

Notification about the transfer of the semiconductor business

The semiconductor business of Panasonic Corporation was transferred on September 1, 2020 to Nuvoton Technology Corporation (hereinafter referred to as "Nuvoton"). Accordingly, Panasonic Semiconductor Solutions Co., Ltd. became under the umbrella of the Nuvoton Group, with the new name of Nuvoton Technology Corporation Japan (hereinafter referred to as "NTCJ").

In accordance with this transfer, semiconductor products will be handled as NTCJ-made products after September 1, 2020. However, such products will be continuously sold through Panasonic Corporation.

Publisher of this Document is NTCJ.

If you would find description "Panasonic" or "Panasonic semiconductor solutions", please replace it with NTCJ.

※ Except below description page

"Request for your special attention and precautions in using the technical information and semiconductors described in this book"

Nuvoton Technology Corporation Japan

MN34120PA Data Sheet

Overview

This product is MOS type image sensor of Type-1/2.33" 16.37 mega pixels. R,G,B primary color mosaic filters are used as the color filters. In the still mode, the signal of 16.37 mega pixels can be output to the high-resolution ultra-high-density. The FHD movie is achieved by vertical and horizontal mixing.

Feature

Parameter	Content	
Scan mode	Progressive scan	
Optical size	1/2.33 type 4:3 aspect	
Number of effective pixels	4,660 (H) × 3,512 (V) = 16,365,920 (pixel)	
Number of active pixels	4,632 (H) × 3,488 (V) = 16,156,416 (pixel)	
Total number of pixels	4,804 (H) × 3,648 (V) = 17,524,992 (pixel)	
Pixel size	1.335 (H) μm × 1.335 (V) μm	
Package	LGA Package (Ceramics)	
Actual imaging area dimensions (active pixel area)	6183.72 (H) μm × 4656.48 (V) μm	
Color filter arrangement	R,G,B primary color mosaic filters	
Power supply voltage	3.3V / 1.8V / 1.2V	
Master clock	Typ. 54 MHz	
Output signal type	subLVDS DDR method 648 Mbps	
Register I/F	4-wire Serial I/F	
Driving mode	Full scan1(1ch8port/12bit)	16fps : 4632H × 3488V
	Full scan2(1ch8port/10bit)	22fps : 4632H × 3488V
	1080p mode(1ch6port/12bit)	60fps : 2314H × 1304V
	720p mode(1ch4port/12bit)	60fps : 1543H × 872V
	Monitor mode(1ch2port/12bit)	30fps : 1543H × 496V

Application

- Digital Still Camera
- Camcorder

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Even when the products are used within the guaranteed values, take into the consideration of incidence of break down and failure mode, possible to occur to semiconductor products. Measures on the systems such as redundant design, arresting the spread of fire or preventing glitch are recommended in order to prevent physical injury, fire, social damages, for example, by using the products.
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