

**DELL™**

# **OPTIPLEX™380**

**TECHNICAL GUIDEBOOK**

**INSIDE THE OPTIPLEX 380**



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# Dell™ OptiPlex™ 380

Offering more form factors and configurations than ever before in an Essential Optiplex desktop, the new Dell OptiPlex 380 is designed to deliver cost-effective business productivity for growing businesses and organizations. Built with proven, practical features focused on providing essential business value, the OptiPlex 380 is an ideal solution for environments with basic IT infrastructures. Optional features include Intel® Core™ 2 Quad processor, high-speed memory options, and extensive peripheral support. The OptiPlex 380 is backed by a suite of smart, desktop-focused services that help support your IT professionals throughout the technology lifecycle. Customizable to meet your most essential business needs, the OptiPlex 380 solution provides the kind of basic manageability, security, and energy efficient options that help build a foundation for success.

## OptiPlex – The Essential Key to Productivity

The OptiPlex 380 delivers essential performance to help keep your business running:

- Choose from a set of three form factors to fit your organization's space and expandability needs: Mini Tower, Desktop or Small Form Factor.
- A wide range of configuration choices that include Intel® Core™ 2 Quad processors, DDR3 memory, discrete graphics and the Windows® 7 operating system, among other options.
- Exceptional value for reliable business-class computing, featuring Intel® Core™ 2 Quad processors
- Planning support with up to a 12 month lifecycle (plus 2 month transition) stable images, managed transitions, and Dell ImageWatch™ to provide early notification of upcoming technology changes
- Customizable Global service and support through Dell ProSupport service options
- Dell Client Manager remote manager allows easy system manageability

## OptiPlex Helps IT

The OptiPlex 380 is designed and built to be both flexible and easily scalable to meet your changing needs:

- Dell Client Manager allows IT to configure and update multiple desktops simultaneously while monitoring the health of key system components.
- IT can standardize all OptiPlex desktops to a global configuration at time of purchase, making it easy to resolve issues and order replacement parts later.
- A 12 month targeted lifecycle and 2 month managed transition period make it easy to maintain organizational productivity while planning for future deployments. Additional service and support options can extend the product lifecycle.

## OptiPlex: Secure Computing Made Simple

OptiPlex 380 provides basic security offerings to help protect your critical data:

- Identify breaches to the system chassis using such standard features as the Kensington lock slot and chassis intrusion alerts
- Prevent data theft or tampering with features such as setup/BIOS password and USB panel enable/disable, and add optional ProSupport<sup>1</sup> services to assist with hardware and data security.
- Ensure data-center security and compliance without affecting end users' working habits with supported On-Demand Desktop streaming (ODDS)
- Employ system and BIOS passwords to help prevent unauthorized access
- Get support on reducing risk and protecting your sensitive data with Dell's ProSupport Hard Drive Data Recovery and Certified Data Destruction services.

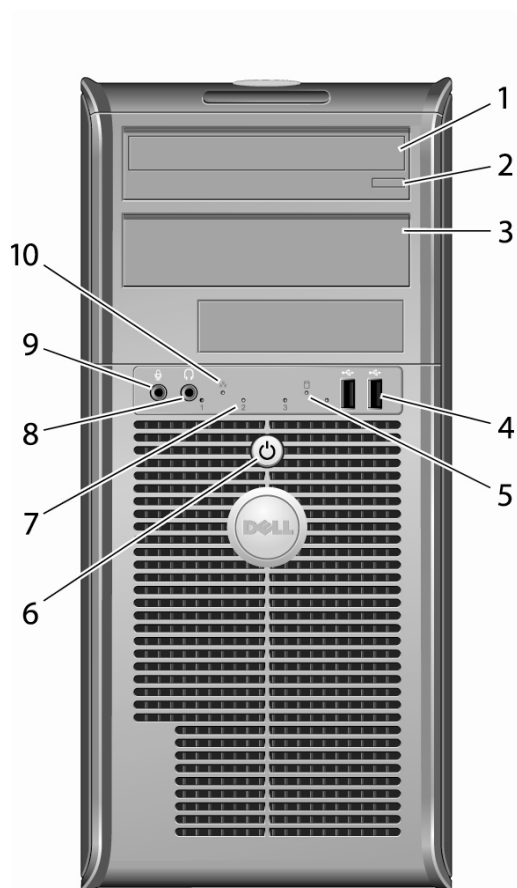
## OptiPlex: Environmentally Conscious - Energy Efficiency

The OptiPlex 380 delivers smart energy choices designed to lower the impact on the environment and help you reduce your organization's energy consumption costs.

- Achieve outstanding performance with less energy through Dell's Energy Smart power management
- Estimate energy usage for multiple customized OptiPlex systems with the Dell Client Energy Savings Calculator([www.dell.com/optiplex](http://www.dell.com/optiplex))
- Help reduce power consumption — and cost — with Dell's power supply, which is up to 88% efficient
- Leverage ENERGY STAR compliance: As an ENERGY STAR-compliant partner, Dell has designed select configurations of the OptiPlex 380 to comply with ENERGY STAR 5.0 standards for energy efficiency.

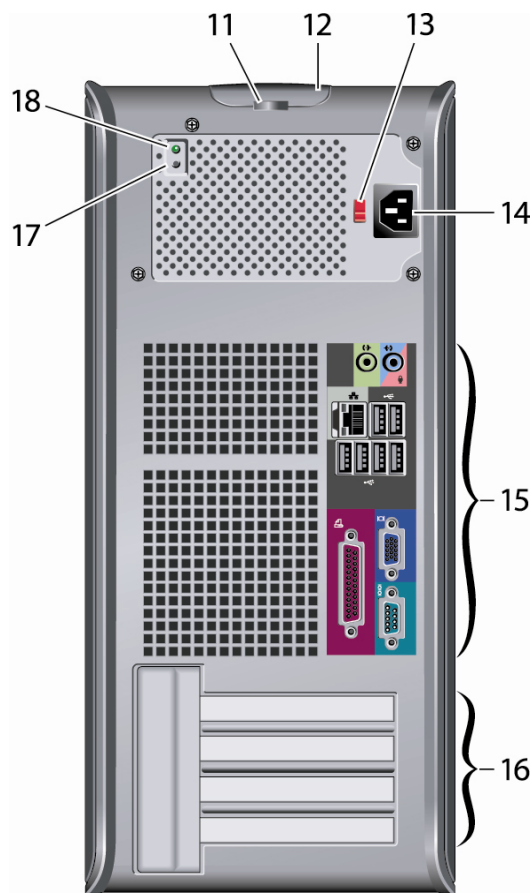
# OptiPlex 380 Technical Specifications

## Mini Tower Computer (MT) View



**Front View**

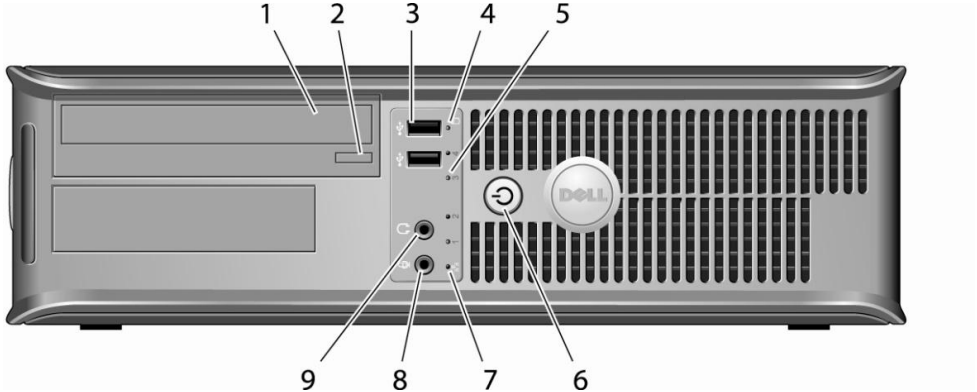
1	Optical Drive (optional)	6	Power Button, Power light
2	Optical Drive Eject Button	7	Diagnostic Lights (4)
3	Optical Drive Panel	8	Headphone Connector
4	USB 2.0 Connectors(2)	9	Microphone Connector
5	Hard Drive Activity Light	10	Network Connectivity Light



**Back View**

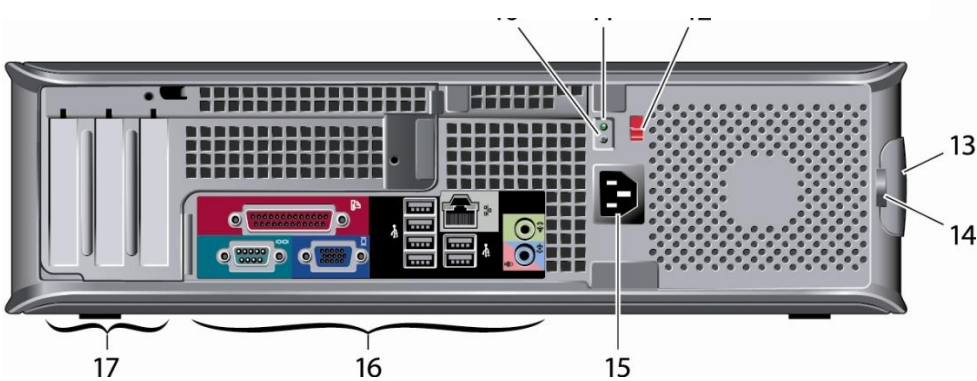
11	Chassis Lock Loop	15	Back Panel Connectors
12	Cover Release Latch	16	Expansion Card Slots (4)
13	Voltage Selector Switch	17	Power Supply Diagnostic Button
14	Power Connector	18	Power Supply Diagnostic Light

Desktop Computer (DT) View



Front View

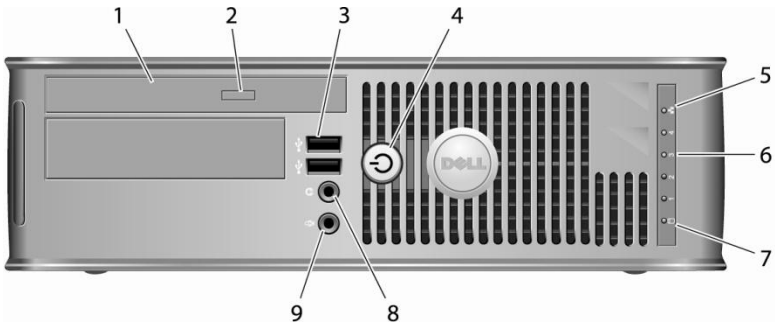
1	Optical Drive (optional)	6	Power button, Power light
2	Optical Drive Eject Button	7	Network Connectivity Light
3	USB 2.0 Connectors (2)	8	Microphone connector
4	Hard Drive Activity Light	9	Headphone connector
5	Diagnostic Lights (4)		



Back View

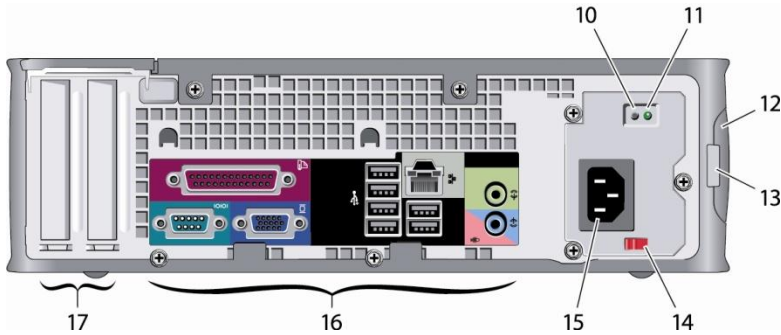
10	Power Supply Diagnostic Button	14	Chassis Lock Loop
11	Power Supply Diagnostic Light	15	Power Cable Connector
12	Voltage selection switch	16	Back Panel Connectors
13	Cover Release Latch	17	Expansion Card Slots (3)

Small Form Factor Computer (SFF) View



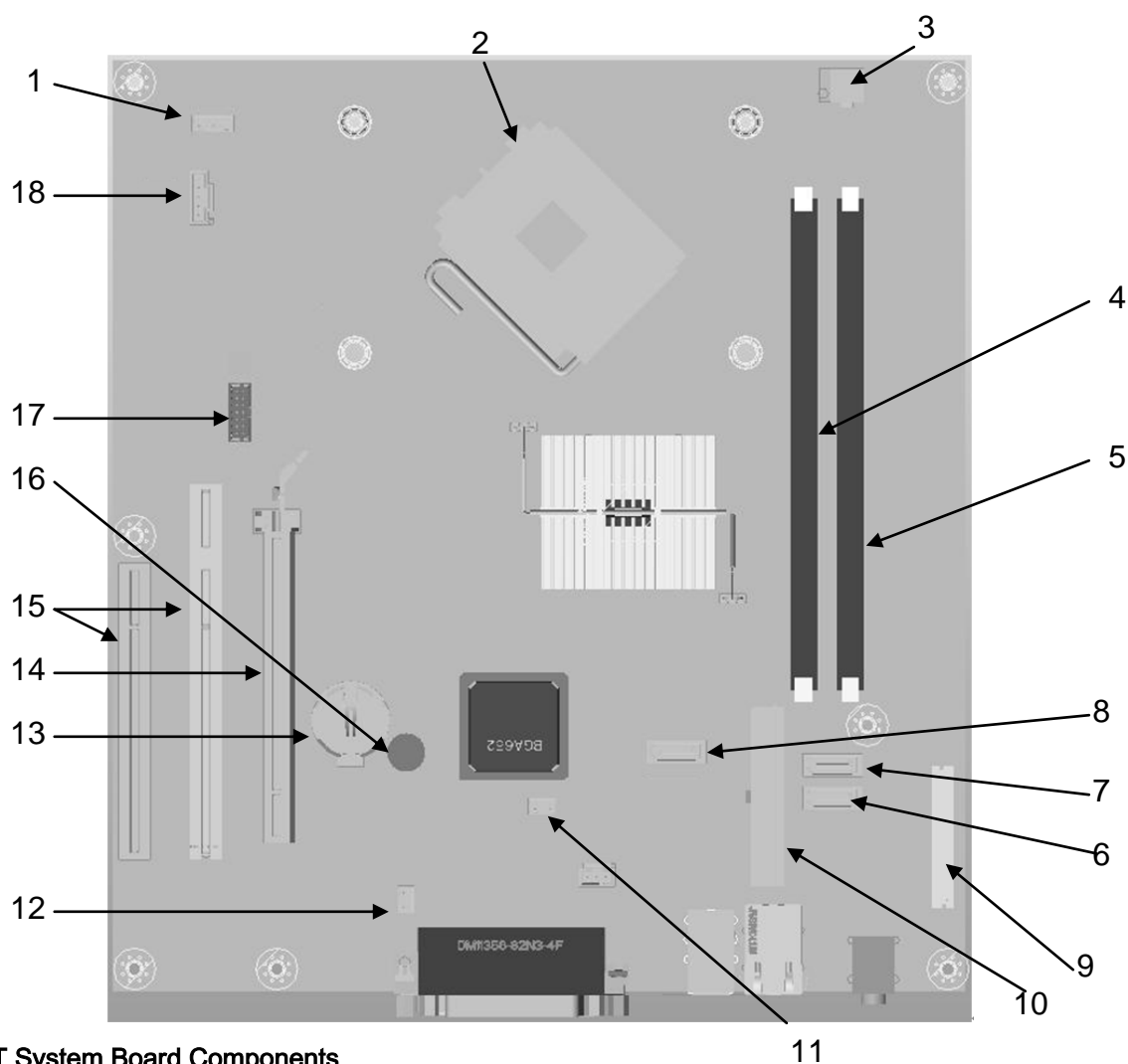
Front View

1	Optical Drive (optional)	6	Diagnostic lights (4)
2	Optical Drive Eject Button	7	Hard Drive Activity Light
3	USB 2.0 Connectors (2)	8	Headphone connector
4	Power button, Power light	9	Microphone connector
5	Network Connectivity Light		



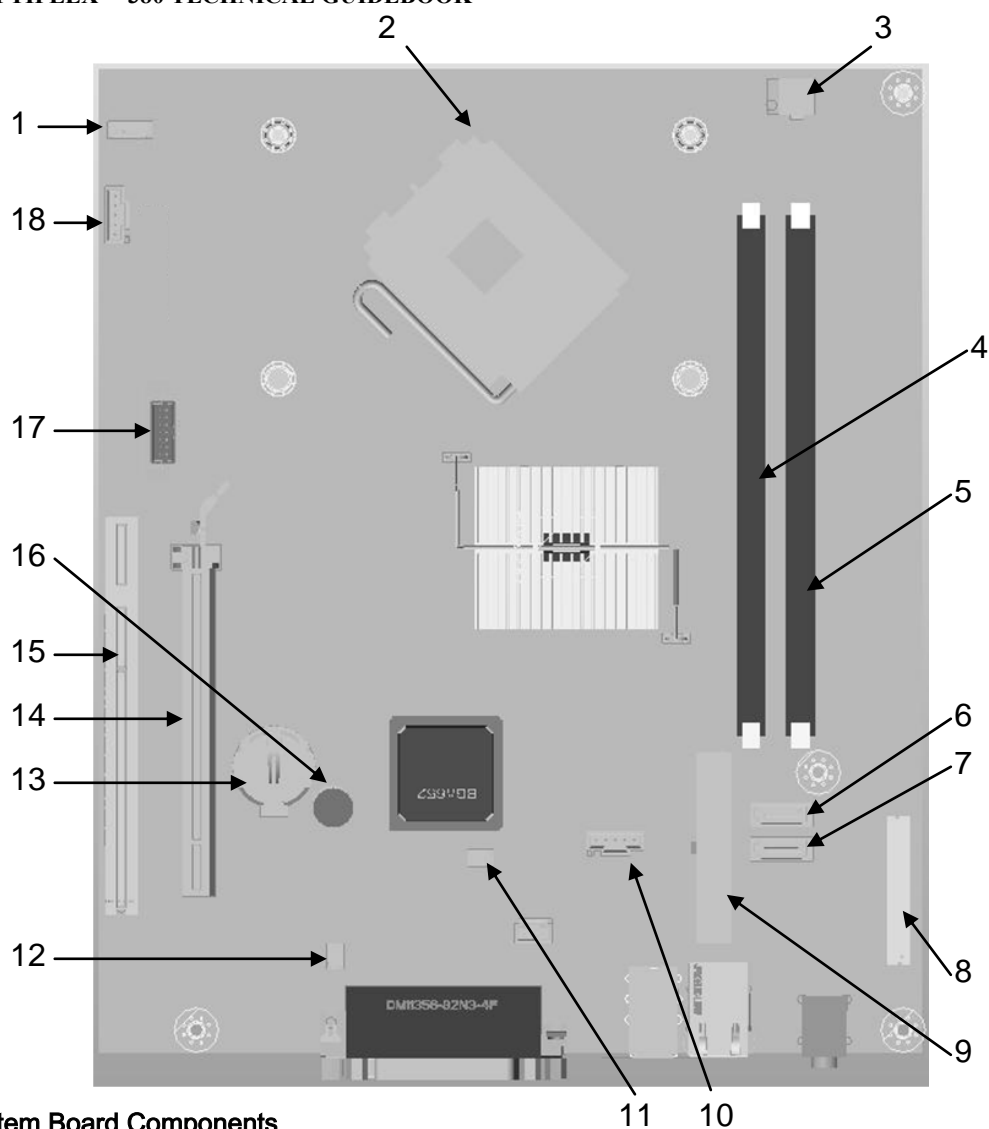
Back View

10	Power Supply Diagnostic Button	14	Voltage Selection Switch
11	Power Supply Diagnostic Light	15	Power Cable Connector
12	Cover Release Latch	16	Back Panel Connectors
13	Chassis Lock Loop	17	Expansion Card Slots (3)



MT/DT System Board Components

1	Speaker connector (INT_SPKR)	11	RTC reset jumper (RTCST)
2	Processor connector (CPU)	12	Password jumper (PSWD)
3	Processor power connector (12VPOWER)	13	Battery socket (BATTERY)
4	Memory module connectors (DIMM_1)	14	PCI Express x16 card connector (SLOT1)
5	Memory module connectors (DIMM_2)	15	PCI card connectors (SLOT2 and SLOT3)
6	SATA drive connectors (SATA0)	16	Internal buzzer (SPKR)
7	SATA drive connectors (SATA1)	17	Serial/ PS/2 connector (PS2/SER2)
8	SATA drive connectors (SATA2)	18	Fan connector (FAN_CPU)
9	Front-panel connector (FRONTPANEL)		
10	Power connector (POWER)		



**SFF System Board Components**

1	Speaker connector (INT_SPKR)	11	RTC reset jumper (RTCRST)
2	Processor connector (CPU)	12	Password jumper (PSWD)
3	Processor power connector (12VPOWER)	13	Battery socket (BATTERY)
4	Memory module connectors (DIMM_1)	14	PCI Express x16 card connector(SLOT1)
5	Memory module connectors (DIMM_2)	15	PCI card connectors (SLOT2)
6	SATA drive connectors (SATA0)	16	Internal buzzer (SPKR)
7	SATA drive connectors (SATA1)	17	Serial/ PS/2 connector (PS2/SER2)
8	Front-panel connector (FRONTANEL)	18	Fan connector (FAN_CPU)
9	Power connector (POWER)		
10	Fan connector (FAN_HDD)		



# 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.

	MT	DT	SFF
<b>Windows 7®</b> operating system (32 bit)	Windows 7® Ultimate; Windows 7® Professional, Windows 7® Home Basic, Windows 7® Home Premium, Windows 7® Starter Edition (Limited Countries Only)		
<b>Windows Vista®</b> operating system (32 bit)	Windows Vista® Business SP1, Windows Vista® Home Basic SP1, Windows Vista® Business SP1 via Windows 7 Professional Downgrade Rights, Windows Vista® Starter SP1, (Limited Countries Only)		
<b>Windows® XP</b> operating system (32 bit, through downgrade right )	Windows® XP Professional SP3 via Windows Vista® Business, Windows® XP Professional SP3 via Microsoft® Windows 7® Professional or Microsoft® Windows 7® Ultimate Downgrade Rights		
<b>Other</b>	FreeDOS for (N-series), Ubuntu® Linux (China Only)		
<b>OS Media Support</b>	X	X	X

## Chipset

	MT	DT	SFF
<b>Chipset</b>	Intel® G41Express Chipset w/ICH7		
<b>Non-volatile memory on chipset</b>			
BIOS Configuration FWH (firmware hub)	16Mb located at SPI_FLASH on chipset		
NIC EEPROM	256 bytes OTP ROM on chipset		

## Processor

 **NOTE: Processor numbers are not a measure of performance.**

PROCESSOR (SPEED,CACHE,FSB)	MT	DT	SFF
<b>Intel® Core™ 2 Quad Processors</b>			
Intel® Core™ 2 Quad Q9650/3.00GHz, 12M, 1333FSB	X	X	X
Intel® Core™ 2 Quad Q9550/2.83GHz, 12M, 1333FSB	X	X	X
Intel® Core™ 2 Quad Q9505/2.83GHz, 6M, 1333FSB	X	X	X
Intel® Core™ 2 Quad Q9400/2.66GHz, 6M, 1333FSB	X	X	X
Intel® Core™ 2 Quad Q8400/2.66GHz, 4M, 1333FSB	X	X	X
<b>Intel® Core™ 2 Duo and Pentium® Dual Core Processors</b>			
Intel® Core™ 2 Duo E8600/3.33GHz, 6M, 1333FSB	X	X	X
Intel® Core™ 2 Duo E8500/3.16GHz, 6M, 1333FSB	X	X	X
Intel® Core™ 2 Duo E8400/3.0GHz, 6M, 1333FSB	X	X	X
Intel® Core™ 2 Duo E7600/3.06GHz, 3M, 1066FSB	X	X	X
Intel® Core™ 2 Duo E7500/2.93GHz, 3M, 1066FSB	X	X	X
Intel® Core™ 2 Duo E7400/2.80GHz, 3M, 1066FSB	X	X	X
Intel® Pentium® Dual-Core E6500/2.93GHz, 2M, 1066FSB)	X	X	X
Intel® Pentium® Dual-Core E6300/2.8GHz, 2M, 1066FSB	X	X	X
Intel® Pentium® Dual-Core E5400/2.7GHz, 2M, 800FSB	X	X	X
Intel® Pentium® Dual-Core E5300/2.60GHz, 2M, 800FSB	X	X	X
<b>Intel® Celeron® Processors</b>			
Intel® Celeron® Dual-Core 3300/2.50GHz, 1M, 800FSB	X	X	X
Intel® Celeron® Dual-Core 3200/2.40GHz, 1M, 800FSB	X	X	X
Intel® Celeron® Dual-Core 1600/2.40GHz, 512K, 800FSB	X	X	X
Intel® Celeron® Dual-Core 1500/2.20GHz, 512K, 800FSB	X	X	X
Intel® Celeron® 450/2.20GHz, 512K, 800FSB	X	X	X

## Memory

Your computer supports a maximum of 4 GB<sup>1</sup> of memory when you use two 2-GB DIMMs.

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.

	MT	DT	SFF
Type: DDR3 Synch DRAM Non-ECC Memory	1066 MHz speeds		
DIMM Slots	2	2	2
DIMM Capacities	Up to 2GB	Up to 2GB	Up to 2GB
Minimum Memory	1GB	1GB	1GB
Maximum Memory with 1066 MHz speed memory	4GB	4GB	4GB
Configurations:			
1066MHz Memory configurations			
4GB <sup>1</sup> DDR3 Non-ECC SDRAM, 1066MHz, (2 DIMM)	X	X	X
3GB DDR3 Non-ECC SDRAM, 1066MHz, (2 DIMM)	X	X	X
2GB DDR3 Non-ECC SDRAM, 1066MHz, (1DIMM)	X	X	X
2GB DDR3 Non-ECC SDRAM, 1066MHz, (2 DIMM)	X	X	X
1GB DDR3 Non-ECC SDRAM, 1066MHz, (1 DIMM)	X	X	X

<sup>1</sup> 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
<b>Bays:</b>			
3.5-inch bay (External Floppy)	1	1	1 (slimline)
5.25-inch bay (External Optical)	2	1	1 (slimline)
Hard Drives Supported (Internal)	2	1 x 3.5" or x 2.5"	1 x 3.5" or 1 x 2.5"
Optical Drives Supported	2	1	1
<b>Interface:</b>			
SATA (number of connectors)	3	3	2
<b>Hard Drive:</b> Size, type, speed, RPM			
500GB <sup>1</sup> SATA 7200 RPM HDD	X	X	X
320GB <sup>1</sup> SATA 7200 RPM HDD	X	X	X
250GB <sup>1</sup> SATA 7200 RPM HDD	X	X	X
160GB <sup>1</sup> SATA 7200 RPM HDD	X	X	X
<b>2<sup>nd</sup> HDD support:</b> (includes two matching capacity/speed hard drives)			
500GB <sup>1</sup> SATA 7200 RPM HDD	X		
320GB <sup>1</sup> SATA 7200 RPM HDD	X		
250GB <sup>1</sup> SATA 7200 RPM HDD	X		
160GB <sup>1</sup> SATA 7200 RPM HDD	X		
<b>Optical Drive:</b> (SFF requires a slimline optical drive)			
DVD+/-RW <sup>2</sup>	SATA 1.5Gbit/s		
DVD-ROM <sup>3</sup>	SATA 1.5Gbit/s		

<sup>1</sup> 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.

<sup>2</sup> Discs burned with this drive may not be compatible with some existing drives and players; using DVD+R media provides maximum compatibility.

<sup>3</sup> DVD-ROM drives may have write-capable hardware that has been disabled via firmware modifications.

## System Board Connectors

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

	MT	DT	SFF
<b>PCI Slot(s): number of</b>	2 FH	2LP or 2FH with	1 LP

		riser	
<b>PCIe x16 Slot: number of</b>	1 FH	1 LP Native or 1 FH with Combo Riser	1 LP Native
<b>Serial ATA (SATA)</b>	3	3	2

## 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.**

	MT	DT	SFF
Integrated Intel GMA X4500	Integrated on system board		
<b>Enhanced Graphic/Video</b>			
DVI (Digital) Adapter Card	Optional card		
256MB ATI RADEON HD 3450 with dual DVI or VGA and S-Video Out (adapters convert to dual DVI or dual VGA)	Optional card		
256MB nVidia GeForce 9300 GE with dual DVI or VGA and S-Video Out (adapters convert to dual DVI or dual VGA)	Optional card		

\* Significant of system memory may be allocated to support integrated graphics, depending on operating system, system memory size and other factors.

\* Populating a up-graphics card in the x16 slot disabled onboard video.

## External Ports/Connectors

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

See chassis diagrams section for port/connector locations

	MT	DT	SFF
USB 2.0	2 Front, 6 Rear		
Serial (native)	One rear		
PS/2 and Serial (low profile card includes PS/2 dongle)	Optional full height or low profile card		
Parallel	One rear		
Network Connector (RJ-45)	One rear		
1394 Controller	Optional full height or low profile card		
<b>Video:</b>			
VGA	One rear		
<b>Audio:</b>			
Microphone-in	One mini jack front		
Headphone	One mini jack front		
Stereo line-in	One mini jack rear		
Speakers line out	One mini jack rear		
<b>Risers:</b> (PCI riser card will replace two PCI slots and Combo riser card will replace one PCI and one PCIe slots.)			
Combo full height riser with 1 PCI and 1 PCIe connector		Optional	
Dual full height riser with 2 PCI connectors		Optional	

## 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.**

	MT	DT	SFF
Broadcom (BCM57780) Gigabit <sup>1</sup> LAN 10/100/1000 (WOL, PXE)	Integrated on system board		
Broadcom NX1 5722 10/100/1000 PCIe Gigabit Networking Card	Optional Supports full height	Optional Low-profile or full height card with optional riser	Optional Supports low profile card

<sup>1</sup> 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 Controller less Modem	Optional full height or low profile card		

## Communications – Wireless

 **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
Wireless 1505 Draft 802.11n WLAN Mini-Card Desktops	Optional full height or low profile card		

## Audio and Speakers

	MT	DT	SFF
Realtek ALC269Q High Definition Audio Codec.	Integrated on system board		
Internal Chassis Speaker	Optional		
Dell AX210 1.2W 2.0 Stereo Speakers	Optional		
Dell AX510/AX510PA FPD Sound Bar	Optional		
Dell AY410 30W 2.1 Stereo Speakers with Subwoofer	Optional		

## Keyboard and Mouse

	MT	DT	SFF
Dell USB Entry Keyboard	Optional		
Dell USB QuietKey Keyboard	Optional		
Dell USB Multimedia Pro Keyboard	Optional		
Dell USB Entry Optical Mouse	Optional		
Dell Laser Mouse	Optional		
Dell Logo Mouse Pad	Optional		

## Security

	MT	DT	SFF
Chassis Intrusion Switch	Optional		
Chassis lock slot	Standard		

## Enterprise Solutions

 **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
EasySafe HDD Protection Card software Solution	Optional – China Only		
Image server (ODDS)	Optional		
Touch Screen Monitor support	Optional		

## Service and Support

 **NOTE:** For more details on Dell Service Plans please to go to: [www.dell.com/service/service\\_plans](http://www.dell.com/service/service_plans)

	MT	DT	SFF
1 Year Next Business Day On-Site Service (1-1-1)	Standard		
3 Year Next Business Day On-site Service (3-3-3)	Optional		


## Software

	MT	DT	SFF
Dell Client Manager Standard	Available via Dell.com		
Dell Control Point	Standard security		
Norton Internet Security	90 Day Trial or optional subscription		
McAfee Security Center	90 Day Trial or Optional Subscription		
DELL PC restore	Standard		
Dell Backup & Recovery Manager	Standard		
Dell OpenManage Client Instrumentation	Standard		
Crossword, Jigsaw, CCTK system management	Standard		



# 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, and one optical drive.**

	MT	DT	SFF
<b>Chassis Volume</b> liters	33	16	10.7
<b>Chassis Weight*</b> kilograms/pounds	12 / 26.5	9 / 19.8	7 / 15.4
<b>Chassis Dimensions: (HxWxD)</b>			
Height inches/centimeters	16.1 / 40.8	4.5 / 11.4	3.7 / 9.3
Width inches/centimeters	7.4 / 18.7	15.7 / 39.9	12.4 / 31.4
Depth inches/centimeters	17.0 / 43.3	13.9 / 35.3	13.4 / 34.0
<b>Shipping Weight*</b> kilograms/pounds includes packaging materials	19.7 / 43.5	12.7 / 28.0	9.7 / 21.3
<b>Packaging Parameters (HxWxD)</b>			
Height inches/centimeters	22.38 / 56.8	20.63 / 52.4	20.88 / 50.04
Width inches/centimeters	22.25 / 56.5	20.31 / 51.6	19.38 / 49.23
Depth inches/centimeters	14.25 / 36.2	11.75 / 29.8	10.63 / 27

## System Board Connector Maximum Allowable Dimensions

	MT	DT	SFF
PCI Slot(s) Dimensions: (HxL)	2	2	1
Height inches/centimeters	4.376/11.115	2.731/6.89	
Length inches/centimeters	6.6/16.765*	6.6/16.765	
PCIe x16 Slot Dimensions: (HxL)	1	1	1
Height inches/centimeters	4.376/11.115	2.731/6.89	
Length inches/centimeters	6.6/16.765*	6.6/16.765	
Risers: (PCI riser card will replace two PCI slots and Combo riser card will replace one PCI and one PCIe slots.)			
Combo Full Height Riser with 1 PCI and 1 PCIe connector (HxL)		1	
Height inches/centimeters		4.376/11.115	

	MT	DT	SFF
Length inches/centimeters		6.9/17.53**	
<b>Dual Full Height Riser with 2 PCI connectors (HxL)</b>		1	
Height inches/centimeters		4.376/11.115	
Length inches/centimeters		6.9/17.53**	

\* 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

	MT	DT	SFF
Temperature			
Operating	10° to 35°C (50° to 95°F)		
Non-Operating	-40° to 65°C (−40° to 149°F)		
Relative Humidity			
Operating (Noncondensing)	20 to 80 %* (*Max Wet bulb temperature= 29 °C)		
Non-Operating (Noncondensing)	5 to 95 %+ (+Max Wet bulb temperature= 38 °C)		
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 50.8 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)		

## Power

	MT		DT		SFF	
	PPFC	EPA	PPFC	EPA	PPFC	EPA
<b>Power Supply Wattage</b>	<b>255W</b>	<b>255W</b>	<b>235W</b>	<b>255W</b>	<b>235W</b>	<b>235W</b>
AC input Voltage Range	90~135Vac, 180~264Vac	90 – 264Vac	90~135Vac, 180~264Vac	90 – 264Vac	90~135Vac, 180~264Vac	90 – 264Vac
AC input current (low ac range/high AC range)	6.5/3.5 Arms	3.6/1.8 Arms	6.5/3.5 Arms	4.0/2.0 Arms	6.5/3.5 Arms	3.5/1.75 Arms
AC input Frequency	47 – 63 Hz	47 – 63 Hz	47 – 63 Hz	47 – 63 Hz	47 – 63 Hz	47 – 63 Hz
AC holdup time (80%load)	16 ms	16 ms	16 ms	16 ms	16 ms	16 ms
Average Efficiency ( Energy Star Compliant)	NA	85 – 88 – 85% @ 20 – 50 – 100% load	NA	85 – 88 – 85% @ 20 – 50 – 100% load	NA	85 – 88 – 85% @ 20 – 50 – 100% load
Typical Efficiency	65%	NA	65%	NA	65%	NA
<b>DC parameters</b>						
+3.3v output	11.0 A	8.0 A	9.0 A	5.0 A	8.0 A	5.0 A
+5.0v output	17.0 A	15.0 A	15.0 A	15.0 A	15.0 A	16.0 A
+12.0v output	16.0 A	13.0 A & 7.0 A	14.0 A	18.0 A	16.0 A	17.0 A
+5.0v auxiliary output	4.0 A	4.0 A	4.0 A	4.0 A	4.0 A	4.0 A
-12.0v output	0.2 A	0.5 A	0.2 A	0.5 A	0.5 A	0.5 A
Max total power	255 W	255 W	235 W	255 W	235 W	235 W
Max combined +3.3v / +5.0v power	121 W	80 W	105 W	91.5 W	98 W	88 W
Max combined 12.0v power (note: only if more than one 12v rail)	NA	220W	N/A	N/A	N/A	N/A
BTUs/h (based on PSU max wattage)	1338 BTU	1023 BTU	1233 BTU	1023 BTU	1233 BTU	943 BTU
<b>3.3v CMOS battery (type and estimated battery life)</b>	3-V CR2032 lithium coin cell. Minimum est. 5 year life					
<b>Power Supply Fan</b>	80 x 25mm	80 x 25mm	92 x 25mm	92 x 25mm	80 x 15mm or 80 x 20mm	80 x 15mm or 80 x 20mm
<b>Compliance:</b>						
Energy Star Compliant	No	Yes	No	Yes	No	Yes
Blue Angel Compliant	Yes	Yes	Yes	Yes	Yes	Yes
Climate Savers / 80Plus Compliant	No	Silver	No	Silver	No	Silver
FEMP Standby Power Compliant	Yes	Yes	Yes	Yes	Yes	Yes

## Audio

<b><u>Integrated ALC 269Q High Definition Audio</u></b>	<b>MT</b>	<b>DT</b>	<b>SFF</b>
High Definition Stereo support	Yes		
Number of channels	2 pairs of ADC/DAC with 4-channels		
Number of Bits / Audio resolution	16,20 and 24-bit resolution		
Sampling rate (recording/playback)	DACs support Up to 192KHz, ADCs support Up to 96KHz.		
Signal to Noise Ratio	98dB		
Wavetable voices			
Analog Audio	Yes		
Dolby Digital			
THX			
Digital out (S/PDIF)			
Audio Jack Impedance			
Microphone	150 k $\Omega$		
Line-In	150 k $\Omega$		
Line-Out	190 $\Omega$		
Headphone	.5 $\Omega$		
Internal Speaker Power Rating	2W		

## Communications – Integrated LAN

<b><u>Integrated Broadcom57780 Gigabit<sup>1</sup> LAN</u></b>	<b>MT</b>	<b>DT</b>	<b>SFF</b>
<b>Connector Type</b>	RJ-45		
<b>Data Rates supported</b>	10/100/1000M		
<b>Controller Details</b>			
Controller bus architecture (example PCIe 1.0a x1)	PCIe V1.1 x 1		
Integrated memory	Yes (buffer memory)		
Data transfer mode (example Bus-Master DMA)	DMA		
Power consumption (full operation per data rate connection speed)	814mW(1000BASE-T) / 450mW(100BASE-T) / 359mW(10BASE-T)		
Power consumption (standby operation)	30 mW		
<b>IEEE standards compliance (example 802.1P)</b>	IEEE802.3, IEEE802.3u, IEEE802.3x		
<b>Hardware Certifications (example FCC, B, GS mark...)</b>	IEEE		
<b>Boot ROM Support</b>	Yes		
<b>Network Transfer Mode (example Full Duplex, Half Duplex)</b>	Full Duplex/Half Duplex		
Network Transfer Rate	10BASE-T (half-duplex) 10 Mbps 10BASE-T (full-duplex) 20 Mbps 100BASE-TX (half-duplex) 100 Mbps 100BASE-TX (full-duplex) 200 Mbps 1000BASE-T (full-duplex) 2000 Mbps Depends on the system environment.		
<b>Environmental</b>			
Operating temperature	0 to 70°C		
Operating humidity	NA		
<b>Operating System Driver Support</b>	Windows XP, Windows Vista , Windows 7 (32bit/64bit), Ubuntu (for China Only)		
<b>Manageability (examples WOL, PXE..)</b>	WoL, PXE		
<b>Management Capabilities Alerting (examples ASF 2.0 AMT...)</b>			

<sup>1</sup> 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 - 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.

<u>Broadcom NetXtreme 10/100/1000 PCIe Gigabit<sup>1</sup> Networking Card</u>	MT	DT	SFF
Connector Type	RJ-45		
Data Rates supported	10/100/1000 Mbps Half/Full duplex		
Controller Details			
Controller bus architecture (example PCIe 1.0a x1)	PCIe V1.1 x 1		
Integrated memory	64KBytes RX, 8KBytes TX		
Data transfer mode (example Bus-Master DMA)	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 (example 802.1P)	802.3, 802.2, 802.3x, 802.1p		
Hardware Certifications (example FCC, B, GS mark...)	FCC B, VCCI B, CE		
Boot ROM Support	No		
Network Transfer Mode (example Full Duplex, Half Duplex)	Full Duplex/Half Duplex		
Network Transfer Rate	10BASE-T (half-duplex) 10 Mbps 10BASE-T (full-duplex) 20 Mbps 100BASE-TX (half-duplex) 100 Mbps 100BASE-TX (full-duplex) 200 Mbps 1000BASE-T (full-duplex) 2000 Mbps Depends on the system environment.		
Environmental			
Operating temperature	0° C to 55° C (32° F - 131° F)		
Operating humidity	5% ~ 85% (non-condensing)		
Operating System Driver Support	Windows XP, Windows Vista, Windows 7 (32bit/64bit), Ubuntu (for China Only)		
Manageability (examples WOL, PXE..)	WOL, ACPI		
Management Capabilities Alerting (examples ASF 2.0 AMT...)			

<sup>1</sup> 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.

<u>V.92 Data/Fax Controllerless Modem</u>	MT	DT	SFF
Bus	PCI		
Connector	RJ-11		
Data Transmission	PCM - Pulse Coded Modulation (V.92/V.90) TCM - Trellis Coded Modulation (V.90/V.34/V.32 bis/V.32)		
Data Speeds	56kbps receive, 48kbps transmit		
Data Standards	ITU V.92/V.90, V.34/V.32 bis/V.32		
Fax Speeds	14.4kbps		
Fax Mode Capabilities	2-wire, half-duplex, synchronous		
Error Correction and Data Compression	V.44, V.42, V.42bis, MNP 2-4, MNP 5		
Power Management	WOR (wake on ring) capable		
Upgradeability	Driver upgradeable		
Video	V.80 Synchronous Access Mode (SAM) can be supported by software applications (not driver)		
Operating Temperature	0~50 degree C		
Operating Humidity	45 degree C 90% max		
Operating System Support	Windows 7 32/64, Vista 32/64, Windows XP 32/64		
Operating System Driver Support	Windows 7 32/64, Vista 32/64, Windows XP 32/64		
Power Requirements	+3.0V~+3.6V, 116.6mW max		
Chipset	Conexant SmartHSFs/LF (CX11256 & CX20493)		
Dimensions of full height card inches/centimeters (L X H)	L: 5.25'/13.325cm H: 4.73'/12.002cm		
Dimensions of low profile card inches/centimeters (L X H)		L: 5.26'/13.366cm H: 3.12'/7.923cm	

## 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.

<u>Integrated Intel GMA 4500*</u>	MT	DT	SFF
Bus Type (example integrated or PCIe x16)	Integrated		
GPU core clock	Gen5 core @ 667 350 MHz Integrated and with 350MHz 24 bit RAMDAC		
Frame Buffer Memory (onboard and shared) Size and Speed	up to 256 MB shared video memory (with 1 GB system memory) up to 352 MB shared video memory (with 2, 3, or 4 GB system memory)		
Maximum power consumption	4.0 W		
Overlay Planes	Yes		
Maximum Color Depth	32 bit		
Maximum Vertical Refresh Rate	85 Hz		
Multiple Display Support	Yes		
Operating Systems Graphics/ Video API Support	OpenGL 2.0/DirectX 10.0		
Supported Resolutions and Max Refresh Rates (Hz) (Note: Analog and/or digital)	Up to 2048x1536 @ 75 Hz Supports flat panels up to 1920x1200 @ 60 Hz or digital CRT/HDTV at 1400x1050 @ 85 Hz		
External connectors	VGA		
Dimensions inches/centimeters (L x H)	N/A		
Environmental Operating Conditions (Non-Condensing):			
Operating Temperature Range	0° to 106° C (32° to 223° F)		
Relative Humidity Range	20% to 80% (non-condensing)		
Altitude Range	-15.2 to 3048 m (–50 to 10,000 ft)		



<b><u>256MB AMD Radeon™ HD 3450 DUAL DVI OR VGA AND TV OUT</u></b>	<b>MT</b>	<b>DT</b>	<b>SFF</b>
<b>Bus Type (example integrated or PCIe x16)</b>	PCIEx16		
<b>GPU core clock</b>	600MHz		
<b>Frame Buffer Memory (onboard and shared) Size and Speed</b>	500Mhz		
<b>Maximum power consumption</b>	22W		
<b>Overlay Planes</b>	Yes		
<b>Maximum Color Depth</b>	32-bit		
<b>Maximum Vertical Refresh Rate</b>	85Hz		
<b>Multiple Display Support</b>	Yes		
<b>Operating Systems Graphics/ Video API Support</b>	D3D and Open GL		
<b>Supported Resolutions and Max Refresh Rates (Hz) (Note: Analog and/or digital)</b>	Max : 1920x1440/32bpp @ 75Hz Min : 640x480/8bpp @ 60Hz		
<b>External connectors</b>	DMS-59 <sup>1</sup> and S-video		
<b>Dimensions of full height card</b> inches/centimeters (L x H)	167.64mm x 120mm		
<b>Dimensions of low profile card</b> inches/centimeters (L x H)		167.64mm x 85mm	
<b>Environmental Operating Conditions (Non-Condensing):</b>			
Operating Temperature Range	10°-50° C		
Relative Humidity Range	5-90% RH		
Altitude Range	0-20,000 ft.		

<sup>1</sup>DMS-59 to VGA or DMS-59 to DVI adaptors required.

<b><u>256MB NVIDIA GEFORCE 9300 GE</u></b>	<b>MT</b>	<b>DT</b>	<b>SFF</b>
<b>Bus Type (example integrated or PCIe x16)</b>	PCIEx16		
<b>GPU core clock</b>	540Mhz		
<b>Frame Buffer Memory (onboard and shared) Size and Speed</b>	500Mhz		
<b>Maximum power consumption</b>	25W		
<b>Overlay Planes</b>	Yes		
<b>Maximum Color Depth</b>	32-bit		
<b>Maximum Vertical Refresh Rate</b>	85Hz		
<b>Multiple Display Support</b>	Yes		
<b>Operating Systems Graphics/ Video API Support</b>	D3D and OpenGL		
<b>Supported Resolutions and Max Refresh Rates (Hz) (Note: Analog and/or digital)</b>	Max : 1920x1440/32bpp @ 75Hz Min : 640x480/8bpp @ 60Hz		
<b>External connectors</b>	DMS-59 and S-video		
<b>Dimensions of full height card</b> inches/centimeters (L x H)	167.64mm x 120mm		
<b>Dimensions of low profile card</b> inches/centimeters (L x H)		167.64mm x 85mm	
<b>Environmental Operating Conditions (Non-Condensing):</b>			
Operating Temperature Range	10°-50° C		
Relative Humidity Range	5-90% RH		
Altitude Range	0-20,000 ft.		

\* Significant of system memory may be allocated to support integrated graphics, depending on operating system, system memory size and other factors.

\* Populating a up-graphics card in the x16 slot disabled onboard video.

## Hard Drives

<u>3.5" 160GB SATA 7200 RPM HDD</u>	MT	DT	SFF
Capacity (bytes)	160,041,885,696		
Dimensions inches/centimeters (W x H x D)	5.87 x 4 x 1		
Interface type and Maximum speed	Up to 3Gb/s		
Internal buffer size (range)	8 MB		
Seek Time (RD/WR)	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):			
Operating Temperature Range	5° 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):			
Operating Temperature Range	-40° to 65°C		
Relative Humidity Range	10% to 90% non-condensing		
Maximum Wet Bulb Temperature	38°C		
Altitude Range	-50 ft to 35000 ft		

\* 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.

<u>3.5” 250GB SATA 7200 RPM HDD</u>	MT	DT	SFF
Capacity (bytes)	250,059,350,016		
Dimensions inches/centimeters (W x H x D)	5.87 x 4 x 1		
Interface type and Maximum speed	Up to 3Gb/s		
Internal buffer size (range)	8 MB		
Seek Time (RD/WR)	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):			
Operating Temperature Range	5° 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):			
Operating Temperature Range	-40° to 65°C		
Relative Humidity Range	10% to 90% non-condensing		
Maximum Wet Bulb Temperature	38°C		
Altitude Range	-50 ft to 35000 ft		

<u>3.5” 320GB SATA 7200 RPM HDD</u>	MT	DT	SFF
Capacity (bytes)	320,072,933,376		
Dimensions inches/centimeters (W x H x D)	5.87 x 4 x 1		
Interface type and Maximum speed	Up to 3Gb/s		
Internal buffer size (range)	16 MB		
Seek Time (RD/WR)	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):			
Operating Temperature Range	5° 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):			
Operating Temperature Range	-40° to 65°C		
Relative Humidity Range	10% to 90% non-condensing		
Maximum Wet Bulb Temperature	38°C		
Altitude Range	-50 ft to 35000 ft		

<u>3.5” 500GB SATA 7200 RPM HDD</u>	MT	DT	SFF
Capacity (bytes)	500,106,788,864		
Dimensions inches/centimeters (W x H x D)	5.87 x 4 x 1		
Interface type and Maximum speed	Up to 3Gb/s		
Internal buffer size (range)	32 MB		
Seek Time (RD/WR)	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):			
Operating Temperature Range	5° 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):			
Operating Temperature Range	-40° to 65°C		
Relative Humidity Range	10% to 90% non-condensing		
Maximum Wet Bulb Temperature	38°C		
Altitude Range	-50 ft to 35000 ft		

## Optical Drives

### DVD +/- RW<sup>1</sup>

	MT	DT	SFF
<b>External Dimensions</b> 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)
<b>Weight (max)</b> pounds/kilograms	800g		170g
<b>Interface type and speed</b>	SATA 1.5Gbit/s		SATA 1.5Gbit/s
<b>Disc Capacity</b>	Standard		Standard
<b>Internal buffer size</b>	supplier dependent		supplier dependent
<b>Access Times (typical)</b>	supplier dependent		supplier dependent
<b>Maximum Data Transfer Rates</b>			
Writes	16x DVD/48x CD		8x DVD/ 24x CD
Reads	16x DVD/48x CD		8x DVD/ 24x CD
<b>Power Source</b>			
DC Power Requirements	12V, 5V		5V
DC Current	1200mA (12V)/ 900mA (5V)		1000mA
<b>Environmental Operating Conditions (Non-Condensing):</b>			
Operating Temperature Range	5C to 50C		5C to 50C
Relative Humidity Range	20% to 80% RH		20% to 80% RH
Maximum Wet Bulb Temperature	29C		29C
Altitude Range	-200 to 3048		-200 to 3048
<b>Environmental Non-Operating Conditions (Non-Condensing):</b>			
Operating Temperature Range	-40C to 65C		-40C to 65C
Relative Humidity Range	5% to 95% RH		5% to 95% RH
Maximum Wet Bulb Temperature	38C		38C
Altitude Range	-200 to 10600m		-200 to 10600m

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

<b>DVD-ROM<sup>1</sup></b>	<b>MT</b>	<b>DT</b>	<b>SFF</b>
<b>External Dimensions</b> 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)
<b>Weight (max) pounds/kilograms</b>	750g		165g
<b>Interface type and speed</b>	SATA 1.5Gbit/s		SATA 1.5Gbit/s
<b>Disc Capacity</b>	Standard		Standard
<b>Internal buffer size</b>	supplier dependent		supplier dependent
<b>Access Times (typical)</b>	supplier dependent		supplier dependent
<b>Maximum Data Transfer Rates</b>			
Writes	N/A		N/A
Reads	16x DVD/48x CD		8x DVD/ 24x CD
<b>Power Source</b>			
DC Power Requirements	12V, 5V		5V
DC Current	1200mA (12V)/ 900mA (5V)		800mA
<b>Environmental Operating Conditions (Non-Condensing):</b>			
Operating Temperature Range	5C to 50C		5C to 50C
Relative Humidity Range	20% to 80% RH		20% to 80% RH
Maximum Wet Bulb Temperature	29C		29C
Altitude Range	-200 to 3048m		-200 to 3048
<b>Environmental Non-Operating Conditions (Non-Condensing):</b>			
Operating Temperature Range	-40C to 65C		-40C to 65C
Relative Humidity Range	5% to 95% RH		5% to 95% RH
Maximum Wet Bulb Temperature	38C		38C
Altitude Range	-200 to 10600m		-200 to 10600m

<sup>1</sup> DVD-ROM drives may have write-capable hardware that has been disabled via firmware modifications.

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

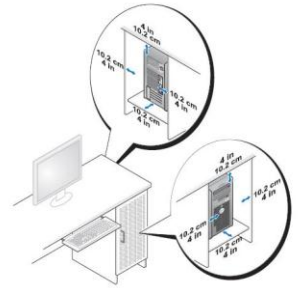
BIOS Factory Defaults		
General	BIOS address	F0000h
	BIOS chip (NVRAM)	16Mb
	Boot Sequence	USB Floppy Drive.
		Onboard SATA Hard Drive
Onboard or USB CD-ROM Drive		
Drives	SMART Reporting:	Disable
	SATA-0:	Enable
	SATA-1:	Enable
	SATA-2:	Enable
System Configuration	Integrated NIC:	Enable
	USB Controller:	Enable
	Parallel Port	PS/2
	Parallel Port Address	378h
	Serial Port #1:	ATUO
	Miscellaneous Devices	Enable (Front USB Ports, PCI Slots and Audio.)
	Video	Primary Video
Performance	Multi Core Support	Enable
	Intel SpeedStep	Enable
	Limit CPUID Value	Disable
	HDD Acoustic Mode	Bypass
	HDD protection Support	Disable
Virtualization Support	Virtualization	Enable

BIOS Factory Defaults		
Security	VT for direct I/O	Disable
	Administrator Password	Not Set
	System Password	Not Set
	Password Changes	Enable
	CPU XD Support	Enable
	Computrace(R)	Deactivate
Power Management	AC Recovery	Power Off
	Auto On Time	08:00 AM (Disable)
	Low Power Mode	Enable
	Remote Wake Up	Disable
	Suspend Mode	S3
Maintenance	Service Tag	TBD
	Asset Tag	TBD
	SERR Messages	Enable
Image Server	Lookup Method	DNS
	Image Server IP	255.255.255.255
	Image Server Port	06910
	Client DHCP	DHCP
	Client IP	255.255.255.255
	Client Subnet Mask	255.255.255.255
	Client Gateway	255.255.255.255
	License Status	TBD
Post Behavior	Fast Boot	Enable
	Numlock LED	Enable
	Post HotKeys	Enable
	Keyboard Errors	Enable

## 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.

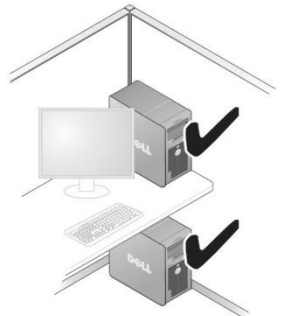
### Recommended Enclosure

Do not install your computer in an enclosure that does not : 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](http://www.dell.com/regulatory_compliance). The Regulatory Datasheet for this product is located at: [www.dell.com/regulatory\\_compliance](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](http://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 380 MT

Component	Typical Configuration	High-end Configuration
CPU	E5400	E8500
Memory	1 GB DDR3 1066 MHz	1 GB DDR3 1066 MHz
HDD (#, capacity)	160 GB 3.5" 7200RPM SATA2	160 GB 3.5" 7200RPM SATA2
RMSD	DVD +/- RW	DVD +/- RW
Graphics Adapter	Integrated GFx	nVidia GeForce 9300 GE

The Declared Noise Emission in accordance with ISO 9296 for the Dell Optiplex 380 MT is as follows<sup>1</sup>:  
(all values  $L_{WAd}$  expressed in bels<sup>2</sup>; 1 bel=10 decibels, re  $10^{-12}$  Watts)

Operating Mode	Typical Configuration Declared Sound Power ( $L_{WAd}$ )	High-end Configuration Declared Sound Power ( $L_{WAd}$ )
Idle	4.1	4.0
HDD Operating	4.0	4.2
ODD Operating	5.1	5.0
90% CPU	4.3	4.2

The Declared A-weighted Sound Pressure Level in decibels (re  $2 \times 10^{-5}$  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 for this product is as follows<sup>1</sup>:

Operating Mode	Typical Configuration Declared Sound Pressure (LpA)				High-end Configuration Declared Sound Pressure (LpA)			
	Table-Top		Floor-Standing		Table-Top		Floor- Standing	
	Operator Position (LpA)	Bystander Position (LpA)	Operator Position (LpA)	Bystander Position (LpA)	Operator Position (LpA)	Bystander Position (LpA)	Operator Position (LpA)	Bystander Position (LpA)
Idle	30.3	25.2	24.7	22.9	29.8	25.4	24.4	22.4
HDD Operating	30.3	25.2	24.7	22.9	29.5	24.6	24.5	22.6
ODD Operating	40.4	34.5	34.9	33.0	41.5	36.1	36.2	33.9
90% CPU	31.7	26.2	24.8	22.9	31.1	26.5	25.0	23.2

<sup>1</sup> All tests are conducted according to ISO 7779 and declared according to ISO 9296 except 90% CPU. For this mode, the system CPU was stressed at 90% utilization with no other peripheral device actively seeking. This test mode is not specified in ISO 7779, but was measured using the same microphone distances and measurement techniques defined for the other reported operating modes.

<sup>2</sup> Declared Sound Power rounded to nearest tenth of a bel per ISO 9296 section 4.4.2

Optiplex 380 DT

Component	Typical Configuration	High-end Configuration
CPU	E5400	E8500
Memory	1 GB DDR3 1066 MHz	1 GB DDR3 1066 MHz
HDD (#, capacity)	160 GB 3.5" 7200RPM SATA2	160 GB 3.5" 7200RPM SATA2
RMSD	DVD +/- RW	DVD +/- RW
Graphics Adapter	Integrated GFx	nVidia GeForce 9300 GE

The Declared Noise Emission in accordance with ISO 9296 for the Dell Optiplex 380 DT is as follows<sup>3</sup>: (all values  $L_{WAd}$  expressed in bels<sup>4</sup>; 1 bel=10 decibels, re  $10^{-12}$  Watts)

Operating Mode	Typical Configuration Declared Sound Power ( $L_{WAd}$ )	High-end Configuration Declared Sound Power ( $L_{WAd}$ )
Idle	3.8	3.8
HDD Operating	3.9	3.8
ODD Operating	5.1	5.1
90% CPU	4.0	4.1

The Declared A-weighted Sound Pressure Level in decibels (re  $2 \times 10^{-5}$  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 for this product is as follows<sup>1</sup>:

Operating Mode	Typical Configuration Declared Sound Pressure (LpA)				High-end Configuration Declared Sound Pressure (LpA)			
	Table-Top		Floor-Standing		Table-Top		Floor- Standing	
	Operator Position (LpA)	Bystander Position (LpA)	Operator Position (LpA)	Bystander Position (LpA)	Operator Position (LpA)	Bystander Position (LpA)	Operator Position (LpA)	Bystander Position (LpA)
Idle	28.6	24.4	24.7	24.3	28.2	24.2	22.4	20.9
HDD Operating	28.5	24.4	24.9	24.5	28.6	24.8	22.3	21.3
ODD Operating	40.9	36.2	39.2	39.9	41.5	36.9	36.2	34.4
90% CPU	29.3	24.9	25.7	24.7	32.9	27.6	24.9	23.7

<sup>3</sup> All tests are conducted according to ISO 7779 and declared according to ISO 9296 except 90% CPU. For this mode, the system CPU was stressed at 90% utilization with no other peripheral device spinning. This test mode is not specified in ISO 7779, but was measured using the same microphone distances and measurement techniques defined for the other reported operating modes.

<sup>4</sup> Declared Sound Power rounded to nearest tenth of a bel per ISO 9296 section 4.4.2

Optiplex 380 SFF

Component	Typical Configuration	High-end Configuration
CPU	E5400	E8500
Memory	1 GB DDR3 1066 MHz	1 GB DDR3 1066 MHz
HDD (#, capacity)	160 GB 3.5" 7200RPM SATA2	160 GB 3.5" 7200RPM SATA2
RMSD	DVD +/- RW	DVD +/- RW
Graphics Adapter	Integrated GFx	nVidia GeForce 9300 GE

The Declared Noise Emission in accordance with ISO 9296 for the Dell Optiplex 380 DT is as follows<sup>5</sup>: (all values  $L_{WAd}$  expressed in bels<sup>6</sup>; 1 bel=10 decibels, re  $10^{-12}$  Watts)

Operating Mode	Typical Configuration Declared Sound Power ( $L_{WAd}$ )	High-end Configuration Declared Sound Power ( $L_{WAd}$ )
Idle	4.0	4.0
HDD Operating	4.0	4.0
ODD Operating	4.7	4.6
90% CPU	4.1	4.5

The Declared A-weighted Sound Pressure Level in decibels (re  $2 \times 10^{-5}$  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 for this product is as follows<sup>1</sup>:

Operating Mode	Typical Configuration Declared Sound Pressure (LpA)				High-end Configuration Declared Sound Pressure (LpA)			
	Table-Top		Floor-Standing		Table-Top		Floor- Standing	
	Operator Position (LpA)	Bystander Position (LpA)	Operator Position (LpA)	Bystander Position (LpA)	Operator Position (LpA)	Bystander Position (LpA)	Operator Position (LpA)	Bystander Position (LpA)
Idle	29.0	24.9	21.7	21.2	31.5	27.4	24.7	23.4
HDD Operating	29.1	25.2	21.7	21.2	32.4	27.8	25.4	23.9
ODD Operating	38.2	32.7	28.7	27.6	38.7	32.9	30.0	28.7
90% CPU	32.1	27.3	23.5	23.4	35.9	31.1	28.7	27.8

<sup>5</sup> All tests are conducted according to ISO 7779 and declared according to ISO 9296 except 90% CPU. For this mode, the system CPU was stressed at 90% utilization with no other peripheral device spinning. This test mode is not specified in ISO 7779, but was measured using the same microphone distances and measurement techniques defined for the other reported operating modes.

<sup>6</sup> Declared Sound Power rounded to nearest tenth of a bel per ISO 9296 section 4.4.2