ThinkStation Wi-Fi Solutions

P3 Tiny, P3 Ultra SFF, P3 Tower P5, P7, P620, P8, PX



ThinkStation Wi-Fi Overview

Every ThinkStation desktop workstation has a supported, optional wireless networking (Wi-Fi) solution. Multiple solutions exist across the ThinkStation family, but each one is built upon an M.2 form factor PCIe Wi-Fi card. Some of the ThinkStations have a dedicated onboard M.2 Wi-Fi slot for this card, while others use a PCIe carrier card. Additionally, the antenna solutions and part numbers for the various Wi-Fi hardware components vary from one platform to the next.

This document will give you some guidance on selecting, ordering, and installing the various ThinkStation Wi-Fi solutions.

This table shows a quick snapshot of the Wi-Fi solutions for each platform. Click a platform name to jump to its page within this document.

Platform	Wi-Fi Solution	M.2 Wi-Fi Slot
P3 Tiny	Intel AX211 Intel AX201 Realtek RTL8852BE	Onboard
P3 Ultra SFF	Intel AX211	Onboard
P3 Tower	Intel AX211	Onboard
<u>P5</u>	Intel AX211	Onboard
<u>P7</u>	Intel AX210	PCle card
P620	Intel AC 9260 Intel AX210	PCle card
<u>P8</u>	AMD RZ616	Onboard
<u>PX</u>	Intel AX210	PCle card

P3 Tiny

P3 Tiny has a dedicated onboard Wi-Fi M.2 slot and supports the following three Wi-Fi modules:

- Intel Wi-Fi 6E AX211
 - 802.11ax 2x2 Wi-Fi + Bluetooth 5.1 (Bluetooth 5.3 hardware ready), Intel vPro technology support
- Intel Wi-Fi 6 AX201
 - 802.11ax 2x2 Wi-Fi + Bluetooth 5.1 (Bluetooth 5.2 hardware ready)
- Realtek Wi-Fi 6 RTL8852BE
 - 802.11ax Dual Band 2x2 Wi-Fi + Bluetooth 5.1

Note: Bluetooth 5.3 is hardware ready but may run at a lower version due to OS limitations. Wi-Fi 6E is only enabled on Windows 11 and operates as Wi-Fi 6 with Windows 10.

Wi-Fi Parts Lists

There is no consolidated Wi-Fi option parts kit for P3 Tiny. The FRU parts below can be ordered to support each of the 3 supported Wi-Fi solutions. Parts, along with current availability and pricing, can be found by searching the desired part numbers at https://support.lenovo.com/us/en/parts-lookup

Intel Wi-Fi 6E AX211 FRU parts		
Intel AX211 Wi-Fi module	5W10V25811	
Wi-Fi card cover	01MN425	
M2 x 3mm screw	5S10U51639	
Wi-Fi 6E external antenna	5A30W89233	
External antenna cable	04X2735	
Wi-Fi 6E front antenna	5A30W89251	

Intel Wi-Fi 6 AX201 FRU parts		
Intel AX201 Wi-Fi module	5W10V25775	
Wi-Fi card cover	01MN425	
M2 x 3mm screw	5S10U51639	
Wi-Fi 6E external antenna	5A30W89233	
External antenna cable	04X2735	
Wi-Fi front antenna	5A30W89210	

Realtek Wi-Fi 6 RTL8852BE FRU parts		
Realtek RTL8852BE Wi-Fi module	5W10V25844	
Wi-Fi card cover	01MN425	
M2 x 3mm screw	5S10U51639	
Wi-Fi 6E external antenna	5A30W89233	
External antenna cable	04X2735	
Wi-Fi front antenna	5A30W89210	

Detailed installation/removal instructions for the Wi-Fi cards and associated hardware can be found in the P3 Tiny Hardware Maintenance Manual:

https://download.lenovo.com/pccbbs/thinkcentre_pdf/p3_tiny_hmm.pdf

P3 Ultra SFF

P3 Ultra SFF has a dedicated onboard Wi-Fi M.2 slot and supports the following Wi-Fi module:

Intel Wi-Fi 6E AX211
 802.11ax 2x2 Wi-Fi + Bluetooth 5.1 (Bluetooth 5.3 hardware ready), Intel vPro support

Note: Bluetooth 5.3 is hardware ready but may run at a lower version due to OS limitations. Wi-Fi 6E is only enabled on Windows 11 and operates as Wi-Fi 6 with Windows 10.

Wi-Fi Parts List

Wi-Fi parts for P3 Ultra SFF can be purchased as a single option kit or as individual FRU parts. Contact your Lenovo sales representative to purchase the option kit listed below. FRU parts, along with current availability and pricing, can be found by searching the desired part numbers at https://support.lenovo.com/us/en/parts-lookup

P3 USFF Wi-Fi C	ption Kit
ThinkStation Intel Wi-Fi AX211 WLAN Module - P3	4XH1N92877

Intel Wi-Fi 6E AX211 FRU parts	
Intel AX211 Wi-Fi Module 5W10V25811	
2 in 1 module group (cable + antenna)	5A31F27677
Wi-Fi card cover	01MN425
M2 x 3mm screw	5S10U51639

Detailed installation/removal instructions for the Wi-Fi cards and associated hardware can be found in the P3 Ultra SFF Hardware Maintenance Manual:

https://download.lenovo.com/pccbbs/thinkcentre_pdf/p3_ultra_hmm.pdf

P3 Tower

P3 Tower has a dedicated onboard Wi-Fi M.2 slot and supports the following Wi-Fi module:

- Intel Wi-Fi 6E AX211 802.11ax 2x2 Wi-Fi + Bluetooth 5.1 (Bluetooth 5.3 hardware ready), Intel vPro support

Note: Bluetooth 5.3 is hardware ready but may run at a lower version due to OS limitations. Wi-Fi 6E is only enabled on Windows 11 and operates as Wi-Fi 6 with Windows 10.

Wi-Fi Parts List

Wi-Fi parts for P3 Tower can be purchased as a single option kit or as individual FRU parts. Contact your Lenovo sales representative to purchase the option kit listed below. FRU parts, along with current availability and pricing, can be found by searching the desired part numbers at https://support.lenovo.com/us/en/parts-lookup

P3 Tower Wi-Fi O	ption Kit
ThinkStation Intel Wi-Fi AX211 WLAN Module - P3	4XH1N92877

Intel Wi-Fi 6E AX211 FRU parts	
Intel AX211 Wi-Fi Module	5W10V25811
Wi-Fi antenna	5A31F27716
Antenna cover	02CW509
Wi-Fi card cover	01MN425
M2 x 3mm screw	5S10U51639

Detailed installation/removal instructions for the Wi-Fi cards and associated hardware can be found in the P3 Tower Hardware Maintenance Manual:

https://download.lenovo.com/pccbbs/thinkcentre_pdf/p3_tw_hmm.pdf

P5 has a dedicated onboard Wi-Fi M.2 slot and supports the following Wi-Fi module:

Intel Wi-Fi 6E AX211
 802.11ax 2x2 Wi-Fi + Bluetooth 5.1 (Bluetooth 5.3 hardware ready), Intel vPro support

Note: Bluetooth 5.3 is hardware ready but may run at a lower version due to OS limitations. Wi-Fi 6E is only enabled on Windows 11 and operates as Wi-Fi 6 with Windows 10.

Wi-Fi Parts List

Wi-Fi parts for P5 can be purchased as a single option kit or as individual FRU parts. Contact your Lenovo sales representative to purchase the option kit listed below. FRU parts, along with current availability and pricing, can be found by searching the desired part numbers at https://support.lenovo.com/us/en/parts-lookup

P5 Wi-Fi Optic	on Kit
ThinkStation Intel Wi-Fi 6E AX211 WLAN Module	4XC1L37930

Intel Wi-Fi 6E AX211 FRU parts	
Intel AX211 Wi-Fi Module	5W10V25811
Wi-Fi card cover	01MN425
M2 x 3mm screw	5S10U51639

Detailed installation/removal instructions for the Wi-Fi cards and associated hardware can be found in the P5 Hardware Maintenance Manual:

https://download.lenovo.com/pccbbs/thinkcentre_pdf/p5_hmm.pdf

P7 uses a PCle carrier card for the following M.2 Wi-Fi module:

- Intel Wi-Fi 6E AX210 802.11ax 2x2 Wi-Fi + Bluetooth 5.1 (Bluetooth 5.3 hardware ready), Intel vPro support

Note: Bluetooth 5.3 is hardware ready but may run at a lower version due to OS limitations. Wi-Fi 6E is only enabled on Windows 11 and operates as Wi-Fi 6 with Windows 10.

Wi-Fi Parts List

Wi-Fi parts for P7 can be purchased as a single option kit or as individual FRU parts. Contact your Lenovo sales representative to purchase the option kit listed below. FRU parts, along with current availability and pricing, can be found by searching the desired part numbers at https://support.lenovo.com/us/en/parts-lookup

P7 Wi-Fi Optic	on Kit
ThinkStation Kit for AX210 WLAN Module - P7/PX	4XF1M87532
ThinkStation Intel Wi-Fi AX210 WLAN Module	4XC1L37931

Intel Wi-Fi 6E AX210 FRU parts	
Intel AX210 Wi-Fi module	5W10V25783
PCIe to m.2 riser card	5C50W00920
Screw with bracket for Wi-Fi card	00XD903
USB Bluetooth cable,600mm	5C10U58440
Internal front Wi-Fi antenna	5A30W89267
Internal rear Wi-Fi antenna	5A30W89268

FRU parts for use with P7 GeForce card configs	
Wi-Fi extended antenna kit	5A31F27743

Detailed installation/removal instructions for the Wi-Fi cards and associated hardware can be found in the P7 Hardware Maintenance Manual:

https://download.lenovo.com/pccbbs/thinkcentre_pdf/p7_intel_hmm.pdf

Configuration notes:

- When installed in a system without a GeForce card, the Wi-Fi carrier card is installed in Slot 2
 - When installed in a system with a GeForce card, the Wi-Fi carrier card is installed in Slot 5 and the Wi-Fi extended antenna kit listed above is required

P620 uses a PCle carrier card for the following M.2 Wi-Fi modules:

- Intel Wireless-AC 9260
 Wi-Fi 5, 802.11ac Dual Band 2x2 Wi-Fi + Bluetooth 5.1
- *Intel Wi-Fi 6E AX210* 802.11ax 2x2 Wi-Fi + Bluetooth 5.1 (Bluetooth 5.3 hardware ready)

Note: Bluetooth 5.3 is hardware ready but may run at a lower version due to OS limitations. Wi-Fi 6E is only enabled on Windows 11 and operates as Wi-Fi 6 with Windows 10.

Wi-Fi Parts List

Wi-Fi parts for P620 can be purchased as a single option kit (AX210 only) or as individual FRU parts. Contact your Lenovo sales representative to purchase the option kit listed below. FRU parts, along with current availability and pricing, can be found by searching the desired part numbers at https://support.lenovo.com/us/en/parts-lookup

P620 Wi-Fi Op	tion Kit
ThinkStation Intel Wi-Fi AX210 WLAN Module	4XC1L37931

Intel Wireless-AC 9260 FRU parts		
Intel 9260 Wi-Fi module	01AX771	
PCIe to m.2 riser card	01AJ901	
External antenna	00XJ119	
80mm antenna cable (need 2)	00XJ061	
USB header cable	00XL361	

Intel Wi-Fi 6E AX210 FRU parts		
Intel AX210 Wi-Fi module	5W10V25783	
PCIe to m.2 riser card	01AJ901	
External antenna	5A31F27683	
80mm antenna cable (need 2)	00XJ061	
USB header cable	5C10U58497	

Detailed installation/removal instructions for the Wi-Fi cards and associated hardware can be found in the P620 Hardware Maintenance Manual:

https://download.lenovo.com/pccbbs/thinkcentre_pdf/p620_hmm_en.pdf

P8 has a dedicated onboard Wi-Fi M.2 slot and supports the following Wi-Fi module:

- **AMD Wi-Fi 6E RZ616** 802.11ax 2x2 Wi-Fi + Bluetooth® 5.3

Note: Bluetooth 5.3 is hardware ready but may run at a lower version due to OS limitations. Wi-Fi 6E is only enabled on Windows 11 and operates as Wi-Fi 6 with Windows 10.

Wi-Fi Parts Lists

There is no consolidated Wi-Fi option parts kit for P8. The FRU parts below can be ordered to support each the supported Wi-Fi solution. Parts, along with current availability and pricing, can be found by searching the desired part numbers at https://support.lenovo.com/us/en/parts-lookup

AMD Wi-Fi 6E RZ616 FRU parts	
AMD RZ616 Wi-Fi module	5W10V25826
Wi-Fi 6E antenna kit	5A31F27728

Detailed installation/removal instructions for the Wi-Fi cards and associated hardware can be found in the P8 Hardware Maintenance Manual:

https://download.lenovo.com/pccbbs/thinkcentre_pdf/p8_hmm.pdf

PX

PX uses a PCIe carrier card for the following M.2 Wi-Fi module:

- Intel Wi-Fi 6E AX210 802.11ax 2x2 Wi-Fi + Bluetooth 5.1 (Bluetooth 5.3 hardware ready), Intel vPro support

Note: Bluetooth 5.3 is hardware ready but may run at a lower version due to OS limitations. Wi-Fi 6E is only enabled on Windows 11 and operates as Wi-Fi 6 with Windows 10.

Wi-Fi Parts List

Wi-Fi parts for PX can be purchased as a single option kit or as individual FRU parts. Contact your Lenovo sales representative to purchase the option kit listed below. FRU parts, along with current availability and pricing, can be found by searching the desired part numbers at https://support.lenovo.com/us/en/parts-lookup

P7 Wi-Fi Option Kit	
ThinkStation Kit for AX210 WLAN Module - P7/PX	4XF1M87532
ThinkStation Intel Wi-Fi AX210 WLAN Module	4XC1L37931

Intel Wi-Fi 6E AX210 FRU parts		
Intel AX210 Wi-Fi module	5W10V25783	
PCIe to m.2 riser card	5C50W00920	
Screw with bracket for Wi-Fi card	00XD903	
USB Bluetooth cable,600mm	5C10U58440	
Internal front Wi-Fi antenna	5A30W89223	
Internal rear Wi-Fi antenna	5A30W89224	

Detailed installation/removal instructions for the Wi-Fi cards and associated hardware can be found in the PX Hardware Maintenance Manual:

https://download.lenovo.com/pccbbs/thinkcentre_pdf/px_hmm.pdf

Revision History

Version	Date	Author	Changes
1.0	8/28/2024	JP	Initial Version