MT9V022IA7ATMH-GEVB

MT9V022 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 the 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
- Parallel Interface
- Serial LVDS Interface
- ROHS Compliant

Figure 1. MT9V022 Evaluation Board

Block Diagram

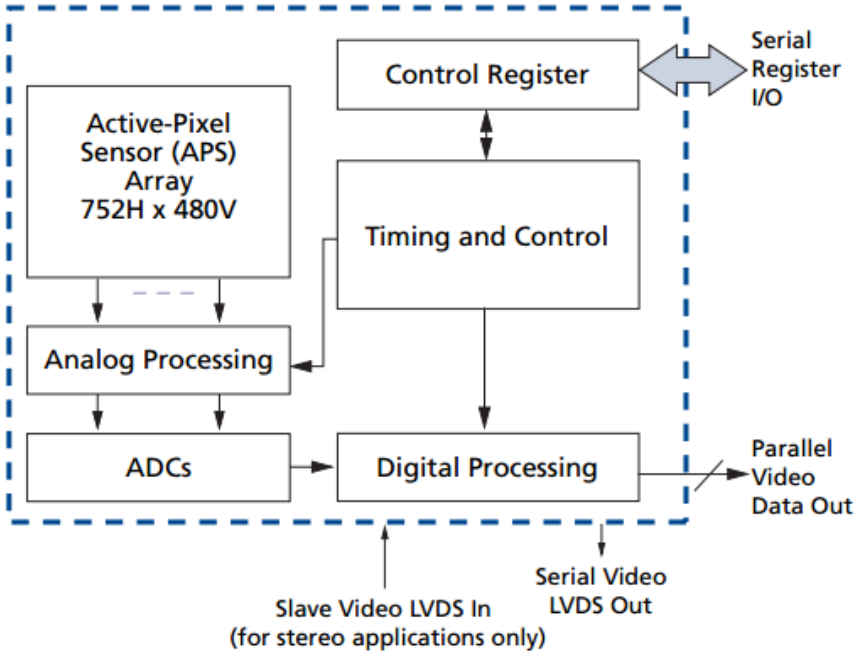

Figure 2. Block Diagram of MT9V022IA7ATMH−GEVB

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Top View

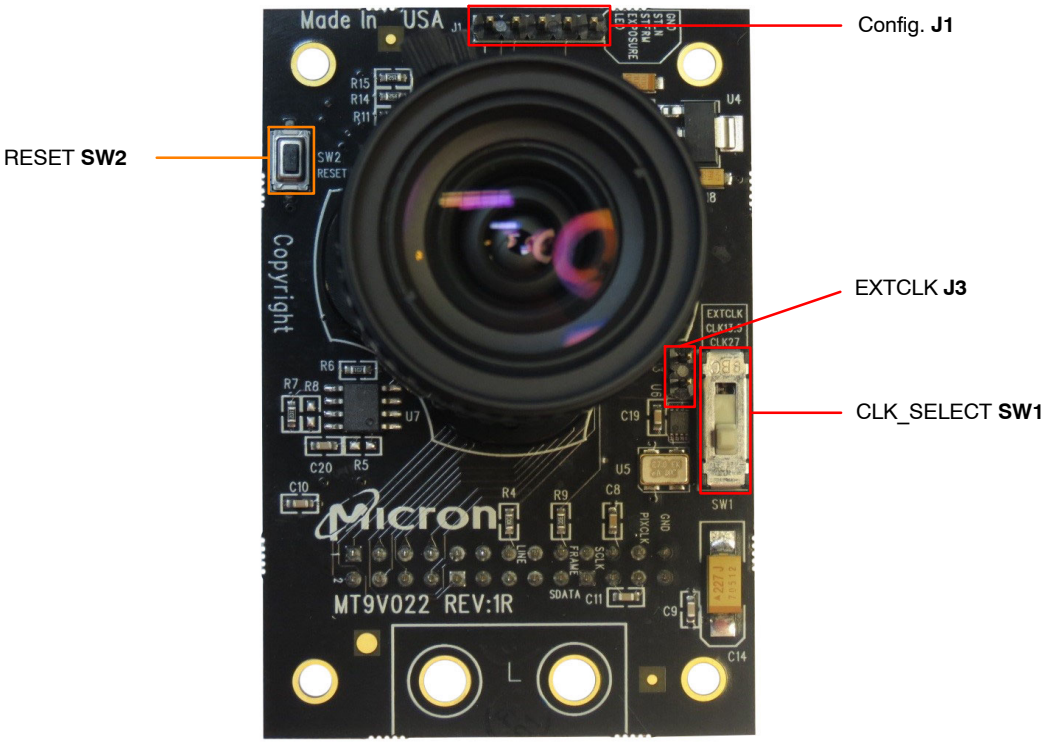

Figure 3. Top View of Evaluation Board

Bottom View

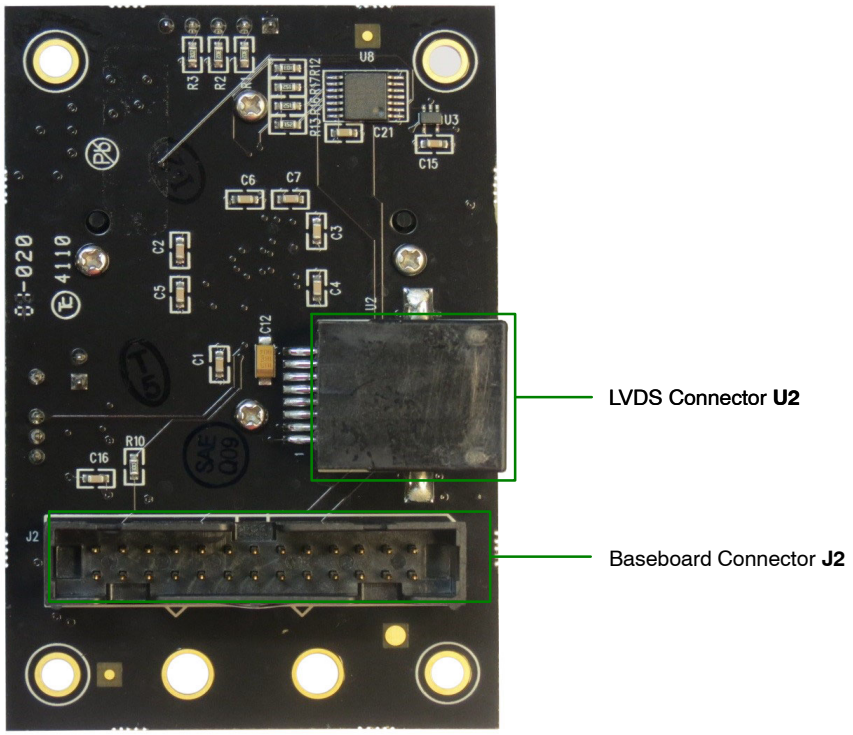

Figure 4. Bottom View of the Evaluation Board − Connector/Jumper

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.

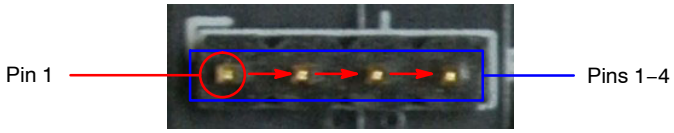

Figure 5. Pin Locations for a Single Jumper. Pin 1 is Located at the Leftmost Side and Increases as it Moves to the Right

Jumper/Header Functions & Default Positions

Table 1. JUMPERS AND HEADERS

Jumper/Header No.	Jumper/Header Name	Pins	Description
J1	Config.	Open (Default)	Connects to various sensor's settings
J3	EXTCLK	Open (Default)	For connection to external clock
SW1	CLK_SELECT	Position 1 (Default)	Connects to on-board 27 MHz oscillator
		Position 2	Connects to on-board 27 MHz oscillator
		Position 3	Connects to EXTCLK from J3
SW2	RESET	N/A	When pushed, 400 ms reset signal will be sent to MT9V022

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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