

Bill of Materials

<Parameter Title not found>

Source Data From: ZeroCrossDetector.PrjPcb  
Project: ZeroCrossDetector.PrjPcb  
Variant: None

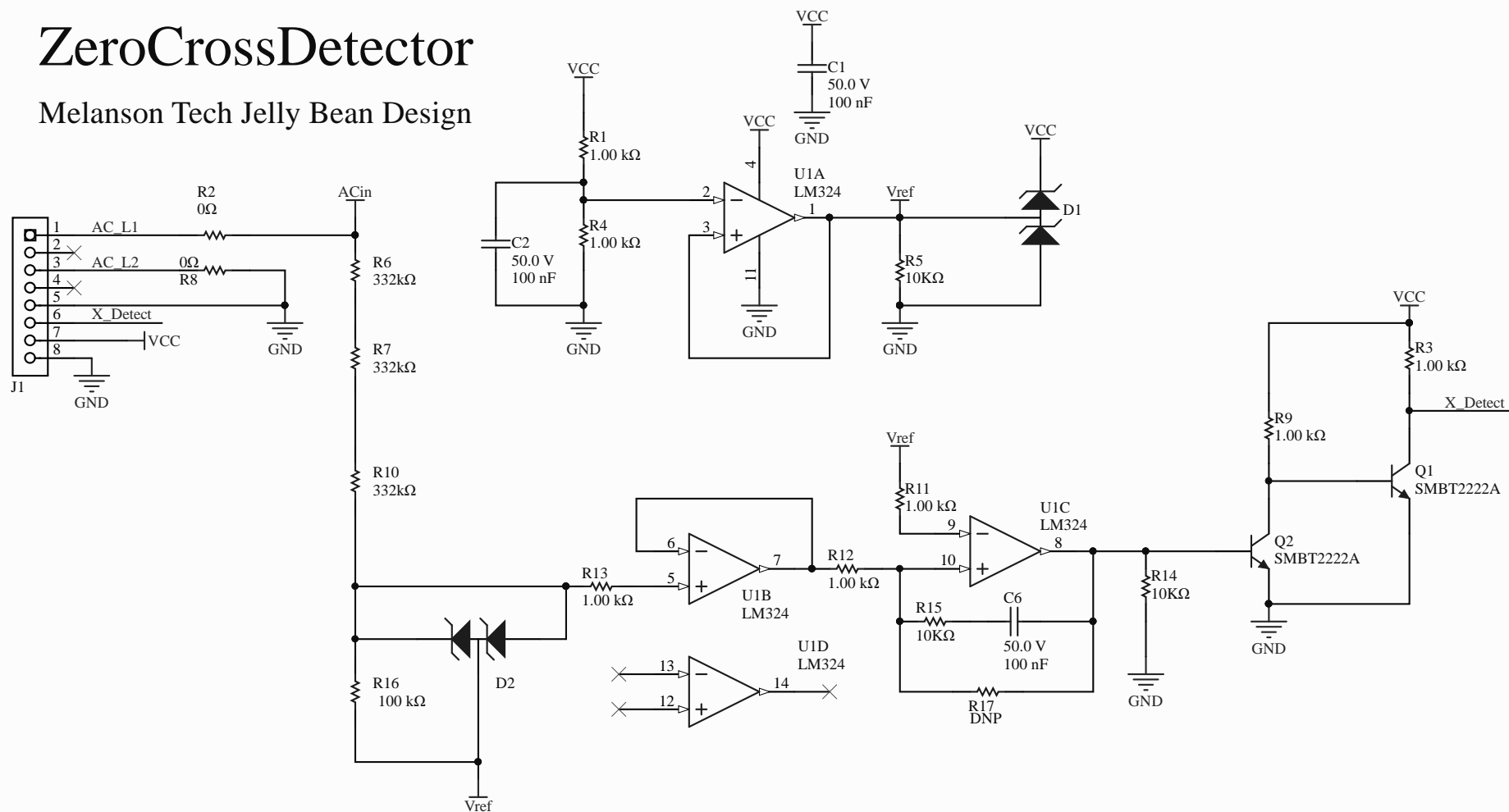
Creation Date: 12/13/2023 10:57:52 AM  
Print Date: 13-Dec-23 10:58:07 AM  
  
Production Quantity: 100  
Currency: CAD

Footprint	Comment	LibRef	Designator	Description	Quantity	Supplier 1	Supplier Part Number 1	Supplier Unit Price 1	Supplier Order Qty 1	Supplier Subtotal 1	Manufacturer 1	Manufacturer Part Number 1
Cap,0805	08055C104JA2A	Cap,0805,100nf,50V,.5%,08055C104JA2A	C1, C2, C6	Capacitor; Ceramic; Cap 0.1 uF; Tol 5%; Vol-Rtg 50 VDC; SMT; 0805; X7R; Tape & Reel	3	Digi-Key	478-3352-1-ND				Loading...	Loading...
SOT23-3	BAT54SLT1G	Diode,Shottky,Array,Series,30V,200mA,BAT54SLT1G	D1, D2	Diode Array 1 Pair Series Connection Schottky 30V 200mA (DC) Surface Mount TO-236-3, SC-59, SOT-23-3	2	Digi-Key	BAT54SLT1GOSCT-ND	0.0735	200	\$ 14.70	ON Semiconductor	BAT54SLT1G
Header,8Pin,Singl eRow, RA,0.1" Symbol,Open Source	HEADER,0.1",8 Pin,SinlgeRow Open Source	HEADER,0.1",8 Pin,SinlgeRow Symbol,Open Source	J1	Open Source Silk Screen Logo	1	Digi-Key	S1011E-36-ND	1.99271	100	\$ 199.27	Sullins	PBC36SAAN
SOT23-3	SMBT2222A	Trans,40V,600mA,0.33W,SMBT2222A	Q1, Q2	NPN Silicon Switching Transistor, 40 V VCEO, 600 mA IC, SOT23, Reel, Green	2	Digi-Key	SMBT2222AE6327HTS A1CT-ND	0.14739	200	\$ 29.48	Infineon	SMBT2222AE-6327
res, 0805, HD	Vishay CRCW08051K0QJNEA	Res,0805,1.00 kO,5%,200ppm,CRCW08051K0QJNEA	R1, R3, R4, R9, R11, R12, R13	Res Thick Film 0805 1K Ohm 5% 0.125W(1/8W) ±200ppm/C Molded SMD Automotive Paper T/R	7	Digi-Key	541-1.0KADKR-ND				Loading...	Loading...
Res,1206	Res1	Res,1206,Gener ic	R2, R8		2							
res, 0805, HD	Vishay / Dale CRCW080510K0FKTA	Res,0805,10.0k O,1%,100 ppm,CRCW080510K0FKTA	R5, R14, R15	RES SMD 10K OHM 1% 1/8W 0805	3	Digi-Key	541-3016-1-ND				Loading...	Loading...
res, 0805, HD	RT0805BRD07332KL	Res,0805,332k, 0.1%,±25ppm/° C,RT0805BRD07332KL	R6, R7, R10	Thin Film Resistors - SMD 1/8W 332K ohm .1% 25ppm	3	Digi-Key	YAG1869CT-ND	0.12602	300	\$ 37.81	Yageo	RT0805BRD07332KL
res, 0805, HD	CRCW0805100KFKEA	Res,0805,100k O,1%,100ppm,CRCW0805100KFKEA	R16	100 kOhms ±1% 0.125W, 1/8W Chip Resistor 0805 (2012 Metric) Thick Film	1	RS						
res, 0805, HD	DNP	Res,0805,Gener ic	R17		1							
SOIC-14	LM324ADR2G	OPAMP, Quad circuit, 1Mhz, SOIC-14,SMD, LM324ADR2G	U1	Single Supply Quad Operational Amplifier, 3 to 32 V, 0 to 70 degC, 14-Pin SOIC, Pb-Free, Tape and Reel	1	Digi-Key	LM324ADR2GOSCT-ND	0.35162	100	\$ 35.16	ON Semiconductor	LM324ADR2G
					27					\$ 316.42		

Approved	Notes

# ZeroCrossDetector

Melanson Tech Jelly Bean Design



Logo1

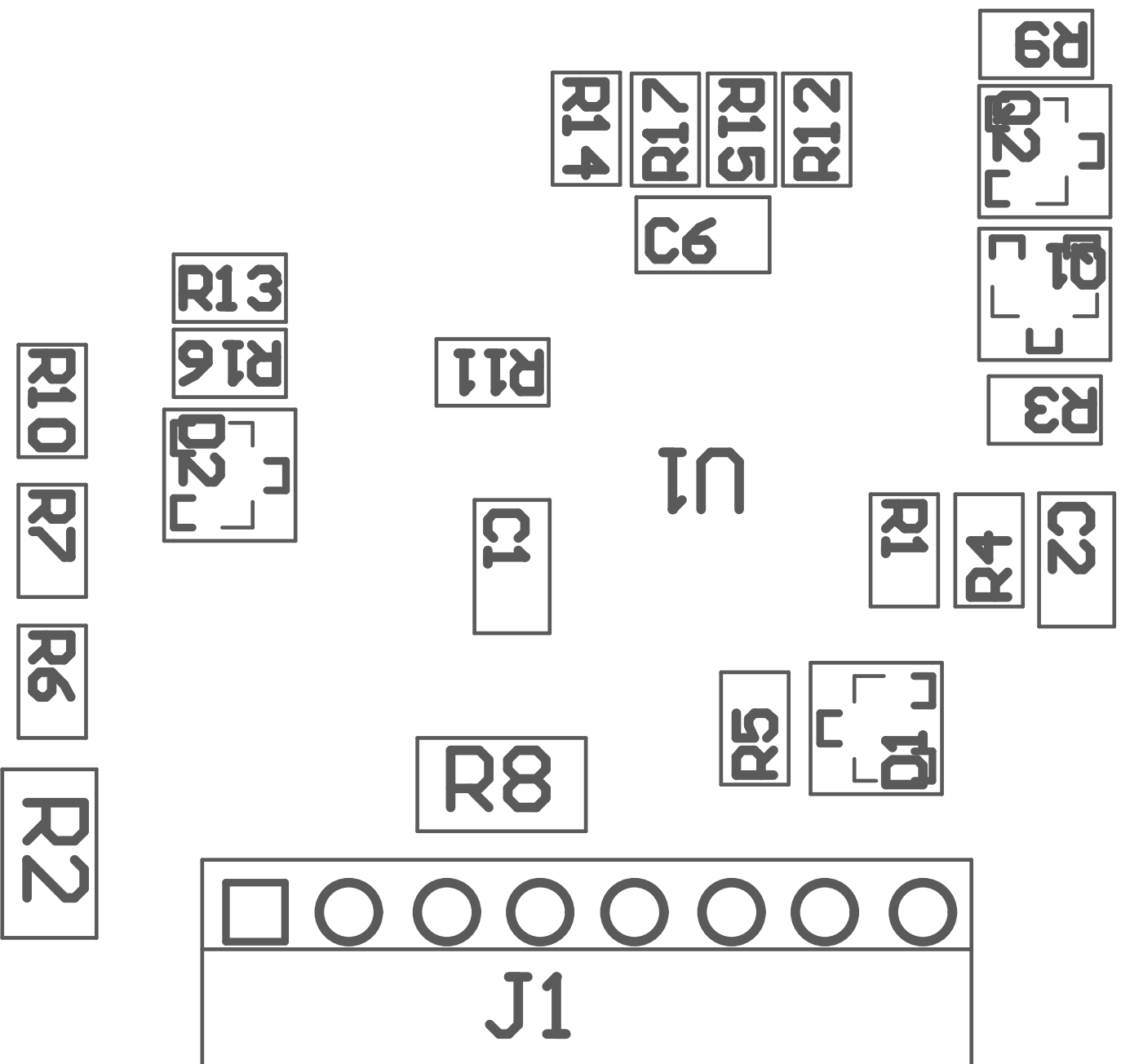


Open Source Logo



Title		
Size	Number	Revision
A		
Date:	12/13/2023	Sheet of
File:	E:\OneDrive\...\ZeroCrossDetector.SchDoc Drawn By:	





[illegible]

ris  
ris  
END  
X-DO  
END  
END

## Design Rules Verification Report

Filename : E:\OneDrive\Shawn\circuitstudio projects\ZeroCrossDetector\ZeroCrossDetector.C  
SPcbDoc

Warnings 0  
Rule Violations 0

Warnings	
Total	0

Rule Violations	
Clearance Constraint (Gap=0.254mm) (All),(All)	0
Silk primitive without silk layer	0
Silk to Silk (Clearance=0.15mm) (All),(All)	0
Silk To Solder Mask (Clearance=0.01mm) (IsPad),(All)	0
Minimum Solder Mask Sliver (Gap=0.01mm) (All),(All)	0
Hole To Hole Clearance (Gap=0.54mm) (All),(All)	0
Height Constraint (Min=0mm) (Max=25.4mm) (Preferred=12.7mm) (All)	0
Hole Size Constraint (Min=0.025mm) (Max=2.54mm) (All)	0
Width Constraint (Min=0.13mm) (Max=0.5mm) (Preferred=0.13mm) (All)	0
Clearance Constraint (Gap=2mm) (InNetClass('HVinA')),(InNetClass('HVinB'))	0
Clearance Constraint (Gap=0.254mm) (InNetClass('LowVolt')),(InNetClass('LowVolt'))	0
Clearance Constraint (Gap=1mm) (InNetClass('HighVolt')),(InNetClass('MidVolt'))	0
Clearance Constraint (Gap=2mm) (InNetClass('HighVolt')),(InNetClass('LowVolt'))	0
Unpoured Polygon (Allow unpoured: False)	0
Clearance Constraint (Gap=1mm) (InNetClass('MidVolt')),(InNetClass('LowVolt'))	0
Un-Routed Net Constraint ( All )	0
Short-Circuit Constraint (Allowed=No) (All),(All)	0
Total	0