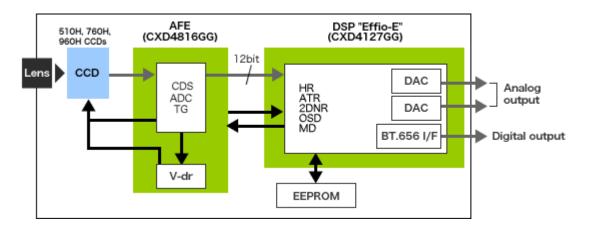


### "Effio" Series Lineup

### "Effio" Series

	"Effio"	NEW! "Effio-E"
Product Name	CXD4112AGG	CXD4127GG
	Wide dynamic range model for 960H CCD	Entry-level model for 960H CCD
System Configuration	CCD: 760H, 960H CCDs  AFE: CXD4813GG  DSP: "Effio" (CXD4112AGG)  LPDDR	CCD: 510H, 760H, 960H CCDs  AFE: CXD4816GG  DSP: "Effio-E" (CXD4127GG) <details></details>
Key Features	<ul> <li>Horizontal resolution of over 650 TVL</li> <li>Wide dynamic range</li> <li>2D and 3D noise reduction</li> <li>OSD</li> <li>Motion detection</li> <li>DC/Video servo</li> <li>Digital zoom</li> <li>Slow shutter</li> <li>Face detection</li> <li>Dual analog and digital outputs</li> <li>Synchronization: LL, VSL, VBSLHP/HR, HRVR</li> </ul>	<ul> <li>Horizontal resolution of over 650 TVL</li> <li>ATR (Adaptive Tone Reproduction)</li> <li>2D noise reduction</li> <li>Preset OSD menu (8 languages)</li> <li>Motion detection</li> <li>DC/Video servo</li> <li>Dual analog and digital outputs</li> <li>HLC (High light compensation)</li> <li>Low power consumption</li> <li><details></details></li> </ul>

## "Effio-E" System Block Diagram and Main Specification



#### **Specifications**

		1	
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	
	Automatic Adjustment of Mechanical Iris	Yes	
	External Synchronization	Line-Lock	
Outputs	Analog Output	Y/C Separate video, Composite video	

	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	ICX662AKA	ICX668AKA	NEWI ICX672AK
	ICX663AKA	ICX669AKA	ICX673AK
	"Super HAD CCD II "	"Super HAD CCD II"	"EXview HAD CCD II "
Image Size	Type 1/3	Type 1/4	Type 1/3
Pixels	480k	480k	480k
	570k	570k	570k
Effective Pixels	976(H) x 494(V)	976(H) x 494(V)	976(H) x 494(V)
	976(H) x 582(V)	976(H) x 582(V)	976(H) x 582(V)
Unit Cell Size	5.0(H) x 7.4(V)	3.75(H) x 5.56(V)	5.0(H) x 7.4(V)
	5.0(H) x 6.25(V)	3.75(H) x 4.69(V)	5.0(H) x 6.25(V)
Sensitivity [mV]	1600	1400	2450
(F5.6)		1350	2400
Saturation Signal [mV]	800	600 540	1400
Smear [dB] (F5.6)	-105	-105	-110
Supply Voltage [V]	+15/-7.5 (typ.)	+15/-7.5 (typ.)	+15/-7.0 (typ.)

H Trans	fer 3.	s.3 (typ.)	3.3 (typ.)	3.3 (typ.)
Voltage	[V]			

<sup>\*</sup>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 $\mu$ m<sup>2</sup> (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 1µm² (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".