

DRAM < 500 kb

SDRAM \approx 64 Mb

* Start screen control via tiles *

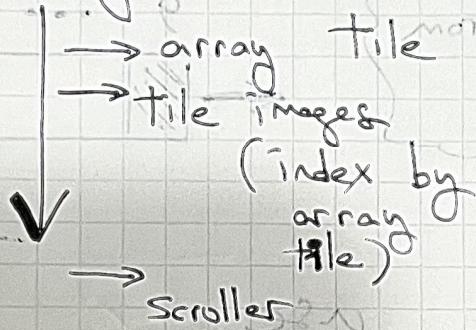
HW

→ qsys handles HW

addressing

NES \rightarrow 8x8

* NEED 3 Registers



80x60

70 tiles

Audio ideas

> record samples,

playback

> store waveform

& sample it

> clk freq / 2^n

⇒ Tile & Sprite approach

* Draw it, then load it

look at the nodes

Software

VS HW

ALL Game Logic to Software

Controls to Hardware

To Hardware

USE 25 MHz

* Separate modules, for each character

②

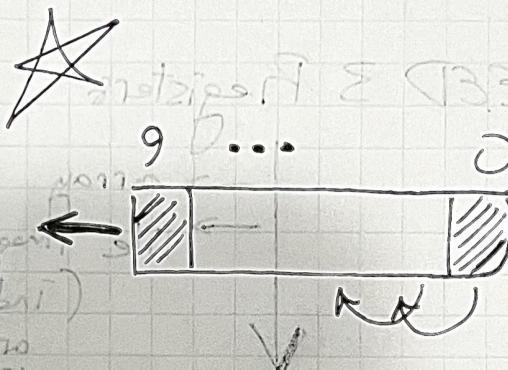
To do color

6 memory sprite

generation module

USE Mega
Wizard

→ ROM for tiles
to modify from
Software



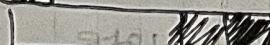
bit shift
Replace

FOR

the "Bridge" → Tiles instead of

Sprite

Set color
to black



* USE 1 bit to keep track (control)
for Mario, Bowser, fireball

* 32 Bits *