

# BATTLECARD FOR AMD PROCESSOR-BASED LAPTOPS



**AMD RYZEN™ 7 2700U  
MOBILE PROCESSOR WITH  
RADEON™ RX VEGA 10 GRAPHICS**



**INTEL I7-8550U**

**GET THE WORLD'S FASTEST PROCESSOR FOR ULTRATHINS WITH THE AMD RYZEN™ 7 2700U MOBILE PROCESSOR.<sup>1</sup>**

## GREAT FOR



PHOTO  
EDITING



MUSIC



GAMING



MOVIES



WEB



1080P  
VIDEO EDITING



PROCESSOR

## BETTER GRAPHICS, COMPUTE, AND PRODUCTIVITY PERFORMANCE.<sup>2,3,4</sup>

**THE NEW AMD RYZEN 7 MOBILE PROCESSOR DELIVERS  
THE EXPERIENCE YOU WANT:**

- Desktop-class performance to accelerate content creation, gameplay and productivity workloads<sup>5</sup>
- Edit videos and stream your favorite shows in smooth 4k and 1080p<sup>6</sup>
- Get processor level intelligence that anticipates your needs with SenseMI.<sup>7</sup>
- Optimized for Windows<sup>®</sup> 10
- Smooth 1080p gameplay on the most popular eSport titles<sup>8</sup>

UP TO

**125%**

**BETTER  
GRAPHICS  
PERFORMANCE<sup>2</sup>**

UP TO

**27%**

**BETTER  
COMPUTE  
PERFORMANCE<sup>3</sup>**

UP TO

**22%**

**BETTER  
PRODUCTIVITY<sup>4</sup>**

## AMD ADVANTAGE

**AMD SENSEMI TECHNOLOGY** IS CLEVER MACHINE INTELLIGENCE IN YOUR AMD RYZEN™ MOBILE PROCESSOR—A SERIES OF SMART “SENSES” THAT WORK TOGETHER TO LEARN ABOUT YOUR APPLICATIONS AND TUNE PERFORMANCE FASTER THAN THE BLINK OF AN EYE.<sup>7</sup>



### PRECISION BOOST 2

Gracefully supercharges CPU frequencies on one to many cores



### PURE POWER

Smart sensors work in concert to optimize power consumption



### MOBILE XFR<sup>9</sup>

Premium notebook cooling can raise average CPU performance



### NEURAL NET PREDICTION

A neural network AI can improve performance by learning your apps



### SMART PREFETCH

Learning algorithms can improve performance by preloading vital data

## FOR MORE INFORMATION, VISIT [WWW.AMD.COM](http://WWW.AMD.COM)

1. “Processor for ultrathin notebooks” defined as 15W nominal processor TDP. Based on testing of the AMD Ryzen™ 7 2700U, AMD Ryzen™ 5 2500U, and Core i7-8550U mobile processors as of 10/6/2017 Performance based on Cinebench R15 nT and 3DMark® TimeSpy in order of AMD 2700U, AMD 2500U and Intel 8550U. Cinebench R15 nT results: 660.5, 606.5, 498.2; 3DMark TimeSpy results: 978, 865, 350. 50:50 CPU:GPU weighted relative performance with i7 baseline: Intel i7-8650U = (498.2/498.2\*5) + (350/350\*5) = 100%; AMD Ryzen 5 2500U = (606.5/498.2\*5) + (865/350\*5) = 184%; AMD Ryzen 7 2700U = (660.5/498.2\*5) + (978/350\*5) = 206%. System configuration: AMD Ryzen™ 7 2700U Processor: HP 83C6, AMD Ryzen™ 7 2700U Processor with Radeon™ Vega 10 Graphics, 8GB Dual Channel (2x4GB) DDR4-2400 RAM, Samsung 850 PRO 512GB SATA SSD, Windows 10 Pro RS2, Graphics driver 22.19.655.0, 12-Sep-2017 AMD Ryzen™ 5 2500U Processor: HP 83C6, AMD Ryzen™ 5 2500U Processor with Radeon™ Vega 8 Graphics, 8GB Dual Channel (2x4GB) DDR4-2400 RAM, Samsung 850 PRO 512GB SATA SSD, Windows 10 Pro RS2, Graphics driver 22.19.655.0, 12-Sep-2017. i7-8550U: KBL Woody\_KL, i7-8550U with Intel UHD Graphics 620, 8GB Dual Channel (2x4GB) DDR4-2400 RAM, MTFDDAV256TBN - M.2 Sata, Windows 10 Pro RS2, Graphics driver 22.20.16.4771, 12-Aug-2017 RVM-26
2. Testing by AMD Performance labs. PC manufacturers may vary configurations yielding different results. 3DMark® 11 Performance is used to simulate system performance; the AMD Ryzen™ 7 2700U scored 4357, while the Intel i7-8550U scored 1937 for a benchmark score comparison of 4357/1937 = 2.25X or 125% faster and the Intel i7-7500U scored 1743 for benchmark score comparison of 4357/1743 = 2.50X or 150% faster. AMD Ryzen™ 7 2700U: HP Envy x360 @25W, AMD Ryzen™ 7 2700U Processor with Radeon™ Vega 10 Graphics, 8GB DDR4-2400 RAM, Samsung 850 PRO 512GB SATA SSD, Windows 10 Pro RS2, Graphics driver 22.19.655.2, 06-Sep-2017. Intel Core i7-8550U: Acer Swift 3, Intel Core i7-8550U with Intel UHD Graphics 620 @15W, 16GB DDR4-2400 RAM, Samsung 850 PRO 512GB SATA SSD, Windows 10 Pro RS2, Graphics driver 22.20.16.4771, 12-Aug-2017. Intel Core i7-7500U: HP Envy x360, Intel Core i7-7500U with Intel HD Graphics 620 @15W, 8GB DDR4-2400 RAM, Samsung 850 PRO 512GB SATA SSD, Windows 10 Pro RS2, Graphics driver 22.20.16.4691, 01-Jun-2017, RVM-12
3. Testing by AMD Performance labs. PC manufacturers may vary configurations yielding different results. Cinebench R15 nT is used to simulate multi-thread CPU performance; the AMD Ryzen™ 7 2700U scored 665.50, while the Intel i7-8550U scored 498.15 for a benchmark score comparison of 665.50/498.15 = 1.27X or 27% faster and the Intel i7-7500U scored 325.19 for benchmark score comparison of 665.50/325.19 = 2.05X or 105% faster. AMD Ryzen™ 7 2700U: HP Envy x360 @25W, AMD Ryzen™ 7 2700U Processor with Radeon™ Vega 10 Graphics, 8GB DDR4-2400 RAM, Samsung 850 PRO 512GB SATA SSD, Windows 10 Pro RS2, Graphics driver 22.19.655.2, 06-Sep-2017. Intel Core i7-8550U: Acer Swift 3, Intel Core i7-8550U with Intel UHD Graphics 620 @15W, 16GB DDR4-2400 RAM, Samsung 850 PRO 512GB SATA SSD, Windows 10 Pro RS2, Graphics driver 22.20.16.4771, 12-Aug-2017. Intel Core i7-7500U: HP Envy x360, Intel Core i7-7500U with Intel HD Graphics 620 @15W, 8GB DDR4-2400 RAM, Samsung 850 PRO 512GB SATA SSD, Windows 10 Pro RS2, Graphics driver 22.20.16.4691, 01-Jun-2017, RVM-11
4. Testing by AMD Performance labs. PC manufacturers may vary configurations yielding different results. PCMark 10 Extended is used to simulate productivity performance; the AMD Ryzen™ 7 2700U scored 3102, while the Intel i7-8550U scored 2533 for a benchmark score comparison of 3102/2533 = 1.22X or 22% faster. AMD Ryzen™ 7 2700U: HP 83C6, AMD Ryzen™ 7 2700U with Radeon™ Vega 10 Processor Graphics, 8GB DDR4-2400 RAM, Samsung 850 PRO 512GB SATA SSD, Windows 10 Pro RS2, Graphics driver 22.19.655.2, 06-Sep-2017. Core i7-8550U: Acer Spin 5, Core i7-8550U with Intel UHD Graphics 620, 8GB DDR4-2400 RAM, MTFDDAV256TBN - M.2 Sata SSD, Windows 10 Pro RS2, Graphics driver 22.20.16.4771, 12-Aug-2017, RVM-35
5. Testing by AMD Performance labs. PC manufacturers may vary configurations yielding different results. Cinebench R15 1T and nT are used to simulate single-thread and multi-thread CPU performance, 3DMark Time Spy is used to simulate graphics performance, PCMark 10 Extended is used to simulate system performance. In Cinebench R15 1T, Cinebench R15 nT, 3DMark Time Spy and PCMark 10 Extended respectively, the 15W TDP mXFR enabled AMD Ryzen™ 7 2700U scored 143, 661, 978, and 3121 while the 65W TDP Intel i5-7600 scored 174, 645, 469, and 3098 for benchmark score comparisons of 143/174 = .82x, 661/645 = 1.02x, 978/469 = 2.09x and 3121/3098 = 1.01x. System Configurations: AMD Ryzen™ 7 2700U Processor: HP 83C6, AMD Ryzen™ 7 2700U Processor with Radeon™ Vega 10 Graphics, 8GB Dual Channel (2x4GB) DDR4-2400 RAM, Samsung 850 PRO 512GB SATA SSD, Windows 10 Pro RS2, Graphics driver 22.19.655.0, 12-Sep-2017. i5-7600: MSI B250 Gaming M3, i5-7600 with Intel HD Graphics 630 (Integrated), 16GB Dual Channel (2x8GB) DDR4-2400 RAM, Samsung 850 PRO 512GB SATA SSD, Windows 10 Pro RS2, Graphics driver 15.46.05.4771 RVM-47
6. Requires 4K display and content. Supported resolution varies by GPU model and board design; confirm specifications with manufacturer before purchase. GD-113
7. AMD SenseMI technology is built into all Ryzen processors, but specific features and their enablement may vary by product and platform. Learn more at <http://www.amd.com/en/technologies/sense-mi>.
8. Testing by AMD Performance labs. PC manufacturers may vary configurations yielding different results. Tested game settings are: CS:GO = 1920x1080, DirectX® 9, medium, no MSAA; DOTA 2™ = 1920x1080, DirectX® 11, fastest+; League of Legends = 1920x1080, DirectX® 9, medium. The AMD Ryzen™ 7 2700U scored FPS of: CS:GO = 49; DOTA 2™ = 49; League of Legends = 59. System Configuration: AMD Ryzen™ 7 2700U: HP 83C6, AMD Ryzen™ 7 2700U with Radeon™ Vega 10 Processor Graphics, 8GB DDR4-2400 RAM, Samsung 850 PRO 512GB SATA SSD, Windows 10 Pro RS2, Graphics driver 22.19.655.2, 06-Sep-2017 RVM-29
9. mXFR enablement must meet AMD requirements. Not enabled on all notebook designs. Check with manufacturer to confirm “amplified mXFR performance” support. GD-125

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