

# Small Form Factor — Dell™ OptiPlex™ 980



Microsoft® WindowsDell™ n Series

Dell Inc 2010 ©

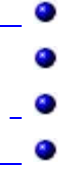
.Dell Inc

Microsoft Corporation *Windows Vistastart Windows Windows Vista* Microsoft ;Intel Corporation *Core Intel*Dell Inc *OptiPlex DELL Dell*

Dell Inc

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BIOS •



.1

:Windows® 7 •

Shut Down  Start

:Windows Vista •

Shut Down Start  Start



:Windows® XP •

Turn Off → Turn Off Computer → Start

6 .2

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Help and Support → Start



small form factor desktop mini-tower



Intel® Core™ i7 Intel Core i5	
Intel Core i5 Intel Core i3 Intel Pentium®	
	(L2
8	Intel Core i7 Intel Core i5
4	Intel Core i5 Intel Core i3
3	Intel Pentium

ECCDDR3 SDRAM	
13331066	
421	
1	
16	

HDIntel	
.Intel i5Intel i7	

PCI ExpressPCI Express x16	
5121759	

Intel	

10/100/1000Intel 82578DM Gigabit Ethernet	

Intel Q57 Express	
	DMA
24	
1664	(NVRAM) BIOS

PCI 2.3 PCI Express 2.0 2.0SATA 1.0A eSATA USB 2.0	
133	PCI
500x1 2x4x16 x16 - 8	PCI Express
3.01.5	SATA
3.0	eSATA
480	USB

	PCI
	(x4PCI Express x16
	PCI Express x16

	PCI Express x1

	5.25
	3.5
	3.5
	2.5

7	eSATA
RJ45	
25	
165509	
	USB
	USB

15VGA 20DisplayPort	
	32PCI 2.3
120	
120	
120	
	PCI Expressx4PCI Express x16
164	
164	
	PCI Express16PCI Express x16
164	
164	
164	
	ATA
7	
7	
7	
240	
(USB10	USB
5	
26	I/O
14	
1156	
4	12
24	
14	
5	
36	PCI Express x1
2	
3	

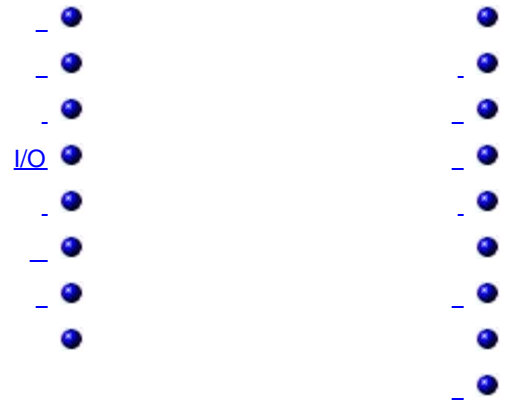




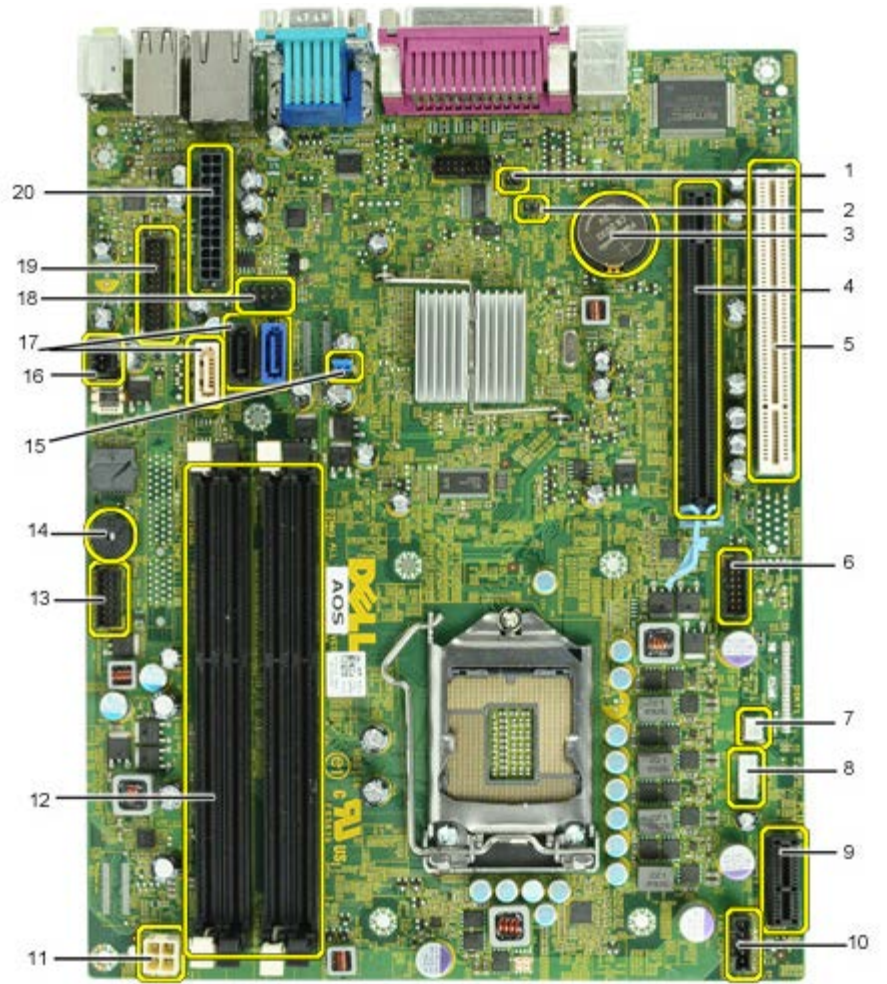
13.7034.80	
12.7532.40	
25.1311.40	
18.298.30	
13.005.90	

95503510	
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%8020	
0.00023505	
0.010.0015005	
5120102540	
127501025105	
1050304815.2	
355010,66815.2	
ISA-S71.04-1985G2	

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(RTCST	2	(Service_Mode	1
(1PCI Express x16	4	(BATTERY	3
(Serial2	6	(SLOT2) PCI	5
(INT_SPKR	8	(THRM3	7
(FAN_CPU	10	(PCIE_WLS1) PCI Express x1	9
(DIMM_1-4	12	12	11
	14	(FRONTPANEL	13
(INTRUDER	16	(PSWD	15
(INT_USBUSB	18	(SATA0-2) SATA	17
(MICRO_PWR	20	(FIOI/O	19

[Boot Menu](#)

## Boot Menu

DellCtrl><Alt><F8F12

SATA  
USB

.(BIOS

System Setup

Enter>	
< >	
Esc>	.(BIOS
<Enter>	
<Esc>	
Load DefaultsAlt><F>	

BIOS

- <F12 •
- <F2 •

<F12

.(BIOS Enter Setup DiagnosticsDellF12

<F2>

<b>General</b>	
.DIMM_2 Size DIMM_1 Size .HT Capable 64-bit Technology Multi Core Capable L2 BIOS • PCI •	System Board
	Date/Time
(USBOnboard or USB Floppy • SATAOnboard SATA Hard Drive • (USBOnboard or USB CD-Rom Drive •	Boot Sequence

<b>Drives</b>	
USBUSBBIOS Disable • Enable • USBUSB Controller	Diskette drive
AHCI RAID = RAID Autodetect / AHCI • ATA RAID = RAID Autodetect / ATA • RAIDSATA RAID On / ATA • Legacy • Legacy .Image ServerRAIDImageServerRAID	(SATA SATA Operation)
SMART	(.S.M.A.R.T.S.M.A.R.T. Reporting)
ATASATA	Drives

<b>System Configuration</b>	
NIC Disable • Enable • (PXEEnable with PXE • (ImageSeverEnable with ImageSever • .ImageServerRAIDRAIDImageServe	NICIntegrated NIC

PXE	
USBUSB Enable • Disable • No boot • USBUSB	(USBUSB Controller)
Disable • AT • PS/2 • EPP • DMAECP • ECP DMA 1 • ECP DMA 3 •	Parallel Port
	Parallel Port Address
Disable • Auto • COM1 • COM3 •	(1Serial Port #1)
USB • PCI • • OptiPlex ON Reader • USB • WiFi NIC Slot •	Miscellaneous Devices

<b>Video</b>	
Auto • PCI Express Graphic (PEG Onboard/Card •	Primary Video

<b>Performance</b>	
	Multi Core Support
	Hyper-Threading Technology
Intel® Turbo Boost Technology Intel® Turbo Boost Technology	Intel® Turbo Boost Technology
CPU Intel® SpeedStep Intel® SpeedStep Intel SpeedStep	(™ Intel® SpeedStep Intel® SpeedStep
	(CC States Control

.3CPUIDCPUID	(CPUIDLimit CPUID Value
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**Virtualization Support**

.Intel® VitalizationVMM <b>(IntelEnable Intel® Vitalization Technology</b>	Virtualization
Intel VitalizationVMM <b>IntelEnable Intel® Vitalization Technology for Direct I/O</b>	VT for Direct I/O
TPMIntel Trusted ExecutionMVM <b>(Intel® Trusted Execution TechnologyEnable Intel® Trusted Execution Technology</b>	Trusted Execution

**Security**

	Administrative Password
	System Password
	Password Changes
	Admin Setup Lockout
<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>	Password Configuration
88	Strong Password
.(TPM TPM Deactivate • Activate • Clear • TPMTTPM ClearTPM	(TPMTTPM Security
	(CPU XD CPU XD Support
Computrace Deactivate •	(Computrace(R

- Disable •
- Activate •

Chassis Intrusion

- Clear Intrusion Warning •
- Disable •
- Enabled •
- On-Silent •

SATA-0

(SATA-0SATA-0 Password

SATA-1

(SATA-1SATA-1 Password

**Power Management**

AC RecoveryAC

AC Recovery

- Power Off •
- Power On •
- Last State •

Auto On Time

12

AM/PM

Auto Power On

Low Power Mode

NIC

Remote Wake up

- Disable •
- Enable •
- Enable with Boot NIC •

Suspend Mode

S1 •

S3 •

Fan Control Override

**Maintenance**



	Service Tag
	Asset Tag
.SERR	(SERRSERR Messages)
.SERR	

Image Server	
ImageServer <b>Static IP •</b> <b>DNS •</b> Lookup MethodImageServerEnableIntegrated NIC	Lookup Method
ImageServerIP <b>255.255.255.255</b> IP .Static IPLookup MethodEnabled with ImageServerSystem ConfigurationIntegrated NIC	(ImageServerImageServer IP)
ImageServerIP <b>06910</b> IP .Enabled with ImageServerSystem ConfigurationIntegrated NIC	(ImageServerImageServer Port)
.(IP <b>Static IP •</b> <b>DHCP •</b> .Enabled with ImageServerSystem ConfigurationIntegrated NIC	DHCPClient DHCP
IP <b>255.255.255.255</b> IP <b>Static IP Client DHCP Client IP</b>	IPClient IP
<b>255.255.255.255</b> <b>Static IP Client DHCP Client SubnetMask</b>	SubnetMaskClient SubnetMask
IP <b>255.255.255.255</b> <b>Static IPClient DHCPClient SubnetMask</b>	Client Gateway
	License Status

Post Behavior	
	Fast Boot
NumLock	(NumlockLEDNumLock LED)
	(POSTPOST Hotkeys)

F2Enable F2 = Setup •  
F12Enable F12 = Boot menu •

Keyboard Errors

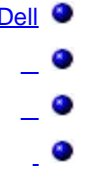
.Manageability Engine BIOS Extensions (MEBx) Setup

(MEBxMEBx Hotkey

**System Logs**

((BIOSBIOS Events

Clear Log •  
Mark all Entries •



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Drivers and Utilities 

System Setup\_

Drivers and UtilitiesDell Diagnostics

Dell

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F12DELL .2

. Drivers and Utilities Dell 

Microsoft® Windows

.<EnterBoot to Utility Partition .3

Dell Main Menu .4

Drivers and UtilitiesDell

Drivers and Utilities .1

.2

F12DELL

WindowsWindows



.<EnterUSBOnboard or USB CD-ROM Drive .3

.<EnterBoot from CD-ROM .4

Enter1 .5

32DellRun the 32 Bit Dell Diagnostics .6

DellMain Menu .7

## DellMain Menu

Main MenuDell .1

<b>Express Test</b>	Express Test
	Extended Test
	Custom Test
	Symptom Tree




.2



Symptom Tree Custom Test .3

	Results
	Errors
	Help
Dell	Configuration
	Parameters

Drivers and UtilitiesDell .4

Main MenuDellMain Menu .5















	
POWER_GOOD VRM	
POWER_GOOD	





	S3S1	
	S0 BIOS	

POSTPOST

	2-1-1
NVRAM	3-1-1
ROM BIOS	4-1-1
	1-2-1
DMA	2-2-1
DMA	3-2-1
DIMM	2-4-41-3-1
DMA	1-1-3
DMA	2-1-3
	3-1-3
	4-1-3
	2-2-3
	4-2-3
NVRAM	1-3-3
NVRAM	2-3-3
	4-3-3
	1-4-3
	2-4-3
ROM	3-4-3
	1-2-4
	2-2-4
Gate A20	3-2-4
	4-2-4
0FFFFh	1-3-4
2	3-3-4
	4-3-4
	1-4-4
	2-4-4

	3-4-4
	4-4-4
	2-1-1
NVRAM	3-1-1
ROM BIOS	4-1-1
	1-2-1
DMA	2-2-1
DMA	3-2-1
	3-1
	2-4-41-3-1
DMA	1-1-3
DMA	2-1-3
	3-1-3
	4-1-3
	2-2-3
	4-2-3
NVRAM	1-3-3
NVRAM	2-3-3
	4-3-3
	1-4-3
	2-4-3
ROM	3-4-3
	1-2-4
	2-2-4
Gate A20	3-2-4
	4-2-4
0FFFFh	1-3-4
2	3-3-4
	4-3-4
	1-4-4
	2-4-4
	3-4-4
	4-4-4

			LED
	• • • • •		 ① ② ③ ④
	•		 ① ② ③ ④
	LED • LED • PSU LED • LED •		 ① ② ③ ④
	DIMM • •		 ① ② ③ ④
	CPU CPU •	CPU	 ① ② ③ ④
	BIOS •	BIOS	 ① ② ③ ④
	PCI-E PCI •		 ① ② ③ ④
	2x2 •		 ① ② ③ ④
	PCI-E PCI •		 ① ② ③ ④
	• •		 ① ② ③ ④
	•		 ① ② ③ ④
	•		 ① ② ③ ④
	•		 ① ② ③ ④
	• •		 ① ② ③ ④
	• •		 ① ② ③ ④
	•		 ① ② ③ ④
	USB •	.USB	 ① ② ③ ④
	• •		

			<b>1</b> 2 3 4
	⋮		1 <b>2</b> 3 4
	⋮		1 2 <b>3</b> 4
	⋮		1 2 3 <b>4</b>



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Adobe.com Adobe Flash Player 

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Adobe.com Adobe Flash Player 

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WLAN .8

WLAN .9

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WLAN .11

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.I/O .7

I/O .8



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