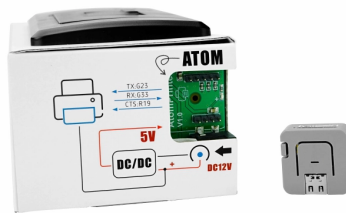


Atom Printer

SKU:K118



NO.	FUNCTION	COMMAND	NO.	FUNCTION	COMMAND
1	Print	Print	1	Print	Print
2	Print	Print	2	Print	Print
3	Print	Print	3	Print	Print
4	Print	Print	4	Print	Print
5	Print	Print	5	Print	Print
6	Print	Print	6	Print	Print
7	Print	Print	7	Print	Print
8	Print	Print	8	Print	Print
9	Print	Print	9	Print	Print
10	Print	Print	10	Print	Print
11	Print	Print	11	Print	Print
12	Print	Print	12	Print	Print
13	Print	Print	13	Print	Print
14	Print	Print	14	Print	Print
15	Print	Print	15	Print	Print
16	Print	Print	16	Print	Print
17	Print	Print	17	Print	Print
18	Print	Print	18	Print	Print
19	Print	Print	19	Print	Print
20	Print	Print	20	Print	Print
21	Print	Print	21	Print	Print
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23	Print	Print	23	Print	Print
24	Print	Print	24	Print	Print
25	Print	Print	25	Print	Print
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27	Print	Print	27	Print	Print
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41	Print	Print	41	Print	Print
42	Print	Print	42	Print	Print
43	Print	Print	43	Print	Print
44	Print	Print	44	Print	Print
45	Print	Print	45	Print	Print
46	Print	Print	46	Print	Print
47	Print	Print	47	Print	Print
48	Print	Print	48	Print	Print
49	Print	Print	49	Print	Print
50	Print	Print	50	Print	Print

Description

Atom Printer is a DIY thermal printer kit, featuring the Atom-Lite IoT core controller paired with a 58mm thermal printer. It supports printing characters, graphics, barcodes, 1D codes, QR codes, and more. The body is covered with a full cardboard shell, giving it a distinctive maker style. The built-in firmware supports two modes: AP connection printing and MQTT message push printing. Based on the ATOM IoT control core, you can further develop more cool printing applications.

Note: This kit does not come with a power adapter. Users need to prepare their own **DC 12V** (5.5mm specification) power adapter. For optimal print quality, the adapter should have a power supply capacity of **2.5A** or higher, as the power supply capability will directly affect the print display quality.

Tutorial



Quick Start

This tutorial will introduce you to the Atom Printer device tutorial & quick start

Features

- Atom-Lite: ESP32-PICO-D4 4MB Flash IoT controller
- Geek-style cardboard shell
- Supports printing characters, graphics, barcodes, QR codes
- Communication interface: UART
- Fast printing speed, high resolution
- Usage methods:
 - AP hotspot connection, web control printing
 - MQTT content push printing (Topic is the device's Mac address)
 - Serial command control (UART 9600bps 8N1)
 - Development platforms: UiFlow, Arduino

Includes

- 1 x Atom Printer
- 1 x Thermal paper roll
- 1 x Sticker thermal paper roll

Applications

- Various receipt printing scenarios

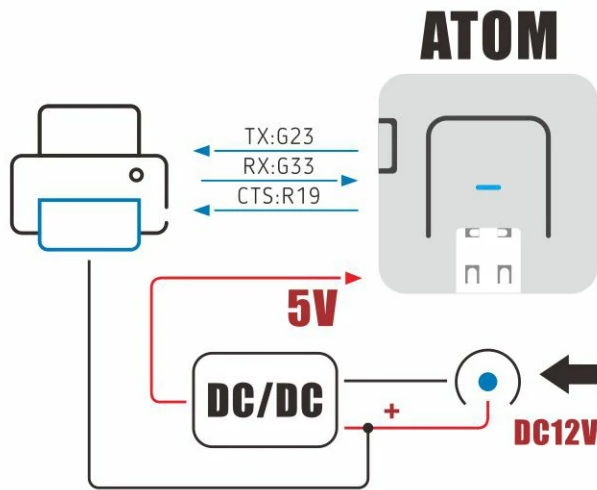
Specifications

Specification	Parameter
Printing method	Thermal printing
Supported text and graphics	Text, graphics, characters, barcodes (Codebar, code93, code39, code128, ENA13, ITF25, UPC-A, UPC-E), QR codes
Power supply voltage	DC 12V
Operating current	2.5A
Printing color	Black and white
Printing speed/resolution	60mm/s 203dpi 8 dots/mm, up to 384 dots per line
Printing width	58mm
Lifespan	50km printing distance
Paper cutting method	Manual tear-off
Thermal paper roll specs	58mm±0.05mm (width) 0.05 ~ 0.1mm (thickness), maximum diameter ≤40mm
Printing speed	60mm/s
Communication interface	USB/RS232/TTL (ATOM defaults to TTL interface UART 9600bps 8N1)
Product Size	151 x 79 x 66mm
Product weight	285g
Package Size	158 x 82 x 70mm
Gross weight	321g

PinMap

o Atom PRINTER

Atom	G23	G33	G19
Atom PRINTER	TX	RX	CTS



Softwares

Arduino

- [Atom Printer Firmware](#)

Protocol

- [ATOM_PRINTER_CMD_v1.06 PDF](#)

Setting

NO	Function	command
1	Init	0x1B,0x40
2	Set Print Position X mm	0x1B,0x24,(X * 8)&0x00ff,((X * 8) > > 8)&0x00ff
3	Set Left Margin X mm	0x1D,0x4C,(X * 8)&0xff,((X * 8) > > 8)&0x00ff
4	Set Line Space X mm	0x1B,0x33,(X * 8)
5	Set Baud Rate: X	0x1B,0x23,0x23,0x53,0x42,0x44,0x52,X (9600:X=0x80,0x25,0x00,0x00) (115200:X=0x00,0xC2,0x01,0x00)
6	Set Character Size:X,Y	0x1D,0x21,((X&0x0f) < < 4) (Y&0x0f)
7	Set Bold:on/off	0x1B,0x47,0x01/0x00
8	Set Underline:on/off	0x1B,0x2D,0x01/0x00

Print

NO	Function	Command
1	Print X at Y mm	0x1B,0x24,(Y * 8)&0x00ff,((Y * 8) > 8)&0x00ff,X
2	Set Print Position X mm	0x1D,0x28,0x6B,0x03,0x00,0x31,0x45,X (L:0x48/M:0x49/Q:0x50/H:0x51)

QRCode

NO	Function	Command
1	Set QRCode Adjust Level X	0x1D,0x28,0x6B,0x03,0x00,0x31,0x45,X (L:0x48/M:0x49/Q:0x50/H:0x51)
2	Set QRCode Buffer Length:L Buffer:X	0x1D,0x28,0x6B,(L+3)&0x00ff,((L+3) > 8)&0x00ff,0x31,0x50,0x30,X,0x00
3	Print QRCode	0x1D,0x28,0x6B,0x03,0x00,0x31,0x51,0x30,0x00

BarCode

NO	Function	Command
1	Barcode Sw:on/off	0x1D,0x45,0x43,0x01/0x00
2	Set HRI Position	0x1D,0x48,hide:0x00/above:0x01/below:0x02/both:0x03
3	Print BarCode Type:T Lenth:L Buffer:X	0x1D,0x6B,T,L,X,0x00 Type: UPC-A=0x41/UPC- E=0x42/JAN13(EAN13)=0x43/JAN8(EAN8)=0x44/CODE39=0x45/ITF=0x46/CODABAR=0x47/CODE93= 0x48/CODE128=0x49

Bmp

NO	Function	Command
1	Print BMP Width:W Hight:H Data:X	0x1D,0x76,0x30,(W/8)&0x00ff,((W/8) > 8)&0x00ff,H&0x00ff,(H > 8)&0x00ff,X

EasyLoader

Easyloader	Download Link	Notes
Atom Printer Test Easyloader	download	/

| Video

[M5Stack打印机, PM2.5模块和MQTT打印日志.mp4](#)

[ATOM_PRINTER_GUIDE.mp4](#)