

Make Any HD Content into HDR Quality

Summary

Razzor's Patented Algorithms bring natural-eye image viewing on all content and restores image details lost due to limitations in both the camera lens and encoding. Razzor's Algorithms enables power-savings on mobile devices and improves panel quality while reducing display panel cost.

The combined Razzor Algorithms include:

Dynamic Contrast: *Region based algorithm with Programmable level of Contrast & Limit on saturated pixels*

Dynamic Brightness: *Coupled with the local Dynamic Contrast provides more than 2x improvement in Brightness*

Adaptive Sharpening: *Pixel based, Directional algorithm Sharpens & Smooths Increases Depth and Details*

Consumer And OEM Benefits

The numerous benefits for the end consumer with Razor Algorithms include: *Daylight Viewing, Longer Battery Life, Increased Dynamic Range in Streaming Movies bringing HDR Quality, Improved Drone content with Hidden Details shown in shadows, improved vision for Auto-Back-up Camera Application, and more life-like, Immersive VR Content.*



Before Razzor Algorithms



After Razzor Algorithms

Razor Technologies

The benefits to manufacturers and OEM include increased battery life and potentially lowered panel costs. Razor can customize it's Algorithm output based on panel specs for best quality.






Before Razor Algorithms

After Razor Algorithms

Competition

Razor's only major competitor, Apical, was acquired by ARM Holdings last year. All Razor customers have attested Razor's algorithms are superior in quality and features to Apical.

| | Apical | Razor | |
|-------------------|--------------|---|---|
| Contrast: | Good | Excellent | <i>Contrast controlled between 0-100 with higher dynamic range</i> |
| Brightness: | Not Included | Up to 400% - With Separate Control | <i>Brightness varies 0-100. Contrast improves brightness but a separate boost can bring the power requirements further down</i> |
| Sharpness: | Not included | Included as standard package | <i>Adaptive sharpening smooths noise and sharpens edges giving added depth</i> |
| Complete Package: | Not included | Contrast, Brightness, Sharpness, & Color | <i>Integrated with Optional eeColor: Patented 3D Tables in IPT space shipped on 5M+ Dell PCs</i> |

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| <i>Original Image</i> | <i>Apical Algorithms Applied</i> | <i>Razor Algorithms Applied</i> |

Availability

Razor's Algorithms are available as software drivers in both Intel & Android platforms. Razor Hardware IP is available as a small footprint RTL hardware block for embedded IC applications.