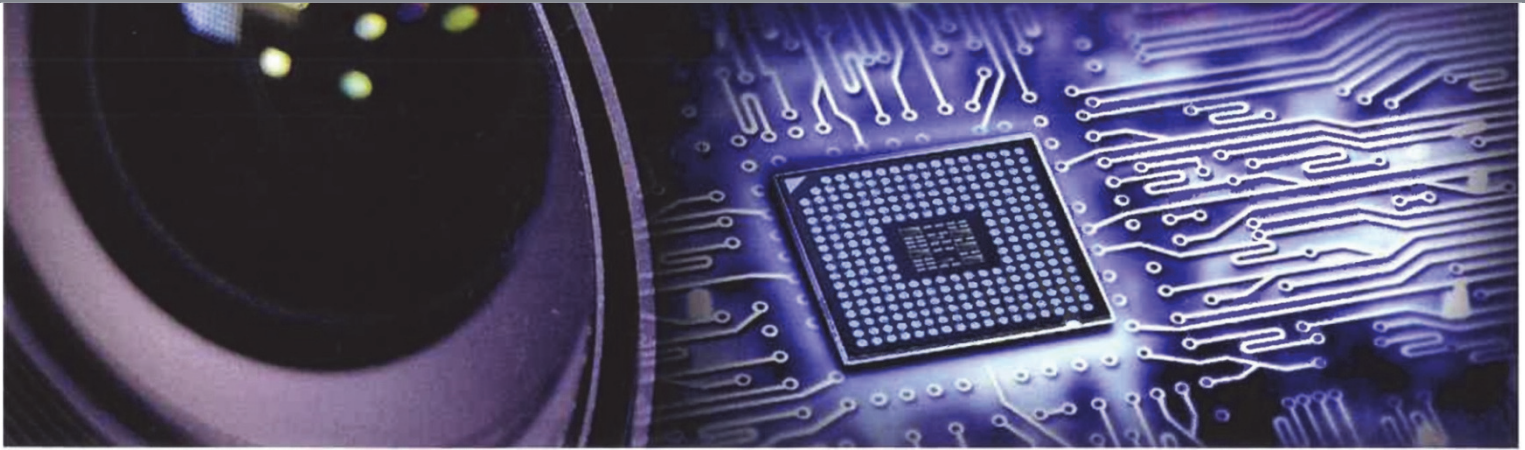


Milbeaut® Image Processor : MB86S22A

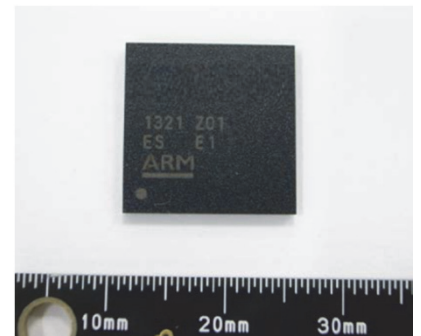


■ Overview

"MB86S22A" series has the following three features, in the still image processing has been achieved about twice the processing performance compared to conventional products.

- Renewed image processing algorithm, significantly improve the optical correction capability.
- Processing speed up by the newly developed IIP(Integrated Image Processor) circuit.
- Improve the quality of HDR capture.

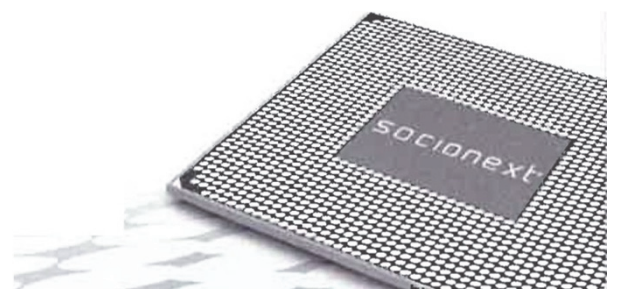
Also in the video recording, it was to enable the H.264/AVC compression and decompression video processing of full HD (p30 and i60) by its own algorithm. "MB86S22A" will provide the best solution for high-quality, high-speed processing that is required for the digital camera.



■ Milbeaut ISP Solution

"Milbeaut" is a high quality imaging processor with track record of DSLR, smartphones, surveillance camera and other various cameras since its start-up in 2000.

Socionext will provide various imaging solution based on our experience in image processing technology accumulated with Milbeaut's 15 years of history.



Key Feature

● Video

MPEG4/AVC(H.264) High/Main Profile Level4.0 1080/i60 and 1080/p30

● Continuous Shooting

Bayer Continuous shooting : 25Mpix/20fps

JPEG Continuous shooting : 25Mpix/10fps

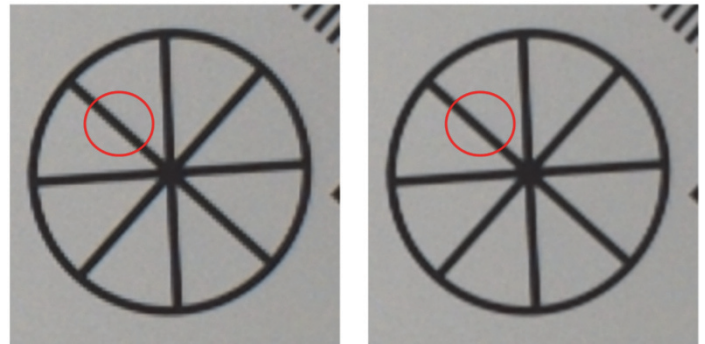
● Video Application

- 3D Video Capture and Recording Application
- Face Detection
- Video Stabilization
- 3D Noise Reduction
- Object Tracking
- WDR(Wide Dynamic Range)
- Scene Detection
- HDR(High Dynamic Range)
- Jaggy Reduction
- Continuous Auto Focus

● Distortion Correction

By Hardware Macro, distortion correction can be processed

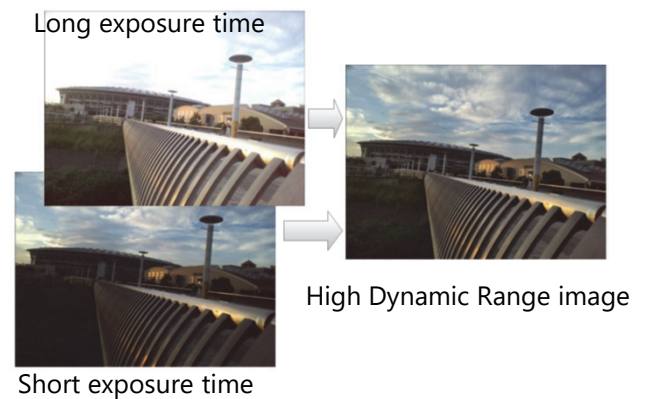
◆ Jaggy Reduction



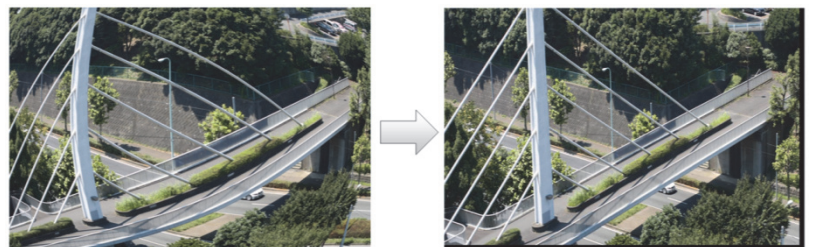
OFF

ON

◆ HDR -High Dynamic Range-



◆ Distortion Correction



OFF

ON

Specification

Function	Specification
ISP Process	55nm CMOS Technology
Package Size	Ball Pitch 0.5mm, Body size 15mm × 15mm
CPU	ARM Cortex-A5 MPCore (Dual Core)
Video Codec	H.264 1080/i60, 1080/p30
Image Processing rate	500Mpix/sec
Max Image Size	5.8K Pixel(Horizontal)
Sensor Interface	Parallel : 12bit 1ch Serial : sub-LVDS 12Lane, SLVS 8Lane
Host PC Interface	UART/CSIO 6ch, USB2.0 High-Speed

Function	Specification
LCD Interface	Composite(NTSC,PAL), D-LCD, HDMI
Card Interface	NandFlash 1ch, SDCard 2ch
Continuous Shooting	25M/10fps
Face Detection	Support(Hardware)
Distortion Correction	Support(Hardware)
Video Stabilization	Support(Hardware)
Still Stabilization	Support(Hardware)
Jaggy Reduction	Support(Hardware)

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