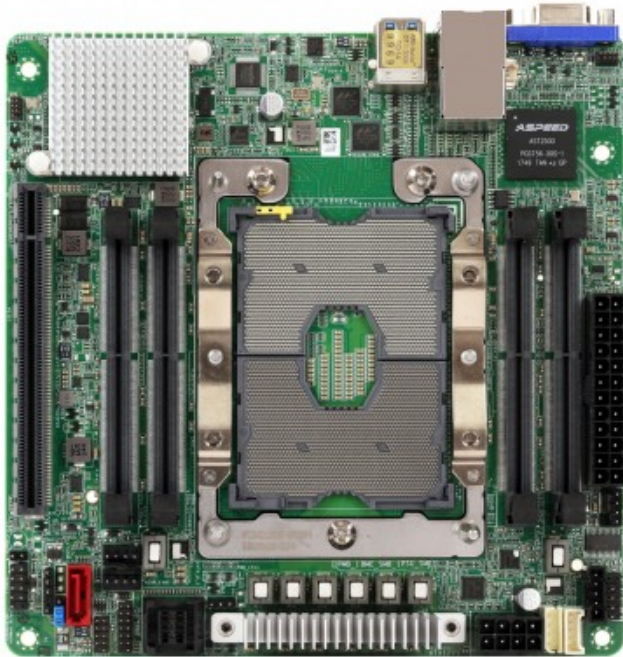


# ASRock EPC621D6I, 1xSKT LGA3647, Intel Xeon Scalable, C621, SATA, 2xGbE, IPMI

Part number: EPC621D6I



|                     |                                              |
|---------------------|----------------------------------------------|
| Category            | Workstation                                  |
| Form Factor         | Mini-ITX                                     |
| Dimensions          | 6.7" x 6.7"                                  |
| CPU Socket          | LGA 3647 (Socket P)                          |
| # of CPU sockets    | 1                                            |
| Supported CPU's     | Intel Xeon Scalable Processors               |
| Chipset             | C621                                         |
| Memory Type         | DDR4 ECC SODIMM<br>DDR4 non-ECC SODIMM       |
| Memory Speed        | 2933 MHz<br>2666 MHz<br>2400 MHz<br>2133 MHz |
| # of DIMM's         | 6                                            |
| Max Memory Size     | 192 GB                                       |
| Integrated GPU      | ASPEED AST2500                               |
| # of PCIe x16 3.0   | 1                                            |
| # of USB Ports      | 2 x USB 3.2 (rear)<br>1 x USB 2.0 (header)   |
| # of SATA Ports     | 1                                            |
| # of SATA DOM power | 1                                            |
| # of SAS Ports      | 1                                            |
| # of 1GbE Ports     | 2 x RJ45                                     |
| BMC chip            | ASPEED AST2500                               |
| TPM                 | 1 x TPM 2.0 13-pin Header                    |

## EPC621D6I

- Supports single Intel Xeon Scalable Processors/2nd Gen. Intel Xeon Scalable Processors
- Supports 6 Channel, DDR4 2666/2400/2133 SO-RDIMM, \*ECC SO-DIMM, 4 DIMM slots.  
\*Conditional supported
- IntelC621:7x SATA3
- Supports dual GLAN by Intel integrated MAC X722 + Marvell 88E1514
- Supports 1 x PCIe 3.0 x16
- 2 x USB 3.0 ports

## Specifications

|                         |                                                                                                                                                                                                                              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Form Factor             | m-ITX                                                                                                                                                                                                                        |
| Dimensions              | 6.7" x 6.7" (170.2 mm x 170.2 mm)                                                                                                                                                                                            |
| <b>Processor System</b> |                                                                                                                                                                                                                              |
| CPU                     | Intel® Xeon® Scalable Processors                                                                                                                                                                                             |
| Socket                  | Single Socket LGA3647 (Socket P)                                                                                                                                                                                             |
| Chipset                 | Intel® C621                                                                                                                                                                                                                  |
| <b>System Memory</b>    |                                                                                                                                                                                                                              |
| Capacity                | 6 x 260-pin DDR4 DIMM slots (4 x DIMM on top, 2 x DIMM on bottom)<br>Support up to 64GB DDR4 SO-RDIMM, *ECC SO-DIMM.<br><br>*Conditional supported, for detail please refer below <a href="#">PDF</a>                        |
| Type                    | Six Channel DDR4 memory technology<br>Support DDR4 2933*/2666/2400/2133 SO-RDIMM, SO-ECCDIMM<br>*DDR4 2933 memory is supported only when using the Intel® Cascade Lake CPU and Intel® Cascade Lake BIOS.                     |
| DIMM Size Per DIMM      | SO-RDIMM, SO-ECC DIMM:* 32GB, 16GB, 8GB, 4GB<br><br>*Conditional supported, for detail please refer below <a href="#">PDF</a>                                                                                                |
| DIMM Frequency          | SO-RDIMM, SO-ECC DIMM: 2933*/2666/2400/2133 MHz<br><br>*DDR4 2933 memory is supported only when using the Intel® Cascade Lake CPU and Intel® Cascade Lake BIOS.                                                              |
| Voltage                 | 1.2V                                                                                                                                                                                                                         |
| <b>Expansion Slot</b>   |                                                                                                                                                                                                                              |
| PCIe x 16               | SLOT7: PCIe3.0 x16                                                                                                                                                                                                           |
| <b>Storage</b>          |                                                                                                                                                                                                                              |
| SATA Controller         | 5 SATA3 6Gb/s: 1 Mini-SAS HD, 1 SATA DOM                                                                                                                                                                                     |
| <b>Ethernet</b>         |                                                                                                                                                                                                                              |
| Interface               | 1000 /100 /10 Mbps                                                                                                                                                                                                           |
| LAN Controller          | 2 x 1GbE RJ45 via Intel® integrated MAC X722 + Marvell Alaska 88E1514<br>Supports Wake-On-LAN<br>Supports Energy Efficient Ethernet 802.3az<br>Supports Dual LAN with Teaming function<br>Supports PXE<br>LAN1 supports NCSI |
| <b>Management</b>       |                                                                                                                                                                                                                              |
| BMC Controller          | ASPEED AST2500                                                                                                                                                                                                               |
| Features                | Watch Dog<br>NMI                                                                                                                                                                                                             |
| <b>Graphics</b>         |                                                                                                                                                                                                                              |
| Controller              | ASPEED AST2500                                                                                                                                                                                                               |
| VRAM                    | DDR4 256MB                                                                                                                                                                                                                   |
| <b>Rear Panel I/O</b>   |                                                                                                                                                                                                                              |
| VGA Port                | 1 (D-Sub)                                                                                                                                                                                                                    |
| USB 3.2 Gen2 Port       | 2                                                                                                                                                                                                                            |
| Lan Port                | 2 RJ45 (1GbE)                                                                                                                                                                                                                |

|              |                       |
|--------------|-----------------------|
| Dedicate LAN | 1 dedicated LANG port |
|--------------|-----------------------|

### Internal Connector

|                 |                                                                           |
|-----------------|---------------------------------------------------------------------------|
| COM Header      | 1                                                                         |
| TPM Header      | 1                                                                         |
| PMBus CONN      | 1                                                                         |
| Fan Header      | 3 (4-pin)                                                                 |
| USB 2.0 Header  | 1                                                                         |
| System Panel    | 1 (9-pin): power switch, reset switch, system power LED, HDD activity LED |
| BMC_SMB Header  | 1                                                                         |
| Power Connector | 1 (24-pin, ATX main power), 1 (8-pin, ATX 12V)                            |
| ME/SPS Recovery | 1                                                                         |
| Clear CMOS      | 1 (contact pad)                                                           |

### Onboard LED

|                      |   |
|----------------------|---|
| Standby PWR LED 5vsb | 1 |
| Fan Fail LED         | 3 |

### System BIOS

|               |                                                                                                                |
|---------------|----------------------------------------------------------------------------------------------------------------|
| BIOS Type     | 256Mb AMI UEFI Legal BIOS                                                                                      |
| BIOS Features | Plug and Play (PnP)<br>ACPI 2.0 Compliance Wake Up Events<br>SMBIOS 2.8.0 Support<br>ASRock Rack Instant Flash |

### Hardware Monitor

|             |                                                                                                                                                   |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Temperature | CPU Temperature Sensing<br>System Temperature Sensing                                                                                             |
| Fan         | CPU/Rear/Front Fan Tachometer<br>CPU Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature)<br>CPU/Rear/Front Fan Multi-Speed Control |
| Voltage     | Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore, DRAM, 1.05V_PCH, +BAT, 3VSB, 5VSB                                                                |

### Support OS

OS

Microsoft® Windows® (Server OS):  
Server 2012 R2 (64 bit)  
Server 2016 (64 bit)  
Server 2019 (64 bit)

Linux:  
Red Hat Enterprise Linux Server 6.9 (64 bit) / 7.6 (64 bit)  
CentOs 6.9 (64 bit) / 7.6 (64 bit)  
SUSE Enterprise Linux Server 11 SP4 (64 bit) / 12 SP4 (64 bit)  
FreeBSD 11.2 (64 bit)  
Ubuntu 16.04 (64 bit) / 18.04 (64 bit)

Virtual:  
VMWare® ESXi 6.5 u1/ vSphere 6.5 u1  
Citrix XenServer 7.5

- \*Please refer to our website for the latest OS support list.
- \*On Ubuntu 16.04 (64 bit) / 18.04 (64 bit) system, Intel® Raid mode only supports UEFI BOOT.
- \*SUSE Enterprise Linux Server 11 SP4 (64 bit) / 12 SP4 (64 bit) system only supports UEFI BOOT.
- \*Cascade Lake CPU supports Red Hat 7.6 / CentOS 7.6.

## Environment

Temperature Operation temperature: 10°C ~ 35°C / Non operation temperature: -40°C ~ 70°C

The specification is subject to change without notice in advance. The brand and product names are trademarks of their respective companies. Any configuration other than original product specification is not guaranteed.

Visit us for more info:

<https://www.superstorage.pl/asrock-epc621d6i-1xskt-lga3647-intel-xeon-scalable-c621-sata-2xgbe-ipmi-p-5104.html>