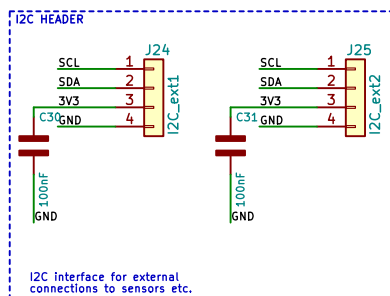
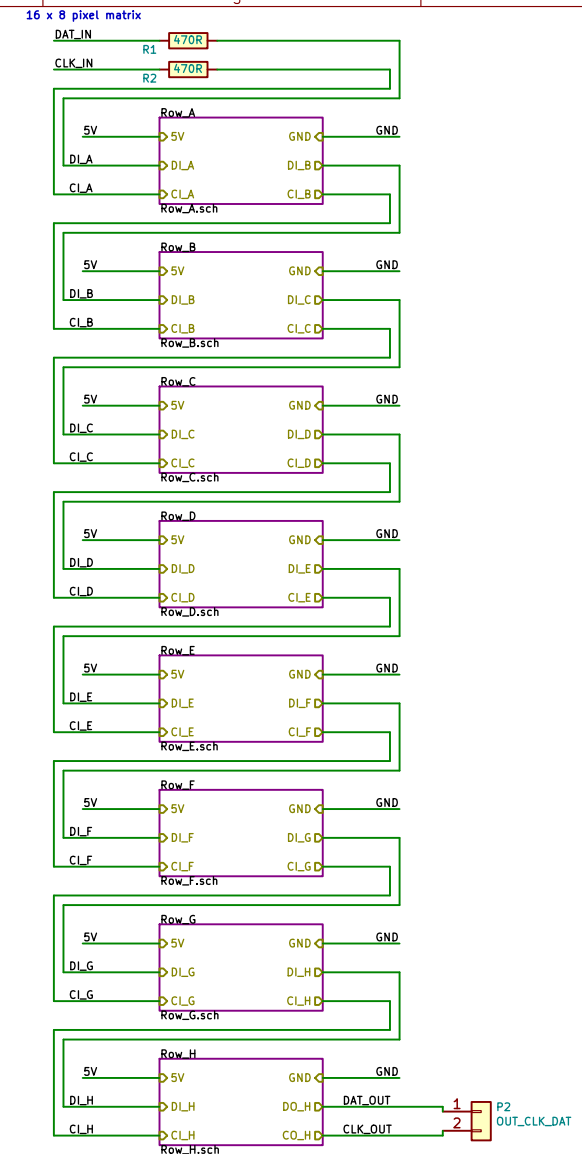
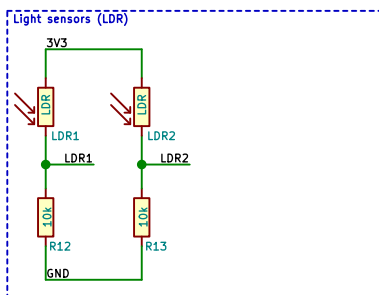
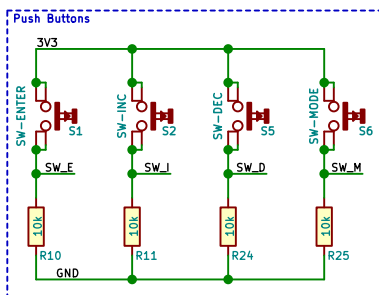
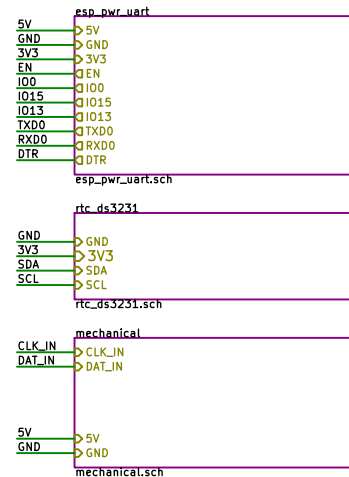


SPI header with breakout pins.
Connect with wire to appropriate pins on ESP32

Native SPI pins are (clk, mosi, miso, cs):
SPI1: 6, 8, 7, 11
HSPI: 14, 13, 12, 15
VSPI: 18, 23, 19, 5
If using native pins max SPI clock can be set to 80 MHZ.
Only HSPI & VSPI are supported by esp-idf driver.



I2C interface for external connections to sensors etc.

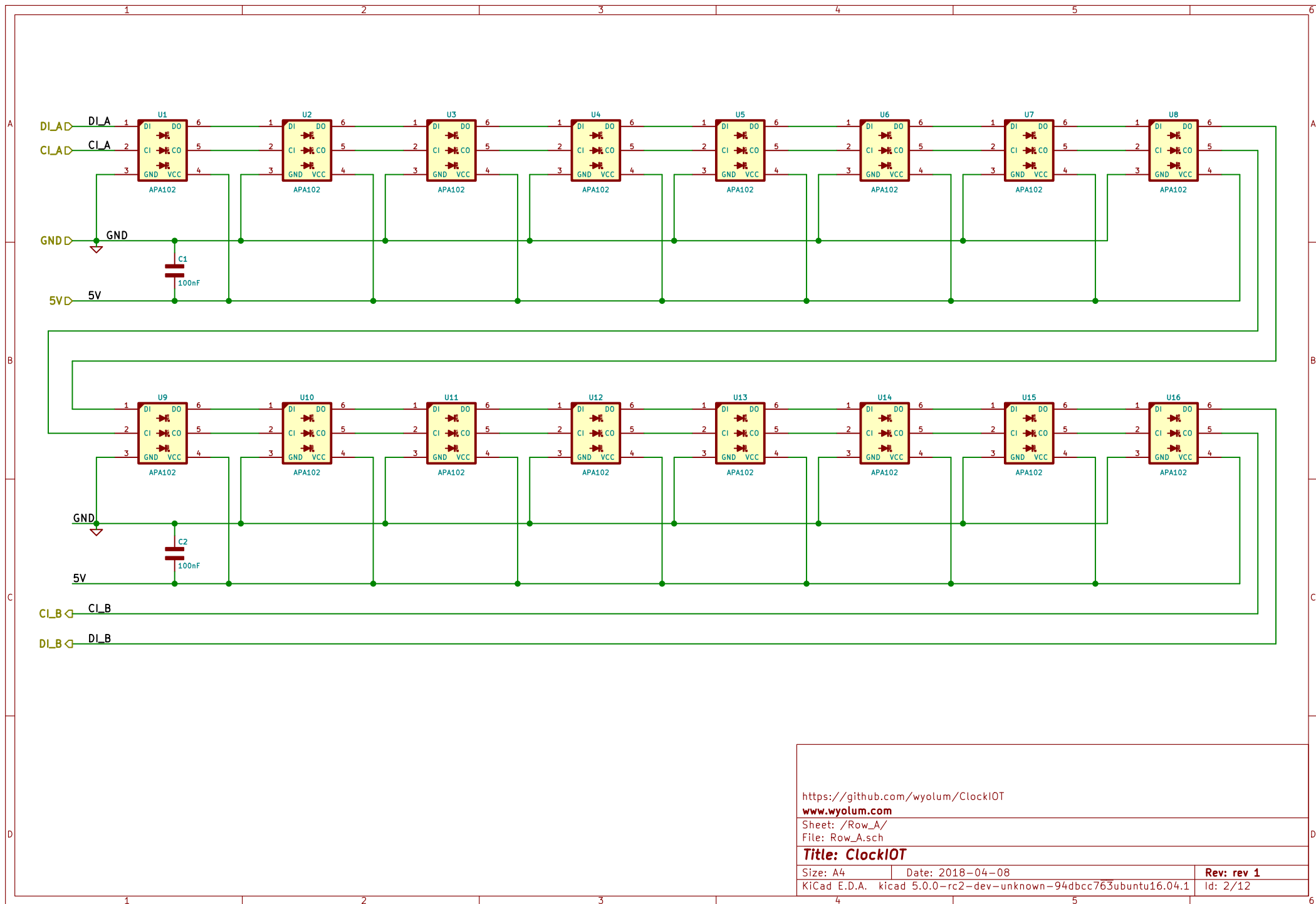


Wyolum 
<https://github.com/wyolum/ClockIoT>
www.wyolum.com

KiCad 

Sheet: /
 File: ClockIoT.sch
Title: ClockIoT
 Size: A4 Date: 2018-04-08
 KiCad E.D.A. kicad 5.0.0-rc2-dev-unknown-94dbcc763ubuntu16.04.1
 Rev: rev 1
 Id: 1/12

open source
hardware



<https://github.com/wyolum/ClockIOT>

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Sheet: /Row_A/

File: Row_A.sch

Title: ClockIOT

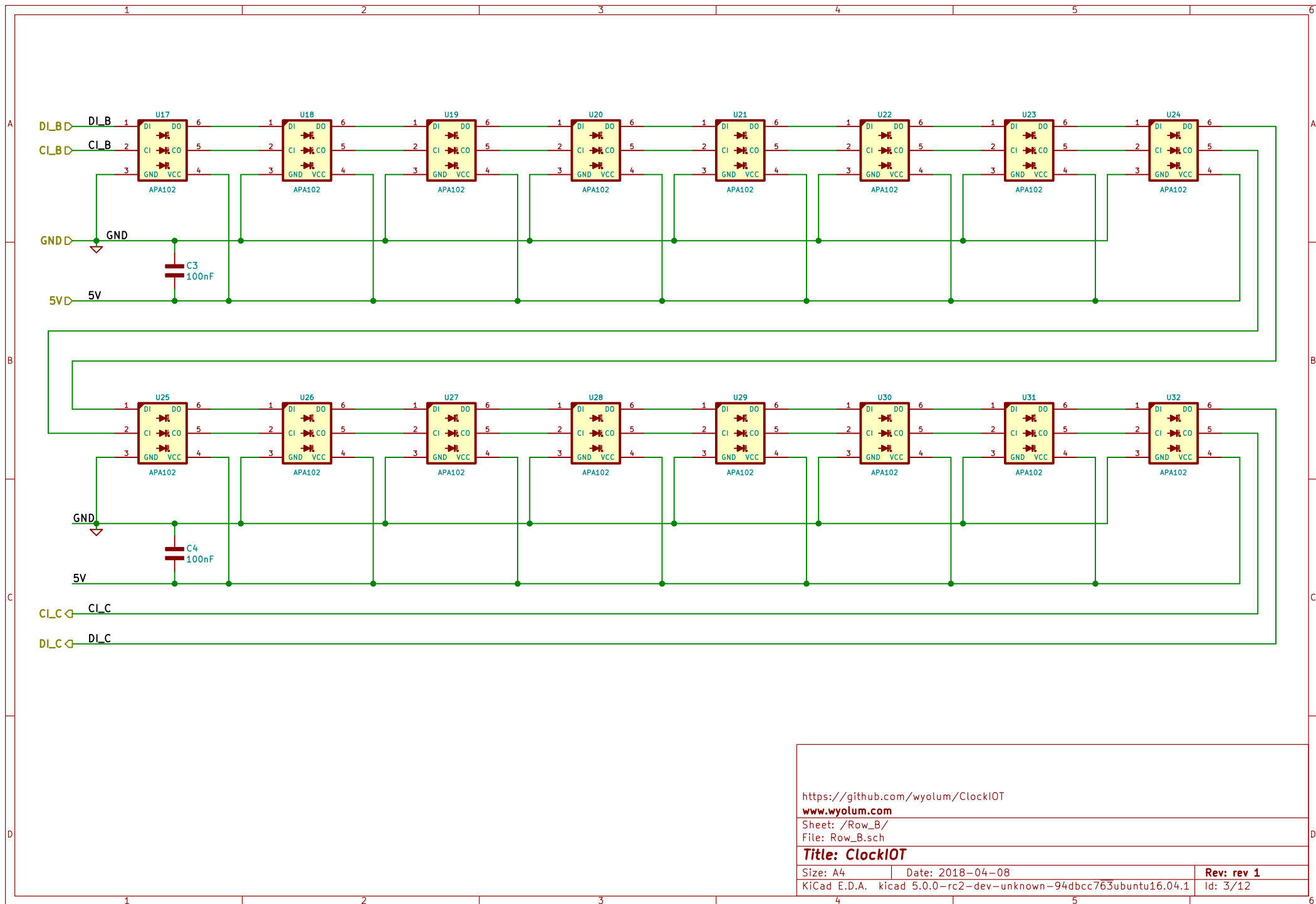
Size: A4

Date: 2018-04-08

Rev: rev 1

KiCad E.D.A. kicad 5.0.0-rc2-dev-unknown-94dbcc763ubuntu16.04.1

Id: 2/12



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Sheet: /Row_B/

File: Row_B.sch

Title: ClockIOT

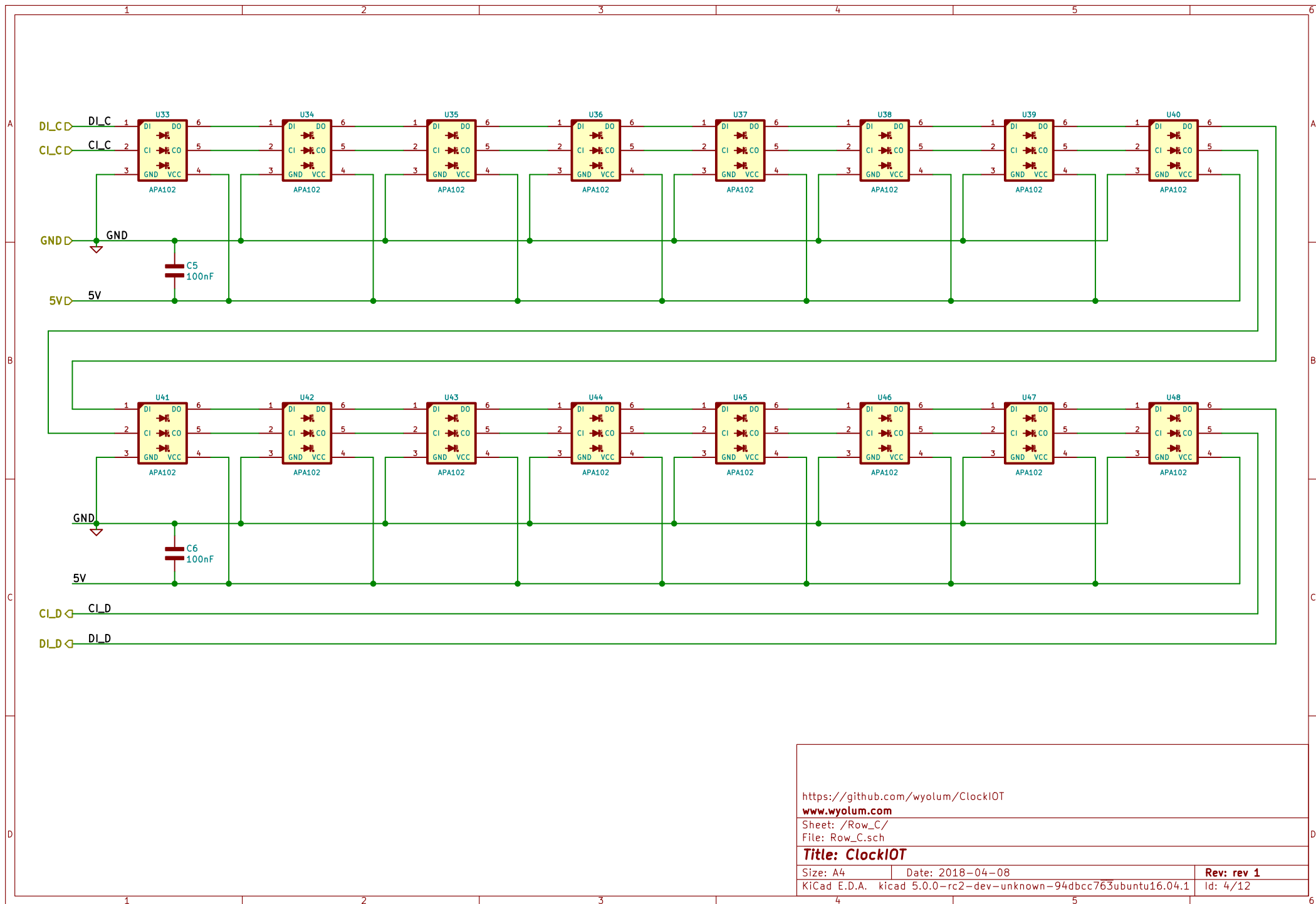
Size: A4

Date: 2018-04-08

Rev: rev 1

KiCad E.D.A. kicad 5.0.0-rc2-dev-unknown-94dbcc763ubuntu16.04.1

Id: 3/12



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Sheet: /Row_C/

File: Row_C.sch

Title: ClockIOT

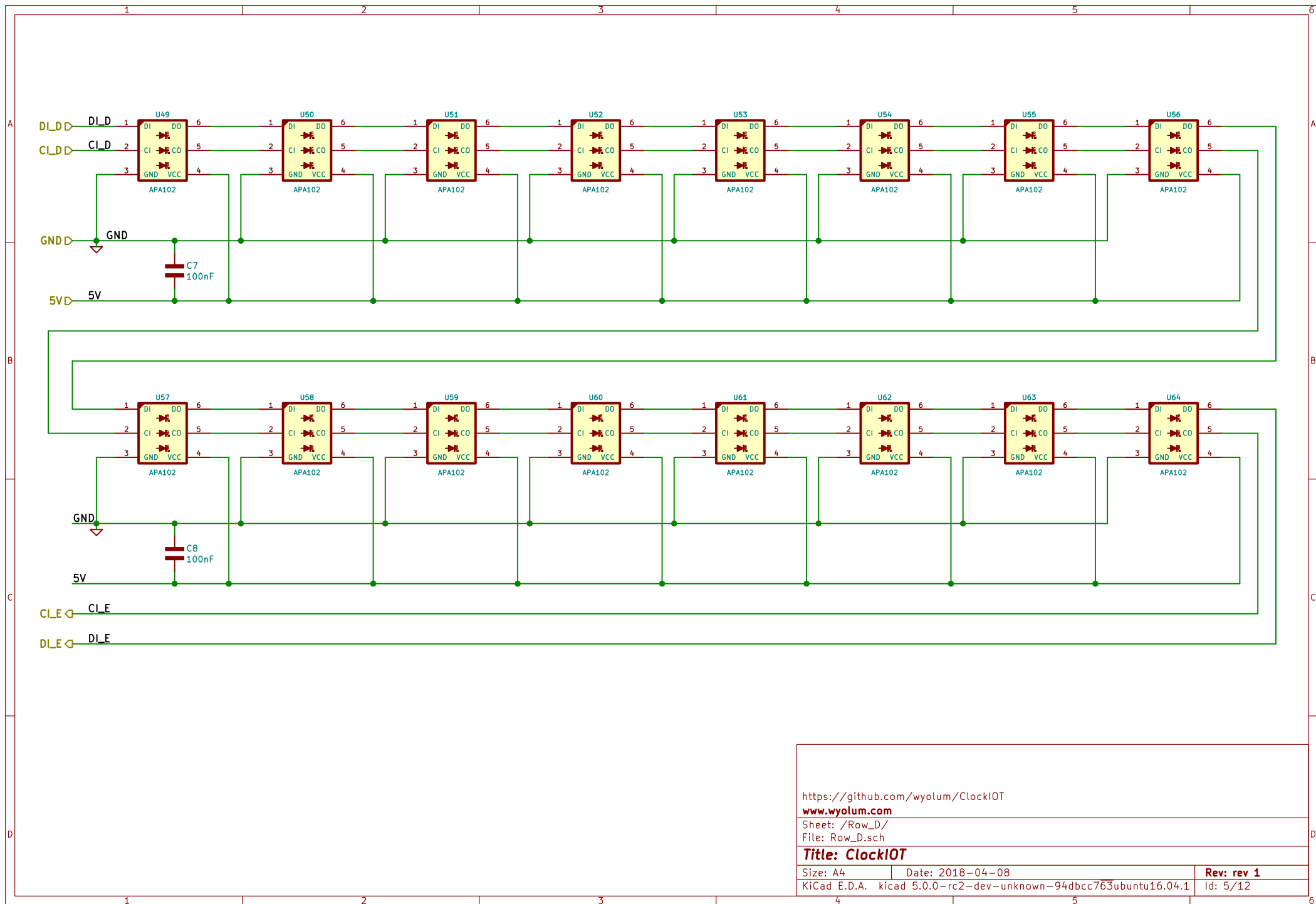
Size: A4

Date: 2018-04-08

Rev: rev 1

KiCad E.D.A. kicad 5.0.0-rc2-dev-unknown-94dbcc763ubuntu16.04.1

Id: 4/12



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Sheet: /Row_D/

File: Row_D.sch

Title: ClockIOT

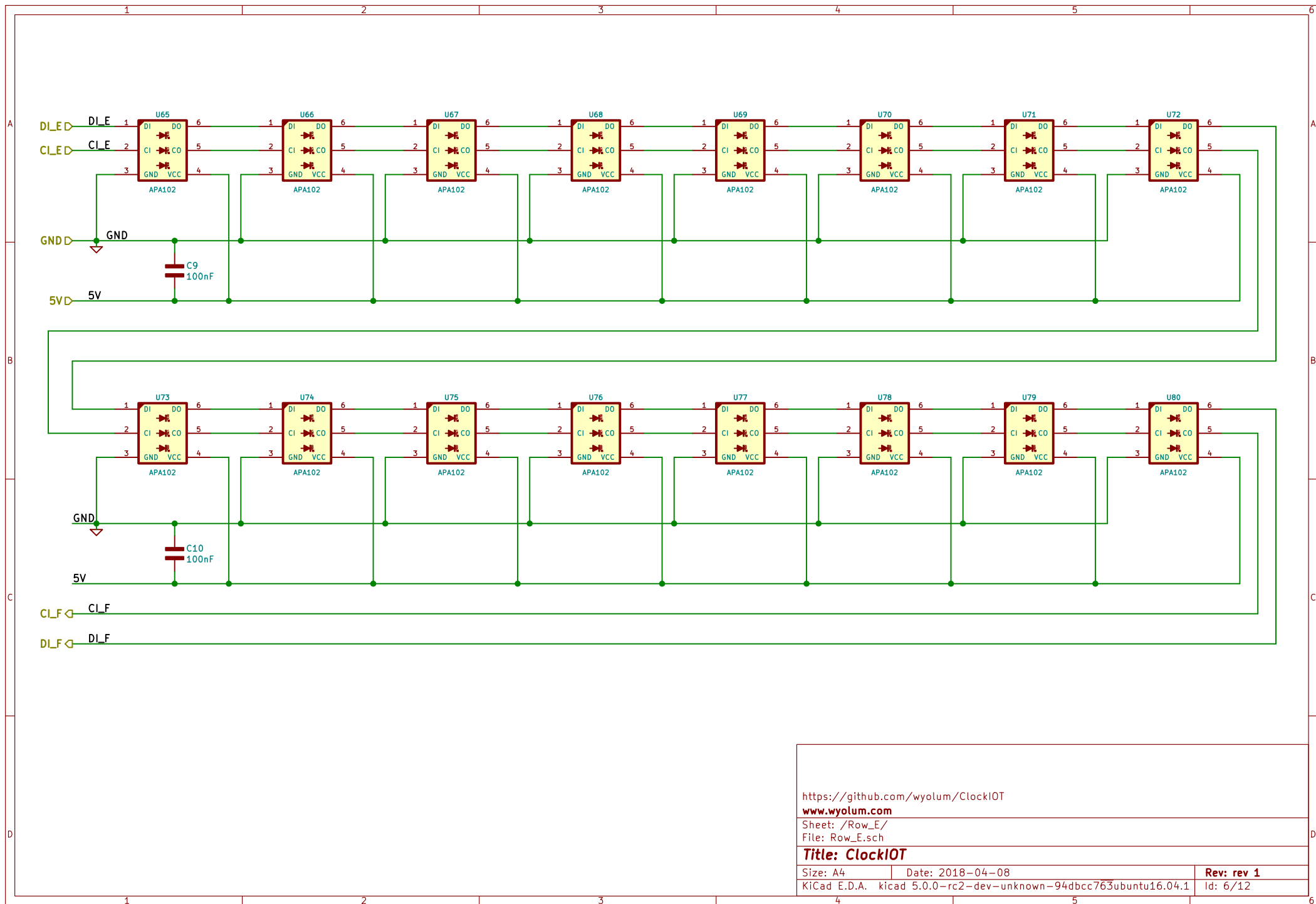
Size: A4

Date: 2018-04-08

Rev: rev 1

KiCad E.D.A. kicad 5.0.0-rc2-dev-unknown-94dbcc763ubuntu16.04.1

Id: 5/12



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Sheet: /Row_E/

File: Row_E.sch

Title: ClockIOT

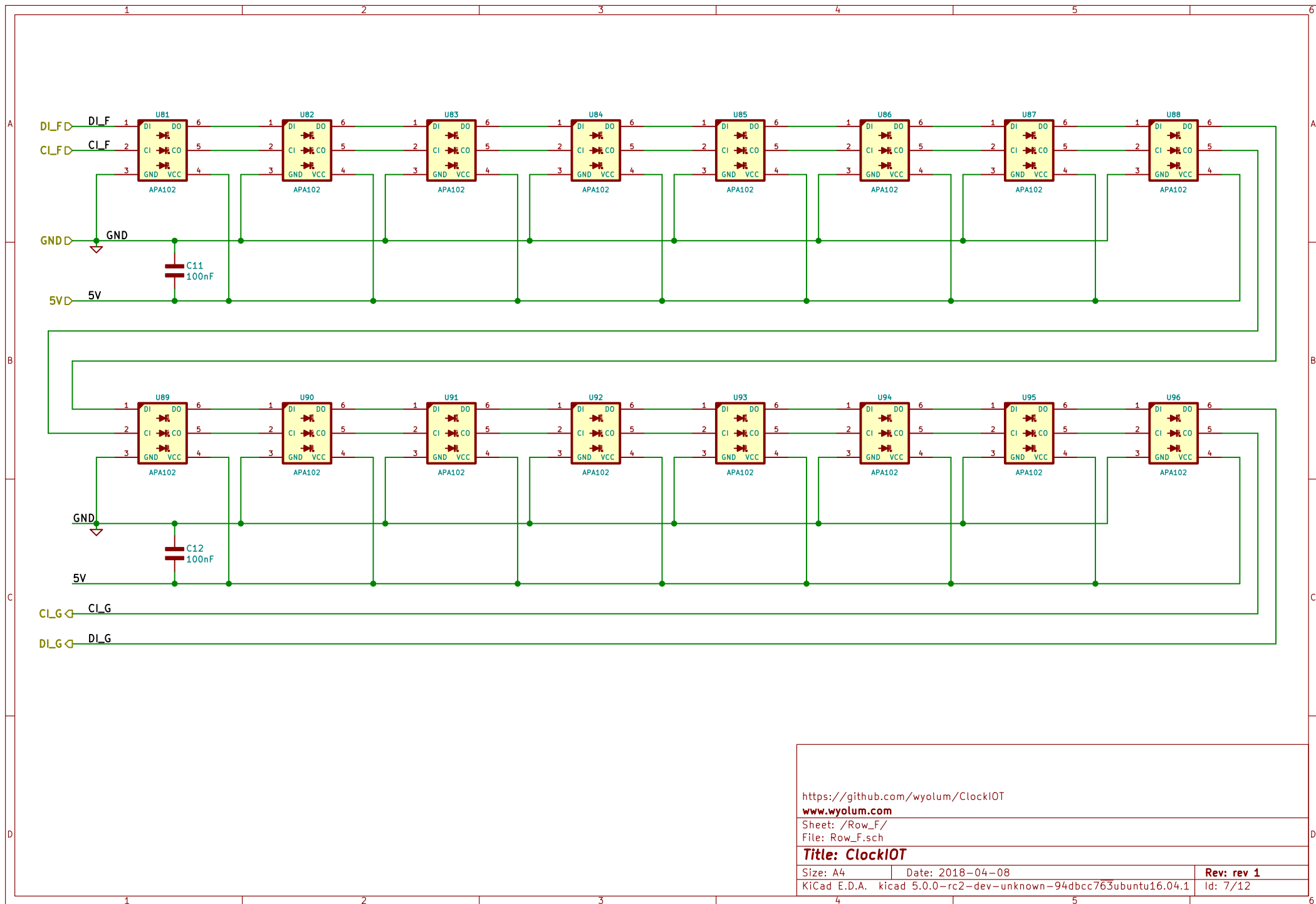
Size: A4

Date: 2018-04-08

Rev: rev 1

KiCad E.D.A. kicad 5.0.0-rc2-dev-unknown-94dbcc763ubuntu16.04.1

Id: 6/12



<https://github.com/wyolum/ClockIOT>

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Sheet: /Row_F/

File: Row_F.sch

Title: ClockIOT

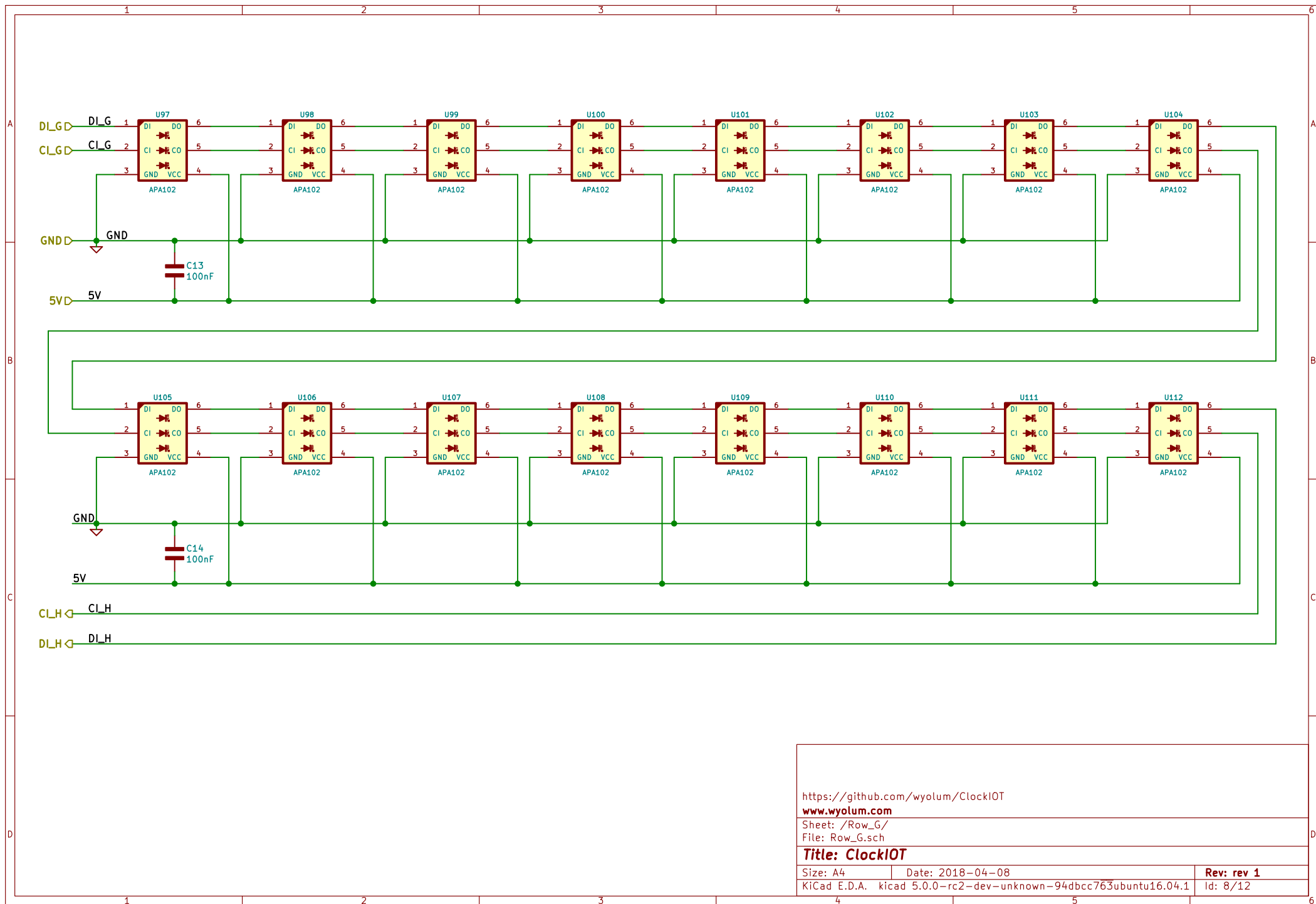
Size: A4

Date: 2018-04-08

Rev: rev 1

KiCad E.D.A. kicad 5.0.0-rc2-dev-unknown-94dbcc763ubuntu16.04.1

Id: 7/12



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Sheet: /Row_G/

File: Row_G.sch

Title: ClockIOT

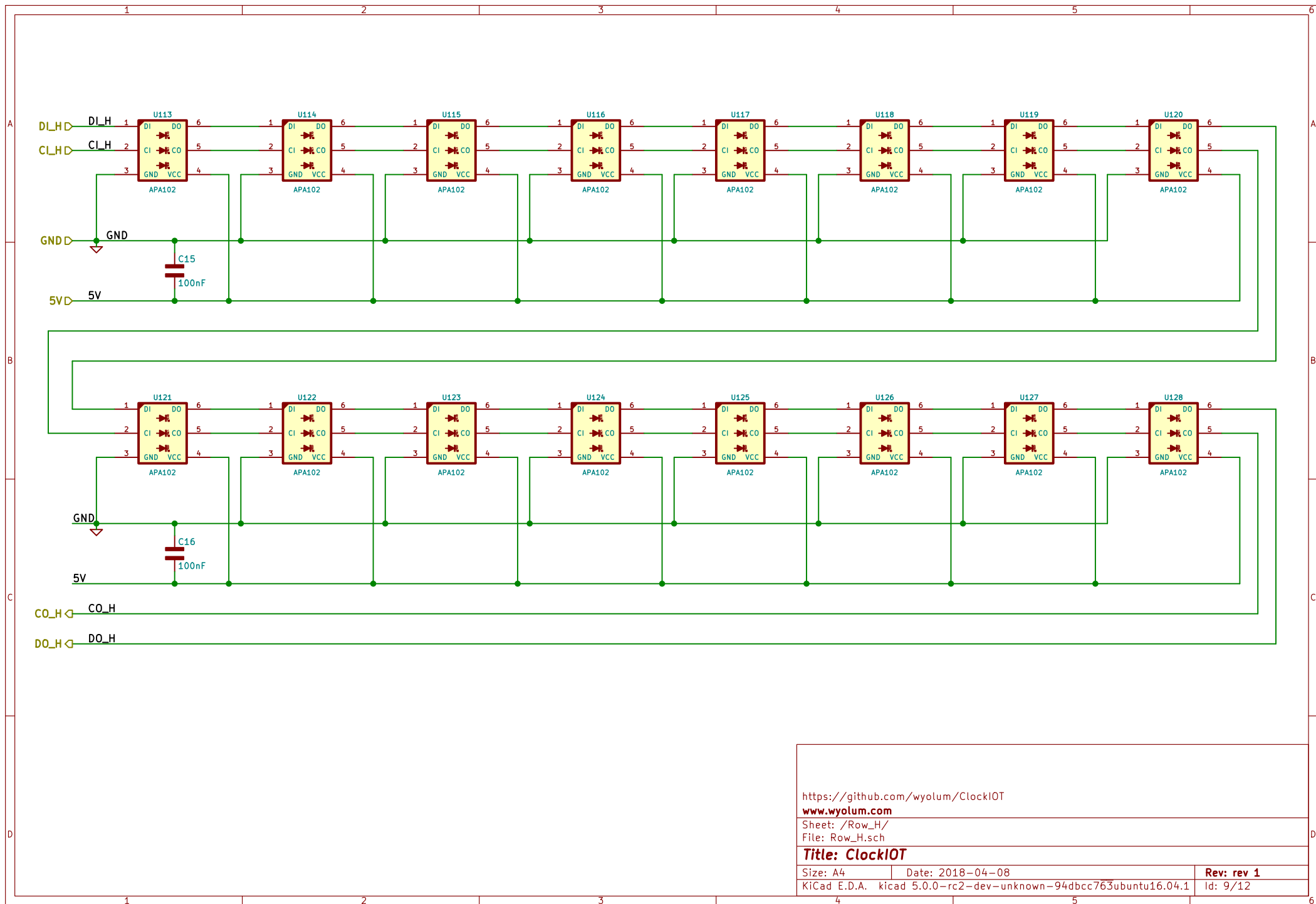
Size: A4

Date: 2018-04-08

Rev: rev 1

KiCad E.D.A. kicad 5.0.0-rc2-dev-unknown-94dbcc763ubuntu16.04.1

Id: 8/12



<https://github.com/wyolum/ClockIOT>

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Sheet: /Row_H/

File: Row_H.sch

Title: ClockIOT

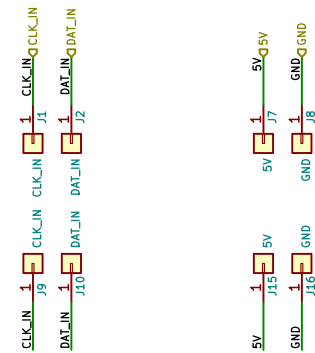
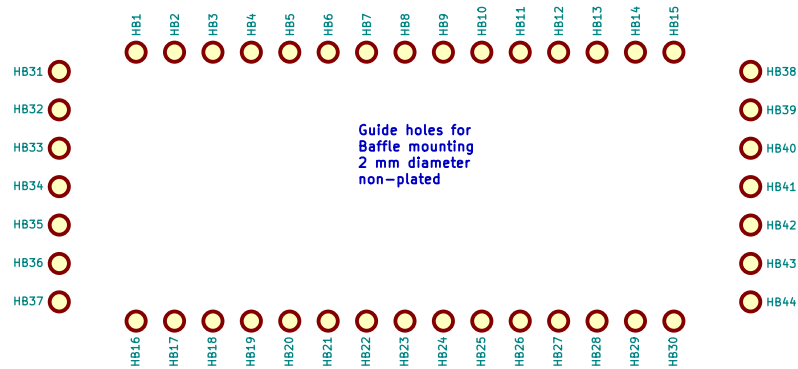
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Date: 2018-04-08

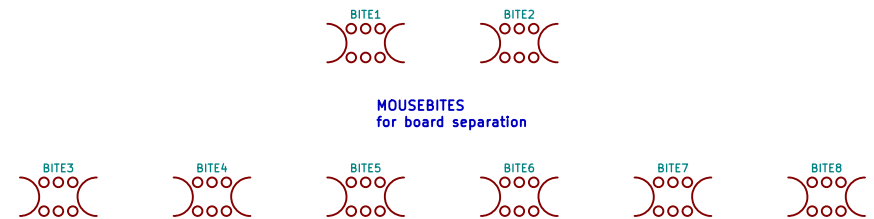
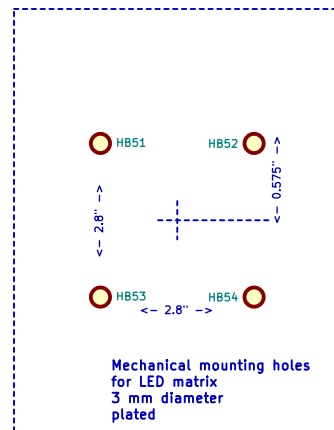
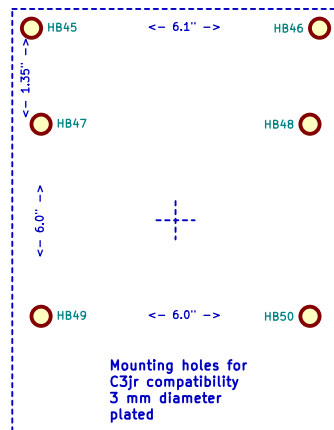
Rev: rev 1

KiCad E.D.A. kicad 5.0.0-rc2-dev-unknown-94dbcc763ubuntu16.04.1

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Mounting holes for
piggy back attachment
of "snap-off" control board.
Use M3 HEX posts to connect
LED board to control board



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Sheet: /mechanical/
File: mechanical.sch

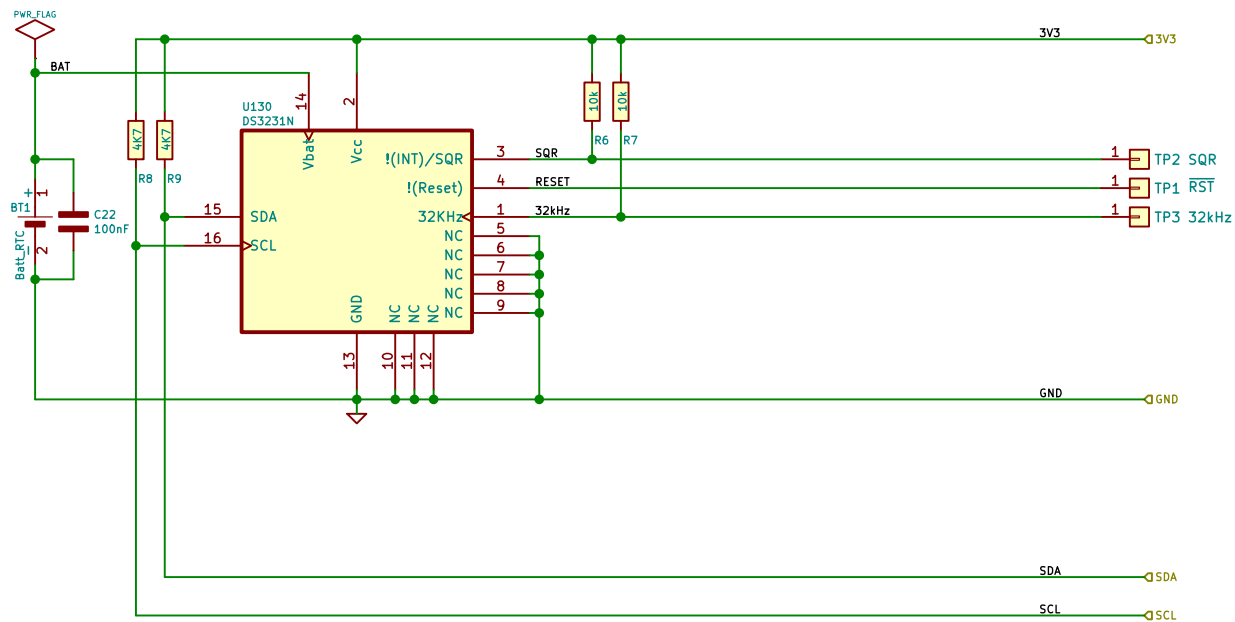
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Size: A4 Date: 2018-04-08

KiCad E.D.A. kicad 5.0.0-rc2-dev-unknown-94dbcc763ubuntu16.04.1

Rev: rev 1

Id: 10/12



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Sheet: /rtc_ds3231/

File: rtc_ds3231.sch

Title: ClockIOT

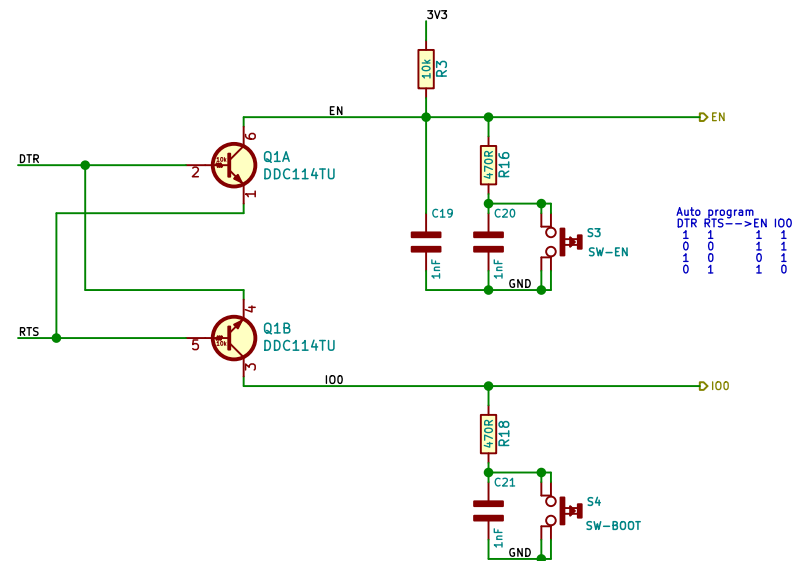
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Date: 2018-04-08

Rev: rev 1

KiCad E.D.A. kicad 5.0.0-rc2-dev-unknown-94dbcc763ubuntu16.04.1

Id: 11/12



open source
hardware

Sheet: /esp_pwr_uart/
File: esp_pwr_uart.sch

Title: ClockIoT

Size: A4	Date: 2018-04-08
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Size: A4	Date: 2018-04-08
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Rev: rev 1

Id: 12/12