



Availability	February 2025
Brand	Lexar
Product Name Full	Lexar® Professional NM1090 PRO PCIe 5.0 NVMe M.2 2280 SSD
Product Name Short	NM1090 PRO PCIe 5.0 SSD
Product Name e-Commerce	Lexar Professional 4TB NM1090 PRO PCIe Gen5 Internal SSD, Up to 14000/13000 MB/s Read/Write, Advanced Thermal Control Design, DirectStorage Enabled, for Gamers and Creators Lexar Professional 2TB NM1090 PRO PCIe Gen5 Internal SSD, Up to 14000/13000 MB/s Read/Write, Advanced Thermal Control Design, DirectStorage Enabled, for Gamers and Creators Lexar Professional 1TB NM1090 PRO PCIe Gen5 Internal SSD, Up to 14000/10000 MB/s Read/Write, Advanced Thermal Control Design, DirectStorage Enabled, for Gamers and Creators
Product Line	SSD
Marketing Text 25-Word Description (<750 characters)	Experience blazing load times up to 200% ² faster thanks to PCIe 5.0 technology and an advanced thermal control design for an incredible gaming experience, pro-level rendering, and more.
Marketing Text 50-Word Description (<750 characters)	Experience blazing load times up to 200% ² faster thanks to PCIe 5.0 technology and an advanced thermal control design. With incredible read speed up to 14,000MB/s and write speed up to 13,000MB/s, ¹ the Lexar® Professional NM1090 PRO M.2 2280 PCIe Gen 5x4 NVMe SSD delivers the performance to accelerate AI model training and deliver stunningly immersive gaming and professional rendering, and more. DRAM Cache and SLC Dynamic Cache also contribute to enhanced data transfer speeds, reducing wait times and improving system responsiveness. Additionally, the drive's powerful 6nm controller increases heat dissipation to offset its blistering speed.
Bullet Feature 1	PCIe 5.0 technology delivers blistering read/write speeds up to 14,000/13,000MB/s ¹ and accelerates load times by 200% ² – great with AMD Ryzen and Intel i9
Bullet Feature 2	A powerful 6nm controller optimizes heat control for a smoother experience and more efficient performance
Bullet Feature 3	A perfect internal SSD for AI PCs: reduces bottlenecks and accelerates AI model training, inferencing, and real-time data processing
Bullet Feature 4	DRAM Cache and SLC Dynamic Cache greatly enhance data transfer speeds to reduce wait times and improve system responsiveness
Bullet Feature 5	Works with Microsoft DirectStorage ³ to significantly boost game loads, minimize delays, conserve CPU power, and enrich the gaming experience
Bullet Feature 6	Lexar DiskMaster SSD Management tool lets you perform firmware updates, manage the drive and its data, and monitor drive health
Footnote(s)/ Disclaimer(s)	¹ Up to 14,000MB/s read transfer, up to 13,000MB/s write. Speeds based on internal testing. Actual performance may vary. ² Compared to PCIe 4.0 SSDs. ³ This feature will only work if the computer meets the working requirements of DirectStorage and the game is compatible with DirectStorage. Lexar is not liable for any loss of data or images. Product appearance, performance, software offerings, and packaging may vary depending on ship date and available inventory. Actual usable memory capacity may vary. 1GB equals 1 billion bytes.
Warranty	Five-year limited warranty
Market Segment	Electronics, Computers & accessories, data storage, external solid state drives
Category	SSD
Sub Category	SSD, M.2 2280, PCIe Gen 5x4, Lexar

Keywords for Search	SSD, 1TB SSD, 2TB SSD, 4TB SSD, PCIe 5.0 SSD, High performance SSD, next-gen SSD, sleek SSD, compact SSD, Microsoft DirectStorage SSD, content, data storage, content storage, high-speed SSD, storage, backup drive, rendering drive, gaming PC SSD
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Specifications				
Form Factor	M.2 2280			
Interface	PCIe Gen 5x4			
Capacities	1TB / 2TB / 4TB			
Speed	1TB: Sequential read speed up to 14,000MB/s ¹ , sequential write speed up to 10,000MB/s ¹ , random read up to 1650K IOPs, random write up to 1800K IOPs 2TB: Sequential read speed up to 14,000MB/s ¹ , sequential write speed up to 13,000MB/s ¹ , random read up to 2100K IOPs, random write up to 1800K IOPs 4TB: Sequential read speed up to 14,000MB/s ¹ , sequential write speed up to 13,000MB/s ¹ , random read up to 2100K IOPs, random write up to 1700K IOPs			
Operating Temperature	0°C ~ 70°C (32°F to 158°F)			
Storage Temperature	-40°C ~ 85°C (-40°F to 185°F)			
Shock	1500G, duration 0.5ms, Half Sine Wave			
Vibration	10-2000Hz, 1.5mm, 20G, 1 Oct/min, 30min/axis (X, Y, Z)			
Dimensions (L x W x H)	80 x 22 x 3.8mm / 3.15" x 0.87" x 0.15"			
TBW	1TB: 700TBW, 2TB: 1400TBW, 4TB: 2800TBW			
MTBF	1,500,000 Hours			
Ordering Information				
Single and/or Master Carton UPC (Global)	Part Number	Description	Single UPC	10-Pack UPC
	LNM109P001T-RNNNG	Lexar Internal SSD NM1090 Pro PCIe Gen 5x4 1TB, GL	843367136780	10843367136787
	LNM109P002T-RNNNG	Lexar Internal SSD NM1090 Pro PCIe Gen 5x4 2TB, GL	843367136797	10843367136794
	LNM109P004T-RNNNG	Lexar Internal SSD NM1090 Pro PCIe Gen 5x4 4TB, GL	843367136803	10843367136800
Single and/or Master Carton UPC (NA)	Part Number	Description	Single UPC	10-Pack UPC
	LNM109P001T-RNNNU	Lexar Internal SSD NM1090 Pro PCIe Gen 5x4 1TB, NA	843367136810	10843367136817
	LNM109P002T-RNNNU	Lexar Internal SSD NM1090 Pro PCIe Gen 5x4 2TB, NA	843367136827	10843367136824
	LNM109P004T-RNNNU	Lexar Internal SSD NM1090 Pro PCIe Gen 5x4 4TB, NA	843367136834	10843367136831

Country and Region of Origin	Global SKU: China NA SKU: Taiwan	
Harmonized Tariff Schedule	8471.7011.00	
Compliance	CE, FCC, VCCI, RCM, CMA, WEEE, UKCA	
Weights and Dimensions		
Product		
Unit Weight	0.02 lbs	8 g
Unit Dimensions (L x W x H)	3.15" x 0.87" x 0.15"	80mm x 22mm x 3.8mm
Image		
Retail Box (Dual Package)		
Package Type	Retail Box	
Qty Per Package	1	
Shipping Weight	0.104 lbs	47.4 g
Package Dimensions L x W x D	6.496" x 4.133" x 0.590"	165mm x 105mm x 15 mm
Image		
Retail Box – Inner Pack		
Package Type	Inner Carton	
Retail Inner Pack Quantity	10	
Shipping Weight	1.344 lbs	0.61 kg
Package Dimensions L x W x D	7.086" x 6.496" x 4.921"	180mm x 165mm x 125mm

Retail Box – Master Pack		
Package Type	Master Carton	
Retail Master Pack Quantity	120	
Shipping Weight	17.73 lbs	8.04 kg
Package Dimensions L x W x D	20.078" x 14.763" x 10.826"	510mm x 375mm x 275mm