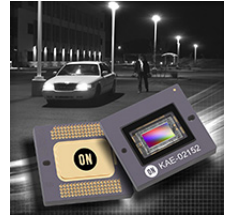


产品概览

KAE-02152: 行间转移 EMCCD 图像传感器，2.1 MP

欲看完整文档，请参阅数据表。



KAE-02152 图像传感器是采用 2/3" 光学制式的 1080p CCD，可提供比 KAE-02150 更高的量子效率（特别是对于 NIR 波长）。该传感器四个输出中的每个输出都包含了传统的水平 CCD 寄存器和高增益 EMCCD 寄存器。因此具有出色的低光成像性能。820 nm 处的 QE 大约增加了一倍，从而提高了灵敏度，而不会降低器件的调制传递功能 (MTF)。场景内可切换增益功能会以逐像素为基础对每个电荷包进行采样。这使摄像头系统能够根据用户可选的阈值确定，通过正常增益输出还是通过 EMCCD 输出来传送电荷。巧妙地管理在黑暗背景中具有明亮物体的场景。在阳光到星光下，一个摄像头就可以捕捉优质图像。垂直溢出漏极结构抑制了图像光晕，提供出色的 MTF，实现了用于精确曝光控制的电子快门。KAE-02152 采用两种封装配置：PGA 和带集成热电冷却器 (TEC) 的 PGA。

特性

- Increased QE, with 2x improvement at 820 nm
 - Intra-scene switchable gain
 - Wide dynamic range
 - Low noise architecture
 - Exceptional low-light imaging

 - Global shutter
 - Excellent image uniformity and MTF
 - Multiple spectral sensitivity options
 - PGA package, or PGA with integrated thermoelectric cooler

 - Available with Sparse CFA
- For more features, see the data sheet

优势

- Improved sensitivity for NIR wavelengths
- Dynamic compensation under changing conditions
- Imaging of bright regions in otherwise dark scenes
- Sub-electron noise for EMCCD gains of 20x at T = 0C
- Enables imaging in widely varying conditions, sunlight to starlight
- Excellent imaging of moving objects with minimal artifacts
- CCD technology provides excellent image quality
- Optimized for monochrome or color image capture
- Integrated cooler simplifies development of cooled camera design
- Provides color information with monochrome sensitivity

应用

- Surveillance
- Scientific Imaging
- Medical Imaging
- Intelligent Transportation Systems

欲了解更多信息，请联系您当地的销售支援 www.onsemi.cn。

创建于：7/13/2020