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LED Display Power Board

Marquette University Senior Design 2018/2019, Group E44
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Note: If component footprints, tolerances, and power ratings are hidden, components are:
0402 case size, 1% tolerance, 1/16W power rating

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Sheet: /
File: LTC7851_Demo.sch

Title: Electronic Display Power Board

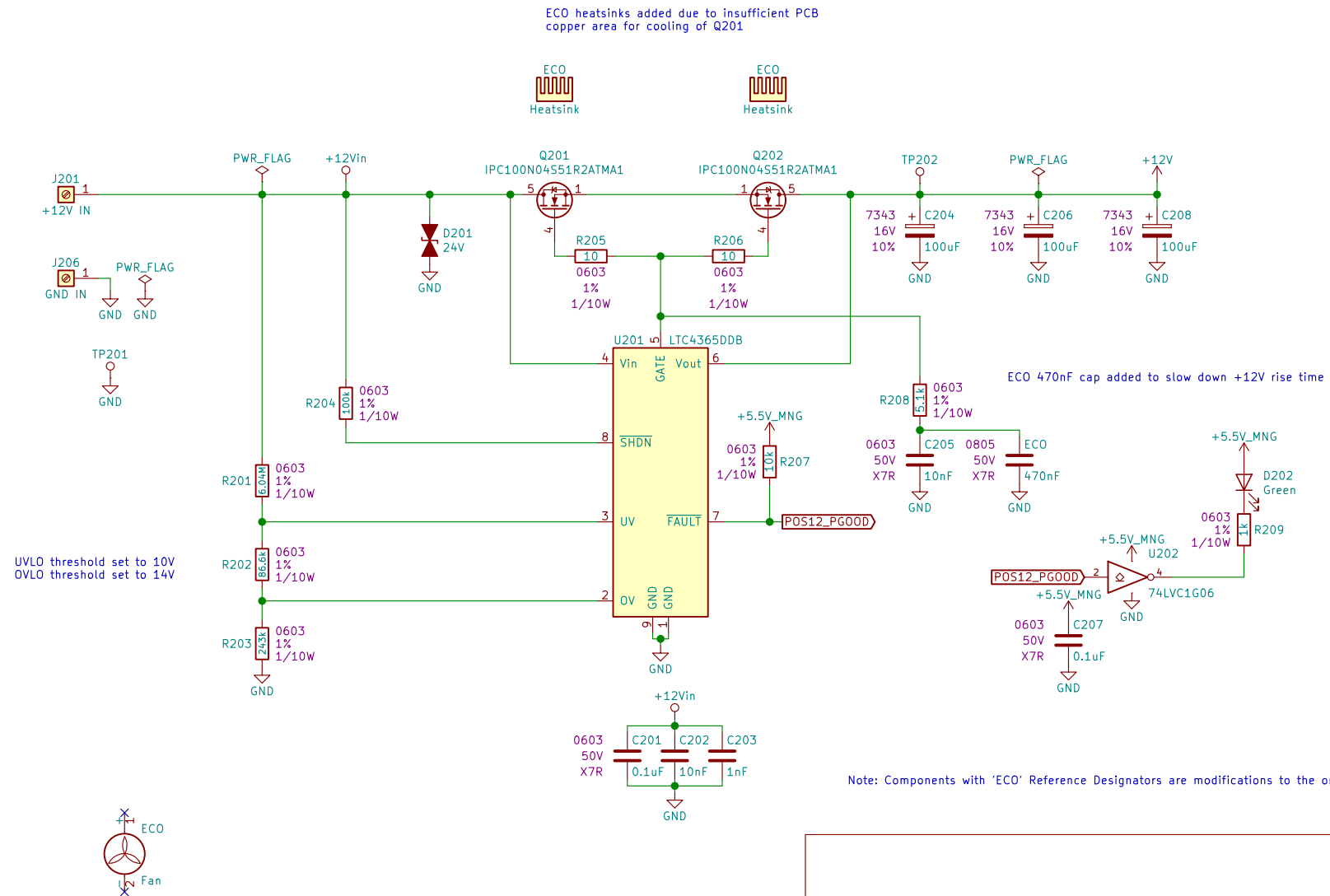
Size: A Date: 2018-11-28

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Rev: A

Id: 1/14

02. Power Input



Note: Components with 'ECO' Reference Designators are modifications to the original design

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Sheet: /Power Input/
File: Power_Input.sch

Title: Electronic Display Power Board

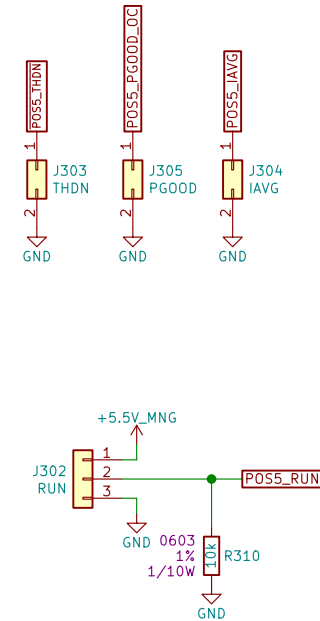
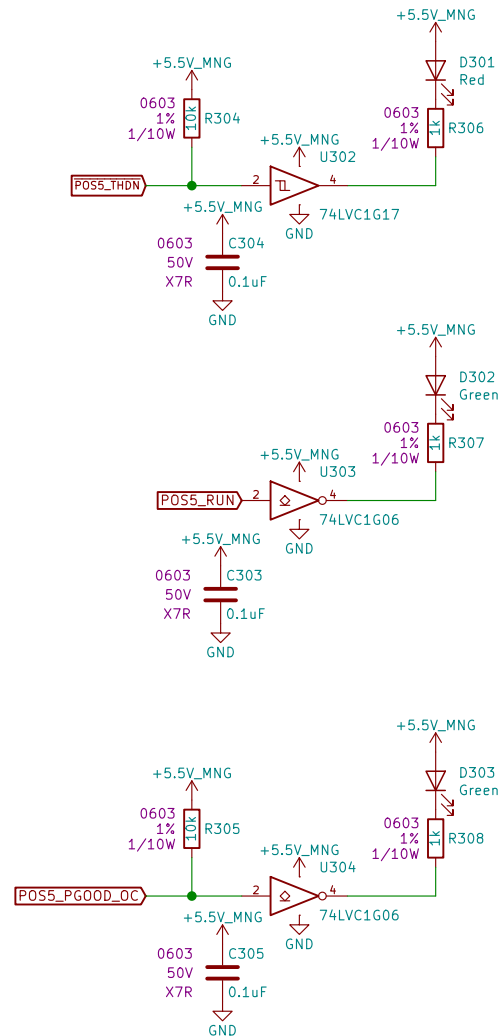
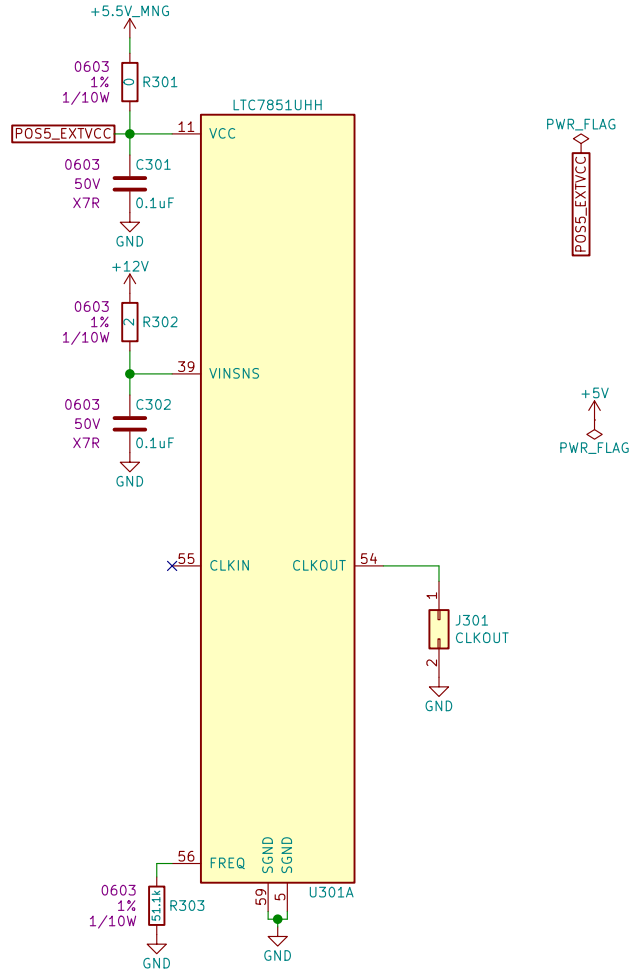
Size: A	Date: 2018-11-28
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Rev: A

Id: 2/14

03. +5V Control



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Sheet: /POS5 Control/

File: POS5_Control.sch

Title: Electronic Display Power Board

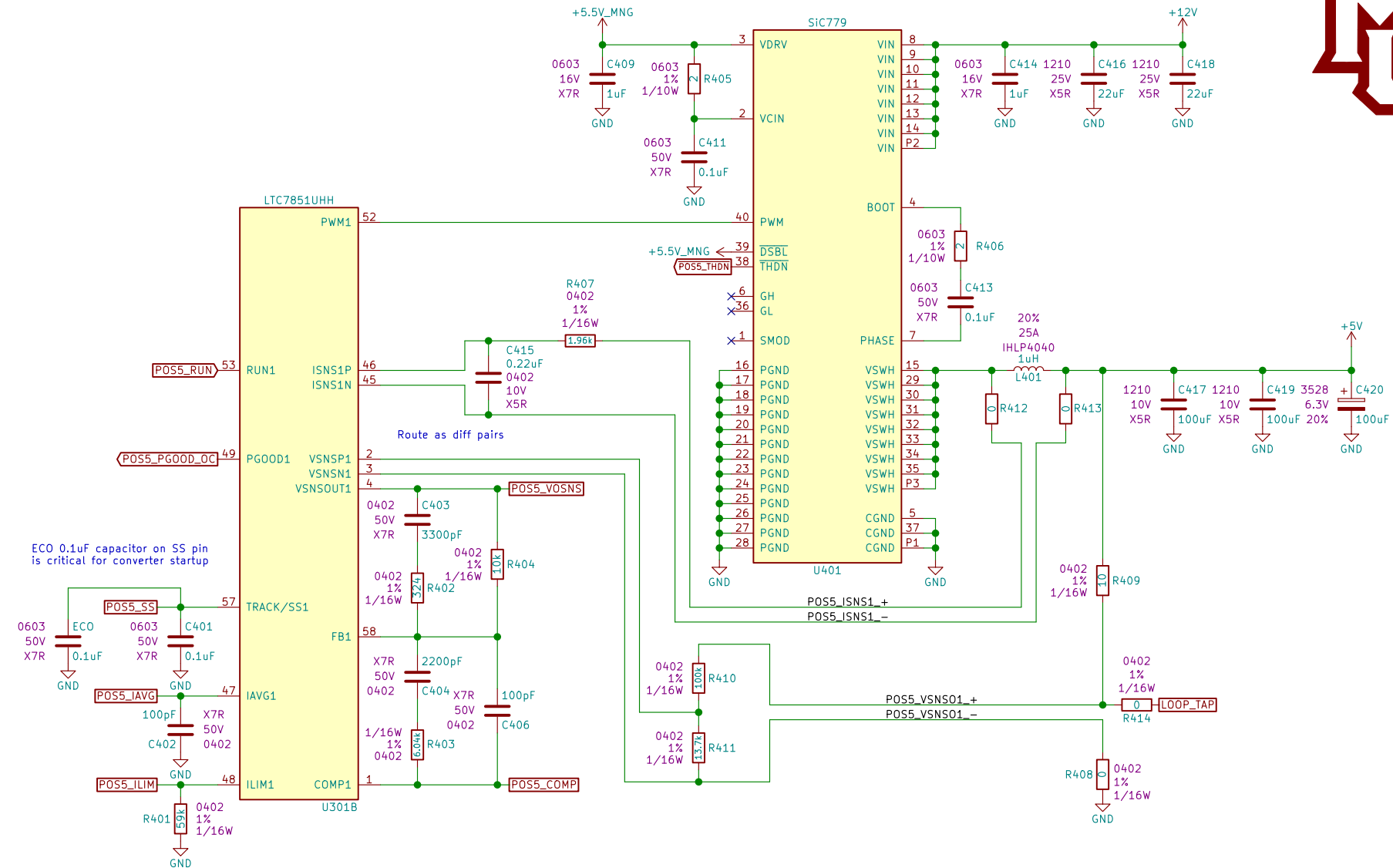
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KiCad E.D.A. kicad (5.1.0)-1

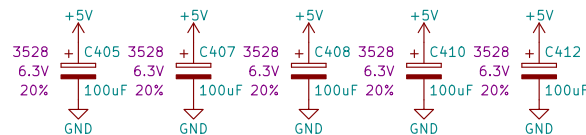
Rev: A

Id: 3/14

04. +5V Phase 1



Do not populate any of the capacitors below:
C405, C407, C408, C410, C412



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Sheet: /POS5 Phase 1/

File: POS5_Phase_1.sch

Title: Electronic Display Power Board

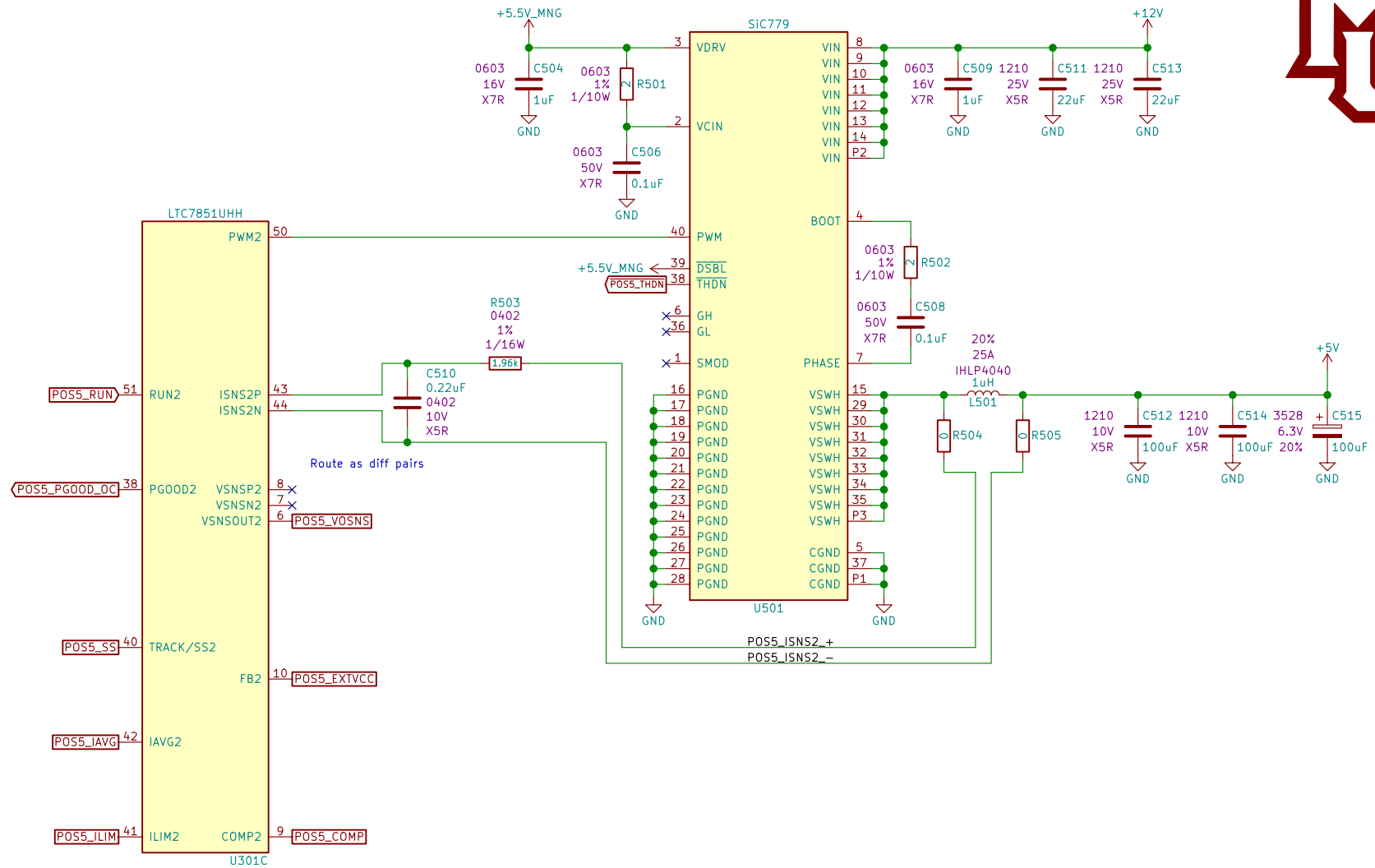
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KiCad E.D.A. kicad (5.1.0)-1

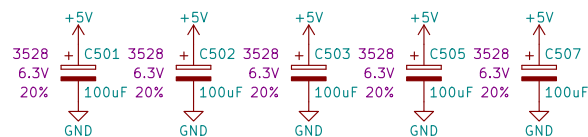
Rev: A

Id: 4/14

05. +5V Phase 2



Do not populate any of the capacitors below:
C501, C502, C503, C505, C507



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Sheet: /POS5 Phase 2/
File: POS5_Phase_2.sch

Title: Electronic Display Power Board

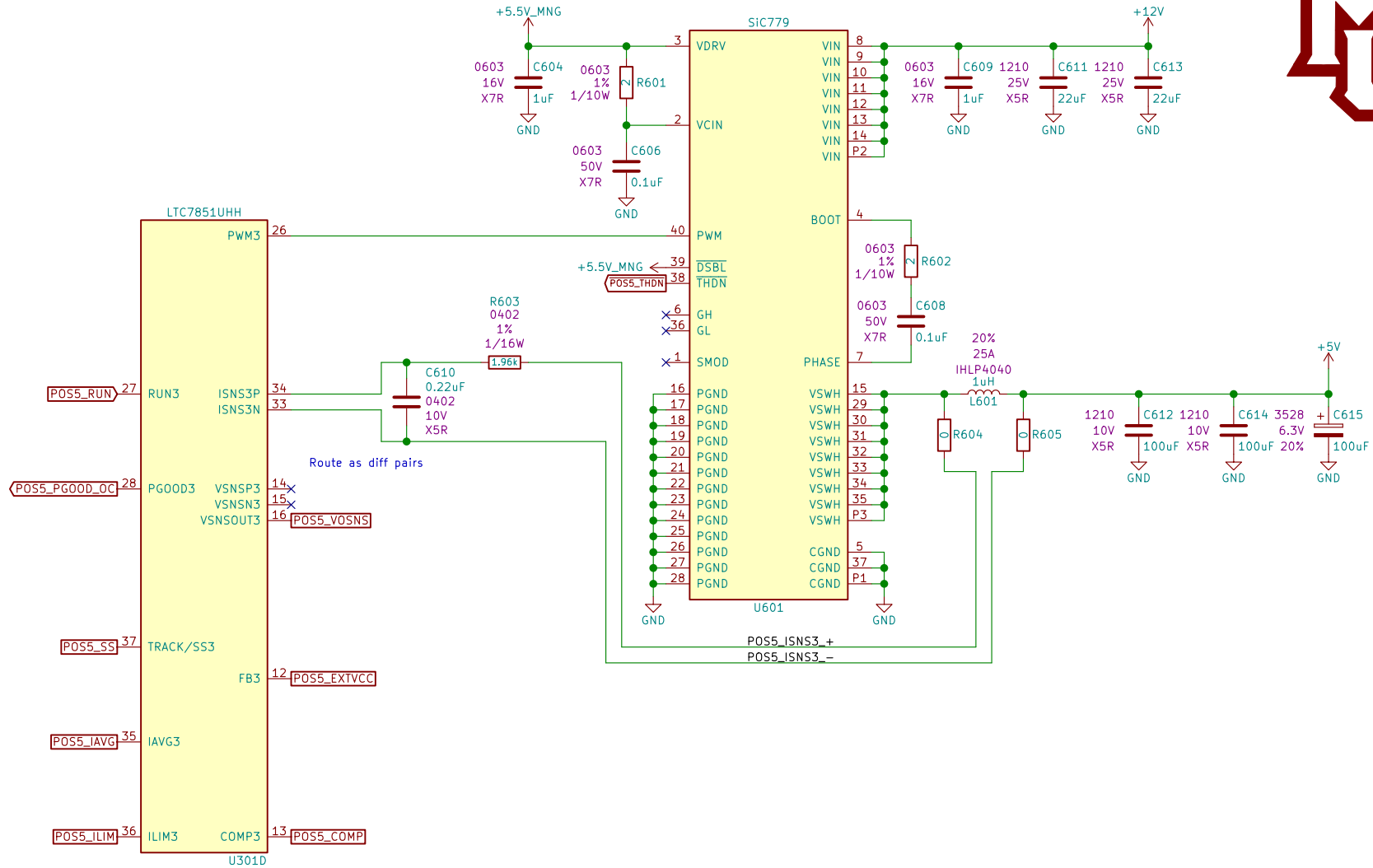
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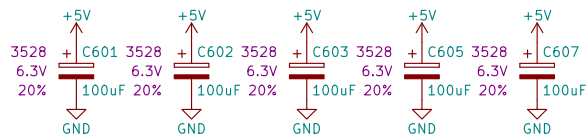
Rev: A

Id: 5/14

06. +5V Phase 3



Do not populate any of the capacitors below:
C601, C602, C603, C605, C607



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Sheet: /POS5 Phase 3/
File: POS5_Phase_3.sch

Title: Electronic Display Power Board

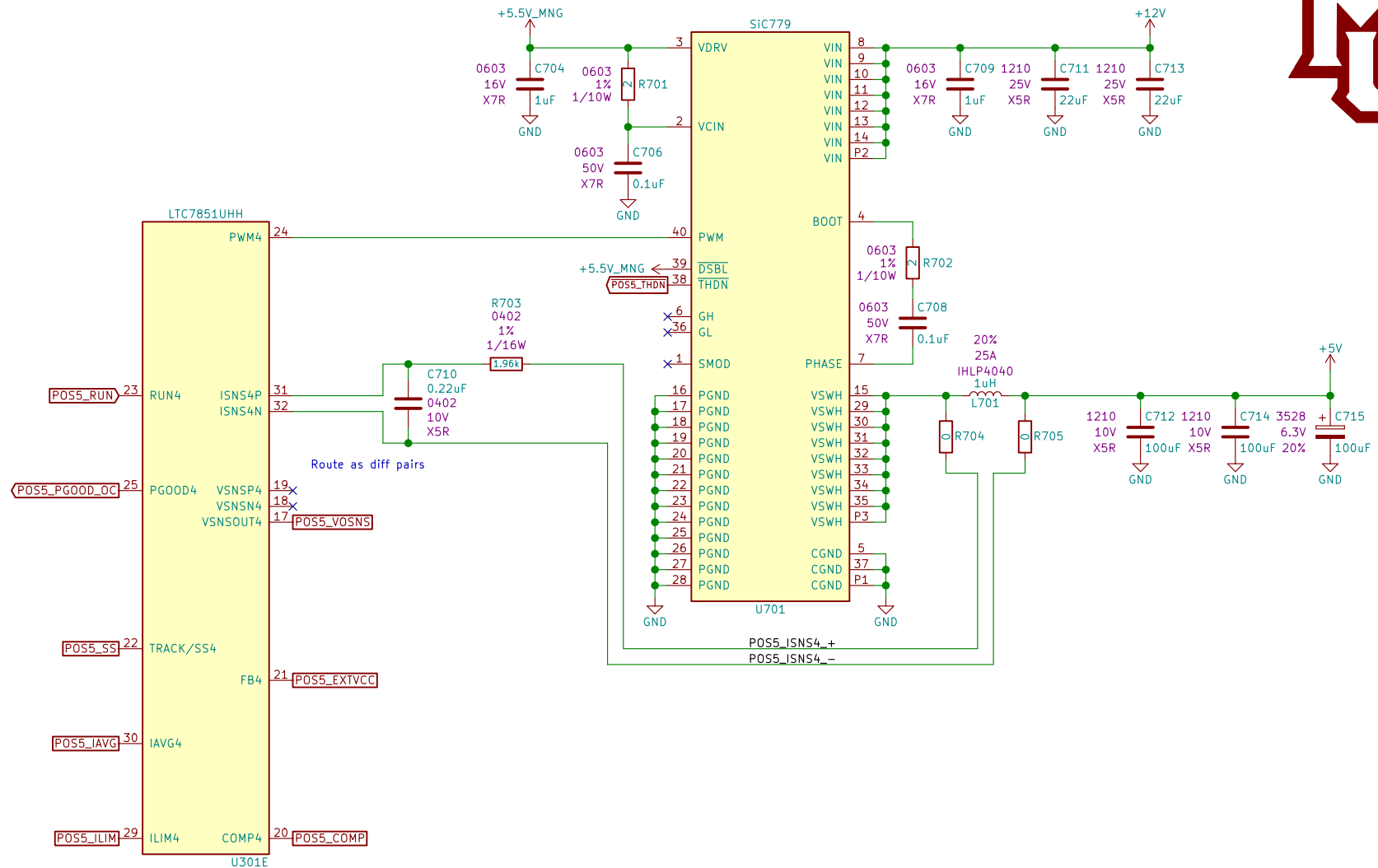
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KiCad E.D.A. kicad (5.1.0)-1

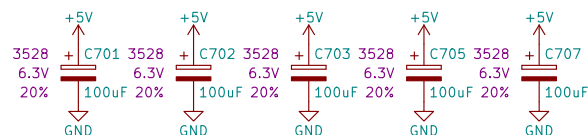
Rev: A

Id: 6/14

07. +5V Phase 4



Do not populate any of the capacitors below:
C701, C702, C703, C705, C707



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Sheet: /POS5 Phase 4/
File: POS5_Phase_4.sch

Title: Electronic Display Power Board

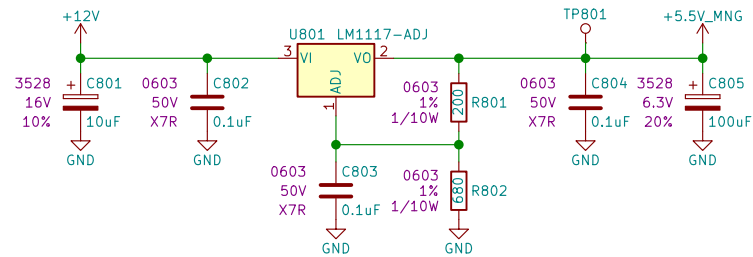
Size: A Date: 2018-11-28

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08. +5.5V MNG



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Sheet: /POS5P5_MNG/

File: POS5P5_MNG.sch

Title: Electronic Display Power Board

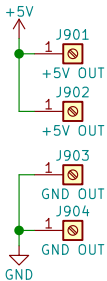
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Rev: A

Id: 8/14

09. Power Output



Marquette University Senior Design 2018/2019 Group E44		
Sheet: /Power Output/ File: Power_Output.sch		
Title: Electronic Display Power Board		
Size: A	Date: 2018-11-28	Rev: A
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10. Mounting Holes and Mechanical Components



MH1001
MountingHole



MH1003
MountingHole



MH1004
MountingHole



MH1006
MountingHole



4-40 Screw
MK1001



4-40 Screw
MK1009



4-40 Screw
MK1002



4-40 Screw
MK1010



4-40 Standoff
MK1003



4-40 Standoff
MK1011



4-40 Standoff
MK1004



4-40 Standoff
MK1012



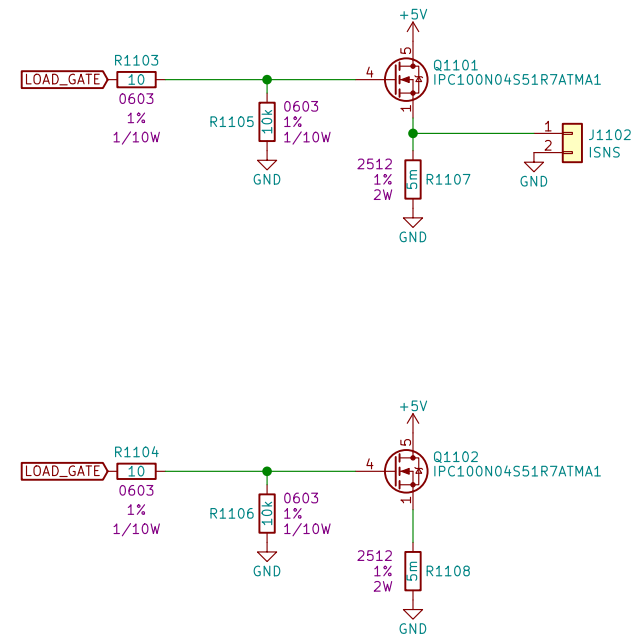
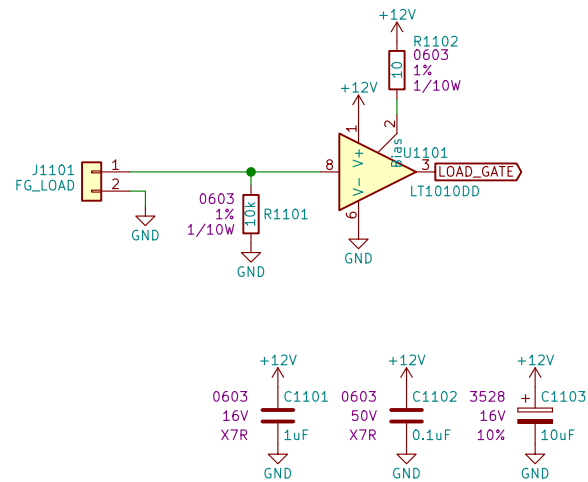
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Sheet: /Mechanical/
File: Mechanical.sch

Title: Electronic Display Power Board

Size: A	Date: 2018-11-28	Rev: A
KiCad E.D.A. kicad (5.1.0)-1		Id: 10/14

11. Active Load Driver and Active Load Bank 1



Do not populate any components on this sheet

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Sheet: /Active Load 1/

File: Active_Load_1.sch

Title: Electronic Display Power Board

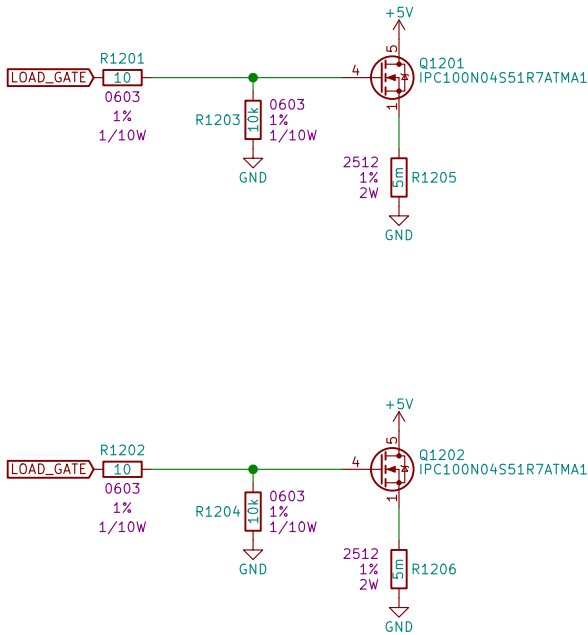
Size: A Date: 2018-11-28

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Rev: A

Id: 11/14

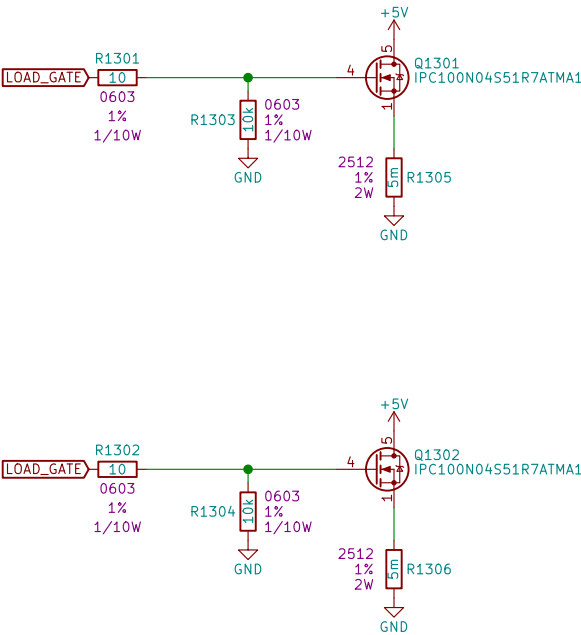
12. Active Load Bank 2



Do not populate any components on this sheet

Marquette University Senior Design 2018/2019 Group E44		
Sheet: /Active Load 2/ File: Active_Load_2.sch		
Title: Electronic Display Power Board		
Size: A	Date: 2018-11-28	Rev: A
KiCad E.D.A. kicad (5.1.0)-1		Id: 12/14

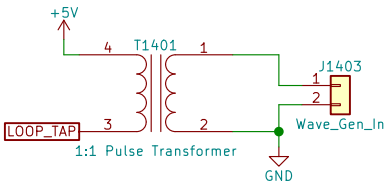
13. Active Load Bank 3



Do not populate any components on this sheet

Marquette University Senior Design 2018/2019 Group E44		
Sheet: /Active Load 3/ File: Active_Load_3.sch		
Title: Electronic Display Power Board		
Size: A	Date: 2018-11-28	Rev: A
KiCad E.D.A. kicad (5.1.0)-1		Id: 13/14

14. Open Loop Transfer Function Test Components



Do not populate any components on this sheet

Marquette University Senior Design 2018/2019 Group E44		
Sheet: /Loop Response/ File: Loop_Response.sch		
Title: Electronic Display Power Board		
Size: A	Date: 2018-11-28	Rev: A
KiCad E.D.A. kicad (5.1.0)-1		Id: 14/14