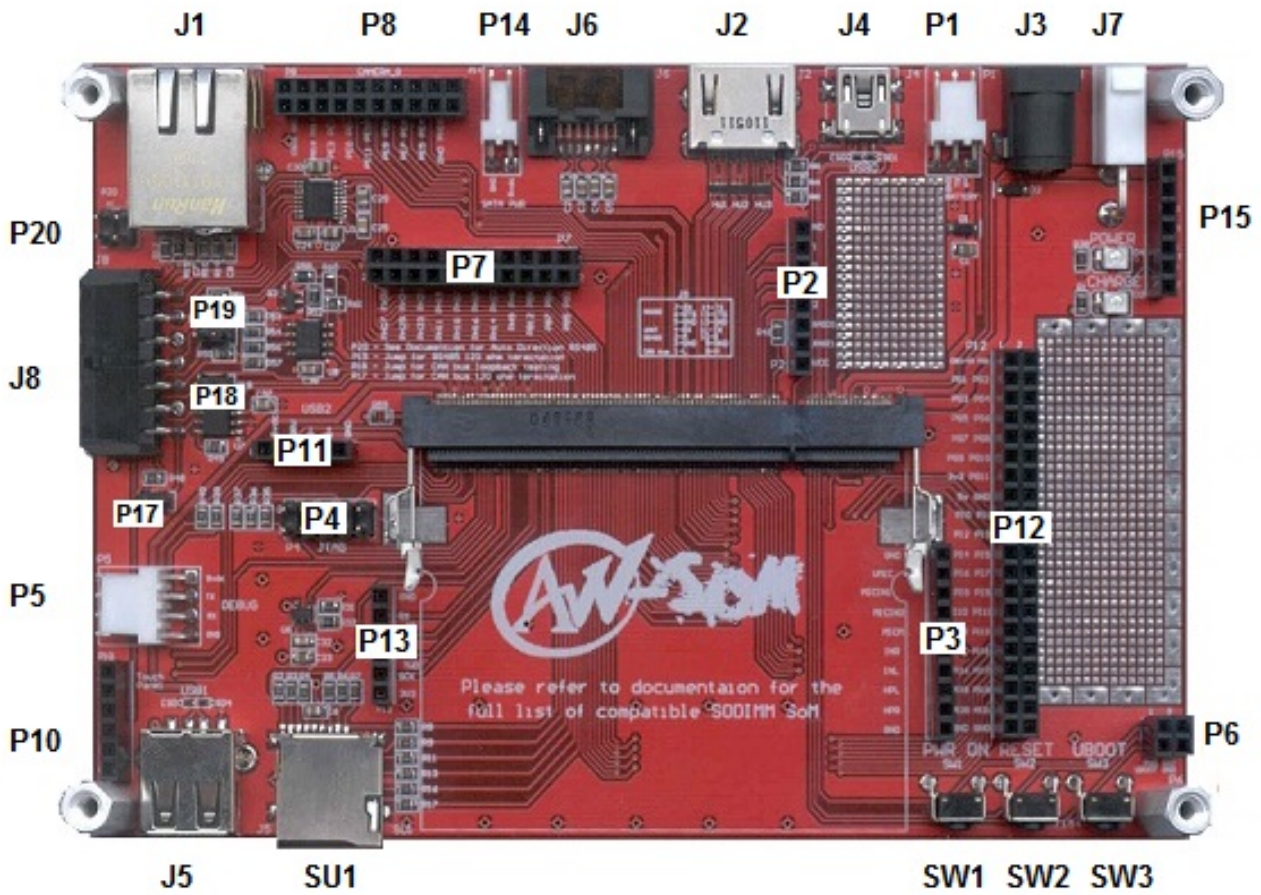


Product

AW-SOM DEVELOPER'S MAIN BOARD

[SKU: AWSOM-DEV-MAIN]



Description

Ethernet Port

HDMI

Product

AC Wall Adapter Input - 5VDC

USB0 (OTG)

USB2 (HOST)

SATA Data

DC Power Input - 5VDC

CanBus (CAN1), RS485
(UART5), UART4, RS232
(UART3 4 wire)

MicroSD Card (mmc0)

Power Button (Instant On,
Forced Off approx 10sec)

Reset

UBOOT (Bootloader/Recovery)

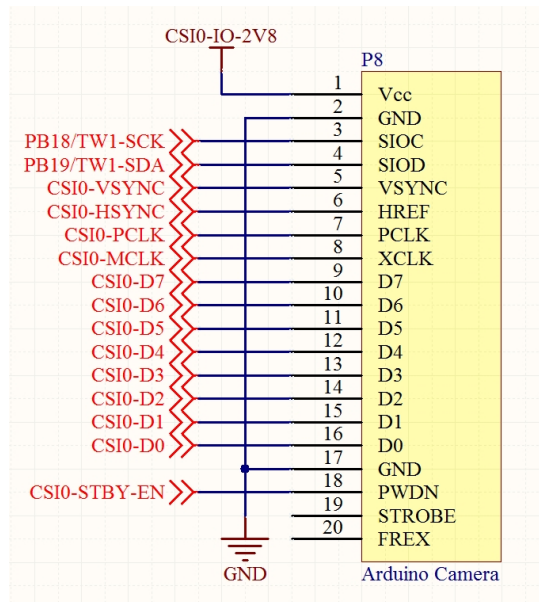
P8 Camera Header

Product

Header is compatible various 8 bit camera modules (16 bit also available)

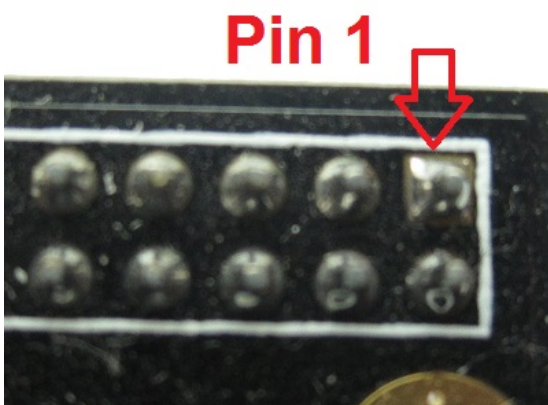
I/O voltage tolerance is software adjustable (default 2.8V)

P8 Main Carrier Board Header



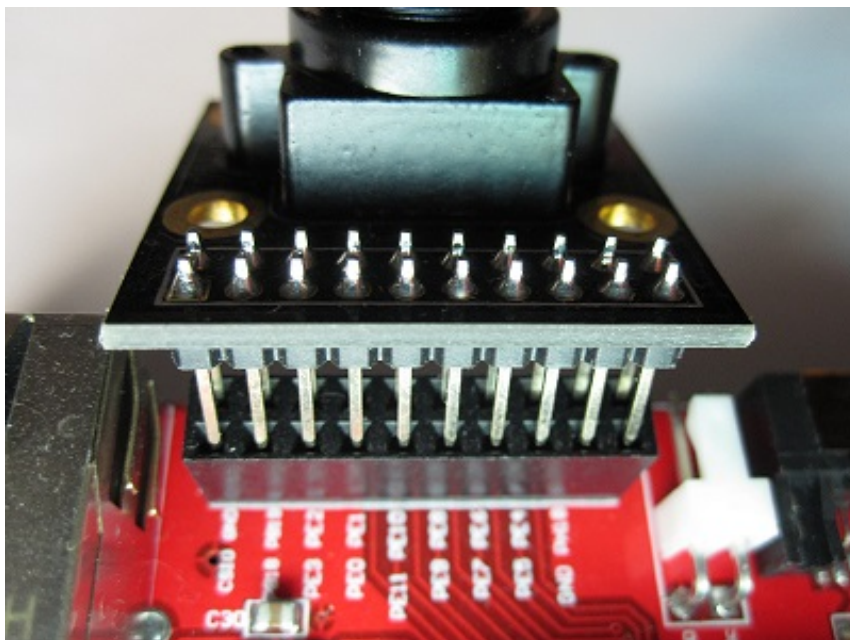
*Note: Pin 19 and Pin 20 Can be tied to unused GPIOs found on other headers

Pin 1 on the camera modules is identified by the square footprint pad on the pcb.

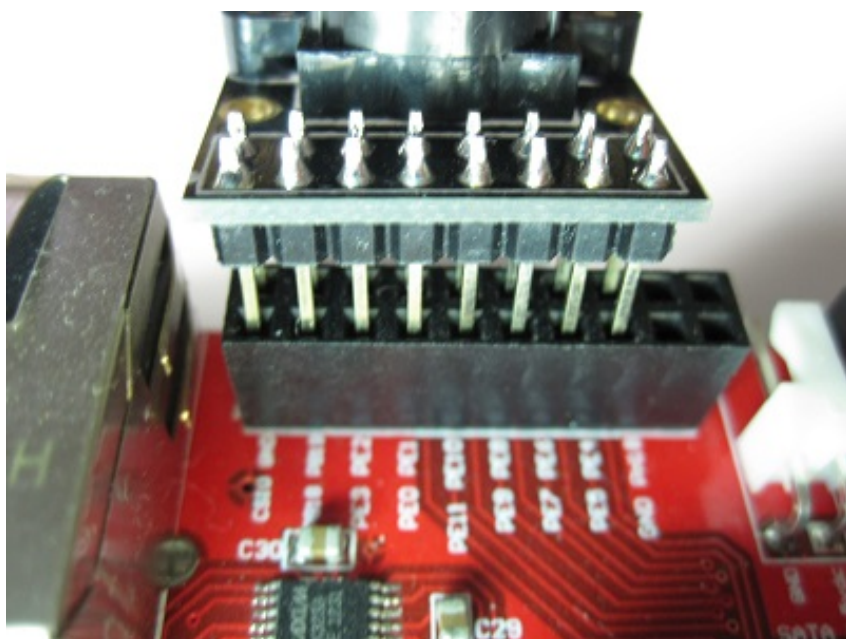


Example: OV5642 Camera Module

Product



Example: OV7670 Camera Module



Hardware sys_config.fex/script.bin file will need to be edited to match the camera being used. See camera product

page for proper settings. CSI, Camera and Video drivers are also required.

Product

AW-SoM Developer Main Board Pin Function (PDF)

AW-SoM Developer Main Board Function Worksheet (cvs)

AW-SoM Developer A Series SODIMM Function Worksheet (cvs)

Datasheets

[AAT4610BIGV-1-T1 Active High Current Limited Load Switch](#) (PDF)

[RCLAMP0524P TVS Array](#) (PDF)

[SESDFBP05C Single Line ESD Protection Diode](#) (PDF)

2.1mm DC Barrel Power Jack

USB Type A

USB Micro Type B

HDMI Type A

SATA Data Jack

HANRUN HY911105H

MicroSD Card Slot

[SODIMM 200 pin 1.8V 8.00mm](#) (PDF)

[FPC Connectors, 0.5mm pitch](#) (PDF)

Application Notes

Power Button Settings

Product

Programming Port E and Port G Reference I/O voltage. (For cameras and other I/O applications)

Battery Temperature Sensor

How to Guides

Flashing Images

- To NAND using PC

- To NAND using Bootable MicroSD Card

- To MicroSD Card and make MicroSD Card Bootable

Understanding Hardware System Configuration files

Edit Hardware Systems Configuration after installed on Hardware

- On NAND, FAT Partition shows up as Mass Storage device

- On MicroSD Card, FAT Partition shows up as Mass Storage device

Edit Prebuild Images

- Android images using Windows DragonFace Tool

Adding Driver Support

- To prebuilt images

Software

Product

Prebuilt Images

Development Tools

Schematics

[AWSOM-DEV-MAIN SCHEMATICS V4R1](#) (PDF)

Bill of Materials

[AWSOM-DEV-MAIN BOM V4R1](#) (PDF)

Component Libraries and Project Files

[AWSOM A SERIES SODIMM](#) (Altium Designer, IntLib)

AWSOM DEV MAIN CARRIER COMPONENTS (Altium Designer, IntLib)

AWSOM DEV MAIN CARRIER PCB PROJECT (Altium Designer, ZIP)

Mechanical

AWSOM-DEV-MAIN-V4 3D STP (ZIP)

[AWSOM-A10-SD-V1.6 3D STP](#) (ZIP)

Product

Available Models

Unique solution ID: #1009

Author: Robert Ings

Last update: 2014-01-10 03:04