



5-Megapixel, 1/2.5-Inch CMOS Image Sensor

Image Quality Has Never Been Better

Features

- DigitalClarity™ CMOS imaging technology
- Low-power, progressive scan CMOS image sensor
- 5-megapixel resolution (2,592H x 1,944V)
- 1/2.5-inch optical format
- On-chip, 12-bit analog-to-digital converter (ADC)
- 15 frames per second (fps) at full resolution
- 30 fps for 1,080 progressive scan
- 60 fps for 720 progressive scan
- Viewfinder and snapshot modes
- Programmable gain and exposure control
- Two-wire serial interface
- Global reset
- Binning for enhanced viewing experience
- Phase lock loop (PLL) for versatile clock in scheme

Improved Performance Means New Possibilities

Equip your customers with Micron's 5-megapixel MT9P001 image sensor and they'll discover a new world of possibilities for their phones and digital still cameras. They can capture the extraordinary, the inspirational, and even the everyday experience in high-quality images worth keeping.

Unparalleled CMOS Image Quality

Micron's exclusive DigitalClarity technology dramatically reduces noise levels in our CMOS sensors. The 5-megapixel, 1/2.5-inch optical format of the MT9P001, operating within the space constraints of mobile applications, brings DSC-class images to the mobile phone space. Your MT9P001-equipped phone or digital still camera will deliver sharp, crystal-clear images—whether capturing continuous video or single frames—even in extreme low-light conditions.

The MT9P001 comes with all the advantages of our CMOS technology, including a small form factor, low power consumption, fast performance, and ease of integration. Sophisticated camera functions, includ-

ing programmable gain, frame rate, exposure time, image mirroring, and viewfinder and snapshot modes have been incorporated onto the chip itself.

High-Resolution Image Capture

With a 12-bit ADC, our 5-megapixel CMOS image sensor enables high-resolution image capture and HDTV video formats (1,080 progressive scan) that surpasses the performance of CCD-based digital still cameras. Furthermore, with 15 fps image capture at full resolution, it enables specialized high-speed DSC performance not achieved with CCDs. These features, paired with advanced functions like pixel binning (to smooth alias artifacts) and global reset for snapshot modes, make the MT9P001 the perfect choice for next-generation ultra-high-end camera phones and digital still cameras.

Applications

- Cellular phones
- Digital still cameras
- HDTV video cameras

For Designers Who Demand More; For Customers Who Expect More

Micron's new 5-megapixel image sensor is the latest addition to our comprehensive portfolio of high-performance mobile imaging solutions. The MT9P001 incorporates a number of features and functions to streamline your designs and improve your customers' imaging experiences. To order, call us at 208-368-3900 or visit us on the Web at www.micron.com/imaging.



