



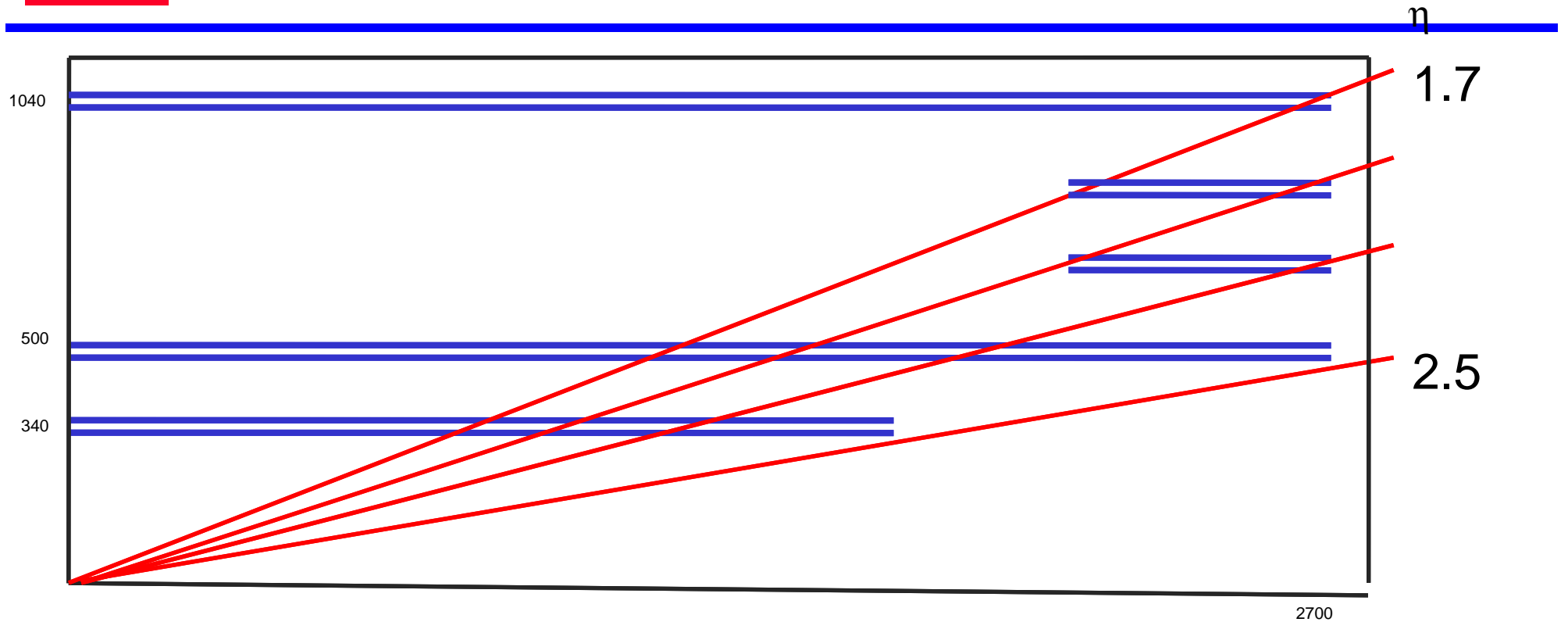
# Scope and Structure of the Tracking Trigger Project

## Scope and Structure of the Tracking Trigger Project

**Peter Sharp**  
**20 November 2008**

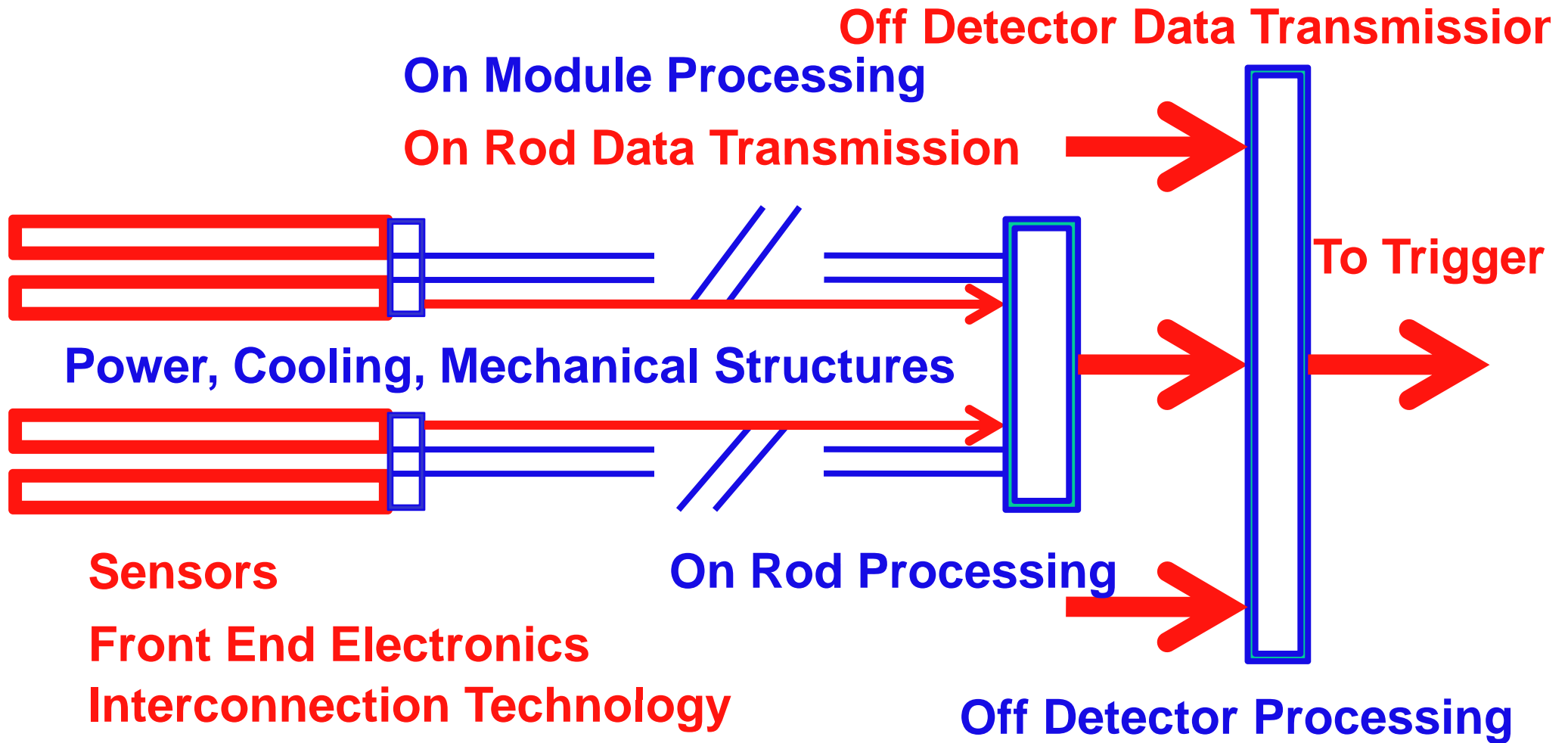


# Layout for the Tracking Trigger Project





# Scope of the Tracking Trigger Project



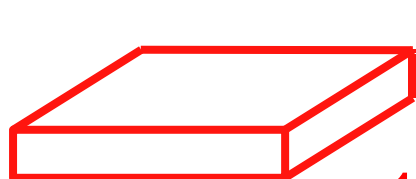


# Basic Units for Tracking Trigger Project



Module Unit 100 \* 100 \* 2mm  
Sensors, FE Electronics,  
Interconnections, On module Processing

Mechanical  
Structure



2 mm

2700 mm

On Rod Data Transmission

100 mm

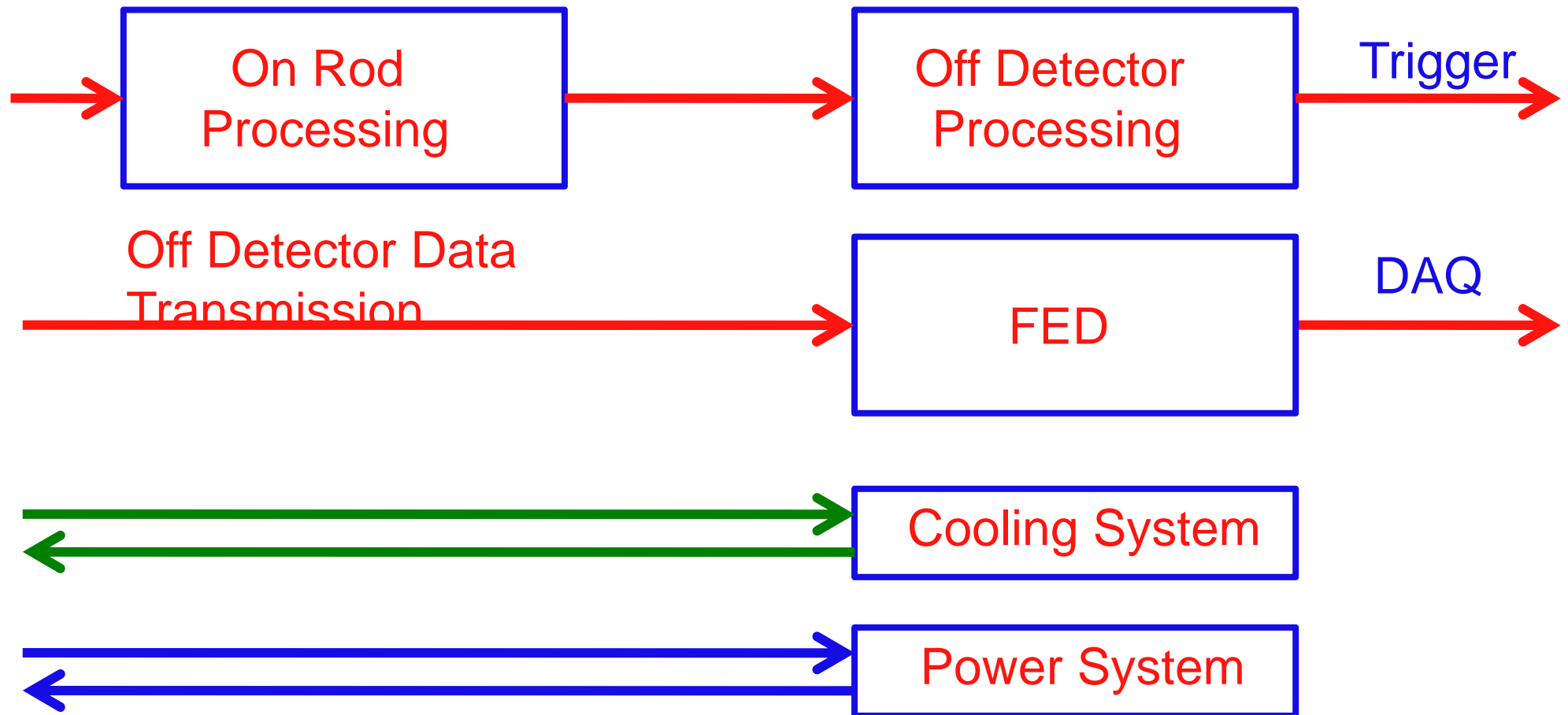
Power Unit  
~12V in ~1.8V out

100 mm

CO<sub>2</sub> Cooling System



# Basic Units for Tracking Trigger Project





# Basic Units for Tracking Trigger Project

- **Module Design**
    - Sensor, FEE, Interconnection, On Module Processing, Construction
  - **On Rod Data Transmission**
  - **On Rod Processing**
  - **Simulation**
  - **Off Detector Data Transmission**
  - **Off Detector Processing**
  - **FEDs and DAQ system**
  - **Powering and DCS System** (Grounding and Shielding)
  - **Cooling System**
  - **Mechanical Layout and Structures**
- and**  
**System**  
**Engineering**  
**and**  
**Optimization**