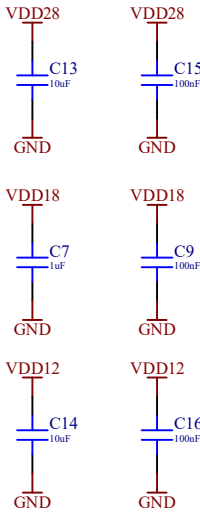
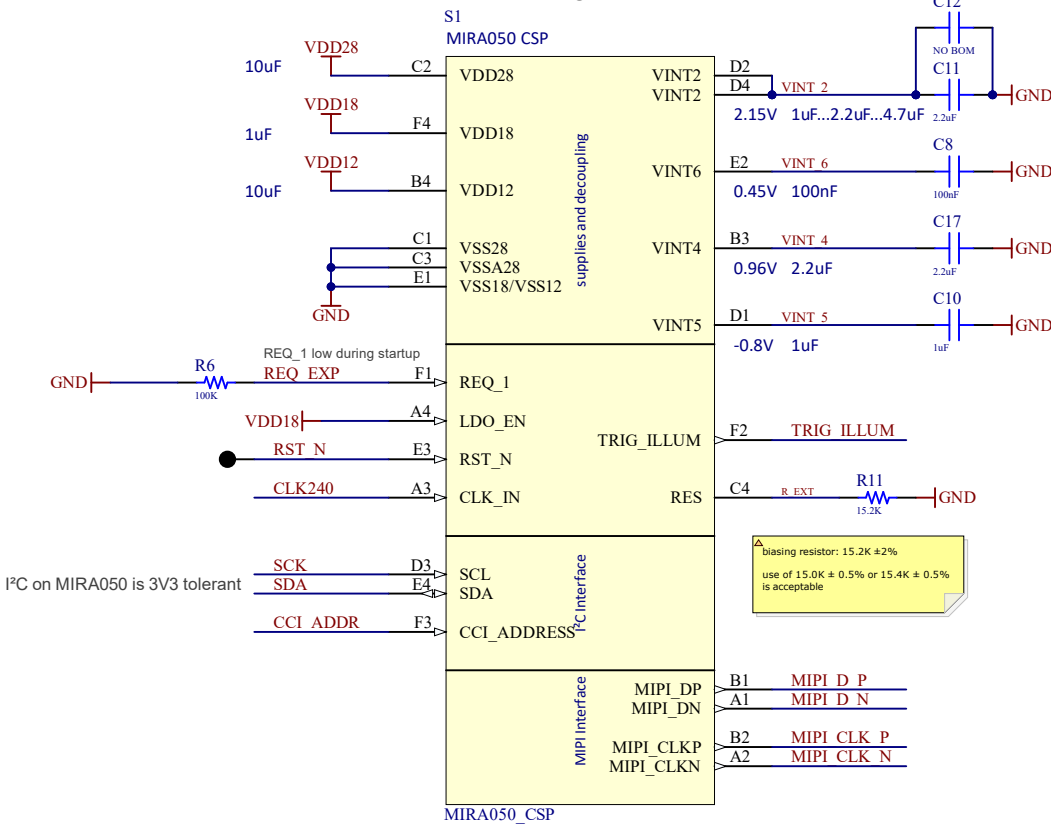


MIRA050 CSP Reference Design

MIRA050 supply decoupling



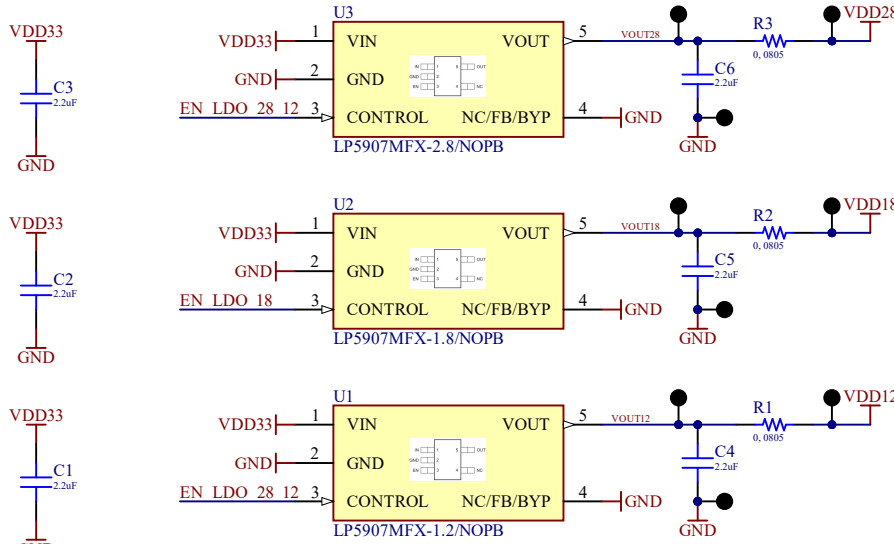
MIRA050 image sensor



I²C on MIRA050 is 3V3 tolerant

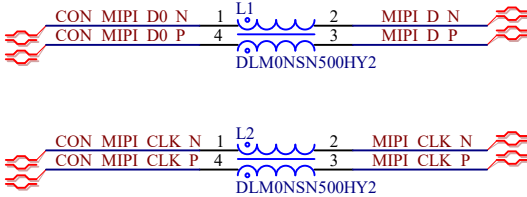
blasing resistor: 15.2K ±2%
use of 15.0K ± 0.5% or 15.4K ± 0.5% is acceptable

Local power supplies

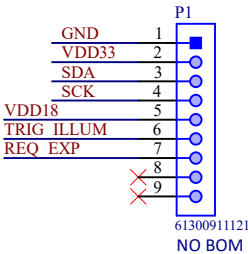


Noise Suppression for MIPI D-PHY

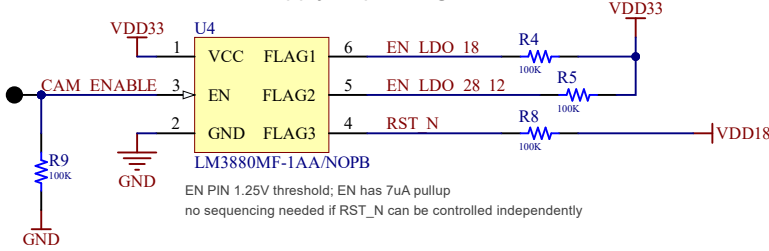
optional, present on most RPI cameras
<https://www.murata.com/en-global/products/emc/emifil/library/pickup/mipid-phy>



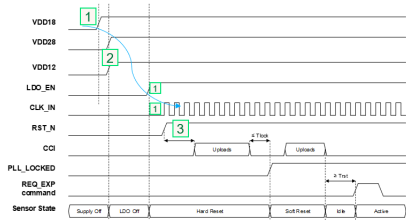
additional sensor I/O



Power supply sequencing



MIRA050



MIRA050 I²C address

device address 0b011011x
0x36, 0x37
default 0b0110110 = 0x36

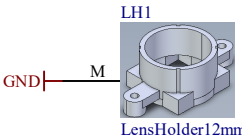
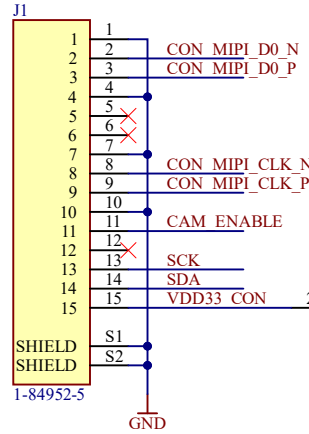
Sensor	Supply [V]	Current [mA]	Power [mW]	Total Power [mW]
MIRA050	2.8	15	42	
MIRA050	1.8	1	1.8	
MIRA050	1.2	50	60	103.8

Modified sequence for 3 EN signals (LM3880, 10ms delays):
1.) 1.8V supply → chain output to OSC supply and OSC_EN; LDO_EN
2.) 2.8V supply and 1.2V supply
3.) RST_N

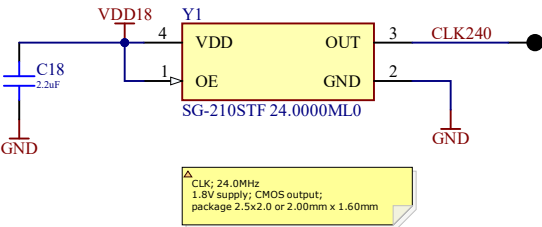
ams OSRAM

FPC 15pin connector

RPI style cable
15 pins, 1mm pitch
Termination Style: Top on One Side, Bottom on Other
e.g. Molex 0152670852
e.g. Würth 686715100001



CLK for MIRA050



CLK: 24.0MHz
1.8V supply; CMOS output;
package 2.5x2.0 or 2.00mm x 1.60mm



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Drawn
MKOC

Title, Comments
MIRA050 CSP

Reference Design

Approved/Checked

Drawing No.
*

Project
MIRA050

Rev.
3.0

Date
06-May-2024

Sheet
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