

ZCU102 Conversion to Source Board

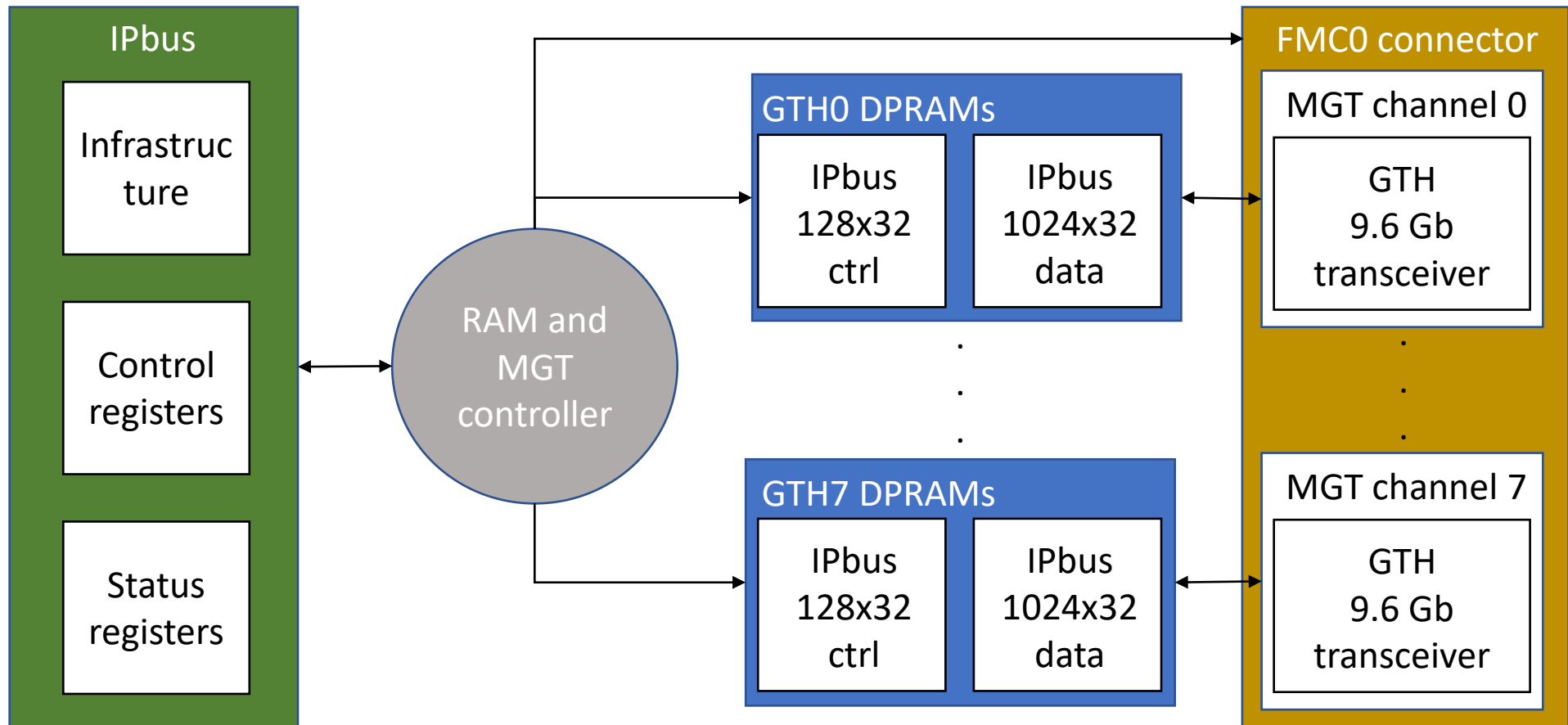
Mattia Barbanera

ZCU102 Source Board

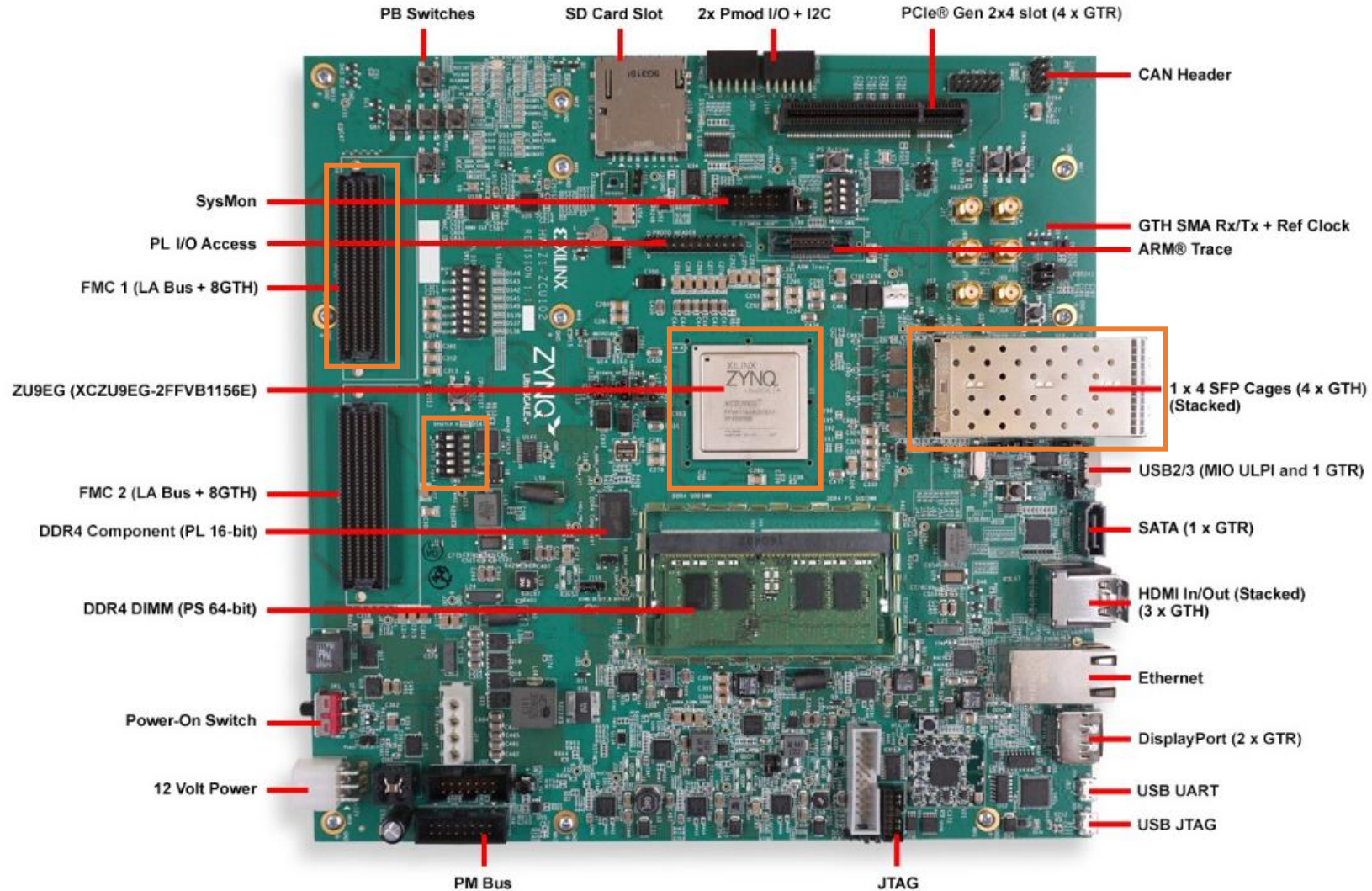
[Release 0.0.4:](#)

- 8 independent 9.6 Gb fibers on FMC0 connector
- 8 IPbus dual-port RAMs for data to be transmitted
 - 1024 words deep
 - 32 bit wide
- 8 IPbus dual-port RAMs for mgt control
 - 128 words deep
 - 32 bit wide
 - 8 ctrl words of 4 bit each
- Configuration and Status registers

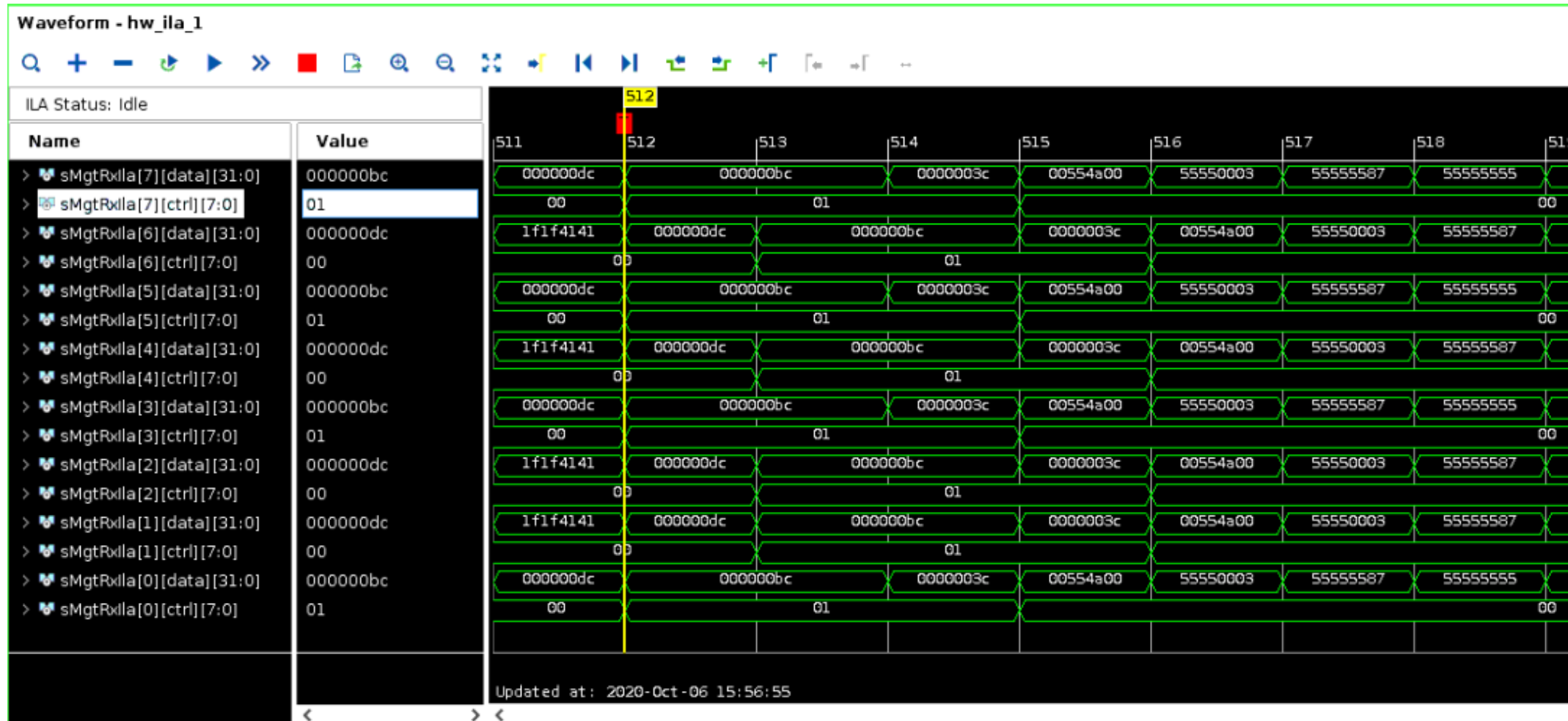
ZCU102 Source Board: Schematic



ZCU102 Source Board: Elements used



ILA for 8 Channels Loopback Test (RX)



To Do

- Add playback functionalities:
 - One shot, infinite loop, repeat n-times
 - Use wibulators?
- Write the received data into dpRAMs
- Use two FMC daughter cards for more channels
- Test it with Felix board
- Upgrade with DDR4 memory