

Socionext Develops New Milbeaut Processor for Security Camera Applications

Provides Optimum Image Processing Using Very Low Power

Yokohama, May 29, 2017 — Socionext today introduced the new SC2002, the latest addition to its lineup of the Milbeaut® family image signal processors. Samples of the new processor, which is targeted for security camera applications, are now available.

The new SC2002, Nicknamed “M11S”, is designed to meet the needs of security cameras, which are becoming increasingly popular. Equipped with the ARM® Cortex™-A9 Dual 600MHz CPU, it delivers the needed performance for today’s security camera applications.

The new IC offers the latest functionalities for capturing high-quality images under low light conditions such as the 3DNR (Three-Dimensional Noise Reduction) and the WDR (Wide Dynamic Range) technology. The WDR synthesizes two images taken with different exposures and achieves the dynamic range of 120dB or better, which is essential when an image contains areas of different levels of light. The IC also features a high-performance DSP with built-in intelligence configured for a function-rich network camera system with video analysis capability. With its unparalleled performance and unique functionalities, the SC2002 provides solutions suitable for various security cameras applications, ranging from professional use to home security.

The SC2002 also comes with a built-in HEVC encoder which allows H.264-quality images to be transmitted at half the bit-rate. This reduces the number of video streams and required network bandwidth, enabling faster transfer of long video recordings to portable media like hard disk drives and SD memory cards. Utilizing the Socionext proprietary low-power design methodology, the IC achieves exceptional performance while consuming only 1.5W in typical operating conditions.

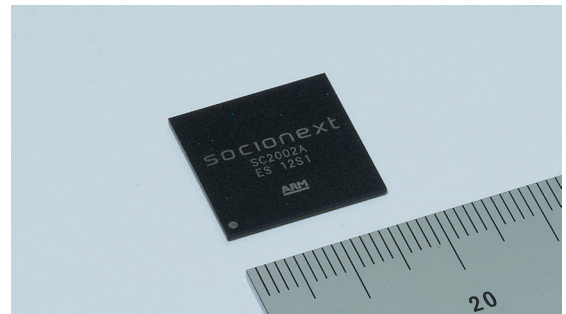


Photo: SC2002

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Inquiry Form <http://socionext.com/en/contact/>

Socionext will demonstrate its high-quality image capturing capability at Computex Taipei, May 30 to June 3.

Main Specifications of SC2002 include the following:

| | |
|---------------------|---|
| CPU | ARM Cortex A9 Dual 600MHz |
| Encoder | Performance: HEVC/H.264/JPEG 3M Pixels@60fps Resolution (Max): 2048x1536 (3M Pixels) Frame rate (Max): 60frames/s up to 3M pixels Multi thread: 16 threads |
| Sensor Interface | Sub-LVDS serial 8 ch, LVCMOS parallel 12 bits |
| Interface | SDRAM: 16bit DDR3-1600(4G /8Gbits) NAND FLASH: 8bit SLC NAND(1G to 8Gbits) Ethernet PHY: 10/100(MII) ,1000(RGMII) IEEE802.3-2008 USB: USB2.0, High speed host /device with PHY SD: 2ch (SD/SDHC/SDXC/SD-IO) Support Peripherals: UART, I ² C, SPI, PWM, GPIO, RTC, ADC, PIR Digital audio: I ² S Analog audio IN: stereo (Lch+Rch) Input x 1 Analog audio OUT: stereo (Lch+Rch) Output x 3 Audio codec: G.711/G.726/AMR-NB/AAC-LC/PCM Video Input: BT.656(480i/576i) / BT.1120 (1080 60p/50p/30p/25p/60i/50i) Video Output: BT.656(480i/576i) / BT.1120 (1080 60p/50p/30p/25p/60i/ 50i) / CVBS (NTSC / PAL) |
| Image Processing IP | Noise reduction: 3DNR, 2DNR Digital WDR: Digital Overlapping WDR 2 or 3 frames ATR-EX (Adaptive tone reproduction) Rotation image: Horizontal mirror, Vertical flip, 90/180/270 degrees Electronic zoom: x 1/16 to x 16 On-Chip detector for AE/AWB/AF, Auto IRIS (PWM control), Day/Night Static/Dynamic White Black pixel detection and compensation Programmable gamma correction Defog, HLC (Highlight Compensation), Simple-LDC (Lens Distortion Correction), IR optimizer, Privacy mask, OSD(On Screen Display), Face Detection, Object Detection, Tampering alert, Trip Wire |

About Socionext Inc.

Socionext is a new innovative enterprise that designs, develops and delivers System-on-Chip products to customers worldwide. The company focuses on imaging, networking, computing and other dynamic technologies that drive today's leading-edge applications. Socionext combines world-class expertise, experience, and an extensive IP portfolio to provide exceptional solutions and ensure a better quality of experience for customers. Founded in 2015, Socionext Inc. is headquartered in Yokohama, and has offices in Japan, Asia, United States and Europe to lead its product development and sales activities. For more information, visit socionext.com.

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