

CCD Image Sensors for Camcorders

Overview

Providing a variety of CCD Image Sensors for the consumer camcorders application field.

The industry's state-of-the-art technology employed ensures higher performance and expanded functions than those of conventional models, thus responding to a wide variety of needs.

Features

- Offering a lineup of models with 270k to 1.33M pixels in total
- High sensitivity with low smear
- Continuously variable electronic shutter function
- Ease of system construction with peripheral ICs/LSIs



Specifications

Part No.	Size	Nominal pixel count in total	Effective pixel count (*1) (H) (V)	Transfer mode	Format	Saturation output (*2) Typ. (mV)	Sensitivity (F8.0) Typ. (mV)	Package
MN39165FD	3.1 mm (Type-1/6)	680k	962 × 654	IT	NTSC	700	149	WDIP014-P-0400F
MN39265FD	3.1 mm (Type-1/6)	810k	962 × 774	IT	PAL	600	153	WDIP014-P-0400F
MN39117FT	4.5 mm (Type-1/4)	270k	510 × 492	IT	NTSC	600	400	WDIP014-P-0400F
MN39217FH	4.5 mm (Type-1/4)	320k	500 × 582	IT	PAL	600	380	WDIP014-P-0400F
MN39230FH	4.5 mm (Type-1/4)	460k	724 × 582	IT	PAL	600	220	WDIP014-P-0400F
MN39241FT	4.5 mm (Type-1/4)	480k	752 × 582	IT	PAL	550	220	WDIP014-P-0400F
MN39242FT	4.5 mm (Type-1/4)	570k	752 × 697	IT	PAL	550	200	WDIP014-P-0400F
MN39160FH	4.5 mm (Type-1/4)	680k	962 × 654	IT	NTSC	700	240	WDIP014-P-0400F
MN39260FH	4.5 mm (Type-1/4)	810k	962 × 774	IT	PAL	700	240	WDIP014-P-0400F
MN39192FH	4.5 mm (Type-1/4)	1.33M	1290 × 966	IT	NTSC PAL	550	100	WDIP014-P-0400F

(*1): The effective pixel count includes the transient pixels. ▲: Under development [Symbols] IT: Interline Transfer method
 (*2): Carrier (color signal) saturation output

Peripheral ICs/LSIs

	Part No.	Operating voltage (V)	Process	Function	Package	Pin count
Timing generator	MN5216-2	5.0	CMOS	TG/SSG single-chip	QFP	80
	MN5270	5.0	CMOS	TG/SSG single-chip	QFP	80
	MN52A6CB	5.0	CMOS	TG/SSG single-chip	TQFP	48
Vertical driver	MN3112SA	5.0,15.0,-7.0	CMOS	Multi-power supply type	SSOP	20
	MN31121SA	5.0,15.0,-7.0	CMOS	Multi-power supply type	SSOP	20
Digital pre-processor	AN12012A	2.7 to 3.6	CMOS	CDS + AGC + 10-bit A/D	LQFP	48
Digital Encoder	MN67336	3.5 to 5.0	CMOS	Color video digital encoder	TQFP	48

System Configuration

