

MityCAM-C50000 for Embedded Vision



The MityCAM-C50000 couples a 47.5MP CMV50000 CMOS imaging sensor from ams/CMOSIS with the processing technology in Critical Link's Intel/Altera Arria 10 SoC System on Module. The open architecture design allows you to load your algorithms directly into the hardware for advanced on-board processing.



MityCAM-C50000 System Features:

- 47.5MP High-Speed global shutter image sensor with true CDS
- Tightly integrated FPGA and ARM for embedded vision applications
- USB3 Vision, HDMI, CoXPress, and other interface options
- Reduce project risk and cost, while accelerating development

Multiple Production Ready Configurations:

- Fully-enclosed compact camera
- Complete 3-board set solution
- Partial board set solution for customers electing to customize sensor or I/O boards

	CMV-50000
Active Pixels	7290(H) x 6004(V)
Pixel Size	4.6 μm x 4.6 μm
Frame Rate	30 fps
Noise (@104 fps)	8.8 e^-
Dark current $\text{e}^-/\text{pixel}/\text{sec}$ @ 25C	66.2 e^-/S
Peak Quantum Efficiency	>60%
Dynamic Range	64 dB
Shutter Mode	Global Shutter
Chroma Options	Color or Mono

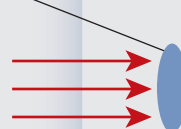


MityCAM Embedded Vision Platform



Production-Ready Hardware

- Standard F-mount lens



Sensor
Card

SoC
Processor
Card

Interface
Card
(Multiple
Options)



UI for sensor setup/
configuration and
data acquisition.

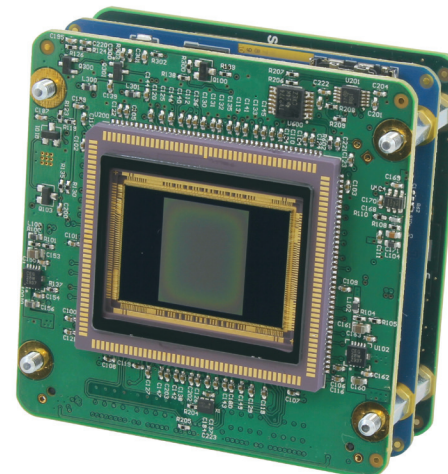
- 8.0 MP CMOSIS Sensor
- 47.5MP CMOSIS Sensor
- 5.5 MP sCMOS Fairchild Imaging
- 2.1 MP sCMOS Fairchild Imaging

- On-board processing: dual Cortex-A9 ARM and FPGA fabric
- Open architecture for user programming

- MIPI (extended range capability)
- GigE Vision
- USB3 Vision
- Camera Link
- HDMI
- USB 2.0
- GenICam
- Ethernet
- CoXpress

MityCAM is Critical Link's family of highly configurable imaging and vision solutions. The platform is designed to be customizable with a variety of high-performance sensors, user programmable SoC featuring tightly integrated ARM and FPGA fabric, and multiple I/O options. Customers benefit from the platform's flexibility, with each building block tailorable to suit the application.

MityCAM products deliver robust on-board processing making them ideal for scientific imaging and vision applications involving high-throughput and advanced image processing.



Applications:

- Test & Measurement
- Process Automation
- Robotics
- Smart Grid/Lighting
- Safety & Inspection
- Lab & Surgical Equipment Instrumentation
- Building Controls/ Automation
- Digital Displays
- Communication Systems

For complete product information, visit www.criticallink.com/imaging

