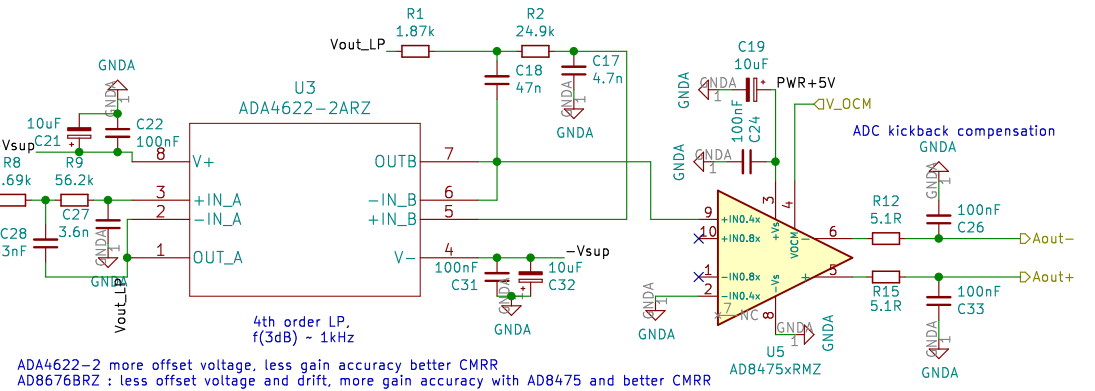


set R3-R6 and to select total resistance of RN1:500R or 1k or 2k(default)
 make path R10,R11,R13,R14 identical!!! (otherwise CMRR compromised)



ADA4622-2 more offset voltage, less gain accuracy better CMRR
 AD8676BRZ : less offset voltage and drift, more gain accuracy with AD8475 and better CMRR

Project: MFC (Lvl 3 Magnetic field stabilization in RbSr)
 use in combination with A/D&D/A board, ArduinoShield, AutocalSwitch etc.
 Software by M. Borkowski, ArduinoDUE platform
 Design by: L. Reichsöllner for RbSr QuSim (UvA)

RbSr QuSim

Sheet: /AFE1/
 File: AnalogFrontEnd.sch

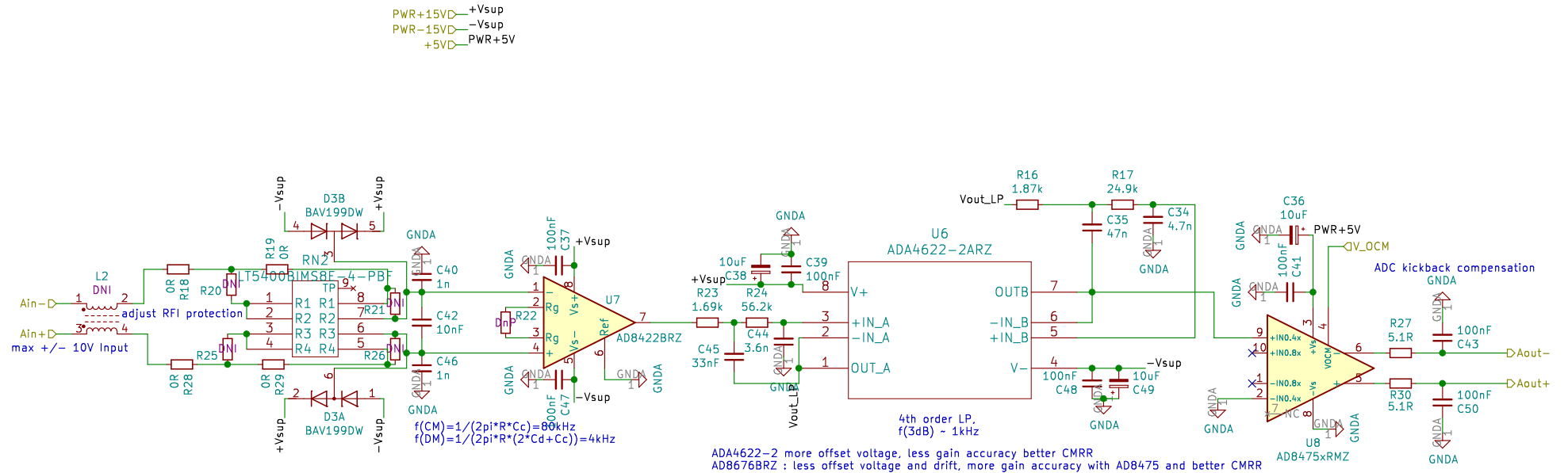
Title: High-Precision, low-noise Analog Front End

Size: A4 Date: 2020-09-09

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Rev: 3.1

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set R3-R6 and to select total resistance of RN1:500R or 1k or 2k(default)
 make path R10,R11,R13,R14 identical!!! (otherwise CMRR compromised)

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RbSr QuSim

Sheet: /AFE2/

File: AnalogFrontEnd.sch

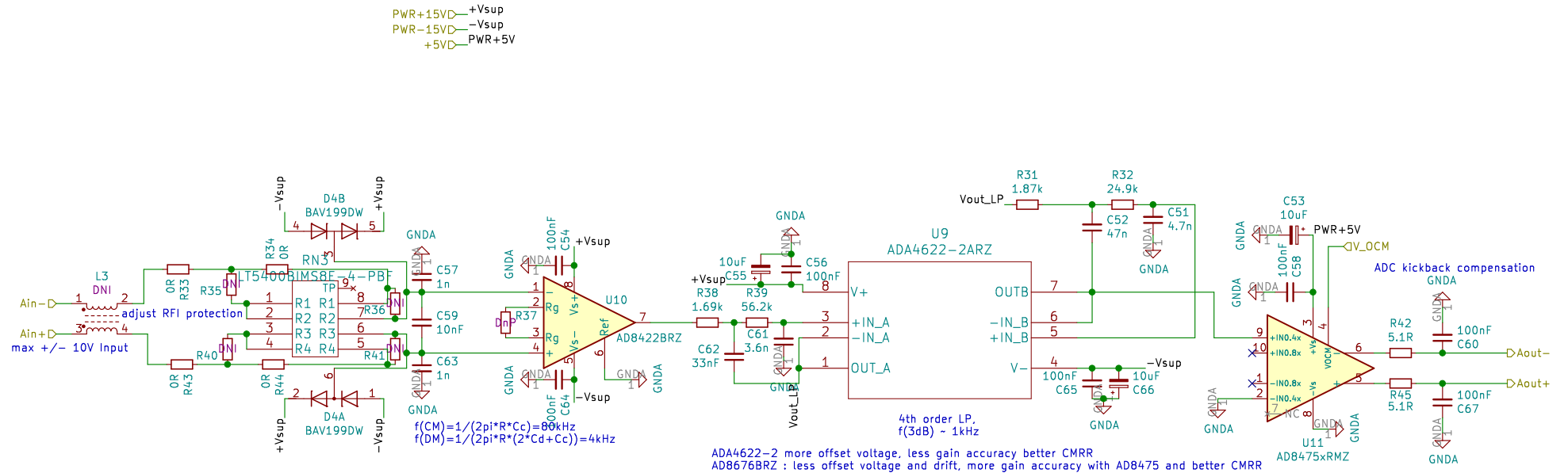
Title: High-Precision, low-noise Analog Front End

Size: A4 Date: 2020-09-09

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Id: 3/8



Project: MFC (Lvl 3 Magnetic field stabilization in RbSr)
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RbSr QuSim

Sheet: /AFE3/
 File: AnalogFrontEnd.sch

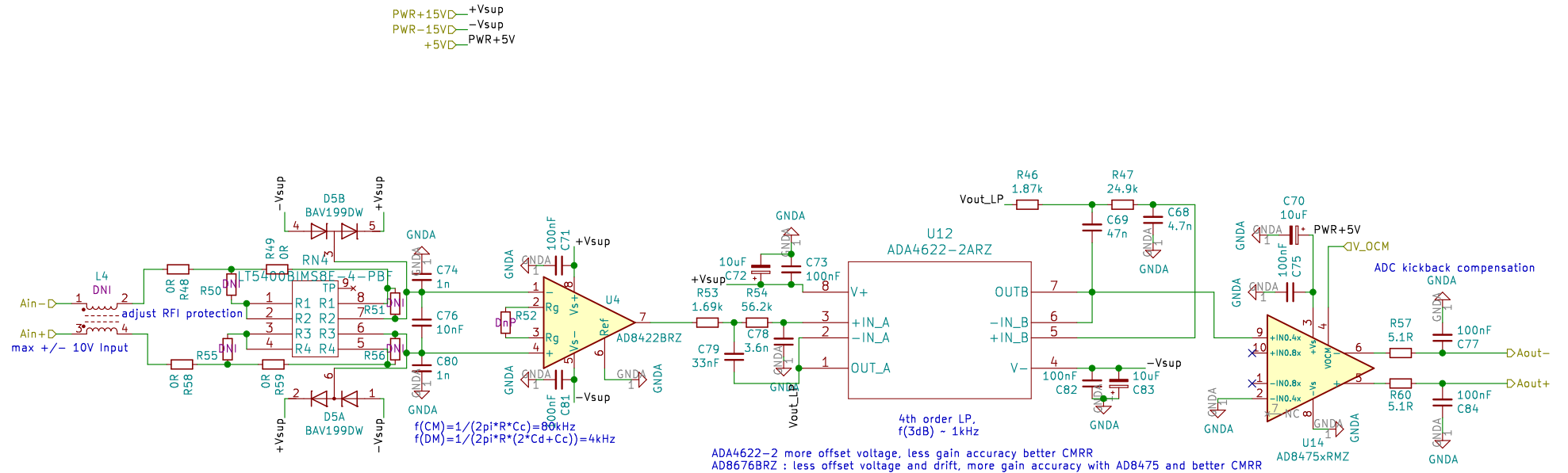
Title: High-Precision, low-noise Analog Front End

Size: A4 Date: 2020-09-09

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Rev: 3.1

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set R3-R6 and to select total resistance of RN1:500R or 1k or 2k(default)
 make path R10,R11,R13,R14 identical!!! (otherwise CMRR compromised)

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RbSr QuSim

Sheet: /AFE4/
 File: AnalogFrontEnd.sch

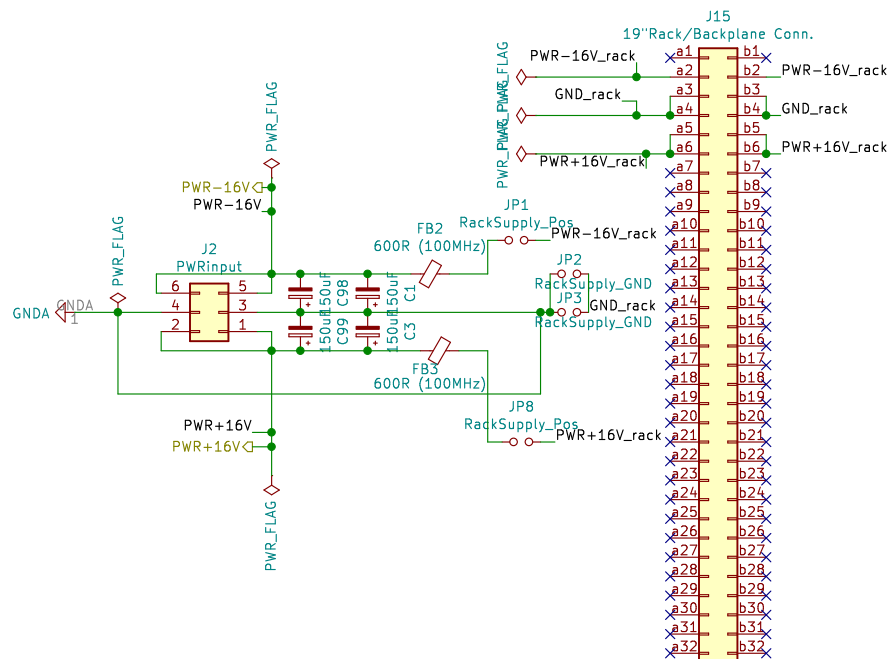
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Size: A4 Date: 2020-09-09

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Rev: 3.1

Id: 5/8



Project: MFC (Lvl 3 Magnetic field stabilization in RbSr)
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 Design by: L. Reichsöllner for RbSr QuSim (UvA)

RbSr QuSim

Sheet: /PowerCconnection1/
 File: PowerConnection.sch

Title: High-Precision, low-noise Analog Front End

Size: A4 Date: 2020-09-09

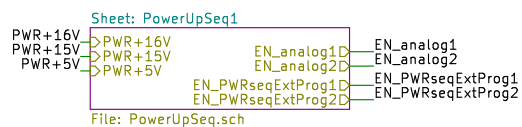
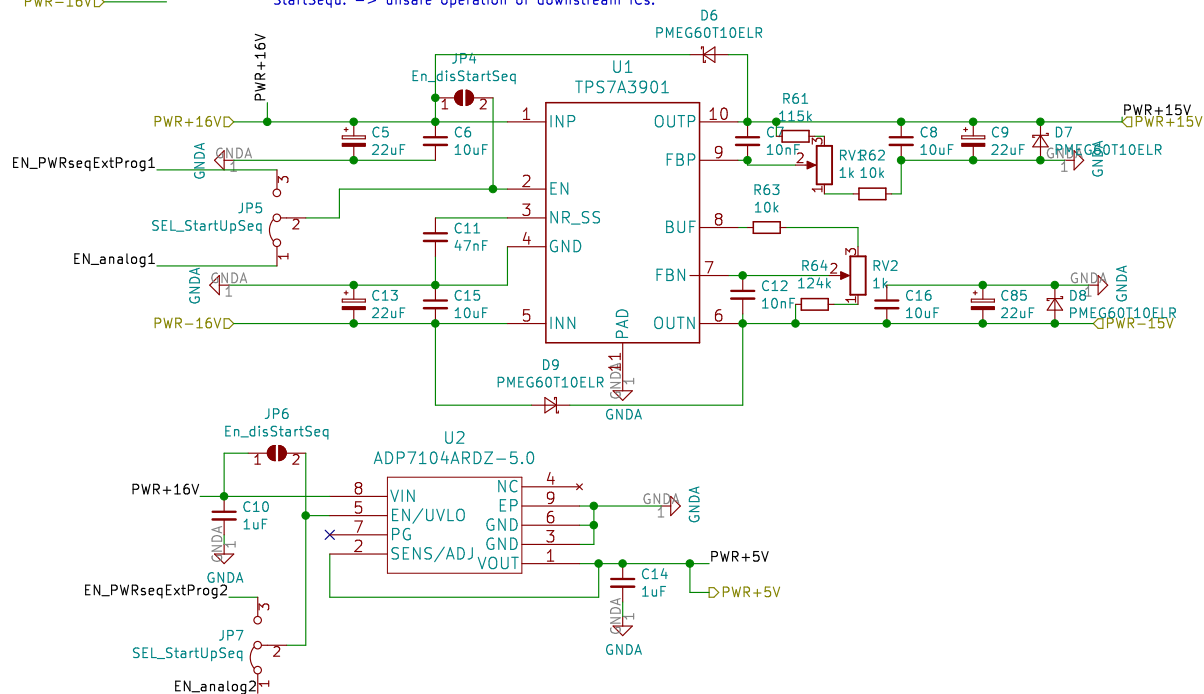
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PWR+16V
PWR-16V

do not use En_disStartSeq.
enables this device immediatly without
StartSeq. -> unsafe operation of downstream ICs.



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RbSr QuSim

Sheet: /Power/
File: Power.sch

Title: High-Precision, low-noise Analog Front End

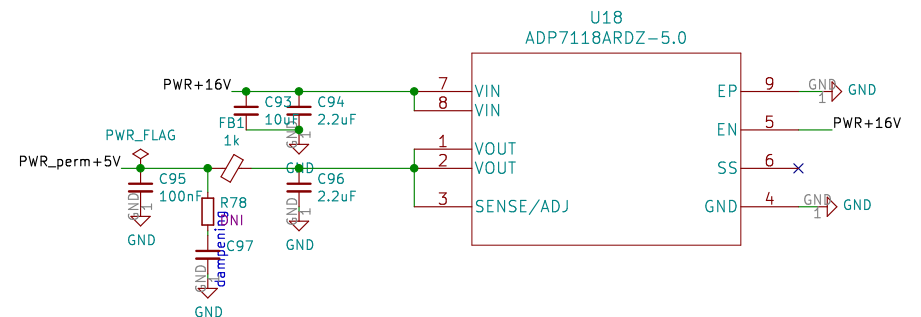
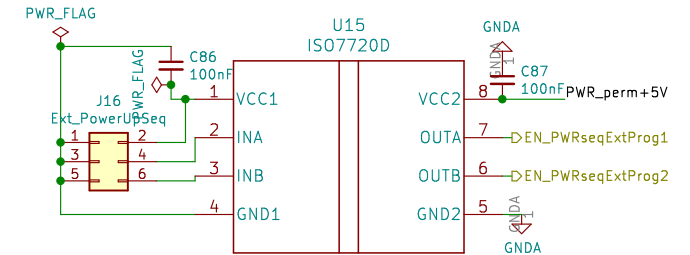
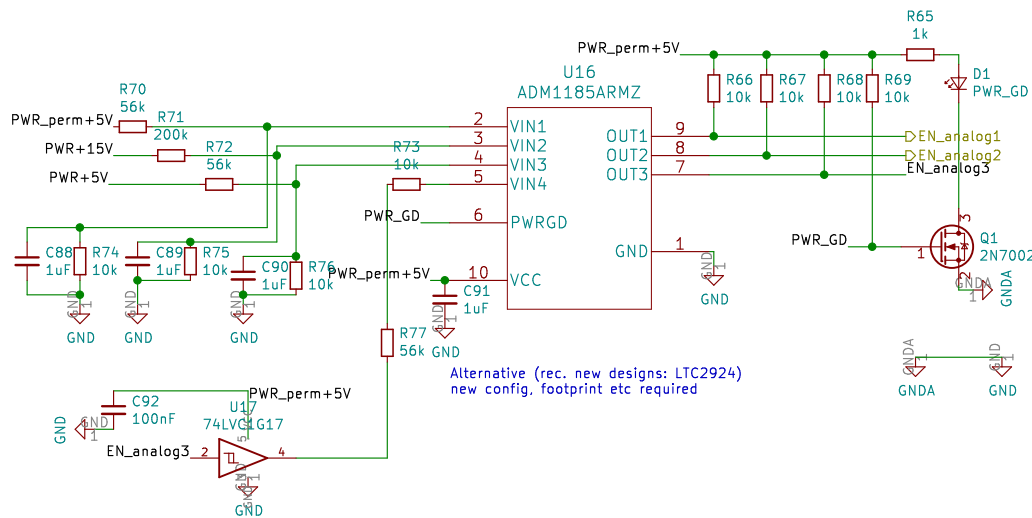
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PWR+16V D PWR+16V
PWR+15V D PWR+15V
PWR+5V D PWR+5V



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RbSr QuSim

Sheet: /Power/PowerUpSeq1/
File: PowerUpSeq.sch

Title: High-Precision, low-noise Analog Front End

Size: A4 Date: 2020-09-09

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Rev: 3.1

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