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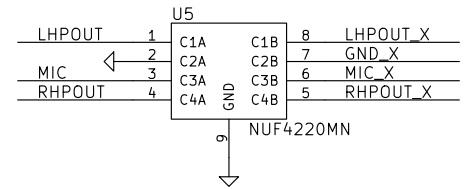
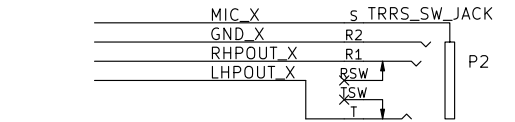
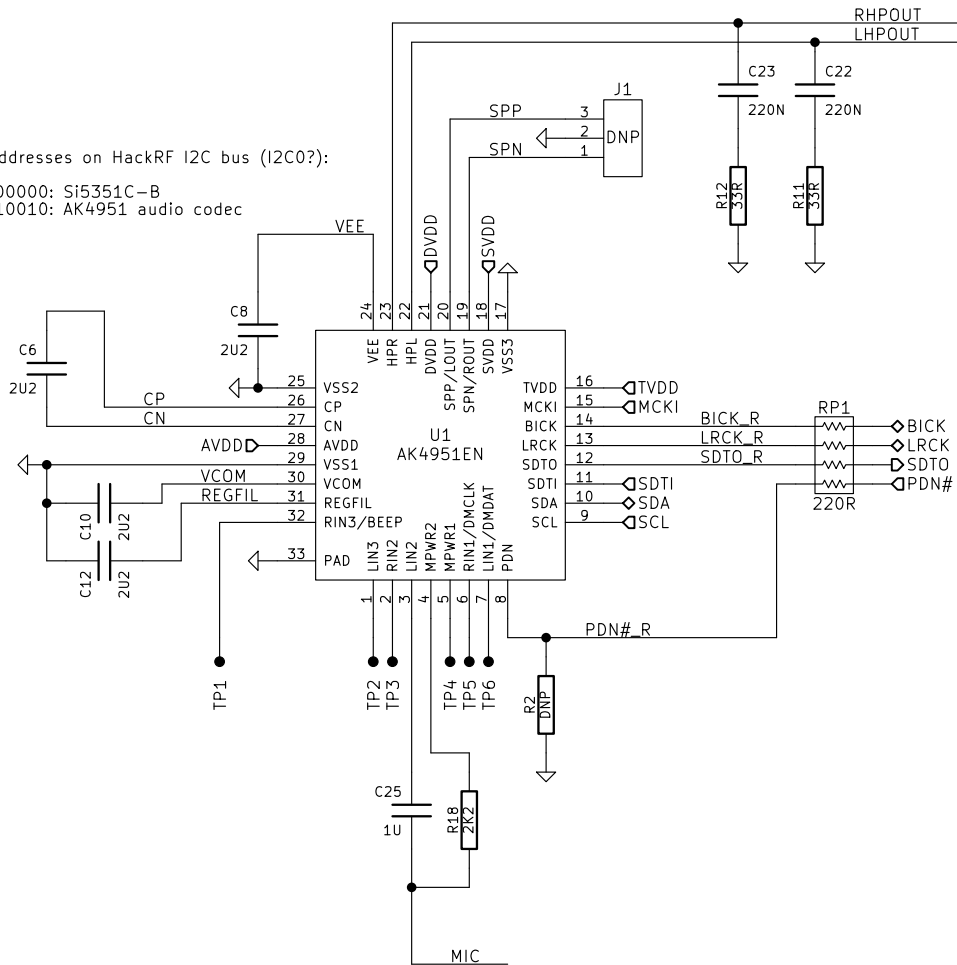
Sheet: /  
 File: portapack\_h1.sch

**Title: PortaPack H1**

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I2C Addresses on HackRF I2C bus (I2C0?):

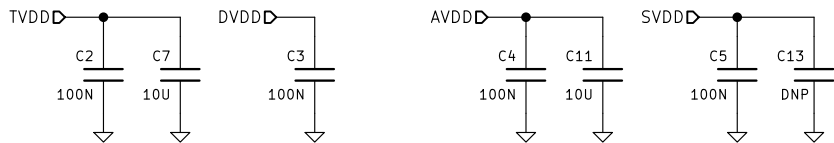
0b1100000: Si5351C-B  
 0b0010010: AK4951 audio codec



PDN/SCL/SDA/SDTI/LRCK/BICK/MCKI:  
 L: < 0.3 TVDD, H > 0.7 TVDD

Init: power down, EXT slave, PLL off  
 BICK, LRCK: inputs

Input float OK: [LR]IN[123]



No 10U on DVDD, very near regulator 10U.

No 10U on SVDD to comply with USB inrush spec.

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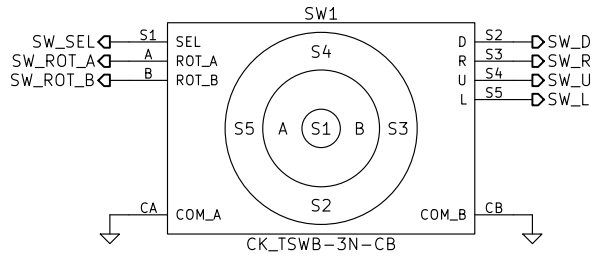
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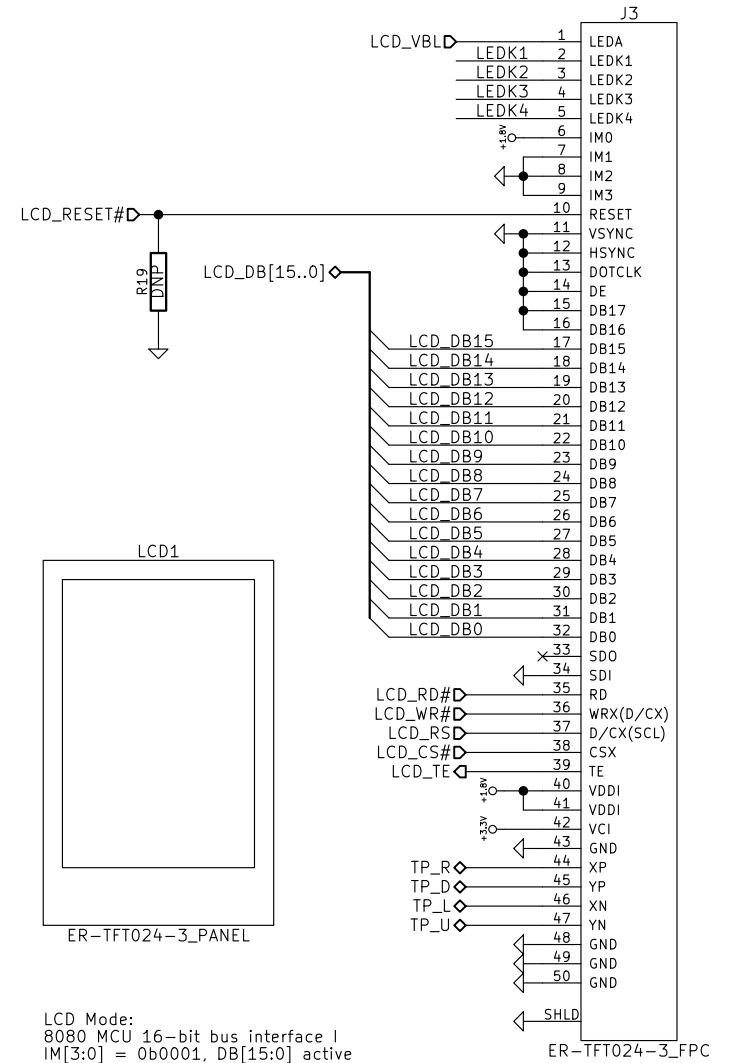
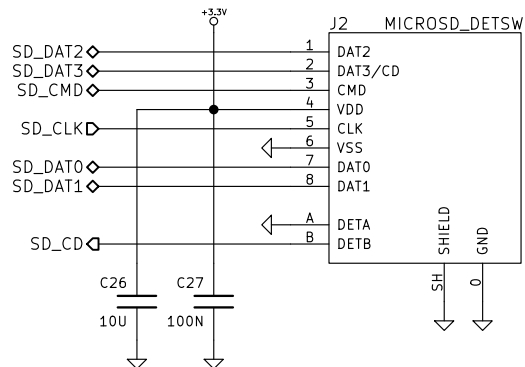
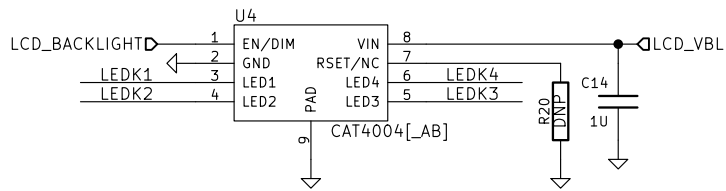
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EN/DIM: 200k PD internal, enable > 1.3V, disable < 0.4V  
RSET: not required, default 25mA current  
UVLO: 2.0V typ



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Sheet: /lcd\_sw\_sd/  
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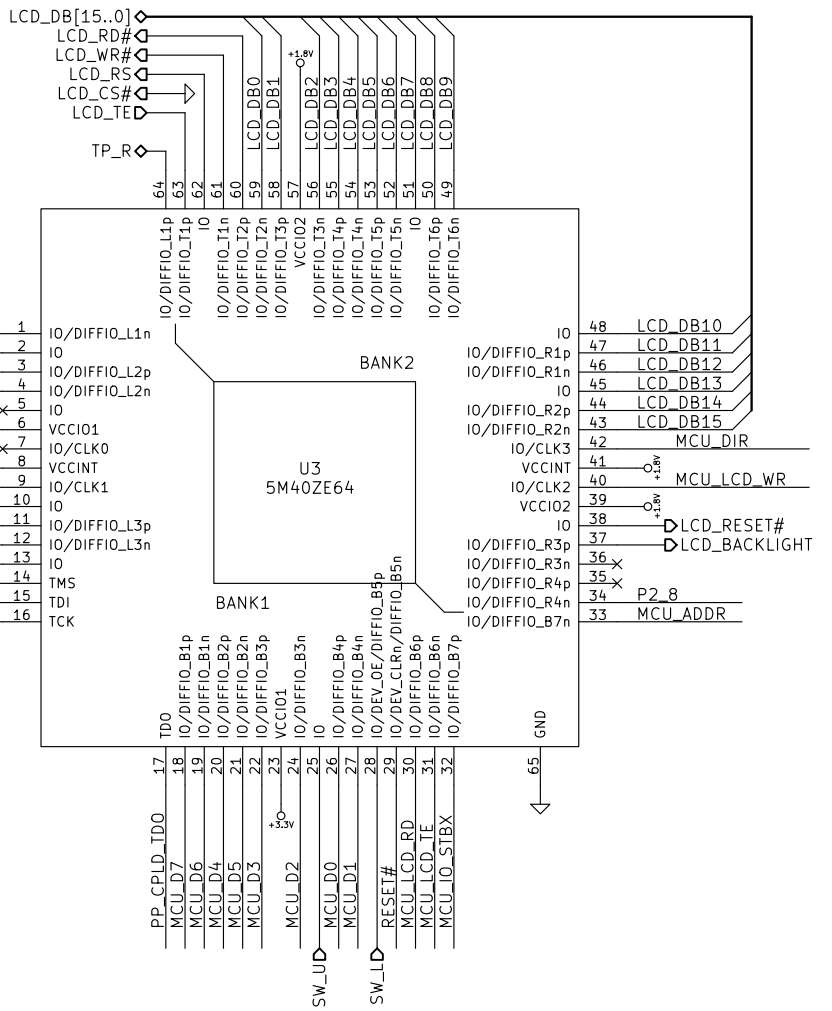
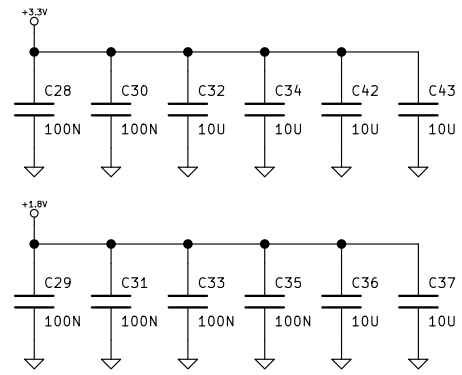
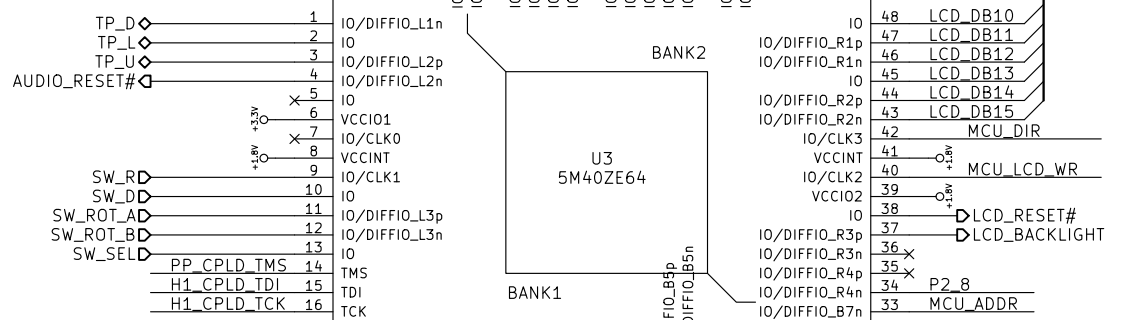
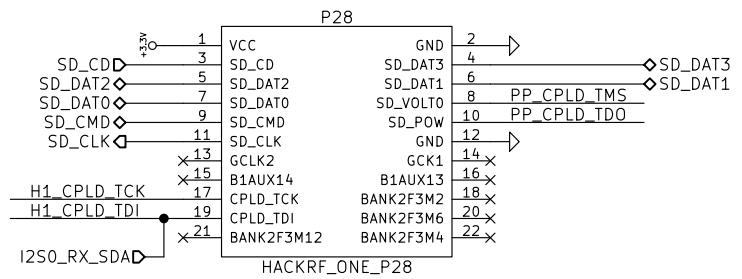
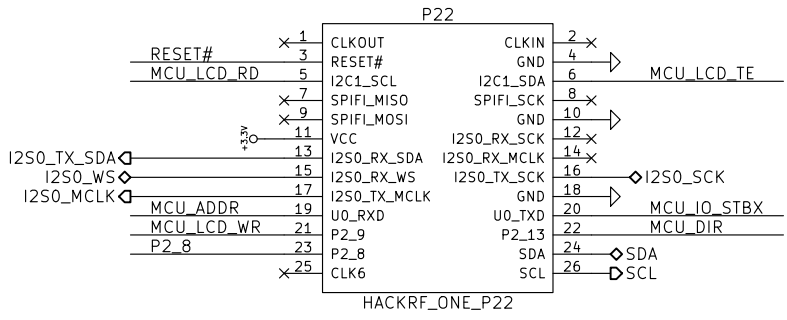
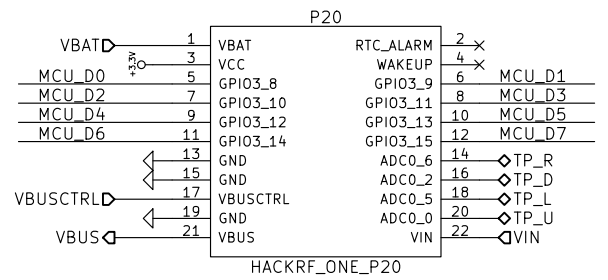
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Init: I/O is hi-Z with pull-ups.  
 SRAM download when VCCINT reaches 1V55.  
 User mode once downloaded and VCCIO OK.  
 VCCINT stable to user mode: 200 usec max.  
 VCCIOs stable to user mode: 2 usec.

Pull-ups: 5-25k @ 3V3, 25-60k @ 1V8.  
 External R-pull: 1K PD, 10K PU recommended.  
 VCCIO=3V3: 2V5, 3V3 inputs OK.  
 VCCIO=1V8: 1V5, 1V8, 2V5, 3V3 inputs OK.

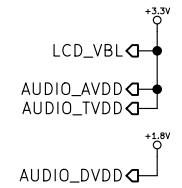
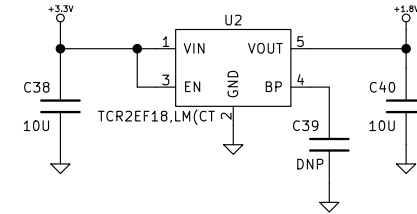
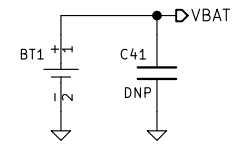
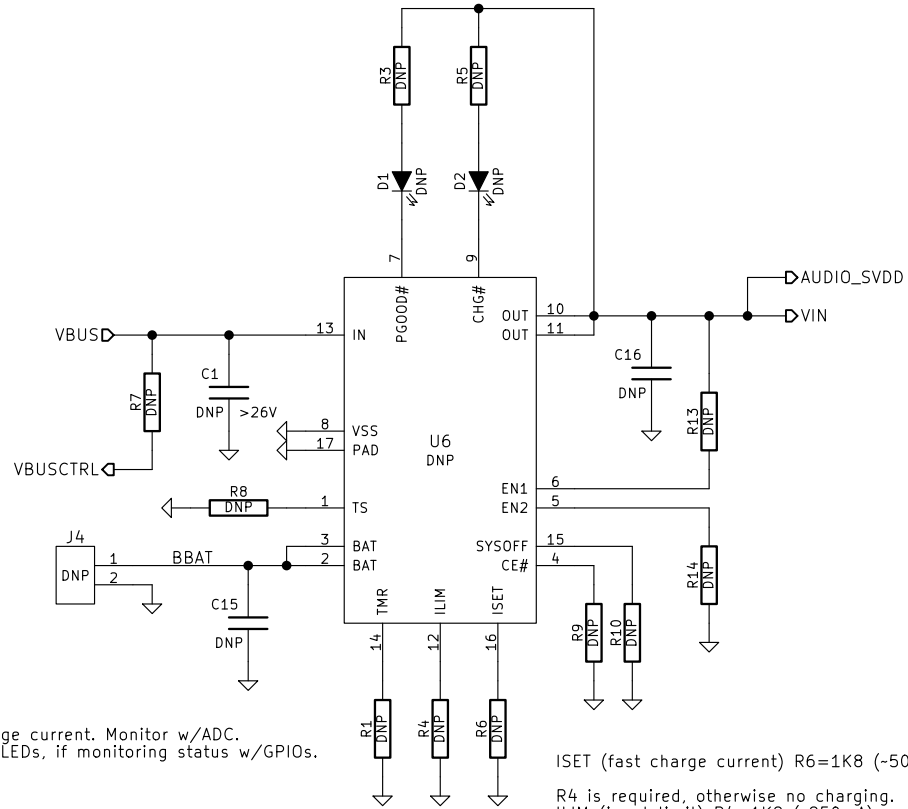
JTAG active w/VCCINT, but refers to VCCIO.  
 TDI, TMS: weak internal PU  
 TCK: weak internal PD (keep low at power-up)



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TODO:

V(ISET) indicates charge current. Monitor w/ADC.  
R3,R5=100K, remove LEDs, if monitoring status w/GPIOs.

ISET (fast charge current) R6=1K8 (-500mA).

R4 is required, otherwise no charging.  
ILIM (input limit) R4=1K8 (-850mA).

TMR=open for default timer values.

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