DC–DC Boost Module (5V 250mA)

U1

3 VI GND VO 2

1

L1
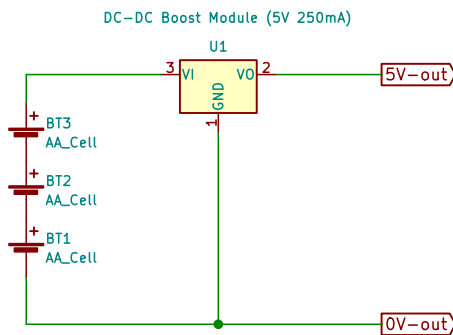Coil 1 – 150uH

5V–out

BT1
AA_Cell

+ C1
470uF

0V–out

Using just one 1.5V battery

This shows the additional LC filter
That may be needed to smooth out ripple
Depending on the quality of the
Boost converter
This filter can be added to any of the examples here.

Component values shown are experimental.
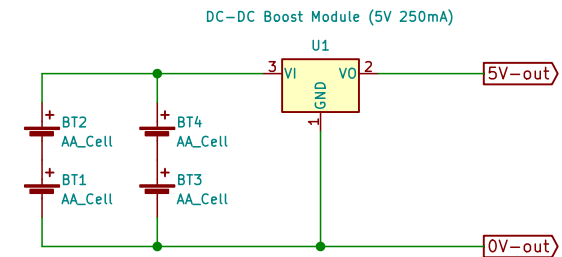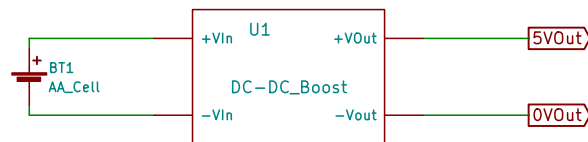Other circuits might require other values.

DC–DC Boost Module (5V 250mA)

U1

3 VI GND VO 2

1

5V–out

BT2
AA_Cell

BT1
AA_Cell

0V–out
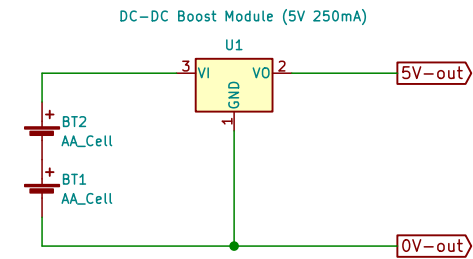
Using two batteries for improved efficiency and capacity

DC–DC Boost Module (5V 250mA)

U1

3 VI GND VO 2

1

5V–out

BT3
AA_Cell

BT2
AA_Cell

BT1
AA_Cell

0V–out

Using three batteries for max efficiency

Note that some DC DC boost modules have 4 pins.

In that case Just connect the battery terminals to the respective

Vin + and – terminals and the Vout Plus and minus (Gnd) as drawn.

DC–DC Boost Module (5V 250mA)

U1

3 VI GND VO 2

1

5V–out

BT2
AA_Cell

BT4
AA_Cell

BT1
AA_Cell

BT3
AA_Cell

0V–out

Using four battreies in sets of two for good efficiency and great capacity

Note that using four batteries in series results in an overvoltage condition.
Thats why I've drawn two sets of two in parallel.
Take care that most battery holders meant for four batteries will need modification!
Alternatively just use two battery holders for two AA batteries.

U1

+VIn   +VOut

DC–DC_Boost

–VIn   –Vout

BT1
AA_Cell

5VOut

0VOut

Arduino Power from AA batteriessing a simple three pin DC DC Boost regulator module

By Dennis Meulensteen

Sheet: /
File: ArduinoPower.sch

Title: Arduino Battery Power

Size: A4   Date: Mar 3, 2018   Rev: 1.1

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