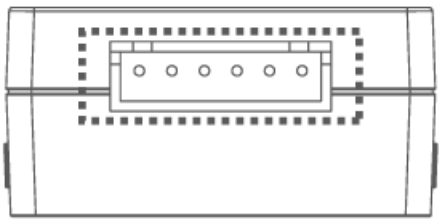
ArduCam Mega SPI Camera for Any Microcontroller User Guide

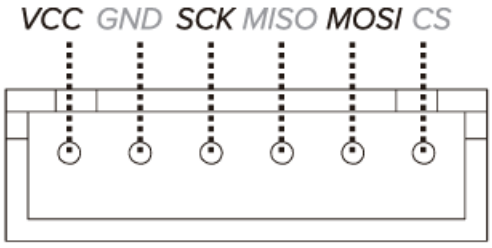
Contents

ArduCam Mega SPI Camera for Any Microcontroller

Connecting the Camera to an Arduino UNO

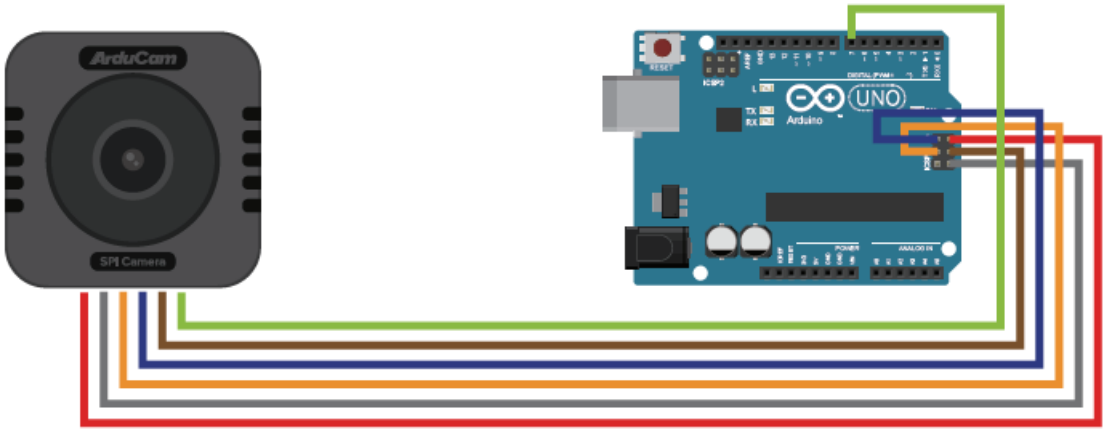
- Arducam Mega Camera Pinout





Camera pin	VCC	GND	SCK	MISO	MOSI	CE
Platform pin def	Power	Ground	Clock	Input	Output	Chip Select

- Wiring

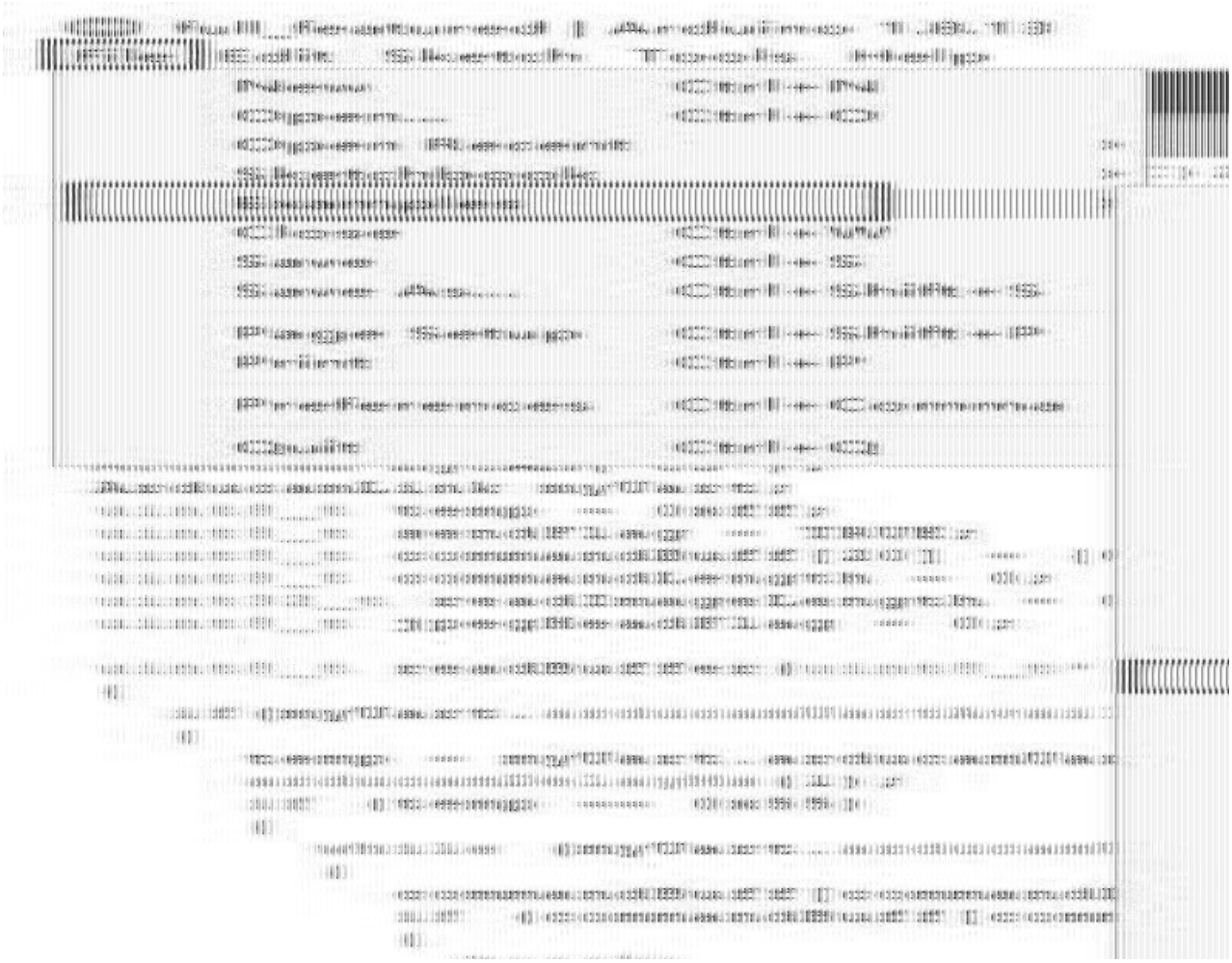


Arducam Mega	VCC	GND	SCK	MISO	MOSI	CE
Arduino UNO	5V	GND	13	12	11	7

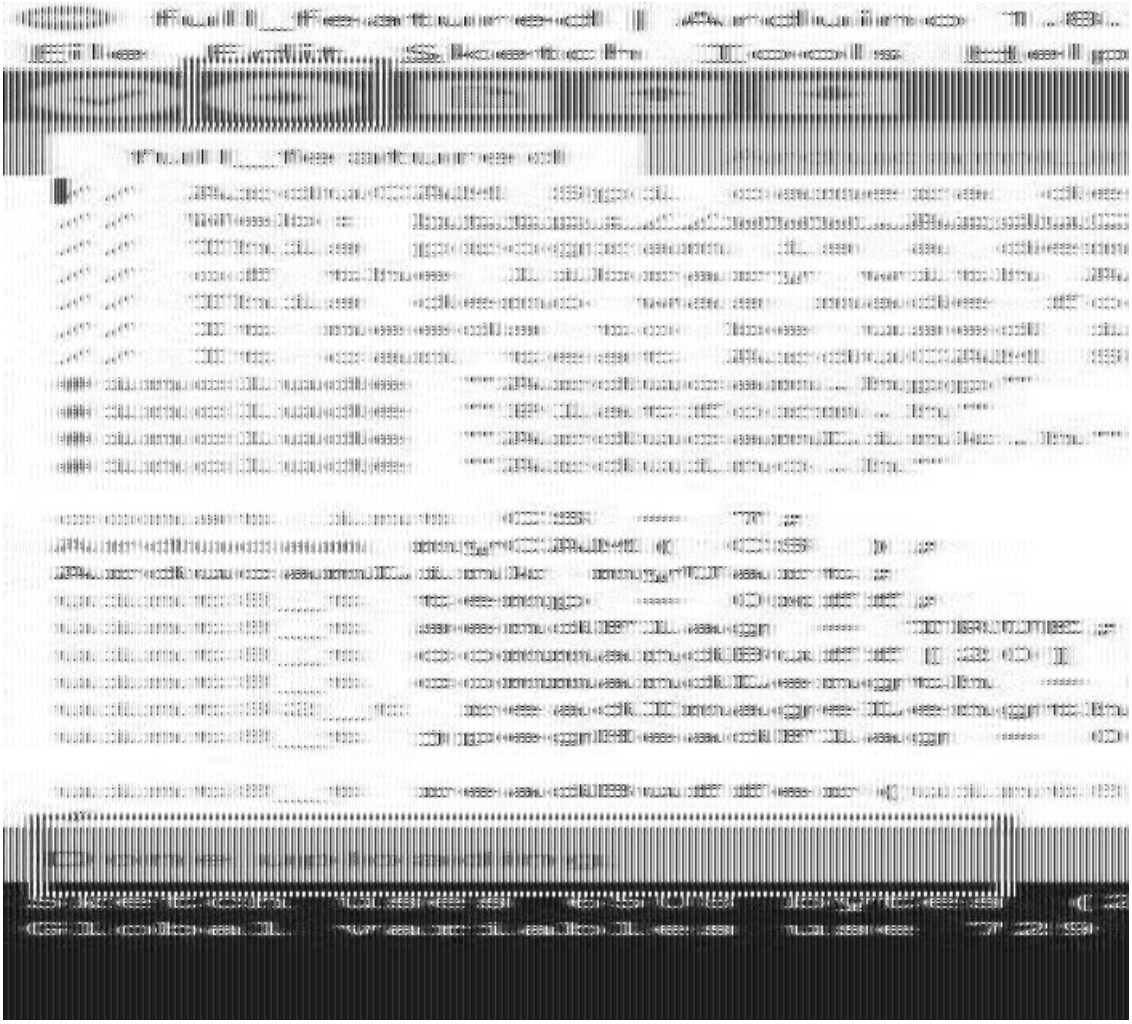
Operating the Camera

- Select Platform

- Choose the ArducamSpiCamera Example

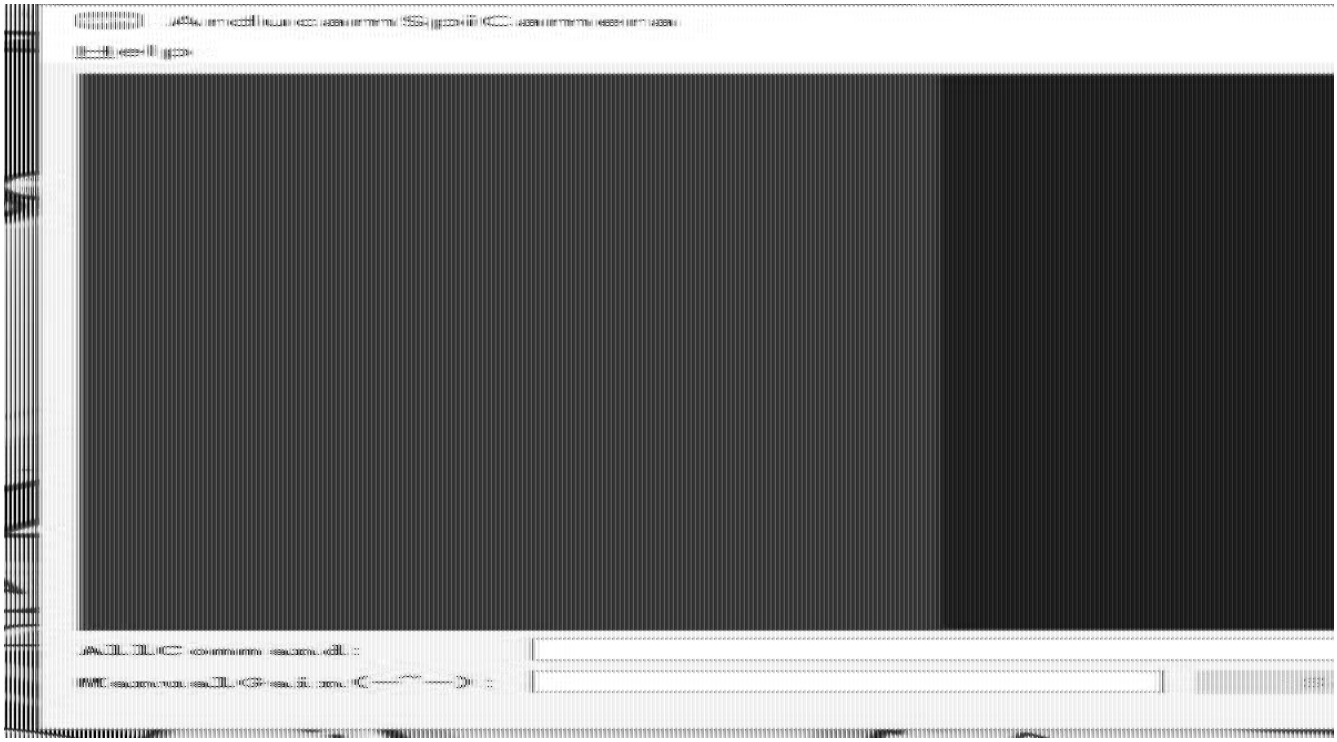


- Download program

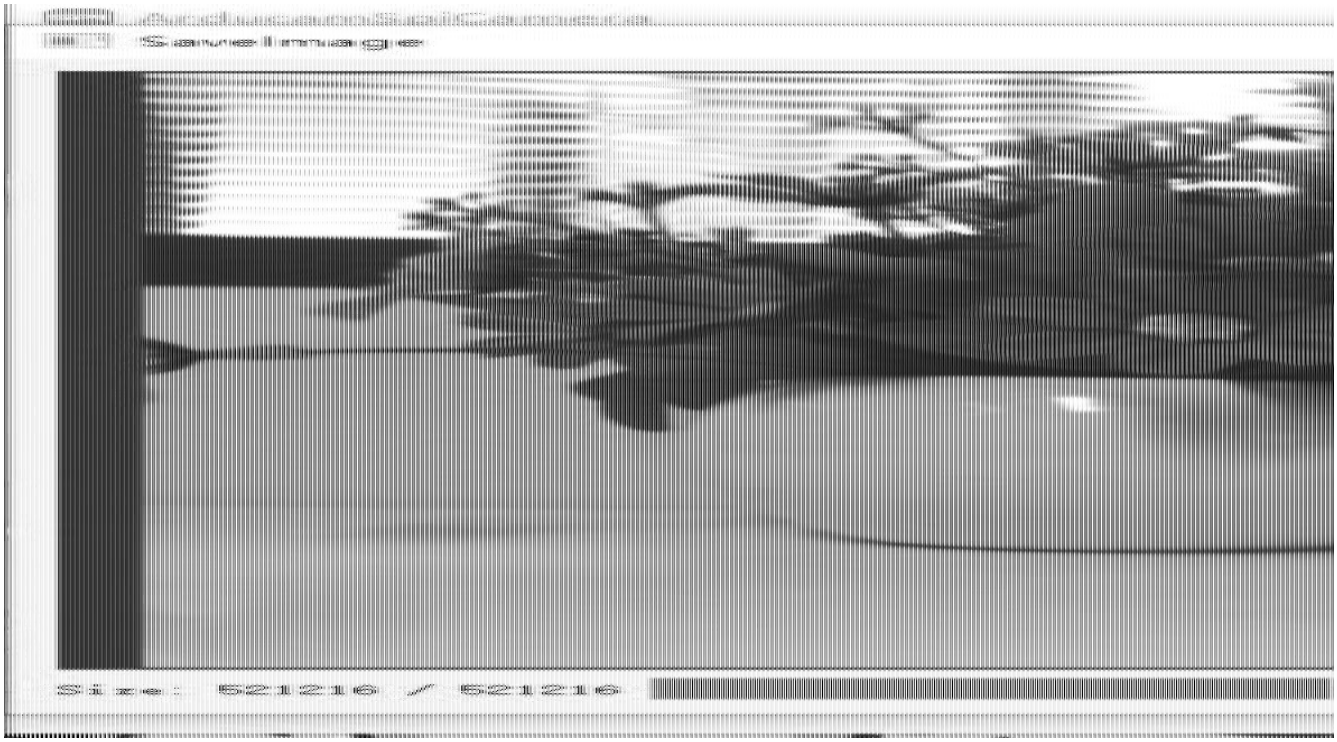


- Open The ArducamSpiCamera GUI Tool

  Select the port number of Arduino UNO, set baud rate to 921600, click open.



- The camera is up and running.



NOTE: You can also use the Arducam Mega with other Arduino boards with SPI interfaces, like Mega, Mega 2560, DUE, Nano 33 BLE, etc.

Platforms That Are Already in Our SDK

- ESP32/ESP8266 >
- Raspberry Pi Pico >
- STMicroelectronics STM32 Series >
- Texas Instruments MSP430 >

- Raspberry Pi >

NOTE: Connecting the Arducam Mega to any MCU you are familiar with is super easy and simple, simple use the following resources:

- Arducam Mega timing >
- Wiring diagram of Arducam Mega >
- How to write the SPI driver for your platform >
- C API Reference >
- C++ API Reference >
- How to use the ArducamSpiCamera GUI tool >

Instructions for Safe Use

To properly use the Arducam Mega Camera, kindly note:

- Before connecting, you should always power the HOST MCU off and remove the power supply first.
- Make sure you connect the wires correctly.
- Avoid high temperatures.
- Avoid water, moisture, or conductive surfaces while in operation.
- Avoid folding, or straining the flex cable.
- Gently push/pull the connector to avoid damaging the printed circuit board.
- Avoid moving or handling the printed circuit board excessively while it's in operation.
- Handle by the edges to avoid damage from electrostatic discharge.
- Where the camera board 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.

Documents / Resources

	ArduCam Mega SPI Camera for Any Microcontroller [pdf] User Guide Mega, SPI Camera for Any Microcontroller, Mega SPI Camera for Any Microcontroller