MT9V114EBKSTC5H-GEVB

MT9V114 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 ON Semiconductor's image sensors products. This headboard is intended to plug directly into the Demo 2X system. Test points and jumpers on the board provide access to clock, I/Os and other miscellaneous signals.

Figure 1. MT9V114 Evaluation Board

Features

- Clock Input
  - Default – 27 MHz crystal oscillator
  - Optional Demo 2X controlled MClk
- Two Wire Serial Interface
  - Selectable base address
- Parallel Interface
- ROHS Compliant

Block Diagram

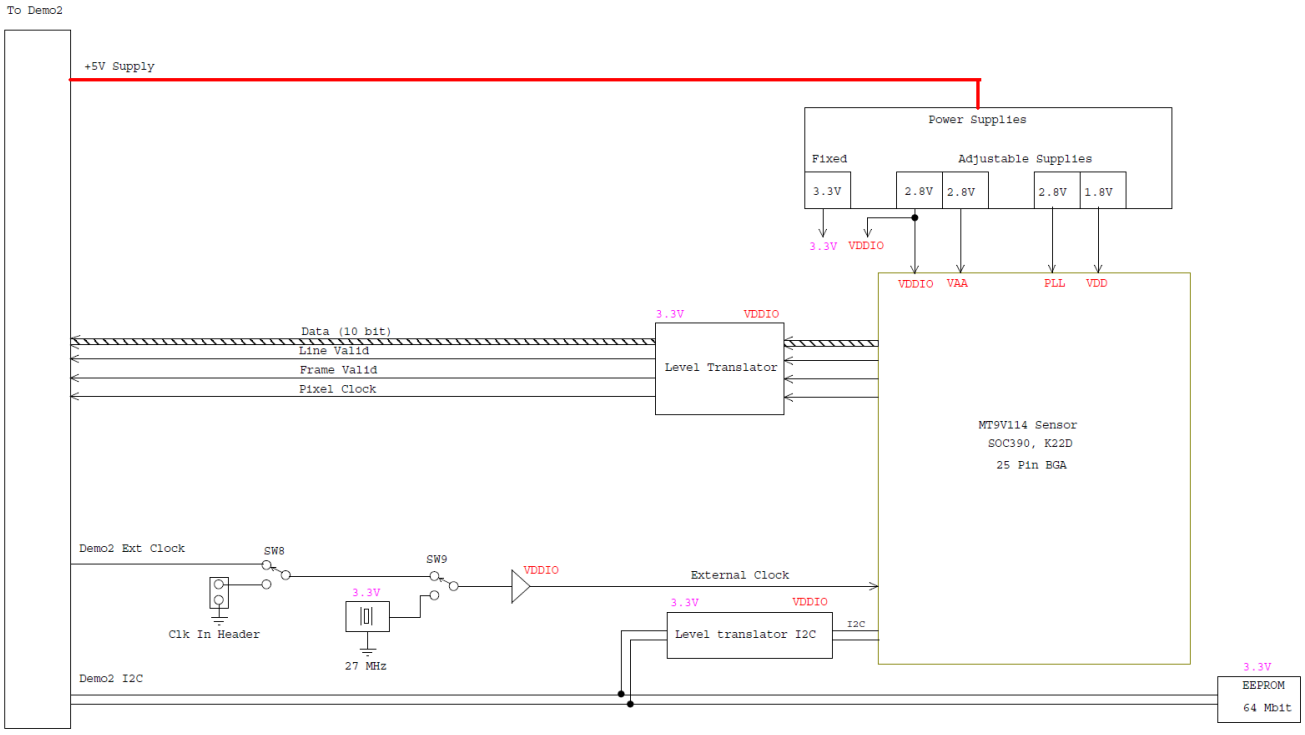

Figure 2. Block Diagram of MT9V114EBKSTC5H–GEVB

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Top View

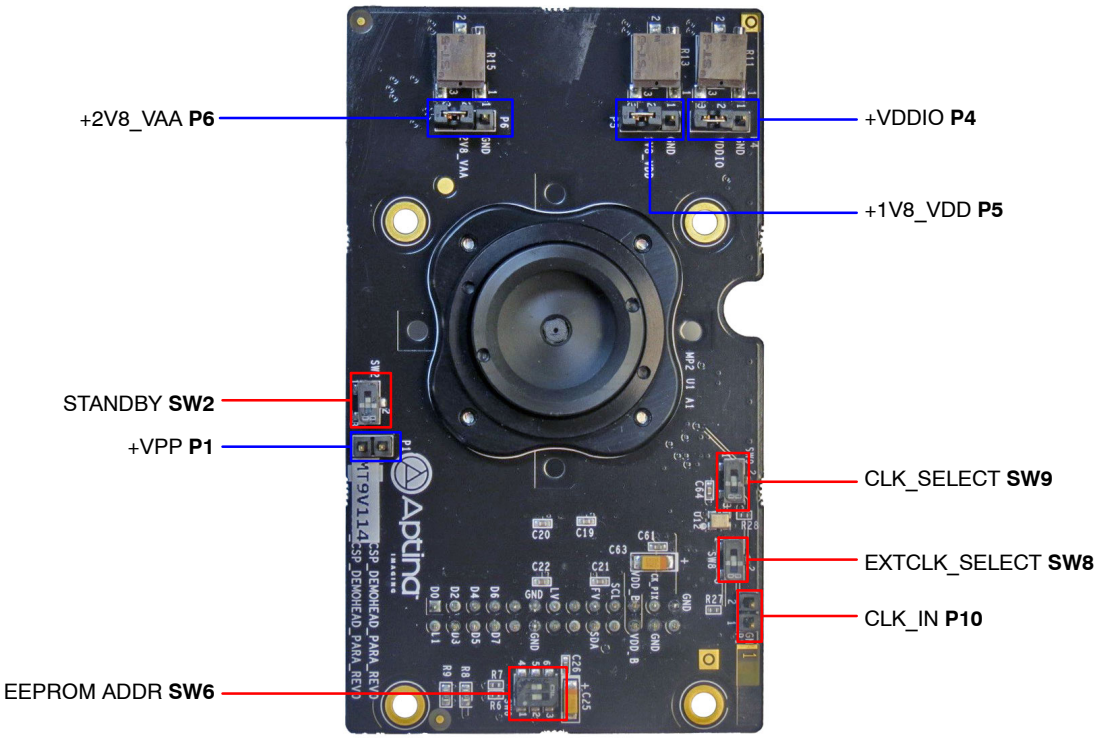

Figure 3. Top View of Evaluation Board − Default Jumpers

Bottom View

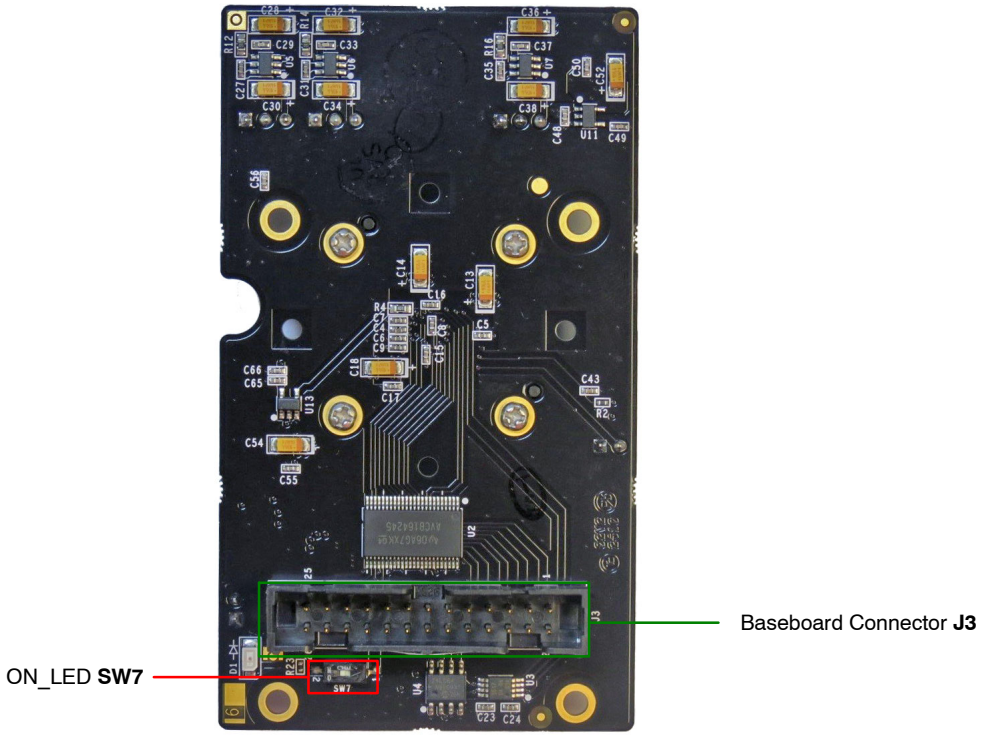

Figure 4. Bottom View of the Evaluation Board − Connector

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.

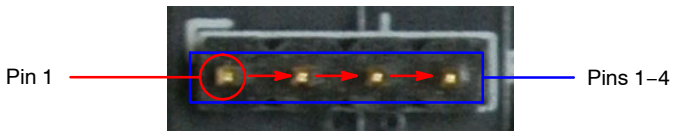

Figure 5. Pin Locations for a Single Jumper.
Pin 1 is Located at the Leftmost Side and Increases as it Moves to the Right

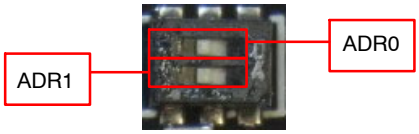

Figure 6. Address Switch Locations in their Default Positions.
The First Switch (ADR0) and the Second Switch (ADR1) of SW3 are Set to ON

Jumper/Header Functions & Default Positions

Table 1. JUMPERS AND HEADERS

Jumper/Header No.	Jumper/Header Name	Pins	Description
P1	+VPP	Open (Default)	Connection to external +VPP power supply for OTPM
P4	+VDDIO	2−3 (Default)	Connects to on-board +VDDIO power supply
		1−2	External power supply connection
P5	+1V8_VDD	2−3 (Default)	Connects to on-board +1V8_VDD power supply
		1−2	External power supply connection
P6	+2V8_VAA	2−3 (Default)	Connection to on-board +2V8_VAA power supply
		1−2	External power supply connection
P10	CLK_IN	Open (Default)	Connects to external clock
SW2	STANDBY	Off (Default)	Normal operation
		On	Standby mode
SW6	EEPROM ADDR	A2 On, A1 Off (Default)	EEPROM Address set to 0xA8
		A2 On, A1 On	EEPROM Address set to 0xAC
		A2 Off, A1 On	EEPROM Address set to 0xA4
		A2 Off, A1 Off	EEPROM Address set to 0xA0
SW7	ON_LED	On (Default)	Connects LED indicator to +VDD_BUS
		Off	Turn off LED indicator
SW8	EXTCLK_SELECT	On (Default)	Connects to Pin 2 of P10
		Off	Connects to clock signal from Demo 2X board

Table 1. JUMPERS AND HEADERS (continued)

Jumper/Header No.	Jumper/Header Name	Pins	Description
SW9	CLK_SELECT	Off (Default)	Connects to on-board oscillator
		On	Connects to output of SW8

Interfacing to ON Semiconductor Demo 2X Baseboard

The ON Semiconductor Demo 2X baseboard has a similar 26-pin connector which mates with J3 of the headboard. The four mounting holes secure the baseboard and the headboard with spacers and screws.

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