MT9V125IA7XTCH-GEVB

MT9V125 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.

Features

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

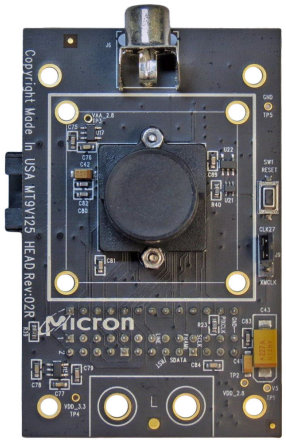


Figure 1. MT9V125 Evaluation Board

Block Diagram

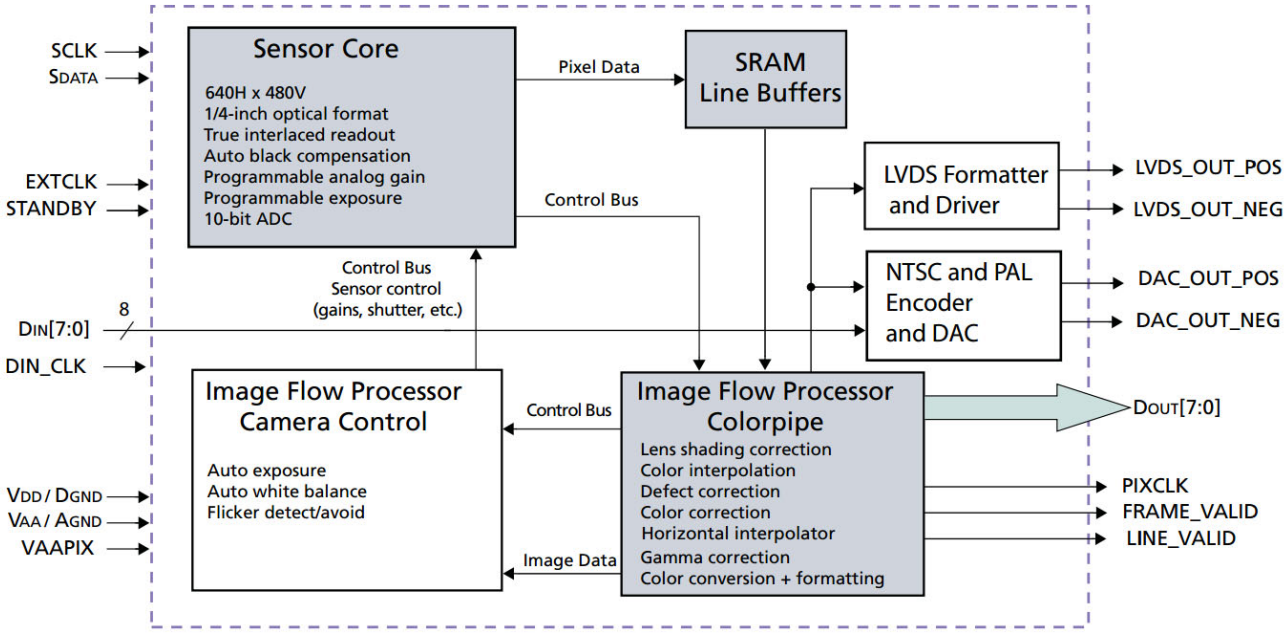


Figure 2. Block Diagram of MT9V125IA7XTCH−GEVB

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Top View

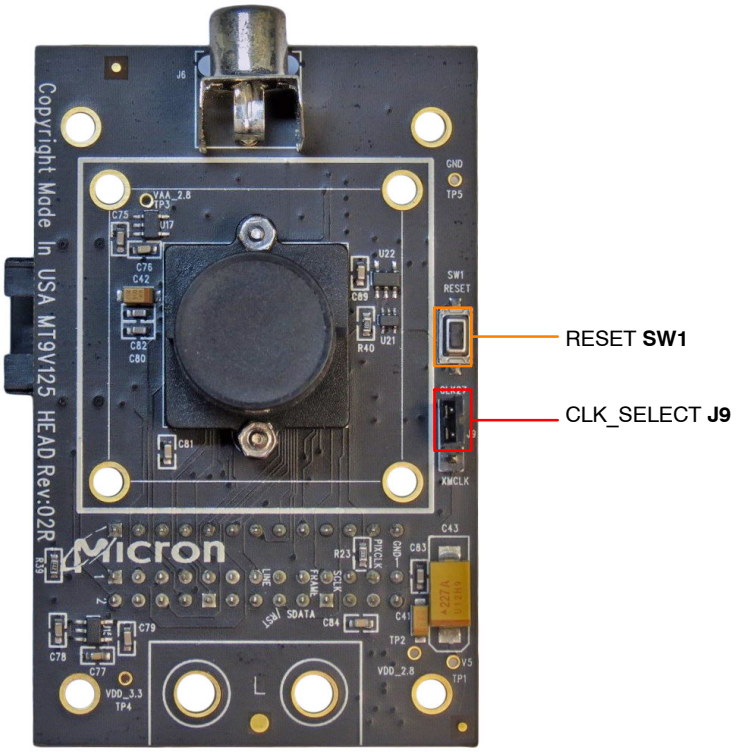


Figure 3. Top View of Evaluation Board − Jumpers

Bottom View

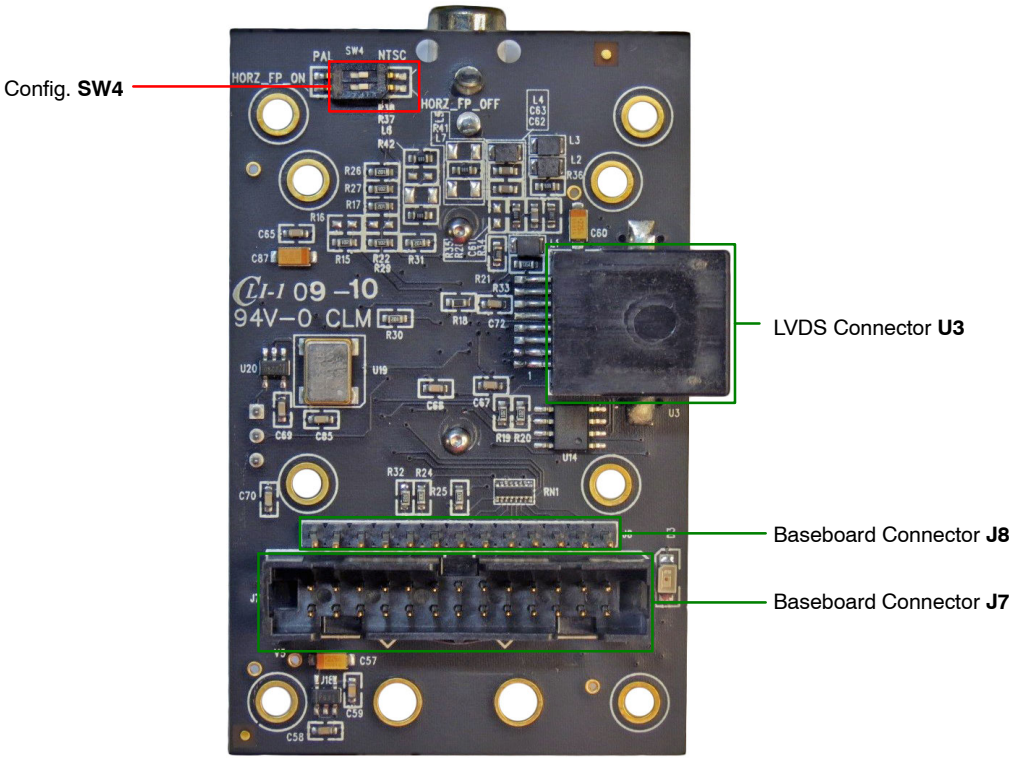


Figure 4. Bottom View of the Evaluation Board − Connector

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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.

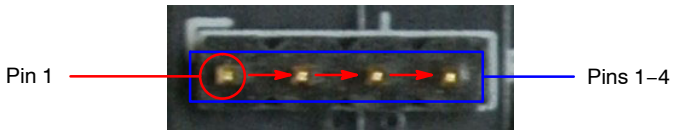


Figure 5. Pin Locations for a Single Jumper.
Pin 1 is Located at the Leftmost Side and Increases as it Moves to the Right

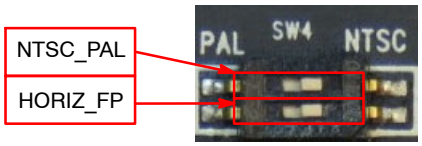


Figure 6. Default Switch Positions of SW4,
The First Switch (NTSC_PAL) is Set to OFF, and the Second Switch (HORIZ_FP) is Set to OFF

Jumper/Header Functions & Default Positions

Table 1. JUMPERS AND HEADERS

Jumper/Header No.	Jumper/Header Name	Pins	Description
J9	CLK_SELECT	1−2 (Default)	Connects to on-board oscillator
		2−3	Connects to XMCLK from Demo 2X board
SW1	RESET	N/A	When pushed, 400 ms reset signal will be sent to MT9V125
SW4	Config.	NTSC_PAL OFF (Default)	NTSC mode selected
		NTSC_PAL ON	PAL mode selected
		HORIZ_FP OFF (Default)	Horizontal setting
		HORIZ_FP ON	Horizontal flip image readout format

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 J7 and J8 of the headboard. The four mounting holes secure the baseboard and the headboard with spacers and screws.

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