

Name Yekoye Aklilu Tesfahun

ID 1602738

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## **Alienware PC Brand Evaluation**

### **1. Hardware Quality & Performance**

<b>Criteria</b>	<b>Evaluation</b>
CPU Performance	Latest Intel Core i7/i9 and AMD Ryzen 7/9 processors with very high performance and efficiency
GPU Performance	High-end NVIDIA RTX and AMD Radeon dedicated GPUs suitable for gaming and creative work
RAM	High-speed DDR5 RAM, upgradeable up to 64GB or more
Storage	NVMe SSD (PCIe Gen4/Gen5), very fast with large capacity options

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### **2. Thermals & Noise**

<b>Criteria</b>	<b>Evaluation</b>
Cooling System	Advanced cooling system with vapor chambers and powerful fans
Fan Noise	Moderate to loud under heavy gaming or workload
Thermal Throttling	Very low due to strong thermal design

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### **3. Build Materials & Durability**

<b>Criteria</b>	<b>Evaluation</b>
Chassis	Premium aluminum and magnesium alloy construction
Hinges	Strong and durable hinges
MIL-STD Certification	Not common, but overall build quality is very strong

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## 4. Design & Ergonomics

Criteria	Evaluation
Weight & Portability.	Heavy; designed mainly for gaming performance
Keyboard	RGB backlit keyboard with good key travel
Trackpad	Accurate, smooth, and responsive
Hinge Design	Traditional and strong hinge mechanism
Aesthetics	Futuristic gaming design with RGB lighting

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## 5. Display Quality

Criteria	Evaluation
Resolution	Full HD (FHD), QHD, and 4K options available
Panel Type	IPS and OLED panels
Brightness	300–500+ nits
Color Coverage.	High sRGB, AdobeRGB, and DCI-P3 coverage
Refresh Rate	120Hz to 360Hz
Contrast Ratio	High contrast ratio
Touchscreen	Rarely available

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## 6. Reliability & Brand Reputation

Criteria	Evaluation
Reliability	Very good, backed by Dell enterprise-level quality
User Reviews.	Mostly positive, praised for performance
Repairability	Moderate; Dell parts and service widely available

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## 7. Battery & Power Efficiency

Criteria	Evaluation
Battery Life	Approximately 3–6 hours (typical for gaming laptops)
Fast Charging	Supported
Power Adapter.	Large, high-wattage power adapter

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## 8. Software & Ecosystem

Criteria	Evaluation
Bloatware	Alienware Command Center included (generally useful)
OS Support	Windows supported; limited Linux support
Driver Updates	Stable and frequently updated

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## 9. Security Features

Criteria	Evaluation
BIOS Security	Strong Dell BIOS security features
TPM	Trusted Platform Module available
Fingerprint / IR.	Rare on most models
Privacy Shutter	Usually not available
Encryption	BitLocker encryption supported

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## 10. Upgradeability & Repairability

Criteria	Evaluation
RAM Upgrade	Supported
Storage Expansion	Multiple M.2 slots and SATA support
Battery Replacement.	Serviceable

<b>Criteria</b>	<b>Evaluation</b>
Modularity	Good in desktops, moderate in laptops

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## 11. Connectivity & Ports

<b>Criteria</b>	<b>Evaluation</b>
USB-A / USB-C	Available
Thunderbolt 4	Available on some models
HDMI / Display.	Port Supported
SD Card Reader	Available on selected models
Ethernet	Available
Wi-Fi	Wi-Fi 6 / Wi-Fi 6E
Bluetooth	Version 5.x

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## 12. Price & Value

<b>Criteria</b>	<b>Evaluation</b>
Price-to-Performance.	. High performance but relatively expensive
Lifespan Value	Long-lasting hardware
Upgrade Path	Good but costly
Student Discounts	Sometimes available

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## 13. Customer Service & Warranty

<b>Criteria</b>	<b>Evaluation</b>
Warranty	1–3 years standard
Repair Type	On-site and depot repair options

Criteria	Evaluation
Support Quality	Very good (Dell support reputation)
Extended Warranty	Available
Accidental Damage Protection.	Optional

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## 14. Special Use-Cases

Use Case	Evaluation
Gaming	Excellent – top-tier GPU, cooling, and high-refresh displays
Business	Good but expensive for office-focused use
Creative Work	Excellent – powerful CPU/GPU, color-accurate displays, Thunderbolt support
Students	Suitable for engineering and multimedia students, but heavy and costly

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