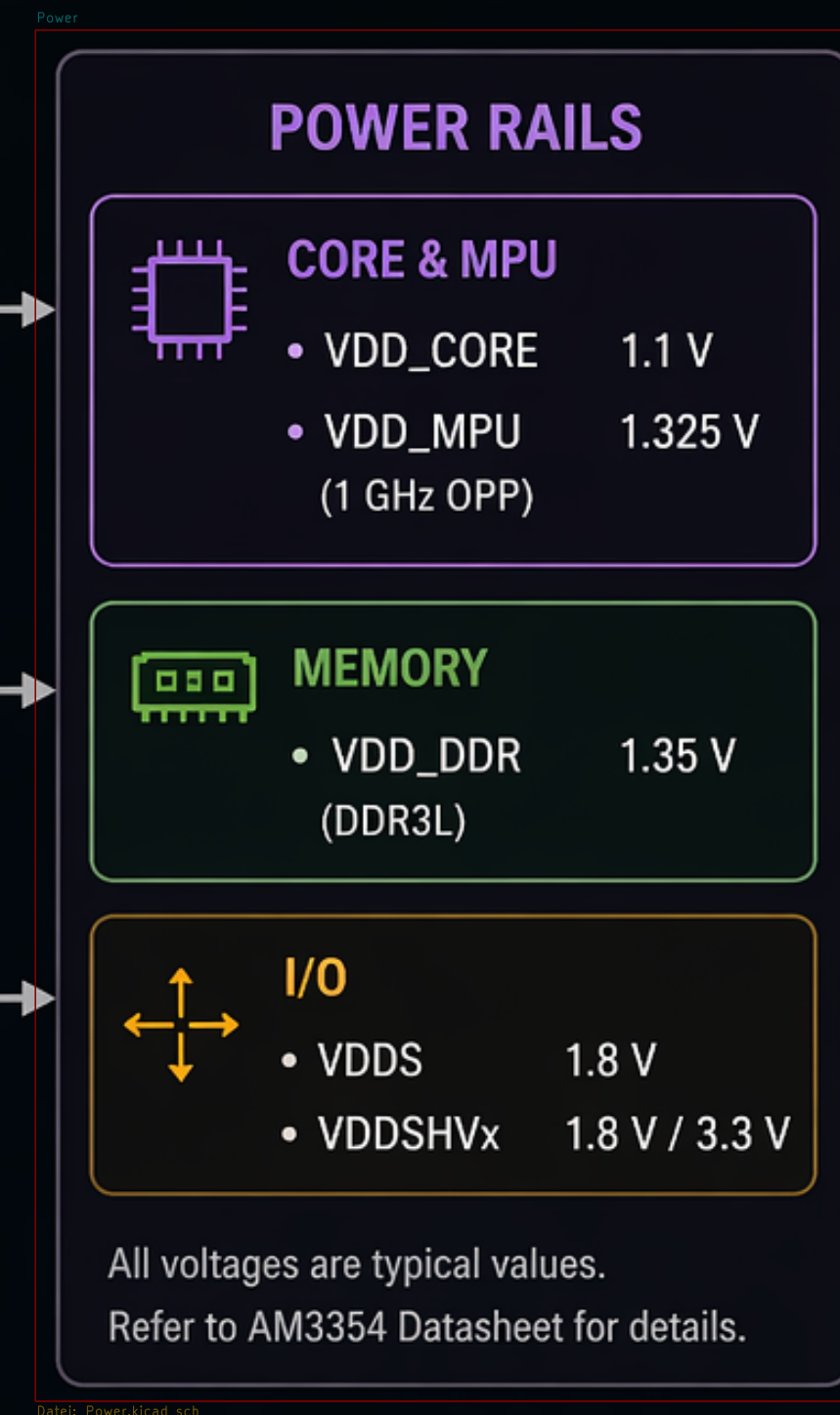
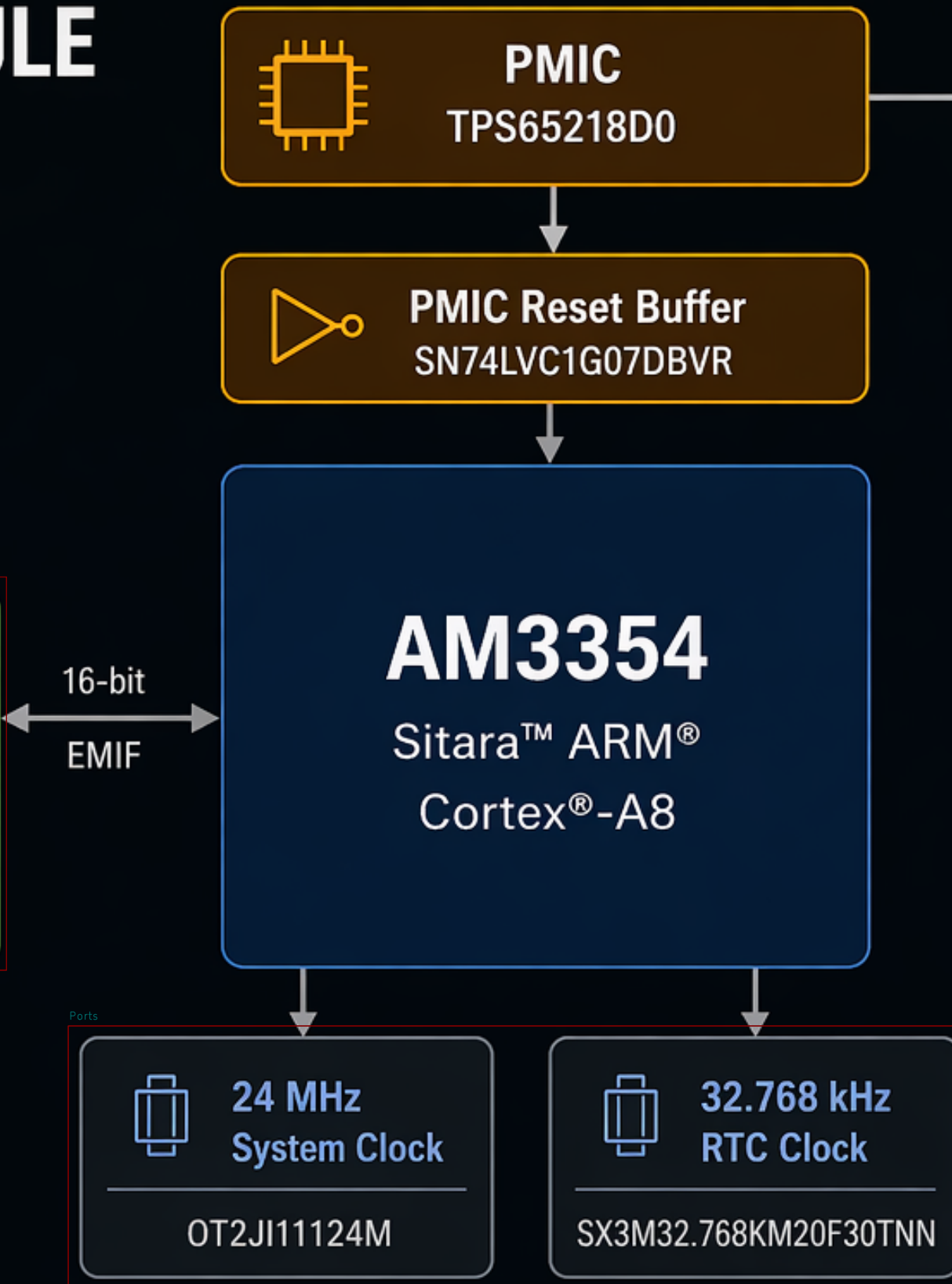


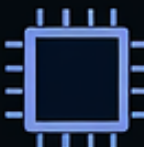
SYSTEM ON MODULE

Top-Level Overview

 Date: 12.04.2026
 Author: Ti2i3
 Revision: A1



KEY COMPONENTS (Critical)

 **AM3354 Processor**
Sitara™ ARM®
Cortex®-A8

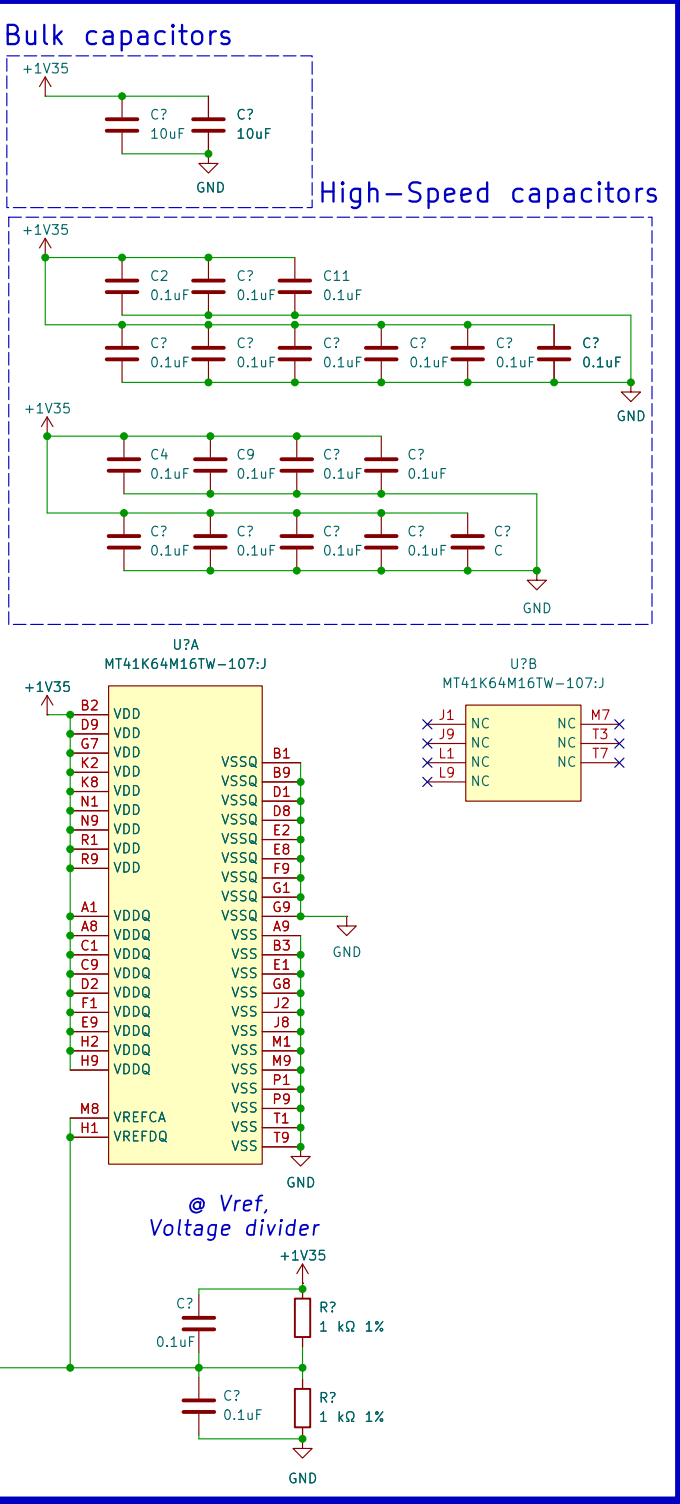
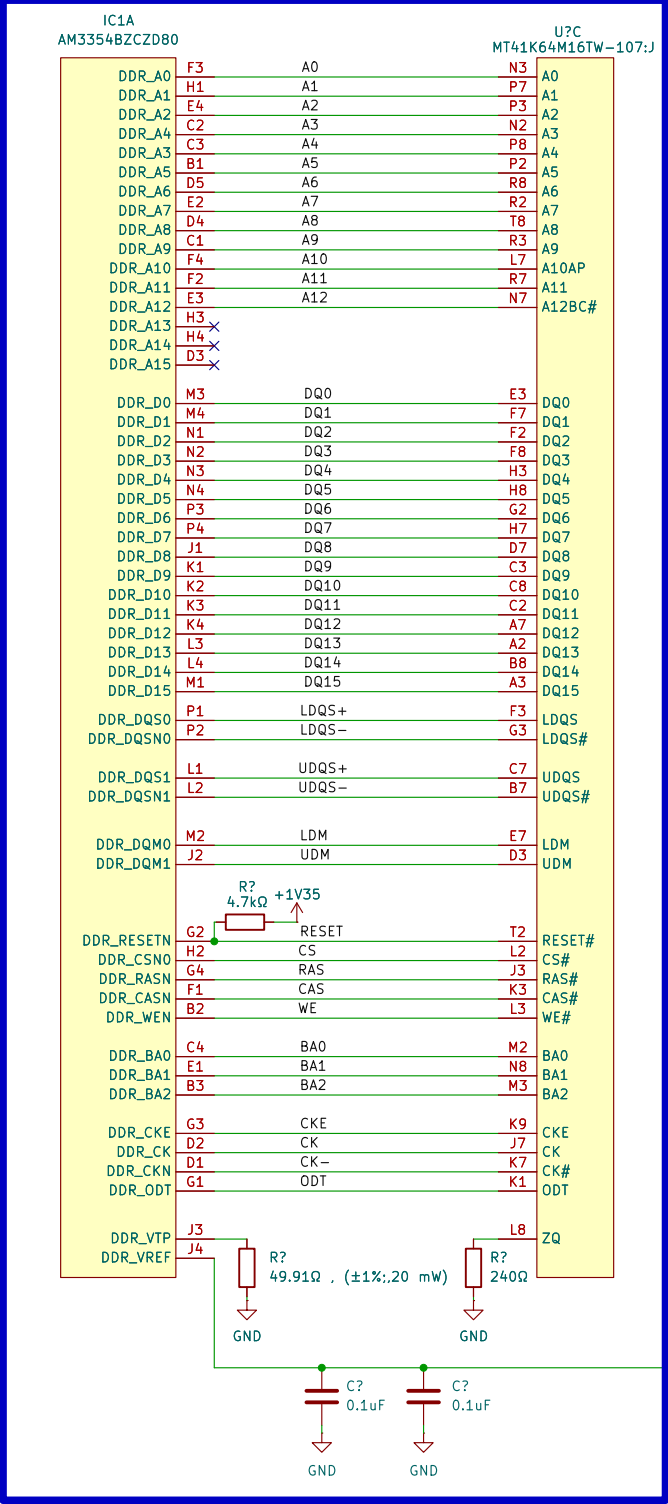
 **DDR3L Memory**
MT41K64M16TW-107:J
1 Gb / 933 MHz / 16-bit
1.35 V

GENERAL NOTES

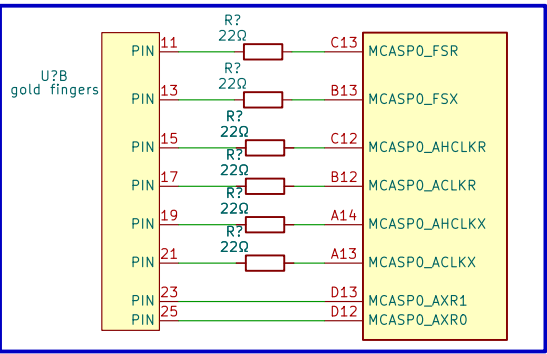
- All capacitors are rated at 10 V.
- Use 16 V capacitors on 5 V rails.

Am3354 to DDR3L

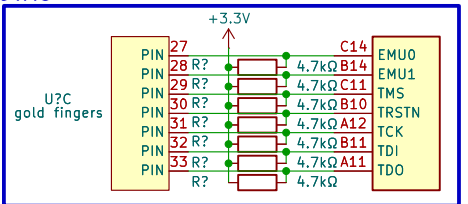
DDR3L Power



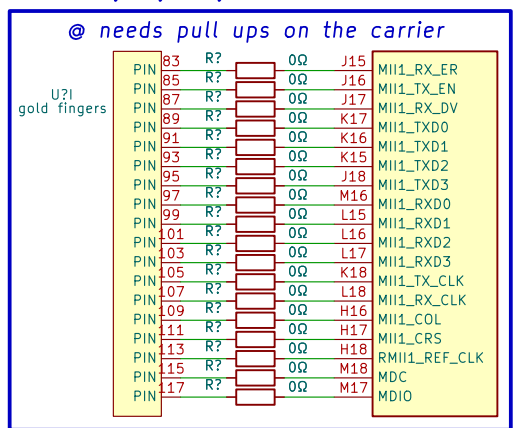
Audio



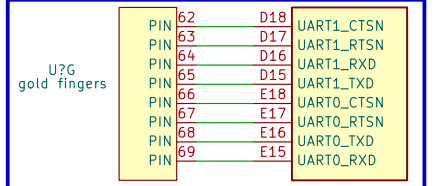
JTAG @ ESD protection may be required



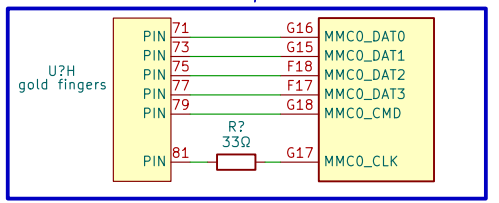
ETHERNET/10/100/1000



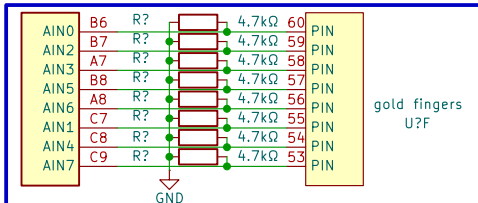
UART



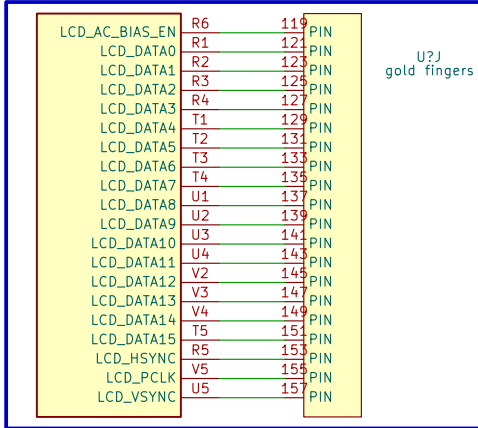
RMI @ Pull-ups on the carrier board will be implemented.



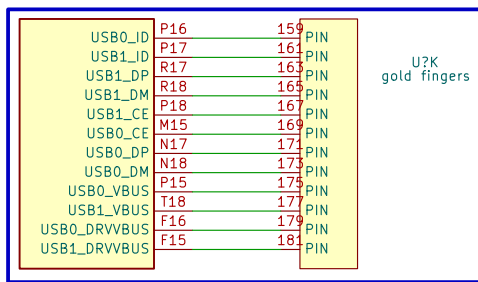
ADC



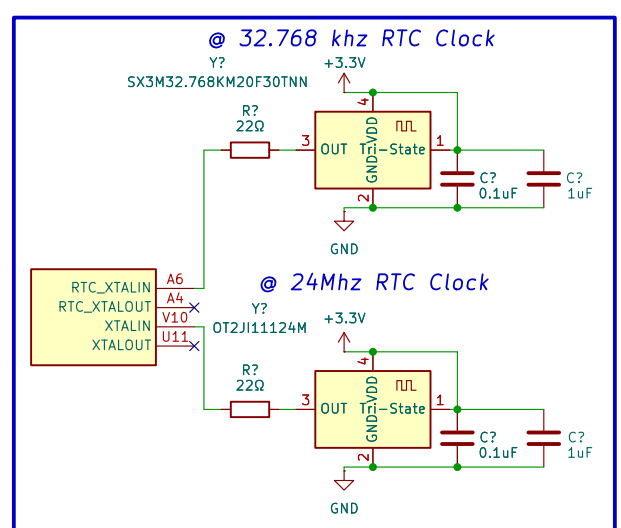
LCD @ Connect the lcd pins on the carrier



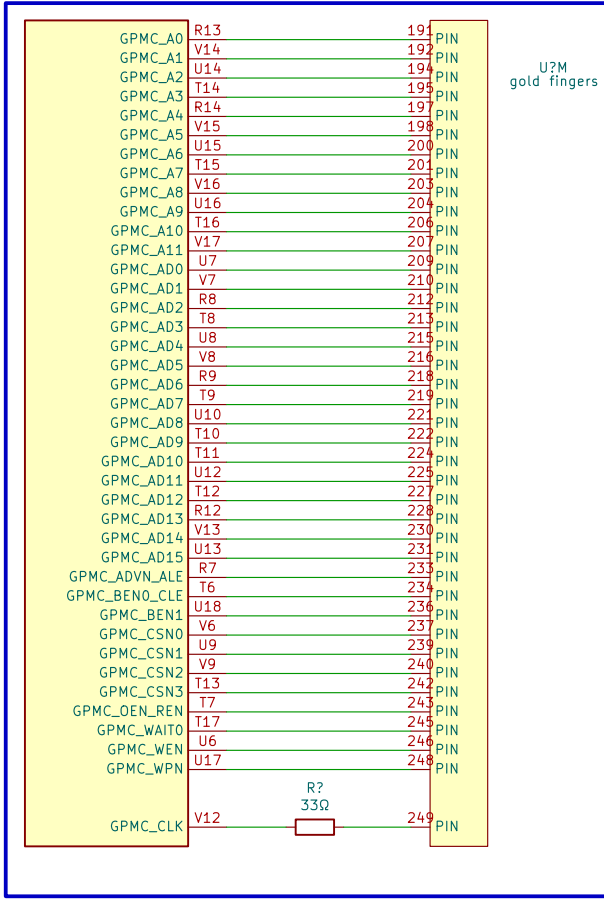
USB @ High speed signals Minimize addition of series resistor or TP



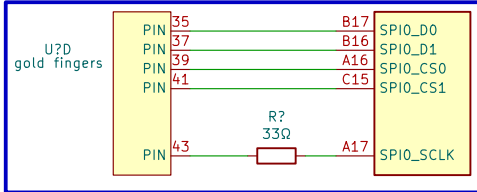
CLOCK



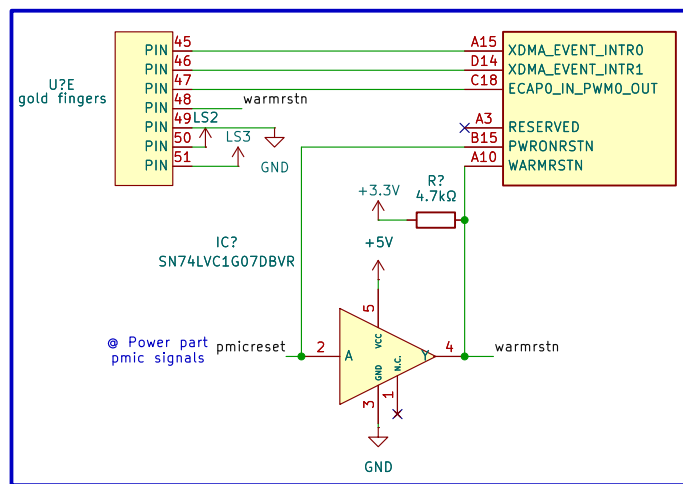
General-Purpose Memory Controller



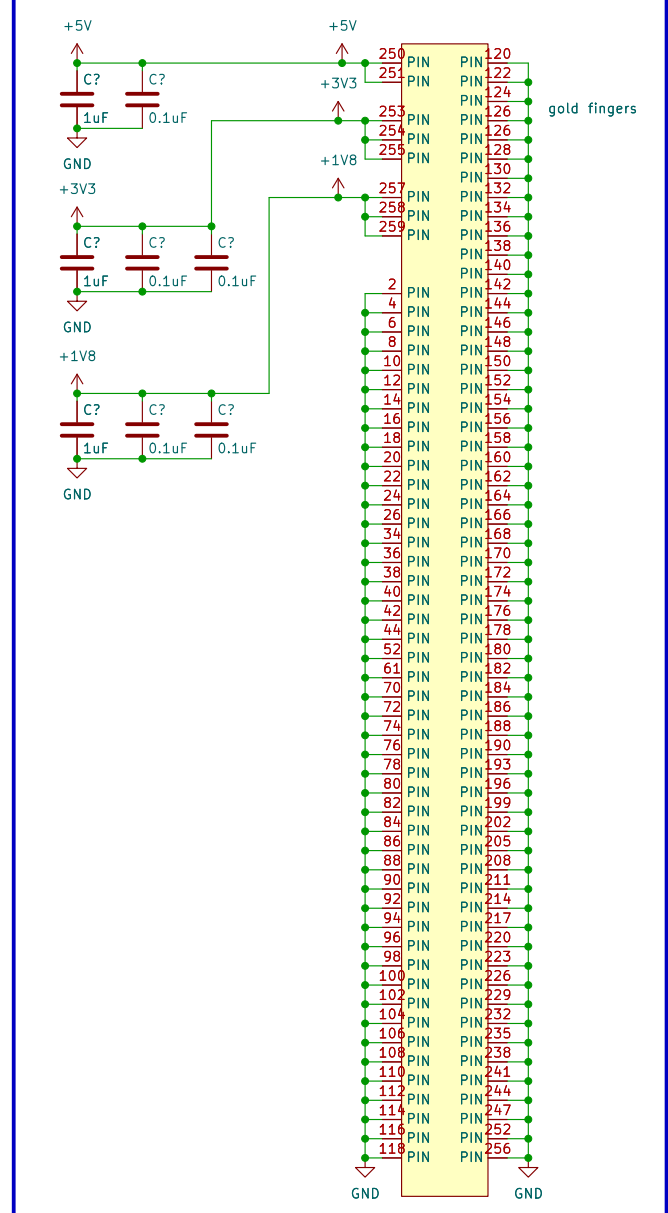
SPI



REST @ Connect the rtc pins on the carrier!



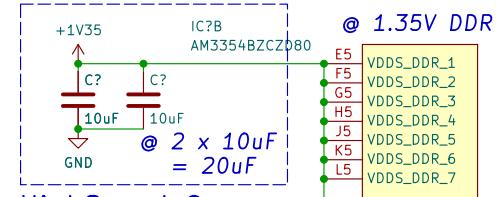
SODIMM Power Pins



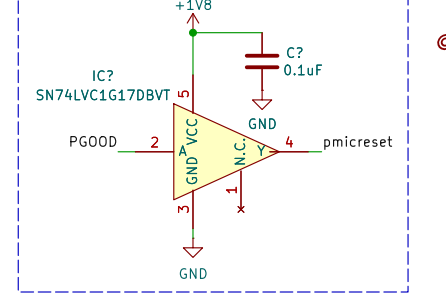
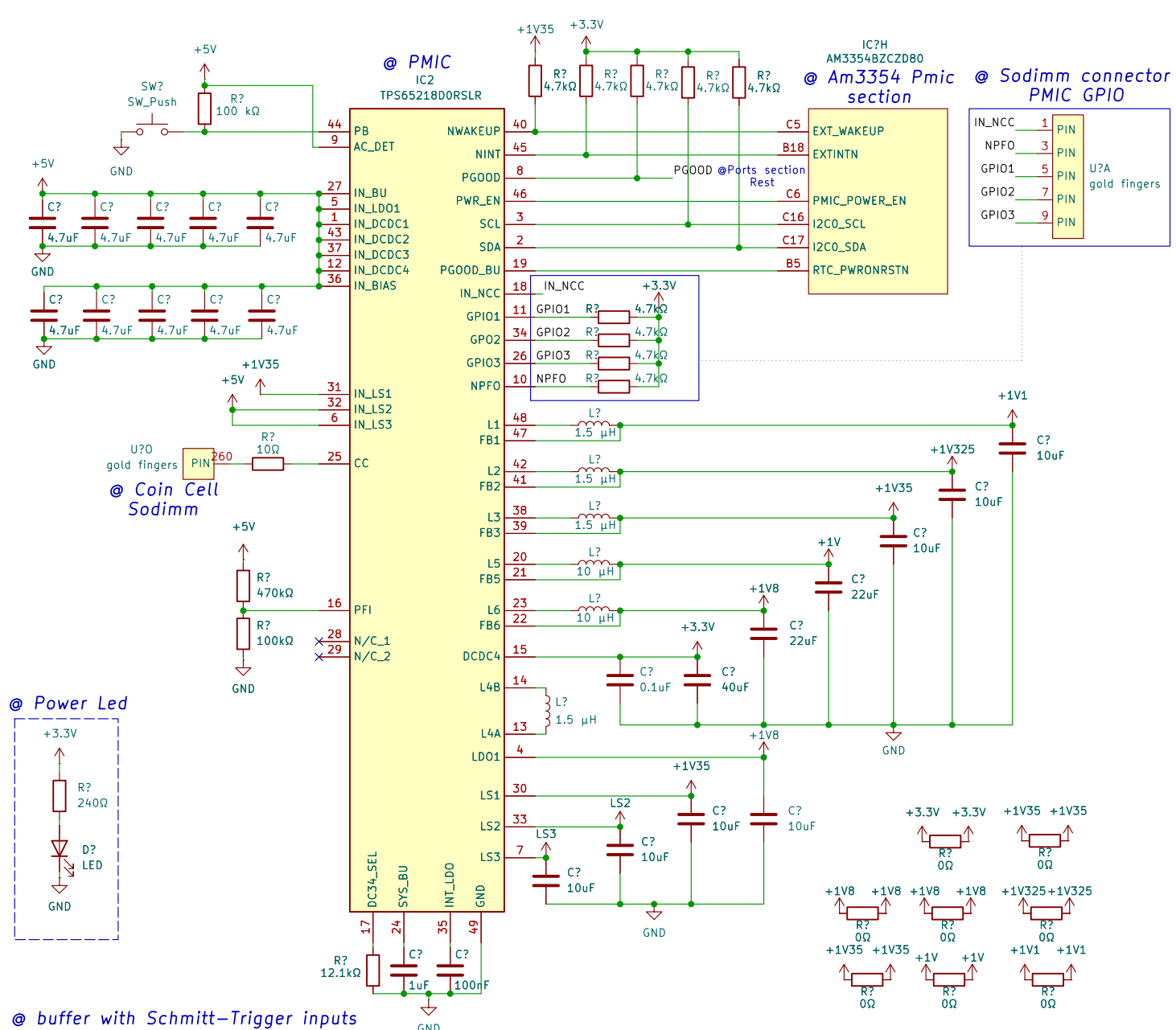
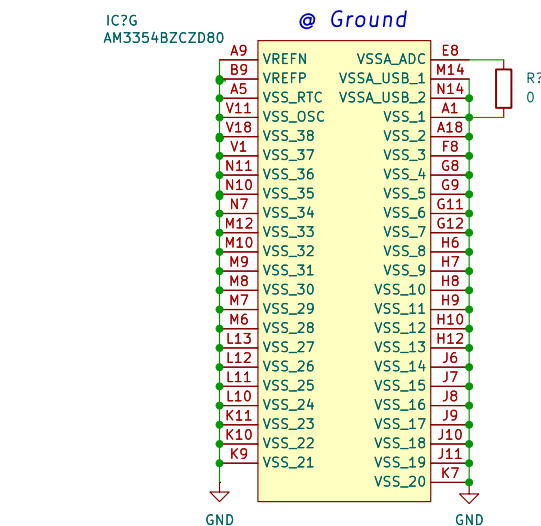
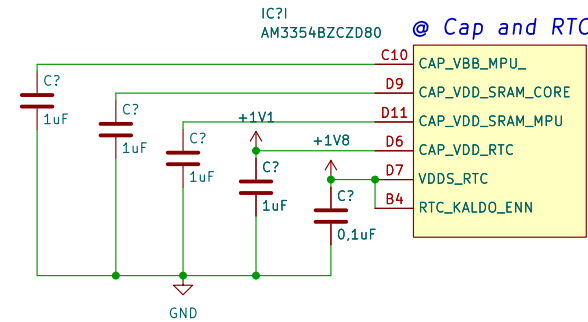
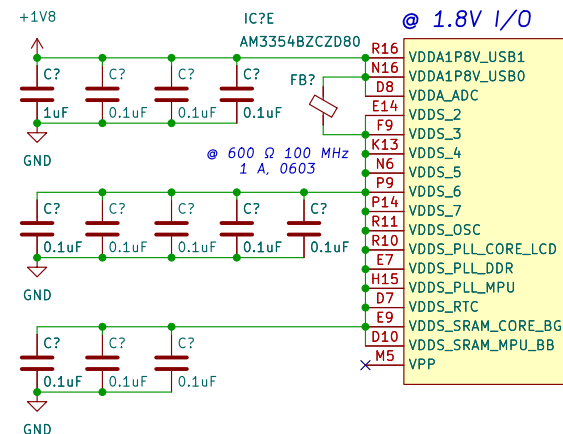
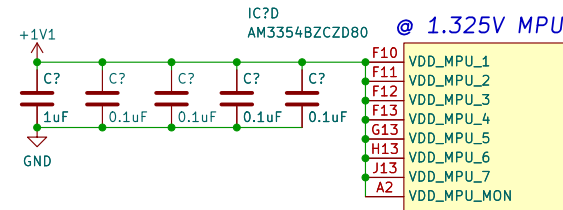
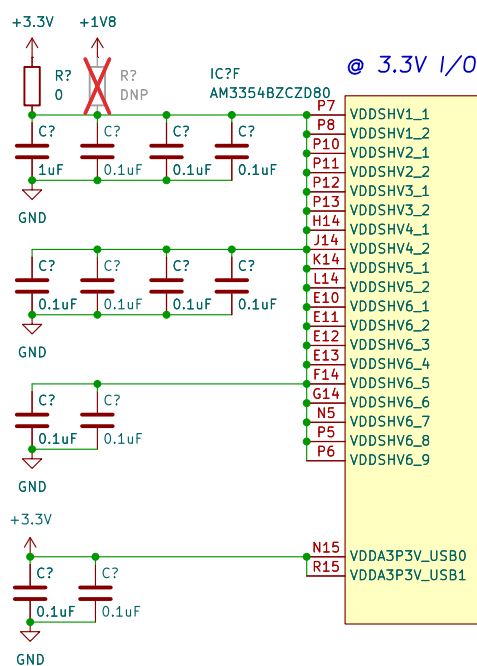
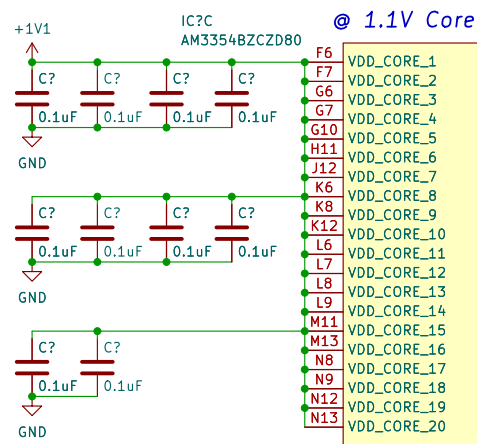
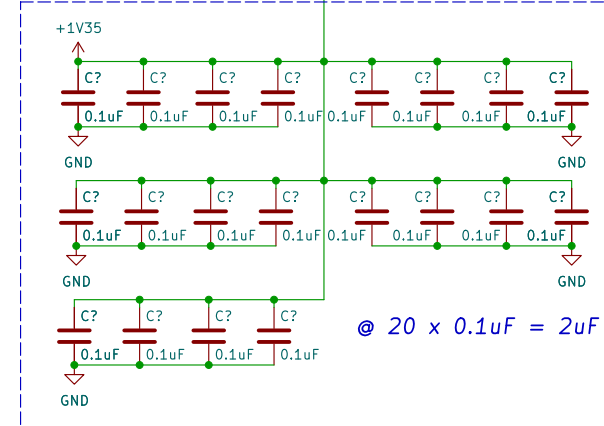
Power AM3354

PMIC TPS65218D0RSLR

Bulk Capacitors



HighSpeed Caps



@ Fail-safe protection is not implemented, as all connected I/O devices share the same supply source as the corresponding VDDSHV domains. External power injection on I/O pins is not supported. If such use cases are required, fail-safe protection must be evaluated.