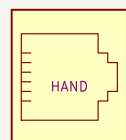


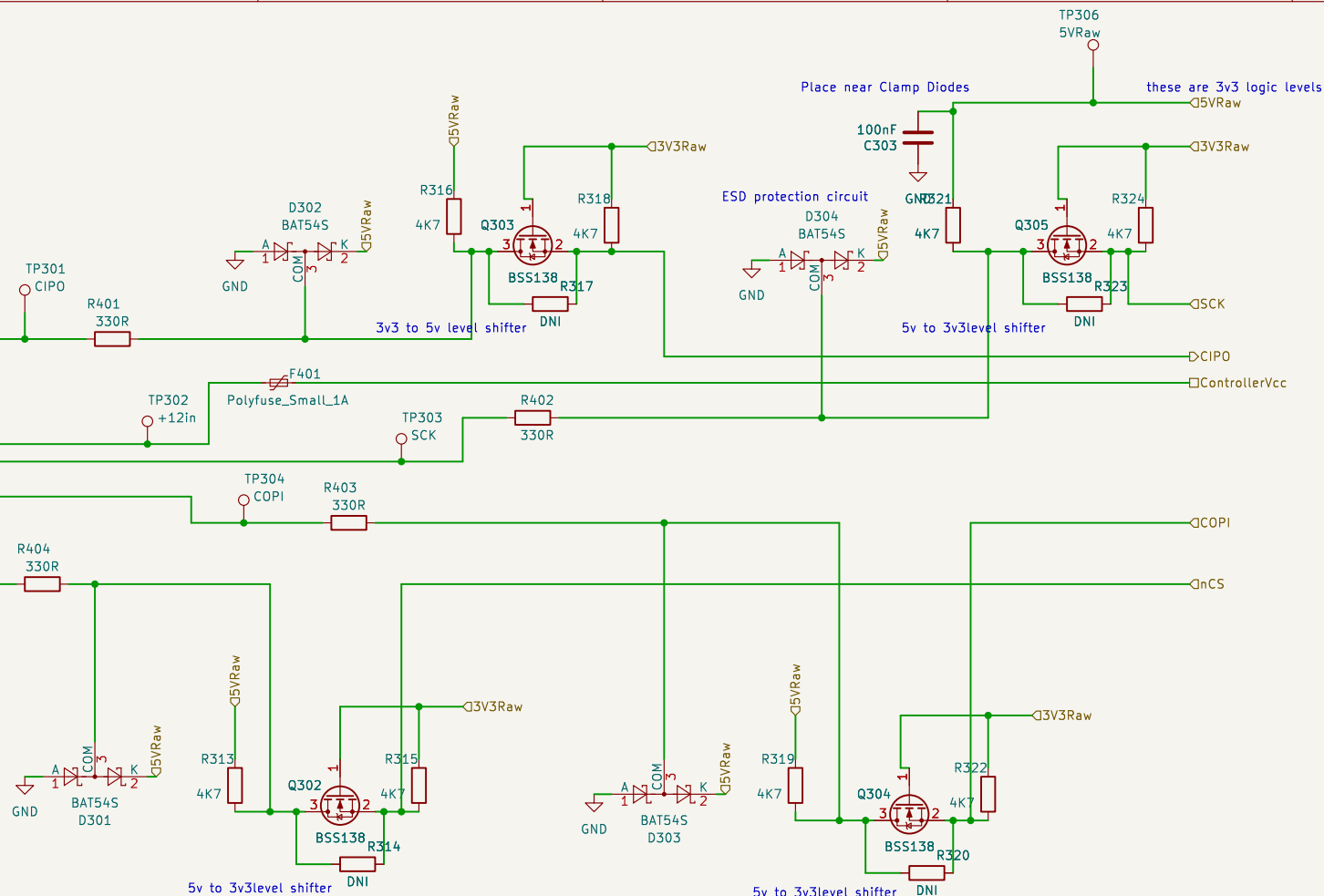
Id: 2/8

SPI Peripheral Interface

J401
RJ12_6P6C_HORZ
At this interface we have a 5v logic levels.



6 MISO
5 +12In
4 SCK
3
2 MOSI
1 SS



Inherited from the GPAD
<https://github.com/PubInv/krake>
 DrawnBy: (Forrest) Lee Erickson, Nagham Kheir
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Sheet: /SPI Peripheral/
 File: SPI Peripheral.kicad_sch

Title: KRAKE_PCB

Size: A4 Date: 2025-07-18

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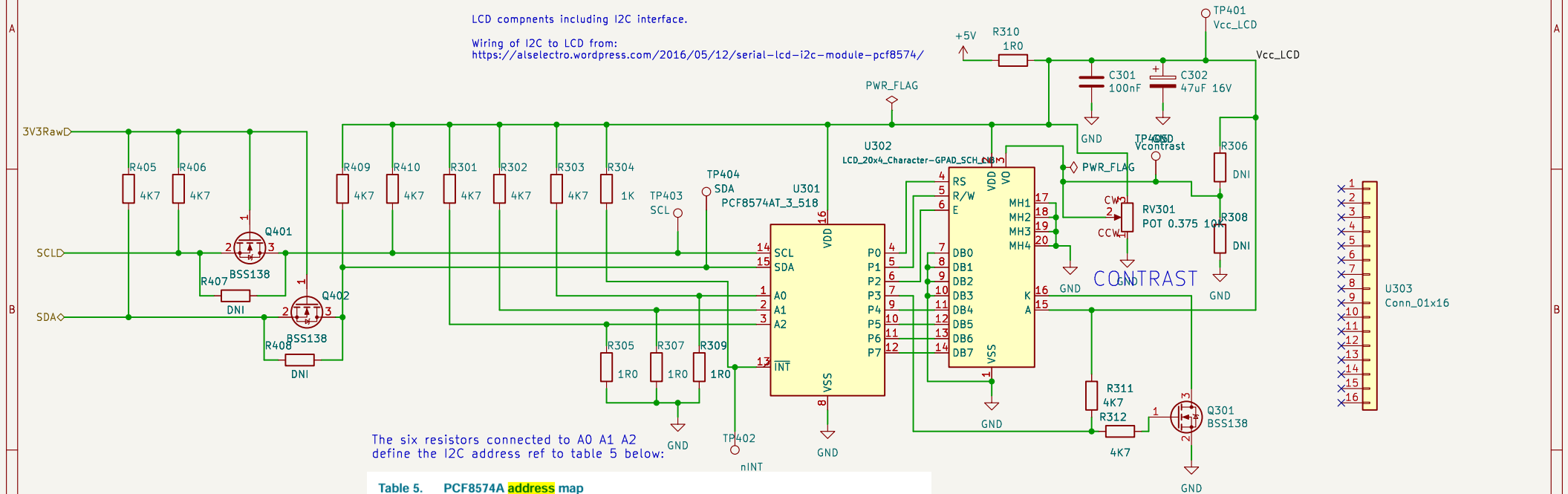


Rev: 2.0

Id: 3/8

LCD compments including I2C interface.

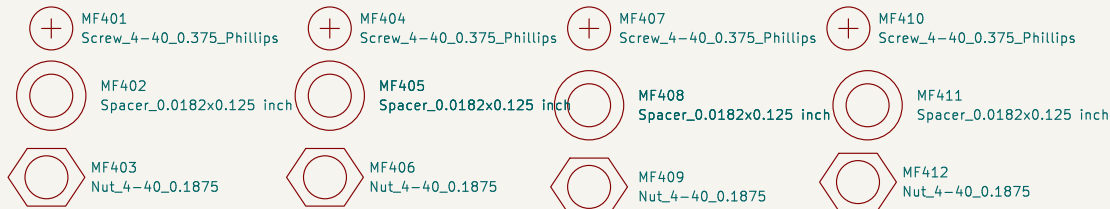
Wiring of I2C to LCD from:
<https://alselectro.wordpress.com/2016/05/12/serial-lcd-i2c-module-pcf8574/>



The six resistors connected to A0 A1 A2
define the I2C address ref to table 5 below:

Table 5. PCF8574A address map

Pin connectivity			Address of PCF8574A								Address byte value		7-bit hexadecimal address without R/W
A2	A1	A0	A6	A5	A4	A3	A2	A1	A0	R/W	Write	Read	
V _{SS}	V _{SS}	V _{SS}	0	1	1	1	0	0	0	-	70h	71h	38h
V _{SS}	V _{SS}	V _{DD}	0	1	1	1	0	0	1	-	72h	73h	39h
V _{SS}	V _{DD}	V _{SS}	0	1	1	1	0	1	0	-	74h	75h	3Ah
V _{SS}	V _{DD}	V _{DD}	0	1	1	1	0	1	1	-	76h	77h	3Bh
V _{DD}	V _{SS}	V _{SS}	0	1	1	1	1	0	0	-	78h	79h	3Ch
V _{DD}	V _{SS}	V _{DD}	0	1	1	1	1	0	1	-	7Ah	7Bh	3Dh
V _{DD}	V _{DD}	V _{SS}	0	1	1	1	1	1	0	-	7Ch	7Dh	3Eh
V _{DD}	V _{DD}	V _{DD}	0	1	1	1	1	1	1	-	7Eh	7Fh	3Fh



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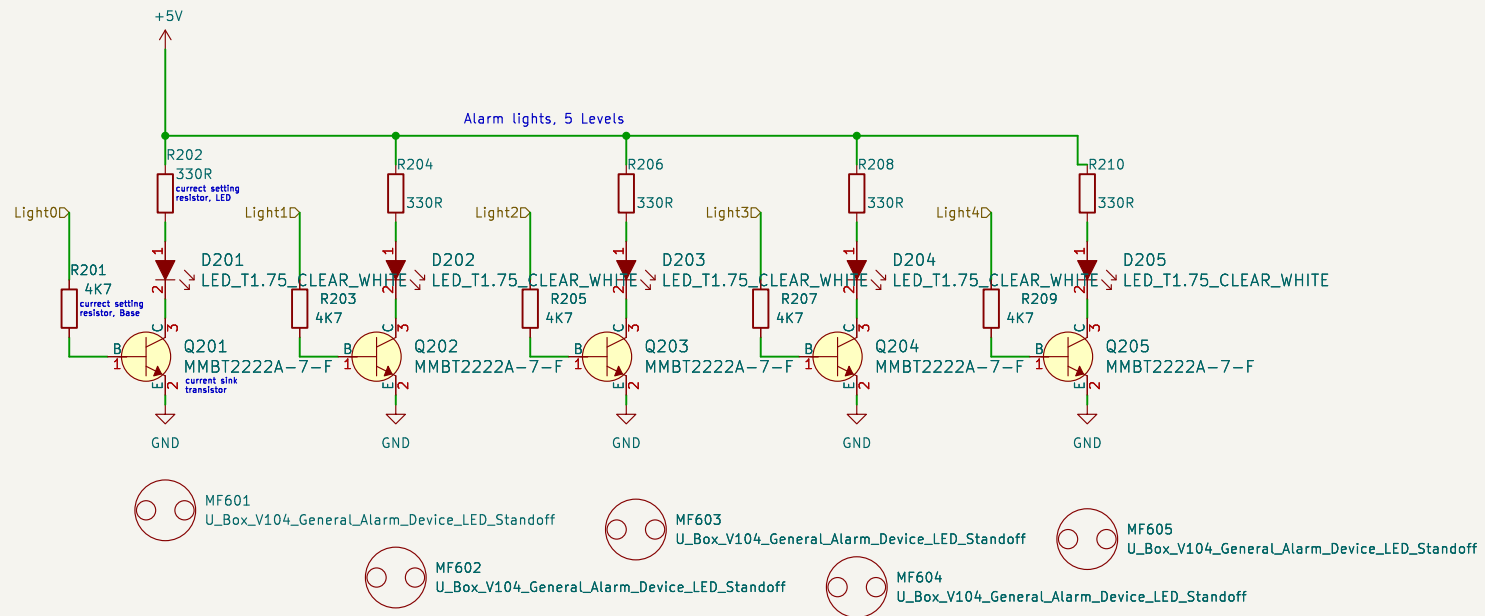


PublicInvention
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File: LCD And I2C Interface.kicad_sch

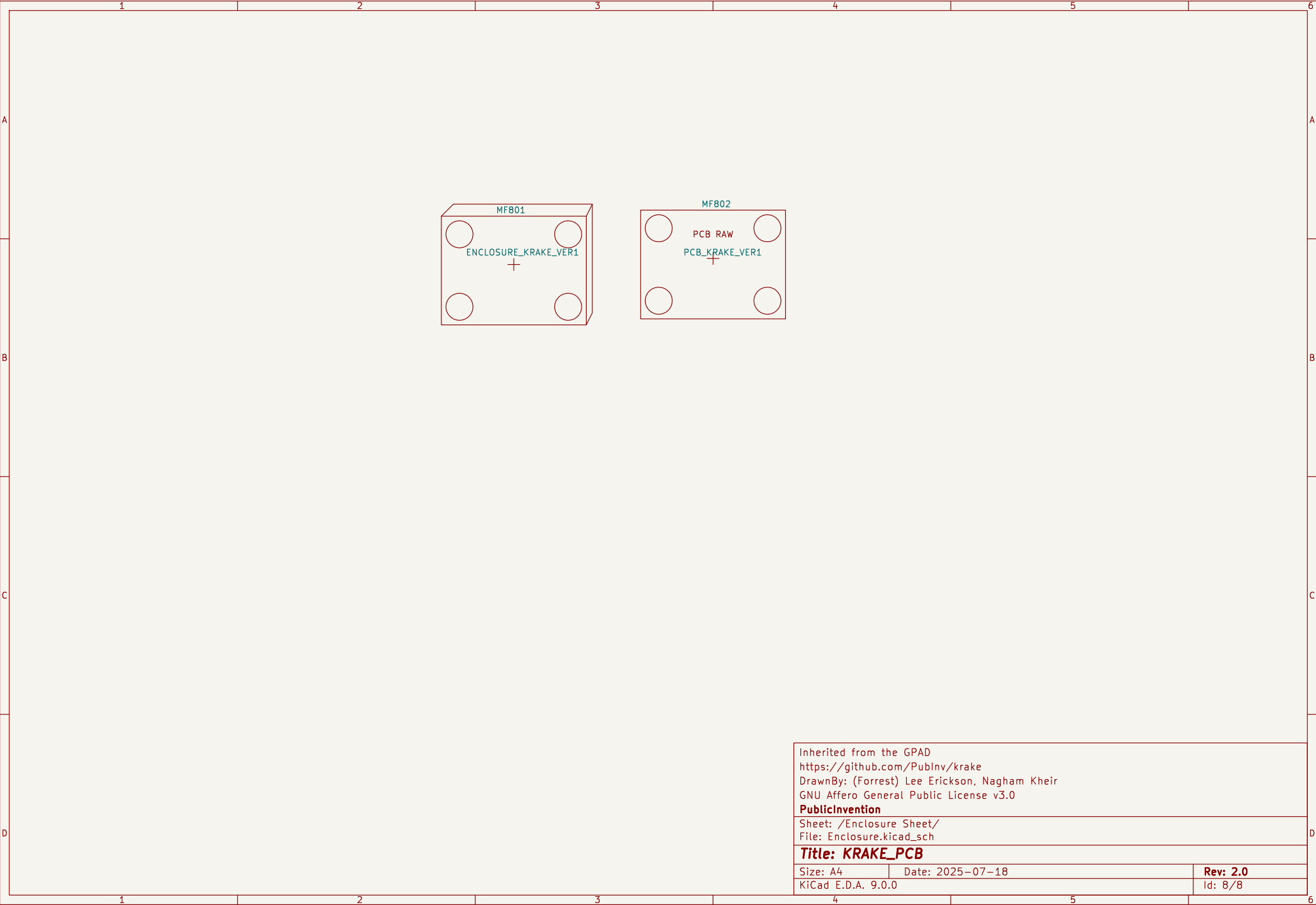
Title: KRAKE_PCB

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Sheet: /AlarmLights5/ File: AlarmLights5.kicad_sch		
Title: KRAKE_PCB		
Size: A4	Date: 2025-07-18	Rev: 2.0
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Sheet: /Enclosure Sheet/ File: Enclosure.kicad_sch		
Title: KRAKE_PCB		
Size: A4	Date: 2025-07-18	Rev: 2.0
KiCad E.D.A. 9.0.0		Id: 8/8