


MT9V126(SOC356) 63IBGA HB DEMO3 Card

Page	Description
1	Title Page
2	Block Diagram
3	Pinout
4	Sensor
5	Power Supply
6	VideoOut_Clock_Reset
7	External Interface

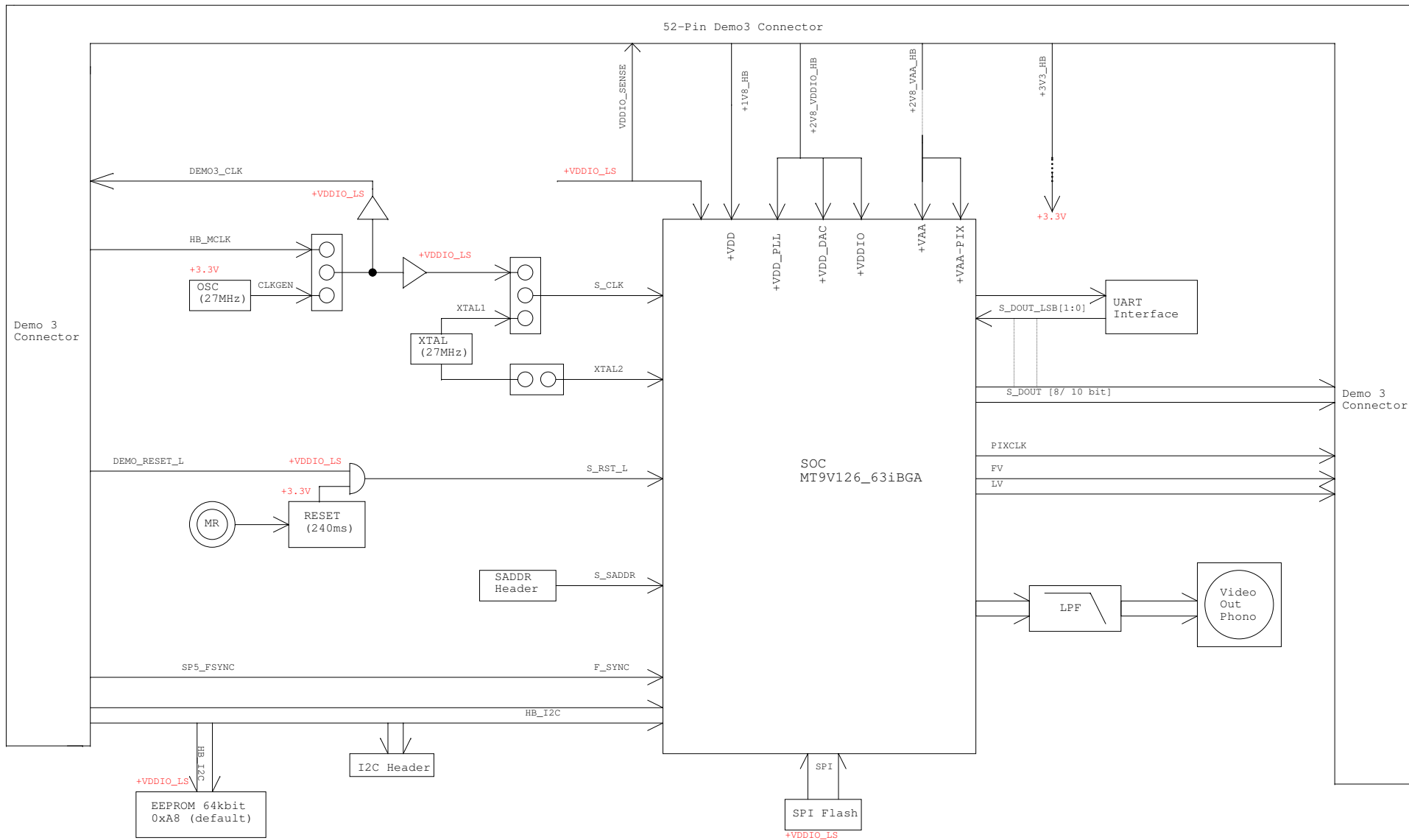
Rev	Who	Date	Description
Rev 0.0	jwrede	10/06/2014	Base Schematic for Custom Design
Rev 0.1	aralex	06/24/2016	Initial schematic. Same as MT9V128, only sensor part/symbol is different. The PCB is common for both
	aralex	07/13/2016	Updated Header Text for P25 and P26



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Title		
Title		
Size	Document Name	Rev
C	MT9V126(SOC356)_63IBGA_HB_DEMO3_Card	0.1
Date: Wednesday, July 13, 2016		Sheet 1 of 7

Block Diagram



MT9V126_SENSOR(SOC356)

	1	2	3	4	5	6	7	8
A		DAC_REF	GND_DAC	DAC_NEG	VDD_DAC	Dout2	Dout1	Dout0
B	EXTCLK	XTAL	DAC_POS	GND	VDD_PLL	Dout6	Dout4	Dout3
C	RESET_BAR	FRAME_SYNC	VDD	GND	VDD_IO	TDO	Dout7	Dout5
D	DIN_CLK	DIN0	VDD	GND	VDD_IO	TDI	Dout_LSB1	Dout_LSB0
E	DIN2	DIN1	VDD	GND	VDD_IO	LINE_VALID	FRAME_VALID	PIXCLK
F	DIN5	DIN3	TMS	TCK	TRST_N	ATEST1	VAA_PIX	VAA_PIX
G	DIN6	DIN4	SCLK	SPI_CS_N	SPI_SDI	ATEST2	VAA	VAA
H	DIN7	SADDR	SData	SPI_SDO	SPI_SCLK	AGND	AGND	AGND



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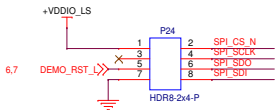
Title Pinout

Size	Document Name	Rev
C	MT9V126(SOC356)_631BGA_HB_DEMO3_Card	0.1

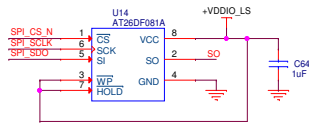
Date: Friday, June 24, 2016 Sheet 3 of 7

MT9V126_SENSOR

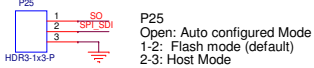
FLASH PROGRAMMING CONNECTOR



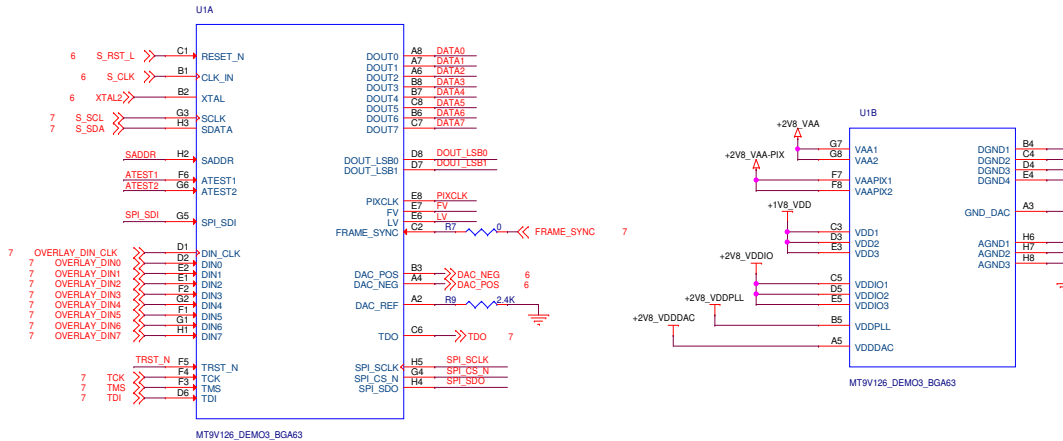
SPI FLASH



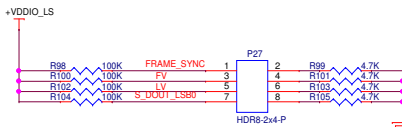
CONFIGURATION HEADER



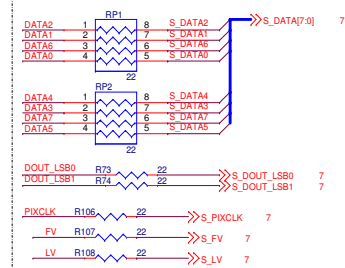
I2C HEADER



- P27
 1-2: Closed (default)
 3-4: Close -> Normal (default)
 Open -> Horizontal Flip
 5-6: Close: Normal (default)
 Open -> Pedestal
 7-8: Close -> NTSC (default)
 Open -> PAL



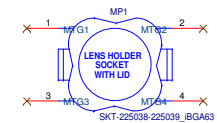
TERMINATION RESISTORS



TEST POINTS

- S_PIXCLK 1 TP1 PIXCLK
- S_DATA0 1 TP3 S_DATA0
- S_DATA1 1 TP4 S_DATA1

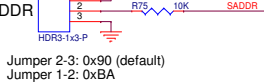
SOCKET



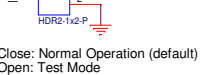
ATEST



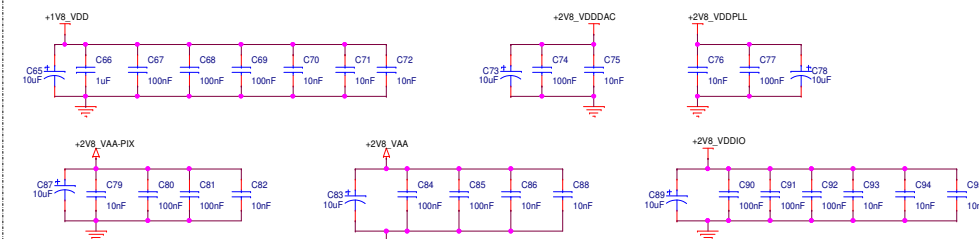
SADDR



TRST_N



DECAPS



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Title: Sensor

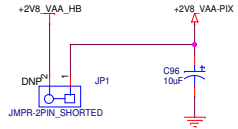
Size C Document Name: MT9V126(S0CC356)_63BGA_HB_DEM03_Card Rev: 0.1

Date: Wednesday, July 13, 2016 Sheet: 4 of 7

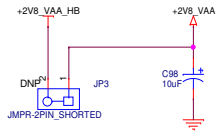
POWER SUPPLY

SENSOR

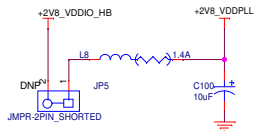
2.8V VAA-PIX Power supply



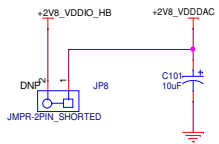
2.8V VAA Power supply



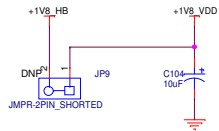
VDD_PLL Power Supply



VDD-DAC Power Supply

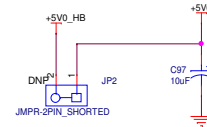


VDD Power Supply

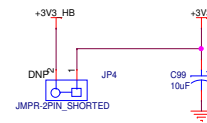


PERIPHERAL

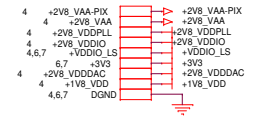
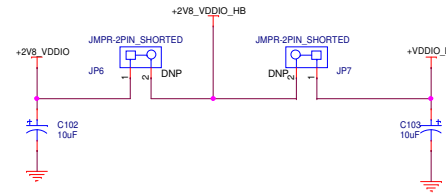
Peripheral 5V Power Supply



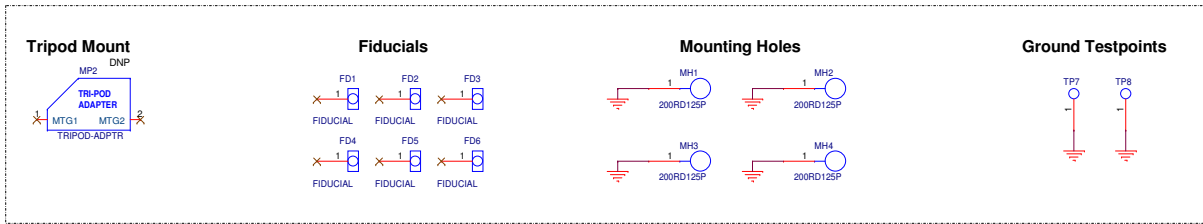
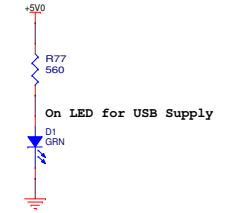
Peripheral 3.3V Supply



VDDIO & VDDIO_LS 2.8V Supply



Layout: Mount LED on bottom side of PCB

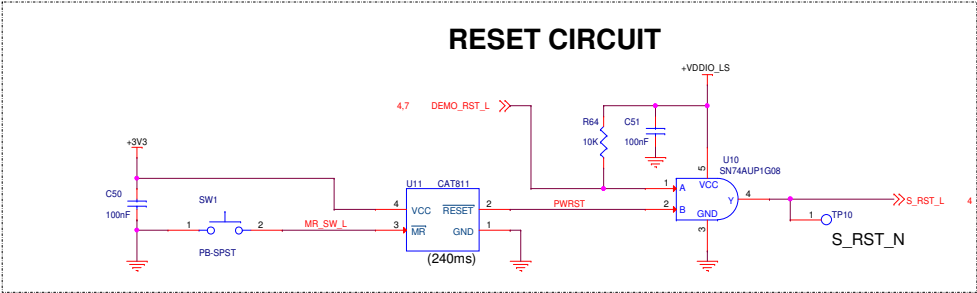
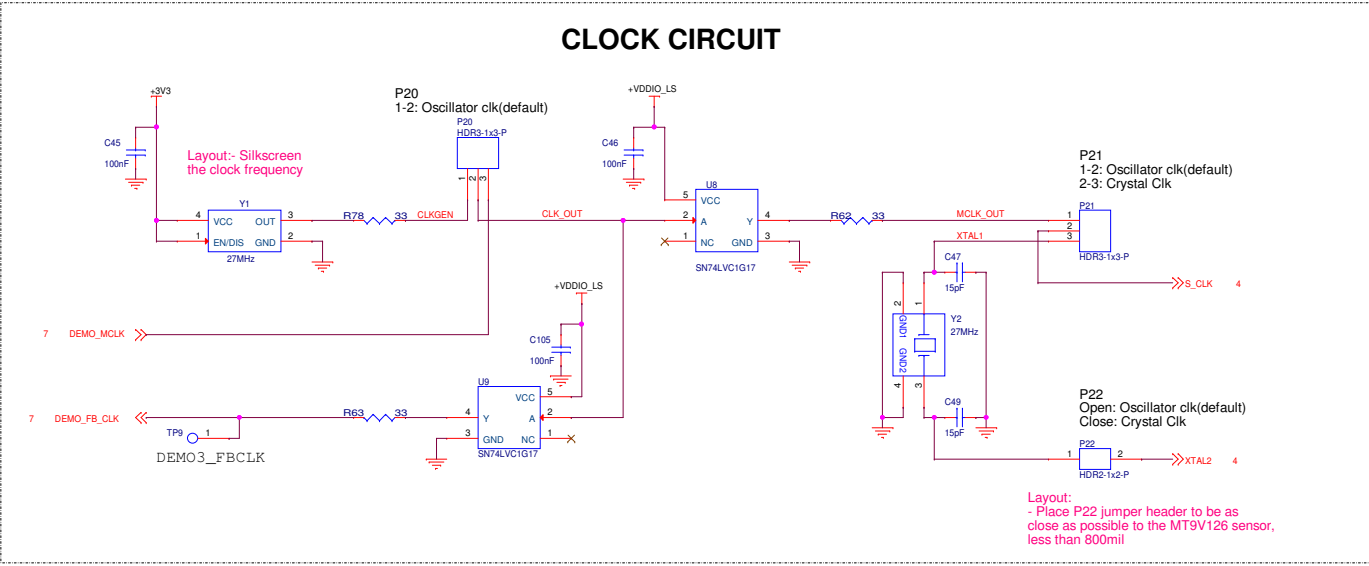
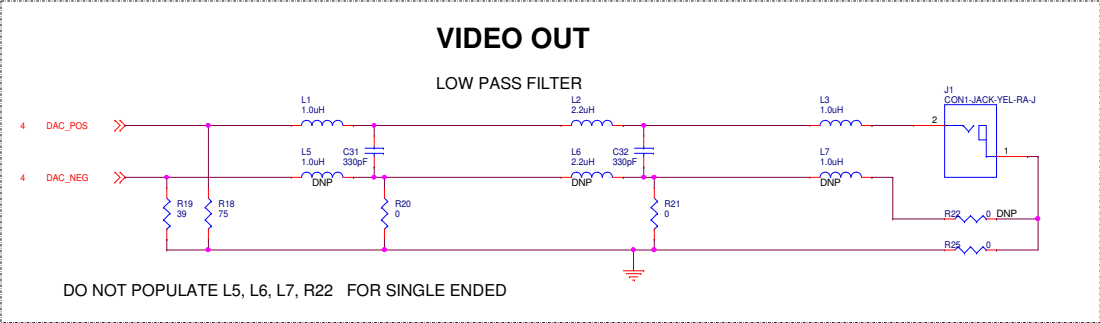
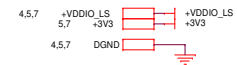


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Title Power Supply

Size C	Document Name MT9V126(SOC356)_6318GA_HB_DEMO3_Card	Rev 0.1
Date Friday, June 24, 2016	Sheet 5 of 7	

VideoOut_Clock_Reset



External Interface

