Chipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Product Overview

AR0261: CMOS Image Sensor, 2 MP, 1/6"

For complete documentation, see the data sheet.

ON Semiconductor's AR0261 is a 2-megapixel sensor delivering native 1080p resolution with exceptional image quality and meets strict form factor requirements (z-height less than 3.5mm) for ultra-thin, full HD video applications within the Mobile, Tablet and Notebook market. This sensor has a 1/6-inch optical format and a new 1.4-micron pixel featuring ON Semiconductor A-PixHS(tm) technology to provide excellent low-light performance. The new sensor provides HD video at 1080p/60fps or 720p/60fps critical for sharp, clear video capture.

Features

- 2 MP CMOS sensor with advanced 1.4um pixel BSI technology
- Data interfaces: 1 and 2 lane mobile industry processor interface (MIPI)
- Bit-depth compression available for MIPI Interface:10-8 and 10-6 to enable lower bandwidth receivers for full frame rate applications
- 3D synchronization controls to enable stereo video capture
- Interlaced multi-exposure readout enabling High Dynamic Range (HDR) still and video applications
- 8.8kbits one-time programmable memory (OTPM) for storing shading correction coefficients and module information
- Programmable controls: gain, horizontal and vertical blanking, auto black level offset correction, frame size/rate, exposure, left-right and top-bottom image reversal, window size, and panning
- On-chip dual phase-locked loop (PLL) oscillator structure for improved EMI characteristics
- Superior low-light performance
- Low dark current
  For more features, see the data sheet

Applications

- Mobile
- Consumer
- Medical

End Products

- Smart Phone
- Digital Still camera
- Wearable devices

Part Electrical Specifications

Product	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Output Interface	Color	Package Type
AR0261CSSC30SMD20	Pb-free Halide free	Active	CMOS	2.1	60	1/6 inch	Electronic Rolling	1.4 x 1.4	MIPI	RGB	

Application Diagram

Typical Connections
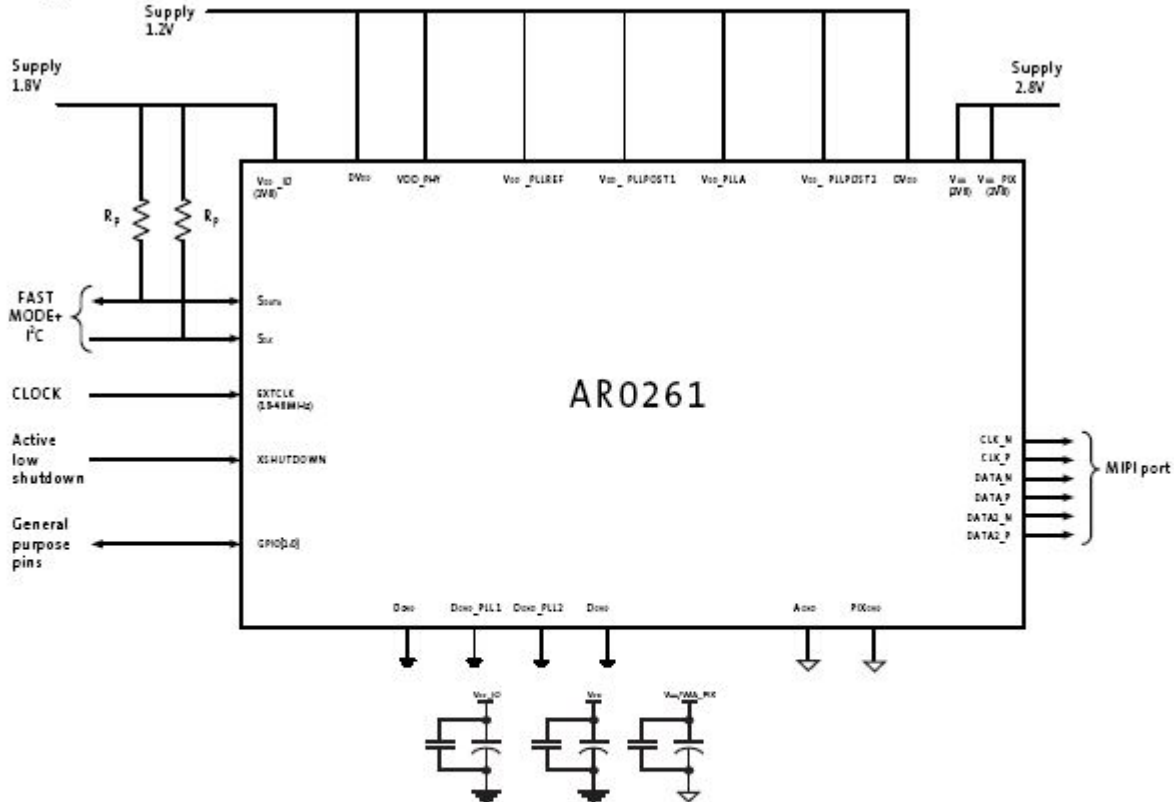
Notes:
1. All power supplies must be adequately decoupled. The order of preference is as follows: 2.8V supply - 1.0μF and 0.1μF; 1.2V supply - 1.0μF and 0.1μF; 1.8V supply - 0.1μF. The minimum recommended decoupling configuration is 0.1μF per power supply.
2. Aptina recommends a 1.5kΩ resistor value for the two-wire serial interface RPULL-UP; however, other values may be used. refer to section 7.1 pull-up resister sizing section of the UM10204 I^2C specification in http://www.nxp.com/documents/user_manual/UM10204.pdf
3. All inputs must be configured with VDD_IO.
4. Mechanical pads are not shown in this figure.
5. VAA and VAA_PIX may be tied together.

For more information please contact your local sales support at www.onsemi.com.
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