Design: <Project Name>		
Sheet	**Title**	**Content**
1	Overview	this Sheet
2	Open Issues	open issues and Revision List
5	GTL2010	Schematic
6	MECHANICAL	Holes, Passer Marks, etc.
7	PCB Placement	PCB Placement Overview
8	LAYER_STACK	shows the Layer Stack of the board

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PROJECT TITLE:			
Levelshifter			
BOARD NO	SHEET TITLE	SIZE:	REV:
<CODE>	OVERVIEW	A3	A
DRAWN: Lars Träger	DATED: <Drawn Date>	RELEASED: <Released By>	DATED: <Release Date>
CHECKED: <Checked By>	DATED: <Checked Date>	LAST SAVED 19.11.2007	SHEET: 1 OF 6

Open Issues (unsorted):	

History:	
Revision	
A	initial Revision

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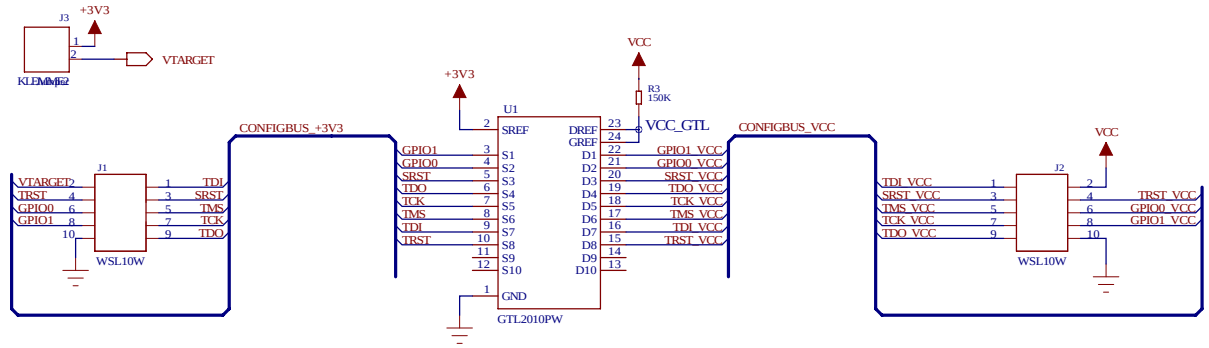
PROJECT TITLE:			
Levelshifter			
BOARD NO	SHEET TITLE	SIZE:	REV:
<CODE>	OPEN_ISSUES	A3	A

DRAWN:	DATED:	RELEASED:	DATED:
Lars Träger	<Drawn Date>	<Released By>	<Release Date>
CHECKED:	DATED:	LAST SAVED	
<Checked By>	<Checked Date>	19.11.2007	SHEET: 2 OF 6

Calculation for propagation delay:
The low to high transition time in the system is determined by the total RC time constant and the relevant pick off points + internal delay rise time(<5.5ns)
The high to low transition is less than 5.5 ns
The total propagation time is: 5.5ns + 5.5ns+3k3*50pF=164ns+11ns
The pick off point is 1/2
so the propagation delay is = 164ns/2+11ns=93ns=10.7MHZ

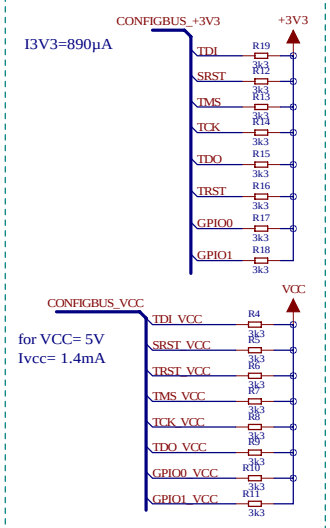
LEVELSHIFTER



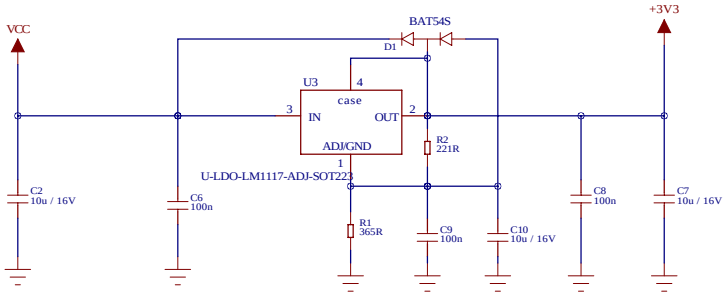
for more informations about Gtl2010 please look at Application Note AN10145 from Philips Semiconductors

PULL-UP Resistors for 3V3 and VCC Bus

$$\text{Resistor value } (\Omega) = \frac{\text{Pull-up voltage } (V) - 0.35\ V}{\text{Pull-up current}}$$

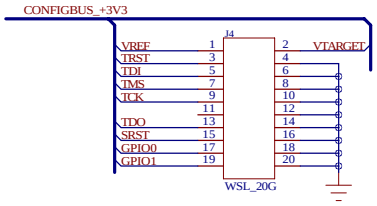


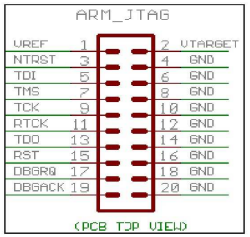
POWER_SUPPLY



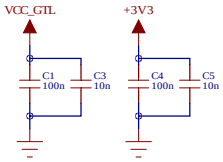
V_out = (1+R1/R2) * 1.25 V => R1 = 365 Ohms for V_out = 3.31V

ARM_JTAG





Decoupling for GTL2010



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PROJECT TITLE:			
Levelshifter			
BOARD NO: <CODE>	SHEET TITLE: GTL2010	SIZE: A3	REV: A
DRAWN: Lars Träger	DATED: <Drawn Date>	RELEASED: <Released By>	DATED: <Release Date>
CHECKED: <Checked By>	DATED: <Checked Date>	LAST SAVED: 19.11.2007	SHEET: 3 OF 6

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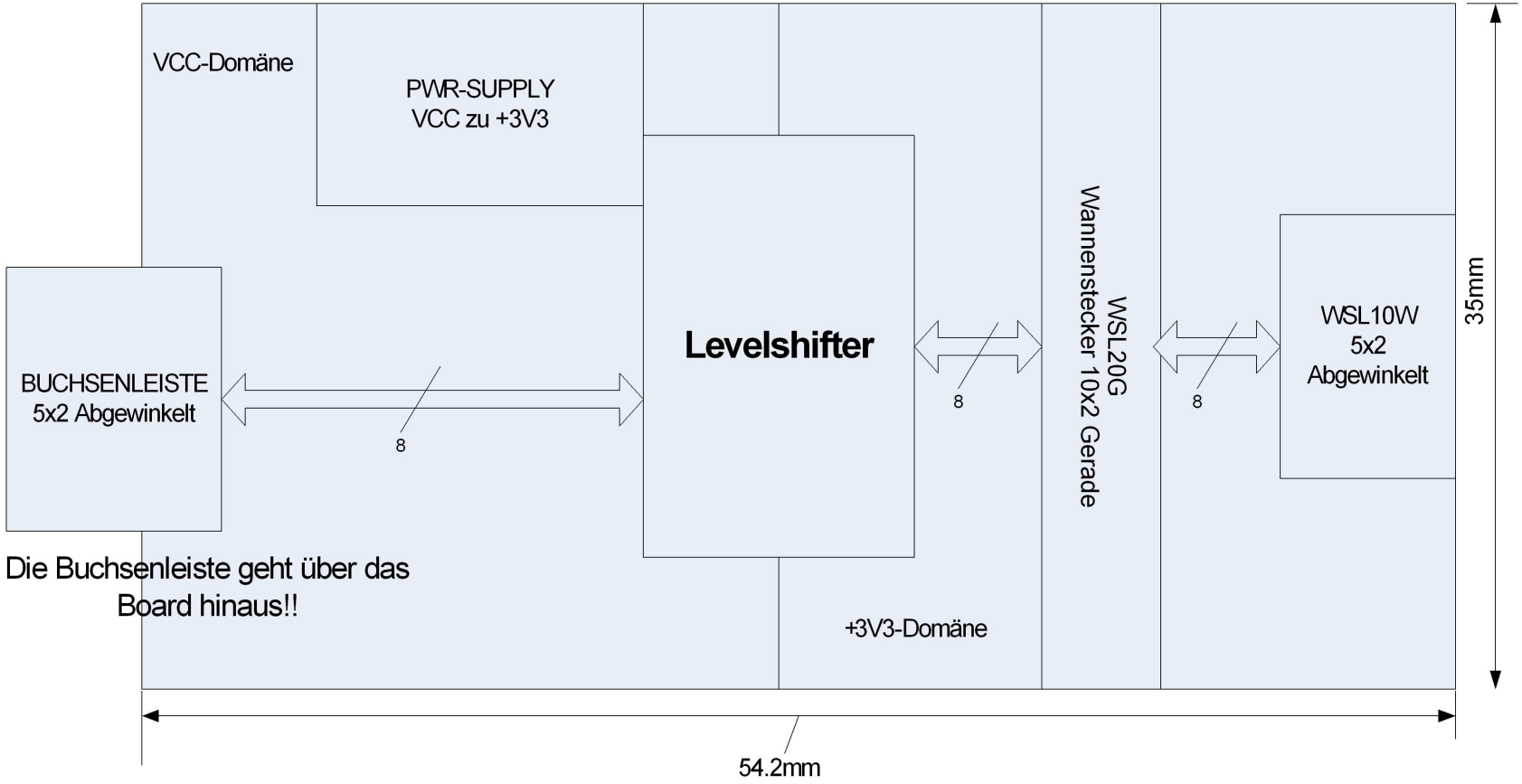
PROJECT TITLE: Levelshifter			
BOARD NO: <CODE>	SHEET TITLE: MECHANICAL	SIZE: A3	REV: A
DRAWN: Lars Träger	DATED: <Drawn Date>	RELEASED: <Released By>	DATED: <Release Date>
CHECKED: <Checked By>	DATED: <Checked Date>	LAST SAVED: 19.11.2007	SHEET: 4 OF 6



In-Circuit GmbH Königsbrücker Str. 73 D-01099 Dresden Germany					
PROJECT TITLE: Levelshifter					
BOARD NO: <CODE>	SHEET TITLE: PCB_PLACEMENT			SIZE: A3	REV: A
DRAWN: Lars Träger	DATED: <Drawn Date>	RELEASED: <Released By>	DATED: <Release Date>		
CHECKED: <Checked By>	DATED: <Checked Date>	LAST SAVED: 19.11.2007	SHEET: 5 OF 6		

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PROJECT TITLE:
Levelshifter

BOARD NO	SHEET TITLE	SIZE:	REV:
<CODE>	PCB_LAYER_STACK	A3	A

DRAWN:	DATED:	RELEASED:	DATED:
Lars Träger	<Drawn Date>	<Released By>	<Release Date>

CHECKED:	DATED:	LAST SAVED	
<Checked By>	<Checked Date>	19.11.2007	SHEET: 6 OF 6