

ThinkPad®



Lenovo® ThinkPad X220 Tablet



Lenovo ThinkPad X220 Tablet



Lenovo ThinkPad X220 Tablet



Lenovo ThinkPad X220 Tablet



Lenovo ThinkPad X220 Tablet



Lenovo ThinkPad X220 Tablet

ThinkPad® X220 Tablet (4298) - November 2011 - I - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Widescreen display	Camera	Disk SATA GB ⁵ rpm	Optical in Ultrabay Series 3	Mini Card WLAN	PCIe Mini Card WWAN	Finger print reader	Blue-tooth cells	Bat- tery cells	Ext Battery Intel vPro	Global (G) GMP (P)	Pre- load
4298-4TG	i7-2640M	4GBx1	12.5" HD <i>Multi</i>	720p	128G SSD		Intel 6205 ²⁸	upg	Fing	Blue	6	vPro	G	Pro 64
4298-4CG	i5-2520M	4GBx1	12.5" HD <i>Outdoor</i>	720p	128G SSD		Intel 6205	upg	Fing	Blue	6	vPro	G	Pro 64
4298-4BG	i5-2520M	4GBx1	12.5" HD <i>Multi</i>	720p	128G SSD		Intel 6205	upg	Fing	Blue	6	vPro	G	Pro 64
4298-42G	i5-2520M	4GBx1	12.5" HD <i>Multi</i>	720p	320G 7200	DVD±RW UltraB	Intel 6205	upg	Fing	Blue	6	vPro	G	Pro 64
4298-3ZG	i5-2520M	4GBx1	12.5" HD <i>Outdoor</i>	720p	320G 7200	DVD±RW UltraB	Intel 6205	upg	Fing	Blue	6	vPro	G	Pro 64
4298-3YG	i7-2620M	4GBx1	12.5" HD <i>Multi</i>	720p	128G SSD		Intel 6205	upg	Fing	Blue	6	vPro	G	Pro 64
4298-3XG	i7-2620M	4GBx1	12.5" HD <i>Outdoor</i>	720p	128G SSD		Intel 6205	upg	Fing	Blue	6	vPro	G	Pro 64
4298-3UG	i7-2620M	4GBx1	12.5" HD <i>Multi</i>	720p	320G 7200		Intel 6205	upg	Fing	Blue	6	6 vPro	G	Pro 64
4298-3TG	i7-2620M	4GBx1	12.5" HD <i>Outdoor</i>	720p	320G 7200		Intel 6205	upg	Fing	Blue	6	6 vPro	G	Pro 64
4298-56G	i5-2520M	4GBx1	12.5" HD <i>Multi</i>	720p	160G SSD		Intel 6205	upg	Fing	Blue	6	vPro	G	Pro 64
• A depot repair service 3-year limited warranty • Microsoft® Office 2010 Product Key Ready (O10PKR)														
Positioning Processor	<i>Convertible tablet ultraportable; one spindle</i> Intel® Core™ i5-2520M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-2620M processor (dual-core, 2.70GHz, 4MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.40GHz), HT technology Intel Core i7-2640M processor (dual-core, 2.80GHz, 4MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.50GHz), HT technology									Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Fingerprint Software (fingerprint models) • Password Manager (fingerprint models) • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo SimpleTap Preloaded applications¹⁴ (only some listed) • Norton™ Internet Security 2011 (30 days of virus definitions) • Skype™ for Windows • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW)				
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets													
Optical Ultrabay SATA disk	<i>Some:</i> DVD burner, removable from ThinkPad Ultrabase Series 3 Supports Ultrabay Slim devices in optional or standard ThinkPad Ultrabase Series 3 <i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabase Series 3													
mSATA™ SSD	None													
Widescreen display	<i>Outdoor:</i> 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare display with scratch resistant Corning® Gorilla® Glass, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, IPS <i>MultiTouch:</i> 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, IPS, MultiTouch screen supports pen & five-finger gesture <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in side base (right), rotate and swivel hinge , power, reset, and rotation buttons on display bottom													
Camera	HD720p resolution, wider view angle, low light sensitive, fixed focus													
Graphics	Intel HD Graphics 3000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via optional cable); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via optional cable)													
Keyboard TrackPoint® Touchpad ThinkLight™	7 row, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, buttonless touchpad below keyboard, multi-touch None													
Dimensions ³ Weight ² Case material Battery - type Extended Battery Battery - life ¹⁰	<i>without UltraBase; 3-cell:</i> 12.0" x 9" x 1.1-1.23"; 305mm x 228.7mm x 27-31.3mm <i>3-cell:</i> from 3.67 lb (1.66kg); <i>6-cell:</i> from 3.97 lb (1.80kg) <i>Display cover:</i> Magnesium + PCABS; <i>Bottom:</i> Magnesium alloy Lithium Ion 3-cell or 6-cell, supports optional external battery as 2nd battery <i>Some:</i> Slim external Lithium Ion 6-cell battery (ThinkPad Battery 19+) <i>3-cell (30Whr):</i> up to 4.0 hr; <i>6-cell (66Whr):</i> up to 8.8 hr; <i>external battery (64Whr):</i> up to 9.0 hr; <i>6-cell plus external battery:</i> up to 17.8 hr									Supports ThinkVantage® technologies ThinkPad Ultrabase Series 3 • Provides desktop expansion and cable management for X220 and X220 Tablet • Easily connects to the bottom of the X220 or X220 Tablet for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side Other features: • Power button (front) • Security key lock, security keyhole • Analog VGA DB-15 monitor port • DisplayPort (supports single-link DVI-D via optional cable) • Four USB 2.0 ports • Gigabit ethernet (RJ-45) port • Microphone in and headphone out • Requires 65W or 90W AC adapter • 1.39 lb; 630g				
Chipset	Mobile Intel QM67 Express Chipset													
Ultrabase Multicard Reader ExpressCard Ports	<i>Some:</i> ThinkPad Ultrabase Series 3 (see right side) 4-in-1 reader (SD, SDHC, SDXC, MMC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0 (one powered), external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)													
PCIe Mini Card WLAN ⁴ WWAN Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 Wireless WAN upgradable None None Bluetooth 3.0 wireless, LED indicator Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, LED indicator, Power On Authentication, supports the security chip													
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, LED indicator, Power On Authentication, supports the security chip													
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades²² available									65-watt AC Adapter ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²				

See footnotes for more detailed information
 WE model(s) announced May 3, May 10, August 2, or October 4, 2011, or January 3, 2012
 WE model(s) withdrawn effective December 2012

ThinkPad® X220 Tablet (4298) - November 2011 - II - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Widescreen display	Camera	Disk SATA GB ⁵ rpm	Optical in Ultrabase Series 3	PCle Mini Card WLAN	PCle Mini Card WWAN	Carrier	Bat-tery cells	Ext Battery cells	Global Intel vPro	(G) GMP (P)load	
4298-32G	i7-2620M	2GBx2	12.5" HD <i>Outdoor</i>	720p	160G SSD	Optional	Opt Intel 6205 ²⁸	Ericsson	selectable	6		vPro	Pro 64	
4298-22G	i5-2520M	2GBx2	12.5" HD <i>Outdoor</i>	720p	320G 7200	Optional	Opt Intel 6205	WWAN upg		6	6	vPro	Pro 64	
4298-2YG	i7-2620M	2GBx2	12.5" HD <i>Multi</i>	720p	320G 7200	Optional	Opt Intel 6205	WWAN upg		6		vPro	Pro 64	
4298-2XG	i5-2520M	2GBx1	12.5" HD <i>Multi</i>	720p	250G 5400	Optional	Opt Intel 6205	WWAN upg		6		vPro	Pro 64	
4298-26G	i7-2620M	2GBx2	12.5" HD <i>Multi</i>		320G 7200	Optional	Opt Intel 6300 ²⁸	WWAN upg		6	6	vPro	G Pro 64	
4298-27G	i5-2520M	2GBx1	12.5" HD <i>Outdoor</i>		320G 7200	Optional	Opt Intel 6205	WWAN upg		6		vPro	G Pro 64	
<ul style="list-style-type: none">• A depot repair service 3-year limited warranty• Microsoft® Office 2010 Product Key Ready (O10PKR)														
Positioning Processor	Convertible tablet ultraportable; one spindle Intel® Core™ i5-2520M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-2620M processor (dual-core, 2.70GHz, 4MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.40GHz), HT technology								Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Fingerprint Software (fingerprint models)• Password Manager (fingerprint models)• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo SimpleTap					
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none">• Norton™ Internet Security 2011 (30 days of virus definitions)• Skype™ for Windows• Microsoft Office 2010 preloaded; purchase product key to activate• Corel® WinDVD® (DVD±RW)• Corel Burn.Now™ Lenovo Edition (DVD±RW)					
Optical Ultrabay SATA disk	Option for ThinkPad Ultrabase Series 3 Supports Ultrabay Slim devices in optional or standard ThinkPad Ultrabase Series 3 <i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabase Series 3													
mSATA™ SSD	None													
Widescreen display	<i>Outdoor:</i> 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare display with scratch resistant Corning® Gorilla® Glass, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, IPS <i>MultiTouch:</i> 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, IPS, MultiTouch screen supports pen & five-finger gesture <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in side base (right), rotate and swivel hinge , power, reset, and rotation buttons on display bottom <i>Some:</i> HD720p resolution, wider view angle, low light sensitive, fixed focus													
Camera	<i>Some:</i> HD720p resolution, wider view angle, low light sensitive, fixed focus													
Graphics	Intel HD Graphics 3000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via optional cable); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via optional cable)								Supports ThinkVantage® technologies					
Keyboard TrackPoint® Touchpad ThinkLight™	7 row, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, buttonless touchpad below keyboard, multi-touch None								ThinkPad Ultrabase Series 3 <ul style="list-style-type: none">• Provides desktop expansion and cable management for X220 and X220 Tablet• Easily connects to the bottom of the X220 or X220 Tablet for traveling• Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side					
Dimensions ³ Weight ²	<i>without UltraBase; 3-cell:</i> 12.0" x 9" x 1.1-1.23"; 305mm x 228.7mm x 27-31.3mm <i>3-cell:</i> from 3.67 lb (1.66kg); <i>6-cell:</i> from 3.97 lb (1.80kg)								Other features: <ul style="list-style-type: none">• Power button (front)• Security key lock, security keyhole• Analog VGA DB-15 monitor port• DisplayPort (supports single-link DVI-D via optional cable)• Four USB 2.0 ports• Gigabit ethernet (RJ-45) port• Microphone in and headphone out• Requires 65W or 90W AC adapter• 1.39 lb; 630g					
Case material	<i>Display cover:</i> Magnesium + PCABS; <i>Bottom:</i> Magnesium alloy													
Battery - type	Lithium Ion 3-cell or 6-cell, supports optional external battery as 2nd battery													
Extended Battery	<i>Some:</i> Slim external Lithium Ion 6-cell battery (ThinkPad Battery 19+)													
Battery - life ¹⁰	<i>3-cell (30Whr):</i> up to 4.0 hr; <i>6-cell (66Whr):</i> up to 8.8 hr; <i>external battery (64Whr):</i> up to 9.0 hr; <i>6-cell plus external battery:</i> up to 17.8 hr													
Chipset	Mobile Intel QM67 Express Chipset													
Ultrabase Multicard Reader ExpressCard Ports	<i>Option:</i> ThinkPad Ultrabase Series 3 (see right side) 4-in-1 reader (SD, SDHC, SDXC, MMC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0 (one powered), external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)													
PCle Mini Card WLAN ⁴	Two PCI Express Mini Card slots <i>Some:</i> 11a/b/g/n, PCle Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> 11a/b/g/n, PCle Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® F5521gw Mobile Broadband Module, PCle Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS													
WWAN														
Carrier Modem	<i>Some:</i> User selectable, contract required with service provider													
Bluetooth™	None													
Ethernet	Bluetooth 3.0 wireless, LED indicator													
Intel AMT	Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCle x1													
Audio support	Intel Active Management Technology (iAMT)													
Security	High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack													
Security chip	Power-on password, hard disk password, supervisor password, security keyhole													
Fingerprint reader	Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, LED indicator, Power On Authentication, supports the security chip													
Limited warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available								65-watt AC Adapter ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²					

See footnotes for more detailed information
 WE model(s) announced March 22, April 5, or July 12, 2011
 WE model(s) withdrawn effective December 2012

© Lenovo
 (G-CMT1-2) February 2013

ThinkPad® X220 Tablet (4299) - Onsite (November 2011) - I - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Widescreen display	Disk SATA GB ⁸ rpm	Optical in UltraBase	ThinkPad Ultrabase Series 3	PCIe Mini Card WLAN	PCIe Mini Card WWAN	Carrier	Finger-print reader	Bat-tery cells	Ext Battery cells	Global (G) Intel vPro GMP (P)	Pre-load
4299-36G	i5-2520M	4GBx1	12.5" HD Outdoor	320G 7200	DVD±RW	UltraB	Intel 6205 ²⁸	upg		Fing	6		vPro G P	Pro 64
4299-35G	i5-2520M	4GBx1	12.5" HD Multi	320G 7200	DVD±RW	UltraB	Intel 6205	upg		Fing	6		vPro G P	Pro 64
4299-32G	i7-2620M	4GBx1	12.5" HD Outdoor	128G SSD			Intel 6205	upg		Fing	6		vPro G P	Pro 64
4299-2ZG	i7-2620M	4GBx1	12.5" HD Multi	128G SSD			Intel 6205	upg		Fing	6		vPro G P	Pro 64
4299-2SG	i7-2620M	4GBx1	12.5" HD Outdoor	320G 7200			Intel 6205	upg		Fing	6	6	vPro G P	Pro 64
4299-2RG	i7-2620M	4GBx1	12.5" HD Multi	320G 7200			Intel 6205	upg		Fing	6	6	vPro G P	Pro 64
4299-2QG	i5-2520M	4GBx1	12.5" HD Multi	320G 7200			Intel 6205	Ericsson	select	Fing	6		vPro	Pro 64
4299-2PG	i5-2520M	4GBx1	12.5" HD Multi	160G SSD			Intel 6205	Ericsson	select	Fing	6		vPro	Pro 64
4299-2BG	i7-2620M	2GBx2	12.5" HD Outdoor	160G SSD			Intel 6205	Ericsson	select	Fing	6		vPro	Pro 64
4299-2AG	i5-2520M	2GBx2	12.5" HD Outdoor	320G 7200			Intel 6205	upg		Fing	6	6	vPro	Pro 64
Positioning Processor	Convertible tablet ultraportable; one spindle Intel® Core™ i5-2520M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-2620M processor (dual-core, 2.70GHz, 4MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.40GHz), HT technology									Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) • Rescue and Recovery™ • Access Connections™ • Fingerprint Software (fingerprint models) • Password Manager (fingerprint models) • ThinkVantage Power Manager • ThinkVantage Toolbox • Lenovo SimpleTap				
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets									Preloaded applications¹⁴ (only some listed) • Norton™ Internet Security 2011 (30 days of virus definitions) • Skype™ for Windows • Microsoft Office 2010 preloaded; purchase product key to activate • Corel® WinDVD® (DVD±RW) • Corel Burn.Now™ Lenovo Edition (DVD±RW)				
Optical Ultrabay SATA disk	<i>Some:</i> DVD burner, removable from ThinkPad Ultrabase Series 3 Supports Ultrabay Slim devices in optional or standard ThinkPad Ultrabase Series 3 <i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabase Series 3													
Widescreen display	<i>Outdoor:</i> 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare display with scratch resistant Corning® Gorilla® Glass, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, IPS <i>MultiTouch:</i> 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, IPS, MultiTouch screen supports pen & five-finger gesture <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in side base (right), rotate and swivel hinge , power, reset, and rotation buttons on display bottom													
Camera	HD720p resolution, wider view angle, low light sensitive, fixed focus													
Graphics	Intel HD Graphics 3000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via optional cable); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via optional cable)									Supports ThinkVantage® technologies ThinkPad Ultrabase Series 3 • Provides desktop expansion and cable management for X220 and X220 Tablet • Easily connects to the bottom of the X220 or X220 Tablet for traveling • Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side Other features: • Power button (front) • Security key lock, security keyhole • Analog VGA DB-15 monitor port • DisplayPort (supports single-link DVI-D via optional cable) • Four USB 2.0 ports • Gigabit ethernet (RJ-45) port • Microphone in and headphone out • Requires 65W or 90W AC adapter • 1.39 lb; 630g 65-watt AC Adapter ENERGY STAR® 5.0-compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²				
Keyboard TrackPoint® Touchpad ThinkLight™	7 row, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, buttonless touchpad below keyboard, multi-touch None													
Dimensions ³ Weight ² Case material Battery - type Extended Battery Battery - life ¹⁰	<i>without UltraBase; 3-cell:</i> 12.0" x 9" x 1.1-1.23"; 305mm x 228.7mm x 27-31.3mm <i>3-cell:</i> from 3.67 lb (1.66kg); <i>6-cell:</i> from 3.97 lb (1.80kg) <i>Display cover:</i> Magnesium + PCABS; <i>Bottom:</i> Magnesium alloy Lithium Ion 3-cell or 6-cell, supports optional external battery as 2nd battery <i>Some:</i> Slim external Lithium Ion 6-cell battery (ThinkPad Battery 19+) <i>3-cell (30Whr):</i> up to 4.0 hr; <i>6-cell (66Whr):</i> up to 8.8 hr; <i>external battery (64Whr):</i> up to 9.0 hr; <i>6-cell plus external battery:</i> up to 17.8 hr													
Chipset	Mobile Intel QM67 Express Chipset													
Ultrabase Multicard Reader ExpressCard Ports	<i>Some:</i> ThinkPad Ultrabase Series 3 (see right side) 4-in-1 reader (SD, SDHC, SDXC, MMC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0 (one powered), external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)													
PCIe Mini Card WLAN ⁴ WWAN	Two PCI Express Mini Card slots 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> Wireless WAN upgradable <i>Some:</i> Wireless WAN, Ericsson® F5521gw Mobile Broadband Module, PCIe Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS													
Carrier Modem Bluetooth™ Ethernet Intel AMT Audio support	<i>Some:</i> User selectable, contract required with service provider None Bluetooth 3.0 wireless, LED indicator Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack													
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, LED indicator, Power On Authentication, supports the security chip													
Limited warranty ¹²	3-years/1-year battery, limited onsite service²⁴, 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available													

See footnotes for more detailed information

WE model(s) announced March 22, April 5, May 3, or May 10, 2011

WE model(s) withdrawn effective December 2012

© Lenovo

(G-CMT1-3) February 2013

ThinkPad® X220 Tablet (4299) - Onsite (November 2011) - II - withdrawn

Personal Systems Reference (PSREF)

Type-model	Processor	Memory	Widescreen display	Camera	Disk SATA GB ⁵ rpm	Optical in UltraBase	ThinkPad Ultrabase Series 3	PCIe Mini Card WLAN	PCIe Mini Card WWAN	Battery cells	Ext Battery cells	Intel vPro	Global (G) GMP (P)	Pre-load
4299-4TG	i7-2640M	4GBx1	12.5" HD <i>Multi</i>	720p	128G SSD	Optional	Opt	Intel 6205 ²⁸	WWAN upg	6		vPro	G P	Pro 64
4299-4CG	i5-2520M	4GBx1	12.5" HD <i>Outdoor</i>	720p	128G SSD	Optional	Opt	Intel 6205	WWAN upg	6		vPro	G P	Pro 64
4299-4BG	i5-2520M	4GBx1	12.5" HD <i>Multi</i>	720p	128G SSD	Optional	Opt	Intel 6205	WWAN upg	6		vPro	G P	Pro 64
4299-29G	i7-2620M	2GBx2	12.5" HD <i>Multi</i>	720p	320G 7200	Optional	Opt	Intel 6205	WWAN upg	6		vPro		Pro 64
4299-28G	i5-2520M	2GBx1	12.5" HD <i>Multi</i>	720p	250G 5400	Optional	Opt	Intel 6205	WWAN upg	6		vPro		Pro 64
4299-26G	i7-2620M	2GBx2	12.5" HD <i>Multi</i>		320G 7200	Optional	Opt	Intel 6300 ²⁸	WWAN upg	6	6	vPro	G P	Pro 64
4299-27G	i5-2520M	2GBx1	12.5" HD <i>Outdoor</i>		320G 7200	Optional	Opt	Intel 6205	WWAN upg	6		vPro	G P	Pro 64
<ul style="list-style-type: none">• Some models are part of the Global Models Plus program with limited onsite service²⁴ 3-year limited warranty• Microsoft® Office 2010 Product Key Ready (O10PKR)														
Positioning Processor	<i>Convertible tablet ultraportable; one spindle</i> Intel® Core™ i5-2520M processor (dual-core, 2.50GHz, 3MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-2620M processor (dual-core, 2.70GHz, 4MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.40GHz), HT technology Intel Core i7-2640M processor (dual-core, 2.80GHz, 4MB Cache), DDR3 memory controller (up to 1333MHz), Intel Turbo Boost 2.0 (3.50GHz), HT technology									Preloaded operating system²⁰ - Genuine Windows® 7 Professional 64 Ready to install applications¹⁴ (only some listed) <ul style="list-style-type: none">• Rescue and Recovery™• Access Connections™• Fingerprint Software (fingerprint models)• Password Manager (fingerprint models)• ThinkVantage Power Manager• ThinkVantage Toolbox• Lenovo SimpleTap Preloaded applications¹⁴ (only some listed) <ul style="list-style-type: none">• Norton™ Internet Security 2011 (30 days of virus definitions)• Skype™ for Windows• Microsoft Office 2010 preloaded; purchase product key to activate• Corel® WinDVD® (DVD±RW)• Corel Burn.Now™ Lenovo Edition (DVD±RW)				
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets													
Optical Ultrabay SATA disk	Option for ThinkPad Ultrabase Series 3 Supports Ultrabay Slim devices in optional or standard ThinkPad Ultrabase Series 3 <i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>All:</i> removable, upgradable, Shock Mounted Hard Drive, supports the second disk in optional or standard ThinkPad Ultrabase Series 3													
mSATA™ SSD	None													
Widescreen display	<i>Outdoor:</i> 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare display with scratch resistant Corning® Gorilla® Glass, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, 1.2% reflectivity, multiple anti-reflectivity layers, IPS <i>MultiTouch:</i> 12.5" (317.5mm) HD (1366x768) TFT color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio, IPS, MultiTouch screen supports pen & five-finger gesture <i>All:</i> WideView (170° viewing), anti-reflective and anti-glare protective coatings, write on screen with standard digitizer pen , pen holder in side base (right), rotate and swivel hinge , power, reset, and rotation buttons on display bottom													
Camera	<i>Some:</i> HD720p resolution, wider view angle, low light sensitive, fixed focus													
Graphics	Intel HD Graphics 3000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via DisplayPort (supports single-link DVI-D via optional cable); supports dual independent display; <i>Maximum external resolution:</i> 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @75Hz; 1920x1200 @60Hz (single-link DVI-D via optional cable)													
Keyboard TrackPoint® Touchpad ThinkLight™	7 row, 89-key, ThinkVantage button, spill-resistant, multimedia Fn keys TrackPoint pointing device, "Press-to-Select," Internet Scroll Bar ¹³ , magnifying glass UltraNav™, buttonless touchpad below keyboard, multi-touch None													
Dimensions ³ Weight ² Case material Battery - type Extended Battery Battery - life ¹⁰	<i>without UltraBase; 3-cell:</i> 12.0" x 9" x 1.1-1.23"; 305mm x 228.7mm x 27-31.3mm <i>3-cell:</i> from 3.67 lb (1.66kg); <i>6-cell:</i> from 3.97 lb (1.80kg) <i>Display cover:</i> Magnesium + PCABS; <i>Bottom:</i> Magnesium alloy Lithium Ion 3-cell or 6-cell, supports optional external battery as 2nd battery <i>Some:</i> Slim external Lithium Ion 6-cell battery (ThinkPad Battery 19+) <i>3-cell (30Whr):</i> up to 4.0 hr; <i>6-cell (66Whr):</i> up to 8.8 hr; <i>external battery (64Whr):</i> up to 9.0 hr; <i>6-cell plus external battery:</i> up to 17.8 hr													
Chipset	Mobile Intel QM67 Express Chipset									Supports ThinkVantage® technologies				
Ultrabase Multicard Reader ExpressCard Ports	<i>Option:</i> ThinkPad Ultrabase Series 3 (see right side) 4-in-1 reader (SD, SDHC, SDXC, MMC) One slot (ExpressCard/34, ExpressCard/54) Three USB 2.0 (one powered), external monitor (VGA DB-15, DisplayPort), ethernet (RJ-45)									ThinkPad Ultrabase Series 3 <ul style="list-style-type: none">• Provides desktop expansion and cable management for X220 and X220 Tablet• Easily connects to the bottom of the X220 or X220 Tablet for traveling• Converts ThinkPad to a two-spindle system with optional Ultrabay Slim accessories in right side				
PCIe Mini Card WLAN ⁴ WWAN Modem Bluetooth™ Ethernet Intel AMT Audio support	Two PCI Express Mini Card slots <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino® Advanced-N 6205, 2x2 <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, Intel Centrino Ultimate-N 6300, 3x3 Wireless WAN upgradable None Bluetooth 3.0 wireless, LED indicator Intel 82579LM Gigabit Network Connection (Lewisville), PHY, PCIe x1 Intel Active Management Technology (iAMT) High Definition (HD) Audio, Conexant 20672 codec / stereo speakers, 1 watt x 2 / volume up, down, mute buttons / dual array microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole									Other features: <ul style="list-style-type: none">• Power button (front)• Security key lock, security keyhole• Analog VGA DB-15 monitor port• DisplayPort (supports single-link DVI-D via optional cable)• Four USB 2.0 ports• Gigabit ethernet (RJ-45) port• Microphone in and headphone out• Requires 65W or 90W AC adapter• 1.39 lb; 630g				
Security Security chip Fingerprint reader	Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader (right base of display), used in tablet/notebook mode, LED indicator, Power On Authentication, supports the security chip									65-watt AC Adapter ENERGY STAR® 5.0-compliant ROHS-compliant				
Limited warranty ¹²	3-years /1-year battery, limited onsite service²⁴ , 8 am - 5 pm, Mon - Fri coverage excluding public and national holidays. Calls received after 3 pm will require an additional next business day for service dispatch / service upgrades available									International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²				

See footnotes for more detailed information

WE model(s) announced March 22, May 3, May 10, July 12, or October 4, 2011

WE model(s) withdrawn effective December 2012

© Lenovo

(G-CMT1-4) February 2013