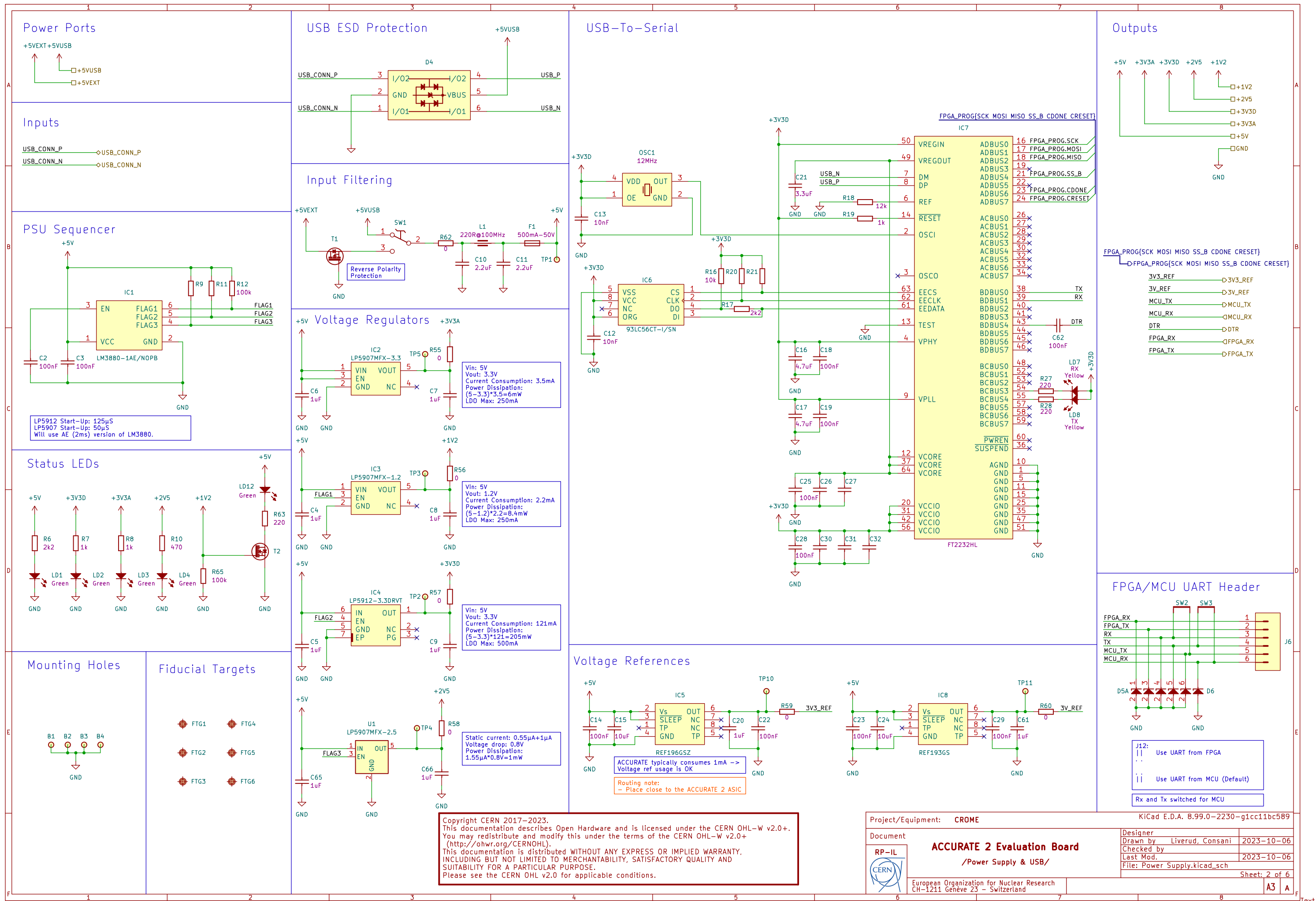
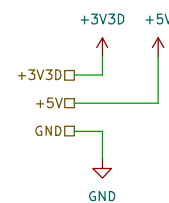


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Project/Equipment: CROME		KiCad E.D.A. 8.99.0–2230–g1cc11bc589	
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		Checked by	2023–10–18
		Last Mod.	2023–10–18
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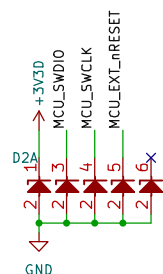
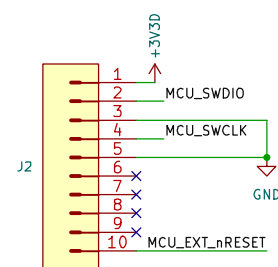
Power Ports



Inputs

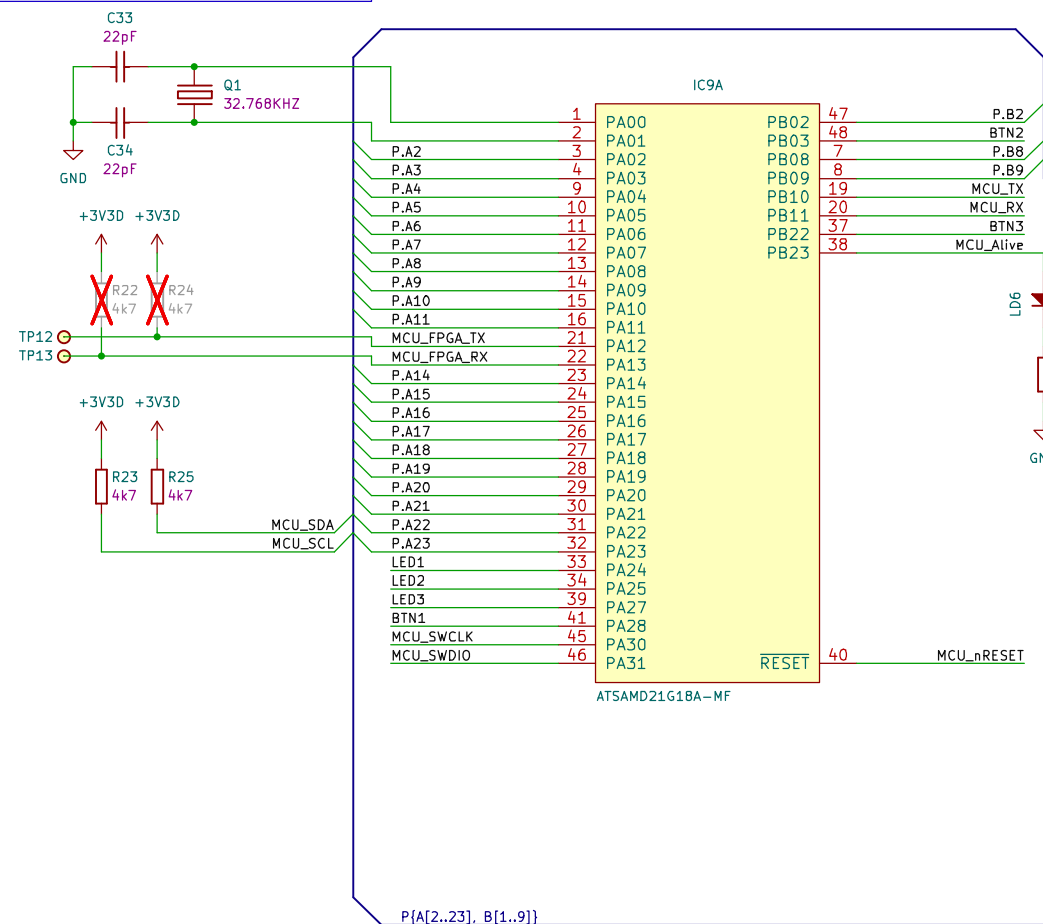


Programming Header



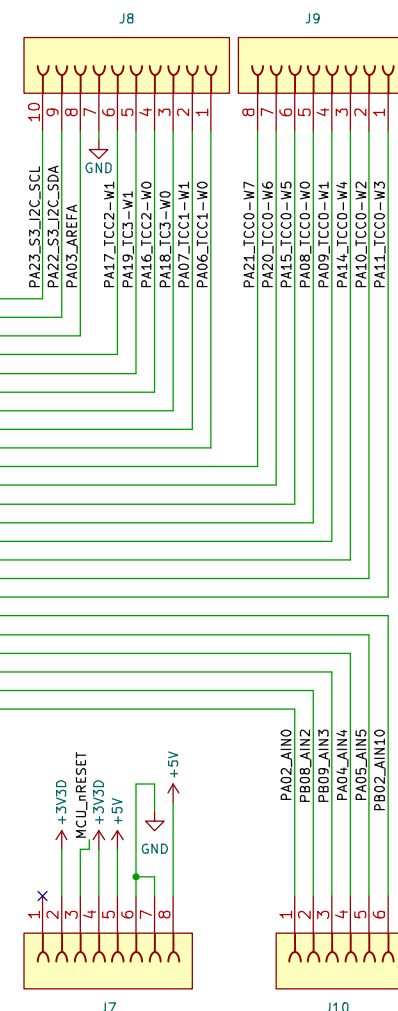
ATSAMD21 MCU

Calculation of crystal load capacitors:
 $C_{LOAD} = \frac{([C_{XIN} + C_{LEXT}] * [C_{XOUT} + C_{LEXT}])}{([C_{XIN} + C_{LEXT} + C_{EXT} + C_{XOUT}]) + C_{STRAY}}$
 $C_{LOAD} = 12.0pF$ (from crystal datasheet)
 $C_{XIN32} = 3.1pF$ (from MCU datasheet)
 $C_{XOUT} = 3.3pF$ (from MCU datasheet)
 $C_{STRAY} = 0.5pF$ (estimate)
 $C_{LEXT} = 19.8pF$

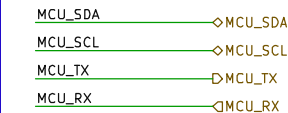


Arduino Header

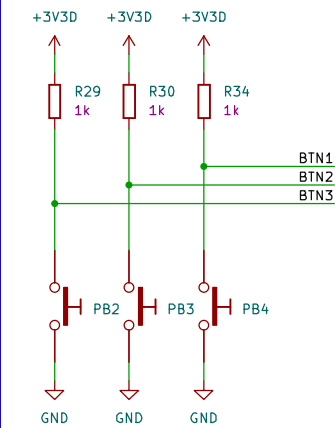
Routing note:
 - Placement of female headers must match Arduino Zero Shield



Outputs

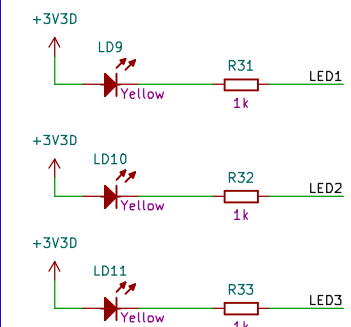


Buttons

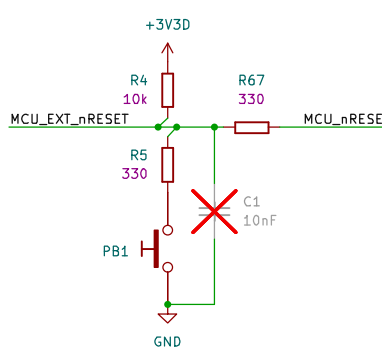


Routing note:
 - REV2: Place BTN1 (PB4) rightmost, then BTN2 and BTN3 leftmost

LEDs



TO CHECK:



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Document

RP–IL



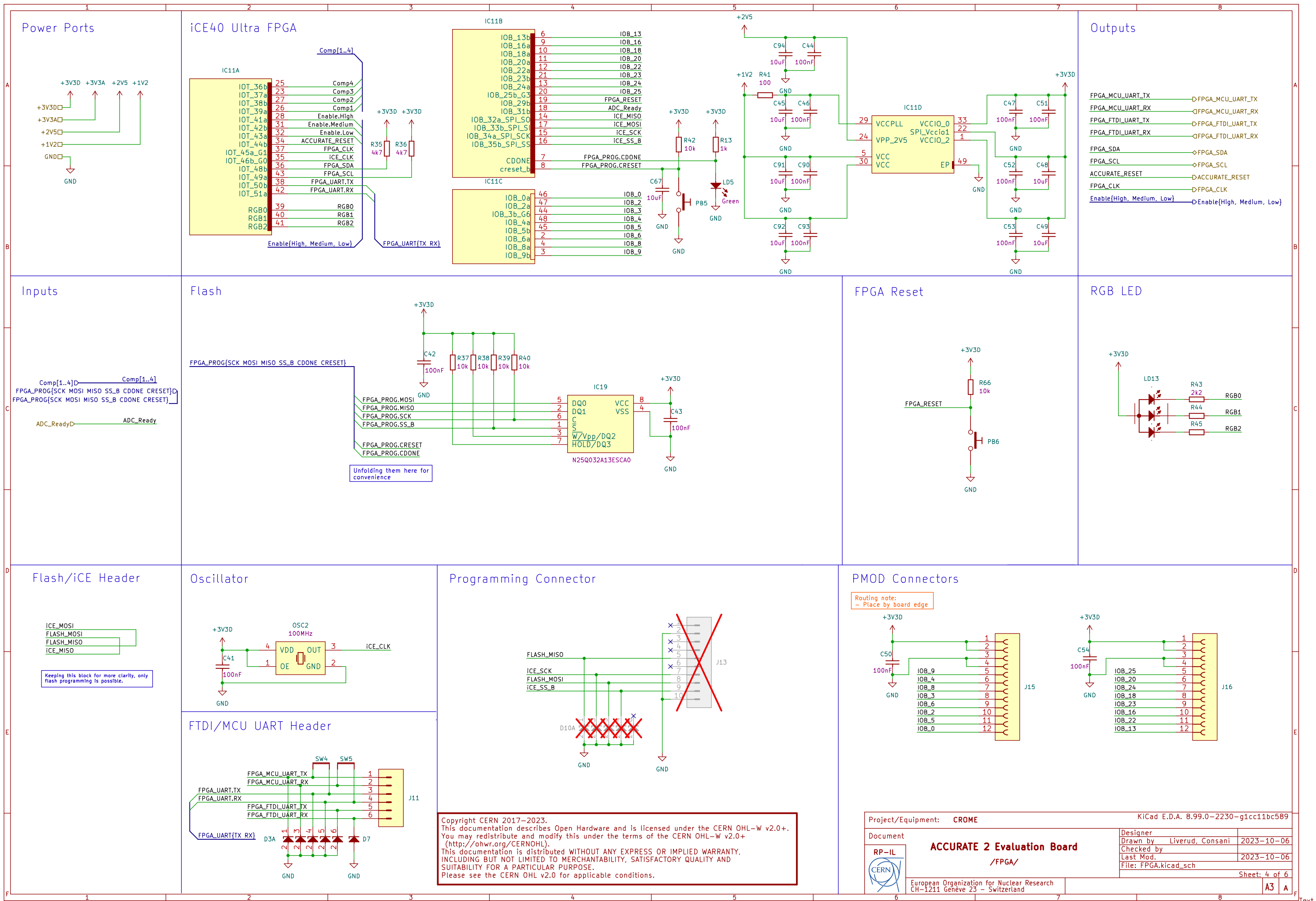
ACCURATE 2 Evaluation Board
 /MCU/

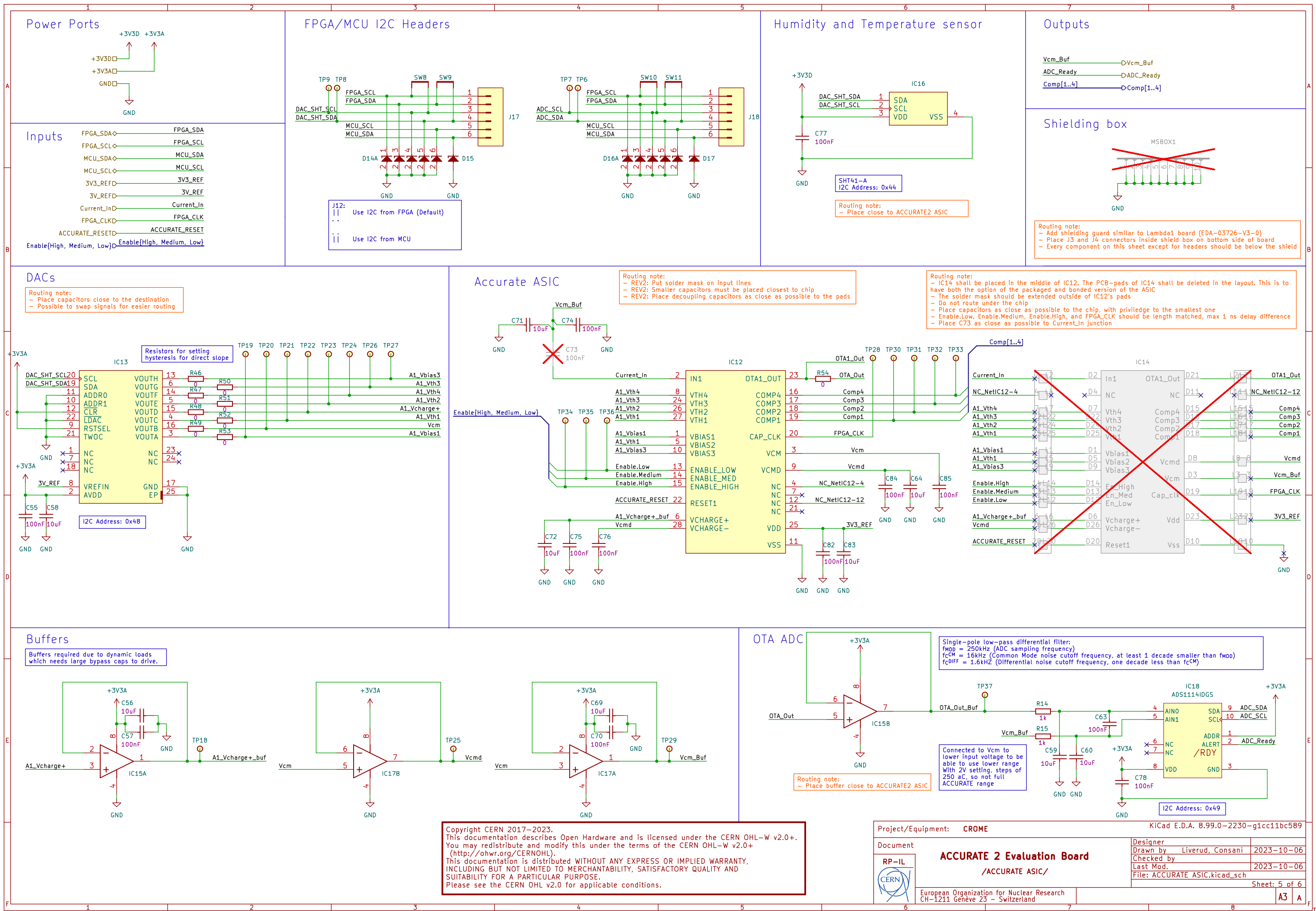
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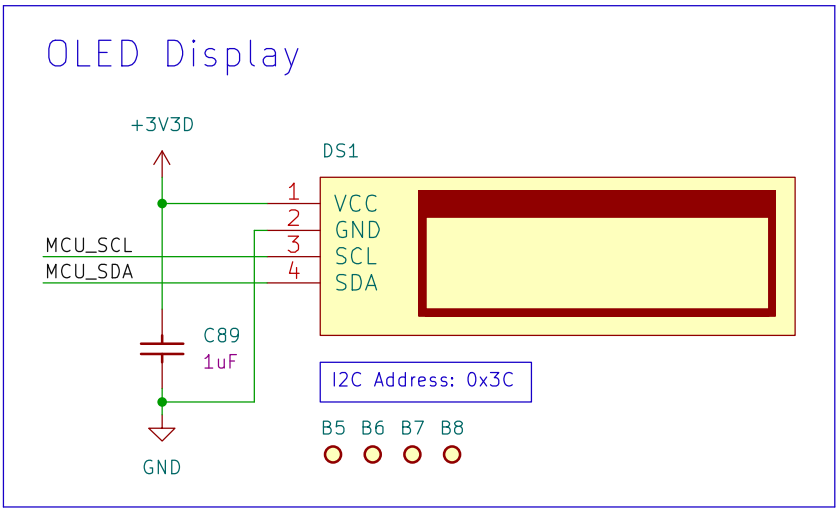
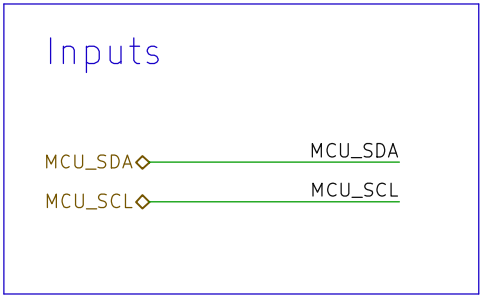
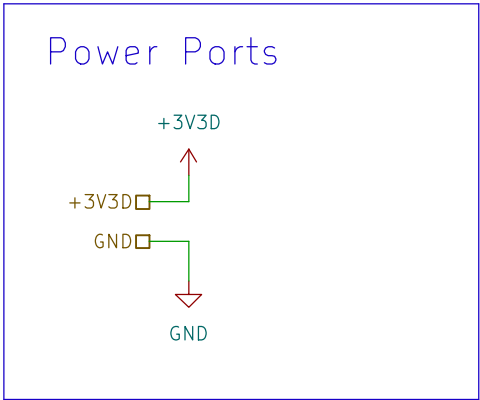
Designer	
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Checked by	
Last Mod.	2023–10–06
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Project/Equipment: CROME		KiCad E.D.A. 8.99.0-2230-g1cc11bc589	
Document		Designer	
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