Product Specifications Reference
Lenovo® ThinkPad® Tablets/Convertibles
2014 to present - withdrawn

July 2014 - Version 457 (Western Europe)
Summary of Changes

This section describes the withdrawn products which are added in this edition and in previous editions.

July 30, 2014 - Version 457

► Withdrawn product(s)

ThinkPad Twist S230u are withdrawn and added in the book
ThinkPad Twist S230u

Lenovo® ThinkPad Twist S230u (Tent Mode)

Lenovo® ThinkPad Twist S230u (Tablet Mode)

Lenovo® ThinkPad Twist S230u (Notebook Mode)

Lenovo® ThinkPad Twist S230u (Stand Mode)
**ThinkPad Twist S230u (3347) - TopSeller**

**Positioning**
- Convertible tablet, one spindle

**Processor**
- Intel® Core™ i3-2375M processor (2 cores, 1.50GHz, 3MB cache), Intel HD Graphics 3000

**Memory**
- 2G / PC3-10600 1333MHz DDR3 / soldered to system board, no SO-DIMM sockets

**Optical**
- None

**SATA disk**
- None

**mSATA™ SSD**
- 16GB mSATA Solid State Drive (SSD), via PCIe Mini Card slot

**Widescreen display**
- 12.5" (317.5mm) HD (1366x768) TFT color. Smudgeless and anti-reflective display with Corning® Gorilla® Glass, LED backlight, 350 nits, 16:9 aspect ratio, 500:1 contrast ratio, IPS, rotate and swivel hinge

**Multitouch Camera**
- Projected Capacitive Touch (PCT) technology, supports 5-point multi-touch

**Graphics**
- Intel HD Graphics 3000 in processor

**Keyboard**
- 6-row, 83-key, spill-resistant, multimedia Fn keys

**TrackPoint®**
- TrackPoint pointing device

**Touchpad**
- UltraNav™, buttonless touchpad below keyboard, Tap Zones, multi-touch

**Light sensor**
- Ambient light sensor

**ThinkLight™**
- None

**Dimensions**
- 8-cell: 12.32" x 9.29" x 0.79"; 313mm x 236mm x 20mm

**Weight**
- 8-cell: from 3.50 lb (1.60kg)

**Battery- type**
- Integrated Li-Polymer 8-cell, HW Authentication

**Battery extended**
- None

**Battery- life**
- 8-cell (42.4Whr): up to 6.0 hr

**Chipset**
- Mobile Intel HM77 Express Chipset

**Multicard Reader**
- 4-in-1 reader (SD, SDHC, SDXC, MMC)

**ExpressCard Read**
- None

**Modem**
- None

**Bluetooth™**
- Bluetooth 4.0 wireless, integrated in WLAN PCIe Half Mini Card

**Ethernet**
- Gigabit Network Connection Realtek® RTL8111F PHY, PCIe x1

**Intel AMT**
- None

**Audio support**
- High Definition (HD) Audio, Realtek ALC3202 codec / stereo speakers, 2 watt x 2, Dolby® Home Theater® v4 certified / volume up, down, mute buttons / dual array microphone, combo audio/mic jack

**Security**
- Power-on password, hard disk password, supervisor password, security keyhole

**Security chip**
- Trusted Platform Module, TCG 1.2-compliant

**Fingerprint reader**
- None

**Limited warranty**
- 1-year - depot repair service / service upgrades available

See footnotes for more detailed information

© Lenovo

WE model(s) announced January 1, 2013

(G-TANR1-2) January 2013
### ThinkPad Twist S230u (3347) - TopSeller (Ultrabook)

**Product Specifications Reference (PSREF)**

<table>
<thead>
<tr>
<th>Type-model</th>
<th>Processor</th>
<th>Memory</th>
<th>Widescreen display</th>
<th>Camera</th>
<th>Disk SATA</th>
<th>PCle Mini Card</th>
<th>PCle Mini Card WWAN/ mSATA</th>
<th>SIM card</th>
<th>Top color</th>
<th>Bluetooth cells</th>
<th>Preload</th>
<th>Ann date (mm/yy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3347-29G</td>
<td>i7-3517U</td>
<td>8GB</td>
<td>12.5&quot; HD Multi</td>
<td>720p</td>
<td>128G SSD</td>
<td>Intel 2230</td>
<td>Ericsson</td>
<td>Selectable</td>
<td>Black</td>
<td>BT</td>
<td>8</td>
<td>Win8 Pro64 10/12</td>
</tr>
<tr>
<td>3347-28G</td>
<td>i7-3517U</td>
<td>8GB</td>
<td>12.5&quot; HD Multi</td>
<td>720p</td>
<td>128G SSD</td>
<td>Intel 2230</td>
<td>Ericsson</td>
<td>Selectable</td>
<td>Black</td>
<td>BT</td>
<td>8</td>
<td>Win8 Pro64 10/12</td>
</tr>
<tr>
<td>3347-27G</td>
<td>i5-3317U</td>
<td>4GB</td>
<td>12.5&quot; HD Multi</td>
<td>720p</td>
<td>500G 7200</td>
<td>Intel 2230</td>
<td>24GB</td>
<td>None</td>
<td>Black</td>
<td>BT</td>
<td>8</td>
<td>Win8 Pro64 10/12</td>
</tr>
<tr>
<td>3347-26G</td>
<td>i5-3317U</td>
<td>4GB</td>
<td>12.5&quot; HD Multi</td>
<td>720p</td>
<td>500G 7200</td>
<td>Intel 2230</td>
<td>24GB</td>
<td>None</td>
<td>Black</td>
<td>BT</td>
<td>8</td>
<td>Win8 Pro64 10/12</td>
</tr>
<tr>
<td>3347-4PG</td>
<td>i3-3217U</td>
<td>4GB</td>
<td>12.5&quot; HD Multi</td>
<td>720p</td>
<td>320G 7200</td>
<td>Intel 2230</td>
<td>24GB</td>
<td>None</td>
<td>Black</td>
<td>BT</td>
<td>8</td>
<td>Win8 Pro64 12/12</td>
</tr>
<tr>
<td>3347-4NG</td>
<td>i3-3217U</td>
<td>4GB</td>
<td>12.5&quot; HD Multi</td>
<td>720p</td>
<td>320G 7200</td>
<td>Intel 2230</td>
<td>24GB</td>
<td>None</td>
<td>Black</td>
<td>BT</td>
<td>8</td>
<td>Win8 Pro64 12/12</td>
</tr>
<tr>
<td>3347-8TG</td>
<td>i3-3217U</td>
<td>4GB</td>
<td>12.5&quot; HD Multi</td>
<td>720p</td>
<td>128G SSD</td>
<td>Intel 2230</td>
<td>Ericsson</td>
<td>Selectable</td>
<td>Black</td>
<td>BT</td>
<td>8</td>
<td>Win8 Pro64 08/13</td>
</tr>
</tbody>
</table>

- Small and medium business (SMB) model(s), part of the WE TopSeller™ Program
- A depot repair service 1-year limited warranty

#### Preloaded operating system
- Some: Windows® 8 64-bit
- Some: Windows® 8 Pro 64-bit

#### Preloaded applications
- Lenovo Support
- Lenovo Companion
- Lenovo Cloud Storage
- Password Manager
- Fingerprint Software (fingerprint models)
- ThinkVantage System Update
- Norton™ Internet Security
- (30 days of virus definitions)
- Microsoft Office preloaded;
- purchase a product key to activate
- Skype™

---

**Positioning**

**Processor**

- Convertible tablet ultrabook: one spindle
- Intel® Core™ i3-3217U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology
- Intel Core i5-3317U processor (2 cores, 1.70GHz, 3MB Cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology
- Intel Core i7-3517U processor (2 cores, 1.90GHz, 4MB Cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.00GHz), HT technology

---

**Memory**

- 4GB or 8GB / PC3-10600 1333MHz DDR3 / soldered to systemboard, no SO-DIMM sockets

---

**Optical SATA disk**

- None
- Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high
- Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™

**mSATA™ SSD**

- All: removable, upgradable
- Some: 24GB mSATA Solid State Drive (SSD), via PCIe Mini Card slot

---

**Widescreen display**

- 12.5" (317.5mm) HD (1366x768) TFT color.
- Smudgeless and anti-reflective display with Corning® Gorilla® Glass,
- LED backlight, 350 nits, 16:9 aspect ratio, 500:1 contrast ratio, IPS, rotate and swivel hinge
- Buttons: volume up / down and Windows buttons
- Side buttons: power and auto rotation buttons

**Multi-touch Camera**

- Projected Capacitive Touch (PCT) technology, supports 5-point multi-touch
- HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus

---

**Graphics**

- Intel HD Graphics 4000 in processor.
- Supports external digital monitor via Mini HDMI and Mini DisplayPort;
- Supports dual independent display;
- Maximum external resolution: 2560x1600 (Mini DisplayPort) @60Hz;
- 1920x1200 (Mini HDMI) @60Hz

---

**Keyboard**

- 6-row, 83-key, spill-resistant, multimedia Fn keys
- TrackPoint®: TrackPoint pointing device
- Touchpad: UltraNav™, buttonless touchpad below keyboard, Tap Zones, multi-touch
- Light sensor: Ambient light sensor
- ThinkLight™: None

---

**Dimensions**

- 8-cell: 12.32" x 9.29" x 0.79; 313mm x 236mm x 20mm
- 8-cell: from 3.50 lb (1.60kg)

---

**Weight**

- Display cover: Magnesium + Polyphenylene sulfide (PPS);
- Bottom: Magnesium + PPS
- Integrated Li-Polymer 8-cell, HW Authentication
- Battery - type: PCle Mini Card slot
- Battery - life: up to 24.4hr

---

**Chipset**

- Mobile Intel HM77 Express Chipset
- 4-in-1 reader (SD, SDHC, SDXC, MMC)

---

**Smart Card Reader**

- None
- Card Reader: None
- Ports: Two USB 3.0, external monitor (mini-HDMI, mini-DisplayPort), ethernet (RJ-45)

---

**PCle Mini Card**

- Two PCIe Express Mini Card slots
- PCle WLAN: 11b/g/n, PCle Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2,
- Wi-Fi + BT combo adapter
- PCle WWAN: Some: Wireless WAN, Ericsson® HS321gw Mobile Broadband Module, PCle Half Mini Card, GPRS/WDMA/HSPA/HSPA+, GPS
- SIM card: Some: User selectable, contract required with service provider
- Modem: None
- Bluetooth™: Bluetooth 4.0 wireless, integrated in WLAN PCle Half Mini Card
- Ethernet: Gigabit Network Connection Realtek® RTL8111F, PHY, PCIe x1
- Intel AMT: None
- Audio support: High Definition (HD) Audio, Realtek ALC3202 codec /
- stereo speakers, 2 watt x 2, Dolby® Home Theater v4 certified /
- volume up, down, mute buttons / dual array microphone, combo audio/mic jack
- Security: Power-on password, hard disk password, supervisor password, security keyhole
- Security chip: Trusted Platform Module, TCG 1.2-compliant
- Fingerprint reader: None

---

**Limited warranty**

- 1-year limited warranty
- Depot repair service / service upgrades available

---

See footnotes for more detailed information

© Lenovo

WE model(s) announced October 23 or December 4, 2012; August 20, 2013

(G-TANR1-1) August 2013

---

**Ann date (mm/yy)**

- 2012
- 2013

---

**Footnotes**

- Some: Windows® 8 64-bit
- Some: Windows® 8 Pro 64-bit

---

**Supported Technologies**

- 65-watt AC Adapter
- 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