



Hardware Specification for Sia Service

To ensure optimal performance and scalability for SIA: Securaa's AI service, the following hardware requirements must be met. These specifications are designed to support the intensive computing tasks associated with AI workloads, including data processing, model training, and inference. By adhering to these recommendations, users can experience enhanced speed, efficiency, and reliability of AI operations.

This document outlines the minimum and recommended hardware specifications for deploying and maintaining SIA. Proper alignment with these requirements ensures smooth operation, reduced latency, and the ability to handle large datasets and complex algorithms efficiently.

1. Processor (CPU)

- **Model:** Intel or AMD
- **Cores:** 16 physical cores minimum (32 Cores recommended)

2. Memory (RAM)

- **Minimum Installed:** 64GB DDR4
- **Expandable Up To:** 128GB DDR4
- **Configuration:** 6 x 16GB DDR4-3200MHz DIMMs (for minimum requirement)
- **Slots Available:** At least 4 DIMM slots

3. Storage

- **Primary Drive:** 1TB SSD (Solid State Drive)
 - **Type:** NVMe M.2 SSD
 - **Purpose:** Operating System and Application installation
- **Additional Storage Options:**
 - Consider adding another SSD or HDD for data redundancy and backups, depending on the expected data usage and growth.

4. Operating System

- **OS:** Ubuntu (Latest Version)
 - **Preconfigured:** Pre-installed and configured with Docker for containerized applications

5. Network

- **Ethernet Ports:** Dual 1GbE ports (2 x 1 Gigabit Ethernet)



- **Optional:** 10GbE port if high network throughput is required
- **Network Interface:** Integrated on motherboard or dedicated NIC (Network Interface Card)