

# **20th AGATA Week**

## **Digital Insp/Mon, 18Sep19**

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STFC Daresbury Laboratory

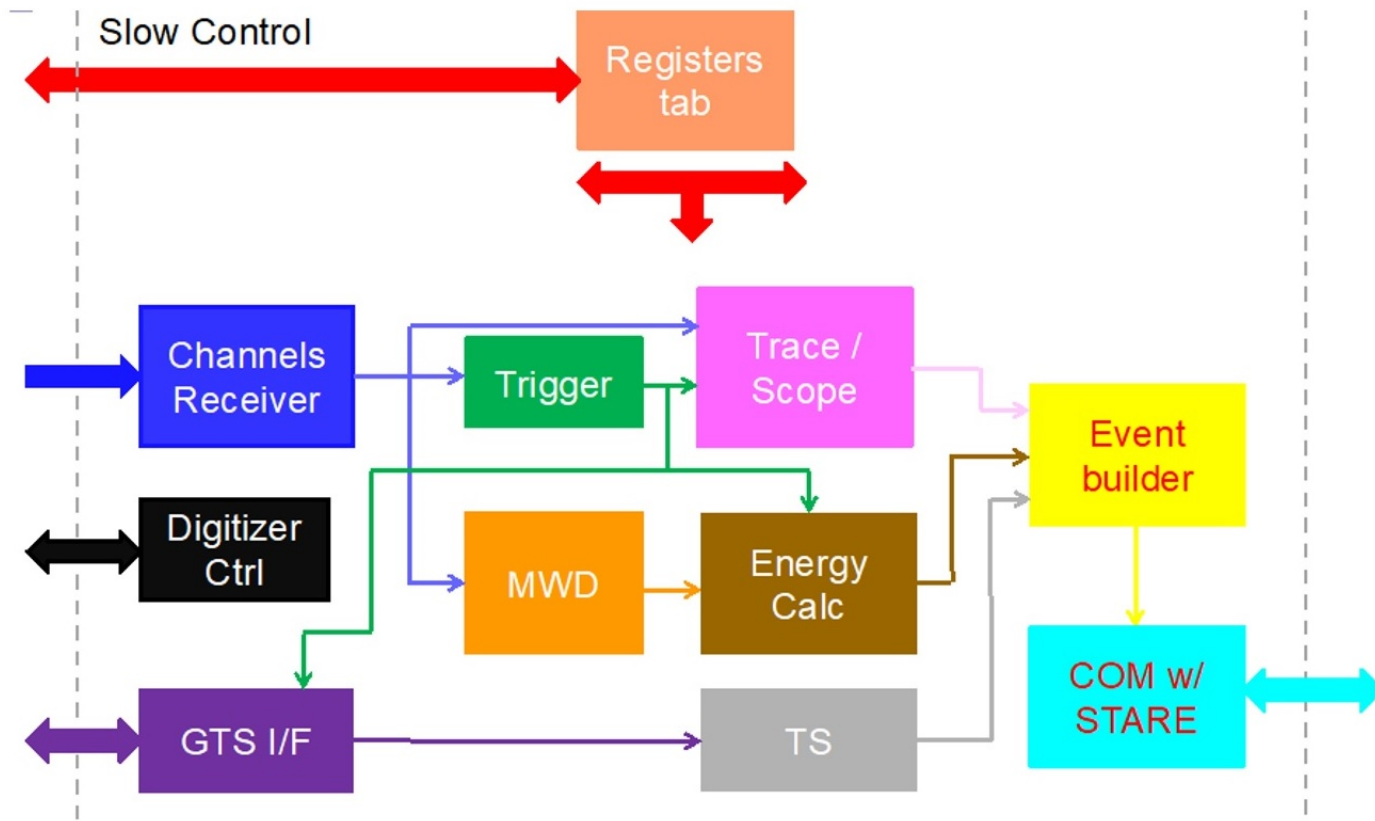


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# Monitoring Requirements\_1

(From Project Definition)

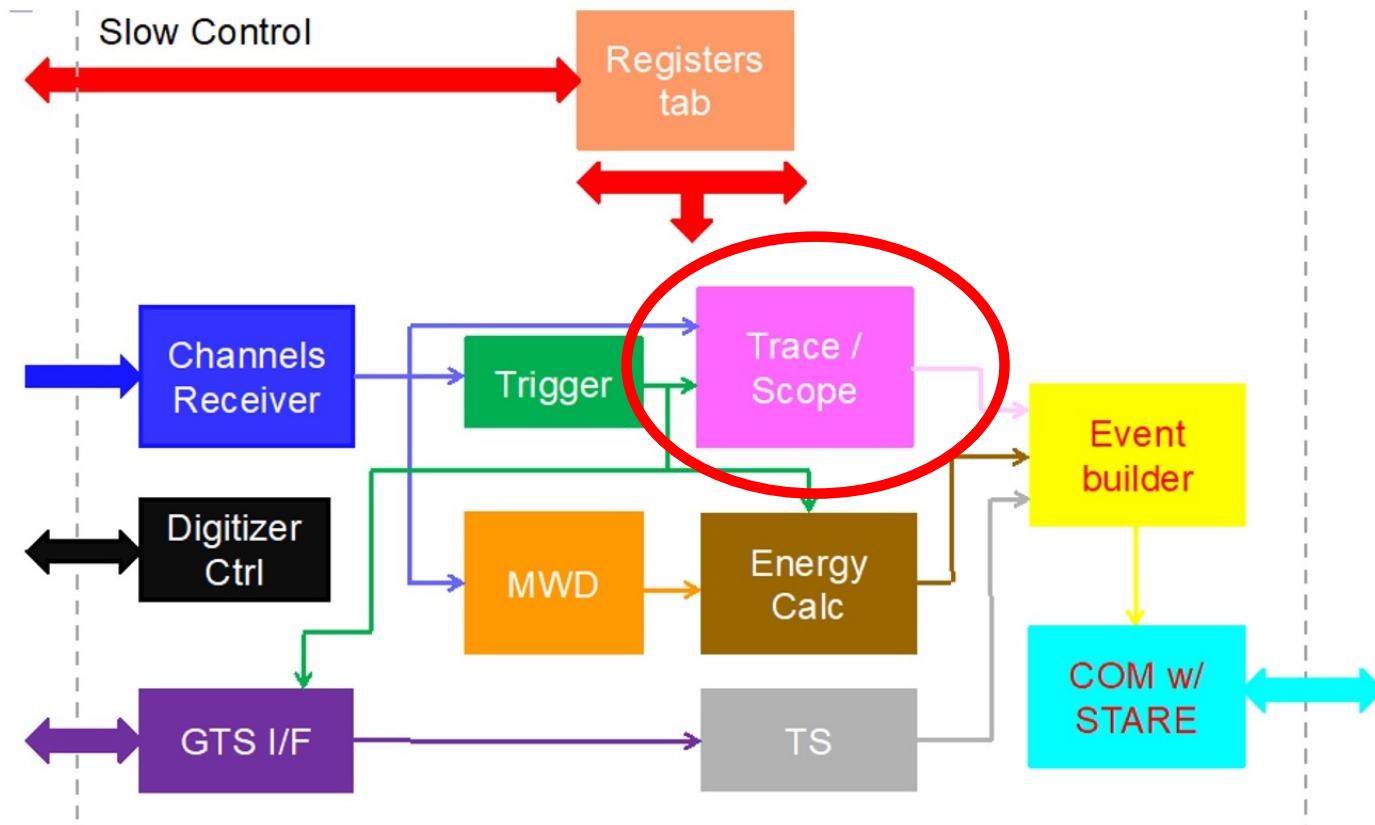


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# Monitoring Requirements\_1

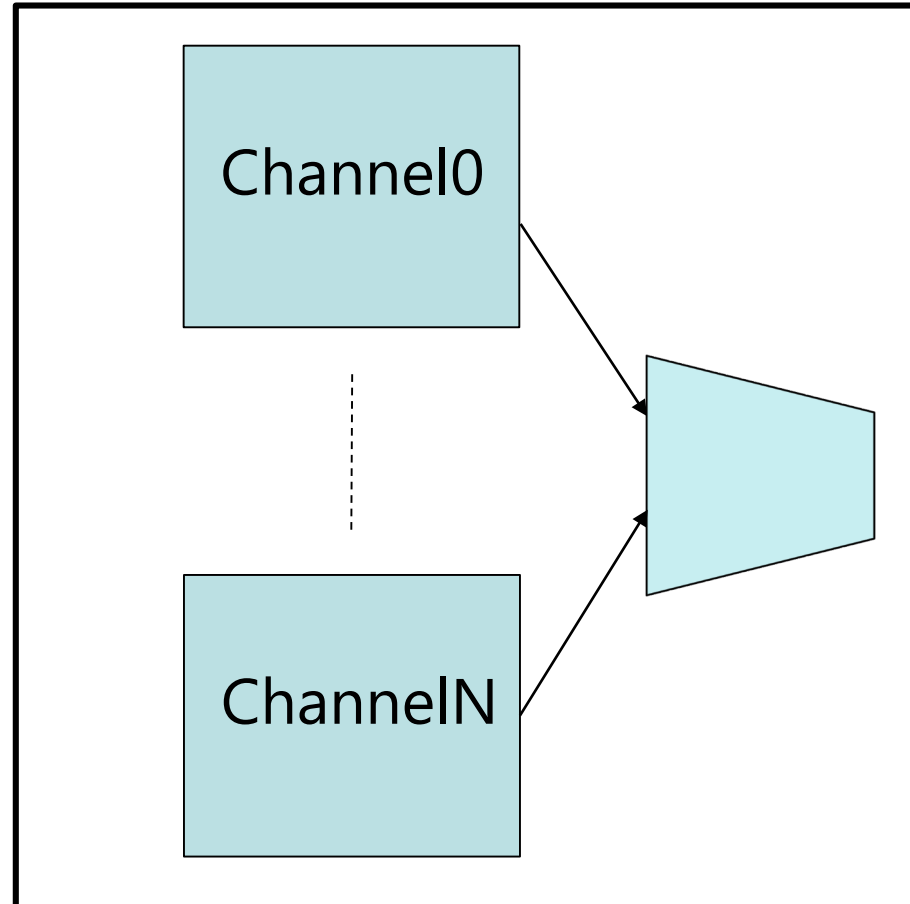
(From Project Definition)



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# Trace/Scope Block

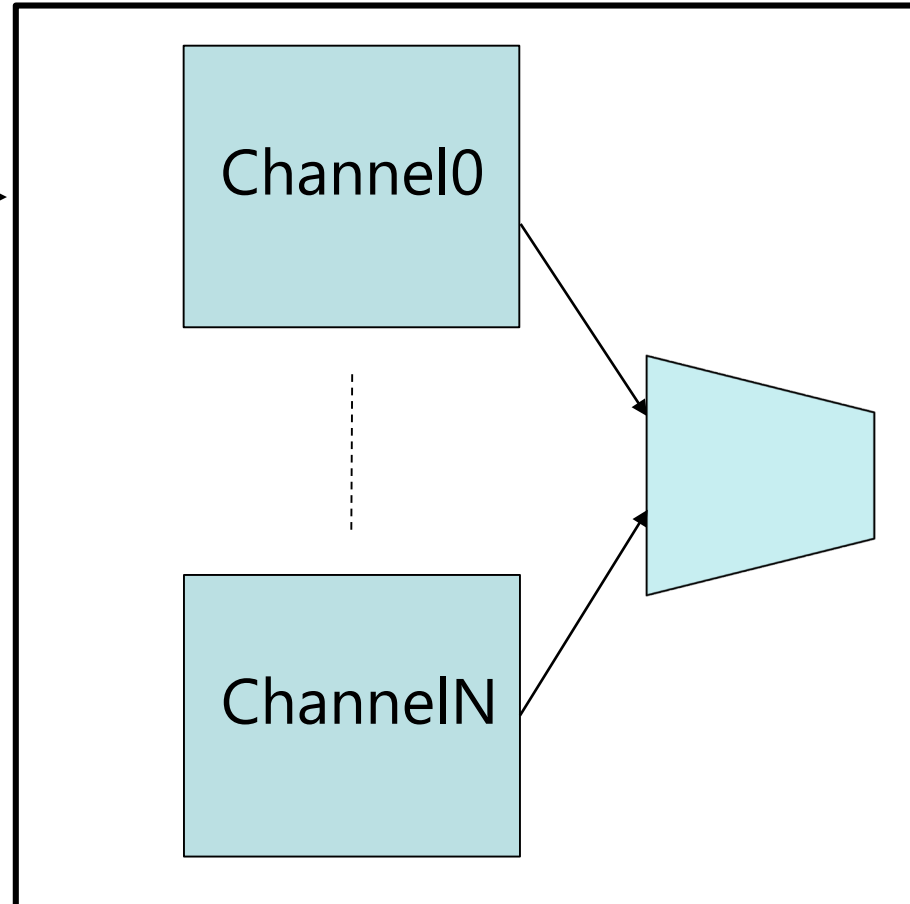


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# Trace/Scope Block

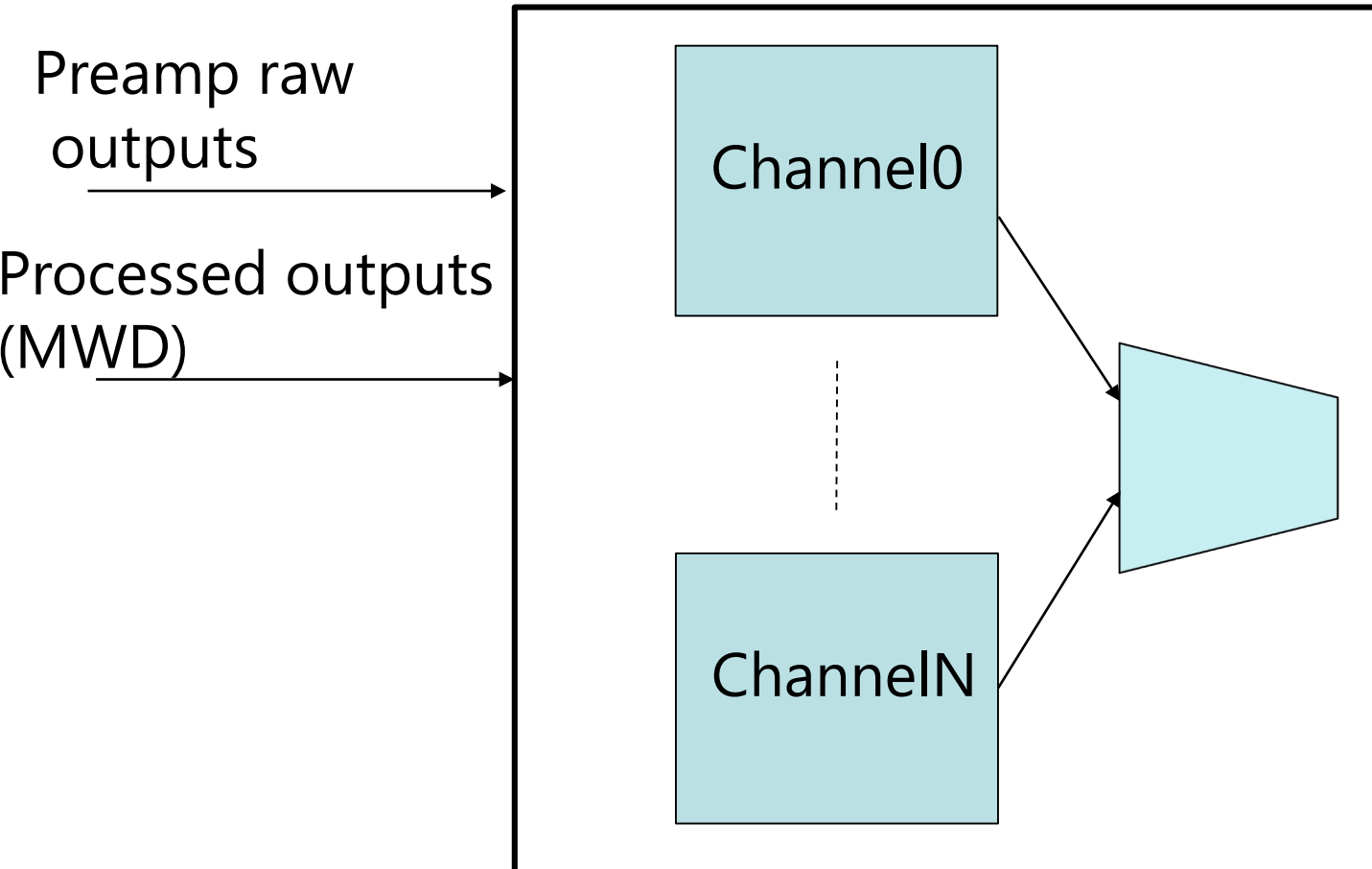
Preamp raw  
outputs



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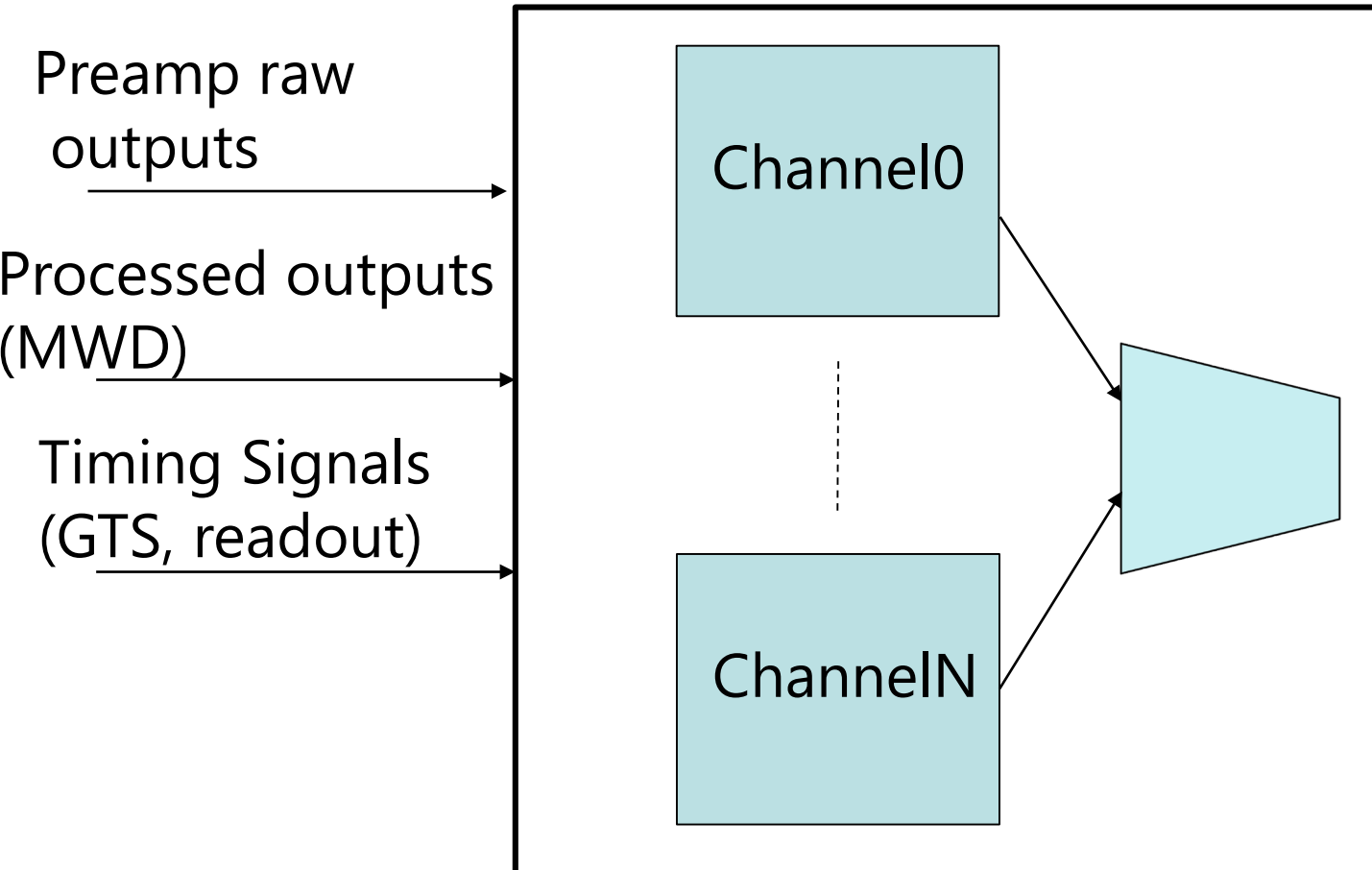
# Trace/Scope Block



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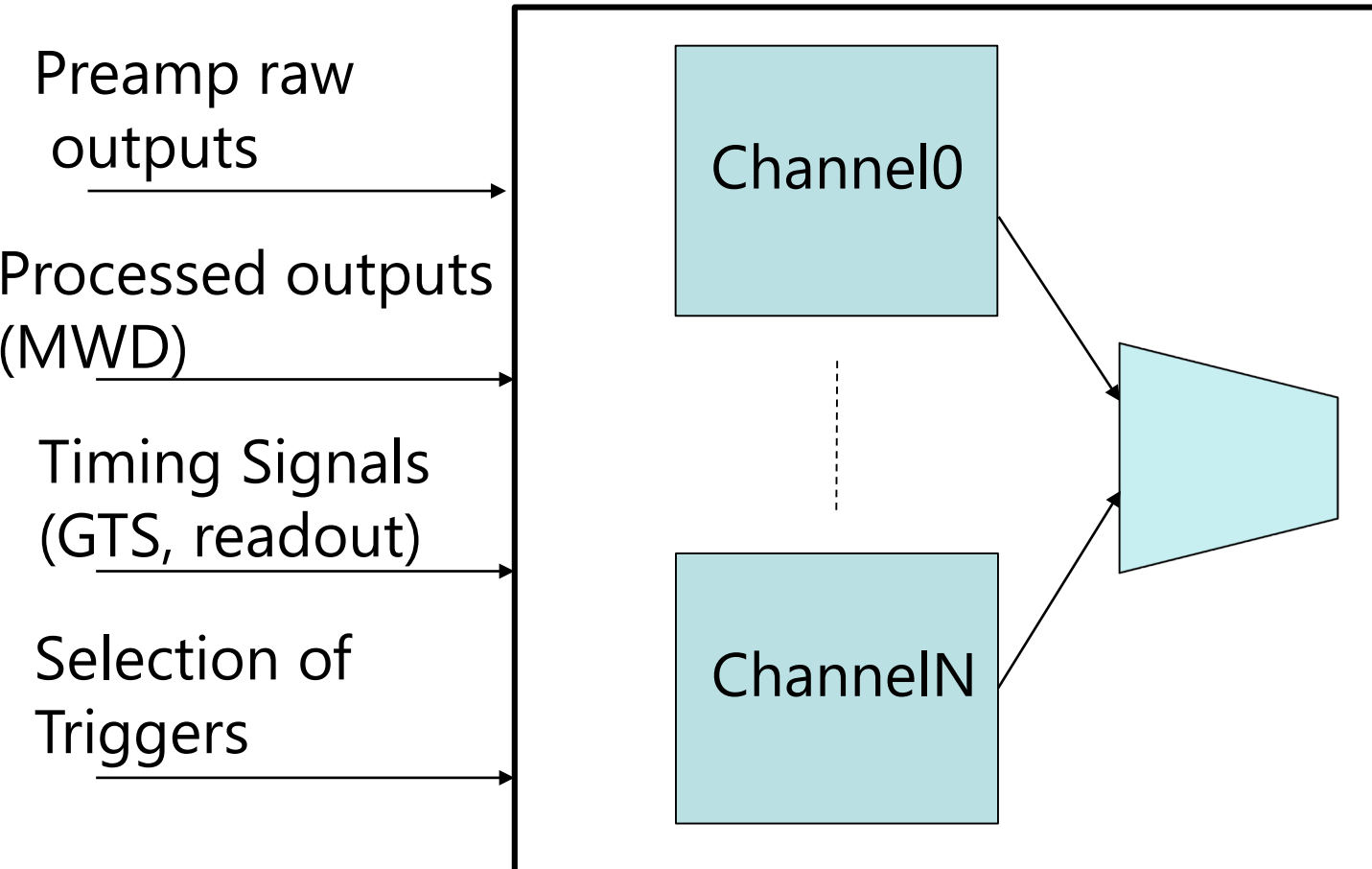
# Trace/Scope Block



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# Trace/Scope Block

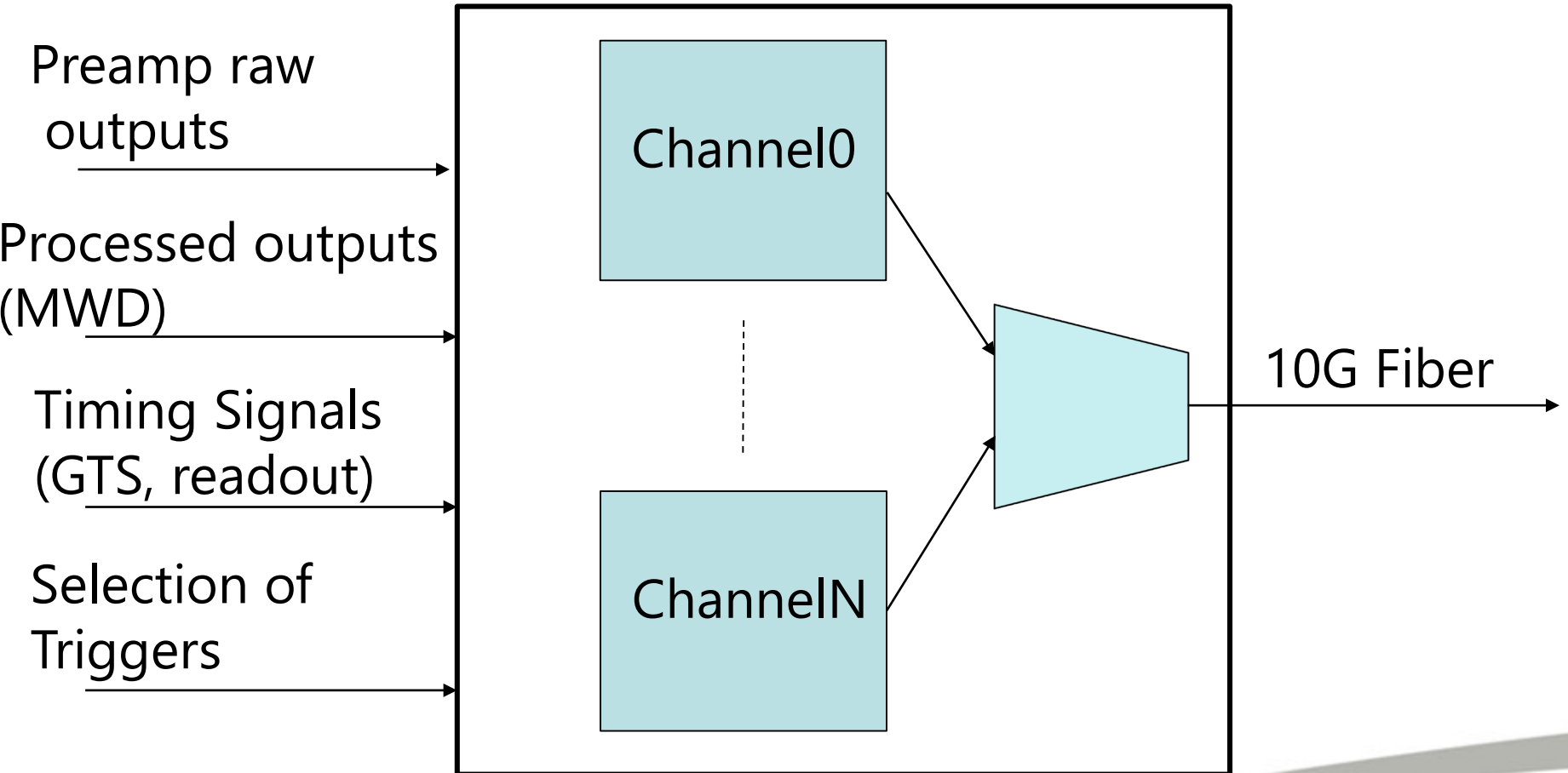


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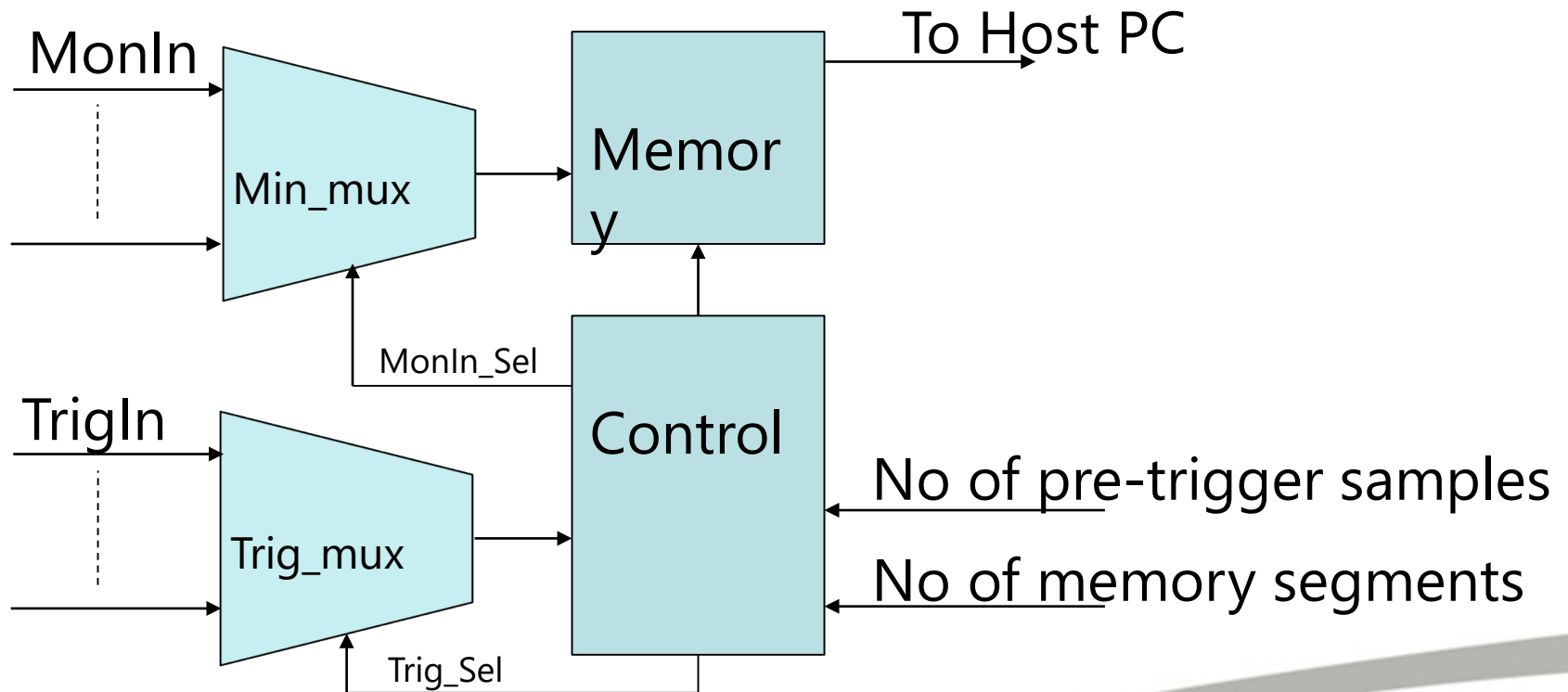
# Trace/Scope Block



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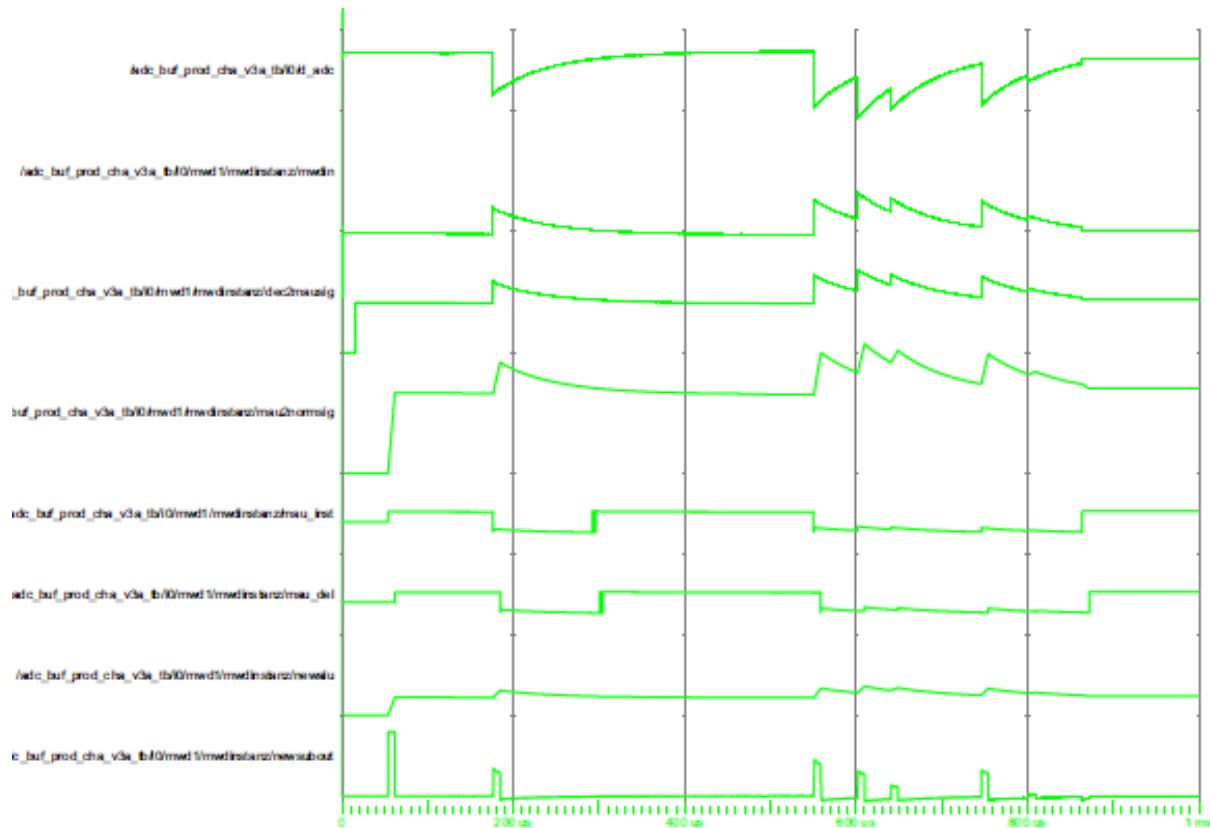
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# Channel Block



# Visualisation

(From Project Definition)



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# Requirements

Capture and display of input signals:

- Raw format from preamps.
- Processed (e.g intermediate results of MWD algorithm to aid parameter adjustment).
- Timing signals(from GTS, readout triggers, ancillary detectors)



# Requirements

- Duration of longest trace captured.
  - 50us for all channels.
  - 1-2ms, but with reduced channel number.
- Adjustable pre-trigger capability.
- Capability to segment memory.
- Minimum dead timing b/w capturing and processing of data.



# Requirements

- Assume that visualisation has a dedicated Ethernet link (10G) from STARE.
- Visualisation software will be produced as part of this project



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# Questions

- Are ADC samples aligned (FADC data stochastic Latency aligner)?
- Latency b/w adc samples and external timing signals?
- 36+1 channels. How many channels viewed at the same time?
- No of triggers to be monitored. How many at the same time?

