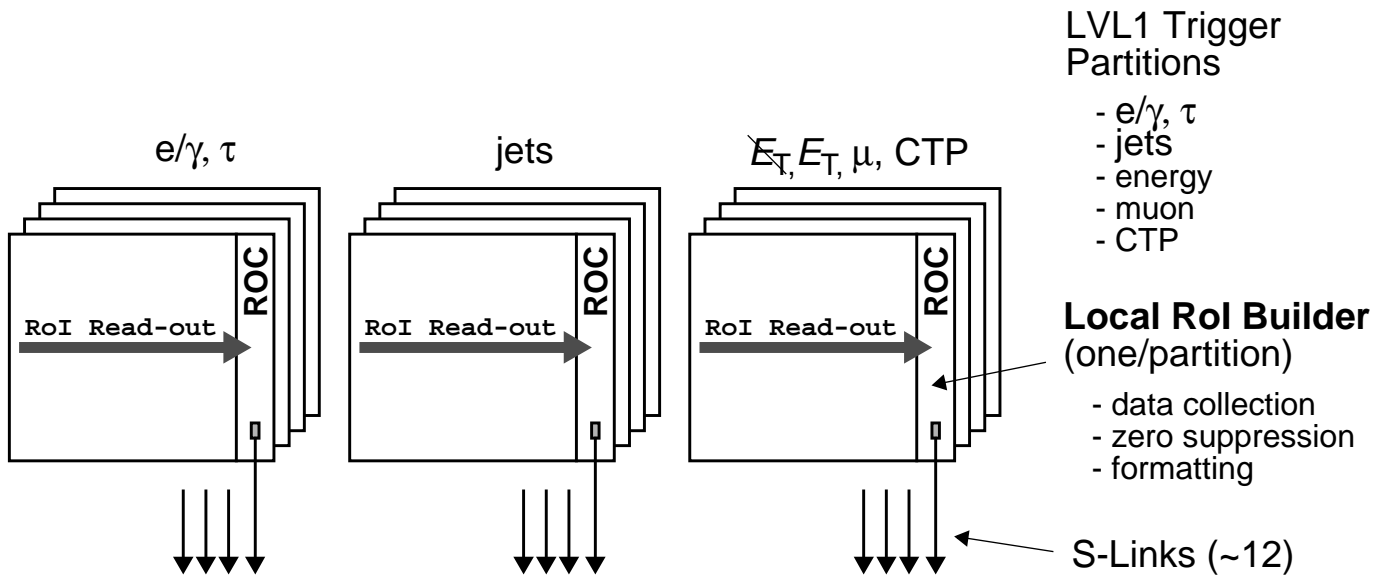


LVL1/LVL2 Interface



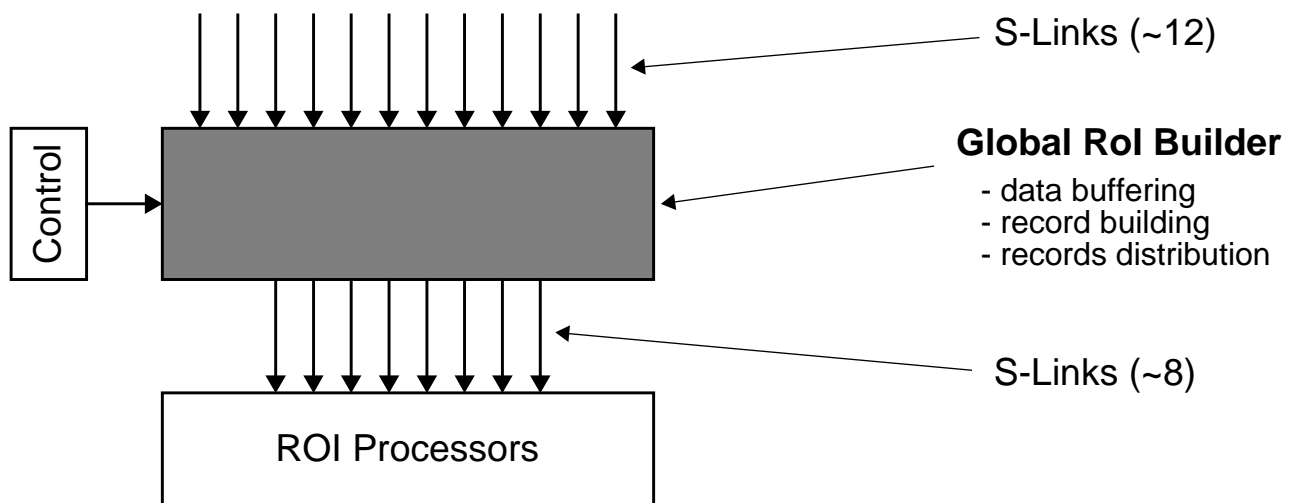
LVL1 Trigger provides to LVL2:

- an event identification information (L1ID and BCID),
- an information about Regions of Interest (RoI) identified by the LVL1,
- other information useful for the LVL2.

LVL1 Trigger provides to LVL2 zero suppressed and formatted data

LVL1/LVL2 Data Links are “standard” ATLAS (S-Links)

LVL1 RoI Data Fragment Format follows ATLAS recommendations



LVL1 Rol Data Fragment Format (from Local Rol Builder)

Word #	Content	Type
1	Begin of Fragment(B0F00000)	Control
2	00 24-bit L1ID	Data
3	00000 12-bit BCID	Data
4	Number of LVL1 Data Words	Data
5	LVL1 Data Word #1	Data
N+4	LVL1 Data Word #N	Data
N+5	End of Fragment(E0F00000)	Control

N - Number of LVL1 Data Words

Variable - e/g, t, jets, muon (may be = 0)

Fixed - energy (3), CTP (10)

Data words:

e/ γ , τ	00 8-bit Tthresh 12-bit eta/phi 4-bit yype
jets	TBD
muon	0000 3-bit Pt 5-bit sub-sector 8-bit sector
energy (3)	Missing energy
	Transverse energy X
	Transverse energy Y
CTP (10)	128-bit input pattern
	96-bit trigger candidates (before...)
	96-bit trigger candidates (after...)