DELL[™] OPTIPLEX[™] 740



THE DELL OPTIPLEX 740 IS THE RIGHT CHOICE FOR CUSTOMERS AIMING TO BALANCE IMAGE STABILITY AND END-USER PERFORMANCE. DELL EXTENDS THE OPTIPLEX 740'S VALUE BY OFFERING A LONGER LIFECYCLE WITH PROVEN INDUSTRY-STANDARD FEATURES SUCH AS ASF 2.0, TPM 1.2, AND RAID 0 & 1. WITH SUPPORT FOR AMD BUSINESS CLASS LONG-LIFECYCLE PROCESSORS AND AMD PHENOM™ TRIPLE AND QUAD-CORE PROCESSORS, THE OPTIPLEX 740 IS MAXIMIZED FOR PERFORMANCE, MANAGEABILITY, AND STABILITY FOR YEARS TO COME. SIMPLIFY DESKTOP COMPUTING WITH THE OPTIPLEX 740.

POWER EFFICIENCY:

Productivity and power savings in a proven, reliable design. Dell Energy Smart is a unique approach to energy-efficient computing which includes hardware, software, tools, and industry partnerships.

BUILD YOUR BUSINESS WITH

- Dell factory-enabled Energy Smart software settings put your system into a low-energy sleep state after 15 minutes of inactivity. Remote power policy management software delivers even greater energy savings.
- Efficient hardware includes AMD Cool'n'Quiet[™] 2.0 processor technology and 80PLUS[®] power supplies configurations
- Efficient Dell BTX design and HyperCool[™] thermal-management technology help save energy and boost reliability
- Dell's online Energy Calculator is a unique tool which allows you to compare systems, features, and usage models to optimize energy savings across Dell commercial client products
- Dell is working alongside industry leaders and standards organizations worldwide to help drive revolutionary change

SMART SECURITY:

Strategic, comprehensive endpoint solutions for all types of businesses.

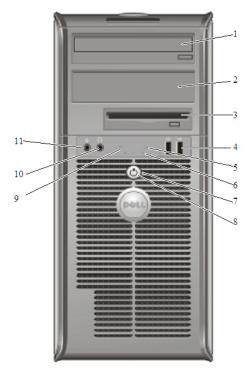
- Enhanced Virus Protection in AMD Business Class processors can help strengthen PC protection
- RAID 1 support helps keep data intact and accessible via real-time data redundancy
- Built-in TPM 1.2 helps protect the network from unauthorized access, while enabling multi-factor authentication via optional Smart Card Reader and/or fingerprint reader
- Wave Embassy Trust Suite software offers a comprehensive security solution, from protecting network access to encrypting files and data transfers

ESSENTIAL REMOTE MANAGEMENT:

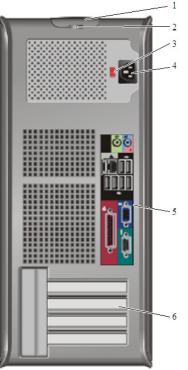
Run your IT better and have greater control with flexible hardware options and scalable management software. Built-in, standards-based management helps ensure simplicity and interoperability.

- Widely installed ASF 2.0 (Alert Standard Format) standards-based technology, which supports basic in- and out-of-band hardware inventory, alerting, and power control
- Dell Client Manager Standard, available as a free download, integrates all of the components of Dell OpenManage™ into a single management console. Easily scalable with upgrades to Dell Client Manager Plus or the Management Suite for Dell Clients.

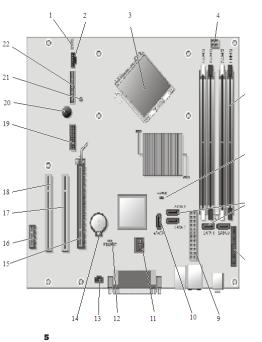
Mini Tower Computer (MT) View



Front View	
1	5.25-inch drive bay
2	5.25-inch drive bay
3	3.5-inch drive bay
4	USB 2.0 connectors (2)
5	LAN indicator light
6	diagnostic lights
7	power button
8	power light
9	hard drive activity light
10	headphone connector
11	microphone connector
10 11	

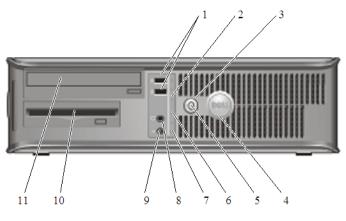


Back View	
1	cover-release latch
2	padlock ring
3	voltage selection switch
4	power connector
5	back panel connectors
6	card slots (4)

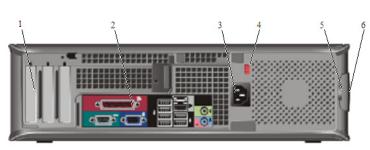


Syst	temBoard Components		
1	speaker connector (INT_SPKR)	12	RTC reset jumper (RTCRST)
2	fan (FAN_CPU)	13	intrusion switch connector (INTRUDER)
3	processor connector (CPU)	14	battery socket (BATTERY)
4	processor power connector (12VPOWER)	15	PCI Express x16 connector (SLOT1)
5	memory module connectors (DIMM_1, DIMM_2, DIMM_3, DIMM_4)	16	PCI Express x1 connector (SLOT4)
6	password jumper (PSWD)	17	PCI connector (SLOT2)
7	SATA drive connectors (SATA0, SATA1, SATA2, SATA3)	18	PCI connector (SLOT3)
8	front-panel connector (FRONTPANEL)	19	serial connector (SERIAL2)
9	power connector (POWER)	20	system board speaker (BEEP)
10	external SATA connector (eSATA)	21	aux power LED (aux_LED)
11	internal USB (INT_USB)	22	floppy connector (DSKT)

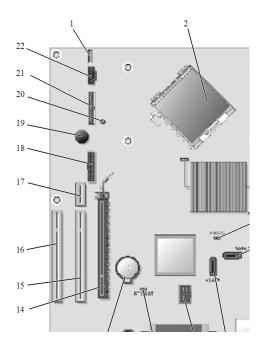
Desktop Computer (DT) View



Front View	
1	USB 2.0 connectors (2)
2	LAN indicator light
3	power button
4	Dell badge
5	power light
6	diagnostic lights
7	hard drive activity light
8	headphone connector
9	microphone connector
10	3.5-inch drive bay
11	5.25-inch drive bay

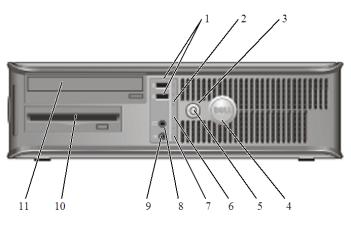


Back View	
1	card slots
2	back panel connectors
3	power connector
4	voltage selection switch
5	padlock ring
6	cover-release latch

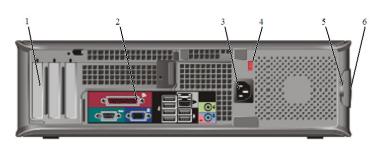


Syst	temBoard Components		
1	internal speaker (INT_ SPKR)	12	intrusion switch connector (INTRUDER)
2	processor connector (CPU)	13	battery socket (BATTERY)
3	processor power connector (12VPOWER)	14	PCI Express x16 connector (SLOT1)
4	memory module connectors (DIMM_1, DIMM_2, DIMM_3, DIMM_4)	15	PCI connector (SLOT2)
5	password jumper (PSWD)	16	PCI connector (SLOT3)
6	SATA connectors (SATA0, SATA1, SATA2)	17	riser connector (uses PCI-E port/SLOT1 and PCI port/ SLOT2)
7	front-panel connector (FRONTPANEL)	18	serial connector (SERIAL2)
8	power connector (POWER)	19	system board speaker (BEEP)
9	external SATA connector (eSATA)	20	aux power LED (aux_LED)
10	internal USB (INT_USB)	21	floppy connector (DSKT)
11	RTC reset jumper (RTCRST)	22	fan connector (FAN_CPU)

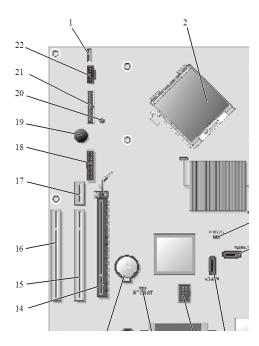
Small Form Factor Computer (SFF) View



Front View	
1	USB 2.0 connectors (2)
2	LAN indicator light
3	power button
4	Dell badge
5	power light
6	diagnostic lights
7	hard drive activity light
8	headphone connector
9	microphone connector
10	3.5-inch drive bay
11	5.25-inch drive bay



Back View	
1	card slots
2	back panel connectors
3	power connector
4	voltage selection switch
5	padlock ring
6	cover-release latch



Syst	temBoard Components		
1	internal speaker (INT_ SPKR)	12	intrusion switch connector (INTRUDER)
2	processor connector (CPU)	13	battery socket (BATTERY)
3	processor power connector (12VPOWER)	14	PCI Express x16 connector (SLOT1)
4	memory module connectors (DIMM_1, DIMM_2, DIMM_3, DIMM_4)	15	PCI connector (SLOT2)
5	password jumper (PSWD)	16	PCI connector (SLOT3)
6	SATA connectors (SATA0, SATA1, SATA2)	17	riser connector (uses PCI-E port/SLOT1 and PCI port/ SLOT2)
7	front-panel connector (FRONTPANEL)	18	serial connector (SERIAL2)
8	power connector (POWER)	19	system board speaker (BEEP)
9	external SATA connector (eSATA)	20	aux power LED (aux_LED)
10	internal USB (INT_USB)	21	floppy connector (DSKT)
11	RTC reset jumper (RTCRST)	22	fan connector (FAN_CPU)

MARKETING SYSTEM CONFIGURATIONS

NOTE: Offerings may vary by region. For more information regarding the configuration of your computer, click "Start", "Help", and "Support" and select the option to view information about your computer.

OPERATING SYSTEM

NOTE: One of the following Operating Systems will be preinstalled.

	МТ	DT	SFF
Windows Vista® operating system	Windows Vista® Ultimate (32 bit), Windows Vista® Business (32 and 64 bit), Windows Vista® Home Basic (32 bit)		
Windows XP* operating system	Windows® XP Professional SP3 via Vista® Business or Ultimate Downgrade Rights		
Other	FreeDOS for (n-series), Novell SLED (China only)		
OS Media Support	Х	Х	Х

CHIPSET

NOTE: The AMD Phenom processor requires the 8Mbit (1MB) NVRAM chip and is therefore available only on models that include the 8Mbit (1MB) NVRAM chip. If your computer has the 8 Mbit (1MB) NVRAM chip and the AMD Phenom processor, the word enhanced appears in the title on the BIOS splash screen and the system setup program screens.

	МТ	DT	SFF
Chipset	NVIDIA® Quadro® NVS 210S Chipset (North Bridge) nForce 430 (South Bridge)		orth Bridge)
Non-volatile memory on chipset			
BIOS Configuration SPI (Serial Peripheral Interface)	4 bit (512 KB) or 8 bit (1MB) on select models located at SPI_FLASH on chipset		dels located at
TPM 1.2 Security Device (Trusted Platform Module)	I 16KB located at TPM1P2 on chipset		chipset
NIC EEPROM	LOM configuration	n contained within a	1Gbit SPI_FLASH

PROCESSOR

NOTE: Global Standard Products (GSP) are a subset of Dell's relationship products that are managed for availability and synchronized transitions on a worldwide basis. They ensure the same platform is available for purchase globally. This allows customers to reduce the number of configurations managed on a worldwide basis, thereby reducing their costs. They also enable companies to implement global IT standards by locking in specific product configurations worldwide. The following GSP processors identified below will be made available to Dell customers.

NOTE: Processor numbers are not a measure of performance.

	МТ	DT	SFF
AMD Phenom [™] X3 and X4 (Triple and Quad-core) processors with AMD-Virtualization, HyperTransport Technology, and Cool'n'Quiet, Enhanced Virus Protection			
AMD Phenom X4 9600B Processor (2.3 GHz, 2000 MHz, 4 x 512 KB L2 cache, 95W)	X-GSP	X-GSP	X-GSP
AMD Phenom X4 9500 Processor (2.2 GHz, 2000 MHz, 4 x 512 KB L2 cache, 95W)	x	х	х
AMD Phenom X3 8700 Processor (2.4 GHz, 2000 MHz, 3 x 512 KB L2 cache, 95W)	Х	х	х
AMD Phenom X3 8600B Processor (2.3 GHz, 2000 MHz, 3 x 512 KB L2 cache, 95W)	X-GSP	X-GSP	X-GSP
AMD Athlon™ X2 (Dual-core) processors with AMD-Virtualization, HyperTransport Technology, and Cool'n'Quiet, Enhanced Virus Protection			
AMD Athlon X2 5800+ Processor (3.0 GHz, 2000 MHz, 2 x 512 KB L2 cache, 89W)	x	Х	х
AMD Athlon X2 5600+ Processor (2.9 GHz, 2000 MHz, 2 x 512 KB L2 cache, 65W)	х	Х	Х
AMD Athlon X2 5400B Processor (2.8 GHz, 2000 MHz, 2 x 512 KB L2 cache, 65W)	X-GSP	X-GSP	X-GSP
AMD Athlon X2 5200+ Processor (2.7 GHz, 2000 MHz, 2 x 512 KB L2 cache, 65W)	х	Х	х
AMD Athlon X2 5000B Processor (2.6 GHz, 2000 MHz, 2 x 512 KB L2 cache, 65W)	X-GSP	X-GSP	X-GSP
AMD Athlon X2 4850e Processor (2.5 GHz, 2000 MHz, 2 x 512 KB L2 cache, 45W)	х	Х	х
AMD Athlon X2 4800+ Processor (2.5 GHz, 2000 MHz, 2 x 512 KB L2 cache, 65W)	х	Х	Х
AMD Athlon X2 4450B Processor (2.3 GHz, 2000 MHz, 2 x 512 KB L2 cache, 45W)	X-GSP	X-GSP	X-GSP
AMD Athlon X2 4400+ Processor (2.3 GHz, 2000 MHz, 2 x 512 KB L2 cache, 65W)	х	Х	Х
AMD Athlon™ (Single-core) processors with AMD-Virtualization, HyperTransport Technology, and Cool'n'Quiet, Enhanced Virus Protection			
AMD Athlon 1640B Processor (2.7 GHz, 2000 MHz, 512 KB x 1 L2 cache, 45W)	X-GSP	X-GSP	X-GSP

ADVANCED SYSTEM MANAGEABILITY MODES

	МТ	DT	SFF
Basic Client Systems Management (Broadcom Full ASF 2.0)	Х	Х	х

MEMORY

Your computer supports a maximum of 8 GB of memory when you use four 2-GB DIMMs; however, 32-bit operating systems, such as the 32-bit version of Microsoft* Windows* XP, can only use a maximum of 4 GB of address space. Moreover, certain components within the computer require address space in the 4GB range. Any address space reserved for these components cannot be used by computer memory; therefore, the amount of memory available to the operating system is less than 4GB.

NOTE: The entire 8-GB memory range is available to 64-bit operating systems.

Memory modules should be installed in pairs of matched memory size, speed, and technology. If the memory modules are not installed in matched pairs, the computer will continue to operate, but with a slight reduction in performance.

	МТ	DT	SFF
Type: DDR2 Synch DRAM Non-ECC Memory	Supports 667MHz or 800MHz speeds		z speeds
DIMM Slots	4	4	4
DIMM Capacities	Up to 2GB	Up to 2GB	Up to 2GB
Minimum Memory	1GB	1GB	1GB
Maximum Memory with 667MHz or 800MHz speed memory	8GB ¹	8GB ¹	8GB ¹
Configurations: memory availability may vary by your region			
800MHz Memory configurations			
8GB ¹ DDR2 Non-ECC SDRAM, 800MHz, (4 DIMM)	х	х	х
4GB ¹ DDR2 Non-ECC SDRAM, 800MHz, (2 DIMM)	х	х	х
4GB ¹ DDR2 Non-ECC SDRAM, 800MHz, (4 DIMM)	х	х	х
2GB DDR2 Non-ECC SDRAM, 800MHz, (4 DIMM)	х	х	х
2GB DDR2 Non-ECC SDRAM, 800MHz, (2 DIMM)	х	х	х
1GB DDR2 Non-ECC SDRAM, 800MHz, (2 DIMM)	х	х	х
1GB DDR2 Non-ECC SDRAM, 800MHz, (1 DIMM)	х	х	х
512MB DDR2 Non-ECC SDRAM, 800MHz, (1 DIMM)	х	Х	Х

¹ The total amount of available memory will be less than 4GB. The amount less depends on the actual system configuration. To fully utilize 4GB or more of memory requires a 64-bit enabled processor and 64-bit operating system.

DRIVES AND REMOVABLE STORAGE

	MT	DT	SFF
Bays:			
3.5-inch Bay Externally Accessible	1	14	1 (slimline)
3.5-inch Bay Internally Accessible	2	14	1
5.25-inch Bay	2	1	1 (slimline)
Hard Drives Supported ³	2	2	1
Optical Drives Supported (External)	2	1	1
Interface:			
SATA	4	3	2
Floppy/Diskette	1	1	1
Hard Drive: Size, Type, Speed			
80GB ¹ SATA 10K RPM HDD	х	х	х
500GB ¹ SATA 7200 RPM HDD	х	х	х
320GB ¹ SATA 7200 RPM HDD	х	х	х
250GB ¹ SATA 7200 RPM HDD	х	х	х
160GB ¹ SATA 7200 RPM HDD	х	х	х
80GB ¹ SATA 7200 RPM HDD			
RAID 0 Enhanced Performance: (includes two matching capacity/speed hard drives)			
160GB' SATA 10K RPM HDD	х	х	
1TB ¹ SATA 7200 RPM HDD	х	х	
640GB ¹ SATA 7200 RPM HDD	х	х	
500GB ¹ SATA 7200 RPM HDD	х	х	

DRIVES AND REMOVABLE STORAGE

320GB ¹ SATA 7200 RPM HDD	х	х	
160GB ¹ SATA 7200 RPM HDD	х	х	
RAID 1 Data Protection: (includes two matching capacity/speed hard drives)			
80GB' SATA 10K RPM HDD	х	х	
500GB ¹ SATA 7200 RPM HDD	Х	х	
320GB ¹ SATA 7200 RPM HDD	Х	х	
250GB ¹ SATA 7200 RPM HDD	Х	х	
160GB ¹ SATA 7200 RPM HDD	Х	х	
80GB ¹ SATA 7200 RPM HDD	Х	х	
Optical Drive: (SFF requires a slimline optical drive)			
DVD+/-RW ²	16x S	SATA	8x EIDE
DVD-ROM ³	16x SATA 8x EIDE		
Combo Drive CD-RW	48x/32x/48x/16x SATA		24x/24x/24x EIDE
CD-ROM	48x SATA		24x EIDE
Floppy Diskette Drive:			
Floppy Drive	1.44MB 1.44MB (slimline)		
Media Card Reader: (uses Floppy Diskette Drive slot)			
Dell 19 in 1 Media Card Reader	х	x	х

³ This only pertains to drives physically contained within the chassis and does not refer to HDDs attached via eSATA (including port multiplier), USB or optional 1394.

 ⁶ Card length can be longer than standard half-length card but cannot be a full-length card.
 ⁶ For hard drives, GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

SYSTEM BOARD CONNECTORS

NOTE: See Detailed Engineering Specifications for maximum card dimensions support.

	мт	DT	SFF
PCI Slot(s): number of	2	2	1
PCIe x16 Slot: number of	1	1	1
PCle x1 Slot: number of	1		
Flexbay	1	1	1
Serial ATA (SATA)	5	4	3

GRAPHICS/VIDEO CONTROLLER

NOTE: MT supports full height card, DT supports low profile card or full height card with optional riser. SFF supports low profile card.

	МТ	DT	SFF
Integrated nVIDIAI* Quadro NVS 210S*	Integrated on system board		
Enhanced Graphic/Video Options			
DVI (Digital) Adapter Card	Optional full height or low profile card		
128MB ATI Radeon X1300 with DVI and TV Out	Optional full height or low profile card		
256MB ATI Radeon X1300 PRO Dual Monitor with VGA cable and TV Out	Optional full height or low profile card		
256MB ATI Radeon X1300 PRO Dual Monitor with DVI and VGA cables and TV Out	Optional full height or low profile card		

	МТ	DT	SFF
256MB ATI Radeon™ HD 2400 PRO with DVI and TV Out	Optional	full height or low prof	ile card
256MB ATI Radeon™ HD 2400 XT Dual Monitor with VGA cable and TV Out	Optional full height or low profile card		
256MB ATI Radeon™ HD 2400 XT Dual Monitor with DVI and VGA cables and TV Out	Optional full height or low profile card		
256MB ATI RADEON™ HD 3450 Graphics with dual DVI or VGA and S-Video Out (adapters convert to dual DVI or dual VGA)	Optional full height or low profile card		
256MB ATI RADEON™ HD 3470 Graphics with Dual DP (adapters convert to dual Display Port to dual DVI	Optional full height or low profile card		
256MB NVIDIA [®] GeForce [®] 9300 GE with dual DVI or VGA and S-Video Out (adapters convert to dual DVI or dual VGA)	Optional full height or low profile card		

* The graphics driver for the onboard integrated graphics can reserve up to 128MB of system memory.

EXTERNAL PORTS/CONNECTORS

NOTE: MT supports full height cards, DT supports low profile cards or full height cards with optional riser. SFF supports low profile cards.

See chassis diagrams section for port/connector locations	МТ	DT	SFF		
USB 2.0 (includes one internal on MT, DT and SFF)	8				
Serial		One rear			
PS/2 and Serial (low profile card includes PS/2 dongle)	Optional full height or low profile card				
eSATA	Optional	full height or low pro	file card		
Parallel		One rear			
Network Connector (RJ-45)		One rear			
1394 Controller	Optional full height or low profile card				
Video:					
VGA		One rear			
DVI	Optional full height or low profile card				
Audio:					
Microphone-in		One minijack front			
Headphone		One minijack front			
Stereo line-in		One minijack front			
Speakers line out		One minijack front			
Risers: (replaces 1 PCI slot and 1 PCIe slot on DT system board)					
Combo full height riser with 1 PCI and 1 PCIe connector		Х			
Dual full height riser with 2 PCI connectors	х				

COMMUNICATIONS - NETWORK ADAPTER (NIC)

NOTE: MT supports full height card, DT supports low profile card or full height card with optional riser. SFF supports low profile card.

	МТ	DT	SFF	
Integrated Broadcom [*] 5754 Gigabit ¹ Ethernet LAN 10/100/1000 (Remote Wake Up, and PXE support)	Inte	Integrated on system board		
Broadcom NetXtreme 10/100/1000 PCIe Gigabit ¹ Networking Card	Optional full height or low profile card			

¹This term does not connote an actual operating speed of 1 Gb/sec. For high speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

COMMUNICATIONS - MODEM

NOTE: MT supports full height card, DT supports low profile card or full height card with optional riser. SFF supports low profile card.

	МТ	DT	SFF
V.92 Data/Fax Controllerless Modem	Optional	full height or low prof	file card

AUDIO AND SPEAKERS

	МТ	DT	SFF	
ADI 1984 High Definition Audio	Integrated on system board			
Internal Chassis Speaker	Optional			
Dell A225 Speakers	Optional			
Dell A525 Speakers	Optional			
Dell AS501 Flat Panel Speakers (Sound Bar)	Optional			
Dell AS501PA Flat Panel Speakers (Sound Bar)	Optional			

KEYBOARD AND MOUSE

	МТ	DT	SFF
Dell USB Entry QuietKey Keyboard	Optional		
Dell USB Enhanced Multimedia Keyboard		Optional	
Dell Smart Card USB Keyboard		Optional	
Dell Bluetooth Keyboard and Mouse	Optional		
Dell USB Entry 2 Button Scroll Mouse	Optional		
Dell USB Optical 2 Button Scroll Mouse	Optional		
Dell USB Premium 5 Button Mouse	Optional		
Dell Palmrest	Optional		
Dell Logo Mouse Pad	Optional		

SECURITY

	МТ	DT	SFF
Trusted Platform Module (TPM) 1.2	Integrated on system board		
Chassis Intrusion Switch	Optional		
Dell USB External Biometric Fingerprint Reader	Optional		
Chassis lock slot	Standard		

SERVICE AND SUPPORT

NOTE: For more details on Dell Service' Plans please to go to www.dell.com/service/service_plans/

	МТ	DT	SFF
3 Year Next Business Day On-site ² Service (3-3-3)	Standard		
Broadcom NetXtreme 10/100/1000 PCIe Gigabit ¹ ProSupport Service		Optional	

¹ For a copy of our guarantees or limited warranties, please write Dell USA L.P., Attn: Warranties, One Dell Way, Round Rock, TX 78682. For more information, visit www.dell.com/warranty.
² Service may be provided by third-party. Technician will be dispatched if necessary following phone-based troubleshooting. Subject to parts availability, geographical restrictions and terms of service contract. Service timing dependent upon time of day call placed to Dell. U.S. only.

SOFTWARE

	МТ	DT	SFF
Dell Client Manager Standard	Available via Dell.com		
Wave EMBASSY* Trust Suite	Standard		
Norton Internet Security	90 Day Trial or Optional Subscription		
McAfee Security Center	90 Day Trial or Optional Subscription		

DETAILED ENGINEERING SPECIFICATIONS

SYSTEM DIMENSIONS (PHYSICAL)

NOTE: System Weight* and Shipping Weight* is based on a typical configuration and may vary based on PC configuration. A typical configuration includes: integrated graphics, one hard drive, one optical drive, and one diskette drive.

	мт	DT	SFF
Chassis Volume liters	33	16	10.7
Chassis Weight*1 pounds/kilograms	25.8/11.70	18.2/8.26	15/6.80
Chassis Dimensions: (HxWxD)			
Height inches/centimeters	16.3 / 41.4	4.5 / 11.4	3.65 / 9.26
Width inches/centimeters	7.3 / 18.5	15.7 / 39.9	12.4 / 31.4
Depth inches/centimeters	17.3 / 43.9	13.9 / 35.3	13.4 / 34
Shipping Weight*1 pounds/kilograms includes packaging materials	43.5/19.73	28/12.7	21.3/9.66
Packaging Parameters (HxWxD) ²			
Height inches/centimeters	22.38/56.85	20.63/52.4	20.88/50.04
Width inches/centimeters	22.25/56.52	20.31/51.59	19.38/49.23
Depth inches/centimeters	14.25/36.2	11.75/29.85	10.63/27

¹ Weights are approximates and may change based on system configuration and included accessories.
² Dimensions are DAO specific. Each region has unique packing.

SYSTEM BOARD CONNECTOR MAXIMUM ALLOWABLE DIMENSIONS

	МТ	DT	SFF
PCI Slots	2	2	1
Height (inches/centimeters)	4.376 / 11.115	2.731	6.89
Length (inches/centimeters)	7.4 / 18.796*	6.6 / 1	6.764
PCIe x16 Slots	1	1	1
Height (inches/centimeters)	4.376 / 11.115	2.731	6.89
Length (inches/centimeters)	7.4 / 18.796*	6.6 / 16.764	
PCIe x1 Slots	1		
Height (inches/centimeters)	4.376/11.115		
Length (inches/centimeters)	7.4 / 18.796*		
Risers: (replaces 1 PCI slot and 1 PCIe slot on DT system bo	ard)		
Combo Full Height Riser with 1 PCI and 1 PCIe connector (HxL)		1	
Height (inches/centimeters)		4.376/11.115	
Length (inches/centimeters)*,**		6.6/16.764	
Dual Full Height Riser with 2 PCI connectors (HxL)		1	
Height (inches/centimeters)		4.376/11.115	
Length (inches/centimeters)*,**		6.6/16.764	

* Card length can be longer than standard Half-Length Card but cannot be a Full-Length Card. ** 6.9/17.53 in/cm is longer than the standard Half-Length Card

SYSTEM LEVEL ENVIRONMENTAL AND OPERATING CONDITIONS

	МТ	DT	SFF
Temperature			
Operating	10° to 35° C (50° to 95° F)		
Non-Operating (Storage)	-40° to 65° C (-40° to -149° F)		
Relative Humidity	20% to 80% (non-condensing)		
Maximum vibration			
Operating	0.25 G at 3 to 200 Hz at 0.5 octave/min		
Non-Operating	0.5 G at 3 to 200 Hz at 1 octave/min		
Maximum Shock			
Operating	Bottom half-sine pulse with a change in velocity of 5 cm/sec (20 inches/sec)		

Non-Operating	27-G faired square wave with a velocity change of 508 cm/ sec (200 inches/sec)
Maximum Altitude	
Operating	-15.2 to 3048 m (-50 to 10,000 ft)
Non-Operating	-15.2 to 10,668 m (-50 to 35,000 ft)

POWER¹

SYSTEM DIMENSIONS (PHYSICAL)

NOTE: 'These form factors utilize a more efficient Active Power Factor Correction (APFC) power supply. Dell recommends only Universal Power Supplies (UPS) based on Sine Wave output for APFC PSUs, not an approximation of a Sine Wave, Square Wave, or quasi-Square Wave (see UPS technical specifications). If you have questions, please contact the manufacture to confirm the output type.

	M	1T	D	т	S	FF
Power Supply Wattage	305W	305W EPA	280W	280W EPA	275W	275W EPA
AC input Voltage Range	90-135A/ 180-264A	90-264A	90-135A/ 180-264A	90-264A	90-135A/ 180-264A	90-264A
AC input current (low ac range/ high AC range)	9.0A/4.5A	4.5A/2.3A	9.0A/4.5A	4.5A/2.3A	8.8A/4.3A	4.3A/2.2A
AC input Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
AC holdup time (50% load)	16ms	16ms	16ms	16ms	16ms	16ms
Minimum Efficiency	>65%	>80%	>65%	>80%	>65%	>80%
PFC (Active)		~		~		~
	DC	parameters				
+3.3v output	17.0A	17.0A	10.0A	10.0A	5.0A	5.0A
+5.0v output	22.0A	22.0A	15.0A	15.0A	18.0A	18.0A
+12.0v output	18.0+18.0A	18.0+18.0A	16.0A	16.0A	17.0A	17.0A
+5.0v auxiliary output	4.0A	4.0A	4.0A	4.0A	4.0A	4.0A
-12.0v output	1.0A	1.0A	0.5A	0.5A	0.5A	0.5A
Max total power	305W	305W	280W	280W	275W	275W
Max combined +3.3v / +5.0v power	150W	150W	108W	108W	106W	106W
Max combined 12.0v power (note: only if more than one 12v rail)	264W	264W	N/A	N/A	N/A	N/A
BTUs/h (based on PSU max wattage)	1600	1300	1468	1195	1444	1171
3.3v CMOS battery (type & est. battery life)		3-V CR2032	lithium coin cell;	estimated 5-yea	r battery life	
RTC accuracy (time of day)						
Power Supply Fan (size and type)	Sleeve bearing	Sleeve bearing	Sleeve bearing	Sleeve bearing	Ball bearing	Ball bearing
Р	ower Supply N	Meets Require	ments of:			
Energy Star Compliant	N	N	N	N	N	N
Blue Angel Compliant		Y		Y		Y
UL Compliant	Y	Y	Y	Y	Y	Y
FEMP Executive Order 13221		Y		Y		Y

AUDIO

Integrated STAC9200X Two Channel High Definition Audio

	МТ		DT	SFF
High Definition Stereo support	x		х	х
Number of Channels		2		
Number of Bits / Audio resolution		24-bit resolution		
Sampling Rate (recording/playback)		44.1,48,96,192 KHz sample rate		
Signal to Noise Ratio		DAC 100 Db; ADC 96 dB		
Wavetable Voices				
Analog Audio	✓		~	✓
Dolby Digital				
ТНХ				
Digital out (S/PDIF)				

Audio Jack Impedance	
Microphone	150 kΩ
Line-In	150 kΩ
Line-Out	190 Ω
Headphone	.5 Ω
Internal Speaker Power Rating	2 Watts

COMMUNICATIONS - NETWORK ADAPTER (NIC)

NOTE: MT SUPPORTS FULL HEIGHT CARD, DT SUPPORTS LOW PROFILE CARD OR FULL HEIGHT CARD WITH OPTIONAL RISER. SFF SUPPORTS LOW PROFILE CARD.

	МТ	DT	SFF
Integrated Broadcom® 5754 Gigabit1 Ethernet LAN 10/100/1000 (Remote Wake Up, and PXE support)	Integrated on system board		ard
Broadcom NetXtreme 10/100/1000 PCIe Gigabit1 Networking Card	Supports full- height card	Low-profile card or full height card with	Supports low profile card
		optional riser	

¹ This term does not connote an actual operating speed of 1 Gb/sec. For high speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

INTEGRATED BROADCOM[®] 5754 GIGABIT¹ ETHERNET LAN 10/100/1000

	MT DT SFF
External Connector Type	RJ45
Data Rates Supported	10/100/1000 Mbps
Controller Details	
Controller Bus Architecture	PCI-e V1.1x1
Integrated Memory	N/A
Data Transfer Mode	N/A
Power Consumption (full operation per data rate connection speed)	1000 Mbps: 1312 mW, 100 Mbps: 731 mW, 10 Mbps: 844 mV
Power consumption (standby operation)	No Link (low power mode): 55mW
	No Link (w/ WOL): TBD
	10 Mbps Idle (w/ WOL): 175 mW
	100 Mbps Idle (w/ WOL): 352 mW
IEEE standards compliance	802.3ab, 802.3z-Clause 30,802.1p, 802.3x
Hardware Certifications	N/A
Boot ROM Support	PXE, RPL
Network Transfer Mode	
Network Transfer Rate	Full duplex at 10, 100, or 1000 Mbps and
Network transfer hate	half duplex at 10 or 100 Mbps
Environmental	
Operating temperature	0° C to 70° C (32° F to 158° F)
Operating humidity	20% to 80% (non-condensing)
Operating System Driver Support	DOS, NT, Win2K, Netware, XP, Vista 32/64bit
Manageability	WOL, PXE
Management Capabilities Alerting	ASF2.0

¹ This term does not connote an actual operating speed of 1 Gb/sec. For high speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

BROADCOM NETXTREME 10/100/1000 PCIE GIGABIT' NETWORKING CARD

	МТ	DT	SFF
Connector Type	RJ-45		
Data Rates Supported	10/100/1000 Mbps Half/full duplex		
Controller Details			
Controller Bus Architecture	PCIe c1.0a x1		

BROADCOM NETXTREME 10/100/1000 PCIE GIGABIT' NETWORKING CARD

	МТ	DT	SFF
Integrated Memory	64KBytes RX, 8KBytes TX		
Data Transfer Mode		Bus-Master DMA	
Power Consumption (full operation per data rate connection speed)	2.84W (860mA @ +3.3V)		
Power Consumption (standby operation)		Less than 300mW	
IEEE Standards Compliance	8	02.3, 802.2, 802.3x, 802.	1p
Hardware Certifications	FCC B, VCCI B, CE		
Boot ROM Support		No	
Network Transfer Mode		Full Duplex/Half Duple	x
	10BASI	E-T (full-duplex) 20 Mb	ps Max*
	100BASE-TX (half-duplex) 100 Mbps Max*		
Network Transfer Rate	100BASE-TX (full-duplex) 200 MbpsMax*		
	1000BASE-T (full-duplex) 2000 Mbps Max*		
	* Depends on the system environment.		
Environmental			
Operating Temperature	0° C to 55° C (32° F to 131° F)		
Operating Humidity	5% ~ 85% (non-condensing)		
Operating System Driver Support	Window	v XP, Vista. Linux, Netw	vare, Unix
Manageability	WOL, PXE2.1, ACPI		
Management Capabilities Alerting	None		

¹ This term does not connote an actual operating speed of 1 Gb/sec. For high speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

COMMUNICATIONS - MODEM

NOTE: MT supports full height card, DT supports low profile card or full height card with optional riser. SFF supports low profile card.

	MT	DT	SFF
V.92 Data/Fax Controllerless Modem	Supports full height card	Low profile card or full height card with optional riser	Supports low profile card

V.92 DATA/FAX CONTROLLERLESS MODEM

МТ	DT	SFF
PCI		
RJ-11		
PCM - Pul	se Coded Modulation	(V.92/V.90)
TCM - Trellis Coo	led Modulation (V.90/	V.34/V.32 bis/V.32)
56kb	os receive, 48kbps tra	insmit
ITU	V.92/V.90, V.34/V.32 bis	s/V.32
	14.4kbps	
2-wir	e, half-duplex, synchr	onous
V.44, V.42, V.42bis, MNP 2-4, MNP 5		
WOR (wake on ring) capable		
Driver upgradeable		
V.80 Synchronous Access Mode (SAM) can be supported by		
software applications (not driver)		
0° C-50° C (32° F-122° F)		
45° C (113° F) 90% max		х
Vista 32/64, Windows XP 32/64		32/64
Vista 32/64, Windows XP 32/64		32/64
+3.0V~+3.6V, 116.6mW max		
Conexant SmartHSFs/LF (CX11256 & CX20493)		6 & CX20493)
L: 5.25in/13.325cm		
H: 4.73in,	/12.002cm	
	L: 5.26in/	13.366cm
	H: 3.12in	/7.923cm
	PCM - Pul TCM - Trellis Coc 56kbj ITU V 2-wirr V.44, V WO V.80 Synchronous A softw 0 V.80 Synchronous A softw 1 Vista Vista Vista L: 5.25in/	PCI PCI RJ-11 PCM - Pulse Coded Modulation TCM - Trellis Coded Modulation (V.90/ 56kbps receive, 48kbps tradition ITU V.92/V.90, V.34/V.32 bis ITU V.92/V.90, V.34/V.32 bis 2-wire, half-duplex, synchr V.44, V.42, V.42bis, MNP 2-4, WOR (wake on ring) cap Driver upgradeable V.80 Synchronous Access Mode (SAM) software applications (not 0° C-50° C (32° F-122° 45° C (113° F) 90% ma Vista 32/64, Windows XP Vista 32/64, Windows XP Vista 32/64, Windows XP L: 5.25in/13.325cm H: 4.73in/12.002cm

GRAPHICS/VIDEO CONTROLLER

NOTE: MT supports full height card, DT supports low profile card or full height card with optional riser. SFF supports low profile card.

INTEGRATED NNVIDIAL* QUADRO NVS 210S1	МТ	DT	SFF	
Bus Type		Integrated		
GPU Core Clock	300MH	300MHz Integrated 24 bit RAMDAC		
Frame Buffer Memory (onboard and shared) Size and Speed	Up to 128	BMB of shared system	n memory	
Maximum Power Consumption		15.72W		
Overlay Planes		Yes		
Maximum Color Depth		32 bit		
Maximum Vertical Refresh Rate		75Hz		
Multiple Display Support	Yes, w	rith optional DVI add-i	in card	
Operating Systems Graphics/ Video API Support		DirectX 9.0c		
Supported Resolutions and Max Refresh Rates (Hz) (Note: Analog and/or digital)	-	D-sub = 1900x1200@75hz DVI = 1600x1200@60hz		
External Connectors		VGA		
Dimensions inches/centimeters (L x H)		N/A		
Environmental Operating Conditions				
Operating Temperature Range	0°	0° to 105° C (32° to 221° F)		
Relative Humidity Range	20%	20% to 80% (non-condensing)		
Altitude Range	-15.2	to 3048 m (–50 to 10,0	000 ft)	
DVI (Digital) Adapter				
Bus Type		sDV0		
	U	p to 2048x1566 @ 75 H	łz	
Maximum Supported Resolution	Supports flat panels up to 1920x1200 @ 60 Hz or digital (HDTV at 1400x1050 @ 85 Hz		•	
Dimensions of Full Height Card inches/centimeters (L x H)	5.75x2.75in/ 14.61x6.99cm			
Dimensions of Low Profile Card inches/centimeters (L x H)		5.75x2.75in/ 14.61x6.99cm		
External Connectors		DVI		

¹ Up to 128MB of system memory may be allocated to support integrated graphics, depending on system memory size and other factors.

28MB ATI RADEON X1300 WITH DVI AND TV OUT	МТ	DT	SFF	
Bus	PCIEx16			
GPU Core Clock		400Mhz		
Frame Buffer Memory (onboard and shared) Size and Speed		128MB 400Mhz		
Maximum Power Consumption		20W		
Overlay Planes		Yes		
Maximum Color Depth		32-bit		
Maximum Vertical Refresh Rate	85Hz			
Multiple Display Support	No			
Operating Systems Graphics/ Video API Support	D3D and Open GL			
Supported Resolutions and Max Refresh Rates (Hz) (Note: Analog and/or digital)	Max : 1920x1440/32bpp @ 75Hz Min : 640x480/8bpp @ 60Hz			
External connectors	DVI-D and S-video with Composite		nposite	
Dimensions of full height card inches/centimeters (L x H)	6.6x4.72in/ 167.64x120mm			
Dimensions of low profile card inches/centimeters (L x H)	6.6x3.35in/ 167.64x85mm			
Environmental Operati	ng Conditions			
Operating Temperature Range		50°-122°F (10°-50° C)		
Relative Humidity Range		5-90% RH		
Altitude Range	0-20,000 ft.			

128MB ATI RADEON X1300 WITH DVI AND TV OUT	МТ	DT	SFF
Dimensions of low profile card inches/centimeters (L x H)	6.6x3.35in/ 167.64x85mm		
Environmental Operating Conditions			
Operating Temperature Range	50°-122°F (10°-50° C)		
Relative Humidity Range	5-90% RH		
Altitude Range	0-20,000 ft.		

256MB ATI RADEON™ HD 2400 PRO WITH DVI AND TV OUT	МТ	DT	SFF
Bus Type	PCIEx16		
GPU Core Clock	400MHz		
Frame Buffer Memory (onboard and shared) Size and Speed		256MB 500Mhz	
Maximum Power Consumption		21W	
Overlay Planes		Yes	
Maximum Color Depth		32-bit	
Maximum Vertical Refresh Rate		85Hz	
Multiple Display Support	No		
Operating Systems Graphics/ Video API Support	D3D and Open GL		
Supported Resolutions and Max Refresh Rates (Hz) (Note: Analog and/or digital)	Max : 1920x1440/32bpp @ 75Hz Min : 640x480/8bpp @ 60Hz		
External connectors	DVI-D and S-video		
Dimensions of full height card inches/centimeters (L x H)	6.6x4.72in/ 167.64x120mm		
Dimensions of low profile card inches/centimeters (L x H)	6.6x3.35in/ 167.64x85mm		
Environmental Operating Conditions	·		
Operating Temperature Range		50°-122°F (10°-50° C)	
Relative Humidity Range	5-90% RH		
Altitude Range	0-20,000 ft.		

R VGA AND TV OUT	МТ	DT	SFF
Bus Type (example integrated or PCIe x16)	PCIEx16		
GPU core clock	600Mhz		
Frame Buffer Memory (onboard and shared) Size and Speed	500Mhz		
Maximum power consumption	22W		
Overlay Planes	Yes		
Maximum Color Depth	32-bit		
Maximum Vertical Refresh Rate	85Hz		
Multiple Display Support	Yes		
Operating Systems Graphics/ Video API Support	D3D and Open GL		
Supported Resolutions and Max Refresh Rates (Hz) (Note: Analog and/ or digital)	Max : 1920x1440/32bpp @ 75Hz Min : 640x480/8bpp @ 60Hz		
External connectors	DMS-591 and S-video		1
Dimensions of full height card inches/centimeters (L x H)	167.64mm x 120mm	167.64mm	x 120mm
Dimensions of low profile card inches/centimeters (L x H)		167.64mr	n x 85mm
Environmental Operating Conditions (Non-Condensing):			
Operating Temperature Range	10°-50° C		
Relative Humidity Range	5-90% RH		
Altitude Range	0-20,000 ft.		

1DMS-59 to VGA or DMS-59 to DVI adaptors required.

256MB NVIDIANVIDIA GEFORCE 9300 GE	МТ	DT	SFF
Bus Type (example integrated or PCIe x16)	PCIEx16		
GPU core clock		540Mhz	
Frame Buffer Memory (onboard and shared) Size and Speed		500Mhz	
Maximum power consumption		25W	
Overlay Planes		Yes	
Maximum Color Depth	32-bit		
Maximum Vertical Refresh Rate	85Hz		
Multiple Display Support	Yes		
Operating Systems Graphics/ Video API Support	D3D and Open GL		
Supported Resolutions and Max Refresh Rates (Hz) (Note: Analog and/ or digital)	Max : 1920x1440/32bpp @ 75Hz Min : 640x480/8bpp @ 60Hz		
External connectors	DMS-591 and S-video)
Dimensions of full height card inches/centimeters (L x H)	167.64mm x 120mm	167.64mn	n x 120mm
Dimensions of low profile card inches/centimeters (L x H)	167.64mm x 85mm		n x 85mm
Environmental Operating Conditions (Non-Condensing):			
Operating Temperature Range	10°-50° C		
Relative Humidity Range	5-90% RH		
Altitude Range	0-20,000 ft.		

¹DMS-59 to VGA or DMS-59 to DVI adaptors required.

256MB AMD RADEON™ HD 3470 GRAPHICS W/ DUAL DP	МТ	DT	SFF
Bus Type (example integrated or PCIe x16)	PCIEx16		
GPU core clock		750Mhz	
Frame Buffer Memory (onboard and shared) Size and Speed		500Mhz	
Maximum power consumption		18W	
Overlay Planes		Yes	
Maximum Color Depth		32-bit	
Maximum Vertical Refresh Rate	85Hz		
Multiple Display Support	Yes		
Operating Systems Graphics/ Video API Support	D3D and Open GL		
Supported Resolutions and Max Refresh Rates (Hz) (Note: Analog and/ or digital)	Max : 1920x1440/32bpp @ 75Hz Min : 640x480/8bpp @ 60Hz		
External connectors	2 Display Port		
Dimensions of full height card inches/centimeters (L x H)	167.64mm x 120mm	167.64mm	ı x 120mm
Dimensions of low profile card inches/centimeters (L x H)		167.64mr	n x 85mm
Environmental Operating Conditions (Non-Condensing):			
Operating Temperature Range	10°-50° C		
Relative Humidity Range	5-90% RH		
Altitude Range	0-20,000 ft.		

HARD DRIVES

BOGB SATA 10000 RPM HDD	
Capacity (bytes)	80,026,361,856
Dimensions inches (W x D x H)	5.87 x 4 x 1
Interface type and Maximum speed	Up to 3Gb/s
Internal buffer size (range)	16 MB
Average Seek Time	4.6 ms
Rotational Speed	10000 rpm
Logical Blocks	156,301,488
Power Source	
DC Power (Max)	Idle 7.0W, Active 10.0W
DC Current	5V (.8A) and 12V (1.8A)
Environmental Operating Conditions (Non-Condensing):	

Temperature Range	-40°F to 149°F (-400C to 650C)	
Relative Humidity Range	10% to 90% non-condensing	
Maximum Wet Bulb Temperature	100.4°F (380C)	
Altitude Range	-50 ft to 35000 ft	
Environmental Non-Operating Conditions (Non-Condensing):		
Tempurature Range	-40°F to 149°F (-400C to 650C)	
Tempurature Range	10% to 90% non-condensing	
Tempurature Range	100.4°F (380C)	
Tempurature Range	-50 ft to 35000 ft	

¹ For hard drives, GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

BOGB SATA 7200 RPM HDD		
Capacity (bytes)	80,026,361,856	
Dimensions inches (W x D x H)	5.87 x 4 x 1	
Interface type and Maximum speed	Up to 3Gb/s	
Internal buffer size (range)	8 MB	
Average Seek Time	8.5 ms	
Rotational Speed	7200 rpm	
Logical Blocks	156,301,488	
Power Source		
DC Power (Max)	Idle 7.0W, Active 10.0W	
DC Current	5V (.8A) and 12V (1.8A)	
Environmental Operating Conditions (Non-Condensing):		
Temperature Range	41°F to 140°F (50C to 600C)	
Relative Humidity Range	20% to 80% non-condensing	
Maximum Wet Bulb Temperature	84°F (290C)	
Altitude Range	-50 ft to 10000 ft	
Environmental Non-Operating Conditions (Non-Condensing):		
Tempurature Range	-40°F to 149°F (-400C to 650C)	
Tempurature Range	10% to 90% non-condensing	
Tempurature Range	100.4°F (380C)	
Tempurature Range	-50 ft to 35000 ft	

¹ For hard drives, GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

60GB SATA 7200 RPM HDD		
Capacity (bytes)	160,041,885,696	
Dimensions inches (W x D x H)	5.87 x 4 x 1	
Interface type and Maximum speed	Up to 3Gb/s	
Internal buffer size (range)	8 MB	
Average Seek Time	8.5 ms	
Rotational Speed	7200 rpm	
Logical Blocks	312,581,808	
Power Source		
DC Power (Max)	Idle 7.0W, Active 10.0W	
DC Current	5V (.8A) and 12V (1.8A)	
Environmental Operating Conditions (Non-Condensing):		
Temperature Range	41°F to 140°F (50C to 600C)	
Relative Humidity Range	20% to 80% non-condensing	
Maximum Wet Bulb Temperature	84°F (290C)	
Altitude Range	-50 ft to 10000 ft	
Environmental Non-Operating Conditions (Non-Condensing):		
Tempurature Range	-40°F to 149°F (-400C to 650C)	
Tempurature Range	10% to 90% non-condensing	
Tempurature Range	100.4°F (380C)	
Tempurature Range	-50 ft to 35000 ft	

¹ For hard drives, GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

250GB SATA 7200 RPM HDD		
Capacity (bytes)	250,059,350,016	
Dimensions inches (W x D x H)	5.87 x 4 x 1	
Interface type and Maximum speed	Up to 3Gb/s	
Internal buffer size (range)	8-16 MB	
Average Seek Time	8.5 ms	
Rotational Speed	7200 rpm	
Logical Blocks	488,397,168	
Power Source		
DC Power (Max)	Idle 7.0W, Active 10.0W	
DC Current	5V (.8A) and 12V (1.8A)	
Environmental Operating Conditions (Non-Condensing):		
Temperature Range	41°F to 140°F (50C to 600C)	
Relative Humidity Range	20% to 80% non-condensing	
Maximum Wet Bulb Temperature	84°F (290C)	
Altitude Range	-50 ft to 10000 ft	
Environmental Non-Operating Conditions (Non-Condensing):		
Tempurature Range	-40°F to 149°F (-400C to 650C)	
Tempurature Range	10% to 90% non-condensing	
Tempurature Range	100.4°F (380C)	
Tempurature Range	-50 ft to 35000 ft	

¹ For hard drives, GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

20GB SATA 7200 RPM HDD		
Capacity (bytes)	320,072,933,376	
Dimensions inches (W x D x H)	5.87 x 4 x 1	
Interface type and Maximum speed	Up to 3Gb/s	
Internal buffer size (range)	16 MB	
Average Seek Time	8.5 ms	
Rotational Speed	7200 rpm	
Logical Blocks	625,142,448	
Power Source		
DC Power (Max)	Idle 7.0W, Active 10.0W	
DC Current	5V (.8A) and 12V (1.8A)	
Environmental Operating Conditions (Non-Condensing):		
Temperature Range	50C to 600C	
Relative Humidity Range	20% to 80% non-condensing	
Maximum Wet Bulb Temperature	290C	
Altitude Range	-50 ft to 10000 ft	
Environmental Non-Operating Conditions (Non-Condensing):		
Tempurature Range	-400C to 650C	
Tempurature Range	10% to 90% non-condensing	
Tempurature Range	380C	
Tempurature Range	-50 ft to 35000 ft	

500GB SATA 7200 RPM HDD

Capacity (bytes)	500,107,862,016
Dimensions inches (W x D x H)	5.87 x 4 x 1
Interface type and Maximum speed	Up to 3Gb/s
Internal buffer size	16 MB
Average Seek Time	8.5 ms
Rotational Speed	7200 rpm
Logical Blocks	976,773,168
Power Source	
DC Power (Max)	Idle 7.0W, Active 10.0W
DC Current	5V (.8A) and 12V (1.8A)
Environmental Operating Conditions (Non-Condensing):	
Temperature Range	5°C to 60°C
Relative Humidity Range	20% to 80% non-condensing
Maximum Wet Bulb Temperature	29°C
Altitude Range	-50 ft to 10000 ft
Environmental Non-Operating Conditions (Non-Condensing):
Temperature Range	-40°C to 65°C
Relative Humidity Range	10% to 90% non-condensing
Maximum Wet Bulb Temperature	38°C
Altitude Range	-50 ft to 35000 ft

¹ For hard drives, GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

2.5" 160GB FULL DISK ENNCRYPTION SATA HDD

Capacity (bytes)	160,041,885,696	
Dimensions inches (W x D x H)	5.87 x 4 x 1	
Interface type and Maximum speed	Up to 3Gb/s	
Internal buffer size	8 MB	
Average Seek Time	8.5 ms	
Rotational Speed	7200 rpm	
Logical Blocks	312,581,808	
Power Source		
DC Power (Max)	Idle 7W, Active 10W	
DC Current	5V (.8A) and 12V (1.8A)	
Environmental Operating Conditions (Non-Condensing):		
Temperature Range	50°C to 600°C	
Relative Humidity Range	20% to 80% non-condensing	
Maximum Wet Bulb Temperature	29°C	
Altitude Range	-50 ft to 10000 ft	
Environmental Non-Operating Conditions (Non-Condensing):		
Temperature Range	-40°C to 65°C	
Relative Humidity Range	10% to 90% non-condensing	
Maximum Wet Bulb Temperature	38°C	
Altitude Range	-50 ft to 35000 ft	

¹ For hard drives, GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

OPTICAL DRIVES

OPTICAL DRIVES			
DVD +/- RW ¹	МТ	DT	SFF
External Dimensions inches/ centimeters (Without Bezel – W x H x D)	148.2mm(6in)/42mm (2in)/ 190.5 (max)	148.2mm(6in)/42mm (2in)/ 190.5 (max)	128.0 mm (5.04)/ 12.7mm (0.5 in)/ 126.1mm (4.97in)
Weight (max) pounds/ kilograms	800g	800g	170g
Interface type and speed	SATA 16x	SATA 16x	SATA 8x
Disc Capacity	Standard	Standard	Standard
Internal buffer size	supplier dependent	supplier dependent	supplier dependent
Access Times (typical)	supplier dependent	supplier dependent	supplier dependent
Maximum Data Transfer Rates			
Writes	16x DVD/48x CD	16x DVD/48x CD	8x DVD/ 24x CD
Reads	16x DVD/48x CD	16x DVD/48x CD	8x DVD/ 24x CD
Power Source			
DC Power Requirements	12V	12V	5V
DC Current	1200mA (12V)/ 900mA (5V)	1200mA (12V)/ 900mA (5V)	1000mA
Environmental Operating Conditions (Non- Condensing):			
Operating Temperature Range	5C to 50C	5C to 50C	5C to 50C
Relative Humidity Range	20% to 80% RH	20% to 80% RH	20% to 80% RH
Maximum Wet Bulb Temperature	29C	29C	29C
Altitude Range	-200 to 3048m	-200 to 3048m	-200 to 3048m
Environmental Non- Operating Conditions (Non- Condensing):			
Operating Temperature Range	-45C to 65C	-45C to 65C	-45C to 65C
Relative Humidity Range	5% to 95% RH	5% to 95% RH	5% to 95% RH
Maximum Wet Bulb Temperature	38C	38C	38C
Altitude Range	-200 to 10600m	-200 to 10600m	-200 to 10600m

¹ Discs burned with this drive may not be compatible with some existing drives and players; using DVD+R media provides maximum compatibility.

DVD-ROM	МТ	DT	SFF
External Dimensions inches/ centimeters (Without Bezel – W x H x D)	148.2mm(6in)/42mm (2in)/ 190.5 (max)	148.2mm(6in)/42mm (2in)/ 190.5 (max)	128.0 mm (5.04)/ 12.7mm (0.5 in)/ 126.1mm (4.97in)
Weight (max) pounds/ kilograms	750g	750g	150g
Interface type and speed	SATA 48x	SATA 48x	SATA 24x
Disc Capacity	Standard	Standard	Standard
Internal buffer size	supplier dependent	supplier dependent	supplier dependent
Access Times (typical)	supplier dependent	supplier dependent	supplier dependent
Maximum Data Transfer Rates			
Writes	N/A	N/A	N/A
Reads	16x DVD/48x CD	16x DVD/48x CD	8x DVD/ 24x CD
Power Source			
DC Power Requirements	12V	12V	5V
DC Current	1200mA (12V)/ 900mA (5V)	1200mA (12V)/ 900mA (5V)	800mA
Environmental Operating Conditions (Non- Condensing):			

Operating Temperature Range	5C to 50C	5C to 50C	5C to 50C
Relative Humidity Range	20% to 80% RH	20% to 80% RH	20% to 80% RH
Maximum Wet Bulb Temperature	29C	29C	29C
Altitude Range	-200 to 3048m	-200 to 3048m	-200 to 3048m
Environmental Non- Operating Conditions (Non- Condensing):			
Operating Temperature Range	-45C to 65C	-45C to 65C	-45C to 65C
Relative Humidity Range	5% to 95% RH	5% to 95% RH	5% to 95% RH
Maximum Wet Bulb Temperature	38C	38C	38C
Altitude Range	-200 to 10600m	-200 to 10600m	-200 to 10600m

¹ Discs burned with this drive may not be compatible with some existing drives and players; using DVD+R media provides maximum compatibility.

COMBO DVD/ CDRW	МТ	DT	SFF
External Dimensions inches/ centimeters (Without Bezel – W x H x D)	148.2mm(6in)/42mm (2in)/ 190.5 (max)	148.2mm(6in)/42mm (2in)/ 190.5 (max)	128.0 mm (5.04)/ 12.7mm (0.5 in)/ 126.1mm (4.97in)
Weight (max) pounds/ kilograms	750g	750g	165g
Interface type and speed	SATA 48x	SATA 48x	SATA 24x
Disc Capacity	Standard	Standard	Standard
Internal buffer size	supplier dependent	supplier dependent	supplier dependent
Access Times (typical)	supplier dependent	supplier dependent	supplier dependent
Maximum Data Transfer Rates			
Writes	16x DVD/48x CD	16x DVD/48x CD	8x DVD/ 24x CD
Reads	16x DVD/48x CD	16x DVD/48x CD	8x DVD/ 24x CD
Power Source			
DC Power Requirements	12V	12V	5V
DC Current	1200mA (12V)/ 900mA (5V)	1200mA (12V)/ 900mA (5V)	900mA
Environmental Operating Conditions (Non- Condensing):			
Operating Temperature Range	5C to 50C	5C to 50C	5C to 50C
Relative Humidity Range	20% to 80% RH	20% to 80% RH	20% to 80% RH
Maximum Wet Bulb Temperature	29C	29C	290
Altitude Range	-200 to 3048m	-200 to 3048m	-200 to 3048m
Environmental Non- Operating Conditions (Non- Condensing):			
Operating Temperature Range	-45C to 65C	-45C to 65C	-45C to 65C
Relative Humidity Range	5% to 95% RH	5% to 95% RH	5% to 95% RH
Maximum Wet Bulb Temperature	38C	38C	38C
Altitude Range	-200 to 10600m	-200 to 10600m	-200 to 10600m

¹ Discs burned with this drive may not be compatible with some existing drives and players; using DVD+R media provides maximum compatibility.

CD-ROM	мт	DT	SFF
External Dimensions inches/ centimeters (Without Bezel – W x H x D)	148.2mm(6in)/42mm (2in)/ 190.5 (max)	148.2mm(6in)/42mm (2in)/ 190.5 (max)	128.0 mm (5.04)/ 12.7mm (0.5 in)/ 126.1mm (4.97in)
Weight (max) pounds/ kilograms	750g	750g	157g
Interface type and speed	SATA 48x	SATA 48x	SATA 24x
Disc Capacity	Standard	Standard	Standard
Internal buffer size	supplier dependent	supplier dependent	supplier dependent
Access Times (typical)	supplier dependent	supplier dependent	supplier dependent
Maximum Data Transfer Rates			
Writes	N/A	N/A	N/A
Reads	48x CD	48x CD	24x CD
Power Source			
DC Power Requirements	12V	12V	5V
DC Current	1200mA (12V)/ 900mA (5V)	1200mA (12V)/ 900mA (5V)	800mA
Environmental Operating Conditions (Non- Condensing):			
Operating Temperature Range	5C to 50C	5C to 50C	5C to 50C
Relative Humidity Range	20% to 80% RH	20% to 80% RH	20% to 80% RH
Maximum Wet Bulb Temperature	29C	29C	29C
Altitude Range	-200 to 3048m	-200 to 3048m	-200 to 3048m
Environmental Non- Operating Conditions (Non- Condensing):			
Operating Temperature Range	-45C to 65C	-45C to 65C	-45C to 65C
Relative Humidity Range	5% to 95% RH	5% to 95% RH	5% to 95% RH
Maximum Wet Bulb Temperature	38C	38C	38C
Altitude Range	-200 to 10600m	-200 to 10600m	-200 to 10600m

More details for optical drives can be found at:

http://support.dell.com/support/systemsinfo/documentation.aspx?c=us&l=en&s=gen&~cat=7

BIOS Defaults

BIOS Factory Defaults (All chassis unless noted)		
Drives	Diskette drive:	Internal
	SATA-0:	On
	SATA-1:	On
	SATA-2 ¹ :	Depends on chassis and HDDs installed
	SATA-3 ² :	Depends on chassis and HDDs installed
	SMART Reporting:	Off
Onboard Devices	Integrated NIC:	On
	Integrated Audio:	On
	USB Controller:	On
	Rear Quad USB:	On
	Rear Triple USB:	On
	Front USB:	On
	LPT Port Mode:	PS/2
	LPT Port Address:	378h
	Serial Port #1:	Auto
	UART Powerdown	Auto

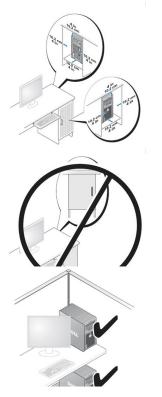
Video	Primary Video:	Auto	
VIGEO	Video Memory Size	64MB	
Performance	Multiple CPU Core:	On	
	HDD Acoustic Mode:	Bypass	
	Admin Password:	(none)	
	System Password:	(none)	
	SATA-0 Password:	(none)	
	SATA-1 Password:	(none)	
Security	SATA-2 Password ¹ :	depends on chassis	
	SATA-3 Password ² :	Depends on chassis	
	Password Changes:	Unlocked	
	No Execute:	On	
	Computrace®:	Deactivate	
	AC Recovery:	Off	
	Auto Power On:	Off	
	Auto Power Time:	12:00 AM	
Power Management	Low Power Mode:	Off	
	Remote Wake Up:	Off	
	Cool and Quiet:	On	
	Suspend Mode:	S3	
	Service Tag:	System specific	
Maintananaa	ASF Mode:	Off	
Maintenance	Load Defaults:	Cancel	
	Event Log:	Mark All Entries	
Post Behavior	Fast Boot:	On	
	Numlock Key:	On	
	POST Hotkeys:	Setup & Boot Menu	
	MEBx Hotkey:	On	
	Keyboard Errors:	Report	

 $^{\scriptscriptstyle 1}$ Not present on SFF

² Only present on MT

Chassis Enclosure & Ventilation Requirements

Enclosure Ventilation	If your enclosure has doors, they need to be of a type that allows at least 30% airflow through the enclosure (front and back).
Enclosure Minimum Clearance	Leave a 10.2 cm (4 in.) minimum clearance on all vented sides of the computer to permit the airflow required for proper ventilation.
Recommended Enclosure	Do not install your computer in an enclosure that does not allow airflow. This restricts the airflow and impacts your computer's performance, possibly causing it to overheat.
Open Desk Minimum Clearance	If your computer is installed in a corner, on a desk, or under a desk, leave at least 5.1 cm (2 in.) clearance from the back of the computer to the wall to permit the airflow required for proper ventilation.



Regulatory Compliance and Environmental

Product related conformity assessment and regulatory authorizations including Product Safety, Electromagnetic Compatibility (EMC), Ergonomics, and Communication Devices relevant to this product may be viewed at www.dell.com/regulatory_compliance. The Regulatory Datasheet for this product is located at http://www.dell.com/regulatory_compliance.

Details of Dell's environmental stewardship program to conserve product energy consumption, reduce or eliminate materials for disposal, prolong product life span and provide effective and convenient equipment recovery solutions may be viewed at www.dell. com/environment. Product related conformity assessment, regulatory authorizations, and information encompassing Environmental, Energy Consumption, Noise Emissions, Product Materials Information, Packaging, Batteries, and Recycling relevant to this product may be viewed by clicking the Design for Environment link on the webpage.

Acoustic Noise Emission Information

OptiPlex 740 MT: Declared Noise Emissions in accordance with ISO 9296 (tested in accordance with ISO 7779)

Service Level	Sound Power (LWAd, bels) (1 bel=10 decibels, re 10-12 Watts)	Sound Pressure Operator Position (LpAm, decibels) (re 2x10-5 Pa)	Sound Pressure Bystander Position (LpAm, decibels) (re 2x10-5 Pa)
Hard Drive Accessing	3.7	28	24
CD Drive Accessing	5.1	42	37
Idle	3.6	28	23

OptiPlex™ 740 DT: Declared Noise Emissions in accordance with ISO 9296 (tested in accordance with ISO 7779)

Service Level	Sound Power (LWAd, bels) (1 bel=10 decibels, re 10-12 Watts)	Sound Pressure Operator Position (LpAm, decibels) (re 2x10-5 Pa)	Sound Pressure Bystander Position (LpAm, decibels) (re 2x10-5 Pa)
Floppy Drive Accessing	4.9	40	39
Hard Drive Accessing	3.8	28	23
CD Drive Accessing	5.5	45	38
ldle	3.9	28	23

OptiPlex® 740 SFF: Declared Noise Emissions in accordance with ISO 9296 (tested in accordance with ISO 7779)

Service Level	Sound Power (LWAd, bels) (1 bel=10 decibels, re 10-12 Watts)	Sound Pressure Operator Position (LpAm, decibels) (re 2x10-5 Pa)	Sound Pressure Bystander Position (LpAm, decibels) (re 2x10-5 Pa)
Floppy Drive Accessing	4.8	37	32
Hard Drive Accessing	4.0	31	27
CD Drive Accessing	4.8	31	26
Idle	3.9	30	25

¹ The Declared A-weighted Sound Pressure Level in decibels (re 2x10-5 Pa), at Operator, Bystander, and Desk Side Positions are measured in accordance with ISO 7779 7.6.1, 7.6.2, and C.15.2 and declared in accordance with ISO 9296;