification	Action may be required
Change Description	New CPU card for DS3100, DS3105, DS3200, DS3105R, DS3200R

Description

Phase in new Pentium II CPU card, 54-25440-01. The new CPU card can support PII 266 and 300MHz CPU, but the old card (54-25304-01) can only support PII 266MHz CPU.

Severity: Low

Problem: Old card (54-25304-01) can only support PII 266MHz CPU.

Solution

Replace 54-25304-01 with 54-25440-01

Compatibility:

N/A

Customer Impact/Recommendations:

No customer impact since this change is implemented during the manufacturing process.

ECO Number: 70-32723-TA002

Part	CPU
Revision	B02/B02
Component	CPU
Severity	Low
ECO Issue Date	Feb 98
Type of Notification	Action may be required
Change Description	Phase in C1 step CPU for DS3200/DS3105R/DS3200R

Description

Phase in C1 step CPU on PII 266Mhz 512 CPU/Heatsink assemblies.

Severity: Low

Problem: N/A.

Solution

Replace 70-32723-02 with 70-32720-08

Compatibility:

N/A

Customer Impact/Recommendations:

Only like parts can be used in dual processing systems.

ECO Number: 70-32735-TA001

Part	CPU
Revision	A01/A01
Component	CPU
Severity	Low
ECO Issue Date	Feb 98
Type of Notification	Action may be required
Change Description	Phase in C1 step CPU for DS3205, DS3105R, DS3200R, DS3205R

Description

Phase in C1 step CPU on PII 300Mhz 512 CPU/Heatsink assemblies.

Severity: Low

Problem: N/A.

Solution

Replace 70-32736-01 with 70-32736-02

Compatibility:

N/A

Customer Impact/Recommendations:

Only like parts can be used in dual processing systems.

ECO Number: 5424580-TA026

Part	MLB
Revision	E04, J05, J06, A01
Component	MLB
Severity	High
ECO Issue Date	Apr 98
Type of Notification	Action may be required
Change Description	BIOS Release V3.02 for DS3100, DS3105, DS3200

Description

Severity: High

Problem:

1. No matter which CPU failed, the POST always displays the message "Processor 02 Test Fail."
2. The 8031 beeps when the system is downloading code to 8031 during POST.
3. The L2 cache auto-sizing for the Deschutes Slot 1 Processor fails during POST.
4. The CPU Patch Code for the Deschutes Slot1 A0 Stepping with CPU ID 0650h (333MHz product family) is not available.
5. When the SCU disables and then enables the MP table, the system hangs at the first warm boot.
6. The RTC will not update the CMOS century value at the year 2000 mark.
7. The PHLASH utility fails under MS-DOS with the RSM card connected.
8. On the DS3100, DS3105, DS3200, DS3105, DS3200, DS3205 systems, 1GB memories (DIMM's) are not supported.
9. The system hangs after the items "Cache System BIOS ROM" and "Cache Video ROM" in the SCU are set to "Disabled" and "Enabled" respectively.

Symptom:

1. When a bad processor is installed on the lower slot of the CPU card as Processor 01, the POST always displays "Processor 02 Test Fail" not "Processor 01 Test Fail".
2. After warm booting the system several times, sometimes 8031 beeps during the POST.
3. During the POST, the CPU L2 size is shown as "Failed".
4. None.
5. Post task (mplnitj) will disable the CPU APIC using MSR[1Bh]. When the SCU disables the then enables MP table, some incorrect values are displayed from disable to enable in some CPU APIC registers (MSR[1Bh] bit 11).

6. The RTC will not update CMOS century value at the year 2000 mark.
7. When running the PHLASH utility under MS-DOS with the EISA RSM card installed, the error message "File Close Error on BIOS.ROM" is displayed on the screen.
8. When there is 1GB of memory installed on the DS3200 system, the "Memory Pattern Test" fails on address 20000000h.
9. When "Cache System BIOS" and "Cache Video ROM" in SCU are set to "Disabled" and "Enabled" respectively, the system hangs with a count-down message of "190:Set Cache registers" showing on the screen after testing extended memory.

Solution

Upgrade your Main Logic Board (MLB) to BIOS V3.03.

Compatibility:

This release is backward compatible on all system variants.

Customer Impact/Recommendations:

It is strongly recommended to upgrade to this version of BIOS.

ECO Number: 5425440-TA001

Part	Dual CPU Module
Revision	A01/A02
Component	Foldable Retention
Severity	Medium
ECO Issue Date	Apr 98
Type of Notification	Customer Action Not Required.
Change Description	Current CPU Retention assembly does not work well with the manufacturing process.

Description

The Current CPU Retention Assembly does not work well with the manufacturing process.

Severity: Medium

Problem: N/A.

Solution

Replace 12-45806-01 and 12-45765-01 with 22-14977-01 (Foldable retention) for improved efficiency.

Compatibility:

N/A

Customer Impact/Recommendations:

No customer impact since this change will be phased into manufacturing.

