

Milbeaut® Image Processor: SC2000

Catch
your dreams

with more advanced digital cameras
Milbeaut® image processing solution

▪ Overview

“SC2000” is the latest SoC of the “Milbeaut series” Equipped with a digital signal processor optimized for computer vision, and features advanced functionalities such as 360-degree real-time spherical stitching with multi cameras, image stabilization without mechanical gimbals, and rolling shutter correction.

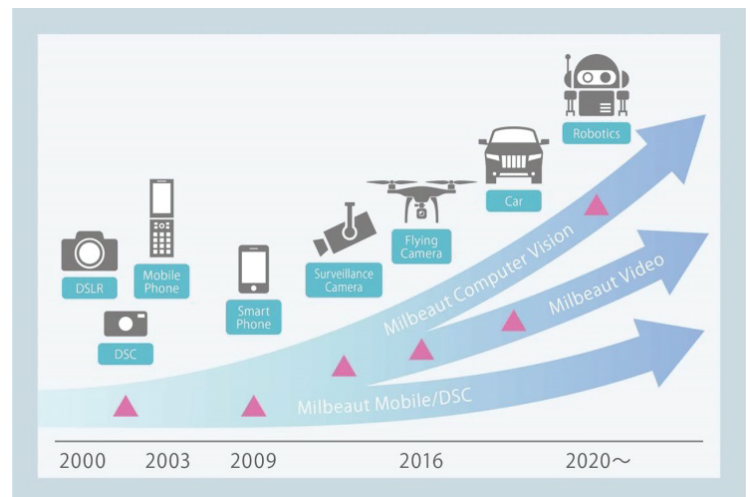
It provides image processing performance up to 1.2Giga pixel per second, three times faster than the previous processor, while keeping power consumption is lower than 1.7 Watts.

▪ Milbeaut ISP Solution

Since its first release the Milbeaut series of image processors has established a track record of success for the surveillance cameras and other various cameras.

In recent years, video shooting by equipment such as drones, action cameras and security cameras has becoming more demanding for high definition picture quality.

The SC2000 delivers high-speed processing of increased image data at low power and is essential component for these new applications.

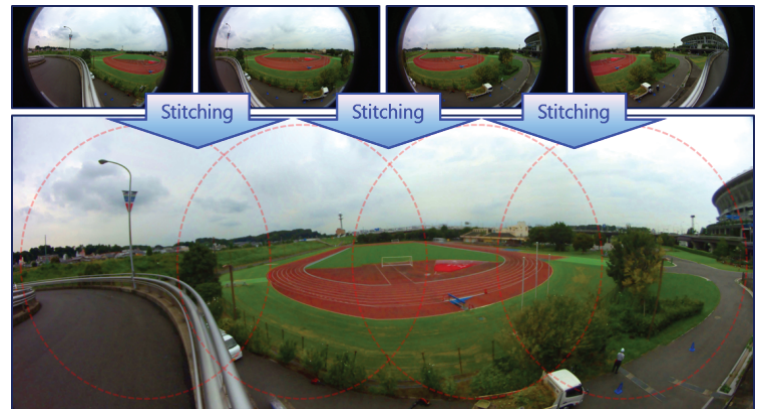


▪ Key Features

● 4-Camera Stitching

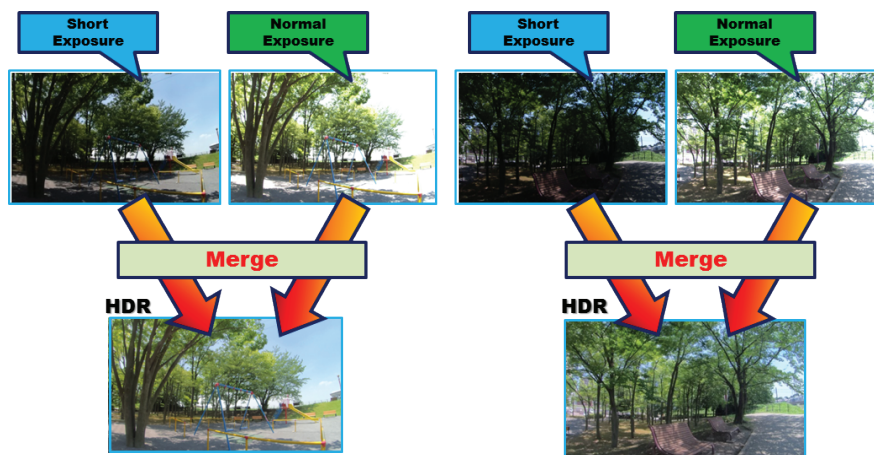
It's possible to stitch the video captured from at most 4 cameras. (Max : 4K 30fps)

When using a fish-eye lens, it's possible to capture a video by the wider field angle by correcting the distortion in real time.



● HDR (High Dynamic Range)

HDR feature prevents under/over exposures and captures more vivid and detailed image in difficult scenes such as backlight, high contrast, and night scenes. Available for both Still and Video captures up to 30fps in full HD size.



▪ Specification

Feature	Specification
ISP Process	28nm
Product Structure	PoP
CPU	CortexA7-Quad 650MHz
Package size	15x15mm, 0.5mm pitch
SDRAM type	LPDDR-3
Image Processing rate	Max 1.2Gpixel/sec.
Max Pixel Size	No Limitation
Sensor I/F	MIPI Rx (4lane) 2.5Gbps x 4CH S-LVDS (16lane/4clk) 1.0Gbps SLVS-EC (8lane) 2.5Gbps x 4CH
Host I/F	None(PCIe, USB3.0)
LCD I/F	MIPI-DSI/16bit Paralle
TV I/F	HDMI 2.0

Feature	Specification
Video Codec	H.264 4K p30/ HEVC 4K p60
Chorma NR	○ (Hardware)
Bayer NR(ELF)	○ (Hardware)
Lens Distortion Correction	○ (Hardware)
Face Detection	○ (Hardware Assist)
Smile/Blink Detection	○ (Hardware Assist)
High Dynamic Range(HDR)	○ (Hardware)
EIS (Electronic Image Stabilization)	○ (Hardware)
Defect Pixel Correction	○ (Hardware)
Color Aberration	○ (Hardware)
3D NR	○ (Hardware)