

如今智能手机的摄像头素质和成像越来越好。以前置镜头为例，moto edge X和vivo S12 Pro分别配备了6000万像素的豪威OV60A（1/2.76英寸，0.64 μm 等效1.28 μm ）和5000万像素的三星JNV（1/2.6英寸，0.61 μm 等效1.22 μm ）传感器，自拍效果一流。



那么，为什么笔记本摄像头就不能长点心呢？

原因主要体现在两个层面。

第一个，是笔记本A面和B面之间的空间的确有限，再加上现在笔记本领域也都在流行超窄边框，真的塞不进太大的镜头模块。



另一方面，是笔记本压根就没有什么自拍的需求，摄像头的主要任务就是视频会议、网课，搭配红外摄像头后实现人脸识别登录等等，对像素值和成像素质的要求也不高。此外，笔记本的销量和手机也没法比，厂商也提不起兴趣优化迭代。

Intel® Evo™
Project Athena 3rd Edition Specification Target Highlights
12th Gen Intel® Core™ Processors with Intel® Iris® X® Graphics Based Laptops
Co-engineered Designs. Verified to Deliver

- Instant Wake**
 - ✓ Adaptive Connected Standby / Lucid Sleep
 - ✓ Biometric login: fingerprint sensor, face recognition or Bluetooth phone proximity
- Incredible Performance and Responsiveness**
 - ✓ 12th Gen Intel® Core™ i5, i7, i9 processors with Intel® Xe graphics
 - ✓ Optional Intel® Arc™ Discrete Graphics
 - ✓ Optimized with Windows 11 or Chrome OS
 - ✓ Intel® Adaptive™ Technology
 - ✓ vRGB, DDR5 Dual Channel Memory and 128GB PCIe NVMe SSD
- Intelligence Built Across Platform Levels**
 - ✓ AI-assisted Dynamic Background Noise Suppression
 - ✓ Intel® DL Boost + Intel® GNA 3.0 enabled
 - ✓ Fast feed-back services
 - ✓ OpenVINO™ AI on PC Workload support
 - ✓ Optional Intel Visual Sensing Technology for adaptive features including Wake-on-Proximity, Open-based Dimming and Wake-away Lock
- Battery Life For The Real World**
 - ✓ Fast charging capabilities over USB Type-C
 - ✓ Integration and optimization of low-power components and co-engineering support for power efficiency
- Lightning-Fast Connectivity**
 - ✓ Fast and persistent connector with Intel® Wi-Fi 6E (5GHz)
 - ✓ Intel® Connectivity Performance Suite for intelligent Wi-Fi connection management
 - ✓ Universal cable connectivity over USB Type-C with Thunderbolt™ 4
 - ✓ Optional Intel® 5G LTE or 5G
- Innovative and Engaging Form Factor**
 - ✓ 12.5" x 14" FHD bright displays, backlit keyboards, precision touchpads and more
 - ✓ 18mm-thin, fanless designs
 - ✓ Sleek, thin and light and 2-in-1 chassis designs with flexible bases for a more immersive experience
 - ✓ Immersive audio with premium high-fidelity audio codec speaker and microphone tuning
 - ✓ User-facing camera + FHD 1080p @ 30 fps (optional camera collaboration imaging effects)

Responsiveness on Battery
Real World Battery Life
Instant Wake
Fast Charging
NEW Intelligent Collaboration Experience
Focus. Always Ready. Adaptive.

18 Only 18W limited available for select configurations.
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英特尔随第12代酷睿笔记本平台的发布，还推出了第三代EVO认证标准，除了将认

证范围扩大到更多的笔记本电脑以及新的可折叠设计形态，还对视频通话提出了硬性指标的要求——需要笔记本达到“智能协作”的水平，以便参加高质量的视频会议体验，翻译过来就是必须配备支持1080P的网络摄像头，以及Wi-Fi 6E和基于AI的音频增强功能，以减少背景噪音。

因此，你会发现在今年CES2022上发布的多款笔记本都放弃了祖传的720P镜头配方，全面升级到了1080P、FHD超高清摄像头。虽然只是一点点进步，和智能手机能拍摄4K、8P视频的摄像头没法比，但对笔记本来说也算是一个不小的进步了。

目前，笔记本领域最顶级的摄像头，应该是来自Immervision在CES2022上展示的新型800万像素广角摄像头模块，镜头+传感器的组合只有3.8mm厚，可以满足窄边框轻薄本的安置需求。