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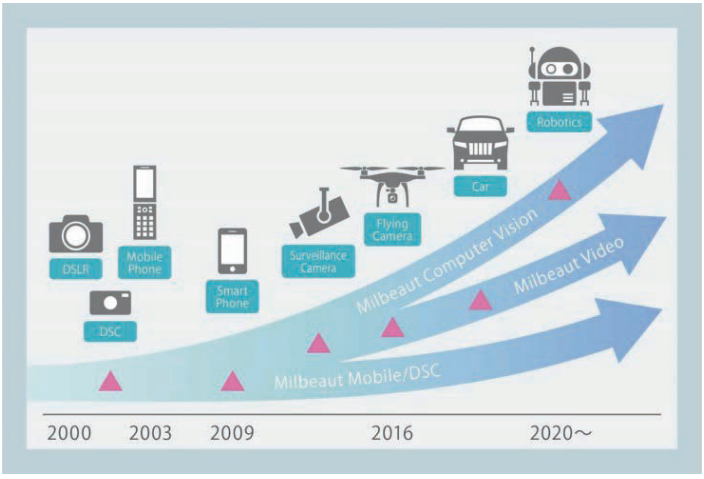
Milbeaut® Image Processor: SC2002

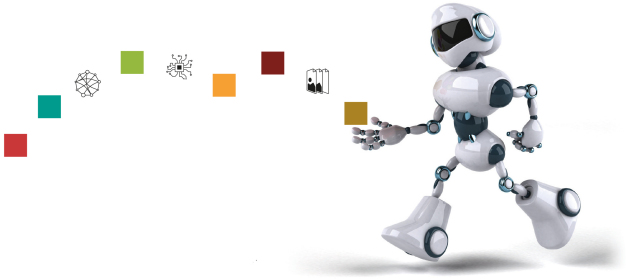
Overview

A new addition to the 'Milbeaut Surveillance Camera series' is the SC2002 SoC which has been developed to realize "Visual Sensing" such as Prediction, Recognition and Detection. The main feature of the 'SC2002' is the new H.265 video encoder and image processing performance, while the power consumption is lower than 1.5 Watt in typical operating conditions. It has the latest functions for capturing high-quality images in low light conditions and achieves high performance with low power consumption. The surveillance camera market, continues to grow steadily with the expanding global security needs.

Milbeaut ISP Solution

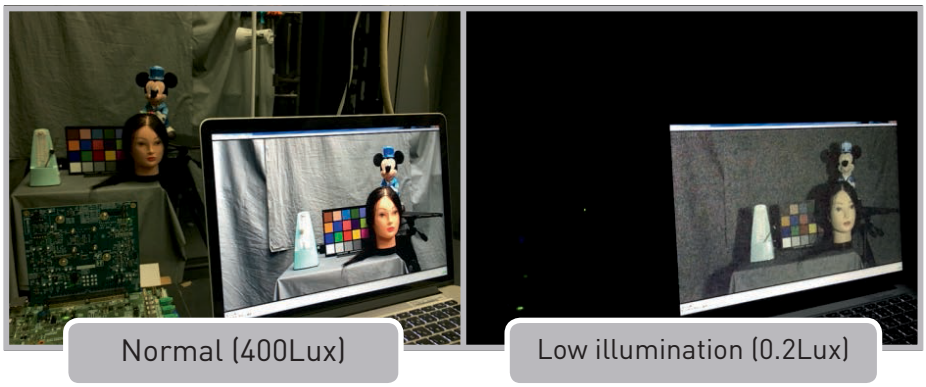
Since its first release in 2000, the Milbeaut series of image processors has established an excellent track record for DSLR, smartphones, surveillance camera and various other cameras. In recent years, video shooting by equipment such as drones, action cameras or security cameras has become very popular, and the demand for high definition picture quality is growing rapidly. High-speed processing of increased image data at low power is now an essential requirement for these applications.





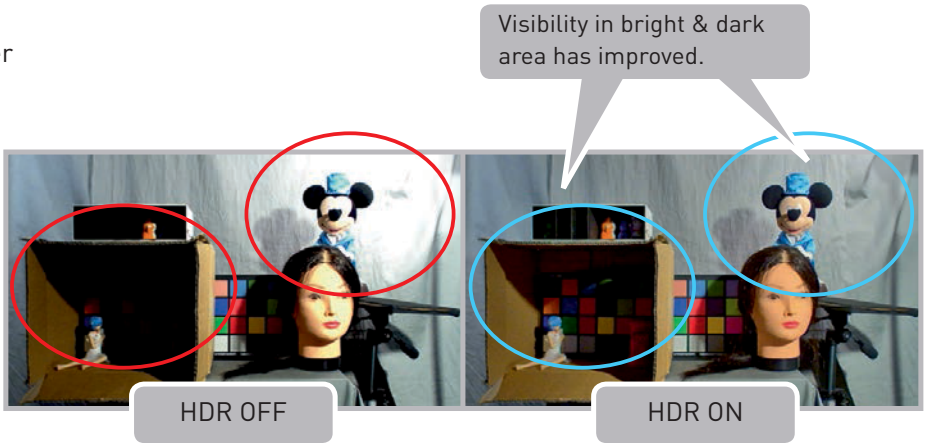
Key Feature

- Low illumination
  With this function, it is possible to greatly improve the shooting quality in an ultra low illumination environment.



HDR (High Dynamic Range)

- The HDR feature prevents under/over exposures and captures a more vivid and detailed image in difficult situations, such as backlight, high contrast, and night scenes.



Specifications

Feature	Specification	Feature	Specification
CPU	CortexA9-Dual 600MHz	Chroma NR(Suppre)	○(Hardware)
SDRAM type	DDR3/DDR3L 16bitx2ch	HEVC(ROI)	○(Hardware)
Package size	17mm x 0.65mm pitch	Lens Distortion Correction	○(Hardware)
Power	Typ. 1.5W、 Worst 3W	Face Detection	○(Hardware)
Operation Temperature	-20°C... +85°C	Object Detection	○(Hardware)
Video Codec	H.264/H.265 3M p60	High Dynamic Range (HDR)	○(Hardware)
Sensor I/F	S-LVDS(8lane/1clk) 648Mbps/lane CMOS 12bit Raw	Headlight Detection	○(Hardware)
Peripheral	USB2.0 Host/Device SDCard(UHS-1x2ch:192MHz) NAND Flash(8bit) Composite Video (NTSC/PAL)	Specific area Masking (OSD/mosaic)	○(Hardware)
Video I/F	(In) Y/C separate 16bits (ITU-R BT656/BT1120)	Defog	○(Hardware)
Low Illumination	○(Hardware)	3DNR	○(Hardware)

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