

## DD160 and DD620 Hardware Overview

Data Domain, Inc.  
2421 Mission College Boulevard, Santa Clara, CA 95054  
866-WE-DDUPE; 408-980-4800  
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# DD160 and DD620 Hardware Overview

This document describes the hardware components of DD160 and DD620 systems.

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## Related Documentation

**Note:** Hard copies of this document may be out of date. Always check for the current version of this document on the Support Documentation Website.

The Documentation page at <https://my.datadomain.com/documentation> provides access to three categories of documents that are related to use of Data Domain products:

- End user documents, under Product Documentation.
- Documents about how to integrate Data Domain systems with third party backup applications, under Integration Documentation.
- Matrices that show which components are compatible with each other, under Compatibility Matrices.

### ▼ View Data Domain documents

1. Log into the support portal at: <https://my.datadomain.com/documentation>.
2. To view user documents, click Product Documentation and then perform the following steps:
  - a. Select the Data Domain model from the Platform list and click View.
  - b. On the row for the correct Data Domain operating system (DD OS) version, click View under Documentation.
  - c. Click the desired title.
3. To view integration-related documents, perform the following steps:
  - a. Click Integration Documentation.
  - b. Select the vendor from the Vendor menu.
  - c. Select the desired title from the list and click View.
4. To view compatibility matrices, perform the following steps.
  - a. Click Compatibility Matrices.
  - b. Select the desired title from Product menu and click View.

## System Features

Table 1 summarizes the DD160 and DD620 system features:

**Table 1:** DD160 and DD620 Features

Feature	DD160	DD620
Rack Height	2U. Supported only in four-post racks.	
NVRAM	One 1 GB NVRAM card for data integrity during a power outage. One separate battery pack.	
Power	Dual redundant, hot swappable power supply units	
Fans	One fan assembly consisting of three fans. Not hot swappable.	
Motherboard I/O	Two 1000/100/10 Copper Ethernet	
PCIe Slots	Three PCIe x8 slots. One slot has an x16 connector.	
Memory	6 GB (3 x 2 GB)	8 GB (4 x 2 GB)
Rackmount Rails	Rackmount Rail Kit for DD160 and DD620 included with system. Available as spare under P/N X-1406URAIL.	
Processors	One dual-core processor	

## Storage Capacity

Data Domain system internal indexes and other product components use variable amounts of storage, depending on the type of data and the sizes of files. If you send different data sets to otherwise identical systems, one system may, over time, have room for more or less actual backup data than another.

**Note:** Data Domain system commands compute and display amounts of disk space or data as decimal multiples of certain powers of two ( $2^{10}$ ,  $2^{20}$ ,  $2^{30}$ , and so forth). For example, 7 GiB of disk space =  $7 \times 2^{30}$  bytes =  $7 \times 1,073,741,824$  bytes. Data Domain refers to this process as *base 2 calculation*.

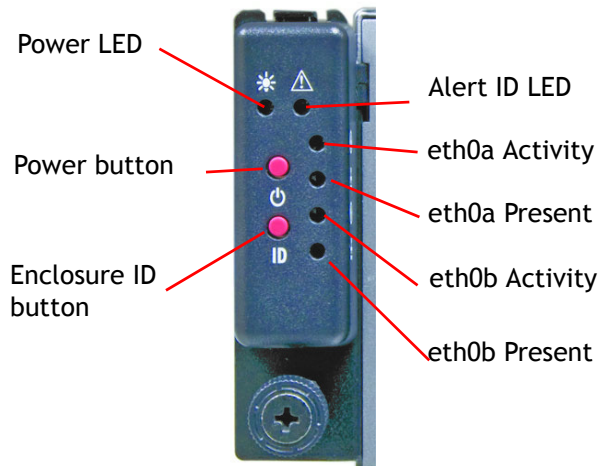
The DD160 and DD620 have either seven or twelve disk drives depending on the configuration. [Table 2](#) summarizes this information.

**Table 2:** Disk Drive Specification

System	Internal Disks	Raw Storage (Base 10)	Data Storage Space (Base 2 Calculation)	Data Storage Space (Base 10 Calculation)
DD160	Seven or twelve 500 GB SATA HDDs	3.5 TB or 6 TB	7 drives: 1,538 GiB	7 drives: 1,651 GB
			7+5 drives: 2,743 GiB	7+5 drives: 2,945 GB
			12 drives: 3,712 GiB	12 drives: 3,987 GB
DD620	Seven or twelve 1 TB SATA HDDs	7 TB or 12 TB	7 drives: 3,360 GiB	7 drives: 3,608 GB
			7+5 drives: 5,935 GiB	7+5 drives: 6,373 GB
			12 drives: 7,837 GiB	12 drives: 8,415 GB

# Front Control Panel

The control panel is at the left edge of the front panel (see [Figure 1](#)).



**Figure 1:** Control Panel Switches and LED Indicators

The control panel contains the following switches, from top to bottom:

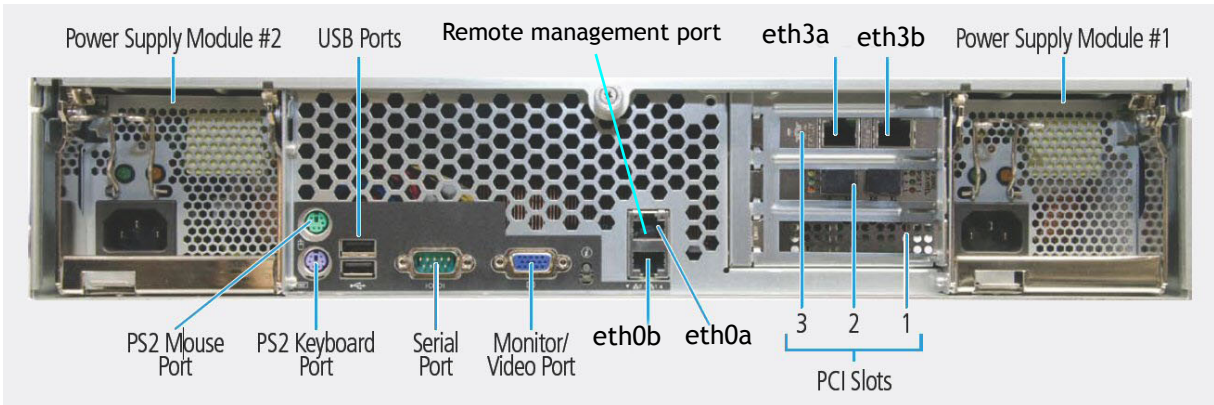
<b>Power Button</b>	Press to start boot (the Alert LED is blue but the system is not running). Never shut down the system by pressing the power button.
<b>Enclosure ID Button</b>	Press the ID switch to light the blue ID LEDs on the front and back panels. When working with a large number of rack mounted units, all of similar appearance, use the ID LEDs to keep track of which unit you are working on.

The front of the control panel contains the following LED indicators, from top to bottom:

<b>Power</b>	The power active LED glows green when the device is on.
<b>Alert/ID</b>	Steady Blue: No alert Blinking Amber: Alert Blinking Blue: ID button has been pressed
<b>eth0a Activity</b>	Blinking: Activity
<b>eth0a Present</b>	Steady: Present
<b>eth0b Activity</b>	Blinking: Activity
<b>eth0b Present</b>	Steady: Present

# Back Panel Connectors

Figure 2 shows the back panel connectors.

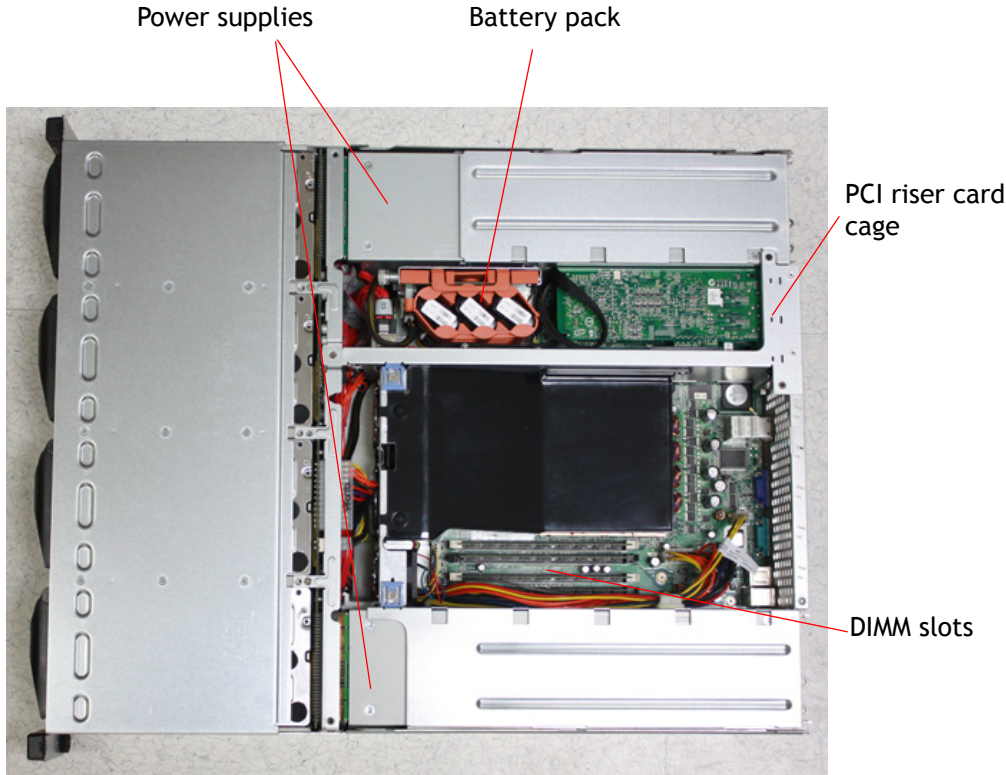


**Figure 2:** Back Panel

A sticker on the back panel (not shown above) shows the system MAC address.

# System Components (Top Cover Removed)

Figure 3 shows the system with the top cover removed.



**Figure 3:** Top View (Cover Removed)



## PCI Cards and Slot Assignments

PCI cards are slotted in a PCI riser cage installed to the right of the left power supply. There are three slots in the riser cage. Slot 1 always contains an NVRAM card. Slots 2 and 3 might contain optional cards. See [Table 3](#).

**Table 3:** Card Slot Assignments

Model	Slot 1 PCI-e x8 with x16 conn	Slot 2 PCI-e x8	Slot 3 PCI-e x8
DD160	1 GB NVRAM	<i>Initial Release</i> <ul style="list-style-type: none"><li>• 4 GBps FC VTL (optional)</li><li>• 1 GB Ethernet (optional), dual port, copper or fiber</li><li>• 1 GB Ethernet (optional), quad port, copper</li></ul>	<i>Initial Release</i> <ul style="list-style-type: none"><li>• 1 GB Ethernet (optional), dual port, copper or fiber</li><li>• 1 GB Ethernet (optional), quad port, copper</li></ul>
DD620	1 GB NVRAM	<i>Initial Release</i> <ul style="list-style-type: none"><li>• 4 GBps FC VTL (optional)</li><li>• 1 GB Ethernet (optional), dual port, copper or fiber</li><li>• 1 GB Ethernet (optional), quad port, copper</li></ul>	<i>Initial Release</i> <ul style="list-style-type: none"><li>• 1 GB Ethernet (optional), dual port, copper or fiber</li><li>• 1 GB Ethernet (optional), quad port, copper</li></ul>

## Ethernet Card Options

You can expand a DD160 or DD620 system with one or two of the following cards:

- Dual-port copper 1 GB (1000 BASE-T) Ethernet PCIe with RJ45 connectors
- Dual-port optical 1 GB (1000 BASE-SX) Ethernet PCIe with LC connectors
- Quad-port copper 1 GB (1000 BASE-T) Ethernet PCIe with RJ45 connectors

See the “Network Management” chapter in the *Data Domain Operating System Administration Guide* for help configuring the Ethernet interfaces for failover and aggregation.

## VTL Card Option

You can expand a DD160 or DD620 system with the following VTL card:

- Dual-port 4 GB Fibre Channel PCIe HBA for VTL

If installed, this card must go into slot 2.

