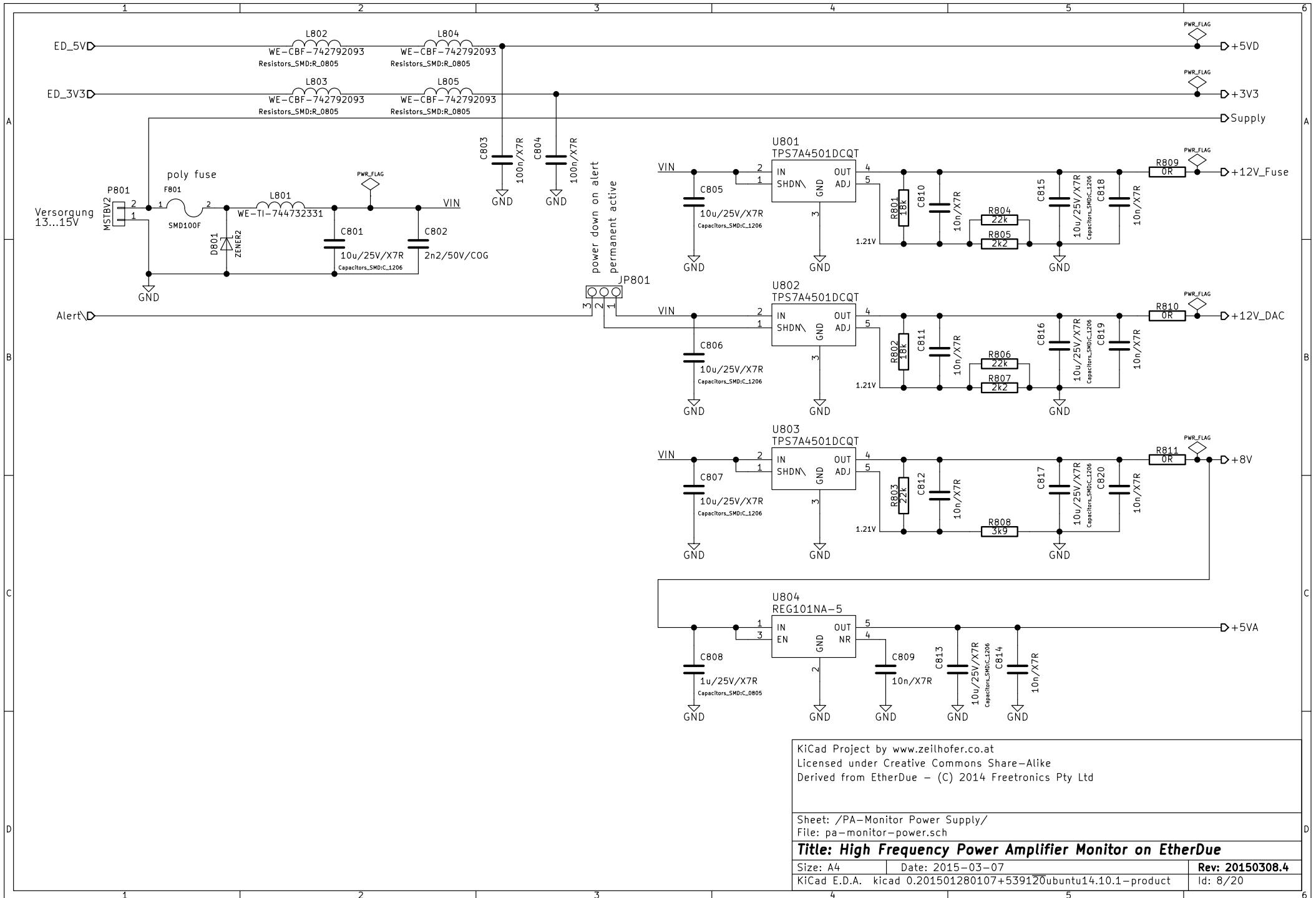


Notes for the PA-Monitor:
 If not otherwise stated all resistors and capacitors are in an SMD-0603 package.
 All vias for decoupling capacitors have a drill diameter of 0.6mm or greater.

Labelling scheme: Use Global labels for simple 1:1 I/O pin->MCU connectors, hierarchical labels for all other inter-sheet connections.

Existing EtherDue Schematic

Notes on the 1nF-1nF-BAT54 network of all ADC inputs.
 The high-side C and the dual-diode should be placed near the connector of the signal.
 The low-side C should be placed near the ADC input pin.

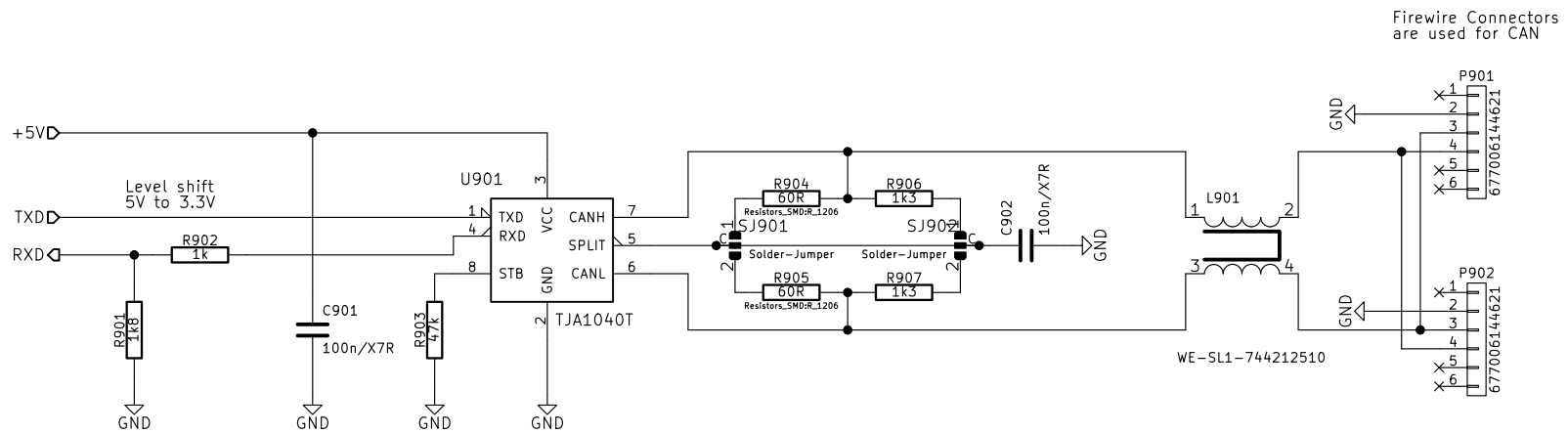


KiCad Project by www.zeilhofer.co.at
 Licensed under Creative Commons Share-Alike
 Derived from EtherDue - (C) 2014 Freetronics Pty Ltd

Sheet: /PA-Monitor Power Supply/
 File: pa-monitor-power.sch

Title: High Frequency Power Amplifier Monitor on EtherDue

Size: A4	Date: 2015-03-07	Rev: 20150308.4
KiCad E.D.A. kicad 0.201501280107+539120ubuntu14.10.1-product		Id: 8/20

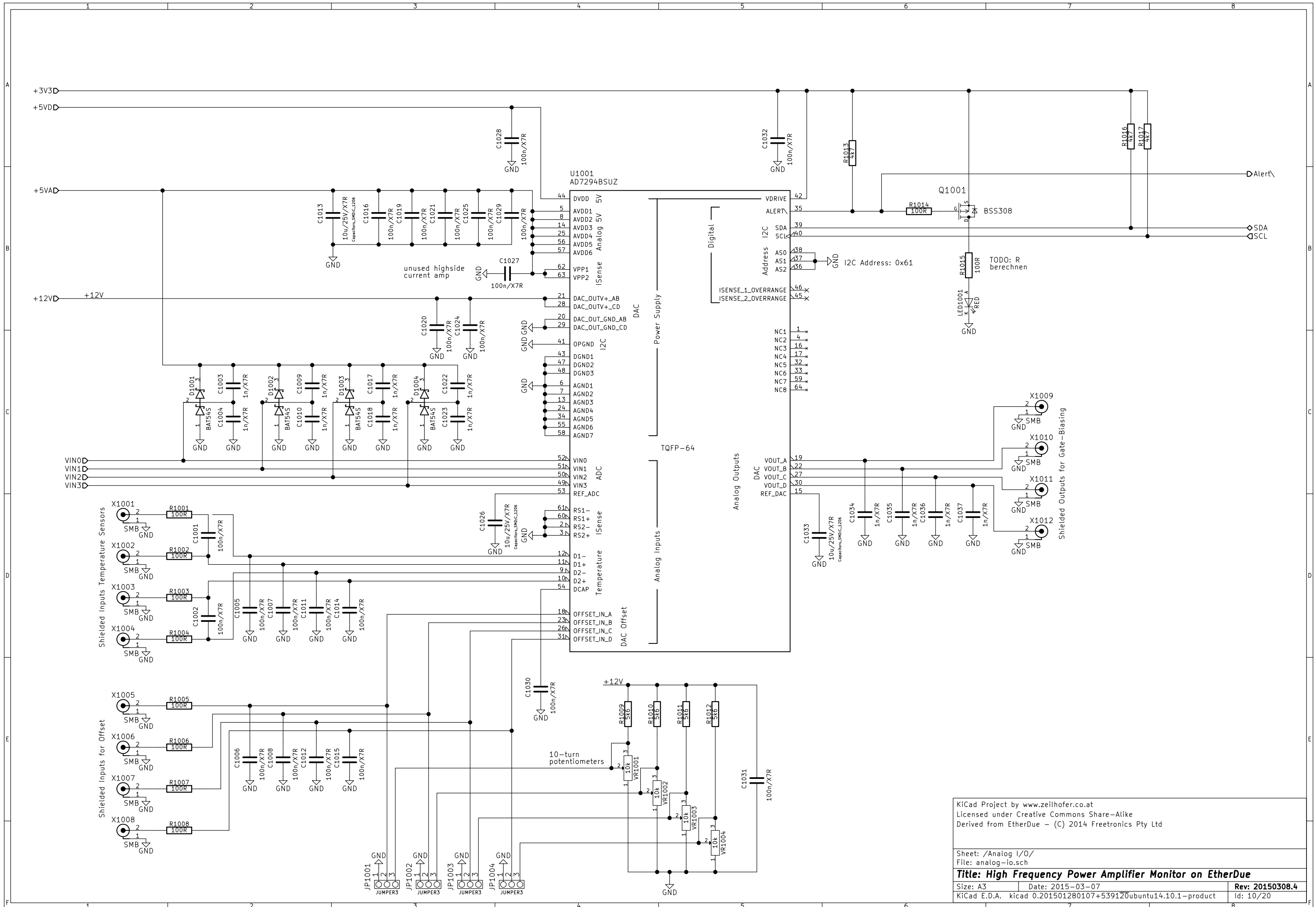


KiCad Project by www.zeilhofer.co.at
 Licensed under Creative Commons Share-Alike
 Derived from EtherDue - (C) 2014 Freertronics Pty Ltd

Sheet: /CAN-Bus/
 File: can-bus.sch

Title: High Frequency Power Amplifier Monitor on EtherDue

Size: A4	Date: 2015-03-07	Rev: 20150308.4
KiCad E.D.A. kicad 0.201501280107+539120ubuntu14.10.1-product		Id: 9/20

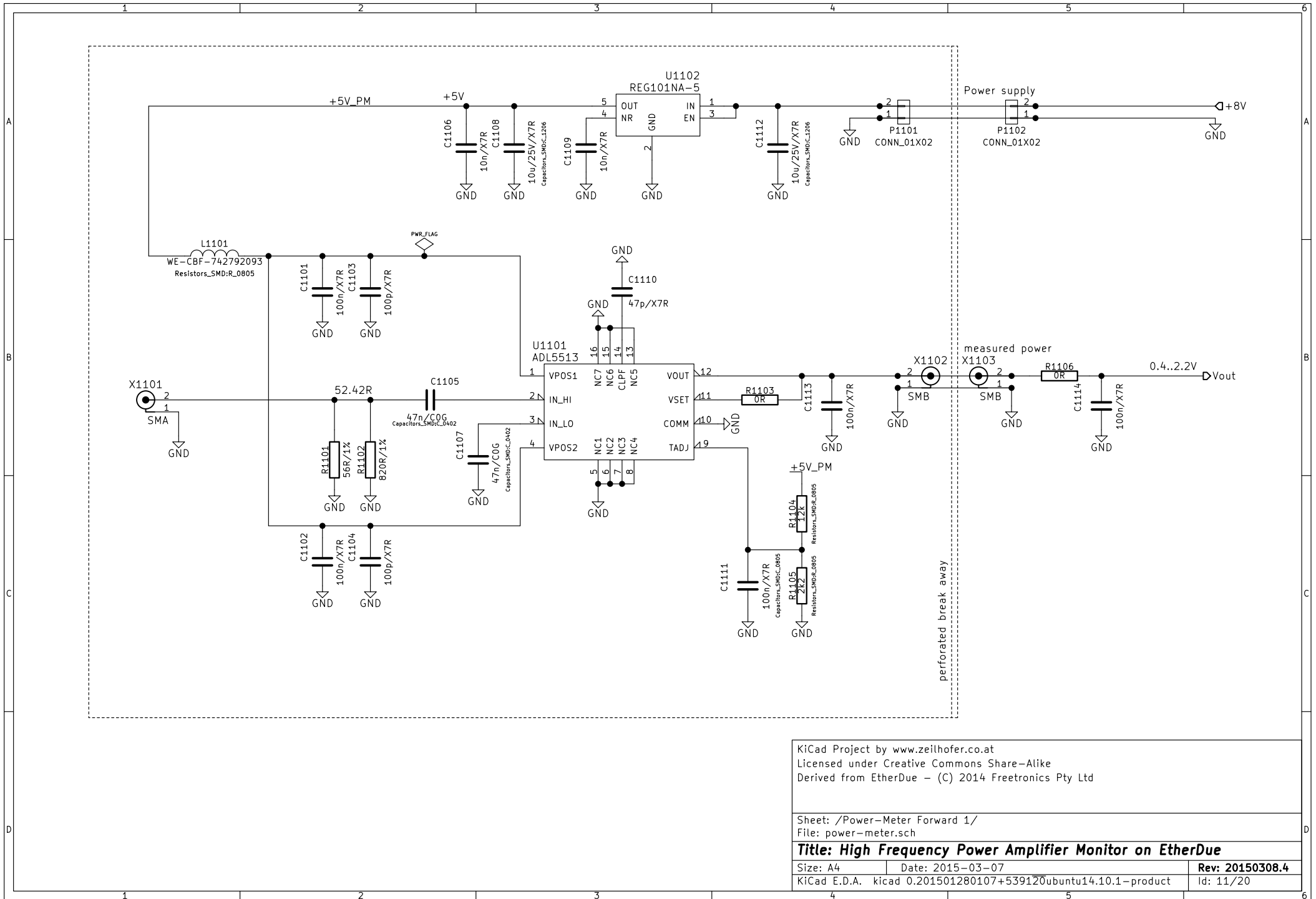


KiCad Project by www.zeilhofer.co.at
 Licensed under Creative Commons Share-Alike
 Derived from EtherDue - (C) 2014 Freertronics Pty Ltd

Sheet: /Analog I/O/
 File: analog-io.sch

Title: High Frequency Power Amplifier Monitor on EtherDue

Size: A3	Date: 2015-03-07	Rev: 20150308.4
KiCad E.D.A. kicad 0.201501280107+53912ubuntu14.10.1-product		Id: 10/20

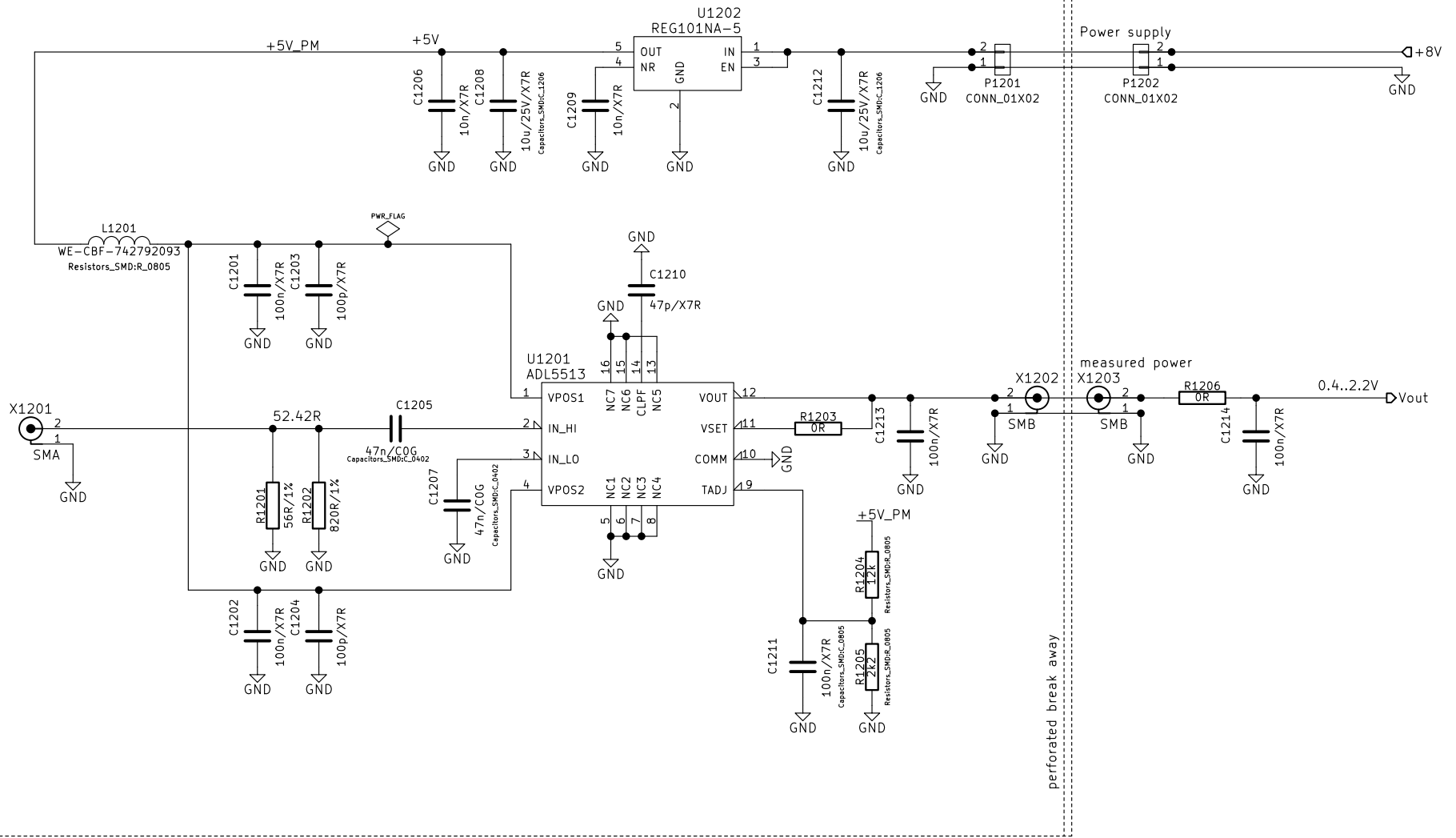


KiCad Project by www.zeilhofer.co.at
 Licensed under Creative Commons Share-Alike
 Derived from EtherDue - (C) 2014 Freetronics Pty Ltd

Sheet: /Power-Meter Forward 1/
 File: power-meter.sch

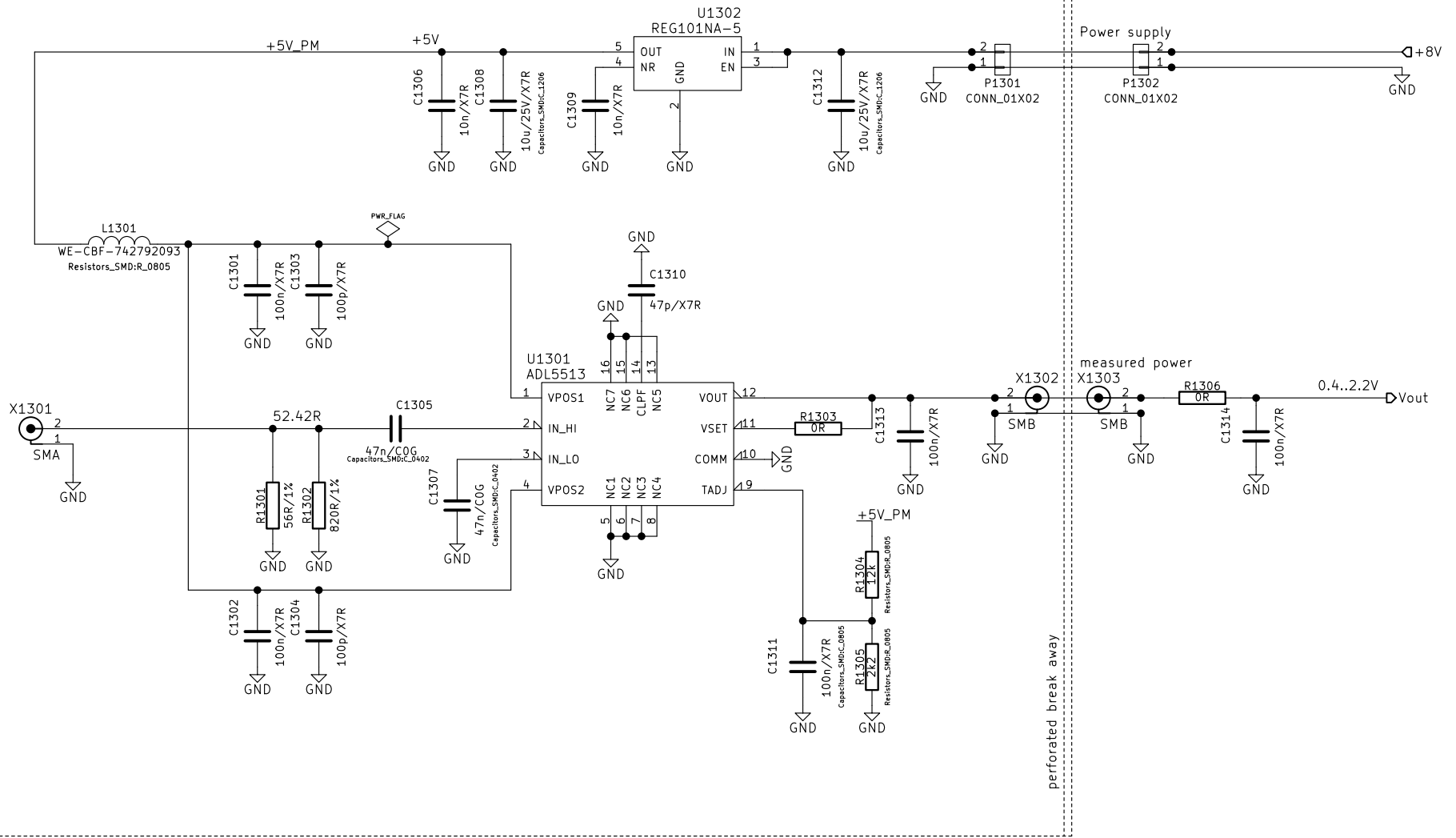
Title: High Frequency Power Amplifier Monitor on EtherDue

Size: A4	Date: 2015-03-07	Rev: 20150308.4
KiCad E.D.A. kicad 0.201501280107+539120ubuntu14.10.1-product		Id: 11/20



perforated break away

KiCad Project by www.zeilhofer.co.at Licensed under Creative Commons Share-Alike Derived from EtherDue - (C) 2014 Freetronics Pty Ltd	
Sheet: /Power-Meter Forward 2/ File: power-meter.sch	
Title: High Frequency Power Amplifier Monitor on EtherDue	
Size: A4	Date: 2015-03-07
KiCad E.D.A. kicad 0.201501280107+539120ubuntu14.10.1-product	Rev: 20150308.4 Id: 12/20

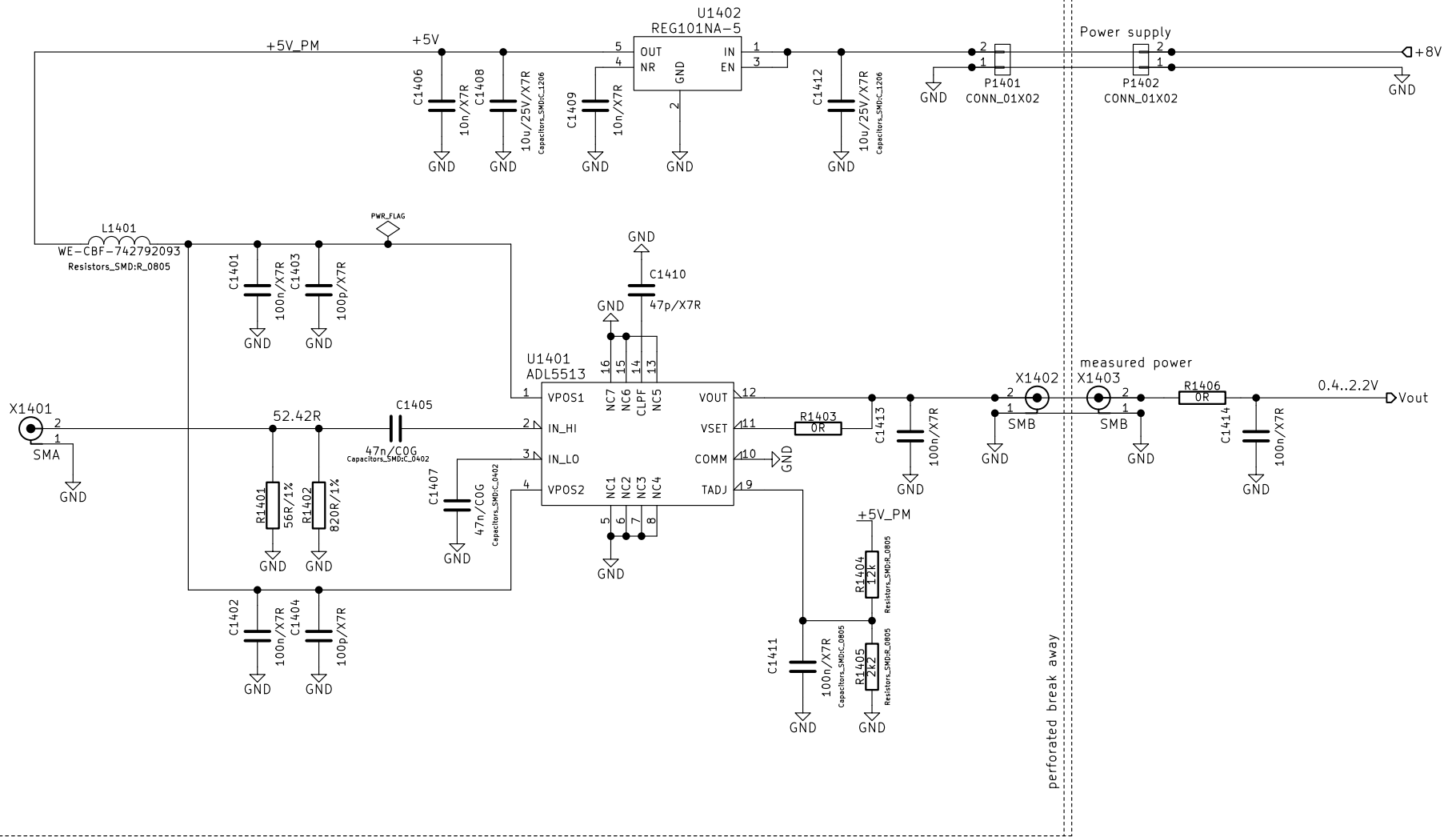


KiCad Project by www.zeilhofer.co.at
 Licensed under Creative Commons Share-Alike
 Derived from EtherDue - (C) 2014 Freetronics Pty Ltd

Sheet: /Power-Meter Return 1/
 File: power-meter.sch

Title: High Frequency Power Amplifier Monitor on EtherDue

Size: A4	Date: 2015-03-07	Rev: 20150308.4
KiCad E.D.A. kicad 0.201501280107+539120ubuntu14.10.1-product		Id: 13/20



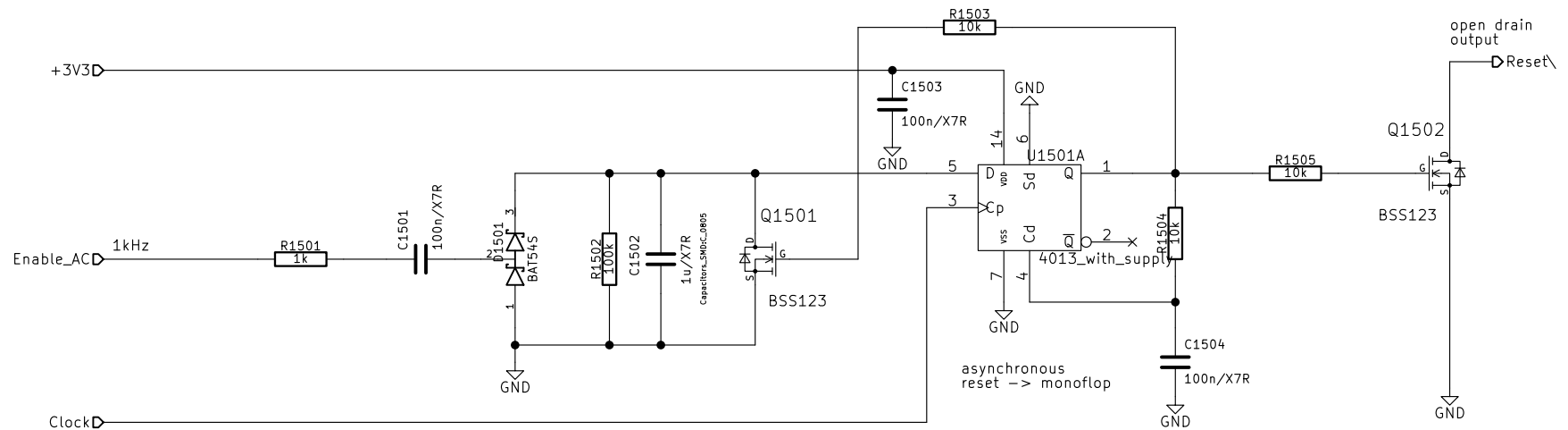
KiCad Project by www.zeilhofer.co.at
 Licensed under Creative Commons Share-Alike
 Derived from EtherDue - (C) 2014 Freetronics Pty Ltd

Sheet: /Power-Meter Return 2/
 File: power-meter.sch

Title: High Frequency Power Amplifier Monitor on EtherDue

Size: A4	Date: 2015-03-07	Rev: 20150308.4
KiCad E.D.A. kicad 0.201501280107+539120ubuntu14.10.1-product		Id: 14/20

The reset output is pulsed low, when
a) a 1kHz (digital, 3.3V) signal is applied to the Enable_AC input and
b) a rising edge is applied to Clock input



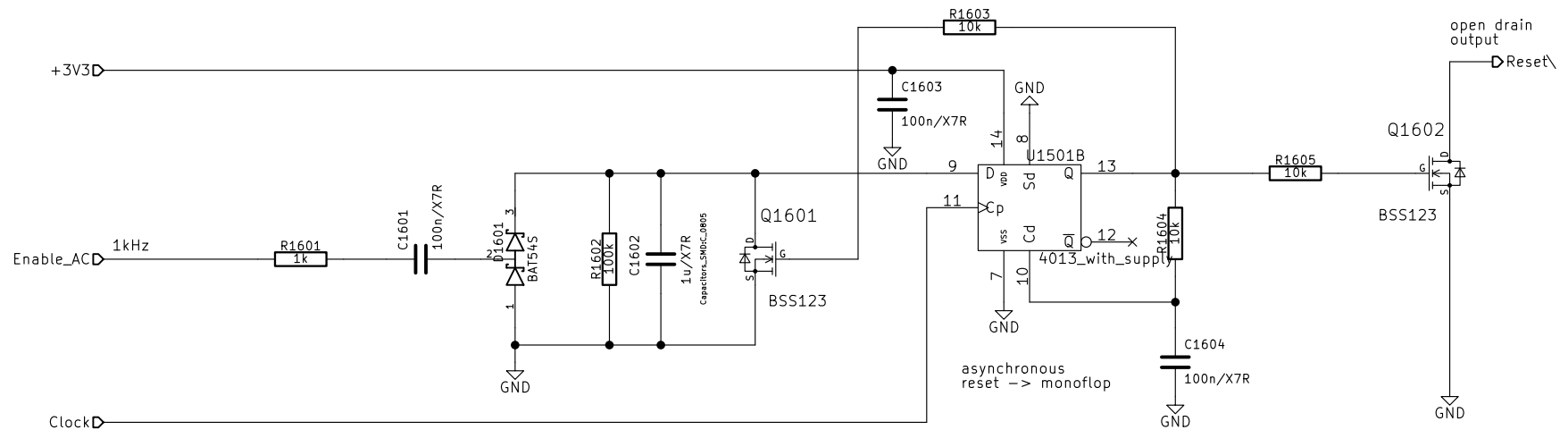
KiCad Project by www.zeilhofer.co.at
Licensed under Creative Commons Share-Alike
Derived from EtherDue - (C) 2014 Freertronics Pty Ltd

Sheet: /Fuse-Reset A/
File: fuse-reset.sch

Title: High Frequency Power Amplifier Monitor on EtherDue

Size: A4	Date: 2015-03-07	Rev: 20150308.4
KiCad E.D.A. kicad 0.201501280107+539120ubuntu14.10.1-product		Id: 15/20

The reset output is pulsed low, when
 a) a 1kHz (digital, 3.3V) signal is applied to the Enable_AC input and
 b) a rising edge is applied to Clock input

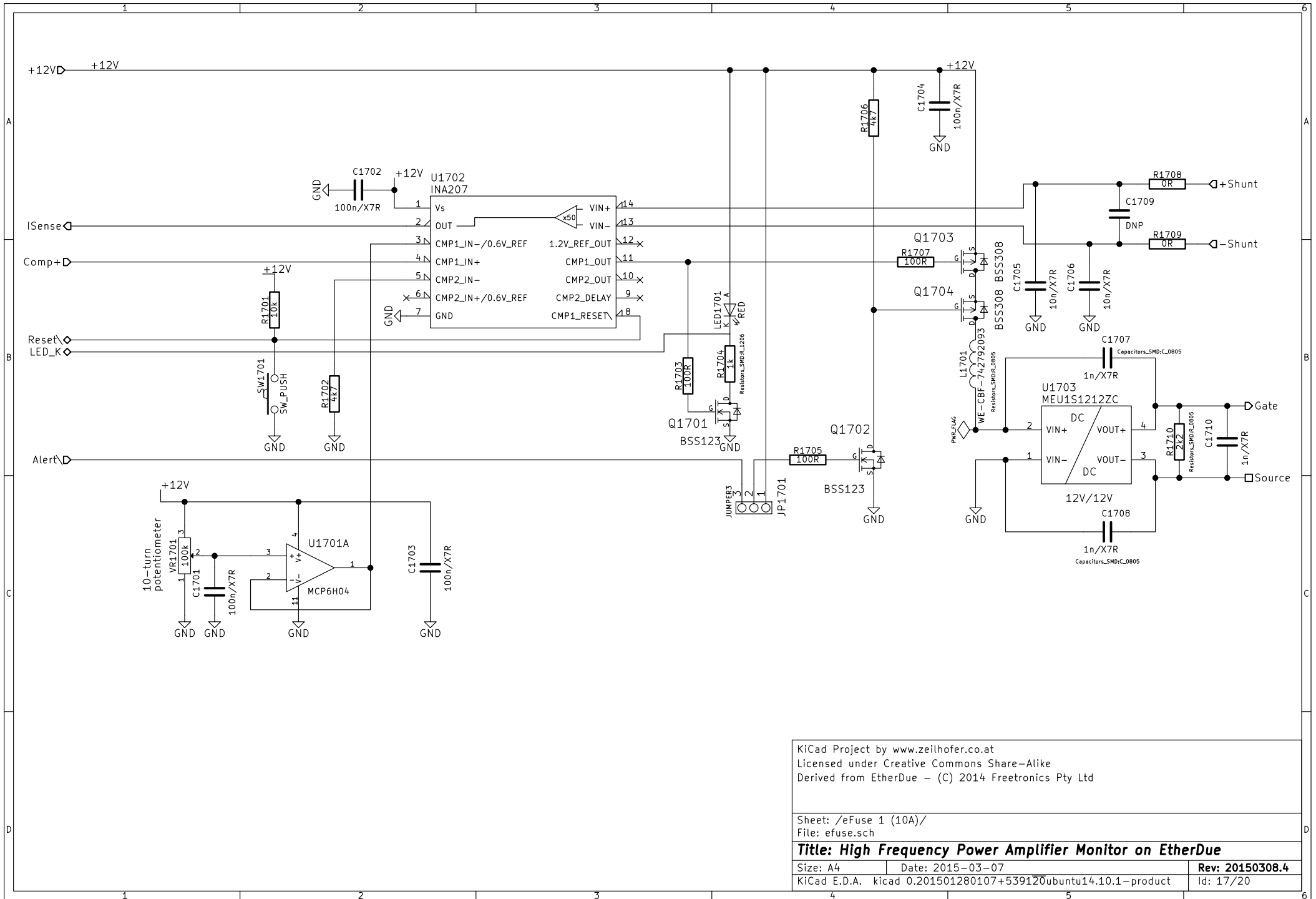


KiCad Project by www.zeilhofer.co.at
 Licensed under Creative Commons Share-Alike
 Derived from EtherDue - (C) 2014 Freertronics Pty Ltd

Sheet: /Fuse-Reset B/
 File: fuse-reset.sch

Title: High Frequency Power Amplifier Monitor on EtherDue

Size: A4	Date: 2015-03-07	Rev: 20150308.4
KiCad E.D.A. kicad 0.201501280107+539120ubuntu14.10.1-product		Id: 16/20

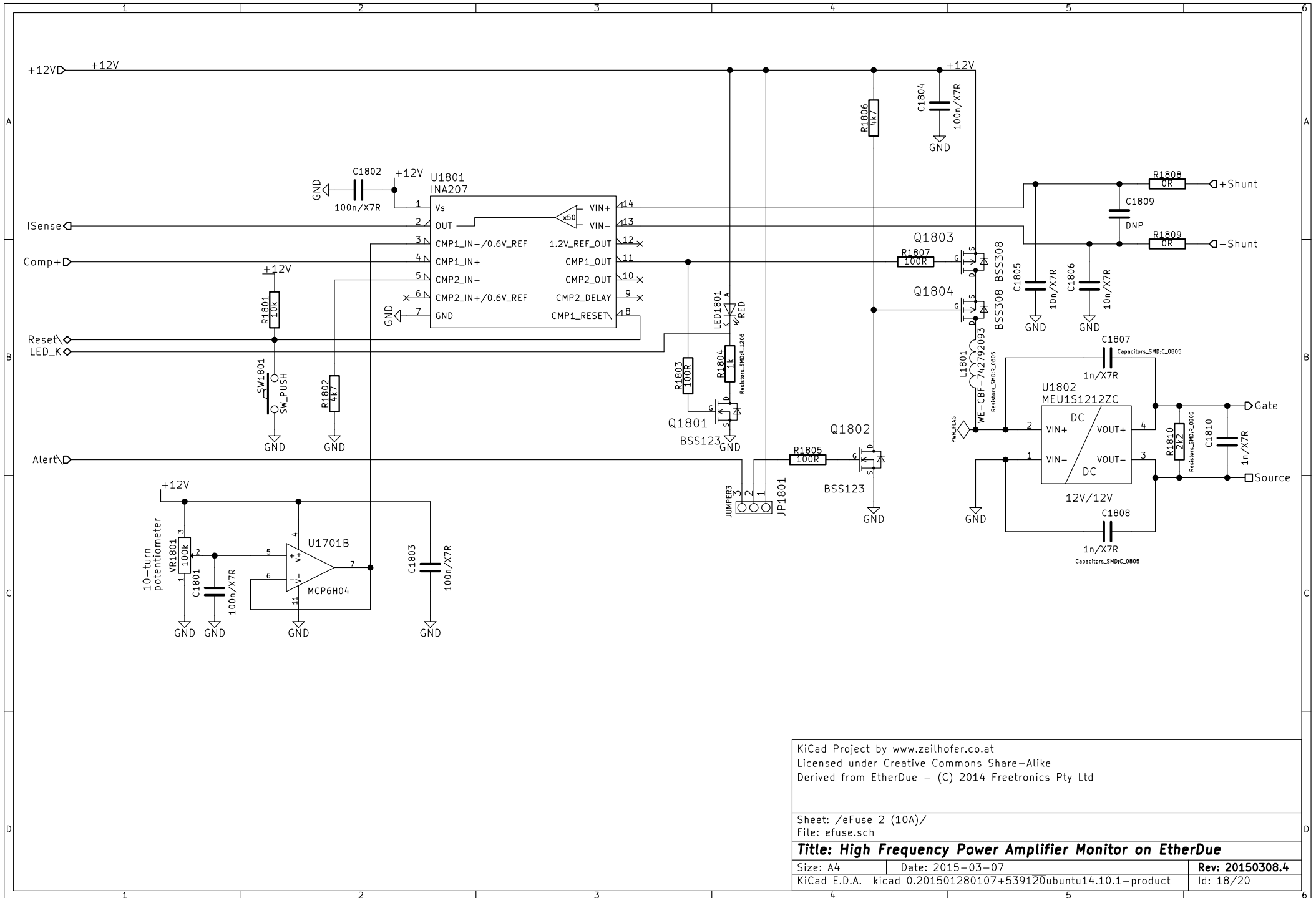


KiCad Project by www.zeilhofer.co.at
 Licensed under Creative Commons Share-Alike
 Derived from EtherDue - (C) 2014 Freertronics Pty Ltd

Sheet: /eFuse 1 (10A)/
 File: efuse.sch

Title: High Frequency Power Amplifier Monitor on EtherDue

Size: A4	Date: 2015-03-07	Rev: 20150308.4
KiCad E.D.A. kicad 0.201501280107+539120ubuntu14.10.1-product		Id: 17/20

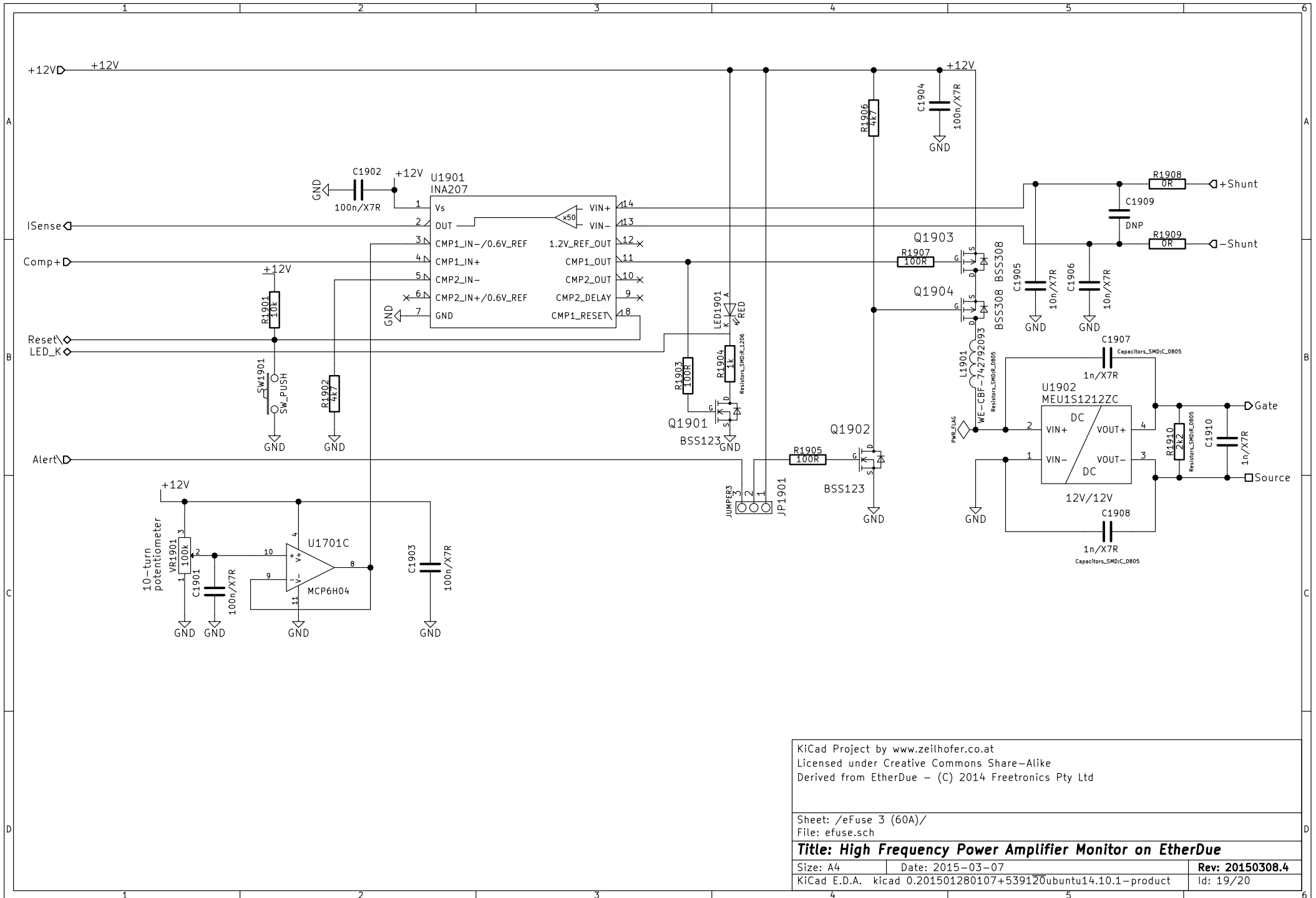


KiCad Project by www.zeilhofer.co.at
 Licensed under Creative Commons Share-Alike
 Derived from EtherDue - (C) 2014 Freertronics Pty Ltd

Sheet: /eFuse 2 (10A)/
 File: efuse.sch

Title: High Frequency Power Amplifier Monitor on EtherDue

Size: A4	Date: 2015-03-07	Rev: 20150308.4
KiCad E.D.A. kicad 0.201501280107+539120ubuntu14.10.1-product		Id: 18/20



KiCad Project by www.zeilhofer.co.at
 Licensed under Creative Commons Share-Alike
 Derived from EtherDue - (C) 2014 Freertronics Pty Ltd

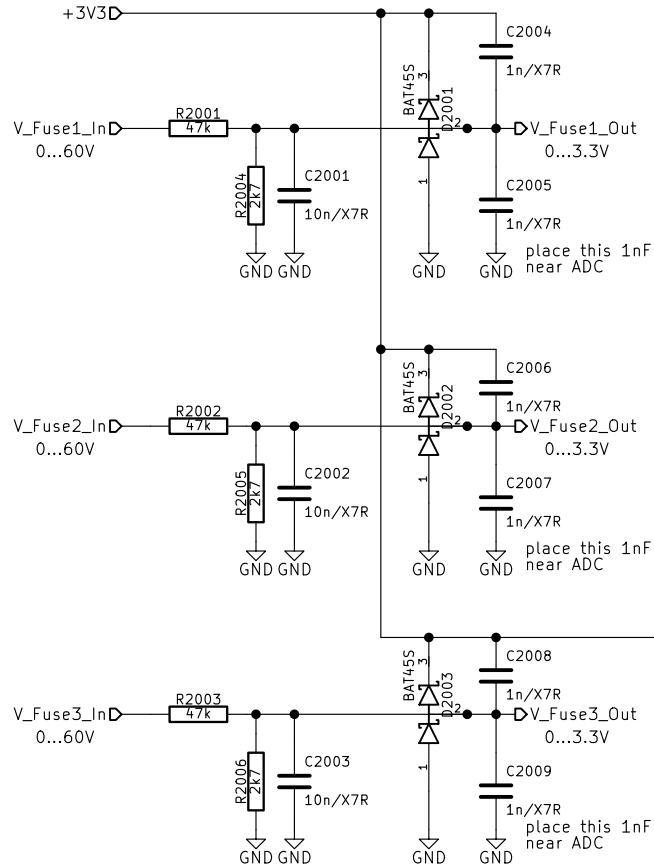
Sheet: /eFuse 3 (60A)/
 File: efuse.sch

Title: High Frequency Power Amplifier Monitor on EtherDue

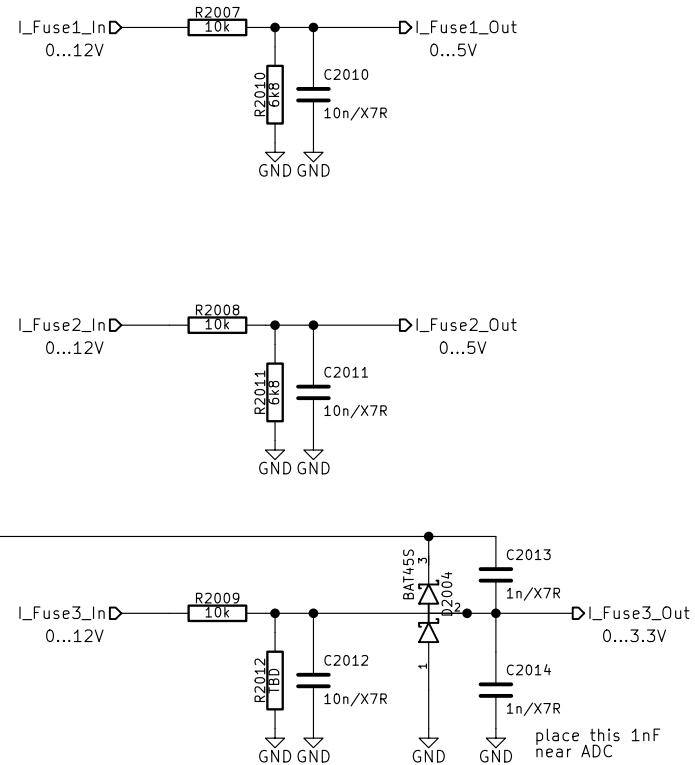
Size: A4 Date: 2015-03-07 Rev: 20150308.4

KiCad E.D.A. kicad 0.201501280107+539120ubuntu14.10.1-product Id: 19/20

Voltages from 60V to 3.3V



Currents of F1 and F2 from 12V to 5V and of F3 from 12V to 3.3V



KiCad Project by www.zeilhofer.co.at
 Licensed under Creative Commons Share-Alike
 Derived from EtherDue - (C) 2014 Freertronics Pty Ltd

Sheet: /Analog Level Adoption/
 File: analog-level-adoption.sch

Title: High Frequency Power Amplifier Monitor on EtherDue

Size: A4	Date: 2015-03-07	Rev: 20150308.4
KiCad E.D.A. kicad 0.201501280107+539120ubuntu14.10.1-product		Id: 20/20