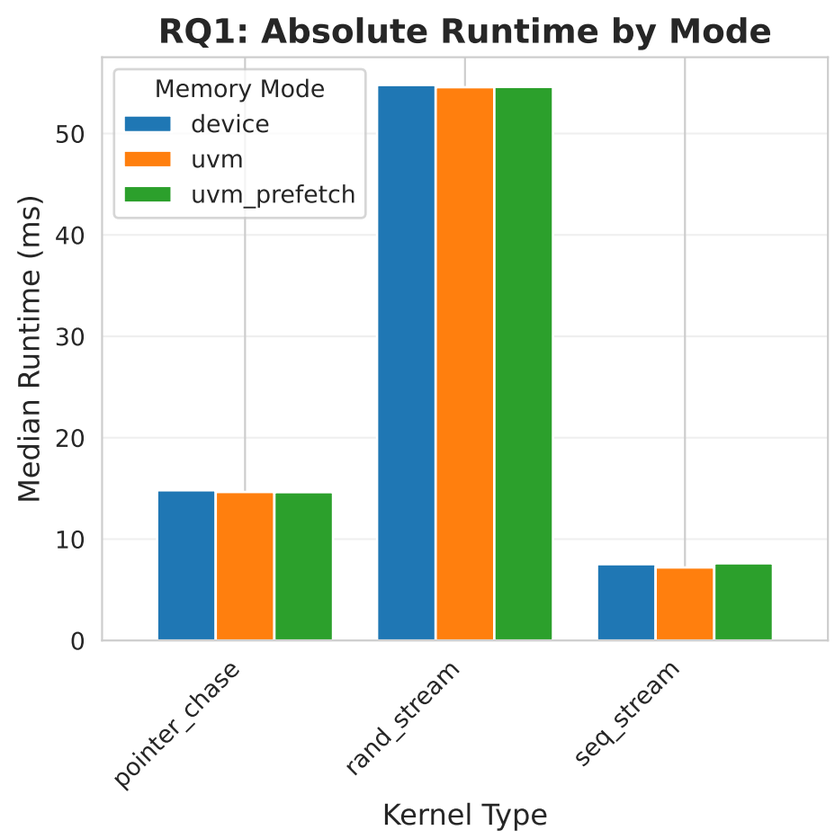
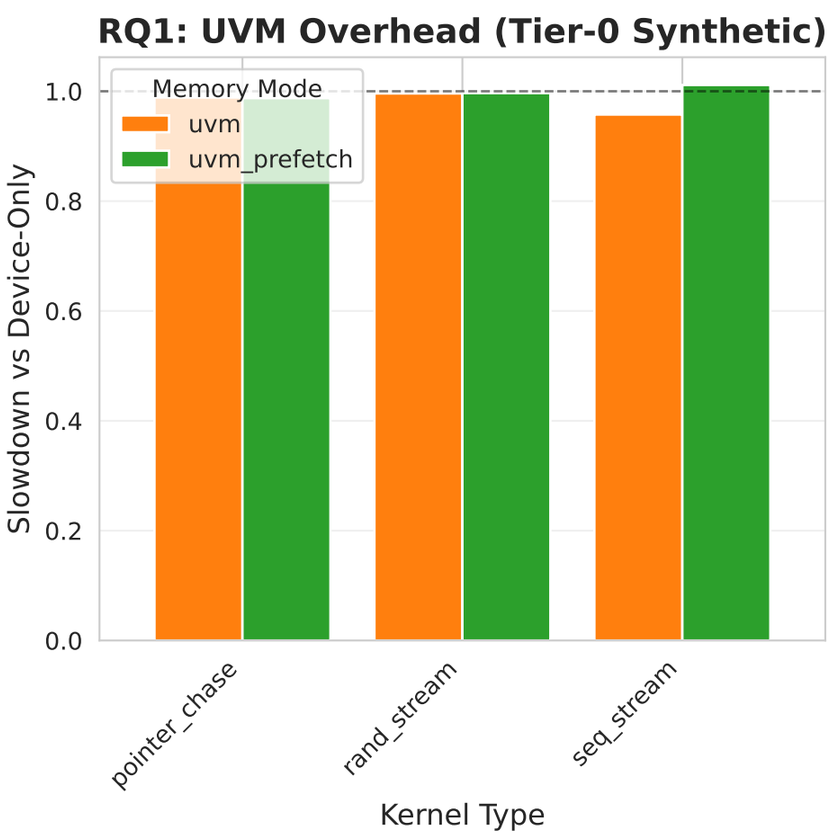
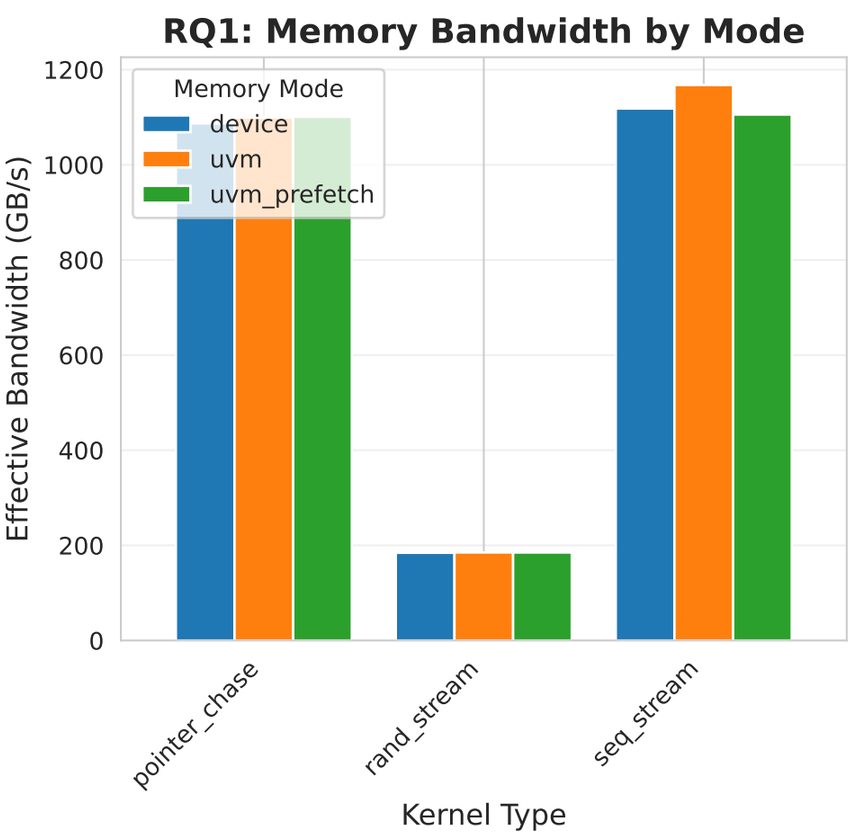

RQ1: Absolute Runtime by Mode
Memory Mode
device
uvm
uvm_prefetch
Median Runtime (ms)
0
10
20
30
40
50
pointer_chase
rand_stream
seq_stream
Kernel Type


RQ1: UVM Overhead (Tier-0 Synthetic)
Memory Mode
uvm
uvm_prefetch
Slowdown vs Device-Only
0.0
0.2
0.4
0.6
0.8
1.0
pointer_chase
rand_stream
seq_stream
Kernel Type


RQ1: Memory Bandwidth by Mode
Memory Mode
device
uvm
uvm_prefetch
Effective Bandwidth (GB/s)
0
200
400
600
800
1000
1200
pointer_chase
rand_stream
seq_stream
Kernel Type