onsemi

ARX383

Image Sensor, 0.3 MP, Global Shutter, Hyperlux[™] SG

Product Overview

For complete documentation, see the data sheet.

The ARX383 is a 1/8inch 0.3Mp VGA CMOS digital image sensor with an activepixel array of 640 x 480. It incorporates an innovative global shutter pixel design optimized for accurate and fast capture of moving scenes at 120 frame per second, full resolution. The sensor produces clear, low noise images in both lowlight and bright scenes. It includes sophisticated camera functions such as adjustable auto-exposure control, auto black-level correction, windowing, skipping, pixelbinning, and, both video & single frame modes. It is programmable through a simple twowire serial interface. The ARX383 produces clear, sharp digital pictures with an industry leading Global Shutter Efficiency, and its ability to capture both continuous video and single frames makes it the perfect choice for a wide range of applications, including scanning, autonomous mobilty, AR/VR, AloT and industrial quality control.

Features

- Best in Class Global Shutter Efficiency
- Low Operational Power
- Small Form Factor
- Built-In Statistics Engine
- Multiple Subsampling Modes

Applications

- Barcode Scanning
- People Counting
- Machine Vision
- Autonomous Mobility
- AR/VR/MR

End Products

- Barcode Scanners
- People Counters
- Machine Vision Cameras
- AR/VR/MR Headsets
- Payment Terminals with Face-Access

| Part Electrical Specifications |
|--------------------------------|
|--------------------------------|

| Product | Status | Compilance | Typ e | Me gapi xels | Fra me Rat e (fps) | Opti cal For mat | Shu tter Typ e | Pixe I Size (µm) | Out put Inte rfac e | Col or | Fam ily | Pac kag e Typ e | Cas e Outl ine | MS L Typ e | MS L Te mp (°C) | Con tain er Typ e | Con tain er Qty. |
|---------------------------|--------|----------------|----------|--------------------|------------------------------------|---------------------------|---------------------------|-------------------------------|---------------------------------|-----------|------------------------|--------------------------------------------|-------------------------|---------------------|-----------------------------|-------------------------------|---------------------------|
| ARX383CSSM0 0SMD20 | Active | (†) (2) | CM OS | 0.3 | 120 | 1/8 inch | Glo bal Shu tter | 2.8 x 2.8 | MIPI | Mon o | Hyp erlu x SG | - | | NA | 0 | MT FR M | 1 |
| ARX383CSSM0 0SMD20-RC1 | Active | H PD | CM OS | 0.3 | 120 | 1/8 inch | Glo bal Shu tter | 2.8 x 2.8 | MIPI | Mon o | Hyp erlu x SG | - | | NA | 0 | MT FR M | 1 |
| ARX383CSSM0 0SMKA0-CP | Active | 10 | CM OS | 0.3 | 120 | 1/8 inch | Glo bal Shu tter | 2.8 x 2.8 | MIPI | Mon o | Hyp erlu x SG | OD CSP 35 3.9 22x 3.5 56 | 570 CU. PDF | 4 | 250 | CTR AY | 300 0 |
| ARX383CSSM0 0SMKA0-CP2 | Active | 1 | CM OS | 0.3 | 120 | 1/8 inch | Glo bal Shu tter | 2.8 x 2.8 | MIPI | Mon o | Hyp erlu x SG | OD CSP 35 3.9 22x 3.5 56 | 570 CU. PDF | 4 | 250 | CTR AY | 50 |
| ARX383CSSM0 0SMKA0-CR | Active | 1 | CM OS | 0.3 | 120 | 1/8 inch | Glo bal Shu tter | 2.8 x 2.8 | MIPI | Mon o | Hyp erlu x SG | OD CSP 35 3.9 22x 3.5 56 | 570 CU. PDF | 4 | 250 | CTR AY | 300 0 |
| ARX383CSSM2 8SMD20 | Active | 1 20 | CM OS | 0.3 | 120 | 1/8 inch | Glo bal Shu tter | 2.8 x 2.8 | MIPI | Mon o | Hyp erlu x SG | - | | NA | 0 | MT FR M | 1 |
| ARX383CSSM2 8SMD20-RC1 | Active | H 90 | CM OS | 0.3 | 120 | 1/8 inch | Glo bal Shu tter | 2.8 x 2.8 | MIPI | Mon o | Hyp erlu x SG | - | | NA | 0 | MT FR M | 1 |
| ARX383CSSM2 8SMKA0-CP | Active | () () | CM OS | 0.3 | 120 | 1/8 inch | Glo bal Shu tter | 2.8 x 2.8 | MIPI | Mon o | Hyp erlu x SG | OD CSP 35 3.9 22x 3.5 56 | 570 CU. PDF | 4 | 250 | CTR AY | 300 0 |
| ARX383CSSM2 8SMKA0-CP2 | Active | 00 | CM OS | 0.3 | 120 | 1/8 inch | Glo bal Shu tter | 2.8 x 2.8 | MIPI | Mon o | Hyp erlu x SG | OD CSP 35 3.9 22x 3.5 56 | 570 CU. PDF | 4 | 250 | CTR AY | 50 |
| ARX383CSSM2 8SMKA0-CR | Active | () () | CM OS | 0.3 | 120 | 1/8 inch | Glo bal Shu tter | 2.8 x 2.8 | MIPI | Mon o | Hyp erlu x SG | OD CSP 35 3.9 22x 3.5 56 | 570 CU. PDF | 4 | 250 | CTR AY | 300 0 |