### Microsoft AMD

# **Run Microsoft SQL Server 2022 on HPE ProLiant servers using AMD EPYC<sup>™</sup> processors**

### Optimize performance, transaction processing rates, availability, and security with SQL Server running on AMD EPYC<sup>™</sup> processor-based servers

Business continuity	Seamless analytics	Leadership performance	Robust Security Features	
Enhance disaster recovery by reducing the time to recover with accelerated database recovery (ADR) and Azure integration with SQL Server on HPE ProLiant DL385 Gen10 Plus V2 enabled by AMD EPYC <sup>™</sup> processors.	Query data and do analytics quickly from within SQL Server or using external data sources through data virtualization in SQL Server on HPE ProLiant DL385 Gen10 Plus V2 using AMD EPYC <sup>™</sup> processors.	Record performance, price- performance for TPC-H (non-clustered) 10TB Benchmark <sup>1</sup> , running SQL Server on HPE ProLiant DL385 Gen10 Plus V2 enabled by AMD EPYC <sup>™</sup> processors.	Modernize protection and minimize potential attack surfaces with the industry- leading security of SQL Server and AMD Infinity Guard's hardware-based, multilayered security. <sup>2</sup>	
Available in SQL Server 2022: Azure integration is made even easier with Azure SQL Managed Instance link.	D22: Azure integration is ade even easier with zure SQL Managed2022: Azure Synapse Link delivers near real-time insights with a no-ETL		Available in SQL Server 2022: SQL Server 2022 adds SQL Ledger to provide an immutable record of data modifications.	

# Take your SQL Server workloads running on AMD EPYC<sup>™</sup> processor to the next level with HPE servers



### HPE ProLiant DL385 Gen10 Plus V2

HPE ProLiant DL385 Gen10 Plus V2 server with two AMD EPYC 7302 processors, 32 GB memory, P408i-a storage controller, eight small form factor drive bays and a 500W power supply

Leadership services and ease of deployment

Flexible design making your investment expand as your business needs grow

World-class performance featuring enhanced compute density

Defend applications and data before your server is built with HPE trusted supply chain

ember 26, 2022. https://tpc.org/3362

Corporation

AMD Infinity Guard features vary by EPYC<sup>M</sup> Processor generations. Infinity Guard security features must be enabled by server OEMs and/or Cloud Service Providers to operate. Check with your OEM or provider to confirm support of these features. Learn more about Infinity Guard at https://www.amd.com/en/technologies/infinity-guard. GD-183 EPYC-028A: As of 2/2/22, of SPECpower\_ssj® 2008 results published on SPEC's website, the 55 publications with the highest overall efficiency results were all powered by AMD EPYC processors. See

https://www.amd.com/en/claims/epyc3x#faq-EPYC-028 for the list. More information about SPEC® is available at http://www.spec.org. SPEC and SPECpower are registered trademarks of the Standard Performance Evaluation

# AMD EPYC<sup>™</sup> 7003 Processors



#### Faster Time-to-Results

AMD EPYC processors deliver leadership performance across a wide spectrum of workload types.



### Cutting-Edge Security Features

AMD EPYC processors come with AMD Infinity Guard—a full suite of cutting-edge security features, built into the silicon and designed to defend against internal and external threats.



#### Energy Efficiency<sup>3</sup>

AMD EPYC processors power the most energy efficient x86 servers, delivering exceptional performance and helping reduce energy costs.



#### Faster insights

Capture the full value of your IT investment with AMD EPYC processor-powered servers that improve time-to-value for your applications and help you gain business-critical insights faster.

## Elevate SQL Server performance with AMD 3D V-Cache<sup>™</sup> technology

Systems powered by AMD EPYC<sup>™</sup> processors with AMD 3D V-Cache<sup>™</sup> technology provide exceptional Microsoft<sup>®</sup> SQL Server<sup>®</sup> infrastructure performance.

- Industry's first x86 CPU built with true 3D die stacking without solder bumps.
- High-density interconnects for faster data transfer and processing.
- Socket-compatible with existing AMD EPYC 7003 platforms for seamless migration.
- 768MB of high-performance L3 cache for breakthrough per-core performance.
- Large L3 cache reduces memory-bandwidth pressure and latency.
- Available in 1P or 2P configurations with 16, 24, 32, or 64 cores to suit specific customer needs.

Hewlett Packard Enterprise

### SQL Server database sizing recommendations

Size	Size/Users	CPU Cores	SKU	AMD Sizing Recommendation	
м	300GB-1TB <10 users	16	1 x 7373X	<ul> <li>CPU: 1 x 7373X</li> <li>Memory: 256GB (16 x 16GB) @3200MT/s</li> </ul>	<ul> <li>Disk (REDO): 2 x 1TB NVMe</li> <li>Disk (DATA): 8 x 1TB NVMe</li> <li>NIC: 2 x 25G</li> </ul>
L	1TB-3TB <20 users	32	1 x 7573X	<ul> <li>CPU: 1 x 7573X</li> <li>Memory: 512GB (16 x 32GB) @3200MT/s</li> </ul>	<ul> <li>Disk (REDO): 2 x 3TB NVMe</li> <li>Disk (DATA): 8 x 3TB NVMe (or 16 x)</li> <li>NIC: 2 x 25G</li> </ul>
XL	>3TB >20 users	128	2 x 7773X	<ul> <li>CPU: 2 x 7773X</li> <li>Memory: 4TB (32 x 128GB) @3200MT/s</li> </ul>	<ul> <li>Disk (REDO): 2 x 3TB NVMe</li> <li>Disk (DATA): 8 x 3TB NVMe (or 16 x)</li> <li>NIC: 2 x 25G</li> </ul>