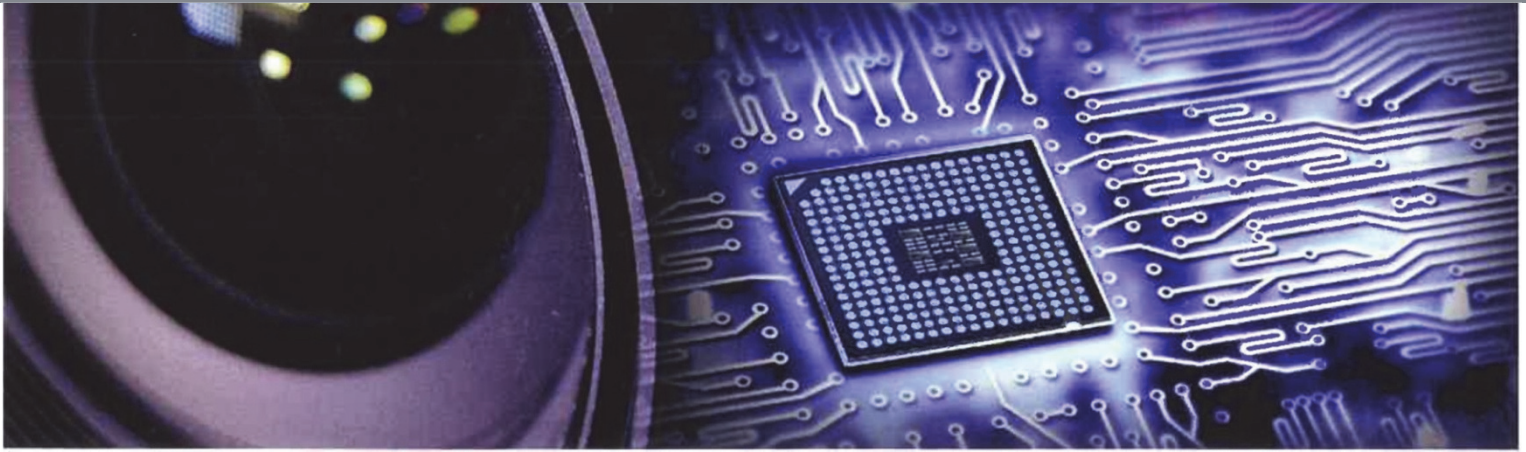
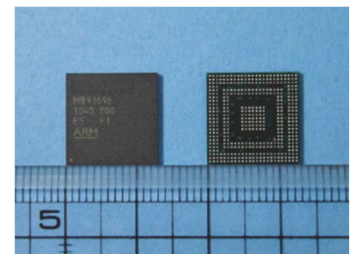


Milbeaut® Image Processor : MB91696B



■ Overview

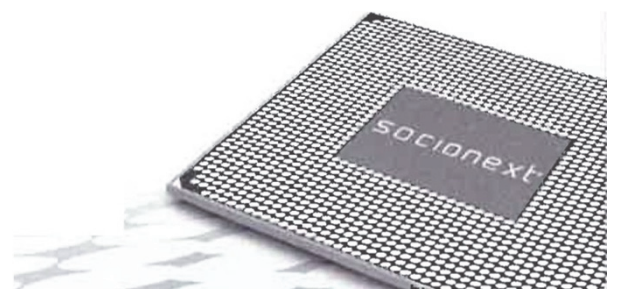
“MB91696B” has realized the high-speed continuous shooting and high image quality of 14M size per second 7 frame by evolved image processing algorithm of Milbeaut with many of adoption experience in the sixth generation. In addition, the low noise Full HD video recording (1920×1080 pixels) is possible by the installation of the newly developed “H.264 full HD codec engine”. Evolution of these originally developed technology will make it possible to realize a camera solutions in one chip.



MB91696B (13mm×13mm)

■ 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.

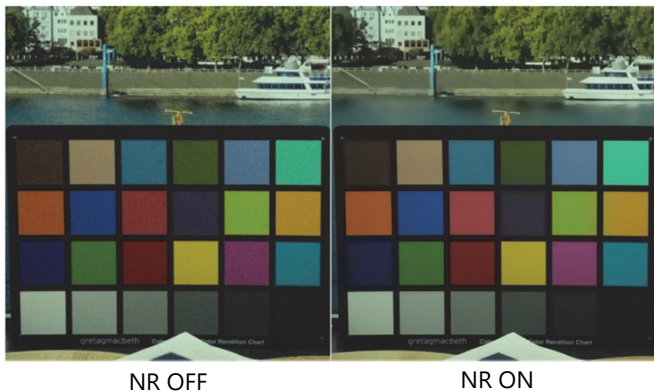


■ Key Feature

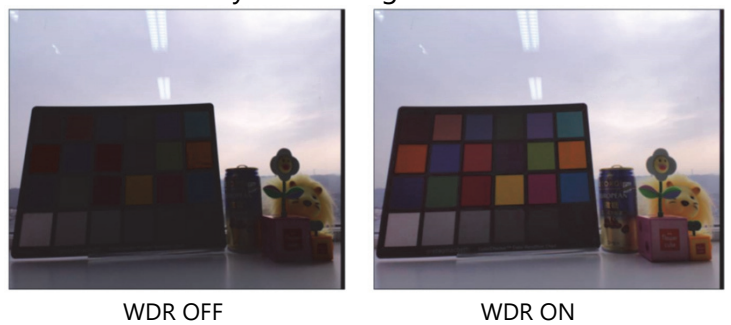
- High speed continuous shooting
 - Signal processing for eliciting the maximum performance of CMOS sensor
 - 14Mpix/7fps (100Mpix/s)
 - Offering new application by the continuous shooting function

- Video Application
 - H.264 1080/p30
 - Face Detection
 - Video Stabilization
 - 3D Noise Reduction(H.264)
 - Continuous Auto Focus
 - Object Tracking
 - WDR(Wide Dynamic Range)
 - Audio handling or LinearPCM/AAC-LC/μLaw by subCPU(ARM9)

◆ Noise Reduction



◆ WDR –Wide Dynamic Range–



■ Specification

Function	Specification
ISP Process	65nm CMOS Technology
Package Size	Ball Pitch 0.5mm, Body size 13mm × 13mm
CPU	ARM946E-S 288MHz x2
Movie Codec	H.264 1080/p30, 720/p30
Image Processing rate	216Mpix/sec
Max Image Size	5.4K Pixel(Horizontal)
Sensor Interface	Parallel : 12bit 1ch Serial : sub-LVDS 8Lane, MIPI 4Lane
Host Interface	UART/CSIO 5ch, USB2.0 High-Speed

Function	Specification
LCD Interface	8bit and 24bit
TV Interface	Composite(NTSC,PAL), HDMI(need Ext Chip)
Card Interface	NandFlash, SDCard 2ch
Continuous Shooting	14M/7fps
Face Detection	Support(Hardware Assist)
Distortion Correction	Support(Hardware)
Video Stabilization	Support(Hardware)
Still Stabilization	Support(Hardware)

The Products and product specifications described in this document are subject to change without notice for modification and/or improvement. At the final stage of your design, purchasing, or use of the products, therefore, ask for the most up-to-date Product Standards in advance to make sure that the latest specifications satisfy your requirements. All company names, brand names and trademarks herein are property of their respective owners.

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