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Robin Murphy

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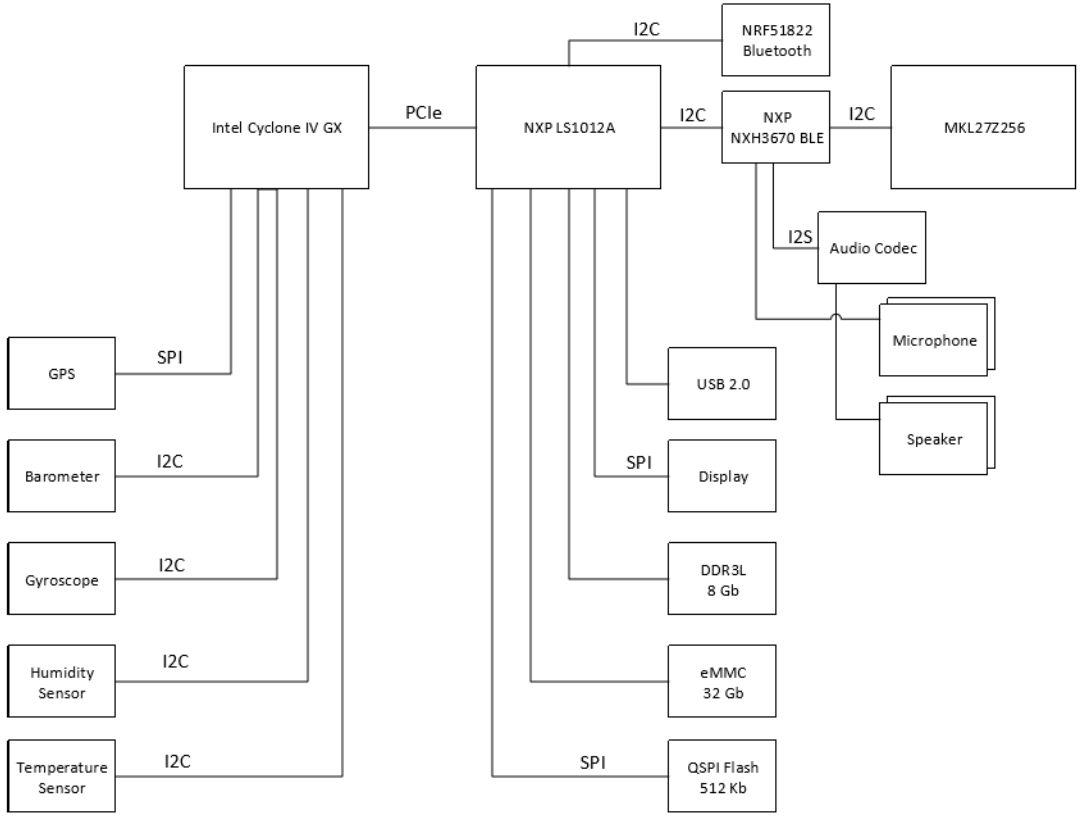
File: SmartH-001.sch

Title: SmartH-001

Size: B	Date: 2020-01-16	**Rev: A1**
KiCad E.D.A. kicad (5.1.4)-1		Id: 1/20

Block Diagram



Robin Murphy		
Sheet: /Block Diagram/		
File: BlockDiagram.sch		
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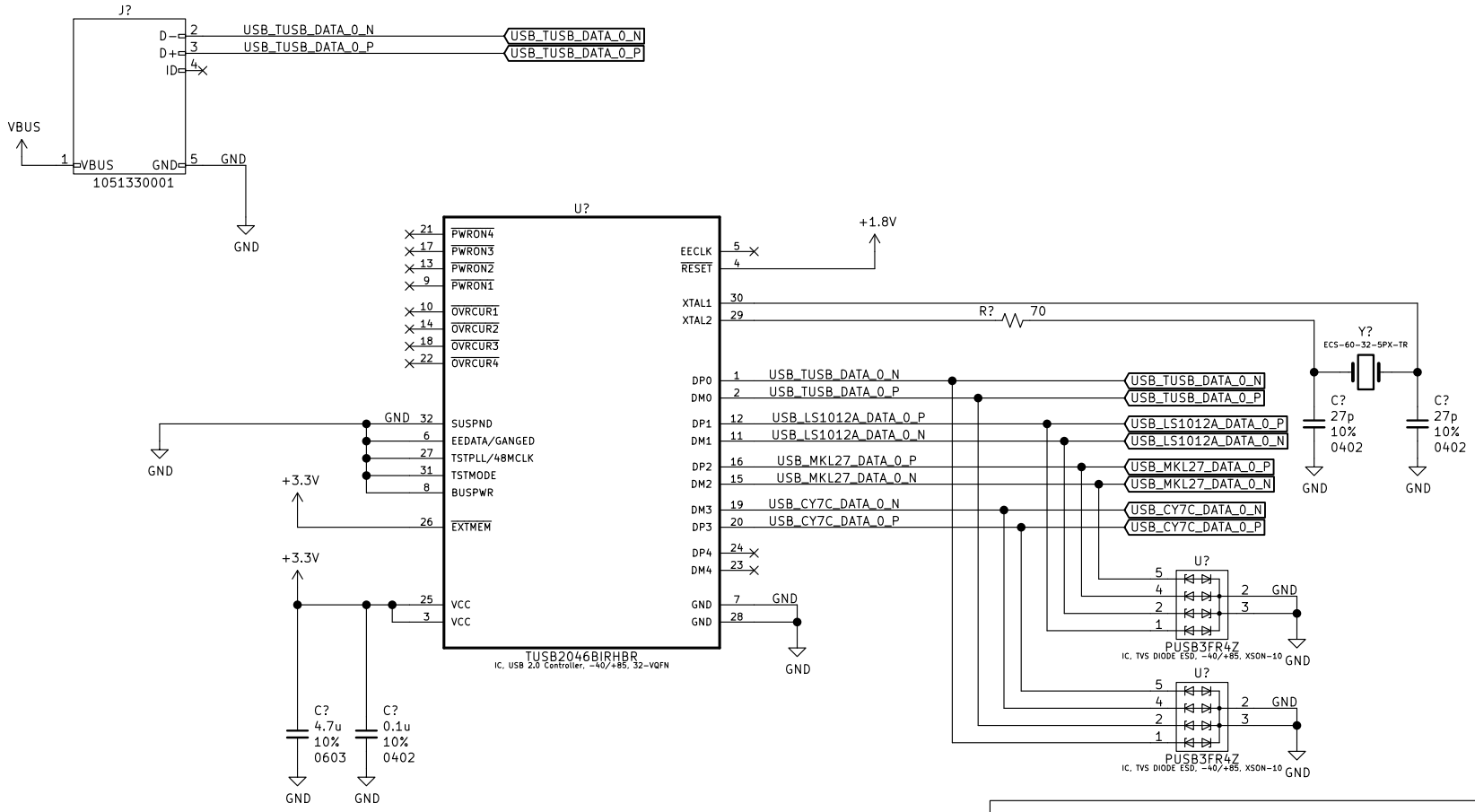
KiCad E.D.A. kicad (5.1.4)-1		Id: 2/20

USB Connector



Robin Murphy		
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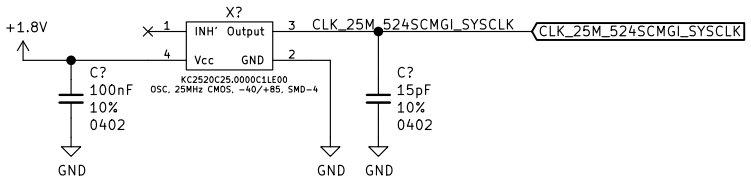
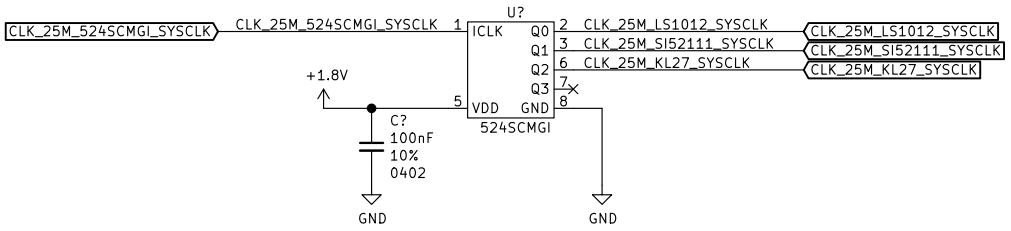
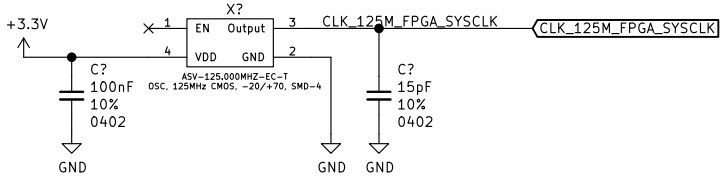
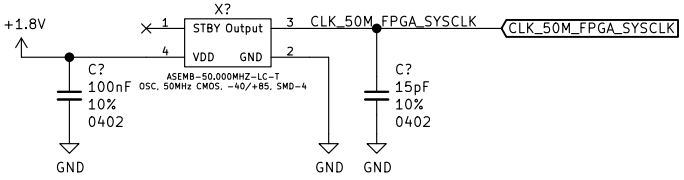
Size: A4	Date: 2020-01-16	**Rev: A1**
KiCad E.D.A. kicad (5.1.4)-1		Id: 3/20

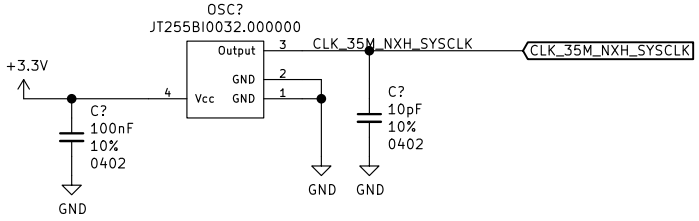
Oscillators











Robin Murphy

Sheet: /Oscillators/
File: Oscillators.sch

Title: SmartH-001

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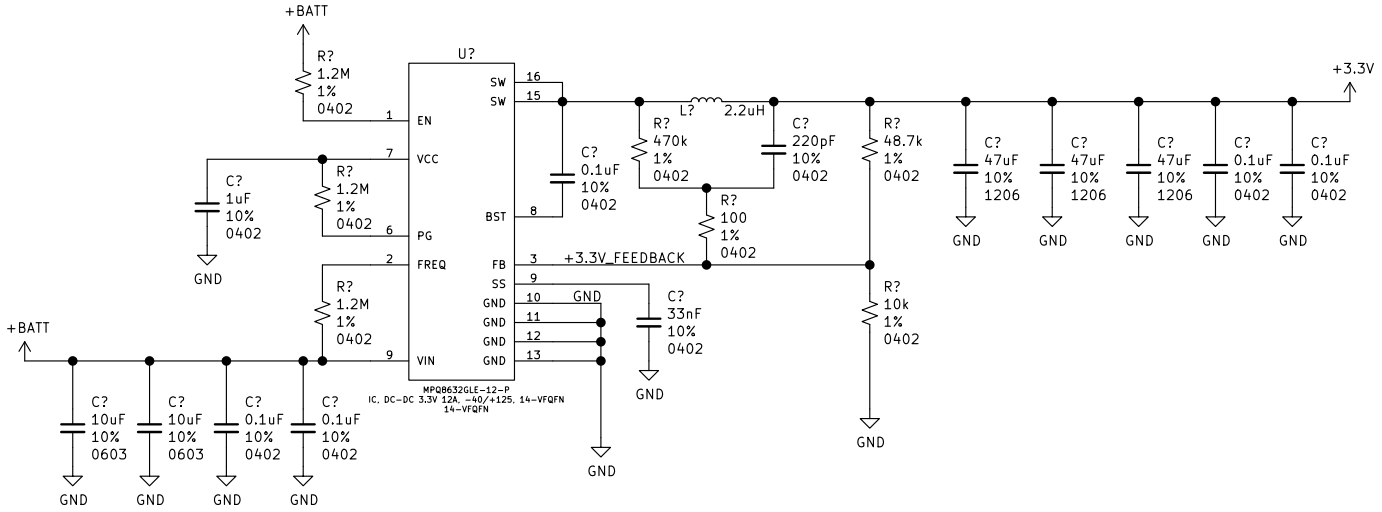
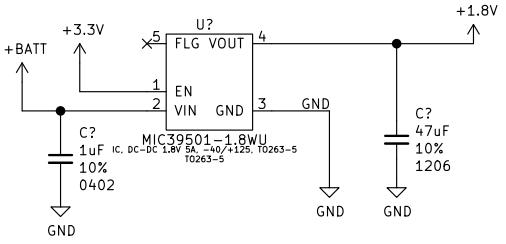
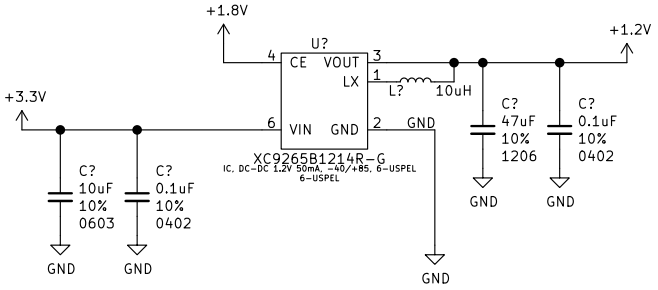
KiCad E.D.A. kicad (5.1.4)-1		Id: 4/20

Power Converters







Robin Murphy		
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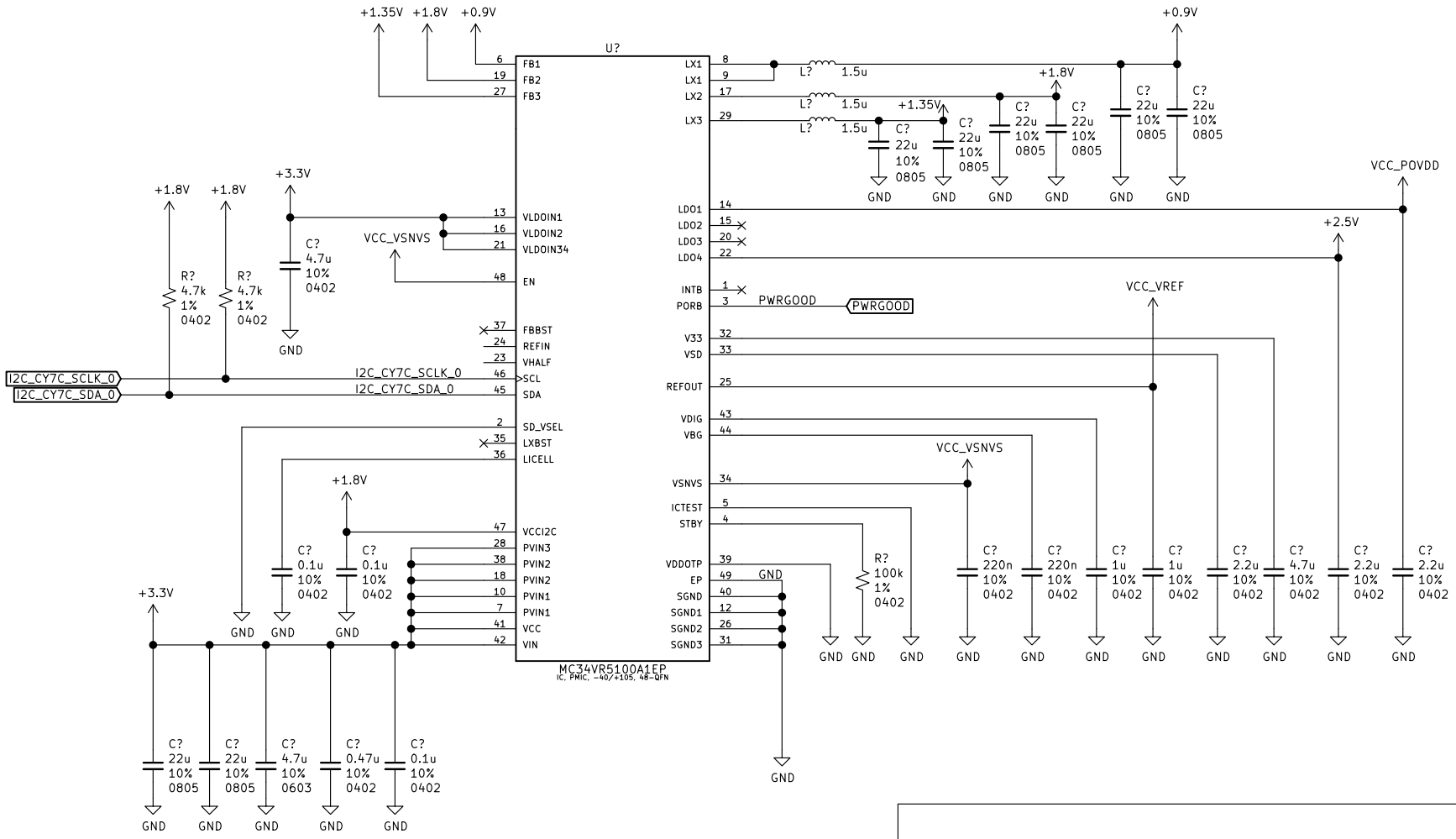
PMIC

Im generating 1.8V here for the LS specific peices and 1.8V from an external regulator for other components, can they both be connected or do they have to be seperate?



Robin Murphy		
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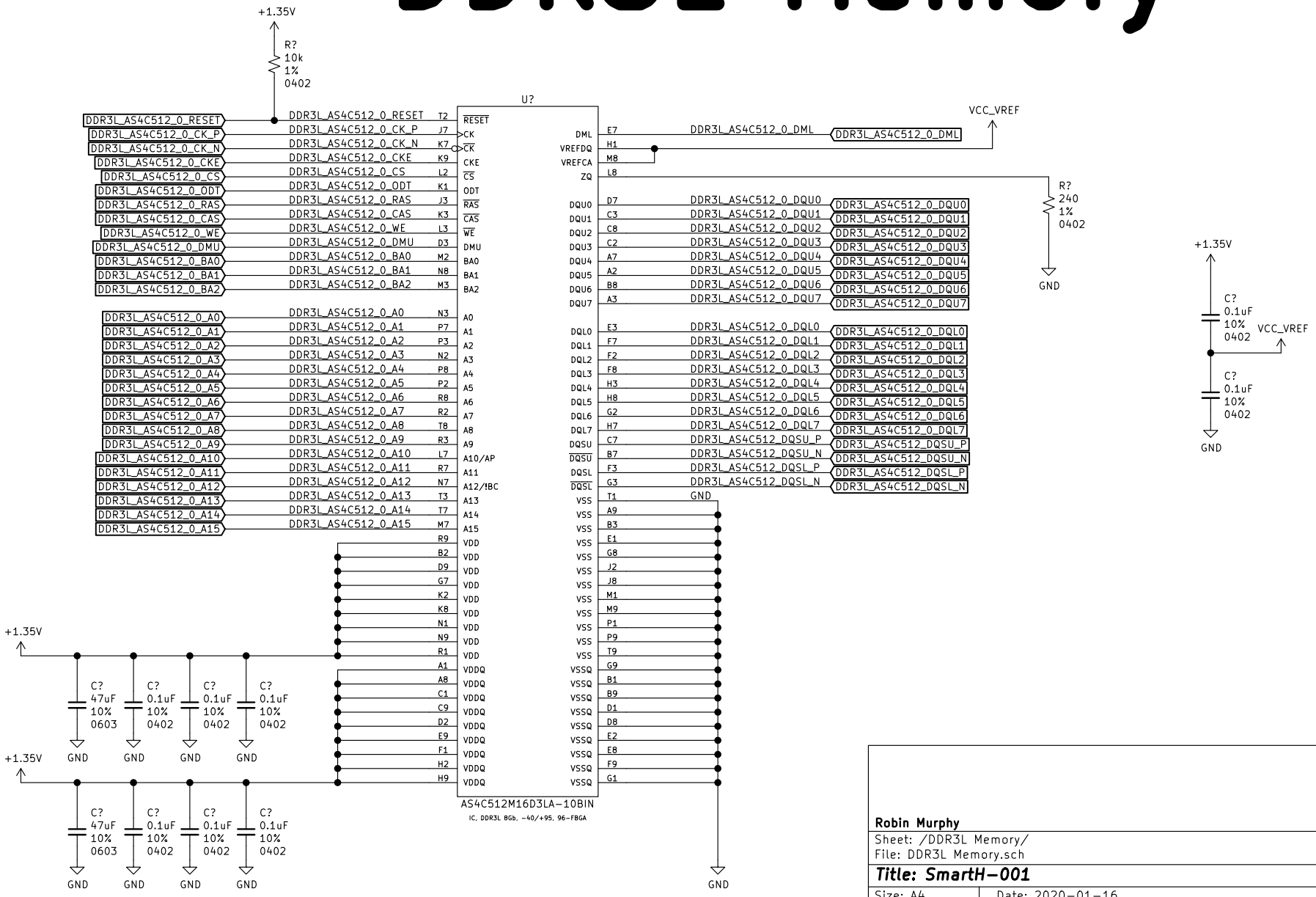
KiCad E.D.A. kicad (5.1.4)-1		Id: 6/20

DDR3L Memory



Robin Murphy		
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Title: SmartH-001		
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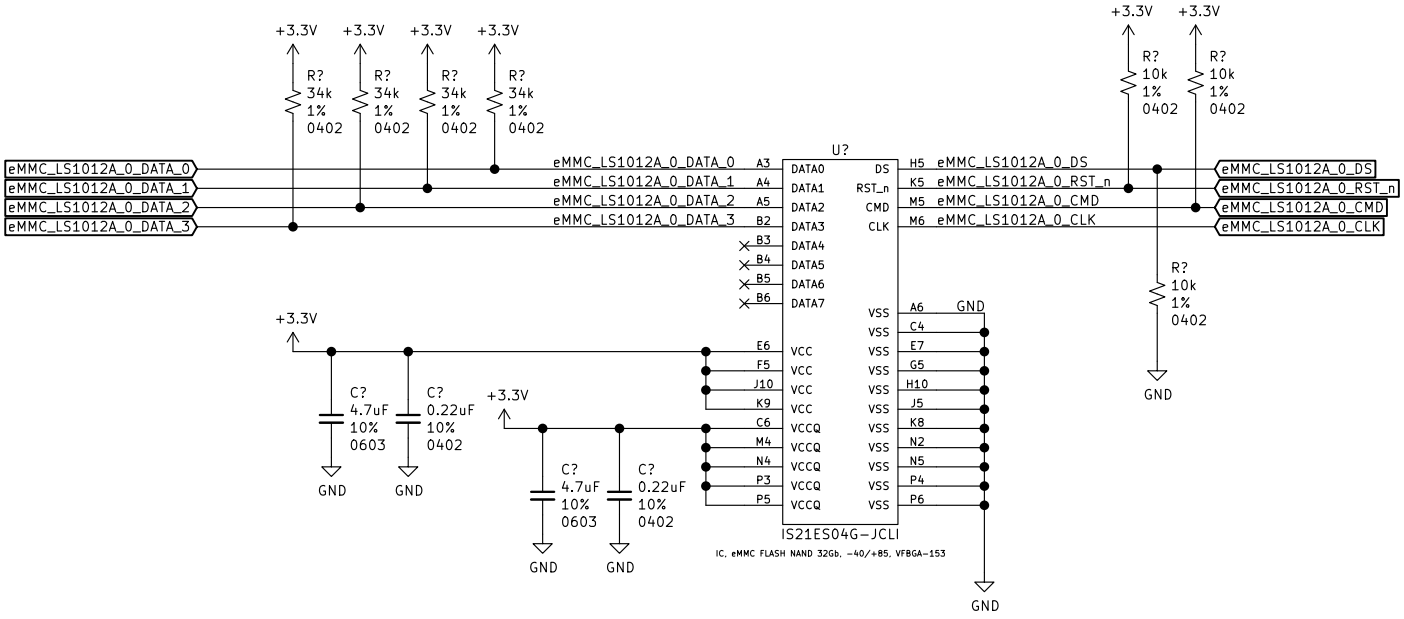
eMMC

They call out VDDI in datasheet, but I can't find it in pin-out...



Robin Murphy		
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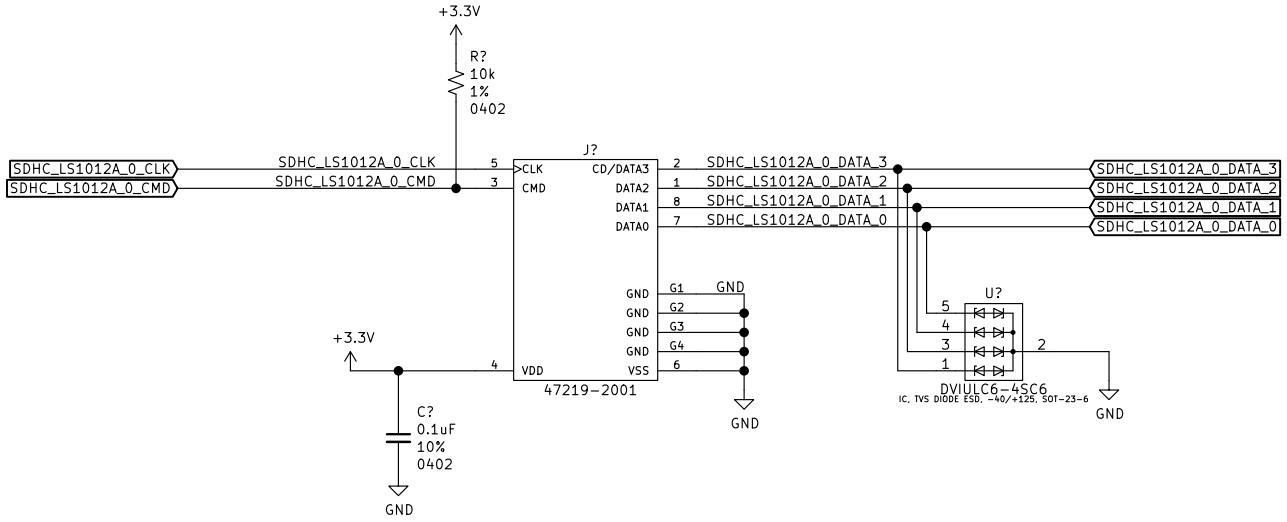
SDHC Connector



Robin Murphy		
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Title: SmartH-001		
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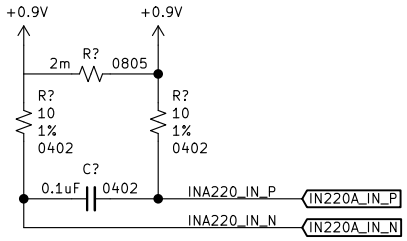
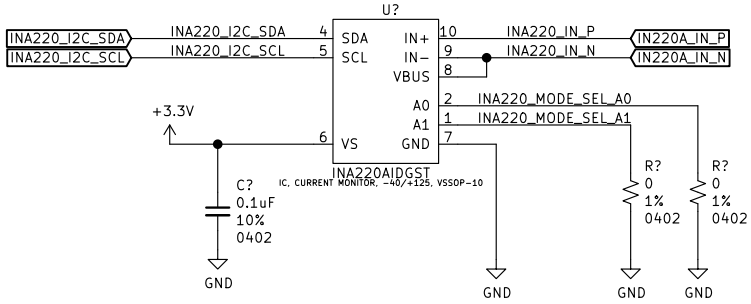
Current Monitor

Maybe change what to measure





Robin Murphy

Sheet: /Current Monitor/
File: CurrentMonitor.sch

Title: SmartH−001

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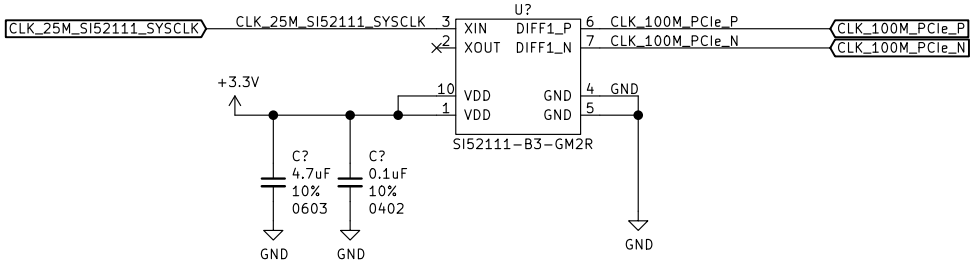
PCIe

Datasheet says: 25.00 MHz crystal input or 3.3 V, 25 MHz clock Input.
What happens if 1.8V 25MHz clock? Should I use a secondary clock?



Robin Murphy		
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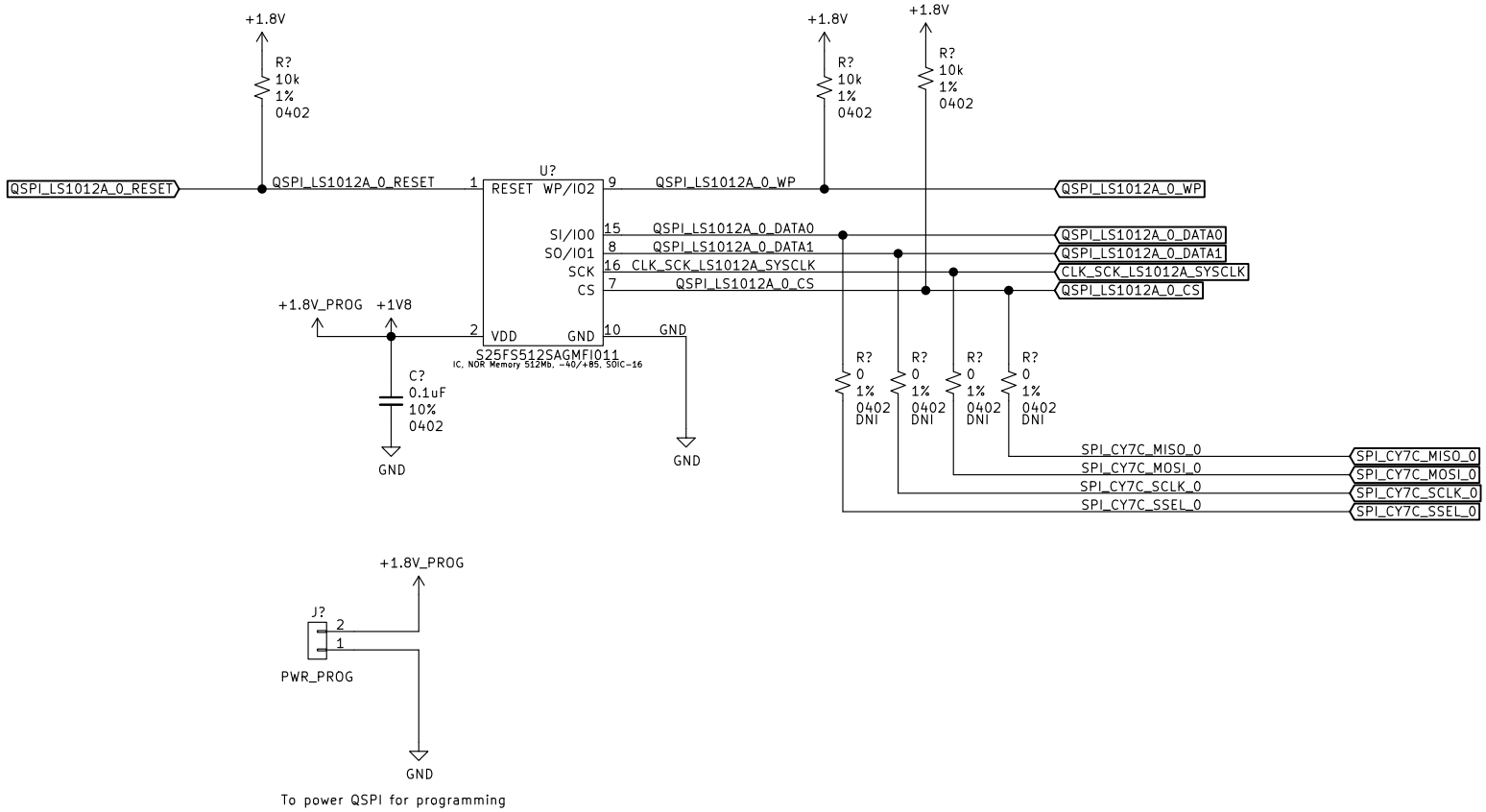
Title: SmartH-001		
Size: A4	Date: 2020-01-16	**Rev: A1**
KiCad E.D.A. kicad (5.1.4)-1		Id: 11/20

QSPI Flash



To power QSPI for programming

Robin Murphy		
Sheet: /QSPI Flash/		
File: QSPI Flash.sch		
Title: SmartH-001		
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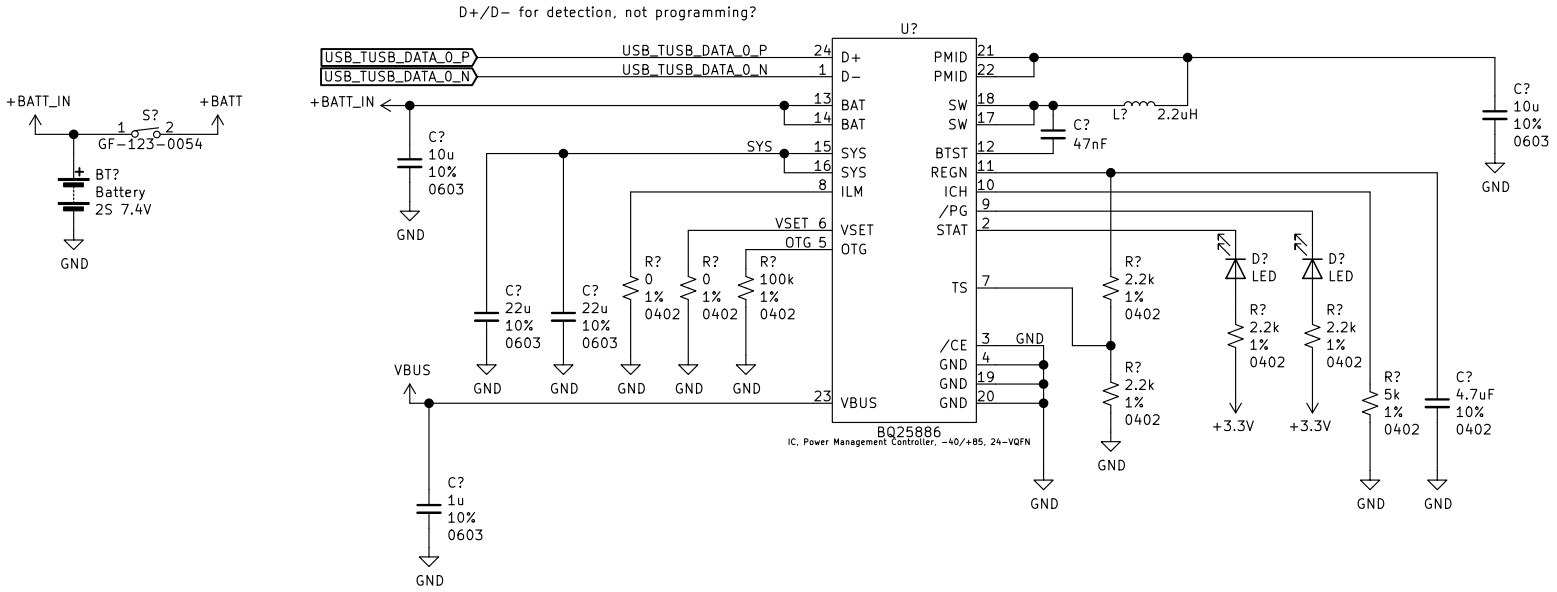
KiCad E.D.A. kicad (5.1.4)-1		Id: 12/20

Battery Charging



Robin Murphy		
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Title: SmartH−001		
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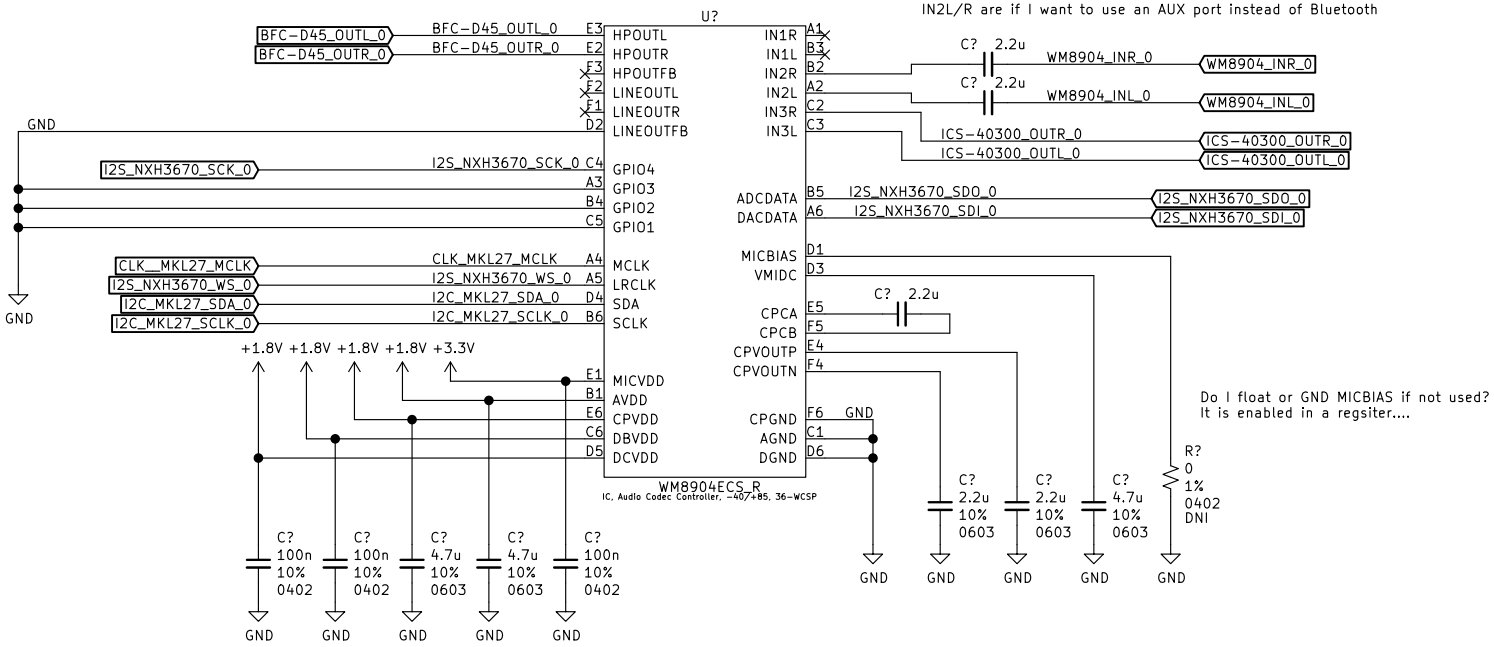
KiCad E.D.A. kicad (5.1.4)−1		Id: 13/20

Audio Codec



Robin Murphy		
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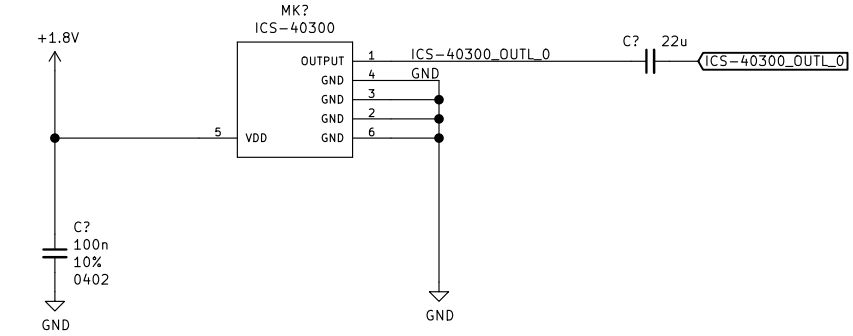
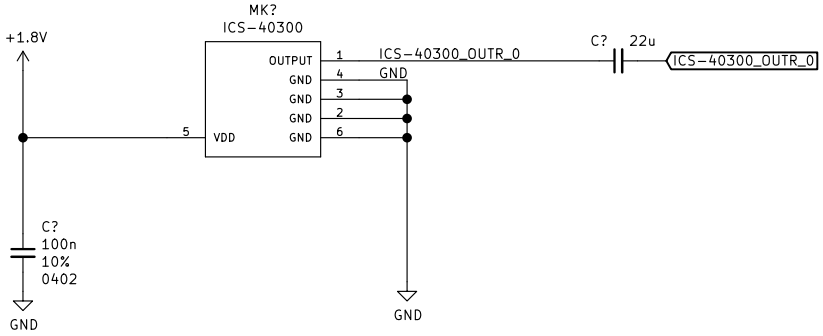
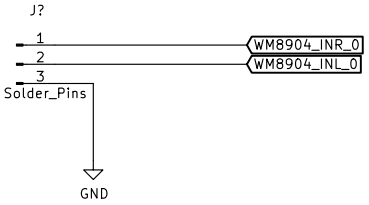
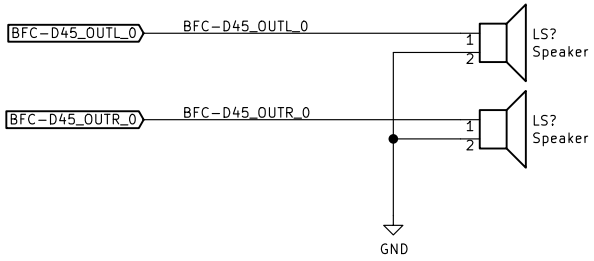
Size: A4	Date: 2020-01-16	**Rev: A1**
KiCad E.D.A. kicad (5.1.4)-1		Id: 14/20

Audio Output









Robin Murphy		
Sheet: /Audio Output/ File: Audio Output.sch		
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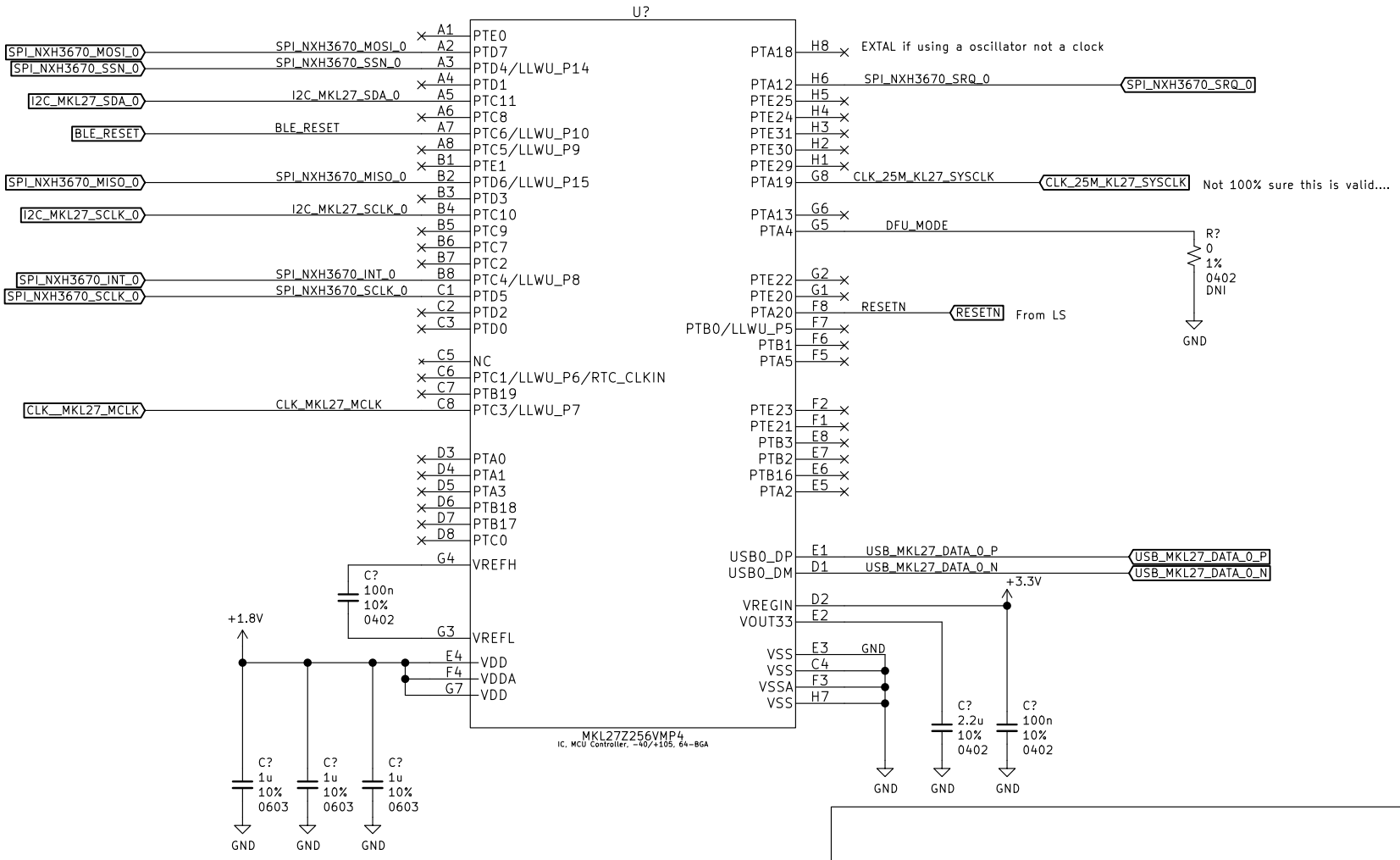
Kinetis KL27



Robin Murphy		
Sheet: /Kinetis KL27/		
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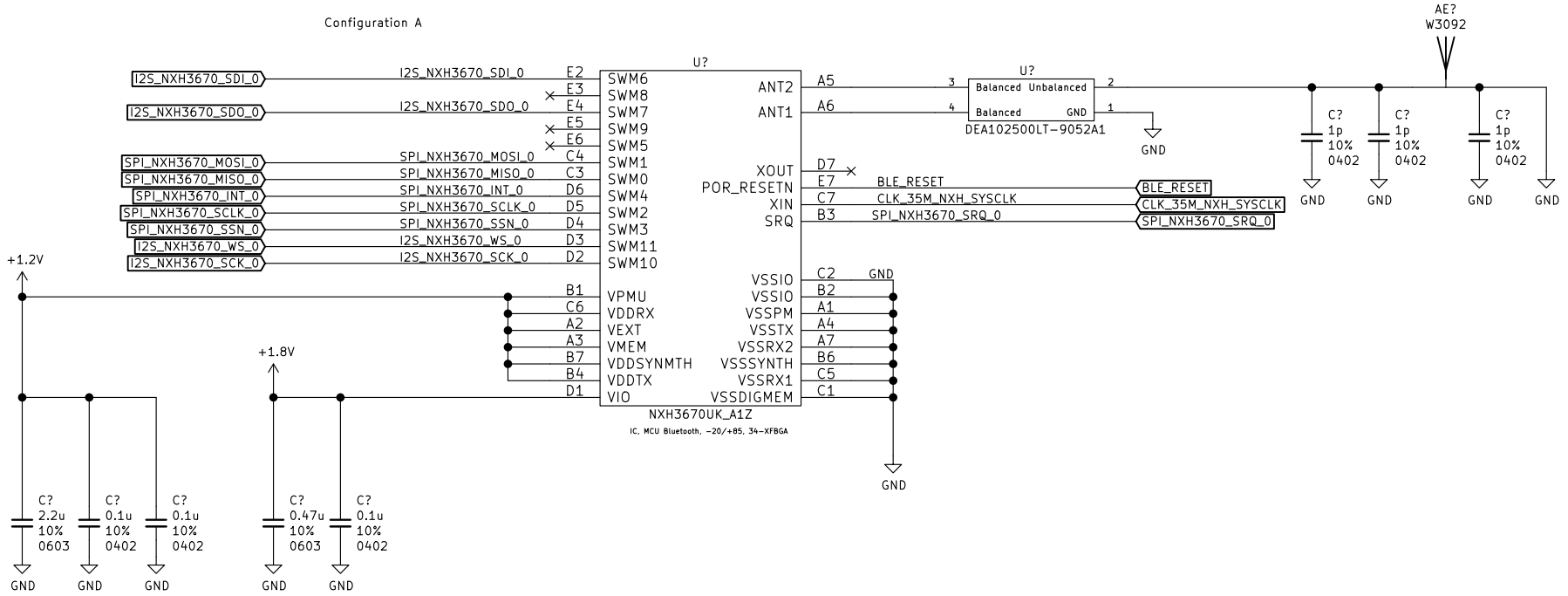
KiCad E.D.A. kicad (5.1.4)-1		Id: 16/20

NxH3670



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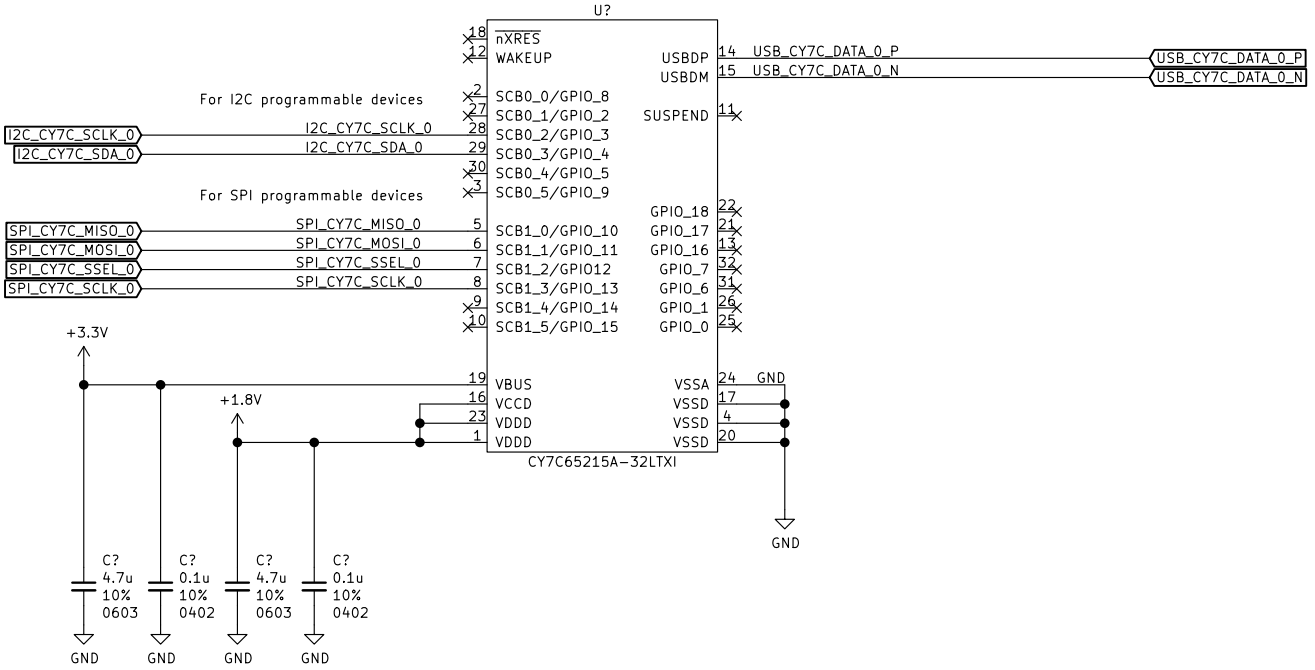
KiCad E.D.A. kicad (5.1.4)-1		Id: 17/20

USB to SPI/I2C Bridge



Robin Murphy		
Sheet: /USB to SPI/I2C Bridge/		
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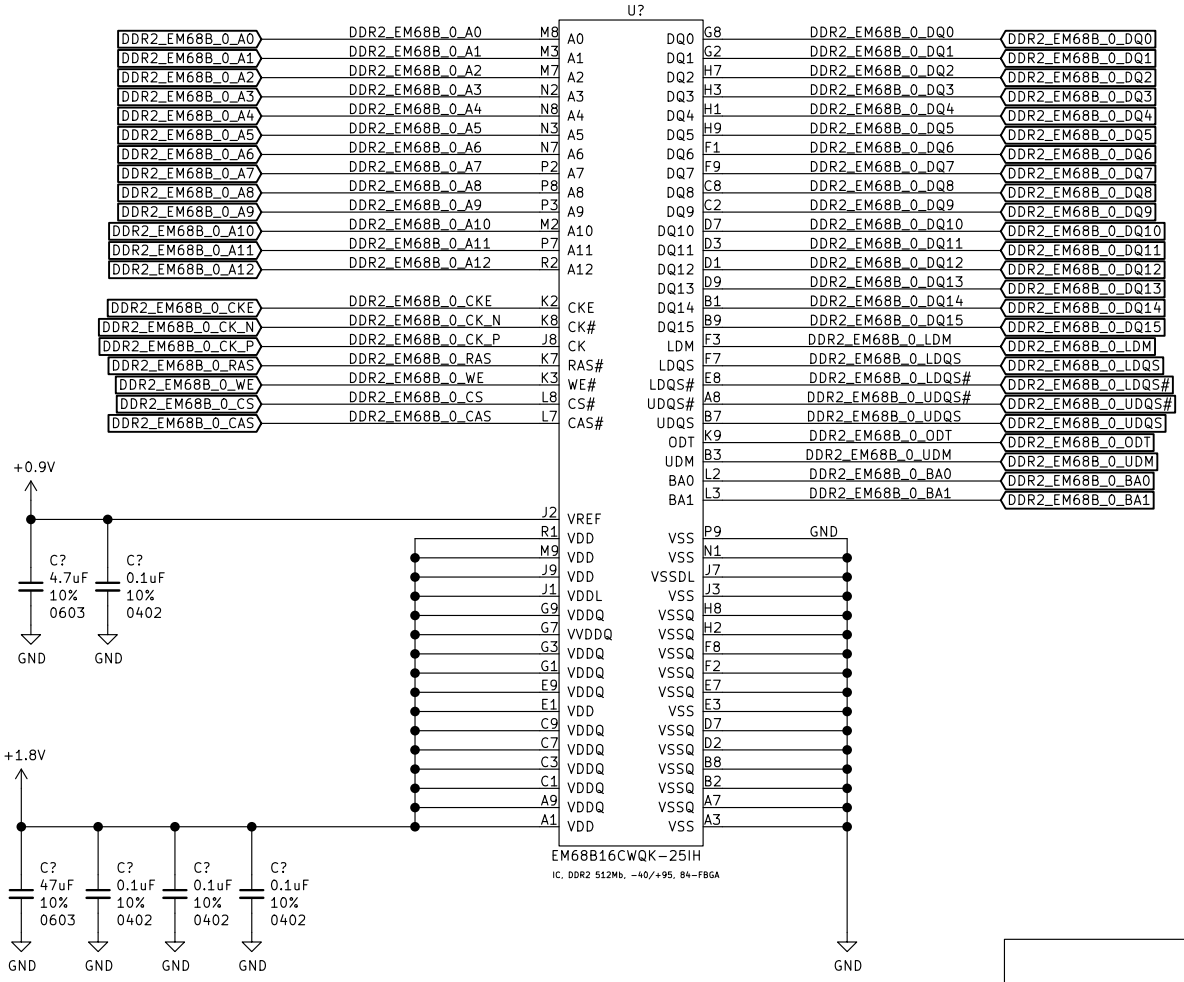
KiCad E.D.A. kicad (5.1.4)-1		Id: 18/20

DDR2 Memory



Robin Murphy		
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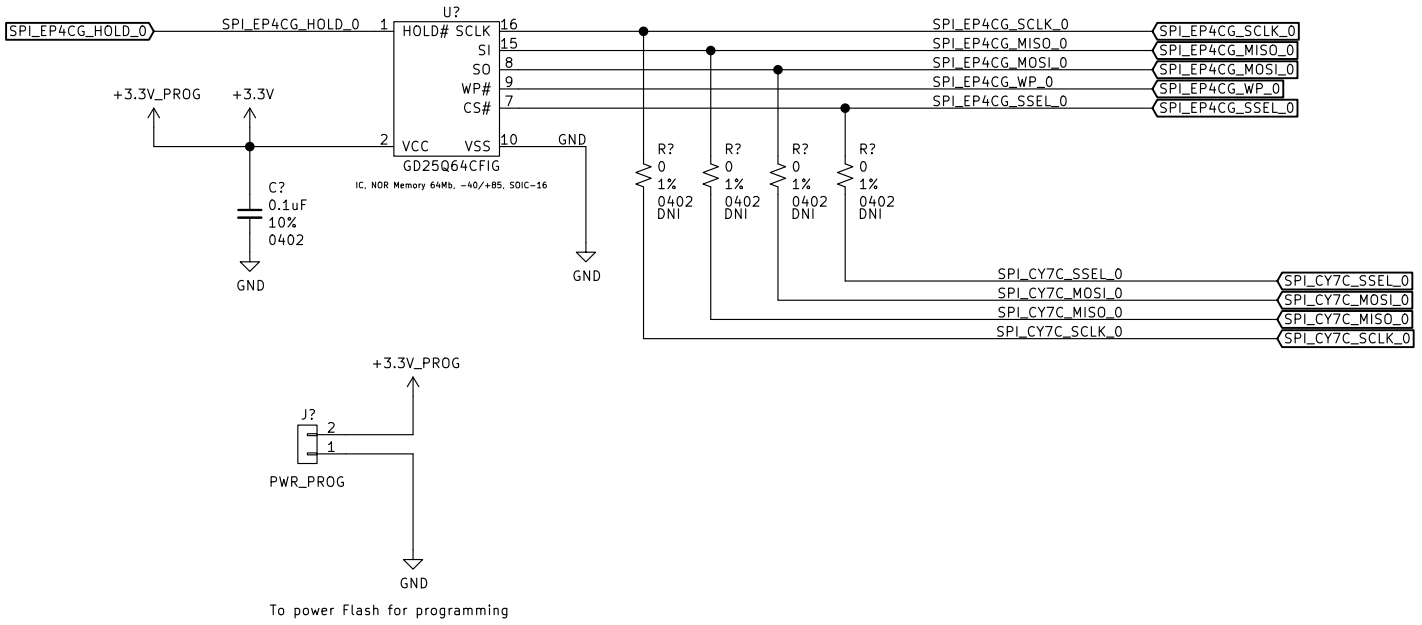
Title: SmartH-001		
Size: A4	Date: 2020-01-16	**Rev: A1**
KiCad E.D.A. kicad (5.1.4)-1		Id: 19/20

Flash Memory



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