Project: ***DM0260***
Current Revision: ***R4M2E2***

DM0260 Revision History:

Date	Revision	Reason for Change	Changes Implemented
12/30/2020	BG0250TG-> R0M0E0	1) ESD protection 2) FFC connector stronger mechanics 3) Outdated stackup	1) Added protection diodes to MIPI lines 2) Changed FFC with Molex 505278 series 3) Standarized 4L stackup
02/12/2020	R0M0E0 -> R1M1E1	1) Make FFC connectors type and pinout ArduCam standard so that camera modules will be compatible with DM1090FFC 2) Library and components not common w/ LuxonisMaster and some has bigger size footprint than needed	1)Changed FFC connectors to ArduCam standard pinout, updated all connections to the conenctors. CBA can be connected with same side 26pin FFC to DM1090FFC 2) Updated all componets using LuxonisMaster libraries 3) Removed unecessary components from design (10k pull-ups on LDO enable connected directly) made downsizing of footprints for easier layout
02/12/2020	DM0250_R1M1E1 -> DM0260_R0M0E0	1) Add support for 33-pin standard FPC connector from Arducam 2) Add support for multiple cameras by option to change the core voltage	1) Used 33-pin standard FPC connector for CCM 2) With populating either R4 or R5 you can select 1V05 or 1V2 core voltage respectively.
02/12/2020	DM0260_R0M0E0 -> DM0260_R1M0E0	1) Correct the error because of unused pads 2) Add GND vias reducing the current loops	1) Corrected added pads on top/bottom layer 2) Added GND vias
11/04/2020	DM0260_R1M0E0 -> DM0260_R2M1E1	1) Rotate text for 180 deg for better readability 2) Add holes for M12 camera holder (PY111-577) 3) Change the logo from old one to new one	1) Rotateed text for 180 deg for better readability 2) Added holes for M12 camera holder (PY111-577) 3) Changed the logo from old one to new one
06/29/2023	DM0260_R2M1E1 -> DM0260_R3M1E2	Missing EEPROM.	Added EEPROM and connected CAM_RST to change address of EEPROM.
08/07/2023	DM0260_R3M1E2 -> DM0260_R4M1E2	missing pads on TOP and BOTTOM on GND vias, manufacturing problem.	Restoring removed unused pads.
10/11/2023	DM0260_R4M1E2 -> DM0260_R4M2E2	Missing holes for 20mm pitch CCM	Changing 2 mounting holes with pitch of 18 mm to slot to support 18 and 20mm mounting pitch.

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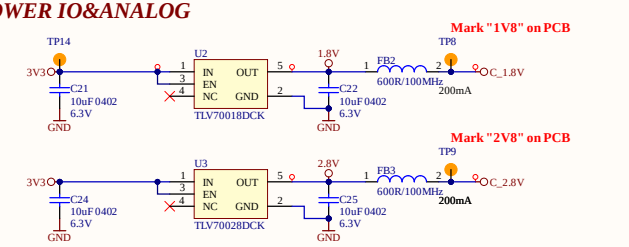
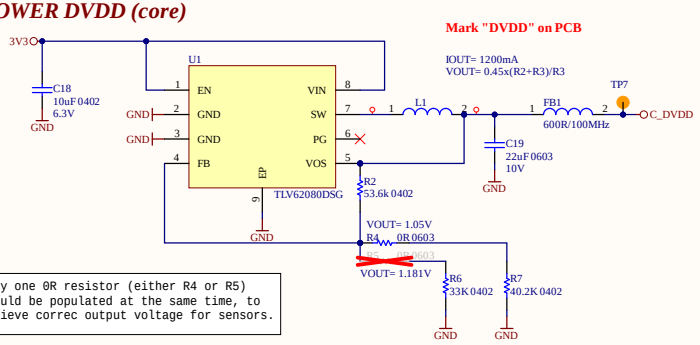
Drawn by: ***David Malovrh***				

POWER IO&ANALOG



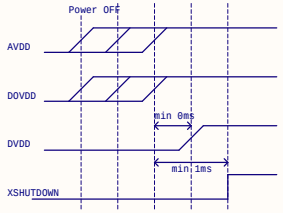
Add capacitor to ground to make RC timing circuit for EN pins in order to obtain the appropriate power supply sequencing if ncessary

POWER DVDD (core)



Only one 0R resistor (either R4 or R5) should be populated at the same time, to achieve correc output voltage for sensors.

Power Supply Sequence & Requirements



1. AVDD rising can occur before or after DOVDD rising as long as they are rising before XSHUTDOWN rising
2. XSHUTDOWN is pulled up after AVDD and DOVDD are stable
3. DVDD rises after DOVDD, but before XSHUTDOWN is pulled high

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DM0260

Revision: R4M2E2

MODULE CONNECTOR

IMX378

Supply Name		Voltage	Max Current
Module	Sensor		
AVDD	VANA	2.8V ± 0.1	55mA
DOVDD	VIF	1.8V ± 0.1	2.5mA
DVDD	VDIG	1.05V ± 0.1	446mA

AR0234

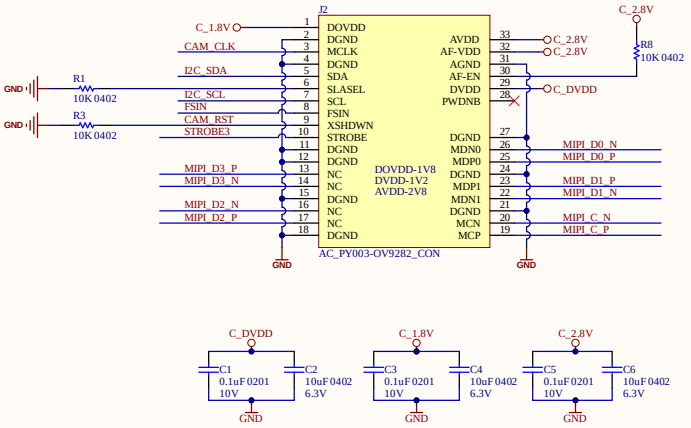
Supply Name		Voltage	Max Current
Module	Sensor		
AVDD	VANA	2.8V ± 0.3	55mA
DOVDD	VIF	1.8V ± 0.1	8mA
DVDD	VDIG	1.2V ± 0.06	147mA

OV9282

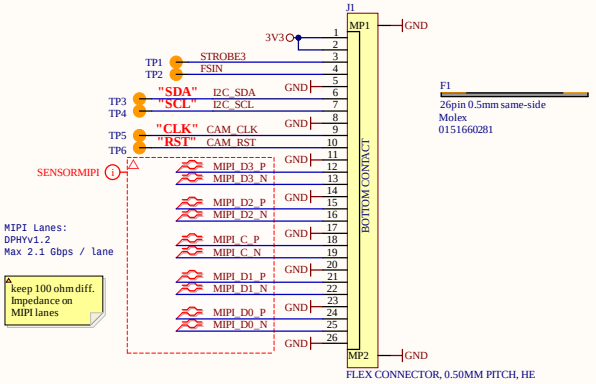
Supply Name		Voltage	Max Current
Module	Sensor		
DOVDD	VDD-IO	1.8V	2.5mA
DVDD	VDD-D	1.2V	52mA
AVDD	VDD-A	2.8V	24mA

IMX477

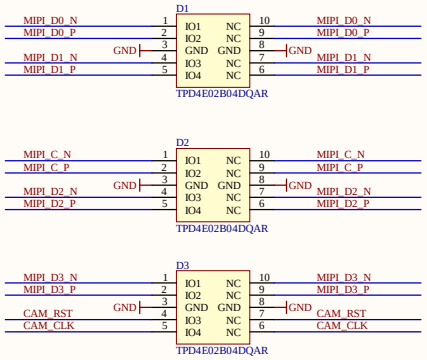
Supply Name		Voltage	Max Current
Module	Sensor		
AVDD	VANA	2.8V ± 0.3	55mA
DOVDD	VIF	1.8V ± 0.1	8mA
DVDD	VDIG	1.2V ± 0.06	290mA



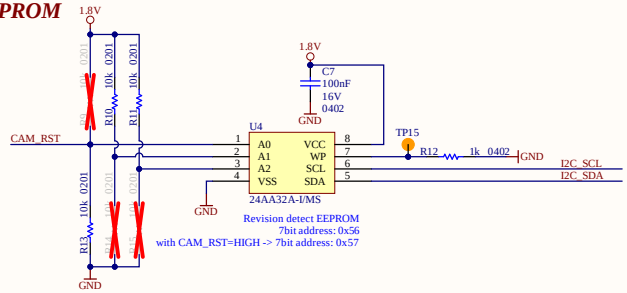
FFC CAMERA CONNECTOR



ESD PROTECTION



EEPROM



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