Trigger Level 2 & 3 Event Filter

Read-out Network (RN)

RU

SFC

Control & Monitoring

Sub-Farm Controllers (SFC)

Front-End Multiplexers (FEM)

Front-End Electronics

VDET TRACK ECAL HCAL MUON RICH

LHC-B Detector

Level 0 Trigger

Level 1 Trigger

Fixed latency 3.2 ms
Variable latency <256 µs

Variable latency L2 ~10 ms L3 ~200 ms

Storage

Data rates
40 TB/s
1 TB/s
4 GB/s
2-4 GB/s
20 MB/s

40 MHz
1 MHz
40 kHz
1 MHz

40 MHz
1 MHz

Variable latency L2 ~10 ms L3 ~200 ms

CPU

CPU

CPU

CPU

4 GB/s

LAN

Read-out Network (RN)

Read-out units (RU)

Front End Links

Timing & Fast Control

L0 L1