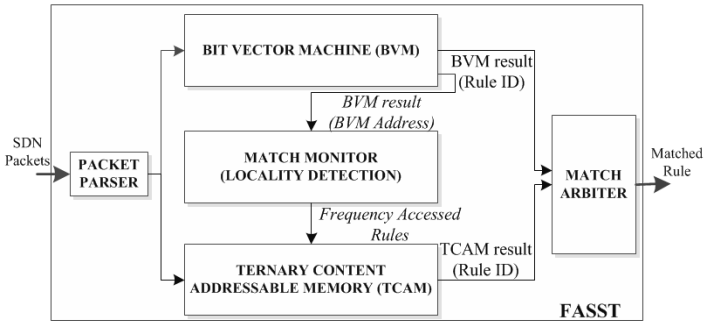
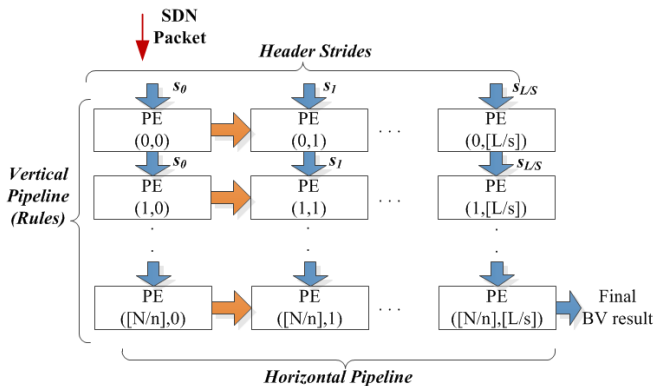


Göksan ERAL: A Low Latency, High Throughput and Scalable Hardware Architecture for Flow Tables in Software Defined Networks(2016)

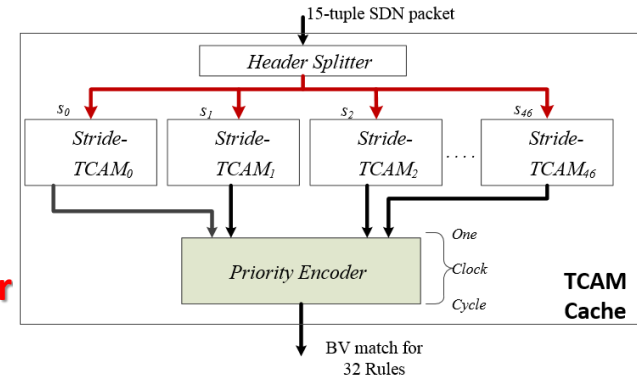


FASST: Fast Scalable SDN Table



BVM: 2D-Pipeline Architecture
80 cycles look up (t_{slow})

- ❖ **Parallel BVM-TCAM packet lookup process**
- ❖ **Exploiting temporal locality on SDN**
- ❖ **Dependent rule caching solution on soft processor**
- ❖ **Support of dynamic rule update in TCAM Cache**
- ❖ **Scalability with rule size and clock rate**
- ❖ **200 MPPS Throughput, 25 ns average latency at 97% cache hit rate, 5.27 W power consumption**



TCAM: 3 cycles look up (t_{fast}), 32 SDN Rules memory capacity

- ❖ **Support of 512 15-tuple SDN Rules in BVM**

