

Samsung MZ-V7E1T0BW 970 EVO 1 TB V-NAND M.2 PCI Express Solid State Drive Specifications

- **General Feature**
 - Application Client PCs
 - Capacity 1,000GB (1GB=1 Billion byte by IDEMA) * Actual usable capacity may be less (due to formatting, partitioning, operating system, applications or otherwise)
 - Form Factor M.2 (2280)
 - Interface PCIe Gen 3.0 x4, NVMe 1.3
 - Dimension (WxHxD) 80.15 x 22.15 x 2.38 (mm)
 - Weight Max 8.0 g Weight
 - Storage Memory Samsung V-NAND 3-bit MLC
 - Controller Samsung Phoenix Controller
 - Cache Memory Samsung 1GB Low Power DDR4 SDRAM
- **Special Feature**
 - TRIM Support Supported
 - S.M.A.R.T Support Supported
 - GC (Garbage Collection) Auto Garbage Collection Algorithm
 - Encryption Support AES 256-bit Encryption (Class 0)TCG/Opal IEEE1667 (Encrypted drive)
 - WWN Support Not supported
 - Device Sleep Mode Support Yes
- **Performance**
 - Sequential Read Up to 3,400 MB/s * Performance may vary based on system hardware & configuration
 - Sequential Write Up to 2,500 MB/s * Performance may vary based on system hardware & configuration
 - Random Read (4KB, QD32) Up to 500,000 IOPS * Performance may vary based on system hardware & configuration
 - Random Write (4KB, QD32) Up to 450,000 IOPS * Performance may vary based on system hardware & configuration
 - Random Read (4KB, QD1) Up to 15,000 IOPS * Performance may vary based on system hardware & configuration
 - Random Write (4KB, QD1) Up to 50,000 IOPS * Performance may vary based on system hardware & configuration
- **Environment**
 - Average Power Consumption (system level) * Average: 6 W * Maximum: 10 W (Burst mode) * Actual power consumption may vary depending on system hardware & configuration
 - Power consumption (Idle) Max. 30 mW * Actual power consumption may vary depending on system hardware & configuration
 - Allowable Voltage 3.3 V \pm 5 % Allowable voltage
 - Reliability (MTBF) 1.5 Million Hours Reliability (MTBF)
 - Operating Temperature 0 - 70 °C Operating Temperature
 - Shock 1,500 G & 0.5 ms (Half sine)

- **Accessories**
 - Installation Kit Not Available
- **Software**
 - Management SW Magician Software for SSD management
- **Warranty**
 - 5-Year Limited Warranty or 600 TBW Limited Warranty