

~~done~~ Wii video + sound to LCD logic FPGA design (Phase 1)
 picorv32 for GPU management
 double frame buffer for LCD (24bit 640x480 = 7,328,000 bits)
 GC video lite for controlling protocol

$\times 2 = 16MB$
 $64MB = 2^{23} \text{ bits}$
 at least

long term support

$1280 \times 720 \times 24 \text{ bits} = 22,118,400 \text{ bits}$

~~To be done~~

High level

Ram controller for frame buffer

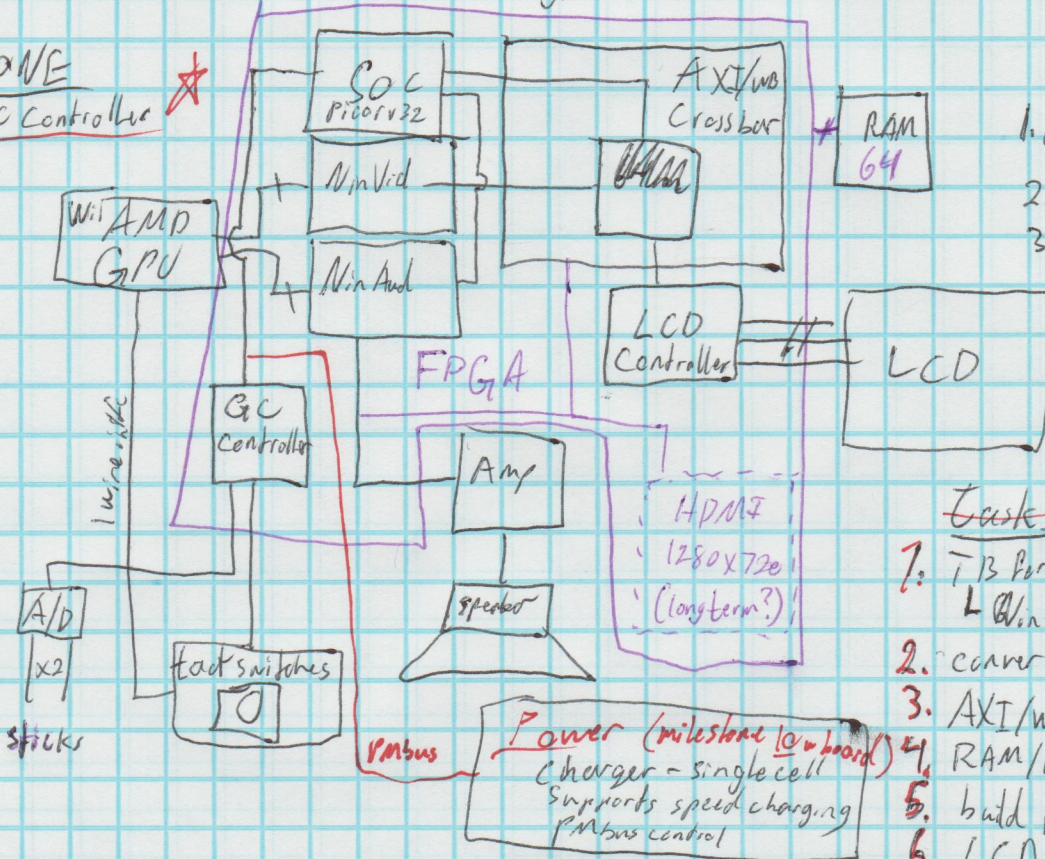
AXI or WB crossbar

DONE

GC Controller

Done

1. download source materials
2. mixed language sim
3. Git repository



Tasks milestones

1. TB for GC video lite
2. convert GC video to verilog
3. AXI/WB Interconnect
4. RAM/Hypervisor controller
5. build picorv32 with RAM
6. LCD controller (RAM+Lib)
7. Audio amp cost
8. GC Analogue
- 9-10 Milestone

Memory layout

64MB 0x0 - 0xFFFF
 8Mbytes exactly 8,388,607 bytes

word address

Reserve	0x 0 0 0 0 0 0 0 0	0x 0 F F F F F
Frame Buffer 1	0x 1 0 0 0 0 0 0	0x 1 F F F F F
Frame Buffer 2	0x 2 0 0 0 0 0 0	0x 2 F F F F F
PicoRV32	0x 3 0 0 0 0 0 0	0x 3 F F F F F
Hardware Reserve	0x 4 0 0 0 0 0 0	0x 4 F F F F F
	0x 5 0 0 0 0 0 0	0x 5 F F F F F
	0x 6 0 0 0 0 0 0	0x 6 F F F F F
	0x 7 0 0 0 0 0 0	0x 7 F F F F F

Phase 2 is adapting wii onto Dev board

Development board with features to test

10. build board