



Schematic1		Update Date	2024-06-09
Page	Words smallest RGB LED Cube	Create Date	2024-06-07
Drawn		Part Number	
Reviewed		Words smallest RGB LED Cube	
		VER	SIZE
		V0.1	A4
		PAGE	1 OF 1

Comment	Description	Designator	Footprint	LibRef	Quantity
22pF	Capacitance: Tolerance:±5% Tolerance:±5% Voltage Rated: Temperature Coefficient:	C1, C2	C0402	0402CG220J500NF	2
BZT52C3V3SOD-123	Diode Configuration:Single Zener Voltage (Nom):3.3V Reverse Leakage Current (I):5µA@1V Zener Voltage (Range):3.1V-3.5V Zener Voltage (Range):3.1V-3.5V Power Dissipation:500mW Zener Impedance (Zz):95Ω Tolerance:- Tolerance:-	D1	SOD-123_L2.7-W1.6- L53.7-RO-1	BZT52C3V3SOD-123	1
HDR-F-2.54_1x2P		H1	HDR-TH_2P-P2.54-V-F	HDR-F-2.54_1x2P	1
1.27*1*2PEt	Pin Structure:1x2P Pitch:1.27mm Row Spacing- Circular Pins:Square Pins:Square Pins Mounting Type:Stright Number of Rows:Plug Number of Pins:2P Current Rating (Max):3A Voltage Rating (Max)- Length of Mating Pin:3mm Insulation Height:1.7mm Length of En	H2, H3	HDR-TH_2P-P1.27-V- M	1.27*1*2PEt	2
HDR-F-2.54_2x3		H4	HDR-TH_6P-P2.54-V-F- R2-C3-S2.54	HDR-F-2.54_2x3	1
A03401	Type:1-PChannel Drain Source Voltage (Vds): Continuous Drain Current (Id): Power Dissipation (Pd): Drain Source On Resistance (RDS(on)@Vgs,Id):65mΩ@10V,4.2A Gate Threshold Voltage (Vgs(th)Id):1.3V@25 µA Total Gate Charge (Qg@Vgs)- Input Capacitance (Ci)	Q1	SOT-23-3_L2.9-W1.4- P1.90-L52.6-BR	A03401_C727156	1
3.3kΩ	Type:Thick Film Resistors Resistance:3.3kΩ Tolerance:±1% Tolerance:±1% Power(Watts): Overload Voltage (Max): Temperature Coefficient:±100ppm/ °C Temperature Coefficient:±100ppm/ °C Operating Temperature Range:- 55°C--155°C Operating Temperature Range:- 55°C--155°C	R1	R0603	0603WAF3301T5E	1
ATMEGA328P-MN	CPU Core:AVR Program Storage Size:16KB GPIO Ports Number:23 Operating Voltage Range:1.8V-5.5V Operating Voltage Range:1.8V-5.5V CPU Maximum Speed:20MHz Program Memory Type:FLASH Operating Temperature Range:- 40°C--105°C Operating Temperature Range:- 40°C--105°C	U1	VQFN-32_L5.0-W5.0- P0.50-TL-EP3.1	ATMEGA328P-MN	1
XL-1010RGBC- WS2812B		U2, U3, U4, U5, U6, U7, U8, U9, U10, U11, U12, U13, U14, U15, U16, U17, U18, U19, U20, U21, U22, U23, U24, U25, U26, U27, U28, U29, U30, U31, U32, U33, U34, U35, U36, U37, U38, U39, U40, U41, U42, U43, U44, U45, U46, U47, U48, U49, U50, U51, U52, U53, U54, U55, U56, U57, U58, U59, U60, U61, U62, U63, U64, U65	LED-SMD_4P-1.1.0- W1.0-TL_XL- 1010RGBC-WS2812B	XL-1010RGBC- WS2812B	64
16MHz	Crystal Type:贴片晶振 Frequency: Normal temperature Frequency Tolerance:±10ppm Normal temperature Frequency Tolerance:±10ppm External load capacitor: Frequency Stability(Full temperature range):±20ppm Frequency Stability(Full temperature range):±20ppm Operati	X1	OSC-SMD_4P-1.3.2- W2.5-BL	X322516MLB45I	1