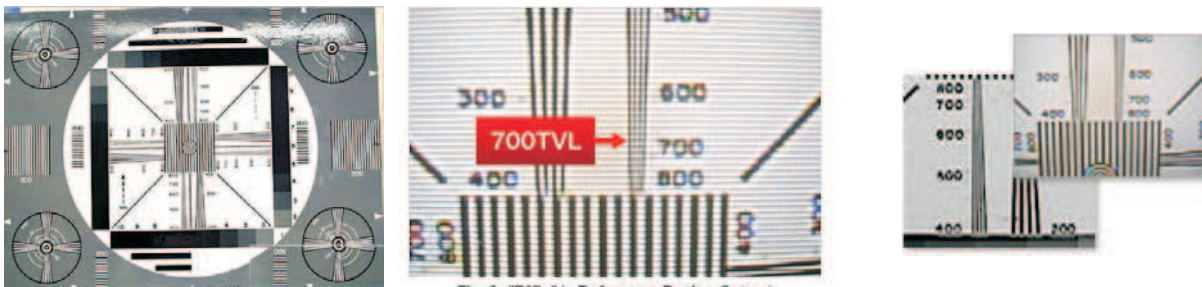


Enhanced Features and Fine Image Processor

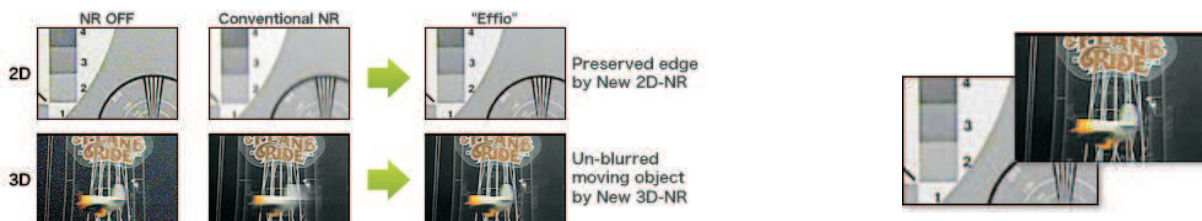
"Effio" means "Enhanced Features and Fine Image Processor", and it is a Sony signal processor which realizes high resolution, high S/N ratio and high color reproduction for security camera.

"Effio" Promises You No.1 Image Quality & Performance

- High-resolution processing



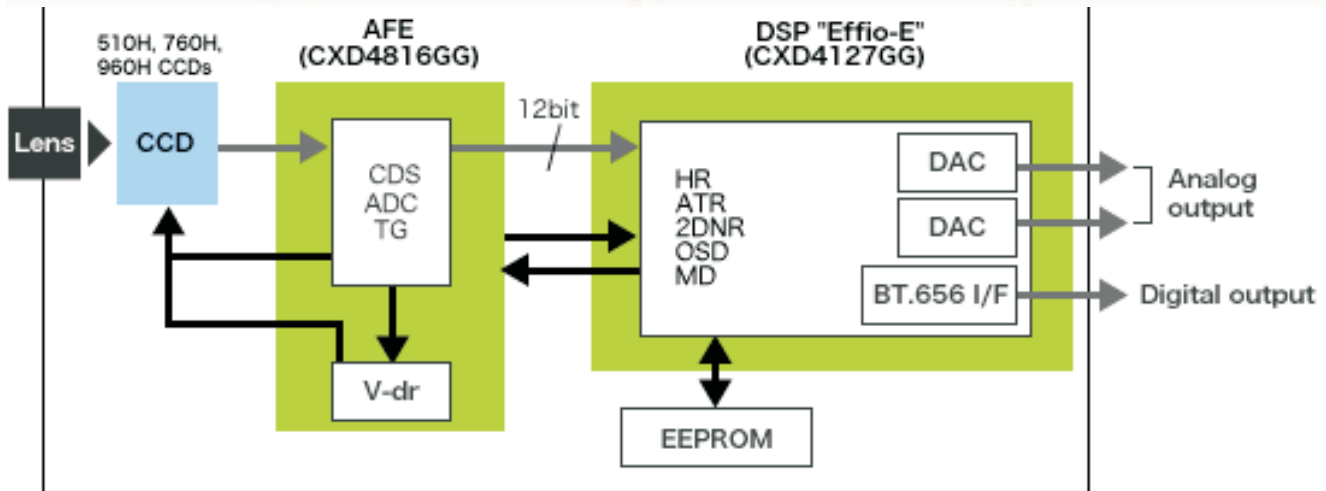
- Noise reduction using smoothing filter with edge preservation:



- White balance processing with wide-range color temperature support and high-saturation processing



"Effio-E" System Block Diagram and Main Specification



Specifications

"Effio-E"	
Product Name	CXD4127GG Entry-level model for 960H CCD
System Configuration	CCD: 510H, 760H, 960H CCDs AFE: CXD4816GG DSP: "Effio-E" (CXD4127GG)
Key Features	<ul style="list-style-type: none"> • Horizontal resolution of over 650 TVL • ATR (Adaptive Tone Reproduction) • 2D noise reduction • Preset OSD menu (8 languages) • Motion detection • DC/Video servo • Dual analog and digital outputs • HLC (High light compensation) • Low power consumption

Item	"Effio-E" system	
Supported CCDs	510H, 760H, 960H CCDs	
System Configuration	2 chips (DSP/AFE)	
Main Functions	Horizontal Resolution	Over 650 TVL
	ATR	Yes
	Noise Reduction	2D-NR
	Day & Night	Yes
	Privacy Mask	8 masks
	HLC	Yes
	AFD	Yes
	Motion Detection	Yes
	OSD Menu	8 languages
	White Pixel Detection and Compensation	Static and Dynamic
Outputs	Automatic Adjustment of Mechanical Iris	Yes
	External Synchronization	Line-Lock
	Analog Output	Y/C Separate video, Composite video
Power Supply Voltages	Digital Output	-ITU-R BT.656 Compliant (27MHz) -CCD image size (CCD drive frequency)
	Dual Analog and Digital Outputs	Yes
	Power Supply Voltages	CXD4127GG: 3.3V, 1.2V CXD4816GG: 3.3V, VH, VL
Packages	CXD4127GG: LFBGA 97Pin CXD4816GG: LFBGA 80Pin	



960H CCD Image Sensor

Product Name	ICX672AK
	ICX673AK
	"EXview HAD CCD II"
Image Size	Type 1/3
Pixels	480k
	570k
Effective Pixels	976(H) x 494(V)
	976(H) x 582(V)
Unit Cell Size [μm]	5.0(H) x 7.4(V)
	5.0(H) x 6.25(V)
Sensitivity [mV] (F5.6)	2450
	2400
Saturation Signal [mV]	1400
Smear [dB] (F5.6)	-110
Supply Voltage [V]	+15/-7.0 (typ.)
H Transfer Voltage [V]	3.3 (typ.)

***CCD = CCD image sensor**

Super HAD CCD II™

*"Super HAD CCD II" is a trademark of Sony Corporation.

The "Super HAD CCD II" is a version of Sony's high performance CCD HAD (Hole-Accumulation Diode) sensor with realized sensitivity (typical) of 1000mV or more per $1\mu\text{m}^2$ (Color: F5.6/ BW: F8 in 1 s accumulation equivalent.)

EXview HAD CCD II™

*"EXview HAD CCD II" is a trademark of Sony Corporation. The "EXview HAD CCD II" is a CCD image sensor that realizes sensitivity (typical) of 1000mV or more per $1\mu\text{m}^2$ (Color: F5.6/ BW: F8 in 1 s accumulation equivalent) and improves light efficiency by including near infrared light region as a basic structure of Sony's "EXview HAD CCD".

The Representative Products



Box Cam Series



Dome Cam Series



Vandalproof Dome Cam Series



Waterproof Cam Series