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Lenovo 81C8

# Performance Results



ADD TO PC BUILD



TEST YOUR PC



Gaming 14%

Tree trunk ?



Desktop 59%

Gunboat ?



Workstation 38%

Jet ski ?

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### PC Status

Overall this PC is performing as expected (41st percentile). This means that out of 100 PCs with exactly the same components, 59 performed better. The overall PC percentile is the average of each of its individual components.

### Processor

With an average single core score, this CPU can handle browsing the web, email, video playback and the majority of general computing tasks including light gaming when coupled with an appropriate GPU. Finally, with a gaming score of 50.9%, this CPU's suitability for 3D gaming is average.

### Graphics

5.04% is a very low 3D score (RTX 2060S = 100%). This GPU can only handle very basic 3D games but it's fine for general computing tasks.

### Boot Drive

161% is an exceptional SSD score. This drive is suitable for heavy workstation use, it will facilitate fast boots, responsive applications and allow for fast transfers of multi-gigabyte files.

### Memory

8GB is enough RAM to run any version of Windows and it's sufficient for the vast majority of games. 8GB is also enough for moderate file and system caches which result in a very responsive system.

### OS Version

Windows 10 is the most recent version of Windows, and the best to date in our opinion.

System	Lenovo 81C8 (all builds)
Motherboard	LENOVO LNVNB161216
Memory	4.4 GB free of 8 GB @ 2.4 GHz
Display	1920 x 1080 - 32 Bit colors,
OS	Windows 10
BIOS Date	20180731
Uptime	0 Days
Run Date	Jul 28 '20 at 16:24
Run Duration	128 Seconds
Run User	IDN-User
Background CPU	1%
CPU Throttled	▲ 89%

▲ CPU throttled at 89% by Windows. Ensure maximum processor state is set to 100% via Settings > System > Power & sleep > Additional power settings > Change plan settings > Change advanced power settings > Processor power management > Maximum processor state.

## ✓ PC Performing as expected (41<sup>st</sup> percentile) ?

Actual performance vs. expectations. The graphs show user score (x) vs user score frequency (y).

Processor	Bench ?	Normal ?	Heavy ?	Server ?
<p>Intel Core i7-8550U                      110,024 User benchmarks, average bench 64%</p>	<p>50.9%</p> <p>Above average</p>	<p>Memory 67.9</p> <p>1-Core 53.3</p> <p>2-Core 96</p> <p>46% 72.4 Pts</p>	<p>4-Core 184</p> <p>8-Core 279</p> <p>30% 232 Pts</p>	<p>64-Core 286</p> <p>19% 286 Pts</p>
<p>▲ Performing way below expectations (13<sup>th</sup> percentile) ?</p>				
<p>Poor: 45% ↑ This bench: 50.9% Great: 78%</p>				

Graphics Card	Bench ?	3D DX9 ?	3D DX10 ?	3D DX11 ?
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# User Benchmark

IDN-User

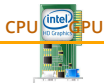
ID

Bench

3D DX9

3D DX10

3D DX11



Intel UHD Graphics 620 (Mobile Kaby Lake R)  
**5.04%** \*NEW\*  
 Legend(17AA 39CE) 1GB  
 Driver: igdumd64.dll Ver. 24.20.100.6286  
 ✓ Performing as expected (45<sup>th</sup> percentile)

5.04% \*NEW\*

Lighting 22.8  
 Reflection 27  
 Parallax 24  
 6% 24.6 fps

MRender 15  
 Splatting 29.8  
 5% 20.8 fps

COMPARE

BUILD

TEST

ABOUT

Poor: 4% ↑ Great: 6%  
 This bench: 5.04%

EFps Game Bottleneck...

## Drives

Bench

Sequential

Random 4k

Deep queue 4k



Samsung PM961 NVMe PCIe M.2 256GB-Rp 668,868  
**58,179 User benchmarks, average bench 184%**  
 204GB free (System drive)  
 Firmware: 4L1QCXB7 Max speed: PCIe 5,000 MB/s  
 SusWrite @10s intervals: 482 320 322 318 323 319 MB/s  
 ⚠ Performing below expectations (28<sup>th</sup> percentile)

161%  
 Outstanding

Read 1,652  
 Write 1214  
 Mixed 826  
 SusWrite 347  
 224% 1,010 MB/s

4K Read 41.1  
 4K Write 79.4  
 4K Mixed 49.9  
 168% 56.8 MB/s

DQ Read 506  
 DQ Write 448  
 DQ Mixed 495  
 366% 483 MB/s

Poor: 103% ↑ Great: 238%  
 This bench: 161%



Seagate ST1000LM035-1RK172 1TB  
**248,441 User benchmarks, average bench 47%**  
 929GB free  
 Firmware: LCM2  
 SusWrite @10s intervals: 96 125 128 127 128 124 MB/s  
 ✓ Performing way above expectations (88<sup>th</sup> percentile)

66.5%  
 Good

Read 110  
 Write 112  
 Mixed 47.7  
 SusWrite 121  
 71% 97.7 MB/s

4K Read 1.7  
 4K Write 1.6  
 4K Mixed 0.1  
 112% 1.13 MB/s

Poor: 19% ↑ Great: 71%  
 This bench: 66.5%

## Memory Kit

Bench

Multi core

Single core

Latency



Samsung M471A1K43CB1-CRC 1x8GB  
**82,626 User benchmarks, average bench 37%**  
 1 of 2 slots used  
 8GB SODIMM DDR4 clocked @ 2400 MHz  
 ⚠ Performing below expectations (32<sup>nd</sup> percentile)

35.2%  
 Below average

MC Read 14.2  
 MC Write 13.8  
 MC Mixed 10  
 36% 12.7 GB/s

SC Read 6.5  
 SC Write 9.7  
 SC Mixed 8.3  
 23% 8.17 GB/s

Latency 106  
 38% 106 ns

Poor: 23% ↑ Great: 43%  
 This bench: 35.2%

Take a copy of your results </>

## System Memory Latency Ladder

L1/L2/L3 CPU cache and main memory (DIMM) access latencies in nano seconds.



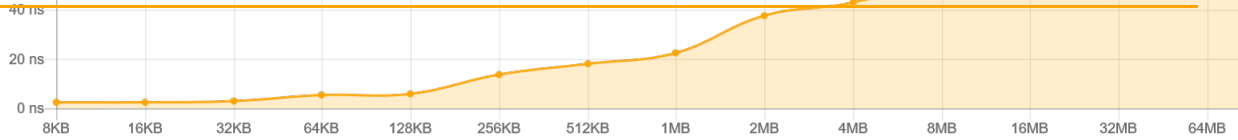
# UserBenchmark

IDN-User

ID



CPU GPU SSD HDD RAM USB FPS EFPS YouTube \*NEW\* COMPARE BUILD TEST ABOUT



## PC Games

Compare your in-game performance to other users with your hardware: UHD Graphics 620 (Mobile Kaby Lake R), Display(), 1280 x 720, 57 Hz.

1. Pick a game that you play on this PC.

Grand Theft Auto V	Counter-Strike: Global...	Fortnite
League of Legends	Minecraft	PlayerUnknown's Batt...
Tom Clancy's Rainbow...	Overwatch	Apex Legends
Call of Duty modern w...	DOTA 2	Assassin's Creed Odys...
Battlefield 5	ARK: Survival Evolved	X-Plane 11
Escape from Tarkov	Assassin's Creed Origi...	Microsoft Flight Simul...

MORE GAMES

2. What settings do you play on?

Settings

Low

Med

High

Max

3. How many (uncapped) fps do you get?

Avg. fps

SUBMIT YOUR FPS

## Custom PC Builder [\(Explore upgrades for this PC\)](#)

Build your perfect PC: compare component prices, popularity, speed and value for money.

CHOOSE AN UPGRADE:

CPU	GPU	SSD	HDD	RAM	MBD
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# User Benchmark Builds (Compare 1,060 builds)

See popular component choices, more breakdowns and rankings. [YouTube](#) <sup>\*NEW\*</sup>

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**Gaming 15%**

Surfboard [?](#)



**Desktop 75%**

Battleship [?](#)



**Workstation 45%**

Yacht [?](#)

System: Lenovo 81C8

CPU	GPU	SSD	RAM
<b>Core i5-8250U</b> Intel Bench 64%, 158,956 samples 703x	<b>UHD Graphics 620 (Mobile Kaby Lake R)</b> Intel Bench 5%, 233,179 samples 894x	<b>PM961 NVMe PCIe M.2 256GB</b> Samsung Rp 668,868 Bench 184%, 58,179 samples 169x	<b>RMSA3260MH78HAF-2666 1x8GB</b> Ramaxel Bench 38%, 9,189 samples 226x
<b>Core i7-8550U</b> Intel Bench 64%, 110,024 samples 180x	<b>940MX</b> Nvidia Bench 10%, 24,179 samples 116x	<b>600p Series NVMe PCIe M.2 256GB</b> Intel Rp 1,140,223 Bench 116%, 39,631 samples 100x	<b>M471A1K43CB1-CRC 1x8GB</b> Samsung Bench 37%, 82,626 samples 119x
<b>Core i3-8130U</b> Intel Bench 58%, 13,250 samples 158x	<b>MX130</b> Nvidia Bench 10%, 5,787 samples 31x	<b>PM961 NVMe PCIe M.2 128GB</b> Samsung Bench 169%, 7,463 samples 69x	<b>HMA81GS6AFR8N-UH 1x8GB</b> Hynix Bench 37%, 101,246 samples 100x

[EDIT WITH CUSTOM PC BUILDER](#)

Value: 45% - Average [?](#)

Total price: Rp 668,868



## The Best.

### CPU

Intel Core i5-9600K **\$180** [?](#)  
 Intel Core i5-9400F **\$156**  
 Intel Core i7-9700K **\$359**

### GPU

Nvidia GTX 1660S (Super) **\$230**  
 Nvidia GTX 1650S (Super) **\$170**  
 Nvidia RTX 2070S (Super) **\$510**

### SSD

Crucial MX500 250GB **\$45**  
 Samsung 850 Evo 120GB **\$78**  
 Samsung 860 Evo 250GB **\$46** [?](#)

### HDD

Seagate Barracuda 1TB (2016) **\$42** [?](#)  
 WD Blue 1TB (2012) **\$24** [?](#)  
 Seagate Barracuda 3TB (2016) **\$85**

### RAM

Corsair Vengeance LPX DDR4 3200 C16 2x8GB **\$63**  
 Corsair Vengeance LPX DDR4 3000 C15 2x8GB **\$73**  
 G.SKILL Trident Z DDR4 3200 C14 4x16GB **\$681**

### USB

SanDisk Extreme 64GB **\$72**  
 SanDisk Extreme 32GB **\$46**  
 SanDisk Extreme 16GB **\$24**

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CPU GPU SSD HDD USB RAM MBD

Build

Test

EFps

Can You Run It?

