

NXP Automotive S12ZVMBEVB

C U S T O M E R E V B

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Revisions			
Rev	Description	Designer	Date
AX1	Initial Draft A070 Release	J.Sanchez	29/12/15
A	Prototype Release	J.Sanchez	12/01/16
B		J.Sanchez	14/04/16

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*

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 S12Z family of Microprocessors. Customers using any part of these schematics as a basis for hardware design, do so at their own risk and NXP does not assume any liability for such a hardware design.

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

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

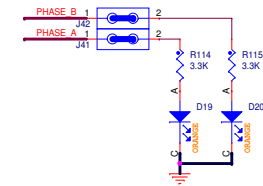
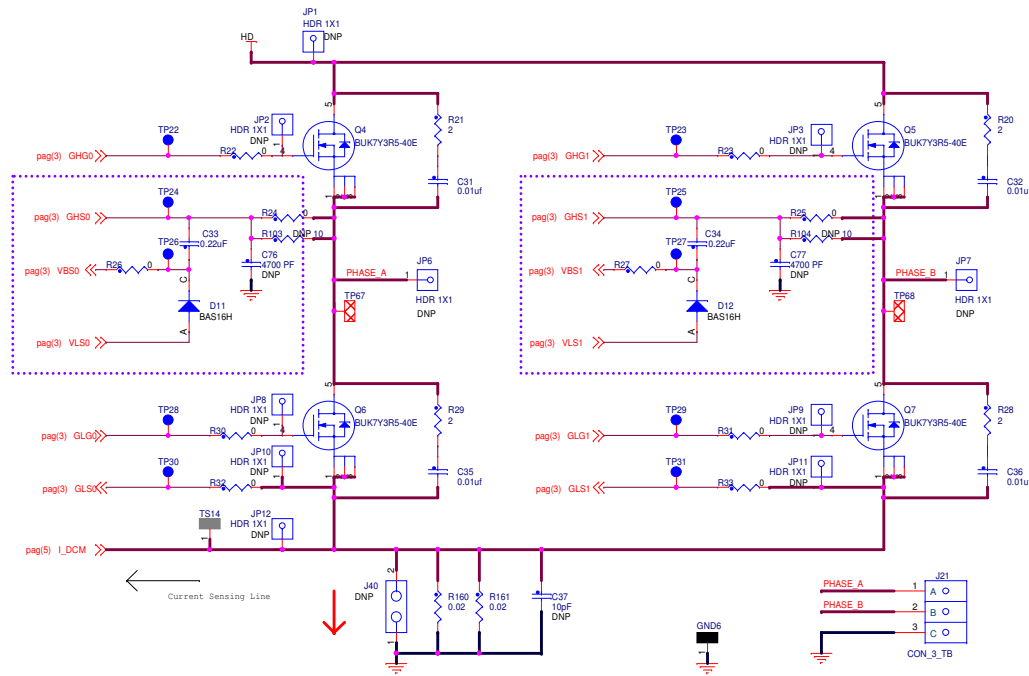
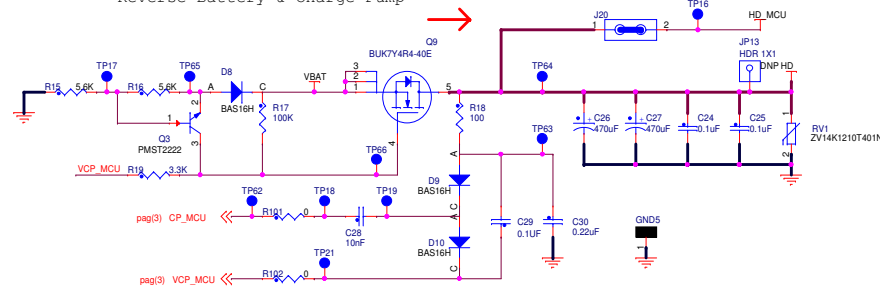
TPV?

TPH5

TP?

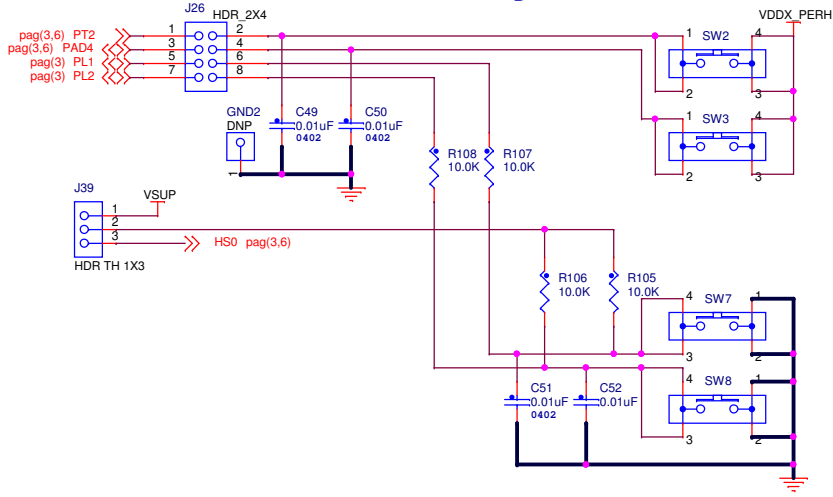
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ICAP Classification:		FCP:	FIUO: X PUBL:
Designer: Jesus Sanchez	Drawing Title: S12ZVMBEVB		
Drawn by: Jesus Sanchez	Page Title: TITLE		
Approved: C Vazquez / T Kuehnle	Size B	Document Number SCH-29131: SPF-29131	Rev B
Date: Thursday, April 14, 2016		Sheet 1	of 7

Reverse Battery & Charge Pump

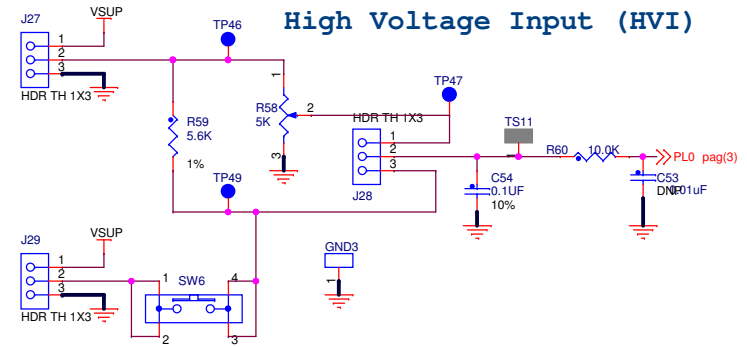


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Designer: Jesus Sanchez	Drawing Title: S12ZVMBEVB		
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Date:	Thursday, April 14, 2016	Sheet	4 of 7

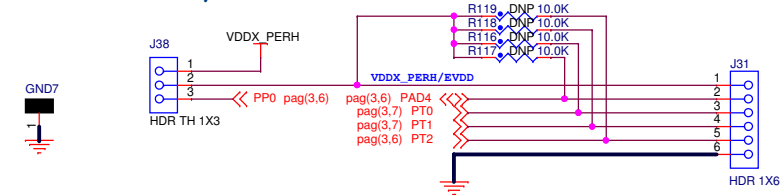
User Switches (Active High)



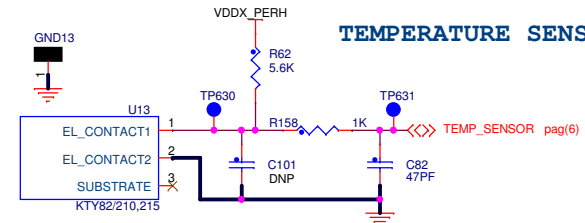
High Voltage Input (HVI)



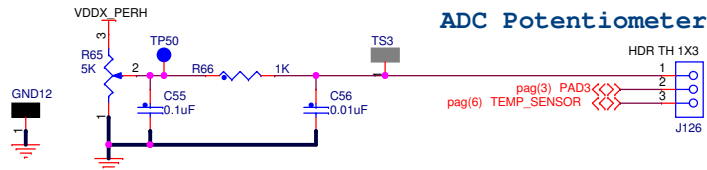
Hall Sensor/ SPI



TEMPERATURE SENSOR



ADC Potentiometer



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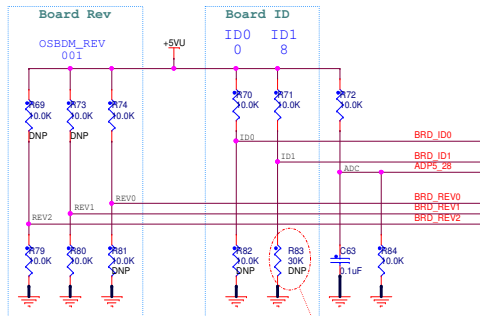
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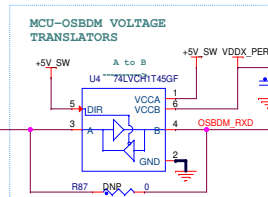
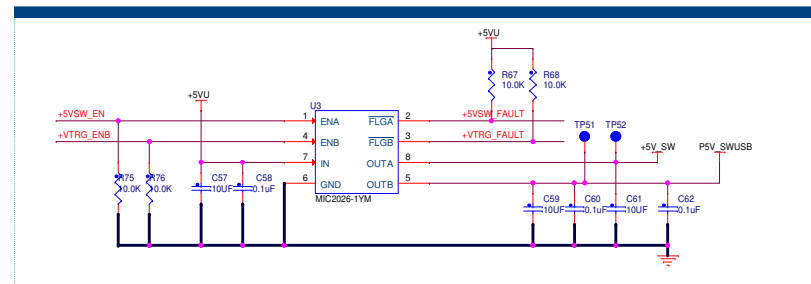
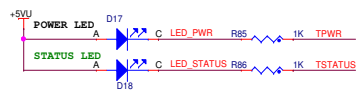
Designer: Jesus Sanchez	Drawing Title: S12ZVMBEV8	ICAP Classification:	FCP:	FIUO: X	PUBI:
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USB – Power Section

#	Pull-Up	Pull-Down
0	10K	0
1	10K	1.3K
2	10K	3.3K
3	10K	5.6K
4	10K	10K
5	10K	18K
6	10K	30K
7	10K	62K
8	10K	(NC)



Don't populate R65.
Provision for future use.



 TX / RX [R456 and R457]
POKA-YOKE: Place both jumpers with the same orientation and provide same airgap between their terminals in a square fashion.

