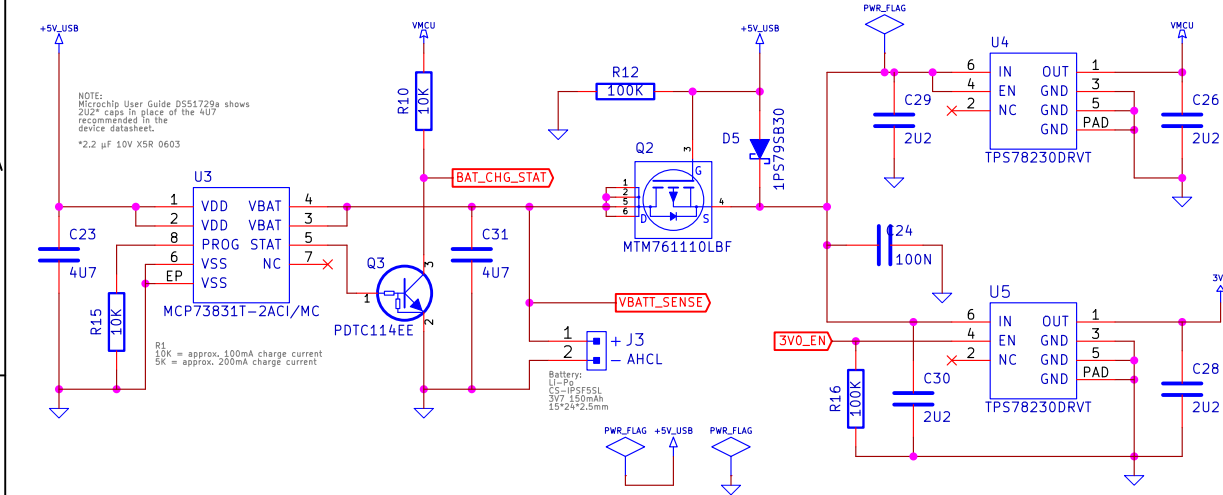
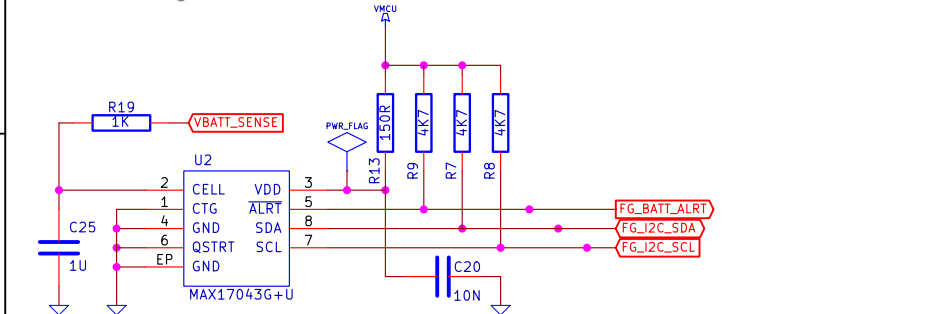


USB Battery Charger and VMCU Regulator

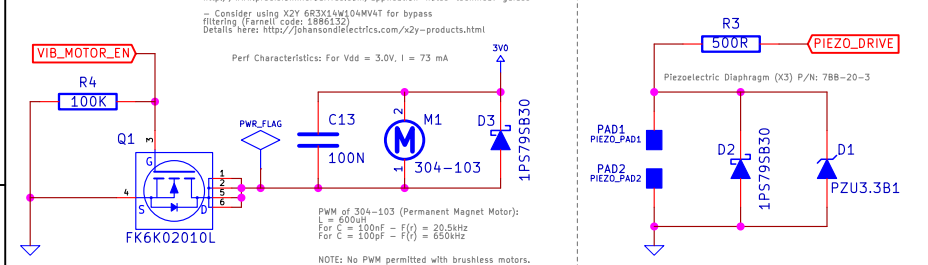


NOTE: THIS IS A WORK IN PROGRESS.
FOR DERIVATIVES, CONSIDER IT A STARTING POINT.
Latest version will be made available either at:
github.com/hairykiwi/OTM-02

LiPo Fuel Gauge



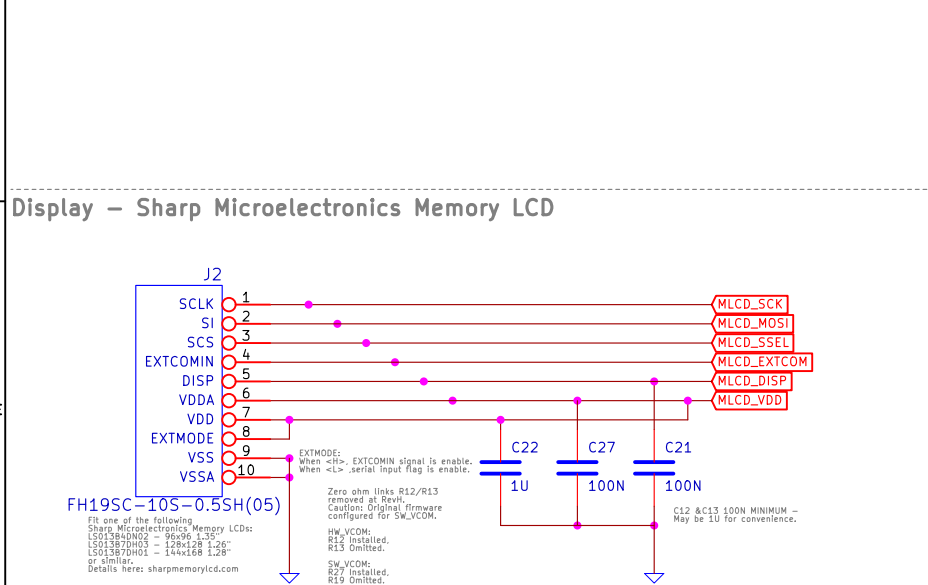
Vibratory Motor



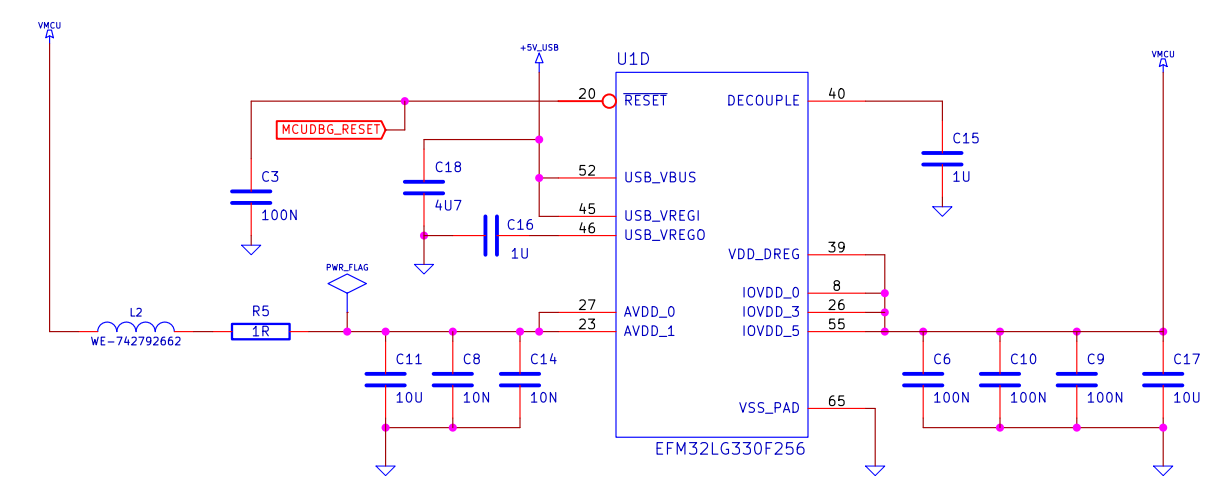
RTC

RV-3049 - Configure for 1024Hz CLKOUT - EXPERIMENTAL
Removed for PCB DRG
Last Included in Rev.D saved 2012-11-29 15:49 UTC

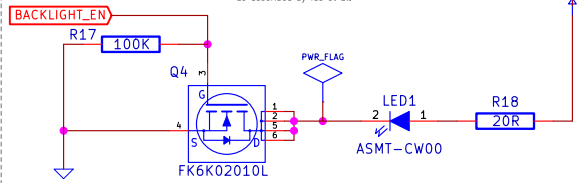
Display - Sharp Microelectronics Memory LCD



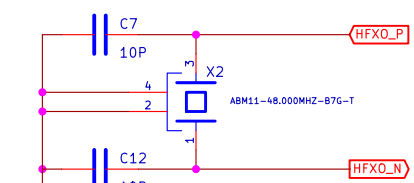
Power Supply Decoupling



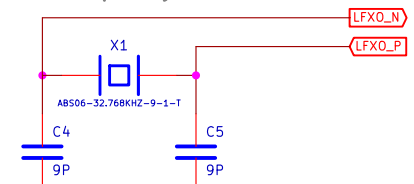
Backlight



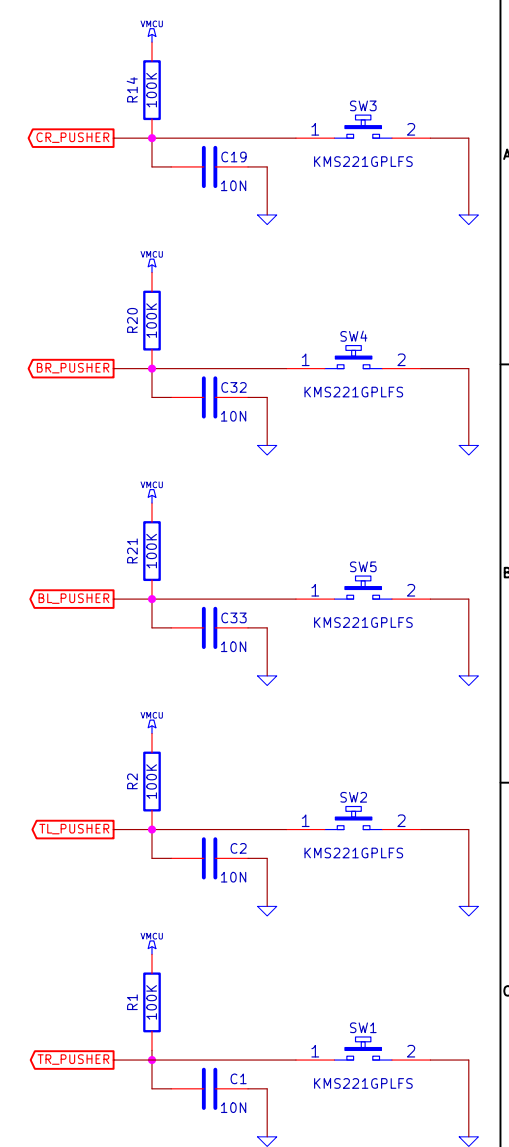
High Frequency Clock



Low Frequency Clock

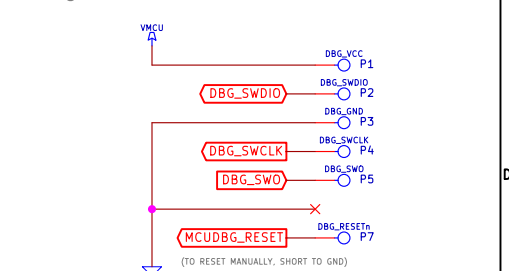


Pushers | Buttons (tact switches)

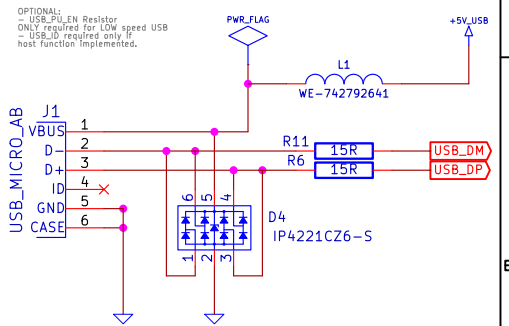


NOTE:
The above switch circuits require software debounce to be implemented.

Debug Interface



USB MICRO AB Connection

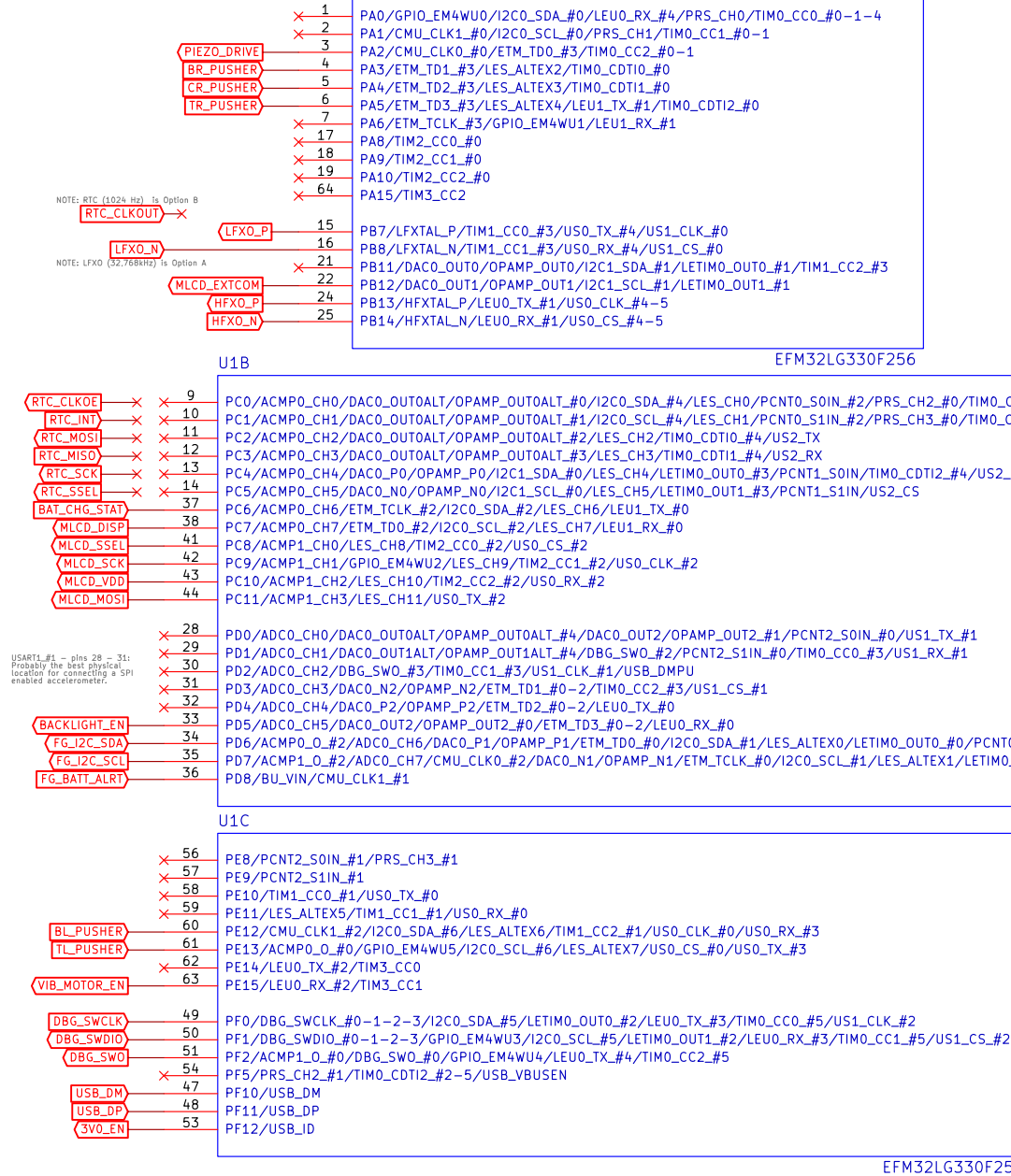


NOTES

• U1 Pin/function locations to be optimised according to PCB layout requirements.

• Extra junctons shown throughout circuit are remnants of Test Points which could be reinstated, space permitting.

• All XX_PUSHER MCU inputs coincide with Low Energy Sense (LES) inputs for potential implementation of capacitive touch button UI.



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Send comments, feedback, suggestions to: Hamish Mead
info at meadtimemachines dot co dot uk

With thanks to Microchip, Sparkfun and Olimex for the recharge circuit topology, to Mark Burton at SmartAvionics.com and the energy friendly people at Energymicro.com for the ongoing discussions and much valued advice.

File: OTM-02.sch		
Sheet:1/1		
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Title: OTM-02 - Open source Time Machine #2		
Size: A3	Date: 2 feb 2013	Rev: L
KiCad E.D.A.		Id: 1/1