**http://facweb.northseattle.edu/tfiegenb/eet/DELL/UserGuide/specs.htm**

**Technical Specifications: Dell™ OptiPlex™ GX110 System User's Guide**

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| **Processor** |
| Microprocessor type | Intel® Pentium® III microprocessor |
| Internal cache | 32-kilobyte (KB) first-level (16-KB data cache; 16-KB instruction cache) |
| Level 2 (L2) cache memory | integrated 256-KB at full microprocessor speed |
| Math coprocessor | internal to Pentium III microprocessor |
| **Memory** |
| Architecture | 100-megahertz (MHz) synchronous dynamic random-access memory (SDRAM) |
| Dual in-line memory module (DIMM) sockets | two (non-error checking and correction [ECC]) |
| DIMM capacities | 32-, 64-, 128-, and 256-megabyte (MB) SDRAM |
| System random-access memory (RAM) | 32 to 512 MB |
| Basic input/output system (BIOS) address | F0000h |
| **System Information** |
| System chip set | Intel 810e |
| Data bus width | 64 bits |
| Address bus width | 32 bits |
| DMA channels | eight |
| Interrupts | 15 |
| System BIOS | Desktop Management Interface (DMI) 2.0s- and system management BIOS 2.3-compliant BIOS in 4-megabit (Mb) flash chip |
| System clock | 100 or 133 MHz (matches external bus speed) |
| Network interface controller | 3Com 3c905c |
| **Graphics and Video** |
| Graphics architecture | Intel Dynamic Video Memory (DVM) technology |
| Graphics accelerator | Intel Direct Accelerated Graphics Port (AGP) 2D and 3D graphics accelerator |
| Display cache | 4-MB, 133-MHz synchronous dynamic random-access memory (SDRAM) |
| Graphics memory | Dynamically assigned from system memory |
| Video resolutions (display supports some or all of these resolutions) | 640 x 480 pixels; 85 hertz (Hz) max refresh rate with 16.7 million colors800 x 600 pixels; 85 Hz max refresh rate with 16.7 million colors1024 x 786 pixels; 85 Hz max refresh rate with 16.7 million colors1152 x 864 pixels; 85 Hz max refresh rate with 16.7 million colors1280 x 1024 pixels; 85 Hz max refresh rate with 16.7 million colors1600 x 1200 pixels; 75 Hz max refresh rate with 256 colors |
| **Audio (Optional)** |
| Audio type | Sound Blaster emulation |
| Audio controller | Analog Devices AD1881 AC97 Codec |
| Stereo conversion | 16 bit (analog-to-digital and digital-to-analog) |
| Interfaces: |
| Internal | PCI bus/AC97 |
| External | stereo line-in minijack;microphone-in minijack;headphones/speakers-out minijack |
| **Expansion Bus** |
| Bus types | Peripheral Component Interconnect (PCI), Industry-Standard Architecture (ISA)**\*** |
| Bus speed | PCI—33 MHzISA—8.33 MHz |
| Small-form-factor chassisexpansion-card connectors: |  |
| Standard PCI riser board | two PCI expansion slots |
| Low-profile chassisexpansion-card connectors: |  |
| Standard PCI riser board | three PCI expansion slots |
| Optional PCI/ISA riser board | one PCI expansion slot; one ISA expansion slot; one shared PCI/ISA expansion slot  |
| Midsize chassis expansion-card connectors: |  |
| Standard PCI riser board | five PCI expansion slots |
| Optional PCI/ISA riser board | two PCI expansion slots; two ISA expansion slots; one shared PCI/ISA expansion slot |
| Mini tower chassisexpansion-card connectors: |  |
| Standard PCI riser board | five PCI expansion slots |
| Optional PCI/ISA riser board | three PCI expansion slots; two ISA expansion slots; two shared PCI/ISA expansion slots |
| PCI expansion-card connector size | 120 pins |
| PCI expansion-card connector data width (maximum) | 32 bits |
| ISA expansion-card connector size | 98 pins |
| ISA expansion-card connector data width (maximum) | 16 bits |
| ***\*If you choose one of the optional riser boards with ISA expansion-card connectors, evaluate the performance of any ISA expansion cards on a single system before you order other ISA riser boards. Dell recommends this step due to the broad range of ISA implementations in the computer industry.*****Drives** |
| Externally accessible bays: |
| Small-form-factor chassis | one 3.5-inch bay for a 3.5-inch diskette drive; one 5.25-inch bay for a removable media device (slim-height devices only) |
| Low-profile chassis | one 3.5-inch bay for a 3.5-inch diskette drive; one 5.25-inch bay for a removable media device |
| Mini tower chassis | one 3.5-inch bay for a 3.5-inch diskette drive; three 5.25-inch bays for removable media devices |
| Internally accessible bays: |
| Small-form-factor chassis | one bay for a 1-inch-high enhanced integrated drive electronics (EIDE) hard-disk drive |
| Low-profile chassis | one bay for a 1-inch-high EIDE hard-disk drive |
| Mini tower chassis | two 3.5-inch bays for either one or two 1-inch-high hard-disk drives, or one 1-inch-high hard-disk drive and one 1.6-inch-high hard-disk drive |
| **Ports** |
| Externally accessible: |
| Serial (data terminal equipment [DTE]) | two 9-pin connectors; 16550-compatible |
| Parallel | 25-hole connector (bidirectional) |
| Video | 15-hole connector (on video card) |
| Integrated network interface controller (NIC) | RJ45 connector |
| Personal System/2 (PS/2)-style keyboard | 6-pin mini-Deutsche Industrie Norm (DIN) |
| PS/2-compatible mouse | 6-pin mini-DIN |
| Universal Serial Bus (USB) | two USB-compliant connectors |
| Internally accessible: |
| Primary EIDE hard-disk drive | 40-pin connector on PCI local bus |
| Secondary EIDE hard-disk drive | 40-pin connector on PCI local bus |
| Diskette drive | 34-pin connector |
| Remote Wake Up | 3-pin connector |
| Fan | 3-pin connector |
| **Key Combinations** |
| <Ctrl><Alt><Del> | restarts (reboots) the system |
| <Ctrl><Alt><\> | toggles microprocessor speeds on 101-key keyboard (in MS-DOS® real mode only) |
| <Ctrl><Alt><#> | toggles microprocessor speeds on 102-key keyboard (in MS-DOS real mode only) |
| <F2> or <Ctrl><Alt><Enter> | starts embedded System Setup (during power-on system test [POST] only) |
| <F3> or <F12> | automatically starts (boots) the system from the network environment specified by the managed boot agent (MBA) rather than from one of the devices in the System Setup **Boot Sequence** option |
| <Ctrl><Alt><F10> | launches the utility partition (if installed) during system start-up |
| **Controls and Indicators** |
| Reset control | push button (no reset button on small-form-factor systems) |
| Power control | push button |
| Power indicators | green light-emitting diode (LED) on riser board—blinking green in sleep state; dual-color LED on front panel—green for power, yellow for diagnostics |
| Hard-disk drive access indicator | green LED |
| Link integrity indicator (on optional integrated NIC connector) | green LED for 10-Mb operation; orange LED for 100-Mb operation |
| Activity indicator (on optional integrated NIC connector) | yellow LED |
| **Power** |
| DC power supply: |
| Wattage | small-form-factor chassis: 110 watts (W);low-profile chassis: 145 W;midsize chassis: 200 W;mini tower chassis: 200 W |
| Heat dissipation | small-form-factor chassis: 808 BTU/hr (nominal);low-profile chassis: 808 BTU/hr (nominal);midsize chassis: 913 BTU/hr (nominal);mini tower chassis: 913 BTU/hr (nominal) |
| Voltage | 90 to 135 volts (V) at 60 Hz; 180 to 265 V at 50 Hz |
| Backup battery | 3-V CR2032 coin cell |
| **Physical** |
| Small-form-factor chassis: |  |
| Height | 9.1 centimeters (cm) (3.6 inches) |
| Width | 31.8 cm (12.5 inches) |
| Depth | 37.8 cm (14.9 inches) |
| Weight | 6.6 kilograms (kg) (14.5 pounds [lb]) |
| Low-profile chassis: |  |
| Height | 10.9 cm (4.3 inches) |
| Width | 40.9 cm (16.1 inches) |
| Depth | 43.7 cm (17.2 inches) |
| Weight | 10.9 kg (24 lb) |
| Midsize chassis: |
| Height | 16.5 cm (6.5 inches) |
| Width | 41.9 cm (16.5 inches) |
| Depth | 44.5 cm (17.5 inches) |
| Weight | 12.7 kg (28 lb) |
| Mini tower chassis: |  |
| Height | 44.4 cm (17.5 inches) |
| Width | 20.6 cm (8.1 inches) |
| Depth | 43.7 cm (17.2 inches) |
| Weight | 14.9 kg (33.0 lb) or more, depending on options installed |
| **Environmental** |
| Temperature: |
| Operating | 10° to 35° Celsius (C) [50° to 95° Fahrenheit [F]) |
| Storage | –40° to 65°C (–40° to 149°F) |
| Relative humidity | 20% to 80% (noncondensing) |
| Maximum vibration: |
| Operating | 0.25 gravities (G) at 3 to 200 Hz at 1 octave/min |
| Storage | 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 20 inches/sec (50.8 cm/sec) |
| Storage | 27-G faired square wave with a velocity change of 200 inches/sec (508 cm/sec) |
| Altitude: |
| Operating | –16 to 3048 meters (m) (–50 to 10,000 feet [ft]) |
| Storage | –16 to 10,600 m (–50 to 35,000 ft) |