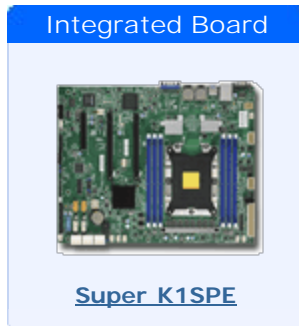


# SuperServer 5038K-i (Complete System Only)



## Key Features

- Development Box
- Financial Analysis
- Oil and Gas Simulation
- Code Optimization

1. Single socket P (LGA 3647) supports Intel® Xeon® Phi™ x200 processor, CPU TDP support Up to 260W
2. Intel® C612 chipset
3. Up to 384GB ECC LRDIMM, 192GB ECC RDIMM, DDR4-2400MHz in 6 DIMM slots
4. 2 PCI-E 3.0 x16, 1 PCI-E 3.0 x4
5. 6x 3.5" and 4x 2.5" tool-less drive bays, 2x 5.25" peripheral bays
6. Dual GbE LAN port via Intel® i350
7. Dual cooling zones, 6 fans total  
1x 12cm rear exhaust fan
8. 750W Multi-output Power Supply

Due to the complexity of integration, this product is sold as completely assembled systems only (with minimum 1 CPU, 6 DIMMs, and 1 HDD installed). Please contact your Supermicro sales rep for special requirements.

[▶ Drivers & Utilities](#) ▶ [BIOS](#) ▶ [IPMI](#) ▶ [Tested Memory](#) ▶ [Manuals](#) ▶ [OS Certification Matrix](#) ▶ [Drive Options](#)

Note: Image above may show a varied configuration or optional parts. Please refer to parts list for standard parts included.

## Specifications

### Product SKUs

SuperWorkstation	▪ SYS-5038K-i (Black)
SYS-5038K-i-NF1	▪ Includes 1x 7210 processors
SYS-5038K-i-NF3	▪ Includes 1x 7230 processors
SYS-5038K-i-NF5	▪ Includes 1x 7250 processors
SYS-5038K-i-NF9	▪ Includes 1x 7290 processors

### Motherboard

Super K1SPE

### Processor

Host Processor	▪ Intel® Xeon® Phi™ x200 Processor, CPU TDP support up to 260W ▪ Socket P (LGA 3647)
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Cores	▪ Up to 72 Cores ▪ 16GB MCDRAM on package
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### System Memory

Memory	▪ 6x 288-pin DDR4 DIMM slots
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### Chassis

Form Factor	▪ Tower
Model	▪ CSE-GS5A-753B

### Dimensions and Weight

Height	▪ 18.1" (460mm)
Width	▪ 7.9" (201mm)
Depth	▪ 19.4" (493mm)
Package	▪ 24.9" (H) x 14.2" (W) x 24.0" (D)
Weight	▪ Net Weight: 28 lbs (12.7 kg) ▪ Gross Weight: 35 lbs (15.88 kg)
Available Colors	▪ Black

### Front Panel

Buttons	▪ Power On/Off Button ▪ Reset Button
LEDs	▪ Power LED ▪ Hard drive activity LED

Capacity	<ul style="list-style-type: none"> <li>Up to 192GB ECC RDIMM</li> </ul>
Memory Type	<ul style="list-style-type: none"> <li>2400/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit (RDIMM)</li> </ul>
DIMM Sizes	<ul style="list-style-type: none"> <li>RDIMM: 32GB, 16GB, 8GB, 4GB</li> </ul>
Memory Voltage	<ul style="list-style-type: none"> <li>1.2 V</li> </ul>
Error Detection	<ul style="list-style-type: none"> <li>Corrects single-bit errors</li> <li>Detects double-bit errors (using ECC memory)</li> </ul>

#### On-Board Devices

Chipset	<ul style="list-style-type: none"> <li>Intel C612 chipset</li> </ul>
SATA	<ul style="list-style-type: none"> <li>SATA3 (6Gbps) via C612 controller</li> <li>RAID 0, 1, 5, 10 support</li> </ul>
Network Controllers	<ul style="list-style-type: none"> <li>Intel® i350 Dual Port Gigabit Ethernet</li> <li>Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output</li> </ul>
IPMI	<ul style="list-style-type: none"> <li>Support for Intelligent Platform Management Interface v.2.0</li> <li>IPMI 2.0 with virtual media over LAN and KVM-over-LAN support</li> <li>Nuvoton WPCM450 BMC</li> </ul>

#### Input / Output

SATA	<ul style="list-style-type: none"> <li>10 SATA3 (6Gbps) ports</li> </ul>
LAN	<ul style="list-style-type: none"> <li>2 RJ45 Gigabit Ethernet LAN ports</li> <li>1 Dedicated IPMI LAN port</li> </ul>
USB	<ul style="list-style-type: none"> <li>6 USB 3.0 ports (4 rear + 2 front)</li> </ul>
Display	<ul style="list-style-type: none"> <li>1 VGA port</li> </ul>
COM Port/Header	<ul style="list-style-type: none"> <li>1 COM Port (header)</li> </ul>

#### Expansion Slots

PCI-Express	<ul style="list-style-type: none"> <li>2 PCI-E 3.0 x16 slots</li> <li>1 PCI-E 3.0 x4 slot</li> </ul>
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#### System BIOS

BIOS Type	<ul style="list-style-type: none"> <li>128Mb SPI Flash EEPROM with AMI BIOS</li> </ul>
BIOS Features	<ul style="list-style-type: none"> <li>Plug and Play (PnP)</li> <li>APM 1.2</li> <li>DMI 2.3</li> <li>PCI 2.3</li> <li>ACPI 1.0 / 2.0 / 3.0 / 4.0</li> <li>USB Keyboard support</li> <li>Hardware BIOS Virus protection</li> <li>SMBIOS 2.7.1</li> <li>UEFI 2.3.1</li> <li>RTC (Real Time Clock) Wakeup</li> </ul>

Ports

- 2x USB 3.0 ports

#### Drive Bays

Internal HDD	<ul style="list-style-type: none"> <li>6x 3.5" and 4x 2.5" tool-less drive bays</li> </ul>
Peripheral	<ul style="list-style-type: none"> <li>2x 5.25" Peripheral drive bays</li> </ul>

#### System Cooling

Fans	<ul style="list-style-type: none"> <li>2x 12cm front chassis fans</li> <li>1x 8cm mid chassis fan</li> <li>1x 12cm rear chassis fans</li> <li>2x 12cm radiator exhaust fans</li> </ul>
Liquid Cooling	<ul style="list-style-type: none"> <li>Closed loop Liquid Cooling unit (UL Tested)</li> </ul>

#### Power Supply

750W Multi-output Power Supply for Desktop, semi-modular cable output

AC Input	<ul style="list-style-type: none"> <li>100-240Vac, 50-60Hz</li> </ul>
+5V	<ul style="list-style-type: none"> <li>Max: 20A &amp; Min: 0A</li> </ul>
+12V	<ul style="list-style-type: none"> <li>Max: 62A &amp; Min: 0.1A (100Vac-240Vac)</li> </ul>
+3.3V	<ul style="list-style-type: none"> <li>Max: 20A &amp; Min: 0A</li> </ul>
+5V SB	<ul style="list-style-type: none"> <li>Max: 2.5A &amp; Min: 0A</li> </ul>
-12V	<ul style="list-style-type: none"> <li>Max: 0.3A</li> </ul>

Certification



[Gold Certified](#)

#### PC Health Monitoring

CPU	<ul style="list-style-type: none"> <li>+12V, +3.3V, +5V, +5V standby, 3.3V standby, Supports system management utility, System level control, VBAT</li> </ul>
FAN	<ul style="list-style-type: none"> <li>Low noise fan speed control</li> </ul>
Temperature	<ul style="list-style-type: none"> <li>Monitoring for CPU and chassis environment</li> <li>Thermal Control for fan connectors</li> <li>PECI</li> </ul>

#### Operating Environment / Compliance

RoHS	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
Environmental Spec.	<ul style="list-style-type: none"> <li>Operating Temperature: 10°C to 35°C (50°F to 95°F)</li> <li>Non-operating Temperature: -40°C to 70°C (-40°F to 158°F)</li> <li>Operating Relative Humidity: 8% to 90% (non-condensing)</li> <li>Non-operating Relative Humidity: 5% to 95% (non-condensing)</li> </ul>

**Parts List - (Items Included)**

	<b>Part Number</b>	<b>Qty</b>	<b>Description</b>
<b>Motherboard / Chassis</b>	<u>MBD-K1SPE</u>	1	Super K1SPE Motherboard
	CSE-GS5A-753B	1	3U Mid-Tower Chassis
<b>Cable 1</b>	CBL-0062L	1	12V 8 TO 8 PIN POWER CONNECTOR EXTENSION, LF, 20cm, 18AWG
<b>Cable 2</b>	CBL-0296L	2	4 pin to 4 pin fan extension cord, for PWM fan. 23cm. 24AWG
<b>Cable 3</b>	CBL-SAST-0624	4	70cm SATA cable S-S 30AWG,RoHS/REACH,PBF
<b>Cable 4</b>	CBL-0042L	1	24 PIN POWER CONNECTOR EXTENTION, 20CM. 18AWG
<b>Fan</b>	FAN-0172L4	1	80x80x25 mm, 2.8K RPM, Optional Middle Cooling Fan for S5 Chassis
<b>Parts</b>	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket.
<b>Heatsink / Retention</b>	SNK-P3000A4	1	Liquid Cooling Module for Intel Knights Landing (KNL) Processors
<b>Power Supply</b>	PWS-753-PQ	1	[DESKTOP ONLY], PS2/ATX 750W Multi-output Power supply with modular cable 80Plus Gold, RoHS/REACH
<b>Software</b>	SFT-OOB-LIC	1	License key for enabling OOB BIOS management

**Optional Parts List**

	<b>Part Number</b>	<b>Qty</b>	<b>Description</b>
<b>Global Services &amp; Support</b>	<u>OS4HR3/2/1</u>	-	3/2/1-year onsite 24x7x4 service
	<u>OSNBD3/2/1</u>	-	3/2/1-year onsite NBD service
<b>Software</b>	SFT-DCMS-Single	1	DataCenter Management Package (per node license)