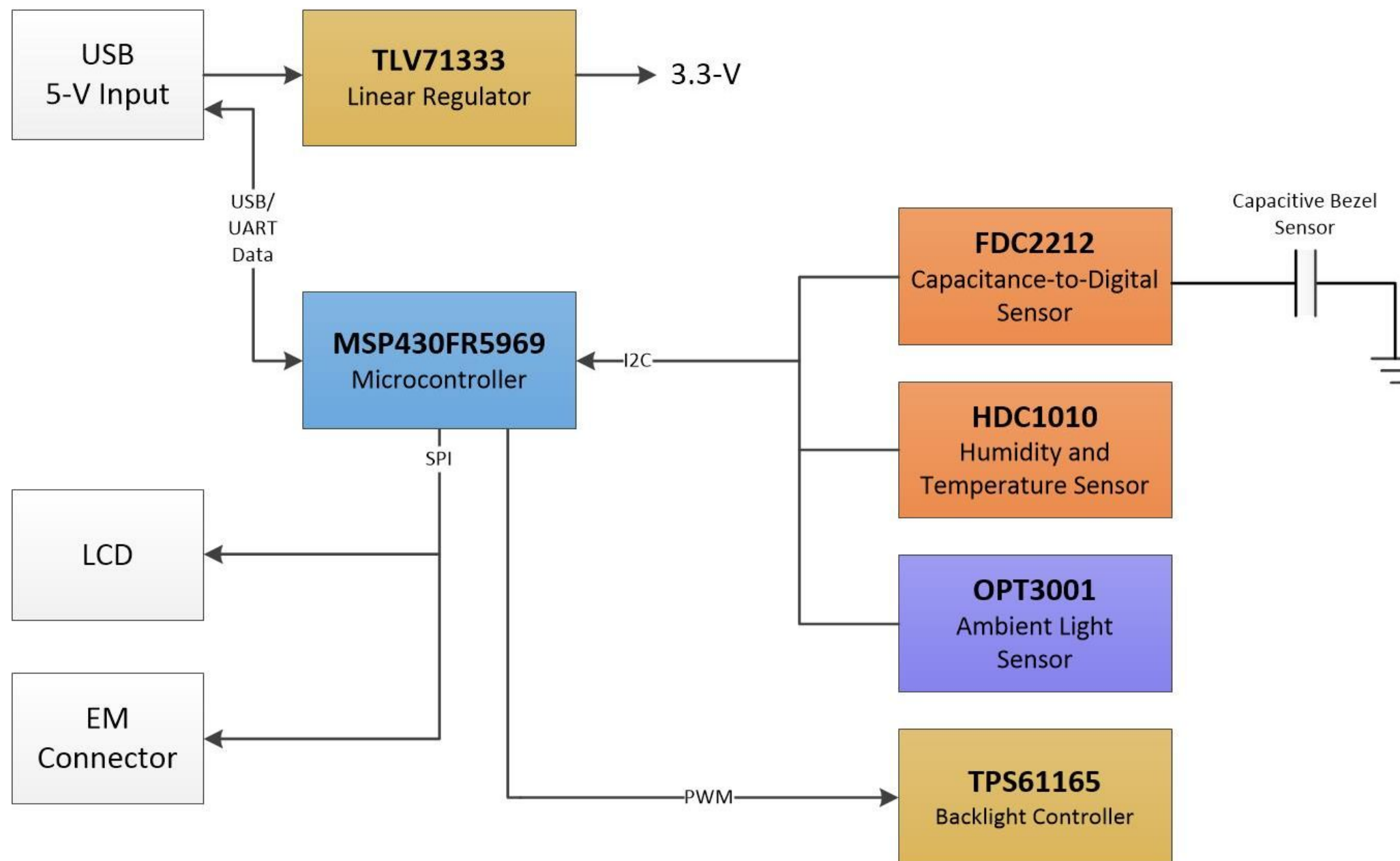


TIDA-01364
 Smart Backlight and Lighting Control by
 Ambient Light and Noise-Immune Proximity
 Sensor Reference Design

Revision History	
Revision	Notes
E1	Initial Board Release



Orderable: N/A	Designed for: Public Release	Mod. Date: 10/17/2016
TID #: TIDA-01364	Project Title: TIDA-01364 Backlight Control and Proximity Sensin	
Number: TIDA-01364	Rev: A	Sheet Title: Cover Sheet
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 1 of 5
Drawn By: Jarrod Krebs	File: TIDA-01364 ALS_CoverSheet.SchDoc	Size: B
Engineer: Jarrod Krebs	Contact: http://www.ti.com/support	

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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: TIDA-01364
 PCB Rev: A

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

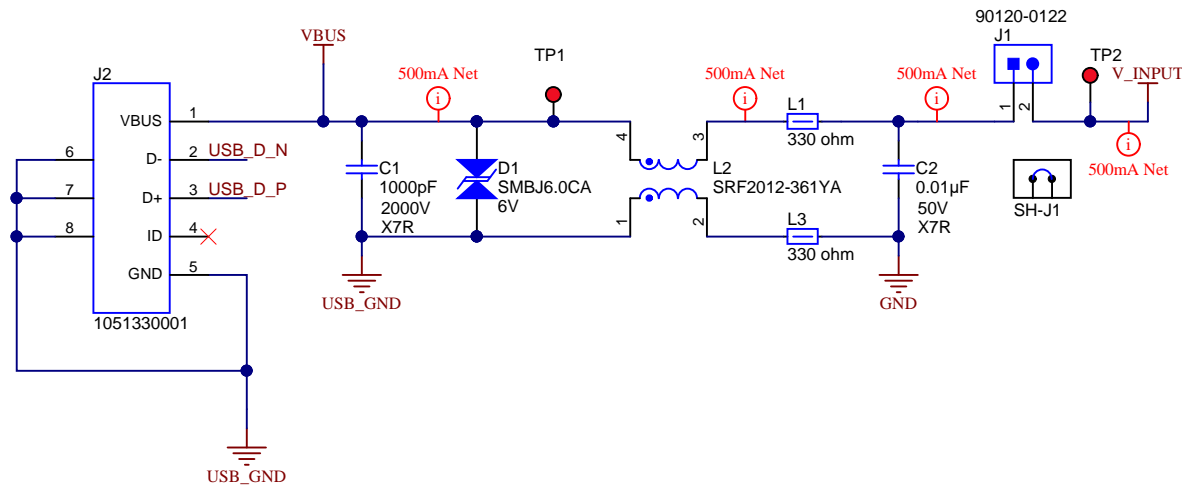
ZZ8 DNP
 Solder U3 - BL1 assembly to the board.

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

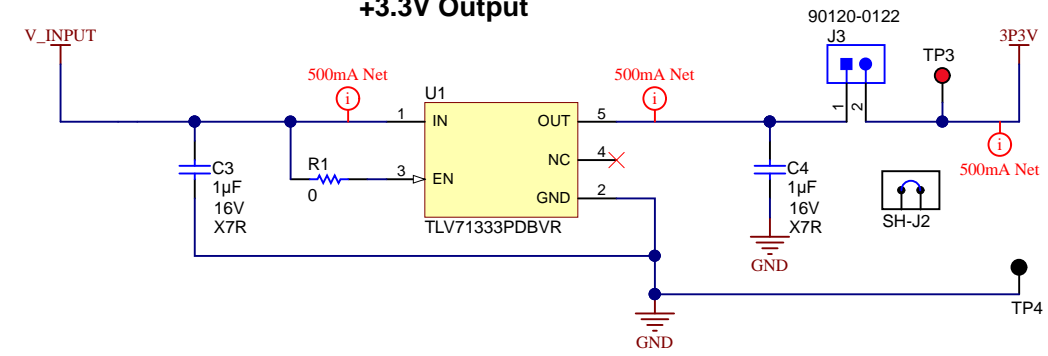
Orderable: N/A	Designed for: Public Release	Mod. Date: 10/17/2016
TID #: TIDA-01364	Project Title: TIDA-01364 Backlight Control and Proximity Sensin	
Number: TIDA-01364	Rev: A	Sheet Title: Hardware
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 2 of 5
Drawn By: Jarrod Krebs	File: TIDA-01364 ALS_TID_Hardware.SchDoc	Size: B
Engineer: Jarrod Krebs	Contact: http://www.ti.com/support	

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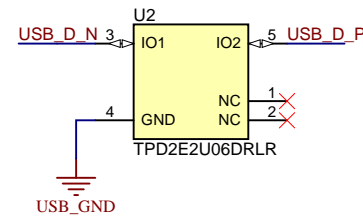
USB Connection



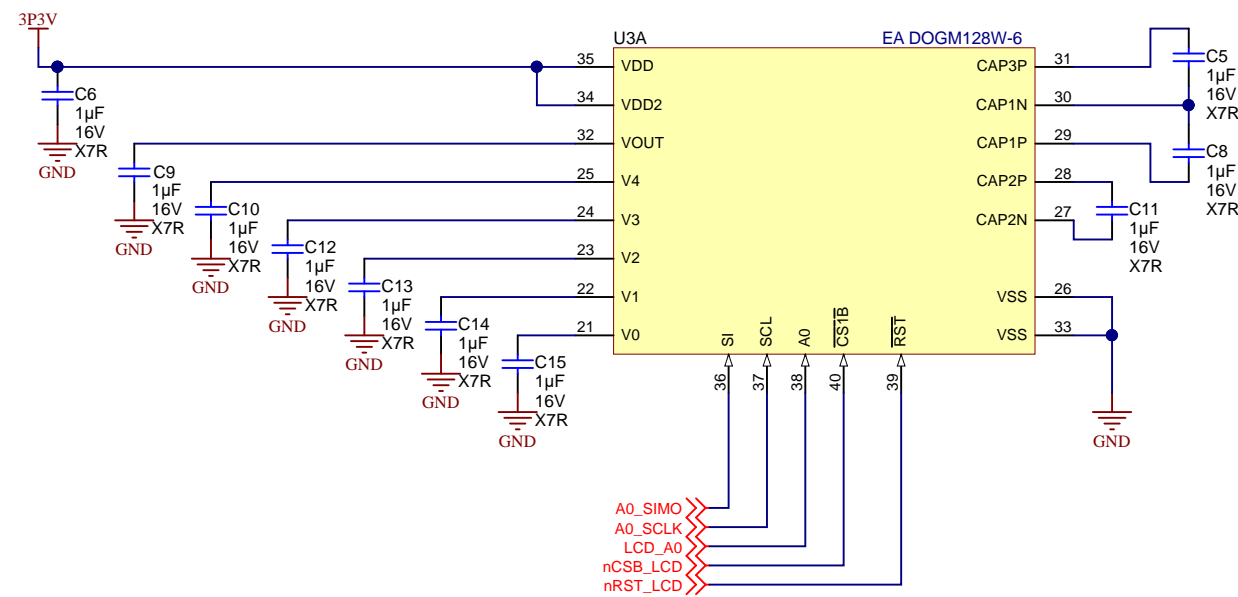
+3.3V Output



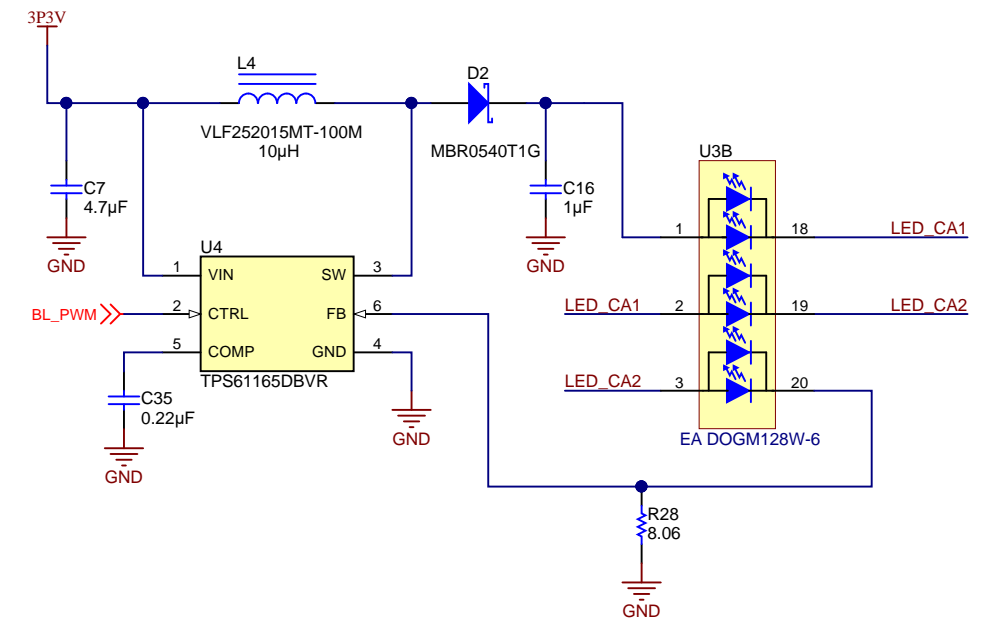
USB ESD Protection



LCD Display



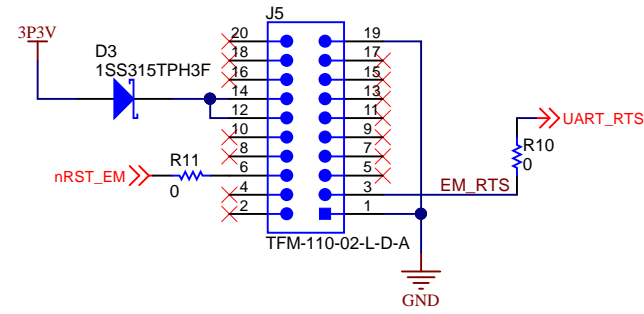
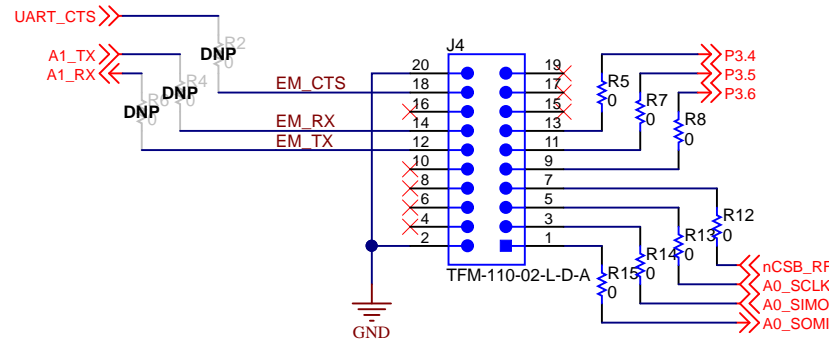
LCD Backlight & Driver



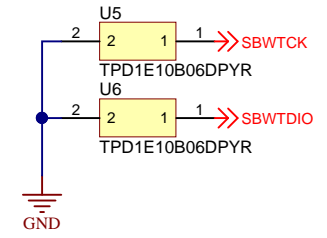
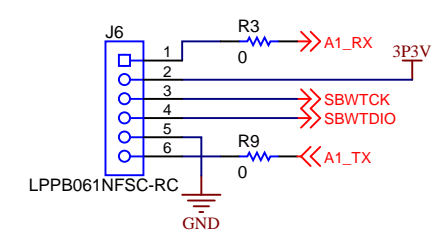
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TID #: TIDA-01364	Project Title: TIDA-01364 Backlight Control and Proximity Sensing	
Number: TIDA-01364	Rev: A	Sheet: 3 of 5
SVN Rev: Version control disabled	Assembly Variant: 001	Size: B
Drawn By: Jarrod Krebs	File: TIDA-01364 ALS_Sheet1.SchDoc	
Engineer: Jarrod Krebs	Contact: http://www.ti.com/support	

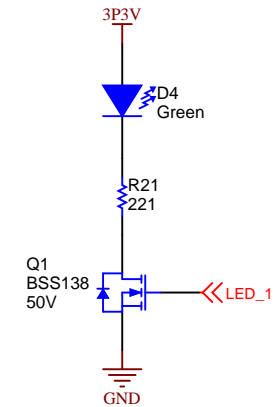
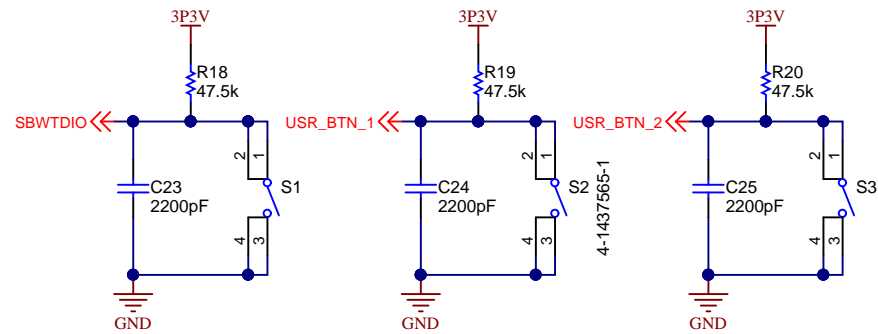
EM Connector for Wireless Connectivity



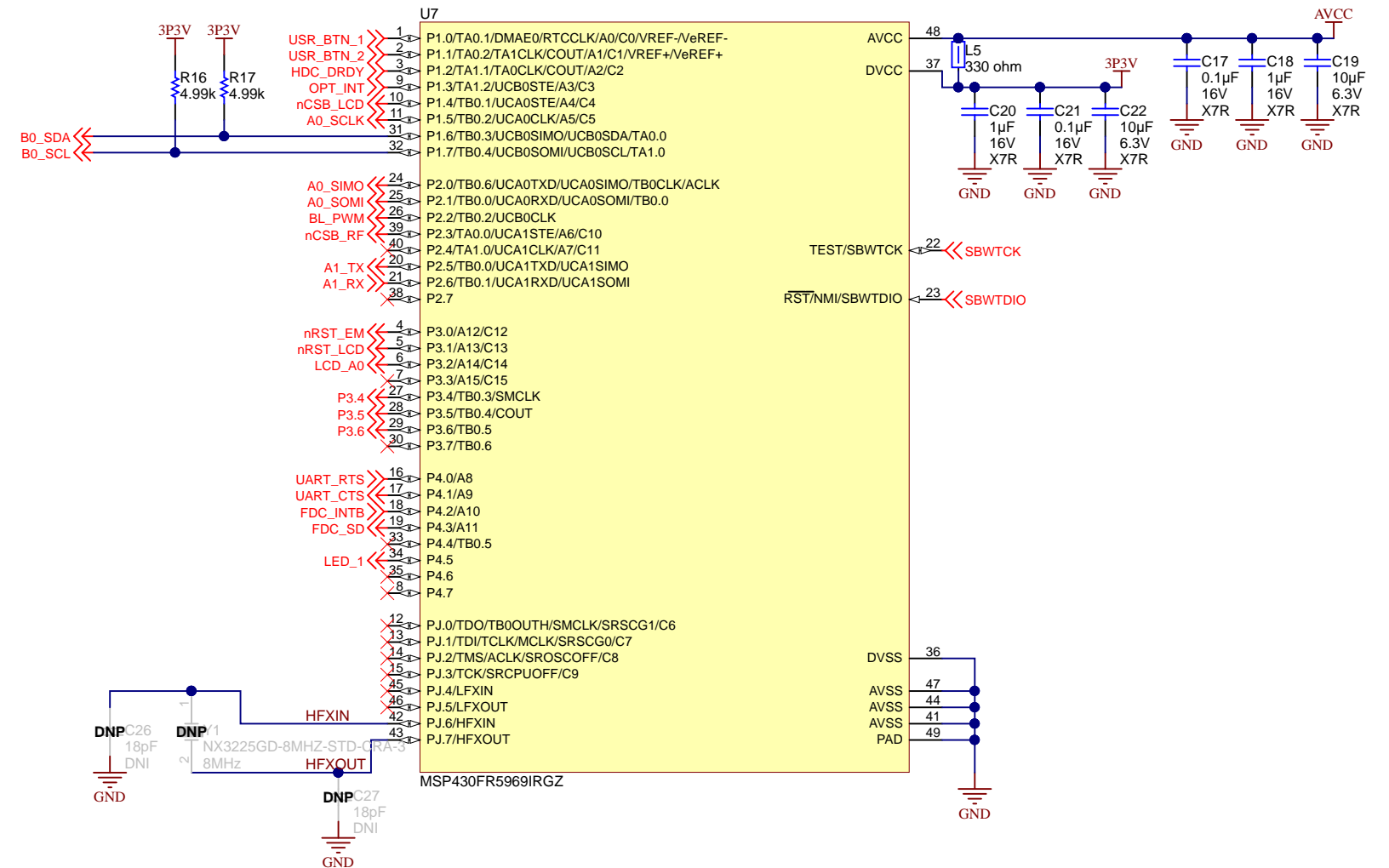
JTAG Interface & ESD Protection



Reset & User Buttons



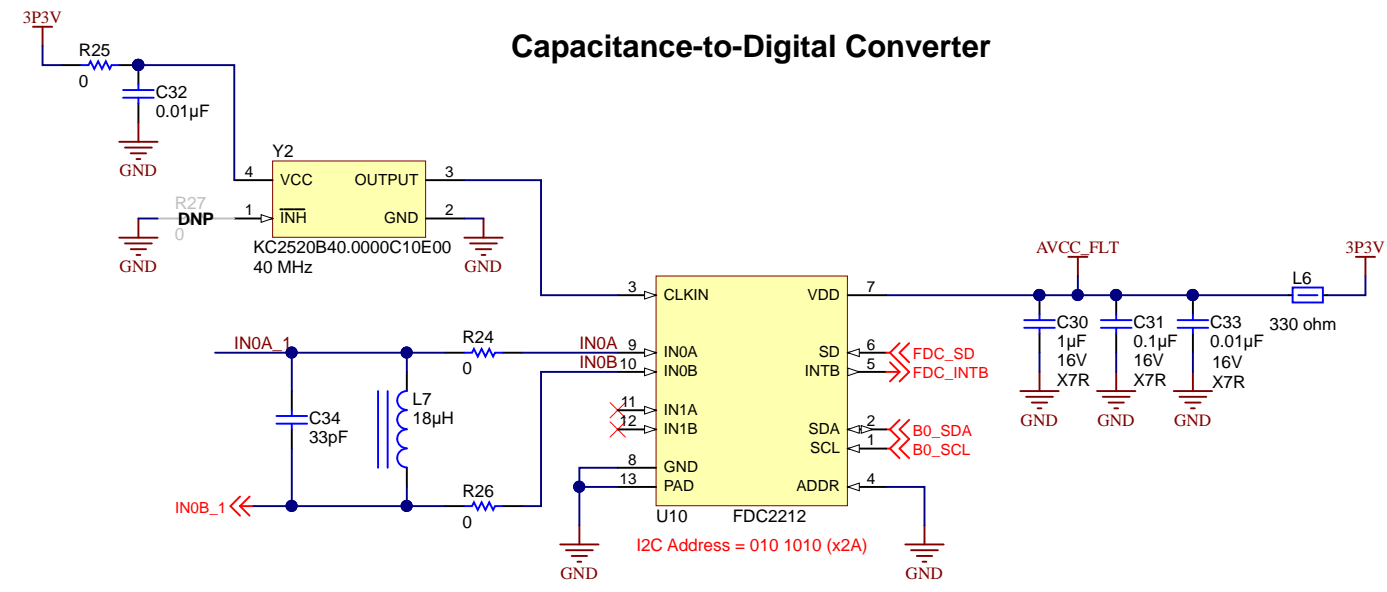
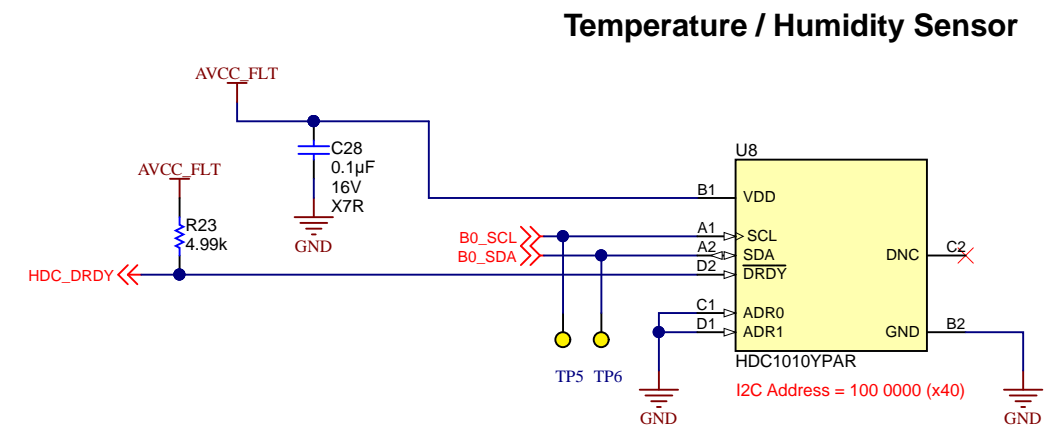
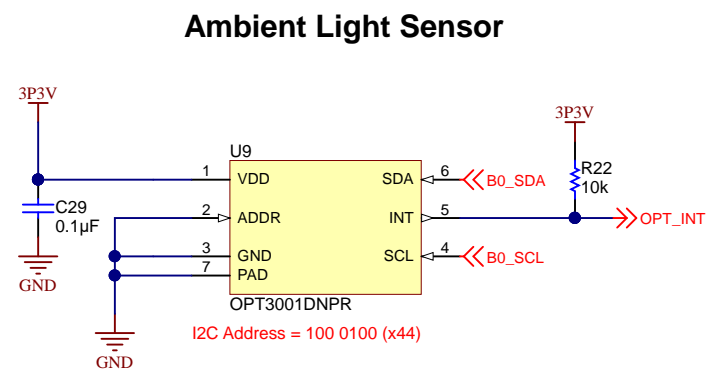
MSP430 Microcontroller



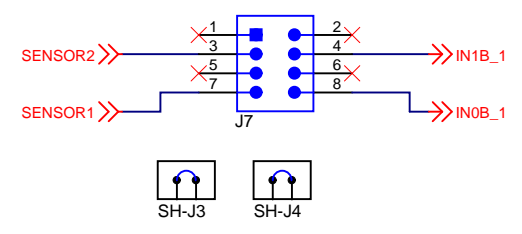
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Orderable: N/A	Designed for: Public Release	Mod. Date: 10/19/2016
TID #: TIDA-01364	Project Title: TIDA-01364 Backlight Control and Proximity Sensing	
Number: TIDA-01364	Rev: A	Sheet Title: MCU and EM Connector
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 4 of 5
Drawn By: Jarrod Krebs	File: TIDA-01364 ALS_Sheet2.SchDoc	Size: B
Engineer: Jarrod Krebs	Contact: http://www.ti.com/support	





CIN & SHLD Selection Headers



Orderable: N/A	Designed for: Public Release	Mod. Date: 10/19/2016
TID #: TIDA-01364	Project Title: TIDA-01364 Backlight Control and Proximity Sensing	
Number: TIDA-01364	Rev: A	Sheet Title: Sensors
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 5 of 5
Drawn By: Jarrod Krebs	File: TIDA-01364 ALS_Sheet3.SchDoc	Size: B
Engineer: Jarrod Krebs	Contact: http://www.ti.com/support	

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