AR0237_iBGA80_Demo3Head

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Rev	Who	Date	Description
Rev 0.0	aralex	06/10/15	Initial schematic taken from AR0230 IBGA 80 demo3 HB design because the pinout is the same. Changed P3 from 2 pin header to 3 pin header Added R50, P30; Deleted R8
		06/12/15	Updated with the new Sensor part for AR0237

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Title: TITLE PAGE		
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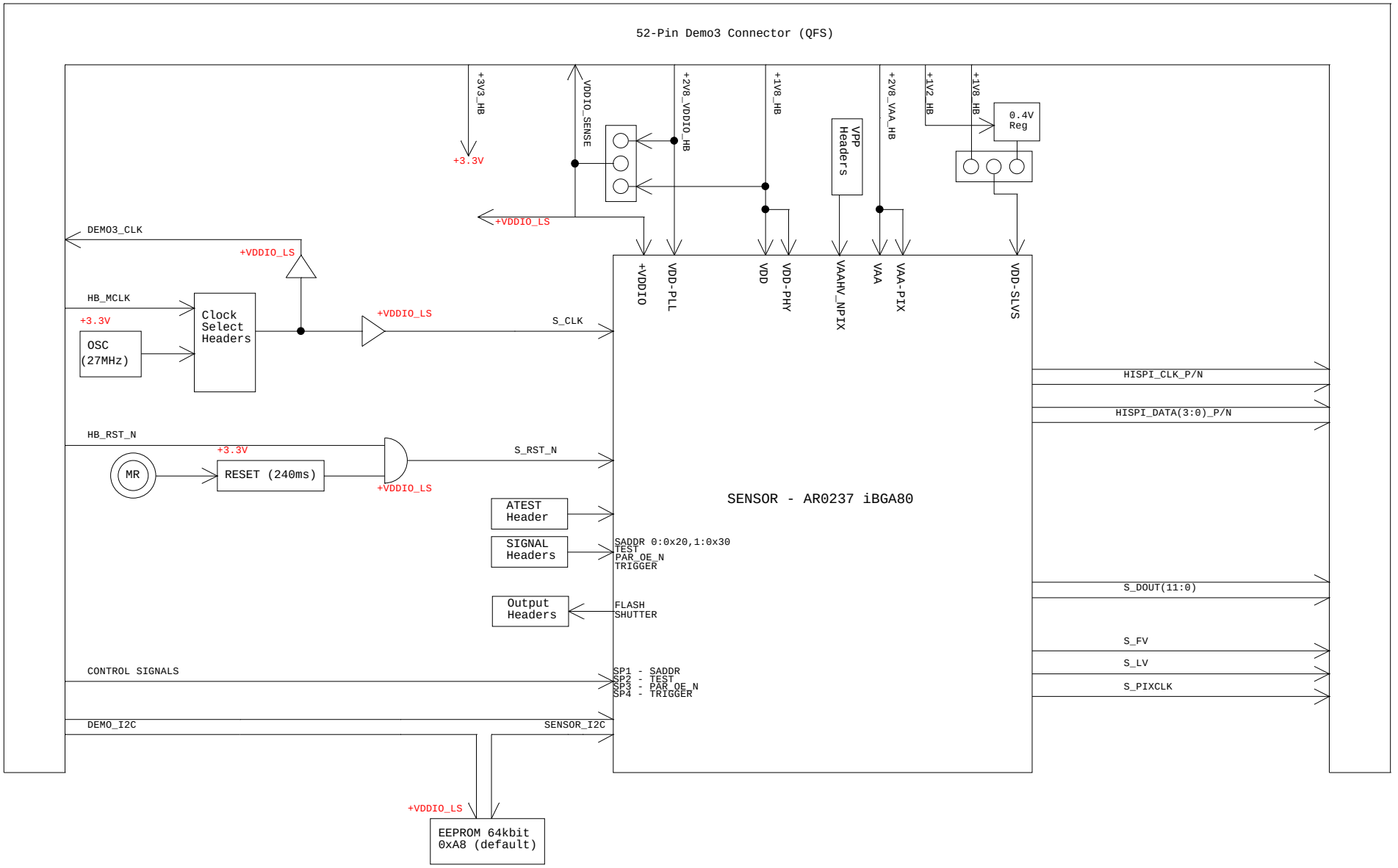
Block Diagram



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Title	BLOCK DIAGRAM	
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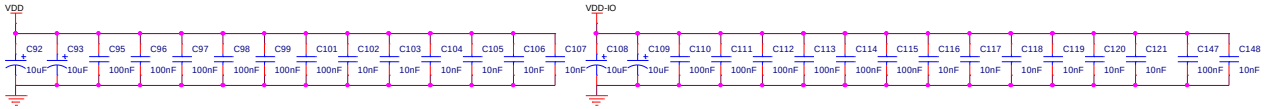
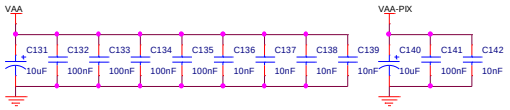
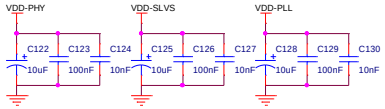
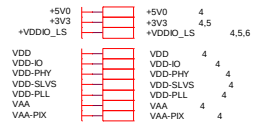
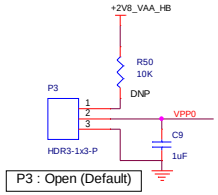
Sensor







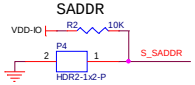




P3 : Open (Default)

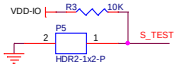
TRIGGER

SADDR

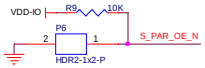


Jumper P4:
SHORT : SADDR= 0x20
OPEN : SADDR= 0x30

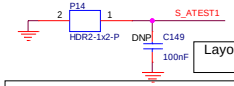
TEST



OE_N



ATEST1

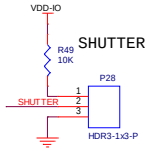


Layout Note: Place capacitor close to BGA ball of ATEST1 pin

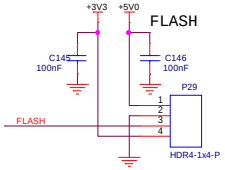
Default Jumper Settings

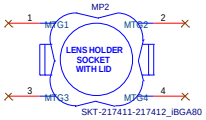
P5 : SHORT (S_TEST->GND)
P6 : SHORT (Parallel mode Default)
P14: SHORT (ATEST->GND)

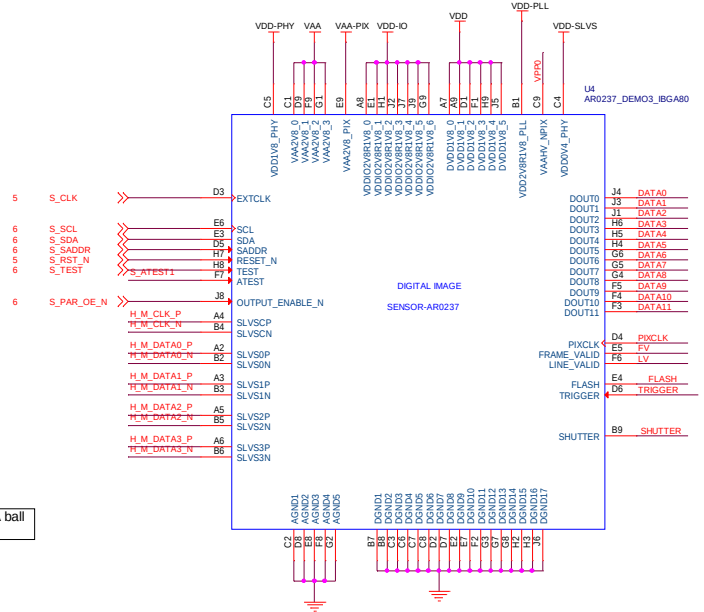
SHUTTER



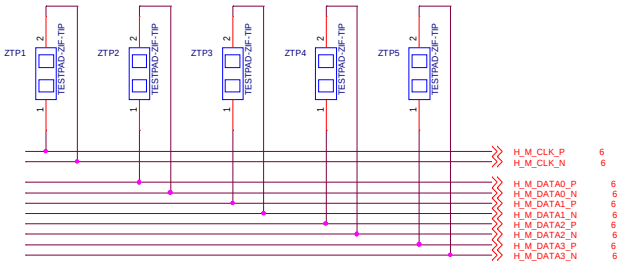
FLASH

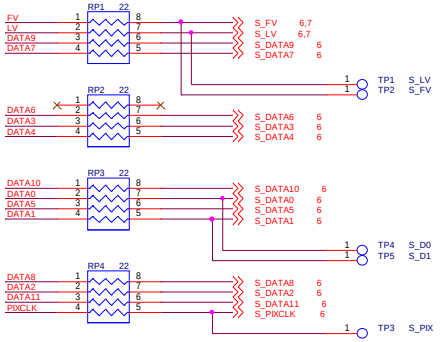




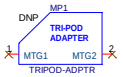


(Note for layout: - Place these testpads near the Demo3 I/F connector at the top side of PCB)





TRIPOD MOUNT



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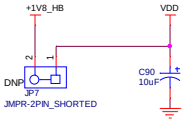
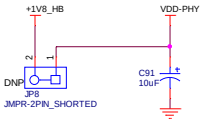
Debug Headers: Cut away the shorted trace
and mount header for power debugging

Power

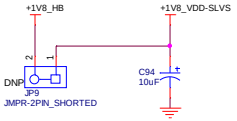
VDD 1.8V SUPPLY



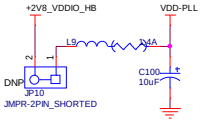
VDD-PHY 1.8V SUPPLY



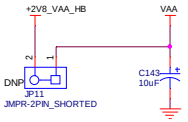
VDD-SLVS 1.8V SUPPLY



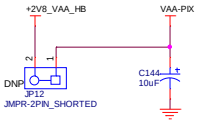
VDD-PLL 2.8V SUPPLY



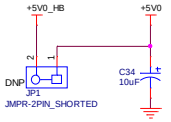
VAA 2.8V SUPPLY



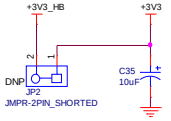
VAA-PIX 2.8V SUPPLY



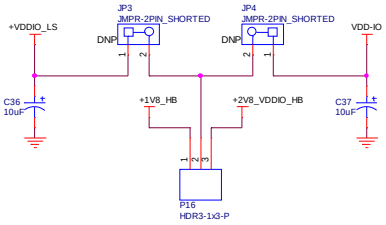
PERIPHERAL 5V SUPPLY



PERIPHERAL 3.3V SUPPLY

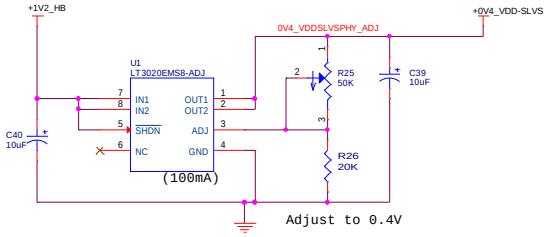


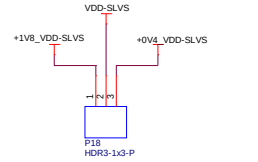
VDDIO & VDDIO_LS 1.8V/2.8V SUPPLY



P16 Default Setting: 1-2 Short (1V8 operation)

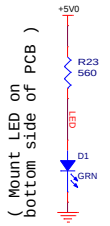
VDD_SLVS 0.4V SUPPLY

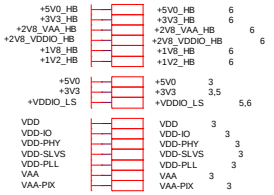




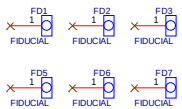
P18 Default Setting: 1-2 Short (SLVS mode)

5V LED



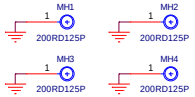


Fiducials



Ground Testpoints

Mounting Holes



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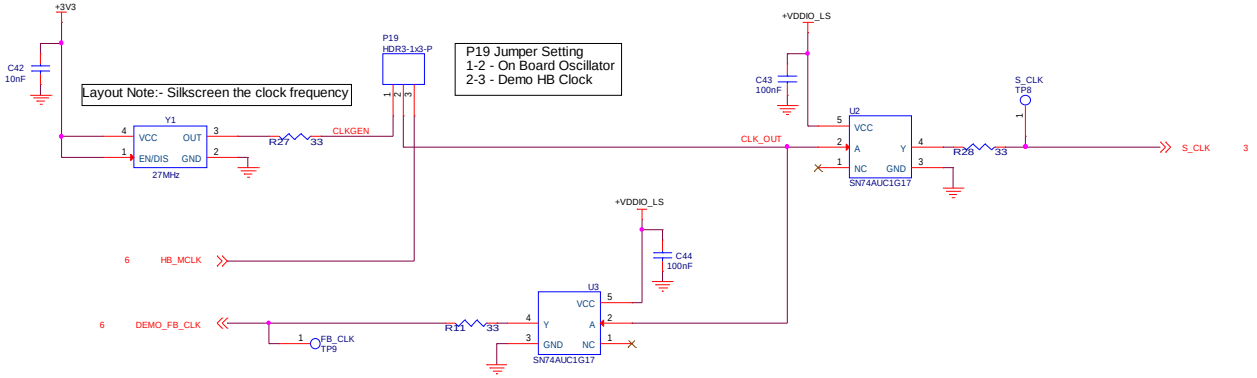
Clock and Reset

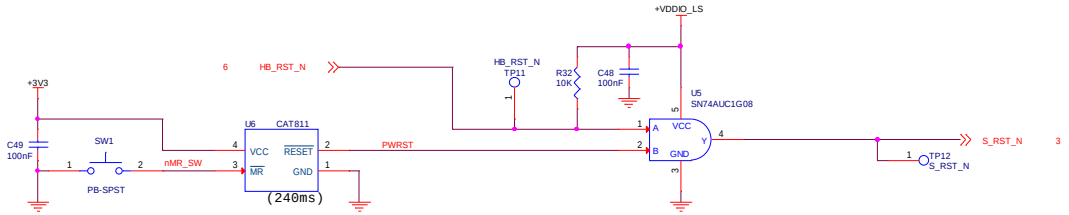
+5V0 +3V3 +VDDIO_LS

+5V0 3,4
+3V3 3,4
+VDDIO_LS 4,6

CLOCK CIRCUIT



RESET CIRCUIT



Script executed

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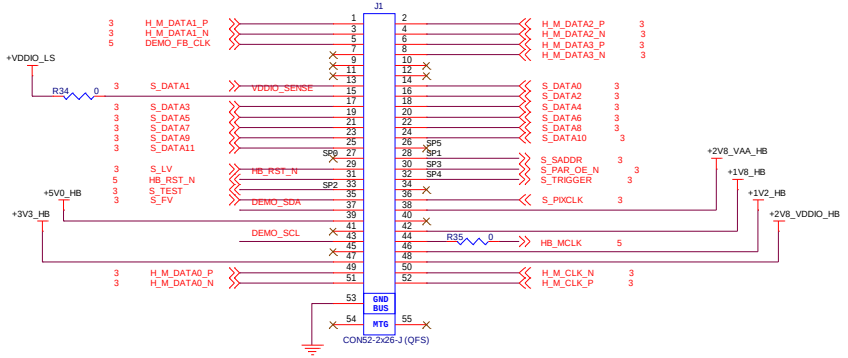
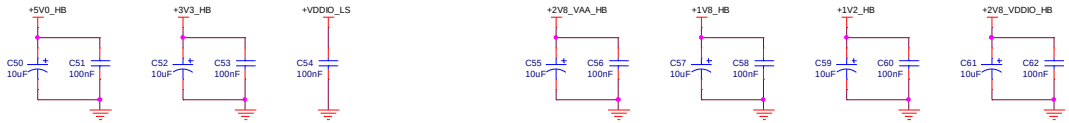
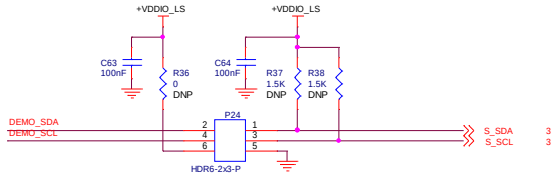
External Interface

DEMO3 BASEBOARD I/F



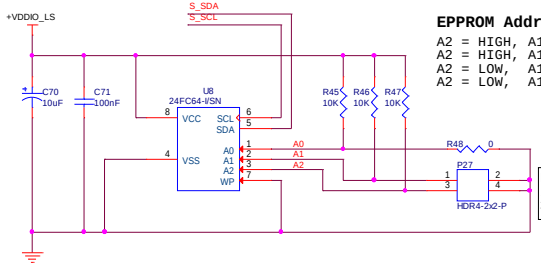


I2C DEBUG



P24 Default Setting:
1-2 : Short : Demo and Sensor SDA connected
3-4 : Short : Demo and Sensor SCL connected

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
```

P27 Default Jumper Setting:
1-2 : Short => Ground/Low
3-4 : Open => Pull-up/High

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Title	EXTERNAL INTERFACE	
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