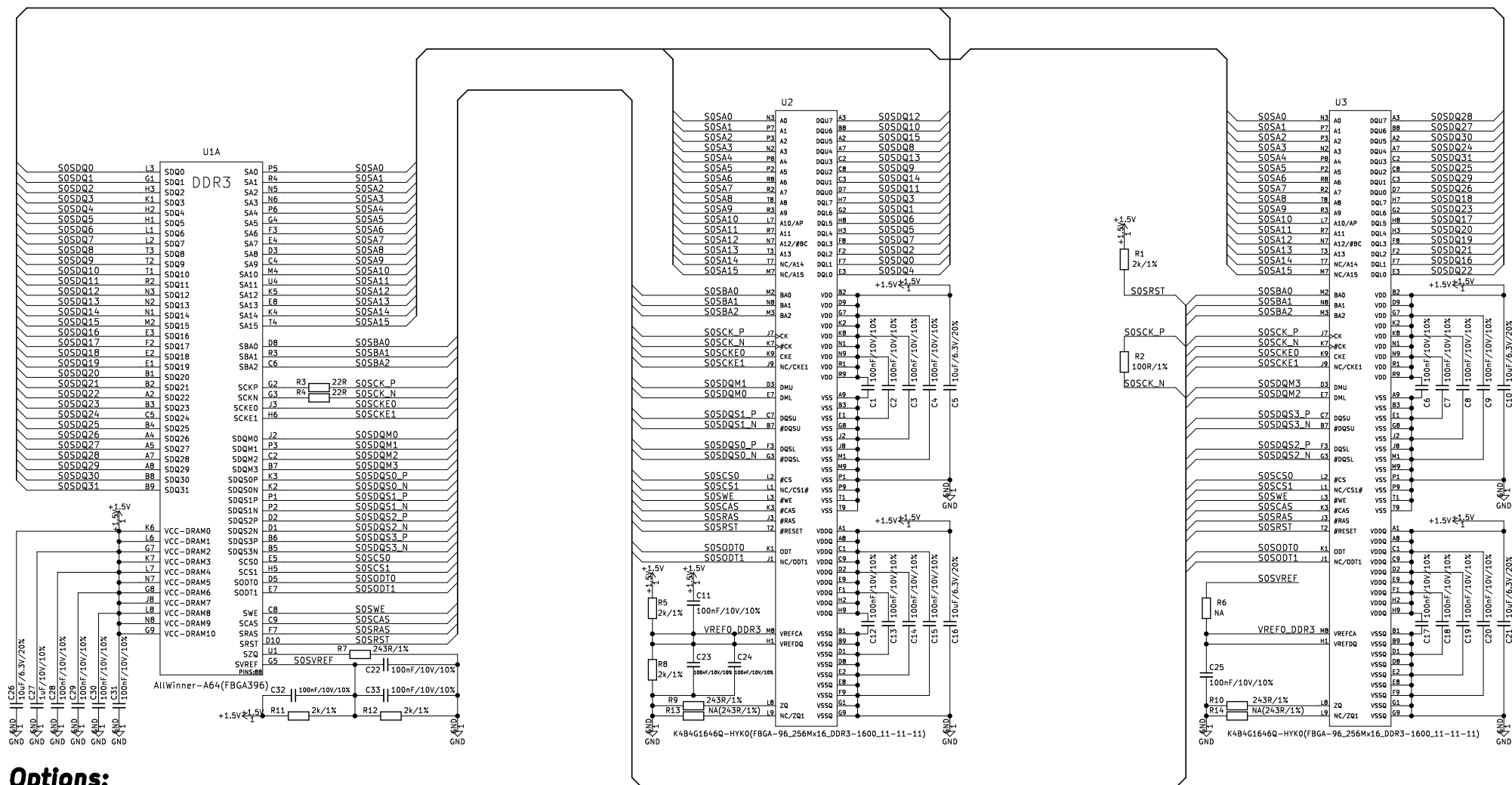


# DDR3:1GByte



## Options:

=====

1. Use 2(DDR3 256Mx16 Memory chips)x4Gb = 1GByte, i.e. 2xH5TQ4G63MFR-PBC(or K4B4G1646Q-HYK0) -> Default
2. Use 2(DDR3 512Mx16 Memory chips)x8Gb = 2GBytes, i.e. 2xH5TC8G63AMR-PBA(or K4B8G1646Q-MYK0)

## Note:

=====

We have used a number of fully compatible, but different DDR3 memories due to supply unavailability. In such cases the memory part name in the schematic might remain outdated. It is recommended to always refer to the exact memory name printed on the component itself.

# NAND Flash

Option!

=====

eMMC is default, because in this case, SPI0 is not multiplexed with eMMC as is with the NAND Flash!  
SPI0 is available on the UEXT connector!

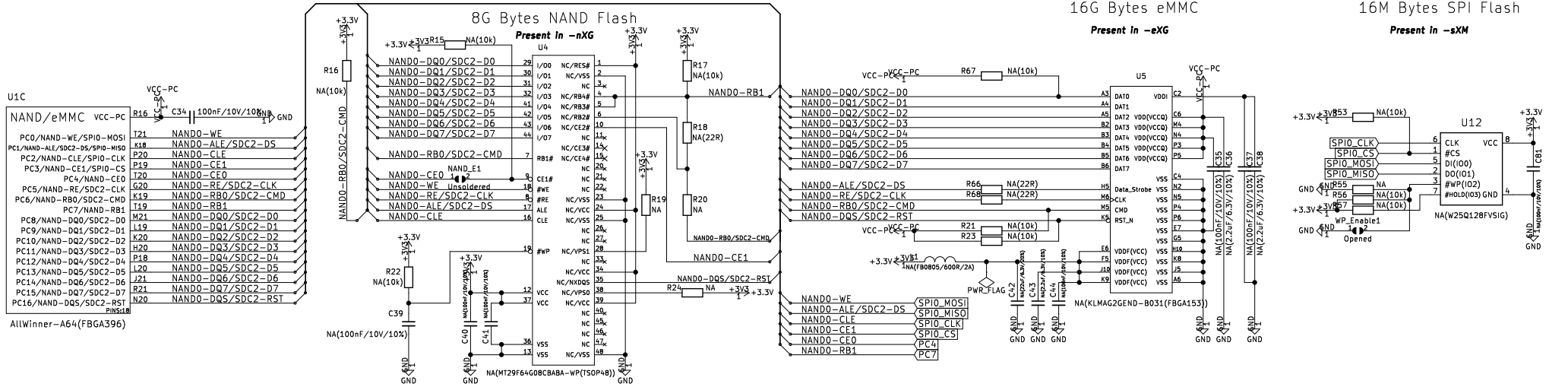
# eMMC SPI Flash

16G Bytes eMMC

16M Bytes SPI Flash

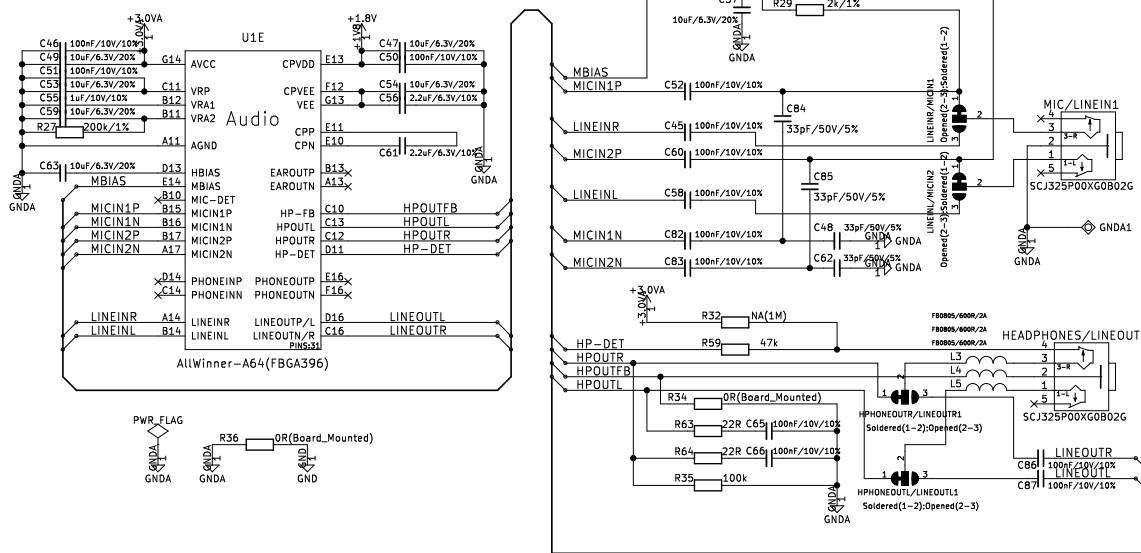
**Present in -eXG**

**Present in -sXM**

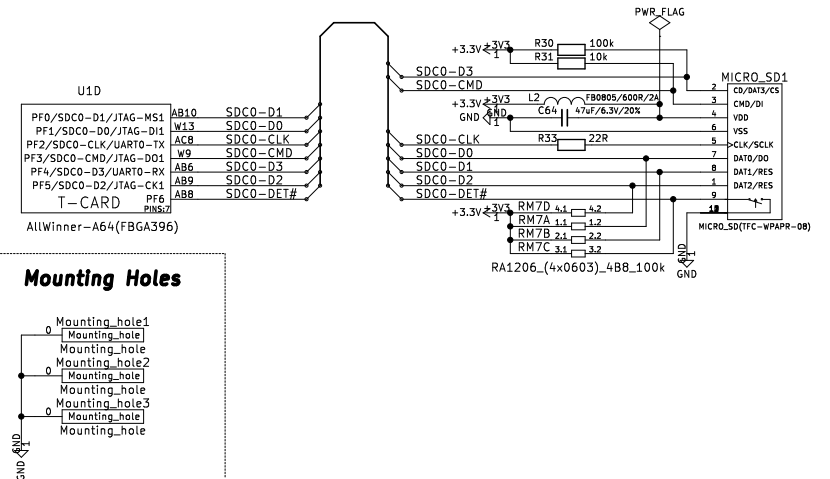


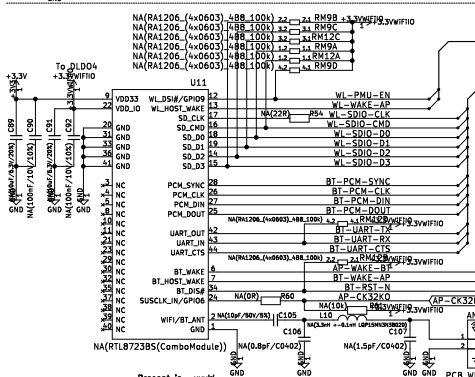
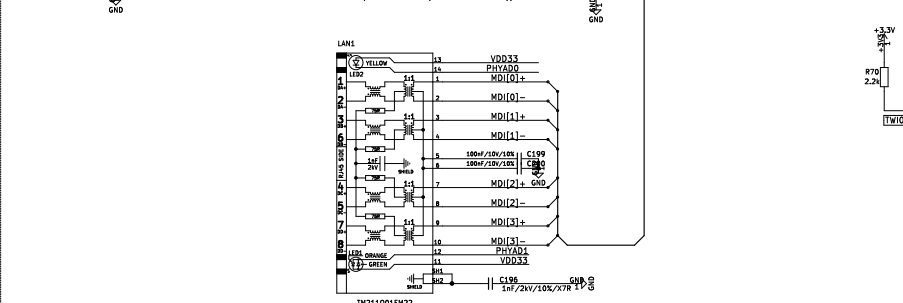
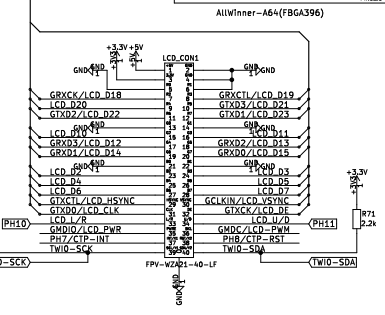
# Audio

CPVEE and VEE to be made as Kelvin connection.



## T-Card



[illegible][illegible][illegible]

[illegible]

Note:

=====  
 SPI0 is multiplexed with the NAND Flash Memory!  
 Use it only when booting from SD card or eMMC!

[illegible]

The schematic diagram illustrates the electrical connections for the Allwinner A64 (FPGA396) board. Key components and connections include:

- Power Management:**
  - AP-CK32K0:** A 32.768kHz crystal oscillator connected to pins R93 and R94.
  - AP-RESET# and AP-NMI#:** Active-low reset and nMI pins connected to pins R96 and R98.
  - KEYPAD and UBOOT:** Keypad and UBOOT pins connected to pins R99 and R99.
  - Power Capacitors:** C183 (22pF/50V/5%), C184 (22pF/50V/5%), C185 (33pF/50V/5%), C187 (33pF/50V/5%), C188 (100nF/10V/10%), C191 (10uF/6.3V/20%), and C193 (10uF/50V/10%).
- Signal and Control:**
  - U1B:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1C:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1D:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1E:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1F:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1G:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1H:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1I:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1J:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1K:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1L:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1M:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1N:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1O:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1P:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1Q:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1R:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1S:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1T:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1U:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1V:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1W:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1X:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1Y:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.
  - U1Z:** A 32-bit microcontroller connected to pins R93, R94, R96, R98, R99, and R99.