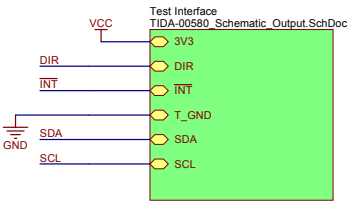


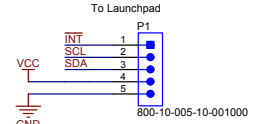
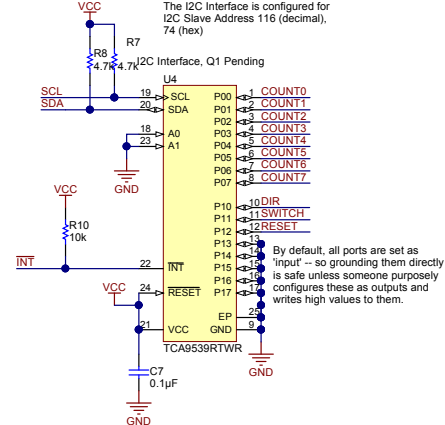
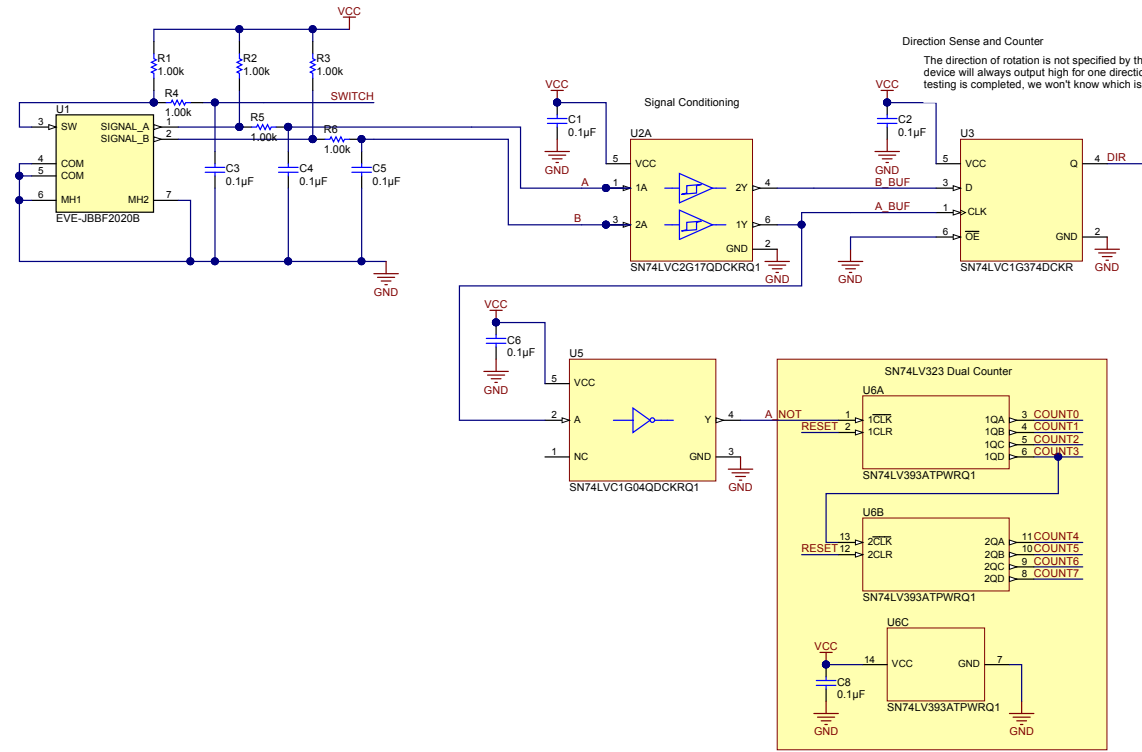
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Orderable: N/A	Designed for: Public Release	Mod. Date: 8/17/2015
TID #: unknown	Project Title: Discrete Logic Rotary Quadrature Decoder	
Number: TIDA-00580	Rev: E1	Sheet Title:
SVN Rev: Version control disabled	Assembly Variant: [No Variations]	Sheet: 2 of 3
Drawn By:	File: TIDA-00580_Schematic_Output_SchDoc	Size: B
Engineer: Emmys Maier	Contact: http://www.ti.com/support	

All LED indicators used solely for testing and the associated circuitry are found on the "Test Interface" schematic.



Direction Sense and Counter  
The direction of rotation is not specified by the manufacturer of the rotary encoder. This device will always output high for one direction of rotation and low for the other, but until testing is completed, we won't know which is which.



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Orderable: N/A	Designed for: Public Release	Mod. Date: 8/17/2015
TID #: unknown	Project Title: Discrete Logic Rotary Quadrature Decoder	
Number: TIDA-00580	Rev: E1	Sheet Title:
SVN Rev: Version control disabled	Assembly Variant: [No Variations]	Sheet: 2 of 3
Drawn By:	File: TIDA-00580_Schematic.SchDoc	Size: B
Engineer: Emrys Maier	Contact: http://www.ti.com/support	http://www.ti.com



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# Bill of Materials

Bill of Materials For Project [TIDA-00580.PrjPcb] (No PCB Document Selected)

Source Data From: TIDA-00580.PrjPcb  
 Project: TIDA-00580.PrjPcb  
 Variant: None

Creation Date: 8/21/2015 9:14:14 AM

Print Date: 21-Aug-15 9:14:19 AM

Footprint	Comment	LibRef	Designator	Description	Quantity
0603	0603YC104JAT2 A	0603YC104JAT2 A	C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11	CAP, CERM, 0.1 µF, 16 V, +/- 5%, X7R, 0603	11
LB Q39G_BLUE	LB Q39G-L2N2-35-1	LB Q39G-L2N2-35-1	D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19	LED, Blue, SMD	19
Mill-Max_800-10-005-10-001000	800-10-005-10-001000	800-10-005-10-001000	P1	Header, 100mil, 5x1, TH	1
0402	CRCW04021K00FKED	CRCW04021K00FKED	R1, R2, R3, R4, R5, R6	RES, 1.00 k, 1%, 0.063 W, 0402	6
0402	CRCW04024K70JNED	CRCW04024K70JNED	R7, R8	RES, 4.7 k, 5%, 0.063 W, 0402	2
0402	CRCW040210K0JNED	CRCW040210K0JNED	R10	RES, 10 k, 5%, 0.063 W, 0402	1
0603	CRCW0603100RJNEA	CRCW0603100RJNEA	R12, R12, R13, R13, R14, R14, R15, R15, R16, R16, R17, R17, R18, R18, R19, R19, R20, R21, R22	RES, 100, 5%, 0.1 W, 0603	19
Panasonic_EVE-JBBF2020B	EVE-JBBF2020B	EVE-JBBF2020B	U1	ENCODER ROTARY 12MM 20PPR W/SW, TH	1
DCK0006A_N	SN74LVC2G17QDCKRQ1	SN74LVC2G17QDCKRQ1	U2	Dual Schmitt Trigger Buffer, DCK0006A	1
DCK0006A_N	SN74LVC1G374DCKR	SN74LVC1G374DCKR	U3	Single D-Type Flip-Flop With 3-State Output, DCK0006A	1
RTW0024B	TCA9539RTWR	TCA9539RTWR	U4	Remote 16-Bit I2C and SMBus, Low-Power I/O Expander with Interrupt Output, Reset & Config. Register, 1.65 to 5.5 V, -40 to 85 degC, 24-pin QFN (RTW), Green (RoHS & no Sb/Br)	2
DCK0005A_N	SN74LVC1G04QDCKRQ1	SN74LVC1G04DCKR	U5	Single Inverter Gate, DCK0005A	1
PW0014A_N	SN74LV393ATPWRQ1	SN74LV393ATPWRQ1	U6	DUAL 4-BIT BINARY COUNTER, PW0014A	1
DCK0005A_N	SN74LV1T34DC KR	SN74LV1T34DC KR	U8	Single Power Supply Single Buffer GATE CMOS Logic Level Shifter, DCK0005A	1
DCK0005A_N	SN74LV1T04DC K	SN74LV1T04DC K	U9	SN74LV1T04 Single Power Supply Inverter Gate CMOS Logic Level Shifter, DCK0005A	1

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Approved	Notes