PING PONG GAME
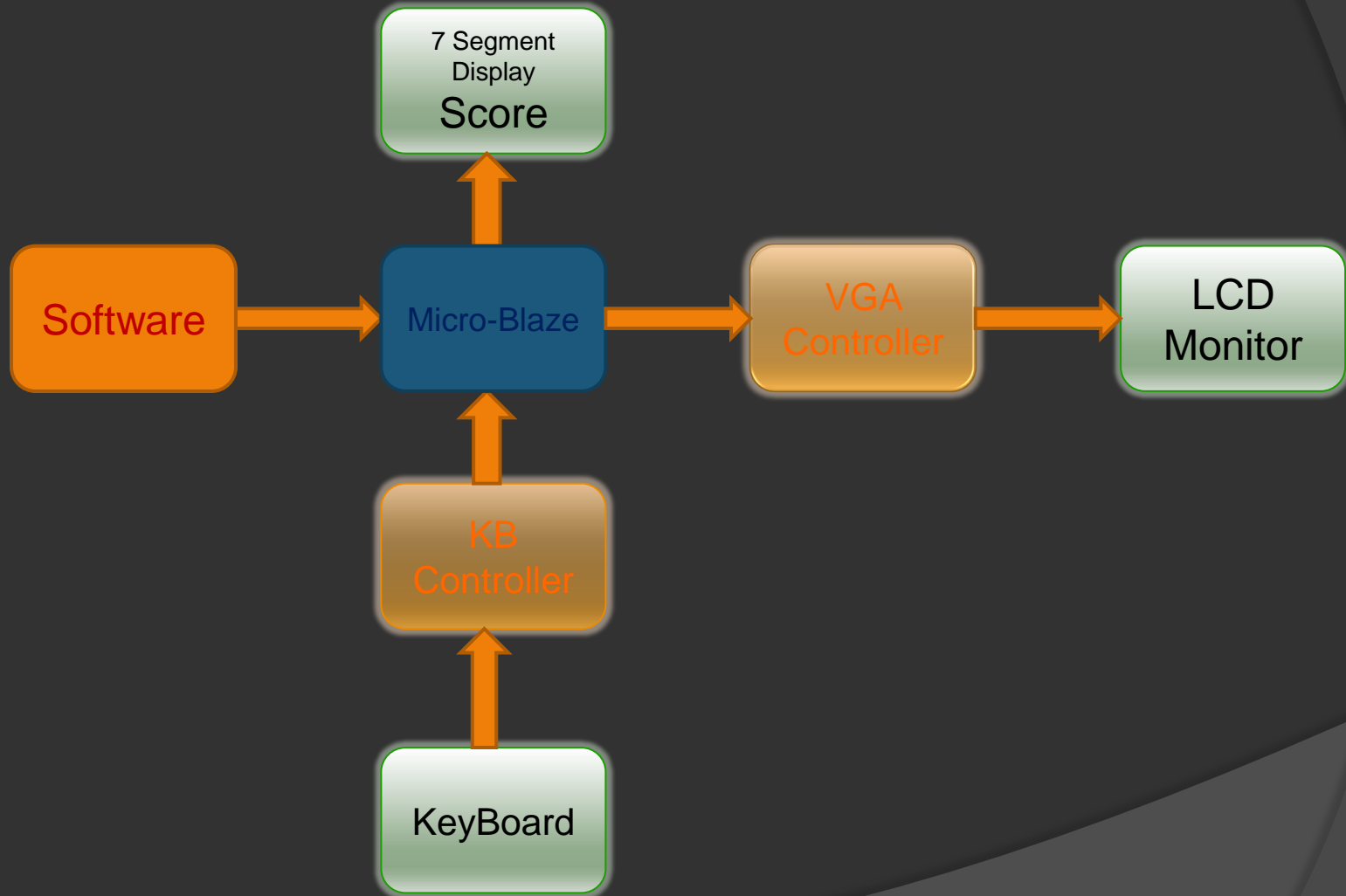
Mittapalli Radhika(aso10rmi)

- Implemented a two player pingpong game.
- Implemented in hardware.
- VGA display.
- Game can be played with the push buttons on the board

Block Diagram

```
                  ┌──────────────┐
                  │  7 Segment   │
                  │   Display    │
                  │    Score     │
                  └──────────────┘
                         ▲
                         │
┌──────────┐      ┌──────────────┐      ┌──────────────┐      ┌──────────────┐
│ Software │ ───▶ │ Micro-Blaze  │ ───▶ │     VGA      │ ───▶ │     LCD      │
│          │      │              │      │  Controller  │      │   Monitor    │
└──────────┘      └──────────────┘      └──────────────┘      └──────────────┘
                         ▲
                         │
                  ┌──────────────┐
                  │      KB      │
                  │  Controller  │
                  └──────────────┘
                         ▲
                         │
                  ┌──────────────┐
                  │   KeyBoard   │
                  └──────────────┘
```
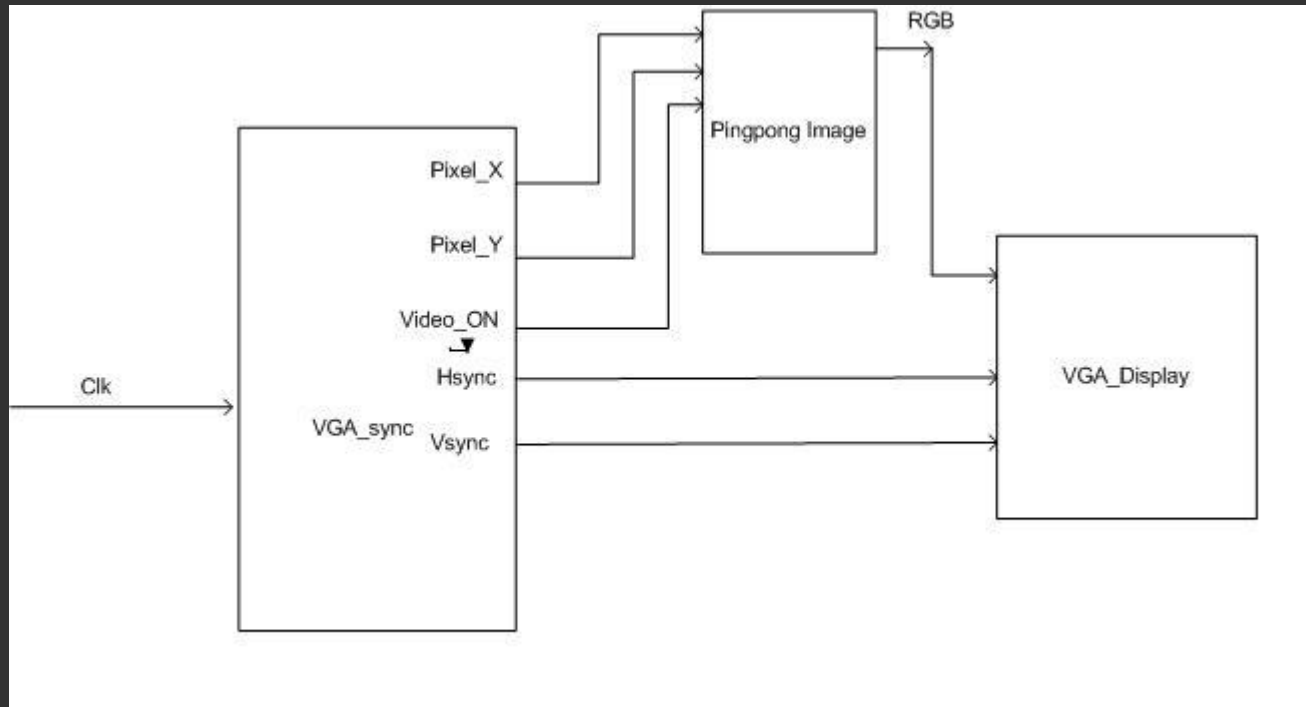
Implementation

Hardware

- Game Logic
- VGA Controller

VGA Controller

Improvements

- Lot many improvements can be done as only a basic game is implemented.
- Display Score.
- Acceleration can be provided to the ball.
- Sound effects can be added.

Problems

- Couldnot meet the proposal fully as the other team members dropped from the course.

- Proper group selection and proper project planning.

Conclusion

- Good opportunity to learn and explore Xilinix platform studio.
- Understanding of interfacing different peripherals.

THANK YOU