



# BOLT

light**MINI**

DOCUMENTATION/DATASHEET

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## Packaging

### **BOLT lightMINI :**

- BOLT lightMINI (PCB)
- 3.5mm AUX Cable
- Schematics
- 1m of *snow white* LED Strip
- Backup *TIP31C* transistor
- Backup *680Ω* resistor
- Backup *status LED*

*NOTE : Package box may be crushed during the transport, but inside components are protected.*

## Feature

### Low-power *BOLT lightMIN* LED strip controller

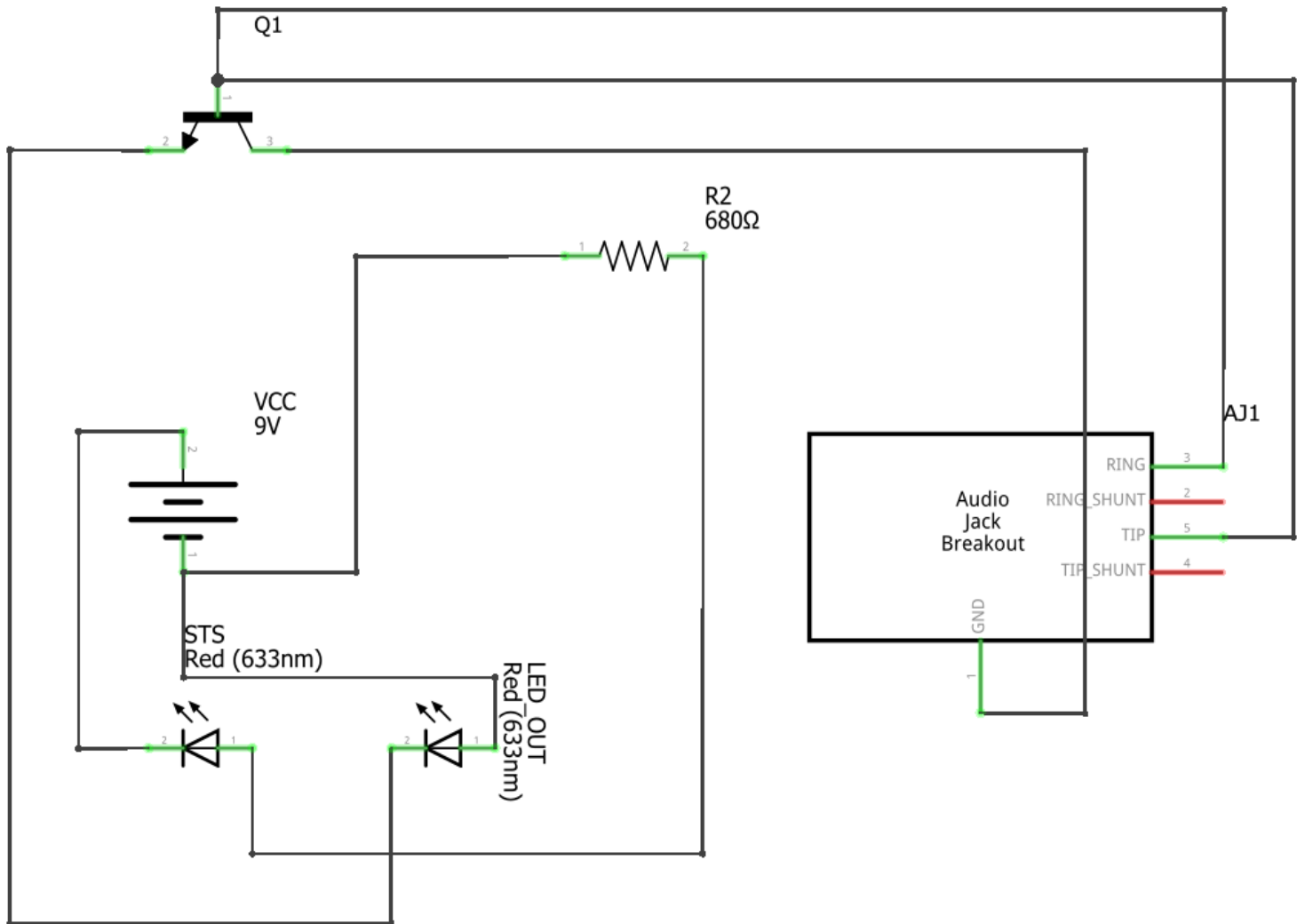
- 9/12V power source
- Small size PCB
- Mono and Stereo audio amplifier
- Working from -25 °C to 95 °C
- Compatible with all sound cards including the most popular
  - Windows Audio
  - Realtek HD Audio
  - Asus Xonar DSX PCIe 7.1
  - Asus Xonar GHX PCIe GX2.5
  - Creative Sound Blaster Audigy FX
  - Creative Sound Blaster ZxR PCIe
  - Creative Sound Blaster Z
  - Aztech AZT1008 Sound Device
  - Aztech AZT2320 Sound Device
  - Aztech AZT3000 Sound Device
  - Intel ICH2
  - Intel ICH3
  - Intel ICH4
  - Intel ICH5
  - Intel ICH6
  - Intel ICH7
  - MediaTrix AudioTrix Pro
  - MediaTrix AudioTrix 3D XG
- Passive cooling

## Product summary

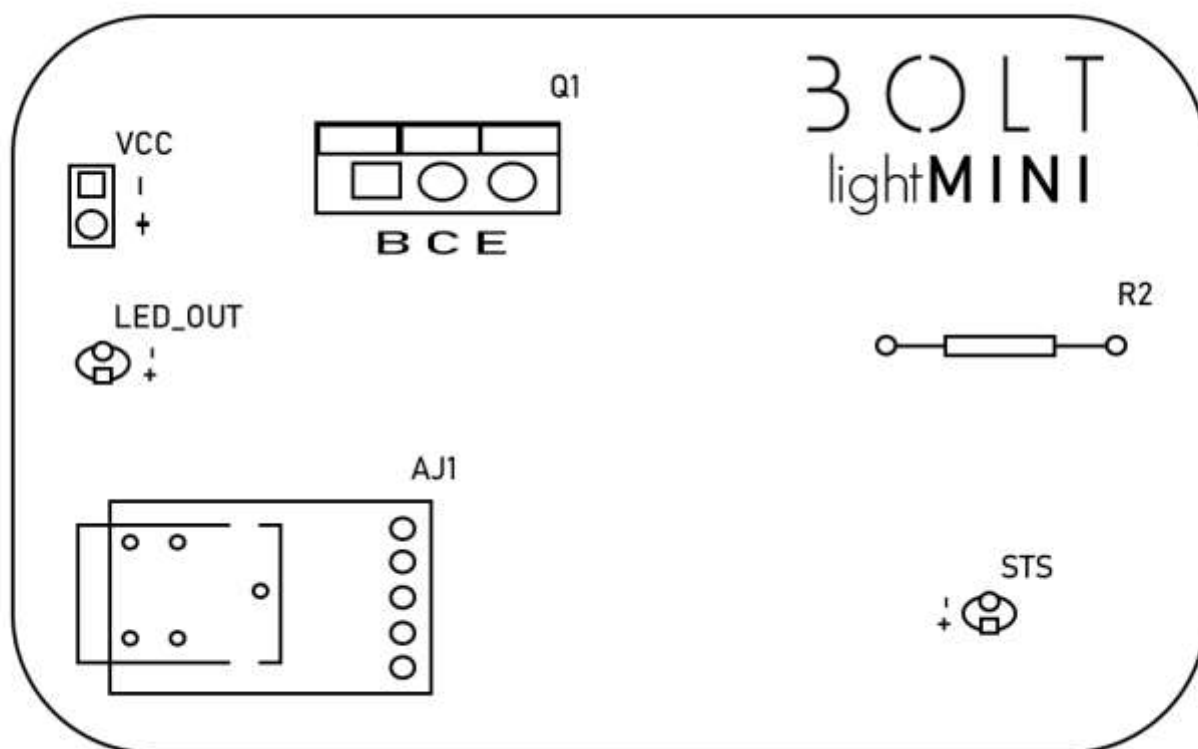
Features	BOLT lightMINI
Maximum outputs (parallel or series)	5 short, 2 long
Maximum power consumption (LED)	40W
Maximum load	3A
Amplifier type	Bipolar N-P-N transistor
Maximum voltage trough transistor	80V DC
Minimum voltage through PCB	9V DC
Maximum voltage through PCB	12V DC
Supported LED strips	White (one color) RGB (with additional controller)

**RGB LED strips** must be connected to 12V because of controller needs. If you have 9V (or less) controller, connect *BOLT lightMINI* to it's supposed voltage.

## Schematics



## Board outline



## Board labeling

VCC – Input 9-12 volts DC

LED\_OUT – Output for LED (output 9-12V, add resistor for LED Diode)

AJ1 – Sparkfun Audio Breakout

STS – Status 3m-m/5mm LED

R2 – 680 $\Omega$  resistor

Q1 – Bipolar N-P-N TIP31C transistor

+ - | Plus (anode-positive) Minus (cathode-negative)

B C E | Base Collector Emitter



## Open source

Entire **BOLT's** project is open-source, that means you can download PCB design, logos, covers, banners and everything from this project. You can find *BOLT* page on GitHub.

[www.github.com/BOLTElectro](https://www.github.com/BOLTElectro)