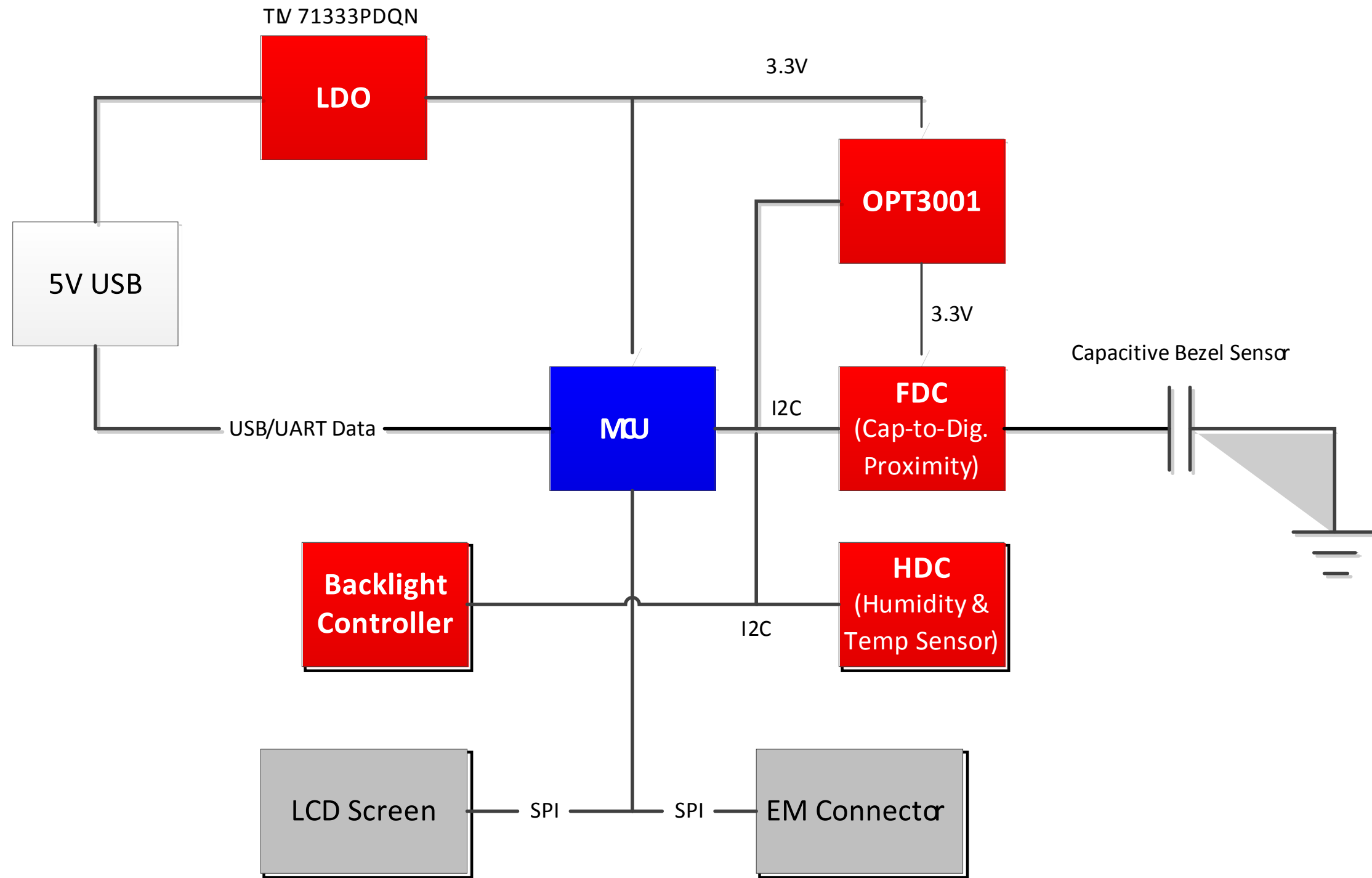


TIDA-00373
Backlight & Smart Lighting Control with
Ambient Light sensing

Revision History	
Revision	Notes



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Orderable: N/A	Designed for: Public Release	Mod. Date: 12/18/2014	 TEXAS INSTRUMENTS http://www.ti.com
TID #: 00373	Project Title: TIDA-00373 Backlight & Smart Lighting Control with	Sheet Title: Cover Sheet	
Number: ISE4024	Rev: E2	Assembly Variant: 001	Sheet: 1 of 5
SVN Rev: Version control disabled	File: ISE4024_CoverSheet.SchDoc	Size: B	Contact: http://www.ti.com/support
Drawn By: Jarrod Krebs	Engineer: Jarrod Krebs		© Texas Instruments 2014

H1 NY PMS 440 0025 PH
 H2 NY PMS 440 0025 PH
 H3 NY PMS 440 0025 PH
 H4 NY PMS 440 0025 PH

H11 NY PMS 256 0025 PH
 H12 NY PMS 256 0025 PH

H5 1902E
 H6 1902E
 H7 1902E
 H8 1902E

H13 NY HN 256
 H14 NY HN 256

~~DNP~~ FID1
~~DNP~~ FID2
~~DNP~~ FID3
~~DNP~~ FID4
~~DNP~~ FID5
~~DNP~~ FID6

PCB Number: ISE4024
 PCB Rev: E2

PCB LOGO
 Texas Instruments
 PCB LOGO
 Pb-Free Symbol
 PCB LOGO
 FCC disclaimer

BL1
 MECH
 EA LED55X46-W

Label Table	
Variant	Label Text
001	S/N xxxx

~~ZZ1~~ DNP
 These assemblies are ESD sensitive, ESD precautions shall be observed.

~~ZZ2~~ DNP
 These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.

~~ZZ3~~ DNP
 These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.

~~ZZ4~~ DNP
 Place SH-J1 on J1 and SH-J2 on J3 (pins 1 -2) and SH-J3 to SH-J4 on J7. SH-J3 (pins 1-2)

~~ZZ5~~ DNP
 Component BL1 must be assembled to U3 Before U3 is attached to the board.

~~ZZ6~~ DNP
 Remove protective coverings from BL1 and U3

~~ZZ7~~ DNP
 Slide pins of U3 into holes of BL1. BL1 must lie flat on the back of U3

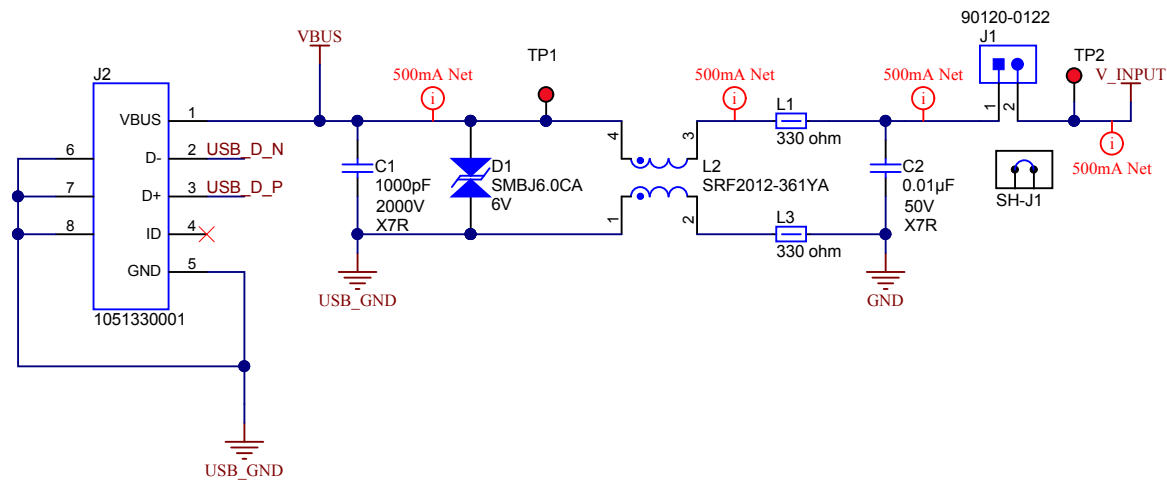
~~ZZ8~~ DNP
 Solder U3 - BL1 assembly to the board.

~~ZZ9~~ DNP
 Solder Pins 1, 2, 3, 18, 19, and 20 of U3 to BL1 from the top to insure electrical continuity.

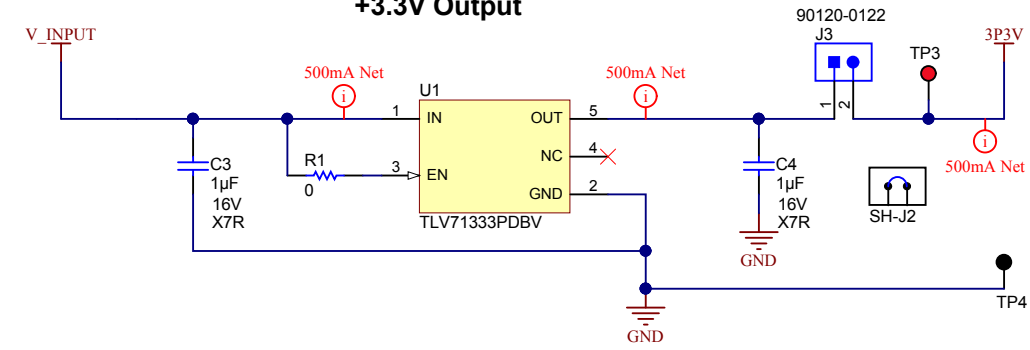
Orderable: N/A	Designed for: Public Release	Mod. Date: 2/5/2015
TID #: 00373	Project Title: TIDA-00373 Backlight & Smart Lighting Control with	
Number: ISE4024	Rev: E2	Sheet Title: Hardware
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 2 of 5
Drawn By: Jarrod Krebs	File: ISE4024_TID_Hardware.SchDoc	Size: B
Engineer: Jarrod Krebs	Contact: http://www.ti.com/support	

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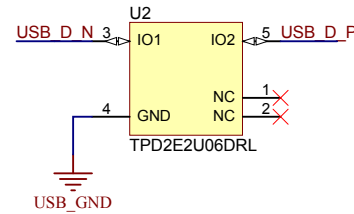
USB Connection



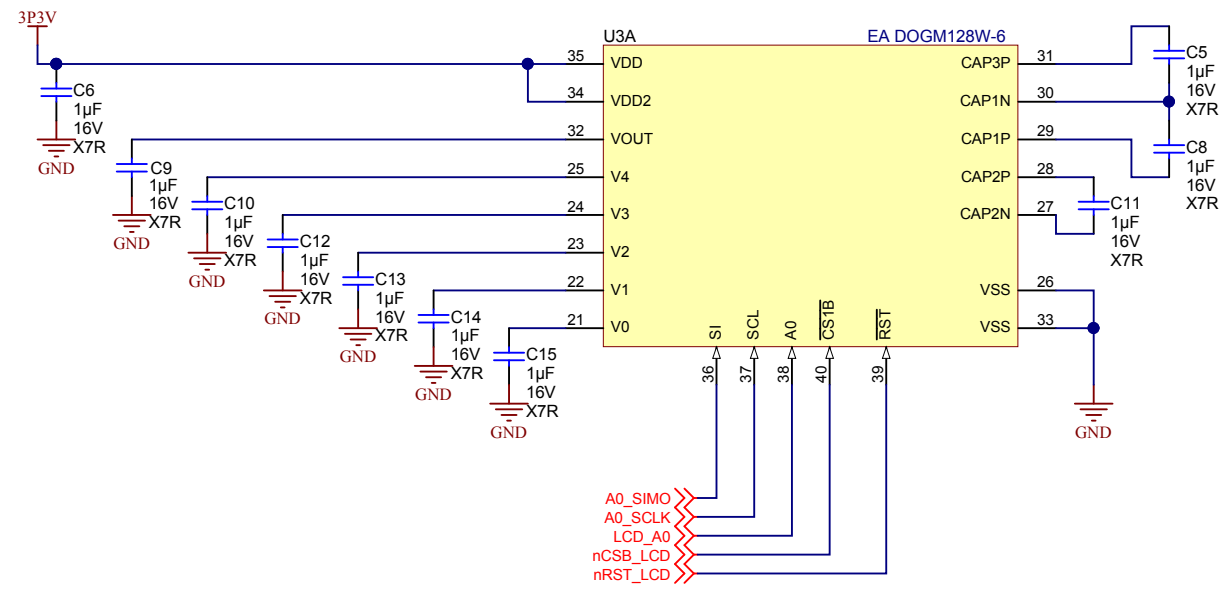
+3.3V Output



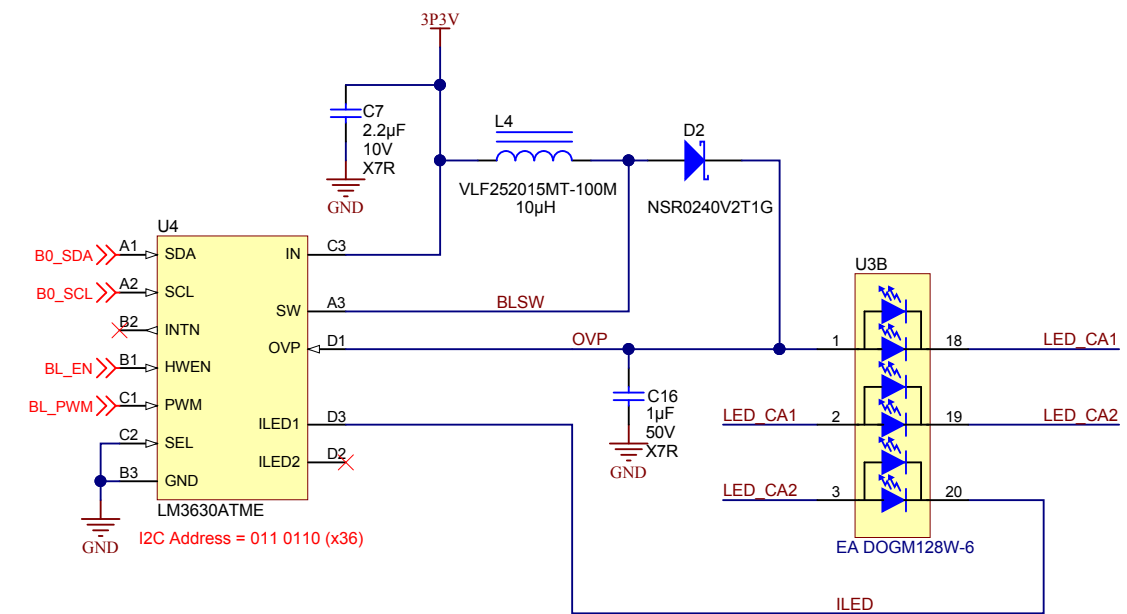
USB ESD Protection



LCD Display



LCD Backlight & Driver



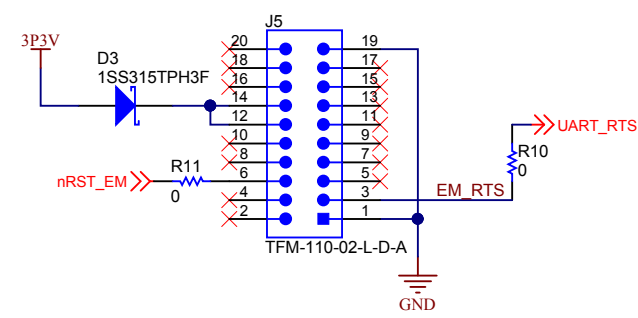
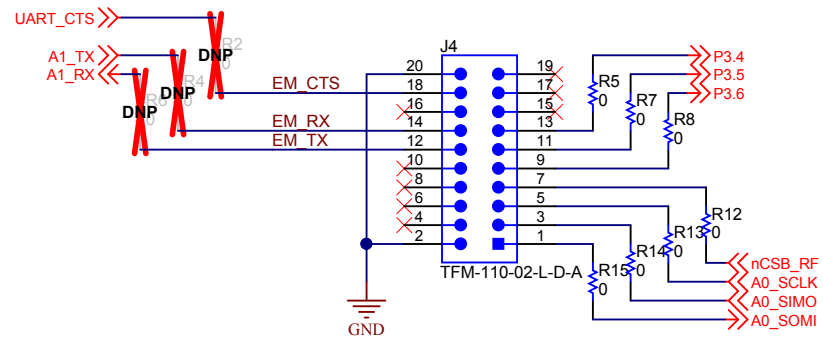
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TID #: 00373	Project Title: TIDA-00373 Backlight & Smart Lighting Control with	
Number: ISE4024	Rev: E2	Sheet Title: Power and Display
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 3 of 5
Drawn By: Jarrod Krebs	File: ISE4024_Sheet1.SchDoc	Size: B
Engineer: Jarrod Krebs	Contact: http://www.ti.com/support	

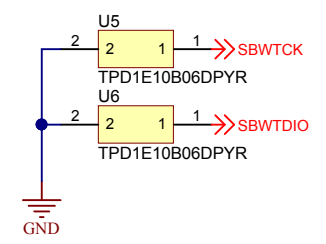
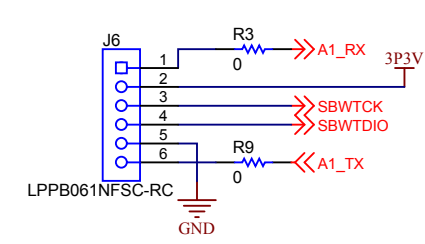


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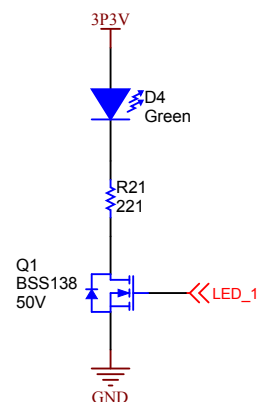
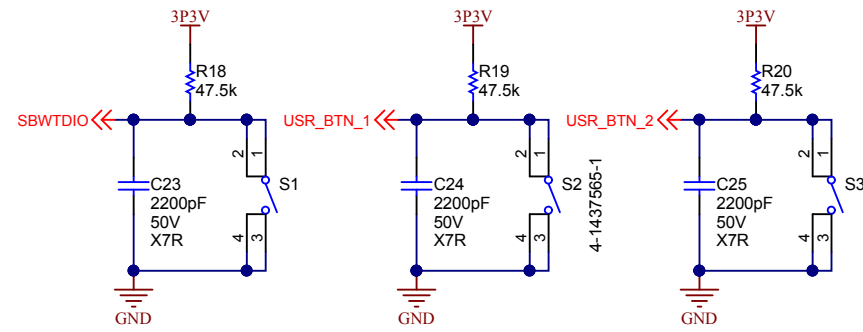
EM Connector for Wireless Connectivity



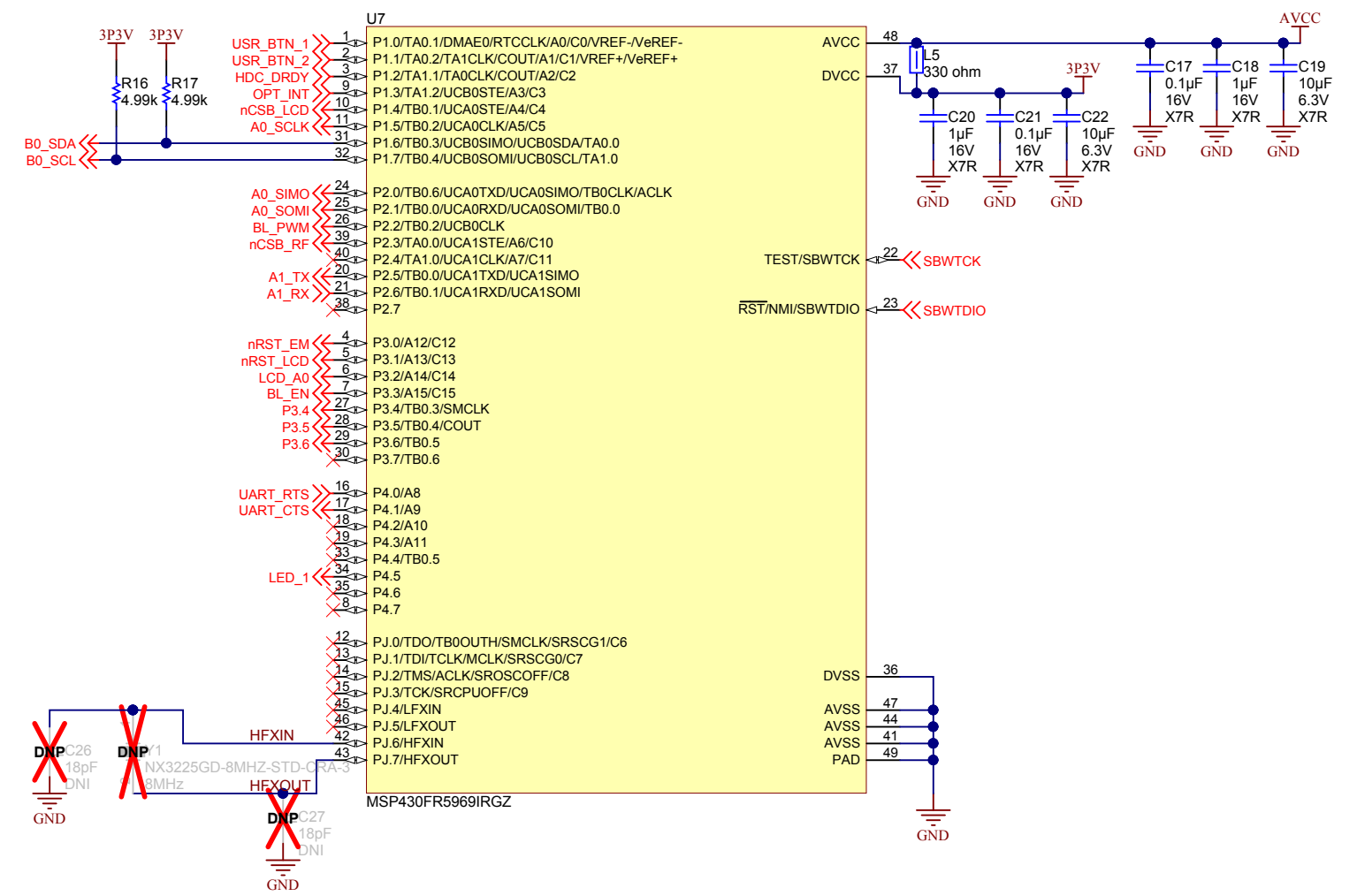
JTAG Interface & ESD Protection



Reset & User Buttons



MSP430 Microcontroller



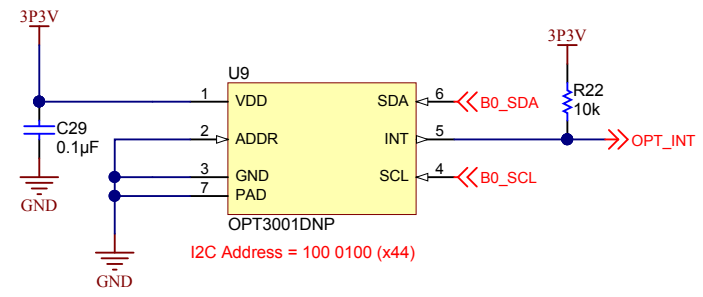
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TID #: 00373	Project Title: TIDA-00373 Backlight & Smart Lighting Control with		
Number: ISE4024	Rev: E2	Sheet Title: MCU and EM Connector	
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 4 of 5	
Drawn By: Jarrod Krebs	File: ISE4024_Sheet2_SchDoc	Size: B	
Engineer: Jarrod Krebs	Contact: http://www.ti.com/support		

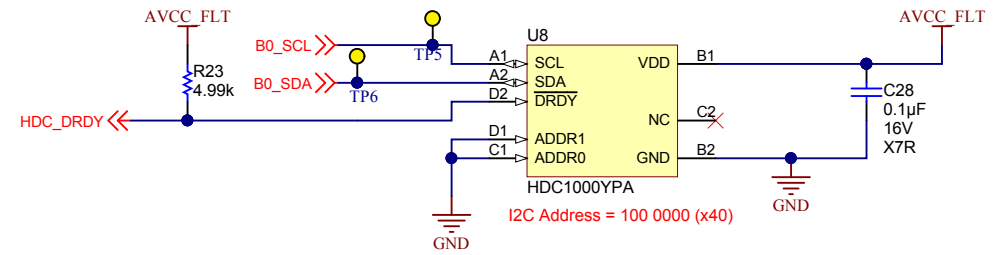
A

A

Ambient Light Sensor



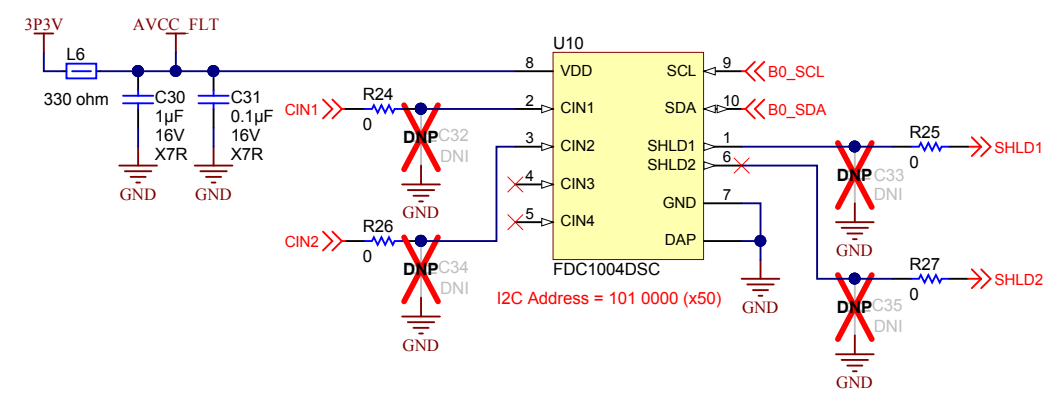
Temperature / Humidity Sensor



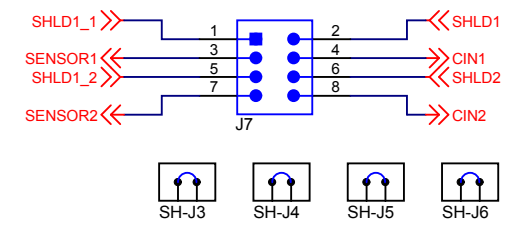
B

B

Capacitance-to-Digital Converter



CIN & SHLD Selection Headers



C

C

D

D

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TID #: 00373	Project Title: TIDA-00373 Backlight & Smart Lighting Control with		
Number: ISE4024	Rev: E2	Sheet Title: Sensors	
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 5 of 5	
Drawn By: Jarrod Krebs	File: ISE4024_Sheet3.SchDoc	Size: B	
Engineer: Jarrod Krebs	Contact: http://www.ti.com/support		

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