

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 11/30/2015 at the links provided (click on the model names to follow these links). 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 notebook
- is the smallest 15-inch notebook
- has a 5.4 percent smaller footprint than the MacBook Pro® with Retina® Display (15-inch)¹
- is the lightest performance-class 15-inch notebook²

Brand	Model	Battery info	Battery life claims
Dell	XPS 15	Dell 84 Wh 6-cell Lithium Ion battery	Up to 17 hours
Acer	Aspire® V5-561-9410	4-cell Lithium Ion 2500mAh Maximum battery run time: 4 hours	4 hours
Acer	Aspire R7-572-5893	4-cell Lithium Ion 3560 mAh Maximum battery run time: 5.5 hours	5.5 hours
Acer	Aspire E5-571-37SY	6-cell Lithium Ion 5000 mAh Maximum battery run time: 7 hours	7 hours
Acer	Aspire E1-572-6459	4-cell 2500 mAh Lithium Ion 4 hour maximum battery run time	4 hours
Acer	Aspire VN7-571G-719D	3-cell 4450 mAh Lithium Ion	No official Acer claims reported. LAPTOP Magazine reported 2 hours and 48 minutes of Wi-Fi® web surfing.
Acer	Aspire VN7-591G-70RT	3-cell 4605 mAh Lithium Ion 4-hour maximum run time	4 hours

¹ Used in this report, the term “footprint” refers to the total surface area of the notebook.

² 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 VN7-591G-79YZ	3-cell 4605 mAh Lithium Ion	No official Acer claims reported. Micro Center claims 4-hour battery life.
Acer	Aspire VN7-591G-729V	3-cell 4605 mAh Lithium Ion	No official Acer claims reported. Amazon claims 4-hour battery life.
Acer	Aspire VN7-591G-72K6	3-cell 4450 mAh Lithium Ion	No official Acer claims reported. TabletSpecsReview claims up to over 7 hours in regular use conditions.
Acer	Aspire VN7-591G-7857	3-cell 4605 mAh Lithium Ion	No official Acer claims reported. Amazon claims 4-hour battery life.
Acer	Aspire VN7-591-76TR	3-cell 4450 mAh Lithium Ion	No official Acer claims reported. Newegg claims 4-hour battery life.
Acer	Aspire VN7-591G-77FS	3-cell 4605 mAh Lithium Ion	No official Acer claims reported. Amazon claims 4-hour battery life.
Apple	MacBook Pro with Retina Display	99.5 Wh Lithium-polymer battery	9 hours wireless web; Up to 9 hours iTunes® movie playback; Up to 30 days of standby time
ASUS	Transformer Book Flip TP500LA	3-cell 48 Wh	No official ASUS claims. B&H claims up to 5 hours.
ASUS	ZenBook™ Pro UX501	6-cell 96 Wh Polymer	6 hours office productivity; 6.2 hours web browsing; 6 hours video playback; Up to two weeks in standby mode
ASUS	ZenBook NX500	6-cell 96 Wh Polymer	No official ASUS claims reported. PC Magazine claims 5 hours 24 minutes.
ASUS	X550JK	4-cell 45 Wh	No official ASUS claims reported. Amazon claims 5 hours.
ASUS	N550JX	No info listed	14 days of standby. ASUS provides no battery life claim under load.
ASUS	N550JK	No info listed	14 days of standby. No claim of battery life under load.
ASUS	N550JV	4-cell battery No other info listed	14 days of standby. No claim of battery life under load.

Brand	Model	Battery info	Battery life claims
ASUS	G501JW	6-cell 96 Wh Polymer Battery	No official ASUS claims reported. Newegg claims up to 5 hours.
ASUS	G56JK	6-cell 5200 mAh 56 Wh	No official ASUS claims reported. Newegg claims up to 5 hours.
ASUS	G56JR	6-cell 5200 mAh 56 Wh	No official ASUS claims reported. Flipkart claims up to 3 hours.
ASUS	N551JQ	6-cell 5200 mAh 56 Wh	14-days of standby. Newegg claims up to 5 hours.
ASUS	N551JM	6-cell 5200 mAh 56 Wh	14-days of standby. PT can find no other battery life claims from other 3rd parties.
ASUS	X551CA	4-cell 2600 mAh 37 Wh	No official Asus claims. Staples claims 2 hours 52 minutes.
ASUS	X555LA	2-cell 37 Wh Polymer	No official Asus claims. LAPTOP Magazine reported 5 hours and 55 minutes of WiFi web-surfing.
ASUS	X550CC	4-cell 2600 mAh 37 Wh	No official Asus claims reported. PT can find no other battery life claims from other 3rd parties.
ASUS	D550MA	3-cell 3000 mAh 33 Wh	No official Asus claims reported. B&H claims up to 4 hours.
Fujitsu®	LIFEBOOK® E754	<p>1st battery options: Li-Ion battery 6-cell, 63 Wh Li-Ion battery 6-cell, 72 Wh</p> <p>2nd battery (optional): Li-Ion battery 6-cell, 28 Wh</p> <p>Runtime 1st battery: Up to 13 hrs and 10 min (with 72 Wh battery)</p> <p>Runtime 1st + 2nd battery: Up to 21 hrs (with 72 Wh high capacity main battery + 2nd Battery + SSD Hard Drive)</p> <p>Battery charging time ~160 min (63 Wh) ~ 200 min (72 Wh)</p>	13 hrs and 10 min (with 72 Wh battery); 21 hrs (with 72 Wh high capacity main battery + 2nd Battery + SSD Hard Drive)
Fujitsu	LIFEBOOK E554	Up to 11 hour 20 minute runtime, BAPCo® MobileMark 2007 Productivity Workload, Win7 OS	11 hour 20 minute runtime, BAPCo® MobileMark 2007 Productivity Workload, Windows® 7 OS

Brand	Model	Battery info	Battery life claims
HP	LIFEBOOK E554	HP Long Life 3-cell, 50 Wh Li-ion polymer prismatic 3-cell, 50 Wh models with SSD: up to 15 hours and 30 minutes (integrated, MM07)	15 hours and 30 minutes (integrated, MM07)
HP	Pavilion 15T	4-cell 41 Wh Lithium Ion Battery	7 hours and 30 minutes
HP	ProBook 650 G1	Primary battery: 9-cell (100 Wh) Li-Ion; 6-cell (55 Wh) Li-Ion; 3-cell (33 Wh) Li-Ion; 6-cell (55 Wh) Long Life; HP Fast Charge (6-cell only)	11 hours (6-cell, Long Life 55 Wh Li-ion models with hard drive); 10 hours and 45 minutes (discrete graphics)
HP	ProBook 450 G2	4-cell 44 Wh Lithium Ion	No official HP claims. CNET claims up to 11 hours (Note: CNET has an obvious typo of 11 seconds)
HP	255 G3	4-cell (41 Wh) polymer 3-cell (31 Wh) polymer	No official HP claims. Trusted Reviews reports just under 4 hours.
HP	355 G2	4-cell 41 Wh Lithium Ion	No official HP claims. Notebook Check reports 4 hours 43 minutes of web surfing at 150 nits.
HP	EliteBook 755 G2	3-cell (24 Wh) HP Long Life 3-cell (50 Wh) HP Long Life Secondary battery support: 6-cell (60 Wh) slice	9 hours and 45 minutes
HP	250 G3	4-cell 41 Wh Lithium Ion 3-cell 31 Wh Lithium Ion Up to 6 hours 45 minutes battery life	6 hours and 45 minutes
HP	HP ENVY - 15t Quad Windows 7 Laptop	6-cell 47 Wh or 62 Wh Lithium-ion Battery	5 hours and 30 minutes
HP	HP ENVY - 15t Slim Quad Laptop	6-cell 47 Wh or 62 Wh Lithium-ion Battery	5 hours and 30 minutes
HP	HP OMEN - 15t Quad Touch Select Laptop	4-cell 58 Wh Lithium-ion Battery	4 hours and 45 minutes
HP	HP OMEN - 15t Quad Touch Laptop	4-cell 58 Wh Lithium-ion Battery	4 hours and 45 minutes

Brand	Model	Battery info	Battery life claims
HP	HP OMEN Notebook - 15-5110nr	4-cell, 58 Wh Li-ion polymer	No official HP claims. LAPTOP Magazine claims 4 hours 6 minutes while web surfing at 100 nits screen brightness. CNET claims 3 hours 11 minutes of video playback.
Lenovo	U530 Touch	>=10 hrs Windows 8 Idle @ 150 nits >=6 hrs FHD playback @ 150 nits 4-cell Li-Polymer	10 hours Idle; 6 hours FHD playback.
Lenovo	ThinkPad® W550s	3 cell Front (44 Wh) 6 cell Rear High Capacity (72 Wh) 3 cell Rear (23 Wh) 6 cell Rear (48 Wh)	17 hours with two batteries: an internal 3-cell battery, plus a hot-swappable 6-cell rear battery.
Lenovo	ThinkPad Yoga™ 15	Up to at least 8 hrs	8 hours.
Lenovo	Edge 15	Up to 8 hours	8 hours.
Lenovo	Ideapad™ 100-15	Up to 3 hours with 24 Wh battery	3 hours with 24 Wh battery
Lenovo	G50	4-cell Up to 4 hours	4 hours
Lenovo	Z50	Up to 5 hours	5 hours
Lenovo	Z51	41 Wh Up to 4 hours	4 hours
Lenovo	Flex 3 (15 inch)	Up to 5.5 hours with 45 Wh battery, up to 3.5 hours with 30Wh battery	5.5 hours with 45 Wh battery
Lenovo	B50	Up to 6 hours (Intel® Core™ i models) Up to 5 hours (Intel Pentium® models)	6 hours (Intel Core i models); 5 hours (Intel Pentium models)
Lenovo	Y50 Touch (six various models all match the criteria)	Up to 4 hours Wi-Fi browsing depending on configuration	5 hours Wi-Fi browsing depending on configuration
Lenovo	Y50-70 UHD (six various models all match the criteria)	Up to 5 hours Wi-Fi browsing depending on configuration	5 hours Wi-Fi browsing depending on configuration
Lenovo	Y50	Up to 5 hours Wi-Fi browsing depending on configuration	5 hours WiFi browsing depending on configuration
Lenovo	ThinkPad E550	Up to 9 hours with standard, removable, 6-cell 48 Wh battery	9 Hours (48 Wh Internal Battery) MobileMark 2012
Lenovo	ThinkPad E555	Up to 6.3 hours (48 Wh customer swappable battery) (MobileMark 2012)	6.3 hours (48 Wh customer swappable battery) MobileMark 2012

Brand	Model	Battery info	Battery life claims
Lenovo	ThinkPad L540	6-cell (48 Wh): 6 hours 6-cell (56 Wh): 7 hours	11 hours with standard removable 6-cell battery
Lenovo	ThinkPad T550	3-cell 116 Wh Up to 24 hours	24 hours (116 Wh)
Lenovo	ThinkPad T540p	9-cell (9.21 Ah) (57++) 6-cell (5.2 Ah) (57+) 13+ hours	13+ hours
Lenovo	ThinkPad W541	6-cell (56 Wh) 9-cell (99 Wh)	6 hours
Toshiba	Tecra W50-A1510	Li-Ion (66 Wh, 6-Cell)	No official Toshiba claims reported. SpecOut reports 4.8 hours.
Toshiba	Tecra Z50-A1503	4 cell/60 Wh Lithium Ion battery pack (Not user replaceable)	8.6 hours

Figure 1: Battery life information we gathered for the notebooks. All links and data current as of 11/30/15.

Figure 2 shows the dimensional information for the notebooks we researched. We found the new Dell XPS 15 was the thinnest of these notebooks.

Brand	Model	Thinness		Dimensions		total area (sq. in.)	Weight	
		mm	inches	mm	inches		lbs	kg
Dell	XPS 15 (berlinetta)	12.0 - 17.0	0.46 - 0.66	357 x 235	14.06 x 9.25	130.055	4.09	1.85
Acer	Aspire V5-561-9410		0.48 (front) - 1.01 (rear)		15 x 10.1	151.5	5.18 (approximate)	
Acer	Aspire R7-572-5893		0.81 (front) - 1.12 (rear)		14.8 x 10	148	5.29 (approximate)	
Acer	Aspire E5-571-37SY		1 (front) - 1.19 (rear)		15 x 10.1	151.5	5.51	
Acer	Aspire E1-572-6459		1		15 x 10.1	151.5	5.18	

Brand	Model	Thickness		Dimensions		total area (sq. in.)	Weight	
		mm	inches	mm	inches		lbs	kg
Acer	Aspire VN7-571G-719D		0.86 (front) 0.94 (rear)		15.3 x 10.1	154.53	5.29	
Acer	Aspire VN7-591G-70RT		0.86 (front) 0.94 (rear)		15.3 x 10.1	154.53	5.29	
Acer	Aspire VN7-591G-71W9		0.86 (front) 0.94 (rear)		15.3 x 10.1	154.53	5.29	
Acer	Aspire VN7-591G-79YZ		0.86 (front) 0.94 (rear)		15.3 x 10.1	154.53	5.29	
Acer	Aspire VN7-591G-729V		0.86 (front) 0.94 (rear)		15.3 x 10.1	154.53	5.29	
Acer	Aspire VN7-591G-72K6		0.86 (front) 0.94 (rear)		15.3 x 10.1	154.53	5.29	
Acer	Aspire VN7-591G-7857		0.86 (front) 0.94 (rear)		15.3 x 10.1	154.53	5.29	
Acer	Aspire VN7-591-76TR		0.86 (front) 0.94 (rear)		15.3 x 10.1	154.53	5.29	
Acer	Aspire VN7-591G-77FS		0.86 (front) 0.94 (rear)		15.3 x 10.1	154.53	5.29	
Apple	MacBook Pro with Retina Display		0.71		14.13 x 9.73	137.4849	4.49	
Asus	Transformer Book Flip TP500LA		0.9		15 x 10	150	4.6	
Asus	ZenBook Pro UX501	21.3	0.8	383 x 255	15.1 x 10	151	4.5 (with 6 cell battery)	
Asus	ZenBook NX500	19 (with 6 cell battery)		378 x 255 (with 6 cell battery)			5 (with 6 cell battery)	
Asus	X550JK		1.15-1.2		15 x 10	150	5.4	

Brand	Model	Thickness		Dimensions		total area (sq. in.)	Weight	
		mm	inches	mm	inches		lbs	kg
Asus	N550JX	27.7		383 x 255			5.7	
Asus	N550JK		1.1		15.1 x 10	151	6	
Asus	N550JV	27.7		383 x 255				2.6
Asus	G56JK		1.1-1.3		15 x 10	150	5.9	
Asus	G550JK		1.1		15 x 10	150	5.7	
Asus	G56JR	27.2-34		380 x 255				2.7
Asus	N551JQ		0.6-1.3		15 x 10	150	6	
Asus	N551JM	28-31.5		383 x 255				2.7
Asus	X551CA	30.9-36.59		380 x 251				2.15
Asus	X555LA		1		15 x 10.1	151.5	5	
Asus	X550CC	24.8-31.7		380 x 251				2.3
Asus	D550MA		1.2 (labeled as Tablet dimensions)		15 x 9.9 (labeled as Tablet dimensions)	148.5 (labeled as tablet dimensions)	4.7	
Fujitsu	LIFEBOOK E754		0.78-1.06		14.72 x 9.84	144.8448	With modular optical drive: approx. 4.37 With modular weight saver: approx. 4.12 With 2nd modular battery: approx. 4.56	
Fujitsu	LIFEBOOK E554	24.2 - 31.4		374 x 250			4.9 (including weight saver, may vary based on configuration)	2.2 (including weight saver, may vary based on configuration)
HP	EliteBook 850 G2	21.4 (non-touch) 25.8 (touch)	0.84 (non-touch) 1.02 (touch)	375.5 x 253.6	14.78 x 9.98	147.5044	Starting at 4.02 (non-touch) Starting at 4.54 (touch)	Starting at 1.83 (non-touch) Starting 2.06 (touch)

Brand	Model	Thickness		Dimensions		total area (sq. in.)	Weight	
		mm	inches	mm	inches		lbs	kg
HP	Pavilion 15T		0.99		15.14 x 10.28	155.6392	5.07	
HP	ProBook 650 G1	25.3 (at front)	0.99 (at front)	378 x 257 (at front)	14.88 x 10.12 (at front)	150.5856	Starting at 5.1	Starting at 2.32
HP	ProBook 450 G2	Non-Touch: 23.4 (front) 25.5 (rear) Touch: 25 (front) 27.1 (rear)	Non-Touch: 0.92 (front) 1 (rear) Touch: 0.98 (front) 1.07 (rear)	375 x 262.8 (non-touch) 375 x 263.2 (touch)	14.76 x 10.35 (non-touch) 14.76 x 10.36 (touch)	152.766 (non-touch) 152.9136 (touch)	Starting at 4.54	Starting at 2.06
HP	255 G3	25.3 (non-touch) 25.6 (touch)	1 (non-touch) 1 (touch)	378 x 259 (non-touch) 378 x 259 (touch)	14.88 x 10.2 (non-touch) 14.88 x 10.2 (touch)	151.776	Starting at 4.83 (non-touch) Starting at 5.49 (touch)	Starting at 2.19 (non-touch) Starting at 2.49 (touch)
HP	355 G2	23.1	0.9	261 x 384	10.27 x 15.12	155.2824	Starting at 5.07	Starting at 2.3
HP	EliteBook 755 G2	21.5 (front - non-touch) 25.8 (front - touch)	0.85 (front - non-touch) 1.02 (front - touch)	375.5 x 253.6 (non-touch) 375.5 x 253.6 (touch)	14.78 x 9.98 (non-touch) 14.78 x 9.98 (touch)	147.5044	Starting at 4.4	Starting at 2
HP	250 G3	25.3 (non-touch) 25.6 (touch)	1 (non-touch) 1.01 (touch)	378 x 259 (non-touch) 378 x 259 (touch)	14.88 x 10.2 (non-touch) 14.88 x 10.2 (touch)	151.776	Starting at 4.83 (non-touch) Starting at 5.25 (touch)	Starting at 2.19 (non-touch) Starting at 2.38 (touch)
HP	HP ENVY - 15t Quad Windows 7 Laptop		0.67		14.94 x 9.87	147.4578	5.06	
HP	HP ENVY - 15t Slim Quad Laptop		1.1		14.94 x 9.87	147.4578	5.06	
HP	HP OMEN - 15t Quad Touch Select Laptop		0.78		15.07 x 9.67	145.7269	4.68	

Brand	Model	Thickness		Dimensions		total area (sq. in.)	Weight	
		mm	inches	mm	inches		lbs	kg
HP	HP OMEN - 15t Quad Touch Laptop		0.78		15.07 x 9.67	145.7269	4.68	
HP	HP OMEN Notebook - 15-5110nr		0.78		15.07 x 9.67	145.7269	4.68	
Lenovo	U530 Touch		0.86		14.09 x 10.11	142.4499	5.07	
Lenovo	ThinkPad W550s		0.88 (non-touch) 0.92 (touch)		15 x 10.2 (non-touch) 15 x 10.2 (touch)	153	4.92 (non-touch)	
Lenovo	ThinkPad Yoga 15		0.82		15.07 x 10.07	151.7549	5.07	
Lenovo	Edge 15	20.3	0.8	381 x 276.9	15 x 10.9	163.5	5	
Lenovo	Ideapad 100-15		0.89		14.88 x 10.43	155.1984	5.1	
Lenovo	G50		0.98		15.11 x 10.4	157.144	5.51	
Lenovo	Z50		0.98		15.11 x 10.43	157.5973	5.29	
Lenovo	Z51		0.97		15.12 x 10.43	157.7016	5.07	
Lenovo	Flex 3 (15 inch)		0.87		15.16 x 10.04	152.2064	5.0 (starting point)	
Lenovo	B50	24.7	1	380 x 262	15 x 10.3	154.5	4.74 (without Optical Disk Drive) 5.11 (with Optical Disk Drive)	2.15 without Optical Disk Drive, 2.32 with Optical Disk Drive
Lenovo	Y50 Touch (six various models all match the criteria)		0.9		15.23 x 10.37	157.9351	5.7	
Lenovo	Y50-70 UHD (six various models all match the criteria)		0.9		15.23 x 10.37	157.9351	5.29	
Lenovo	Y50		0.9		15.23 x 10.37	157.9351	5.29	
Lenovo	ThinkPad E550		1.06		14.84 x 10.08	149.5872	5.21 (with optical drive)	
Lenovo	ThinkPad E555		1.1		14.8 x 10	148	5.18	
Lenovo	ThinkPad L540		1.22		14.84 x 9.72	144.2448	5.5	

Brand	Model	Thickness		Dimensions		total area (sq. in.)	Weight	
		mm	inches	mm	inches		lbs	kg
Lenovo	ThinkPad T550		0.88		14.98 x 10.17	152.3466	5 (starting point)	
Lenovo	ThinkPad T540p		1.09		14.82 x 9.76	144.6432	5.5	
Lenovo	ThinkPad W541		1.10-1.167		15.6 x 9.7	151.32	5.57	
Toshiba	Tecra W50-A1510		1.09-1.37		15 x 10	150	Starting at 6.0	
Toshiba	Tecra Z50-A1503	20.4	0.8	379 x 252	14.9 x 9.9	147.51	Starting at 4.1	Starting at 1.85

Figure 2: Dimensional information for the notebooks. All links and data current as of 11/30/15.

Figure 3 details the available screen information for the systems we researched. According to vendor-provided data, the new Dell XPS 15 has a display with up to 60 percent more pixels than the MacBook Pro with Retina Display (15-inch).

Brand	Model	Screen	Screen Resolution		Pixels
			Vertical	Horizontal	
Dell	XPS 15 (berlinetta)	15.6"	3,840	2,160	8,294,400
Acer	Aspire V5-561-9410	15.6"	1,366	768	1,049,088
Acer	Aspire R7-572-5893	15.6"	1,920	1,080	2,073,600
Acer	Aspire E5-571-37SY	15.6"	1,366	768	1,049,088
Acer	Aspire E1-572-6459	15.6"	1,366	768	1,049,088
Acer	Aspire VN7-571G-719D	15.6"	1,920	1,080	2,073,600
Acer	Aspire VN7-591G-70RT	15.6"	1,920	1,080	2,073,600
Acer	Aspire VN7-591G-71W9	15.6"	3,840	2,160	8,294,400
Acer	Aspire VN7-591G-79YZ	15.6"	3,840	2,160	8,294,400
Acer	Aspire VN7-591G-729V	15.6"	3,840	2,160	8,294,400
Acer	Aspire VN7-591G-72K6	15.6"	1,920	1,080	2,073,600
Acer	Aspire VN7-591G-7857	15.6"	1,920	1,080	2,073,600
Acer	Aspire VN7-591-76TR	15.6"	1,920	1,080	2,073,600
Acer	Aspire VN7-591G-77FS	15.6"	1,920	1,080	2,073,600
Apple	MacBook Pro with Retina Display	15.4"	2,880	1,800	5,184,000

Brand	Model	Screen	Screen Resolution		Pixels
			Vertical	Horizontal	
Asus	Transformer Book Flip TP500LA	15.6"	1,920	1,080	2,073,600
Asus	ZenBook Pro UX501	15.6"	3,840	2,160	8,294,400
Asus	ZenBook NX500	15.6"	1,920	1,080	2,073,600
Asus	X550JK	15.6"	1,366	768	1,049,088
Asus	N550JX	15.6"	1,920	1,080	2,073,600
Asus	N550JK	15.6"	1,920	1,080	2,073,600
Asus	N550JV	15.6"	1,920	1,080	2,073,600
Asus	G56JK	15.6"	1,920	1,080	2,073,600
Asus	G550JK	15.6"	1,920	1,080	2,073,600
Asus	G56JR	15.6"	1,366	768	1,049,088
Asus	N551JQ	15.6"	1,920	1,080	2,073,600
Asus	N551JM	15.6"	1,920	1,080	2,073,600
Asus	X551CA	15.6"	1,366	768	1,049,088
Asus	X555LA	15.6"	1,366	768	1,049,088
Asus	X550CC	15.6"	N/A	N/A	N/A
Asus	D550MA	15.6"	1,366	768	1,049,088
Fujitsu	LIFEBOOK E754	15.6"	1,920	1,080	2,073,600
Fujitsu	LIFEBOOK E554	15.6"	1,920	1,080	2,073,600
HP	EliteBook 850 G2	15.6"	1,920	1,080	2,073,600
HP	Pavilion 15T	15.6"	1,366	768	1,049,088
HP	ProBook 650 G1	15.6"	1,920	1,080	2,073,600
HP	ProBook 450 G2	15.6"	1,920	1,080	2,073,600
HP	255 G3	15.6"	1,366	768	1,049,088
HP	355 G2	15.6"	1,366	768	1,049,088
HP	EliteBook 755 G2	15.6"	1,920	1,080	2,073,600
HP	250 G3	15.6"	1,366	768	1,049,088
HP	HP ENVY - 15t Quad Windows 7 Laptop	15.6"	1,920	1,080	2,073,600
HP	HP ENVY - 15t Slim Quad Laptop	15.6"	1,920	1,080	2,073,600
HP	HP OMEN - 15t Quad Touch Select Laptop	15.6"	1,920	1,080	2,073,600
HP	HP OMEN - 15t Quad Touch Laptop	15.6"	1,920	1,080	2,073,600

Brand	Model	Screen	Screen Resolution		Pixels
			Vertical	Horizontal	
HP	HP OMEN Notebook - 15-5110nr	15.6"	1,920	1,080	2,073,600
Lenovo	U530 Touch	15.6"	1,920	1,080	2,073,600
Lenovo	ThinkPad W550s	15.6"	2,880	1,620	4,665,600
Lenovo	ThinkPad Yoga 15	15.6"	1,920	1,080	2,073,600
Lenovo	Edge 15	15.6"	1,920	1,080	2,073,600
Lenovo	Ideapad 100-15	15.6"	1,366	768	1,049,088
Lenovo	G50	15.6"	1,366	768	1,049,088
Lenovo	Z50	15.6"	1,920	1,080	2,073,600
Lenovo	Z51	15.6"	1,920	1,080	2,073,600
Lenovo	Flex 3 (15 inch)	15.6"	1,920	1,080	2,073,600
Lenovo	B50	15.6"	1,920	1,080	2,073,600
Lenovo	Y50 Touch (six various models all match the criteria)	15.6"	1,920	1,080	2,073,600
Lenovo	Y50-70 UHD (six various models all match the criteria)	15.6"	3,840	2,160	8,294,400
Lenovo	Y50	15.6"	1,920	1,080	2,073,600
Lenovo	ThinkPad E550	15.6"	1,920	1,080	2,073,600
Lenovo	ThinkPad E555	15.6"	1,366	768	1,049,088
Lenovo	ThinkPad L540	15.6"	1,920	1,080	2,073,600
Lenovo	ThinkPad T550	15.6"	2,880	1,620	4,665,600
Lenovo	ThinkPad T540p	15.6"	2,880	1,620	4,665,600
Lenovo	ThinkPad W541	15.6"	2,880	1,620	4,665,600
Toshiba	Tecra W50-A1510	15.6"	1,920	1,080	2,073,600
Toshiba	Tecra Z50-A1503	15.6"	1,920	1,080	2,073,600

Figure 3: Display information for the 15-inch laptops. All links and data current as of 11/30/15.

Figure 4 details the available processor and graphics card information for the systems we researched.

Brand	Model	Processor	Graphics Card
Dell	XPS 15 (berlinetta)	6th generation Intel Core processors up to quad-core i7	NVIDIA® GeForce® GTX 960M
Acer	Aspire V5-561-9410	Intel Core i7-4500U	Intel HD 4400 with Shared Memory
Acer	Aspire R7-572-5893	Intel Core i5-4210U	Intel HD Graphics 4400 with Shared Memory
Acer	Aspire E5-571-37SY	Intel Core i3-4030U	Intel Shared Memory
Acer	Aspire E1-572-6459	Intel Core i5-4200U	Intel HD 4400 with Shared Memory
Acer	Aspire VN7-571G-719D	Intel Core i7-5500U	NVIDIA GeForce GTX 950M with 4 GB Dedicated Memory
Acer	Aspire VN7-591G-70RT	Intel Core i7-4720HQ	NVIDIA GeForce GTX 960M with 4 GB Dedicated Memory
Acer	Aspire VN7-591G-71W9	Intel Core i7-4720HQ	NVIDIA GeForce GTX 860M with 4 GB Dedicated Memory
Acer	Aspire VN7-591G-79YZ	Intel Core i7-4720HQ	NVIDIA GeForce GTX 960M with 4 GB Dedicated Memory
Acer	Aspire VN7-591G-729V	Intel Core i7-4720HQ	NVIDIA GeForce GTX 960M with 4 GB Dedicated Memory
Acer	Aspire VN7-591G-72K6	Intel Core i7-4720HQ	NVIDIA GeForce GTX 860M with 4 GB Dedicated Memory
Acer	Aspire VN7-591G-7857	Intel Core i7-4720HQ	NVIDIA GeForce GTX 860M with 4 GB Dedicated Memory
Acer	Aspire VN7-591-76TR	Intel Core i7-4720HQ	NVIDIA GeForce GTX 960M 4GB Dedicated Memory
Acer	Aspire VN7-591G-77FS	Intel Core i7-4720HQ	NVIDIA GeForce GTX 960M with 4 GB Dedicated Memory
Apple	MacBook Pro with Retina Display	Intel Core i7-4870HQ	AMD Radeon R9 M370X with 2GB of GDDR5 memory
Asus	Transformer Book Flip TP500LA		
Asus	ZenBook Pro UX501	Intel Core i7-4720HQ	NVIDIA GeForce GTX 960M with 2GB GDDR5 VRAM
Asus	ZenBook NX500	Intel Core i7 4712HQ	NVIDIA GeForce GTX 850M 2GB GDDR5 VRAM
Asus	X550JK	Intel Core i7 4710HQ	NVIDIA GeForce GTX 850M with 2GB DDR3
Asus	N550JX	Intel Core i7 4720HQ Intel Core i5 4200H	NVIDIA GeForce GTX 950M with 2GB/4GB DDR3
Asus	N550JK	Intel Core i7 4700HQ Intel Core i7 4710HQ	NVIDIA GeForce GTX 850M with 2GB DDR3
Asus	N550JV	Intel Core i7 4700HQ	NVIDIA GeForce GT 750M with 2GB/4GB DDR3
Asus	G56JK	Intel Core i7 4710HQ Intel Core i5 4200H	NVIDIA GeForce GTX 850M with 2GB/4GB DDR3
Asus	G550JK	Intel Core i7 4700HQ Intel Core i5 4200H	NVIDIA GeForce GTX 850M with 2GB/4GB DDR3
Asus	G56JR	Intel Core i7 4700HQ Intel Core i5 4200H	NVIDIA GeForce GTX 760M 2GB GDDR5
Asus	N551JQ	Intel Core i7 4710HQ	NVIDIA GeForce GT 845M with 2GB DDR3 VRAM

Brand	Model	Processor	Graphics Card
Asus	N551JM	Intel Core i7 4710HQ Intel Core i5 4200H	NVIDIA GeForce GTX860M 2G/4G GDDR5
Asus	X551CA	Intel Core i3 3217U Intel ULV Pentium 2117U Intel Celeron® 1007U	Integrated Intel HD Graphics 4400
Asus	X555LA	Intel Core i7 4510U Intel Core i5 4210U	Integrated Intel HD Graphics 4400
Asus	X550CC	Intel Core i7 3537U Intel Core i5 3337U Intel Core i3 3217U Intel ULV Pentium 2117U Intel Celeron 1007U	NVIDIA GeForce GT 720M
Asus	D550MA	Intel Bay Trail-M Dual Core Celeron N2815	Integrated Intel® UMA
Fujitsu	LIFEBOOK E754	Intel Core i3-4000M Intel Core i5-4210M Intel Core i5-4310M vPro™ Intel Core i7-4610M vPro Intel Core i7-4712MQ	Intel HD Graphics 4600
Fujitsu	LIFEBOOK E554	Intel Core i3-4000M Intel Core i3-4100M Intel Core i5-4210M Intel Core i5-4310M Intel Core i7-4712MQ	Intel HD Graphics 4600
HP	EliteBook 850 G2	Intel Core i7-5600U Intel Core i7-5500U Intel Core i5-5300U Intel Core i5-5200U Intel Core i3-5010U	Integrated: Intel HD Graphics 5500
HP	Pavilion 15T	6th Gen Intel Core i5-6200U 6th Gen Intel Core i5-6200U 6th Gen Intel Core i7-6500U	Intel(HD Graphics 520 NVIDIA GeForce 940M 2GB Discrete Graphics Intel(R) HD Graphics 520

Brand	Model	Processor	Graphics Card
		6th Gen Intel Core i7-6500U	NVIDIA GeForce 940M 2GB Discrete Graphics
HP	ProBook 650 G1	Intel Core i7-4610M	Intel HD Graphics 4600
HP	ProBook 450 G2	Intel Core i7-4510U Intel Core i5-4210U Intel Core i3-4030U Intel Core i3-4005U	Intel HD Graphics 4400
HP	255 G3	AMD quad-core AMD dual-core	AMD Radeon™ 8210/8280/8330/8400
HP	355 G2	AMD Quad-Core A8-6410 APU AMD Quad-Core A6-6310 APU AMD Quad-Core A4-6210 APU	Radeon R5 Graphics Radeon R4 Graphics Radeon R3 Graphics
HP	EliteBook 755 G2	AMD Quad-Core APU AMD Dual-Core APU	AMD Radeon Graphics
HP	250 G3	Intel Core i3-3217U Intel Celeron N2815	Intel HD Graphics 4000
HP	HP ENVY - 15t Quad Windows 7 Laptop	Intel Core i7-4722HQ	NVIDIA GeForce GTX 950M 4GB
HP	HP ENVY - 15t Slim Quad Laptop	Intel Core i7-4722HQ	NVIDIA GeForce GTX 950M 4GB
HP	HP OMEN - 15t Quad Touch Select Laptop	Intel Core i7-4720HQ	NVIDIA GeForce GTX 960M 4GB
HP	HP OMEN - 15t Quad Touch Laptop	Intel Core i7-4720HQ	NVIDIA GeForce GTX 960M 2GB/4GB
HP	HP OMEN Notebook - 15-5110nr	Intel Core i7-4720HQ	NVIDIA GeForce GTX 960M 2GB GDDR5
Lenovo	U530 Touch	4th Gen Intel Core i7-4500U 4th Gen Intel Core i5-4200U 4th Gen Intel Core i3-4005U	Intel HD Graphics 4000
Lenovo	ThinkPad W550s	Intel Core i7-5500U Processor Intel Core i7-5600U Processor	NVIDIA K620M
Lenovo	ThinkPad Yoga 15	Up to Intel Core i7	NVIDIA GeForce 840M 2GB
Lenovo	Edge 15	5th Intel Core i7-5500U 5th Intel Core i3-5005U	Intel HD Graphics 5500
Lenovo	Ideapad 100-15	Intel Pentium N2840 processor	Integrated Intel Graphics
Lenovo	G50	Intel Celeron Processor N2830	Intel HD Graphics
Lenovo	Z50	Intel Core i7-4510U	Intel HD Graphics 4400

Brand	Model	Processor	Graphics Card
Lenovo	Z51	Up to 5th Generation Intel Core i7	Integrated Intel or up to AMD R9-M375
Lenovo	Flex 3 (15 inch)	Up to 6th Generation Intel Core i7	Intel HD Graphics
Lenovo	B50	Intel Core i7-4500U Intel Core i5-4200U Intel Core i3-4100U Intel Core i3-4010U Intel Core i3-4005U Intel Pentium N3520 Intel Pentium N2920 Intel Pentium N2815	Intel HD NVIDIA GeForce 820M (optional) AMD Radeon R5 M230 (optional)
Lenovo	Y50 Touch (six various models all match the criteria)	Intel Core i7-4720HQ	NVIDIA GeForce GTX 860M 4GB
Lenovo	Y50-70 UHD (six various models all match the criteria)	Intel Core i7-4710HQ	NVIDIA GeForce GTX 860M 4GB
Lenovo	Y50	Intel Core i7-4710HQ Intel Core i7-4700HQ	NVIDIA GeForce GTX 860M 2GB/4GB
Lenovo	ThinkPad E550	Up to Intel Core i7 Processor	Intel HD Graphics AMD Radeon R7 M265 2GB (with Intel Core i7 Processor)
Lenovo	ThinkPad E555	Up to AMD A10 Processor	AMD Integrated Graphics Optional AMD Discrete Graphics
Lenovo	ThinkPad L540	Intel Core i7-4600M Intel Core i7-4702MQ Intel Core i5-4330M Intel Core i5-4300M Intel Core i3-4000M	Intel HD Graphics 4600 with HM86 (non-vPro), and W TPM, and W/Express card Intel HD Graphics 4600 with HM86 (non-vPro), and W TPM, and W/Express card
Lenovo	ThinkPad T550	Intel Core i7-5600U Intel Core i5-5300U Intel Core i5-5200U	Integrated with docking

Brand	Model	Processor	Graphics Card
Lenovo	ThinkPad T540p	Intel Core i3-4000M Intel Core i5-4200M Intel Core i5-4300M Intel Core i5-4330M Intel Core i7-4600M Intel Core i7-4700MQ Intel Core i7-4800MQ Intel Core i7-4900MQ	GeForce GT 730M Intel HD Graphics (integrated)
Lenovo	ThinkPad W541	Intel Core i7-4710MQ Intel Core i7-4810MQ Intel Core i7-4910MQ Intel Core i7-4940MX Extreme Edition	NVIDIA Quadro® K1100M 2G NVIDIA Quadro K2100M 2G
Toshiba	Tecra W50-A1510	Intel Core i7-4810MQ	NVIDIA Quadro K2100M
Toshiba	Tecra Z50-A1503	Intel Core i7-4600U	Mobile Intel HD Graphics

Figure 4: Processor and graphics information. All links and data current as of 11/30/15.

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