



Lenovo ThinkCentre M78  
Small and Tower



Lenovo ThinkCentre M78 Tower  
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M78 Small



Lenovo ThinkCentre M78 Small  
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M78 Tower



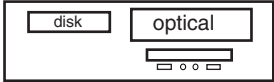
Lenovo ThinkCentre M78 Tower

# ThinkCentre® M78 Small (5100) - TopSeller

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory <sup>a</sup>	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
5100-A1U	4x3	A8-5500B	4GBx1	1TB 7200	DVD±RW	None	Radeon HD 7560D	None	None	Stand	None	None	Pro 64 08/28/12
5100-A2U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	None	None	Pro 64 08/28/12
5100-A3U	4x3	A4-5300	4GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	None	None	Pro 64 08/28/12
5100-A4U	4x3	A4-5300	2GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	None	None	Pro 64 08/28/12

- Small and medium business (SMB) model(s), part of the US TopSeller Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

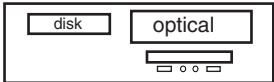
Positioning	<i>Mainstream enterprise stability and manageability</i>											<b>Preloaded operating system</b>
Processor	<b>AMD Accelerated Processor A4-5300</b> (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz) <b>AMD Accelerated Processor A6-5400B</b> (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz) <b>AMD Accelerated Processor A8-5500B</b> (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz)											Genuine Windows® 7 Professional 64
Implementation	Processor in Socket FM2											<b>Ready to install applications</b> (only some listed)
Memory	32GB max, <b>UDIMM, PC3-12800 1600MHz DDR3</b> , four 240-pin DIMM sockets											<ul style="list-style-type: none"> <li>• Rescue and Recovery™</li> <li>• Password Manager</li> <li>• Business-in-a-Box</li> </ul>
Graphics	<b>AMD Radeon HD Graphics</b> , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz</i>											<b>Preloaded applications</b> (only some listed)
DP dongle	None											<ul style="list-style-type: none"> <li>• ThinkVantage® Product Recovery</li> <li>• ThinkVantage System Update</li> <li>• ThinkVantage Communication Utility</li> <li>• ThinkVantage Power Manager</li> <li>• View Management Utility</li> <li>• Lenovo Solution Center</li> <li>• Lenovo Message Center Plus</li> <li>• Lenovo SimpleTap</li> <li>• Norton™ Internet Security (30 days of virus definitions)</li> <li>• Adobe® Reader®</li> <li>• Google Chrome</li> <li>• Google Toolbar</li> <li>• Skype™ for Windows</li> <li>• Evernote®</li> <li>• RapidBoot HDD Accelerator</li> <li>• Symantec™ VIP</li> <li>• Windows Live™ Essentials</li> <li>• Microsoft Office 2010 preloaded; purchase product key to activate</li> <li>• Corel® Burn.Now™ (DVD±RW)</li> <li>• Corel DVD MovieFactory® (DVD±RW)</li> </ul>
Disk	SATA 6.0Gb/s 7200 rpm											
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1											
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar											
eSATA port	None											
Media reader	None											
Chipset	<b>AMD A75 Chipset</b>											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Modem	None											
Security chip	Trusted Platform Module (TPM 1.2-compliant)											
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
Power supply	240 watts, autosensing, active Power Factor Correction											
Machine	<ul style="list-style-type: none"> <li>• Business black color; metal case</li> <li>• 13.3" W X 15.0" D X 3.9" H</li> <li>• 339mm W X 381mm D X 100mm H</li> <li>• 16.5 lb (7.5 kg) in maximum configuration</li> <li>• Toolless cover flips up and tilts backward on rear hinges</li> <li>• Toolless disk and optical drive removal</li> <li>• Toolless adapter retention</li> </ul>											<b>Security</b>
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader											<ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)</li> <li>• Cable lock</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Hard disk password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard and mouse</li> <li>• Individual USB port disablement</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3											
												
Limited Warranty	<b>3-years, limited onsite service.</b> 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet

See footnotes for important warranty information  
US model(s) announced August 28, 2012

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(ANDE1-1) August 2012

Type-model	Slot x bay	Processor	Memory <sup>a</sup>	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
4865-A7U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	None	Pro 32	08/28/12
4865-C1U	4x3	A8-5500B	4GBx1	1TB 7200	DVD±RW	None	Radeon HD 7560D	None	None	Stand	None	Pro 64	08/28/12
4865-C2U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	None	Pro 64	08/28/12
4865-C3U	4x3	A4-5300	4GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	None	Pro 64	08/28/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

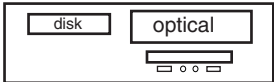
Positioning	<i>Mainstream enterprise stability and manageability</i>		<p><b>Preloaded operating system</b></p> <p><i>Some:</i> Genuine Windows® 7 Professional 32</p> <p><i>Some:</i> Genuine Windows 7 Professional 64</p> <p><b>Ready to install applications</b> (only some listed)</p> <ul style="list-style-type: none"> <li>● Rescue and Recovery™</li> <li>● Password Manager</li> <li>● Business-in-a-Box</li> </ul> <p><b>Preloaded applications</b> (only some listed)</p> <ul style="list-style-type: none"> <li>● ThinkVantage® Product Recovery</li> <li>● ThinkVantage System Update</li> <li>● ThinkVantage Communication Utility</li> <li>● ThinkVantage Power Manager</li> <li>● View Management Utility</li> <li>● Lenovo Solution Center</li> <li>● Lenovo Message Center Plus</li> <li>● Lenovo Simple Tap</li> <li>● Norton™ Internet Security (30 days of virus definitions)</li> <li>● Adobe® Reader®</li> <li>● Google Chrome</li> <li>● Google Toolbar</li> <li>● Skype™ for Windows</li> <li>● Evernote®</li> <li>● RapidBoot HDD Accelerator</li> <li>● Symantec™ VIP</li> <li>● Windows Live™ Essentials</li> <li>● Microsoft Office 2010 preloaded; purchase product key to activate</li> <li>● Corel® Burn.Now™ (DVD±RW)</li> <li>● Corel DVD MovieFactory® (DVD±RW)</li> </ul>
Processor	<p><b>AMD Accelerated Processor A4-5300</b> (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz)</p> <p><b>AMD Accelerated Processor A6-5400B</b> (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz)</p> <p><b>AMD Accelerated Processor A8-5500B</b> (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz)</p>		
Implementation	Processor in Socket FM2		<p><b>Security</b></p> <ul style="list-style-type: none"> <li>● Security chip (see information on left)</li> <li>● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)</li> <li>● Cable lock</li> <li>● Power-on password</li> <li>● Administrator password</li> <li>● Hard disk password</li> <li>● Boot sequence control</li> <li>● Boot without keyboard and mouse</li> <li>● Individual USB port disablement</li> <li>● Chassis intrusion switch on selected model(s)</li> </ul>
Memory	32GB max, <b>UDIMM, PC3-12800 1600MHz DDR3</b> , four 240-pin DIMM sockets		
Graphics	<p><b>AMD Radeon HD Graphics</b>, integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz</p>		<p>RoHS-compliant</p> <p>Supports ThinkVantage Technologies</p> <p>For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet</p>
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1		
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	<b>AMD A75 Chipset</b>		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	System floor stand for vertical orientation		
Power supply	240 watts, autosensing, active Power Factor Correction		
Machine	<ul style="list-style-type: none"> <li>● Business black color; metal case</li> <li>● 13.3" W X 15.0" D X 3.9" H</li> <li>● 339mm W X 381mm D X 100mm H</li> <li>● 16.5 lb (7.5 kg) in maximum configuration</li> <li>● Toolless cover flips up and tilts backward on rear hinges</li> <li>● Toolless disk and optical drive removal</li> <li>● Toolless adapter retention</li> </ul>		
Bay	<p>Bay 1: 5.25", 1.6" high, access, std optical</p> <p>Bay 2: 3.5", 1" high, no access, std disk</p> <p>Bay 3: 3.5", .5" high, access, opt reader</p>		
Slot	<p>Slot 1: Low Profile, PCI Express 2.0 x16 (40w max)</p> <p>Slot 2: Low Profile, PCIe 2.0 x1</p> <p>Slot 3: Low Profile, 32-bit PCI 2.3</p> <p>Slot 4: Low Profile, 32-bit PCI 2.3</p>		
			
Limited Warranty	<p><b>3-years, limited onsite service.</b> 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available</p>		

# ThinkCentre® M78 Small (2113) - ENERGY STAR® 5.2

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory <sup>a</sup>	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
2113-A1U	4x3	A4-5300	2GBx1	250G 7200	DVD±RW	None	Radeon HD 7480D	None	None	Stand	ES52	None	Pro 32 08/28/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										
Processor	<b>AMD Accelerated Processor A4-5300</b> (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz)										
Implementation	Processor in Socket FM2										
Memory	32GB max, <b>UDIMM, PC3-12800 1600MHz DDR3</b> , four 240-pin DIMM sockets										
Graphics	<b>AMD Radeon HD Graphics</b> , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz</i>										
DP dongle	None										
Disk	SATA 6.0Gb/s 7200 rpm										
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1										
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar										
eSATA port	None										
Media reader	None										
Chipset	<b>AMD A75 Chipset</b>										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)										
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
Speaker	Internal speaker for business audio										
IEEE 1394	None										
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®										
Modem	None										
Security chip	Trusted Platform Module (TPM 1.2-compliant)										
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Floor Stand	System floor stand for vertical orientation										
Power supply	240 watts, autosensing, 85% PSU										
Machine	<ul style="list-style-type: none"> <li>● Business black color; metal case</li> <li>● 13.3" W X 15.0" D X 3.9" H</li> <li>● 339mm W X 381mm D X 100mm H</li> <li>● 16.5 lb (7.5 kg) in maximum configuration</li> <li>● Toolless cover flips up and tilts backward on rear hinges</li> <li>● Toolless disk and optical drive removal</li> <li>● Toolless adapter retention</li> </ul>										
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader										
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3										
											
	<b>Preloaded operating system</b> Genuine Windows® 7 Professional 32 <b>Ready to install applications</b> (only some listed) <ul style="list-style-type: none"> <li>● Rescue and Recovery™</li> <li>● Password Manager</li> <li>● Business-in-a-Box</li> </ul> <b>Preloaded applications</b> (only some listed) <ul style="list-style-type: none"> <li>● ThinkVantage® Product Recovery</li> <li>● ThinkVantage System Update</li> <li>● ThinkVantage Communication Utility</li> <li>● ThinkVantage Power Manager</li> <li>● View Management Utility</li> <li>● Lenovo Solution Center</li> <li>● Lenovo Message Center Plus</li> <li>● Lenovo Simple Tap</li> <li>● Norton™ Internet Security (30 days of virus definitions)</li> <li>● Adobe® Reader®</li> <li>● Google Chrome</li> <li>● Google Toolbar</li> <li>● Skype™ for Windows</li> <li>● Evernote®</li> <li>● RapidBoot HDD Accelerator</li> <li>● Symantec™ VIP</li> <li>● Windows Live™ Essentials</li> <li>● Microsoft Office 2010 preloaded; purchase product key to activate</li> <li>● Corel® Burn.Now™ (DVD±RW)</li> <li>● Corel DVD MovieFactory® (DVD±RW)</li> </ul>										
	<b>Security</b> <ul style="list-style-type: none"> <li>● Security chip (see information on left)</li> <li>● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)</li> <li>● Cable lock</li> <li>● Power-on password</li> <li>● Administrator password</li> <li>● Hard disk password</li> <li>● Boot sequence control</li> <li>● Boot without keyboard and mouse</li> <li>● Individual USB port disablement</li> <li>● Chassis intrusion switch on selected model(s)</li> </ul>										
	EPEAT™ Gold rating ENERGY STAR 5.2-compliant ULE Gold RoHS-compliant										
	Supports ThinkVantage Technologies										
	For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet										
Limited Warranty	<b>3-years, limited onsite service</b> , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										

See footnotes for important warranty information  
 US model(s) announced August 28, 2012

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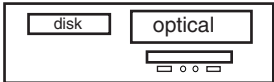


# ThinkCentre® M78 Small (2114) - ES 5.2 (GMP)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory <sup>a</sup>	SATA disk GB rpm	SATA optical	Media reader	Graphics	Chassis intrusion switch	PS/2 port	Floor stand	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
2114-A1U	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	Radeon HD 7540D	None	None	Stand	ES52	G P	Pro 64	08/28/12

- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

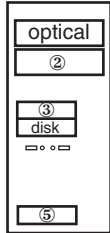
Positioning	<i>Mainstream enterprise stability and manageability</i>											<b>Preloaded operating system</b>		
Processor	<b>AMD Accelerated Processor A6-5400B</b> (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz)											Genuine Windows® 7 Professional 64		
Implementation	Processor in Socket FM2											<b>Ready to install applications</b> (only some listed)		
Memory	32GB max, <b>UDIMM, PC3-12800 1600MHz DDR3</b> , four 240-pin DIMM sockets											<ul style="list-style-type: none"> <li>● Rescue and Recovery™</li> <li>● Password Manager</li> <li>● Business-in-a-Box</li> </ul>		
Graphics	<b>AMD Radeon HD Graphics</b> , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz</i>											<b>Preloaded applications</b> (only some listed)		
DP dongle	None											<ul style="list-style-type: none"> <li>● ThinkVantage® Product Recovery</li> <li>● ThinkVantage System Update</li> <li>● ThinkVantage Communication Utility</li> <li>● ThinkVantage Power Manager</li> <li>● View Management Utility</li> <li>● Lenovo Solution Center</li> <li>● Lenovo Message Center Plus</li> <li>● Lenovo Simple Tap</li> <li>● Norton™ Internet Security (30 days of virus definitions)</li> <li>● Adobe® Reader®</li> <li>● Google Chrome</li> <li>● Google Toolbar</li> <li>● Skype™ for Windows</li> <li>● Evernote®</li> <li>● RapidBoot HDD Accelerator</li> <li>● Symantec™ VIP</li> <li>● Windows Live™ Essentials</li> <li>● Microsoft Office 2010 preloaded; purchase product key to activate</li> <li>● Corel® Burn.Now™ (DVD±RW)</li> <li>● Corel DVD MovieFactory® (DVD±RW)</li> </ul>		
Disk	SATA 6.0Gb/s 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1													
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar													
eSATA port	None													
Media reader	None													
Chipset	<b>AMD A75 Chipset</b>													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)													
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®													
Modem	None													
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Floor Stand	System floor stand for vertical orientation													
Power supply	240 watts, autosensing, 85% PSU													
Machine	<ul style="list-style-type: none"> <li>● Business black color; metal case</li> <li>● 13.3" W X 15.0" D X 3.9" H</li> <li>● 339mm W X 381mm D X 100mm H</li> <li>● 16.5 lb (7.5 kg) in maximum configuration</li> <li>● Toolless cover flips up and tilts backward on rear hinges</li> <li>● Toolless disk and optical drive removal</li> <li>● Toolless adapter retention</li> </ul>													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 3.5", .5" high, access, opt reader													
Slot	Slot 1: Low Profile, PCI Express 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, 32-bit PCI 2.3 Slot 4: Low Profile, 32-bit PCI 2.3													
														
												<b>Security</b>		
												<ul style="list-style-type: none"> <li>● Security chip (see information on left)</li> <li>● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)</li> <li>● Cable lock</li> <li>● Power-on password</li> <li>● Administrator password</li> <li>● Hard disk password</li> <li>● Boot sequence control</li> <li>● Boot without keyboard and mouse</li> <li>● Individual USB port disablement</li> <li>● Chassis intrusion switch on selected model(s)</li> </ul>		
												EPEAT™ Gold rating		
												ENERGY STAR® 5.2-compliant		
												ULE Gold		
												RoHS-compliant		
												Supports ThinkVantage Technologies		
												For compatible accessories, please go to O-M78 sheet;		
												For ThinkPlus™ service upgrade options, please go to S-TC sheet		
Limited Warranty	<b>3-years, limited onsite service</b> , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available													

See footnotes for important warranty information  
US model(s) announced August 28, 2012

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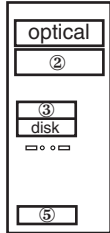
Type-model	Slot x bay	Processor	Memory <sup>8</sup>	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Chassis intr switch	PS/2 port	ENERGY STAR 5.2	Win7 Global preload	Ann date (mm/dd/yy)
2111-A1U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	None	None	Pro 64 08/28/12
2111-A2U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	None	None	Pro 64 08/28/12
2111-A3U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	Radeon HD 7560D	None	None	None	None	Pro 64 08/28/12
2111-A4U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	GeForce 605	None	None	None	None	Pro 64 08/28/12

- Small and medium business (SMB) model(s), part of the US TopSeller Program
- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										<b>Preloaded operating system</b>		
Processor	<p><b>AMD Accelerated Processor A4-5300</b> (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz)</p> <p><b>AMD Accelerated Processor A6-5400B</b> (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz)</p> <p><b>AMD Accelerated Processor A8-5500B</b> (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz)</p>										Genuine Windows® 7 Professional 64		
Implementation	Processor in Socket FM2										<b>Ready to install applications</b> (only some listed)		
Memory	32GB max, <b>UDIMM, PC3-12800 1600MHz DDR3</b> , four 240-pin DIMM sockets										<ul style="list-style-type: none"> <li>• Rescue and Recovery™</li> <li>• Password Manager</li> <li>• Business-in-a-Box</li> </ul>		
Graphics	<p><i>Some:</i> <b>AMD Radeon HD Graphics</b>, integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA)@60Hz; 2560x2048 (DP)@60Hz</p> <p><i>Some:</i> <b>NVIDIA® GeForce® 605</b>, PCI Express® 2.0 x16 adapter, DirectX 11, 512MB, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I)@60Hz</p>										<b>Preloaded applications</b> (only some listed) <ul style="list-style-type: none"> <li>• ThinkVantage® Product Recovery</li> <li>• ThinkVantage System Update</li> <li>• ThinkVantage Communication Utility</li> <li>• ThinkVantage Power Manager</li> <li>• View Management Utility</li> <li>• Lenovo Solution Center</li> <li>• Lenovo Message Center Plus</li> <li>• Lenovo SimpleTap</li> <li>• Norton™ Internet Security (30 days of virus definitions)</li> <li>• Adobe® Reader®</li> <li>• Google Chrome</li> <li>• Google Toolbar</li> <li>• Skype™ for Windows</li> <li>• Evernote®</li> <li>• RapidBoot HDD Accelerator</li> <li>• Symantec™ VIP</li> <li>• Windows Live™ Essentials</li> <li>• Microsoft Office 2010 preloaded; purchase product key to activate</li> <li>• Corel® Burn.Now™ (DVD±RW)</li> <li>• Corel DVD MovieFactory® (DVD±RW)</li> </ul>		
DP dongle	None												
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1												
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar												
eSATA port	None												
Media reader	None												
Chipset	<b>AMD A75 Chipset</b>												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Power supply	280 watts with variable speed fan, manual switch												
Machine	<ul style="list-style-type: none"> <li>• Business black color; metal case</li> <li>• 6.9" W X 17.4" D X 16.3" H</li> <li>• 175mm W X 442mm D X 414mm H</li> <li>• 27.5 lb (12.5 kg) in maximum configuration</li> <li>• Toolless cover removal, toolless adapter retention</li> <li>• Toolless disk, optical drive removal</li> </ul>												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk												
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3										<b>Security</b> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• One lock to secure both cover and entire system to fixed object:                             <ul style="list-style-type: none"> <li>- Padlock loop (in rear for opt padlock)</li> <li>- Security slot (in rear for optional Kensington® MicroSaver® cable)</li> </ul> </li> <li>• Cable lock</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Hard disk password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard and mouse</li> <li>• Individual USB port disablement</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>		
Limited Warranty	<b>3-years, limited onsite service</b> , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										RoHS-compliant		
											Supports ThinkVantage Technologies		
											For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet		

Type-model	Slot x bay	Processor	Memory <sup>8</sup>	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Chassis intr switch	PS/2 port	ENERGY STAR 5.2 Global	Win7 preload	Ann date (mm/dd/yy)
1766-A7U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	None	Pro 32	08/28/12
1766-B1U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	None	Pro 64	08/28/12
1766-B2U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	None	Prem 32	08/28/12
1766-B3U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	Radeon HD 7560D	None	None	None	Pro 64	08/28/12
1766-B4U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	None	Pro 64	08/28/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>								<b>Preloaded operating system</b>				
Processor	<b>AMD Accelerated Processor A4-5300</b> (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz) <b>AMD Accelerated Processor A6-5400B</b> (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz) <b>AMD Accelerated Processor A8-5500B</b> (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz)								<i>Some:</i> Genuine Windows® 7 Professional 32 <i>Some:</i> Genuine Windows 7 Professional 64 <i>Some:</i> Genuine Windows 7 Home Premium 32				
Implementation	Processor in Socket FM2								<b>Ready to install applications</b> (only some listed)				
Memory	32GB max, <b>UDIMM, PC3-12800 1600MHz DDR3</b> , four 240-pin DIMM sockets								<ul style="list-style-type: none"> <li>• Rescue and Recovery™</li> <li>• Password Manager</li> <li>• Business-in-a-Box</li> </ul>				
Graphics	<b>AMD Radeon HD Graphics</b> , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz								<b>Preloaded applications</b> (only some listed)				
DP dongle	None								<ul style="list-style-type: none"> <li>• ThinkVantage® Product Recovery</li> <li>• ThinkVantage System Update</li> <li>• ThinkVantage Communication Utility</li> <li>• ThinkVantage Power Manager</li> <li>• View Management Utility</li> <li>• Lenovo Solution Center</li> <li>• Lenovo Message Center Plus</li> <li>• Lenovo Simple Tap</li> <li>• Norton™ Internet Security (30 days of virus definitions)</li> <li>• Adobe® Reader®</li> <li>• Google Chrome</li> <li>• Google Toolbar</li> <li>• Skype™ for Windows</li> <li>• Evernote®</li> <li>• RapidBoot HDD Accelerator</li> <li>• Symantec™ VIP</li> <li>• Windows Live™ Essentials</li> <li>• Microsoft Office 2010 preloaded; purchase product key to activate</li> <li>• Corel® Burn.Now™ (DVD±RW)</li> <li>• Corel DVD MovieFactory® (DVD±RW)</li> </ul>				
Disk	SATA 6.0Gb/s 7200 rpm												
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive												
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1												
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar												
eSATA port	None												
Media reader	None												
Chipset	<b>AMD A75 Chipset</b>												
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)												
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)												
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)												
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)												
Audio	High Definition (HD) Audio, Realtek® ALC662 codec												
Speaker	Internal speaker for business audio												
IEEE 1394	None												
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®												
Modem	None												
Security chip	Trusted Platform Module (TPM 1.2-compliant)												
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Power supply	280 watts with variable speed fan, manual switch												
Machine	<ul style="list-style-type: none"> <li>• Business black color; metal case</li> <li>• 6.9" W X 17.4" D X 16.3" H</li> <li>• 175mm W X 442mm D X 414mm H</li> <li>• 27.5 lb (12.5 kg) in maximum configuration</li> <li>• Toolless cover removal, toolless adapter retention</li> <li>• Toolless disk, optical drive removal</li> </ul>												
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk												
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3												
Limited Warranty	<b>3-years, limited onsite service</b> , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available								<b>Security</b> <ul style="list-style-type: none"> <li>• Security chip (see information on left)</li> <li>• One lock to secure both cover and entire system to fixed object:                             <ul style="list-style-type: none"> <li>-Padlock loop (in rear for opt padlock)</li> <li>-Security slot (in rear for optional Kensington® MicroSaver® cable)</li> </ul> </li> <li>• Cable lock</li> <li>• Power-on password</li> <li>• Administrator password</li> <li>• Hard disk password</li> <li>• Boot sequence control</li> <li>• Boot without keyboard and mouse</li> <li>• Individual USB port disablement</li> <li>• Chassis intrusion switch on selected model(s)</li> </ul>				
									RoHS-compliant				
									Supports ThinkVantage Technologies				
									For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet				

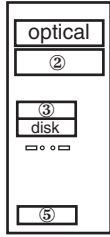


# ThinkCentre® M78 Tower (1562) - ENERGY STAR® 5.2

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory <sup>8</sup>	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Chassis intr switch	PS/2 port	ENERGY STAR 5.2	Win7 Global preload	Ann date (mm/dd/yy)
1562-A1U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	ES52	None	Pro 32 08/28/12
1562-C1U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	ES52	None	Prem 32 08/28/12
1562-C2U	4x5	A4-5300	2GBx1	250G 7200	Bay	DVD±RW	None	Radeon HD 7480D	None	None	ES52	None	Pro 64 08/28/12
1562-C3U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	ES52	None	Pro 64 08/28/12
1562-C4U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	Radeon HD 7560D	None	None	ES52	None	Pro 64 08/28/12
1562-C5U	4x5	A8-5500B	4GBx1	1TB 7200	Bay	DVD±RW	None	GeForce 605	None	None	ES52	None	Pro 64 08/28/12

- 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>		<p><b>Preloaded operating system</b></p> <p><i>Some:</i> Genuine Windows® 7 Professional 32</p> <p><i>Some:</i> Genuine Windows 7 Professional 64</p> <p><i>Some:</i> Genuine Windows 7 Home Premium 32</p> <p><b>Ready to install applications</b> (only some listed)</p> <ul style="list-style-type: none"> <li>● Rescue and Recovery™</li> <li>● Password Manager</li> <li>● Business-in-a-Box</li> </ul> <p><b>Preloaded applications</b> (only some listed)</p> <ul style="list-style-type: none"> <li>● ThinkVantage® Product Recovery</li> <li>● ThinkVantage System Update</li> <li>● ThinkVantage Communication Utility</li> <li>● ThinkVantage Power Manager</li> <li>● View Management Utility</li> <li>● Lenovo Solution Center</li> <li>● Lenovo Message Center Plus</li> <li>● Lenovo Simple Tap</li> <li>● Norton™ Internet Security (30 days of virus definitions)</li> <li>● Adobe® Reader®</li> <li>● Google Chrome</li> <li>● Google Toolbar</li> <li>● Skype™ for Windows</li> <li>● Evernote®</li> <li>● RapidBoot HDD Accelerator</li> <li>● Symantec™ VIP</li> <li>● Windows Live™ Essentials</li> <li>● Microsoft Office 2010 preloaded; purchase product key to activate</li> <li>● Corel® Burn.Now™ (DVD±RW)</li> <li>● Corel DVD MovieFactory® (DVD±RW)</li> <li>● InterVideo WinDVD® (DVD, DVD±RW)</li> </ul>
Processor	<p><b>AMD Accelerated Processor A4-5300</b> (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core technology (up to 3.6GHz), integrated AMD Radeon™ HD 7480D Graphics, integrated DDR3 memory controller (up to 1600MHz)</p> <p><b>AMD Accelerated Processor A6-5400B</b> (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz)</p> <p><b>AMD Accelerated Processor A8-5500B</b> (quad-core, 3.2GHz, 4MB L2 cache), Turbo Core technology (up to 3.7GHz), integrated AMD Radeon HD 7560D Graphics, integrated DDR3 memory controller (up to 1866MHz)</p>		
Implementation	Processor in Socket FM2		
Memory	32GB max, <b>UDIMM, PC3-12800 1600MHz DDR3</b> , four 240-pin DIMM sockets		
Graphics	<p><i>Some:</i> <b>AMD Radeon HD Graphics</b>, integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA)@60Hz; 2560x2048 (DP)@60Hz</p> <p><i>Some:</i> <b>NVIDIA® GeForce® 605</b>, PCI Express® 2.0 x16 adapter, DirectX 11, 512MB, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 30 watts; <i>Maximum resolution:</i> 2560x1600 (DisplayPort, DVI-I)@60Hz</p>		
DP dongle	None		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1		
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	<b>AMD A75 Chipset</b>		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Power supply	280 watts, autosensing, 85% PSU		
Machine	<ul style="list-style-type: none"> <li>● Business black color; metal case</li> <li>● 6.9" W X 17.4" D X 16.3" H</li> <li>● 175mm W X 442mm D X 414mm H</li> <li>● 27.5 lb (12.5 kg) in maximum configuration</li> <li>● Toolless cover removal, toolless adapter retention</li> <li>● Toolless disk, optical drive removal</li> </ul>		
Bay	<p>Bay 1: 5.25", 1.6" high, access, std optical</p> <p>Bay 2: 5.25", 1.6" high, access, open</p> <p>Bay 3: 3.5", 1" high, access, opt reader</p> <p>Bay 4: 3.5", 1" high, no access, std disk</p> <p>Bay 5: 3.5", 1" high, no access, opt disk</p>		
Slot	<p>Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max)</p> <p>Slot 2: half-length, full-height, PCIe 2.0 x1</p> <p>Slot 3: half-length, full-height, 32-bit PCI 2.3</p> <p>Slot 4: half-length, full-height, 32-bit PCI 2.3</p>		
			
Limited Warranty	<p><b>3-years, limited onsite service</b>, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available</p>		
	<p><b>Security</b></p> <ul style="list-style-type: none"> <li>● Security chip (see information on left)</li> <li>● One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> <li>-Padlock loop (in rear for opt padlock)</li> <li>-Security slot (in rear for optional Kensington® MicroSaver® cable)</li> </ul> </li> <li>● Cable lock</li> <li>● Power-on password</li> <li>● Administrator password</li> <li>● Hard disk password</li> <li>● Boot sequence control</li> <li>● Boot without keyboard and mouse</li> <li>● Individual USB port disablement</li> <li>● Chassis intrusion switch on selected model(s)</li> </ul>		
	<p>EPEAT™ Gold rating</p> <p>ENERGY STAR 5.2-compliant</p> <p>ULE Gold</p> <p>RoHS-compliant</p>		
	<p>Supports ThinkVantage Technologies</p>		
	<p>For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet</p>		

See footnotes for important warranty information  
US model(s) announced August 28, 2012

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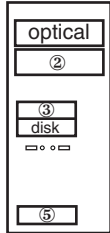


# ThinkCentre® M78 Tower (1565) - ES 5.2 (GMP)

Personal Systems Reference (PSREF)

Type-model	Slot x bay	Processor	Memory <sup>8</sup>	SATA disk GB rpm	2nd Disk Bay	SATA optical	Media reader	Graphics	Chassis intr switch	PS/2 port	ENERGY STAR 5.2	Global (G) GMP (P)	Win7 preload	Ann date (mm/dd/yy)
1565-A1U	4x5	A6-5400B	4GBx1	500G 7200	Bay	DVD±RW	None	Radeon HD 7540D	None	None	ES52	G P	Pro 64	08/28/12

- Part of the Global Models Plus (GMP) program with limited onsite service 3-year limited warranty
- Microsoft® Office 2010 Product Key Ready (O10PKR)

Positioning	<i>Mainstream enterprise stability and manageability</i>										<b>Preloaded operating system</b>			
Processor	<b>AMD Accelerated Processor A6-5400B</b> (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core technology (up to 3.8GHz), integrated AMD Radeon HD 7540D Graphics, integrated DDR3 memory controller (up to 1866MHz)										Genuine Windows® 7 Professional 64			
Implementation	Processor in Socket FM2										<b>Ready to install applications</b> (only some listed)			
Memory	32GB max, <b>UDIMM, PC3-12800 1600MHz DDR3</b> , four 240-pin DIMM sockets										<ul style="list-style-type: none"> <li>● Rescue and Recovery™</li> <li>● Password Manager</li> <li>● Business-in-a-Box</li> </ul>			
Graphics	<b>AMD Radeon HD Graphics</b> , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; works along with discrete graphics to support up to four independent monitors; <i>Maximum resolution: 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz</i>										<b>Preloaded applications</b> (only some listed)			
DP dongle	None										<ul style="list-style-type: none"> <li>● ThinkVantage® Product Recovery</li> <li>● ThinkVantage System Update</li> <li>● ThinkVantage Communication Utility</li> <li>● ThinkVantage Power Manager</li> <li>● View Management Utility</li> <li>● Lenovo Solution Center</li> <li>● Lenovo Message Center Plus</li> <li>● Lenovo SimpleTap</li> <li>● Norton™ Internet Security (30 days of virus definitions)</li> <li>● Adobe® Reader®</li> <li>● Google Chrome</li> <li>● Google Toolbar</li> <li>● Skype™ for Windows</li> <li>● Evernote®</li> <li>● RapidBoot HDD Accelerator</li> <li>● Symantec™ VIP</li> <li>● Windows Live™ Essentials</li> <li>● Microsoft Office 2010 preloaded; purchase product key to activate</li> <li>● Corel® Burn.Now™ (DVD±RW)</li> <li>● Corel DVD MovieFactory® (DVD±RW)</li> </ul>			
Disk	SATA 6.0Gb/s 7200 rpm													
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive													
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1													
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar													
eSATA port	None													
Media reader	None													
Chipset	<b>AMD A75 Chipset</b>													
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)													
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)													
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)													
Audio	High Definition (HD) Audio, Realtek® ALC662 codec													
Speaker	Internal speaker for business audio													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®													
Modem	None													
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), 104-key, black, Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Power supply	280 watts, autosensing, 85% PSU													
Machine	<ul style="list-style-type: none"> <li>● Business black color; metal case</li> <li>● 6.9" W X 17.4" D X 16.3" H</li> <li>● 175mm W X 442mm D X 414mm H</li> <li>● 27.5 lb (12.5 kg) in maximum configuration</li> <li>● Toolless cover removal, toolless adapter retention</li> <li>● Toolless disk, optical drive removal</li> </ul>													
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk													
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3													
														
Limited Warranty	<b>3-years, limited onsite service</b> , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										<b>Security</b> <ul style="list-style-type: none"> <li>● Security chip (see information on left)</li> <li>● One lock to secure both cover and entire system to fixed object:               <ul style="list-style-type: none"> <li>-Padlock loop (in rear for opt padlock)</li> <li>-Security slot (in rear for optional Kensington® MicroSaver® cable)</li> </ul> </li> <li>● Cable lock</li> <li>● Power-on password</li> <li>● Administrator password</li> <li>● Hard disk password</li> <li>● Boot sequence control</li> <li>● Boot without keyboard and mouse</li> <li>● Individual USB port disablement</li> <li>● Chassis intrusion switch on selected model(s)</li> </ul>			
											EPEAT™ Gold rating ENERGY STAR 5.2-compliant ULE Gold RoHS-compliant			
											Supports ThinkVantage Technologies			
											For compatible accessories, please go to O-M78 sheet; For ThinkPlus™ service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information  
US model(s) announced August 28, 2012

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