

# S32K118EVb-Q064

## CUSTOMER EVB

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Revisions				
Rev	Description	Designer	Date	Approved
X1				TBD
A	Prototype	J.Sanchez		
B	Final Release	J.Sanchez		

### CAUTION:

This schematic is provided for reference purposes only. As such, NXP does not make any warranty, implied or otherwise, as to the suitability of circuit design or component selection (type or value) used in these schematics for hardware design using the NXP S32K family of Microprocessors. Customers using any part of these schematics as a basis for hardware design, do so at their own risk and Freescale does not assume any liability for such a hardware design.

3 Different test points used in design:

TPVx - Through Hole Pad small

TPHx - Through Hole Pad Large (for standard 0.1" header). Also used on IO Matrix (IOMx)

TPX - Surface Mount Wire Loop

TPV?

TPH5

TP?


### Notes:

- All components and board processes are to be ROHS compliant
- All connectors and headers are denoted Jx/Px and are 2.54mm pitch unless otherwise stated
- All jumpers are denoted Jx. Jumpers are 2mm pitch
- Jumper default positions are shown in the schematics. For 3 way jumpers, default is always posn 1-2.
- 2 Pin jumpers generally have the "source" on pin 1.
- All switches are denoted SWx
- All test points (SMT wire loop style) are denoted TPx
- Test point Vias (just through hole pads) are denoted TPVx

Signals (ports) have not been routed via busses as this makes it harder to determine where each signal goes.

User notes are given throughout the schematics.

Specific PCB LAYOUT notes are detailed in *ITALICS*

		<b>Automotive Product Group</b> 6501 William Cannon Drive West Austin, TX 78735-8598	
This document contains information proprietary to NXP and shall not be used for engineering design, procurement or manufacture in whole or in part without the express written permission of NXP Semiconductors.			
Designer: Oswaldo Romero		Drawing Title: <b>XS32K118EVb-Q064</b>	
Drawn by: Jesus Sanchez		Page Title: <b>TITLE PAGE</b>	
Approved: APPROVER		Size B	Document Number SCH-29945 PDF: SPF-29945
Date: Tuesday, February 20, 2018		Sheet 1	of 6

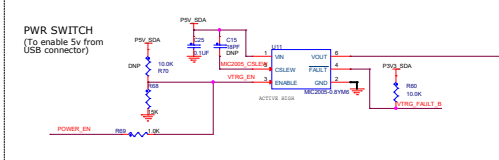
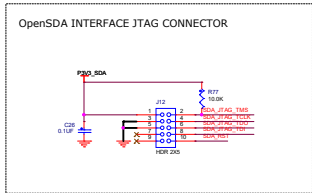
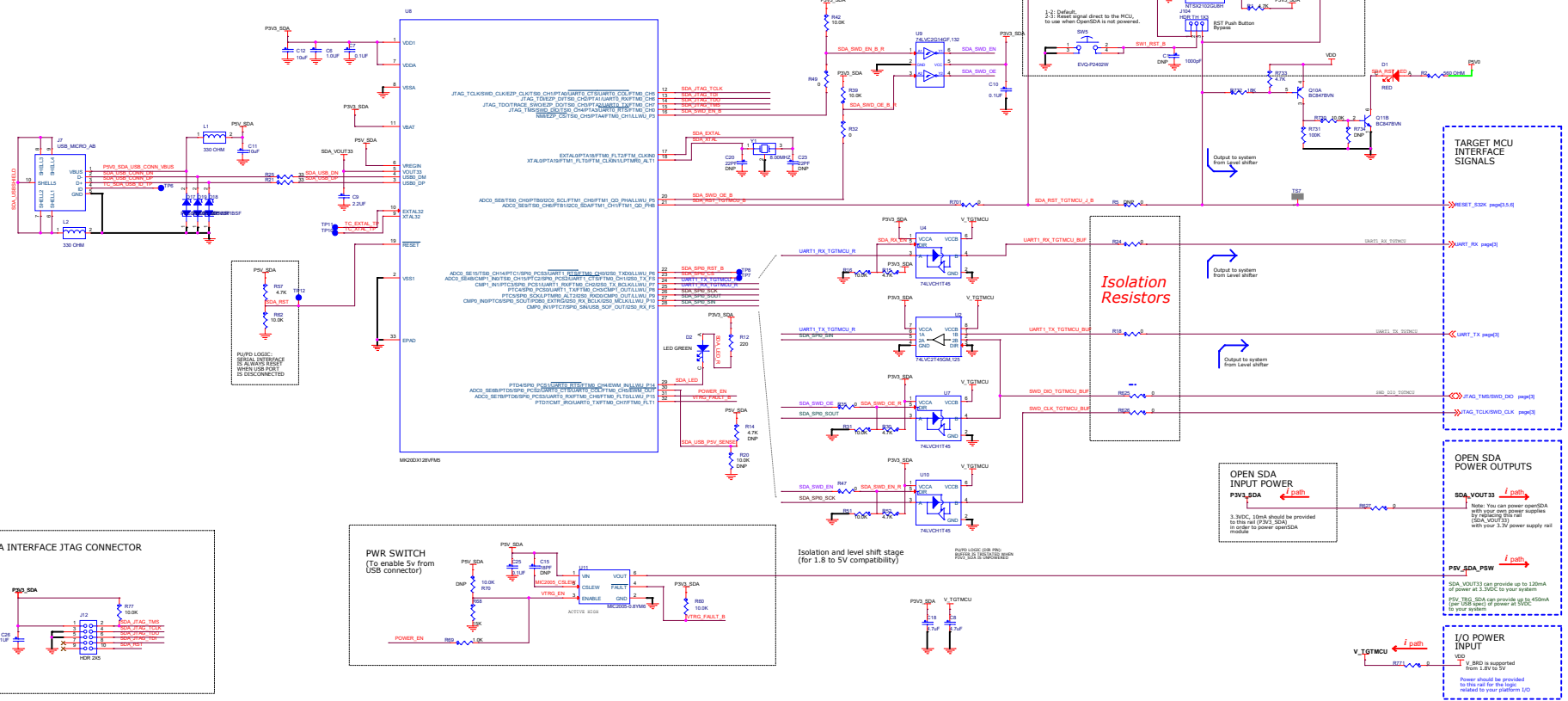
1. Unless Otherwise Specified:  
All resistors are in ohms, 1% and 5 %  
All capacitors are in uF, 10% , 20 % and 5%  
All voltages are DC  
All polarized capacitors are aluminum electrolytic
2. Interrupted lines coded with the same letter or letter combinations are electrically connected.
3. Device type number is for reference only. The number varies with the manufacturer.
4. Special signal usage:  
\_B Denotes - Active-Low Signal  
<> or [] Denotes - Vectored Signals
5. Interpret diagram in accordance with American National Standards Institute specifications, current revision, with the exception of logic block symbology.



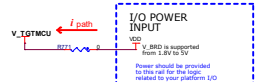
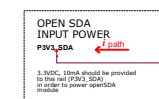
ICAP Classification: CP: ___ IUO: ___ PUBI: _X_			
Drawing Title: XS32K118EVB-Q064			
Page Title: Notes and Block Diagram			
Size B	Document Number SCH-29945 PDF: SPF-29945		Rev B
Date: Tuesday, February 20, 2018	Sheet 2	of 6	



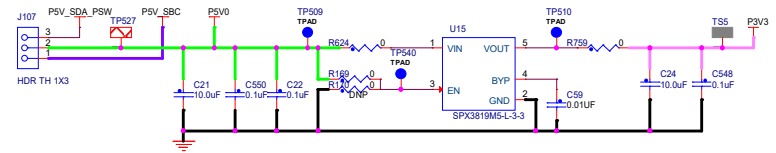
# OpenSDA Interface



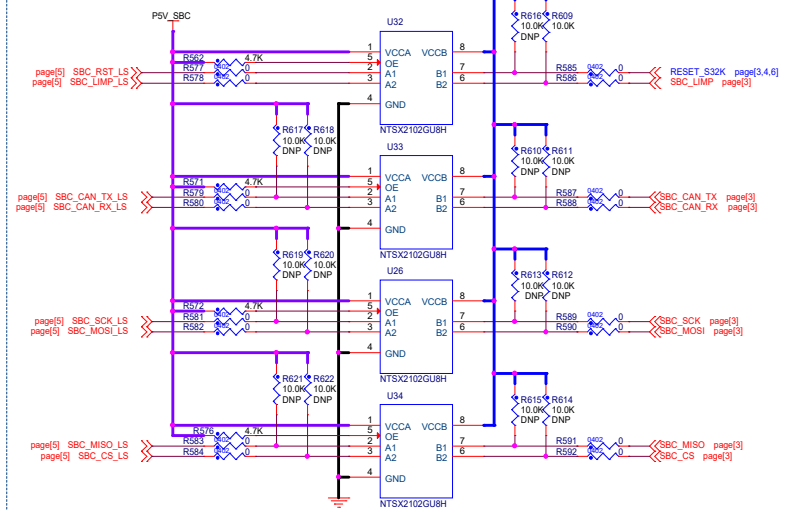
Isolation and level shift stage  
(for 1.8 to 5V compatibility)



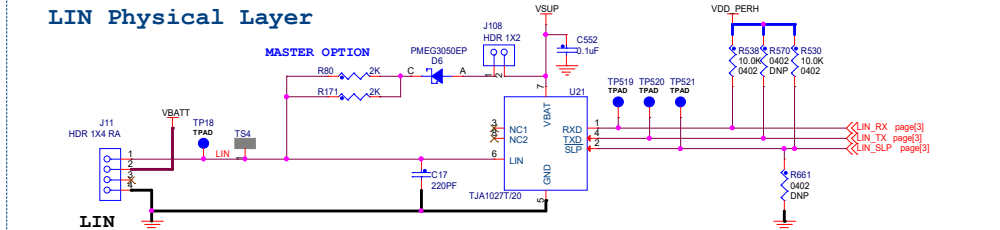
### 3.3V LDO Power Supply



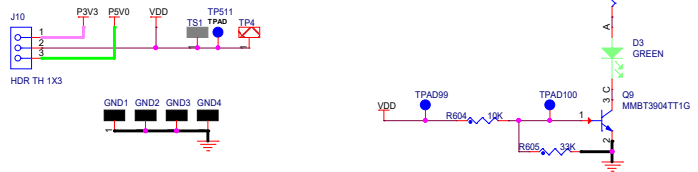
### Dual supply translating transceiver; open drain; auto direction sensing



### LIN Physical Layer



### MCU Power Supply - Jumper Selection



### MCU Current Measurement

