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GRAND-BDE

Powered by an advanced 14nm Intel® Xeon® D 64-bit SoC processor, up to 128GB DDR4 ECC RDIMM RAM / 64GB DDR4 non-ECC UDIMM RAM, and the 12Gb/ s SAS-enabled GRAND-BDE delivers outstanding performance for data transmission and applications. With a thermal design power of only 20-65W, the GRAND- BDE fulfills demands for both performance and energy saving.

## *Features*



* Intel® Xeon® D processor optimizes performance and efficiency
* 4 x DIMM Slots, up to 128 GB memory with 4 x 32GB DIMMs
* 4 x PCIe slot can support 40GbE network card
* Storage expandable, up to 1PB
* 10GbE network card support ready



**SAS**

**Storage**

**Expansion**



**Ready**



**DDR4**

**up to 128GB RAM**



**ECC RAM**

**support**



**SAS**

**12Gb/s**

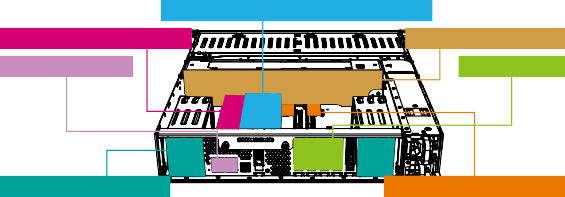
**Excellent Hardware**

Immensely, Durable & Compact

The GRAND-BDE supports SAS 12Gb/s 2.5” drives, allowing for SAS 12Gb/ s and SATA 6Gb/s hard drives and SSDs. Businesses can create the most powerful storage by implementing suitable drives based on their needs.

# Expansion Capability

GRAND-BDE provide Five built-in PCIe 3.0 expansion slots provide great expandability options for 10GbE/40GbE network adapters, USB 3.1 Gen 2 (10Gb/s) and 12Gb/s SAS expansion cards, PCIe NVMe SSD - or even a graphics card.



**Intel® Xeon® multi-core processor**

**DDR4 2133 MHz menory Hot swappable fans Gigabit port x 4 PCIe slot x 4**

**2.5” SATA SSD slot x 6**

**12Gb/s SAS controllers**



**4 3 2 1**

**6 x SATA SSD drive bays**

**4 x PCIe expansion slots**

**Optional**

## *Specifications*

|  |  |  |
| --- | --- | --- |
| **Model Name** | **GRAND-BDE-18B** | **GRAND-BDE-30B** |
| **CPU** | Intel® Xeon® Processor D-1521, 4 core 2.4 GHz Intel® Xeon® Processor D-1531, 6 core 2.2 GHz  Intel® Xeon® Processor D-1548, 8 core 2.0 GHz (for GRAND-BDE-30B only) | |
| **Memory** | Total DIMM slots: 4  Maximum memory: DDR4 128GB (32GB RDIMM x 4) | |
| **Drive Tray SSD drive bay x 6** | Front: 2.5” / 3.5” x 12 Rear: 2.5” SSD drive bay x 6 | Front: 2.5” x 24 Rear: 2.5” Rear: 2.5” SSD drive bay x 6 |
| **Hard Drive** | Front: SAS 12Gb/s, SAS 6Gb/s, SATA 6Gb/s and SSD Rear: SATA 6Gb/s and SSD | |
| **Network port** | 4 x Gigabit ports | |
| **LEDs** | 10 GbE network, system status, network, drive LED | |
| **Buttons** | Power button, Reset button | |
| **Form Factor** | 2U rack mount | |
| **Dimensions (H x W x D)** | 88 x 442.5 x 530.5 mm 3.46 x 17.42 x 20.89 inch | 88.3 x 439 x 484.5 mm 3.47 x 17.28 x 19.07 inch |
| **Operating Temperature** | 0ºC ~ 40ºC | |
| **Relative Humidity** | 5 to 95% non-condensing, wet bulb: 27ºC | |
| **Power Supply** | Redundant power: input 90 to 264VAC: 450W x 2 | |
| **PCIe Expansion Slots** | Quantity: 4  Slot 1: PCIe 3.0 x8 Slot 3: PCIe 3.0 x4  Slot 2: PCIe 2.0 x4 Slot 4: PCIe 3.0 x4 or PCIe 3.0 x8\*  Note: Slot 4 provides the bandwidth of PCIe 3.0 x8 when Slot 3 is not in use. Slot 4 then provides the bandwidth of PCIe 3.0 x4 only when an expansion board is installed in Slot 3. | |
| **Fan** | 4 x 6 cm High efficiency fan | |
| **10GbE PCIe Card Slot** | Support specific 10GbE network card (P/N: LAN-10G2F-PHY-CS4227) | |

***Ordering Information***

|  |  |
| --- | --- |
| **Part No.** | **Description** |
| **GRAND-BDE-18B- D1521-R10** | 2U 12Bay front 3.5”, 6bay rear 2.5” HDD or SSD support, rackmount storage server system (Barebone) with Intel® Xeon® D-1521, 450W redundant PSU, RoHS |
| **GRAND-BDE-18B- D1531-R10** | 2U 12Bay front 3.5”, 6bay rear 2.5” HDD or SSD support, rackmount storage server system (Barebone) with Intel®  Xeon® D-1531, 450W redundant PSU, RoHS |
| **GRAND-BDE-30B- D1521-R10** | 2U 24Bay front 2.5”, 6bay rear 2.5” HDD or SSD support, rackmount storage server system (Barebone) wth Intel® Xeon® D-1521, with 450W redundant PSU, RoHS |
| **GRAND-BDE-30B- D1531-R10** | 2U 24Bay front 2.5”, 6bay rear 2.5” HDD or SSD support, rackmount storage server system (Barebone) wth Intel®  Xeon® D-1531, with 450W redundant PSU, RoHS |
| **GRAND-BDE-30B- D1548-R10** | 2U 24Bay front 2.5”, 6bay rear 2.5” HDD or SSD support, rackmount storage serversystem (Barebone) wth Intel® Xeon® D-1548, with 450W redundant PSU, RoHS |

\*Pre-install Memory by Request

## *Packing List*

***Options***

|  |  |  |
| --- | --- | --- |
| **Item** | **Item** | **Description** |
| **Network card** | **LAN-40G2SF-MLX** | Dual-port 40GbE QSFP+ network expansion card |
| **Network card** | **LAN-10G2SF-MLX** | Dual-port 10GbE SFP+ network expansion card |
| **Network card** | **LAN-10G2T-X550** | Dual-port 10GBASE-T network expansion card |
| **USB card** | **USB-U31A2P01** | USB 3.1 Gen 2 10Gbps Type-A dual-port PCIe card |
| **SAS Card** | **SAS-12G2E** | Dual port storage expansion, SAS 12Gbps |
| **Rail kit** | **RAIL-A03-57** | A03 series (Chassis) slide, Maxmium load 57 kg |
| **Cable** | **CAB-SAS10M-8644** | MiniSAS Cable (SFF-8644 to SFF-8644), 1.0m |
|  | **CAB-SAS05M-8644** | MiniSAS Cable (SFF-8644 to SFF-8644), 0.5m |



GRAND-BDE-2019-V10

***Data Storage***

|  |  |
| --- | --- |
| Ethernet cable x 4 | Flat head screws (for 2.5” HDD) |
| Power cord x 2 | Flat head screws (for 3.5” HDD, GRAND-BDE-180B only) |