

# SuperServer 1018R-WC0R



## Integrated Board



## Super X10SRW-F

### Available Colors:

Black



► [Drivers & Utilities](#) ► [BIOS](#) ► [IPMI](#) ► [Tested Memory](#) ► [Manuals](#)  
► [OS Certification Matrix](#) ► [Quick-References Guide](#) ► [Drive Options](#)

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

## Key Features

1. Single socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v4<sup>†</sup>/ v3 and E5-1600 v4<sup>†</sup>/ v3 family
2. Up to **1TB<sup>†</sup>** ECC 3DS LRDIMM , up to DDR4- **2400<sup>†</sup>**MHz ; 8x DIMM slots
3. 2x PCI-E 3.0 x16 FH slots and 1x PCI-E 3.0 x8 (in x16) HH slot
4. Intel® i350-AM2 Dual port GbE LAN
5. Integrated IPMI 2.0 and KVM with Dedicated LAN
6. 8x 2.5" Hot-swap SAS3/SATA3 + 2x 2.5" Hot-swap SATA3 HDD bays  
Default support 8+2 SATA3 HDD
7. 750W Redundant Power Supplies  
**Platinum Level Certified**

# Specifications

## Product SKUs

|                       |                                  |
|-----------------------|----------------------------------|
| <b>SYS-1018R-WC0R</b> | ■ SuperServer 1018R-WC0R (Black) |
|-----------------------|----------------------------------|

## Motherboard

|                       |
|-----------------------|
| <b>Super X10SRW-F</b> |
|-----------------------|

## Processor

|                     |                                                                                                                                                             |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CPU</b>          | ■ Intel® Xeon® processor E5-2600 v4 <sup>†</sup> / v3, E5-1600 v4 <sup>†</sup> / v3 family (up to 145W TDP <sup>**</sup> )<br>■ Single Socket R3 (LGA 2011) |
| <b>Core / Cache</b> | ■ Up to <b>22 Cores</b> <sup>†</sup> / Up to <b>55MB</b> <sup>†</sup> Cache                                                                                 |
| <b>Note</b>         | <sup>†</sup> BIOS version 2.0 or above is required                                                                                                          |
| <b>Note</b>         | <sup>**</sup> Motherboard supports this maximum TDP. Please verify your system can thermally support                                                        |

## System Memory

|                        |                                                                                                                            |
|------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Memory Capacity</b> | ■ 8x 288-pin DDR4 DIMM slots<br>■ Up to 1TB ECC 3DS LRDIMM<br>■ Up to 512GB ECC LRDIMM<br>■ Up to 256GB ECC RDIMM          |
| <b>Memory Type</b>     | ■ <b>2400</b> <sup>†</sup> / 2133/1866/1600MHz ECC DDR4 SDRAM 72-bit, 288-pin (RDIMM / LRDIMM) / 284-pin gold-plated DIMMs |
| <b>DIMM Sizes</b>      | ■ 3DS LRDIMM: 128GB<br>■ LRDIMM: 64GB, 32GB<br>■ RDIMM: 32GB, 16GB, 8GB, 4GB                                               |
| <b>Memory Voltage</b>  | ■ 1.2 V                                                                                                                    |
| <b>Error Detection</b> | ■ Corrects single-bit errors<br>■ Detects double-bit errors (using ECC memory)                                             |

## On-Board Devices

|                            |                                                                                                                                                                               |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Chipset</b>             | ■ Intel® C612 chipset                                                                                                                                                         |
| <b>SATA</b>                | ■ SATA3 (6Gbps) via C612 controller<br>■ RAID 0, 1, 5, 10 support                                                                                                             |
| <b>IPMI</b>                | ■ Support for Intelligent Platform Management Interface v.2.0<br>■ IPMI 2.0 with virtual media over LAN and KVM-over-LAN support<br>■ ASPEED AST2400 BMC with 10/100/1000Mbps |
| <b>Network Controllers</b> | ■ Intel® i350-AM2 Dual Port Gigabit Ethernet<br>■ Virtual Machine Device Queues reduce I/O overhead<br>■ Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output           |
| <b>VGA</b>                 | ■ ASPEED AST2400 BMC                                                                                                                                                          |

## Input / Output

|             |                                                                           |
|-------------|---------------------------------------------------------------------------|
| <b>SATA</b> | ■ 10x SATA3 (6Gbps) ports<br>■ SATA DOM Power Connector                   |
| <b>LAN</b>  | ■ 2x RJ45 Gigabit Ethernet LAN ports<br>■ 1x RJ45 Dedicated IPMI LAN port |

## Chassis

|                    |                           |
|--------------------|---------------------------|
| <b>Form Factor</b> | ■ 1U Rackmount            |
| <b>Model</b>       | ■ <b>CSE-116AC-R706WB</b> |

## Dimensions and Weight

|                         |                                                                    |
|-------------------------|--------------------------------------------------------------------|
| <b>Height</b>           | ■ 1.7" (43mm)                                                      |
| <b>Width</b>            | ■ 17.2" (437mm)                                                    |
| <b>Depth</b>            | ■ 23.5" (597mm)                                                    |
| <b>Package</b>          | ■ 8" (H) x 24" (W) x 32" (D)                                       |
| <b>Weight</b>           | ■ Gross Weight: 40 lbs (18.1 kg)<br>■ Net Weight: 25 lbs (11.3 kg) |
| <b>Available Colors</b> | ■ Black                                                            |

## Front Panel

|                |                                                                                                    |
|----------------|----------------------------------------------------------------------------------------------------|
| <b>Buttons</b> | ■ Power On/Off button<br>■ System Reset button                                                     |
| <b>LEDs</b>    | ■ Power LED<br>■ Hard drive activity LED<br>■ 2x Network activity LEDs<br>■ System Information LED |

## Expansion Slots

|                    |                                                                                                             |
|--------------------|-------------------------------------------------------------------------------------------------------------|
| <b>PCI-Express</b> | ■ 2x PCI-E 3.0 x16 Full-height Full-length slots<br>■ 1x PCI-E 3.0 x8 (in x16) Half-height Half-length slot |
|--------------------|-------------------------------------------------------------------------------------------------------------|

## Drive Bays

|                 |                                                                               |
|-----------------|-------------------------------------------------------------------------------|
| <b>Hot-swap</b> | ■ 8x 2.5" Hot-swap SAS3/SATA3 HDD bays + 2x 2.5" Hot-swap SATA3 (total of 10) |
|-----------------|-------------------------------------------------------------------------------|

## Backplane

|                                                                                     |
|-------------------------------------------------------------------------------------|
| SAS3/SATA3 HDD Backplane<br>(SAS support requires optional SAS controller + cables) |
|-------------------------------------------------------------------------------------|

## System Cooling

|             |                                                                                 |
|-------------|---------------------------------------------------------------------------------|
| <b>Fans</b> | ■ 4x 40x56mm 4-pin PWM Cooling Fans<br>■ 1x Additional fan to cool add-on cards |
|-------------|---------------------------------------------------------------------------------|

## AC/DC240V Input Redundant Power Supply

|                                               |                                                                                                                                       |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 700W/750W Redundant Power Supplies with PMBus |                                                                                                                                       |
| <b>Total Output Power</b>                     | ■ 700W/750W                                                                                                                           |
| <b>Dimension (W x H x L)</b>                  | ■ 54.5 x 40.25 x 320 mm                                                                                                               |
| <b>Input</b>                                  | ■ 100 - 140Vac / 8 - 6A / 50-60Hz<br>■ 200 - 240Vac / 4.5 - 3.8A / 50-60Hz<br>■ 200 - 240Vdc / 4.5 - 3.8A (CCC Only)                  |
| <b>+12V</b>                                   | ■ Max: 58A / Min: 0.5A (100 - 140Vac)<br>■ Max: 62A / Min: 0.5A (200 - 240Vac)<br>■ Max: 62A / Min: 0.5A (200 - 240Vdc) (CB/CCC Only) |
| <b>+5V sb</b>                                 | ■ Max: 3A / Min: 0A                                                                                                                   |

|                             |                                                                                                                                              |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>USB</b>                  | <ul style="list-style-type: none"> <li>2x USB 3.0 ports (rear)</li> <li>2x USB 2.0 ports (rear)</li> <li>2x USB 3.0 ports (front)</li> </ul> |
| <b>VGA</b>                  | <ul style="list-style-type: none"> <li>1x VGA port</li> </ul>                                                                                |
| <b>Serial Port / Header</b> | <ul style="list-style-type: none"> <li>2x COM ports (1 rear, 1 header)</li> </ul>                                                            |
| <b>DOM</b>                  | <ul style="list-style-type: none"> <li>2x SuperDOM (Disk on Module) ports</li> </ul>                                                         |

#### PC Health Monitoring

|                       |                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Voltage</b>        | <ul style="list-style-type: none"> <li>Monitors for CPU Cores, +12V, +3.3V, +5V, +5V Standby, VBAT, HT, Memory, Chipset Voltages.</li> <li>5-Phase-switching voltage regulator with auto-sense from 0.8375V-1.60V</li> </ul>                                                                                                                          |
| <b>FAN</b>            | <ul style="list-style-type: none"> <li>6x 4-pin fan headers</li> <li>6x fans w/ tachometer status monitoring</li> <li>Status monitor for speed control</li> <li>Status monitor for on/off control</li> <li>Support 3-pin fans (w/o speed control)</li> <li>Low noise fan speed control</li> <li>Pulse Width Modulated (PWM) fan connectors</li> </ul> |
| <b>Temperature</b>    | <ul style="list-style-type: none"> <li>Monitoring for CPU &amp; chassis environment</li> <li>CPU thermal trip support</li> <li>FC temperature sensing logic</li> <li>Thermal Monitor 2 (TM2) support</li> <li>PECI</li> </ul>                                                                                                                         |
| <b>LED</b>            | <ul style="list-style-type: none"> <li>System Information LED</li> <li>+5V Standby alert LED</li> </ul>                                                                                                                                                                                                                                               |
| <b>Other Features</b> | <ul style="list-style-type: none"> <li>Chassis intrusion detection</li> <li>Chassis intrusion header</li> </ul>                                                                                                                                                                                                                                       |

|                      |                                                                                                                                                  |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Output Type</b>   | <ul style="list-style-type: none"> <li>Gold Finger Connector Mating with Molex 45984-4343</li> </ul>                                             |
| <b>Certification</b> |  <b>Platinum Certified</b><br>[ <a href="#">Test Report</a> ] |

#### System BIOS

|                      |                                                                                                                                                                                                                                                                                                                    |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>BIOS Type</b>     | <ul style="list-style-type: none"> <li>64Mb SPI Flash EEPROM with AMI BIOS</li> </ul>                                                                                                                                                                                                                              |
| <b>BIOS Features</b> | <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> |

#### Management

|                             |                                                                                                                                                                                                              |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Software</b>             | <ul style="list-style-type: none"> <li>IPMI (Intelligent Platform Management Interface) v2.0 with KVM support</li> <li><a href="#">SuperDoctor® III</a></li> <li>Watch Dog</li> <li>NMI</li> </ul>           |
| <b>Power Configurations</b> | <ul style="list-style-type: none"> <li>ACPI / ACPM Power Management</li> <li>Main Switch Override Mechanism</li> <li>Power-on mode for AC power recovery</li> <li>Internal/External modem ring-on</li> </ul> |

#### Operating Environment / Compliance

|                            |                                                                                                                                                                                                                                                                                                               |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>RoHS</b>                | <ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>                                                                                                                                                                                                                                              |
| <b>Environmental Spec.</b> | <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

### Parts List - (Items Included)

|                       | Part Number      | Qty | Description                                                                                     |
|-----------------------|------------------|-----|-------------------------------------------------------------------------------------------------|
| Motherboard / Chassis | MBD-X10SRW-F     | 1   | Super X10SRW-F Motherboard                                                                      |
|                       | CSE-116AC-R706WB | 1   | 1U Chassis                                                                                      |
| Backplane             | BPN-SAS3-116A    | 1   | 10-port 1U SAS3 12Gbps direct-attached backplane, support up to 10x 2.5-inch SAS3/SATA3 HDD/SSD |
| Cable 1               | CBL-0207L        | 2   | SATA,INT,ROUND,ST-ST,59CM,26AWG                                                                 |
| Cable 2               | CBL-0157L        | 1   | CBL,SGPIO,2X4F TO 2X4F,P2.54,RIBBON IN RND TUBE,40CM,28AWG                                      |
| Cable 3               | CBL-SAST-0591    | 2   | MINI SAS HD-4 SATA,6G,INT,RF,Cross Over,75CM,75CM SB,30AWG                                      |
| Label                 | LBL-0108         | 1   | CAUTION LABEL FOR REDUNDANT PWR SYSTEMS                                                         |
| Manual                | MNL-1608-QRG     | 1   | SYS-1018R-WC0R, QRG,HF,RoHS/REACH                                                               |
| Riser Card            | RSC-R1UW-2E16    | 1   | 1U LHS WIO Riser card with two PCI-E x16 slots                                                  |
| Riser Card            | RSC-R1UW-E8R     | 1   | 1U RHS WIO Riser card with one PCI-E x8 slot                                                    |
| Heatsink / Retention  | SNK-P0047PS      | 1   | 1U Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Narrow ILM MB                        |
| Power Supply          | PWS-706P-1R      | 2   | 1U 750W redundant power width 54.5mm(Platinum),HF,RoHS/REACH,PBF                                |
| Fan                   | FAN-0101L4       | 5   | 40x56,4 Pin PWM,Primary for SC809,111, Sec.for SC816,819,808                                    |

### Optional Parts List

|                                 | Part Number                             | Qty | Description                                                                                             |
|---------------------------------|-----------------------------------------|-----|---------------------------------------------------------------------------------------------------------|
| Cooling Fan                     | FAN-0101L4                              | -   | 40x40x56mm 14.4K-10.7K RPM Counter-rotating Fan                                                         |
| Storage Controller card & cable | AOC-S3108L-H8iR & 2x CBL-SAST-0593      | -   | Standard LP, 8 Internal ports (12Gb/s) PCI-E 3.0 x8, RAID controller, RAID 0, 1, 5, 6, 10, 50, 60       |
|                                 | AOC-S3108L-H8iR-16DD & 2x CBL-SAST-0593 | -   | Standard LP, 8 Internal ports (12Gb/s) PCI-E 3.0 x8, 16HDD RAID controller, RAID 0, 1, 5, 6, 10, 50, 60 |
|                                 | AOC-S3008L-L8i & 2x CBL-SAST-0593       | -   | Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8, 63HDD, RAID 0, 1, 10                               |
|                                 | AOC-S3008L-L8e & 2x CBL-SAST-0593       | -   | Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8, 122HDD HBA                                         |
|                                 | AOC-S3008L-L8e & 2x CBL-SAST-0593       | -   | Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8, 122HDD HBA                                         |
| CacheVault                      | BTR-CV3108-1U1                          | -   | CacheVault for Broadcom 3108 with SuperCap mounting in 1Y 40x56 fan tray                                |
|                                 | BTR-TFM8G-LSICVM02 & BKT-BBU-BRACKET-05 | -   | CacheVault for Broadcom 3108 with SuperCap mounting bracket for PCI-E location                          |
| Network Card(s)                 | AOC-SGP-i2                              | -   | Standard LP, 2x GbE RJ45, PCI-E x4, Intel i350-AM2                                                      |
|                                 | AOC-SGP-i4                              | -   | Standard LP, 4x GbE RJ45, PCI-E x4, Intel i350                                                          |
|                                 | AOC-STGN-i2S                            | -   | Standard Lp, 2x 10GbE SFP+, PCI-E x8, Intel 82599ES                                                     |
|                                 | AOC-STGF-i2S                            | -   | Standard Lp, 2x 10GbE SFP+, PCI-E x8, Intel X710-BM2                                                    |
|                                 | AOC-STG-B4S                             | -   | Standard Lp, 4x 10GbE SFP+, PCI-E x8, Broadcom BCM57840S                                                |
|                                 | AOC-STGS-i2T                            | -   | Standard Lp, 2x 10GbE RJ45, PCI-E x8, Intel X550-AT2                                                    |
|                                 | AOC-S25G-b2S                            | -   | Standard LP, 2x 25GbE SFP28, PCI-E x8, Broadcom BCM57414                                                |
|                                 | AOC-S25G-m2S                            | -   | Standard LP, 2x 25GbE SFP28, PCI-E x8, Mellanox CX-4 LX                                                 |
| Front Bezels                    | MCP-210-11601-0B                        | 1   | Black front bezels                                                                                      |
| TPM security module             | AOM-TPM-9665V                           | 1   | TPM 2.0, vertical form factor                                                                           |
|                                 | AOM-TPM-9655V                           | 1   | TPM 1.2, vertical form factor                                                                           |
| Global Services & Support       | <u>OS4HR3/2/1</u>                       | -   | 3/2/1-year onsite 24x7x4 service                                                                        |
|                                 | <u>OSNBD3/2/1</u>                       | -   | 3/2/1-year onsite NBD service                                                                           |
| Software                        | <u>SFT-OOB-LIC</u> • <u>eStore</u>      | 1   | OOB Management Package (per node license)                                                               |
| Software                        | <u>SFT-DCMS-Single</u>                  | 1   | DataCenter Management Package (per node license)                                                        |