



Storage Systems

New 250GB SATA HDD FRU for DS4100 and EXP100 (P/N 40K6837)

GC53-1124-00

New 250GB SATA FRU for DS4100 and EXP100 -- Overview

- **What is the new 250GB SATA FRU for DS4100 & EXP100 ?**
 - The production cycle of the original IBM 250GB SATA HDD FRU (P/N 90P1349) has ended, as part of the normal HDD product refresh cycle. A new IBM 250GB SATA HDD FRU (P/N 40K6837) is now available.
- **The new 250GB SATA HDD FRU is fully qualified and released, with the following requirements:**
 - Mandatory prerequisites for the DS4100 controller firmware, EXP100 ESM firmware, and Storage Manager are required before installation.
 - All new DS4100 controller and EXP100 ESM FRUs are now released with the prerequisite firmware pre-installed.
 - The new controller FRU is only required for single-controller DS4100 models.
 - For details, see the part number and code level reference tables in this document.
 - IBM has tested the new HDD FRU with prerequisites installed.
 - Testing was performed in a mixed environment with the original 250GB HDD FRU PN 90P1349 included.
 - No compatibility, functional or performance issues were identified after prerequisites were installed.
- **Service parts (FRU/CRU) for the new and original 250GB HDD FRU are available**
 - The FRU type used must be based on the levels of DS4000 Storage Manager and controller and ESM firmware installed in your system.
 - The new 250GB SATA FRU (P/N 40K6837) must not be used prior to installation of prerequisites.
- **Availability of the original FRU / CRU inventory (P/N 90P1349) is limited**
 - Stock depletion is projected to occur by May 2006. The exact depletion date will vary, based on demand.
 - Customers are strongly encouraged to install prerequisites at the earliest opportunity.

New 250GB SATA FRU for DS4100 and EXP100 -- Prerequisites

- **Mandatory software and firmware prerequisites are required before installing the new 250GB SATA HDD FRU**
 - These prerequisites include code that is necessary to recognize and configure new HDD FRU.
 - Installing the prerequisite code is required to insure continuity of 250GB SATA HDD serviceability.
 - See the prerequisite code level tables in this document for details.
 - **Prerequisite installation order is important:**
 - **(1) Storage Manager → (2) ESM firmware → (3) DS4100 controller firmware and NVSRAM**
 - If this installation order is not followed, and the ESM firmware is updated after controller firmware, a slight performance degradation can occur.
 - Performance can be restored by resetting the controller using the Storage Manager CLI or Subsystem Management window. **Note:** This action might interrupt normal operations. Perform during off-peak hours.
- **Additional FRU part numbers are required to support the new 250GB SATA HDD FRU**
 - The new EXP100 ESM FRU contains firmware prerequisites (no hardware change required)
 - This EXP100 ESM FRU should be used for ESM service replacements after ESMs are upgraded to ESM firmware level 9563 or later.
 - The new DS4100 controller FRUs are required for single-controller models only
 - New DS4100 controller FRUs should be used only after single-controller firmware upgrades to 06.12.16.00, or later, are performed.
 - New DS4100 controller FRUs can also be used on DS4100 dual-controller models.
 - > Dual-controller models will use the firmware “auto-sync” feature to synchronize with prior DS4100 controller FRUs.
 - > Replacement controller firmware will automatically be upgraded when installed.
 - **The new SATA FRUs are available beginning in March 2006**

New 250GB SATA FRU for DS4100 and EXP100 – Part numbers

New FRUs	P/Ns
New 250GB SATA HDD FRU (Use this FRU as a replacement if the customer is at prerequisite code level. Target for availability : March 2006)	40K6837
EXP100 ESM FRU	39M6004
DS4100 Single-controller FRU	39M5961

New 250GB SATA FRU for DS4100 and EXP100 – Required minimum Storage Manager software and ESM firmware levels

The following minimum levels, or later, are required to recognize and support the new 250GB SATA FRU (P/N 40K6837):

DS4000 EXP100 ESM firmware	9563 or later
DS4000 Storage Manager	9.15, 9.16, or later

You can obtain the software and firmware upgrades listed on this page and on the next page at the following Web site:

<http://www.ibm.com/servers/storage/support/disk/>

New 250GB SATA FRU for DS4100 and EXP100 – Required minimum controller firmware and NVSRAM levels

The following minimum controller firmware and NVSRAM levels, or later, are required to recognize and support the new 250GB SATA FRU (P/N 40K6837):

Controllers	Firmware level	NVSRAM Level
DS4100 Standard (Base)	06.12.16.00	N1724F100R912V05
DS4100 Single-controller	06.12.16.00	N1724F10LR912V01
DS4300 Dual, Standard (Base) and Turbo * See note 1	06.12.16.00	N1722F600R912V05
DS4300 Dual, Standard (Base) and Turbo *See note 2	06.12.16.00	N1722F600R28enc2
DS4400	06.12.16.00	N1742F700R912V05
DS4500	06.12.16.00	N1742F900R912V06
DS4800	06.15.20.05	N1815D480R915V05

* **Note 1:** For EXP700/EXP710 attachment only, or when the FC/SATA Intermix premium feature is enabled.

* **Note 2:** For EXP100 attachment only. Support for eight external drawers attachment. Internal FC drives not configured.

New 250GB SATA FRU for DS4100 and EXP100 – Recommendations

- **Install the code prerequisites for new HDD FRUs as soon as possible**
 - You must install the code prerequisites prior to installing any of the new HDD FRU part numbers.
 - Perform upgrades no later than March 2006.
 - These upgrades are mandatory to insure continuity of HDD FRU serviceability.
- **Use new ESM FRUs for service replacements after ESM firmware upgrades**
 - If the original ESM FRUs are used for service replacements, firmware must be upgraded to the prerequisite levels for the new 250GB FRU.
- **Begin using new the HDD FRUs as soon as all code prerequisites are installed**
 - The new 250GB SATA HDD FRU part number: FRU P/N 40K6837
- **Whenever an order is placed for the previous FRU (P/N 90P1349):**
 - Customers should be reminded to upgrade with all prerequisites for P/N 40K6837 at the earliest opportunity to insure continuity of service