## Product Specifications Reference (PSREF)

**ThinkPad W530 2438 (Optimus) - TopSeller**

| Type-model | Processor | Memory | Wide-screen display | Discrete graphics | Disk SATA GB | RAID | Backlit keyboard | PCIe Mini Card | PCle Mini Card WWAN/mSATA | Smart Card | Color calibration | Battery | Intel vPro Preload (mWh) | Ann Date |
|------------|-----------|--------|---------------------|-------------------|--------------|------|------------------|---------------|--------------------------|------------|---------------------|--------|---------------------|---------|----------------------|----------|
| 2438-2MU  | Intel® Core™ i7-3720QM processor | 4GBx4 | 15.6" HD | None | No | None | None | Nothing | 2438-2MU | 15.6" HD | 9 | vPro Pro 64 | 06/12 |
| 2438-2LU  | Intel® Core™ i7-3720QM processor | 4GBx1 | 15.6" HD | None | No | None | None | Nothing | 2438-2LU | 15.6" HD | 9 | vPro Pro 64 | 06/12 |
| 2438-2KU  | Intel® Core™ i7-3820QM processor | 8GBx1 | 15.6" HD | None | No | None | None | Nothing | 2438-2KU | 15.6" HD | 9 | vPro Pro 64 | 06/12 |
| 2438-2JU  | Intel® Core™ i7-3720QM processor | 4GBx1 | 15.6" HD | None | No | None | None | Nothing | 2438-2JU | 15.6" HD | 9 | vPro Pro 64 | 06/12 |
| 2438-2HU  | Intel® Core™ i7-3720QM processor | 4GBx2 | 15.6" HD | None | No | None | None | Nothing | 2438-2HU | 15.6" HD | 9 | vPro Pro 64 | 06/12 |
| 2438-3AU  | Intel® Core™ i7-3720QM processor | 8GBx1 | 15.6" HD | None | No | None | None | Nothing | 2438-3AU | 15.6" HD | 9 | vPro Pro 64 | 07/12 |
| 2438-39U  | Intel® Core™ i7-3720QM processor | 8GBx1 | 15.6" HD | None | No | None | None | Nothing | 2438-39U | 15.6" HD | 9 | vPro Pro 64 | 02/13 |
| 2438-57U  | Intel® Core™ i7-3740XM processor | 4GBx2 | 15.6" HD | None | No | None | None | Nothing | 2438-57U | 15.6" HD | 9 | vPro Pro 64 | 02/13 |
| 2438-58U  | Intel® Core™ i7-3740XM processor | 4GBx1 | 15.6" HD | None | No | None | None | Nothing | 2438-58U | 15.6" HD | 9 | vPro Pro 64 | 02/13 |

### Preloaded operating system
- Genuine Windows® 7
- Professional 64

### Ready to install applications
- (only some listed)
  - Rescue and Recovery™
  - Password Manager

### Preloaded applications
- (only some listed)
  - Lenovo® Solution Center
  - Lenovo Vantage Cards Plus
  - ThinkVantage Product Recovery
  - Access Connections™
  - Fingerprint Software (fingerprint models)
  - ThinkVantage System Update
  - ThinkVantage Power Manager
  - Lenovo Cloud Storage by SugarSync
  - Lenovo SimpleTap
  - Microsoft® Office preloaded; purchase a product key to activate
  - Norton™ Internet Security 2012 (30 days of virus definitions)
  - Adobe® Reader®
  - Skype® for Windows
  - Evernote®
  - Intel Small Business Advantage
  - RapidBoot HD Accelerator
  - Symanette™
  - Windows Live™ Essentials
  - Corel® WinDVD® (DVD:RW)
  - Corel® DVD Factory MovieFactory™ Lenovo Edition (DVD:RW)
  - X-Rite® Color Calibrator (color calibration models)

### Supported ThinkVantage technologies
- 170-watt AC adapter
- ThinkPad Roll Cage (one-piece magnesium frame)
- EPEAT® Gold rating
- ENERGY STAR® 5.0-compliant
- GREEENGUARD® certified
- RoHS-compliant
- International Warranty Service™
- 24 hour x 7 day x 365 days support during the warranty period

For compatible accessories, please go to O-W530 sheet.
For Lenovo service upgrade options, please go to O-TA sheet.
For ISV certifications, please visit www.lenovo.com/support/ISV

See footnotes for more detailed information © Lenovo (K4HW-1) February 2013
### ThinkPad W530 2438 (Optimus) - TopSeller (Windows 8)

Product Specifications Reference (PSREF)

<table>
<thead>
<tr>
<th>Type-model</th>
<th>Processor</th>
<th>Memory</th>
<th>Wide-screen display</th>
<th>Discrete graphics</th>
<th>Disk</th>
<th>SATA GB</th>
<th>RAID</th>
<th>Backlit keyboard</th>
<th>PCle Mini Card</th>
<th>PCle Mini Card WWAN/ mSATA</th>
<th>Battery capacity</th>
<th>Intel APU</th>
<th>Intel GPU</th>
<th>Intel WWAN</th>
<th>Preload</th>
<th>Ann Date (mm/yy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2438-4CU</td>
<td>i7-3720QM</td>
<td>8GBx1</td>
<td>15.6&quot; HD+</td>
<td>NVIDIA K1000M</td>
<td>1x500G SSD</td>
<td>No</td>
<td>Backlit</td>
<td>Intel 6205/15</td>
<td>WWAN upg</td>
<td>None</td>
<td>9 IAMT</td>
<td>vPro</td>
<td>Win7 Pro64</td>
<td>None</td>
<td>10/12</td>
<td></td>
</tr>
<tr>
<td>2438-4BU</td>
<td>i7-3740QM</td>
<td>8GBx1</td>
<td>15.6&quot; FHD</td>
<td>NVIDIA K1000M</td>
<td>1x500G SSD</td>
<td>No</td>
<td>Backlit</td>
<td>Intel 6205/15</td>
<td>WWAN upg</td>
<td>None</td>
<td>9 IAMT</td>
<td>vPro</td>
<td>Win7 Pro64</td>
<td>None</td>
<td>10/12</td>
<td></td>
</tr>
<tr>
<td>2438-3BU</td>
<td>i7-3720QM</td>
<td>8GBx1</td>
<td>15.6&quot; HD+</td>
<td>NVIDIA K1000M</td>
<td>1x500G SSD</td>
<td>No</td>
<td>Backlit</td>
<td>Intel 6205/15</td>
<td>WWAN upg</td>
<td>None</td>
<td>9 IAMT</td>
<td>vPro</td>
<td>Win7 Pro64</td>
<td>None</td>
<td>10/12</td>
<td></td>
</tr>
<tr>
<td>2438-3LU</td>
<td>i7-3740QM</td>
<td>8GBx1</td>
<td>15.6&quot; FHD</td>
<td>NVIDIA K1000M</td>
<td>1x500G SSD</td>
<td>No</td>
<td>Backlit</td>
<td>Intel 6205/15</td>
<td>WWAN upg</td>
<td>None</td>
<td>9 IAMT</td>
<td>vPro</td>
<td>Win7 Pro64</td>
<td>None</td>
<td>10/12</td>
<td></td>
</tr>
<tr>
<td>2438-4LU</td>
<td>i7-3720QM</td>
<td>8GBx1</td>
<td>15.6&quot; HD+</td>
<td>NVIDIA K1000M</td>
<td>1x500G SSD</td>
<td>No</td>
<td>Backlit</td>
<td>Intel 6205/15</td>
<td>WWAN upg</td>
<td>None</td>
<td>9 IAMT</td>
<td>vPro</td>
<td>Win7 Pro64</td>
<td>None</td>
<td>10/12</td>
<td></td>
</tr>
<tr>
<td>2438-4UK</td>
<td>i7-3720QM</td>
<td>8GBx1</td>
<td>15.6&quot; HD+</td>
<td>NVIDIA K1000M</td>
<td>1x500G SSD</td>
<td>No</td>
<td>Backlit</td>
<td>Intel 6205/15</td>
<td>WWAN upg</td>
<td>None</td>
<td>9 IAMT</td>
<td>vPro</td>
<td>Win7 Pro64</td>
<td>None</td>
<td>10/12</td>
<td></td>
</tr>
<tr>
<td>2438-5LU</td>
<td>i7-3740QM</td>
<td>8GBx1</td>
<td>15.6&quot; FHD</td>
<td>NVIDIA K1000M</td>
<td>1x500G SSD</td>
<td>No</td>
<td>Backlit</td>
<td>Intel 6205/15</td>
<td>WWAN upg</td>
<td>None</td>
<td>9 IAMT</td>
<td>vPro</td>
<td>Win7 Pro64</td>
<td>None</td>
<td>10/12</td>
<td></td>
</tr>
<tr>
<td>2438-5UK</td>
<td>i7-3720QM</td>
<td>8GBx1</td>
<td>15.6&quot; HD+</td>
<td>NVIDIA K1000M</td>
<td>1x500G SSD</td>
<td>No</td>
<td>Backlit</td>
<td>Intel 6205/15</td>
<td>WWAN upg</td>
<td>None</td>
<td>9 IAMT</td>
<td>vPro</td>
<td>Win7 Pro64</td>
<td>None</td>
<td>10/12</td>
<td></td>
</tr>
<tr>
<td>2438-6LU</td>
<td>i7-3740QM</td>
<td>8GBx1</td>
<td>15.6&quot; FHD</td>
<td>NVIDIA K1000M</td>
<td>1x500G SSD</td>
<td>No</td>
<td>Backlit</td>
<td>Intel 6205/15</td>
<td>WWAN upg</td>
<td>None</td>
<td>9 IAMT</td>
<td>vPro</td>
<td>Win7 Pro64</td>
<td>None</td>
<td>10/12</td>
<td></td>
</tr>
</tbody>
</table>

- **Small and medium business (SMB) model(s), part of the US TopSeller™ Program**
- A depot repair service 3-year limited warranty
- Power-packed engineering with Open GL graphics and ISV certifications

### Positioning

**Processor**

Mobile workstation; two spindles Intel® Core™ i7-3630QM processor (4 cores, 2.40GHz, 6MB cache), Intel HD Graphics 4000. DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.40GHz), HT technology

**Intel Core i7-3720QM processor** (4 cores, 2.60GHz, 6MB cache), Intel HD Graphics 4000. DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology

**Intel Core i7-3740QM processor** (4 cores, 2.70GHz, 6MB cache), Intel HD Graphics 4000. DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.70GHz), HT technology

**Memory**

dual-core models: 16GB max, two 204-pin SO-DIMM sockets

dual-core models: 8GB max, four 204-pin SO-DIMM sockets

*All: PC3-12800 1600MHz DDR3, non-parity, dual-channel capable

**Optical Ultrabay SATA disk**

Battery - life10

Battery - type

Dimensions

Weight

Case material

Battery - type

Battery - life10

Chipset

ExpressCard

Smart Card Read

Multicard Reader

Ports

PCle Mini Card

PCle WLAN

PCle WWAN

Carrier

Modern

Bluetooth

Audio support

AudiTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip

Power-packed engineering with Open GL graphics and ISV certifications

<table>
<thead>
<tr>
<th>Security chip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trusted Platform Module, TCG 1.2-compliant</td>
</tr>
</tbody>
</table>

Fingerprint reader

AuthenTec fingerprint reader on palm rest, swipe sensor, LED indicator, Power On Authentication, supports the security chip

Limited warranty13 3-years/1-yr battery - depot repair service / service upgrades22 available

See footnotes for more detailed information

© Lenovo

(KN4W4-4) February 2013

---

Preloaded operating system10

- Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit

- Some: Windows 8 Pro 64-bit

Preloaded applications1 (only some listed)

- Windows 7 models
  - Lenovo® Message Center Plus
  - ThinkVantage Product Recovery
  - Access Connections™
  - ThinkVantage Power Manager
  - Lenovo SimpleTap
  - Adobe® Reader®
  - Corel® WinDVD® (DVD:RW)
  - Corel DVD MovieFactory® Lenovo Edition (DVD:RW)

- Windows 8 models
  - Lenovo Support
  - Lenovo Companion
  - Lenovo QuickLaunch
  - PC Device Stage
  - Cyberlink Power2Go® (DVD:RW)
  - Cyberlink PowerProducer® (DVD:RW)
  - All models
    - Lenovo Solution Center
    - Password Manager
    - ThinkVantage System Update
    - FingerPrint Software (finger print reader)
    - Lenovo Cloud Storage by SugarSync
    - Microsoft® Office preloaded; purchase a product key to activate
    - Skype™

Supports ThinkVantage technologies

170-watt AC adapter

ThinkPad Roll Cage (one-piece magnesium alloy)

EPEAT® Gold rating

ENERGY STAR® 5.0-compliant

GREENGUARD® certified

RoHS-compliant

International Warranty Service17 24 hour x 7 day18 toll-free support during the warranty period18

For compatible accessories, please go to O-W530 sheet;

For Lenovo service2 upgrade options, please go to QP-TA sheet;

For ISV certifications, please visit www.lenovo.com/support/ISV
<table>
<thead>
<tr>
<th>Type-model</th>
<th>Processor</th>
<th>Memory</th>
<th>Wide-screen display</th>
<th>Discrete graphics</th>
<th>Disk</th>
<th>SATA RAID</th>
<th>Battery</th>
<th>Power adapter</th>
<th>Preload</th>
<th>Ann date</th>
</tr>
</thead>
<tbody>
<tr>
<td>2438-5JU 7</td>
<td>i7-3740QM</td>
<td>4GBx2</td>
<td>15.6&quot; HD+</td>
<td>K1000M</td>
<td>No</td>
<td>Backlit</td>
<td>Finger print reader</td>
<td>9</td>
<td>135W IAMT vPro</td>
<td>Win7 Pro64</td>
</tr>
<tr>
<td>2438-5HU 7</td>
<td>i7-3740QM</td>
<td>4GBx2</td>
<td>15.6&quot; HD+</td>
<td>K1000M</td>
<td>No</td>
<td>Backlit</td>
<td>Finger print reader</td>
<td>9</td>
<td>135W IAMT vPro</td>
<td>Win7 Pro64</td>
</tr>
<tr>
<td>2438-5GU 7</td>
<td>i7-3740QM</td>
<td>4GBx2</td>
<td>15.6&quot; HD+</td>
<td>K1000M</td>
<td>No</td>
<td>Backlit</td>
<td>Finger print reader</td>
<td>9</td>
<td>135W IAMT vPro</td>
<td>Win7 Pro64</td>
</tr>
<tr>
<td>2438-5CU 7</td>
<td>i7-3740QM</td>
<td>8GBx1</td>
<td>15.6&quot; HD+</td>
<td>K1000M</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>2438-5EU 7</td>
<td>i7-3740QM</td>
<td>8GBx1</td>
<td>15.6&quot; HD+</td>
<td>K1000M</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>2438-5GU 7</td>
<td>i7-3740QM</td>
<td>8GBx1</td>
<td>15.6&quot; HD+</td>
<td>K1000M</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- A depot repair service 3-year limited warranty
- Power-packed engineering with Open GL graphics and ISV certifications

Preloaded operating system10
- Some: Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
- Some: Windows 8 Pro 64-bit

Preloaded applications* (only some listed)
- Windows 7 models
  - Lenovo® Message Center Plus
  - ThinkVantage Productivity
  - Access Connections™
  - ThinkVantage Power Manager
  - Lenovo SimpleTap
  - Adobe® Reader®
  - Corel® WinDVD® (DVD:RW)
  - Corel® Burn:Now™ Lenovo Edition (DVD:RW)
  - Corel® DVD MovieFactory® Lenovo Edition (DVD:RW)

- Windows 8 models
  - Lenovo Support
  - Lenovo Companion
  - Lenovo QuickLaunch
  - PC Device Stage
  - Cyberlink Power2Go (DVD:RW)
  - Cyberlink PowerProducer (DVD:RW)

- All models
  - Lenovo Solution Center
  - Password Manager
  - ThinkVantage System Update
  - FingerPrint Software (fingerprint models)
  - Lenovo Cloud Storage
  - SugarSync
  - Microsoft® Office preloaded; purchase a product key to activate
  - Skype™

Supports ThinkVantage® technologies
- 135W or 170W watt AC adapter
- ThinkPad Roll Cage (one-piece magnesium frame)
- EPEAT® Gold rating
- ENERGY STAR® 5.0-compliant
- GREENGUARD® certified
- RoHS-compliant
- International Warranty Service
- 24 hour 7 day 15 toll-free support during the warranty period

For compatible accessories, please go to O-W530 sheet;
For Lenovo service™ upgrade options, please go to GP-7A sheet;
For ISV certifications, please visit www.lenovo.com/support/ISV

See footnotes for more detailed information
## Product Specifications Reference (PSREF)

### ThinkPad W530 2441 (Optimus)

| Type-model | Processor | Memory | Wide-screen display | Discrete Graphics | Disk | SATAP | RAID | SATA | Optical | Backlit key | PCIe Mini Card/ mSATA | PCIe Mini WAN | Finger print | Battery | Global (G) | Ann Date |
|------------|-----------|--------|---------------------|------------------|------|-------|------|-------|----------|------------|-----------------|---------------|----------------|---------|-----------|---------|-----------|
| 2441-3TU   | I7-3720QM | 4GBx1  | 15.6" FHD            | K1000M           | 2x500G 7200 | No    | DVD±RW | None | Intel 6305 06/12 | None | None | None | Finger 9 | vPro G Pro | 6/12 |
| 2441-3SU   | I7-3720QM | 4GBx1  | 15.6" FHD            | K1000M           | 2x500G 7200 | No    | DVD±RW | None | Intel 6305 06/12 | None | None | None | Finger 9 | vPro G Pro | 6/12 |
| 2441-37U   | I7-3720QM | 4GBx1  | 15.6" FHD            | K2000M           | 1x500G 7200 | No    | DVD±RW | None | Intel 6305 06/12 | None | None | None | Finger 9 | vPro G Pro | 6/12 |
| 2441-36U   | I7-3720QM | 4GBx1  | 15.6" FHD            | K2000M           | 1x500G 7200 | No    | DVD±RW | None | Intel 6305 06/12 | None | None | None | Finger 9 | vPro G Pro | 6/12 |
| 2441-2GU   | I7-3720QM | 4GBx1  | 15.6" FHD            | K1000M           | 1x500G 7200 | No    | DVD±RW | None | Intel 6305 06/12 | None | None | None | Finger 9 | vPro G Pro | 6/12 |
| 2441-2GU   | I7-3720QM | 4GBx1  | 15.6" FHD            | K2000M           | 1x500G 7200 | No    | DVD±RW | None | Intel 6305 06/12 | None | None | None | Finger 9 | vPro G Pro | 6/12 |
| 2441-5LU   | I7-3740QM | 4GBx1  | 15.6" 7H8D          | K1000M           | 1x320G 7200 | No    | DVD±RW | None | Intel 6305 02/13 | None | None | None | Finger 9 | vPro G Pro | 06/12 |
| 2441-5QU   | I7-3740QM | 4GBx1  | 15.6" 7H8D          | K2000M           | 1x500G 7200 | No    | DVD±RW | None | Intel 6305 02/13 | None | None | None | Finger 9 | vPro G Pro | 06/12 |

### Positioning
- Processor: Mobile workstation; two spindles
- Intel Core™ i7-3720QM processor (4 cores, 2.60GHz, 6MB cache)
- Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz)
- Intel Turbo Boost 2.0 (3.60GHz), HT technology
- Intel Core i7-3820QM processor (4 cores, 2.70GHz, 6MB cache)
- Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.70GHz), HT technology
- Intel Core i7-3740QM processor (4 cores, 2.70GHz, 6MB cache)
- Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.80GHz), HT technology
- Intel Core i7-3840QM processor (4 cores, 2.80GHz, 8MB cache)
- Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.80GHz), HT technology

### Memory
- dual-core model: 16GB max
- quad-core model: 32GB max
- two 204-pin SO-DIMM sockets
- DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.80GHz), HT technology

### Optical Ultrabay
- SATA disk: One bay for removable drives, Ultrabay Slim-compatible, 12.7mm high, bottom access
- One slot (ExpressCard/34)

### Graphics
- NVIDIA® Quadro® K1000M or Quadro K2000M
- PCI Express® x16, 2GB memory
- Supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort
- Supports three independent displays:
  - Maximum external resolution: 3840x2160 @60Hz (DisplayPort via optional Mini DP cable); 3840x2160 @60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536 @60Hz (VGA)

### Keyboard
- TrackPoint® technology, “Press-to-Select,” Internet Scroll Bar
- Magnifying glass

### Touchpad
- ThinkPad® technology, wide touchpad below keyboard, Tap Zones, scrolling, multi-touch
- Illuminates the keyboard to improve visibility in low-light conditions

### Dimensions
- Weight: 2.81kg
- Battery - type: Lithium ion 6-cell or 9-cell

### Chipset
- Mobile Intel QM77 Express Chipset
- One slot (ExpressCard/34)
- Supports ThinkVantage® technologies

### Preloaded operating system
- Genuine Windows® 7
- Professional 64

### Ready to install applications
- Lenovo® Solution Center
- Lenovo MESSAGE CENTER Plus
- ThinkVantage Product Recovery
- Access Connections
- FingerPrint Software (fingerprint models)
- ThinkVantage System Update
- ThinkVantage Power Manager
- Lenovo Cloud Storage

### Preloaded applications
- Lenovo SimpleTap
- Microsoft® Office preloaded;
- Purchase a product key to activate
- Norton™ Internet Security 2012
- 30 days of virus definitions
- Adobe® Reader®
- Skype® for Windows
- Evernote
- Adobe® Reader®
- X-Rite®
- Pantone® Color Calibrator (color calibration models)

### License
- Lenovo Productivity Suite
- ThinkVantage® Productivity Center
- Windows® Live Essentials
- Lenovo Cloud Storage
- Lenovo Drivers and BIOS Update
- Lenovo Remote Support Kit
- Lenovo Support App

### Customer Support
- 24×7×365 hours
- 170-watt AC adapter
- ThinkPad Roll Cage (one-piece magnesium frame)
- EPEAT® Gold rating
- ENERGY STAR® 5.0-compliant
- GGREenguard® certified
- RoHS-compliant
- International Warranty Service 24 hour x 7 day x 18 tow-free support during the warranty period
- For compatible accessories, please go to O-W530 sheet
- For Lenovo service upgrade options, please go to GP-7A sheet
- For ISV certifications, please visit www.lenovo.com/support/ISV

### Limited warranty
- 3-years 1-year battery - depot repair service / service upgrades available

---

See footnotes for more detailed information

© Lenovo

(KNW4-2) February 2013
<table>
<thead>
<tr>
<th>Type-model</th>
<th>Processor</th>
<th>Memory</th>
<th>Wide-screen display</th>
<th>Discrete graphics</th>
<th>Disk</th>
<th>SATA GB</th>
<th>RAID</th>
<th>SATA connectivity</th>
<th>Backlit keyboard</th>
<th>PCIE Mini Card</th>
<th>WLAN</th>
<th>GMP</th>
<th>Intel</th>
<th>Global (G)</th>
<th>Preload</th>
<th>Ann Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>2441-45U</td>
<td>i7-3820QM</td>
<td>4GBx2</td>
<td>15.6&quot; FHD</td>
<td>None</td>
<td>K2000M</td>
<td>1x500G 7200</td>
<td>No DVD</td>
<td>None</td>
<td>None</td>
<td>Intel 6205</td>
<td>X-Rite</td>
<td>9</td>
<td>vPro</td>
<td>G</td>
<td>Win8 Pro64</td>
<td>10/12</td>
</tr>
<tr>
<td>2441-46U</td>
<td>i7-3740QM</td>
<td>4GBx2</td>
<td>15.6&quot; HD+</td>
<td>None</td>
<td>K1000M</td>
<td>1x500G 7200</td>
<td>No DVD</td>
<td>None</td>
<td>None</td>
<td>Intel 6205</td>
<td>X-Rite</td>
<td>9</td>
<td>vPro</td>
<td>G</td>
<td>Win8 Pro64</td>
<td>10/12</td>
</tr>
<tr>
<td>2441-55U</td>
<td>i7-3740QM</td>
<td>4GBx2</td>
<td>15.6&quot; HD+</td>
<td>None</td>
<td>K1000M</td>
<td>1x180G SSD</td>
<td>No DVD</td>
<td>Backlit</td>
<td>None</td>
<td>Intel 6205</td>
<td>X-Rite</td>
<td>9</td>
<td>vPro</td>
<td>G</td>
<td>Win7 Pro64</td>
<td>02/13</td>
</tr>
<tr>
<td>2441-55U</td>
<td>i7-3740QM</td>
<td>4GBx2</td>
<td>15.6&quot; HD+</td>
<td>None</td>
<td>K1000M</td>
<td>1x240G FSE SSD</td>
<td>No DVD</td>
<td>Backlit</td>
<td>None</td>
<td>Intel 6205</td>
<td>X-Rite</td>
<td>9</td>
<td>vPro</td>
<td>G</td>
<td>Win7 Pro64</td>
<td>02/13</td>
</tr>
<tr>
<td>2441-55U</td>
<td>i7-3740QM</td>
<td>4GBx2</td>
<td>15.6&quot; HD+</td>
<td>None</td>
<td>K1000M</td>
<td>2x500G 7200</td>
<td>1</td>
<td>None</td>
<td>Backlit</td>
<td>Intel 6205</td>
<td>X-Rite</td>
<td>9</td>
<td>vPro</td>
<td>G</td>
<td>Win7 Pro64</td>
<td>02/13</td>
</tr>
<tr>
<td>2441-55U</td>
<td>i7-3740QM</td>
<td>4GBx2</td>
<td>15.6&quot; HD+</td>
<td>None</td>
<td>K1000M</td>
<td>2x500G 7200</td>
<td>0</td>
<td>None</td>
<td>Backlit</td>
<td>Intel 6205</td>
<td>X-Rite</td>
<td>9</td>
<td>vPro</td>
<td>G</td>
<td>Win7 Pro64</td>
<td>02/13</td>
</tr>
</tbody>
</table>

- A depot repair service 3-year limited warranty
- Power-pushed engineering with Open GL graphics and ISV certifications

Preloaded operating system:
- Some: Windows 7 Professional 64-bit preinstalled through downgrade rights in Windows 8 Pro 64-bit
- Some: Windows 8 Pro 64-bit

Preloaded applications:
- Windows 7 models
  - Lenovo® Message Center Plus
  - ThinkVantage Product Recovery
  - Access Connections™
  - ThinkVantage Power Manager
  - Lenovo SimpleTap
  - Adobe® Reader
  - Corel® WinDVD® (DVD:RW)
  - Corel DVD MovieFactory® Lenovo Edition (DVD:RW)
- Windows 8 models
  - Lenovo Support
  - Lenovo Companion
  - Lenovo QuickLaunch
  - PC Device Stage
  - Cyberlink PowerGo (DVD:RW)
  - Cyberlink PowerProducer (DVD:RW)
- All models
  - Lenovo Solution Center
  - Password Manager
  - ThinkVantage System Update
  - FingerPrint Software (fingerprint device)
  - Lenovo Cloud Storage by SugarSync
  - Microsoft® Office preloaded; purchase a product key to activate
  - Norton™ Internet Security (30 days of virus definitions)
  - Skype™

For Lenovo service, go to O-W530 sheet; for compatible accessories, please go to QP-TA sheet; for ISV certifications, please visit www.lenovo.com/support/ISV

Supports ThinkVantage technologies

- 170-watt AC adapter
- ThinkPad Roll Cage (one-piece magnesium frame)
- EPEAT® Gold rating
- ENERGY STAR® 5.0-compliant
- GREENGUARD® certified
- RoHS-compliant
- International Warranty Service
  - 24 hour x 7 day x 365 day toll-free support during the warranty period

For compatible accessories, please go to O-W530 sheet.
For Lenovo service upgrade options, please go to QP-TA sheet.
For ISV certifications, please visit www.lenovo.com/support/ISV

See footnotes for more detailed information

© Lenovo (KN4W-5) February 2013
Positioning

- Mobile workstation; two spindles

Processor

- Intel® Core™ i7-3720QM processor (4 cores, 2.60GHz, 6MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology
- Intel Core® i7-3820QM processor (4 cores, 2.80GHz, 8MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.80GHz), HT technology
- Intel Core® i7-3840QM processor (4 cores, 2.60GHz, 8MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.80GHz), HT technology

Memory

- dual-core model: 16GB max, two 204-pin SO-DIMM sockets
- quad-core model: 32GB max, four 204-pin SO-DIMM sockets

Optical drive

- DVD±RW None Intel 6300 Finger None

Fingerprint reader

- Intel 6205 Finger None

Software

- Preloaded operating system®
  - Genuine Windows® 7 Professional 64

- Ready to install applications® (only some listed)
  - Rescue and Recovery™
  - Password Manager

- Preloaded applications® (only some listed)
  - Lenovo® Solution Center
  - Lenovo Message Center Plus
  - ThinkVantage Product Recovery
  - Access Connections™
  - FingerPrint Software (fingerprint models)
  - ThinkVantage System Update
  - ThinkVantage Power Manager
  - Lenovo Cloud Storage by SugarSync
  - Lenovo SimpleTap
  - Microsoft® Office preloaded; purchase a product key to activate
  - Norton™ Internet Security 2012 (30 days of virus definitions)
  - Adobe® Reader®
  - Skype™ for Windows
  - Evernote®
  - Intel Small Business Advantage
  - RapidBoot HDD Accelerator
  - Symantec™ VIP
  - Windows Live™ Essentials
  - Corel® WinDVD® (DVD±RW)
  - Corel Burn.Now™ Lenovo Edition (DVDS®)
  - Corel DVD MovieFactory® Lenovo Edition (DVDS±RW)
  - X-Rite® Pantone® Color Calibrator (color calibration models)

Chipset

- Mobile Intel GM77 Express Chipset

Supports ThinkVantage® technologies

- 170-watt AC adapter
- ThinkPad Roll Cage (one-piece magnesium frame)
- PEAT® Gold rating
- ENERGY STAR® 5.0-compliant
- GREENGUARD® certified
- RoHS-compliant
- International Warranty Service for 24 hour x 7 day 18 toll-free support during the warranty period

For compatible accessories, please go to O-W530 sheet;
For Lenovo service® upgrade options, please go to OP-TPA sheet;
For ISV certifications, please visit www.lenovo.com/support/ISV
### ThinkPad W530 2447 (Optimus) - Onsite (Windows 8)

<table>
<thead>
<tr>
<th>Type-model</th>
<th>Processor</th>
<th>Memory</th>
<th>Wide-screen display</th>
<th>Discrete Graphics</th>
<th>Disk SATA</th>
<th>Gbps</th>
<th>RAID</th>
<th>SATA optical</th>
<th>Backlit keyboard</th>
<th>PCIe Mini Card</th>
<th>WLAN</th>
<th>Color Calibration</th>
<th>Battery cells/Pro</th>
<th>Global (G)</th>
<th>Preload</th>
<th>Ann Date (mm/yy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2447-4SU</td>
<td>i7-3720QM</td>
<td>4GBx1</td>
<td>15.6&quot; HD+</td>
<td>NVIDIA K1000M</td>
<td>K1000M</td>
<td>1x500G</td>
<td>7200</td>
<td>No</td>
<td>DVD±RW</td>
<td>None</td>
<td>Intel 6205™ X-Rite</td>
<td>9</td>
<td>vPro</td>
<td>G</td>
<td>P</td>
<td>Win8 Pro64 10/12</td>
</tr>
<tr>
<td>2447-46U</td>
<td>i7-3840QM</td>
<td>4GBx2</td>
<td>15.6&quot; FHD</td>
<td>NVIDIA K1000M</td>
<td>K2000M</td>
<td>1x500G</td>
<td>7200</td>
<td>No</td>
<td>DVD±RW</td>
<td>None</td>
<td>Intel 6205™ X-Rite</td>
<td>9</td>
<td>vPro</td>
<td>G</td>
<td>P</td>
<td>Win8 Pro64 10/12</td>
</tr>
<tr>
<td>2447-4ZU</td>
<td>i7-3740QM</td>
<td>4GBx2</td>
<td>15.6&quot; HD+</td>
<td>NVIDIA K1000M</td>
<td>K1000M</td>
<td>1x500G</td>
<td>7200</td>
<td>No</td>
<td>DVD±RW</td>
<td>Backlit</td>
<td>Intel 6205 None</td>
<td>9</td>
<td>vPro</td>
<td>G</td>
<td>P</td>
<td>Win7 Pro64 02/13</td>
</tr>
<tr>
<td>2447-4YU</td>
<td>i7-3840QM</td>
<td>4GBx2</td>
<td>15.6&quot; FHD</td>
<td>NVIDIA K1000M</td>
<td>K1000M</td>
<td>1x240G</td>
<td>FDE SSD</td>
<td>No</td>
<td>DVD±RW</td>
<td>None</td>
<td>Intel 6205 None</td>
<td>9</td>
<td>vPro</td>
<td>G</td>
<td>P</td>
<td>Win7 Pro64 02/13</td>
</tr>
<tr>
<td>2447-4XU</td>
<td>i7-3740QM</td>
<td>4GBx2</td>
<td>15.6&quot; HD+</td>
<td>NVIDIA K1000M</td>
<td>K1000M</td>
<td>2x500G</td>
<td>7200</td>
<td>None</td>
<td>None</td>
<td>Backlit</td>
<td>Intel 6205 None</td>
<td>9</td>
<td>vPro</td>
<td>G</td>
<td>P</td>
<td>Win8 Pro64 05/13</td>
</tr>
<tr>
<td>2447-5GU</td>
<td>i7-3840QM</td>
<td>4GBx2</td>
<td>15.6&quot; HD+</td>
<td>NVIDIA K1000M</td>
<td>K1000M</td>
<td>2x500G</td>
<td>7200</td>
<td>No</td>
<td>DVD±RW</td>
<td>None</td>
<td>Intel 6205 None</td>
<td>9</td>
<td>vPro</td>
<td>G</td>
<td>P</td>
<td>Win8 Pro64 05/13</td>
</tr>
<tr>
<td>2447-56U</td>
<td>i7-3820QM</td>
<td>4GBx2</td>
<td>15.6&quot; FHD</td>
<td>NVIDIA K2000M</td>
<td>K2000M</td>
<td>1x500G</td>
<td>7200</td>
<td>No</td>
<td>DVD±RW</td>
<td>None</td>
<td>Intel 6205 None</td>
<td>9</td>
<td>vPro</td>
<td>G</td>
<td>P</td>
<td>Win8 Pro64 05/13</td>
</tr>
</tbody>
</table>

### Preloaded operating system
- **Some**: Windows® 7 Professional 64-bit preinstalled through downgrade rights in Windows 8 Pro 64-bit
- **Some**: Windows 8 Pro 64-bit

### Preloaded applications
- **Some**: only some listed
  - **Windows 7 models**
    - Lenovo Message Center Plus
    - ThinkVantage Product Recovery
    - Access Connections™
    - ThinkVantage Power Manager
    - Lenovo SimpleTap
    - Adobe® Reader
    - Corel® WinDVD® (DVD±RW)
    - Corel Burn,Now™ Lenovo Edition (DVD±RW)
    - Corel DVD MovieFactory® Lenovo Edition (DVD±RW)
  - **Windows 8 models**
    - Lenovo Support
    - Lenovo Companion
    - Lenovo QuickLaunch
    - PC Device Stage
    - Cyberlink Power2Go (DVD±RW)
    - Cyberlink PowerProducer
  - **All models**
    - Lenovo Solution Center
    - Password Manager
    - ThinkVantage System Update
    - Fingerprint Software (fingerprint models)
    - Lenovo Cloud Storage by SugarSync
    - Microsoft® Office preloaded: purchase a product key to activate
    - Norton™ Internet Security (30 days of virus definitions)
    - Skype®

### Chipset
- Mobile Intel® QM77 Express Chipset
- Supports ThinkVantage® technologies

### Product Specifications Reference (PSREF)
- 170-watt AC adapter
- ThinkPad Roll Cage (one-piece magnesium frame) EPEAT® Gold rating
- ENERGY STAR® 5.0-compliant GREENGUARD® certified RoHS-compliant
- International Warranty Service 24 hour x 7 day toll-free support during the warranty period

### For compatible accessories, please go to O-W530 sheet.
- For Lenovo service upgrade options, please go to QP-7A sheet.
- For ISV certifications, please visit www.lenovo.com/support/ISV

---

**Type-model**: 2447-4SU, 2447-46U, 2447-4ZU, 2447-4YU, 2447-4XU, 2447-5GU, 2447-56U, 2447-58U, 2447-5GU, 2447-5SU, 2447-5FU

**Processor**: Intel® Core™ i7-3720QM processor (4 cores, 2.60GHz, 6MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.60GHz), HT technology

**Memory**: dual-core model: 16GB max, two 204-pin SO-DIMM sockets

**Optical drive**: Some: DVD burner, 12.7mm Ultrabay Enhanced, removable

**Wide-screen display**: 15.6" (396mm) HD+ (1600x900) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 50:1 contrast ratio, 60% Gamut

**Graphics**: NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA Quadro® K1000M or K2000M, PCI Express® x16, 2GB memory, supports external analog monitor via VGA DB-15 and digital monitor via Mini DisplayPort; supports three independent displays; Maximum external resolution: 3840x2160@60Hz (DisplayPort via optional Mini DP cable); 1920x1080@60Hz (single-link DVI-I via optional Mini DP cable); 2048x1536@85Hz (VGA)

**Battery**: lithium ion 6-cell or 9-cell, supports optional Slice battery as 2nd battery, HW Authentication 6-cell (57Whr) up to 7.7 hr, 9-cell (94Whr) up to 12.8 hr, 9-cell plus 9-cell Slice battery (94Whr, 0A36304) up to 25.6 hr

---

**See footnotes for more detailed information**

© Lenovo (KN4W-6) May 2013
ThinkPad W530 Accessories

Product Specifications Reference (PSREF)

Memory
2GB PC3-12800 DDR3 SODIMM 0A65722 ann 06/05/12
4GB PC3-12800 DDR3 SODIMM 0A65723 ann 06/05/12
8GB PC3-12800 DDR3 SODIMM 0A65724 ann 06/05/12

Ultrasound Enhanced 12.7mm
Serial ATA Hard Drive 12.7mm Bay Adapter III 0A65623 ann 02/28/12
DVD Burner Ultrasound Enhanced Drive III 0A65625 ann 06/05/12

Storage and removable storage
ThinkPad 16GB mSATA Solid State Cache Drive 0B47309 ann 12/11/12
500GB 7200rpm SATA 3.0Gb/s 7mm 4K HDD 0A65631 ann 06/05/12
1TB 5400rpm SATA 3.0Gb/s 9.5mm 4K HDD 0A65633 ann 06/05/12
320GB 7200rpm SATA 3.0Gb/s 7mm 4K HDD 0A65635 ann 06/05/12
320GB 7200rpm SATA 3.0Gb/s 7mm 4K HDD 0A65636 ann 08/21/12
Self Encrypting (SED) OPAL Capable SSD 0A65638 ann 08/21/12
128GB SATA 6.0Gb/s 7mm Solid State Drive 0A65629 ann 06/05/12
180GB SATA 6.0Gb/s 7mm Solid State Drive 0A65630 ann 06/05/12
256GB 2.5" SATA 6.0Gb/s OPAL-capable SSD 0A65620 ann 06/05/12

Wireless WAN (Mini PCI Express)

ThinkPad Expansion
ThinkPad Gobi
Only WWAN upgradable models:

ThinkPad Business Topload Case 43R2476 ann 05/13/08
ThinkPad Business Backpack 43R2482 ann 05/13/08
ThinkPad Deluxe Expander Case 43R2478 ann 05/13/08
ThinkPad Executive Leather Case 43R2480 ann 05/13/08
Lenovo Sport Backpack - Red 0B47309 ann 08/28/12
Lenovo Sport Backpack - Grey 0B47301 ann 08/28/12
Lenovo Sport Slimcase - Grey 0B47303 ann 08/28/12
Lenovo Sport Messenger - Grey 0B47302 ann 08/28/12

Batteries
ThinkPad Battery 70+ (6-cell) 0A36302 ann 06/05/12
ThinkPad Battery 70++ (9-cell) 0A36303 ann 06/05/12
ThinkPad Battery 28++ (9 cell, slice) 0A36304 ann 06/05/12

ThinkPad External Battery Charger 40Y7625 ann 09/20/05

To be used along with system battery for all-day computing:
- Attaches under ThinkPad using docking connector (not supported when using ThinkPad Mini Dock Plus Series 3 w/ USB 3.0 - 170W 433835U)

More information at www.lenovo.com/allldaycomputing

More info at www.lenovo.com/support/poweradapters

Carrying Cases
Up to 15.6" widescreen models:
Lenovo Messenger Max. 41U5253 ann 05/01/07
Lenovo Performance Backpack 41U5254 ann 05/01/07

More information at www.lenovo.com/support/cases

Monitor Accessories
ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D) 2448MB6 ann 09/13/11
ThinkVision L2251x Wide 22" (VGA, DP, DVI-D) 2578MB6 ann 10/20/09

DisplayPort cable is not included.

ThinkVision LT1421 Wide 14" Mobile Monitor with Protective Screen Cover (USB 2.0)
1452S6 ann 08/16/11
ThinkVision LT1421 Wide 14" Mobile Monitor with Protective Case (USB 2.0)
1452D6 ann 08/16/11

More information at www.lenovo.com/support/monitors
www.lenovo.com/support/thinkpad/optimus-monitors

Modular Hard Disk Series 3 w/ USB 3.0 - 170W

ThinkPad Gobi™ 3000 Mobile Broadband 0A36185 ann 04/12/11

Lenovo Essential Notebook Stand 45J9292 ann 05/12/09
TP Mini Dock Plus Series 3 w/ USB 3.0 - 170W 433835U ann 06/05/12

Keyboard
TrackPoint Cap Collection 73P2698 ann 12/16/03
Ultraslim Plus Wireless Keyboard and Mouse 0A34032 ann 04/05/11
USB Numeric Keypad 33L3225 ann 06/21/05
Preferred Pro USB Keyboard 73P4730 ann 02/22/05
Lenovo USB Keyboard with TrackPoint 51J0135 ann 03/24/09


d2Wired via 2.4GHz technology using a micro-size USB receiver.

Mouse
Lenovo Optical Mouse (USB) 06P4069 ann 05/21/03
Lenovo Laser Mouse (USB) 41U3074 ann 01/23/07
ThinkPad USB Laser Mouse 57Y4635 ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical) 31P7405 ann 08/27/02
ThinkPad Travel Mouse (USB, Optical) 31P7410 ann 06/04/02
ThinkPad Bluetooth Laser Mouse 0A36407 ann 06/26/12
Lenovo Wireless Laser Mouse 51J0135 ann 03/24/09

Multimedia
ThinkPad In-Ear Headphones with microphone 57Y4488 ann 01/07/10

Modem
USB 2.0 Lenovo Modem 43R1814 ann 02/26/08

Security
3M 15.6% Privacy Filter from Lenovo 0A64772 ann 04/05/11
Kensington® MicroSaver® Cable Lock 73P2582 ann 02/21/06
Kensington Twin Head Cable Lock 45K1620 ann 09/30/08
Lenovo Security Cable Lock 57Y4303 ann 08/24/10
USB Gemplus GemPC Smart Card Reader 41N3040 ann 02/21/06

© Lenovo

(O-W530) June 2012