System Name: INTEL
Company Name: Virtualan Software

Start Date: 21/03/2022
End Date: 05/12/2025

Points of Contact

Project Manager	Vignesh Kumar
Product Manager	Ram Kumar
Project Owner	Raja Singh
Application Owner	Sunil Verma
Solution Architect	Elan Thangamani

Funding

Years	**Amount**
2022	1 Million
2023	$690,330
2024	$443,300
2025	$1,800,480

Project Versioning

Name	**Version**	**Description**	**Date**
Harry Johnson	1.0	Initial version of the project.	31/01/2022
Leo Das	1.1	Improved version with additional features.	01/11/2023
Priya Sharma	1.2	Version with performance enhancements.	06/03/2024
Alex Thompson	1.3	Latest version with bug fixes and updates.	17/11/2025

Specifications Overview

1. Essentials
2. CPU Specifications
3. Technology - Performance
4. Supplemental Information
5. Memory Specifications
6. Expansion Options
7. Package Specifications
8. Advanced Technologies
9. Security & Reliability
10. Associated Systems
11. Tech Stack
12. Compliance

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1. Essentials

Product Collection	Intel® Xeon® 6
Code Name	Products formerly Granite Rapids
Vertical Segment	Server
Processor Number	6952P
Lithography	Intel 3

2. CPU Specifications

The processor boasts a total of 96 cores and 192 threads, enabling exceptional multitasking and processing capabilities. It operates at a maximum turbo frequency of 3.9 GHz, with a base frequency of 2.1 GHz. The extensive cache size of 480 MB ensures efficient data handling and storage for high-performance tasks. Additionally, the Intel® Ultra Path Interconnect (UPI) speed reaches 24 GT/s, supported by a maximum of six UPI links. This powerful configuration is backed by a thermal design power (TDP) of 400 W, indicating robust performance for demanding applications and workloads.

3. Intel® Speed Select Technology - Performance Profile (Intel® SST-PP)

Config	Active Cores	Base Frequency	TDP	Description	MMID
6952P (0)	96	2.10 GHz	400 W		
6952P (1)	96	2.10 GHz	400 W		

4. Supplemental Information

- **Marketing Status**: Launched
- **Launch Date**: Q3'24

5. Memory Specifications

- **Max Memory Size**: 3 TB
- **Memory Types**: DDR5 (6400 MHz), MRDIMM (8800 MHz)
- **Maximum Memory Speed**: 8800 MHz
- **Max # of Memory Channels**: 12
- **ECC Memory Supported**: Yes

6. Expansion Options

- **Scalability**: 2S
- **PCI Express Revision**: 5.0
- **Max # of PCI Express Lanes**: 96

7. Package Specifications

- **Sockets Supported**: FCLGA7529
- **DTS Max**: 86 °C
- **TCASE**: 72 °C

8. Advanced Technologies

- **Intel® QuickAssist Technology (QAT)**: 4 default devices
- **Intel® Dynamic Load Balancer (DLB)**: 4 default devices
- **Intel® Data Streaming Accelerator (DSA)**: 4 default devices
- **Intel® In-memory Analytics Accelerator (IAA)**: 4 default devices
- **Intel® Virtual RAID on CPU (Intel® VROC)**: Yes
- **Intel® Volume Management Device (VMD)**: Yes
- **Intel® Advanced Matrix Extensions (AMX)**: Yes
- **Intel® Speed Select Technology – Core Power**: Yes
- **Intel® Speed Select Technology – Turbo Frequency**: Yes
- **Intel® Deep Learning Boost (Intel® DL Boost) on CPU**: Yes
- **Intel® Turbo Boost Technology**: 2.0
- **Intel® Hyper-Threading Technology**: Yes
- **Instruction Set Extensions**: Intel® AMX, Intel® SSE4.2, Intel® AVX, Intel® AVX2, Intel® AVX-512
- **# of AVX-512 FMA Units**: 2

9. Security & Reliability

- **Intel® Trust Domain Extensions (TDX)**: Yes
- **Intel® Software Guard Extensions (SGX)**: Yes, with Intel® SPS
- **Intel® Crypto Acceleration**: Yes
- **Intel® Platform Firmware Resilience Support**: Yes
- **Intel® Control-Flow Enforcement Technology**: Yes
- **Intel® Total Memory Encryption - Multi Key**: Yes
- **Intel® Boot Guard**: Yes

- **Intel® Run Sure Technology**: Yes
- **Intel® Virtualization Technology (VT-x)**: Yes
- **Intel® VT-x with Extended Page Tables (EPT)**: Yes

10. Associated Systems

System Name	Acronym	Directional	Description
Dell PowerEdge Servers	DPE	Unidirectional	High-performance servers for data centers and enterprise applications
HP ProLiant Servers	HPL	Bidirectional	Scalable and reliable servers for various enterprise workloads.
Lenovo ThinkSystem	LTS	Unidirectional	Servers optimized for storage, processing, and memory-intensive tasks.
Cisco UCS C-Series	UCS	Bidirectional	Rack servers designed for high compute density and virtualization.

11. Tech Stack

Laptop Brand	Processor	Version	Usage
Dell XPS Series	Intel Core i7	12th Gen	Business laptops known for reliability and performance.
HP Spectre x360	Intel Core i9	13th Gen	High-performance laptops for professionals and creatives.

12. Compliance

Standard	Compliance Status
HIPPA	Yes
PCI	Yes