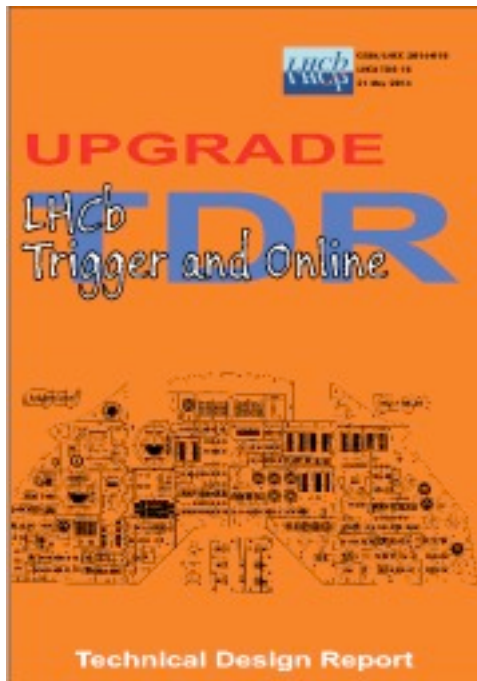




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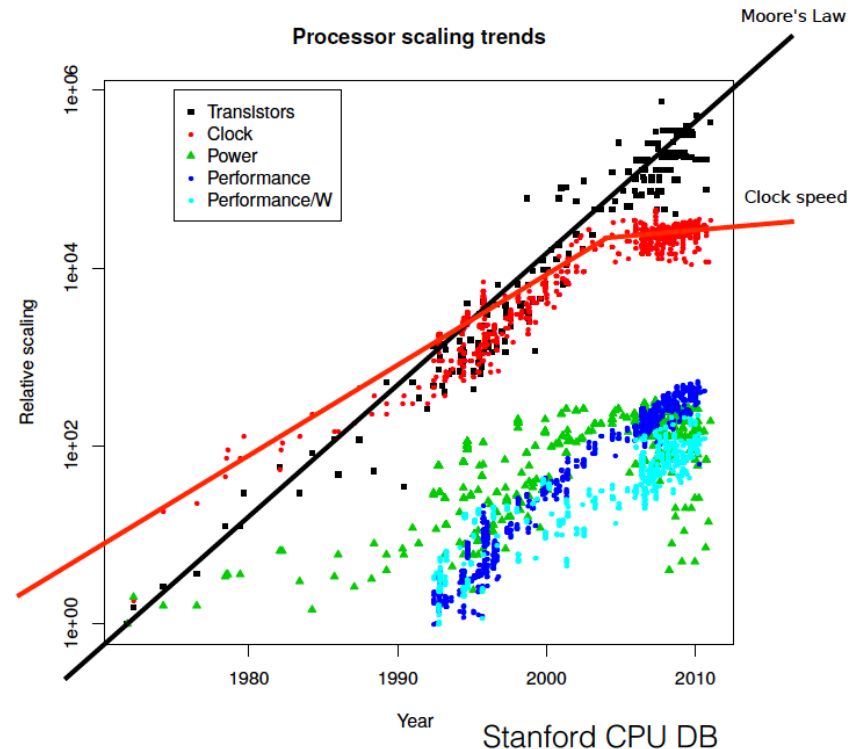


Topics:

- Physics analysis (leptonic B decays)
- Trigger (LHCb upgrade trigger PL)

- Clock speed stalled ~2005 and no breakthrough expected
 - Baseline serial job performance stalled
- Moore's law for processors is not dead
 - But more uncertainty than in the past: feature density doubling time uncertain: 24, 30 or 36 months
 - Will not hit a brick wall
- Critical point: must fully explore all power of (multicore) CPU

→ CPU gain with time
 “does not come for free any more”



	ALICE	LHCb	ATLAS	CMS
Assumed online performance gains	25%/year	35%/year	25%/year	35%/year

V. Gligorov, ECFA 2014