DellTM LatitudeTM 3330 Technical Guidebook



March 2013

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Environmental Specifications

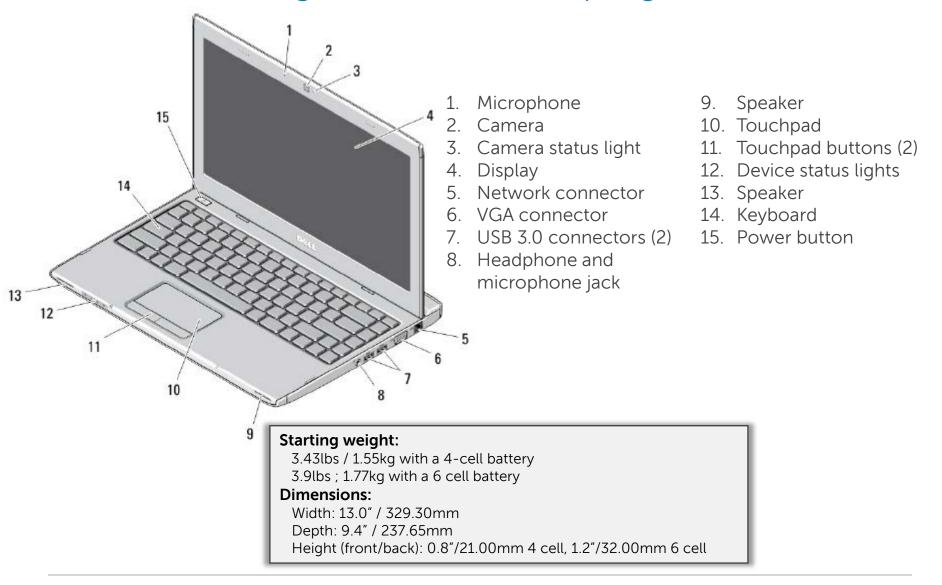


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Latitude 3330
Product Views and
Technical
Specifications



Latitude 3330 Weight, Dimensions, Top/Right View





Latitude 3330 Back/Left View



- 1. Security lock slot
- 2. Battery
- 3. Power connector
- 4. HDMI connector
- 5. USB 2.0 connector with USB PowerShare
- 6. Cooling vents
- 7. Memory card reader (8 in 1)



Latitude 3330 Technical Specifications

Model Number	Latitude 3330
Processor Options	3rd Generation Intel ® Core i5 – 3337U processor 3rd Generation Intel ® Core i3 – 3227U processor (available July 2013) 2nd Generation Intel ® Core i3 – 2375M processor Intel ® Celeron Processor 1007U
Operating System Options	Windows 8, Windows 8 Pro, Window 8 Single Language, all 64 Bit Windows 7 Home Premium, Windows 7 Professional, Windows 7 Home Basic (Emerging Market only), all 64 Bit Ubuntu 12.04 Long Term Support (LTS) SP1
Memory Options	2GB DDR3L, 4GB DDR3L or 8GB DDR3L 2nd Generation Intel® processors run at 1333Mhz 3rd Generation Intel® processors and Intel® Celeron processors run at 1600MHz
Chipset	Intel® HM77
Graphics ² Options	Intel® HD Graphics for Intel® Celeron processors Intel® HD 3000 Graphics for 2nd Generation Intel® processors Intel® HD 4000 Graphics for 3rd Generation Intel® processors
Display Options	13.3" HD, (1366 X 768) 16:9, Anti-Glare
Storage ³ Options	128GB Mobility Solid State Drive 500GB Performance Solid State Hybrid Drive 320GB 5400 RPM Hard Drive 64GB Mobility Solid State Drive
Optical Drive Options	Optional External DVD+/-RW
Multimedia	Integrated 720p HD video webcam and Dell Webcam Central software (Windows 7), Windows 8 provides native webcam software, High Quality Speakers, Stereo headphone/microphone combo jack, Integrated microphone
Battery Options	4 cell (44 WHr) 6 cell (65 WHr)



Latitude 3330 Technical Specifications

Power Options	65W AC adapter 90W AC adapter (available in select regions) BFR/PVC Free1 65W AC adapter (optional) 90W Auto/Air adapter (optional)
Connectivity	Wireless LAN Options: Dell Wireless™ 1504 1X1 802.11bgn Dell Wireless™ 1550 2X2 802.11ac + Bluetooth 4.0 Intel® 6235 2X2 802.11n + Bluetooth 4.0 + WiDi¹³ Mobile Broadband11 and GPS Options: Dell Wireless™ 5630 Multi-mode HSPA+ EVDO Mini Card (Gobi™ 3000) with A-GPS, Windows 7 supported, (available Summer 2013) Dell Wireless™ 5560 Single-mode HSPA+ Mini Card with A-GPS, Windows 7 and Windows 8 supported
Ports, Slots & Chassis	Gigabit Ethernet (RJ-45), USB 3.0 (2), USB 2.0 (1)-PowerShare capable, VGA, HDMI, Multi-Media Card Reader, Kensington lock slot, Stereo headphone/microphone combo jack Optional USB docking
Dimensions & Weight	329.3 mm x 237.7 mm x 21.0 mm (w/ 4 cell), 32.0 mm (w/ 6 cell) 13.0" x 9.4" x 0.8" (w/ 4 cell), 1.2" (w 6 cell) Starting weight: 3.4 lbs/1.55kg with 4-cell battery, 3.9 lbs/1.77 kg with 6 cell battery
Regulatory and Environmental Compliance. Please see www.epeat.net for specific country and rating	Regulatory Model: P18S, Regulatory Type: P18S002 ENERGY STAR 5.2 Qualified, EPEAT Gold Registered ¹⁴ , PSIA California (CEC) Battery Charger Regulation
Systems Management & Security	In-band manageable, Wake-on-LAN, Trusted Platform Module v1.25, Dell Data Protection Access4, Dell Data Protection Encryption (coming Summer 2013) ⁴ , Kensington lock slot, Computrace (optional), Bitlocker (optional)
Warranty & Support Services	Limited Hardware Warranty10 Standard 1 Year Basic Hardware Service with 1 Year Mail-in Service ⁶ . Optional 3-year Next Business Day On Site Service after Remote Diagnosis ¹⁵ or 3 year Dell ProSupport6 offers premium support from expert technicians and 24x7 global availability ⁵ .
Configuration Services	Factory Image load. BIOS Customization. Hardware Customization, Asset Tagging and Reporting.

^{1.} Dell Latitude laptops are brominated flame retardant free (BFR-free) and polyvinyl chloride free (PVC-free); meeting the definition of BFR-/PVC-free as set forth in the iNEMI Position Statement on the 'Definition of Low-Halogen Electronics (BFR-/CFR-/PVC-free)*. Plastic parts contain less than 1,000 ppm (0.1%) of bromine (if the Br source is from BFRs) and less than 1,000 ppm (0.1%) of chlorine (if the Ci source is from CFRs or PVC or PVC copolymers). All printed circuit board (PCB) and substrate laminates contain bromine/chlorine total less than 1,500 ppm (0.15%) with a maximum chlorine of 900 ppm (0.09%) and maximum bromine being 900 ppm (0.09%).

2. Performance Sold State Hybrids Divines combine SSD and a traditional hard drive, or more informational hard drive, or more informational please visit thryworkell.com/sshot /

12. Weights vary depending on configuration and manufacturing variability.

^{3.} Microsoft Windows XP factory installation only available through Dell Configuration Services. For more information, visit www.dell.com/servicedescriptions. 4. Offering available in select countries.

^{5.} Not available in China or Russia. 6. Availability and terms of Dell Services vary by region. For more information, visit www.dell.com/servicedescriptions.

A 64-bit operating system is required to support 4GB or more of system memory.
 Significant system memory may be used to support graphics, depending on system memory size and other factors

 ^{9.} GB means 4-billion bytes and TB equals 4-trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.
 10. Limited Hardware Warranty. For copy of Ltd Hardware Warranty, write Dell USA LP, Attn: Warranties, One Dell Way, Round Rock, TX 78682 or see www.dell.com/warranty.

^{11.} Mobile Broadband: Subject to wireless provider's broadband subscription and coverage area; additional charges apply.

Requires an Intel wireless card, a compatible Media Adapter (sold separately) and an HDMI or composite AV-enabled display.
 EPEAT registration varies by country. Please see www.epeat.net for specific country registration and rating.

TH. ECPLI (regulation) varies by Quality. Freebes been were perfect from the Control of the Cont Remote Diagnosis, Availability varies, Other conditions apply,

Marketing Configurations

NOTE: Offerings may vary by country; not all configurations available in all regions. For more information regarding the configuration of your computer, click Start>Help and Support and select the option to view information about your computer."



Latitude 3330 – Operating Systems



Windows operating system	Windows 8, Windows 8 Pro, Window 8 Single Language, all 64 Bit Windows 7 Home Premium, Windows 7 Professional, Windows 7 Home Basic (Emerging Market), all 64 Bit
Other	Ubuntu 12.04 Long Term Support (LTS) SP1
OS Media Support	Optional



Intel® processor Technology



Processors Support List (March 2013)	UMA Graphics
Intel® Celeron™ 1007U (Dual Core, 1.50GHz, 2M cache) Will transition to Intel® Celeron™ 1017U in July	Intel® HD Graphics
Intel® Core™ i3-2375M (Dual Core, 1.5GHz, 3M cache) Will transition to Intel® Core™ i3-3217U in July	Intel® HD Graphics 3000
Intel® Core™ i3-3227U (Dual Core, 1.9GHz, 3M cache) Post RTS-July	Intel® HD Graphics 4000
Intel® Core™ i5-3337U (Dual Core, 1.8GHz, 3M cache)	Intel® HD Graphics 4000



Memory

Your computer supports a maximum of 8GB of memory when you use two 4GB DIMMs; however, 32-bit operating systems, such as the 32-bit version of Microsoft® Windows® 7, can only use a maximum of 4GB 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 a 32-bit operating system is less than 4GB.

NOTES:

Greater than 4GB memory requires a 64-bit operating system. 1600MHz is factory installed. 1333MHz is compatible with E4 platforms.

1600MHz memory will only perform as 1600MHz memory when 3rd generation CPUs are used. It will perform as 1333MHz memory if 2nd generation CPUs are installed in the system.

Memory modules can be installed in single or dual DIMM configurations. If the memory modules are not installed in matched pairs, the computer will continue to operate.

Memory	Latitude 3330
DIMM Slots	2
Minimum Memory Configuration	2GB
Maximum Memory Configuration	8GB
DIMM Configurations:	
2G 1600MHz DDR3L (1x2G)	X
4G 1600MHz DDR3L (1x4G)	X
4G 1600MHz DDR3L (2x2G)	X
8G 1600MHz DDR3L (2x4G)	X

Not all options above are available on all configurations



Primary Storage and Intel Rapid Start Technology

Primary Storage	Latitude 3330
500GB¹ Hybrid HDD 5400 RPM	X
320GB ¹ HDD 5400 RPM	X
128GB¹ SSD 2.5"	X
64GB¹ mSATA	X

Mobility Solid State Drives offer highly reliable, durable and lightweight storage. SSDs provide improved performance and operate quieter and cooler than standard hard drives.

Self-Encrypting drives provide hardware encrypted data protection which can be activated within a few seconds centrally and can be much safer and faster than software based encryption. Note: Encrypted drives require the system be configured in AHCI mode.

Intel Rapid Start Technology dependencies with system memory and primary storage:

- IRST on a system with 64GB SSD only works with 4GB memory. Other options are restricted
- IRST is restricted against Self-Encrypting SSDs

Intel Rapid Start dependencies	4GB	System memory 6GB / 8GB	16GB
64GB¹ Mobility SSD	Yes	No	No
128GB¹ Mobility SSD	Yes*	Yes*	No ²
256GB¹ Mobility SSD	Yes	Yes	No ²
256GB ¹ Mobility Encrypted SSD (SED)	No	No	No

¹ 1GB means 1 billion bytes

² Expect to add Intel Rapid Start as an option with 16GB memory and 128/256GB SSDs post-launch to select platforms



Connectivity Options

	Connectivity Options	Latitude 3330
WWAN	Dell Wireless™ 5560 Single-mode HSPA+ Mini Card with A-GPS, Windows 7 and Windows 8 supported	Х
(Full mini card)	Dell Wireless™ 5630 Multi-mode HSPA+ EVDO Mini Card (Gobi™ 3000) with A-GPS, Windows 7 supported, (available Summer 2013)	Х
WLAN	Dell Wireless™ 1504 1X1 802.11bgn	Х
(half mini card)	Dell Wireless™ 1550 2X2 802.11ac + Bluetooth 4.0	Х
	Intel® 6235 2X2 802.11n + Bluetooth 4.0 + WiDi (Requires an Intel wireless card, a compatible Media Adapter (sold separately) and an HDMI or composite AV-enabled display.	х

Carriers & Countries

- US: Verizon (DW5630), AT&T (DW5560)
- Canada: None (Generic), DW5560
- Brazil: None (Generic), DW5560
- EMEA: None (Generic), DW5560
- APJ: None (Generic), DW5560



Security Hardware and Keyboard Specifications

Security Hardware

	Latitude 3330
Standard Trusted Platform Module (TPM)	X
Internal fingerprint reader	NA
Internal Smart Card Reader	NA

Keyboard Specs	
Number of keys	86 (U.S) 87 (Brazil) 90 (Japan) 87 (UK)
Layout	US/UK/Brazilian/Japanese
Size	full sized (19.05mm key pitch)
Backlit keyboard option	NA



Detailed Technical Overview and Configuration Specifications



500GB Hybrid HDD 5400 RPM

500 GB HYBRID HDD 5400 RPM		
Capacity (GB)	500GB	
Dimensions inches (W x D x H)	Approximately (2.760 x 3.959 x 0.276 inches)	
Interface type and Maximum speed	Up to 6Gb/s (SATA 3.0)	
MTBF	550,000 hours	
Logical Blocks	976,773,168	
Power Source		
Power Consumption (reference only)	Idle 0.7W, Active 3.10 W	

Environmental Operating Conditions (Non-Condensing):		
Temperature Range	5°C to 60°C	
Relative Humidity Range	5 to 90%	
Op Shock (@2ms)	350G	
Environmental Non-Operating Conditions (Non-Condensing):		
Temperature Range	-40°C to 65°C	
Relative Humidity Range	5 to 95%	



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

320GB HDD 5400 RPM

320GB HDD 5400 RPM	
Capacity (GB)	320GB
Dimensions inches (W x D x H)	Approximately (2.760 x 3.959 x 0.276 inches)
Interface type and Maximum speed	Up to 6Gb/s (SATA 3.0)
MTBF	550,000 hours
Logical Blocks	625,142,448
Power Source	
Power Consumption (reference only)	Idle 0.7W, Active 3.10 W

Environmental Operating Conditions (Non-Condensing):		
Temperature Range	5°C to 60°C	
Relative Humidity Range	5 to 90%	
Op Shock (@2ms)	350G	
Environmental Non-Operating Conditions (Non-Condensing):		
Temperature Range	-40°C to 65°C	
Relative Humidity Range	5 to 95%	



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

128GB SSD 2.5"

128 GB SSD 2.5"	
Capacity (GB)	128GB SSD
Dimensions inches (W x D x H)	Approximately (2.75 x 3.937 x 0.268 inches)
Interface type and Maximum speed	Up to 6Gb/s (SATA 3.0)
MTBF	1M hours
Logical Blocks	250,069,680
Power Source	
Power Consumption (reference only)	Idle 0.7W, Active 2.5W

Environmental Operating Conditions (Non-Condensing):		
Temperature Range	0°C to 70°C	
Relative Humidity Range	10 to 90%	
Op Shock (@0.5ms)	1,500G	
Environmental Non-Operating Conditions (Non-Condensing):		
Temperature Range	-40°C to 70°C	
Relative Humidity Range	5 to 95%	



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

64GB mSATA

64GB MSATA	
Capacity (GB)	64GB MSATA
Dimensions inches (W x D x H)	Approximately (1.175 x 2.00 x 0.150 inches)
Interface type and Maximum speed	Up to 6Gb/s (SATA 3.0)
MTBF	1M hours
Logical Blocks	125,045,424
Power Source	
Power Consumption (reference only)	Idle 0.5W, Active 2.5W

Environmental Operating Conditions (Non-Condensing):		
Temperature Range	0°C to 70°C	
Relative Humidity Range	10 to 90%	
Op Shock (@0.5ms)	1,500G	
Environmental Non-Operating Conditions (Non-Condensing):		
Temperature Range	-40°C to 70°C	
Relative Humidity Range	5 to 95%	



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DIMM Slots	2
Minimum Memory Configuration 2GB	
Maximum Memory Configuration 8GB	
DIMM Configurations:	
2G 1600MHz DDR3L (1x2G) X	
4G 1600MHz DDR3L (1x4G)	X
4G 1600MHz DDR3L (2x2G)	X
8G 1600MHz DDR3L (2x4G)	X



Ports and Connectors

Latitude 3330

USB	USB 3.0 (2) USB 2.0 (1)-Power Share capable
Video	VGA, HDMI (video output)
Network Adapter	RJ-45 network adapter
Modem	NA
Audio	Two channel high definition audio IDT 92HD93 Controller Stereo conversion: 24-bit (analog-to-digital and digital-to-analog) Internal Interface - high-definition audio codec. External Interface - microphone-in and stereo headphones/speakers combo connector Speakers: Power / Peak Power: 2X2Wrms/2X2.5Wpeak Internal speaker amplifier: 2 watt per channel Internal microphone: digital microphone (single microphone with camera) No volume control buttons, only support hot-key keyboard button
Expansion	Memory card reader 1 full, 1 half mini-card slots
Express Card	NA



Webcam Specifications



Easy Remote Collaboration: Videoconference online with a 100% attached built-in camera (comes with Dell Webcam software pre-installed for camera setup). Software varies by operating system. Windows 7 supports Dell Web Cam Central. Windows8 supports the web cam with native software

Webcam Features	Latitude 3330
Camera Type	HD fixed focus
Sensor Type	CMOS sensor technology
Resolution: Motion Video	Up to 1280 x 720 (1MP)
Resolution: Still Image	Up to 1280 x 720 (1MP)
Imaging Rate	Up to 30 frames per second



Dell Wireless™ 1504 1X1 802.11 bgn

Host interface	PCI Express™ Half Mini-Card
Network standard	802.11b, 802.11g, and 802.11n
Wi-Fi Alliance Certifications	802.11b, 802.11g, WPA, WPA2, WMM
Operating Frequency Bands	2.4 GHz (802.11b/g/n)
Dual Diversity Antenna Switching	Dual diversity antenna switching for systems designed with main and auxiliary antennas.
Data Rate	802.11n - Up to 72.2 Mbps*; 802.11g - Up to 54 Mbps 802.11b - Up to 11 Mbps
Power Consumption	TX Average: 1320 mW, RX Average: 1036 mW
Security Authentication EAP Methods Single Sign On Encryption Cisco Compatible Extensions	Open, Shared, WPA, WPA-PSK, WPA2, WPA2-PSK, CCKM MD5, LEAP, EAP-FAST, EAP-TLS, EAP-TTLS (PAP, CHAP, MD5, MS-CHAP, MS-CHAPv2), PEAP (TLS, MS-CHAPv2, GTC) Open, Shared, MD5, LEAP, EAP-FAST, EAP-TLS, EAP-TTLS (PAP, CHAP, MD5, MS-CHAP, MS-CHAPv2), PEAP (TLS, MS-CHAPv2, GTC), Smart Cards WEP (64 bit/128 bit), CKIP (XP), TKIP, AES-CCMP Version 4 (XP), Version 5 (Vista and Windows 7)
Client Utility	Wireless profile and security management (XP), site monitor, link status, adapter configuration and diagnostics
Software Support	Microsoft® WHQL certified for Windows® XP, Windows® Vista, Windows® 7 and Windows® 8; Linux
Radio On/Off	Hardware and software on/off disables transmit and receive to comply with aviation in-flight restrictions
LED output	Wireless enable.
Humidity Non-Operating	Up to 95%
Operating Temperature	Operational 0 to 75C; Storage -40 to 80C
Roaming	Seamless roaming between 802.11b, 802.11b/g, and 802.11n access points
Wake On Wireless	Supported when using Magic Packet over the Air



Dell Wireless™ 1550 2X2 802.11ac + Bluetooth 4.0

Host interface	PCI Express™ Half Mini-Card
Network standard	802.11a, 802.11b, 802.11g, 802.11n and 802.11ac
Wi-Fi Alliance Certifications	802.11a, 802.11b, 802.11g, WPA, WPA2, WMM
Operating Frequency Bands	2.4 GHz (802.11b/g/n) and 5 GHz (802.11a/n/ac)
Dual Diversity Antenna Switching	Dual diversity antenna switching for systems designed with main and auxiliary antennas 2x2 MIMO operation when in 802.11n mode with 2x2 or greater Access Point
Data Rate	802.11ac - Up to 867Mbps; 802.11n - Up to 300 Mbps*; 802.11a/g - Up to 54 Mbps 802.11b - Up to 11 Mbps
Security Authentication EAP Methods	Open, Shared, WPA, WPA-PSK, WPA2, WPA2-PSK EAP-FAST, EAP-TLS, EAP-TTLS (MSCHAPv2), PEAPv0(EAP-MS-CHAPv2), PEAPv1(EAP-GTC)
Encryption Cisco Compatible Extensions	CCX Lite
Client Utility	Wireless profile and security management, site monitor, link status, adapter configuration and diagnostics
Software Support	Microsoft® WHQL certified for Windows® 7 and Windows® 8; Linux
Radio On/Off	Hardware and software on/off disables transmit and receive to comply with aviation in-flight restrictions
LED output	Wireless enable.
Roaming	Seamless roaming between 802.11a, 802.11b, 802.11b/g, 802.11n and 802.11ac access points
Wake On Wireless	Supported when using Magic Packet over the Air
Miracast (WiFi Display)	Supports WFA Miracast (WiFi Display)



Dell Wireless™ 1550 2X2 802.11ac + Bluetooth 4.0

Wireless PAN Standard	V4.0 LE
Bluetooth Data rates	Up to 3Mbps
Bluetooth Operating Frequency Bands	2.4GHz
Bluetooth Range	Up to 7m
Bluetooth Profiles Supported	Includes Streaming Stereo Quality Audio (A2DP), File Transfer (FTP/OBEX), Dial-up Networking (DUN), Mice/Keyboards (HID), Headset (HSP), AVRCP 1.4, OBEX 1.4 and OBEX enhancements, Wideband Audio Headset support
Bluetooth Data Encryption	128-bit encryption
Bluetooth Output Power	Power class 2
Bluetooth Receive Sensitivity	< 0.1% BER at -78 dBm
Temperature	operating temperature 0° to +75° C storage temperature of -40° to +80° C
Humidity	Up to 90%



Intel® 6235 2X2 802.11n + Bluetooth 4.0 + WiDi

Host interface	Half Mini Card form factor, based on PCIe electrical interface
Network standard	IEEE 802.11a/b/g/n
Wi-Fi Alliance Certifications	Wi-Fi Certified for 802.11a, 802.11b, 802.11g, 802.11n, WMM, WPA, WPA2, and WPS Wi-Fi Direct for peer to peer device connections
Operating Frequency Bands	2.4 GHz and 5 GHz
Dual Stream N	Support for two transmit and receive antennas enable better wireless at the same distance when compared to older 802.11a/b/g solutions.
Data Rate	Up to 300 Mbps
Power Consumption	Optimized power modes (sleep states) reduce power consumption during periods of inactivity
Authentication Authentication Protocols Encryption Product Safety	WPA and WPA2, 802.1X,(EAP-TLS, TTLS, PEAP, LEAP, EAP-FAST), EAP-SIM, EAP-AKA PAP, CHAP, TLS, GTC, MS-CHAP*, MS-CHAPv2 64-bit and 128-bit WEP, AES-CCMP, TKIP UL, C-UL, CB(IEC60950-1)
Management Capabilities Alerting	AMT 8.0
Government Compliance	FIPS (Windows® 7 only), FISMA
Client Utility	Intel® PROSet/Wireless Software v15.x
Software Support	Microsoft® WHQL certified for Windows® 7, and Windows® 8; Linux
Radio On/Off	Supported in both hardware and software
LED output	Single WLAN-LED (as per Mini Card specification)
Roaming	Supports seamless roaming between respective access points (802.11b, 802.11g, 802.11a/b/g, and 802.11a/b/g/n)
Wake On Wireless	Supported when VPro/AMT is activated, or Windows® 8 without Intel AMT
Wireless Display	Intel WiDi Wireless Display, supports external display resolutions up to 1080p



Intel® 6235 2X2 802.11n + Bluetooth 4.0 + WiDi

Wireless PAN Standard	Dual Mode Bluetooth* 2.1, 2.1+EDR, 3.0, 3.0+HS, 4.0 (BLE)
Bluetooth Data rates	Up to 3Mbps
Bluetooth Operating Frequency Bands	2.4GHz
Bluetooth Profiles Supported	Includes Streaming Stereo Quality Audio (A2DP), File Transfer (FTP), Dial-up Networking (DUN), Mice/Keyboards (HID), Printing (BPP), Digital Image Management (transfer, print, remote camera operation) (BIP), AVRCP
Bluetooth Data Encryption	128-bit encryption
Bluetooth Output Power	Power class 1
Temperature	operating temperature 0° to $+80^\circ$ C storage temperature of -40° to $+70^\circ$ C
Humidity	Up to 90% RH non-condensing (at temperatures of 25° C to 35° C)



Wireless Communications: Mobile Broadband

Dell Wireless™ 5630 Multi-mode HSPA+ EVDO Mini Card (Gobi™ 3000) with A-GPS		
Carrier Verizon		
Network	CDMA 1x EVDO RevA	
Speed (Downlink)	3.1Mbps	
Speed (Uplink)	1.8Mbps	
Fallback Network	CDMA 1x	
Fallback Speed	153.6Kbps	
Frequency Bands	850/1900	
SIM	No	
GPS	Autonomous	



Wireless Communications: Mobile Broadband

D-11 W:	- LICDA - Missi Court with A CD	6
Dell Wireless™ 5560 Single-mode HSPA+ Mini Card with A-GPS		
Carrier	AT&T Mobility	Telefonica/Generic
Network	HSPA+/3G	HSPA+/3G
Speed (Downlink)	< 21.1 Mbps ⁸	< 21.1 Mbps ⁸
Speed (Uplink)	< 5.76 Mbps ⁸	< 5.76 Mbps ⁸
Fallback Network	EDGE/GPRS	EDGE/GPRS
Fallback Speed	EDGE 247.4 Kbps ⁸ GPRS 85.6 Kbps ⁸	EDGE 247.4 Kbps ⁸ GPRS 85.6 Kbps ⁸
Frequency Bands	850/1900 HSPA/WCDMA 850/1900 EDGE/GPRS	900/2100 HSPA/WCDMA 900/1800 EDGE/GPRS
SIM	Yes	Yes
GPS	Autonomous, A-GPS	Autonomous, A-GPS



Wired Communications

Network Adapter (NIC) – Intel 82579LM without vPRO		
BCM 5761 Integrated Gigabit Ethernet Controller	Integrated on system board	
External connector type	RJ-45	
Data Rates	10/100/1000 Mbps	
Controller bus architecture	PCIE-based. (Intel 82579LM is not PCIE compliant. It operates as half of PCIE v1.1X1 speed)	
Power consumption (Worst-Case Operating Mode)	1000 Mbps: 697mW 100 Mbps: 351 mW 10 Mbps: 389 mW	
Power consumption (standby operation)	No Link (low power mode): 38 mW No Link (Power down mode): 26 mW 10 Mbps Idle (D3 cold, w/ WOL): 134 mW 100 Mbps Idle (D3 cold, w/ WOL): 227 mW	
IEEE standards compliance	802.3, 802.3u and 802.3x	
Boot ROM Support	PXE	
Network Transfer Rate	Full duplex at 10, 100, or 1000 Mbps and	
OperatingTemp/Storage Temp	0C to 85C	
Operating Humidity	20% to 80% (non-condensing)	



Security

Security Hardware

	Latitude 3330
Standard Trusted Platform Module (TPM)	Χ
Internal Fingerprint Reader, smart card reader options	NA



Integrated Graphics Controller

Integrated Graphics Controller	Intel HD Graphics (Intel Celeron Processor)
Models	Latitude 3330
Bus Type	Internal PCIe
Memory Interface	N/A (unified memory architecture)
Clock Speeds	350 MHz graphics core
Max Graphics dynamic frequency	1000MHz(for Celeron-1007U)
Estimated Maximum Power Consumption	NA
Display Support	LVDS, Analog VGA, HDMI, [supports optional USB dock only, not EDock]
Maximum Color Depth	32bit
Maximum Vertical Refresh Rate	Up to 75Hz depending on resolution
Operating Systems Graphics/ Video API Support	DirectX 11, OpenGL 3.1
Supported Resolutions and Max Refresh Rates (Hz) (Note: Analog and/or digital)	Max Digital: 1920x1200/32bpp @60Hz Analog: 1600x1200/32bpp @80Hz or 2048x1280/32bpp @ 60Hz
Numbers of Displays Supports	2 max (two out of three of HDMI/VGA/LCD), no Edock support, supports docking via optional USB dock



Integrated Graphics Controller

Integrated Graphics Controller	Intel HD Graphics 3000 (Intel Sandy Bridge i3 Processors)
Models	Latitude 3330
Bus Type	Internal PCIe
Memory Interface	N/A (unified memory architecture)
Clock Speeds	350 MHz graphics core
Max Graphics dynamic frequency	1000MHz(for Core i3-2375M)
Estimated Maximum Power Consumption	NA
Display Support	LVDS, Analog VGA, HDMI, [supports optional USB dock only, not EDock]
Maximum Color Depth	32bit
Maximum Vertical Refresh Rate	Up to 75Hz depending on resolution
Operating Systems Graphics/ Video API Support	DirectX 11, OpenGL 3.1
Supported Resolutions and Max Refresh Rates (Hz) (Note: Analog and/or digital)	Max Digital: 1920x1200/32bpp @60Hz Analog: 1600x1200/32bpp @80Hz or 2048x1280/32bpp @ 60Hz
Numbers of Displays Supports	2 max (two out of three of HDMI/VGA/LCD), no Edock support, supports docking via optional USB dock



Integrated Graphics Controller

Integrated Graphics Controller	Intel HD Graphics 4000 (Intel Ivy Bridge i3/i5 Processors)
Models	Latitude 3330
Bus Type	Internal PCIe
Memory Interface	N/A (unified memory architecture)
Clock Speeds	350 MHz graphics core
Max Graphics dynamic frequency	1100MHz(for i3-2350M)
Estimated Maximum Power Consumption	NA
Display Support	LVDS, Analog VGA, HDMI, [supports optional USB dock only, not EDock]
Maximum Color Depth	32bit
Maximum Vertical Refresh Rate	Up to 75Hz depending on resolution
Operating Systems Graphics/ Video API Support	DirectX 11, OpenGL 3.1
Supported Resolutions and Max Refresh Rates (Hz) (Note: Analog and/or digital)	Max Digital: 1920x1200/32bpp @60Hz Analog: 1600x1200/32bpp @80Hz or 2048x1280/32bpp @ 60Hz
Numbers of Displays Supports	2 max (two out of three of HDMI/VGA/LCD), no Edock support, supports docking via optional USB dock



Display 3330

3330	13.3" HD Anti-Glare LED
Туре	HD Anti-Glare
Luminance/Brightness (typical)	200 nits
Dimensions	
Height	189mm(maximum)
Width	314mm (maximum)
Diagonal	13.3
Native Resolution	1366 x 768
Megapixels	1.05
Pixels per Inch (PPI)	118
Contrast Ratio (min)	300:1
Response Time (maximum)	25 msec rise/fall
Refresh Rate	60 Hz
Horizontal Viewing Angle	+/- 40 degrees
Vertical Viewing Angle	+10/-30 degrees
Pixel Pitch	0.2148 mm
Power Consumption (typical)	3.0 W



Battery Specification

	4cell 44WHr	6cell 65Whr
Battery Type	Lithium ion	Lithium ion
Dimension		
Length	269.50 mm (10.61")	269.50 mm (10.61")
Width	48.79 mm (1.92")	48.79 mm (1.92")
Height	20.25 mm (0.80")	30.40 mm (1.24")
Weight	245.00 g (.054 lb)	370.00 g (.082 lb)
Voltage	14.8VDC	11.1VDC
Typical Amp-hour capacity	3.0Ah cylindrical	3.0Ah cylindrical
Typical Watt-hour capacity	44Whr	65Whr
Temperature		
Operating	Charge: 0 °C to 50 °C, 32 °F to 158 °F Discharge: 0 °C to 70 °C, 32 °F to 122 °F	Charge: 0 °C to 50 °C, 32 °F to 158 °F Discharge: 0 °C to 70 °C, 32 °F to 122 °F
Non-Operating	-20 °C to 65 °C 4 °F to 149 °F	-20 °C to 65 °C 4 °F to 149 °F
Charging time	0~15degC: 4 hour 16~45degC: 3 hours 46~60degC: 3 hours	0~15degC: 4 hour 16~45degC: 3 hours 46~60degC: 3 hours
ExpressCharge Capable	NA	NA
BATTMAN Capable	NA	NA
3YR LLC Battery, non-EC	NA	NA



Power Adapters

Adapter Specifications	90W	65W	65W	90W Rugged
- Specifications	Auto/Air DC	BFR/PVC Free	Standard	Rugged
Input voltage	11-16VDC	100 to 240 VAC	100 to 240 VAC	100 to 240 VAC
Input current (max)	9A	1.7 A	1.7 A	1.5 A
Input frequency	N/A	50 to 60 Hz	50 to 60 Hz	50 to 60 Hz
Output current	4.62 A (continuous)	3.34 A (continuous)	3.34 A (continuous)	4.62 A (continuous)
Rated output voltage	19.5 VDC	19.5 VDC	19.5 VDC	19.5 VDC
Weight (lbs)	0.26	0.64	0.64	0.73
Weight (kg)	0.12	0.29	0.29	0.33
Dimensions (inches)	3.2x 0.81	1.1 x 1.9 x 4.3	1.1 x 1.9 x 4.3	1.3 x 2.0 x 5.0
Dimensions (mm)	81.8 x 20.6	28 x 47 x 108	28 x 47 x 108	32 x 52 x 128
Temperature range:	0° to 45°C	0° to 40°C	0° to 40°C	0° to 40°C
Operating	32° to 113F	32° to 104°F	32° to 104°F	32° to 104°F
Storage	-40° to 70°C	-40° to 70°C	-40° to 70°C	-40° to 70°C

- 65W BFR/PVC Free is required for BFR/PVC Free Configurations.
- 90W rugged is available in certain regions



Keyboard

Keyboard Specs

Number of keys	86 (U.S) 87 (Brazil) 90 (Japan) 87 (UK)
Layout	US/UK/Brazilian/Japanese
Size	full sized (19.05mm key pitch)
Backlit keyboard option	NA

- Standard keyboard option supported
- No backlit
- No numpad
- Single pointing



Keyboards Hot Key Definition

Keyboard Shortcuts	
Fn+F1	LCD and Projector Display
Fn+F2	Wireless Radio on/off
Fn+F3	Touchpad enable/disable
Fn+F4	Brightness decrease
Fn+F5	Brightness increase
Fn+F8	Audio previous
Fn + F9	Audio play/pause
Fn+F10	Audio next
Fn+F11	Audio volume decrease
Fn+F12	Audio volume increase



Touch Pad Specifications

Touch Pad	Latitude 3330
X/Y position resolution	600dpi
Size	Sensor-active area: • Width: 81mm (3.19") • Height: 41mm (1.61")
Multi-Touch	Configurable Single Finger and Multi-Finger gestures

Supported Gestures	Windows 7	Windows 8
Circular Scrolling	Supported (disabled by default)	Not supported
Drag Lock	Supported	Supported
Edge Swipe	Not supported	Supported
Horizontal / Vertical Scroll Zones	Supported (disabled by default)	Not supported
Zoom Zones	Supported (disabled by default)	Not supported
Zig Zag	Supported (no checkbox to disable)	Supported (no checkbox to disable)
2-finger Pan / Scroll	Supported	Supported
2-finger Pinch Zoom	Supported (disabled by default)	Supported
2-finger Rotate	Supported (disabled by default)	Supported (disabled by default)
2-finger Tap	Not supported	Supported (no checkbox to disable)
3-finger Flick Right/Left/Up/Down	Supported (disabled by default)	Supported (disabled by default)



Touch Pad Specifications

Windows 7 Single Finger Gestures



Windows 8 Single Finger Gestures



Windows7 & Windows 8 Multi Finger Gestures





Optional USB Docking

Key Features	What they are	Benefits
High Compatibility	Docking station is compatible with virtually any notebook	Helps create an easy buying decision for users who may be unsure what docking station ideally suits their notebook. IT purchasers can buy one device that is compatible with different notebooks to help make simple purchasing decisions.
Dual Video Ports	2 video ports for connecting 2 displays to the notebook and docking station.	User can create more workable screen space on their displays by connecting 2 displays to the device, allowing for more programs that can be opened on screen at one time.
2 SuperSpeed™ USB 3.0 Ports	USB 3.0 ports integrated into the device.	Faster data transfer than USB 2.0 for USB 3.0-enabled devices
Gigabit Ethernet Port	Ethernet port for connection to wired networks	Allows user to keep the device plugged in to wired network and helps manage cords that may cause clutter in the workspsace.
4 USB Ports	USB Ports for connecting USB-enabled various devices	Helps create various usage scenarios for devices that have USB ports,
Security Lock Slot (Security Lock not included)	Gives users the ability to use a cord lock to connect the device to a desk or workspace	 Helps deter theft of the docking station and offers peace of mind when away from the workspace and docking station.



Docking Station	
Connectivity	USB 2.0 (2ft USB 2.0 cable included)
Power	6.5A AC Adapter (included)
Color & Finish	Black
Dimensions (H x L x W inches)	1.77 x 5.91 x 12.2
Weight (lbs)	1.98



Environmental Specifications

Environmental and operating conditions		
Models	LATITUDE 3330	
Temperature Range	Operating 0° to 40°C (32° to 95°F) Storage –40° to 65°C (–40° to 149°F)	
Relative humidity (maximum)	Operating 10% to 90% (noncondensing) Storage 0% to 95% (noncondensing)	
Altitude (maximum)	Operating 0 to 3048 m (0 to 10,000 ft) Storage 0 to 10,668 m (0 to 35,000 ft)	

Link to Product Safety, EMC and Environmental Data Sheets:

 $\underline{http://www.dell.com/content/topics/global.aspx/about_dell/values/regulatory_compliance/dec_conform?c=us\&cs=04\&l=en\&s=bsd\&redirect=1$

