MT9D131C12STCH-GEVB

MT9D131 Evaluation Board User's Manual

ON Semiconductor®

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EVAL BOARD USER'S MANUAL

Evaluation Board Overview

The evaluation boards are designed to demonstrate the features of image sensors products from ON Semiconductor. This headboard is intended to plug directly into the Demo 2X system. Test points and jumpers on the board provide access to the clock, I/Os, and other miscellaneous signals.

Figure 1. MT9D131 Evaluation Board

Features

- Clock Input
  - Default – 12 MHz Crystal Oscillator
  - Optional Demo 2X Controlled MClk
- Two-wire Serial Interface
  - Selectable Base Address
- Parallel Interface
- MIPI Interface
- ROHS Compliant

Block Diagram

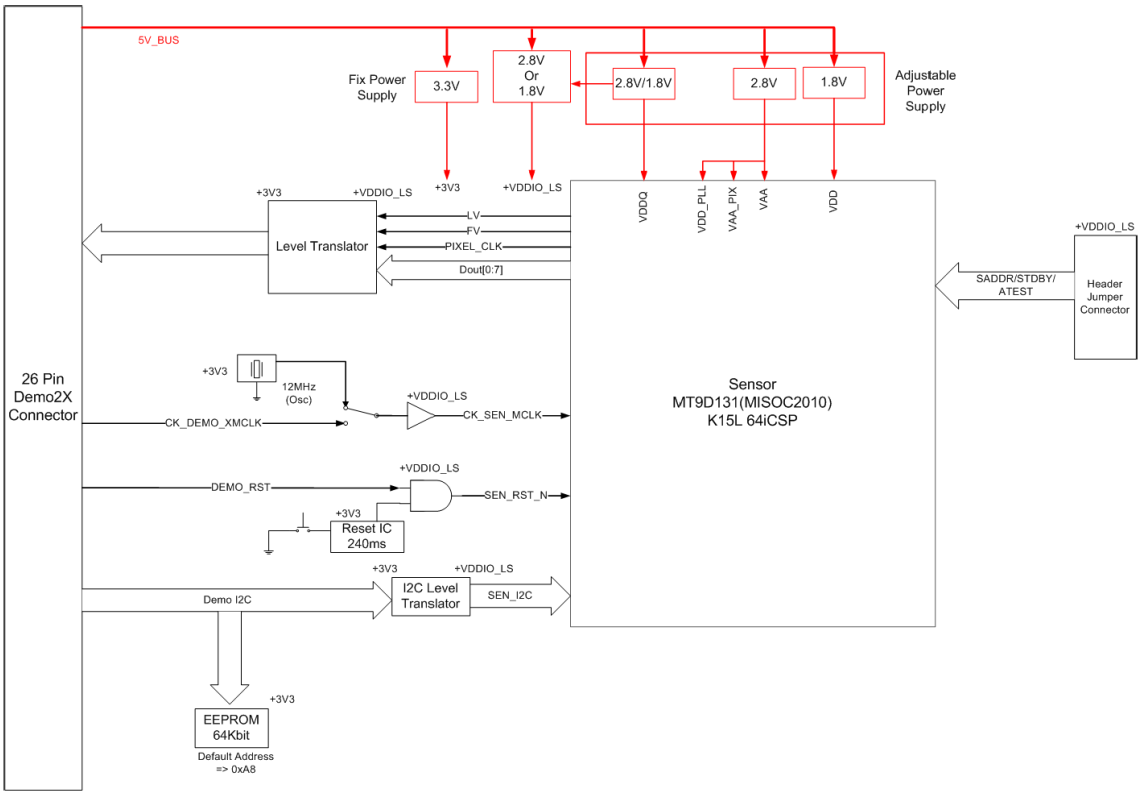

Figure 2. Block Diagram of MT9D131C12STCH−GEVB

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Top View

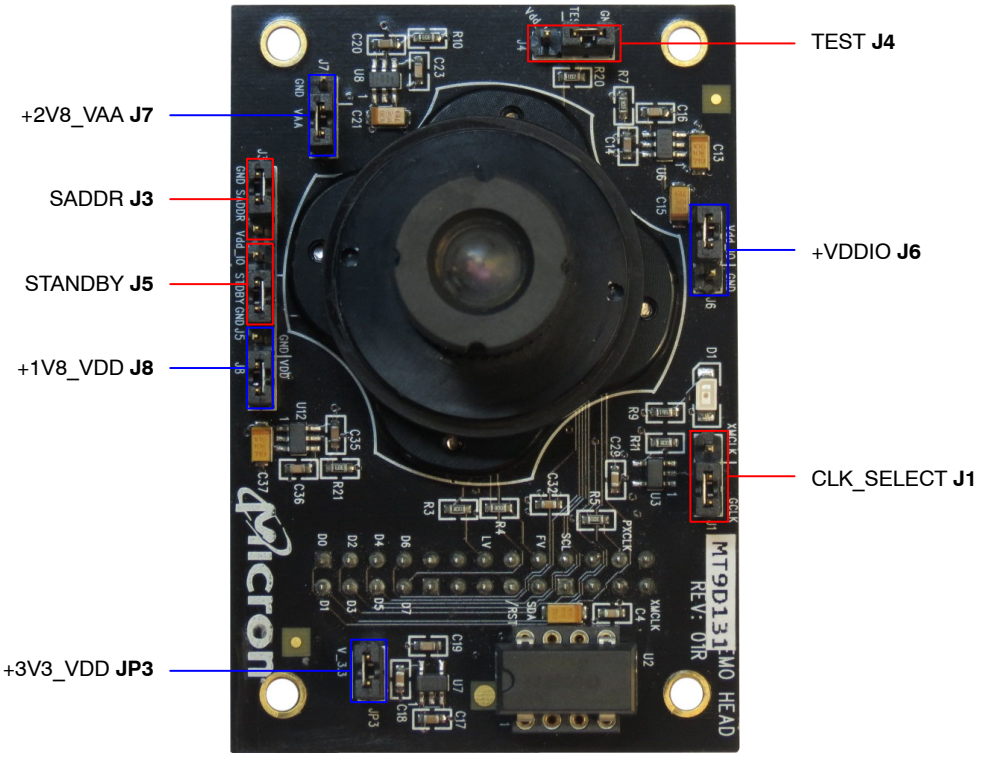

Figure 3. Top View of the Board − Default Jumpers

Bottom View

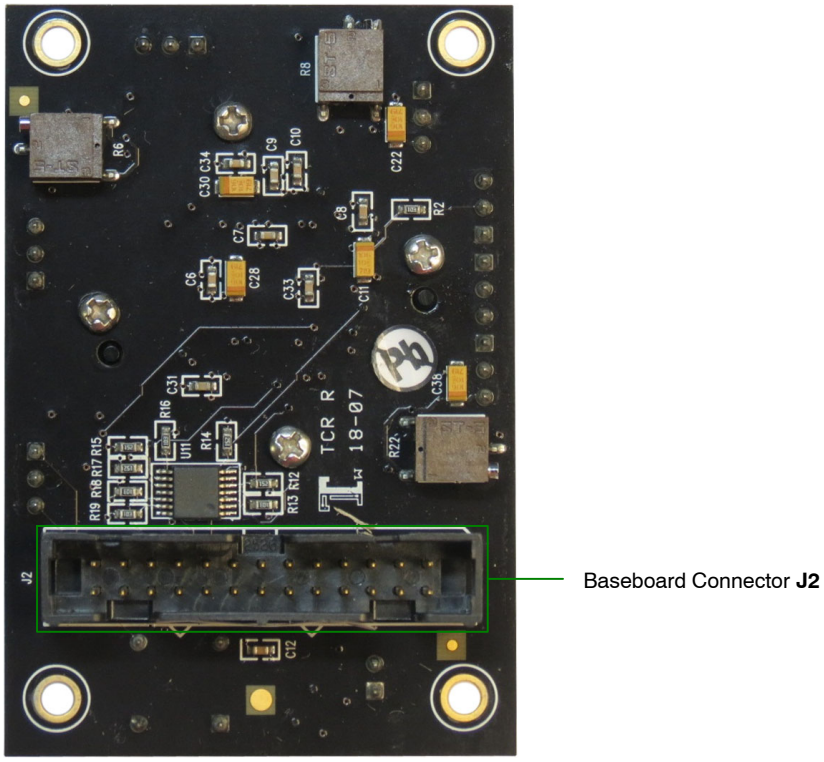

Figure 4. Bottom View of the Board − Connector

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.

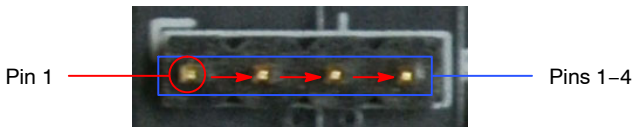

Figure 5. Pin Locations for a Single Jumper. Pin 1 is Located at the Leftmost Side and Increases as it Moves to the Right

Jumper/Header Functions & Default Positions

Table 1. JUMPERS AND HEADERS

Jumper/Header No.	Jumper/Header Name	Pins	Description
J1	CLK_SELECT	2−3 (Default)	Connects to On-board Oscillator
		1−2	Connects to MCLK from Demo2 Board
J3	SADDR	2−3 (Default)	I^2C Address Set to 0x90
		1−2	I^2C Address Set to 0xBA
J4	TEST	2−3 (Default)	Normal Operation
		1−2	Test Mode
J5	STANDBY	2−3 (Default)	Normal Operation
		1−2	Standby Mode
J6	+VDDIO	2−3 (Default)	Connects to On-board +VDDIO Power Supply
		1−2	External Power Supply Connection
J7	+2V8_VAA	2−3 (Default)	Connects to On-board +2V8_VAA Power Supply
		1−2	External Power Supply Connection
J8	+1V8_VDD	2−3 (Default)	Connects to On-board +1V8_VDD Power Supply
		1−2	External Power Supply Connection
JP3	+3V3_VDD	1−2 (Default)	Connects to On-board +3V3_VDD Power Supply
		Open	External Power Supply Connection

Interfacing to ON Semiconductor Demo 2X Baseboard

The ON Semiconductor Demo 2X baseboard has a similar 26-pin connector which mates with J2 of the headboard. The four mounting holes secure the baseboard and the headboard with spacers and screws.

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