

COMPARISON OF 15-INCH CLASS NOTEBOOKS

We compared a Dell™ XPS™ 15 notebook with other 15-inch-class notebooks. These include devices from Acer®, Apple®, ASUS®, HP, Lenovo®, and Toshiba®. Figures 1 through 4 compare the systems using publically available data at each vendor’s respective website. We gathered this data on 05/23/2016 at the links provided. Dell provided us with information about the Dell XPS 15 notebook.

According to vendor-provided data for these notebooks, the new Dell XPS 15:

- has the longest battery life of any 15-inch notebook¹
- is the smallest 15.6-inch notebook
- has a 5.4 percent smaller footprint than the MacBook Pro® with Retina® Display (15-inch)²
- is the lightest performance-class 15-inch notebook³

| Brand | Model | Battery info | Battery life claims |
|-------|--|-----------------------------|--|
| Dell | XPS 15 | 6 cell Lithium Ion 84Wh | 17 hours |
| Acer | Aspire E1 (E1-532-4629) (E1-532-2635) | 4 cell Lithium Ion 2500 mAh | 4 hours |
| Acer | Aspire E1 (E1-572-6484) | 4 cell Lithium Ion 2500 mAh | 4 hours |
| Acer | Aspire E (E5-521-435W) (E5-521-8948) | 6 cell Lithium Ion 2500 mAh | Notebook Check claims 7 hour 7 minutes while web surfing |
| Acer | Aspire E (E5-531P-P3Z4) | 6 cell Lithium Ion 4700 mAh | SuperBiiz claims 7 hours |
| Acer | Aspire E (E5-531-C01E) (E5-531-P4SQ) | 6 cell Lithium Ion 2500 mAh | SpecOut claims 7 hours |

¹ Fujitsu claims an 18-hour battery life for one of their notebooks, but uses a 7-year-old benchmark as a battery life test. This is significant enough that we believe their data is inaccurate, and have thus excluded it from this report.

² Used in this report, the term “footprint” refers to the total surface area of the notebook.

³ Used in this report, the term “performance-class” refers to having similar processors and similar discrete graphics cards.



| Brand | Model | Battery info | Battery life claims |
|-------|---|-----------------------------|---|
| Acer | Aspire E (E5-571P-30QR) | 6 cell Lithium Ion 5000 mAh | 7 hours |
| Acer | Aspire E (E5-571-30F1) | 6 cell Lithium Ion 2500 mAh | SuperBiiz claims 7 hours |
| Acer | Aspire E (E5-511-C33M) | 6 cell Lithium Ion 4700 mAh | PepTec Supply claims 7 hours |
| Acer | Aspire E (E5-573-5653) | 4 cell Lithium Ion 2500 mAh | No official claim No 3rd party claims |
| Acer | Aspire E (E5-532-C7AU) (E5-532-C0K3) (E5-532-C1PC) (E5-532-C9YY) (E5-532-C7K4) (E5-532-C5BS) (E5-573-754K) (E5-573-3970) (E5-573-30CW) (E5-573-395Q) (E5-573-52US) (E5-573-39K5) (E5-573T-59RC) | 4 cell Lithium Ion 2500 mAh | 5 hours |
| Acer | Aspire E (E5-532-P3D4) (E5-532-P40H) (E5-574-53QS) (E5-574-58JM) (E5-573-35JA) (E5-573-50PS) (E5-573-P0DP) (E5-573T-57FZ) | 4 cell Lithium Ion 2520 mAh | No official claim. No 3rd party claim found. |

| Brand | Model | Battery info | Battery life claims |
|-------|--|-----------------------------|--|
| Acer | Aspire E (E5-574G-71WB) (E5-574G-52QU) (E5-573G-79HX) | 4 cell Lithium Ion 2520 mAh | Amazon claims 6 hours |
| Acer | Aspire E (E5-575G-53VG) | 6 cell Lithium Ion 2800 mAh | TeraDataRiver claims 8 hours (Laptop Mag Battery Test) |
| Acer | Aspire E (E5-575G-52RJ) | 4-cell Lithium Ion 2800 mAh | No official claim. No 3rd party claim found. |
| Acer | Aspire E (ES1-512-25TP) (ES1-512-C1DW) (ES1-512-P18H) (ES1-512-C4DW) (ES1-512-C5S4) (ES1-512-C1W0) (ES1-512-P7TZ) | 3 cell Lithium Ion 3220 mAh | 7 hours |
| Acer | Aspire ES (ES1-521-266Z) | 3 cell Lithium Ion 3500 mAh | No official claim No 3rd party claims |
| Acer | Aspire ES (ES1-531-P0JJ) (ES1-531-C2KX) | 3 cell Lithium Ion 3490 mAh | 6 hours |
| Acer | Aspire ES (ES1-571-C7N9) (ES1-571-P1MG) (ES1-571-33BQ) (ES1-571-C4E2) (ES1-571-30XX) | 3 cell Lithium Ion 3220 mAh | 5 hours |
| Acer | Aspire ES (ES1-572-357C) | 4 cell Lithium Ion 3220 mAh | 6.5 hours |
| Acer | Aspire F 15 (F5-571T-569T) (F5-571T-58AL) (F5-571T-783Z) | 4 cell Lithium Ion 2520 mAh | PC Verge claims 6 hours |

| Brand | Model | Battery info | Battery life claims |
|-------|---|-----------------------------|---|
| Acer | Aspire F 15 (F5-572-57T8) (F5-572-74DZ) | 4 cell Lithium Ion 2520 mAh | No official claim www.laptopsuggest.com= 6.5 hours |
| Acer | Aspire F 15 (F5-573-505W) | 4 cell Lithium Ion 2800 mAh | No official claim. No 3rd party claim found. |
| Acer | Aspire R7 (R7-572-5893) | 4 cell Lithium Ion 3560 mAh | 5.5 hours |
| Acer | Aspire V (V3-572-75D2) | 6 cell Lithium Ion 5000 mAh | BuyDig.com claims 7 hours |
| Acer | Aspire V (V3-572PG-546C) | 6 cell Lithium Ion 4700 mAh | No official claim No 3rd party claims |
| Acer | Aspire V 15 (V3-575G-57CN) | 4 cell Lithium Ion 2000 mAh | No official claim No 3rd party claims |
| Acer | Aspire V 15 (V3-574TG-749V) | 4 cell Lithium Ion 2500 mAh | 5 hours |
| Acer | Aspire V 15 (V3-575-57MJ) | 4 cell Lithium Ion 2520 mAh | No official claim No 3rd party claims |
| Acer | Aspire V 15 (V3-575T-53BP) (V3-575T-71U5) (V3-575-51A0) | 4 cell Lithium Ion 2520 mAh | 6 hours |
| Acer | Aspire V 15 (V3-575-50TD) | 4 cell Lithium Ion 2500 mAh | 5 hours |
| Acer | Aspire V 15 (V5-591G-57GW) | 6 cell Lithium Ion 5040 mAh | No official claim No 3rd party claims |
| Acer | Aspire V 15 (V5-591G-50MJ) | 6 cell Lithium Ion 5040 mAh | No official claim No 3rd party claims |
| Acer | Aspire V 15 (V5-591G-75KE) | 6 cell Lithium Ion 5040 mAh | No official claim No 3rd party claims |
| Acer | Aspire V Nitro (VN7-571-72LE) (VN7-571-74D1) | 3-cell 4605 mAh Lithium Ion | No official claim www.frys.com= 8 hours |

| Brand | Model | Battery info | Battery life claims |
|-------|---|----------------------------------|--|
| Acer | Aspire V Nitro (VN7-571G-76RC) | 3-cell 4605 mAh Lithium Ion | 9 hours |
| Acer | Aspire V Nitro (VN7-571G-719D) (VN7-571G-50VG) | 3 cell 4450 mAh Lithium Ion | No official claim No 3rd party claims |
| Acer | Aspire V Nitro (VN7-572TG-775T) | 3 cell | No official claim No 3rd party claims |
| Acer | Aspire V Nitro (VN7-572G-53E7) (VN7-572G-7178) | 3-cell 4605 mAh Lithium Ion | 8 hours |
| Acer | Aspire V Nitro (VN7-572G-75N7) | 3-cell 4605 mAh Lithium Ion | 7.5 hours |
| Acer | Aspire V Nitro (VN7-591G-792U) | 3 cell 4450 mAh Lithium Ion | No official claim www.newegg.com = 3 hours |
| Acer | Aspire V Nitro (VN7-592G-71ZL) (VN7-592G-77LB) (VN7-592G-70EN) (VN7-592G-79X4) (VN7-592G-58C3) (VN7-592G-7015) | 3-cell 4605 mAh Lithium Ion | 6 hours |
| Acer | Aspire V Nitro (VN7-592G-788W) | 3-cell 4605 mAh Lithium Ion | No official claim www.amazon.com = 6 hours |
| Apple | MacBook Pro with Retina Display | 99.5 Whr Lithium-polymer battery | 9 hours wireless web; 9 hours iTunes movie playback; 30 days of standby time |
| ASUS | ROG GL552VW | 4 cell 48 Whrs | No official claim www.google.com = 5 hours |
| ASUS | F555UA-EH71 | 2 cell 37 Whrs Lithium-Polymer | 9-to-5 Gadgets claims 4 Hours |
| ASUS | F555LA-EH51 | 2 cell 37 Whrs Lithium-Polymer | Tech for Pennies claims 4 hours |

| Brand | Model | Battery info | Battery life claims |
|---------|--|---|--|
| ASUS | R554LA-RH31T(WX) R554LA-RH51T(WX) R554LA-RH71T(WX) | 2 cell 38 Whrs Lithium-Polymer | B&H claims 5 hours |
| ASUS | R556LA-RH51(WX) R556LA-RH31(WX) | 2 cell 37 Whrs Lithium-Polymer | B&H claims 5 Hours |
| ASUS | R515MA-RH01 | 2 cell 30 Whrs Lithium-Polymer | Fingerhut claims 4 hours |
| ASUS | K501UX | 3 cells 48 Whrs | 441 min Movie (1080P video)=7.35 hours 393 min Web browsing=6.55 hours 406 min Office operation=6.77 hours |
| ASUS | X555LA | 2-cell 37 Whrs Polymer | No official claim www.laptopmag.com= 5 hours and 55 minutes of WiFi web surfing. |
| ASUS | X553MA-DH21TQ(WX) | 2-cell 30 Whrs Lithium-Polymer | Expert Reviews claims 4 hours 32 minutes |
| ASUS | ZenBook Pro UX501VW | 96 Whrs | 6 hours Office Productivity 6.2 hours Web Browsing 6 hours Video Playback |
| | | | |
| Fujitsu | Lifebook E754 | Li-Ion battery 6-cell, 5,600/5,800 mAh, 63 Wh Li-Ion battery 6-cell, 6,400/6,700 mAh, 72 Wh Li-Ion battery 6-cell, 4,500 mAh, 49 Wh | 9 hours 30 mins (first battery 63 Wh) MM2007 18 hours (first battery 72 Wh) MM2007 25 hours (first battery + 2nd battery) MM2007 |
| Fujitsu | Lifebook E756 | Li-Ion battery 6-cell, 5,600/5,800 mAh, 63 Wh Li-Ion battery 6-cell, 6,400/6,700 mAh, 72 Wh Li-Ion battery 6-cell, 7,100 mAh, 77 Wh | 14 hours (first battery) MM2014 19 hours (first battery + 2nd battery) MM2014 |

| Brand | Model | Battery info | Battery life claims |
|---------|---|---|--|
| Fujitsu | Lifebook E554 | Li-Ion battery 6-cell, 5,600/5,800 mAh, 63 Wh Li-Ion battery 6-cell, 6,400/6,700 mAh, 72 Wh Li-Ion battery 6-cell, 4,500 mAh, 49 Wh | 11h 20 min runtime, Bapco® MobileMark2007 Productivity Workload, Win7 OS |
| Fujitsu | Lifebook E556 | Li-Ion battery 6-cell, 5,600/5,800 mAh, 63 Wh Li-Ion battery 6-cell, 6,400/6,700 mAh, 72 Wh Li-Ion battery 6-cell, 4,500 mAh, 49 Wh | 12 hours MM2014 |
| HP | 15t | 3-cell 31Whr Lithium-ion Battery 4-cell 41Whr Lithium-ion Battery | 8 hours 15 minutes |
| HP | 15z | 3-cell 31Whr Lithium-ion Battery 4-cell 41Whr Lithium-ion Battery | 7 hours 15 minutes |
| HP | Elitebook 850 G2 | 3-Cell (50Whr) Polymer/Prismatic Long life Battery | 15 hours and 30 minutes (MM07) |
| HP | Elitebook 850 G3 | 3-cell, 46 WHr Li-ion polymer | 12 hours 30 minutes |
| HP | EliteBook 755 G2 | 3-cell, 50 WHr Li-ion | 9 hours and 45 minutes. |
| HP | EliteBook 755 G3 | 3-cell, 46 WHr Li-ion polymer | 8 hours |
| HP | ENVY 15t | 3-cell 55.5Whr Lithium-ion | 10 hours |
| HP | ENVY 15z | 3-cell 48Whr Lithium-ion | 7 hours 30 minutes |
| HP | ENVY - 15t Slim Quad | 6-cell 47Whr Lithium-ion Battery 6-cell 62Whr Lithium-ion Battery | 5 hours 30 minutes |
| HP | ENVY - 15 (ah155nr) | 3-cell, 48 Wh prismatic | No official claim No 3rd party claims |
| HP | ENVY x360 - 15 (w155nr) | 3-cell, 48 Wh prismatic | No official claim No 3rd party claims |

| Brand | Model | Battery info | Battery life claims |
|-------|---|--|---|
| HP | ENVY x360 - 15t | 3-cell 48WHr Lithium-ion | 8 hours 45 minutes |
| HP | HP OMEN - 15t Quad | 4-cell 58WHr Lithium-ion Battery | 4 hours and 45 minutes |
| HP | HP OMEN - 15t Quad Select | 4-cell 58WHr Lithium-ion Battery | 4 hours and 45 minutes |
| HP | HP OMEN - 15-5210nr | 4-cell 58WHr Lithium-ion Battery | LAPTOP Magazine claims 4 hours 6 minutes (Laptop Mag Battery Test) |
| HP | Pavilion 15 | 4-cell 48WHr Lithium-ion | 8 hours |
| HP | Pavilion 15t | 4-cell 41WHr Lithium-ion Battery | 7 hours 30 minutes. |
| HP | Pavilion 15z | 4-cell 41WHr Lithium-ion Battery | 7 hours 45 minutes. |
| HP | ProBook 450 G3 | 4-Cell (44 WHr) Lithium-Ion Battery 6-cell (55 WHr) Battery Long Life | No official claim No 3rd party claims |
| HP | ProBook 455 G3 | 4-Cell (44 WHr) Lithium-Ion Battery 6-cell (55 WHr) Battery Long Life | No official claim No 3rd party claims |
| HP | Probook 650 G1 | 9-cell (100 WHr) Li-Ion; 6-cell (55 WHr) Li-Ion; 6-cell (55 WHr) Long Life | 11 hours (6-cell, Long Life 55 WHr Li-ion models with hard drive); 10 hours and 45 minutes (discrete graphics) |
| HP | Probook 650 G2 | 3-cell, 48 Wh Li-ion prismatic | 10 hours and 15 minutes |
| HP | Spectre x360 - 15t | 3-cell 64.5WHr Lithium-ion | 9 hours and 30 minutes |
| HP | ZBook 15 G2 | 8-Cell (83 WHr) Battery 8-Cell (75 WHr) Long Life | 11 hours 15 minutes |
| HP | Zbook 15 G3 | 9 Cell 90 WHr Long Life | No official claim No 3rd party claims |
| HP | ZBook 15u G2 | 3 Cell 50 WHr Long Life | 11 hours 45 minutes |
| HP | Zbook 15u G3 | 3-cell 46 WHr Li-ion prismatic | No official claim No 3rd party claims |

| Brand | Model | Battery info | Battery life claims |
|---------|--|--|--|
| HP | Zbook Studio G3 | 4-cell 64 WHr Li-ion prismatic | No official claim No 3rd party claims |
| Lenovo | Ideapad 300-15 | 4 Cell 32 Watt Hour Li-Cylindrical | 4 Hours Local Video Playback |
| Lenovo | Ideapad 500-15 | 4 Cell 32 Watt Hour Li-Cylindrical | 4 Hours Local Video Playback |
| Lenovo | Ideapad 700-15 | 3 cell 45 Watt Hour Li-Polymer | 4 Hours Local Video Playback |
| Lenovo | Ideapad 310-15 Touch | 2 Cell 30 Watt Hour Li-Cylindrical | 5 Hours |
| Lenovo | ThinkPad P50 | 6 cell 90 Watt Hour Li-Polymer | Notebook Check claims 14 hours (Battery Eater Reader's Test) |
| Lenovo | Ideapad Y700-15 | 4 Cell 60 WHr | 5 hours |
| Lenovo | Flex 3 (15 inch) | 45WHr battery | 5.5 hours |
| Samsung | Notebook 9 Book 9 Pro NP940Z5L-X01US | 4 cell 57Whr | 6.5 hours (MM2014) |
| Toshiba | Tecra C50-C1500 C50-C1502 | Lithium Ion (45Wh, 4-cell)—*Not user replaceable | Laptop6 claims 7.97 hours (MM2014) |
| Toshiba | Tecra A50-C1540 | Lithium Ion (45Wh, 4-cell)—*Not user replaceable | LAPTOP Magazine claims 6 hours (Laptop Mag Battery Test, web surfing over WiFi) |
| Toshiba | Tecra Z50-C1550 | Lithium Ion (45Wh, 4-cell) | LAPTOP Magazine claims 7 hours 18 minutes (Laptop Mag Battery Test, web surfing over WiFi) |
| Toshiba | Tecra Z50 | Lithium Ion (60Wh, 4-Cell)—*Not user replaceable | 8.6 hours |

Figure 1: Battery information. All links and data current as of 05/23/2016.

| Brand | Model | Thickness | | Dimensions | | total area (sq. in.) | Weight | |
|-------|--|-------------|-------------|------------|--------------|----------------------|--------|------|
| | | mm | inches | mm | inches | | lbs | kg |
| Dell | XPS 15 | 12.0 - 17.0 | 0.46 - 0.66 | 357 x 235 | 14.06 x 9.25 | 130.055 | 4.09 | 1.85 |
| Acer | Aspire E1 (E1-532-4629) (E1-532-2635) | | 0.48 - 1.0 | | 15 x 10.1 | 151.5 | 5.18 | |
| Acer | Aspire E1 (E1-572-6484) | | 1 | | 15 x 10.1 | 151.5 | 5.18 | |
| Acer | Aspire E (E5-521-435W) (E5-521-8948) | | 1.0-1.19 | | 15 x 10.1 | 151.5 | 5.51 | |
| Acer | Aspire E (E5-531P-P3Z4) | | 0.97-1.29 | | 15 x 10.1 | 151.5 | 5.95 | |
| Acer | Aspire E (E5-531-C01E) (E5-531-P4SQ) | | 0.96-1.19 | | 15 x 10.1 | 151.5 | 5.51 | |
| Acer | Aspire E (E5-571P-30QR) | | 1.04-1.24 | | 15 x 10.1 | 151.5 | 5.95 | |
| Acer | Aspire E (E5-571-30F1) | | 1.0-1.19 | | 15 x 10.1 | 151.5 | 5.51 | |
| Acer | Aspire E (E5-511-C33M) | | 1.0-1.19 | | 15 x 10.1 | 151.5 | 5.51 | |
| Acer | Aspire E (E5-573-5653) | | 0.98-1.15 | | 15 x 10.1 | 151.5 | 5.29 | |
| Acer | Aspire E (E5-532-C7AU) (E5-532-C0K3) (E5-532-C1PC) (E5-532-C9YY) (E5-532-C7K4) (E5-532-C5BS) (E5-573-754K) (E5-573-3970) (E5-573-30CW) | | 0.98-1.15 | | 15 x 10.1 | 151.5 | 5.29 | |

| Brand | Model | Thickness | | Dimensions | | total area (sq. in.) | Weight | |
|-------|---|-----------|-----------|------------|-----------|----------------------|--------|----|
| | | mm | inches | mm | inches | | lbs | kg |
| | (E5-573-395Q) (E5-573-52US) (E5-573-39K5) (E5-573T-59RC) | | | | | | | |
| Acer | Aspire E (E5-532-P3D4) (E5-532-P40H) (E5-574-53QS) (E5-574-58JM) (E5-573-35JA) (E5-573-50PS) (E5-573-P0DP) (E5-573T-57FZ) | | 0.98-1.15 | | 15 x 10.1 | 151.5 | 5.29 | |
| Acer | Aspire E (E5-574G-71WB) (E5-574G-52QU) (E5-573G-79HX) | | 0.98-1.15 | | 15 x 10.1 | 151.5 | 5.29 | |
| Acer | Aspire E (E5-575G-53VG) | | 0.94-1.19 | | 15 x 10.2 | 153 | 5.27 | |
| Acer | Aspire E (E5-575G-52RJ) | | 0.94-1.19 | | 15 x 10.2 | 153 | 4.92 | |
| Acer | Aspire E (ES1-512-25TP) (ES1-512-C1DW) (ES1-512-P18H) (ES1-512-C4DW) (ES1-512-C5S4) (ES1-512-C1W0) (ES1-512-P7TZ) | | 1.03 | | 15 x 10.2 | 153 | 5.29 | |
| Acer | Aspire ES (ES1-521-266Z) | | 1.07 | | 15 x 10.2 | 153 | 5.29 | |

| Brand | Model | Thickness | | Dimensions | | total area (sq. in.) | Weight | |
|-------|--|-----------|-------------|------------|-----------|----------------------|--------|----|
| | | mm | inches | mm | inches | | lbs | kg |
| Acer | Aspire ES (ES1-531-POJJ) (ES1-531-C2KX) | | 1.03 | | 15 x 10.2 | 153 | 5.29 | |
| Acer | Aspire ES (ES1-571-C7N9) (ES1-571-P1MG) (ES1-571-33BQ) (ES1-571-C4E2) (ES1-571-30XX) | | 1.03-1.07 | | 15 x 10.2 | 153 | 5.29 | |
| Acer | Aspire ES (ES1-572-357C) | | 0.97 | | 15 x 10.2 | 153 | 5.29 | |
| Acer | Aspire F 15 (F5-571T-569T) (F5-571T-58AL) (F5-571T-783Z) | | 0.98-1.15 | | 15 x 10.1 | 151.5 | 5.29 | |
| Acer | Aspire F 15 (F5-572-57T8) (F5-572-74DZ) | | 0.98-1.15 | | 15 x 10.1 | 151.5 | 5.29 | |
| Acer | Aspire F 15 (F5-573-505W) | | 0.91-1.12 | | 15 x 10.2 | 153 | 5.07 | |
| Acer | Aspire R7 (R7-572-5893) | | 0.81 - 1.12 | | 14.8 x 10 | 148 | 5.29 | |
| Acer | Aspire V (V3-572-75D2) | | 1 - 1.19 | | 15 x 10.1 | 151.5 | 5.62 | |
| Acer | Aspire V (V3-572PG-546C) | | 1.04 - 1.24 | | 15 x 10.1 | 151.5 | 6.06 | |
| Acer | Aspire V 15 (V3-575G-57CN) | | 0.94-1.12 | | 15 x 10.2 | 153 | 5.29 | |
| Acer | Aspire V 15 (V3-574TG-749V) | | 0.94-1.12 | | 15 x 10.2 | 153 | 5.29 | |
| Acer | Aspire V 15 (V3-575-57MJ) | | 0.94-1.12 | | 15 x 10.2 | 153 | 5.29 | |

| Brand | Model | Thickness | | Dimensions | | total area (sq. in.) | Weight | |
|-------|---|-----------|-----------|------------|-------------|----------------------|--------|----|
| | | mm | inches | mm | inches | | lbs | kg |
| Acer | Aspire V 15 (V3-575T-53BP) (V3-575T-71U5) (V3-575-51A0) | | 0.94-1.12 | | 15 x 10.2 | 153 | 5.29 | |
| Acer | Aspire V 15 (V3-575-50TD) | | 0.94-1.12 | | 15 x 10.2 | 153 | 5.29 | |
| Acer | Aspire V 15 (V5-591G-57GW) | | 1.08-1.19 | | 15 x 10.2 | 153 | 5.29 | |
| Acer | Aspire V 15 (V5-591G-50MJ) | | 1.08-1.19 | | 15 x 10.2 | 153 | 5.4 | |
| Acer | Aspire V 15 (V5-591G-75KE) | | 1.08-1.19 | | 15 x 10.2 | 153 | 5.4 | |
| Acer | Aspire V Nitro (VN7-571-72LE) (VN7-571-74D1) | | 0.86-0.94 | | 15.3 x 10.1 | 154.53 | 5.29 | |
| Acer | Aspire V Nitro (VN7-571G-76RC) | | 0.86-0.94 | | 15.3 x 10.1 | 154.53 | 5.29 | |
| Acer | Aspire V Nitro (VN7-571G-719D) (VN7-571G-50VG) | | 0.86-0.94 | | 15.3 x 10.1 | 154.53 | 5.29 | |
| Acer | Aspire V Nitro (VN7-572TG-775T) | | 1.02 | | 15.4 x 10.3 | 158.62 | 5.29 | |
| Acer | Aspire V Nitro (VN7-572G-53E7) (VN7-572G-7178) | | 0.94 | | 15.4 x 10.3 | 158.62 | 5.29 | |
| Acer | Aspire V Nitro (VN7-572G-75N7) | | 0.94 | | 15.4 x 10.3 | 158.62 | 5.29 | |
| Acer | Aspire V Nitro (VN7-591G-792U) | | 0.86-0.94 | | 15.3 x 10.1 | 154.53 | 5.29 | |
| Acer | Aspire V Nitro (VN7-592G-71ZL) (VN7-592G-77LB) | | 0.9 | | 15.4 x 10.3 | 158.62 | 5.07 | |

| Brand | Model | Thickness | | Dimensions | | total area (sq. in.) | Weight | |
|---------|--|-------------|-----------|---------------|---------------|----------------------|--------|------|
| | | mm | inches | mm | inches | | lbs | kg |
| | (VN7-592G-70EN) (VN7-592G-79X4) (VN7-592G-58C3) (VN7-592G-7015) | | | | | | | |
| Acer | Aspire V Nitro (VN7-592G-788W) | | 0.9 | | 15.4 x 10.3 | 158.62 | 5.07 | |
| Apple | MacBook Pro with Retina Display | 18 | 0.71 | 358.9 x 247.1 | 14.13 x 9.73 | 137.48 | 4.49 | 2.04 |
| ASUS | ROG GL552VW | 32.75-34.75 | 1.29-1.37 | 385.5 x 256.9 | 15.2 x 10.1 | 153.52 | 5.7 | 2.59 |
| ASUS | F555UA-EH71 | | 1 | | 15.0 x 10.1 | 151.5 | 5.07 | |
| ASUS | F555LA-EH51 | | 1 | | 15.0 x 10.1 | 151.5 | 5.07 | |
| ASUS | R554LA-RH31T(WX) R554LA-RH51T(WX) R554LA-RH71T(WX) | | 1.2 | | 15.0 x 10.3 | 154.5 | 5.7 | |
| ASUS | R556LA-RH51(WX) R556LA-RH31(WX) | | 1 | | 15.0 x 10.1 | 151.5 | 5.07 | |
| ASUS | R515MA-RH01 | | 1 | | 15.0 x 10.2 | 153 | 5.1 | |
| ASUS | K501UX | | 0.85 | | 15 x 10 | 150 | 4.4 | |
| ASUS | X555LA | | 1 | | 15 x 10.1 | 151.5 | 5 | |
| ASUS | X553MA-DH21TQ(WX) | | 1 | | 15 x 10.2 | 153 | 5.1 | |
| ASUS | ZenBook Pro UX501VW | | 0.81-0.84 | | 15.07 x 10.04 | 151.3 | 4.54 | |
| Fujitsu | Lifebook E754 | 20-27 | 0.78-1.06 | 374 x 250 | 14.72 x 9.84 | 144.8 | 4.2 | 1.9 |
| Fujitsu | Lifebook E756 | 20-27 | 0.78-1.06 | 374 x 250 | 14.72 x 9.84 | 144.8 | 4.2 | 1.9 |
| Fujitsu | Lifebook E554 | 24.2 - 31.4 | 0.95-1.23 | 374 x 250 | 14.72 x 9.84 | 144.8 | 4.9 | 2.2 |
| Fujitsu | Lifebook E556 | 24.2 - 31.4 | 0.95-1.23 | 374 x 250 | 14.72 x 9.84 | 144.8 | 4.9 | 2.2 |
| HP | 15t | | 0.96 | | 15.13 x 10.02 | 151.6 | 4.73 | |
| HP | 15z | | 0.96 | | 15.13 x 10.02 | 151.6 | 4.73 | |

| Brand | Model | Thickness | | Dimensions | | total area (sq. in.) | Weight | |
|-------|---|-----------|----------------------------------|---------------|---------------|----------------------|--|----|
| | | mm | inches | mm | inches | | lbs | kg |
| HP | Elitebook 850 G2 | | 0.84 (non-touch) 1.02 (touch) | | 14.78 x 9.98 | 147.5 | Starting at 4.02 (non-touch) Starting at 4.54 (touch) | |
| HP | Elitebook 850 G3 | | 0.76 (non-touch) 0.82 (touch) | | 15.09 x 10.1 | 152.4 | 4.1 (non-touch) 4.54 (touch) | |
| HP | EliteBook 755 G2 | | 0.84 (non-touch) 1.01 (touch) | | 14.78 x 9.98 | 147.5 | 4.19 (non touch) 4.68 (touch) | |
| HP | EliteBook 755 G3 | | 0.76 (non-touch) 0.82 (touch) | | 15.09 x 10.1 | 152.4 | 4.1 (non touch) 4.54 (touch) | |
| HP | ENVY 15t | | 0.9 | | 15.12 x 10.04 | 151.8 | 5.23 | |
| HP | ENVY 15z | | 0.93 | | 15.12 x 10.04 | 151.8 | 5.03 | |
| HP | ENVY - 15t Slim Quad | | 1.1 | | 14.94 x 9.87 | 147.5 | 5.06 | |
| HP | ENVY - 15 (ah155nr) | | 0.93 | | 15.12 x 10.4 | 151.8 | 5.03 | |
| HP | ENVY x360 - 15 (w155nr) | | 0.94 | | 15.04 x 9.8 | 147.4 | 5.06 | |
| HP | ENVY x360 - 15t | | 0.94 | | 15.04 x 9.84 | 147.9 | 4.96 | |
| HP | HP OMEN - 15t Quad | | 0.78 | | 15.07 x 9.67 | 145.7 | 4.68 | |
| HP | HP OMEN - 15t Quad Select | | 0.78 | | 15.07 x 9.67 | 145.7 | 4.68 | |
| HP | HP OMEN - 15-5210nr | 19.9 | 0.78 | 382.9 x 247.5 | 15.07 x 9.74 | 146.7818 | 4.68 | |
| HP | Pavilion 15 | | 1.14 | | 15.14 x 10.44 | 158.1 | 5.12 | |
| HP | Pavilion 15t | | 0.99 | | 15.14 x 10.28 | 155.6 | 5.07 | |
| HP | Pavilion 15z | | 0.99 | | 15.14 x 10.28 | 155.6 | 5.07 | |

| Brand | Model | Thickness | | Dimensions | | total area (sq. in.) | Weight | |
|---------|--|-----------|--|------------|--|------------------------------------|--------|----|
| | | mm | inches | mm | inches | | lbs | kg |
| HP | ProBook 450 G3 | | 0.94-0.98 (non touch) 1.00-1.04 (touch) | | 14.88 x 10.41 (non-touch) 14.88 x 10.42 (touch) | 154.9 (non-touch) 155.0 (touch) | 4.56 | |
| HP | ProBook 455 G3 | | 0.94-0.98 | | 14.88 x 10.41 | 154.9 | 4.74 | |
| HP | Probook 650 G1 | | 0.99 | | 14.88 x 10.12 | 150.6 | 5.1 | |
| HP | Probook 650 G2 | | 1.07 | | 14.88 x 10.11 | 150.4 | 5.1 | |
| HP | Spectre x360 - 15t | | 0.63 | | 14.8 x 9.75 | 144.3 | 4.02 | |
| HP | ZBook 15 G2 | | 1.2 | | 15 x 10.1 | 151.5 | 6.13 | |
| HP | Zbook 15 G3 | | 1 | | 15.2 x 10.4 | 158.1 | 5.7 | |
| HP | ZBook 15u G2 | | 0.84 | | 14.78 x 9.98 | 147.5 | 4.23 | |
| HP | Zbook 15u G3 | | 0.78 | | 15.09 x 10.1 | 152.4 | 4.18 | |
| HP | Zbook Studio G3 | | 0.71 | | 14.76 x 10.04 | 148.2 | 4.4 | |
| Lenovo | Ideapad 300-15 | | 0.90-0.92 | | 15.11 x 10.43 | 157.6 | 5.07 | |
| Lenovo | Ideapad 500-15 | | 0.97 | | 15.12 x 10.43 | 157.7 | 5.1 | |
| Lenovo | Ideapad 700-15 | | 0.89 | | 15.12 x 10.43 | 157.7 | 5.06 | |
| Lenovo | Ideapad 310-15 Touch | | 0.9 | | 14.92 x 10.24 | 152.7808 | 4.85 | |
| Lenovo | ThinkPad P50 | | 1.02 | | 14.86 x 9.93 | 147.5598 | 5.6 | |
| Lenovo | Ideapad Y700-15 | | 1.02 | | 15.23 x 10.90 | 166 | 5.7 | |
| Lenovo | Flex 3 (15 inch) | | 0.87 | | 15.16 x 10.04 | 152.2 | 5 | |
| Samsung | Notebook 9 Book 9 Pro NP940Z5L-X01US | | 0.7 | | 14.72 x 9.83 | 144.7 | 4.45 | |
| Toshiba | Tecra C50-C1500 C50-C1502 | | 0.95 | | 14.9 x 10.2 | 151.98 | 3.97 | |
| Toshiba | Tecra A50-C1540 | | 0.9 | | 14.9 x 10.2 | 151.98 | 4.96 | |

| Brand | Model | Thickness | | Dimensions | | total area (sq. in.) | Weight | |
|---------|---------------------------------|-----------|--------|------------|-------------|----------------------|--------------------------------------|----|
| | | mm | inches | mm | inches | | lbs | kg |
| Toshiba | Tecra Z50-C1550 | | 0.9 | | 14.9 x 10.2 | 151.98 | 4.96 | |
| Toshiba | Tecra Z50 | | 0.8 | | 14.9 x 9.9 | 147.5 | 3.24 (website) 4.1 (pdf document) | |

Figure 2: Notebook dimensions. All links and data current as of 05/23/2016.

| Brand | Model | Screen | Screen Resolution | | Pixels |
|-------|--|--------|-------------------|------------|-----------|
| | | | Vertical | Horizontal | |
| Dell | XPS 15 | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Acer | Aspire E1 (E1-532-4629) (E1-532-2635) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire E1 (E1-572-6484) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire E (E5-521-435W) (E5-521-8948) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire E (E5-531P-P3Z4) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire E (E5-531-C01E) (E5-531-P4SQ) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire E (E5-571P-30QR) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire E (E5-571-30F1) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire E (E5-511-C33M) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire E (E5-573-5653) | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Acer | Aspire E (E5-532-C7AU) (E5-532-C0K3) (E5-532-C1PC) (E5-532-C9YY) (E5-532-C7K4) (E5-532-C5BS) (E5-573-754K) (E5-573-3970) (E5-573-30CW) | 15.6 | 1,366 | 768 | 1,049,088 |

| Brand | Model | Screen | Screen Resolution | | Pixels |
|-------|---|--------|-------------------|------------|-----------|
| | | | Vertical | Horizontal | |
| | (E5-573-395Q) (E5-573-52US) (E5-573-39K5) (E5-573T-59RC) | | | | |
| Acer | Aspire E (E5-532-P3D4) (E5-532-P40H) (E5-574-53QS) (E5-574-58JM) (E5-573-35JA) (E5-573-50PS) (E5-573-P0DP) (E5-573T-57FZ) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire E (E5-574G-71WB) (E5-574G-52QU) (E5-573G-79HX) | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Acer | Aspire E (E5-575G-53VG) | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Acer | Aspire E (E5-575G-52RJ) | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Acer | Aspire E (ES1-512-25TP) (ES1-512-C1DW) (ES1-512-P18H) (ES1-512-C4DW) (ES1-512-C5S4) (ES1-512-C1W0) (ES1-512-P7TZ) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire ES (ES1-521-266Z) | 15.6 | 1,366 | 768 | 1,049,088 |

| Brand | Model | Screen | Screen Resolution | | Pixels |
|-------|--|--------|-------------------|------------|-----------|
| | | | Vertical | Horizontal | |
| Acer | Aspire ES (ES1-531-P0JJ) (ES1-531-C2KX) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire ES (ES1-571-C7N9) (ES1-571-P1MG) (ES1-571-33BQ) (ES1-571-C4E2) (ES1-571-30XX) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire ES (ES1-572-357C) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire F 15 (F5-571T-569T) (F5-571T-58AL) (F5-571T-783Z) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire F 15 (F5-572-57T8) (F5-572-74DZ) | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Acer | Aspire F 15 (F5-573-505W) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire R7 (R7-572-5893) | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Acer | Aspire V (V3-572-75D2) | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Acer | Aspire V (V3-572PG-546C) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire V 15 (V3-575G-57CN) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire V 15 (V3-574TG-749V) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire V 15 (V3-575-57MJ) | 15.6 | 1,366 | 768 | 1,049,088 |

| Brand | Model | Screen | Screen Resolution | | Pixels |
|-------|---|--------|-------------------|------------|-----------|
| | | | Vertical | Horizontal | |
| Acer | Aspire V 15 (V3-575T-53BP) (V3-575T-71U5) (V3-575-51A0) | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Acer | Aspire V 15 (V3-575-50TD) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire V 15 (V5-591G-57GW) | 15.6 | 1,366 | 768 | 1,049,088 |
| Acer | Aspire V 15 (V5-591G-50MJ) | 15.6 | 3,840 | 2,160 | 8,294,400 |
| Acer | Aspire V 15 (V5-591G-75KE) | 15.6 | 3,840 | 2,160 | 8,294,400 |
| Acer | Aspire V Nitro (VN7-571-72LE) (VN7-571-74D1) | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Acer | Aspire V Nitro (VN7-571G-76RC) | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Acer | Aspire V Nitro (VN7-571G-719D) (VN7-571G-50VG) | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Acer | Aspire V Nitro (VN7-572TG-775T) | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Acer | Aspire V Nitro (VN7-572G-53E7) (VN7-572G-7178) | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Acer | Aspire V Nitro (VN7-572G-75N7) | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Acer | Aspire V Nitro (VN7-591G-792U) | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Acer | Aspire V Nitro (VN7-592G-71ZL) (VN7-592G-77LB) | 15.6 | 1,920 | 1,080 | 2,073,600 |

| Brand | Model | Screen | Screen Resolution | | Pixels |
|---------|--|--------|-------------------|------------|-----------|
| | | | Vertical | Horizontal | |
| | (VN7-592G-70EN) (VN7-592G-79X4) (VN7-592G-58C3) (VN7-592G-7015) | | | | |
| Acer | Aspire V Nitro (VN7-592G-788W) | 15.6 | 3,840 | 2,160 | 8,294,400 |
| | | | | | 0 |
| Apple | MacBook Pro with Retina Display | 15.4 | 2,880 | 1,800 | 5,184,000 |
| | | | | | |
| ASUS | ROG GL552VW | 15.6 | 1,920 | 1,080 | 2,073,600 |
| ASUS | F555UA-EH71 | 15.6 | 1,366 | 768 | 1,049,088 |
| ASUS | F555LA-EH51 | 15.6 | 1,366 | 768 | 1,049,088 |
| ASUS | R554LA-RH31T(WX) R554LA-RH51T(WX) R554LA-RH71T(WX) | 15.6 | 1,366 | 768 | 1,049,088 |
| ASUS | R556LA-RH51(WX) R556LA-RH31(WX) | 15.6 | 1,366 | 768 | 1,049,088 |
| ASUS | R515MA-RH01 | 15.6 | 1,366 | 768 | 1,049,088 |
| ASUS | K501UX | 15.6 | 1,920 | 1,080 | 2,073,600 |
| ASUS | X555LA | 15.6 | 1,366 | 768 | 1,049,088 |
| ASUS | X553MA-DH21TQ(WX) | 15.6 | 1,366 | 768 | 1,049,088 |
| ASUS | ZenBook Pro UX501VW | 15.6 | 3,840 | 2,160 | 8,294,400 |
| | | | | | |
| Fujitsu | Lifebook E754 | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Fujitsu | Lifebook E756 | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Fujitsu | Lifebook E554 | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Fujitsu | Lifebook E556 | 15.6 | 1,920 | 1,080 | 2,073,600 |
| HP | 15t | 15.6 | 1,366 | 768 | 1,049,088 |

| Brand | Model | Screen | Screen Resolution | | Pixels |
|-------|---|--------|-------------------|------------|-----------|
| | | | Vertical | Horizontal | |
| HP | 15z | 15.6 | 1,366 | 768 | 1,049,088 |
| HP | Elitebook 850 G2 | 15.6 | 1,920 | 1,080 | 2,073,600 |
| HP | Elitebook 850 G3 | 15.6 | 3,840 | 2,160 | 8,294,400 |
| HP | EliteBook 755 G2 | 15.6 | 1,920 | 1,080 | 2,073,600 |
| HP | EliteBook 755 G3 | 15.6 | 1,920 | 1,080 | 2,073,600 |
| HP | ENVY 15t | 15.6 | 1,920 | 1,080 | 2,073,600 |
| HP | ENVY 15z | 15.6 | 1,920 | 1,080 | 2,073,600 |
| HP | ENVY - 15t Slim Quad | 15.6 | 1,920 | 1,080 | 2,073,600 |
| HP | ENVY - 15 (ah155nr) | 15.6 | 1,366 | 768 | 1,049,088 |
| HP | ENVY x360 - 15 (w155nr) | 15.6 | 1,920 | 1,080 | 2,073,600 |
| HP | ENVY x360 - 15t | 15.6 | 1,920 | 1,080 | 2,073,600 |
| HP | HP OMEN - 15t Quad | 15.6 | 1,920 | 1,080 | 2,073,600 |
| HP | HP OMEN - 15t Quad Select | 15.6 | 1,920 | 1,080 | 2,073,600 |
| HP | HP OMEN - 15-5210nr | 15.6 | 1,920 | 1,080 | 2,073,600 |
| HP | Pavilion 15 | 15.6 | 1,920 | 1,080 | 2,073,600 |
| HP | Pavilion 15t | 15.6 | 1,920 | 1,080 | 2,073,600 |
| HP | Pavilion 15z | 15.6 | 1,920 | 1,080 | 2,073,600 |
| HP | ProBook 450 G3 | 15.6 | 1,920 | 1,080 | 2,073,600 |
| HP | ProBook 455 G3 | 15.6 | 1,366 | 768 | 1,049,088 |
| HP | Probook 650 G1 | 15.6 | 1,920 | 1,080 | 2,073,600 |
| HP | Probook 650 G2 | 15.6 | 1,366 | 768 | 1,049,088 |
| HP | Spectre x360 - 15t | 15.6 | 3,840 | 2,160 | 8,294,400 |
| HP | ZBook 15 G2 | 15.6 | 3,200 | 1,800 | 5,760,000 |
| HP | Zbook 15 G3 | 15.6 | 1,920 | 1,080 | 2,073,600 |
| HP | ZBook 15u G2 | 15.6 | 1,920 | 1,080 | 2,073,600 |

| Brand | Model | Screen | Screen Resolution | | Pixels |
|---------|--|--------|-------------------|------------|-----------|
| | | | Vertical | Horizontal | |
| HP | Zbook 15u G3 | 15.6 | 3,840 | 2,160 | 8,294,400 |
| HP | Zbook Studio G3 | 15.6 | 3,840 | 2,160 | 8,294,400 |
| Lenovo | Ideapad 300-15 | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Lenovo | Ideapad 500-15 | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Lenovo | Ideapad 700-15 | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Lenovo | Ideapad 310-15 Touch | 15.6 | 1,366 | 768 | 1,049,088 |
| Lenovo | ThinkPad P50 | 15.6 | 3,840 | 2,160 | 8,294,400 |
| Lenovo | Ideapad Y700-15 | 15.6 | 3,840 | 2,160 | 8,294,400 |
| Lenovo | Flex 3 (15 inch) | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Samsung | Notebook 9 Book 9 Pro NP940Z5L-X01US | 15.6 | 3,840 | 2,160 | 8,294,400 |
| Toshiba | Tecra C50-C1500 C50-C1502 | 15.6 | 1,366 | 768 | 1,049,088 |
| Toshiba | Tecra A50-C1540 | 15.6 | 1,366 | 768 | 1,049,088 |
| Toshiba | Tecra Z50-C1550 | 15.6 | 1,920 | 1,080 | 2,073,600 |
| Toshiba | Tecra Z50 | 15.6 | 1,920 | 1,080 | 2,073,600 |

Figure 3: Display information. All links and data current as of 05/23/2016.

| Brand | Model | Processor | Graphics Card |
|-------|---|---|--|
| Dell | XPS 15 | 6th generation Intel Core processors up to quad-core i7 | NVIDIA® GEFORCE® GTX 960M |
| Acer | Aspire E (E5-574G-71WB) (E5-574G-52QU) (E5-573G-79HX) | Intel Core i7-6500U Intel Core i5-6200U Intel Core i7-5500U | NVIDIA GeForce 940M with 4 GB Dedicated Memory |
| Acer | Aspire E (E5-575G-53VG) | Intel Core i5-6200U | NVIDIA GeForce 940MX with 2 GB Dedicated Memory |
| Acer | Aspire E (E5-575G-52RJ) | Intel Core i5-6200U | NVIDIA GeForce 940M with 2 GB Dedicated Memory |
| Acer | Aspire V (V3-572PG-546C) | Intel Core i5-5200U | NVIDIA GeForce 840M with 2 GB Dedicated Memory |
| Acer | Aspire V 15 (V3-575G-57CN) | Intel Core i5-6200U | NVIDIA GeForce 940M with 2 GB Dedicated Memory |
| Acer | Aspire V 15 (V3-574TG-749V) | Intel Core i7-5500U | NVIDIA GeForce 940M with 4 GB Dedicated Memory |
| Acer | Aspire V 15 (V5-591G-57GW) | Intel Core i5-6300HQ | NVIDIA GeForce GTX 950M with 2 GB Dedicated Memory |
| Acer | Aspire V 15 (V5-591G-50MJ) | Intel Core i5-6300HQ | NVIDIA GeForce GTX 950M with 2 GB Dedicated Memory |
| Acer | Aspire V 15 (V5-591G-75KE) | Intel Core i7-6700HZ | NVIDIA GeForce GTX 950M with 4 GB Dedicated Memory |
| Acer | Aspire V Nitro (VN7-571G-76RC) | Intel Core i7-5500U | NVIDIA GeForce 940M with 2 GB Dedicated Memory |
| Acer | Aspire V Nitro (VN7-571G-719D) (VN7-571G-50VG) | Intel Core i7-4720HQ Intel Core i5-5200U | NVIDIA GeForce GTX 950M with 4GB Dedicated Memory |
| Acer | Aspire V Nitro (VN7-572TG-775T) | Intel Core i7-6500U | NVIDIA GeForce GTX 950M with 4 GB Dedicated Memory |
| Acer | Aspire V Nitro (VN7-572G-53E7) (VN7-572G-7178) | Intel Core i5-6200U Intel Core i7-6500U | NVIDIA GeForce 945M with 2 GB Dedicated Memory |

| Brand | Model | Processor | Graphics Card |
|-------|---|--|---|
| Acer | Aspire V Nitro (VN7-572G-75N7) | Intel Core i7-6500U | NVIDIA GeForce 945M with 2 GB Dedicated Memory |
| Acer | Aspire V Nitro (VN7-591G-792U) | Intel Core i7-4720HQ | NVIDIA GeForce GTX 960M with 2GB Dedicated Memory |
| Acer | Aspire V Nitro (VN7-592G-71ZL) (VN7-592G-77LB) (VN7-592G-70EN) (VN7-592G-79X4) (VN7-592G-58C3) (VN7-592G-7015) | Intel Core i7-6700HQ | NVIDIA GeForce GTX 960M with 4GB Dedicated Memory |
| Acer | Aspire V Nitro (VN7-592G-788W) | Intel Core i7-6700HQ | NVIDIA GeForce GTX 960M with 4GB Dedicated Memory |
| Apple | MacBook Pro with Retina Display | Intel Core i7-4870HQ | AMD Radeon R9 M370X with 2GB of GDDR5 memory |
| ASUS | ROG GL552VW | Intel Core i5 6300HQ Intel Core i7 6700HQ | NVIDIA GeForce GTX 960M with 2G/4G GDDR5 VRAM |
| ASUS | K501UX | Intel Core i3 5010U (K501LX) Intel Core i5 5200U (K501LX) Intel Core i7 5500U (K501LX) Intel Core i5 6200U (K501UX) Intel Core i7 6500U (K501UX) | NVIDIA GeForce GTX 950M with 2GB/4GB DDR3 VRAM |
| ASUS | ZenBook Pro UX501VW | Intel Core i7 6700HQ | NVIDIA GeForce GTX 960M with 2G/4G GDDR5 |
| HP | ENVY 15t | Intel Core i7-6500U | NVIDIA GeForce GTX 950M 4GB |
| HP | ENVY 15z | | |
| HP | ENVY - 15t Slim Quad | Intel Core i7-6700HQ | NVIDIA GeForce GTX 950M 4GB |
| HP | ENVY x360 - 15 (w155nr) | Intel Core i7-6500U | NVIDIA GeForce 930M (2 GB DDR3L dedicated) |
| HP | ENVY x360 - 15t | Intel Core i7-6500U | NVIDIA GeForce 930M (2 GB DDR3L dedicated) |
| HP | HP OMEN - 15t Quad | Intel Core i7-4720HQ | NVIDIA GeForce GTX 960M 2GB/4GB |
| HP | HP OMEN - 15t Quad Select | Intel Core i7-4720HQ | NVIDIA GeForce GTX960M 4GB |
| HP | HP OMEN - 15-5210nr | Intel Core i7-4710HQ | NVIDIA GeForce GTX 860M 2GB/4GB |

| Brand | Model | Processor | Graphics Card |
|---------|--|--|--|
| HP | Pavilion 15 | Intel Core i5-6300HQ Intel Core i7-6700HQ | NVIDIA GeForce GTX 950M 4GB Discrete Graphics |
| HP | Pavilion 15t | Intel Core i5-6200U Intel Core i7-6500U | NVIDIA GeForce 940M 2GB |
| HP | Pavilion 15z | AMD Quad-Core A8-7410 AMD Quad-Core A10-8700P AMD Quad-Core A10-8780P | AMD Radeon(TM) R7 M360 2Gb |
| HP | ZBook 15 G2 | Intel Core i7-4710MQ Intel Core i7-4810MQ Intel Core i7-4910MQ | NVIDIA Quadro K610M Graphics AMD FirePro M5100 Graphics NVIDIA Quadro K1100M Graphics NVIDIA Quadro K2100M Graphics |
| HP | Zbook 15 G3 | Intel Core i5-6440HQ Intel Core i7-6820HQ Intel Xeon E3-1505M | AMD FirePro W5170M Graphics NVIDIA Quadro M1000M Graphics NVIDIA Quadro M2000M Graphics |
| HP | ZBook 15u G2 | Intel Core i7 5600U Intel Core i7 5500U Intel Core i5 5300U Intel Core i5 5200U | AMD FirePro M4170 FireGL |
| HP | Zbook 15u G3 | Intel Core i7-6500U Intel Core i7-6600U Intel Core i5-6300U Intel Core i5-6200U | AMD FirePro W4190M 2 GB |
| HP | Zbook Studio G3 | Intel Xeon E3-1545M Intel Xeon E3-1505M Intel Core i7-6820HQ Intel Core i7-6700HQ | NVIDIA Quadro M1000M 4GB |
| Lenovo | Ideapad 700-15 | Intel Core i7-6700HQ | NVIDIA GeForce GTX950 4 GB |
| Lenovo | ThinkPad P50 | Intel Xeon E3-1505M v5 | NVIDIA Quadro M2000M |
| Lenovo | Ideapad Y700-15 | Intel Core i7-6700HQ | NVIDIA GTX 960M 4 GB GDDR5 |
| Samsung | Notebook 9 Book 9 Pro NP940Z5L-X01US | Intel Core i7 6700HQ | NVIDIA GeForce GTX 950M 2GB |

| Brand | Model | Processor | Graphics Card |
|---------|---------------------------------|---------------------|------------------------------|
| Toshiba | Tecra Z50-C1550 | Intel Core i7-6600U | NVIDIA GeForce 930M 2GB DDR3 |

Figure 4: Processor and graphics card information. All links and data current as of 05/23/2016.

ABOUT PRINCIPLED TECHNOLOGIES



Principled Technologies, Inc.
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We provide industry-leading technology assessment and fact-based marketing services. We bring to every assignment extensive experience with and expertise in all aspects of technology testing and analysis, from researching new technologies, to developing new methodologies, to testing with existing and new tools.

When the assessment is complete, we know how to present the results to a broad range of target audiences. We provide our clients with the materials they need, from market-focused data to use in their own collateral to custom sales aids, such as test reports, performance assessments, and white papers. Every document reflects the results of our trusted independent analysis.

We provide customized services that focus on our clients' individual requirements. Whether the technology involves hardware, software, websites, or services, we offer the experience, expertise, and tools to help our clients assess how it will fare against its competition, its performance, its market readiness, and its quality and reliability.

Our founders, Mark L. Van Name and Bill Catchings, have worked together in technology assessment for over 20 years. As journalists, they published over a thousand articles on a wide array of technology subjects. They created and led the Ziff-Davis Benchmark Operation, which developed such industry-standard benchmarks as Ziff Davis Media's Winstone and WebBench. They founded and led eTesting Labs, and after the acquisition of that company by Lionbridge Technologies were the head and CTO of VeriTest.

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