ArduCam MEGA™

SPI Camera for Any Microcontroller
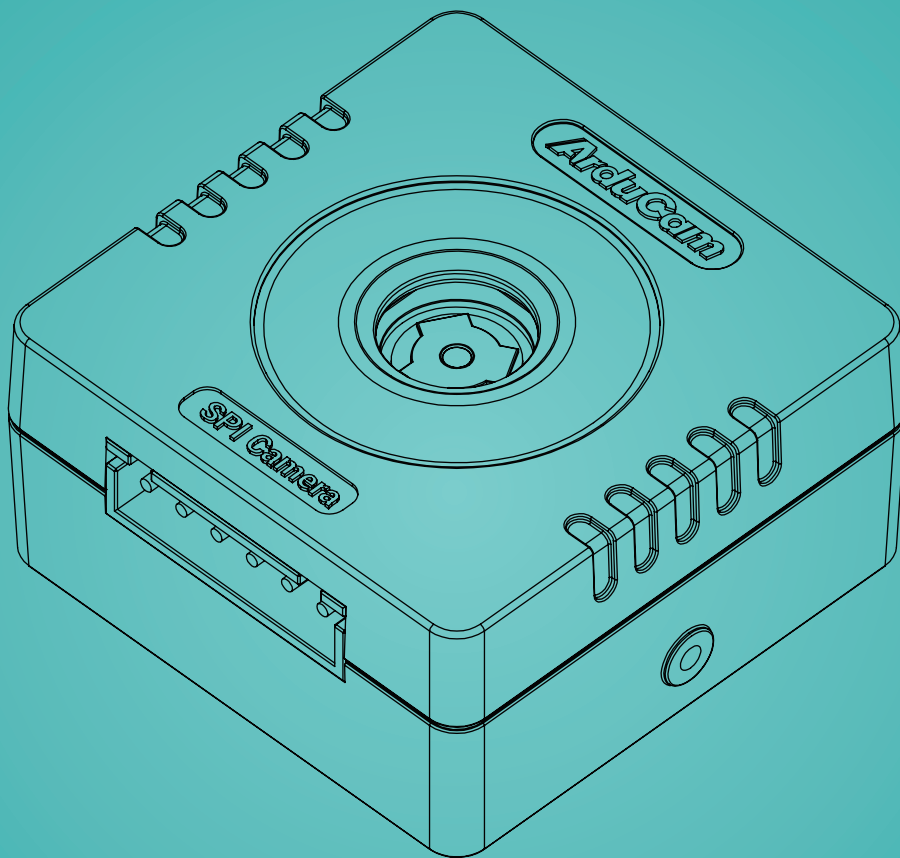
Targeting battery-powered IoT devices, embedded machine vision, and artificial intelligence application, and packed with 10 years of innovation, Arducam Mega is a legendary, future-proof camera solution that helps you connect one or more cameras to any Microcontroller on the planet.

With Arducam instant on technology, the Arducam Mega can be powered down completely to save power. It takes within 100ms to bringup the camera automatically and ready to shoot. The camera works on both 3.3V and 5V system, and it takes up only 4 SPI pins (or any 4 free GPIO that can mimic SPI timing) from your host MCU. With the nature of the SPI bus, multiple cameras can be connected to the single SPI bus to create multi-camera system.

The SDK that comes with Arducam Mega has tons of optimizations and new features, you can manipulate the camera through API as if you are using a DSLR camera via button clicks. We have worked with lots of The best thing is that it's completely open sourced (MIT license), and with a streamlined integration process, we offer more than what you need for your project/application.

The Arduchip (propriatery IP from Arducam) we used in the camera not only gives the camera a huge performance boost, but also ensures compatibility, scalability, and developability and customizability.

The package includes the Arducam Mega camera (enclosed), a 6-pin jumper wire and a 6-pin male header.

Specifications

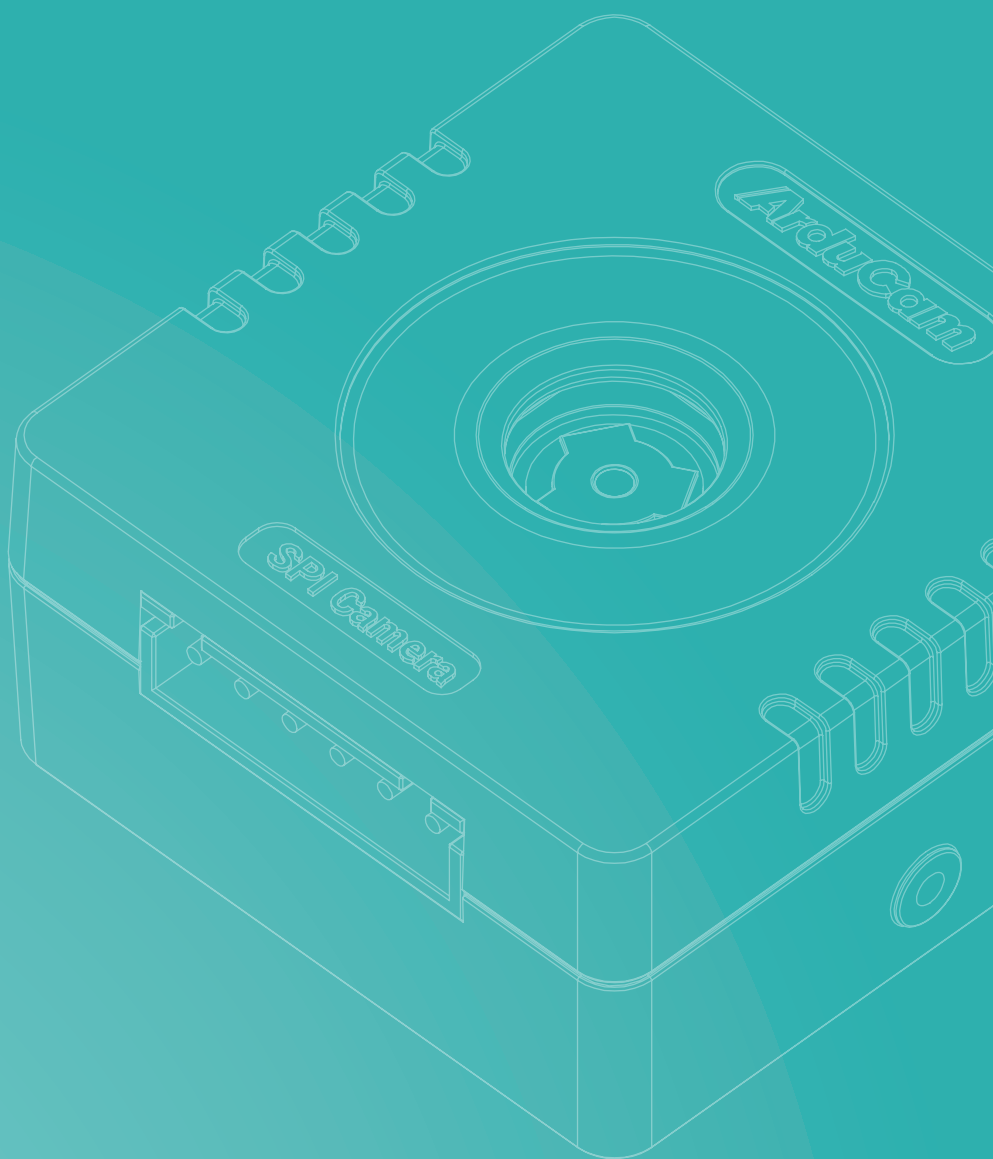|	Arducam Mega – 3MP	Arducam Mega – 5MP-AF
Interface	SPI (4-wire)	SPI (4-wire)
Speed	8Mhz	8Mhz
Optical Size	1/4″	1/4″
Shutter Type	Rolling	Rolling
Sensor Resolution	2048×1536	2592×1944
Still Resolution	320×240 640×480 1280×720 1600×1200 1920×1080 2048×1536	320×240 640×480 1280×720 1600×1200 1920×1080 2592×1944
Camera Case	Yes	Yes
Power Supply	3.3V/5V	3.3V/5V
Power Consumption	≤750 mW	≤1W
Wake-Up Time	42ms	94ms
Focus	60cm~INF	8cm~INF (Autofocus)
Focal ratio (F-Stop)	F2.8	F2.0
Focal length	3.3mm	3.3mm
View Angle	68.75 Degrees (Diagonal)	68.75 Degrees (Diagonal)
Output Format	RGB/YUV/JPEG	RGB/YUV/JPEG
Dimensions	33x33x17 mm	33x33x17 mm

Note: all dimensions in mm.
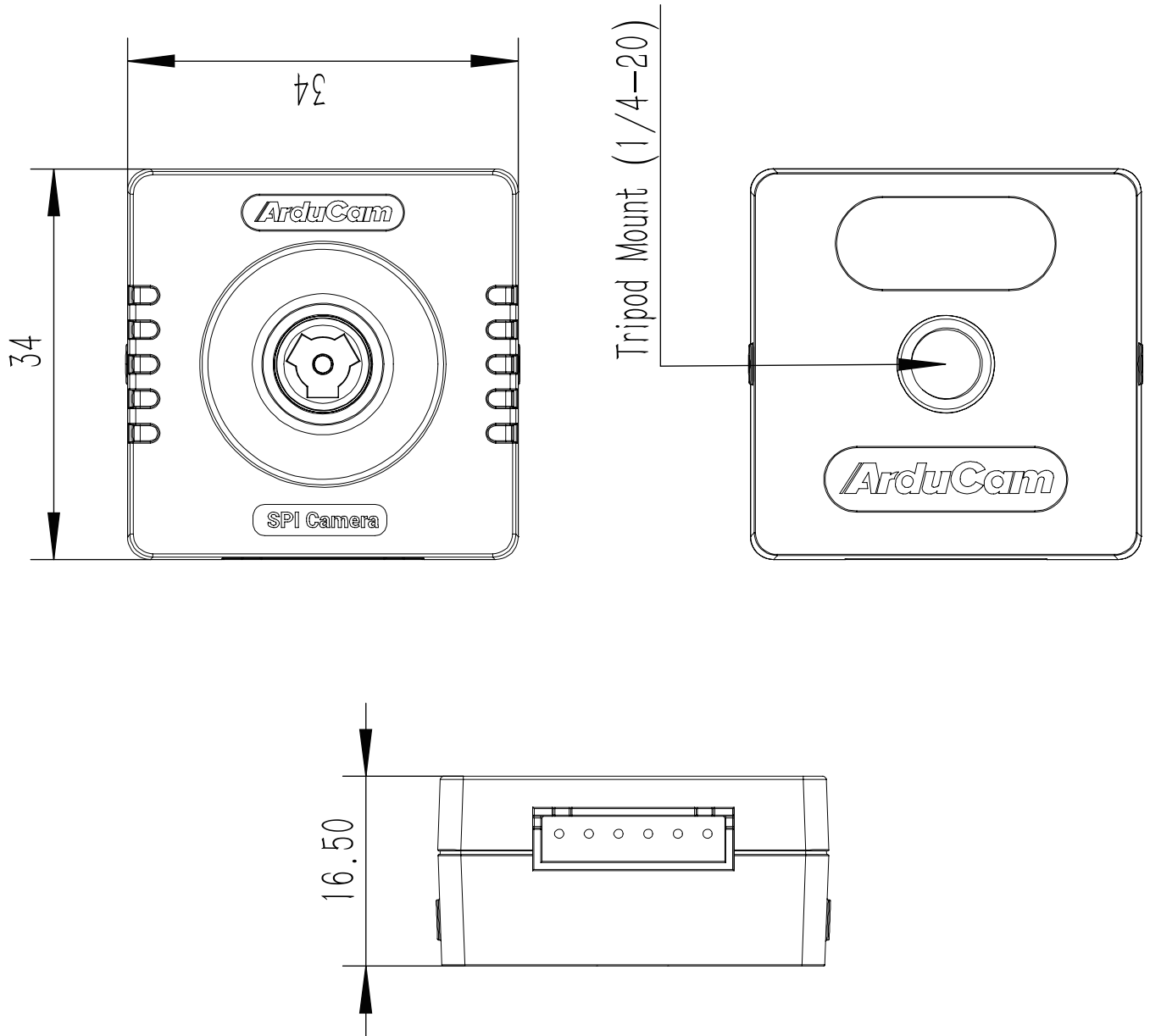
Safety Instructions

● Before connecting, you should always power the Microcontroller off and remove the power supply first.

● Make sure the jumper wire on the camera board is fully plugged in.

● Make sure the jumper wire is correctly connected to the right GPIO pins on the dev board.

● Avoid high temperatures.

● Avoid water, moisture, or conductive surfaces while in operation.

● Avoid folding, or straining the flex cable.

● Avoid cross-threading with tripods.

● Gently push/pull the connector to avoid damaging the printed circuit board.

● Avoid moving or handling the camera/jumper wire excessively while it's in operation.

● Where the camera module is stored should be cool and as dry as possible.

● Sudden temperature/humidity changes can cause dampness in the lens and affect the image/video quality.

https://github.com/ArduCAM/Arducam_Mega