digital

DIGITAL Server 5000 Series
Product Change Information

Initial Release:	**May 1997**
Current Release	**May 1998**

This document details the following for the DIGITAL Server 5000 product change information:

- Introduction

- Product Change Summary

- BIOS Release Summary

- Product Change Release Notes

- BIOS Change Release Notes

- Customer Impact Ratings

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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 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 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
5100 1200/256	Pentium Pro 200 MHZ
5105 1200/512	Pentium Pro 200 MHZ
5200 2266/512	Pentium II 266 MHZ
5100 1200/256 MP	Pentium Pro 200 MHZ Multiple Processor
5105 1200/512 MP	Pentium-Pro 200 MHZ Multiple Processor
5200 1200/512 MP	Pentium II 266 MHZ Multiple Processor

Product Change Summary

Part Number	Part	Old Rev	New Rev	ECO Number	Date	Customer Impact	Change Description
54-24568-01	MLB	B02	B02	5424568-TA003	Nov 96	Low	Component substitution for DS5100
54-24568-01	MLB	B02	B02	5424568-TA004	Jan 97	High	BIOS Release V1.01 for DS5100
54-24568-01	MLB	B02	B02	5424568-TA005	Jan 97	Low	Component substitution for DS5100
54-24568-01	MLB	B02	C03	5424568-TA009	May 97	Medium	Add component for DS5100
54-24568-01	MLB	C03	C03	5424568-TA010	May 97	High	BIOS Release V1.03 for DS5100
54-24568-01	MLB	C03	C03	5424568-TA011	July 97	None	Part substitution for DS5100
54-25304-01	CPU	A01	B01	5425304-TA001	Aug 97	High	Component change for DS5100
54-25304-01	CPU	B01	B01	5425304-TA002	Aug 97	None	Component numbering for DS5200
54-25304-01	MLB	C03	C03	5424568-TA012	Aug 97	High	BIOS Release V2.00 For DS5100/DS5200
54-24568-01	MLB	C03	D03	5424568-TA013	Aug 97	None	Component EOL for DS5100
54-25302-02	TERM	—	A01	5425302-TA001	Aug 97	None	Terminator card for DS5200
54-24568-01	MLB	B01 / D03	B01 / D03	5424568-TA013A	Aug 97	High	BIOS Release V2.00 for DS5100/DS5200
54-24568-01	MLB	D03	E03	5424568-TA014	Sept 97	High	Component change for DS5100
54-24568-01	MLB	E03	E04	5424568-TA015	Sept 97	High	Component classification for DS5100
54-24568-01	MLB	E04	E05	5424568-TA016	Sept 97	High	Component phase in for DS5100
54-25304-01	CPU	B01	B01	5425304-TA001	Sept 97	High	Component change for DS5100
54-25304-01	CPU	B01	B01	5425304-TA002	Sept 97	None	CPU component designation for DS5100
54-25304-01	CPU	B01	B01	5425304-TA003	Sept 97	None	Document correction for DS5200
54-25302-02	Term. Card		A01	5425302-TA001	Sept 97	None	New variation for DS5100
54-25304-02	Term Card	A01	B01	5425302-TA002	Oct 97	High	New variation for DS5200
54-24568-02	MLB	A01	A01	5424568-TA017	Oct 97	High	Upgrade for DS5100

Part	Module	From	To	TA	Date	Priority	Description
PCB56-A9	Krnl.	A01	B01	PCB56-TA001	Oct 97	High	Component phase in for DS5100
PCB50-A9	Krnl.	C01	D01	PCB50-TA003	Oct 97	High	Component phase in for DS5100
PCB50-A9	Krnl	D01	E01	PCB50-TA004	Nov 97	High	Update Reg. Label for DS5100
PCB50-A9	Krnl	E01	F01	PCB50-TA005	Nov 97	Medium	Re-branding change for DS5100
54-24568-01 54-24568-02	MLB	E05 B01 A01	E05 B01 A01	5424568-TA018	Nov 97	Low	BIOS release V2.01 for DS5100/DS5200
54-24568-01/02	MLB	F05 B01 B01	F05 B01 B01	5424568-TA020	Dec 97	Medium	BIOS release V3.00 for DS5100/DS5200
54-24568-01/02	MLB	F05 B01 B01	F05 B01 B01	5424568-TA021	Jan 98	High	BIOS release V3.01 for DS5100/DS5200
54-24568-01/02	MLB	E05 A01	F05 B01	5424568-TA019	Dec 97	High	OCP back light problem for DS5100
70-32723-01/02	CPU Mod	A01	B01	7032723-TA001	Dec 97	Low	New CPU card for DS5200
70-32723-01/02	CPU Mod	B02	B02	7032723-TA002	Feb 98	Low	Phase in C1 step CPU for DS5200
70-32735-01/02	CPU Mod	A01	A02	7032735-TA001	Feb 98	Low	Phase in C1 step CPU for DS5205
54-23954-01	OCP Mod	B02	C02	5423594-TA003	Feb 98	High	Adding components to OCP for DS5100, DS5105, and DS5200
54-24568-01/02	MLB	F05 B01	F06 B02	5424568-TA023	Mar 98	Medium	Modify locating holes in MLB for DS5100, DS5105, DS5200, DS5205, and DS5210
54-25440-01	Dual CPU Mod	A01	A02	5425440-TA001	Apr 98	Medium	Improved CPU Retention Assembly for DS5200
54-24568-01 54-24568-01 54-24568-01 54-24568-02 54-24568-02	MLB	B01 F05 F06 B01 B02	B01 F05 F06 B01 B02	5424568-TA024	Apr 98	High	BIOS release V3.02 for DS5100/DS5105/DS5200

BIOS Release Summary

BIOS Revision	MLB Revision	ECO Number	Date	Customer Impact	Change Description
1.01	B02	5424568-TA004	Jan 97	High	Maintenance Release
1.03	C03	5424568-TA010	May 97	High	Product fix
2.00	C03	5424568-TA012	Aug 97	High	For correct configuration
2.00	B01/D03	5424568-TA013A	Aug 97	High	For correct configuration
2.01	B01/A01	54-24568-TA018	Oct 97	Low	Product fix
3.00	F05, B01 B01	5424568-TA020	Dec 97	Medium	Code modification for rebranding
3.01	F05, B01 B01	5424568-TA021	Jan 98	High	Monitor problem
3.02	B01, F05, F06, B01, B02	5424568-TA024	Apr 98	High	OCP Problem

ECO Number: 5424568-TA003

Part	Motherboard
Revision	B02
Component	Component substitution
Severity	None
ECO Issue Date	11/22/96
Type of Notification	Action not required
Change Description	DRAM parts substitution for DS5100

Description:

Substitute Micron DRAM 256Kx16, 60nx (21-39219-37) with either Hyundai (21-43685-37) or NPNX (21-43926-37)

Solution:

None required

Customer Impact/Recommendations:

None.

ECO Number: 5424568-TA004

Part	Motherboard
Revision	B02
Component	BIOS
Severity	High
ECO Issue Date	Dec 96
Type of Notification	Action required
Change Description	BIOS Release V1.01 for DS5100

Description

1. Severity: Low
   Description: There is a potential for the 8031 chip to incorrectly report the number of CPUs. This problem has never been seen in the field.
   Customer impact:

2. Severity: Medium
   Description: When "Exchange Diskette Drivers" within SCU is enabled, the floppy drives A: and B: were not swapped correctly.
   Customer impact:

3. Severity: Low
   Description: There is a potential for problems with the 8031 download function. This problem has not been seen in the field.
   Customer impact:

4. Severity: Medium
   Description: The registers of the SMC 665 chip were not set correctly by the BIOS resulting in LPT modes incorrectly set.
   Customer impact

5. Severity: Low
   Description: Repeated warm boots may hang the system. This was only seen in the manufacturing test environment.
   Customer impact:

6. Severity:Low
   Description: Repeat warm boots may result in the OCP message disappearing.
   Customer impact:

New Features

1. Severity: Medium
   Description: Added ECU/BIOS version string for Quick Launch installation support.
   Customer impact:

2. Severity: High
   Description: This BIOS release supports the Pentium PRO chip with stepping CPUID=619
   Customer impact:

3. Severity: Low
   Description: The BIOS release now reports memory size and type when ECC errors occur.

For example
a) When a single bit memory error occurs, the warning messages shown on the screen are:
   Correctable Error: Jxx
   Correctable Error: Jyy
b) When multiple bit memory errors occur, the warning messages shown on the screen are:
   Uncorrectable Error: Jxx
   Uncorrectable Error: Jyy

Compatibility

This release is backwards compatible on all system variants.

Solution

Upgrade you Main Logic Board (MLB) to BIOS V1.01 using the BIOS Flash utility.

Customer Impact/Recommendations:

It is recommended to upgrade to this version of BIOS.

ECO Number: 5424568-TA005

Part	Motherboard
Revision	B02
Component	Component substitution
Severity	None
ECO Issue Date	Jan 97
Type of Notification	Action not required
Change Description	Unitrode part substitution for DS5100

Description:

19-39217-01 (Unitrode UC5603DP) can be substituted by 19-43778-02 (Unitrode UC5612DP) or 21-44010-01 (Unitrode UCC5614DP)

Solution:

None required.

Customer Impact/Recommendations:

No customer impact since this change is a manufacturing part substitution.

ECO Number: 5424568-TA009

Part	Motherboard
Revision	C03
Component	Add 0.1uf cap.
Severity	Medium
ECO Issue Date	May 97
Type of Notification	Action may be required
Change Description	EMI Audit failed for DS5100

Description

1. **Severity:** Medium
   Description: The EMI audit failed. It was found while running the EMI test on Pocono product (Intel PII 266Mhz CPU).
   Symptom: N/A
   Customer Impact: No customer impact since change is implemented in manufacturing.

Solution

Add C652, 0.1uf cap. (p/n: 10-24053-34) between j52 pin 4 (power pin) of k/b, mouse conn.) and j52 pin 19 (ground pin) on side 2.

Compatibility

N/A

Customer Impact/Recommendations:

N/A

ECO Number: 5424568-TA010

Part	Motherboard
Revision	C03
Component	BIOS
Severity	High
ECO Issue Date	May 97
Type of Notification	Action may be required
Change Description	BIOS Release V1.03 for DS5100

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 V1.03

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: 5424568-TA011

Part	Motherboard
Revision	C03
Component	MLB
Severity	None
ECO Issue Date	July 97
Type of Notification	Action not required for DS5100
Change Description	21-43925-01 is replaced with 21-43925-02

Description

Severity: None
Description: 21-43925-01, PPB 21150-AA/DC1030C, will End Of Life.
Symptom: N/A

Customer Impact: None

Solution

Substitute with 21-43925-02, PPB 21150-AA/DC1030E.

Compatibility

N/A

Customer Impact/Recommendations:

None

ECO Number: 5425304-TA001

Part	CPU
Revision	B01
Component	CPU
Severity	High
ECO Issue Date	Aug 97
Type of Notification	Action not required
Change Description	Change resistor values for DS5200

Description

Severity: High
Description: System does not boot due to VRM failed.
Symptom: N/A

Customer Impact: None

Solution

Replace 330 ohm resistor (13-40998-37) R18, with 4.7K ohm (13-40998-65).

Compatibility

N/A

Customer Impact/Recommendations:

None

ECO Number: 5425304-TA002

Part	CPU
Revision	B01
Component	CPU
Severity	High
ECO Issue Date	Aug 97
Type of Notification	Action not required
Change Description	Correct component reference designator for DS5200.

Description

Severity: None
Description: Location R18 and C28 are printed with wrong reference designator. R18 is printed with C28, and C28 is printed with R18.
Symptom: N/A

Customer Impact: None

Solution

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

Compatibility

N/A

Customer Impact/Recommendations:

None

ECO Number: 5424568-TA012

Part	MLB
Revision	C03
Component	BIOS
Severity	High
ECO Issue Date	Sept 97
Type of Notification	Action may be required
Change Description	BIOS change from V1.03 to V2.00 for DS5100/DS5200

Description

Severity: High
Description: Support Pocono CPU module (pentium II process card).
Symptom: Pentium II processor and DIMM are not configured correctly when Pocono CPU module is installed.

Solution

Add the corresponding codes.

Compatibility

This release is backward compatible on all system variants.

Customer Impact/Recommendations:

It is strongly recommended to upgrade BIOS version to V2.00 if customer wants to upgrade to Pentium II processor.

ECO Number: 5424568-TA013

Part	MLB
Revision	D03
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 DS5100

Description

Severity: N/A
Description: 32-bit Graphics Accelerator (21-43696-01) is going to end of life.

- 21-40815-06 (TRIO64V+) will replace 21-43696-01.
- Delete 10-38588-14 (C295 / quantity 1).
- Add 13-40998-73 (R296 / quantity 1).

Symptom: N/A

Solution

None required

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 DS5200

Description

Severity: N/A
Description: It is impossible to assemble the terminator card with bracket on Pocono.
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: 5424568-TA013A

Part	MLB
Revision	B01/D03
Component	BIOS
Severity	High
ECO Issue Date	Aug 97
Type of Notification	Action may be required
Change Description	BIOS change from V1.03 to V2.00 for DS5100/DS5200

Description

Severity: High
Description: BIOS Release V2.00

1. **Problem:** Support Pocono CPU module (Pentium II processor cars.
   Sympton: Pentium II processor and DIMM are not configured correctly when Pocono CPU module is installed.
   Solution: Add the corresponding codes.
   Severity: High

2. **Problem:** The revisions of 54-24568-01 and document as well as ECO number are not correct.
   Solution: Correct the revision of 54-24568-01 to D03, document to R, and ECO number to 5424568-TA013.

Compatibility

This release is backward compatible on all system variants.

Customer Impact/Recommendations:

It is strongly recommended to upgrade BIOS version to V2.00 if customer wants to upgrade to Pentium II processor.

ECO Number: 5424568-TA014

Part	MLB
Revision	E03
Component	MLB
Severity	High
ECO Issue Date	Sept 97
Type of Notification	Action not required
Change Description	Component change for DS5100

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: 5424568-TA015

Part	MLB
Revision	E04
Component	MLB
Severity	High
ECO Issue Date	Sept 97
Type of Notification	Action not required
Change Description	Component classification for DS5100

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: 5424568-TA016

Part	MLB
Revision	E05
Component	MLB
Severity	High
ECO Issue Date	Sept 97
Type of Notification	Action not required
Change Description	Component phase in for DS5100

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: 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 DS5100

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 DS5100

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 DS5200

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 DS5100

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: 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 DS5200

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: 5424568-TA017

Part	MLB
Revision	A01
Component	MLB
Severity	High
ECO Issue Date	Oct 97
Type of Notification	Action not required
Change Description	Update MLB for DS5100

Description

Severity: High
Description: Upgrade 21143PA (21-44085-10) with the enhancement version 21143PC (21-44085-12).
Symptom: N/A

Customer Impact: High

Solution

Create a new variation (02) with the F01 etch version and update as follows:

1. Location E114: Implement 21-44085-12 (21143PC) to replace 21-44085-10 (21143PA)

2. Location E111: Implement 23-024N6-00 to replace 23-022N6-00 (E2PROM)

Note: In order to phase in 21143PC the ENET Card will be changed from 54-24576-01.

Compatibility

N/A

Customer Impact/Recommendations:

The 01 version MLB can only use the 54-24576-01 ENET card and the 02 version MLB can only use the 54-25310-01 ENET card.

ECO Number: PCB56-TA001

Part	Kernel
Revision	B01
Component	ENET card
Severity	High
ECO Issue Date	Oct 97
Type of Notification	Action not required
Change Description	Component phase in for DS5100

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 54-24568-01 with 54-24568-02 and add a note that states "54-24568-01 and 54-25310-01 can be substituted by a pair that consists of 54-24568-01 and 54-24576-01".

3. Phase in MLB 54-24568-02 with F01 etch revision for implementing ENET controller 21143PC (refer to ECR SK0030#01 for MLB change.)

Customer Impact/Recommendations:

The 54-24568-02 MLB and 54-25310-01 ENET card require a minimum of V3.4 Quick Launch for customer shipments.

ECO Number: PCB50-TA003

Part	Kernel
Revision	D01
Component	Kernel
Severity	High
ECO Issue Date	Nov 97
Type of Notification	Action not required
Change Description	Phase in new ENet card for DS5100

Description

Phase in new ENet card.

Severity: High
Problem: N/A

Solution

- Replace 54-24576-01 with 54-25310-01

- Replace 54-24568-01 with 54-24568-02 and add a note "54-24568-02 and 54-25310-01 can be substituted by a pair that consists of 54-24568-01 and 54-24576-01".

- Phase in MLB 5424568-02 with F01 etch revision for implementing Enet controller 21143PC (refer to ECR ND0030#01 for MLB change).

Customer Impact/Recommendations:

The 54-24568-02 MLB and 54-25310-01 ENet care requires a minimum of V3.4 QuickLaunch for customer shipments.

ECO Number: PCB50-TA004

Part	Kernel
Revision	E01
Component	Kernel
Severity	High
ECO Issue Date	Nov 97
Type of Notification	Action not required
Change Description	Update Taiwan regulatory label for DS5100

Description

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

Severity: High
Problem: N/A

Solution

Change Taiwan regulatory label, 36-44177-14, revision from A01 to B01.

Customer Impact/Recommendations:

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

ECO Number: PCB50-TA005

Part	Kernel
Revision	F01
Component	Kernel
Severity	High
ECO Issue Date	Nov 97
Type of Notification	Action not required
Change Description	Part number change for re-branding for DS5100

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
• Left side label	36-45369-04	36-45369-07
• Right side label	36-45369-05	36-45369-08
• Doc Kit	QC-04SAA-GZ	QC-06CAA-GZ
• Canada Reg. label	36-45536-28	36-45536-83
• UK Reg. Label	36-45536-29	36-45536-84
• Aust. Reg. Label	36-44177-15	36-45536-85

Change Note:

Was: 11 note: Different variance for different MFG. Sites. 36-44177-15 for Australia, 36-45536-28 for Canada, and 36-45536-29 for UK.

IS: 11 note: Different variance for different MFG sites. 36-45536-83 for Canada, 36-45536-84 for UK, and 36-45536-85 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: 5424568-TA018

Part	MLB
Revision	B01 /E05 /A01
Component	BIOS
Severity	Low
ECO Issue Date	Nov 97
Type of Notification	Action may be required
Change Description	Fix BIOS problem for DS5100/DS5200

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: 5424568-TA020

Part	MLB
Revision	F05 / B01 / B01
Component	BIOS
Severity	Medium
ECO Issue Date	Dec 97
Type of Notification	Action may be required
Change Description	Fix BIOS problem for DS5100/DS5200

Description

Severity: Medium
Change Description: BIOS Release V3.00

Problem:

1. Rebranding features have not been added.
2. Pentium II C1 patch code is not loaded yet.
3. SCU displays 299MHZ for 300MHZ model during SCU configuration.
4. Failed the Windows 9x HCT I/O test.

Symptom:

1. Rebranding name is not displayed correctly.
2. N/A
3. SCU displays 299MHZ for 300MHZ model during SCU configuration.
4. Failed the Windows 9x HCT I/O test.

Solution

Upgrade you MLB to BIOS V3.00 for correcting the following:
1. Modify codes to add rebranding features.
2. Add pentium II C1 patch code.
3. Change codes to correct the model information.
4. workaround: change codes to pass the Windows 9x HCT I/O test.

Compatibility:

This release is backward compatible on all system variants.

Customer Impact/Recommendations:

It is recommended to upgrade to this version.

ECO Number: 5424568-TA021

Part	MLB
Revision	F05 / B01
Component	BIOS
Severity	High
ECO Issue Date	Jan 98
Type of Notification	Action may be required
Change Description	Fix BIOS problem for DS5100/DS5200

Description

Severity: High
Change Description: BIOS Release V3.01
Problem: Flickering problem when using certain monitors.
Symptom: Some monitors support DDC capability.

Solution

Upgrade MLB to BIOS V3.01.

Compatibility:

This release is backward compatible on all system variants.

Customer Impact/Recommendations:

It is recommended to upgrade to this version.

ECO Number: 5424568-TA019

Part	MLB
Revision	F05 / B01
Component	BLB
Severity	High
ECO Issue Date	Jan 98
Type of Notification	Action not required
Change Description	Fix BIOS problem for DS5100

Description

Severity: High
Change Description: The OCP back light does not go out on some systems. This is caused from a problem on E23 (8242 keyboard controller chip) on the MLB
Problem: The OCP back light does not go out on some systems..
Symptom: N/A

Solution

Built with 21-40582-63 (8242-PE) and not 21-39002-64 (8242-PC) on MLB and delete "131 Note: 21-40582-63 can be substituted by 21-39002-64." On KPL.

Compatibility:

N/A

Customer Impact/Recommendations:

No customer impact since it will be implemented in manufacturing side.

ECO Number: 7032723-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 DS5200

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: 7032723-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 DS5200

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: 7032735-TA001

Part	CPU
Revision	A02/A02
Component	CPU
Severity	Low
ECO Issue Date	Feb 98
Type of Notification	Action may be required
Change Description	Phase in C1 step CPU for DS5205

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: 5423594-TA003

Part	OPC
Revision	C02
Component	OCP
Severity	High
ECO Issue Date	Feb 98
Type of Notification	Customer action not required
Change Description	Add components to OCP for DS5100, DS5105, DS5200

Description

Noise from OCP to LCD module which makes unit critical to meet Digital EMI requirement of under 3 dB

Severity: High
Problem: N/A.

Solution

Add 10 pieces of 16-35517-01 (BEAD) on J3 and change E4 from F132 to HCT132.

Compatibility:

N/A

Customer Impact/Recommendations:

No customer impact since this was a manufacturing yield improvement.

ECO Number: 54-24568-TA023

Part	MLB
Revision	F06/B02
Component	MLB
Severity	Medium
ECO Issue Date	Mar 98
Type of Notification	Action not required
Change Description	Modify MLB locating holes for DS5100, DS5105, DS5200, DS5205, and DS5210

Description

The locating holes can be scratched by the locating pin during the manufacturing process which may cause at short between +5V and Gnd.

Severity: Medium
Problem: N/A

Solution

1. Enlarge the etch-free area in the inner layers around the locating hole to guarantee that no short circuit will occur between any two layers, even when locating hole is scratched by the locating pin during production process.

2. Recommend to enlarge the ring space of locating holes from 20 mil to 70 mil.

Compatibility:

N/A

Customer Impact/Recommendations:

No customer impact since this will be implemented by the PCB vendor.

ECO Number: 5424568-TA021

Part	MLB
Revision	F05 / B01
Component	BIOS
Severity	High
ECO Issue Date	Jan 98
Type of Notification	Action may be required
Change Description	Fix BIOS problem for DS5100/DS5200

Description

Severity: High
Change Description: BIOS Release V3.01
Problem: Flickering problem when using certain monitors.
Symptom: Some monitors support DDC capability.

Solution

Upgrade MLB to BIOS V3.01.

Compatibility:

This release is backward compatible on all system variants.

Customer Impact/Recommendations:

It is recommended to upgrade to this version.

ECO Number: 5424568-TA019

Part	MLB
Revision	F05 / B01
Component	BLB
Severity	High
ECO Issue Date	Jan 98
Type of Notification	Action not required
Change Description	Fix BIOS problem for DS5100

Description

Severity: High
Change Description: The OCP back light does not go out on some systems. This is caused from a problem on E23 (8242 keyboard controller chip) on the MLB
Problem: The OCP back light does not go out on some systems.
Symptom: N/A

Solution

Built with 21-40582-63 (8242-PE) and not 21-39002-64 (8242-PC) on MLB and delete "131 Note: 21-40582-63 can be substituted by 21-39002-64 On KPL.

Compatibility:

N/A

Customer Impact/Recommendations:

No customer impact since it will be implemented in manufacturing side.

ECO Number: 5424568-TA024

Part	MLB
Revision	B01, F05, F06, B01, B02
Component	BIOS
Severity	High
ECO Issue Date	Apr 98
Type of Notification	Action may be required
Change Description	Fix BIOS problem for DS5100/DS5200

Description

Severity: High
Change Description: BIOS Release V3.02
Problem:

1. Whenever a CPU fails, the POST always displays the message "Processor 02 Test Fail".

2. The L2 cache auto-sizing for Deschutes Slot 1 Processor fails during the POST.

3. The CPU Patch Code for Deschutes Slot1 A0 Stepping with CPU ID 0650h (333MHz product family) is not available.

4. When The SCU disables and then enables the MP table, the system hangs at the first warm boot.

5. The RTC will not update the CMOS century value at the year 2000 mark.

6. The PHLASH utility fails under MS-DOS with the RSM card connected.

7. On the DS5100/DS5105/DS5200 systems, 1GB memories (DIMM's) are not supported.

8. System hangs after the items "Cache System BIOS ROM" and "Cache Video ROM" in the SCU are set to "Disabled" and "Enabled" respectively.

9. The OCP message needs to be changed from "Unexpected Int. " to "Interrupt Test. "

Symptom:

1. When a bad processor is installed in the lower slot of the CPU card as Processor 01, the POST always displays "Processor 02 Test Fail" not "Processor 01 Test Fail".

2. During the POST, the CPU L2 size shows as "Failed".

3. None.

4. Post task (mpInitj) disables 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).

5. The RTC will not update the CMOS century value at the year 2000 mark.

6. 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.

7. When there is 1GB of memory installed on the DS5100/DS5105/DS5200 systems, the "Memory Pattern Test" fails on address 20000000h.

8. When the "Cache System BIOS" and the "Cache Video ROM" in the SCU are set to "Disabled" and "Enabled" respectively, the system hangs and the count-down message "190:Set Cache registers" is displayed on the screen after testing extended memory.

9. None

Solution

Upgrade MLB to BIOS V3.02.

Compatibility:

This release is backward compatible on all system variants.

Customer Impact/Recommendations:

It is recommended to upgrade to this version, particularly for the DS5100/DS5105 systems.

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.