

Overview

Intel® Optane™ Memory 16GB (cache)

Models

Intel® Optane™ Memory 16GB (cache)

1WV97AA

Compatibility

Intel® Optane™ Memory 16GB (cache) for HP Business Desktop PCs is compatible with:

HP ProDesk 400 G4 SFF, HP ProDesk 400 G4 MT, HP ProDesk 400 G3 DM (Mini), HP ProOne 400 G3 AIO Touch, HP ProOne 400 G3 AIO Non-Touch, HP ProDesk 600 G3 MTW, HP ProDesk 600 G3 SFF, HP ProDesk 600 G3 Desktop Mini, HP ProOne 600 G2 AIO 21.5" Touch, HP ProOne 600 G3 AIO 21.5" Non-Touch, HP EliteDesk 800 G3 TWR, HP EliteDesk 800 G3 SFF, HP EliteDesk 800 G3 35W Desktop Mini, HP EliteDesk 800 G3 65W Desktop Mini, HP EliteOne 800 G3 AIO 23.8" NT, HP EliteOne 800 G3 AIO 23.8" Touch, HP EliteOne 800 G3 AIO 23.8" Touch 4K, HP EliteOne 1000 G1 AiO

NOTE: All models may not be available in all regions.

Intel® Optane™ is available for select HP workstations (HP Z240 Tower and SFF and Z2 Mini) and requires a SATA HDD, 7th Gen Intel® Core™ processor or Intel® Xeon® processor E3-1200 V6 product family, BIOS version with Intel® Optane™ supported, Windows 10, M.2 type 2280-S1-B-M connector on a PCH Remapped PCIe Controller and Lanes in a x2 or x4 configuration with B-M keys that meet Intel® NVMe™ Spec 1.1, and an Intel® Rapid Storage Technology (Intel® RST) 15.5 driver.

Service and Support

Your Option Limited Warranty is a one (1) year (HP Option Limited Warranty Period) parts replacement warranty on any HP-branded or Compaq-branded options (HP Options). If your HP Option is installed in an HP Hardware Product, HP may provide warranty service either for the HP Option Limited Warranty Period or the remaining Limited Warranty Period of the HP Hardware Product in which the HP Option is being installed, whichever period is the longer but not to exceed three (3) years from the date you purchased the HP Option.

Technical Specifications

Memory Technology	Intel® 3D Xpoint™ Memory Technology
Standard Memory Speed	900 MB/s Sequential 128KB Read; 145 MB/s Sequential 128KB Write
Standard Memory Capacity¹	16 GB
PCIe	Gen3 x2
M.2 Form Factors	2280-S1-B-M
Product Dimensions (W x L x H)	22mm (W) x 80mm (L) x 1.5mm (H) 0.87in (W) x 3.15in (L) x 0.06in (H)
Weight	< 10 g < 0.022 lb
Performance^{2,3}	Seq R/W: Up to 900/145 MB/s ⁴ 4KB ⁵ Random Read: Up to 190K 4KB ⁵ Random Write: Up to 35K
Latency (average sequential)	Read: 8.25 µs (TYP) Write: 30 µs (TYP)
Operating System Support^{6,7}	Windows 10 64bits – creators update
Supported Platforms^{6,7}	Intel® 7th Generation Core™ Chipsets and newer
Reliability	Uncorrectable Bit Error Rate (UBER): 1 sector per 10-15 bits read – Mean Time Before Failure (MTBF): 1.6 million hours
Power⁸	3.3V Supply Rail Active/Idle: 3.5W/~1W
Compliance	NVM Express* 1.1 PCI Express* Base Specification Rev 3.0 PCI M.2 HW Spec
Certifications and Declarations	UL*, CE*, C-Tick*, BSMI*, KCC*, Microsoft WHQL*, VCCI*
Endurance Rating	40 GB Writes Per Day Up to 90 TBW (Terabytes Written)
Temperature Specification	Operating: 0 to 70° C Non-Operating ⁹ : -10 to 85° C Temperature monitoring
Weight	2280-S1-B-M: up to TBD
Shock:	1500 G/0.5m/sec
Vibration	Operating: 2.17 GRMS (5-800Hz) Non-Operating: 3.13 GRMS (5-800Hz)
Altitude (Simulated)	Operating: -1,000 ft to 10,000 ft Non-Operating: -1,000 ft to 40,000 ft
Product Ecological Compliance	RoHS

NOTES:

1. See LBA count for actual end user densities, Intel® Optane™ Memory and SSD have separate LBA counts
2. Performance values vary by capacity and form factor
3. Performance specifications apply to both compressible and incompressible data
4. MB/s = 1,000,000 bytes/second
5. 4KB = 4,096 bytes; 8 KB = 8,192 bytes
6. Intel® Optane™ Memory requires specific hardware configuration and Intel® Rapid Storage Technology driver
7. Power values vary by capacity and form factor
8. Please contact your Intel representative for details on the non-operating temperature range

Technical Specifications

© Copyright 2017 HP Development Company, L.P. All rights reserved.

The information contained herein is subject to change without notice. The only warranties for HP products are set forth in the express limited warranty statements accompanying such products. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Microsoft and Windows are registered trademarks or trademarks of Microsoft Corporation in the U.S. and/or other countries.

Technical Specifications

Change Log	
Version 1	
Version 2, August 25, 2017	Double footnote paragraph on compatibility section removed