

FLX6401, FLX6801, FLC6001

PN COMPATIBILITY LISTING

PN 63421

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LIST OF EFFECTIVE PAGES

PUBLICATION NUMBER: 63421 - COMPAT FOR FLX64/FLX68/FLC60
 MASTER BOM PN: 315202901
 ORIGINAL ISSUE DATE: 11/29/04
 LATEST EC UPDATE: EC 131211A DATE: 06/06

Total number of pages in this volume is 18, consisting of the following pages:

TITLE		PAGE NO.	PAGE LEVEL	EC DATE
COVER				
LIST OF EFFECTIVE PAGES		III	131298	05/06
INTRODUCTION		IV		
		V		
CACHE ASSY	FLX6401 CONTROLLER W/CACHE	2-1	131244	10/05
CACHE ASSY	FLX6801 CONTROLLER W/CACHE	2-2	131244	10/05
OBCU ASSY	BATTERY BACKUP ASSEMBLY	2-3	131254	10/05
OFS ASSY	OFS ASSEMBLY	2-4	131154	05/05
OFSJ ASSY	OFSJ ASSEMBLY	2-5	131154	05/05
TRANS MOD	SPF OPTICAL TRANSCEIVER MODULE	2-6	127970	11/04
MCODE	MICROCODE CD, F150.XX.XX.XX	3-1	131242	11/05
IMPELLER	IMPELLER ASSY	4-1	131211A	06/06
PS	POWER SUPPLY	4-2	128091	08/05
PS	POWER SUPPLY (cont.)	4-2A	128098	10/05
EMI PLATE	ASSY,PLATE,EMI TOP OF STACK	4-3	131241	10/05
DMOD ASSY	BLANK DMOD	4-4	127970	11/04
DMOD ASSY	DRIVE CARRIER	4-5	131298	05/06

INTRODUCTION

This manual contains two parts:

1. INTRODUCTION - which defines the content of the manual and explains how to use it.
2. Compatibility is defined as follows:

Downward Compatible: A new assembly (usually a higher PN) is a direct replacement (downward compatible) for an old assembly (usually a lower PN) when it does not degrade machine performance. Downward compatibility is indicated when both assemblies have the same compatibility number for a specific application.

Upward Compatible: An old assembly (usually a lower PN) is equivalent to (upward compatible) and may directly replace a new assembly (usually a higher PN) if its use does not affect machine performance. Upward compatibility is indicated when assemblies having the same compatibility number are also indicated as "equivalent" in the "Description of EC" field.

Each page in the compatibility section contains the compatibility information for each FRU. It shows the history of Engineering Changes (ECs) that resulted in part number changes for that FRU. It also shows which part numbers are obsolete and which part numbers can be used to replace them.

For some FRUs, the functional changes that resulted in new part numbers will not function without corresponding machine rework. This usually results in a compatibility number change for the new assembly. The "Description of EC" field will summarize the changes. A Field APL defining the required rework will be listed in a separate column next to the EC number if applicable.

When a common FRU is released or modified for specific use in a new model or feature, the compatibility number will roll to indicate the new part number is not downward compatible for the new feature or models.

If the FRU is downward compatible for other existing models, an explanation will be added to the EC Description field.

If the compatibility number does not change, the new FRU will perform at least the same functions as the older FRU.

COMPATIBILITY AND OBSOLESCENCE

Any part number that is prefixed with an asterisk (*) is an obsolete part number. Obsolete means that the part will no longer be supplied. If an obsolete part is ordered, the field parts crib will substitute a part that is downward compatible or equivalent to the part number ordered.

Downward compatibility is designated by the compatibility number to the right of the part number. A FRU of a given part number is downward compatible with all those lower part number FRUs that have the same compatibility number. This means it can be used to replace any of the lower part numbers having the same compatibility number without requiring rework to another FRU or the machine.

For Example:

PART NUMBER	COMP NO	EC NO	SOFT REF	HEX FEAT	FIELD BILL	DESCRIPTION OF EC
*42150101	1	40020			NONE	IR - W/W BOARD
*42150102	1	40030			NONE	ADD REWORK
42150202	1	40040			8612	IMBED REWORK - EQUIV TO 102
*42150203	2	40050			8619	ADD REWORK. REQUIRED MBD AT LEVEL ___.
42150204	2	40060			NONE	ADD REWORK

In the above example:

P/N 42150 101 can replace only itself.

P/N 42150 102 can replace itself or P/N 42150101 (or -202 because it is equivalent).

P/N 42150 202 can replace itself, P/N 42150101 or P/N 42150102.

P/N 42150 203 can replace only itself. (Can not replace lower level cards unless MBD change or other prerequisite is installed).

P/N 42150 204 can replace itself and -203. (Cannot replace lower level cards unless MBD change or other prerequisite is installed).

* The asterisk to the left of a part number indicates that the part is obsolete and is no longer supported by manufacturing. The highest level part for each compatibility level should not carry an asterisk because manufacturing must support field spares until all machines have been brought to the next compatibility level.

CAUTION

Upward compatibility exists only if two FRUs with the same compatibility number are described as "equivalent" in the "Description of EC" field. Any other substitution of a lower part number for a higher part number requires a great deal of caution. Such practice may result in noise problems, timing problems, diagnostic errors, etc. Any attempt to utilize such a lower part number requires ensuring that functional changes or improvements missing from the lower part number will not result in customer system operation degradation. Reference the description of each EC and ensure that no machine wiring changes or companion changes to other FRUs were required at the time the higher part number was originally installed. Usage in this manner is not recommended and should be avoided if possible.

UPDATING THE MANUAL

To update the manual, insert the new pages according to the new list of effective pages. Remove and discard any pages that are replaced by a later EC level, or are shown as deleted from the list of effective pages.

Comments concerning the content of this manual should be directed to Configuration Management at the address below. In case of errors, please give specific page and line references, where appropriate. For a reply, include name and address.

Requests for additional copies of this manual should be directed to the Field Crib via Field Inventory System (FIS) terminals.

This publication was prepared by Storage Technology Corporation, 1 StorageTek Drive, Louisville, Colorado 80028-0001.

FRU NAME ODCS W/1GB CACHE ASSY
 PRODUCT NUMBER FLX6401
 FAMID CODE 526
 FRUID NAME ODCS, PWA
 DESCRIPTION FLX6401 CONTROLLER W/CACHE

PART NUMBER	COMP NO	EC NO	SOFT REF	HEX FEAT	FIELD BILL	DESCRIPTION OF EC
*312374601	1	127926	00	00	NONE	INITIAL RELEASE OF FRU for DUALPATH CONTROLLER ODCS PWA W/1GB DATA CACHE. UPDATE CPLD PROM TO ver.d, BOOTLOADER PROM TO rev.14J
*312374602	1	127981	00	00	NONE	UPDATE ODCS PWA TO 256M PROCESSOR DIMM
*312374603	1	131231	00	00	NONE	RESISTOR CHANGE TO RAISE VREF SIGNAL TO ADDRESS ECC ERRORS ON THE ODCS CARD.
* 312374604	1	131236	00	00	NONE	ADDED 22 AWG WIRES TO RAISE THE VDD VOLTAGE GOING TO THE FIBRESLICE CHIPS. RELEASED NEW 9 CHIP DIMMS TO REPLACE 18 CHIP DIMMS TO GET MORE MARGIN TO ADDRESS ECC ERRORS ON THE ODCS CARD.
312374605	1	131244	00	00	NONE	RESISTOR CHANGES ON THE DDR MEMEROY TERMINATION TO IMPROVE MARGIN AND PREVENT ECC ERROR.

FRU NAME ODC W/2GB DATA CACHE ASSY
 PRODUCT NUMBER FLX6801
 FAMID CODE 526
 FRUID NAME ODC, PWA
 DESCRIPTION FLX6801 CONTROLLER W/CACHE

PART NUMBER	COMP NO	EC NO	SOFT REF	HEX FEAT	FIELD BILL	DESCRIPTION OF EC
*312374702	1	127926	00	00	NONE	INITIAL RELEASE OF FRU for QUADPATH CONTROLLER ODC PWA W/2GB DATA CACHE. UPDATE CPLD PROM TO ver.d, BOOTLOADER PROM TO rev.14J
312374703	1	127981	00	00	NONE	UPDATE ODC PWA TO 256M PROCESSOR DIMM
*312374703	1	131154	00	00	103614	FIELD EXCEPTIONAL FB TO UPGRADE EPE UNITS TO FRS HARDWARE LEVEL
*312374704	1	131231	00	00	NONE	<i>RESISTOR CHANGE TO RAISE VREF SIGNAL TO ADDRESS ECC ERRORS ON THE ODC CARD.</i>
*312374705	1	131236	00	00	NONE	ADDED 22 AWG WIRES TO RAISE THE VDD VOLTAGE GOING TO THE FIBRESLICE CHIPS. RELEASED NEW 9 CHIP DIMMS TO REPLACE 18 CHIP DIMMS TO GET MORE MARGIN TO ADDRESS ECC ERRORS ON THE ODC CARD.
312374706	1	131244	00	00	NONE	<i>RESISTOR CHANGES ON THE DDR MEMEROY TERMINATION TO IMPROVE MARGIN AND PREVENT ECC ERROR.</i>

FRU NAME OBCU ASSY
 PRODUCT NUMBER FLX6401, FLX6801
 FAMID CODE 526
 FRUID NAME OBCU, PWA
 DESCRIPTION BATTERY BACKUP ASSY

PART NUMBER	COMP NO	EC NO	SOFT REF	HEX FEAT	FIELD BILL	DESCRIPTION OF EC
*312337908	1	127937	00	00	NONE	RWK OBCU PWA TO ELIMINATE FALSE FAILED OBCU
*312337909	1	127961	00	00	NONE	RWK OBCU PWA TO ELIMINATE FALSE OVP TRIGGER
312337910	1	131254	00	00	NONE	PICK UP USAGE OF OBCU PWA EMBED

FRU NAME OFS ASSY
 PRODUCT NUMBER FLX6401, FLX6801
 FAMID CODE 526
 FRUID NAME OFS, PWA
 DESCRIPTION OFS ASSY

PART NUMBER	COMP NO	EC NO	SOFT REF	HEX FEAT	FIELD BILL	DESCRIPTION OF EC
*312339508	1	127911	00	00	NONE	UPDATE CODE ON OFS PROMS-BASE 1_09, APPS 1_e4, FPGA 1_0d.
*312339509	1	127929	00	00	NONE	UPDATE DESCRIPTIONS ON LABELS
*312339510	1	127943	00	00	NONE	UPDATE CODE ON OFS PROMS APPS 1_0e, FPGA 1_0e, CPLD 1_REV3.
*312339510	1	127955	00	00	NONE	ADHESIVE CHANGE ON GASKET
*312339511	1	131083	00	00	NONE	AT THE OFS FRU LEVEL UPDATE FPGA CODE TO FPG1_10.
*312339512	1	131126	00	00	NONE	UPDATE FRU ASSY TO TRACK BREAK IN OF NEW LABEL
312339513	1	131143	00	00	NONE	UPDATE FRU ASSY. NEW GASKET TO IMPROVE EMI.
*312339513	1	131154	00	00	*103616	FIELD EXCEPTIONAL FB TO UPGRADE EPE UNITS TO FRS HARDWARE LEVEL
*312339514	1	131193	00	00	NONE	CREATED LABELS TO IDENTIFY THE FACEPLATES ARE NOT HANDLES.
*312339514	1	131275	00	00	NONE	CORRECTED 1.8V CURRENT SENSE LOGIC WHN RUNNING UNDER HIGH TEMP BY CHANGING OUT A RESISTER AND ADDING A HEAT SINK. UPDATED PROGRAMABLES TO LATEST VERSION
312332515	2	131330	00	00	NONE	CODE LEVEL APPL1.1C.00 IS NOT COMPATIBLE WITH NEW CODE APPL1.27.00. PURGED FIELD SPARES TO UPGRADE TO LATEST LEVEL

FRU NAME OFSJ ASSY
 PRODUCT NUMBER FLC6001
 FAMID CODE 525
 FRUID NAME OFSJ PWA
 DESCRIPTION OFSJ ASSY

PART NUMBER	COMP NO	EC NO	SOFT REF	HEX FEAT	FIELD BILL	DESCRIPTION OF EC
*312370905	1	127911	00	00	NONE	UPDATE CODE ON OFSJ PROMS-- BASE 1_09, APPS 1_e4, FPGA 1_0d.
*312370906	1	127929	00	00	NONE	UPDATE DESCRIPTIONS ON LABELS
*312370907	1	127943	00	00	NONE	UPDATE CODE ON OFS PROMS-- APPS 1_0e, FPGA 1_0e, CPLD 1_REV3.
*312370907	1	127955	00	00	NONE	ADHESIVE CHANGE ON GASKET
*312370908	1	131083	00	00	NONE	AT THE OFSJ FRU LEVEL UPDATE FPGA CODE TO FPG1_10.
*312370909	1	131126	00	00	NONE	UPDATE FRU ASSY TO TRACK BREAK IN OF NEW LABEL
*312370910	1	131143	00	00	NONE	UPDATE FRU ASSY. NEW GASKET TO IMPROVE EMI.
*312370910	1	131154	00	00	*103618	FIELD EXCEPTIONAL FB TO UPGRADE EPE UNITS TO FRS HARDWARE LEVEL
312370911	1	131193	00	00	NONE	CREATED LABELS TO IDENTIFY THE FACEPLATES ARE NOT HANDLES.
*312370911	1	131275	00	00	NONE	CORRECTED 1.8V CURRENT SENSE LOGIC WHN RUNNING UNDER HIGH TEMP BY CHANGING OUT A RESISTER AND ADDING A HEAT SINK. UPDATED PROGRAMABLES TO LATEST VERSION
312370912	2	131330	00	00	NONE	CODE LEVEL APPL1.1C.00 IS NOT COMPATIBLE WITH NEW CODE APPL1.27.00. PURGED FIELD SPARES TO UPGRADE TO LATEST LEVEL

FRU NAME SPF OPTICAL TRANCEIVER MODULE
 PRODUCT NUMBER FLX6401, FLX6801
 FAMID CODE 526
 FRUID NAME TRANCEIVER
 DESCRIPTION SPF OPTICAL TRANCEIVER MODULE

PART NUMBER	COMP NO	EC NO	SOFT REF	HEX FEAT	FIELD BILL	DESCRIPTION OF EC
10800537	1	127970	00	00	NONE	RELEASE OF SFP OPTICAL TRANCEIVER MODULE TO COMPAT BOOK.

FRU NAME CD,MICROCODE,
 PRODUCT NUMBER FLX6401, FLX6801
 FAMID CODE 526
 FRUID NAME MICROCODE
 DESCRIPTION CD,MICROCODE, F150.XX.XX.XX

PART NUMBER	COMP NO	EC NO	SOFT REF	HEX FEAT	FIELD BILL	DESCRIPTION OF EC
312389301	1	127979	00	00	NONE	INITIAL RELEASE OF FLX6 MICROCODE, F150.42.01.00
312389301	1	131155	00	00	103620	FIELD EXCEPTIONAL FB TO UPGRADE EPE UNITS TO FRS MICROCODE, F150.42.01.00
*312389302	1	131168	00	00	103620	UPDATE FB TO UPGRADE EPE UNITS TO MICROCODE, F150.43.02.00
*312389303	1	131235	00	00	NONE	UPDATE MICROCODE TO F150.43.03.00
*312389304	1	131242	00	00	NONE	UPDATE MICROCODE TO F150.43.11.00. ADDRESSES SEVERAL MISCELLANEOUS ISSUES.
312389305	1	131310	00	00	346993	UPDATE MICROCODE TO F150.43.18.00. INCREASES FLX SYSTEMS ABILITY TO RECOVERY FROM MULTIPLE CONCURRENT FAILURES.

FRU NAME IMPELLER ASSY
 PRODUCT NUMBER FLX6401, FLX6801, FLC6001
 FAMID CODE 526, 525
 FRUID NAME FAN
 DESCRIPTION EC 131211A 06/06

PART NUMBER	COMP NO	EC NO	SOFT REF	HEX FEAT	FIELD BILL	DESCRIPTION OF EC
*312337405	1	127919	00	00	NONE	RELEASE OF IMPELLER ASSEMBLY TO COMPAT BOOK
*312337406	1	131211	00	00	NONE	CHANGE BLOWER IN CONNECTOR ASSY TO INCREASE AIRFLOW.
*312337407	1	131269	00	00	NONE	MODIFY COVER TO INCREASE STRENGTH. DUE TO EFFECTIVITY, CHANGE CONNECTOR ASSY BACK TO LOWER AIRFLOW PN.
312337408	1	131211A	00	00	NONE	REDISPOSITION THE BLOWER AND HIGHER USAGE. ROLL IMPELLER ASSY TO 408 BY ADDING BLOWER PN 312383102.

FRU NAME PS,AC/DC,4 OUTPUT, 660W ASSY
 PRODUCT NUMBER FLX6401, FLX6801, FLC6001
 FAMID CODE 526, 525
 FRUID NAME POWER SUPPLY
 DESCRIPTION POWER SUPPLY

PART NUMBER	COMP NO	EC NO	SOFT REF	HEX FEAT	FIELD BILL	DESCRIPTION OF EC
*314320105	1	128069	00	00	NONE	REWORKED FROM THE 314320103 LEVEL. EQUIVALENT & INTERCHANGEABLE WITH THE 314320106 & COST REDUCED 31433590X
*314320107	1	128091	00	00	NONE	REWORKED FROM THE 314320105 LEVEL. UNITS MODIFIED FOR THE 3.3V RISE TIME. EQUIV. & INTERCHANGEABLE WITH THE '314320108 & COST REDUCED 31433590X
*314320106	1	128064	00	00	NONE	REWORKED FROM THE 314320104 LEVEL. EQUIVALENT & INTERCHANGEABLE WITH THE '314320105 & COST REDUCED 31433590X.
*314320108	1	128091	00	00	NONE	REWORKED FROM THE 314320106 LEVEL. UNITS MODIFIED FOR THE 3.3V RISE TIME. EQUIVALENT & INTERCHANGEABLE WITH THE '314320107 & COST REDUCED 31433590X.
*314335902	1	128064	00	00	NONE	INITIAL RELEASE OF THE COST REDUCED 660W POWER SUPPLY ASSEMBLY. EQUIVALENT & INTERCHANGEABLE WITH THE 314320105 & '106
*314335903	1	128069	00	00	NONE	UPDATE THE COST REDUCED 660W POWER SUPPLY ASSEMBLY TO REDUCE DROOP. EQUIVALENT & INTERCHANGEABLE WITH THE 314320105 & '106
*314335904	1	128076	00	00	NONE	REDUCE HIGH FREQUENCY NOISE. EQUIVALENT & INTERCHANGEABLE WITH THE 314320105 & 106

FRU NAME PS,AC/DC,4 OUTPUT, 660W ASSY
 PRODUCT NUMBER FLX6401, FLX6801, FLC6001
 FAMID CODE 526, 525
 FRUID NAME POWER SUPPLY
 DESCRIPTION POWER SUPPLY

PART NUMBER	COMP NO	EC NO	SOFT REF	HEX FEAT	FIELD BILL	DESCRIPTION OF EC
314335905	1	128077	00	00	NONE	IMPROVE RELIABILITY OF NAND GATE CHIP. EQUIVALENT & INTERCHANGEABLE WITH THE 314320105 & 106
314335906	1	128086	00	00	NONE	TRACK CHANGE FOR PC BOARD TRACE RE-ROUTE OF N_DC_OK SIGNAL, NEW THERMISTOR MOUNT, ADD RoHS COMPLIANCE & CE MARK. EQUIVALENT & INTERCHANGEABLE WITH THE 314320107 & 108.
314346001	2	128098	00	00	NONE	CHANGE FOR ROHS COMPLIANCE. THIS PART IS DOWNWARD COMPATIBLE BUT OLD PARTS CANNOT REPLACE THE ROHS COMPLIANT PART.

FRU NAME PLATE,EMI TOP OF STACK, ASSY
 PRODUCT NUMBER FLX6401, FLX6801
 FAMID CODE 526
 FRUID NAME EMI PLATE
 DESCRIPTION PLATE,EMI TOP OF STACK, ASSY

PART NUMBER	COMP NO	EC NO	SOFT REF	HEX FEAT	FIELD BILL	DESCRIPTION OF EC
*312382301	1	127904	00	00	NONE	INITIAL RELEASE OF EMI PLATE, TOP OF STACK ASSEMBLY
*312382302	1	127976	00	00	NONE	MODIFY PLATE TO PROTECT PWR CORDS AND FOR EASE OF INSPECTION.
312382303	1	131241	00	00	NONE	MODIFY PLATE TO INCREASE AREA FOR CABLE ROUTING

FRU NAME BLANK DMOD ASSY
 PRODUCT NUMBER FLX6401, FLX6801, FLC6001
 FAMID CODE 526, 525
 FRUID NAME DRIVE CARRIER FILLER
 DESCRIPTION BLANK DMOD ASSY

PART NUMBER	COMP NO	EC NO	SOFT REF	HEX FEAT	FIELD BILL	DESCRIPTION OF EC
*312372201	1	127918	00	00	NONE	RELEASE OF BLANK DMOD FILLER ASSEMBLY TO COMPAT
312372202	1	127994	00	00	NONE	MATERIAL CHANGE FOR COST REDUCTION.

FRU NAME DMOD SATA ASSY, 500GB
 PRODUCT NUMBER FLX6401, FLX6801, FLC6001
 FAMID CODE 526, 525
 FRUID NAME ODS2 PWA
 DESCRIPTION DRIVE CARRIER

PART NUMBER	COMP NO	EC NO	SOFT REF	HEX FEAT	FIELD BILL	DESCRIPTION OF EC
*312351006	1	127921	00	00	NONE	FIX FLASHING LEDS.
*312351006	1	127923	00	00	NONE	PICK UP USAGE OF ODS2 '502 EMBED
*312351007	1	127947	00	00	NONE	UPDATE DMOD WITH MAXTOR DRIVE CODE--YAR511W0
*312351008	1	131252	00	00	NONE	UPDATE DMOD WITH MAXTOR CALYPSO DRIVE 2.6 CHIP CHANGE.
*312351009	1	131238	00	00	NONE	UPDATE DMOD WITH ODS2 CHANGE TO GROUND FLOATING INPUT PIN.
312351010	1	131298	00	00	NONE	UPDATE ODS2 MICROCODE TO Rev2. CHANGE DMOD CALYPSO DRIVE BACK TO VERSION WITH 2.5 CHIP
*314646201	1	131158	00	00	NONE	RELEASE OF 250GB SABRE DRIVE. INTERCHANGEABLE WITH 31235100X.
*314646202	1	131238	00	00	NONE	UPDATE DMOD WITH ODS2 CHANGE TO GROUND FLOATING INPUT PIN.
*314646202	1	131298	00	00	NONE	UPDATE ODS2 MICROCODE TO Rev2.
316802501	2	131298	00	00	NONE	CHANGE FOR ROHS COMPLIANCE. THIS PART IS DOWNWARD COMPATIBLE BUT OLD PARTS CANNOT REPLACE THE ROHS COMPLIANT PART.