P3
Vin
GND
VCC
R3 680
D1
GND
GND
1N5822
D2
L1
Inductor 100uH
VCC
C3 1000uF
GND
U2
VIN
ON!/OFF
FEEDBACK
OUTPUT
GROUND
GROUND
LM2576-5.0WU
GND
C2 100uF
GND
GND
GND

GND
S2
SW-SPST
VCC
C7 4.7uF
C9 4.7uF
C8 100nF
GND
D3
R2 680
C1 100nF
GND
U1
AREF
PB0
PB1
PB2
PB3
PB4
PB5
PB6
PB7
PC0
PC1
PC2
PC3
PC4
PC5
PC6/!RESET
AVCC
VCC
VCC
PD0
PD1
PD2
PD3
PD4
PD5
PD6
PD7
ADC6
ADC7
GND
GND
GND
ATMEGA328P-AU
20
12
13
14
MOSI 15
MISO 16
SCK 17
8
23
24
25
26
27
28
29
18
4
6
30 RXD
31 TXD
32
1
2
9
10
11
19
22
3
5
21
GND

RXD
TXD
SRXD
STXD
D4
R8 680
GND
S3
R9 10K
VCC
GND

Y1 4MHz
C5 15pF
C6 15pF
GND
GND

P2
MISO
SCK
Rst
MOSI
1 2
3 4
5 6
ICSP
VCC
S1
R1 10K
VCC
GND
GND

P4
VCC
GND
SRXD
STXD
Rst
1
2
3
4
5
Debug

P1
VCC
SCL
SDA
1
2
3
4
OLED
GND

Sen1
R4 10K SCL
R5 10K SDA
R6 10K
R7 10K
VCC
VCC
VCC
VCC
SCL
SDA
ADDR
RESET
ALERT
VDD
R
EXP
VSS
4
1
2
6
3
5
7
9
8
VCC
C4 100nF
GND
SHT3x-DIS

Title
SharifSmart CoolTag USB
Size A
Number
Revision
Date: 12/20/2020
File: C:\Documents and Settings\..\SSCTUSB2020.SchDoc
Drawn By: SharifSmart
Sheet of

Bill of Materials

Source Data From:	SSCTUSB2020.PrjPcb
Project:	SSCTUSB2020.PrjPcb
Variant:	None

Creation Date:	12/20/2020	8:37:57 PM
Print Date:	44185	44185.85974

Footprint	Comment	LibRef	Designator	Description	Quantity
C1206	Cap Semi	Cap Semi	C1, C4, C5, C6, C8	Capacitor (Semiconductor SIM Model)	5
C0805	Cap Pol3	Cap Pol3	C2, C3	Polarized Capacitor (Surface Mount)	2
CAPR5-4X5	Cap2	Cap2	C7, C9	Capacitor	2
3.2X1.6X1.1	LED2	LED2	D1, D3, D4	Typical RED, GREEN, YELLOW, AMBER GaAs LED	3
SMB	1N5822	D Schottky	D2	Schottky Diode	1
0402-A	Inductor	Inductor	L1	Inductor	1
HDR1X4	OLED	Header 4	P1	Header, 4-Pin	1
HDR2X3	ICSP	Header 3X2	P2	Header, 3-Pin, Dual row	1
HDR1X2	Vin	Header 2	P3	Header, 2-Pin	1
HDR1X5	Debug	Header 5	P4	Header, 5-Pin	1
J1-0603	Res3	Res3	R1, R2, R3, R4, R5, R6, R7, R8, R9	Resistor	9
SPST-2	SW-PB	SW-PB	S1, S3	Switch	2
SPST-2	SW-SPST	SW-SPST	S2	Single-Pole, Single-Throw Switch	1
	SHT3x-DIS	SHT3x-DIS	Sen1		1
QFP80P900X 900X120-32N	ATMEGA328P-AU	ATMEGA328P-AU	U1	AVR AVR[i]® ATmega Microcontroller IC 8-Bit 20MHz 32KB _16K x 16_ FLASH 32-TQFP _7x7_	1
DPAK6P170 _1524X459L2 54X81N	LM2576-5.0WU	LM2576-5.0WU	U2	Buck Switching Regulator IC Positive Fixed 5V 1 Output 3A TO-263-6, D²iPak _5 Leads + Tab_, TO-263BA	1
R38	4MHz	XTAL	Y1	Crystal Oscillator	1
					34

Approved	Notes	