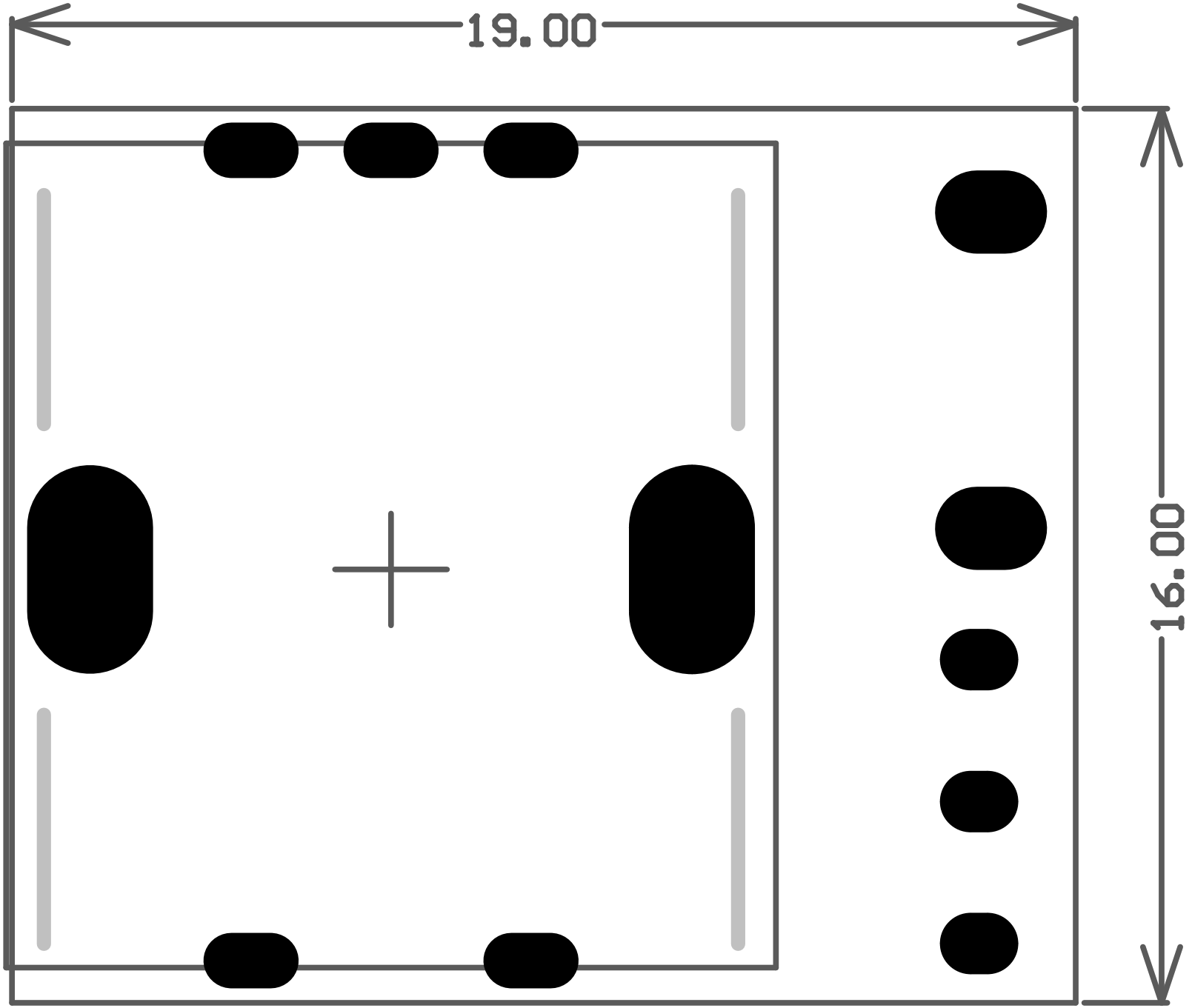
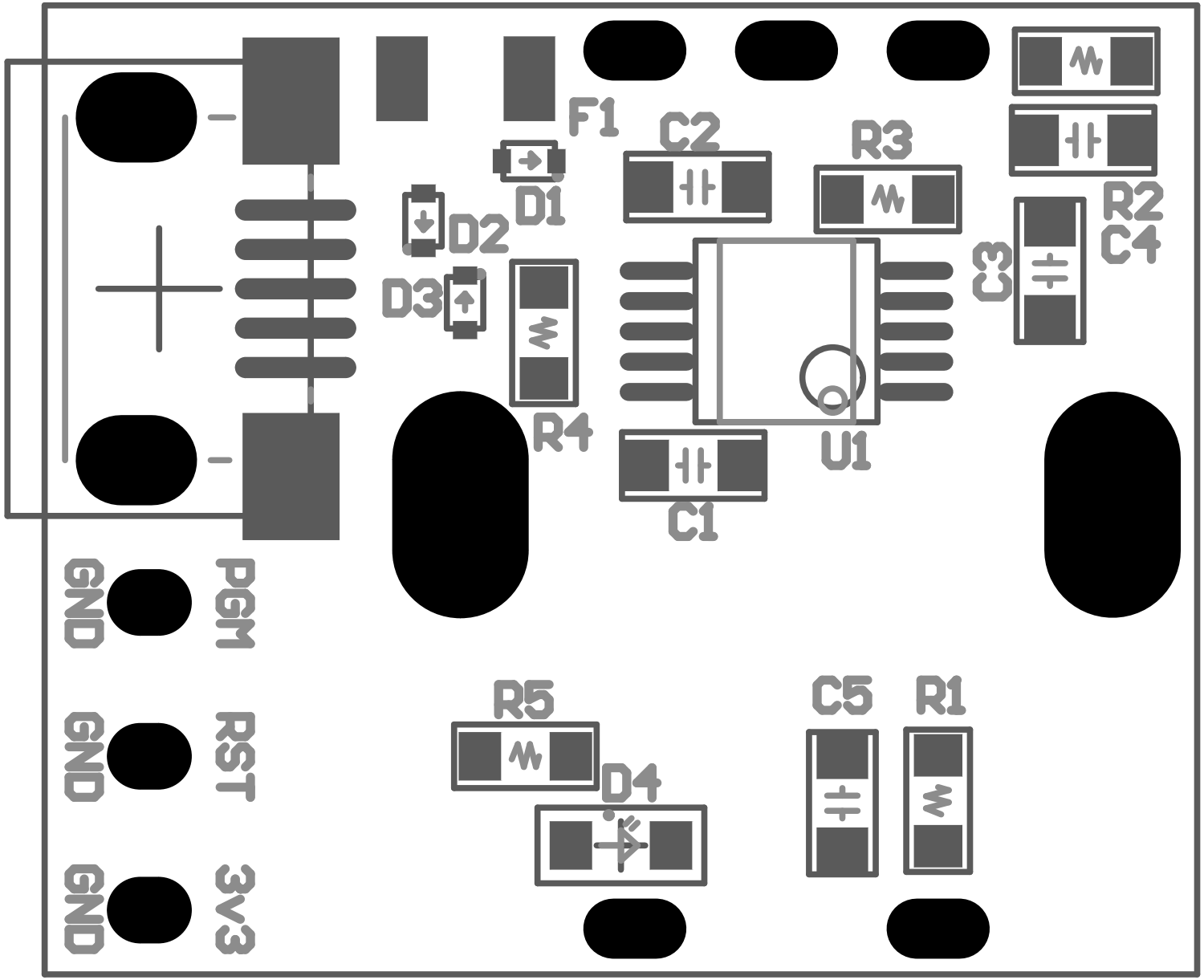
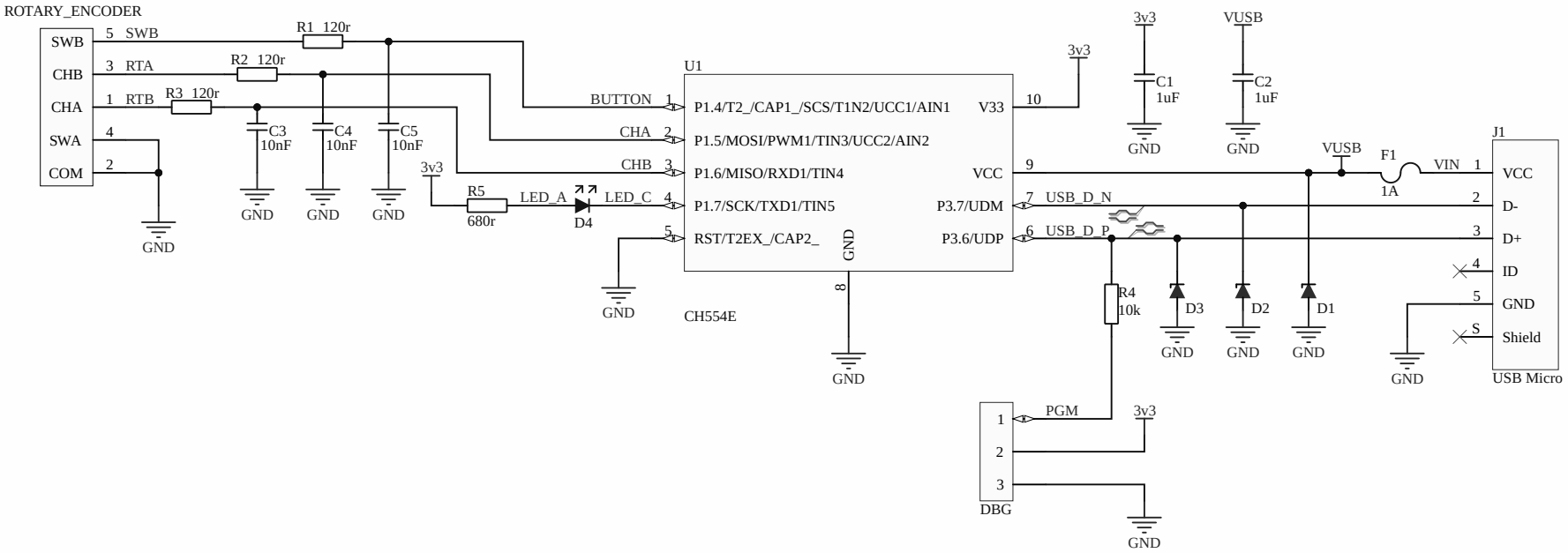

19.00
16.00


F1
C2
R3
R2
C4
C3
D1
D2
D3
R4
U1
C1
GND
PGM
GND
RST
GND
3v3
R5
D4
C5
R1



Tiny Volume Knob	Revision 1 Saved on 05/04/2022
skilbeck.com	Sheet 1 of 1

Designator	Quantity	Comment	Description	Footprint	JLCPCB Part #
U1	1		CH554E	MSOP10 3x3 x 0.5	C111293
F1	1	1A	FUSE	FUSE_0805	C70061
D4	1		LED	SMT LED 0603	C434424
C1, C2	2	1uF	MLCC	MLCC 0603	C105524
C3, C4, C5	3	10nF	MLCC	MLCC 0603	C519509
R1, R2, R3	3	120r	Resistor	0603 SMT Resistor	C22787
R4	1	10k	Resistor	0603 SMT Resistor	C25804
R5	1	680r	Resistor	0603 SMT Resistor	C23228
D1, D2, D3	3		TVS Diode	SODFL 98x40 2 pin	C384848
J1	1		USB Receptacle	USB Micro B Receptacle	C397452

Design Rules Verification Report

Filename : U:\dev\hid_kbd\pcb\wch554e\wch554e\wch554e.PcbDoc

Warnings 0
Rule Violations 0

Warnings	
Total	0

Rule Violations	
Clearance Constraint (Gap=0.152mm) (All),(All)	0
Short-Circuit Constraint (Allowed=No) (All),(All)	0
Un-Routed Net Constraint ((All))	0
Modified Polygon (Allow modified: No), (Allow shelved: No)	0
Width Constraint (Min=0.127mm) (Max=2.54mm) (Preferred=0.254mm) (All	0
Routing Via (Templates Used To Check Via: GND_VIA, routing_via) (All	0
Power Plane Connect Rule(Relief Connect)(Expansion=0.508mm) (Conductor Width=0.254mm) (Air Gap=0.254mm	0
Hole Size Constraint (Min=0.4mm) (Max=3.5mm) (All)	0
Hole To Hole Clearance (Gap=0.254mm) (All),(All)	0
Minimum Solder Mask Sliver (Gap=0.1mm) (All),(All)	0
Net Antennae (Tolerance=0mm) (All)	0
Board Clearance Constraint (Gap=0mm) (All)	0
Component Clearance Constraint (Horizontal Gap = 0.152mm, Vertical Gap = 0.254mm) (All),(All)	0
Total	0

Electrical Rules Check Report

Class	Document	Message
Warning	wch554e.SchDoc	GND contains IO Pin and Power Pin objects (Pin U1-5, Pin DBG-3, Pin U1-8)

Board Stack Report

Stack Up

Layer	Board Layer Stack
1	
2	
3	
4	
5	
6	
7	
8	
9	
	Height : 0.801mm

Layer Stack

Name	Material	Thickness	Constant
Top Paste			
Top Overlay			
Top Solder	SM-001	0.025mm	4
Top Layer	Copper	0.035mm	
Dielectric 1	Core-043	0.680mm	4.3
Bottom Layer	Copper	0.035mm	
Bottom Solder	SM-001	0.025mm	4
Bottom Overlay			
Bottom Paste			