

Zeta: Technical information

Software stack:

- newosldr.exe:
 - Kernel bootloader.
- MahroussUpdate.exe:
 - OTA update service
 - Located on flash memory.
- StageBoard.exe:
 - Phone desktop interface.
 - Located on flash memory.
- newoskrnl.exe: 512K of size.
 - Kernel on flash memory.
 - Loaded by boot.rom, which is its sole task.
- boot.rom: 512K of size.
 - Firmware on flash memory.
 - Must be booted first by ARM CPU at 8M.

Prototype Hardware:

- GSM modem
 - https://simcom.ee/documents/SIM7020/SIM7020%20Hardware%20Design_V1.02.pdf
- 32-bit ARM processor
 - <http://ww1.microchip.com/downloads/en/DeviceDoc/SAM-E70-S70-V70-V71-Family-Data-Sheet-DS60001527D.pdf>
- microSIM card slot, SDcard slot
 - <http://katalog.we-online.de/em/datasheet/693072010801.pdf>
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- 32mb SRAM
 - https://www.espressif.com/sites/default/files/documentation/esp-psram32_datasheet_en.pdf
- 2 Flash memory for OS and Firmware.
 - https://datasheet.lcsc.com/lcsc/2005251034_XTX-XTSD08GLGEAG_C558840.pdf

Real Hardware:

- LTE modem from a reputable source.
- 64-Bit ARM processor, from Samsung.
- microSIM slot.
- 4GB DDRAM3 from Crucial
- Flash memory and ROM from Crucial