

**Uncompromising ultra-portable design**

**POWERFUL MOBILE PERFORMANCE**

Enjoy the powerful Intel® Core™ i7-640M (2.80GHz) w/Turbo boost<sup>20</sup> up to (3.47GHz) and 6GB of pre-installed system memory.

The VAIO® Z laptop comes pre-installed with Genuine Microsoft® Windows® 7 Professional 64-bit<sup>12</sup>.

Microsoft® Office Starter 2010<sup>11</sup> includes reduced-functionality versions of Word® and Excel® only, with advertising.

Uncompromising elegance weaved into a 3.04 lb (with standard battery) go-anywhere package.

Enjoy a 13.1"<sup>14</sup> (1600x900) LED backlit widescreen display, with a scratch resistant LCD, for a brighter, crisper, tougher display.

For even faster read / write times and greater durability, enjoy a 512GB<sup>2</sup> Solid State Drive.

Tackle virtually any graphics requirement with a NVIDIA® GeForce® GT 330M graphics card and 1GB VRAM.

Extend the reach of your Z laptop with Stereo A2DP Bluetooth® technology<sup>14</sup> that's ideal for connecting to other Bluetooth-enabled peripherals.

**SMARTER TECHNOLOGY**

The next revolution in hybrid graphics, an intelligent Auto setting self-selects which power mode - Speed or Stamina - is best given your current computing usage - no reboot required<sup>19</sup>.

Integrated active noise cancelling technology and supplied headphones provide crystal-clear audio in noisy mobile scenarios without a bulky adapter.

A built-in biometric fingerprint scanner makes authentication and secure access quick and easy – you only need your fingerprint.

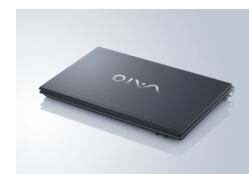
A built-in Assist button launches VAIO Care™ software, a simple do-it yourself PC maintenance tool for tune-ups, troubleshooting and more.

**WIRELESS FREEDOM**

With Share My Connection™ technology built in, the Z Series acts as a mobile hotspot for up to 5 PCs or other Wi-Fi-enabled devices<sup>22</sup>.

A perfect network solution for business travelers and anyone looking to save some money by sharing a single network connection, Share My Connection™ is secure and lets you extend your connectivity with only the coworkers, friends, and family members of your choosing. Moreover, Share My Connection™ even works with Sprint and VPN networks – an ideal feature for those road warriors out there.

The VAIO® Z Series laptop gives you the power and functionality of a larger PC packed into a durable notebook that weighs just over 3 lbs (with standard battery). From its convenient backlit keyboard to its Dynamic Hybrid Graphics system<sup>19</sup> that delivers power when you need it, this computer has all the features that make for a world-class mobile computing experience.



# VPCZ13GGX/B

# VAIO - Notebook Z

## Specifications

### General

Computer Type: Laptop  
 Type of Use: Ultra-portable  
 Action Buttons: VAIO, ASSIST, Performance Select, Windows Arrangement, Wireless on / off  
 Pointing Device: Electro-static touchpad (Multi-Finger)  
 Security: Biometric Fingerprint Sensor  
 Trusted Platform Module (TPM) TCG Ver.1.2 compliant

### Hardware

Keyboard: QWERTY, 82 keys with 2.0mm stroke and 19.05mm pitch  
 Camera: Built-in MOTION EYE® camera and microphone with face-tracking technology  
 Backlit Keyboard: Yes

### Processor

Type: Intel® Core™ i7 - 640M  
 Speed: 2.80GHz with Turbo Boost Technology up to 3.47GHz<sup>20</sup>  
 Cache: 3MB

### Memory

Installed: 6GB (4GBx1+2GBx1)  
 Maximum: 8GB  
 Type/Speed: DDR3/1066MHz

### Hard Drive

Capacity: 512GB<sup>2</sup> (256GB+256GB)  
 Type: Solid State Drive

### Optical Drive

CD Support: Read / Write (CD/-R/-RW)  
 DVD Support: Read / Write (DVD±R/±RW/±R DL/-RAM)

### Expansion Slots

Multimedia Card Reader: One Memory Stick PRO™ (STD / Duo) media slot with MagicGate® functionality  
 One ExpressCard® /34 media slot  
 One Secure Digital (SD memory card) media slot

### Audio

Sound System: Intel® High Definition Audio

### Display

Screen Size: 13.1"<sup>4</sup>  
 Resolution: 1600 x 900  
 Back Light Technology: LED

### Graphics

Processor: NVIDIA® GeForce® GT 330M GPU with Intel® HD Graphics  
 Video RAM: 1GB of dedicated video RAM  
 Technology: Dynamic Hybrid Graphics System<sup>19</sup>

### Inputs and Outputs

Headphone Jack: 1  
 Microphone Input: 1  
 Port Replicator Connector(s): 1 (Bottom)  
 USB Port(s): 3 (2.0 compliant)  
 VGA Output(s): 1  
 DC-In: 1  
 Internal Microphone: 1  
 HDMI™ Output(s): 1

### Power

Battery Type: Standard Capacity Lithium-ion Battery  
 DVD Playback: Up to 3.5 hours<sup>7</sup> Standard Capacity Battery  
 Default Brightness: Up to 7 hours<sup>7</sup> Standard Capacity Battery  
 Up to 10.5 hours<sup>7</sup> Large Capacity Battery  
 Maximum Brightness: Up to 6.5 hours<sup>7</sup> Standard Capacity Battery  
 Up to 9.5 hours<sup>7</sup> Large Capacity Battery

### Start-up Times

Average Boot Time: 60 sec<sup>17</sup>  
 Average Resume Time from Suspend: 2 sec<sup>17</sup>  
 First Boot Time: 5 min<sup>18</sup>

### Wireless/Networking

Ethernet Protocol: 10Base-T/100Base-TX/1000Base-T  
 Ethernet Speed: Fast Ethernet (RJ-45)  
 Bluetooth® Technology: Bluetooth Integrated Stereo A2DP (2.1 + EDR)<sup>14</sup>  
 Mobile Broadband: Sprint and Verizon Wireless Mobile Broadband Built-in  
 GPS: Yes  
 WiFi Adapter: Intel® Centrino® Advanced-N 6200 (802.11a/b/g/n)<sup>3</sup>

### Software

Operating System: Genuine Microsoft® Windows® 7 Professional 64-bit<sup>12</sup>  
 Supplied Software: Microsoft® Office 2010 Starter<sup>11</sup>  
 Anti-Virus Software: Norton Internet Security™ 2010 30-Day Trial Offer<sup>13</sup>  
 System Maintenance and Support: VAIO Care™ - System diagnostics and maintenance  
 Sony® Creativity Suite: PMB - VAIO® Edition - Import, organize, edit and publish in one easy-to-use program.  
 \*Please access VAIO® Help and Support from your PC for a complete list of software applications and trials.

### Service and Warranty Information

Telephone Support: 1 year toll-free technical assistance available 24/7 at 888-476-6972. For priority support, please call 239-768-7605<sup>9</sup>.

Online and Email Support: Available at <http://www.esupport.sony.com/EN/VAIO>

Onsite/In-Home Service: 1 year limited warranty with Onsite/In-Home Service<sup>15</sup>. See actual warranty for details.

International Service: 1 year international service plan. Registration required. See [www.sony.com/IRSP](http://www.sony.com/IRSP) for details.

Limited Warranty Term: 1 year limited warranty<sup>8</sup>. See actual warranty for details.

### Environmental Information

EPEAT™ : Gold  
 RoHS® : Compliant  
 ENERGY STAR®: 5.0

### Dimensions

Weight: 3.04 lbs (with Standard Capacity Battery)  
 Measurements: 12.4"(W) x 1.0-1.3"(H) x 8.3"(D)<sup>5</sup>

### Supplied Accessories

Standard Capacity Lithium-ion battery (5400mAh)  
 AC Adapter  
 Power Cord  
 Noise Canceling Headphones  
 Optional Accessories  
 Stick AC Adapter (VGP-AC19V30)  
 Additional Standard Capacity Battery (VGP-BPS20)  
 Large Capacity Battery (VGP-BPL20)  
 Neoprene Case (VGP-AMC3)  
 Docking Station (VGP-PRZ10)  
 Carrying Case (VGP-CKS3/B)  
 Privacy Filter/ LCD Screen Protector (VGP-FL14)  
 Bluetooth® Keyboard (VGP-BKB1)  
 VAIO® Carrying Case (VGP-CCB4/B)  
 Bluetooth® Remote Mouse (VGP-BMS80)  
 Bluetooth® Aluminum Slider Mouse (VGP-BMS10)

Color: Black  
 UPC Code: 027242814752

1. GHz denotes microprocessor internal clock speed and may vary.  
 2. GB means one billion bytes when referring to hard drive capacity. Accessible capacity may vary. A portion of hard disk space is reserved as a recovery partition.  
 3. Requires 802.11n compatible access point. Some functionality may require Internet services.  
 4. Viewable area measured diagonally.  
 5. Measured at the narrowest point  
 6. i.LINK is a trademark of Sony used only to designate that a product contains an IEEE 1394 connector. All products with an i.LINK connector may not communicate with each other.  
 7. Estimates only based upon Sony engineering testing. Actual performance will vary based on notebook settings, environmental conditions, and usage. Battery capacity decreases over time and use.

8. See actual limited warranty for details. For a copy of Sony's warranty, please visit [www.sony.com/pcsupport](http://www.sony.com/pcsupport), call tollfree 888-476-6972 (888-4SONYPC) or write to Sony Electronics, 12451 Gateway Boulevard, Fort Myers, FL 33913.  
 9. For certain third party software applications, Sony provides first level phone support. Additional telephone support may be available from the applicable 3rd party vendor. Availability and schedule for any such support is determined by the applicable software vendor. Long distance charges may apply  
 10. Broadband Internet service required along with third party services which may require a subscription or other service fee.  
 11. Includes Microsoft® Office 2010 preloaded. Purchase a Product Key to activate a full Microsoft Office 2010 suite.  
 12. Compatibility and performance in a 64-bit environment may vary.  
 13. Norton Internet Security™ 2010 30-day subscription is pre-installed on your Sony VAIO PC. You need to activate the software for the product to work. After your 30-days are finished, buy Norton Internet Security to continue to be protected from viruses, hackers and identity theft.  
 14. Interoperability and compatibility among Bluetooth® devices vary.  
 15. When available, Sony will provide Onsite/In-Home Service in fulfillment of its limited warranty obligations. Any such services are subject to the terms and conditions of the limited warranty. See actual Limited Warranty for details. Onsite/In-Home Service will be provided via third-party technician to be dispatched as needed following phone-based troubleshooting. Some repairs may be accomplished with self repair kits. Onsite/In-Home Service may not be available in all locations.  
 16. Requires high definition-capable display with HDMI™ connector. Image quality will vary.  
 17. Based on original factory image and will vary with product configuration changes and additional software added to the hard drive.  
 18. Excluding end user interaction  
 19. Windows® 7 is required for feature functionality. Rebooting is necessary on pre-installed and downgraded Windows® XP Professional models.  
 20. Intel® Turbo Boost Technology requires a PC with a processor with Intel Turbo Boost Technology capability. Intel Turbo Boost Technology performance varies depending on hardware, software and overall system configuration.  
 21. GPS is available in the U.S. and Canada only. Map detail will vary.  
 22. Sprint and Verizon Wireless Mobile Broadband service sold separately. Mobile Broadband is available to more than 285 million people in 264 major metro areas in the U.S. Offers and coverage, varying by service, not available everywhere. Network details & coverage maps at [vzw.com](http://vzw.com). ©2010 Verizon Wireless.

Computer Interface: For this product, there are a multitude of varying software packages and add-on hardware options. This product is not manufactured to work with any specific software, and Sony does not and cannot make any warranty or representation with respect to the performance of this product with any particular software packages and/or non-Sony add-on hardware options except those mentioned here. Sony hereby disclaims any representations or warranties that this product is compatible with any combination of non-Sony products you may choose to connect to it. While Sony representatives or Sony authorized dealers may be able to assist you and may make recommendations, they are NOT authorized to vary or waive this disclaimer. Purchasers must determine for themselves the suitability and compatibility of the hardware and software in each and every particular instance. Software titles pre-installed on the Sony computer are subject to change without notice. Preinstalled software may not be identical to retail versions or have all documentation. Features and specifications are subject to change without notice. Non-metric weights and measures are approximate and may vary.  
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