

# AR0130CS Evaluation Board User's Manual



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# EVAL BOARD USER'S MANUAL

**Figure 1. AR0130CS Evaluation Board**

- Clock Input
  - ◆ Default – 27 MHz Crystal Oscillator
  - ◆ Optional Demo 2X Controlled MClk
- Two Wire Serial Interface
  - ◆ Selectable Base Address
- Parallel Interface
- ROHS Compliant

**Figure 2. Block Diagram of AR0130CSSM00SPCAH-GEVB**

# AR0130CSSM00SPCAH-GEVB

## Top View

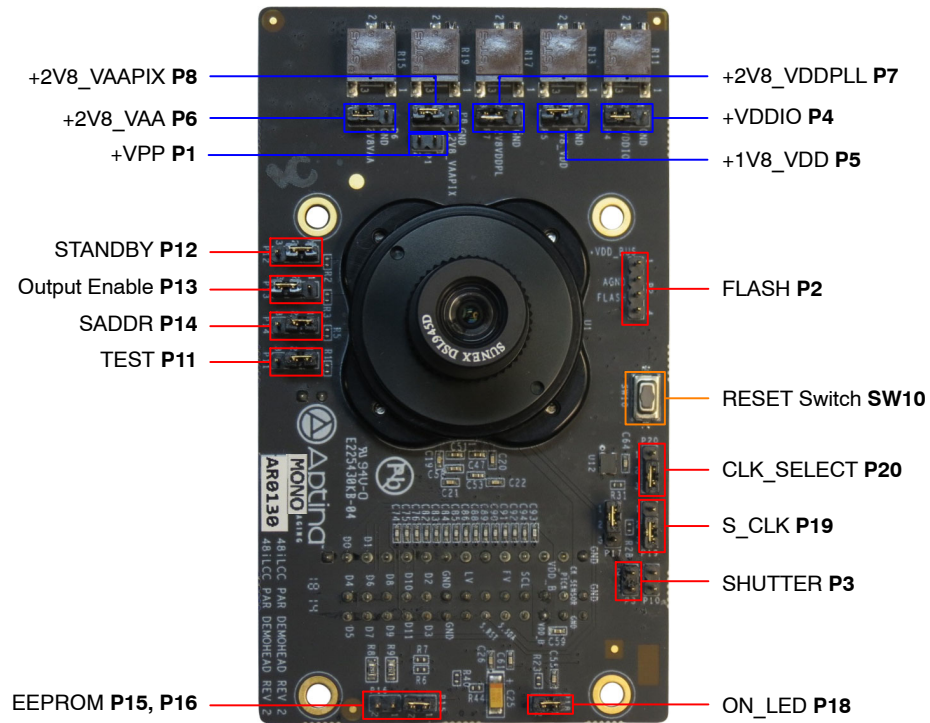


Figure 3. Top View of the Board – Default Jumpers

## Bottom View

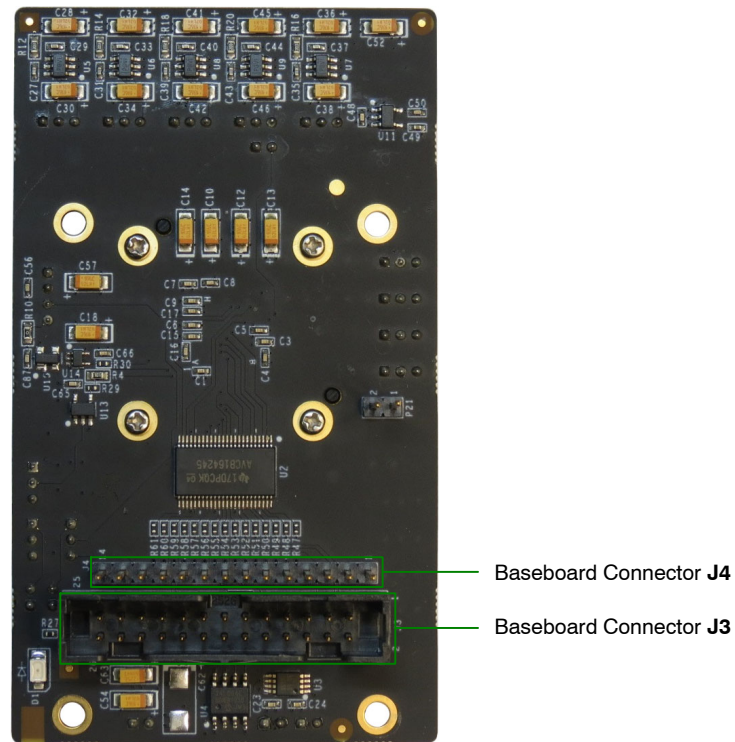
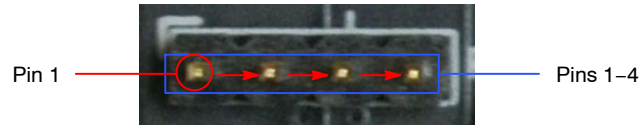


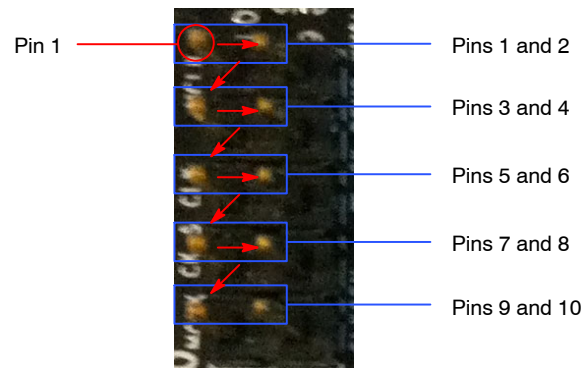
Figure 4. Bottom View of the Board – Connectors

### Jumper Pin Locations

The jumpers on headboards start with Pin 1 on the leftmost side of the pin. Grouped jumpers increase in pin size with each jumper added.



**Figure 5. Pin Locations for a Single Jumper. Pin 1 is Located at the Leftmost Side and Increases as it Moves to the Right**



**Figure 6. Pin Locations and Assignments of Grouped Jumpers. Pin 1 is Located at the Top-Left Corner and Increases in a Zigzag Fashion Shown in the Picture**

### Jumper/Header Functions & Default Positions

**Table 1. JUMPERS AND HEADERS**

| Jumper/Header No. | Jumper/Header Name | Pins               | Description                                |
|-------------------|--------------------|--------------------|--------------------------------------------|
| P1                | VPP                | Open (Default)     | For Connection to +VPP Power Supply        |
| P2                | ATEST              | Open (Default)     | For Testing                                |
| P3                | SADDR              | 2-3                | I <sup>2</sup> C Address Set to 0x30       |
|                   |                    | 1-2                | I <sup>2</sup> C Address Set to 0x20       |
| P4                | TEST               | Closed (Default)   | Normal Operation                           |
|                   |                    | Open               | Test Mode                                  |
| P5                | Shutter/Trigger    | Open               | For Connection to External Shutter/Trigger |
| P6                | STANDBY            | 2-3 (Default)      | Normal Operation                           |
|                   |                    | 1-2                | Standby Mode                               |
| P7                | FLASH              | Open (Default)     | For Connection to External Flash           |
| P8                | O_EN               | 1-2 (Default)      | Normal Operation                           |
|                   |                    | 2-3                | Parallel Data Output Disabled              |
| P9                | VDDIO              | 1-2 (Default)      | 1.8 V Operation of Sensor                  |
|                   |                    | 2-3                | 2.8 V Operation of Sensor                  |
| P10               | Clock Select       | 1-3 (Default)      | Internal Clock                             |
|                   |                    | 3-5                | Demo 2X Clock                              |
|                   |                    | 3-4                | External Clock                             |
| P11               | Master Clock       | 1-2, 3-4 (Default) | Demo 2X IIC                                |
|                   |                    | 2-3                | External IIC                               |

**Table 1. JUMPERS AND HEADERS** (continued)

| Jumper/Header No. | Jumper/Header Name | Pins                               | Description                |
|-------------------|--------------------|------------------------------------|----------------------------|
| P12               | EEPROM Addr. Sel   | 3-4 Open &<br>1-2 Closed (Default) | EEPROM Address Set to 0xA8 |
|                   |                    | 3-4 Open &<br>1-2 Closed           | EEPROM Address Set to 0xAC |
|                   |                    | 3-4 Open &<br>1-2 Closed           | EEPROM Address Set to 0xA4 |
|                   |                    | 3-4 Open &<br>1-2 Closed           | EEPROM Address Set to 0xA0 |

**Interfacing to ON Semiconductor Demo 2X Baseboard**

The ON Semiconductor Demo 2X baseboard has a similar 26-pin connector and 13-pin connector which mate with J3

and J4 of the headboard. The four mounting holes secure the baseboard and the headboard with spacers and screws.

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