

FRAUNHOFER INSTITUTE FOR INTEGRATED CIRCUITS IIS



EAGLECAM TAKES TO THE SKIES

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Creating new Perspectives

Whether for professional productions, animal studies or extreme sports, the EagleCam Technology opens up entirely new possibilities to use digital cameras and to create images.

Camera Designed for the Golden Eagle

EagleCam has a separate camera head and body, is extremely lightweight, and was designed specifically for the anatomy of the Golden Eagle.

Mounted in different positions and angles, the miniaturized camera head is able to catch all the aspects of the animal's specific behavior.

This camera fits perfectly to the predator's physique and is able to create new perspectives and never seen images of the eagle in his natural environment. EagleCam is a flexible camera system with stunning image quality and an easy-to-use Android operating system.

Technology

EagleCam is a highly integrated and flexible embedded imaging system. Based on a high-end system-on-chip design with integrated Dual-Core ARM Cortex-A9 processor, a powerful graphics processing unit and a high-quality h.264 compression unit, EagleCam is far more than just a camera. The system is equipped with WiFi, Bluetooth, on-the-go USB OTG, HDMI and several environmental sensors, making EagleCam a small and smart device. Using Android as the cameras operating system makes the design even more flexible. A special camera App designed for professional use provides image adjustments like manual and automatic





white balance, detail filter and user defined gamma settings.

Image statistics like histogram and vectorscope are calculated and displayed in real time and directly integrated in the camera App.

Image Sensor	1/3" CMOS, native HD
Frame Rates	25, 30fps
Recording	h.264, High Profile Level 4.1 VBR, CBR 1 – 40Mbit/s
Format	.ts, .mp4, .gp3
Image Processing	Manual/Automatic White Balance Manual/ Automatic Exposure Gamma (linear, rec709, user defined) Detail Filter Saturation
Audio	Integrated Microphone
Wireless	WiFi (802.11a/b/g/n), BT2.1 + 4.0/BLE
Sensors	Gyro, Magnetic Compass, Air Pressure
Connectors	HDMI USB OTG Custom Camera Head Connector SD-Card
Operating System	Android
Lens Mount	M12
Battery	Lithium-ion, 1000mAh
Weight	70g
Dimensions	120 x 25 x 25mm

