



Why choose Dell EMC Enterprise-class drives?

Tech Note by:
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All Dell EMC Enterprise drives have been developed and validated to function as designed on the Dell EMC platforms for which they are offered

- Each drive has a unique Dell EMC firmware, which is tuned, tested and validated for PowerEdge Servers
- Each drive has a particular bill of materials designed for optimal performance

Dell EMC puts a sharp focus on quality and process which pervades all Dell EMC activities around HDD and SSD drives

- Quality processes drive the agreements between Dell EMC and each drive supplier
- Engineering processes ensure the drives meet stringent quality standards in all operational environments
- Stringent testing standards ensure Dell EMC branded drives are fully compatible with all other components installed in PowerEdge servers

Dell EMC has instituted an exacting set of manufacturing processes

- Dell requires drive OEM's to track and manage the complete history of every Dell EMC Enterprise drive
- Critical parameter acceptance criteria must be met
- HDD and SSD lots go through ongoing reliability testing
- Full traceability is in place in case proactive replacement is needed

Dell EMC-branded hard disk drives (HDD's) and solid state drives (SSD's) have been through very stringent manufacturing and quality processes to ensure Dell customers are receiving high quality components that are fully compatible with Dell EMC servers.

Dell EMC drives are robust, built by premium manufacturing processes and rigorously tested for maximum reliability. We specify and control the manufacture of our drives' firmware and hardware subcomponents to ensure compatibility and add additional capability to reduce the costs of maintenance. This results in improved stability and performance; Dell EMC's drive reliability frequently is higher than the reliability of other drive suppliers, offsetting much of the cost premium via improvements in reliability and maintainability.

Dell EMC has strong relationships with multiple suppliers of enterprise drives. Suppliers often make samples of new drives available to Dell EMC prior to other system OEMs. Often, Dell EMC has embedded many of our requirements and test plans into the supplier's product development processes. This means the drives have actually been developed with Dell functionality in mind.

Dell EMC specifies the operational capabilities of Dell drives with the complete storage subsystem in mind, these operational capabilities include:

- Drive quality tracking and monitoring
- Predictable performance under various workloads
- Guaranteed compatibility with PowerEdge servers

Dell EMC has very high quality manufacturing processes including long test times and burn-in, ongoing sample testing and component stress testing under stringent environmental conditions.

Premium processes like these mean that Dell EMC drives are the cream of the crop with extremely high quality components, robust manufacturing processes and rigorous quality monitoring.

To learn more about how Dell EMC validates its drives, please go to:

<http://www.dell.com/learn/us/en/04/campaigns/dell-hard-drives>