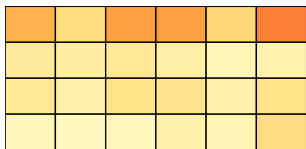
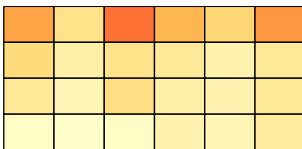


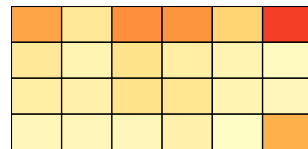
overall



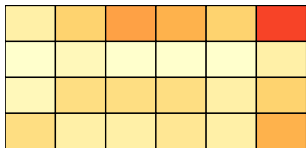
Europe:France



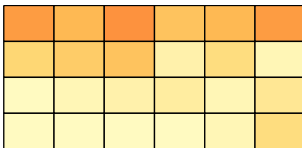
Europe:Germany



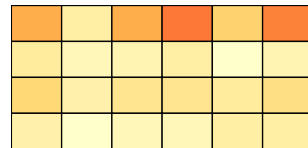
Europe:Italy



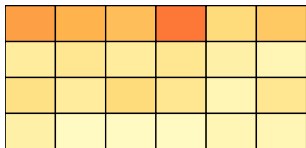
Europe:UK



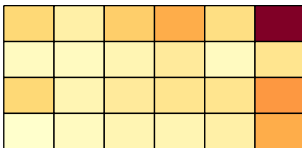
Europe:others



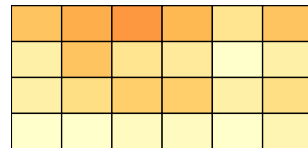
Japan



Russia



USA



Q22\*:MPI+X

OMP	0	0.79	1.6	2.4	3.2	4
Pthread	4.8	5.6	6.3	7.1	7.9	8.7
CUDA	9.5	10	11	12	13	13
No	14	15	16	17	17	18

Latency hiding

End-points

Resilience

Additional opt

Another API

MPI provides all

Q26\*:Missing Semantics