

Gear Display Board

Block Diagram

Power Supply



File: psu.kicad_sch

Mechanical



File: mechanical.kicad_sch

Revision History



File: rev_history.kicad_sch

USB



File: usb.kicad_sch

J1
1x04

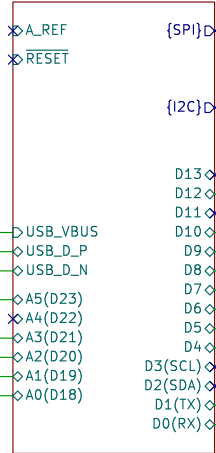


Brightness Control



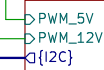
File: buttonui.kicad_sch

MCU



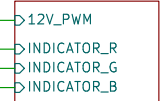
File: main.kicad_sch

Interfaces



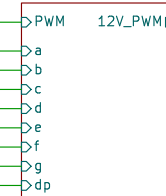
File: interfaces2.kicad_sch

Shift Indicator

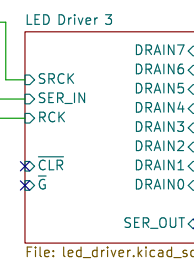


File: indicators.kicad_sch

7-Segment Display

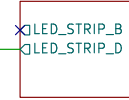


File: 7seg_display.kicad_sch



File: led_driver.kicad_sch

RPM Bar



File: rpm_bar.kicad_sch

J2
1x04



Size	Title, Supplementary title		Revision
A4	Gear Display Board		2.0
Kallio Designs Oy		Sheet name	Page 1/12
		Designer	Date of Issue
		Teemu Latonen	2023-01-05
PCB part number		Assembly part number	
000065		000064	

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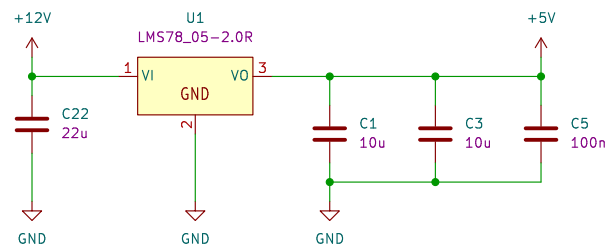
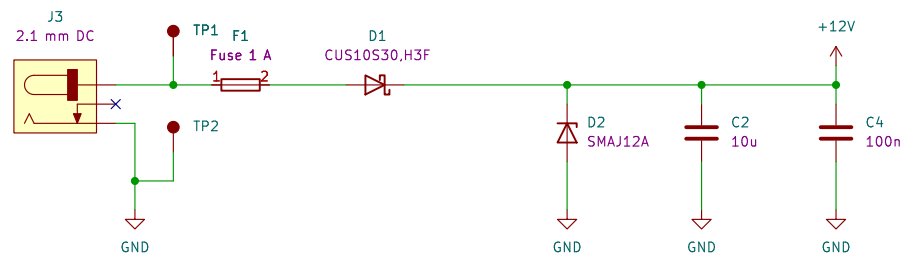
A

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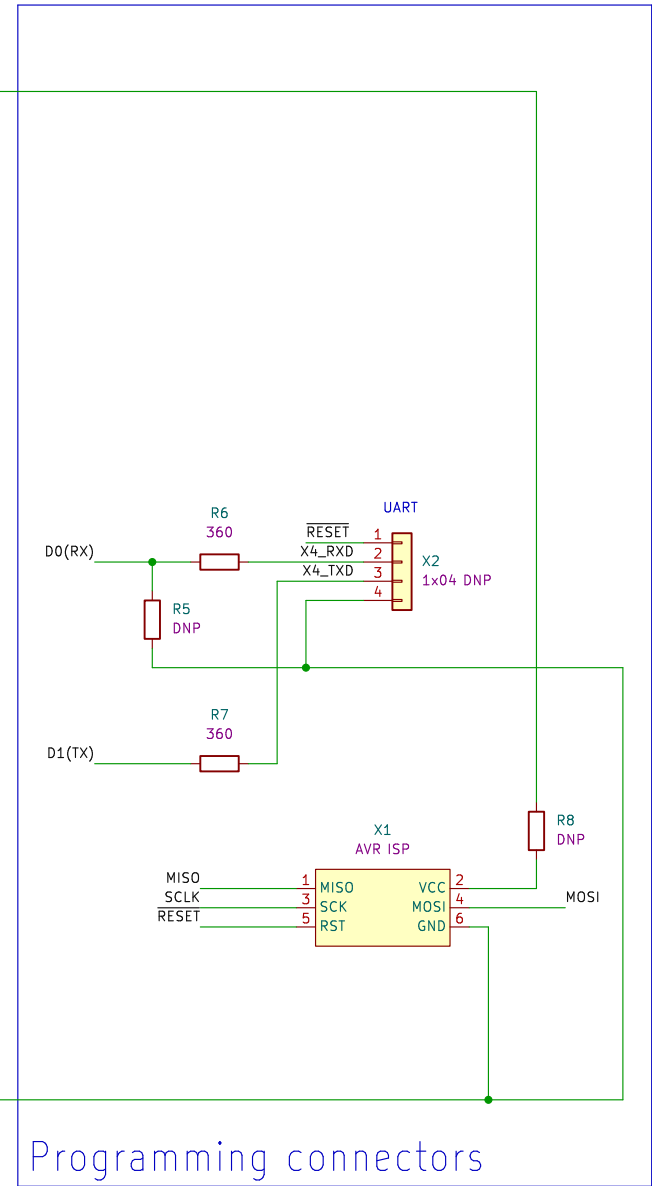
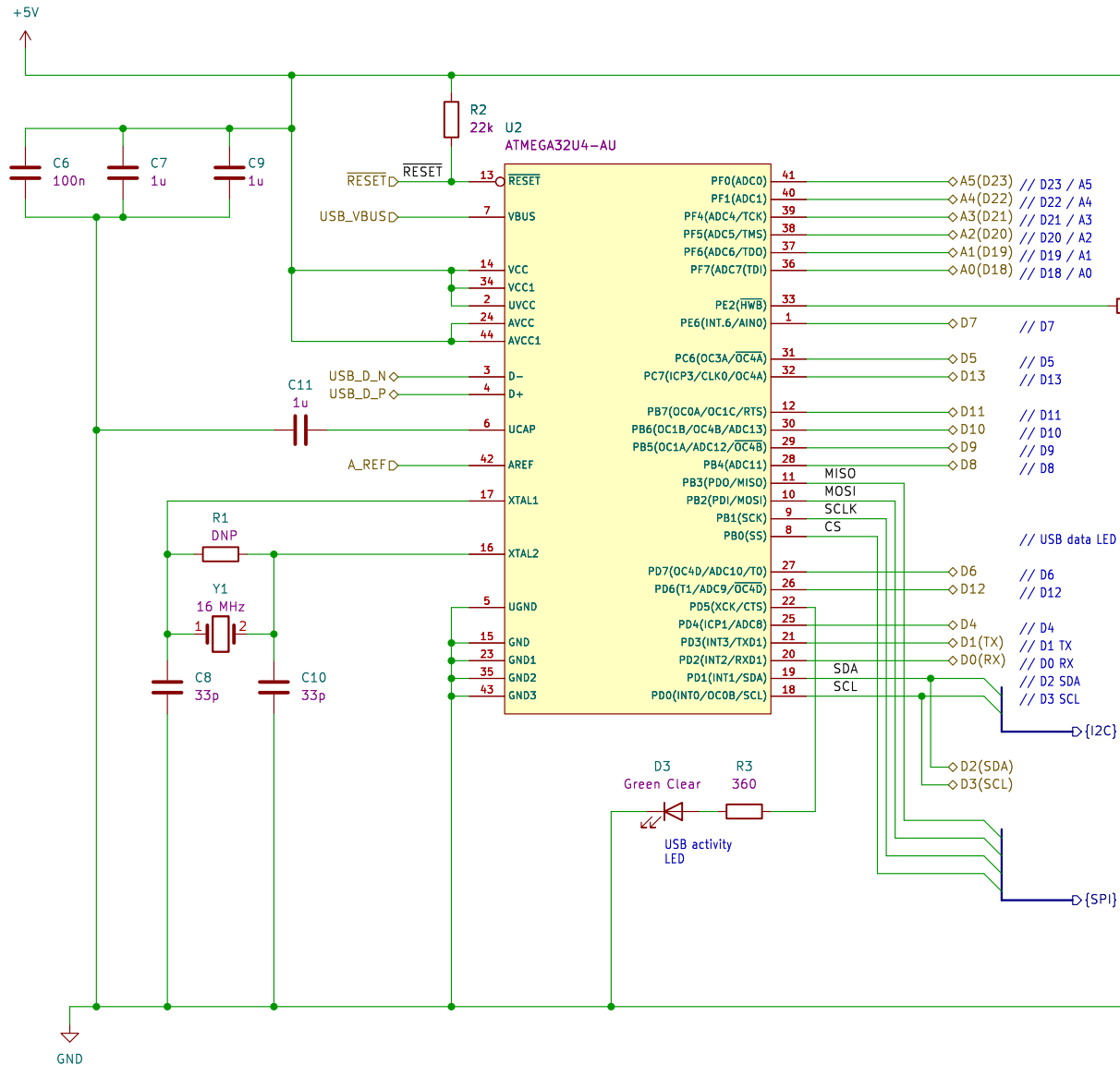
C

D

E

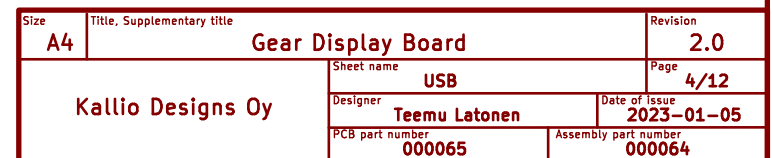


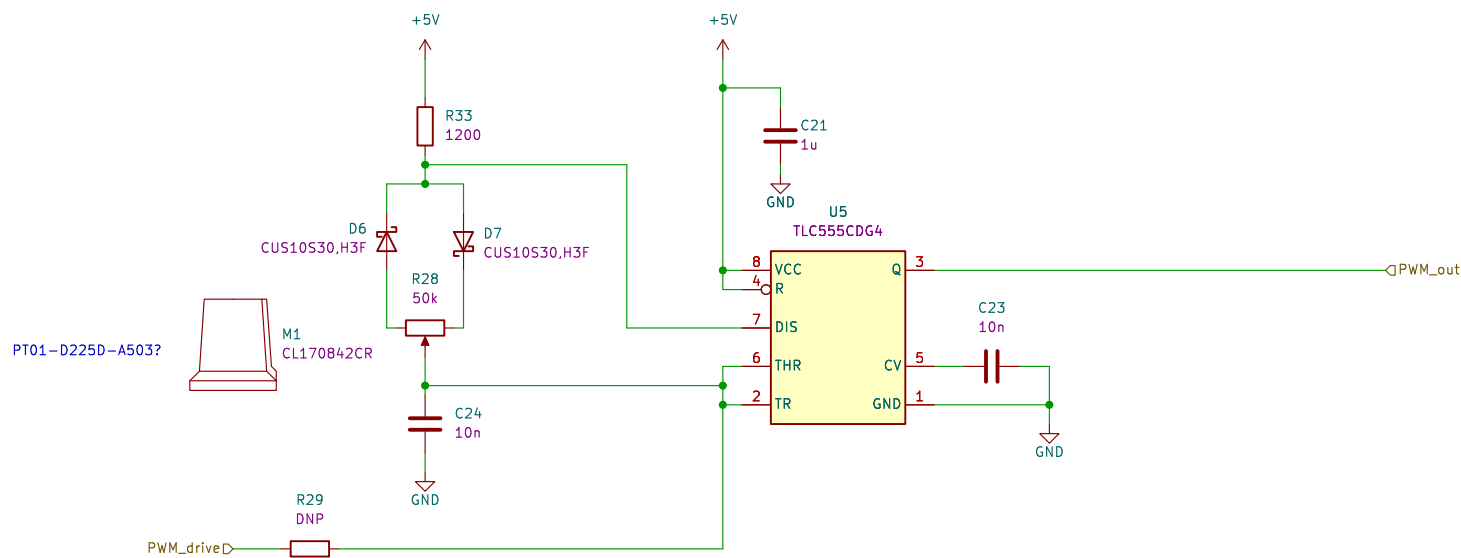
Size	Title, Supplementary title		Revision
A4	Gear Display Board		2.0
Kallio Designs Oy		Sheet name	Power Supply
		Designer	Teemu Latonen
		Date of Issue	2023-01-05
PCB part number		Assembly part number	
000065		000064	



Programming connectors

Size A4	Title, Supplementary title Gear Display Board		Revision 2.0
Kallio Designs Oy		Sheet name MCU	Page 3/12
		Designer Teemu Latonen	Date of Issue 2023-01-05
		PCB part number 000065	Assembly part number 000064





Size	Title, Supplementary title		Revision	
A4	Gear Display Board		2.0	
Kallio Designs Oy		Sheet name	Page	
		Brightness Control	5/12	
		Designer	Date of issue	
		Teemu Latonen	2023-01-05	
PCB part number		Assembly part number		
000065		000064		

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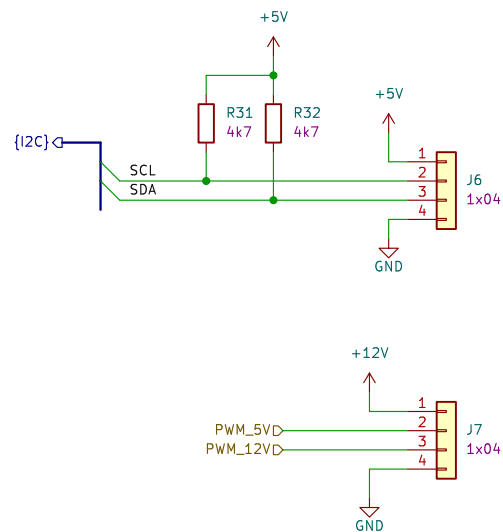
A

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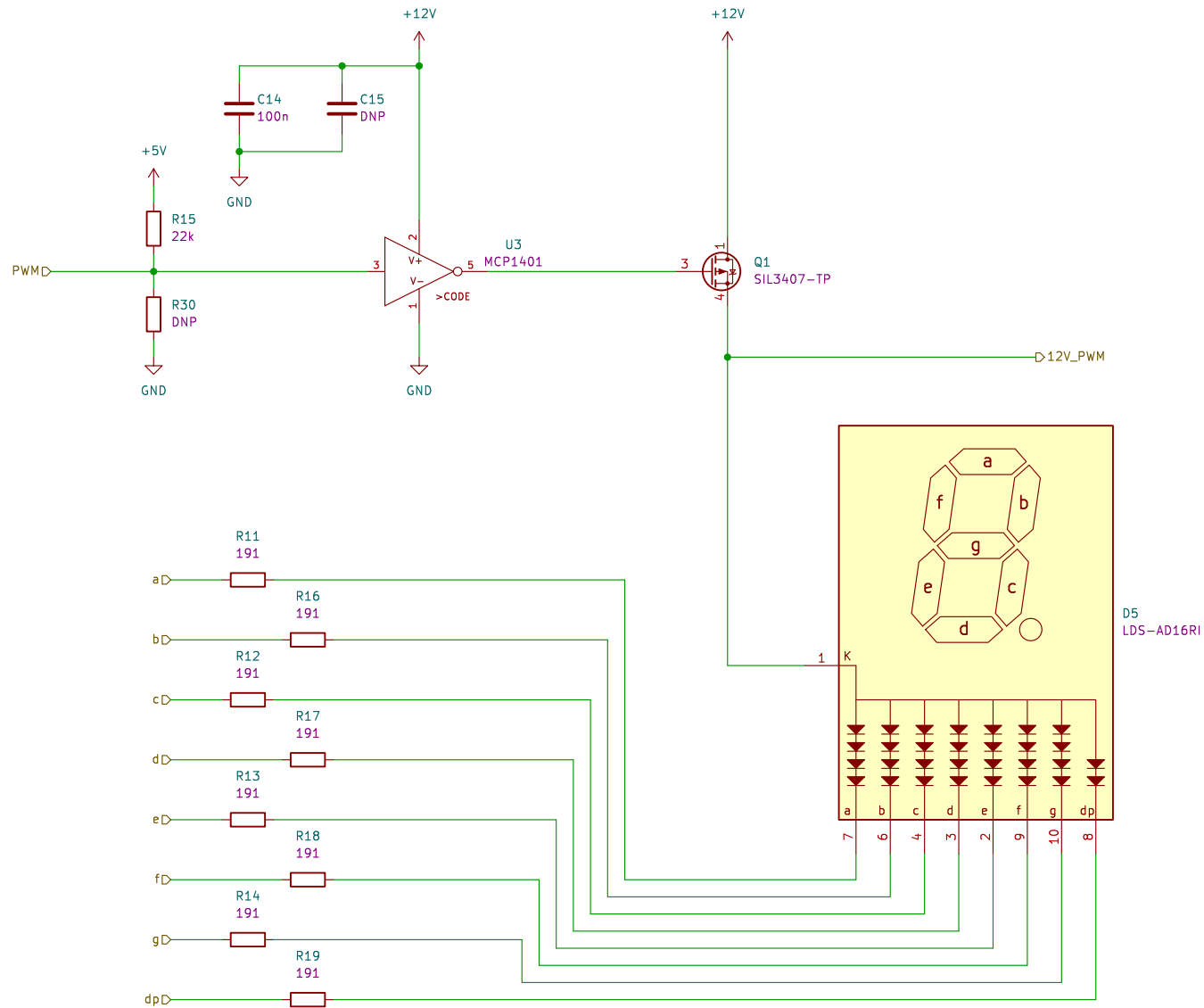
C

D

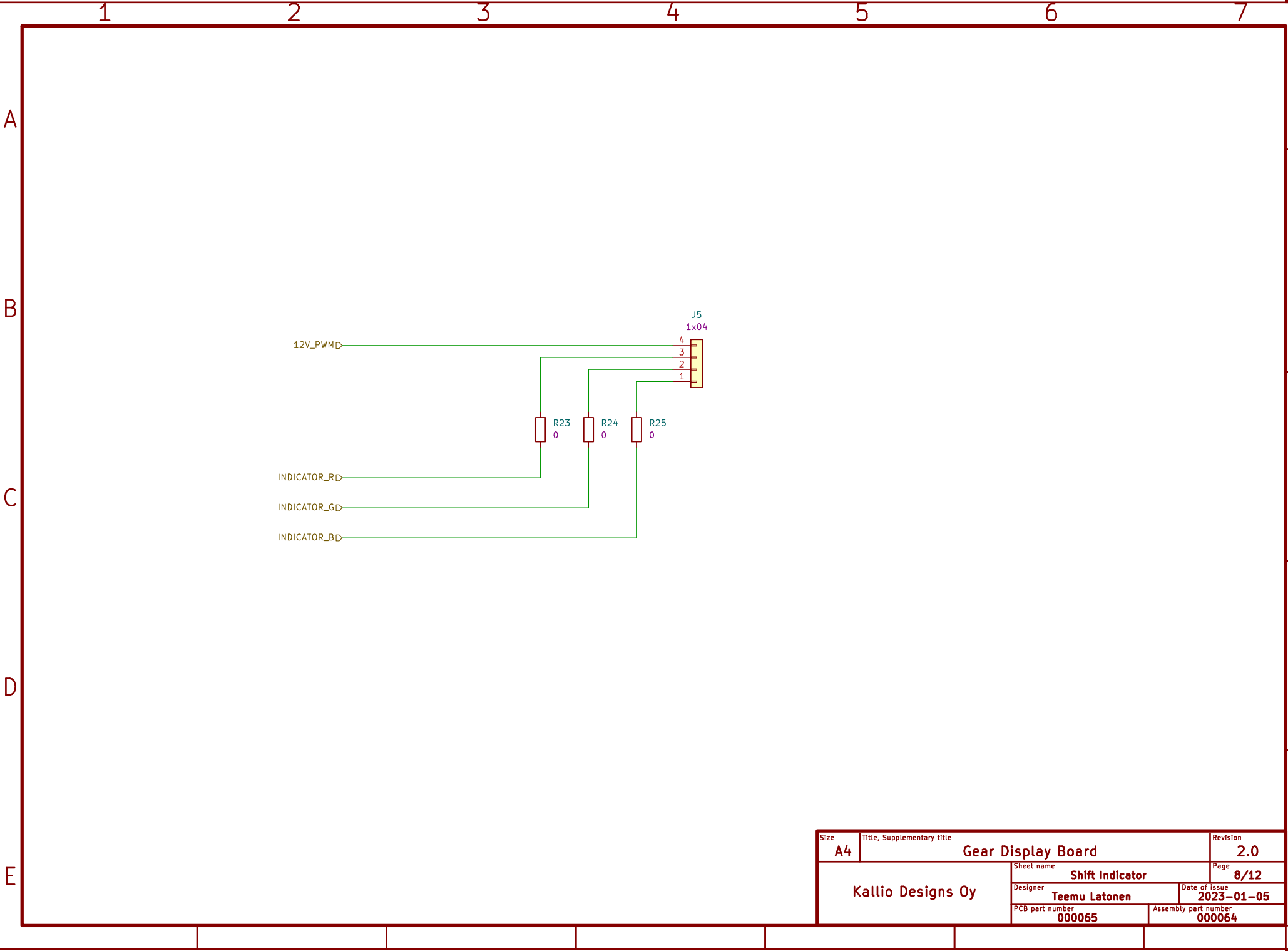
E



Size A4	Title, Supplementary title Gear Display Board		Revision 2.0	
			Sheet name Interfaces	Page 6/12
	Kallio Designs Oy		Designer Teemu Latonen	Date of Issue 2023-01-05
			PCB part number 000065	Assembly part number 000064



Size	Title, Supplementary title		Revision
A4	Gear Display Board		2.0
Kallio Designs Oy		Sheet name	7-Segment Display
		Designer	Teemu Latonen
		Date of Issue	2023-01-05
PCB part number		Assembly part number	
000065		000064	



Size	Title, Supplementary title		Revision	
A4	Gear Display Board		2.0	
Kallio Designs Oy		Sheet name		Page
		Shift Indicator		8/12
		Designer		Date of issue
		Teemu Latonen		2023-01-05
PCB part number		Assembly part number		
000065		000064		

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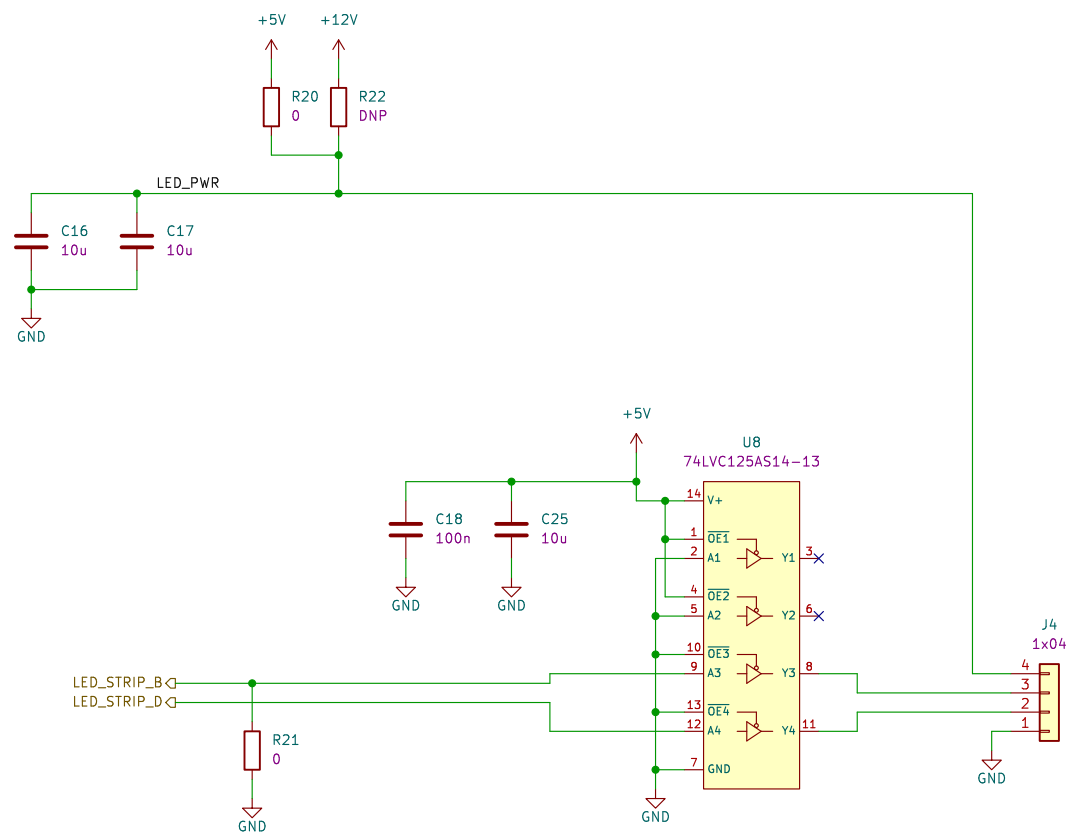
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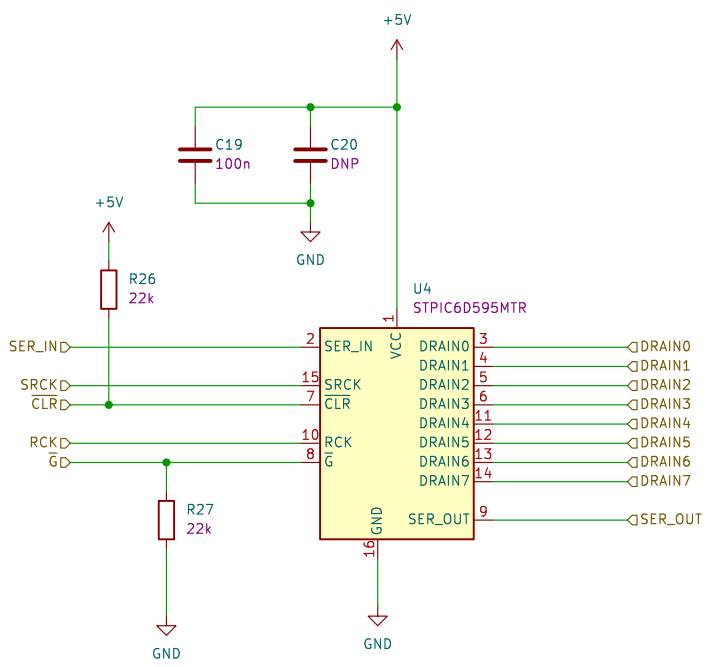
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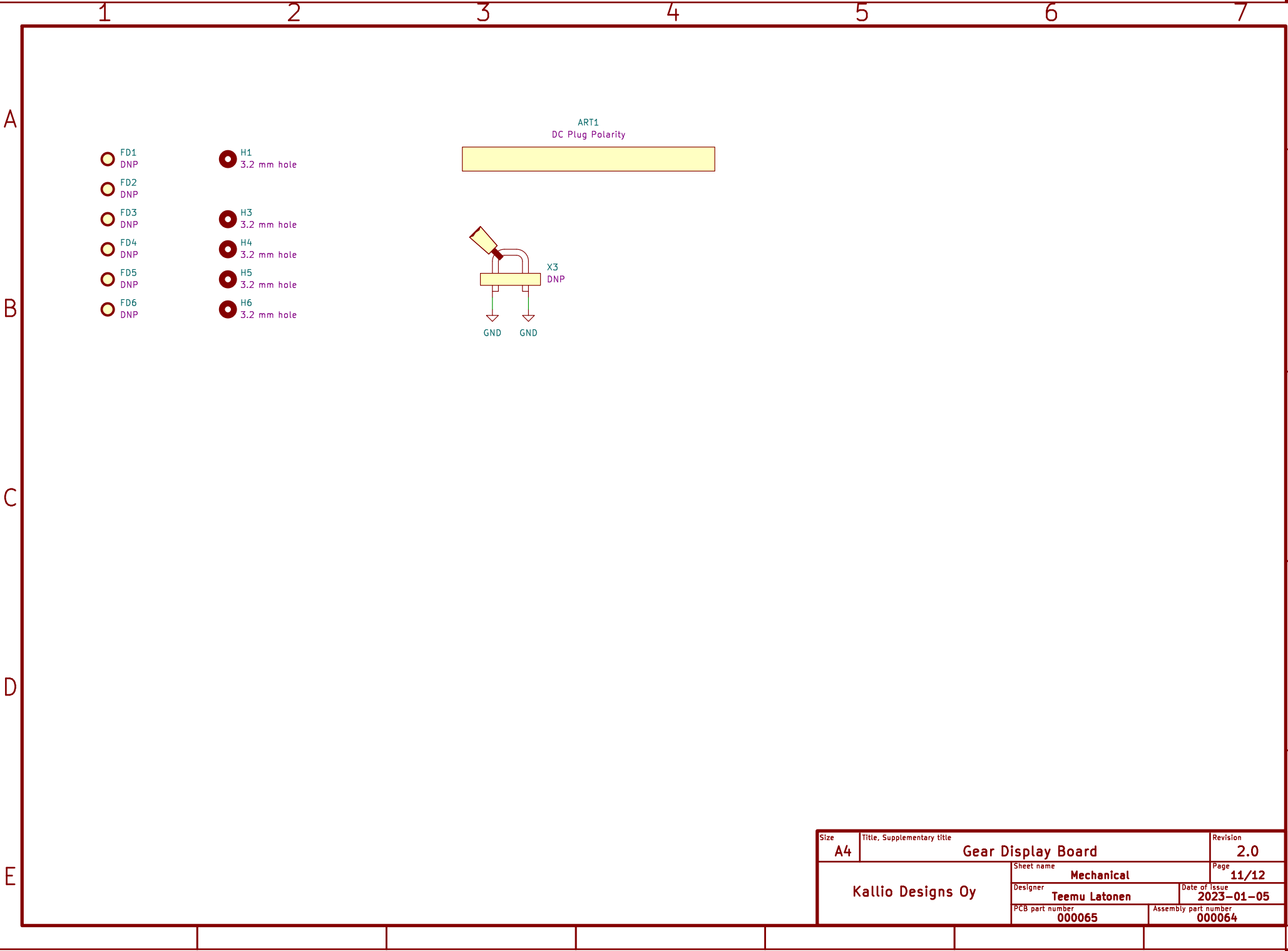
Size A4	Title, Supplementary title Gear Display Board		Revision 2.0	
			Page 9/12	
Kallio Designs Oy		Sheet name RPM Bar		Date of Issue 2023-01-05
		Designer Teemu Latonen		Assembly part number 000064
		PCB part number 000065		

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1 2 3 4 5 6 7



Size A4	Title, Supplementary title Gear Display Board		Revision 2.0	
			Sheet name LED Driver 3	
	Kallio Designs Oy		Designer Teemu Latonen	Date of Issue 2023-01-05
			PCB part number 000065	Assembly part number 000064



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REVISION HISTORY

REV

DATE

DESCRIPTION

	DESIGNER
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1.0

13.08.2022

Initial

Teemu Latonen

2.0

01.03.2023

Buffer U8 added for LED strip

Teemu Latonen

7-segment display configuration changed

Teemu Latonen

External dimmer circuit added

Teemu Latonen

3.0

27.03.2023

7-segment display configuration changed

Teemu Latonen

B

C

D

E

Size A4	Title, Supplementary title Gear Display Board	Revision 2.0
Kallio Designs Oy	Sheet name Revision History	Page 12/12
	Designer Teemu Latonen	Date of issue 2023-01-05
	PCB part number 000065	Assembly part number 000064