

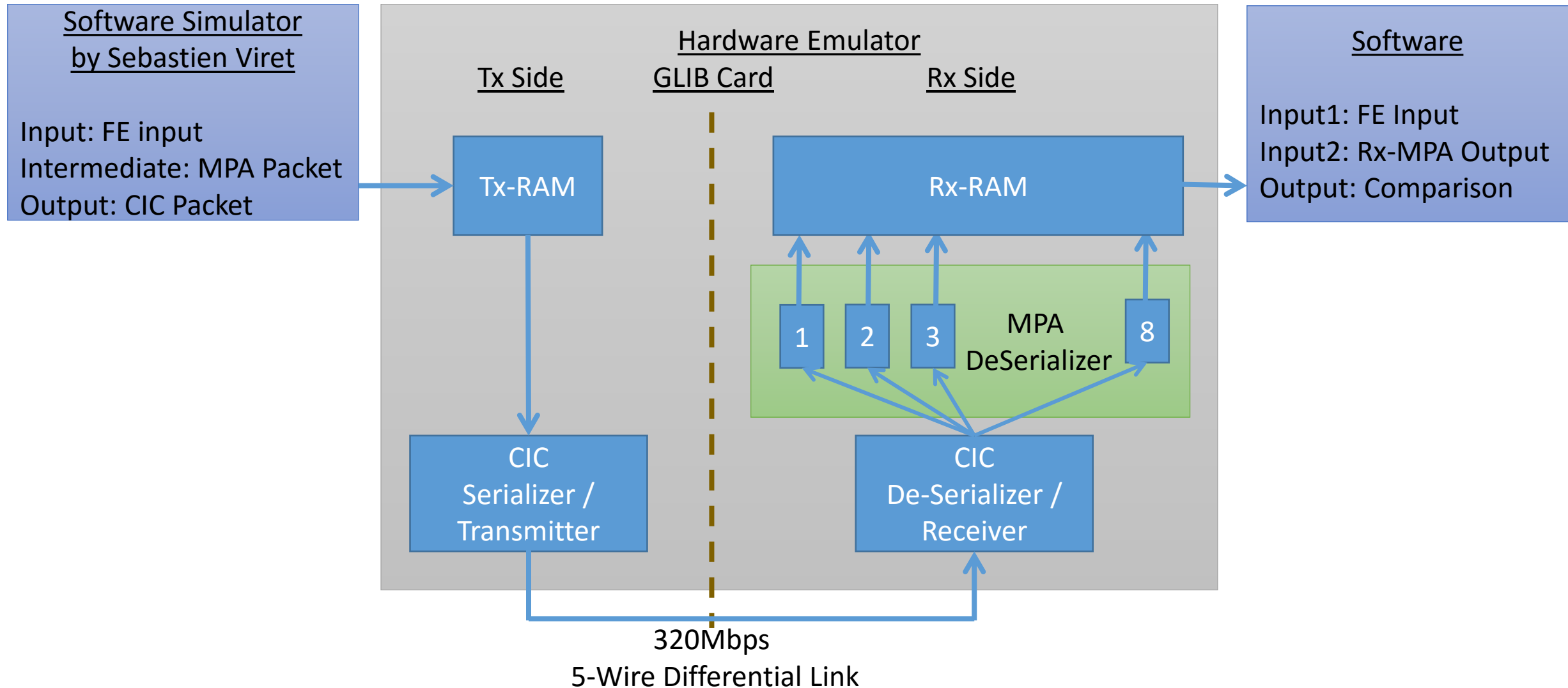
# Proposal for DTC-Tester

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# Aims

- Emulate the CIC payload sent to the lp-GBT
- Design the receiving end after the lp-GBT
- Act as a test-bench for lp-GBT
- Compute the Bit Error Rate

# Functional Diagram



# Procedure & Limitations

## Procedure

- Simulated data stored in Tx-RAM by a computer
- Hardware strobe enables emulator to run for a few milliseconds
- Emulated data read from Rx-RAM in the computer
- Input and Output data compared in software

## Limitation

- Bypass Ip-GBT for now
- L1A Trigger control
  - Trigger already incorporated into the stored data
  - No real-time control (yet)

# Current Status

- Received GLIB card from CERN
- Setup of GLIB and SLC
  - Setup a system with SLC VM.
  - Configured & Tested network setting for VM.
  - Updated **MicroHal** and **Cactus** on SLC 5.
  - Successfully Ping the GLIB card on specified IP over Ethernet interface.
  - Installed **Ph2\_ACF** software.
  - Able to access GLIB registers with Ph2\_ACF software and given .xml connection settings files.
- Compiled a custom-made test code
  - Adder: Adding two values stored in the registers