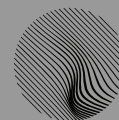
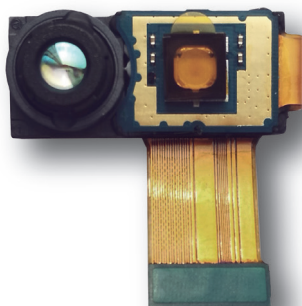


DS541A Product Brief

Time-of-Flight 3D Depth-Sensing Camera for Mobile



SoftKinetic
A Sony Group Company



What is DepthSense?

DepthSense® is SoftKinetic's patented time-of-flight depth sensor. The sensor measures the time it takes for infrared light emitted from the DepthSense® 541A (DS541A) module to return – the time-of-flight (ToF) – and transforms the ToF positional data into real-time, 3D images, as well as greyscale confidence and depth map images. At a refresh rate of up to 30 frames per second (fps), DepthSense delivers fast, low latency data transfer to create the best user experience with virtually no lag.

About DS541A

The DS541A is an embedded 3D Time-of-Flight camera module for indoor and outdoor applications in mobile devices and Internet of Things. The DS541A module combines SoftKinetic's time-of-flight sensor and latest illumination technologies to achieve even higher levels of integration.

The DS541A enables ultra-fast autofocus in every situation, including low-light and contrastless scenes. The 40K resolution enables multi-point autofocus and real-time tracking.

Key Features & Benefits

- ▶ Safe: Diffused laser illumination
- ▶ Reliable: Confidence measure for each pixel
- ▶ Embedded: Ultra-small module for mobile devices
- ▶ Standardized CMOS: Powerful and low cost sensor technology
- ▶ Low power consumption

End-to-End Solution

SoftKinetic is the leading provider of end-to-end depth-sensing and natural gesture recognition solutions. These include 3D CMOS ToF sensors, modules and cameras (DepthSense®), and natural gesture recognition middleware.

We want to give everyone the freedom to control, explore and enjoy the entire digital world through the most natural and intuitive user interfaces and machine interactions.

/ Specifications



Technical Specifications

- ▶ Technology: DepthSense®
- ▶ Depth field of view: 56° x 43° x 70° (H x V x D)
- ▶ Frame rate: 1 fps – 60 fps
- ▶ Nominal operating range: 0.10 m – 5.0 m
- ▶ Illumination type: Diffused laser
- ▶ Intelligent Power Management
- ▶ Operating temperature: 0°C to 45°C
- ▶ Size: 19.81 mm (W) x 8.20 mm (D) x 3.38 mm (H)

/ User Experiences

Professional Photography



Control what is in and out of the focus area in real time, and get great bokeh shots.

Augmented Reality



DepthSense® enables advanced AR experiences such as background replacement and real-time 3D scanning.

Gesture Control



Enjoy enhanced user interface navigation thanks to our DepthSense® solution.

Design and specifications are subject to change without notice as the DS541A is developed for production.