


**Table of Contents**

1	Title
2	Block Diagram
3	K20D MCU
4	OpenSDA INTERFACE
5	I/O Headers and Power Supply

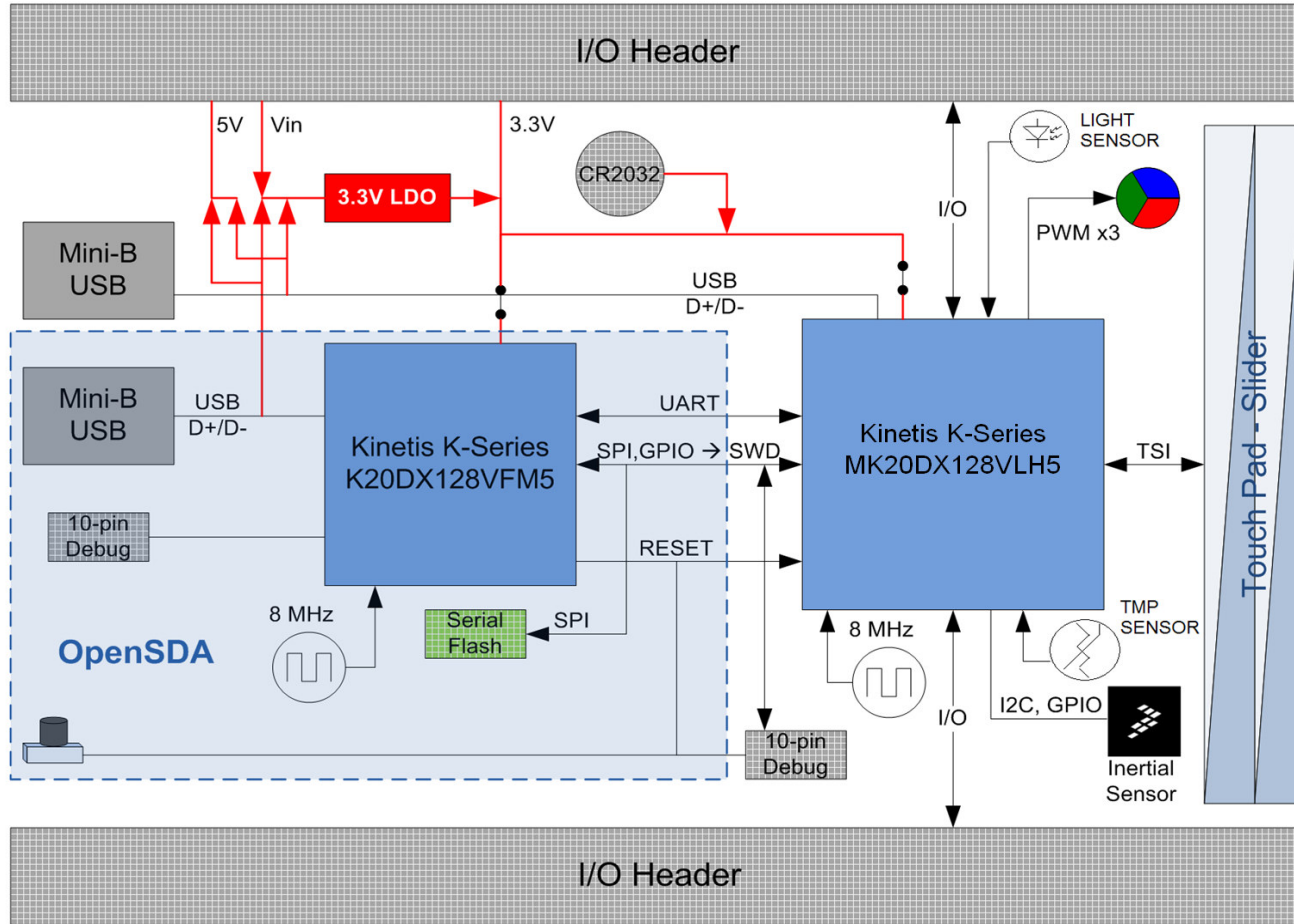
**Revisions**


Rev	Description	Date	Approved
X1	Initial Draft	08/20/12	L. PUEBLA
A	Prototype Release	08/28/12	L. PUEBLA
B	Production Release	11/21/12	L. PUEBLA
C	Respin Release	01/21/13	L. PUEBLA
C1	D9 pop fix	01/29/13	L. PUEBLA

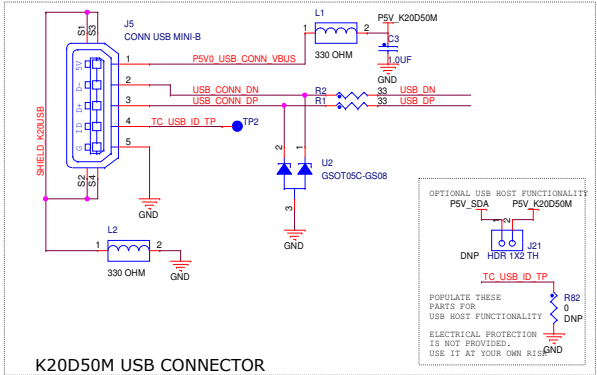
# FRDM-K20D50M

		<b>Automotive, Industrial &amp; Multi-Market Solutions Group</b> 6501 William Cannon Drive West Austin, TX 78735-6598	
ICAP Classification: FCP: FLUQ: PUB: X			
Designer: RAFAEL DEL REY		Drawing Title: <b>X-FRDM-K20D50M</b>	
Drawn by: RAFAEL DEL REY		Page Title: <b>TITLE PAGE</b>	
Approved: LUIS PUEBLA	Size C	Document Number SCH-27720   PDF: SPF-27720	Rev C1
Date: Tuesday, January 29, 2013 Sheet 1 of 5			

- Unless Otherwise Specified:
  - All resistors are in ohms, 5%, 1/8 Watt
  - All capacitors are in uF, 20%, 50V
  - All voltages are DC
  - All polarized capacitors are aluminum electrolytic
- Interrupted lines coded with the same letter or letter combinations are electrically connected.
- Device type number is for reference only. The number varies with the manufacturer.
- Special signal usage:
  - \_B Denotes - Active-Low Signal
  - <> or [] Denotes - Vectored Signals
- Interpret diagram in accordance with American National Standards Institute specifications, current revision, with the exception of logic block symbology.

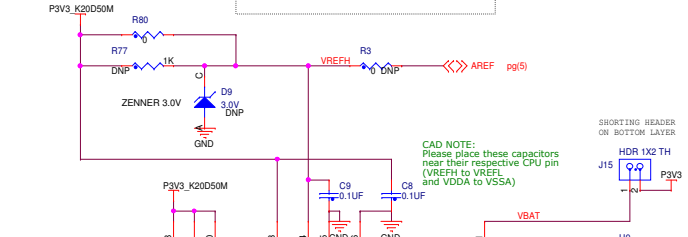
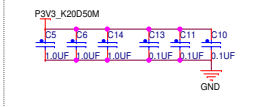


 Hashed blocks indicate optional items that will not be populated by default



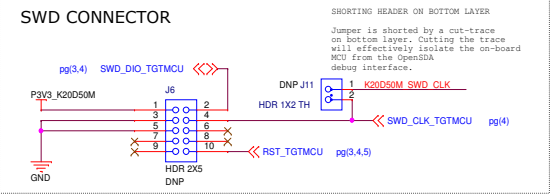
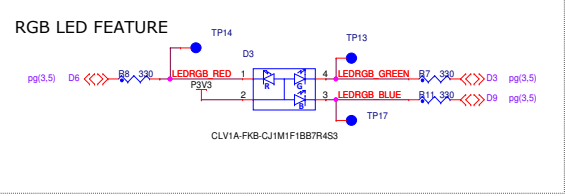
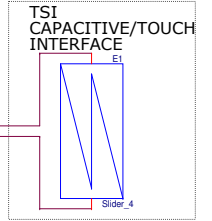
K20D50M USB CONNECTOR

K20D50M Decoupling Caps



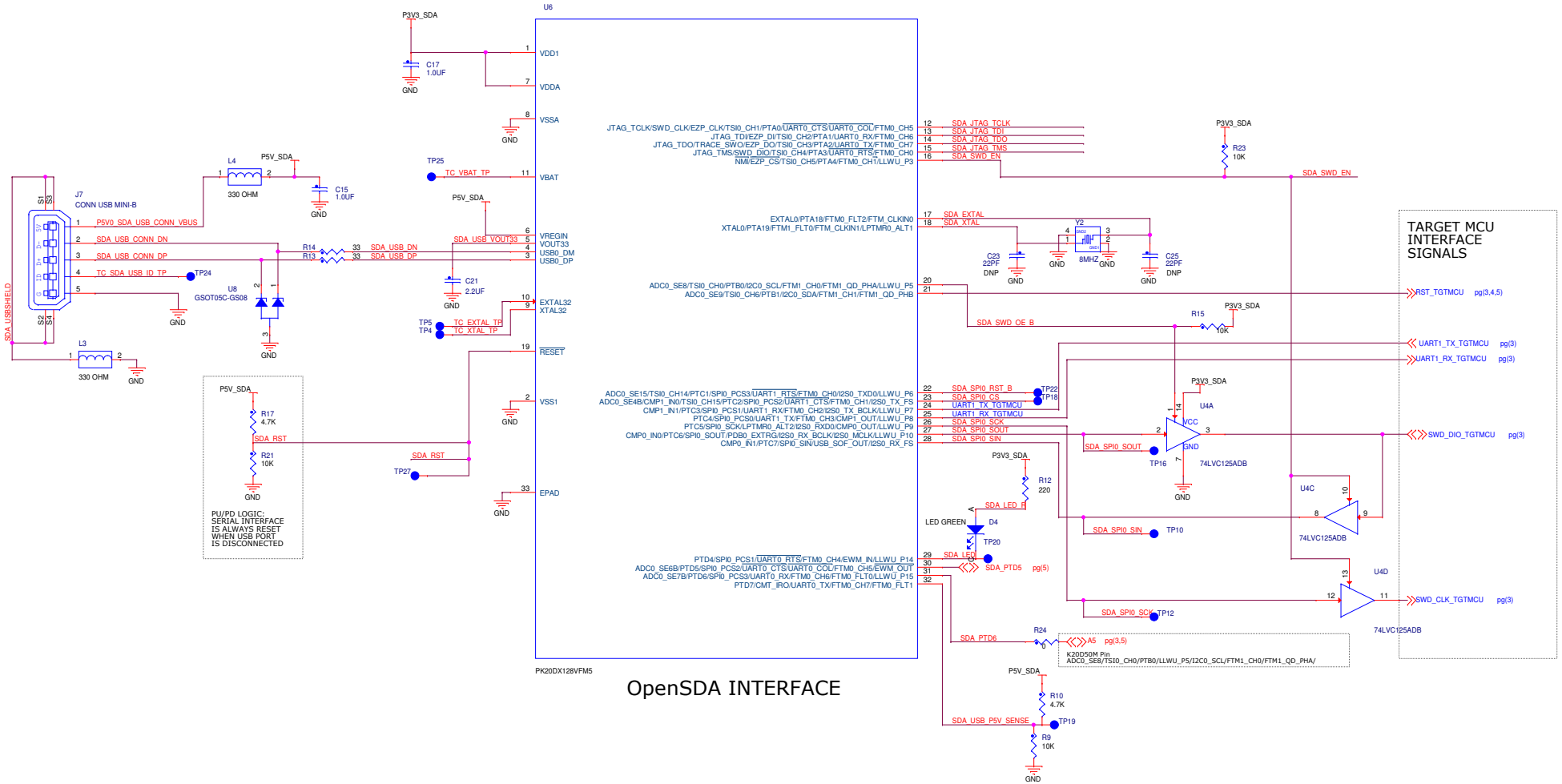
CAD NOTE: Please place these capacitors near their respective CPU pin (VREFH to VREF and VDDA to VSSA)

OPTIONAL USB HOST FUNCTIONALITY PARTS FOR USB HOST FUNCTIONALITY. ELECTRICAL PROTECTION IS NOT PROVIDED. USE IT AT YOUR OWN RISK.

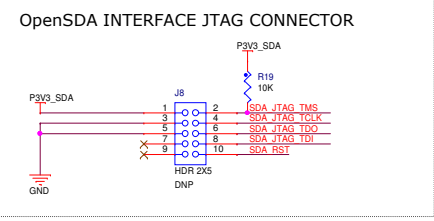
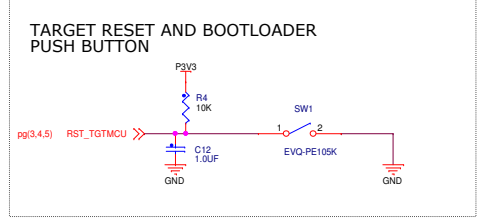
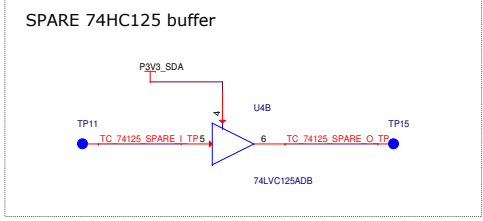


freescale

ICAP Classification: FCP: FIUC: PUB: X  
Drawing Title: X-FRDM-K20D50M  
Page Title: K20D MCU  
Size C Document Number SCH-27720 | PDF: SPF-27720 Rev C1  
Date: Tuesday, January 29, 2013 Sheet 3 of 5



### OpenSDA INTERFACE



**freescale**

ICAP Classification: FCP: FIUC: PUBI: X  
 Drawing Title: **X-FRDM-K20D50M**  
 Page Title: **OpenSDA interface**

Size C	Document Number SCH-27720   PDF: SPF-27720	Rev C1
Date: Tuesday, January 29, 2013 Sheet 4 of 5		

