

# Beam and medium scale test

# Necessary Equipment (Hardware)

- 4 or 9 Front End Boxes
  - 1 Distribution Box (including I<sup>2</sup>C)
  - *TTC-system : TTCvi + TTCvx*
  - *1 OrxCARD + 12 LVDS Adapter*
  - *2 Stratix Boards + Adapter*
  - Power supplies :
    - $\pm 5V / 50A$
    - $2.5V / 5A$
    - $3.3V / 10A$
  - *3 PCs*
  - *2 Scintillator + Nim crate*
  - *Cooling (Peltier element + CPU cooler)*
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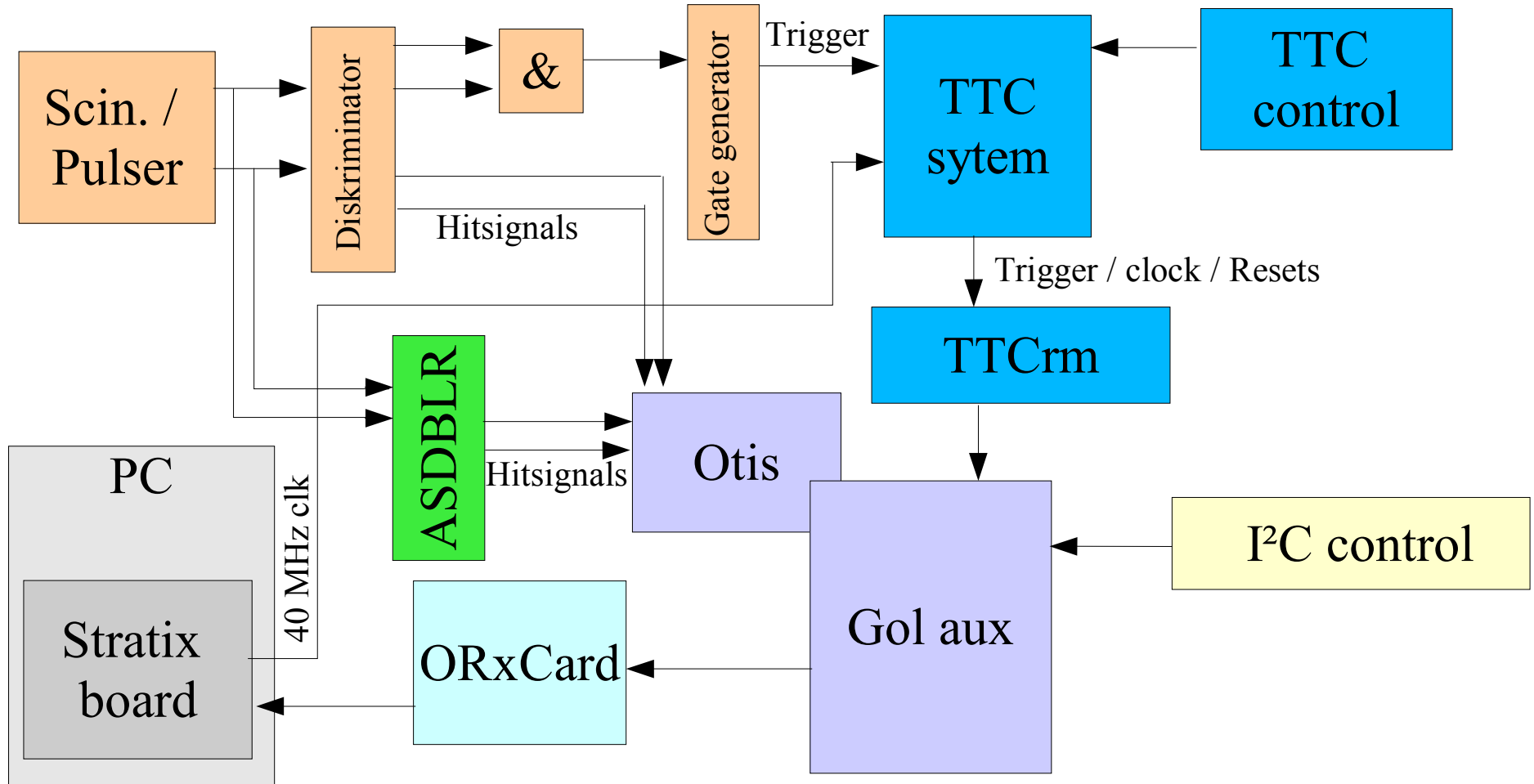
# Necessary Equipment (Software)

- Stratix board code for 6 links
- Readout software for the Stratix Board via PCI-Bus
- DAQ monitoring
- *I<sup>2</sup>C control*
- *TTC control*

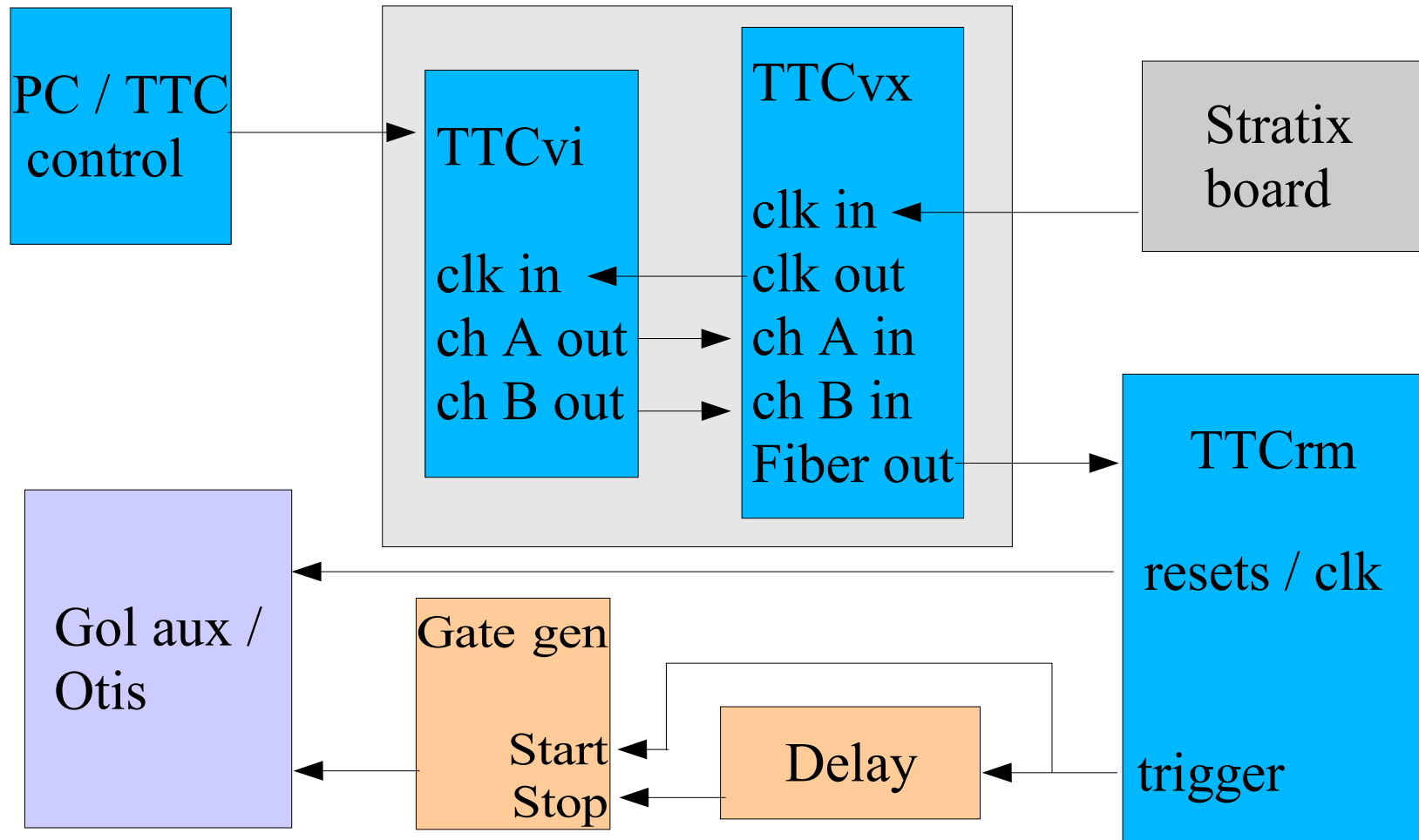
# To do list

- Distribution Box (including I<sup>2</sup>C) (Nikhef)
- Stratix board code for 6 links (Dresden)
- Front End Boxes equipped with Otis 1.1 chip (Nikhef)
- Test of the DAQ with a module (HD)
- 2 Adapter for 4+2 links to Stratix board (Dresden)
- Modification of the Readout software for 2 boards in one PC (Dresden)

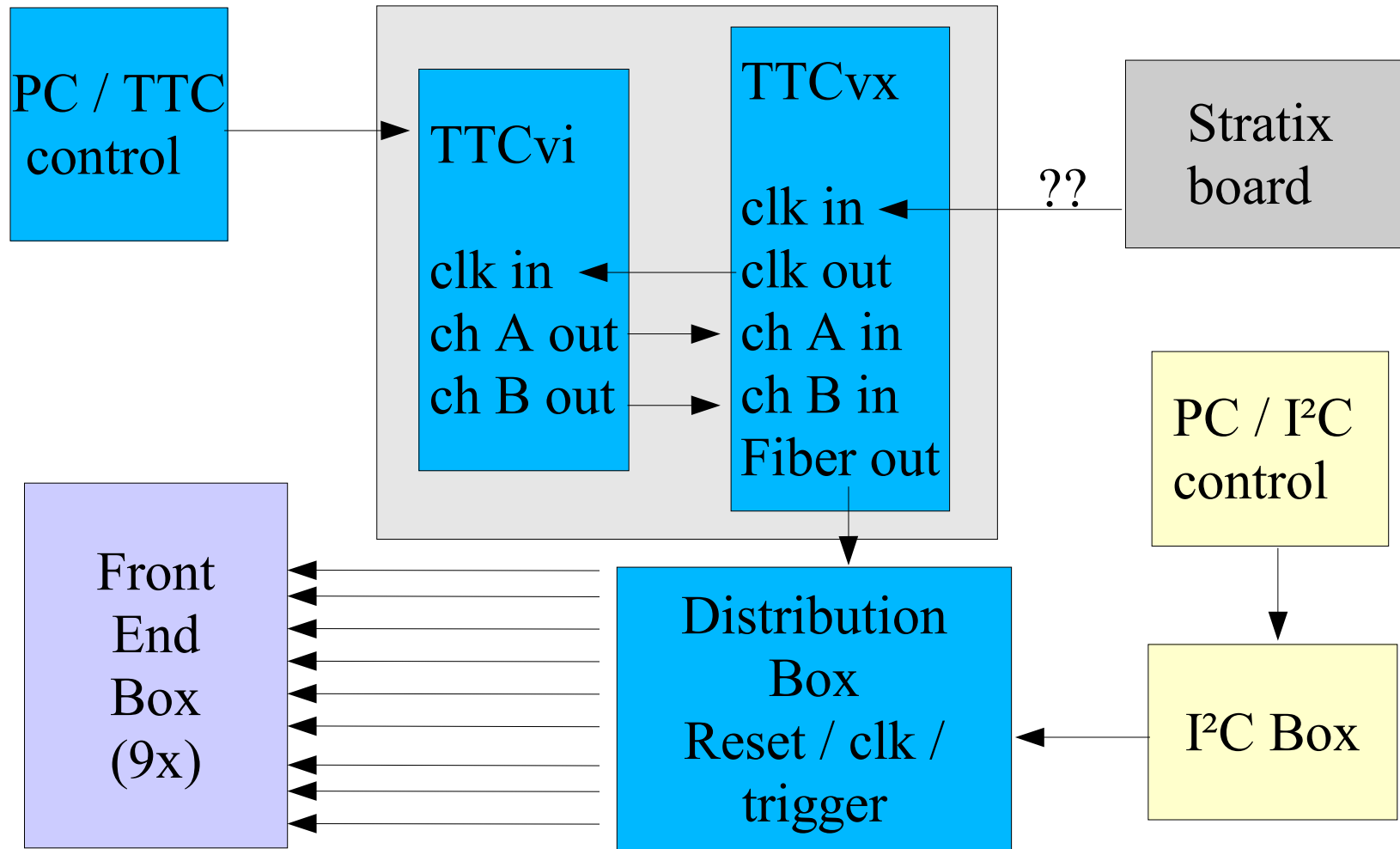
# Complete readout scheme




# Current TTC setup (HD)



# TTC setup (MST)



# I<sup>2</sup>C control



The screenshot shows the I<sup>2</sup>C control software interface. Key elements include:

- General Call:** OFF
- Write Setup:**
- Send Immediately:** ON
- Read Setup:**
- Otis ID:** 8
- Find Device ID:**
- Send All Registers:**
- Read All Registers:**
- I<sup>2</sup>C Status:** Green light ON
- STOP:** Button
- ReadMode:** 3BX, Single Hit
- DebugMode:** Memory Selftest
- ServicePads:** DLL Lock
- DLLReset:** Off
- Latency:** 5
- Offset:** 1110000
- ChannelMask:** All Channels On
- ASDDAC0-3:** 0, 0, 0, 0
- ASDDAC [mV]:** 0, 0, 0, 0
- Clear DACs:**
- Send DAC:**
- ClearCounterRegs:**
- ReadFIFO:**