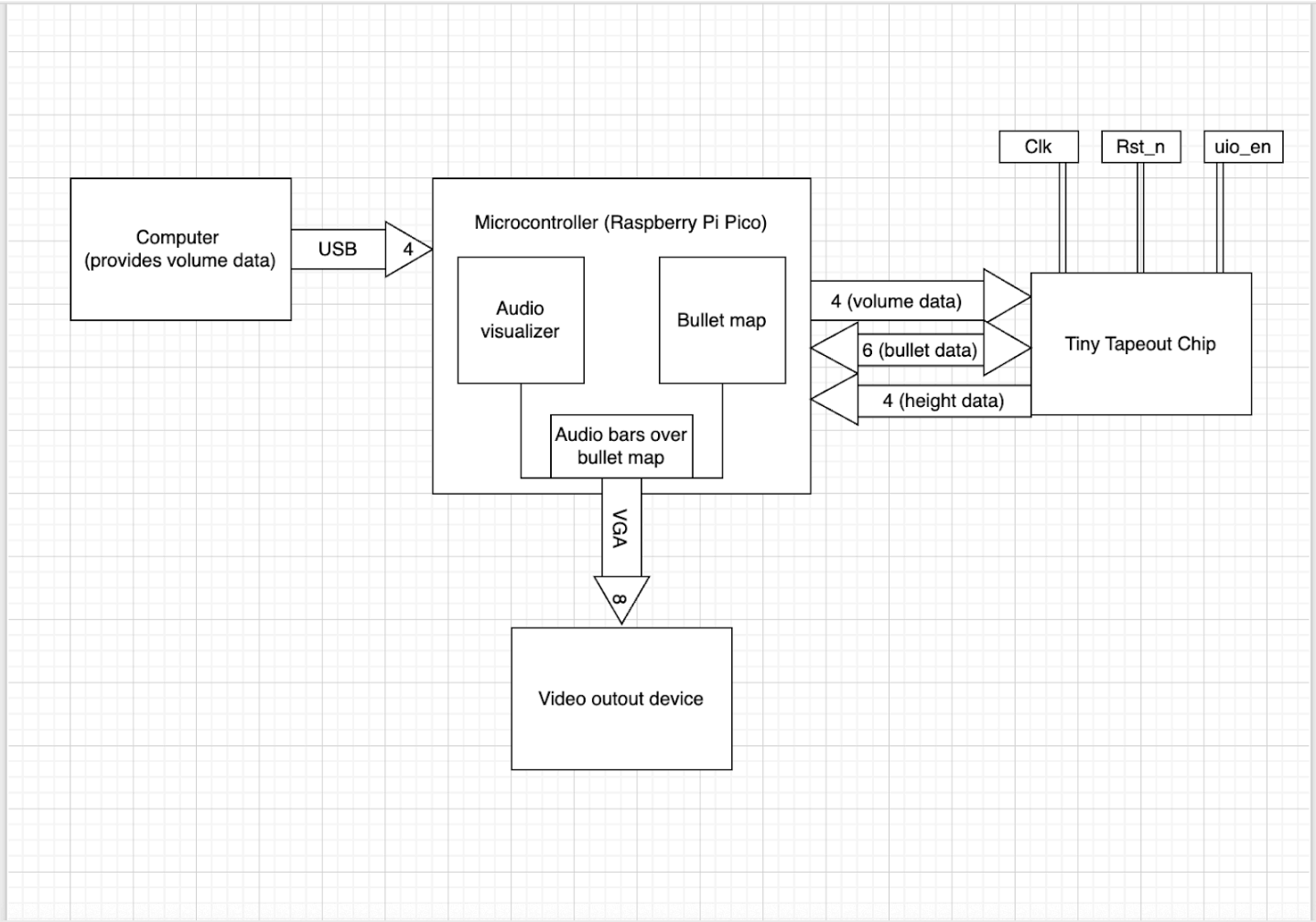
Block Diagram:



I/O:

#	Input	Output	Bidirectional
1	clk		X pos (in/out n times)*
2	rst_n		Y pos (in/out n times)*
3	uio_enable		X vel (in/out n times)*
4	volume	Stretch height	Y vel (in/out n times)*
5	volume	Stretch height	Type of bullet
6	volume	Stretch height	Type of bullet
7	volume	Stretch height	
8			

Projected Schedule

- October 1:
  - Finish counter project, block diagram, I/O
  - Complete code to transform mp4/mp3 audio into input volume values
  - Decide how many “volume bars” the audio visualizer will have
- October 8:
  - Implement bullet types & their corresponding chip calculations (velocity, size, color)
  - Program micro-controller to accept usb input (to receive volume data)
  - Program micro-controller to prepare to output volume and bullet data to chip
- October 15:
  - Start verilog implementation of the chip
- October 22:
  - Midterms
- October 29:
  - Finish verilog implementation of the chip
- November 5:
  - Join microcontroller logic (interface with chip, storing bullet data, display) and I/O with chip logic and I/O
- November 12:
  - Connect micro-controller to external interface (vga output)
- November 19:
  - Start testing, fix any errors
- November 26:
  - Grace period for more testing/updating
- December 3:
  - Finish demoscene, test successful
  - Finals