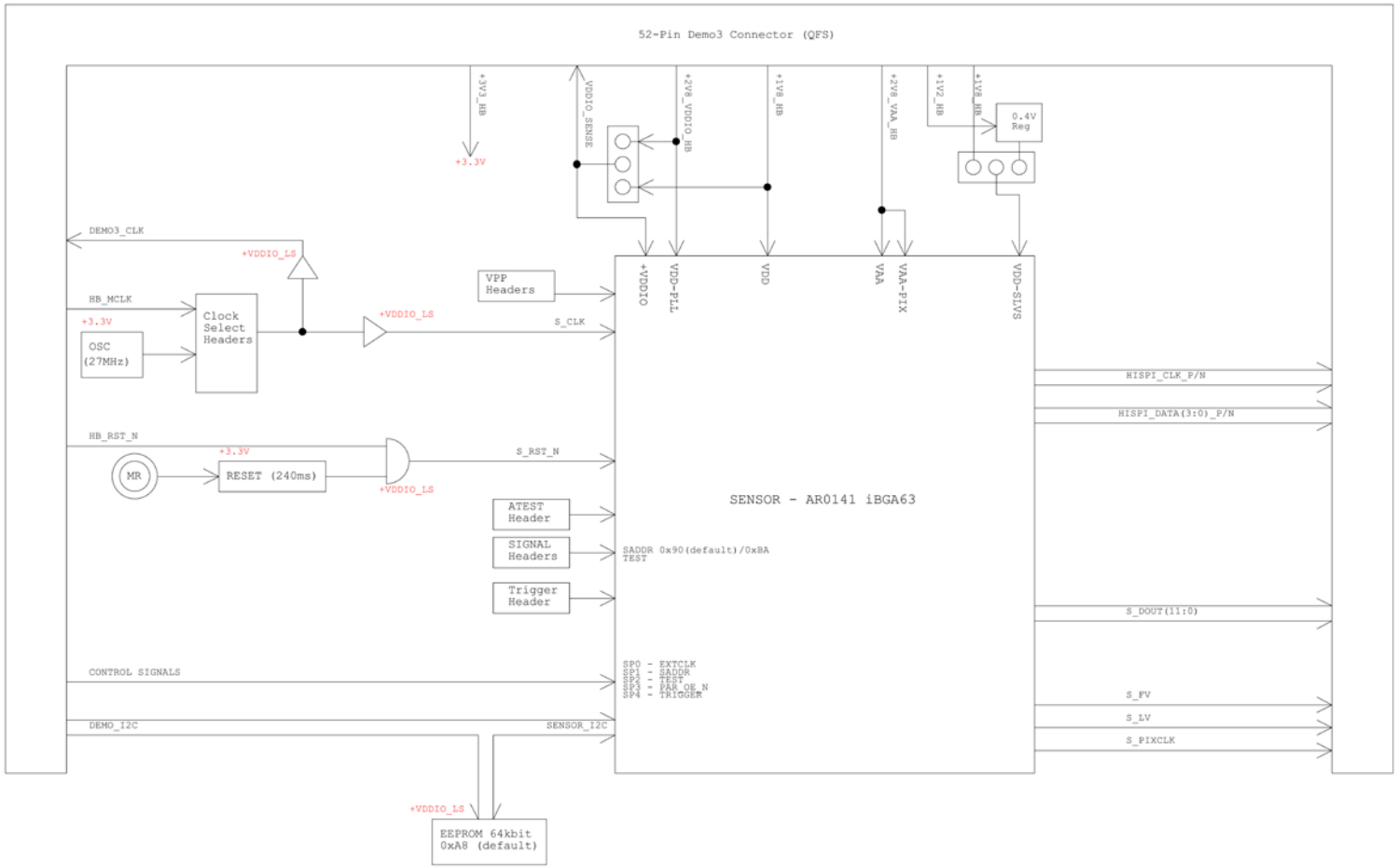
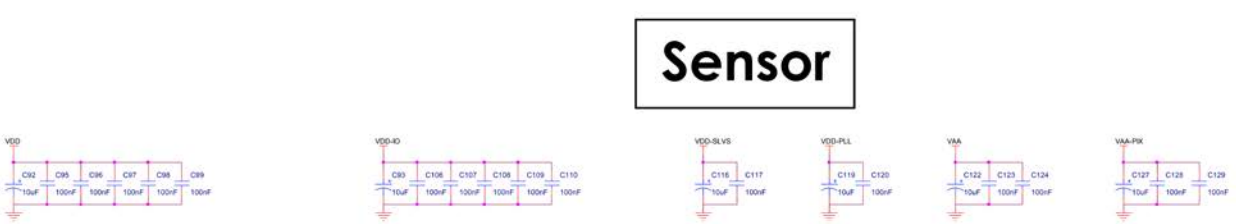
ON Semiconductor®

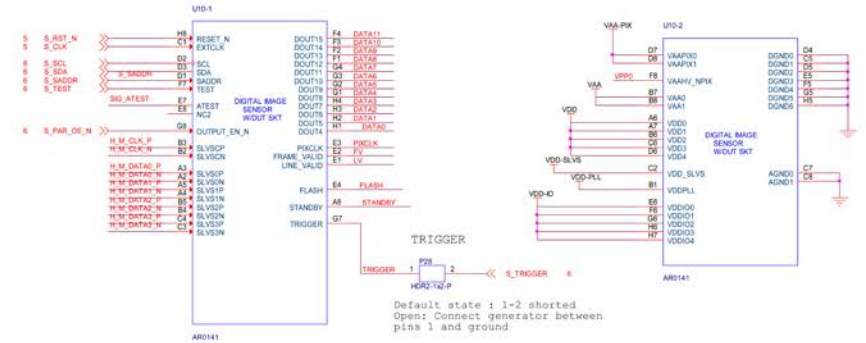
Schematic for the AR0140CS2C00SUEAH3-GEVB Evaluation Board

Block Diagram

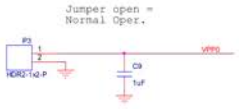


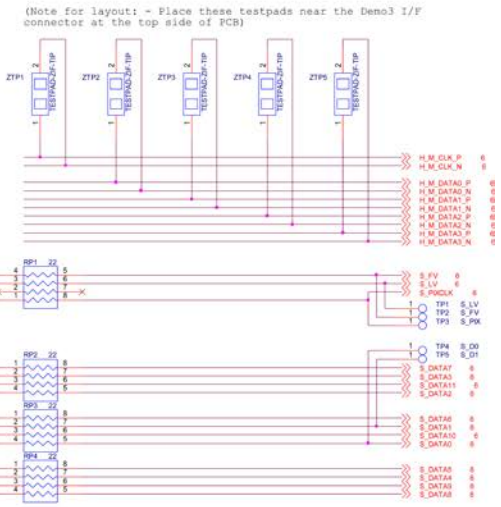
Sensor


VDD
VDD-IO
VDD-SLVS
VDD-PLL
VAA
VAA-PIX

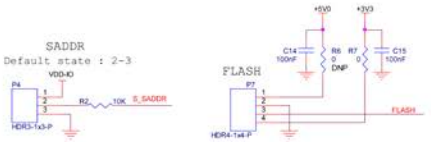

U10-1
AR0141
DIGITAL IMAGE SENSOR W/OUT SKT
TRIGGER
Default state : 1-2 shorted
Open: Connect generator between pins 1 and ground

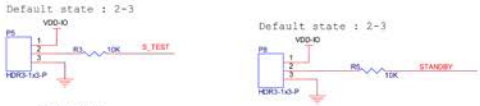
U10-2
AR0141
DIGITAL IMAGE SENSOR W/OUT SKT


Jumper open =
Normal Oper.


(Note for layout: - Place these testpads near the Demo3 I/F connector at the top side of PCB)

LENS HOLDER SOCKET WITH LID


SADDR
Default state : 2-3
FLASH

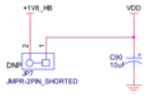

TEST
Default state : 2-3
Default state : 2-3
PAR_OE_N
Default state : 2-3
ATEST1

TRIPOD MOUNT
TRI-POD ADAPTER

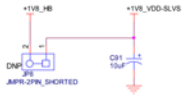
Debug Headers: Cut away the shorted trace and mount header for power debugging

Power

VDD 1.8V SUPPLY

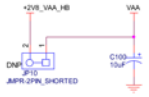


VDD-SLVS 1.8V SUPPLY

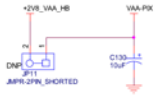


VDD-PLL 2.8V SUPPLY

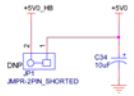
VAA 2.8V SUPPLY



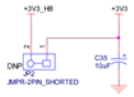
VAA-PIX 2.8V SUPPLY



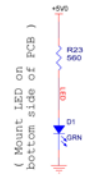
PERIPHERAL 5V SUPPLY



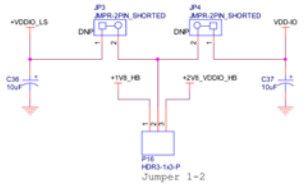
PERIPHERAL 3.3V SUPPLY



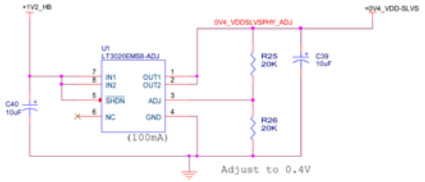
5V LED



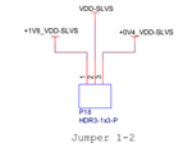
VDDIO & VDDIO_LS 1.8V/2.8V SUPPLY

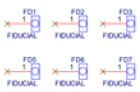


VDDSLVSPHY 0.4V SUPPLY



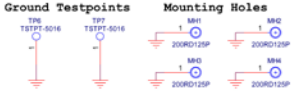
Selection of 0.4V or 1.2V/1V8 for VDDSLVSPHY supply





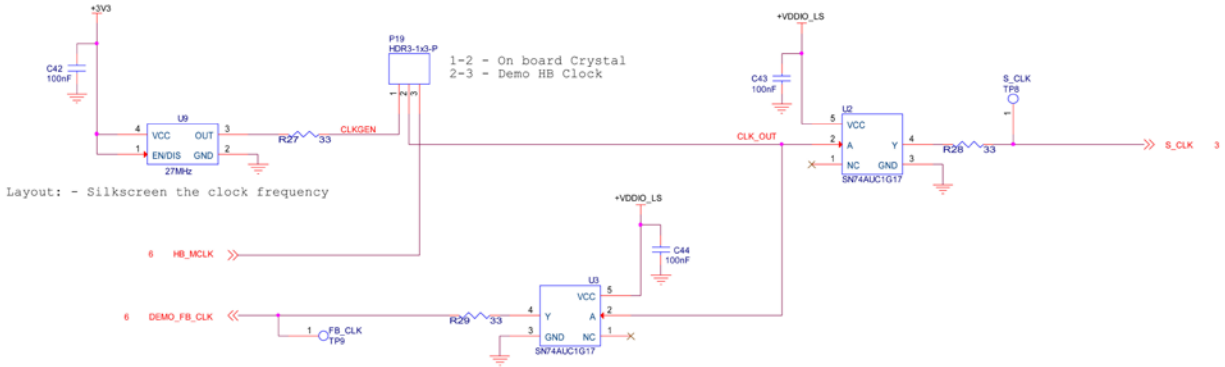
Ground Testpoints

Mounting Holes

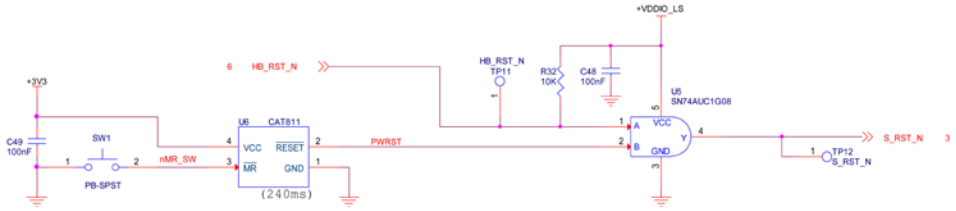


Clock and Reset

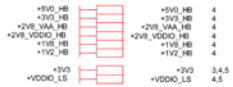
CLOCK CIRCUIT



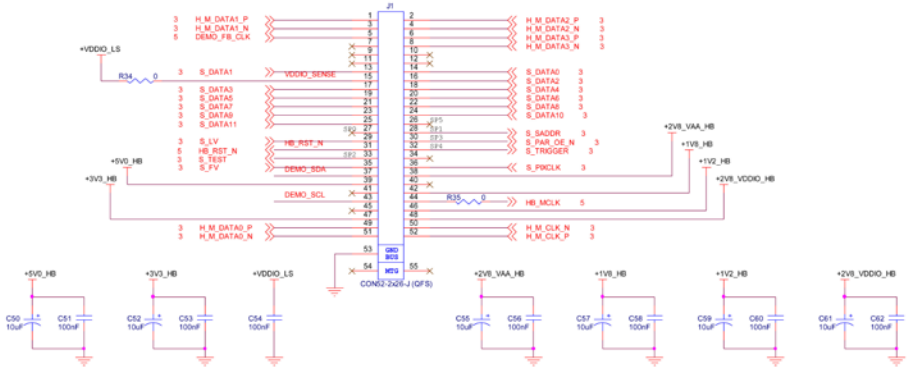
RESET CIRCUIT



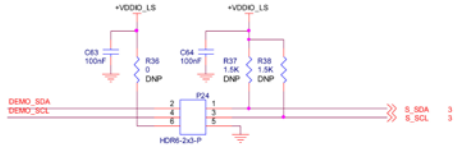
External Interface



DEMO3 BASEBOARD I/F

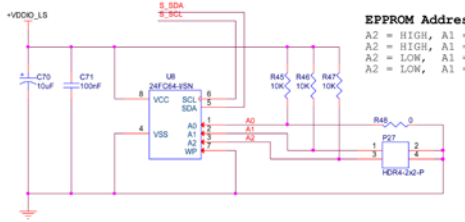


I2C DEBUG



Jumper: 1-2 & 3-4 (default status)

LENS CORRECTION EEPROM



EPPROM Address Switch Settings:

A2 = HIGH, A1 = LOW, A0 = LOW; Address => 0xA8 (default)
A2 = HIGH, A1 = HIGH, A0 = LOW; Address => 0xAC
A2 = LOW, A1 = HIGH, A0 = LOW; Address => 0xA4
A2 = LOW, A1 = LOW, A0 = LOW; Address => 0xA0