



13

15

R1 R3



R10 R11



R5



R8



U5



C6



C7



C2



R2



C8



R9



C9



C15



C3



C5



C1



C10



R6



R7



C4



Description	LibRef	Quantity	Manufacturer Part Number
Cap Ceramic 10uF 16V X7S 10% Pad SMD 0805 Soft Termination 125C Automotive T/R	CAP 10 UF	7	CL21Y106KQ4PN E
Cap Ceramic 22pF 50V C0G 0.25pF SMD 0805 125°C Paper T/R	CAP_22pF	4	C0805C220C5GAC TU
Cap Ceramic 0.1uF 50V X7R 10% SMD 0805 125°C Blister Plastic T/R	CAP_0.1uf	1	C2012X7R1H104K1 25AE
Led SMT Red 0805 Tape	LED_RED	2	LSR976-NR-1
FCI Right Angle Surface Mount Mount Female USB Connector; 100 V ac; 1.8A	Micro_USB	1	10118193-0001LF
Conn Header Vert 20POS 2.54MM	MALE_HEADER_20X1	2	PRPC020SACN-RC
Conn Header R/a 4POS 2.54MM	HDR_MALE_4X1	1	PBC04SBEN
Conn Header Vert 6POS 2.54MM	HDR_MALE_3X2	1	PREC003DFAN-RC
贴片电阻 22Ω ± 1.00% 0.125W ± 100ppm/°C 0805	Res 220hm	2	RC0805FR-0722RL
Res Thin Film 0805 10K Ohm 0.1% 1/8W ±50ppm/°C Molded SMD SMD Paper T/R	Res_10K	3	RT0805BRE0710KL
Res Thick Film 0805 4.7K Ohm 1% 0.125W ±100ppm/°C Molded SMD Paper T/R	Res 4.7 K	1	RMCF0805FT4K70
Res Thick Film 0805 1K Ohm 1% 0.125W(1/8W) ±100ppm/C Pad SMD T/R	Res_1K	2	RC0805FR-071K1P
贴片电阻 10000000Ω ± 1.00% 0.125W ± 100ppm/°C 0805	Res_10 M_Ohm	1	RC0805FR-0710ML
TL3305A Series SPST 12 V 4.5 x 4.5 mm 160 gf Top Actuated SMT Tactile Switch	SW_PB	1	TL3305AF160QG
IC MCU 32BIT 64KB FLASH 48LOFP	STM32F103C8T6	1	STM32F103C8T6
LDO Regulator Pos 3.3V 1.5A 6- Pin(5+Tab) SOT-223 T/R	3V3 Regulator	1	TL1963A-33DCQR
Crystal 8MHz ±30ppm (Tol) ±50ppm (Stability) 20pF FUND 800hm 2-Pin HC- 49/USX Thru-Hole Bulk	Xtal_8MHZ	1	ECS-80-20-4X
Crystal 0.032768MHz ±20ppm (Tol) 6pF Flexural 70000Ohm 2- Pin CSMD T/R	XTAL_32.768_KHZ	1	ABS07-32.768KHZ- 6-T

Design Rules Verification Report

Filename : D:\Altium Project\STM 32 Designing with Altium\STM32f103\STM32 PCB.PcbDoc

Warnings 0
Rule Violations 0

Warnings	
Total	0

Rule Violations	
Clearance Constraint (Gap=0.2mm) (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=0.3mm) (Max=0.5mm) (Preferred=0.3mm) (All)	0
Routing Layers(All)	0
Routing Via (MinHoleWidth=0.1mm) (MaxHoleWidth=0.3mm) (PreferredHoleWidth=0.3mm) (MinWidth=0.2mm)	0
Differential Pairs Uncoupled Length using the Gap Constraints (Min=0.254mm) (Max=0.254mm) (Preferred=0.254mm)	0
Differential Pairs Uncoupled Length using the Gap Constraints (Min=0.254mm) (Max=0.254mm) (Preferred=0.254mm)	0
Power Plane Connect Rule(Relief Connect)(Expansion=0.508mm) (Conductor Width=0.254mm) (Air Gap=0.254mm)	0
Hole Size Constraint (Min=0.2mm) (Max=10mm) (All)	0
Pads and Vias to follow the Drill pairs settings	0
Hole To Hole Clearance (Gap=0.3mm) (All),(All)	0
Net Antennae (Tolerance=0mm) (All)	0
Matched Lengths(Tolerance=25.4mm) (InDifferentialPairClass('diff_90'))	0
Component Clearance Constraint (Horizontal Gap = 0.2mm, Vertical Gap = 0.2mm) (All),(All)	0
Height Constraint (Min=0mm) (Max=25.4mm) (Preferred=12.7mm) (All)	0
Total	0