BEST FOR ENTERPRISE
DATA CENTER DRIVES: INTEL VERSUS SAMSUNG*

EXCEPTIONAL RELIABILITY

100X — Silent Data Corruption, a rare but devastating undetected error, can cost up to $6.5M an hour![1] Testing has discovered that Intel® DC SSDs are **100x less susceptible to Silent Data Corruption[2]** than comparable Samsung drives.

1M — Power-Loss Imminent (PLI) protects in-flight data. Intel® DC SSDs always self-test if PLI is working when they power on, something Samsung drives don't do - leaving the drive vulnerable. With a **1 Million power cycle rating[3],** rely on Intel® DC SSDs!

0.2% — Intel® SSDs have an industry-low **AFR of <0.2%[4],** providing lower TCO with less business disruptions and lost productivity. 2 out of 10 Samsung drives we tested using standard Windows* IOMeter benchmarking resulted in drives failing and becoming unusable, while 100% of the Intel SSDs passed without a single failure.

UNCOMPROMISING QUALITY

#1 — Intel takes pride in product quality and was recognized as the **#1 SSD Controller Chip Vendor in all attributes[5]** at Flash Memory Summit 2015 thanks to the over 5000 unique tests we perform to validate our Data Center drives.

#4 — Intel was named **#4 in the Gartner* 2015 Supply Chain Top 25 Ranking.[6]** This means Intel® SSDs have a best-in-class, multi-source, NVM Mega Wafer Fab Network that includes an IMFT* fab in Utah, 2 Micron* fabs in Singapore, SK Hynix* fab in South Korea, and our very own Intel fab in China!

5YR — Data Center Intel® SSDs all come with a best-in-class **5 year warranty[7]** and industry-recognized customer support. With many endurance offerings of up to 17 drive writes per day, that's over 31,000 drive writes covered!
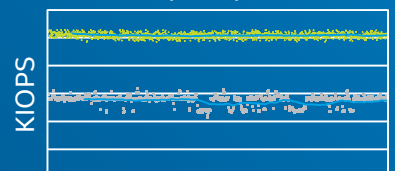
PERFORMANCE THAT MATTERS

5X — Intel® DC SSDs with NVMe™ provide high performance at low latency and are **quicker than Samsung by over 5x at 5ms latency![8]**

95% — Intel pioneered performance consistency and continues to deliver world-class performance in this critical metric, **achieving 95% stability versus Samsung's 83%![8]**

Performance Consistency[8]
4K 70/30 R/W QD4

KIOPS

Time

Intel® SSD DC P3700 Series
Samsung* XS1715

(intel)
experience
what's inside™

1. "Preventing Silent Data Corruption Using Emulex* Host Bus Adapters and Oracle* Linux.*" Oracle* and Emulex*, December 2010.

2. Tests document performance of components on a particular test, in specific systems. Differences in hardware, software, or configuration will affect actual performance. Consult other sources of information to evaluate performance as you consider your purchase. For more complete information about performance and benchmark results, visit http://www.intel.com/performance
   Results presented are according to Intel testing. Error bars are 90% confidence limits based on sample size and hours tested on the following hardware: Intel® Desktop Board DH67CF, Intel® Core™ i5-2400S Processor, Intel® H67 Express Chipset, LSI* SAS 9200-8e Host Bus Adapter, driver v2.00.58, firmware v14. Windows* 7 SP1 (64 Bit) The silent error rate is the rate measured under the beam divided by the acceleration of the beam. The Samsung* PM853T and SM843T drives that returned silent errors did not re-boot into an entirely normal state (for example would no longer complete any writes), but did respond to and complete read commands and returned incorrect data when doing so.

3. Intel Validation Labs. Samsung* SM843T, PM853T, and PM863 drives tested.

4. Intel Actual AFR

5. "2015 Flash Storage Brand Leader Survey" IT Brand Pulse. 2015.

6. "Gartner Supply Chain Top 25 for 2015" Gartner. 2015.

7. Intel® SSD Data Center Family Specifications

8. Tests document performance of components on a particular test, in specific systems. Differences in hardware, software, or configuration will affect actual performance. Consult other sources of information to evaluate performance as you consider your purchase. For more complete information about performance and benchmark results, visit http://www.intel.com/performance
   Performance data based on IOMeter* 2014. Configuration: ASUS* Tek Computer Inc. H87I-Plus; CPU Haswell i7-4770 LGA1150 3.4GHz 8MB 84W 4 cores; Heatsink: Intel® E97378-001 Lga1155/1156; Memory: 4GB DDR3 1333 PC3-10600 (667MHz) Kingston*; Intel® SSD S3500 Series 120GB SSD vs. Samsung* XS1715 SSD Model: SSDSC2BB120G4B 2.5" 6Gb/s; Mini-ITX Antec* chassis; 350W Power Supply, tested by Intel.