



Agilent ADCM-1650 CIF Resolution CMOS Camera Module

Product Overview

Description

The ADCM-1650 ultra compact CMOS camera module is an advanced, low-power CIF resolution camera component for embedded applications. The camera module combines an Agilent CMOS image sensor and image processing pipeline with a high-quality lens to deliver images in JPEG or video format, ready for storage or transmission. Output data is transmitted using a serial or parallel port.

The ADCM-1650 camera module features a quality, integral lens in a tightly integrated sensor and image processing design. The camera module is optimized for use in a variety of embedded applications from cell phones to handheld wireless devices to image-enabled appliances and automotive design.

Incorporating a CCIR 656-compatible 8-bit parallel interface, a JPEG or a YCbCr interface (serial or parallel), the ADCM-1650 supports industry-leading data resolutions as well as sub-sampling.

The ADCM-1650 camera module also supports a range of programmable modes, including support for embedded or external sync capabilities, which extend design flexibility.



Features

- CIF resolution
- Bayer color filters: blue, red and green
- Frame rate: 15 frames per second @ CIF resolution
- Flexible orientation
- Programmable to many image formats (landscape or portrait):
 - CIF (352 x 288)
 - QVGA (320 x 240)
 - QCIF (176 x 144)
 - QQVGA (160 x 120)
 - QQCIF (88 x 72)
 - Any other format 352 x 352 or smaller
- Panning and digital zoom
- Window can be placed anywhere in the 352 x 352 array
- Low power: 80 mW typical at 13 MHz input clock
- High intrinsic sensitivity for enhanced low light performance
- Single power supply with internal voltage regulation

- High quality F/2.6 lens
- Fully configurable image processing
- Direct JPEG or YCbCr 8-bit parallel output port (CCIR 656-compatible)
- Embedded sync capability (CCIR 656)
- Horizontal/vertical mirroring and subsampling
- Optimized temperature performance
- Excellent image quality; JPEG-based compression with selectable quantization tables
- Automatic gathering of frame statistics including histograms for each color channel
- Adaptive quantization in JPEG
- Image resizer
- Auto exposure and auto white balance
- Integrated IR filter
- Compact size: 8.5 x 8.0 x 7.9 mm (with cover glass)

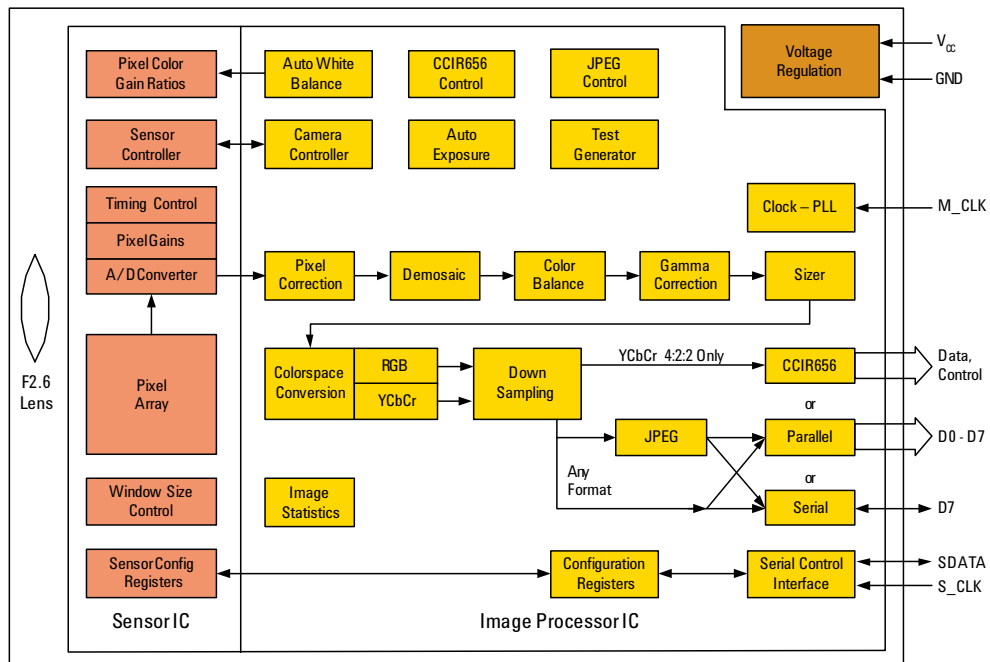
Applications

- Mobile phones
- Video phones
- Personal Digital Assistants
- Digital still mini cameras
- Image-enabled appliances
- Embedded automotive
- Monitoring equipment



Agilent Technologies

The ADCM-1650 camera module is a complete image processing system.



www.agilent.com/semiconductors

For product information and a complete list of distributors, please go to our web site.

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 February 19, 2003
 5988-8921EN



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