

Agilent ADCM-1670 CIF Resolution CMOS Camera Module, UART Output

Product Overview

Description

The Agilent ADCM-1670 ultra compact CMOS camera module is an advanced, low-power CIF resolution camera component for embedded applications. The camera module combines an 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 port.

The ADCM-1670 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 JPEG, YCbCr, RGB or grayscale outputs, the ADCM-1670 supports industry-leading data resolutions as well as subsampling.

The ADCM-1670 camera module also supports a range of programmable modes, which extend design flexibility.



Features

- 352 x 288 CIF resolution
- Bayer color filters – blue, red and green
- Frame rate – 15 frames per second at CIF resolution
- Flexible orientation
- Programmable to many image formats:
 - 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 – window can be placed anywhere in the 352 x 352 array
- Low power – 100 mW typical at 13 MHz input clock
- High intrinsic sensitivity for enhanced low light performance
- Fully configurable image processing
- Single 2.8V power supply with internal voltage regulation
- High quality F/2.6 lens
- Programmable gamma correction and color balancing
- Direct JPEG, YCbCr, RGB or grayscale output
- Internal buffer for slow readout of compressed images
- Horizontal/vertical mirroring and subsampling
- Programmable VSYNC-HSYNC setup and hold, vertical line blanking and external clock polarity
- Optimized temperature performance
- Excellent image quality – JPEG based compression with selectable quantization tables
- Automatic gathering of frame statistics including histograms for each color channel
- Automatic adjustment of compression rate for constant image file sizes
- Image resizer
- Auto exposure and auto white balance
- Integrated IR filter
- Compact size – 12.5 x 10.5 x 5.2 mm

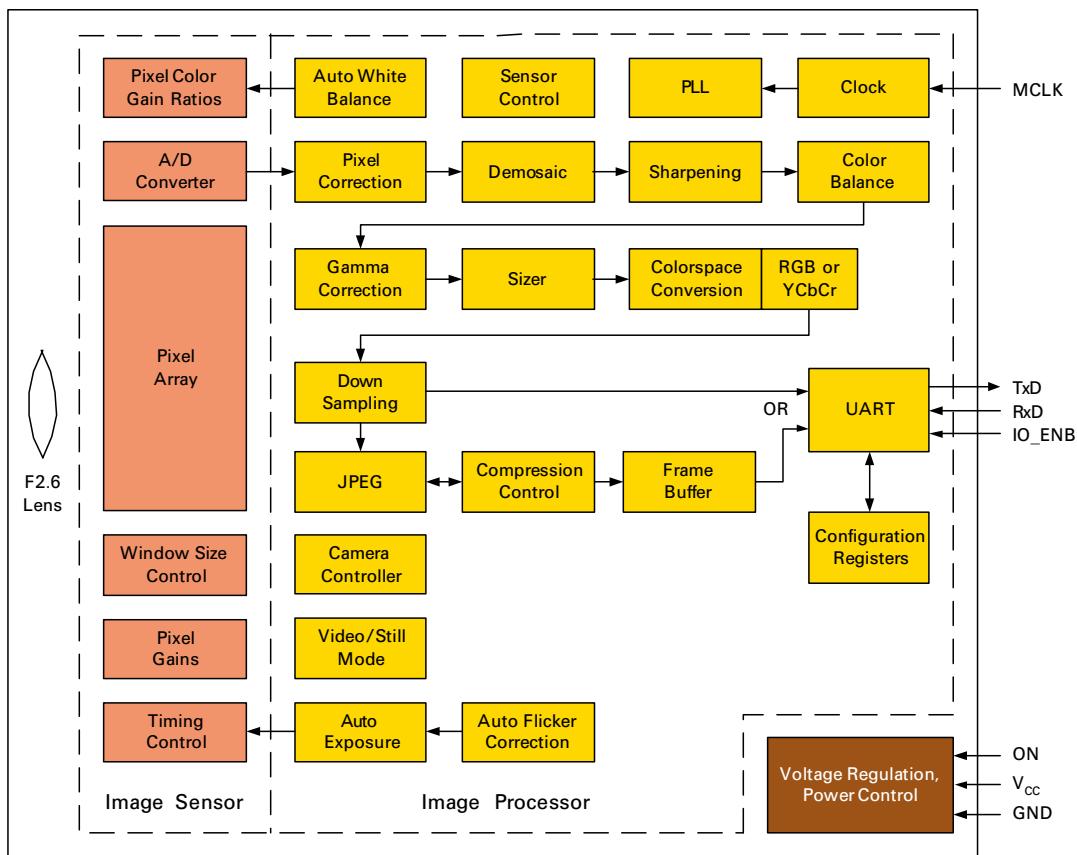
Applications

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



Agilent Technologies

The ADCM-1670 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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Data subject to change.

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