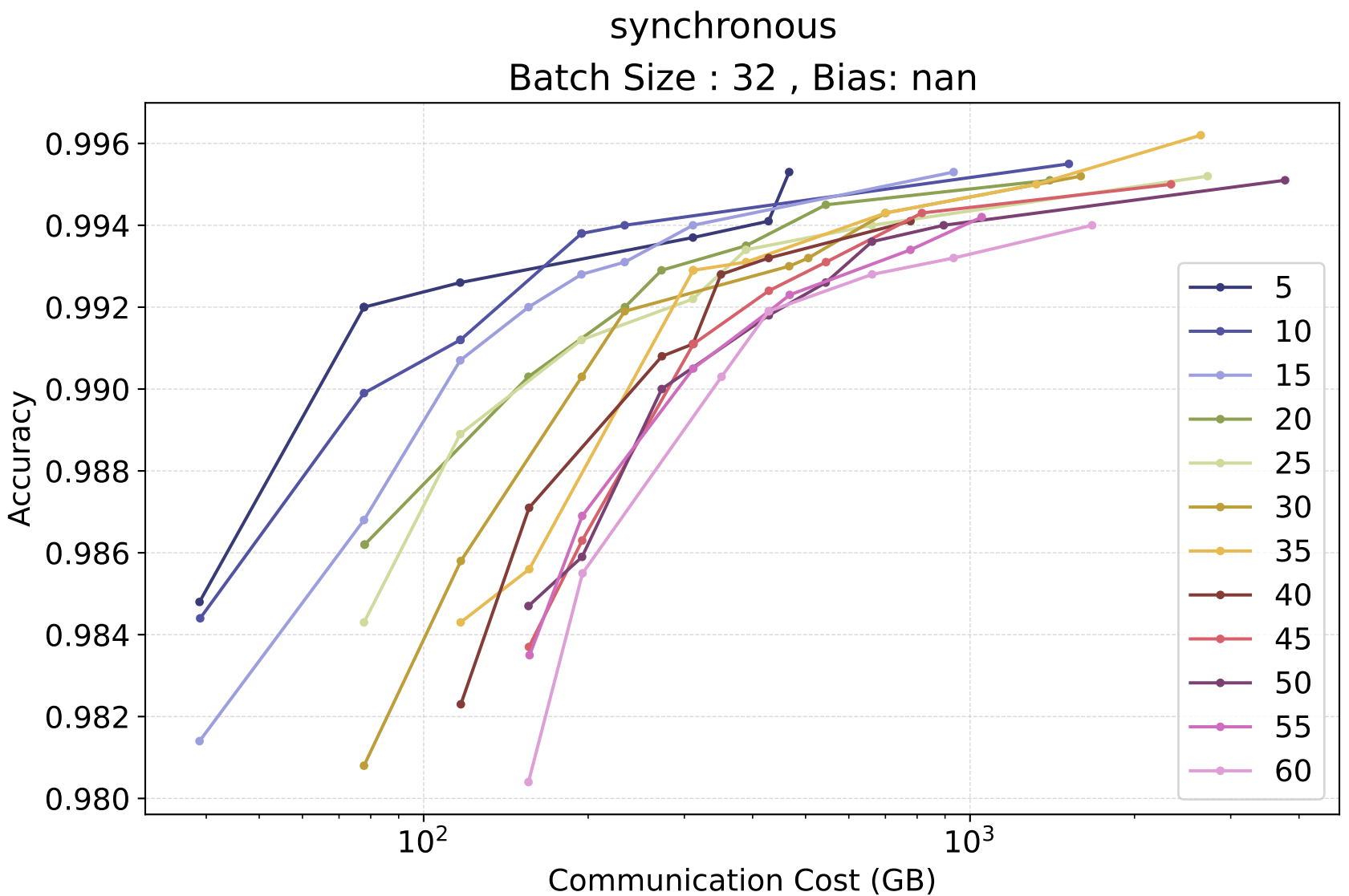
synchronous
Batch Size : 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^2
10^3
Communication Cost (GB)
5
10
15
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45
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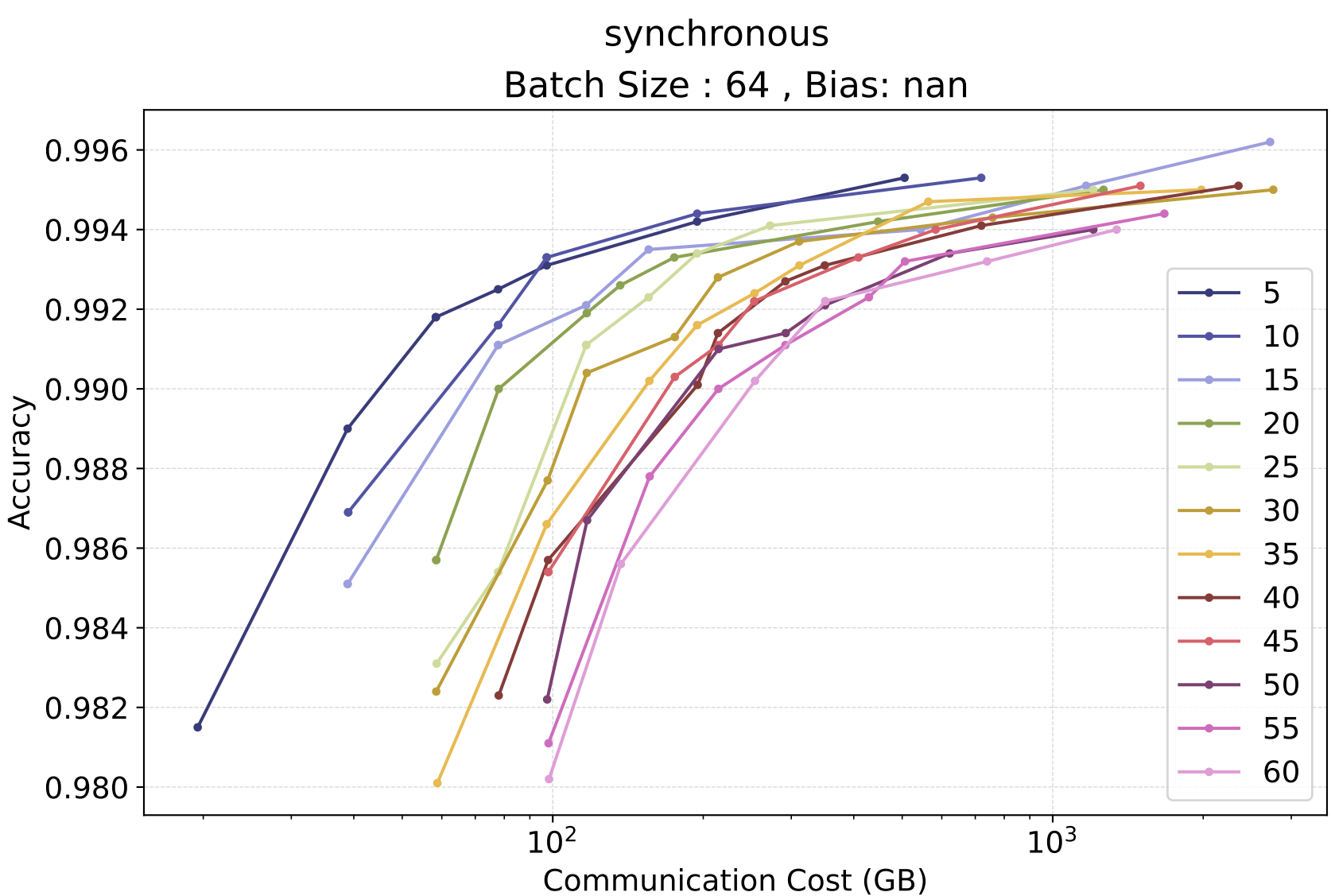
55
60


synchronous
Batch Size : 64 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^2
10^3
Communication Cost (GB)
5
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55
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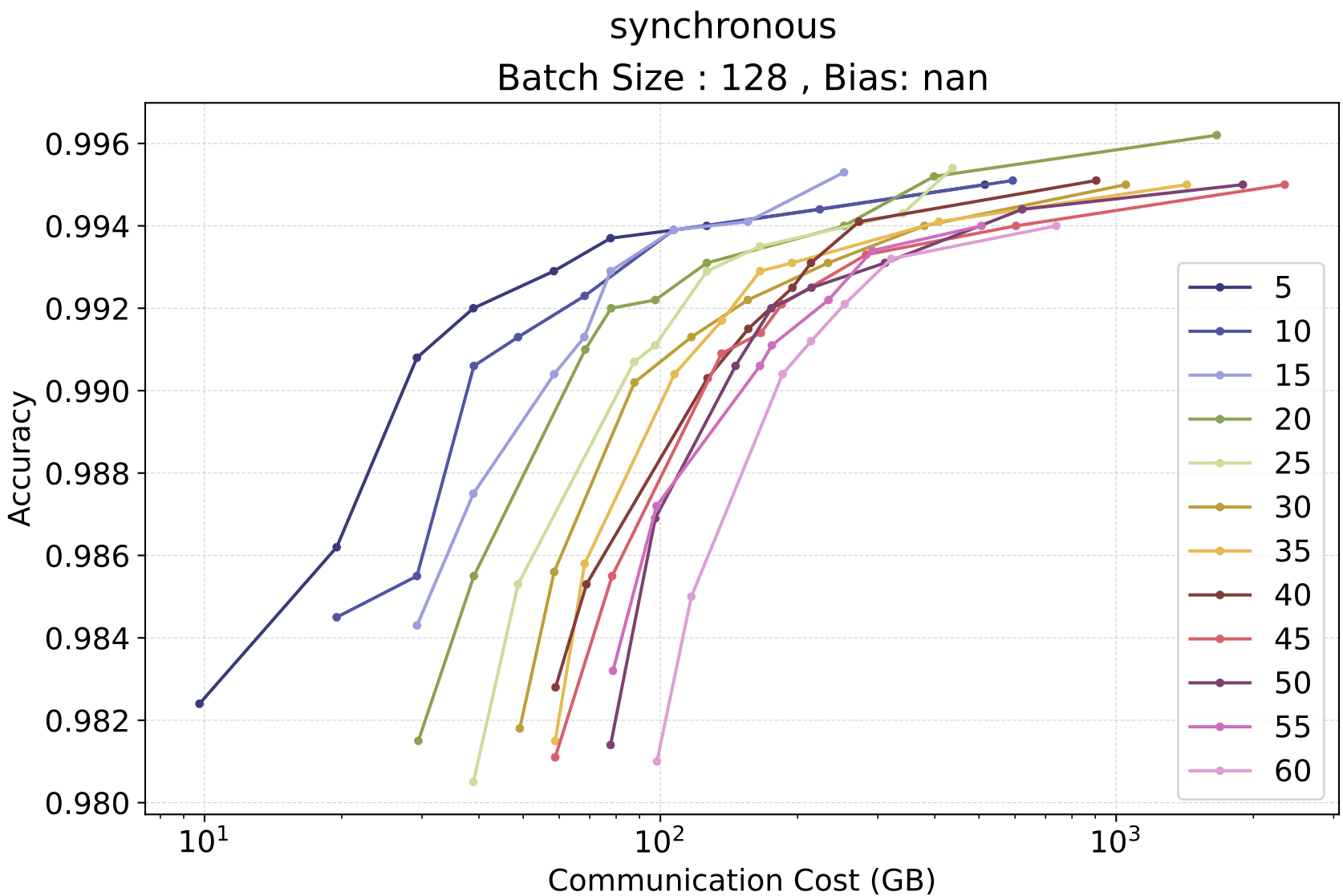
synchronous
Batch Size : 128 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
10^3
Communication Cost (GB)
5
10
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55
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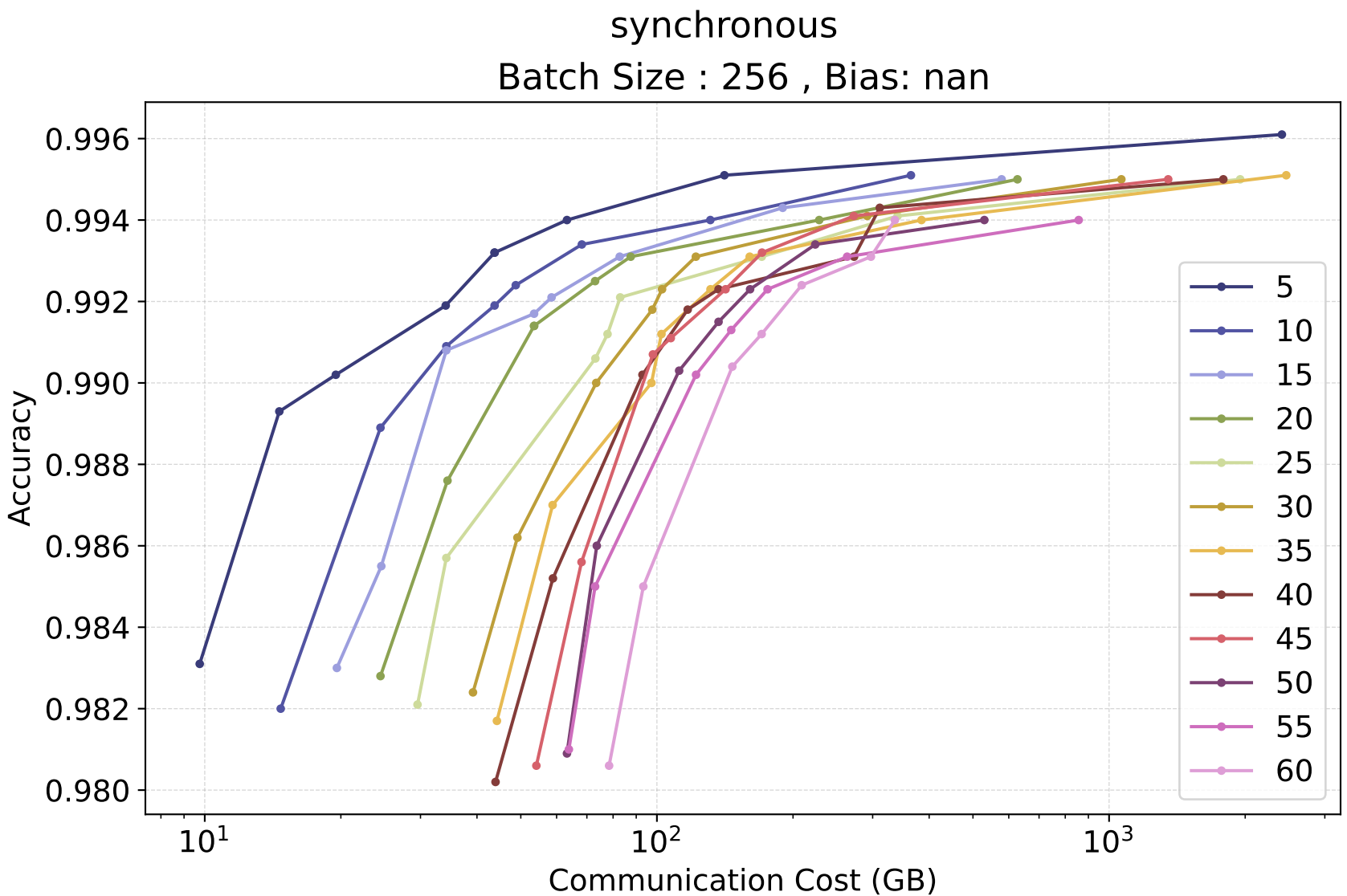
synchronous
Batch Size : 256 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
10^3
Communication Cost (GB)
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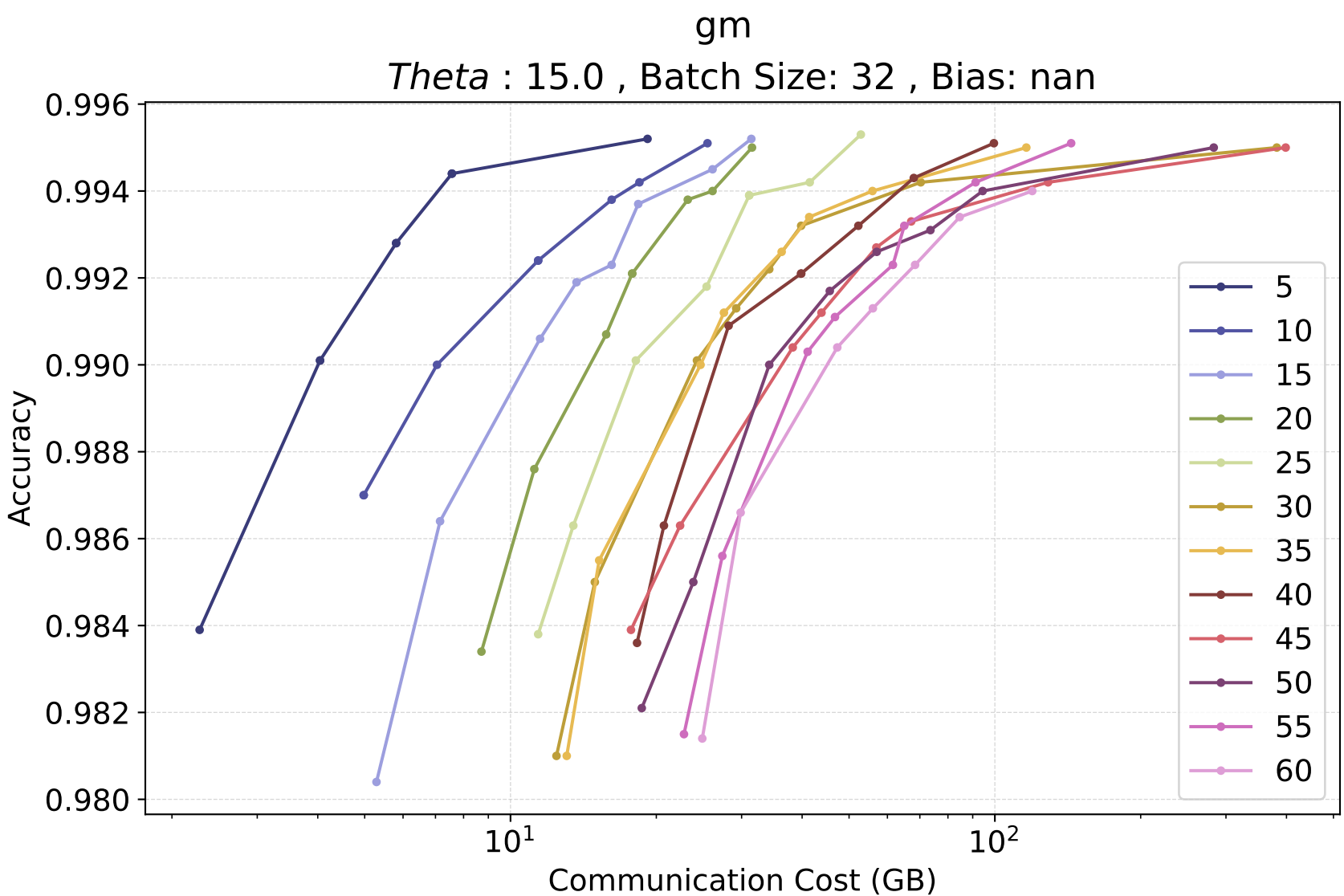
gm
Theta : 15.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
5
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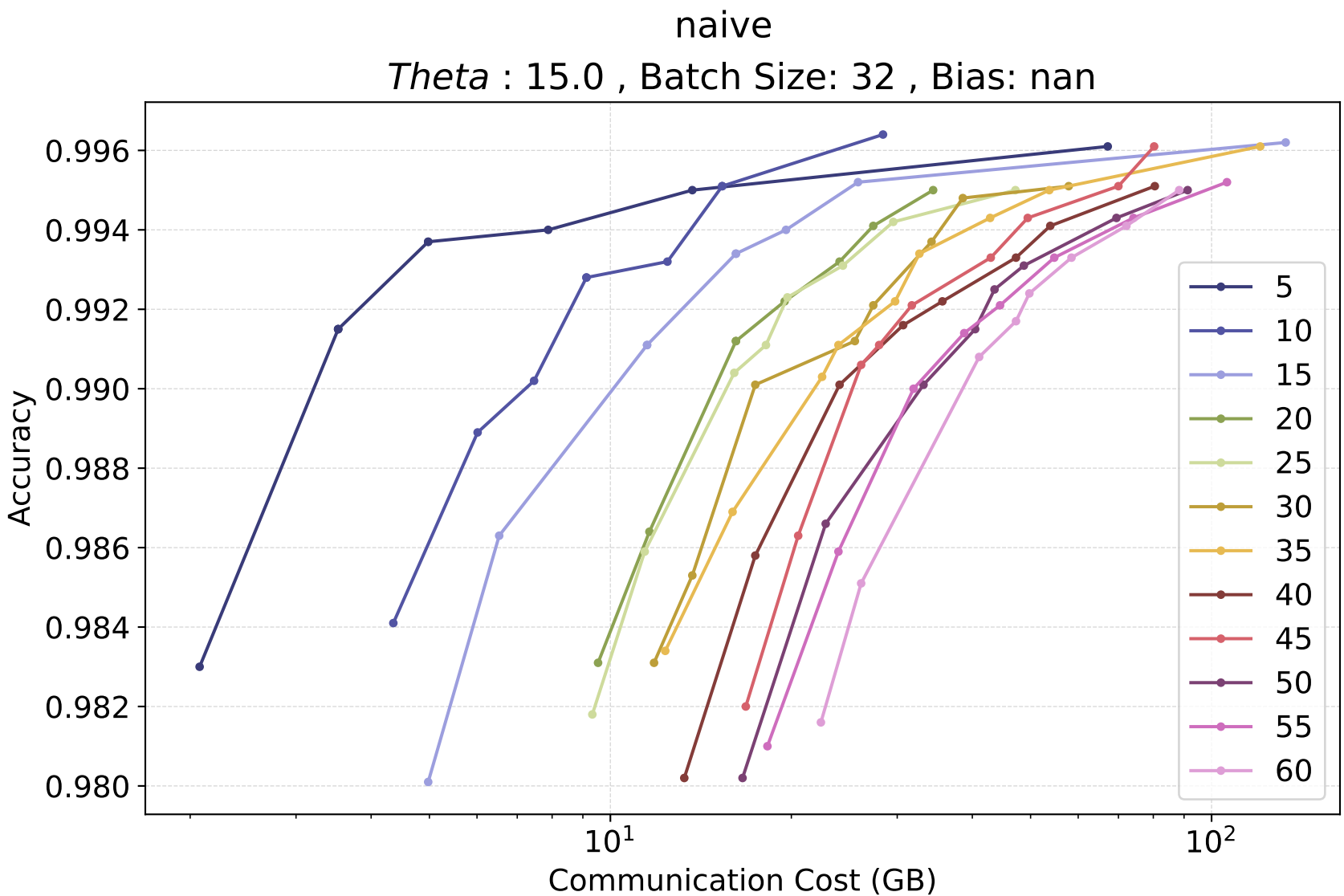
naive
Theta : 15.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
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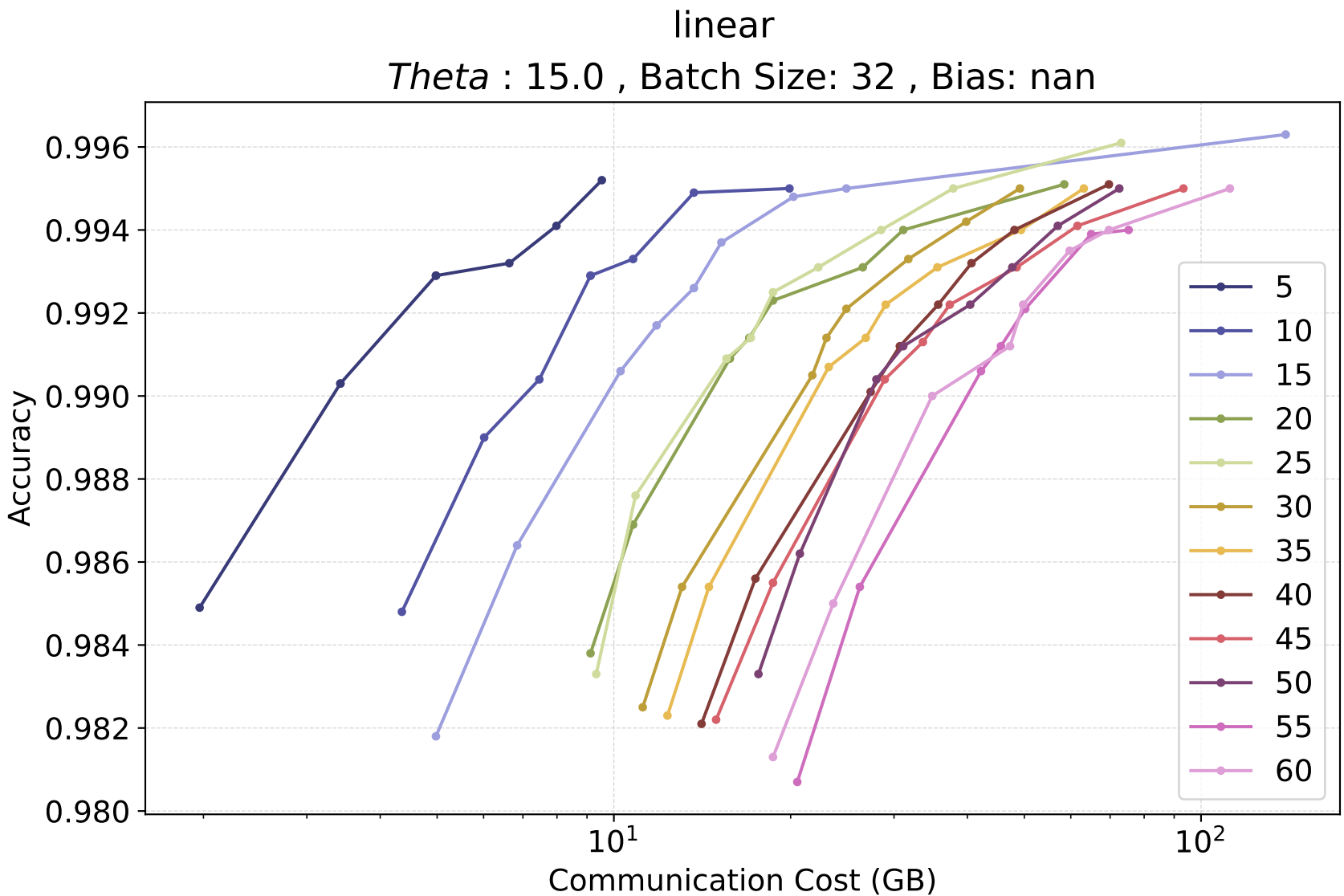
linear
Theta : 15.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
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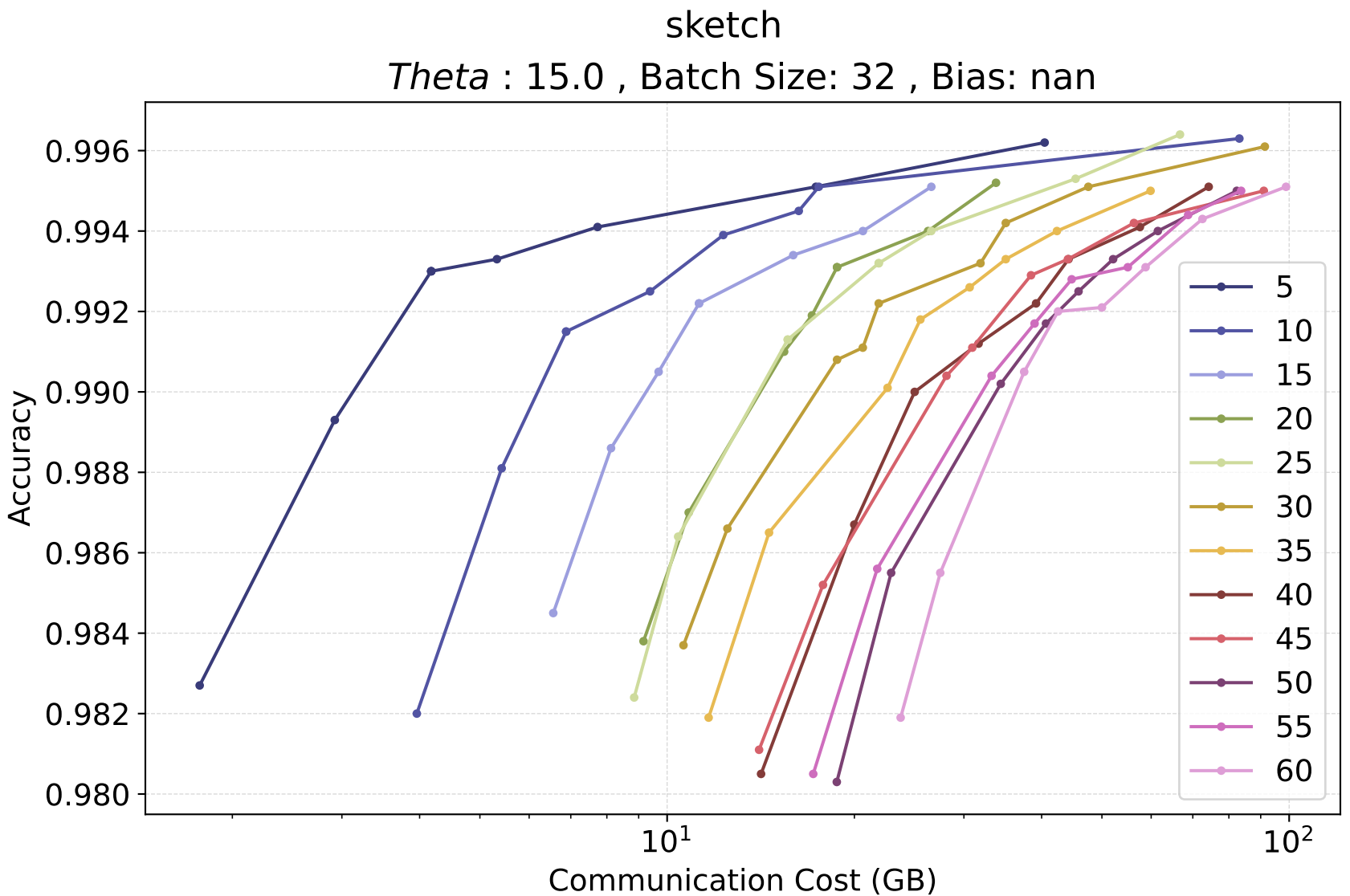
sketch
Theta : 15.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
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10^1
10^2
Communication Cost (GB)
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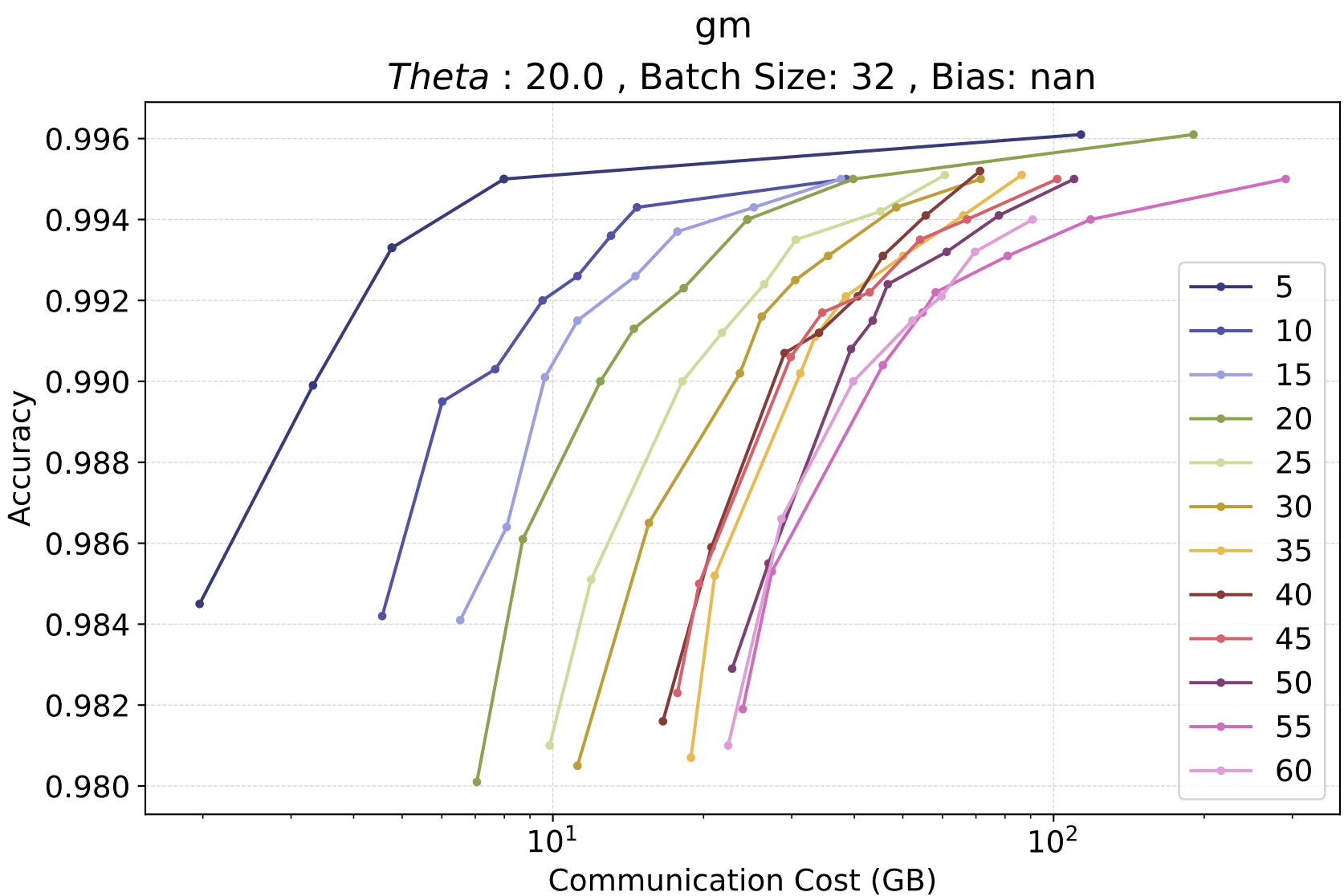
gm
Theta : 20.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
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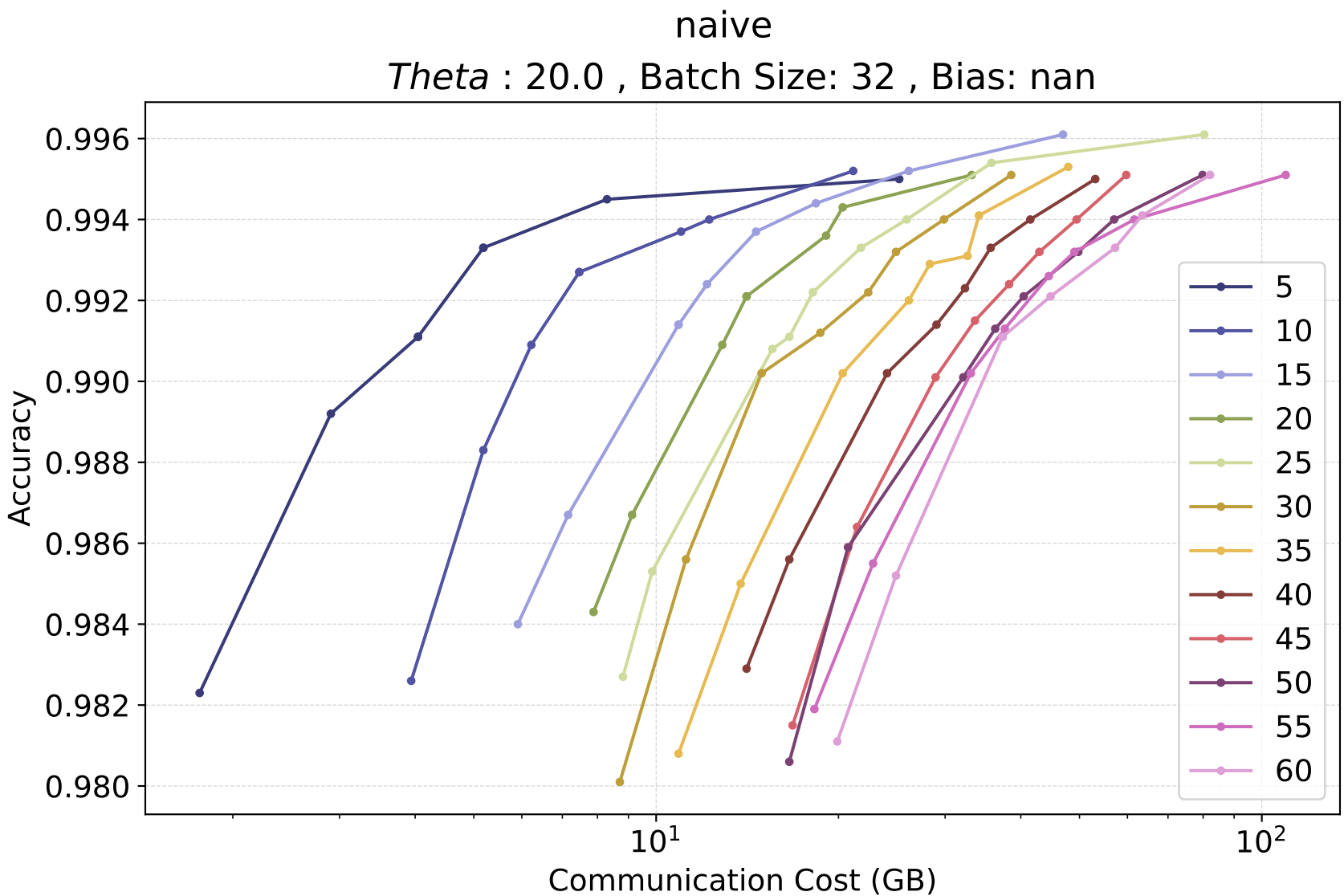
naive
Theta : 20.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
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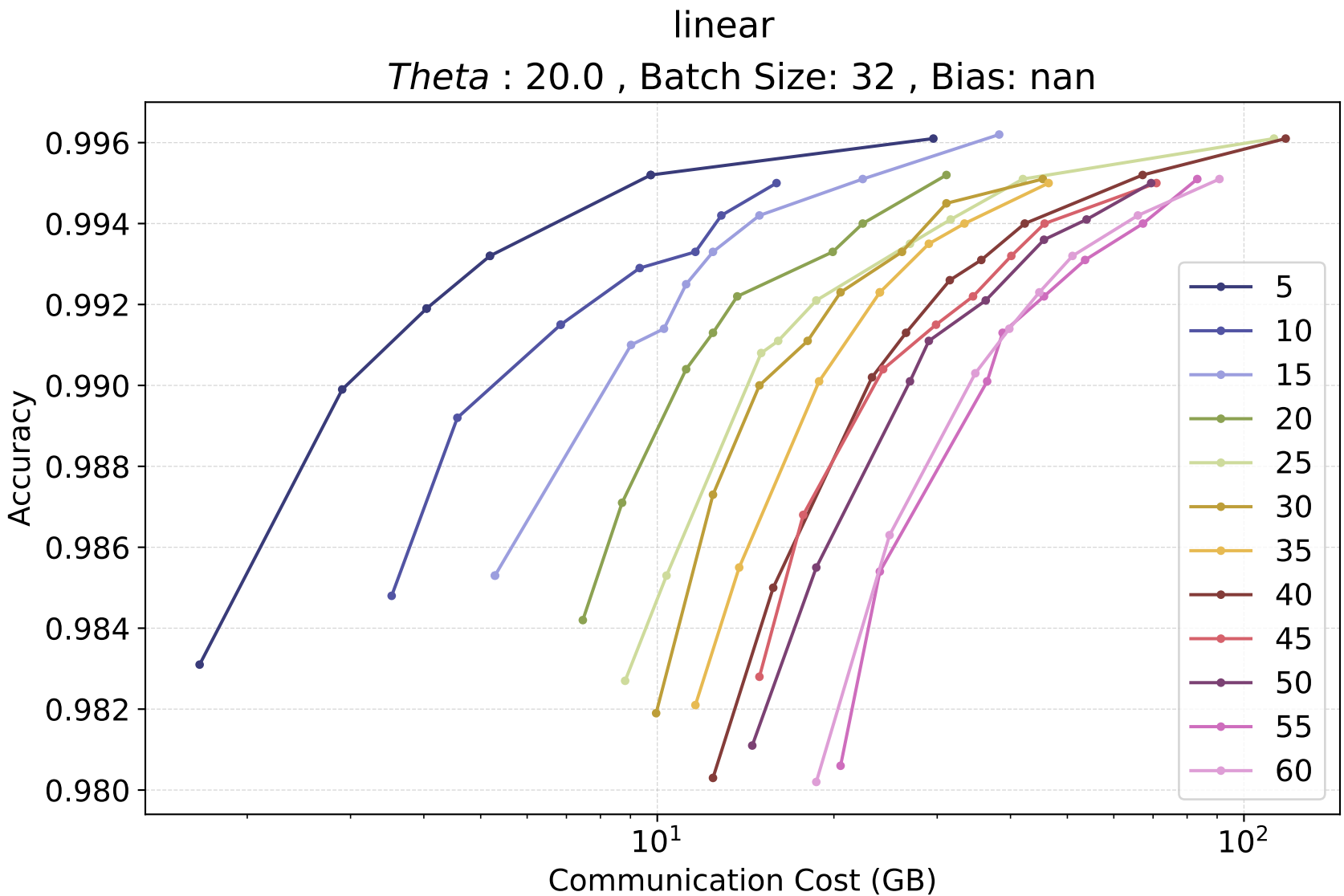
linear
Theta : 20.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
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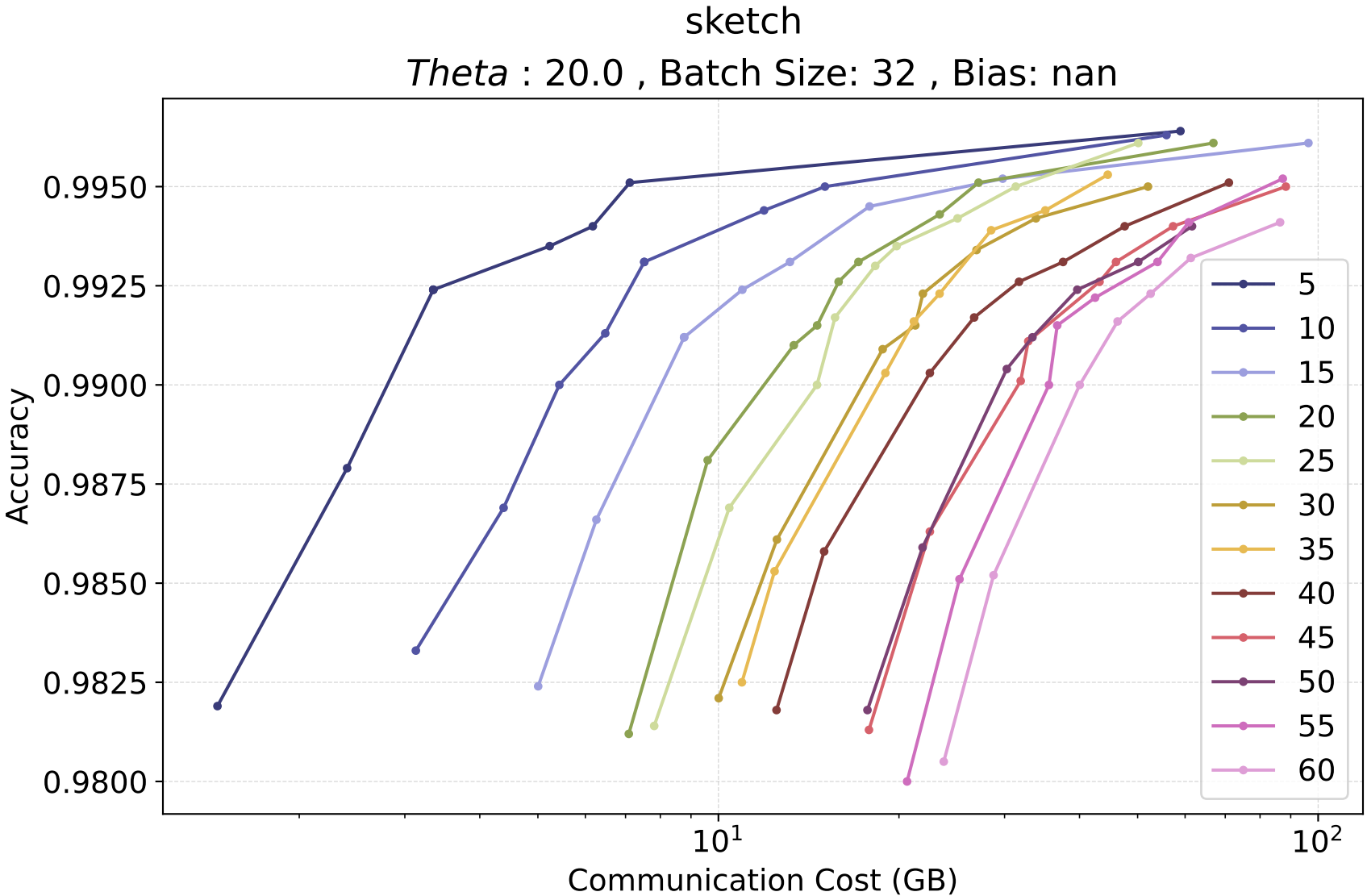
sketch
Theta : 20.0 , Batch Size: 32 , Bias: nan
Accuracy
0.9950
0.9925
0.9900
0.9875
0.9850
0.9825
0.9800
10^1
10^2
Communication Cost (GB)
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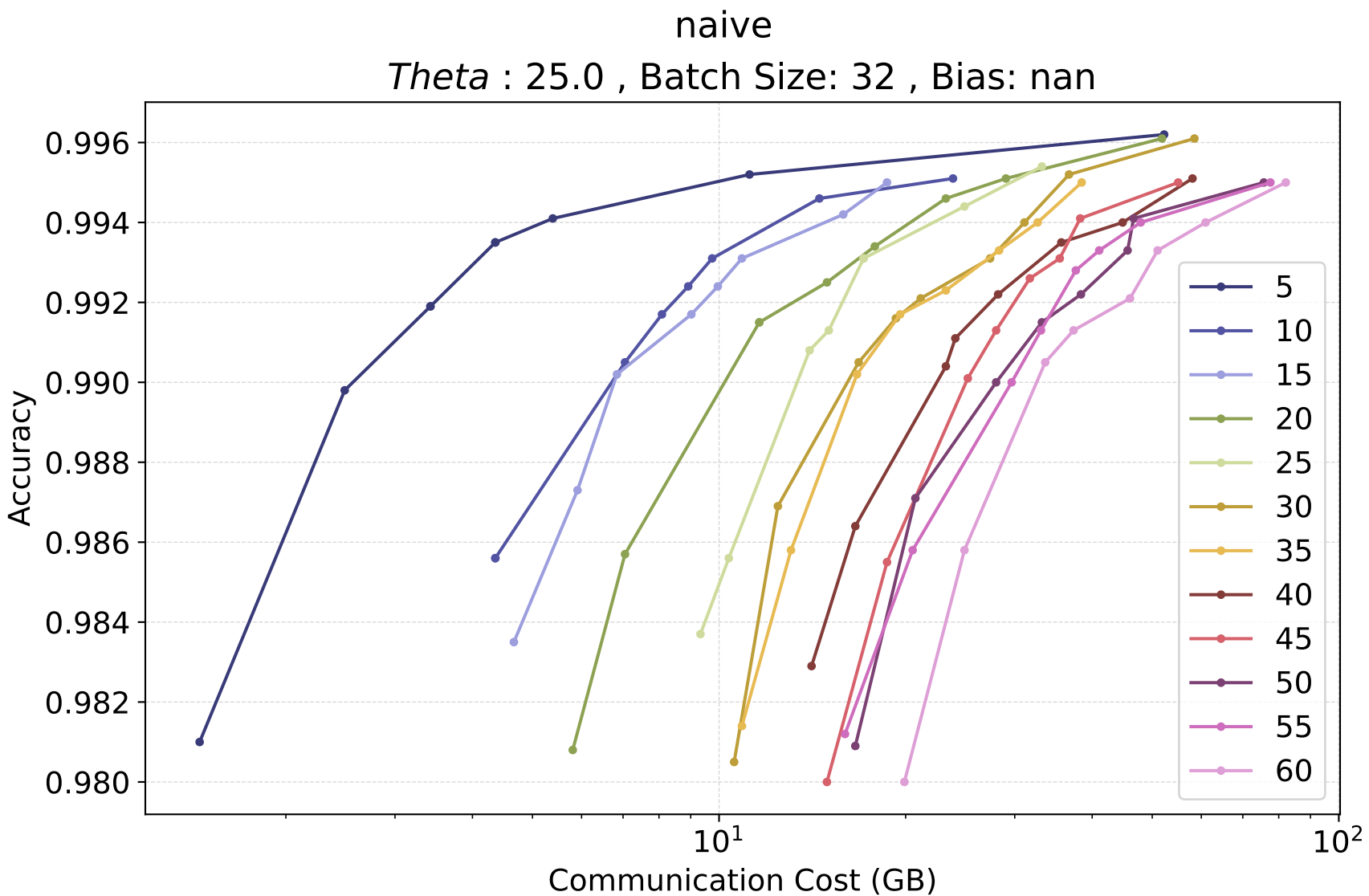
naive
Theta : 25.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
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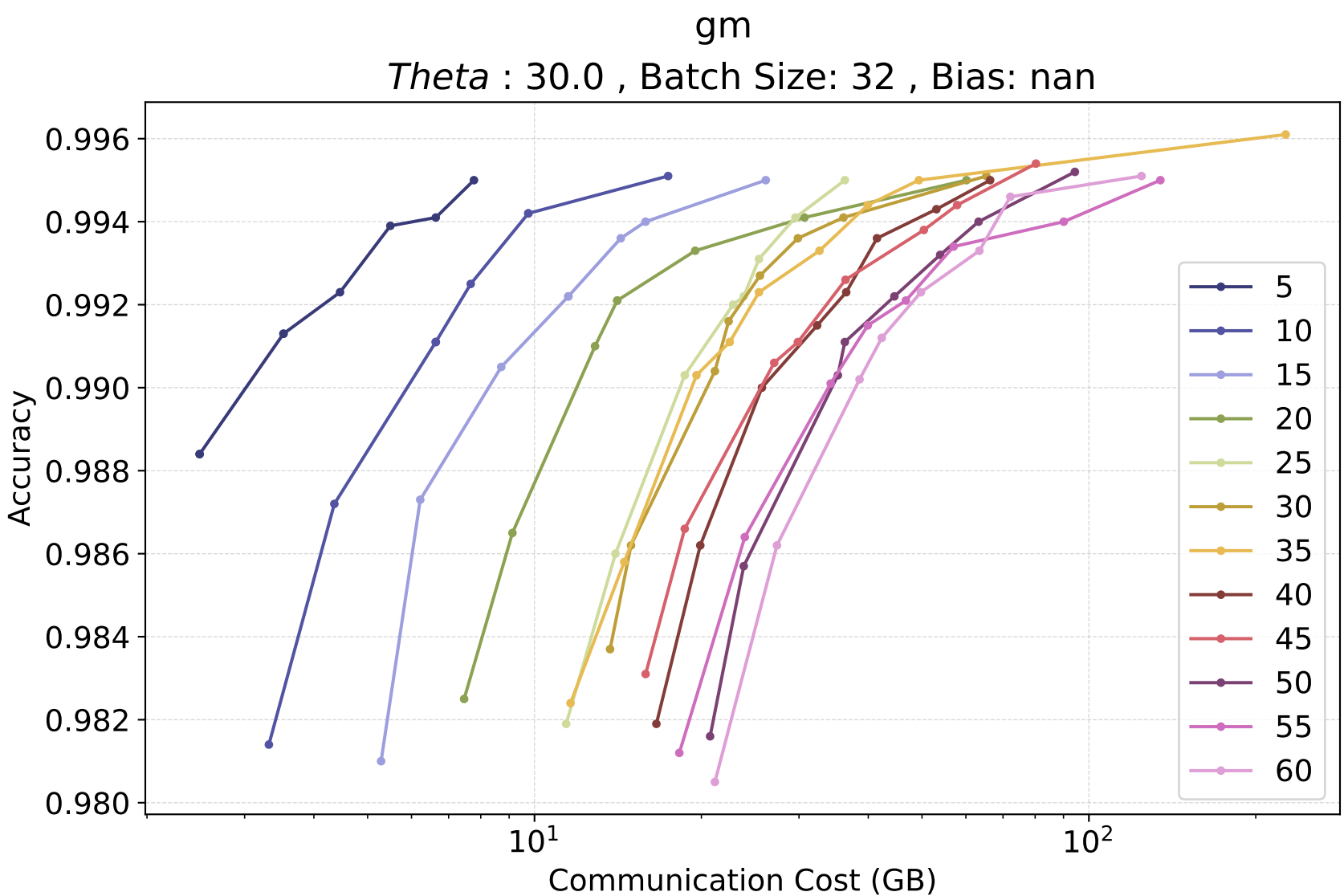
gm
Theta : 30.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
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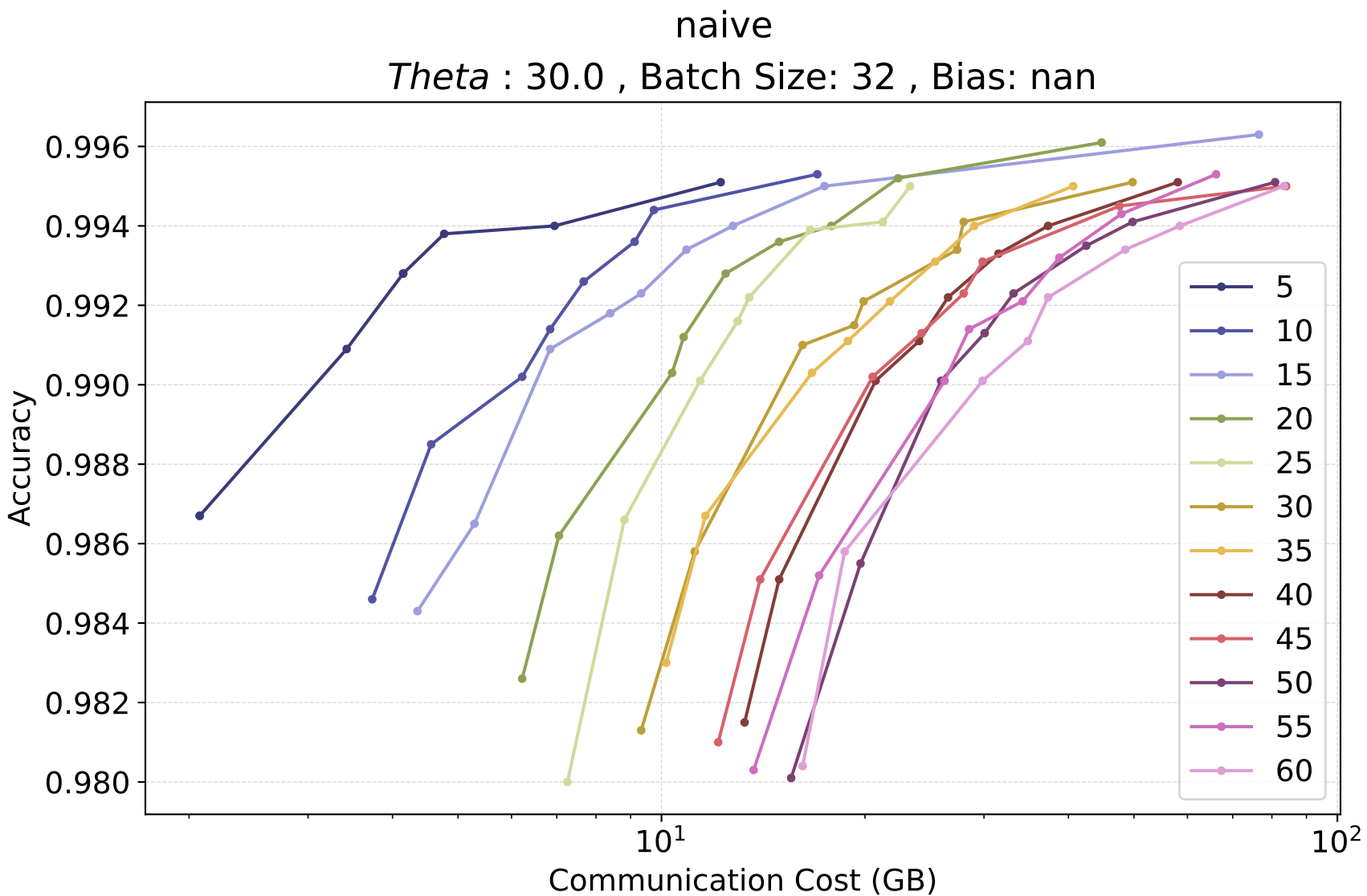
naive
Theta : 30.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
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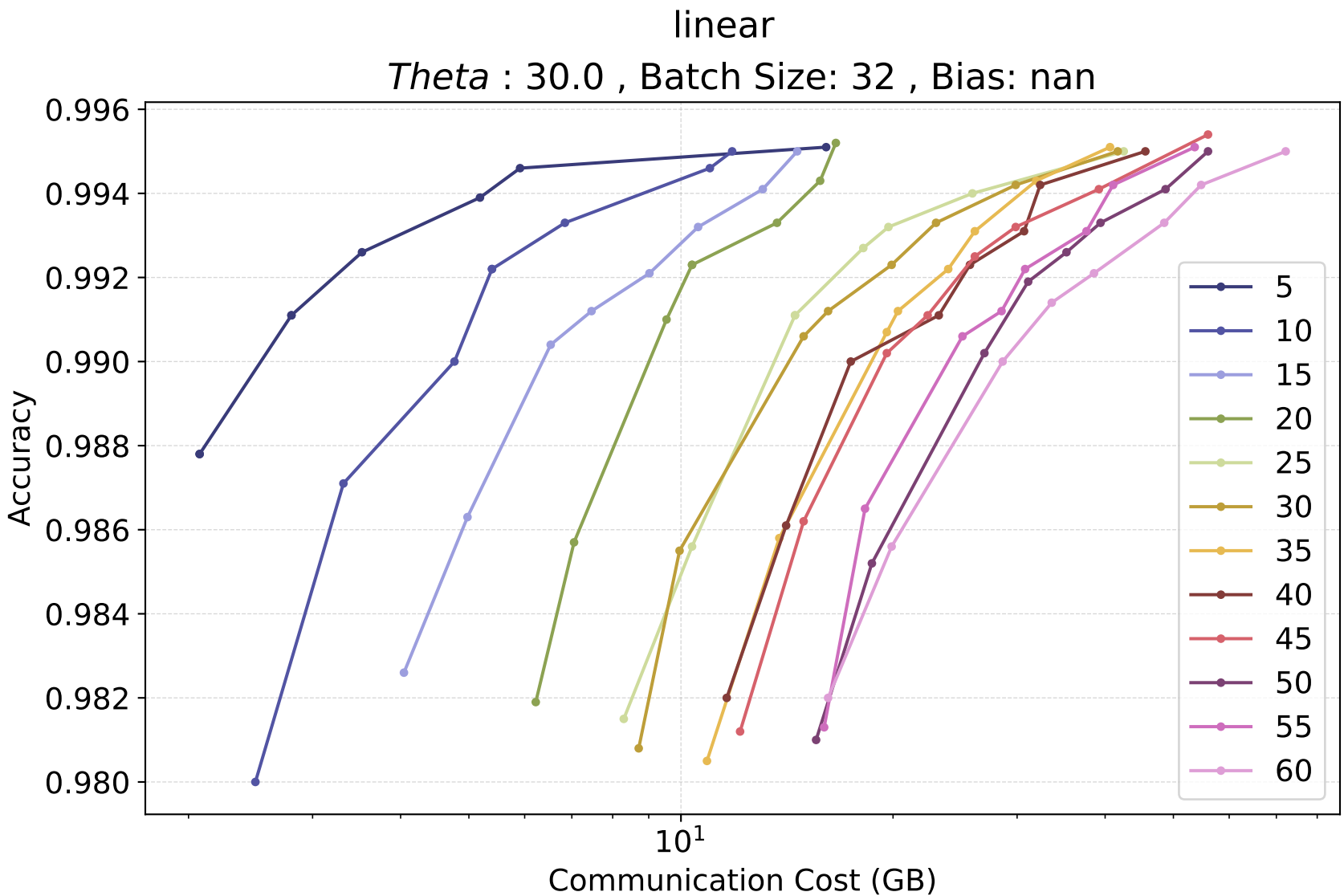
linear
Theta : 30.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
Communication Cost (GB)
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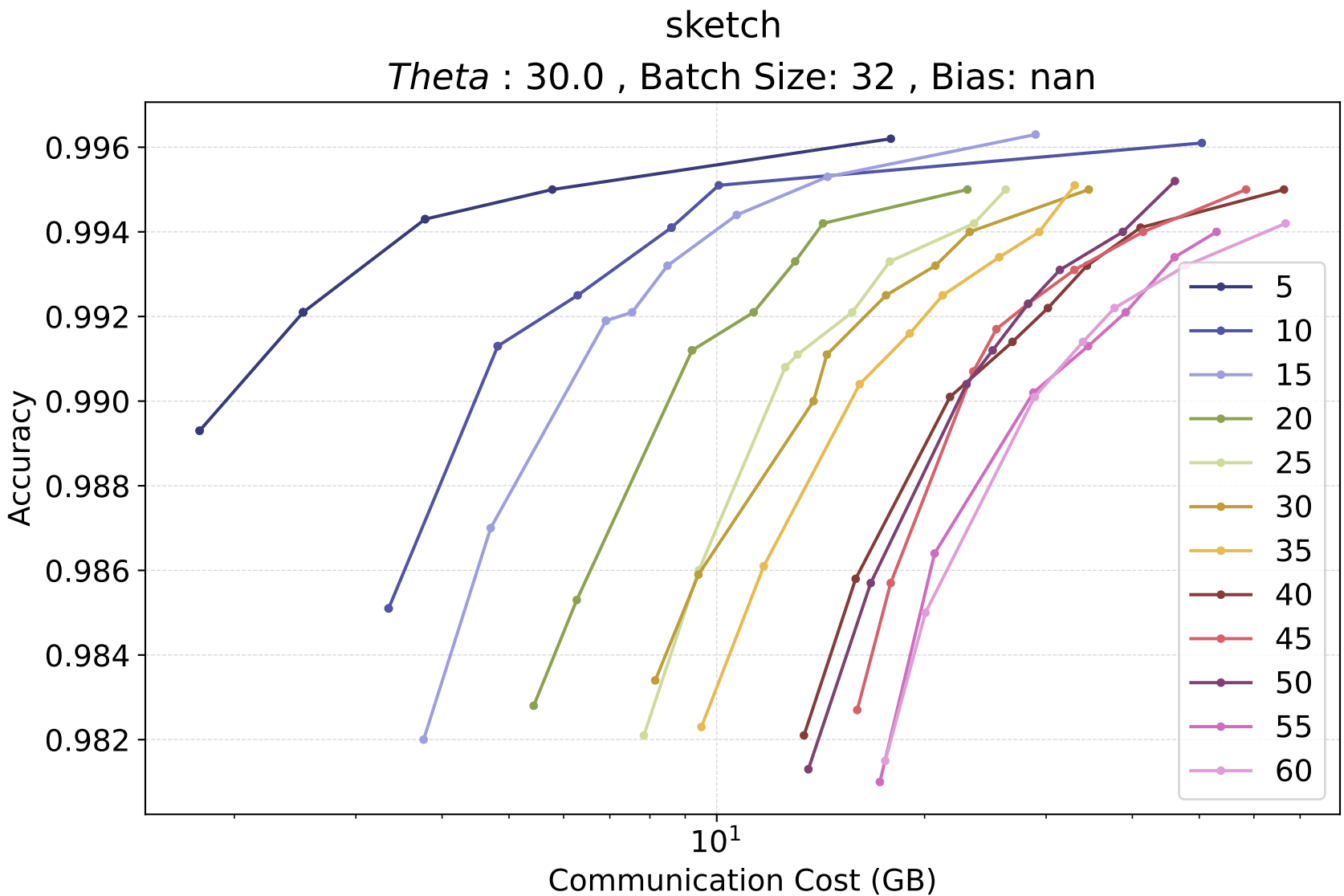
sketch
Theta : 30.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
10^1
Communication Cost (GB)
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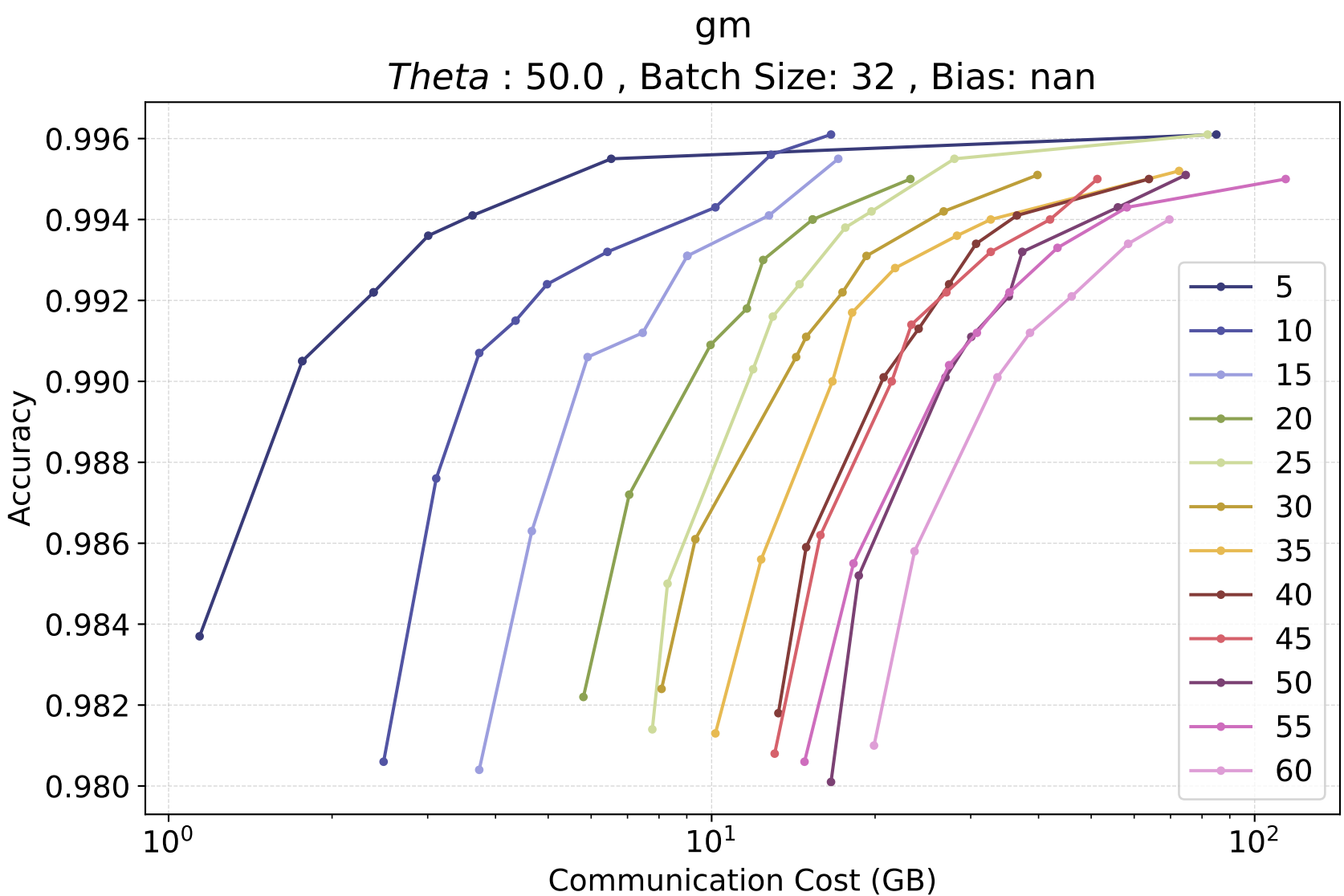
gm
Theta : 50.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^0
10^1
10^2
Communication Cost (GB)
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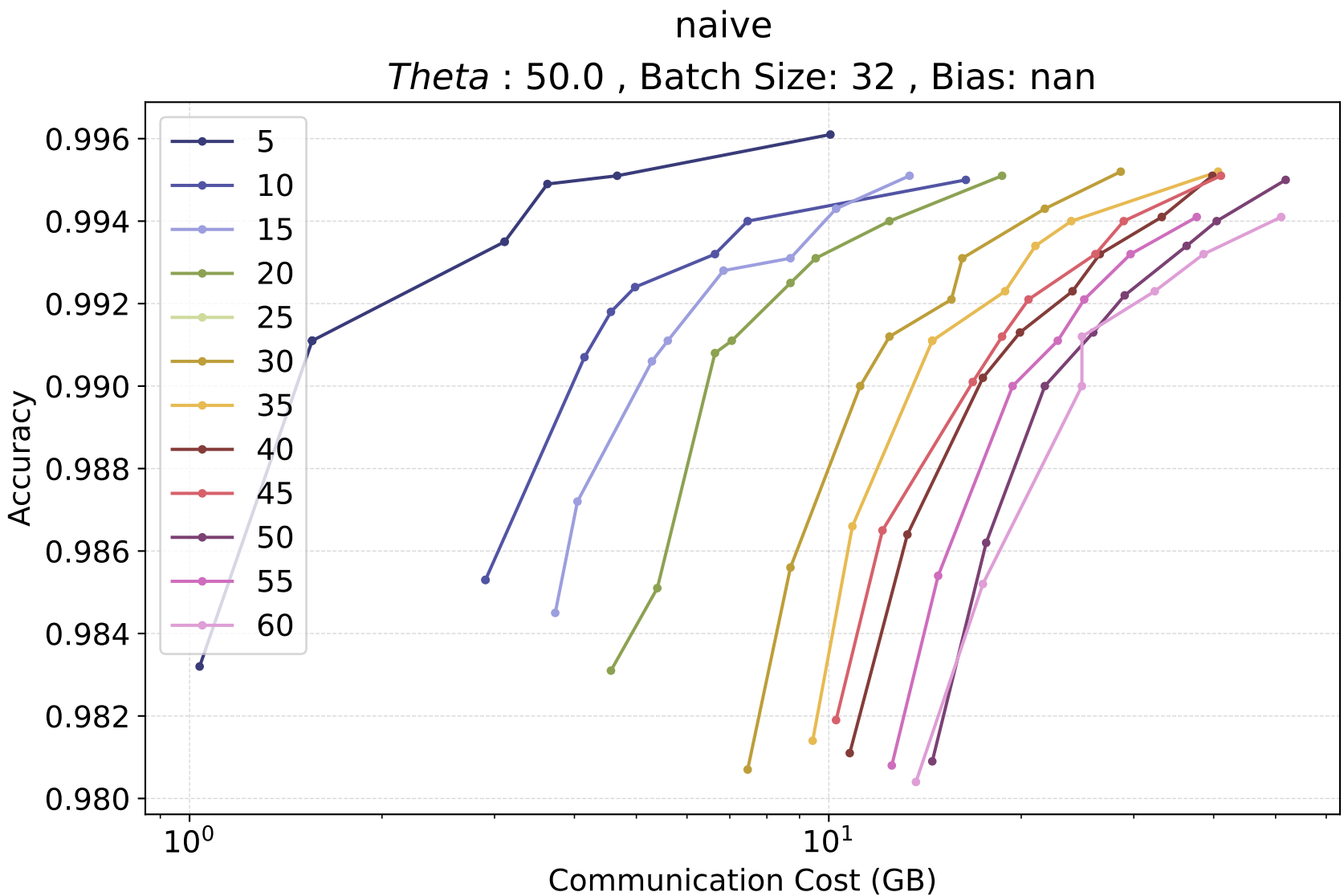
naive
Theta : 50.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
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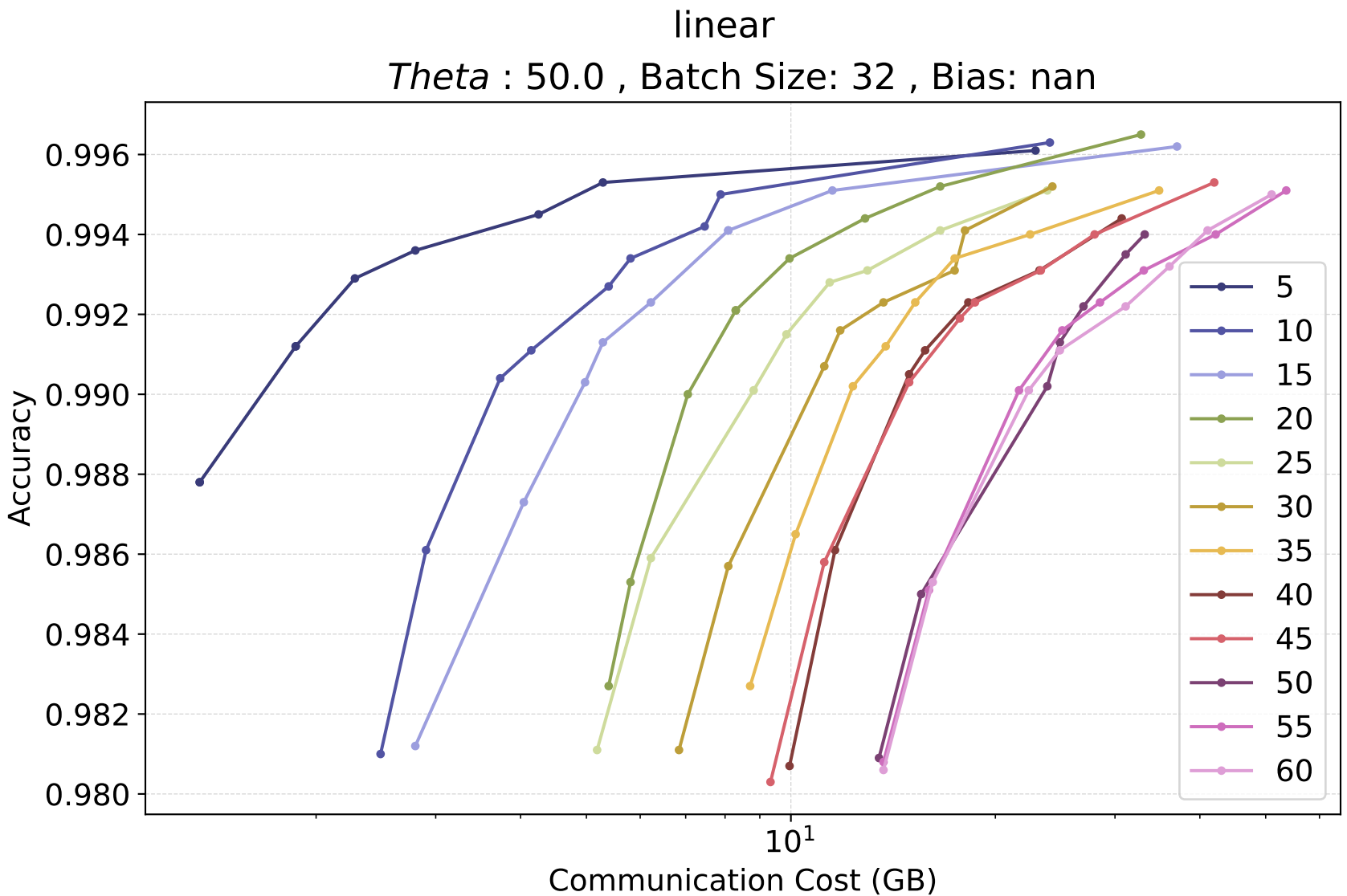
60
10^0
10^1
Communication Cost (GB)


linear
Theta : 50.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
Communication Cost (GB)
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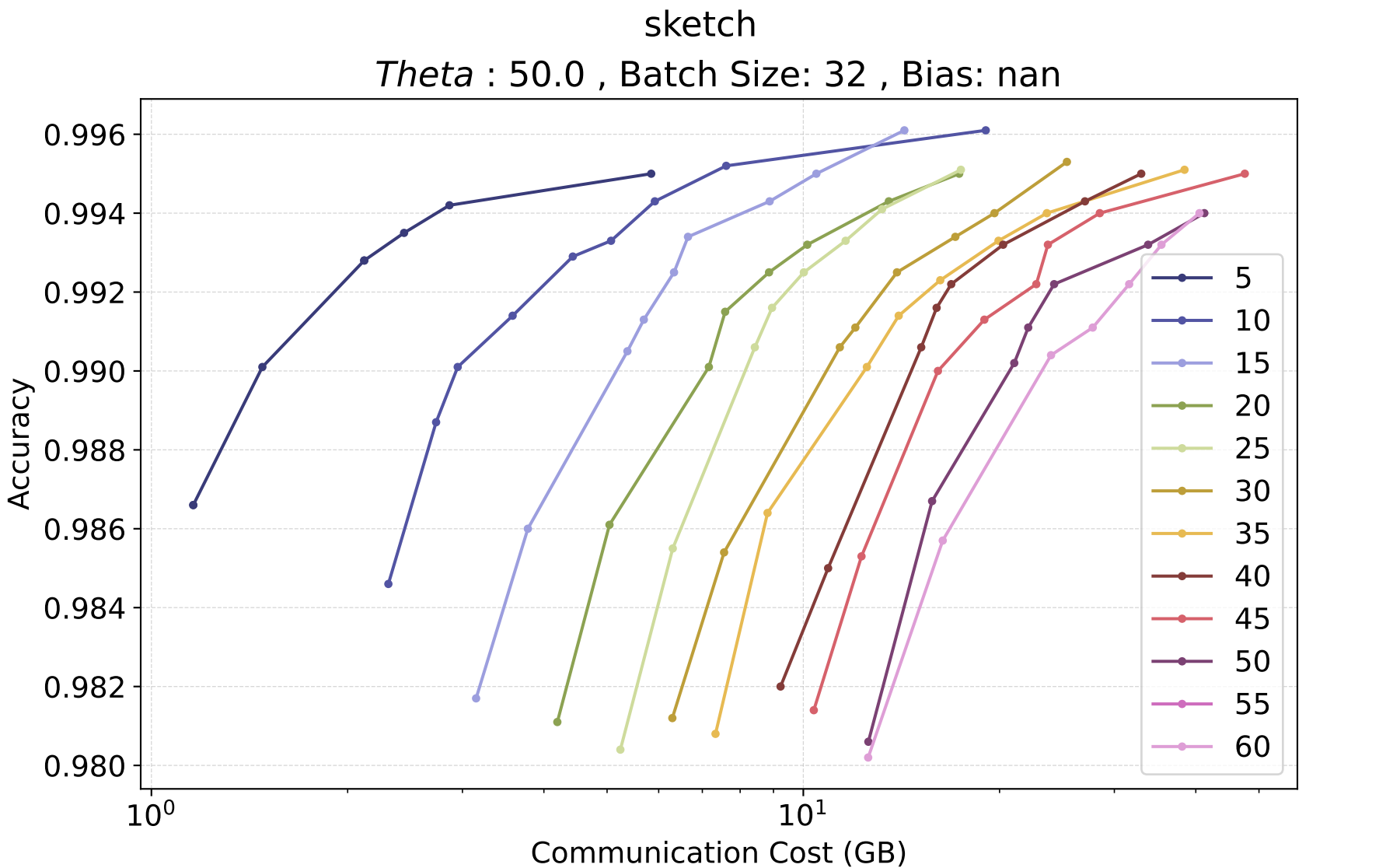
sketch
Theta : 50.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
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0.980
10^0
10^1
Communication Cost (GB)
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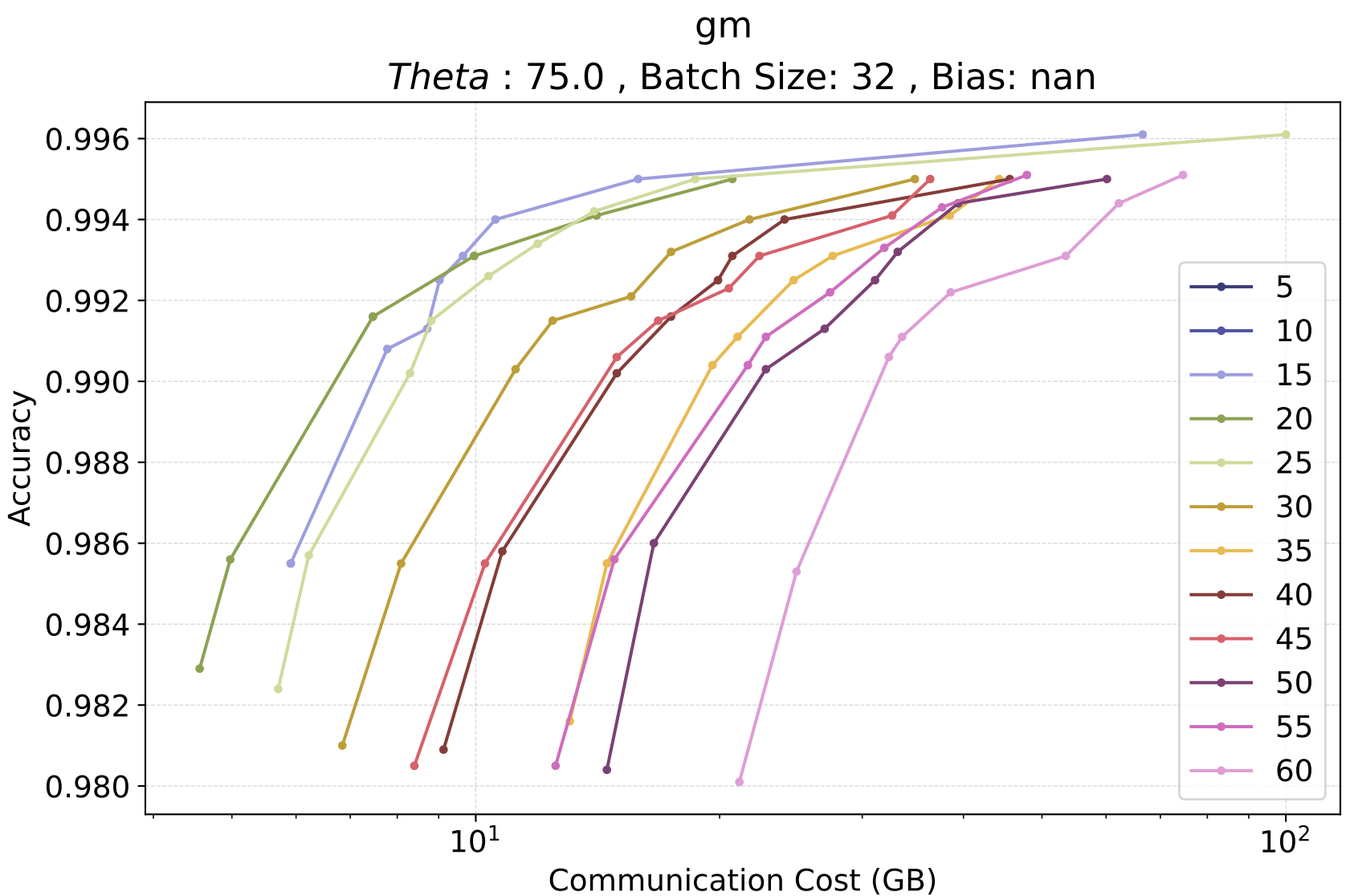
gm
Theta : 75.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
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0.980
10^1
10^2
Communication Cost (GB)
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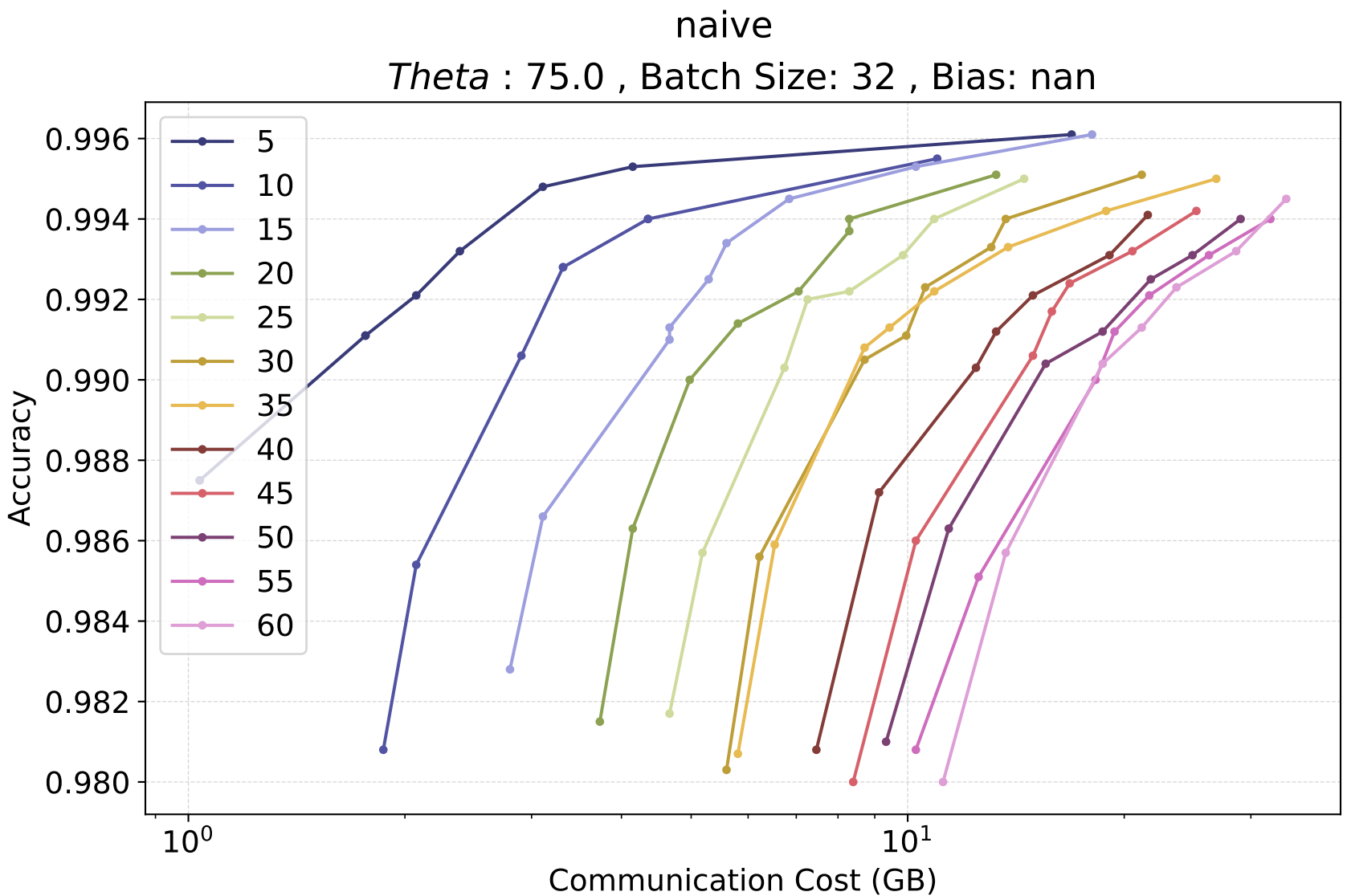
naive
Theta : 75.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
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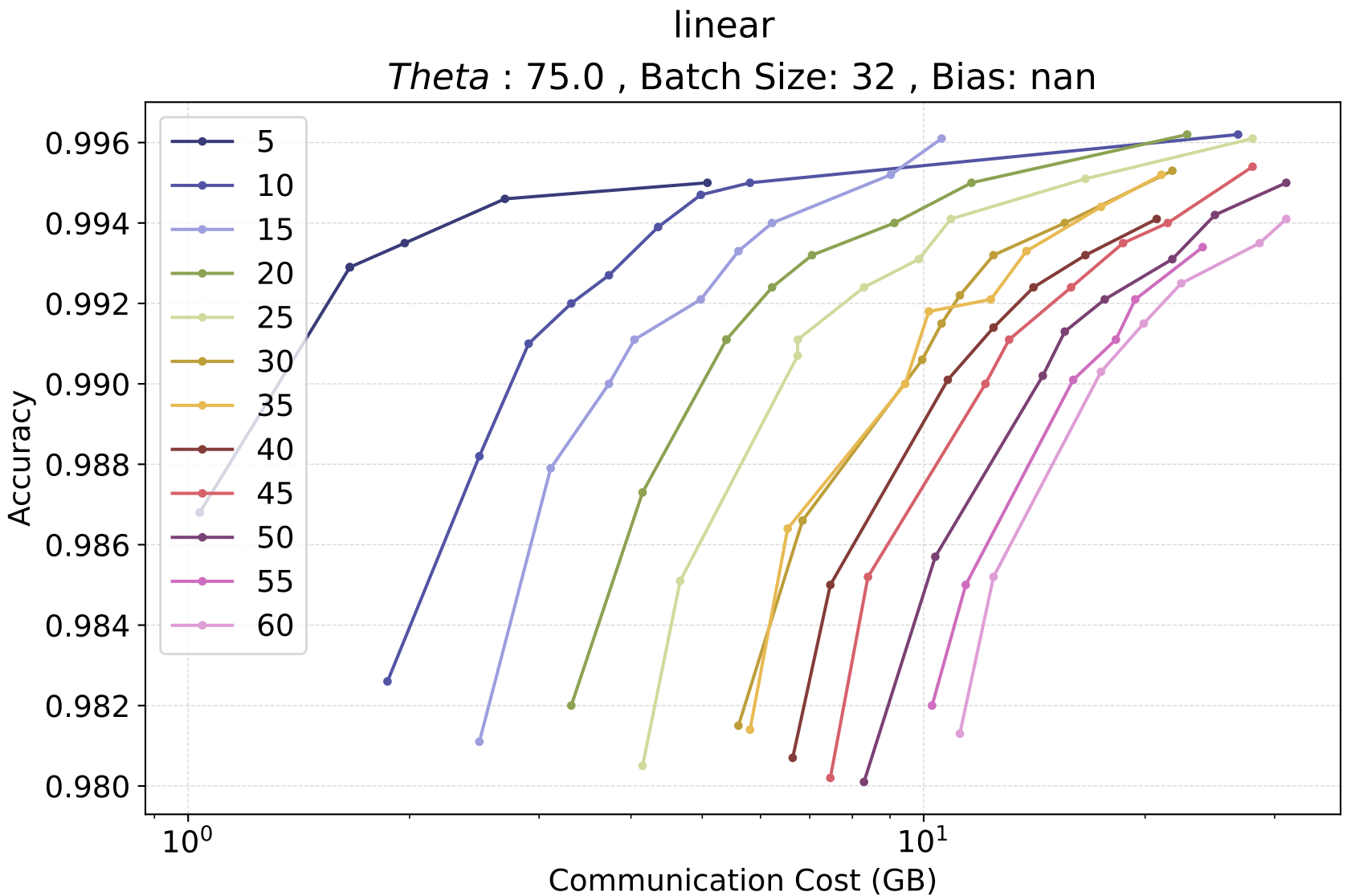
10^0
10^1
Communication Cost (GB)


linear
Theta : 75.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
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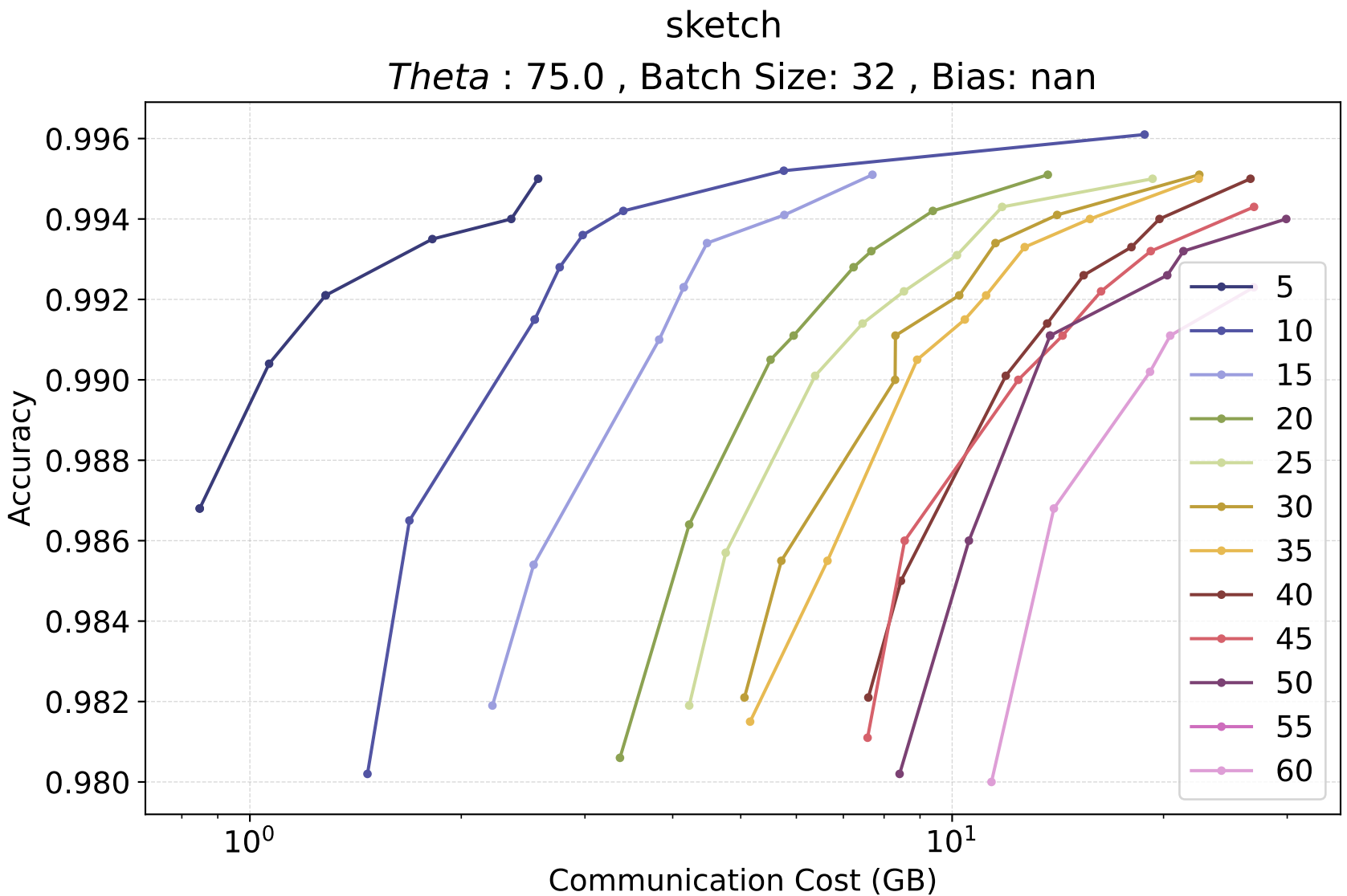
10^0
10^1
Communication Cost (GB)


sketch
Theta : 75.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
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10^0
10^1
Communication Cost (GB)
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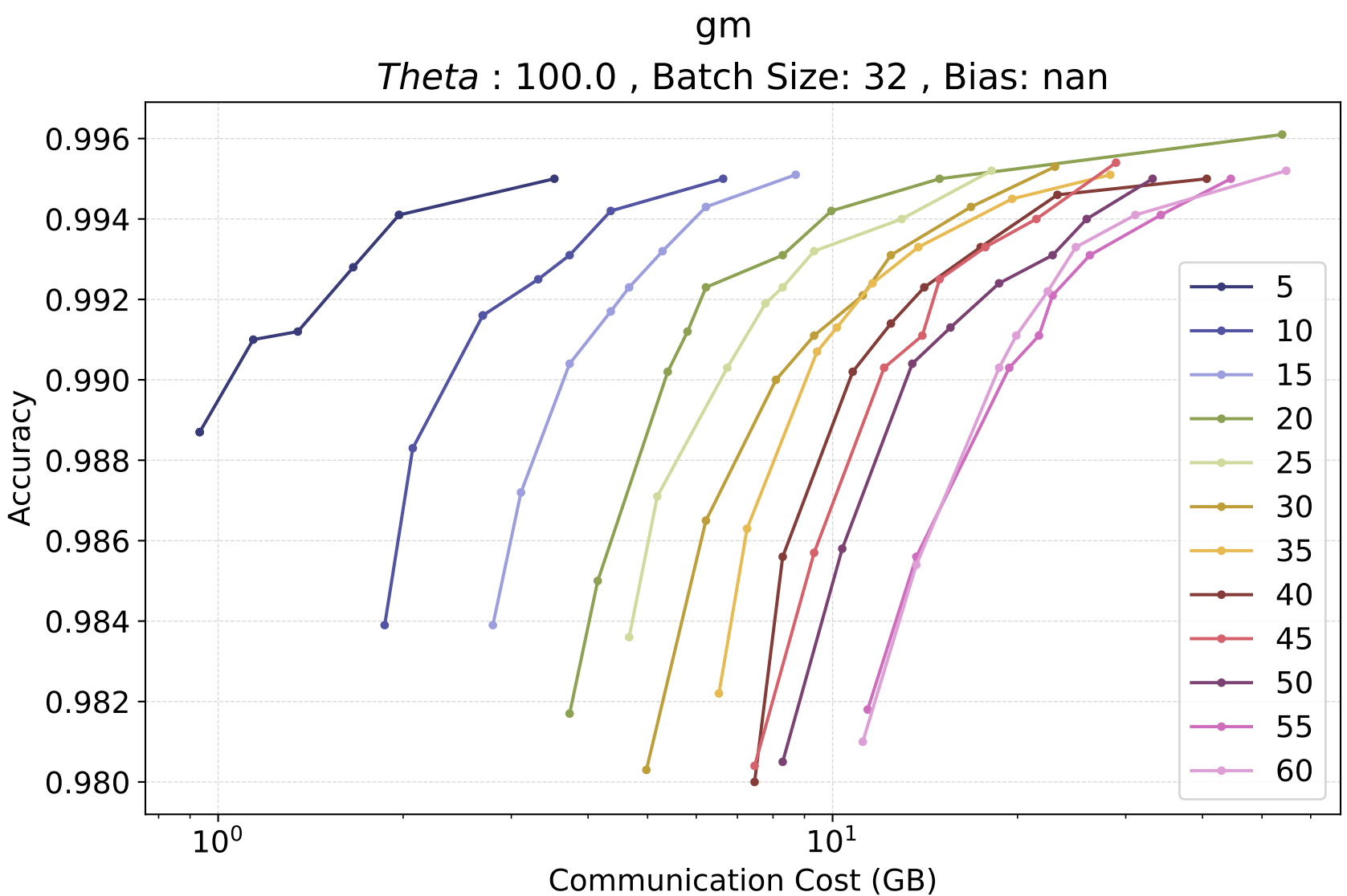
gm
Theta : 100.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
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10^1
Communication Cost (GB)
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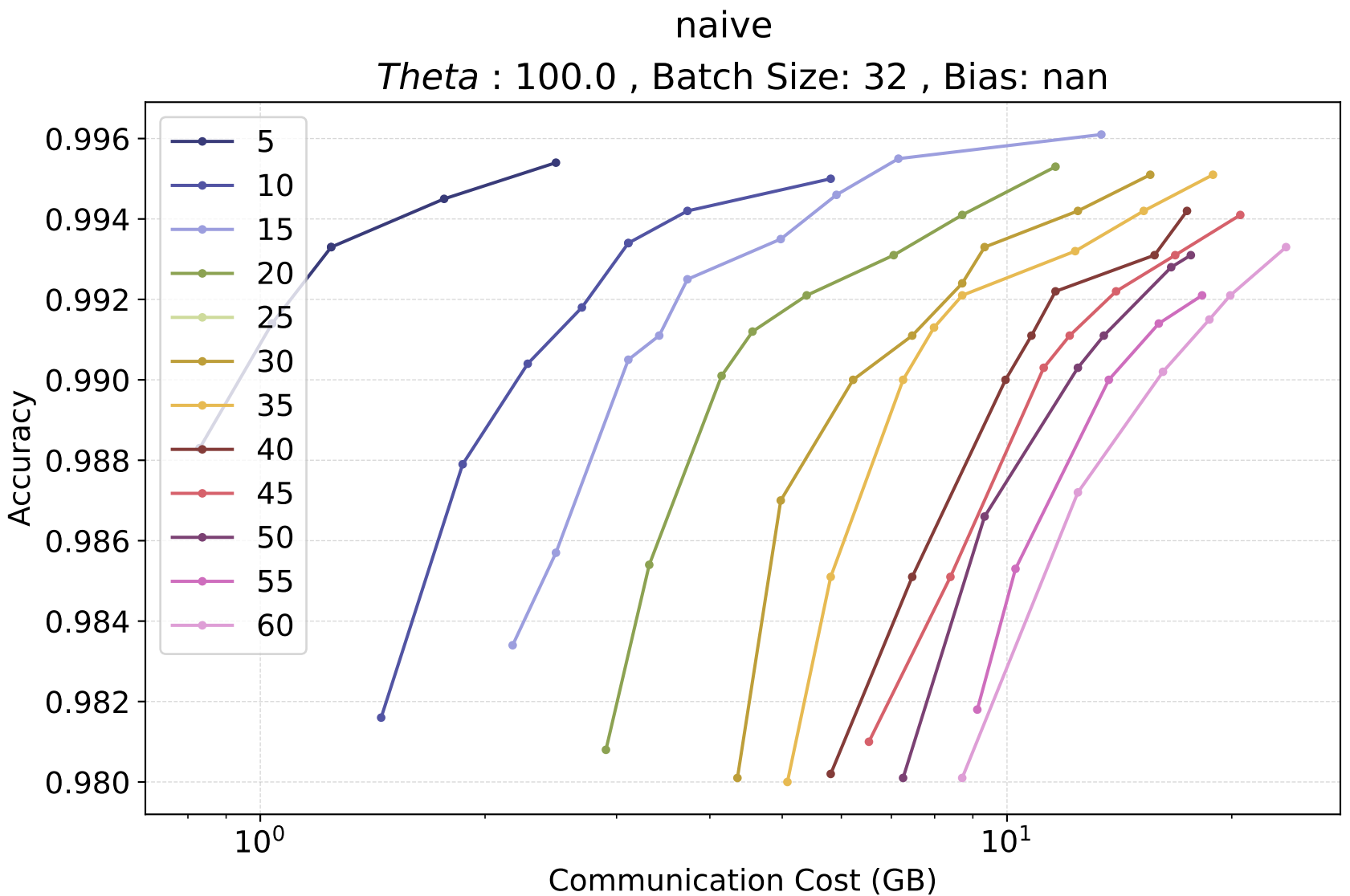
naive
Theta : 100.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
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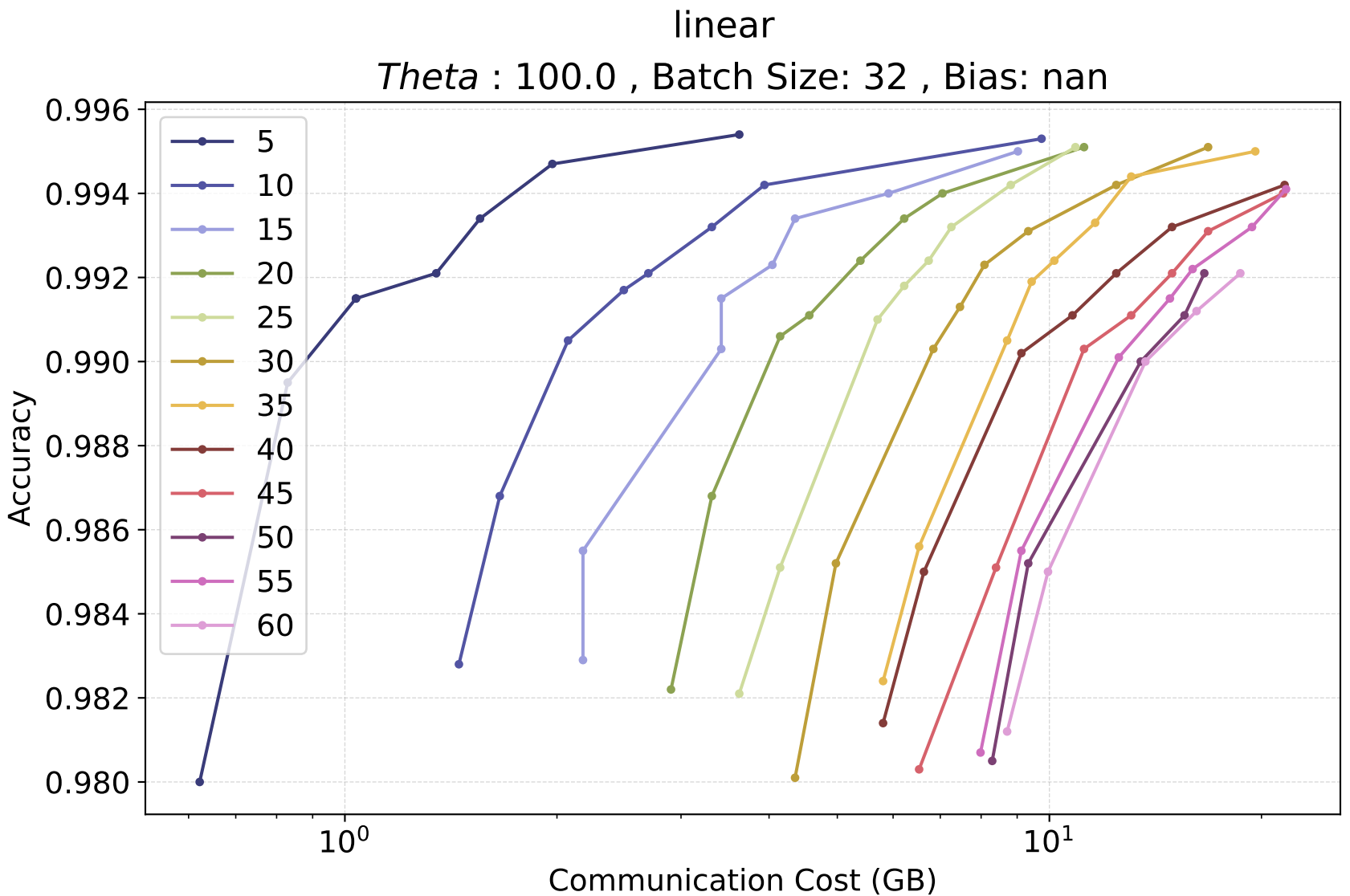
10^0
10^1
Communication Cost (GB)


linear
Theta : 100.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
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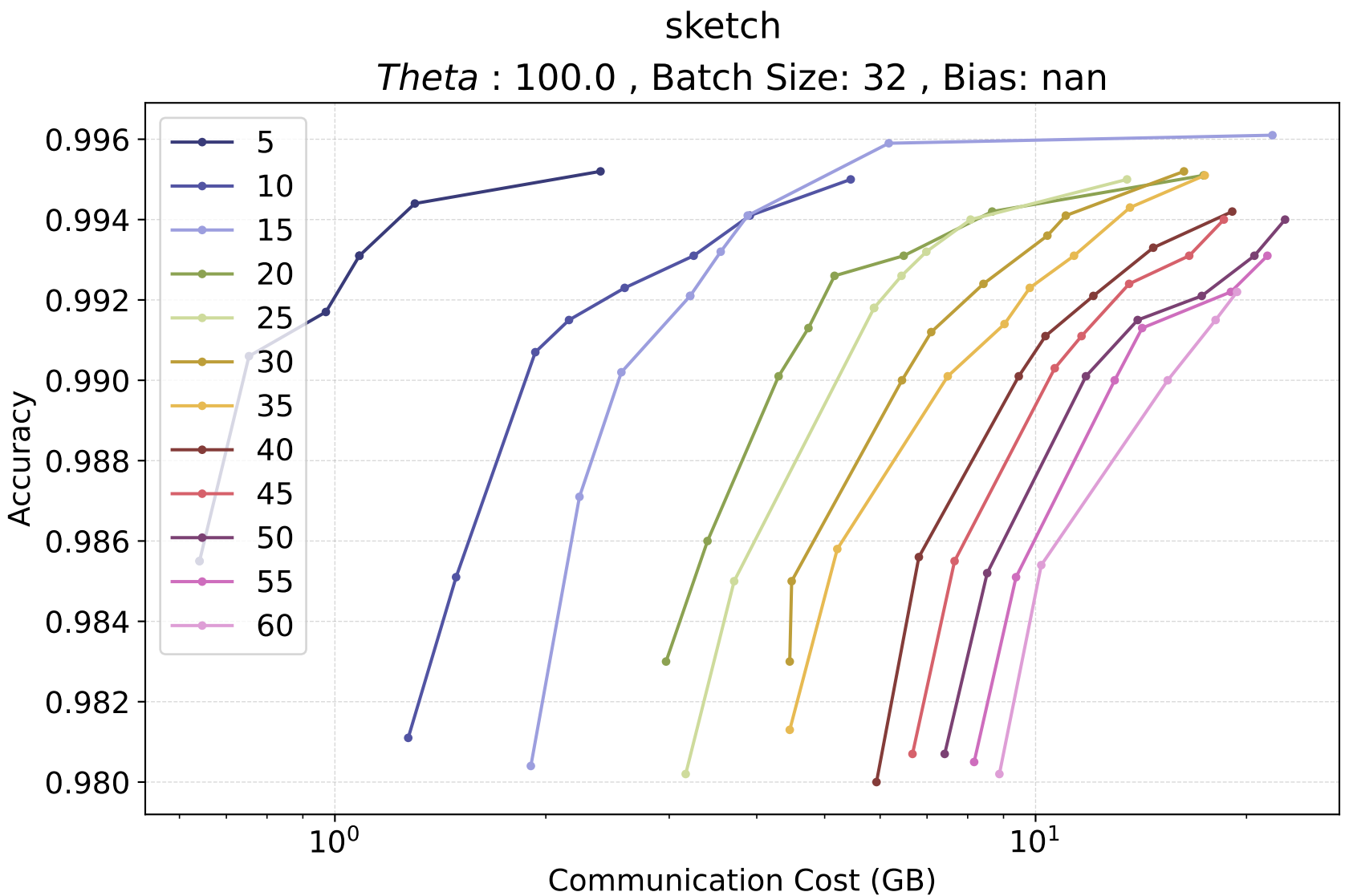
10^0
10^1
Communication Cost (GB)


sketch
Theta : 100.0 , Batch Size: 32 , Bias: nan
Accuracy
0.996
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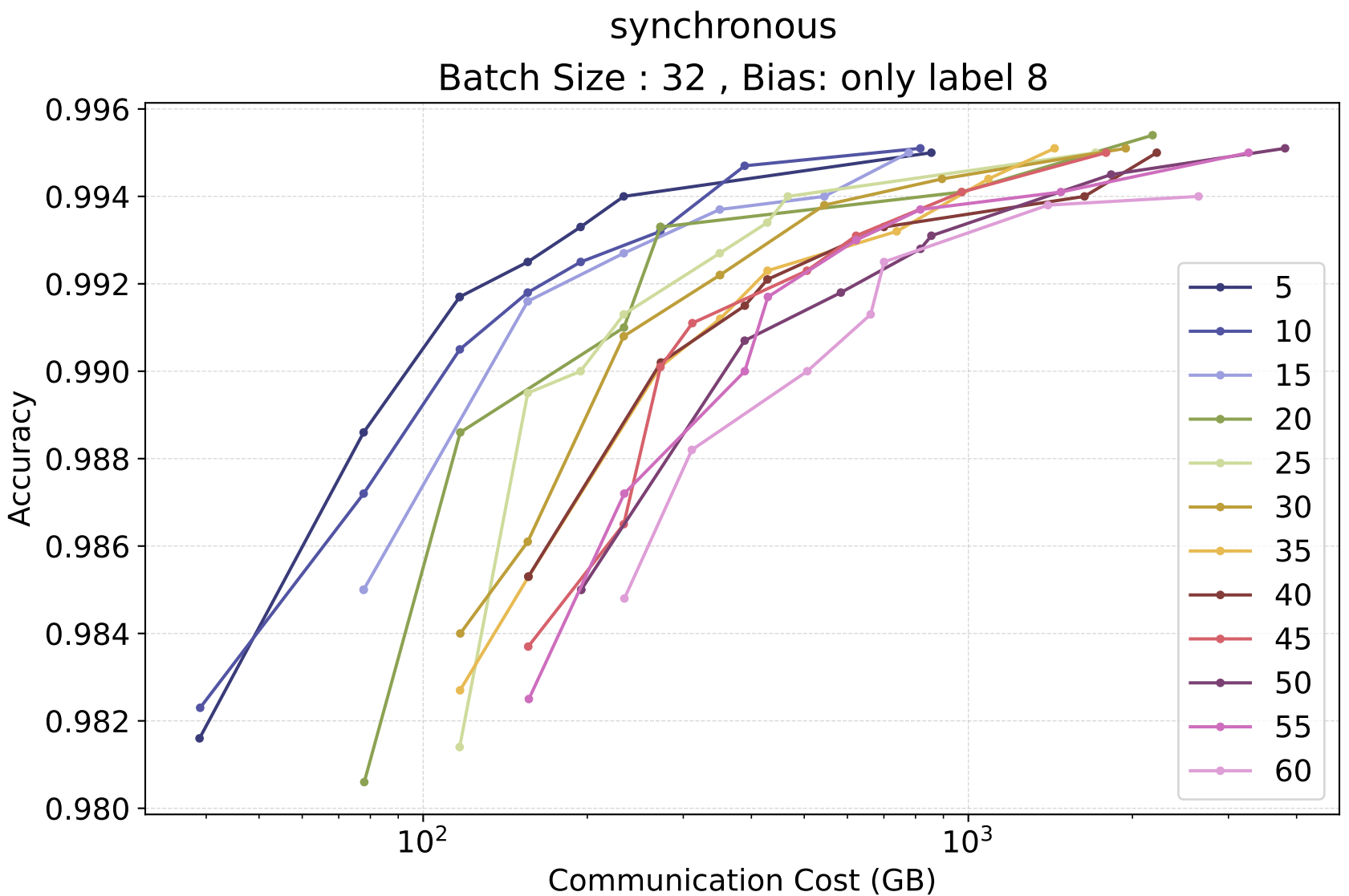
10^0
10^1
Communication Cost (GB)


synchronous
Batch Size : 32 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^2
10^3
Communication Cost (GB)
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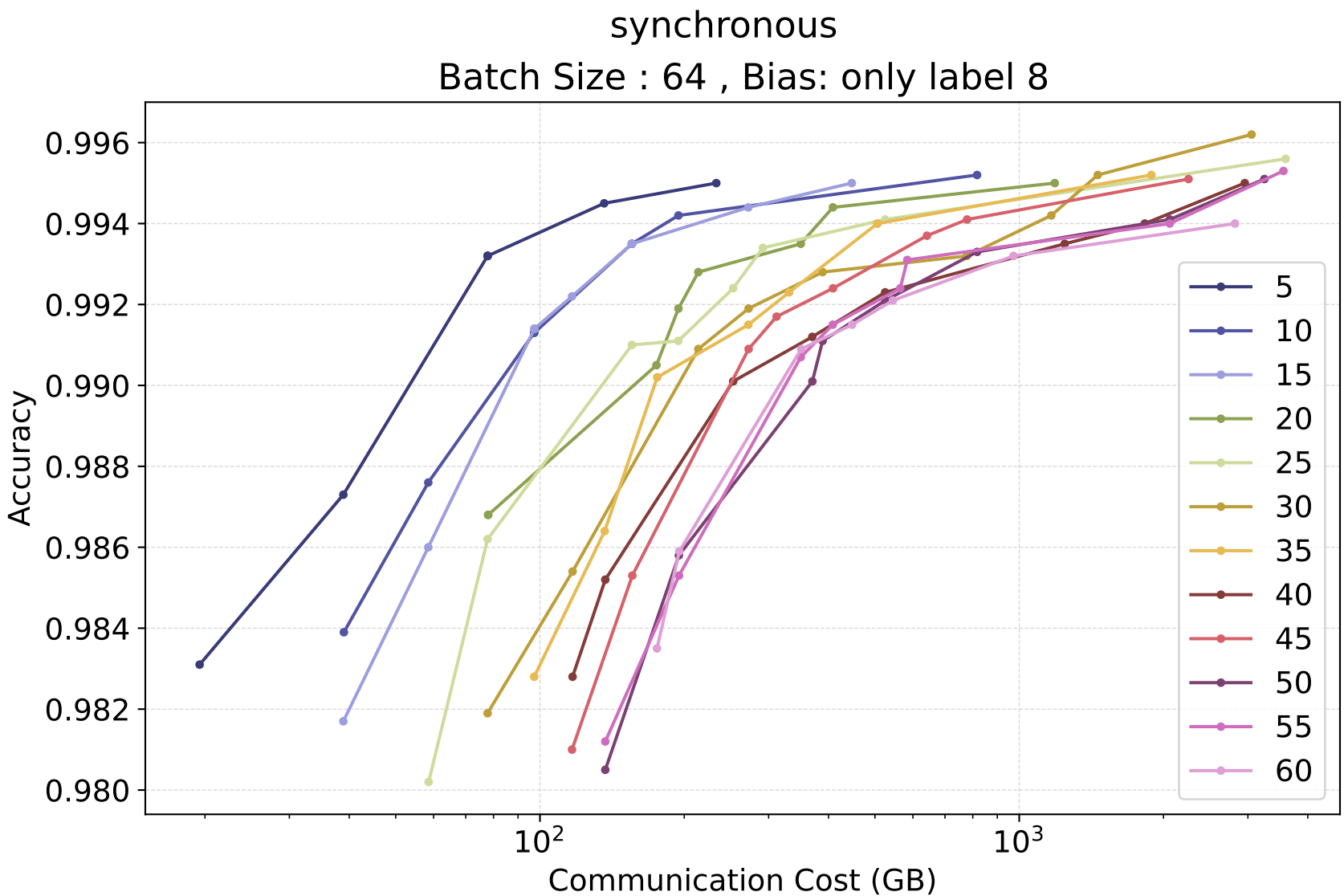
synchronous
Batch Size : 64 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^2
10^3
Communication Cost (GB)
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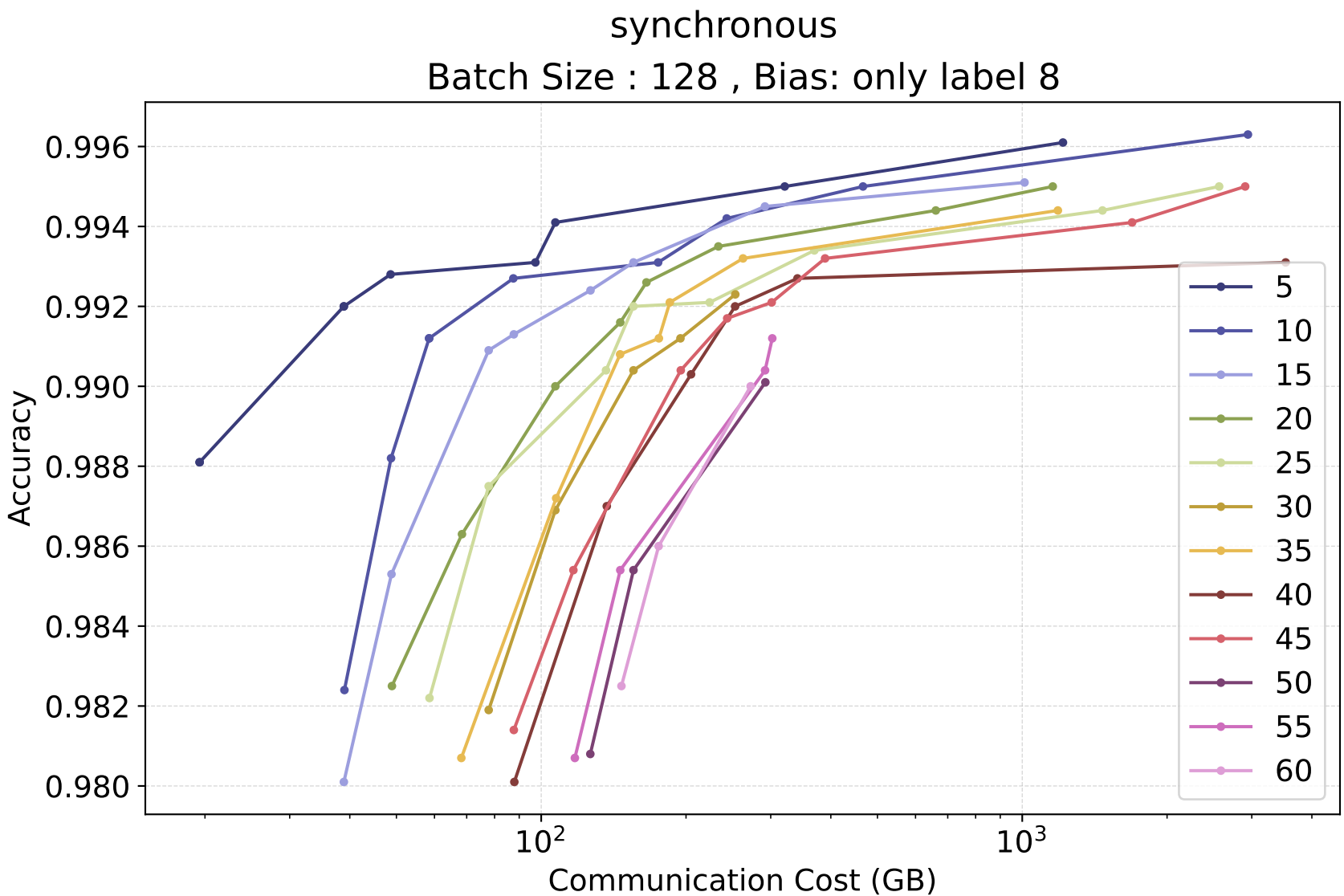
synchronous
Batch Size : 128 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^2
10^3
Communication Cost (GB)
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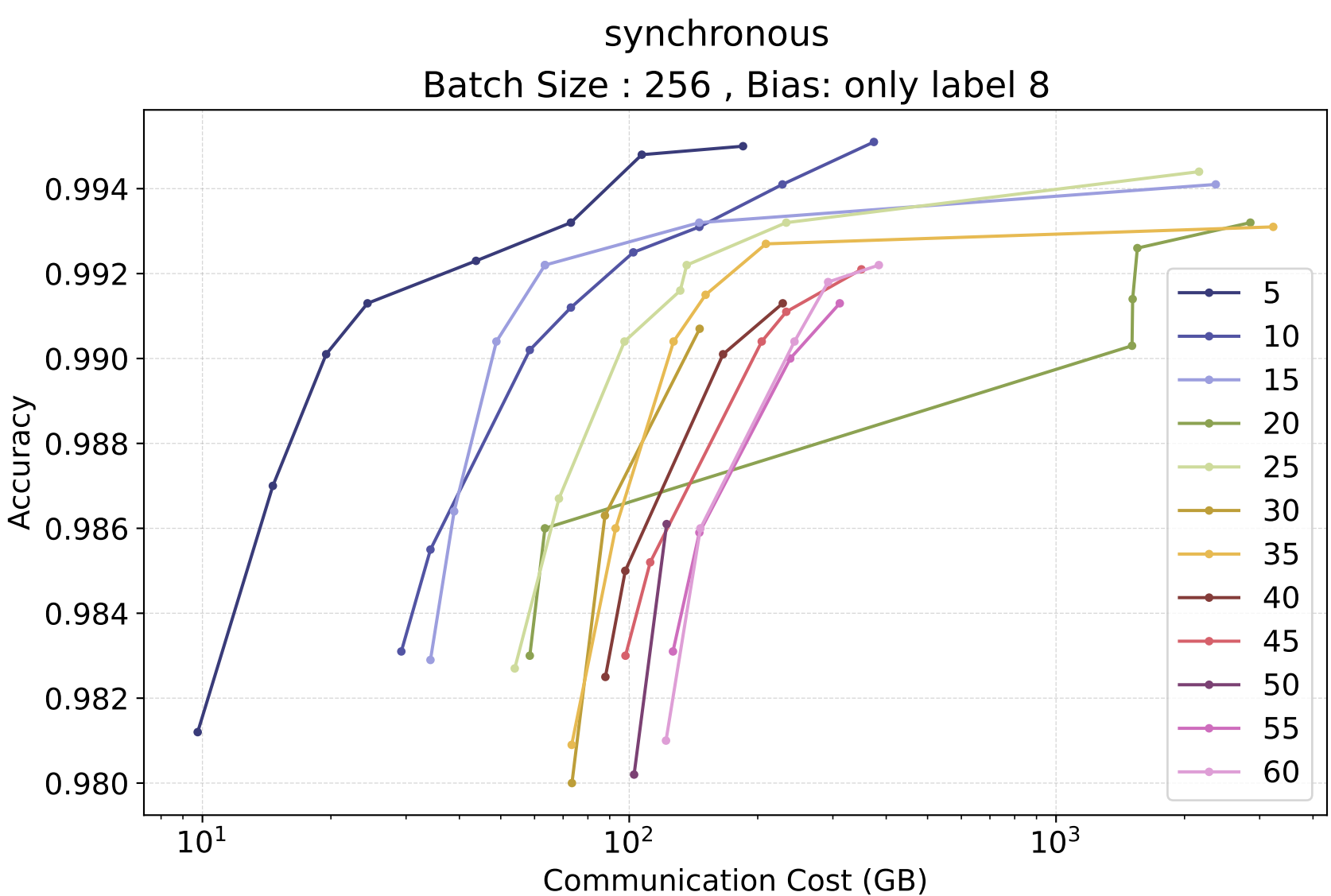
synchronous
Batch Size : 256 , Bias: only label 8
Accuracy
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
10^3
Communication Cost (GB)
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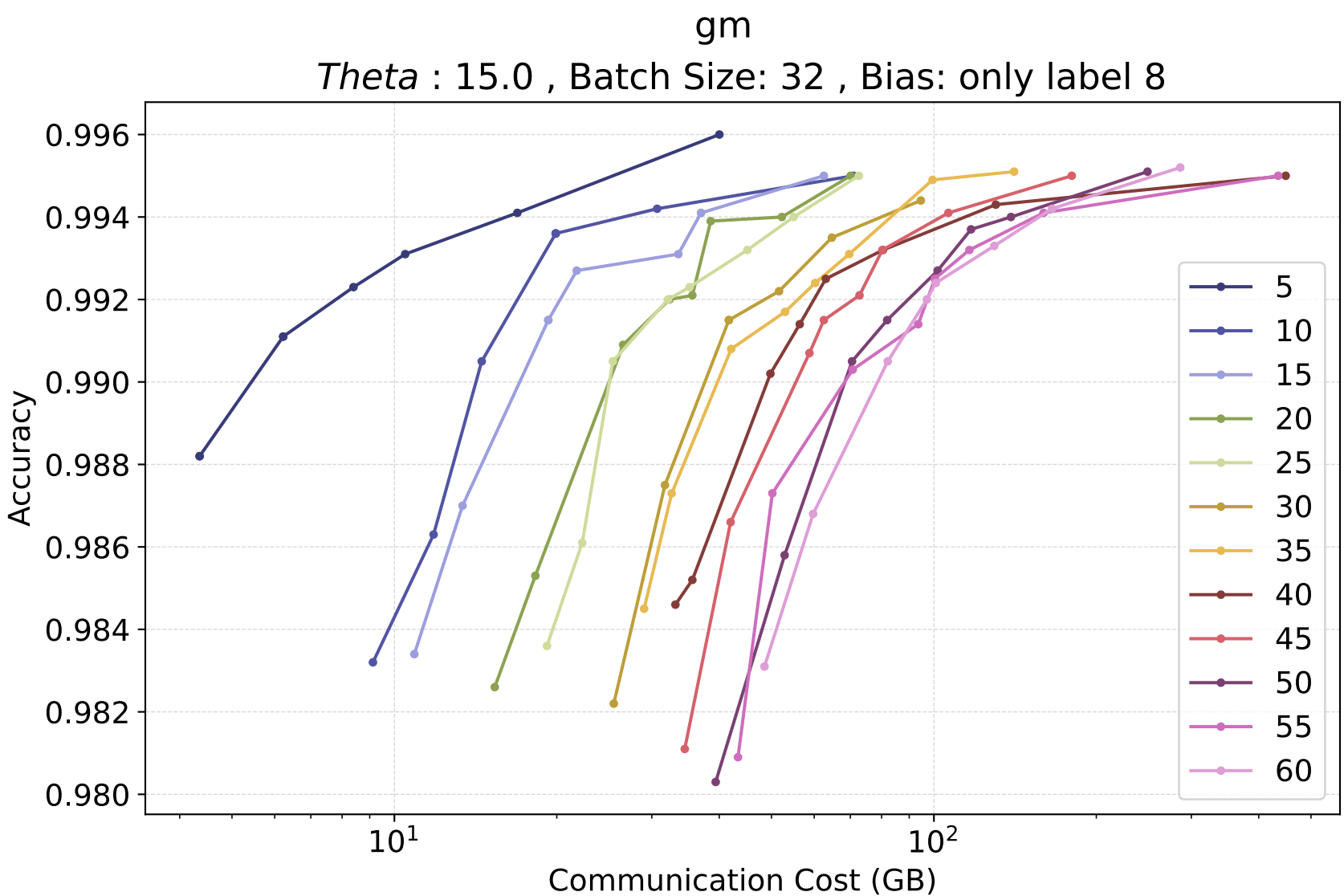
gm
Theta : 15.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
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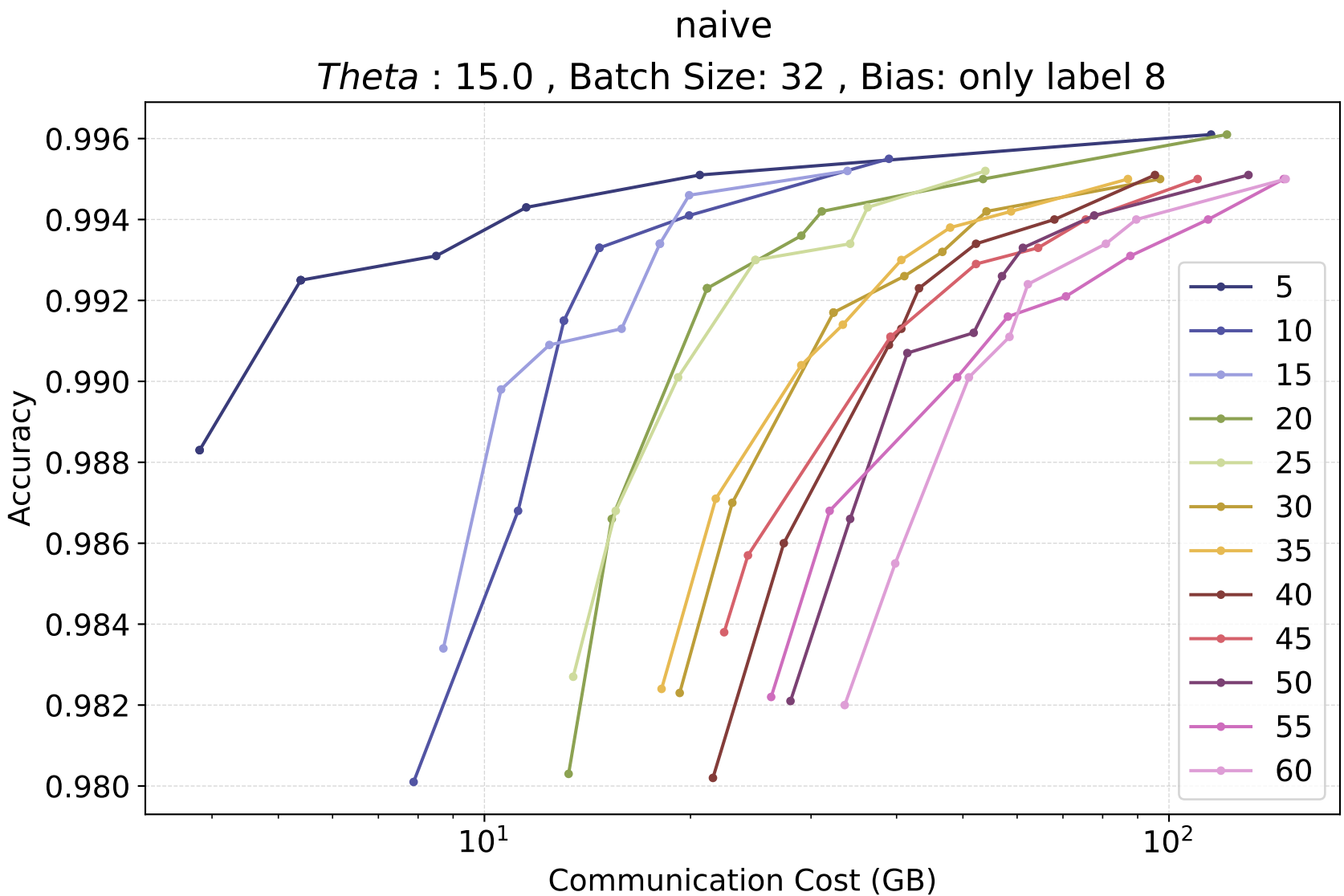
naive
Theta : 15.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
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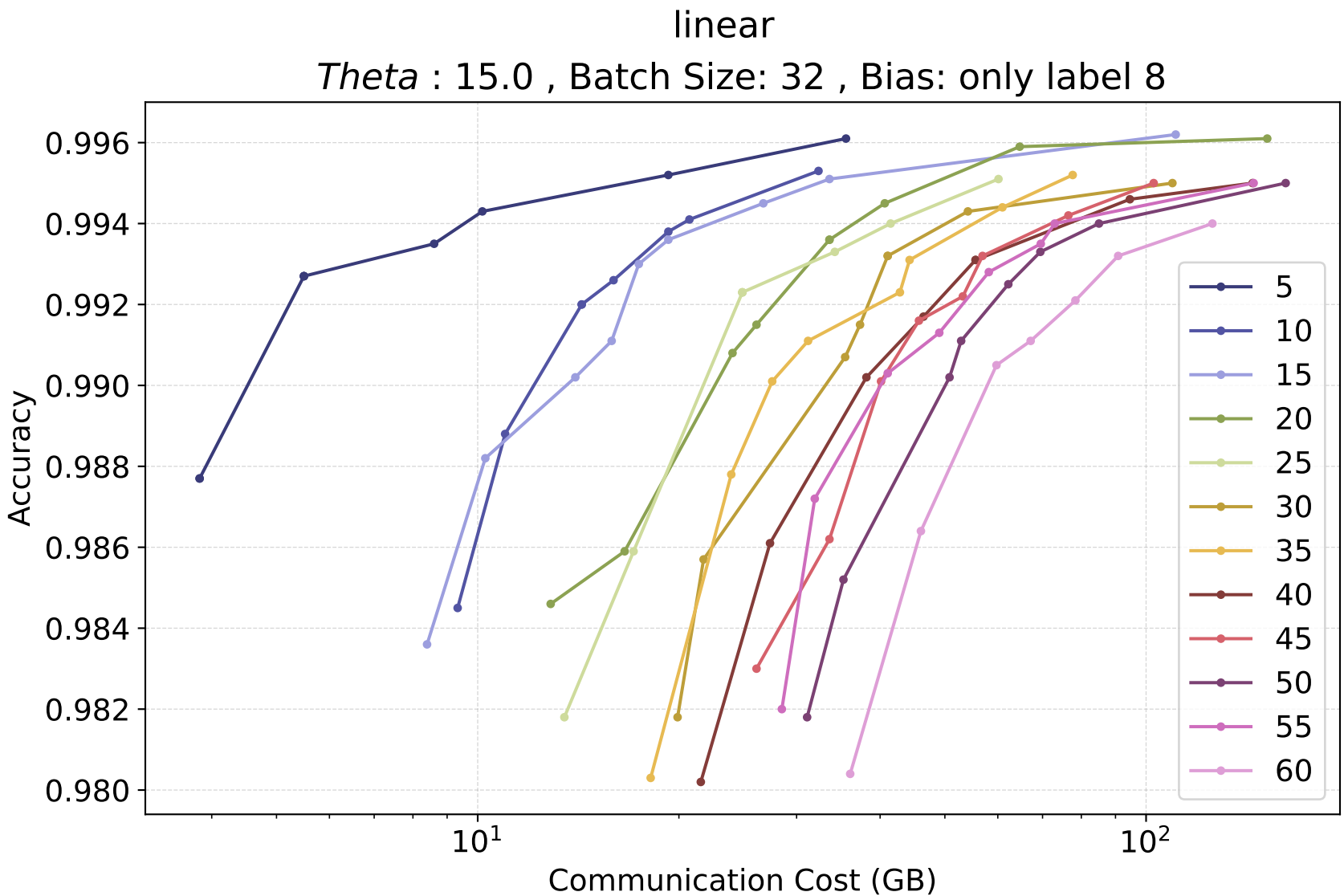
linear
Theta : 15.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
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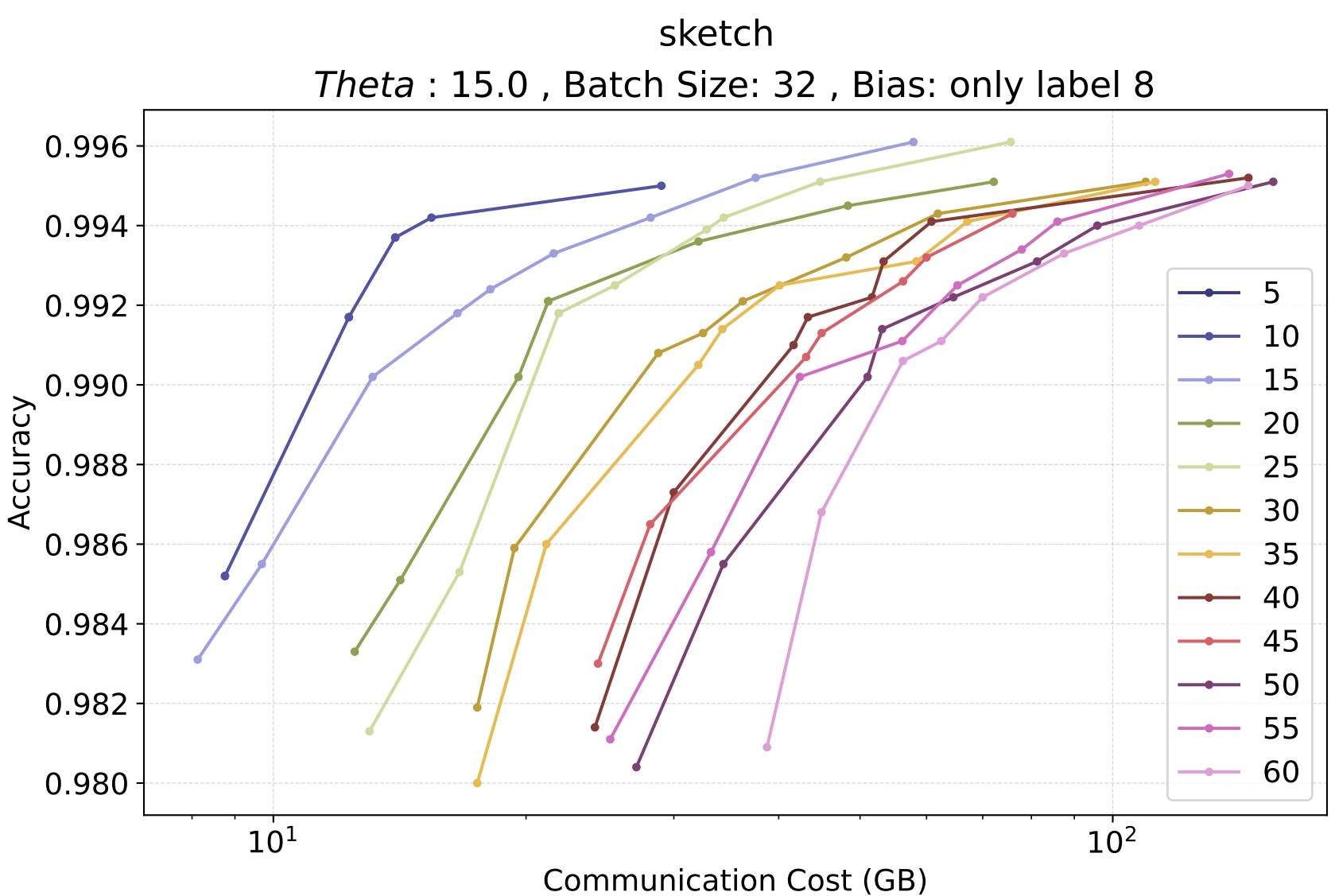
sketch
Theta : 15.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
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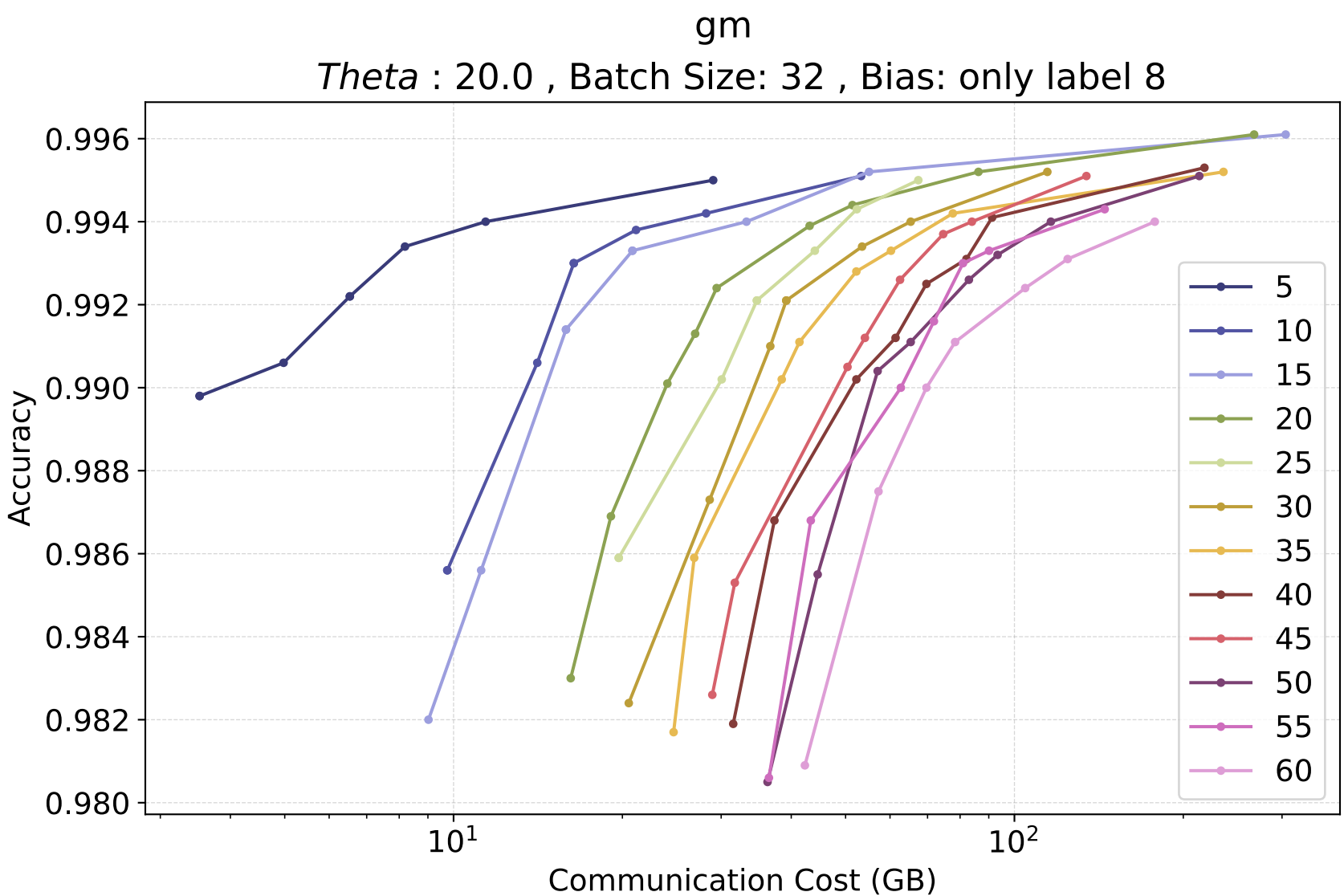
gm
Theta : 20.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
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10^1
10^2
Communication Cost (GB)
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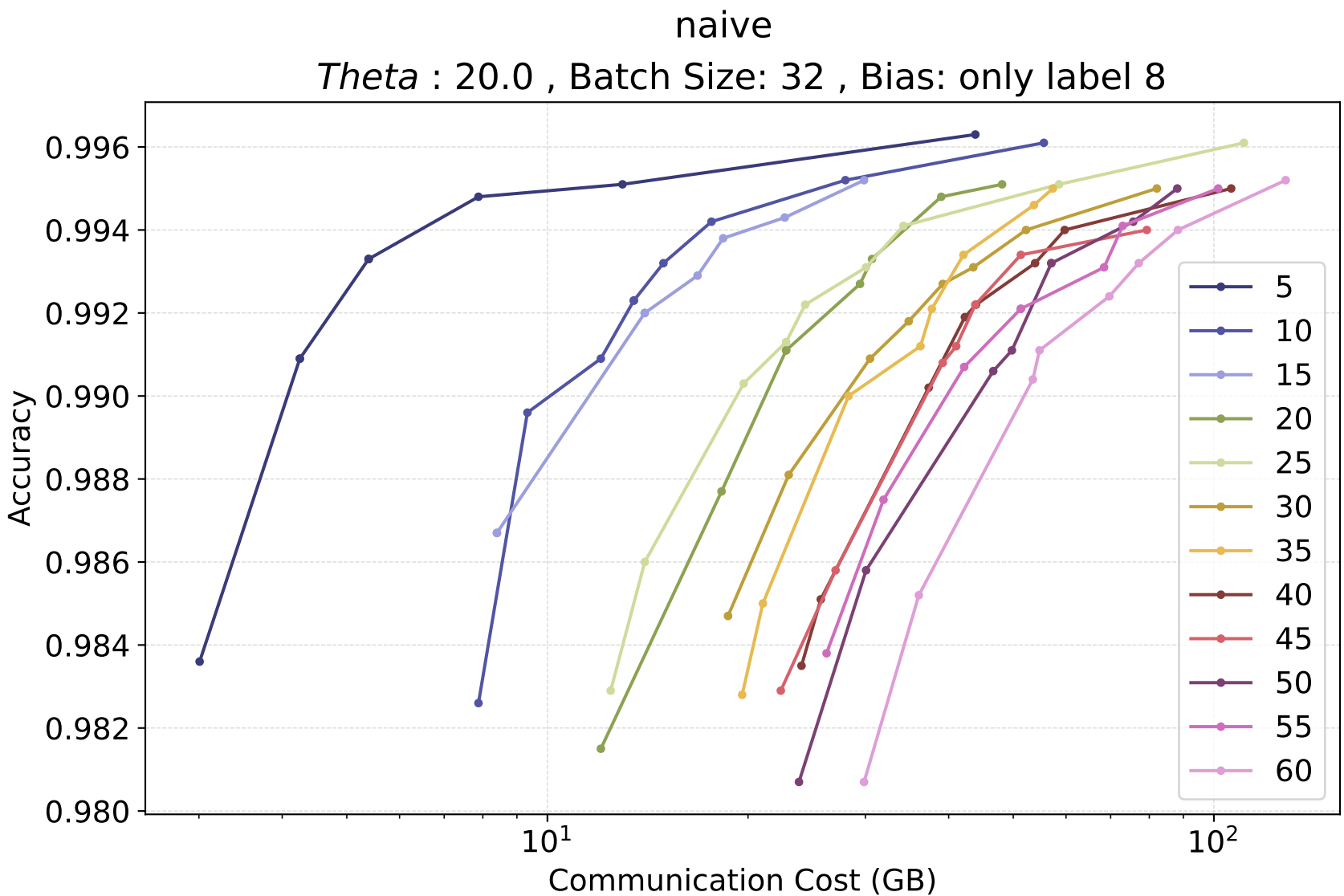
naive
Theta : 20.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
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10^1
10^2
Communication Cost (GB)
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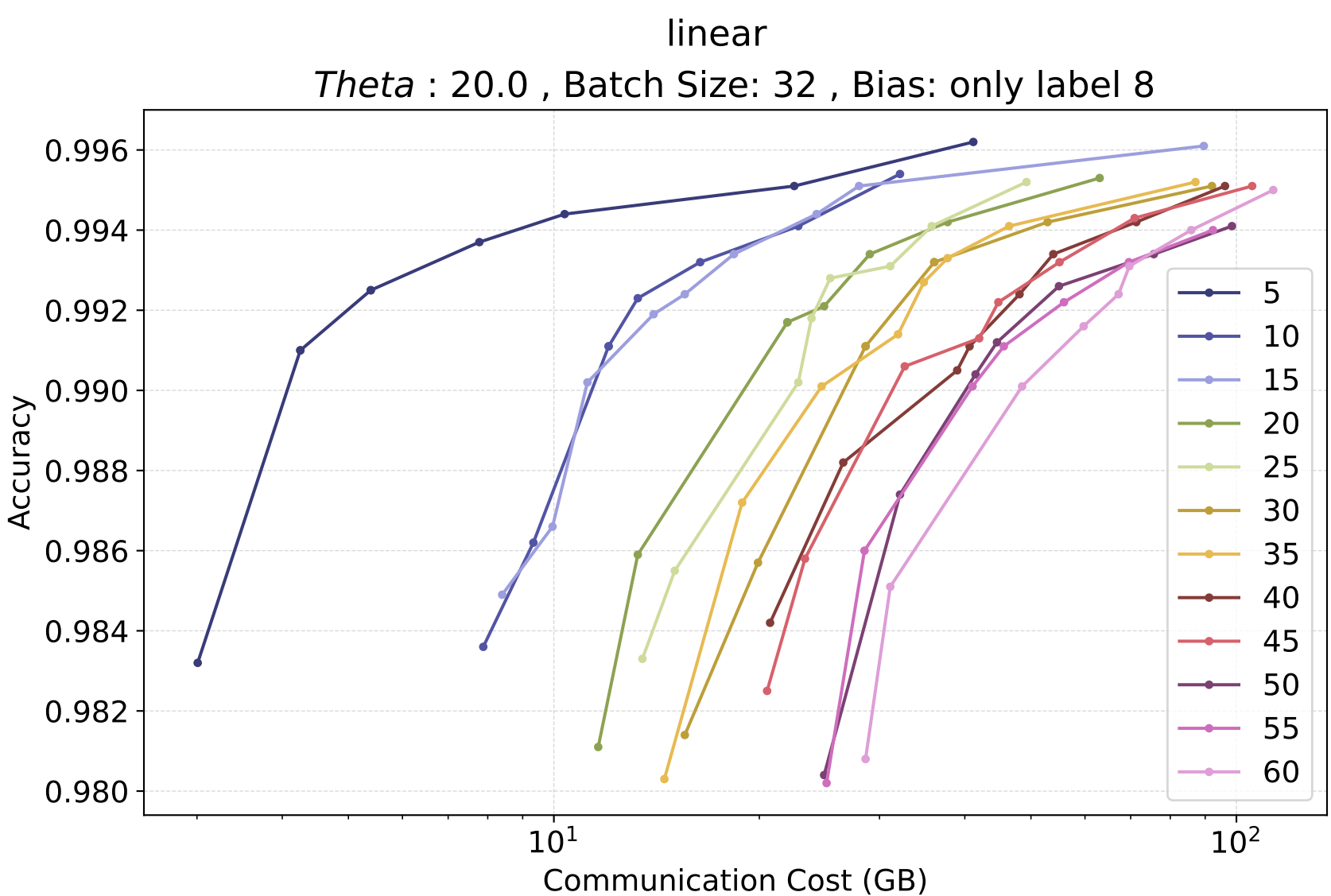
linear
Theta : 20.0 , Batch Size: 32 , Bias: only label 8
Accuracy
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10^2
Communication Cost (GB)
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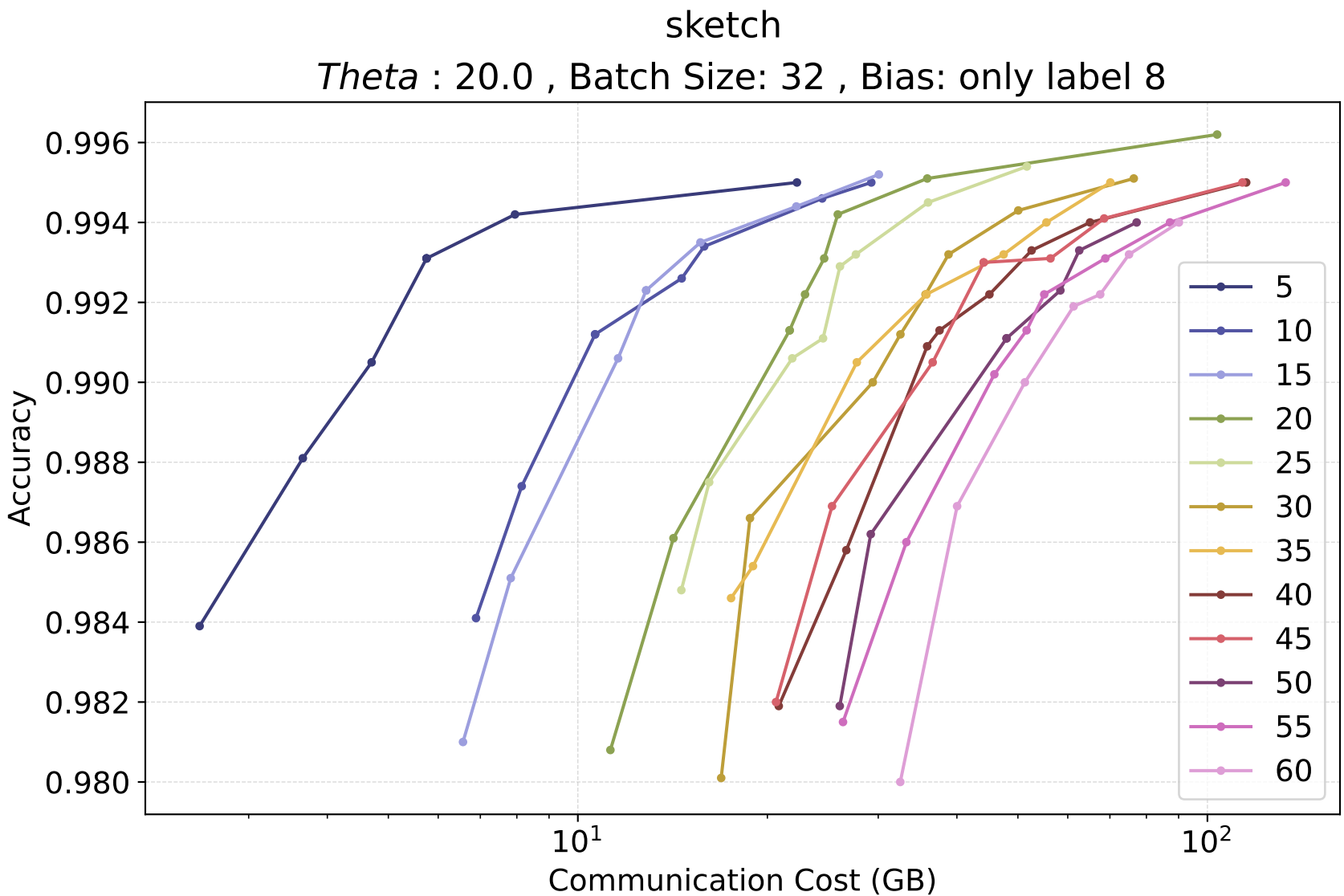
sketch
Theta : 20.0 , Batch Size: 32 , Bias: only label 8
Accuracy
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0.994
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0.990
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10^1
10^2
Communication Cost (GB)
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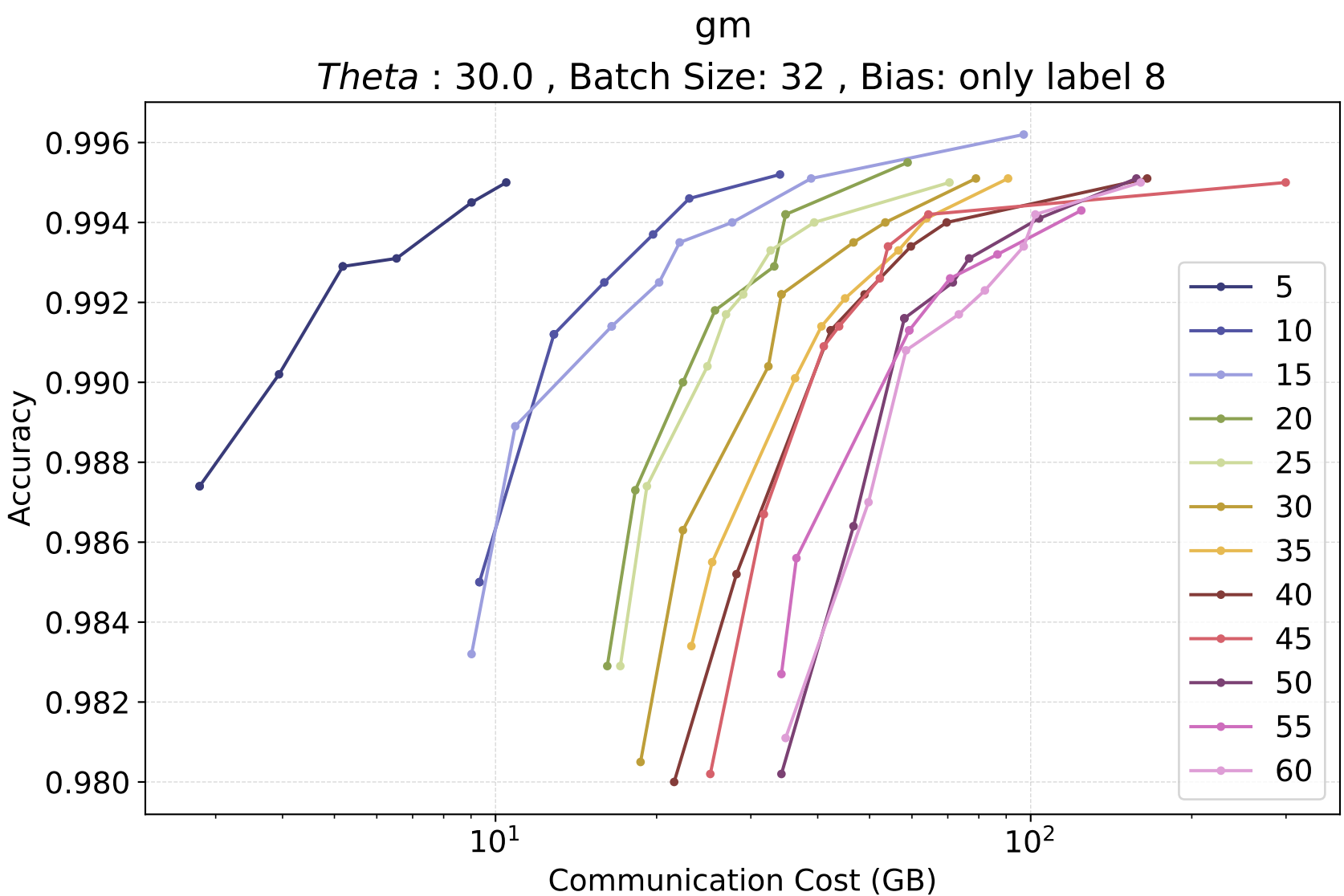
gm
Theta : 30.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
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0.986
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10^1
10^2
Communication Cost (GB)
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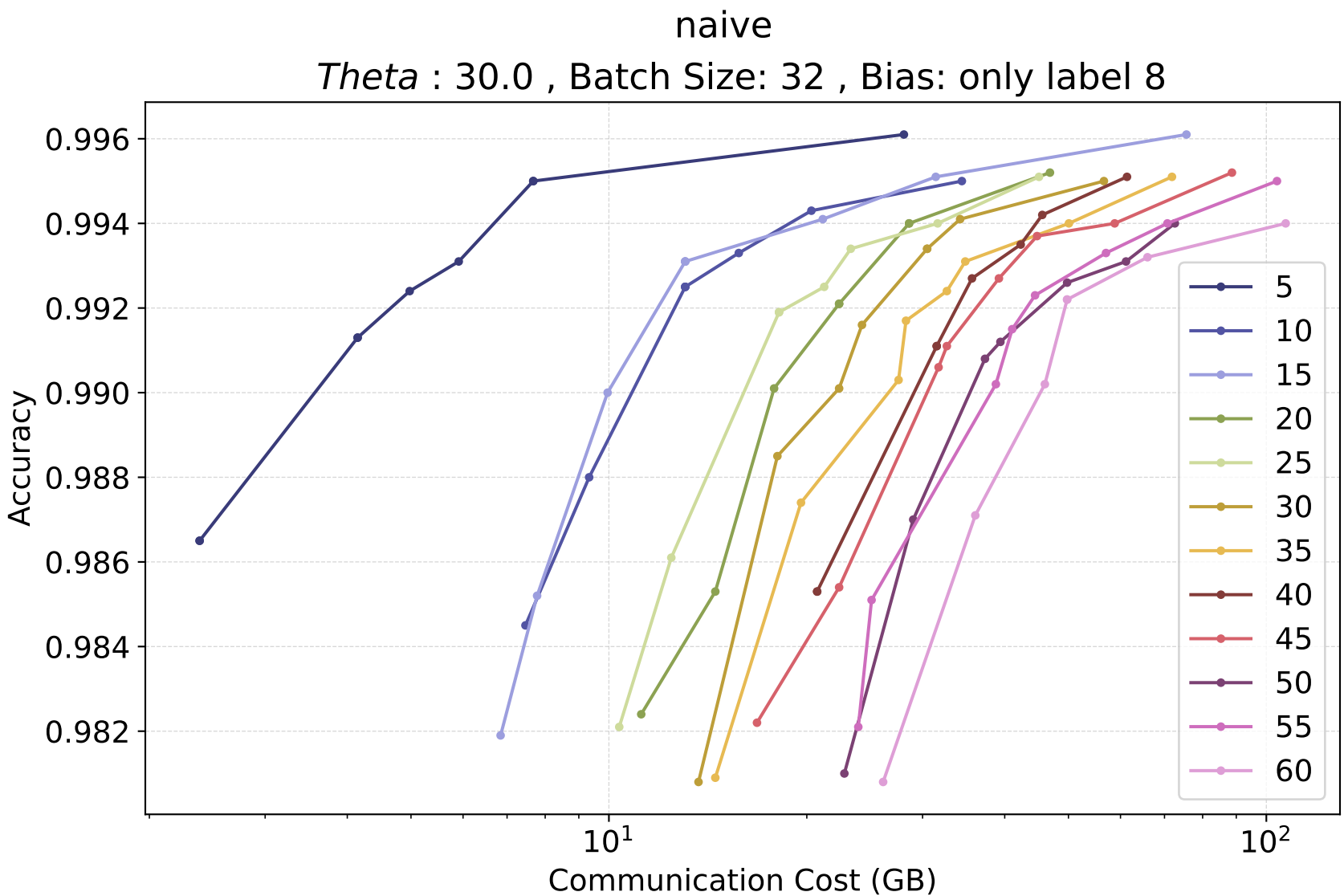
naive
Theta : 30.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
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0.982
10^1
10^2
Communication Cost (GB)
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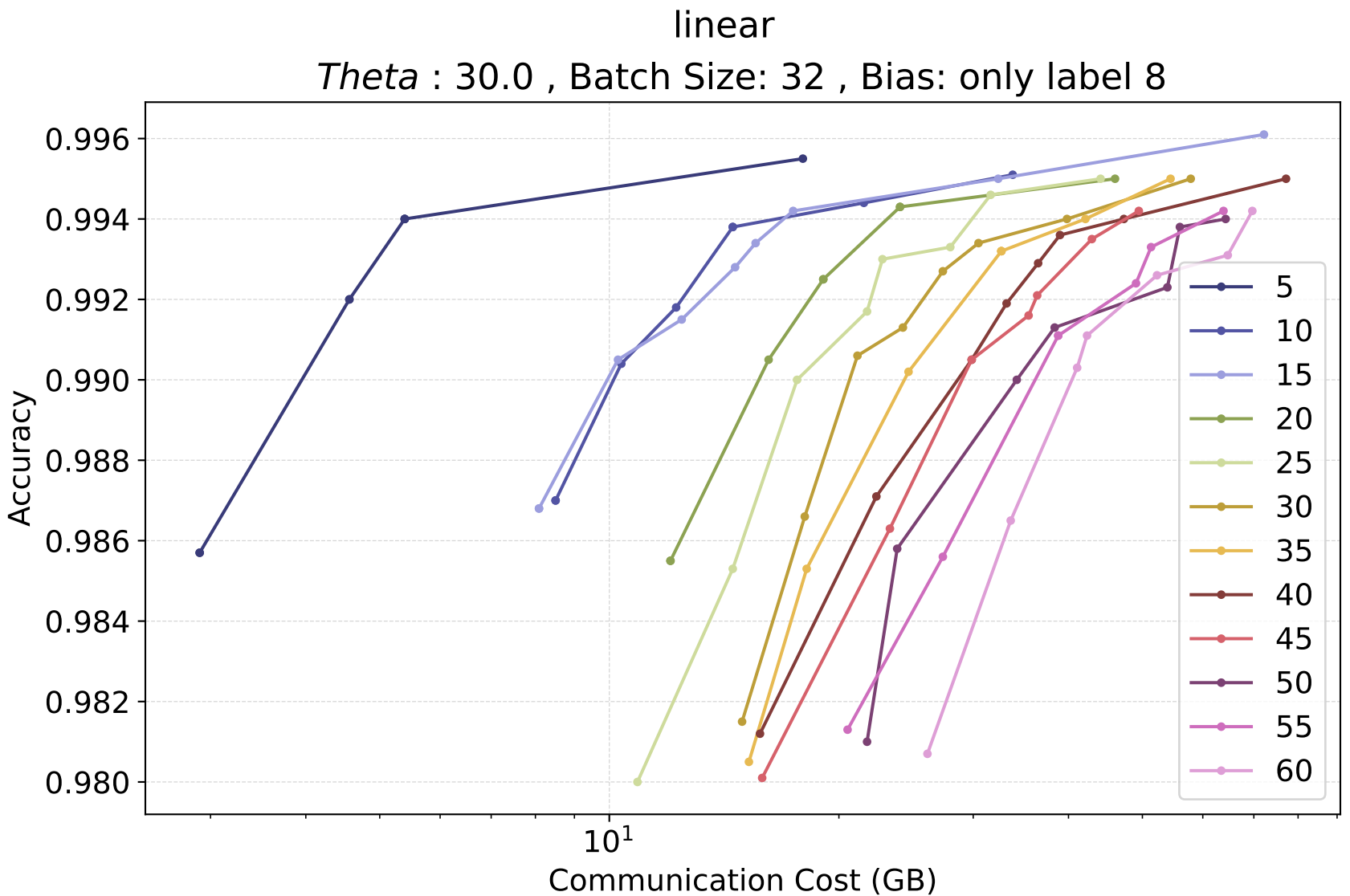
linear
Theta : 30.0 , Batch Size: 32 , Bias: only label 8
Accuracy
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0.994
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10^1
Communication Cost (GB)
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sketch
Theta : 30.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
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10^1
10^2
Communication Cost (GB)
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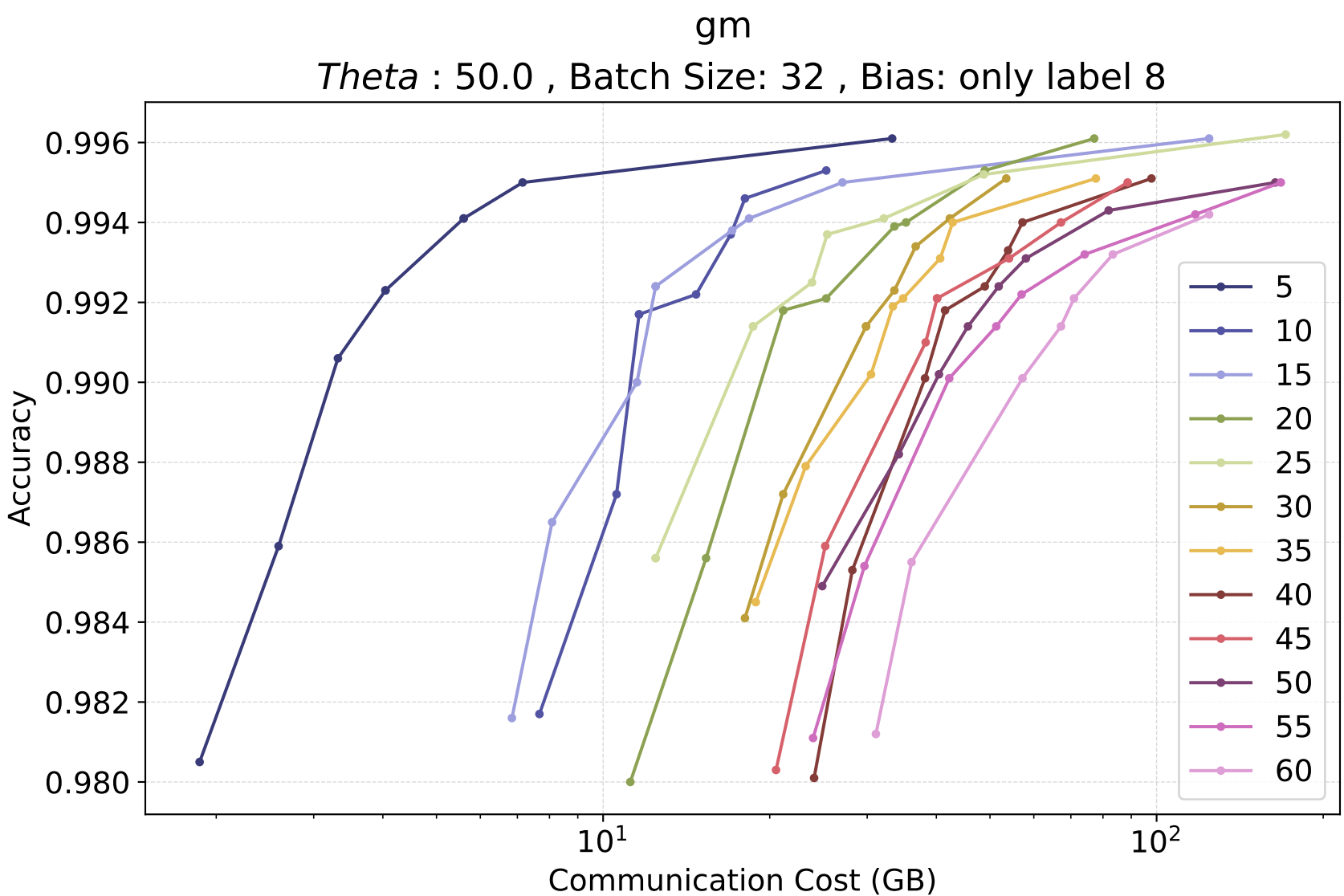
gm
Theta : 50.0 , Batch Size: 32 , Bias: only label 8
Accuracy
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0.994
0.992
0.990
0.988
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0.984
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10^1
10^2
Communication Cost (GB)
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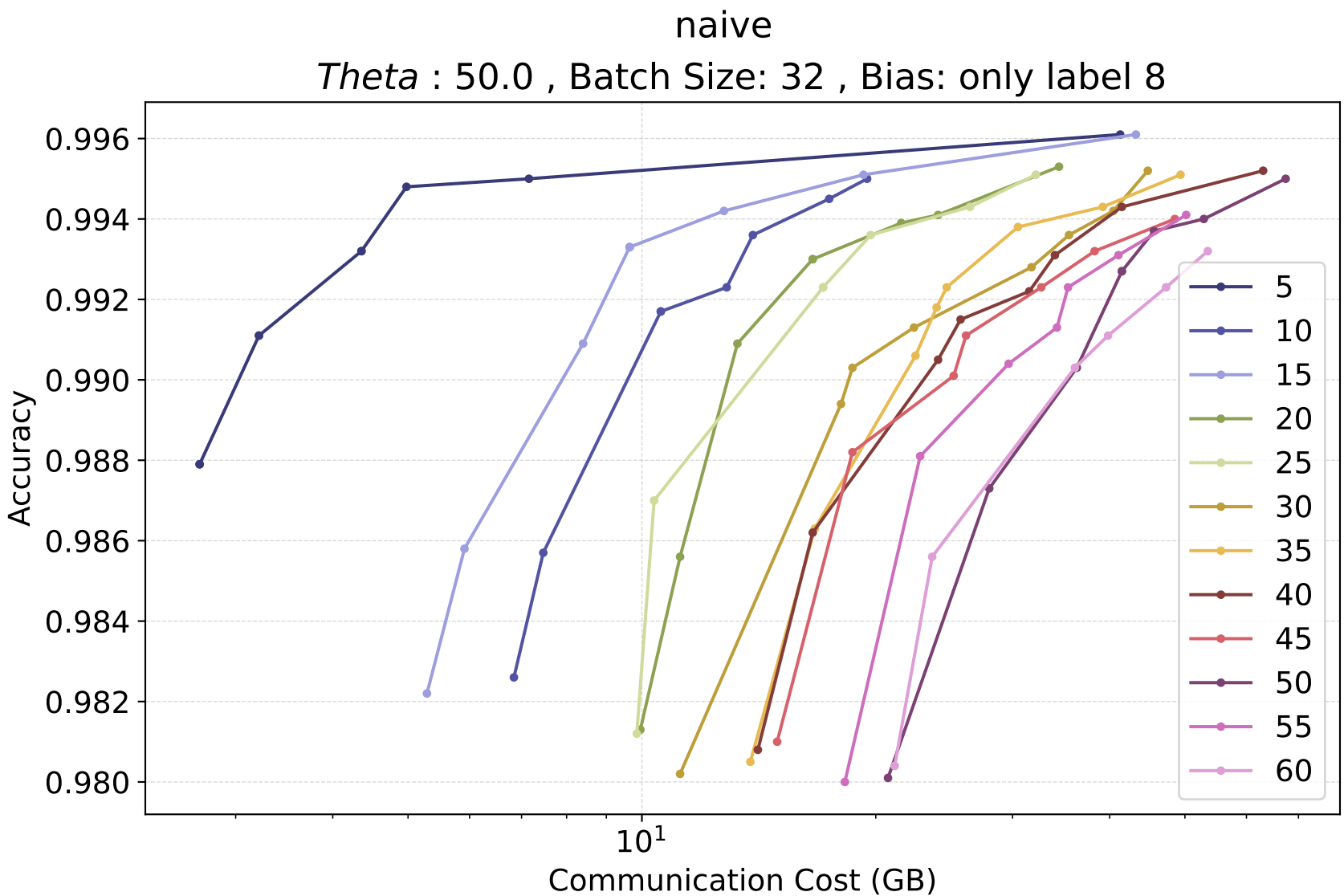
naive
Theta : 50.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
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10^1
Communication Cost (GB)
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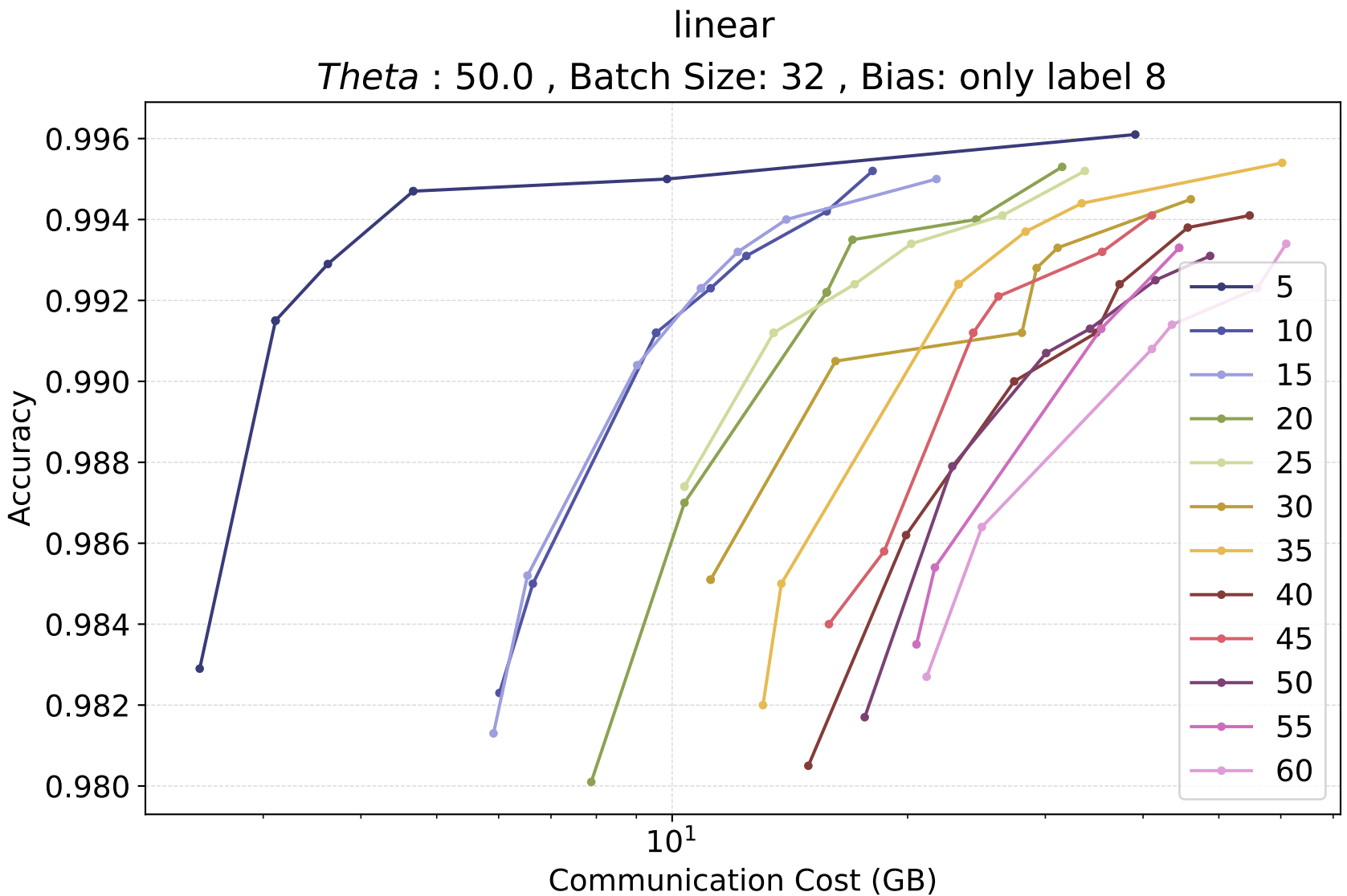
linear
Theta : 50.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
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10^1
Communication Cost (GB)
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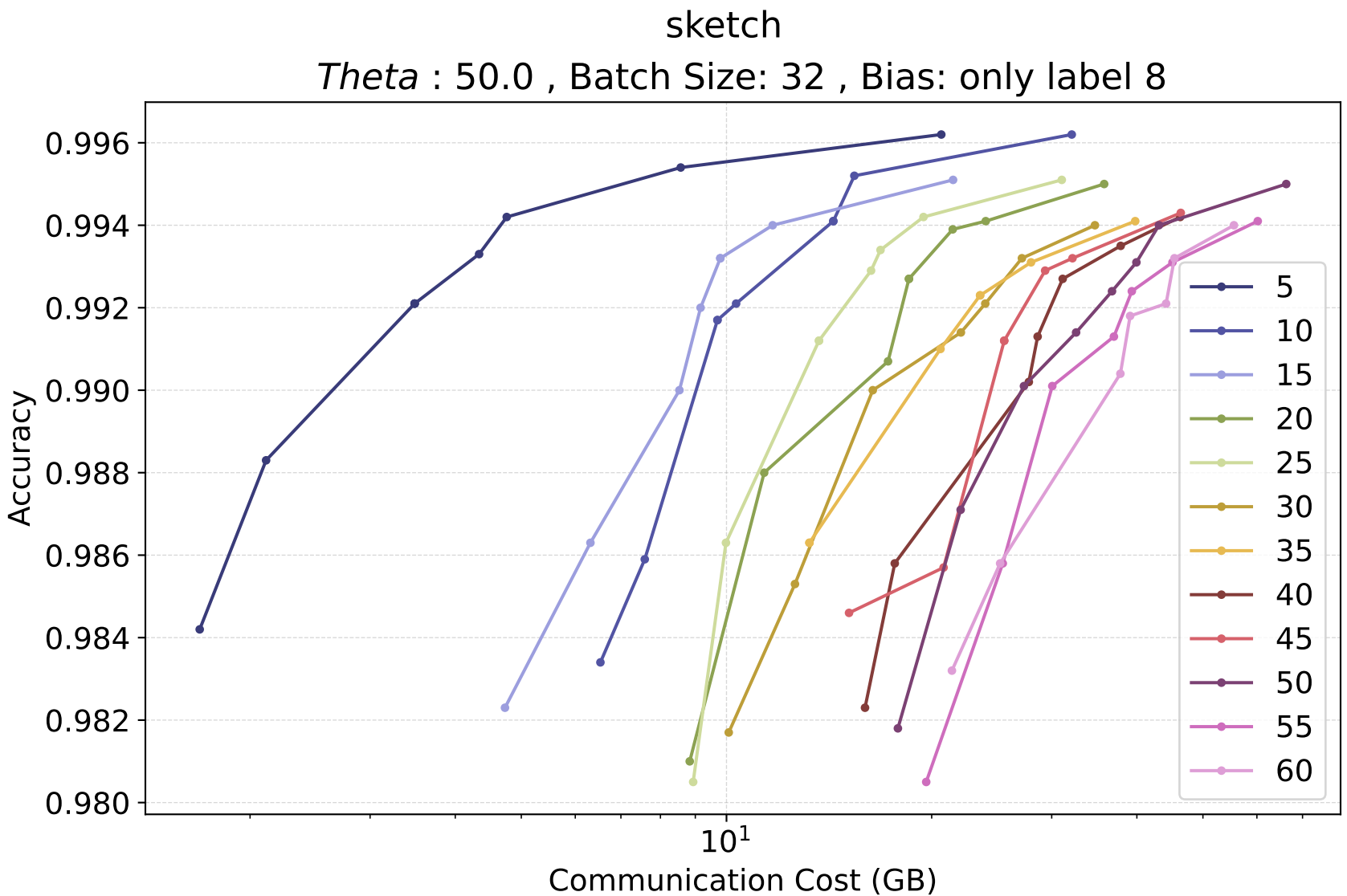
sketch
Theta : 50.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
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10^1
Communication Cost (GB)
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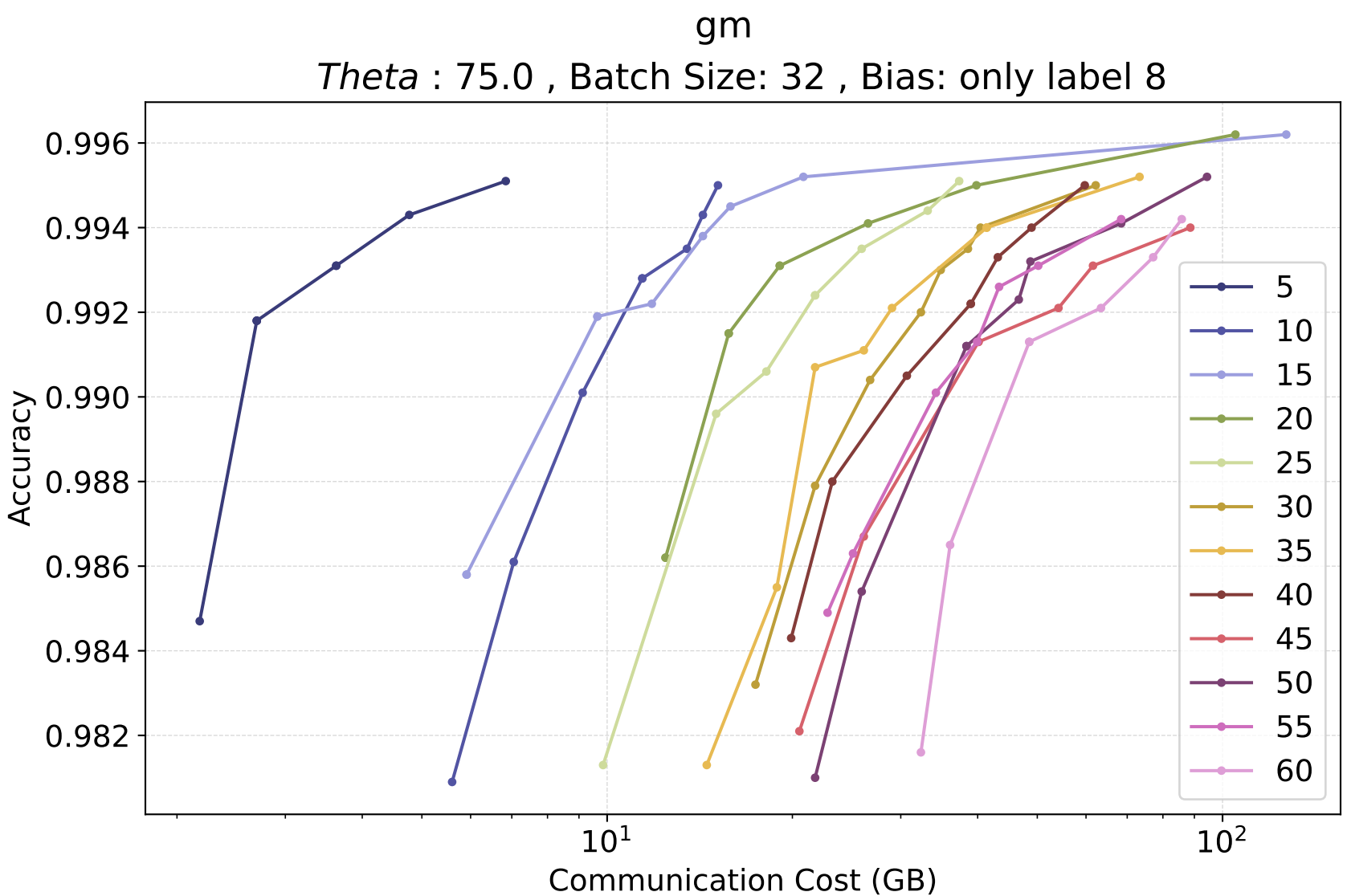
gm
Theta : 75.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
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0.982
10^1
10^2
Communication Cost (GB)
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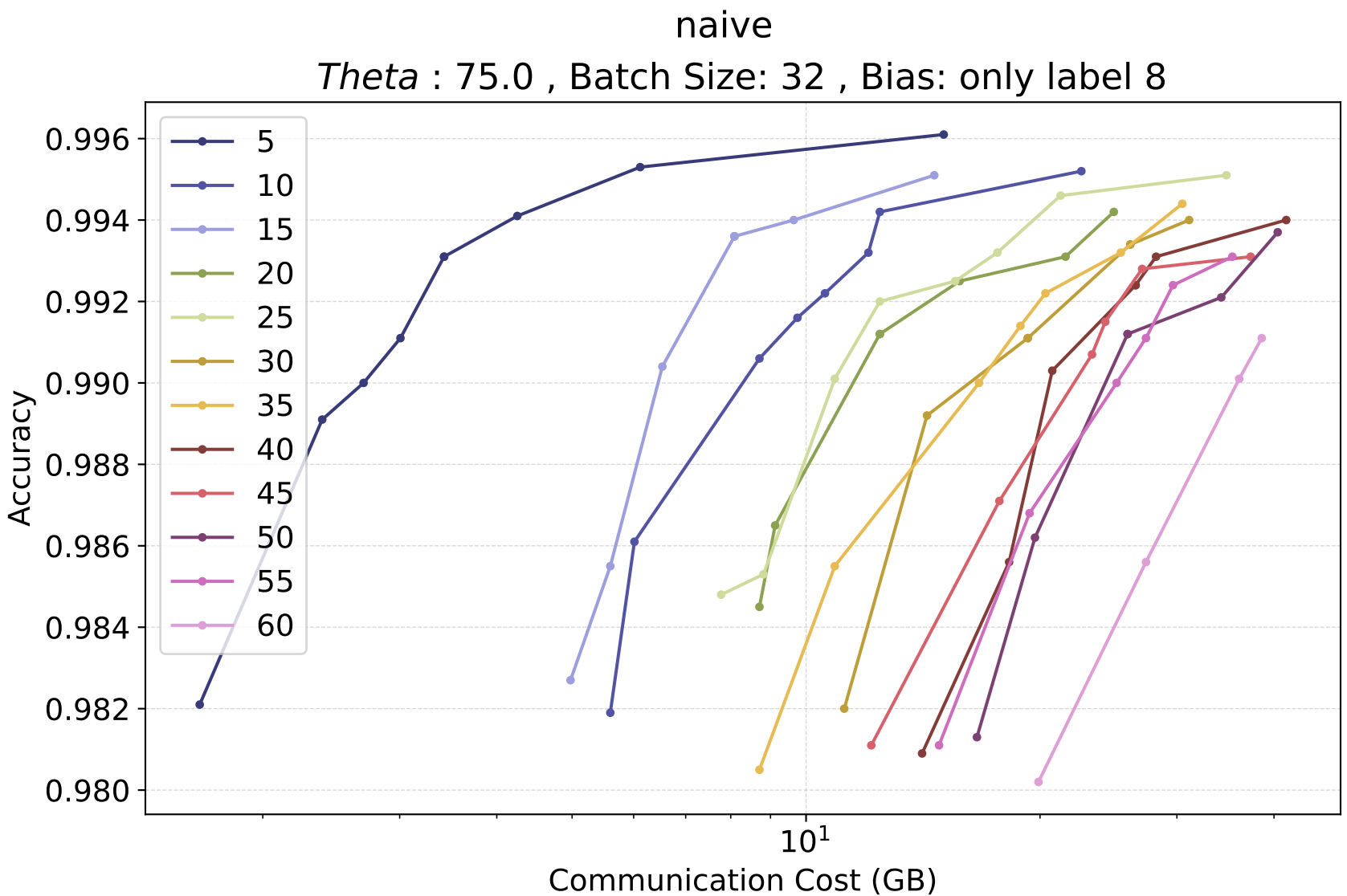
naive
Theta : 75.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
0.992
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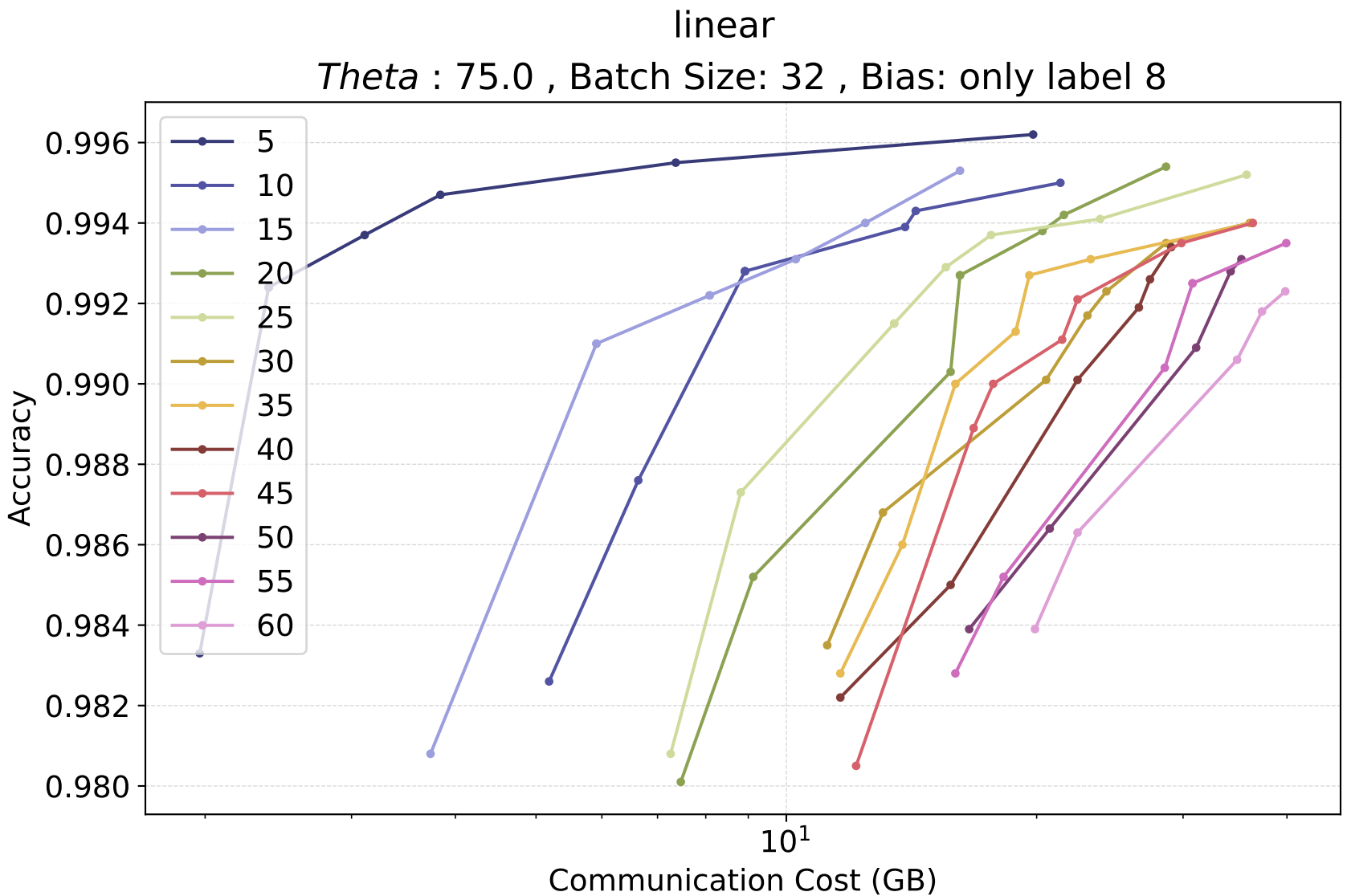
10^1
Communication Cost (GB)


linear
Theta : 75.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
0.988
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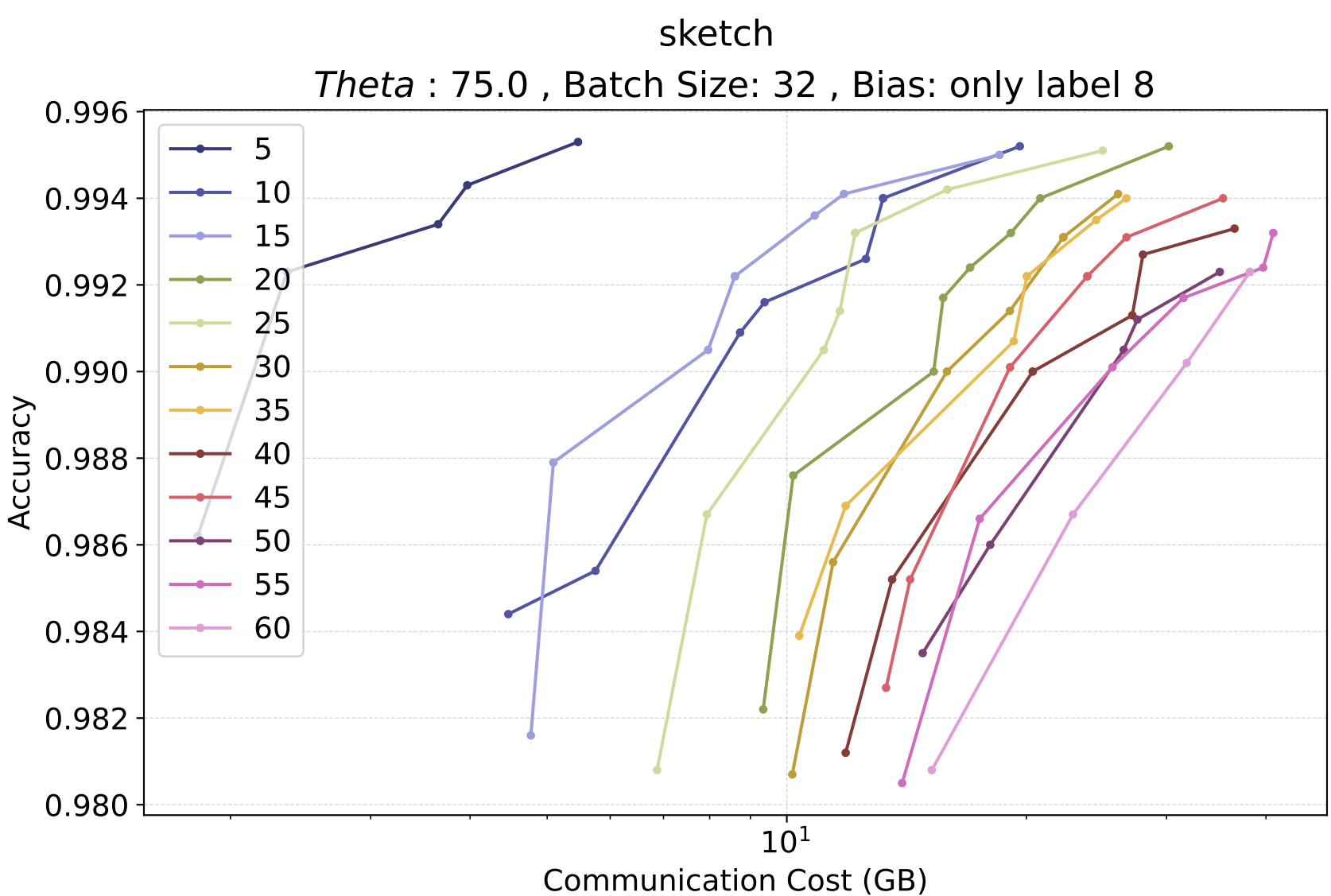
10^1
Communication Cost (GB)


sketch
Theta : 75.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
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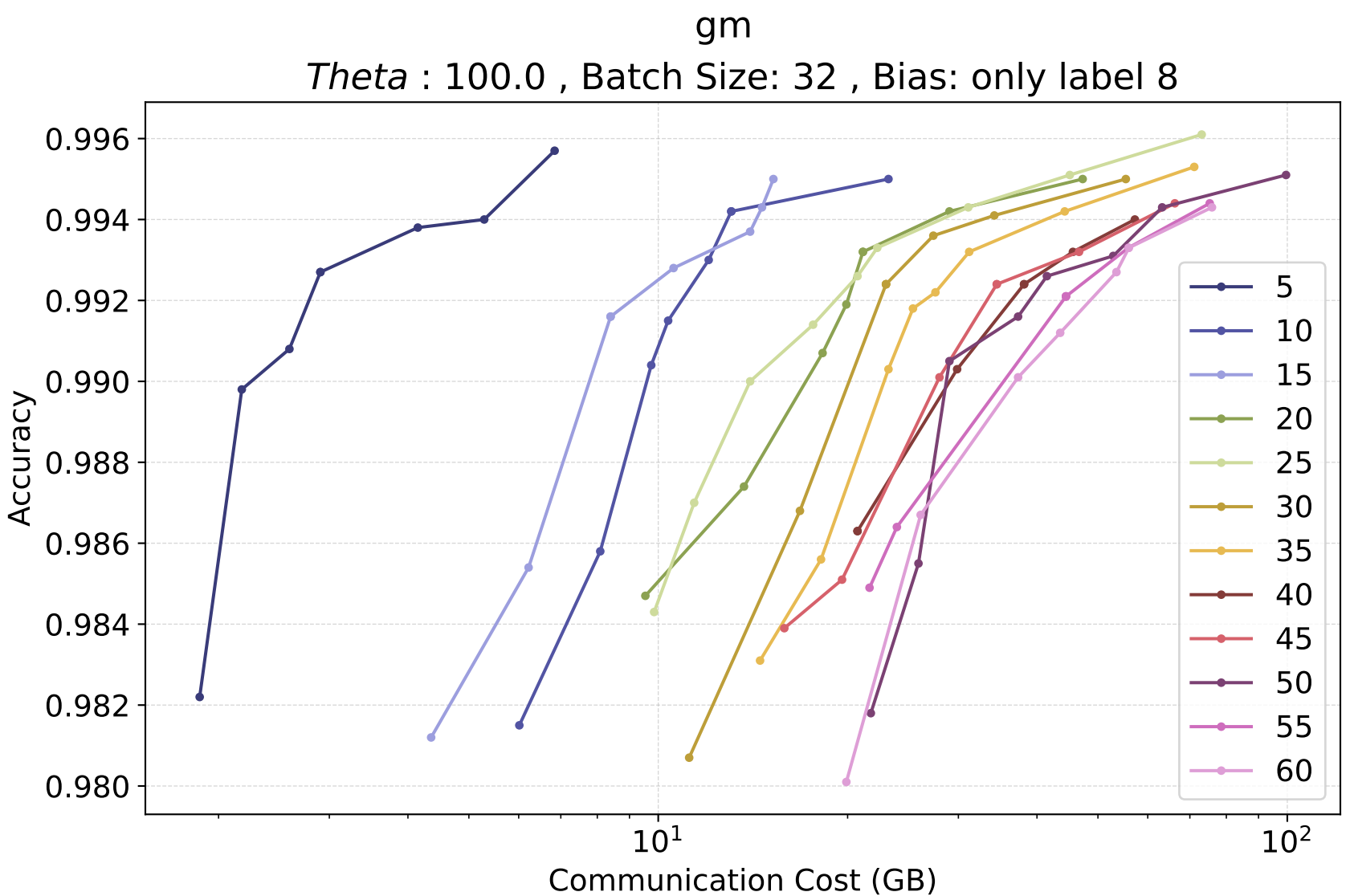
10^1
Communication Cost (GB)


gm
Theta : 100.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
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10^1
10^2
Communication Cost (GB)
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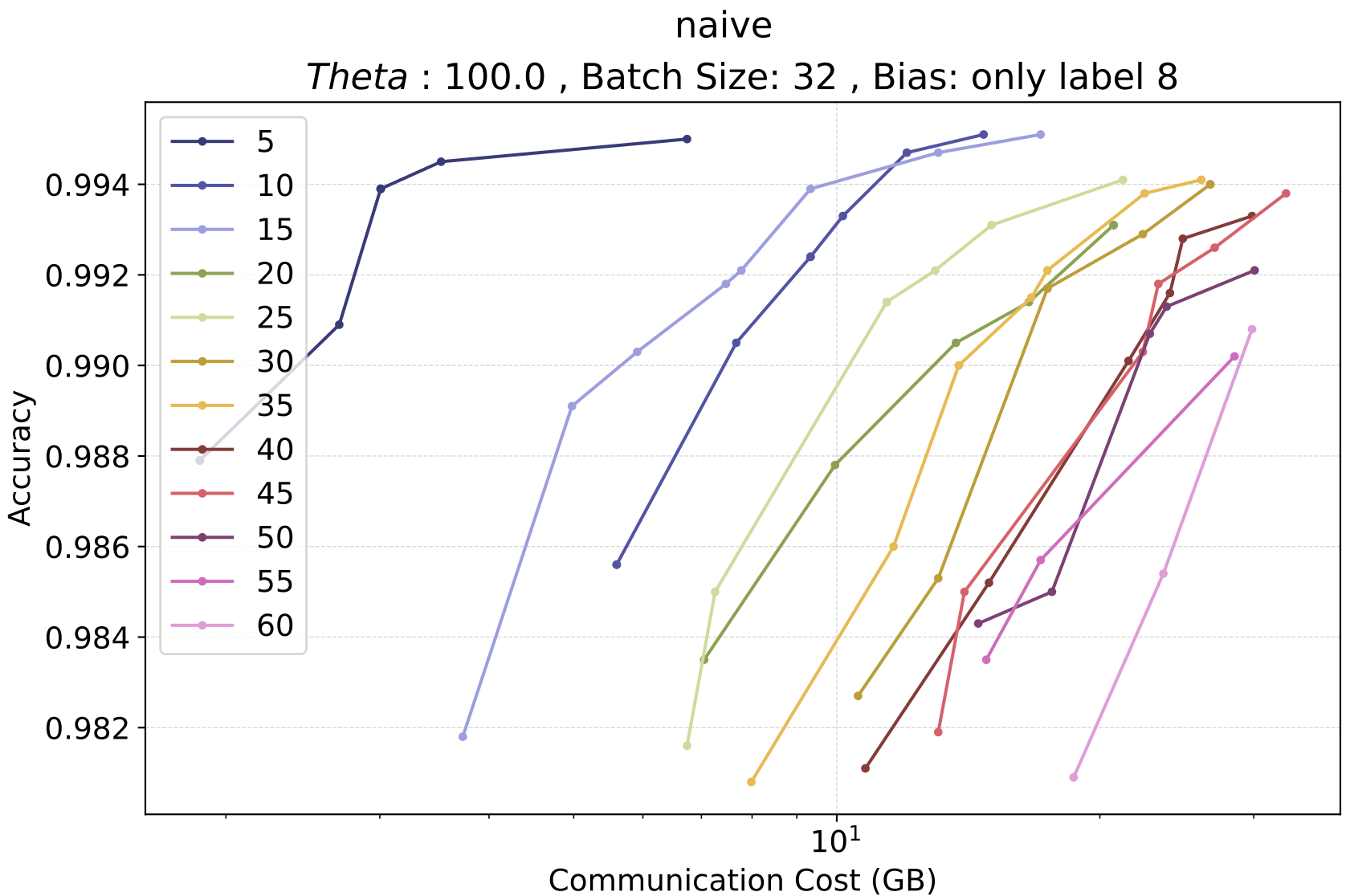
naive
Theta : 100.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.994
0.992
0.990
0.988
0.986
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0.982
10^1
Communication Cost (GB)
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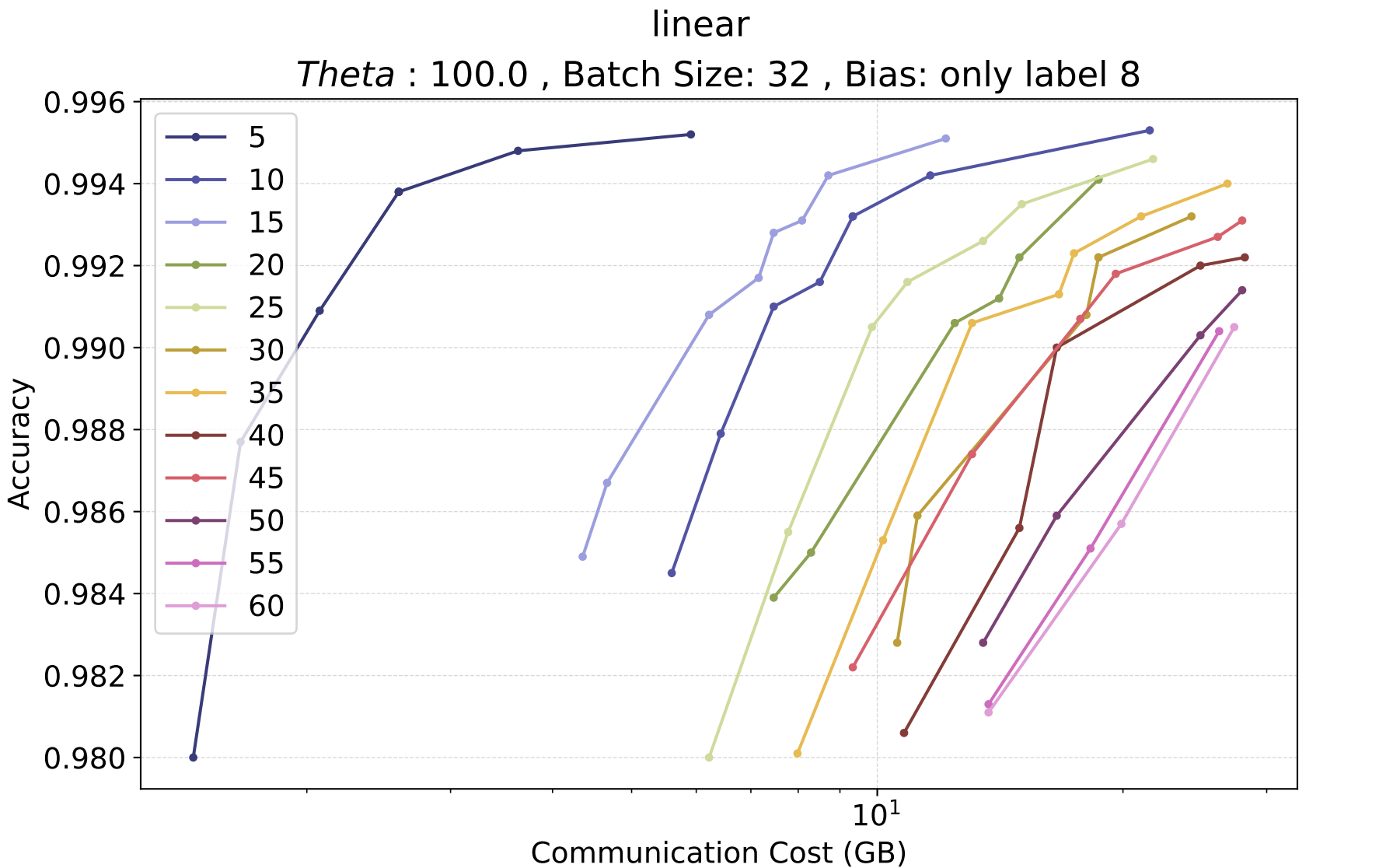
linear
Theta : 100.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
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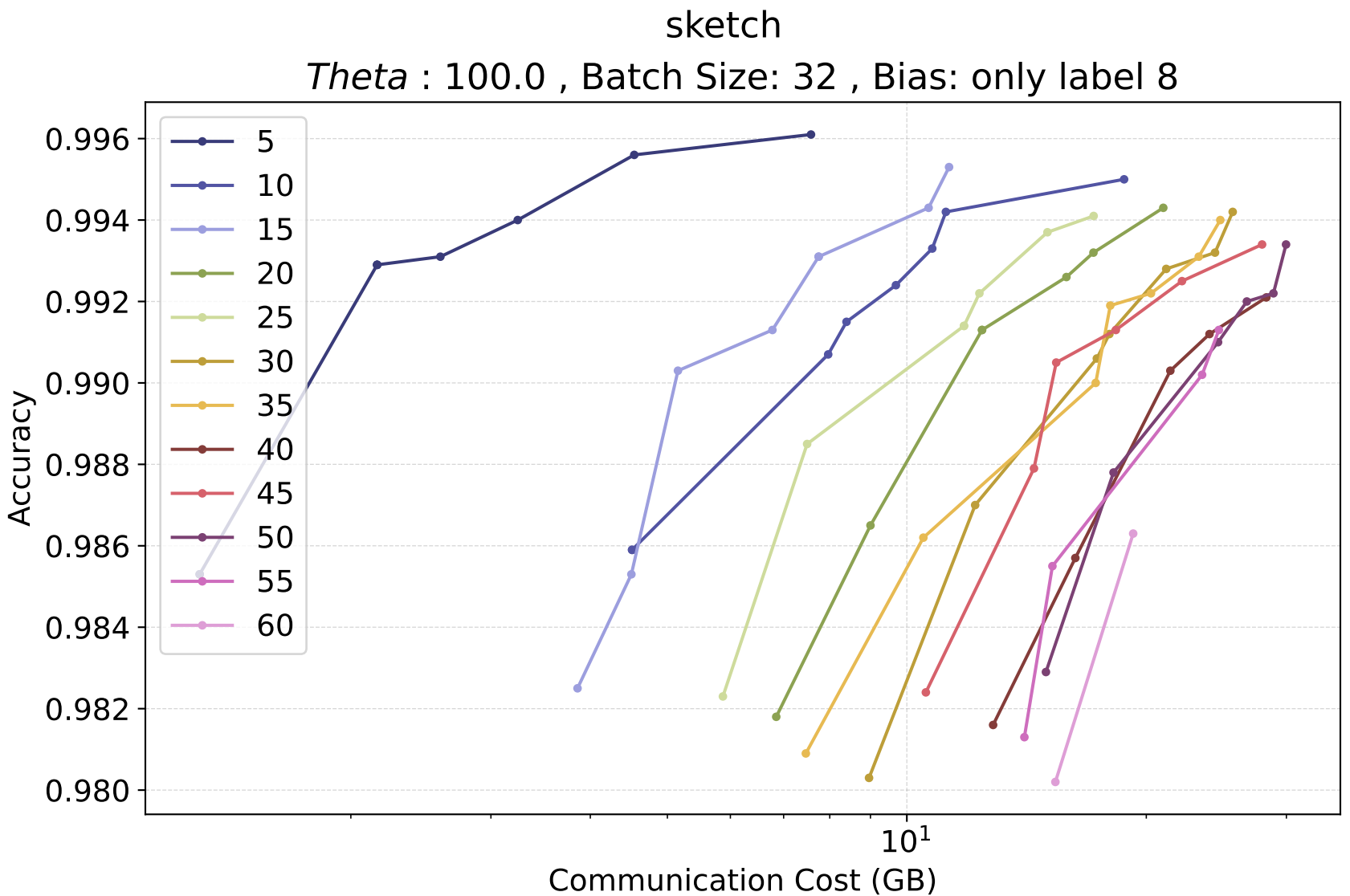
10^1
Communication Cost (GB)


sketch
Theta : 100.0 , Batch Size: 32 , Bias: only label 8
Accuracy
0.996
0.994
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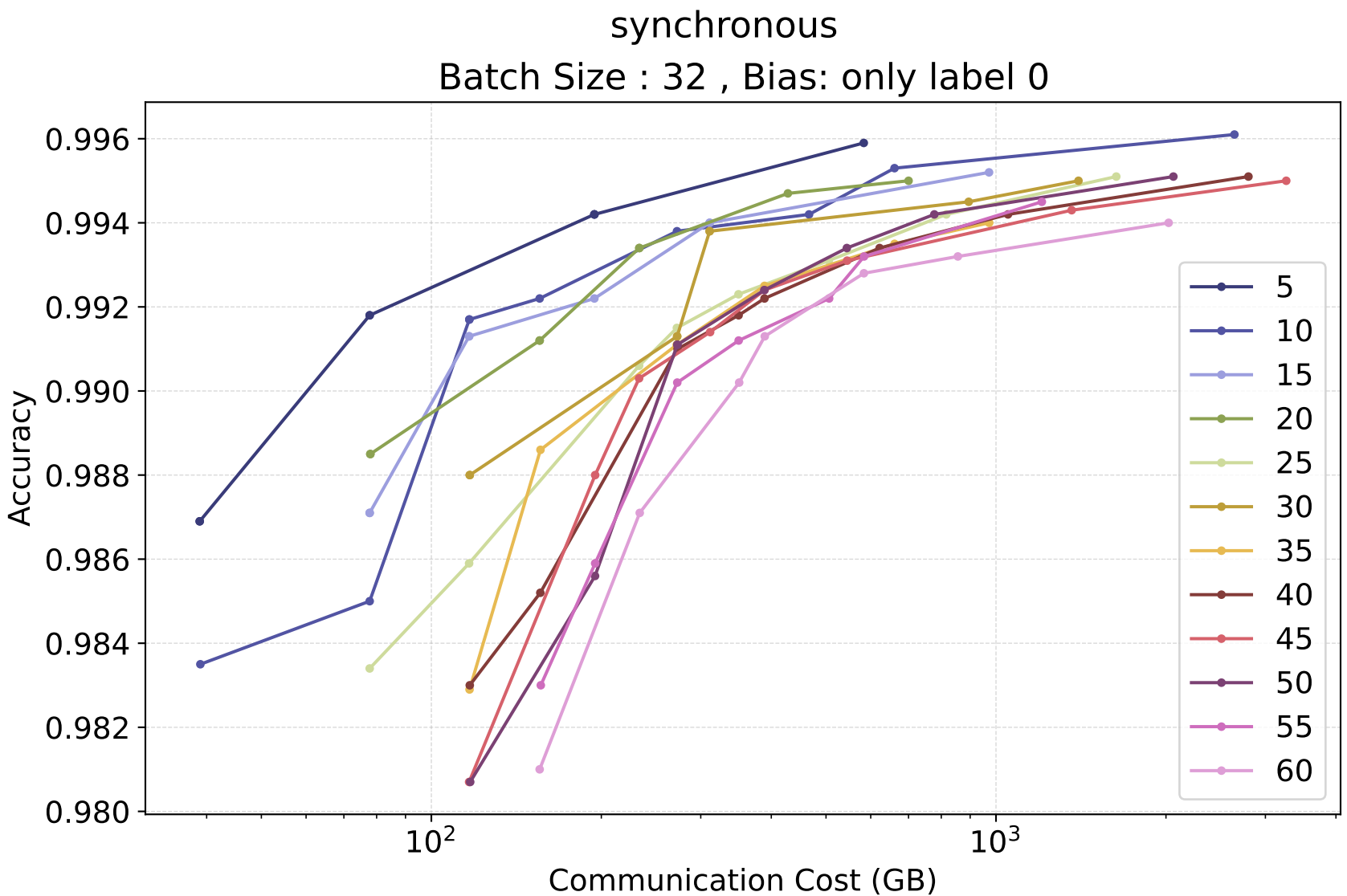
10^1
Communication Cost (GB)


synchronous
Batch Size : 32 , Bias: only label 0
Accuracy
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10^2
10^3
Communication Cost (GB)
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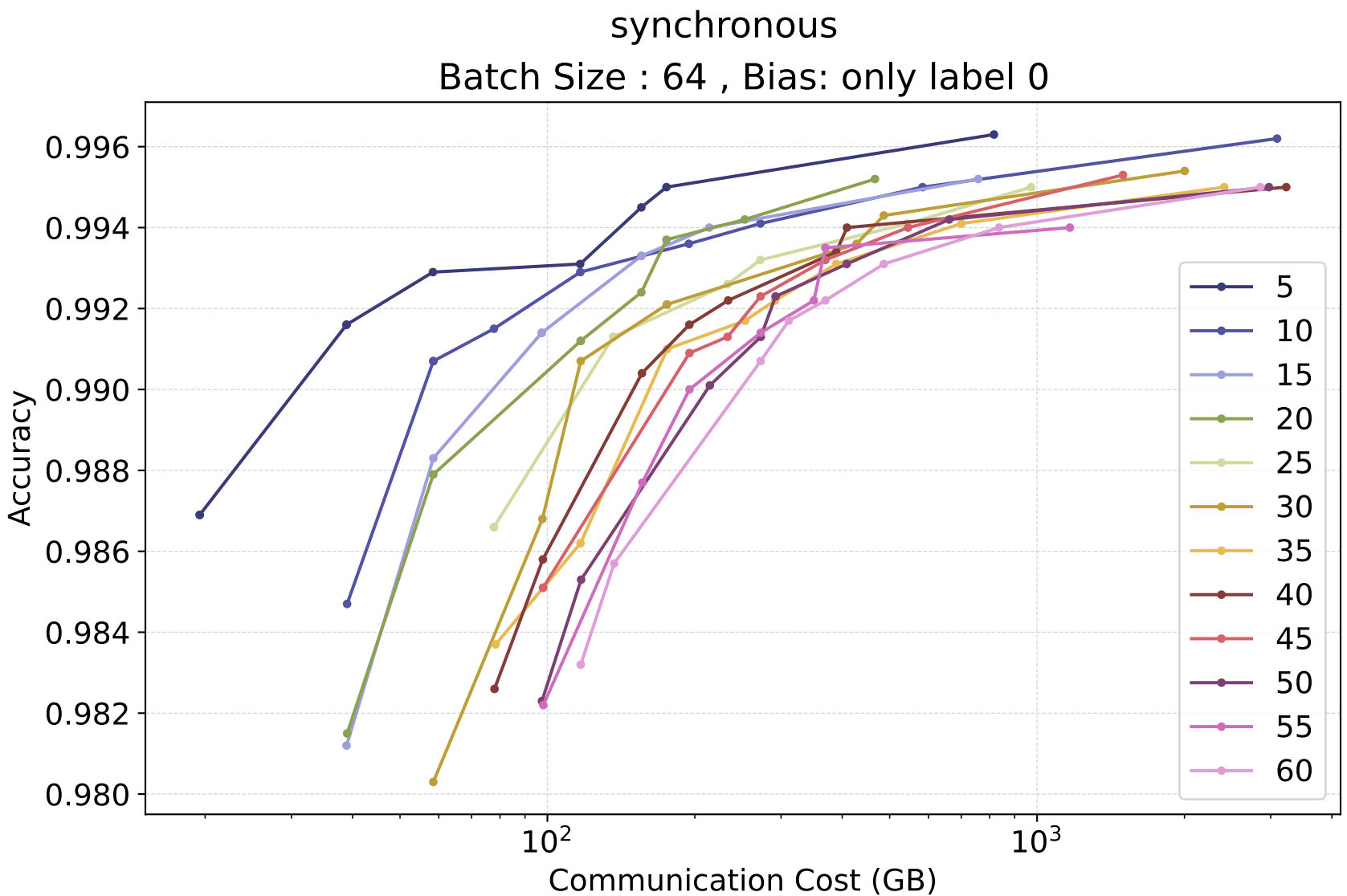
synchronous
Batch Size : 64 , Bias: only label 0
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^2
10^3
Communication Cost (GB)
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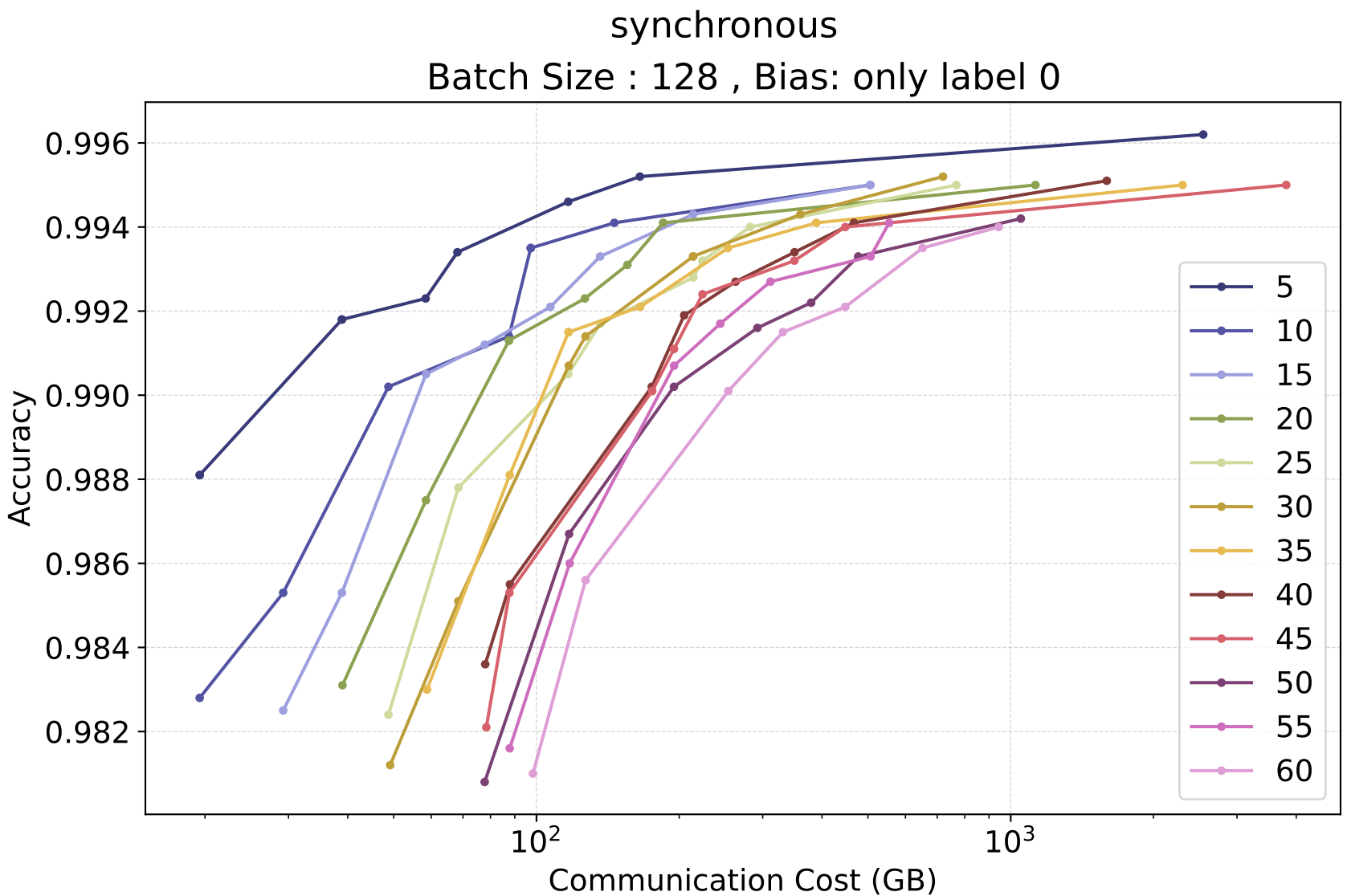
synchronous
Batch Size : 128 , Bias: only label 0
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
10^2
10^3
Communication Cost (GB)
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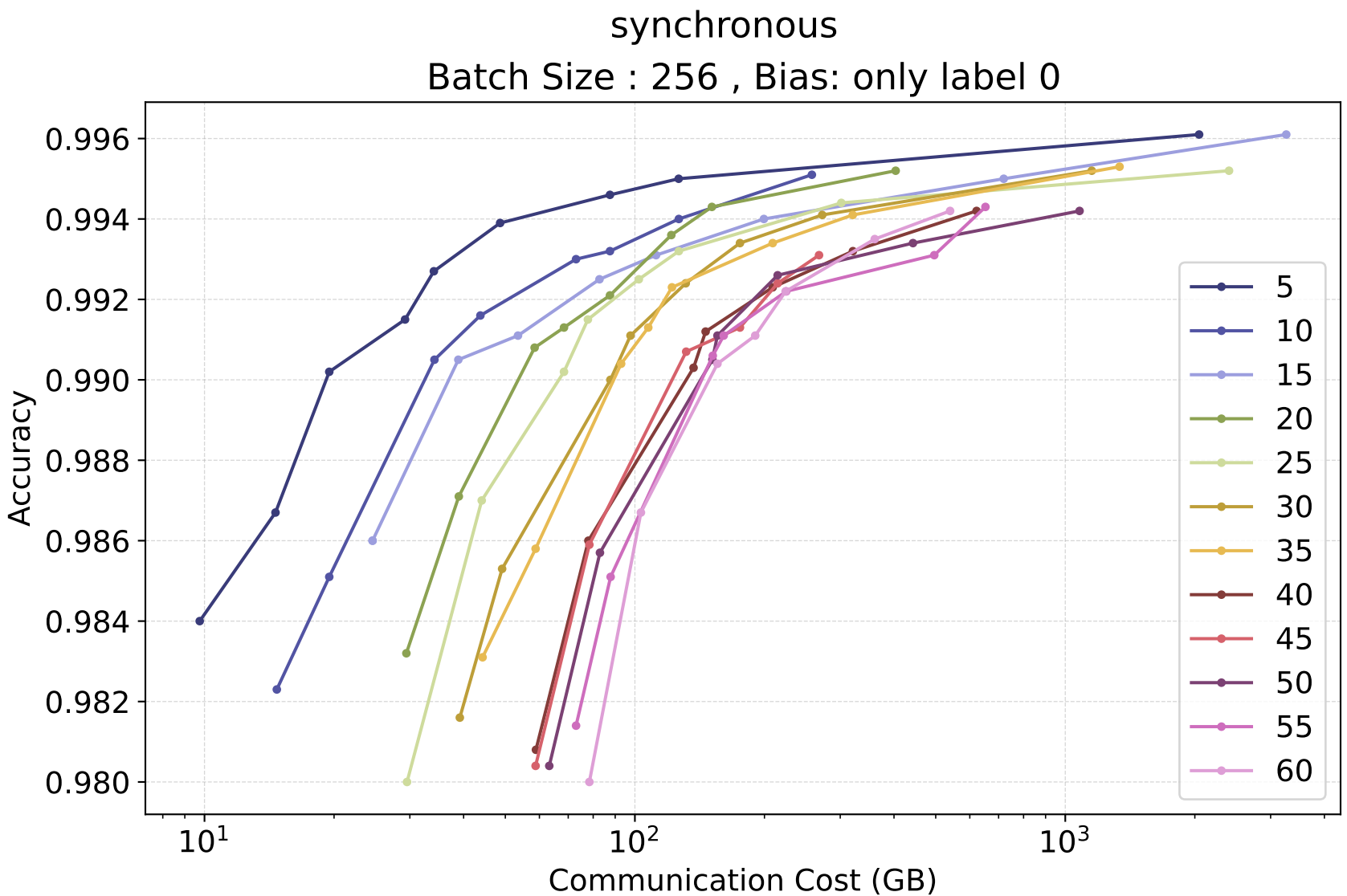
synchronous
Batch Size : 256 , Bias: only label 0
Accuracy
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0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
10^3
Communication Cost (GB)
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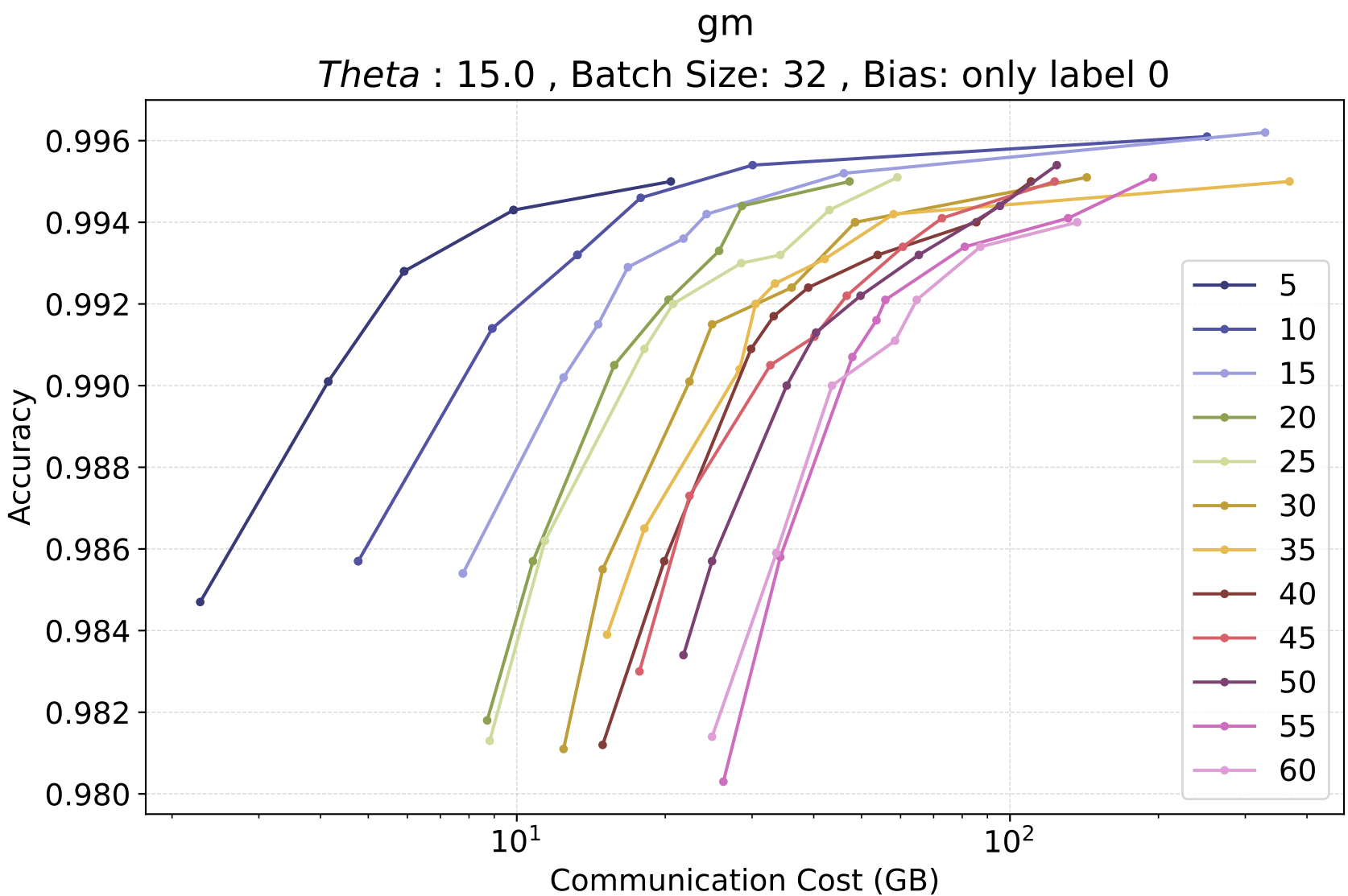
gm
Theta : 15.0 , Batch Size: 32 , Bias: only label 0
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
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10^1
10^2
Communication Cost (GB)
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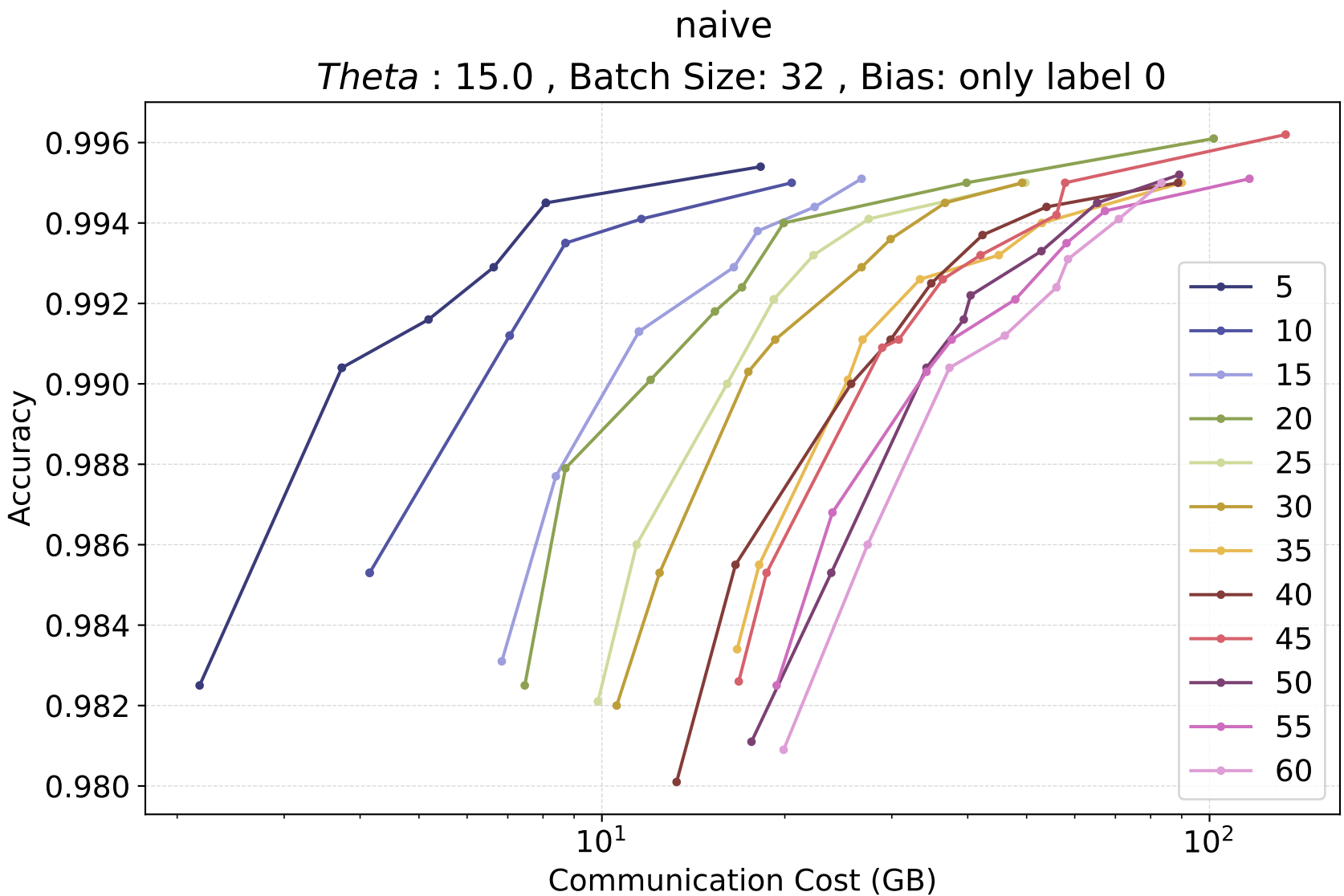
naive
Theta : 15.0 , Batch Size: 32 , Bias: only label 0
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
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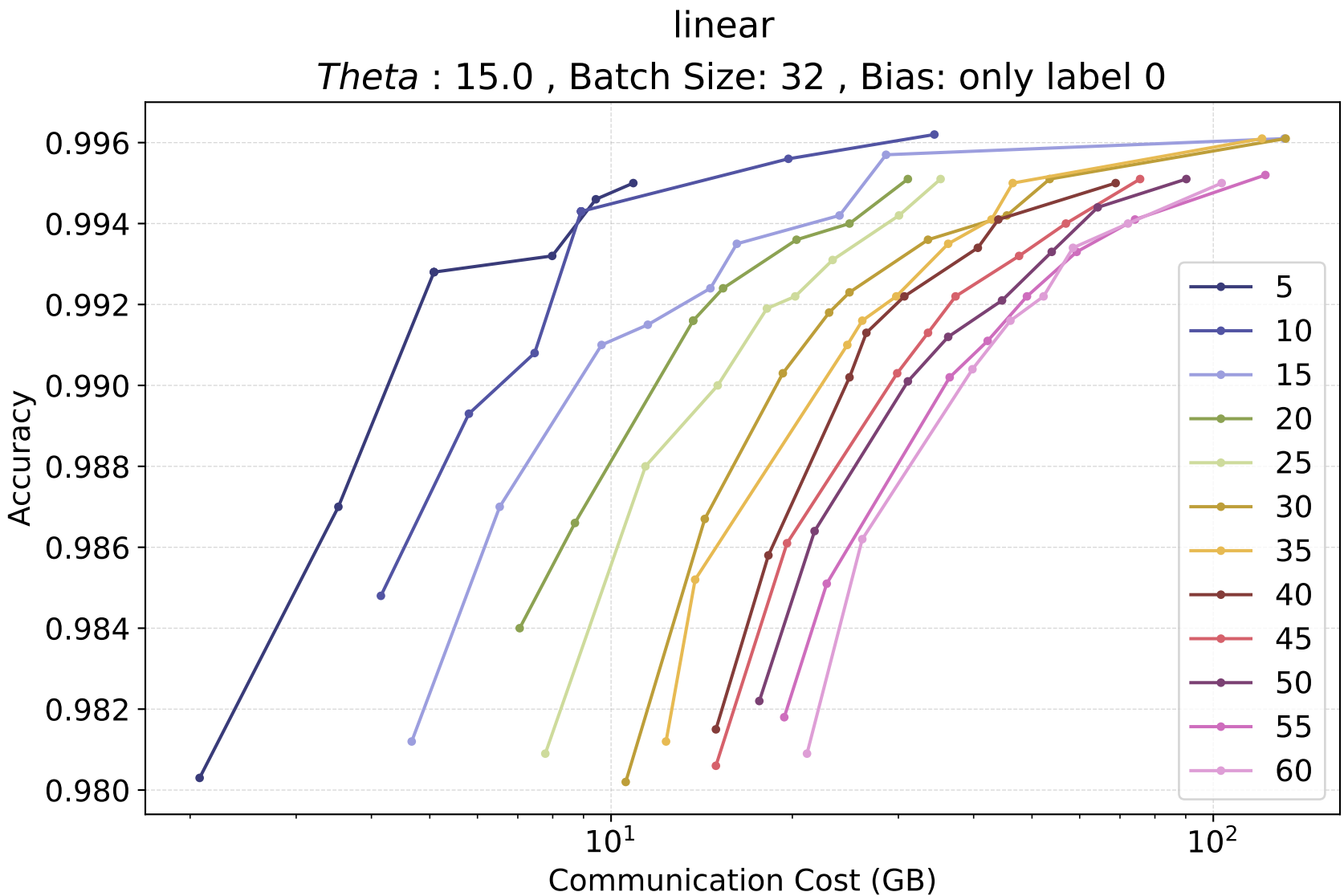
linear
Theta : 15.0 , Batch Size: 32 , Bias: only label 0
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
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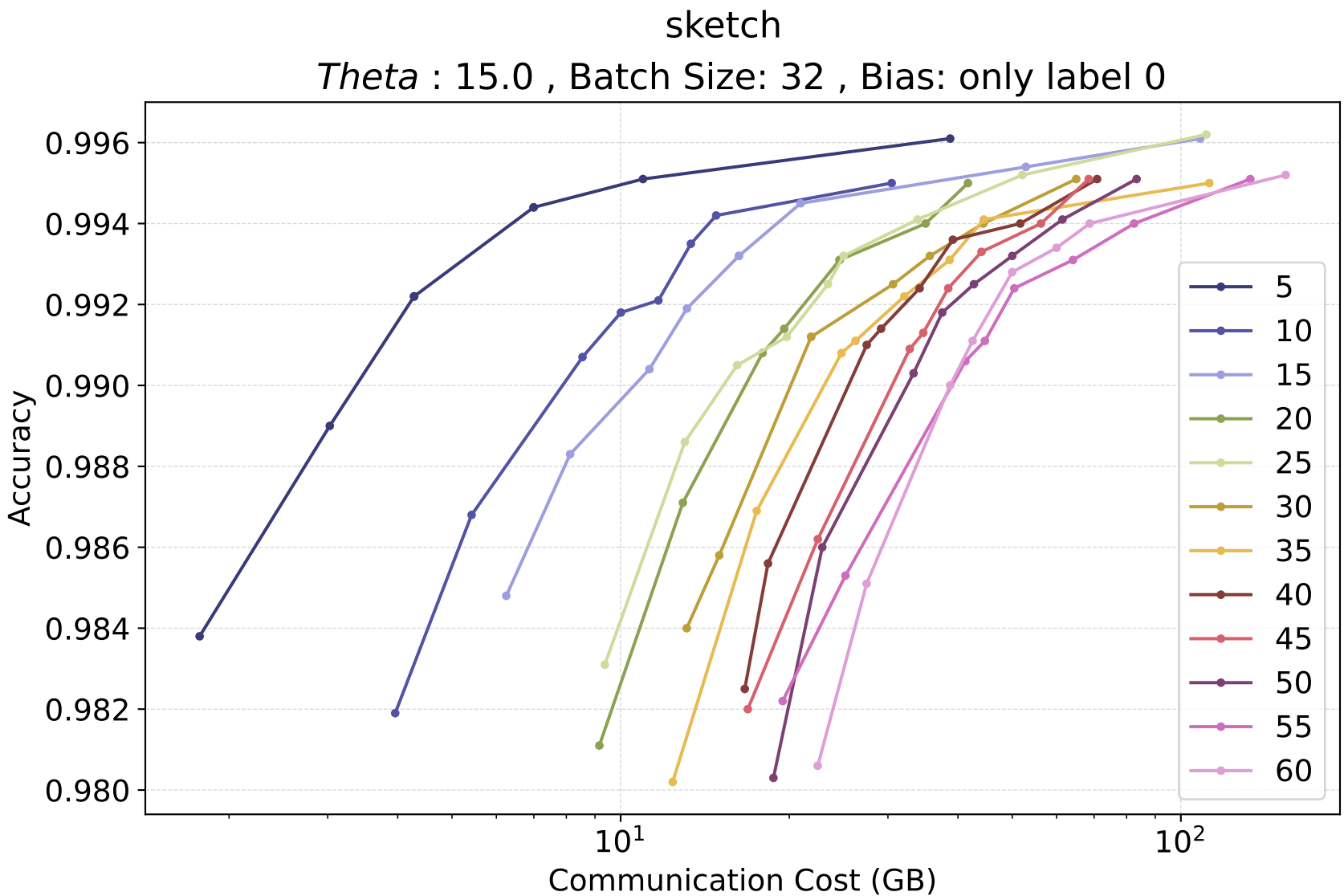
sketch
Theta : 15.0 , Batch Size: 32 , Bias: only label 0
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
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10^1
10^2
Communication Cost (GB)
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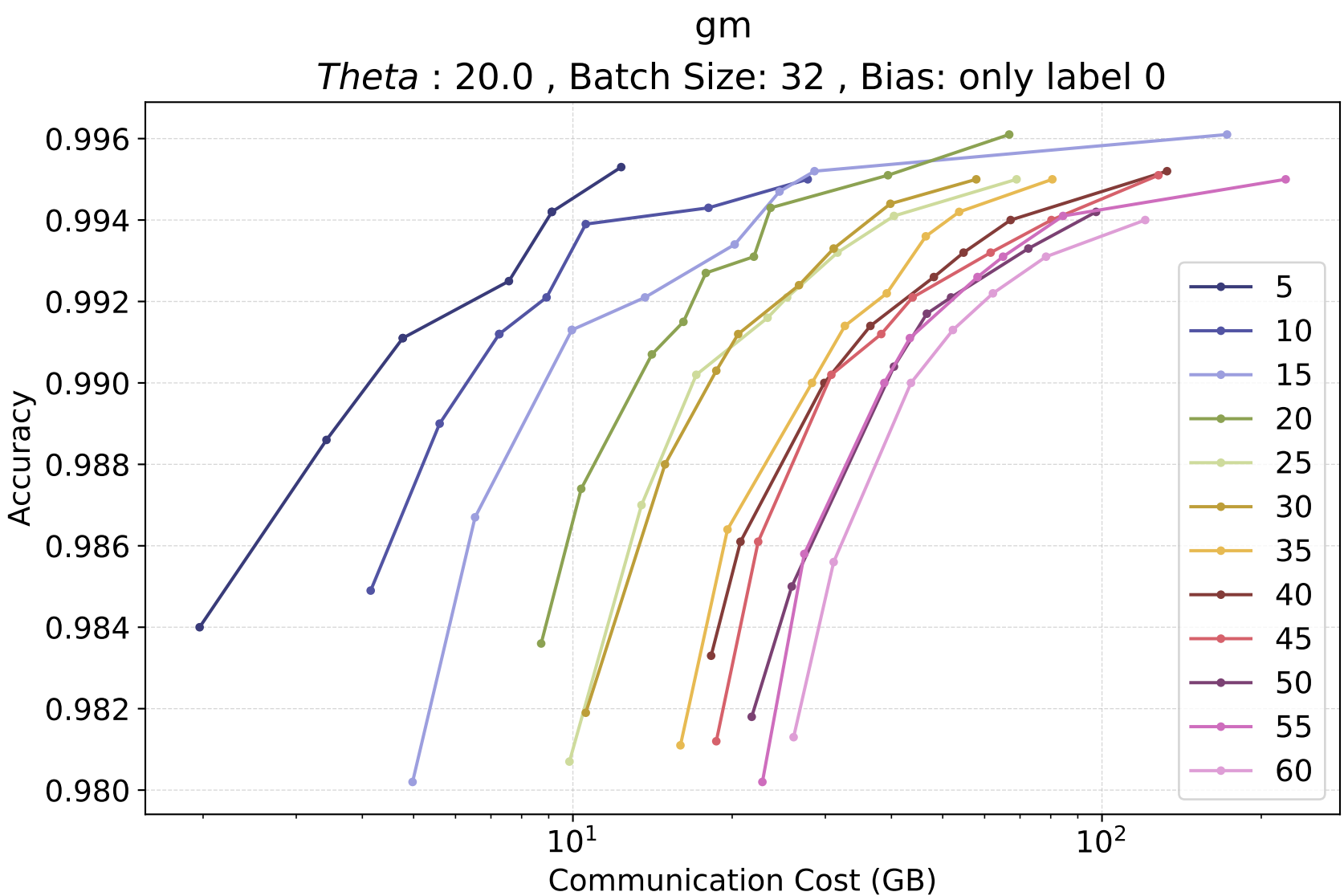
gm
Theta : 20.0 , Batch Size: 32 , Bias: only label 0
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
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10^1
10^2
Communication Cost (GB)
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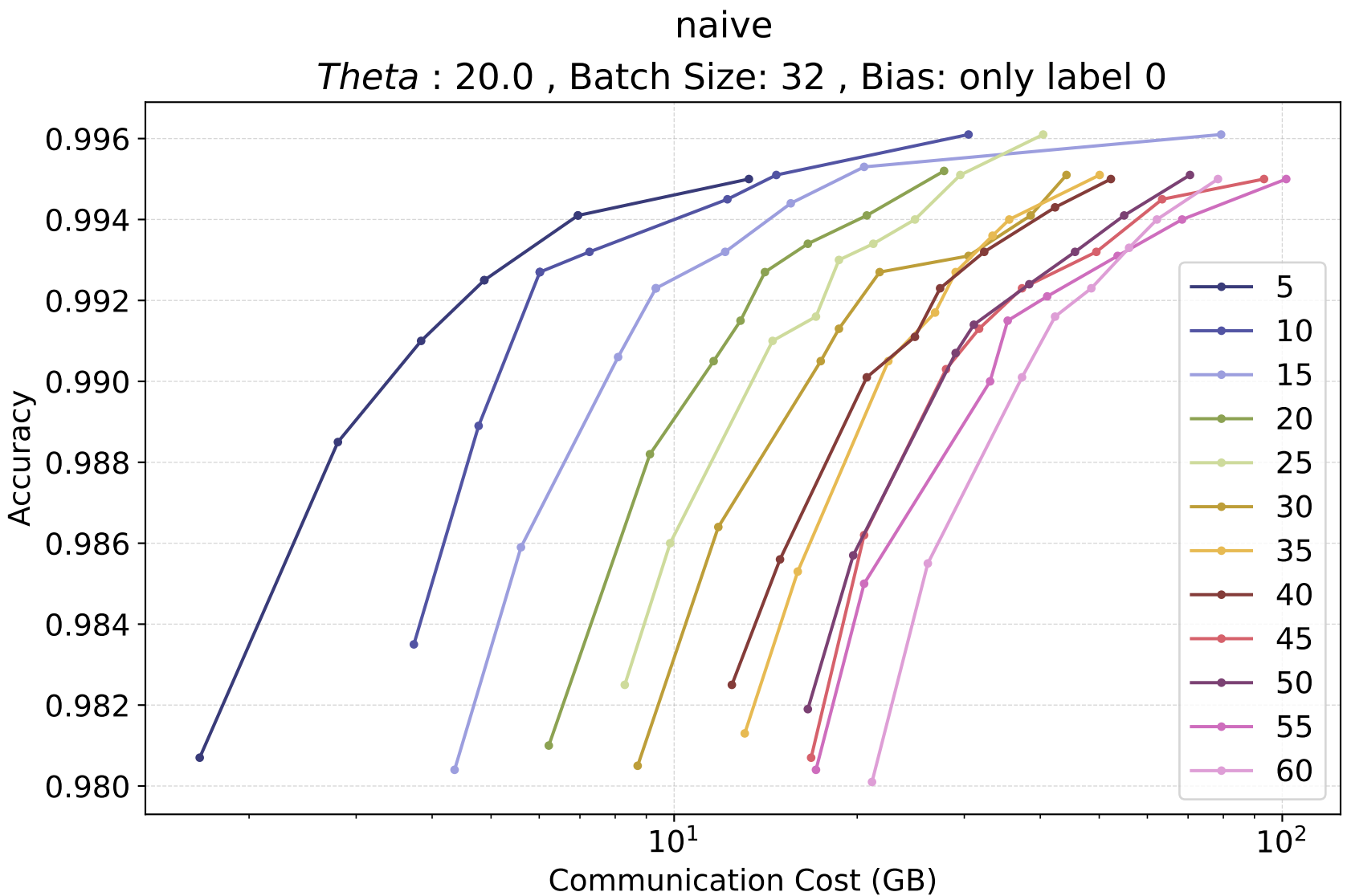
naive
Theta : 20.0 , Batch Size: 32 , Bias: only label 0
Accuracy
0.996
0.994
0.992
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0.988
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10^1
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Communication Cost (GB)
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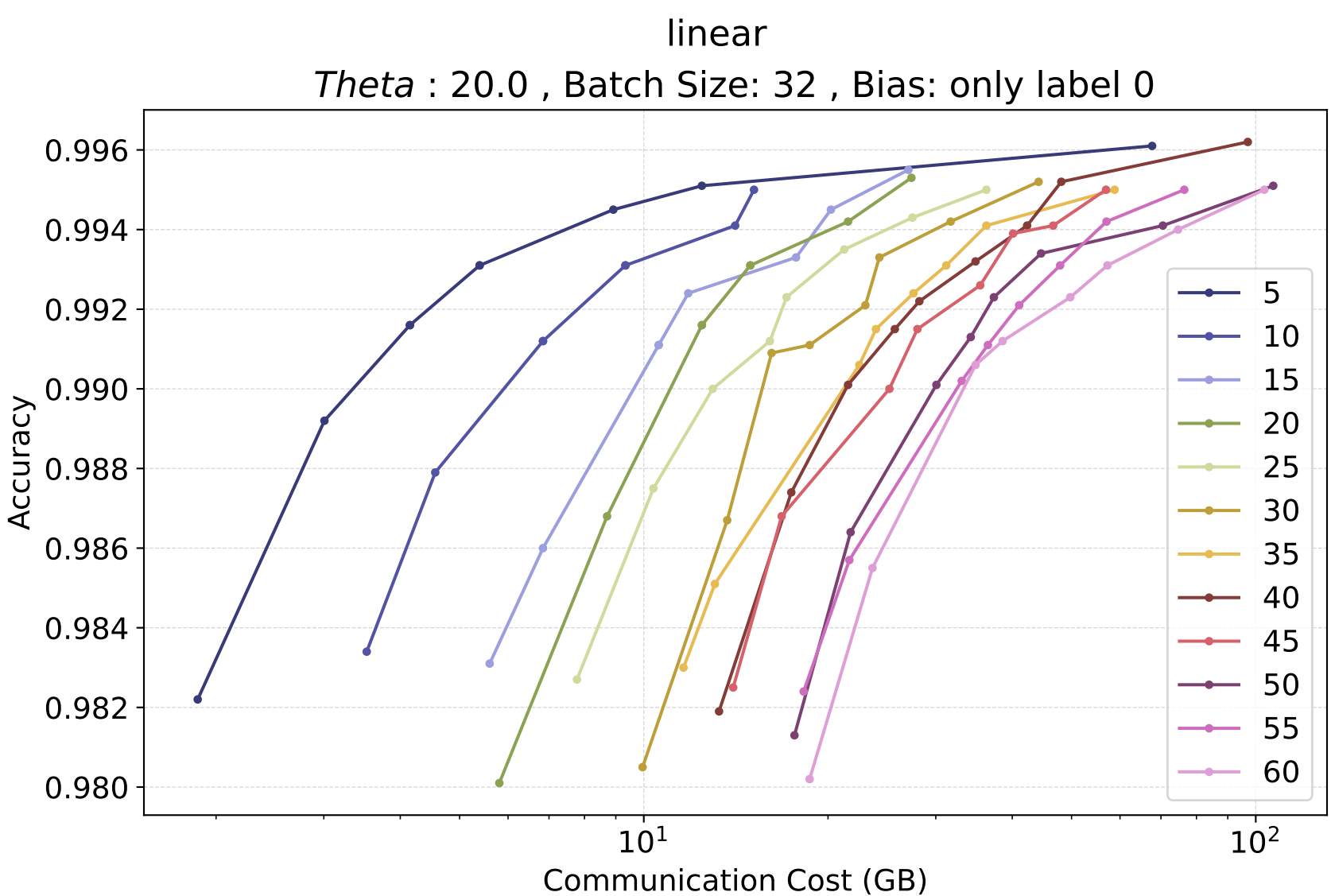
linear
Theta : 20.0 , Batch Size: 32 , Bias: only label 0
Accuracy
0.996
0.994
0.992
0.990
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Communication Cost (GB)
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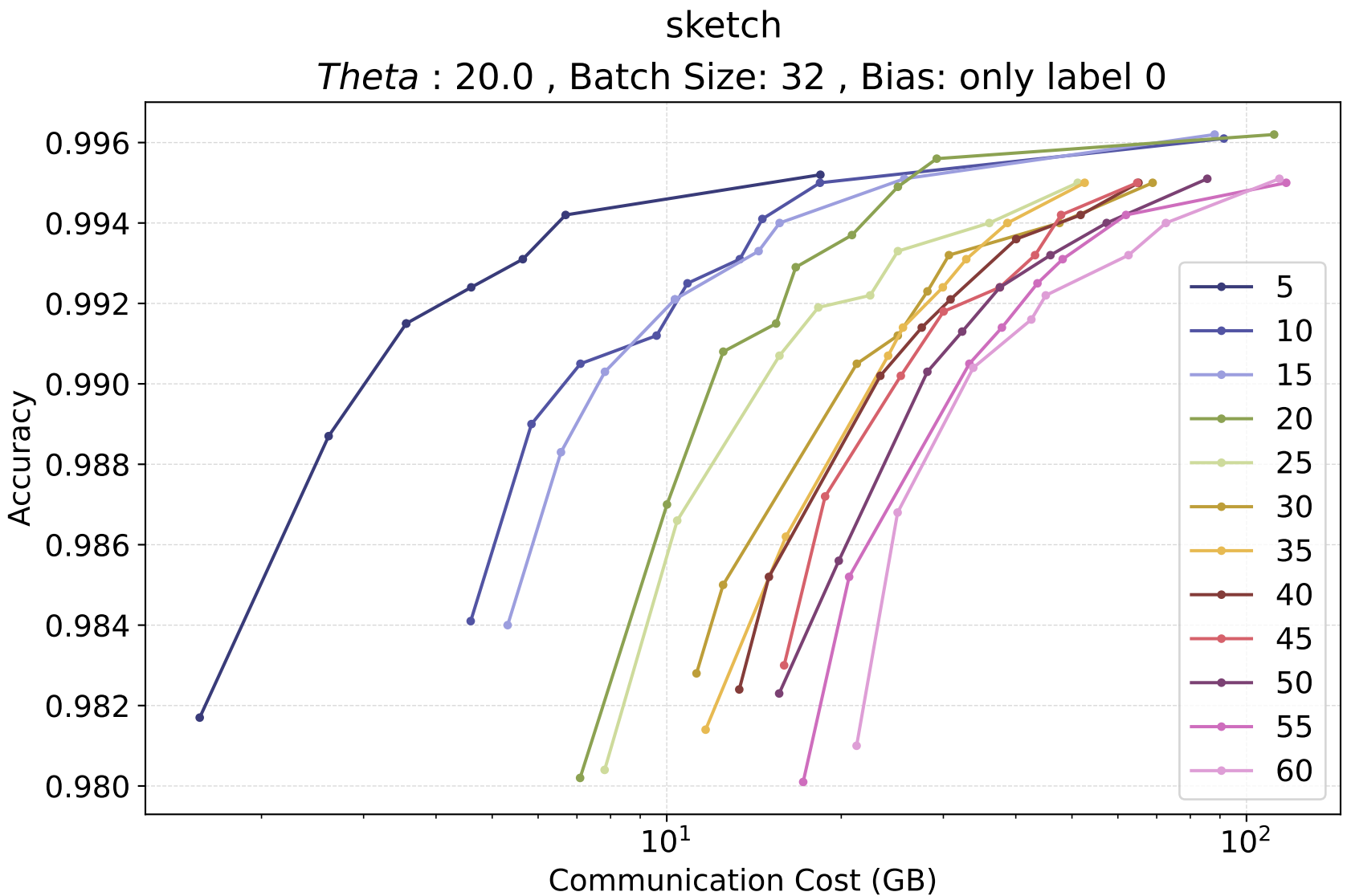
sketch
Theta : 20.0 , Batch Size: 32 , Bias: only label 0
Accuracy
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Communication Cost (GB)
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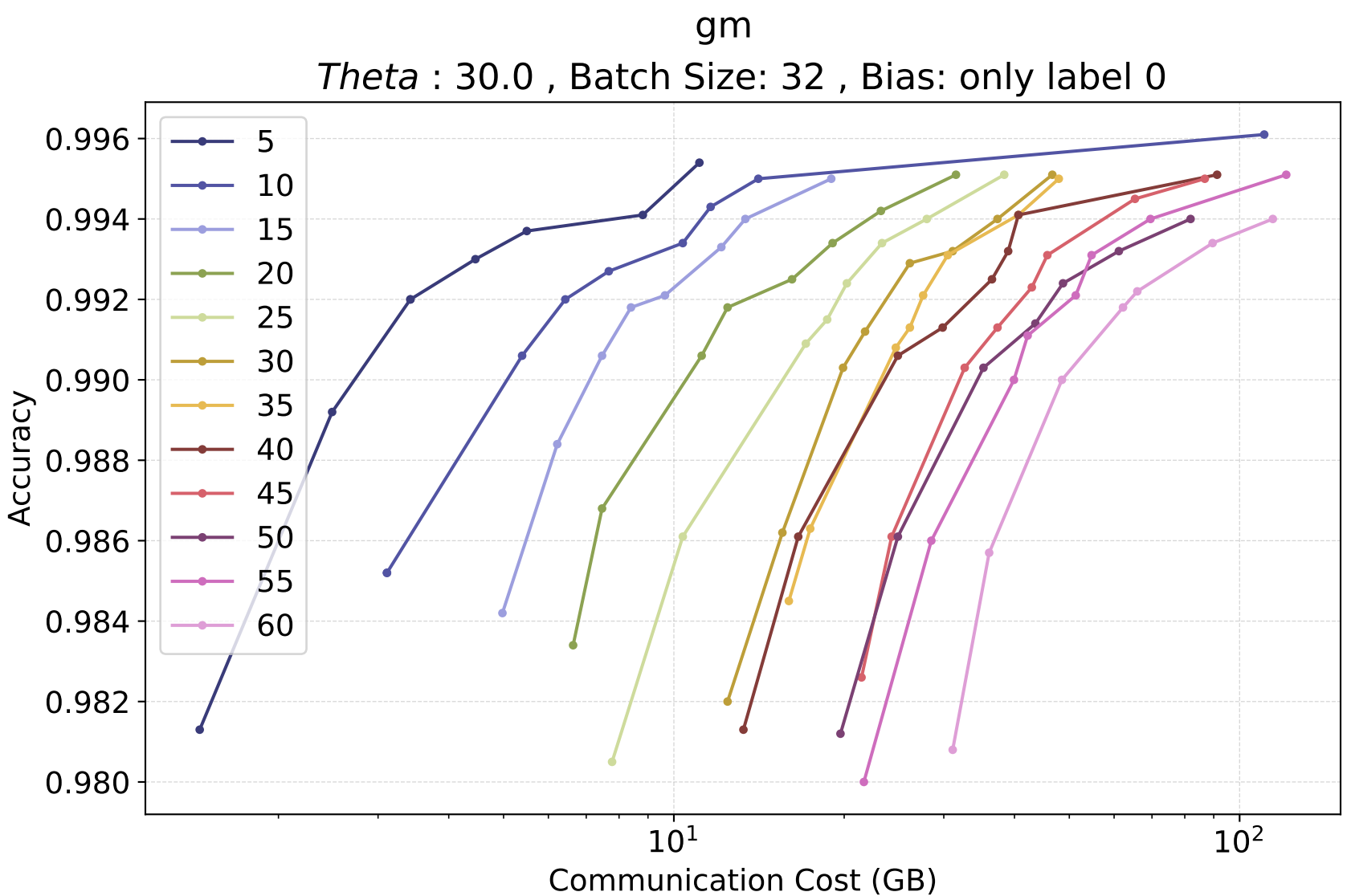
gm
Theta : 30.0 , Batch Size: 32 , Bias: only label 0
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
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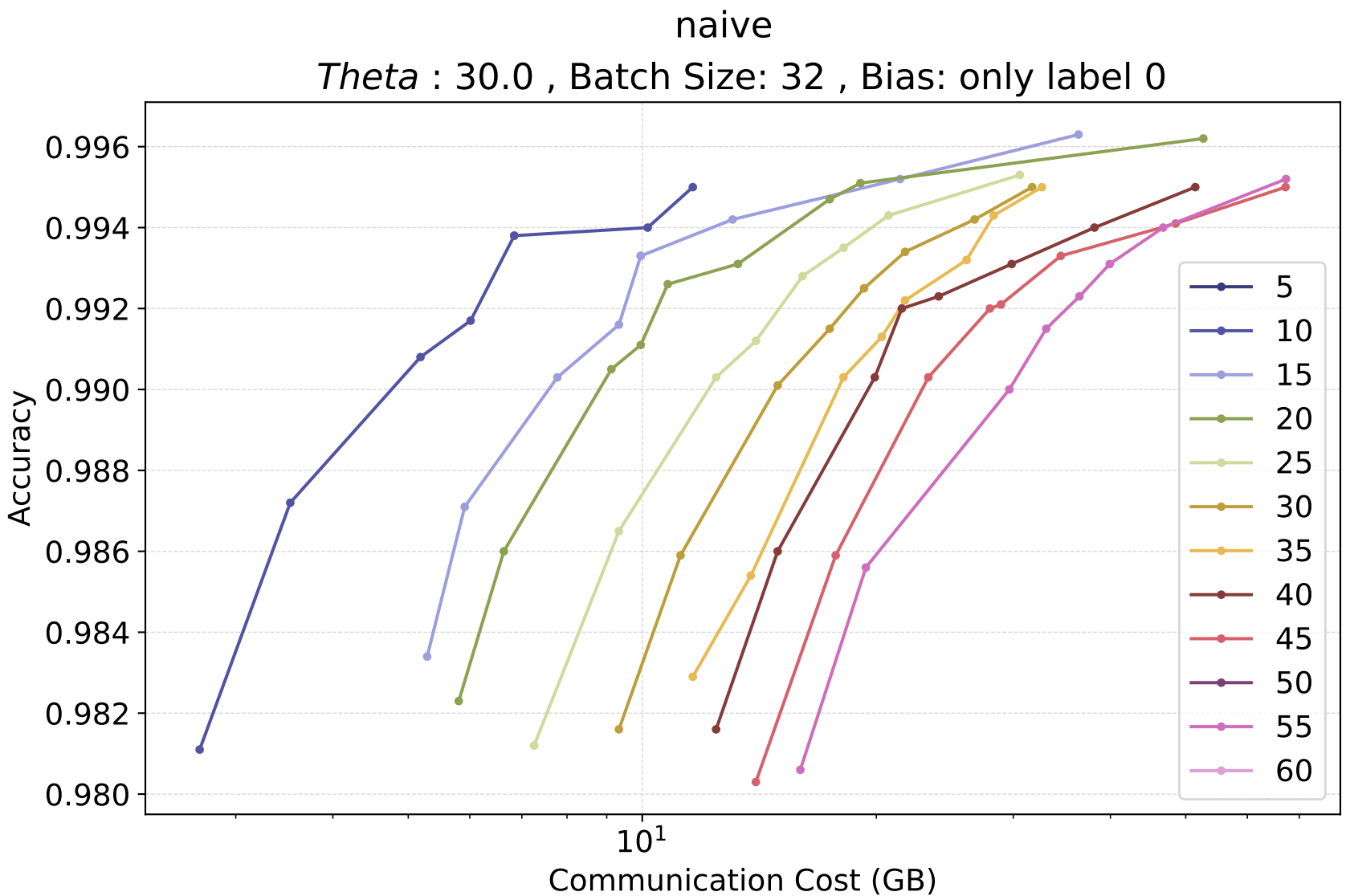
10^1
10^2
Communication Cost (GB)


naive
Theta : 30.0 , Batch Size: 32 , Bias: only label 0
Accuracy
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0.994
0.992
0.990
0.988
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10^1
Communication Cost (GB)
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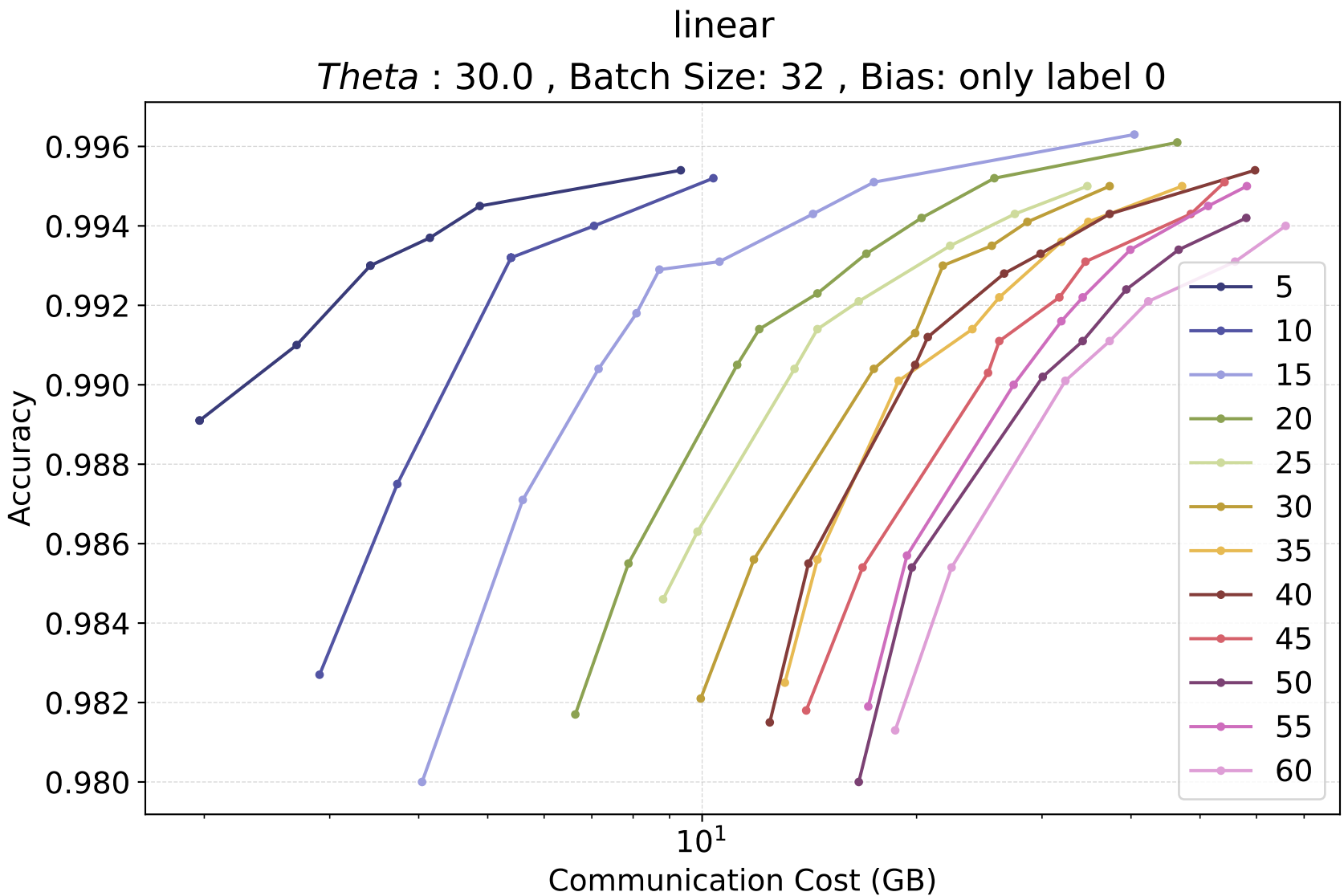
linear
Theta : 30.0 , Batch Size: 32 , Bias: only label 0
Accuracy
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10^1
Communication Cost (GB)
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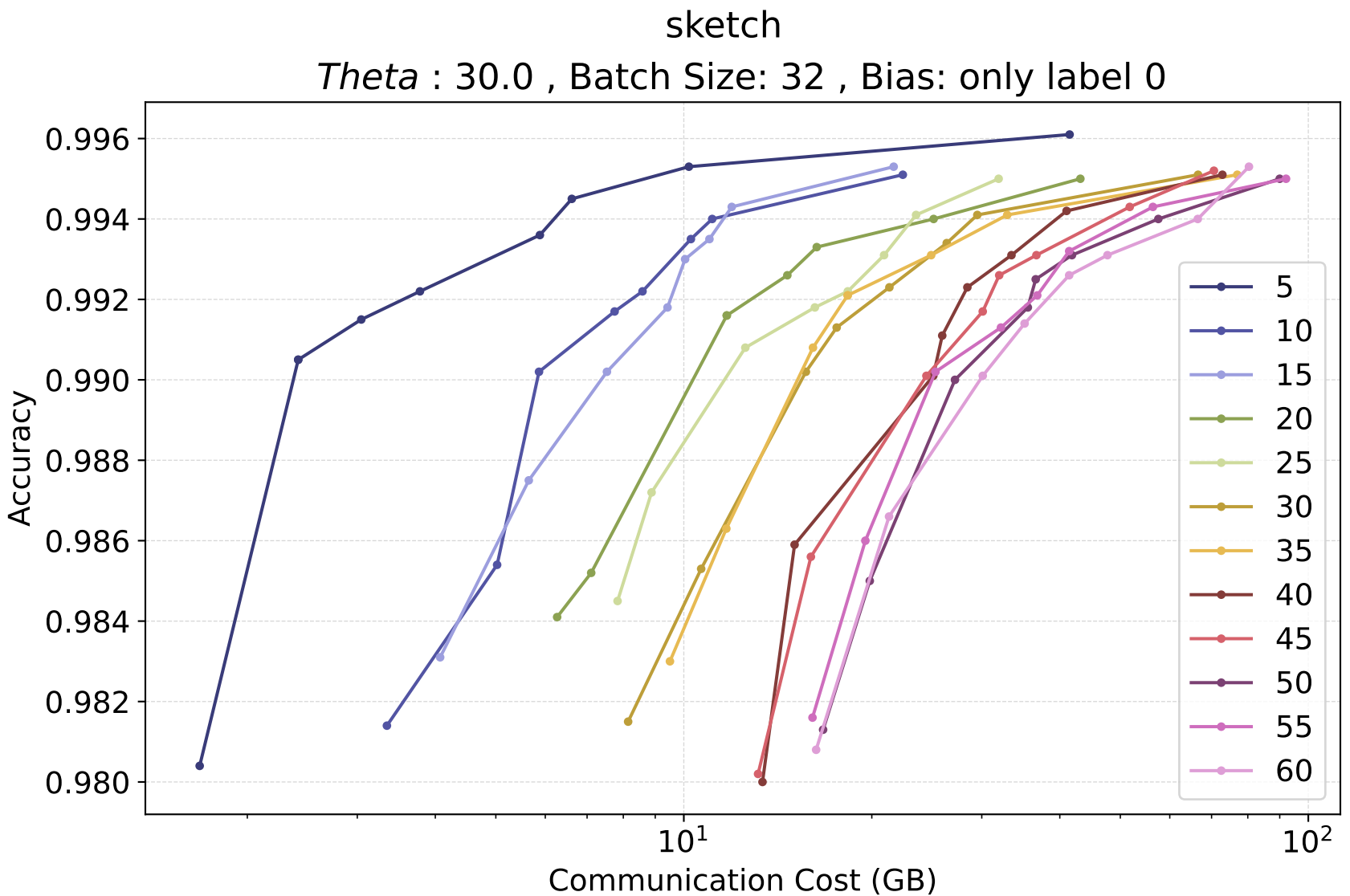
sketch
Theta : 30.0 , Batch Size: 32 , Bias: only label 0
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
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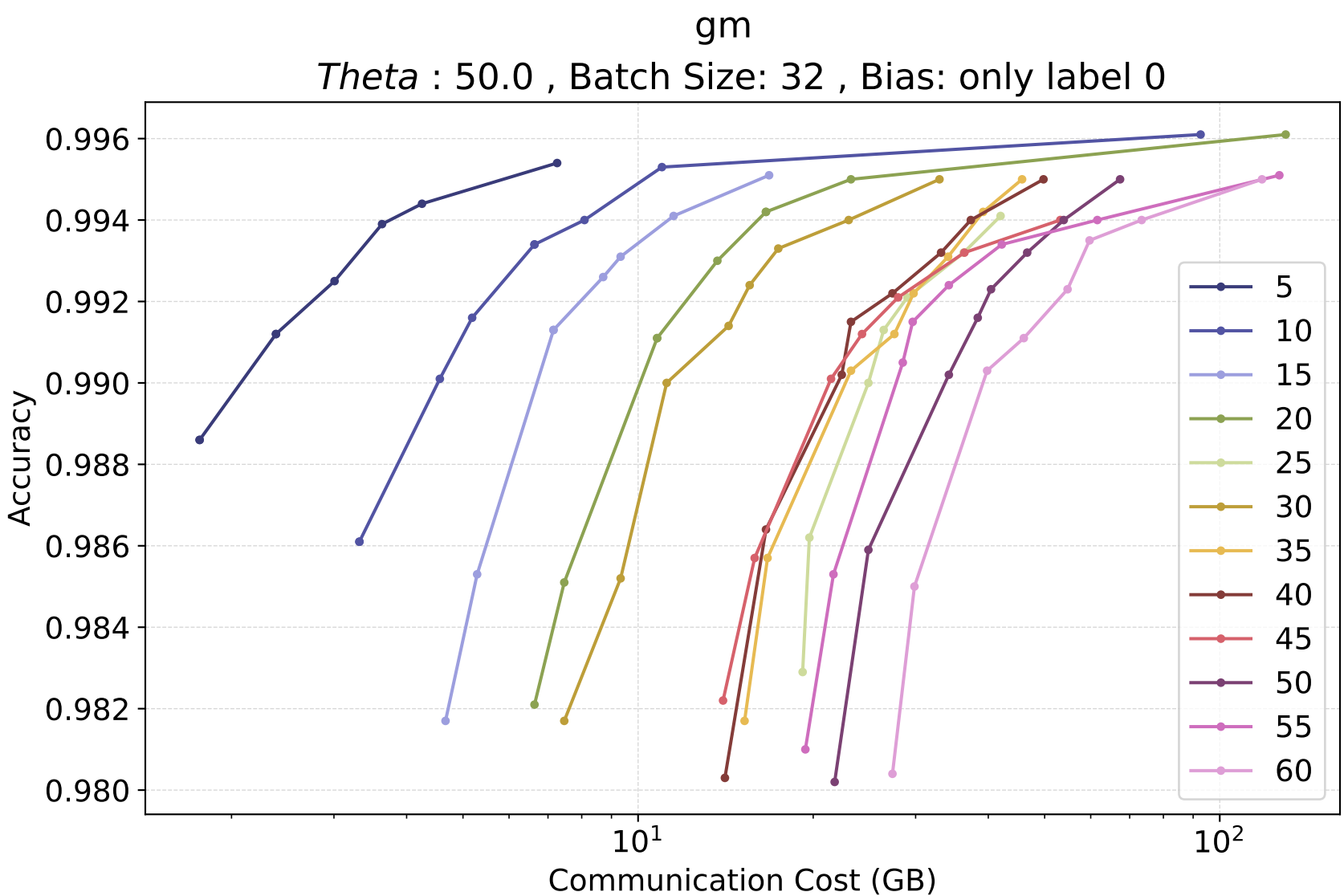
gm
Theta : 50.0 , Batch Size: 32 , Bias: only label 0
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
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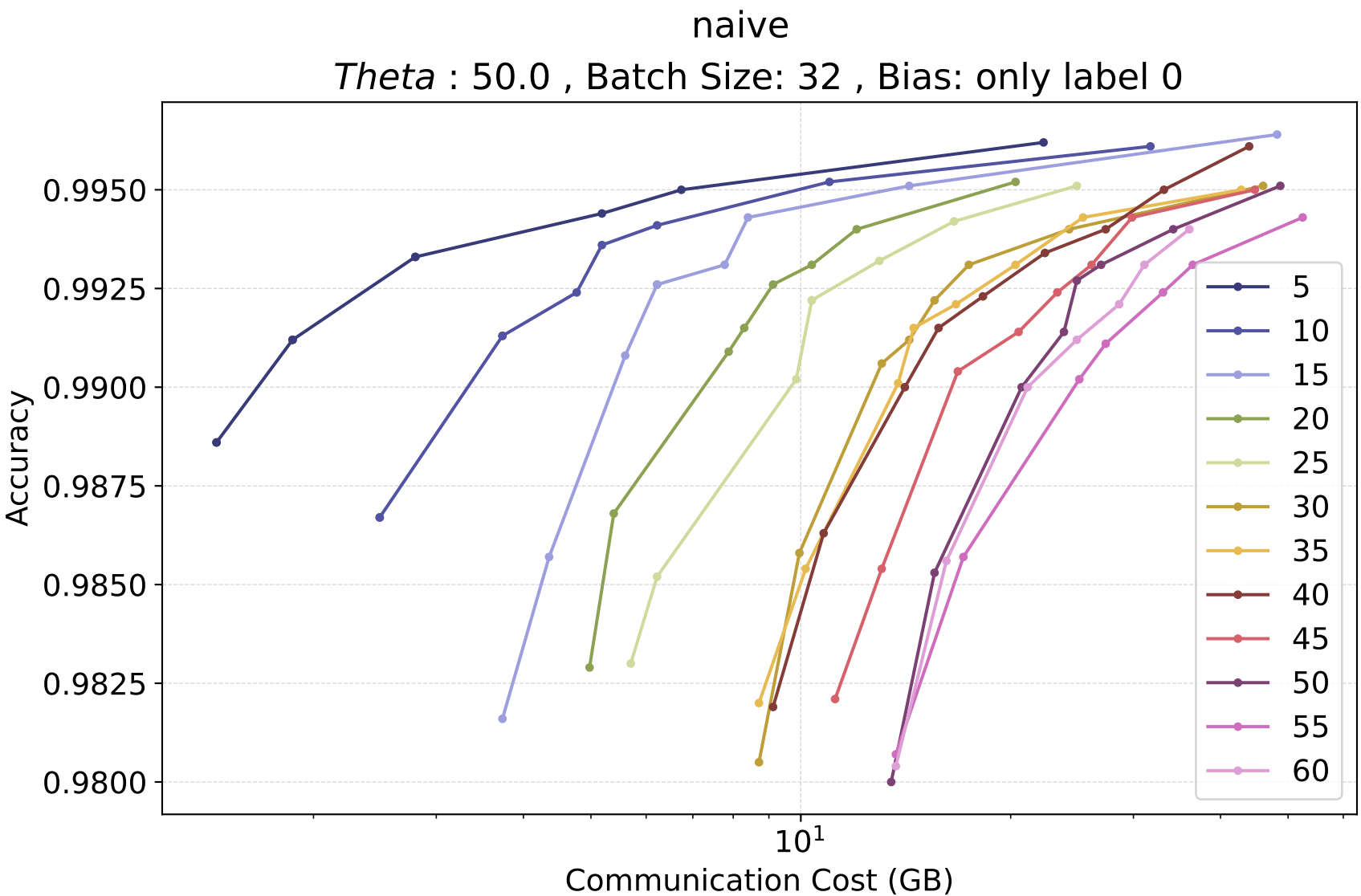
naive
Theta : 50.0 , Batch Size: 32 , Bias: only label 0
Accuracy
0.9950
0.9925
0.9900
0.9875
0.9850
0.9825
0.9800
10^1
Communication Cost (GB)
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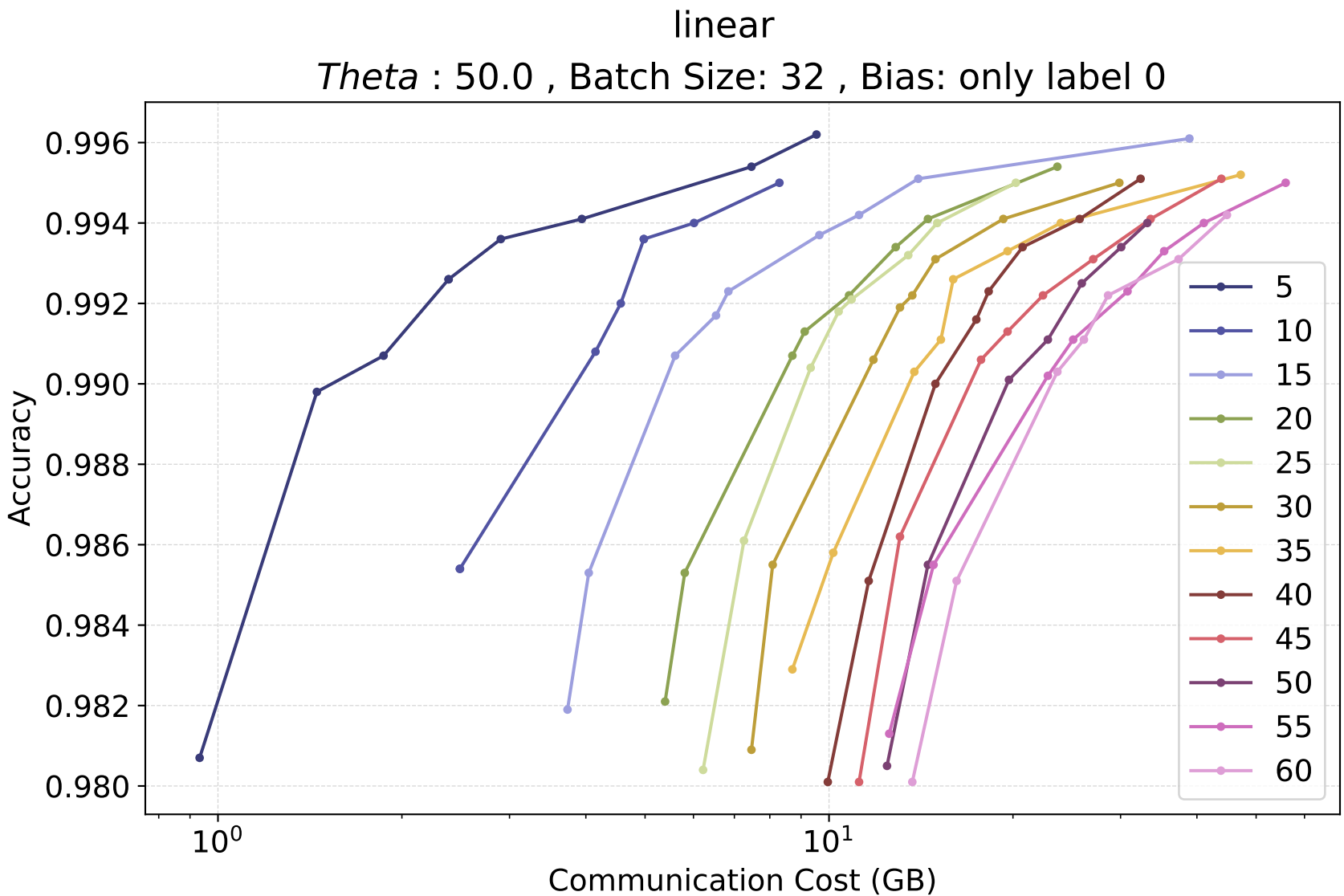
linear
Theta : 50.0 , Batch Size: 32 , Bias: only label 0
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^0
10^1
Communication Cost (GB)
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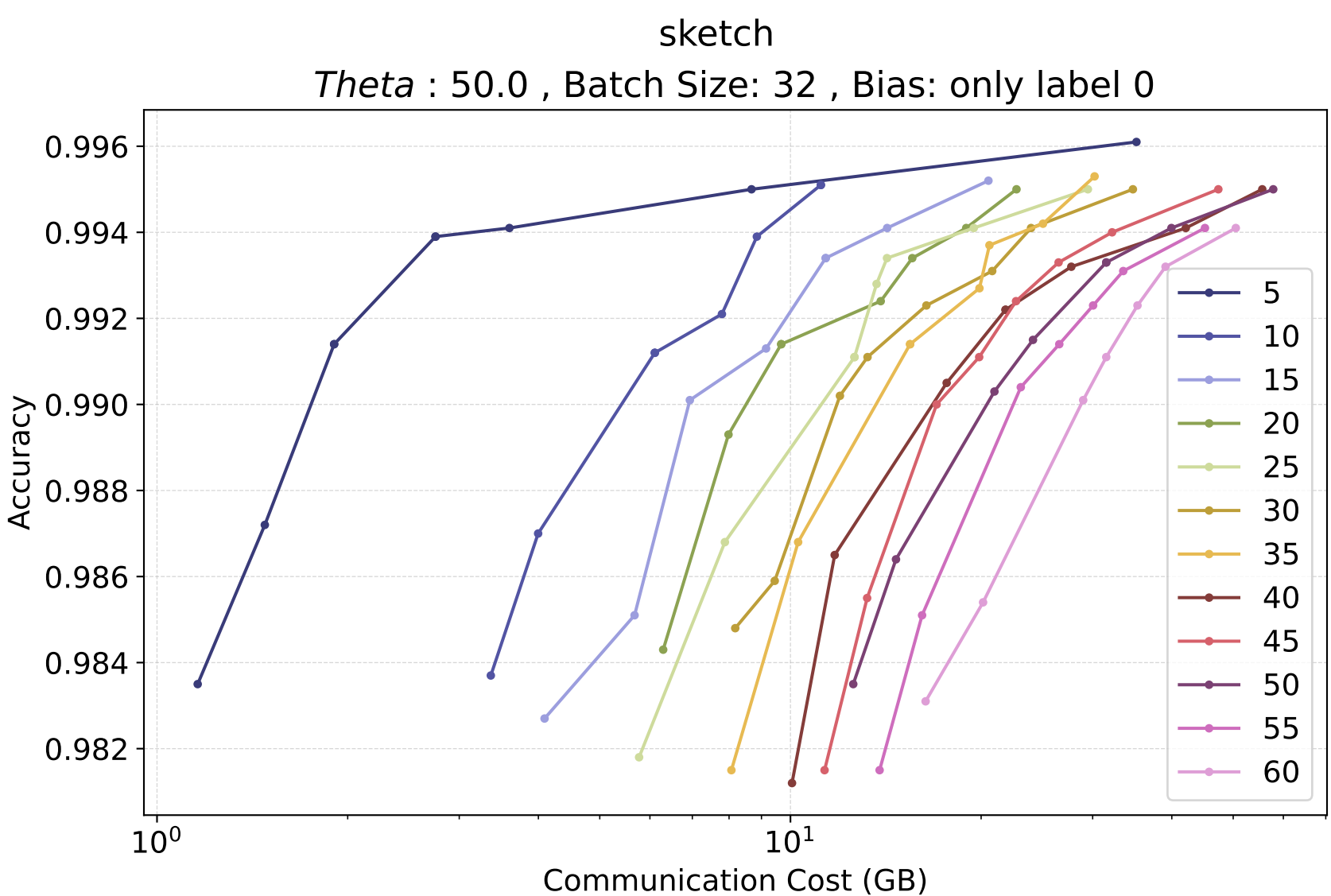
sketch
Theta : 50.0 , Batch Size: 32 , Bias: only label 0
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
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0.982
10^0
10^1
Communication Cost (GB)
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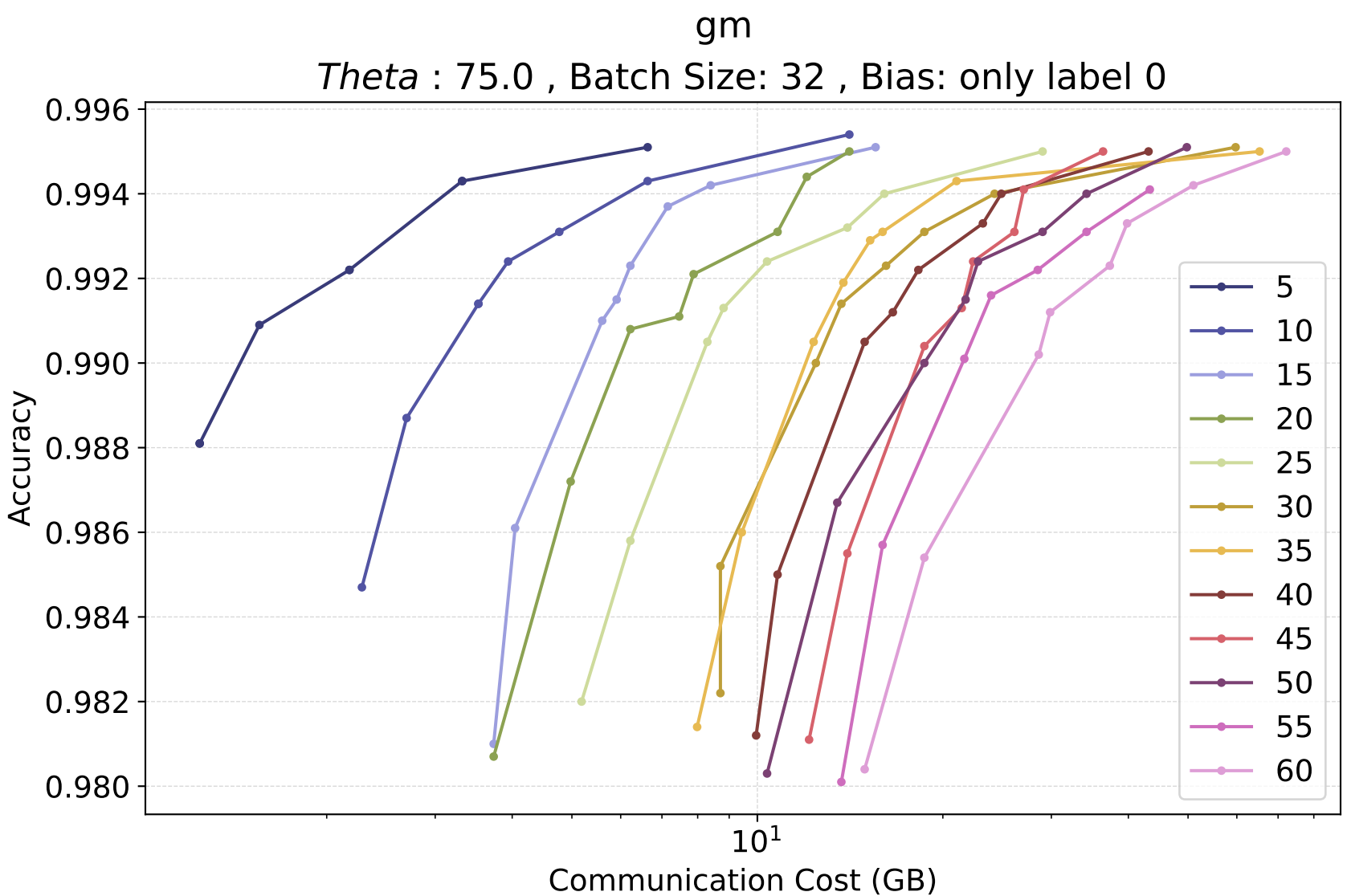
gm
Theta : 75.0 , Batch Size: 32 , Bias: only label 0
Accuracy
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0.994
0.992
0.990
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10^1
Communication Cost (GB)
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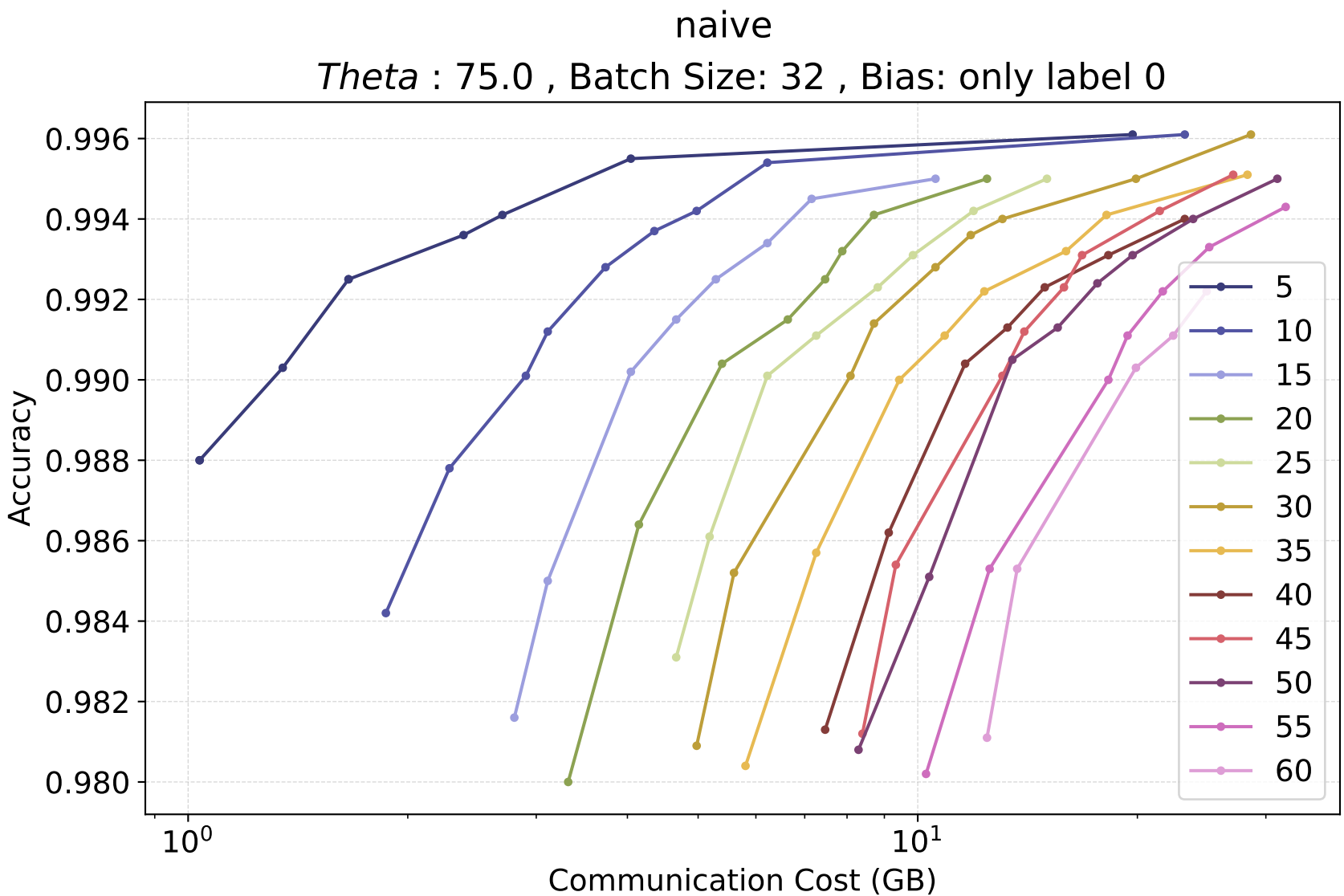
naive
Theta : 75.0 , Batch Size: 32 , Bias: only label 0
Accuracy
0.996
0.994
0.992
0.990
0.988
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10^1
Communication Cost (GB)
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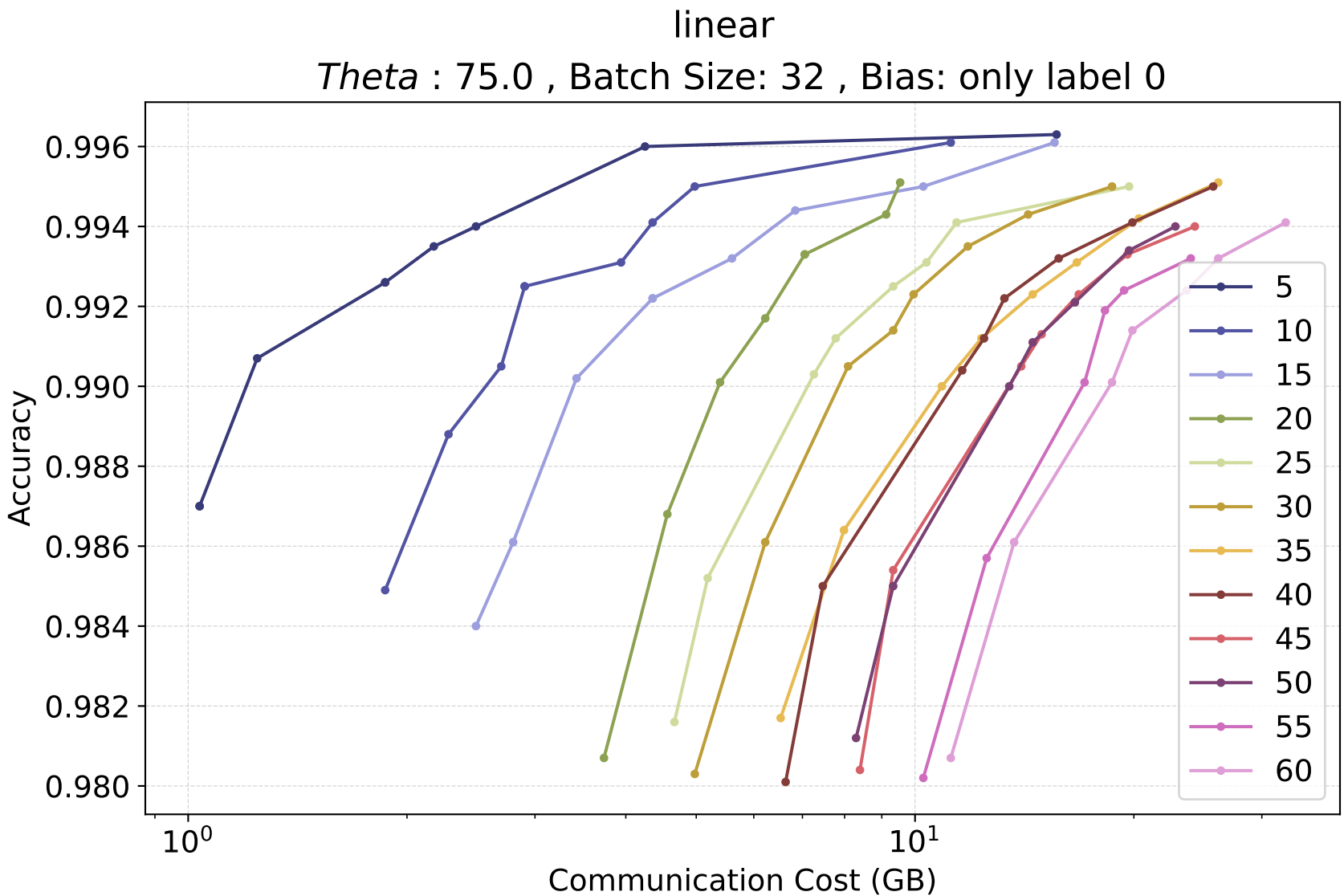
linear
Theta : 75.0 , Batch Size: 32 , Bias: only label 0
Accuracy
0.996
0.994
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10^1
Communication Cost (GB)
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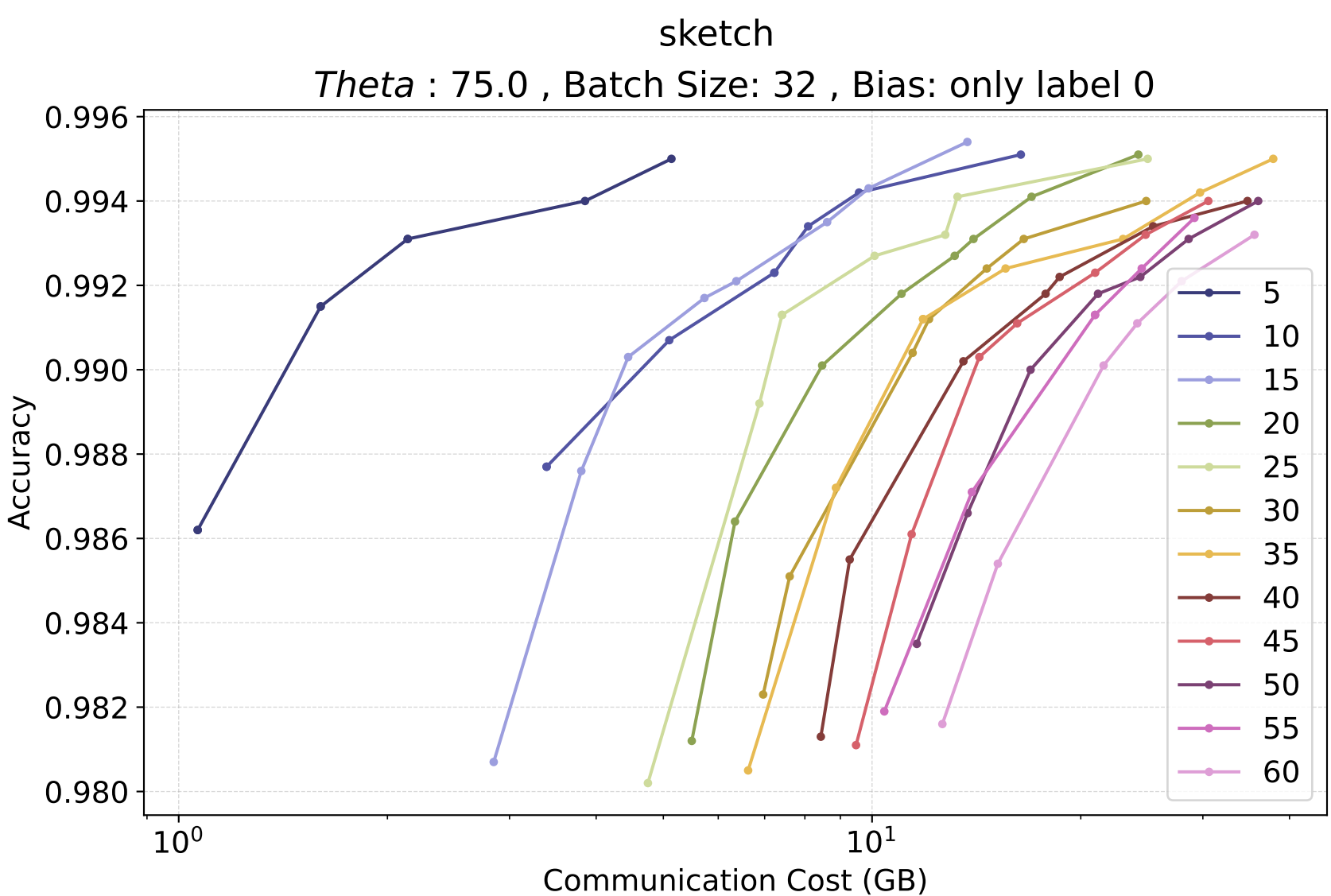
sketch
Theta : 75.0 , Batch Size: 32 , Bias: only label 0
Accuracy
0.996
0.994
0.992
0.990
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0.986
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10^1
Communication Cost (GB)
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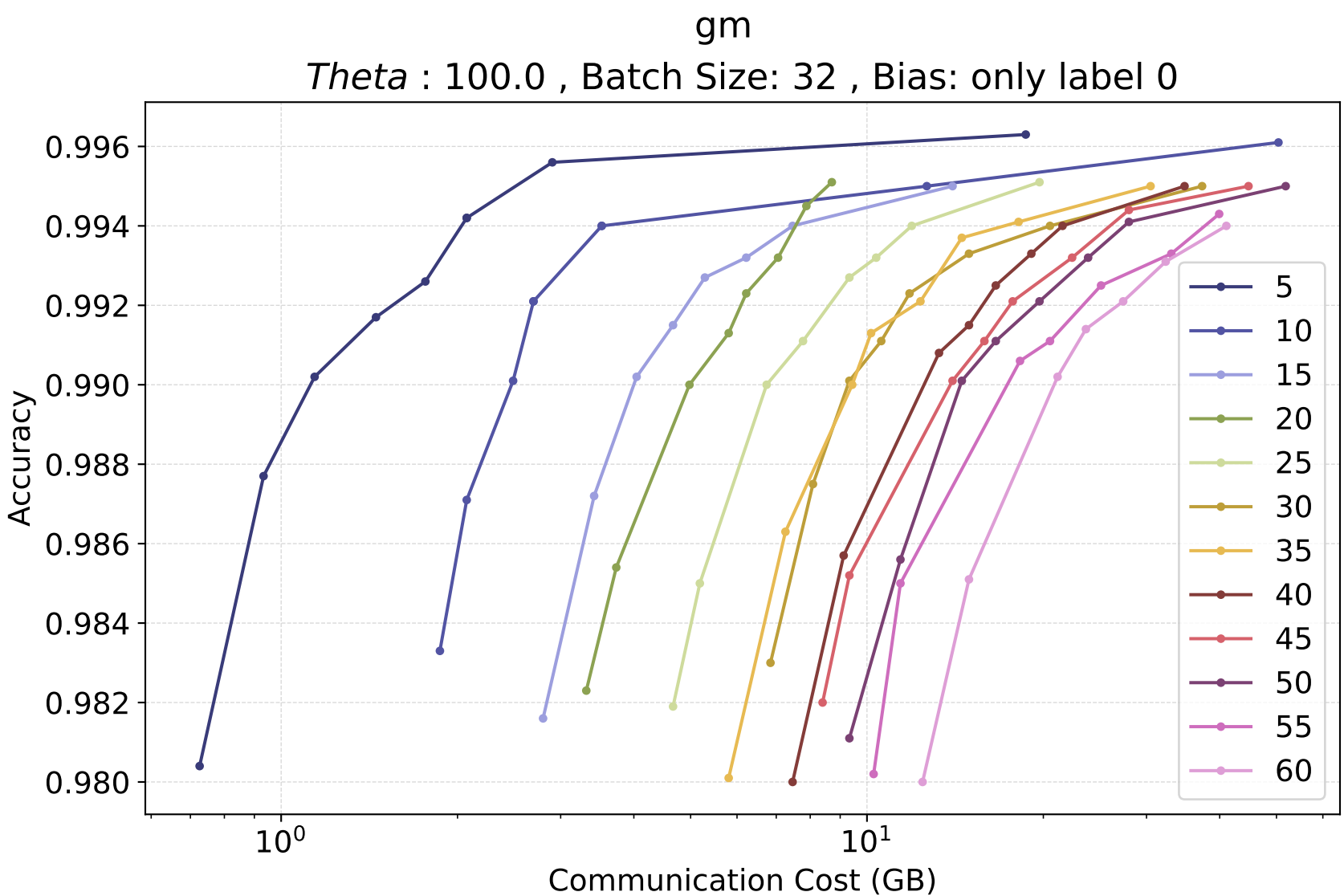
gm
Theta : 100.0 , Batch Size: 32 , Bias: only label 0
Accuracy
0.996
0.994
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Communication Cost (GB)
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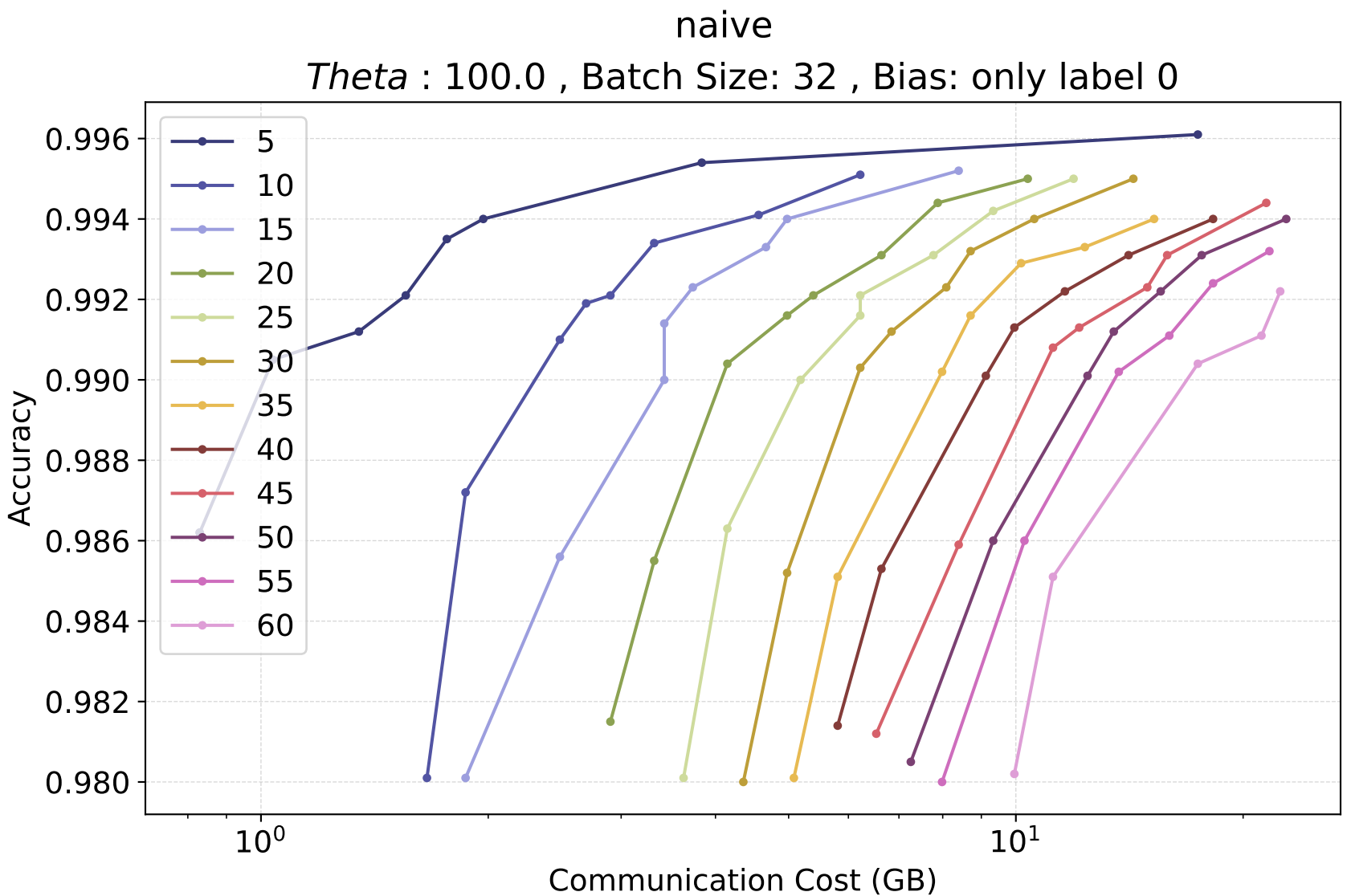
naive
Theta : 100.0 , Batch Size: 32 , Bias: only label 0
Accuracy
0.996
0.994
0.992
0.990
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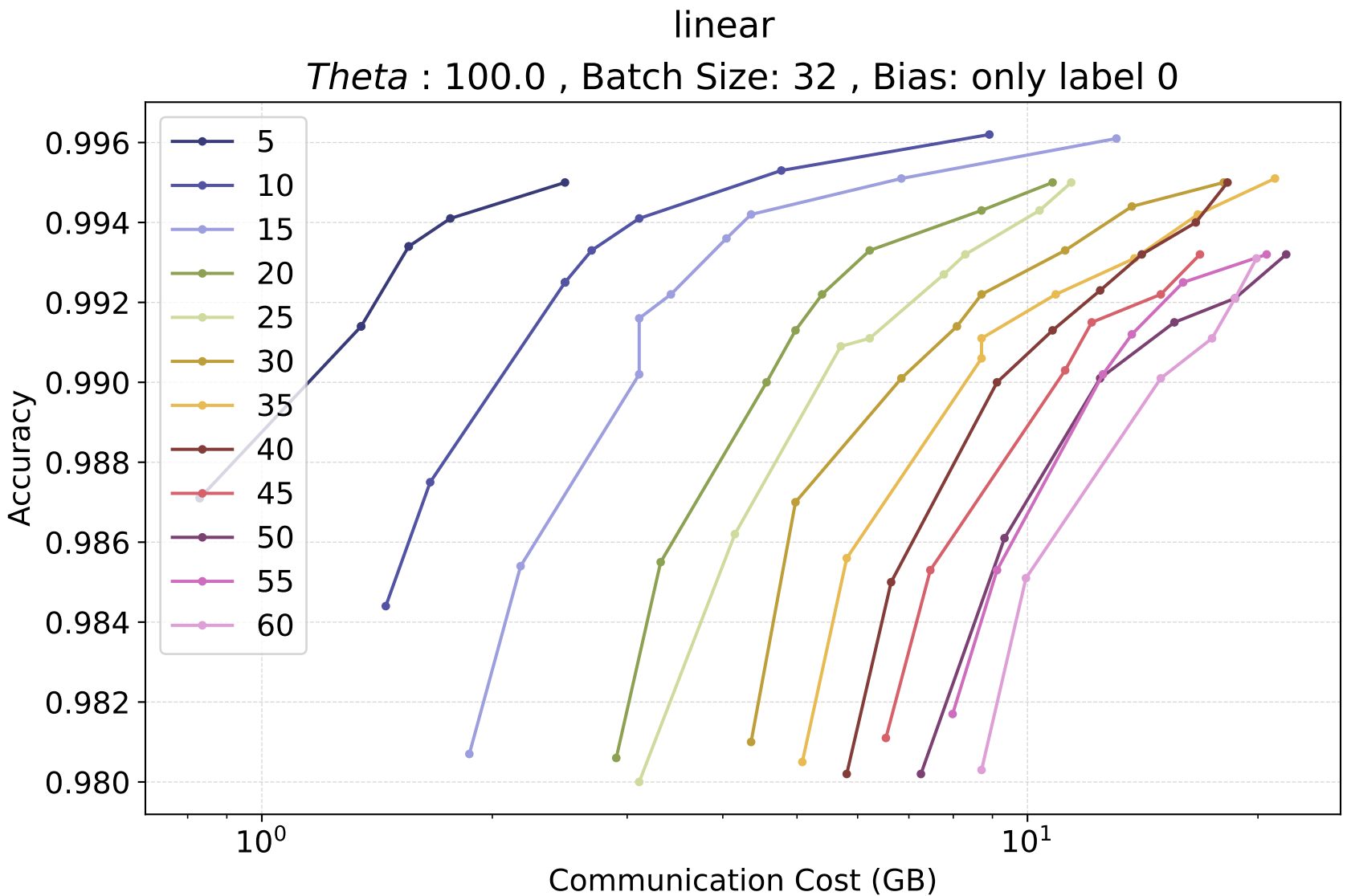
10^0
10^1
Communication Cost (GB)


linear
Theta : 100.0 , Batch Size: 32 , Bias: only label 0
Accuracy
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0.994
0.992
0.990
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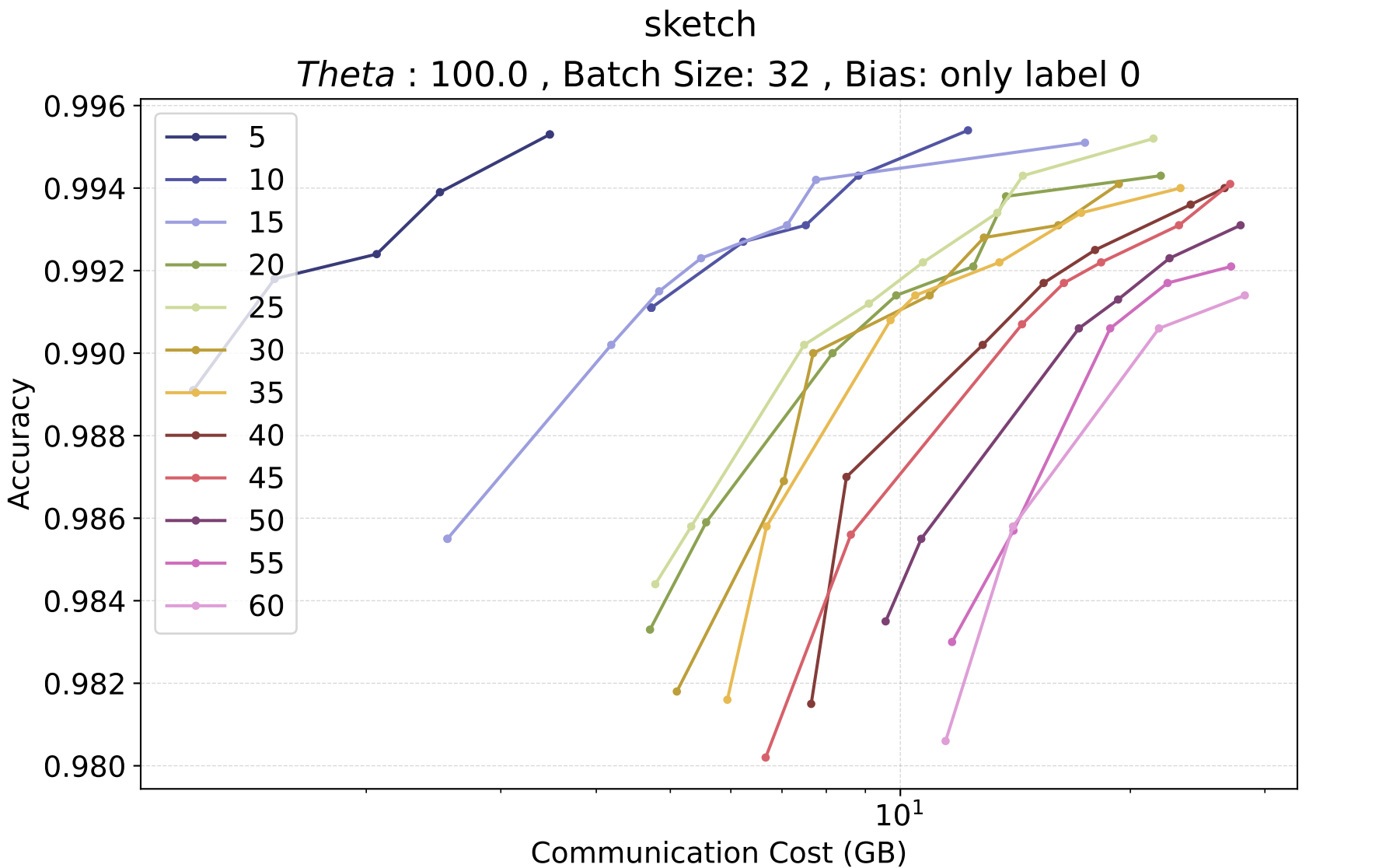
10^0
10^1
Communication Cost (GB)


sketch
Theta : 100.0 , Batch Size: 32 , Bias: only label 0
Accuracy
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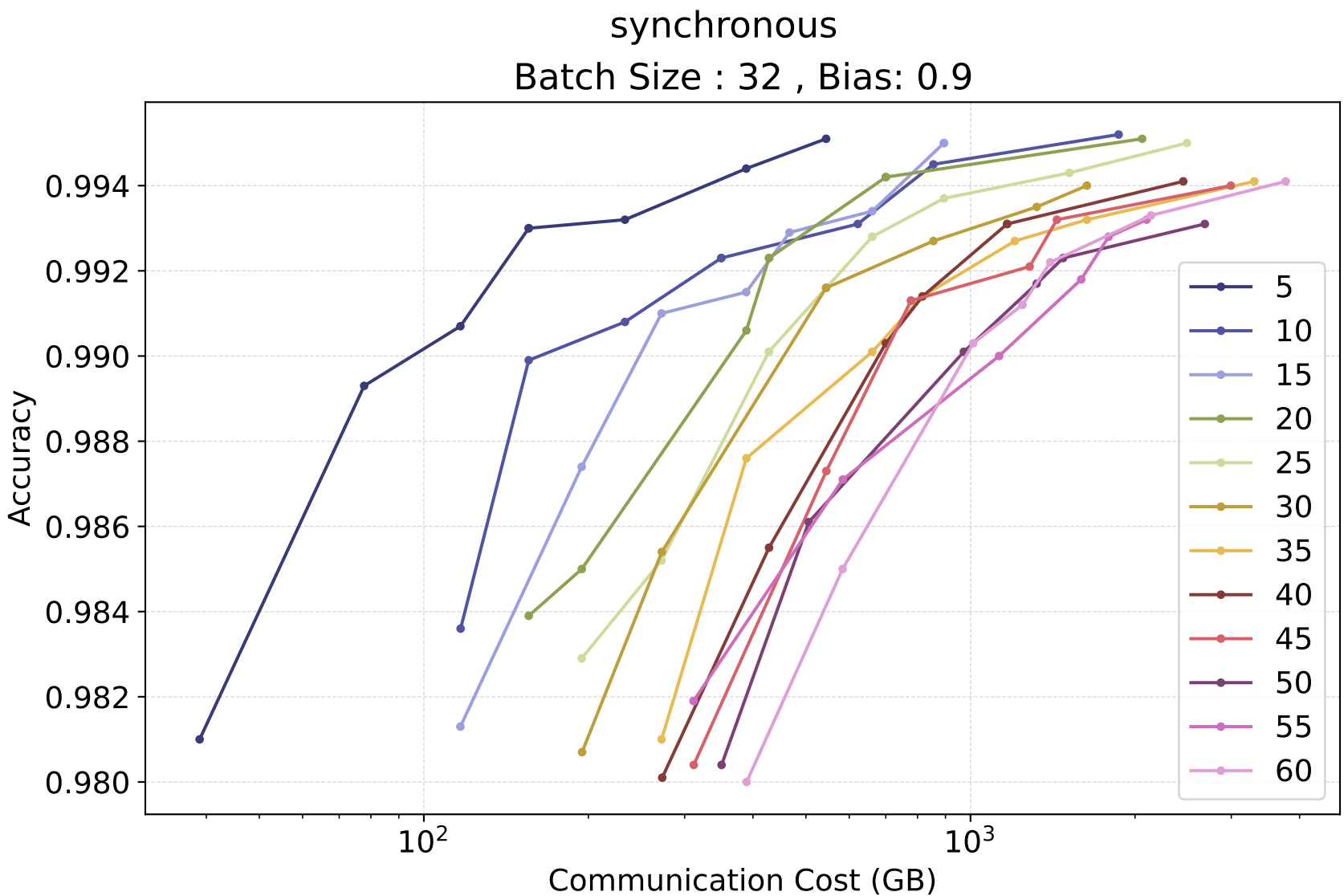
10^1
Communication Cost (GB)


synchronous
Batch Size : 32 , Bias: 0.9
Accuracy
0.994
0.992
0.990
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Communication Cost (GB)
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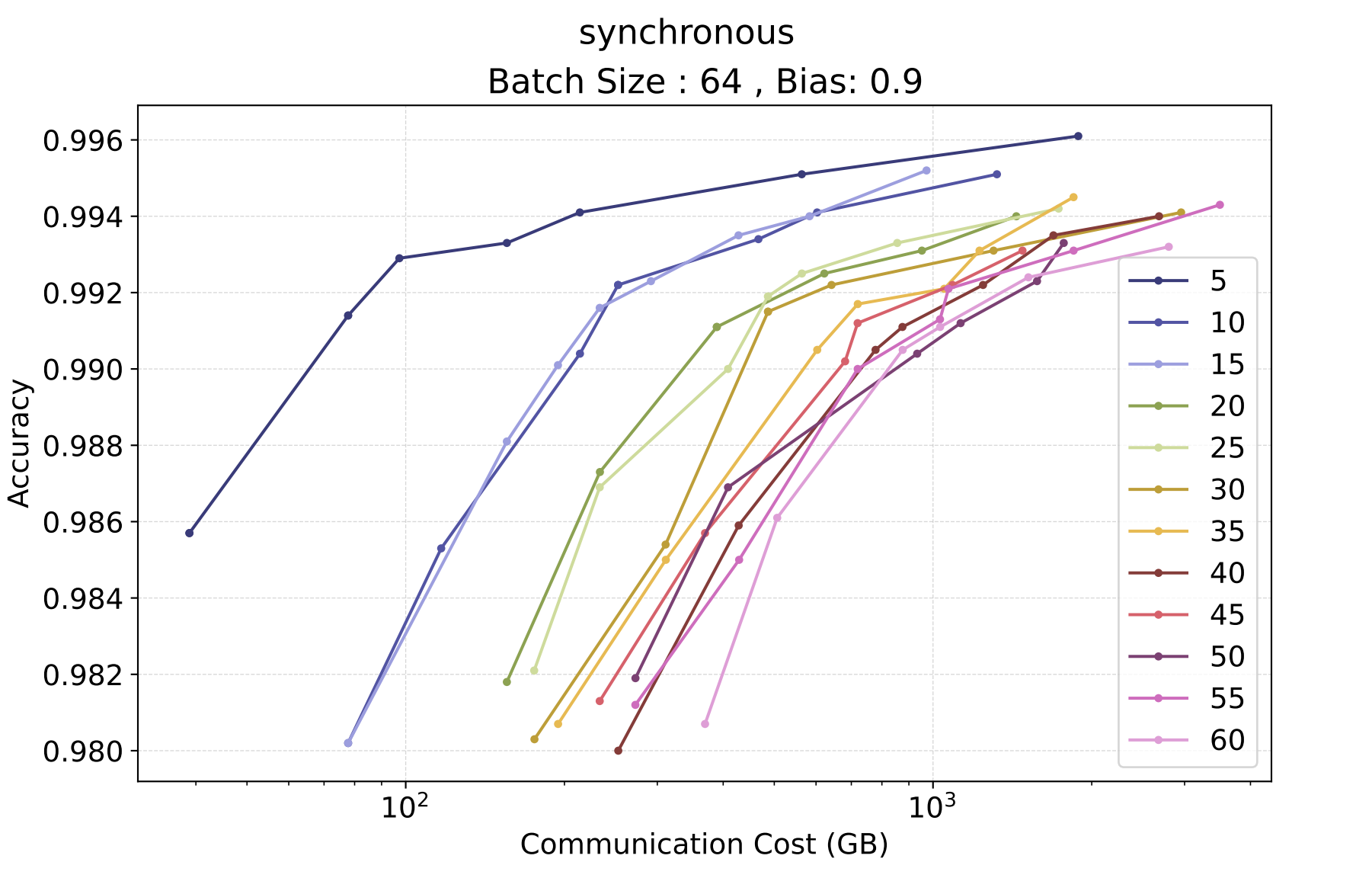
synchronous
Batch Size : 64 , Bias: 0.9
Accuracy
0.996
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10^2
10^3
Communication Cost (GB)
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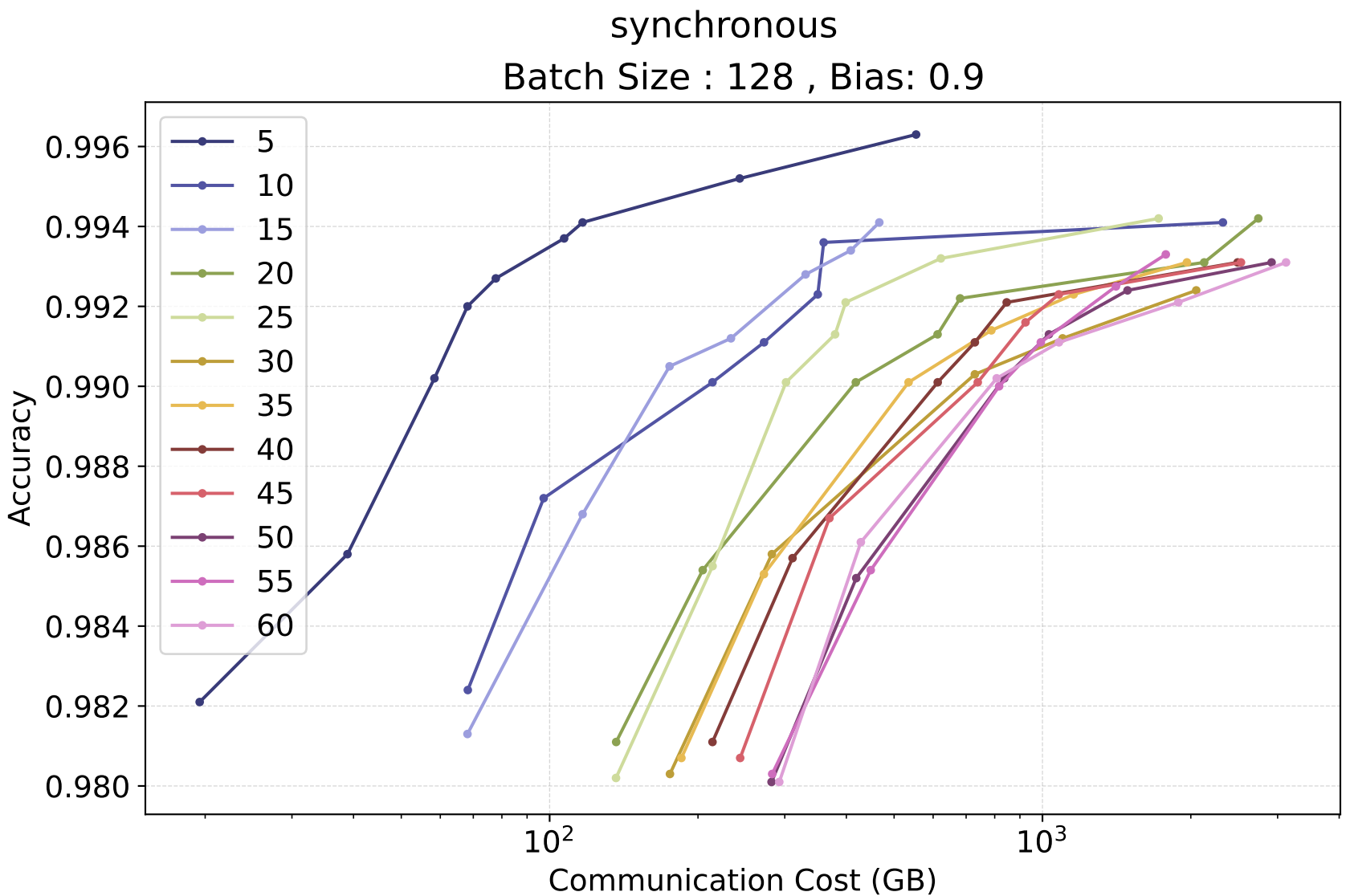
synchronous
Batch Size : 128 , Bias: 0.9
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
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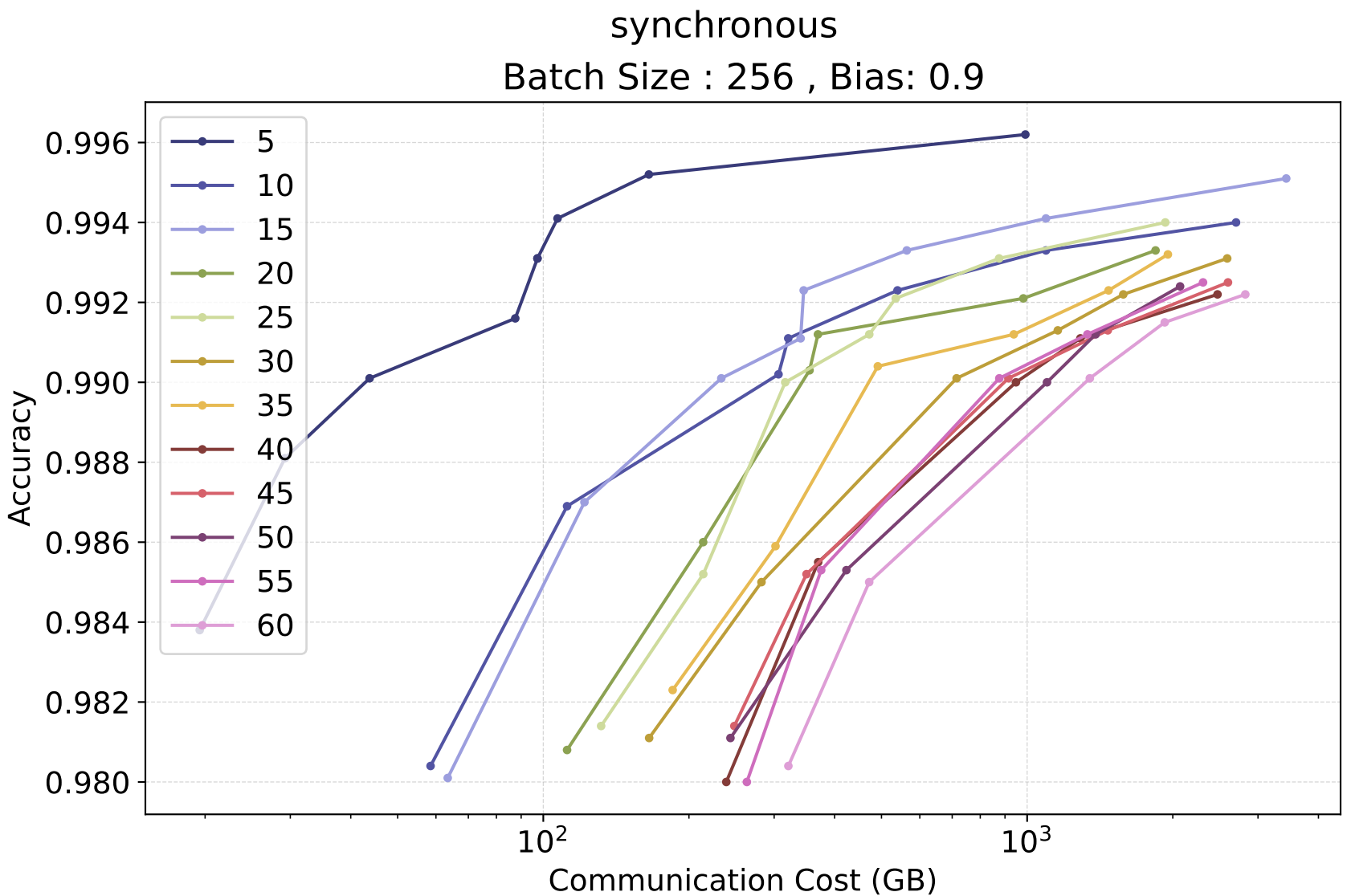
60
10^2
10^3
Communication Cost (GB)


synchronous
Batch Size : 256 , Bias: 0.9
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
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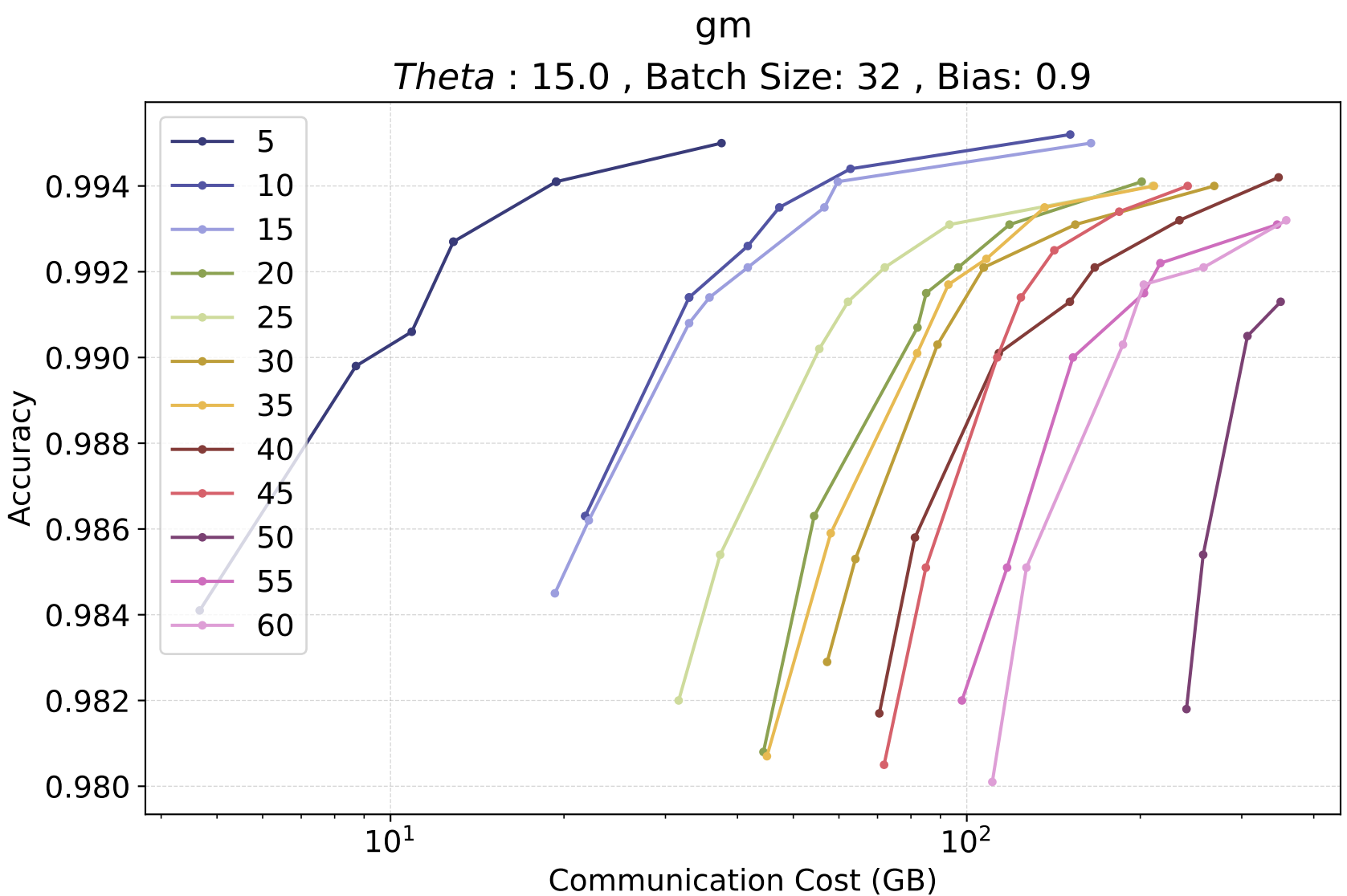
55
60
10^2
10^3
Communication Cost (GB)


gm
Theta : 15.0 , Batch Size: 32 , Bias: 0.9
Accuracy
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
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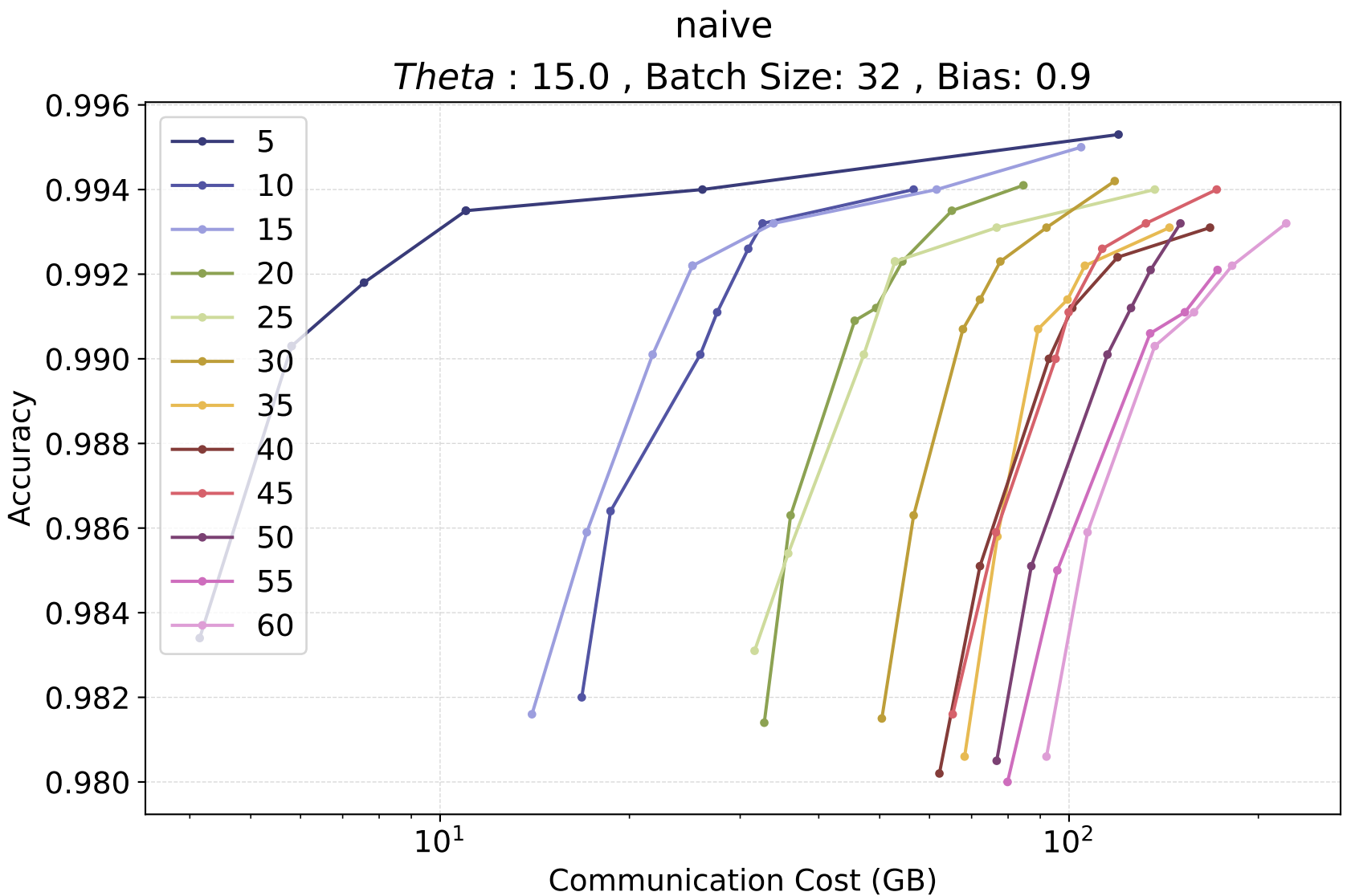
naive
Theta : 15.0 , Batch Size: 32 , Bias: 0.9
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
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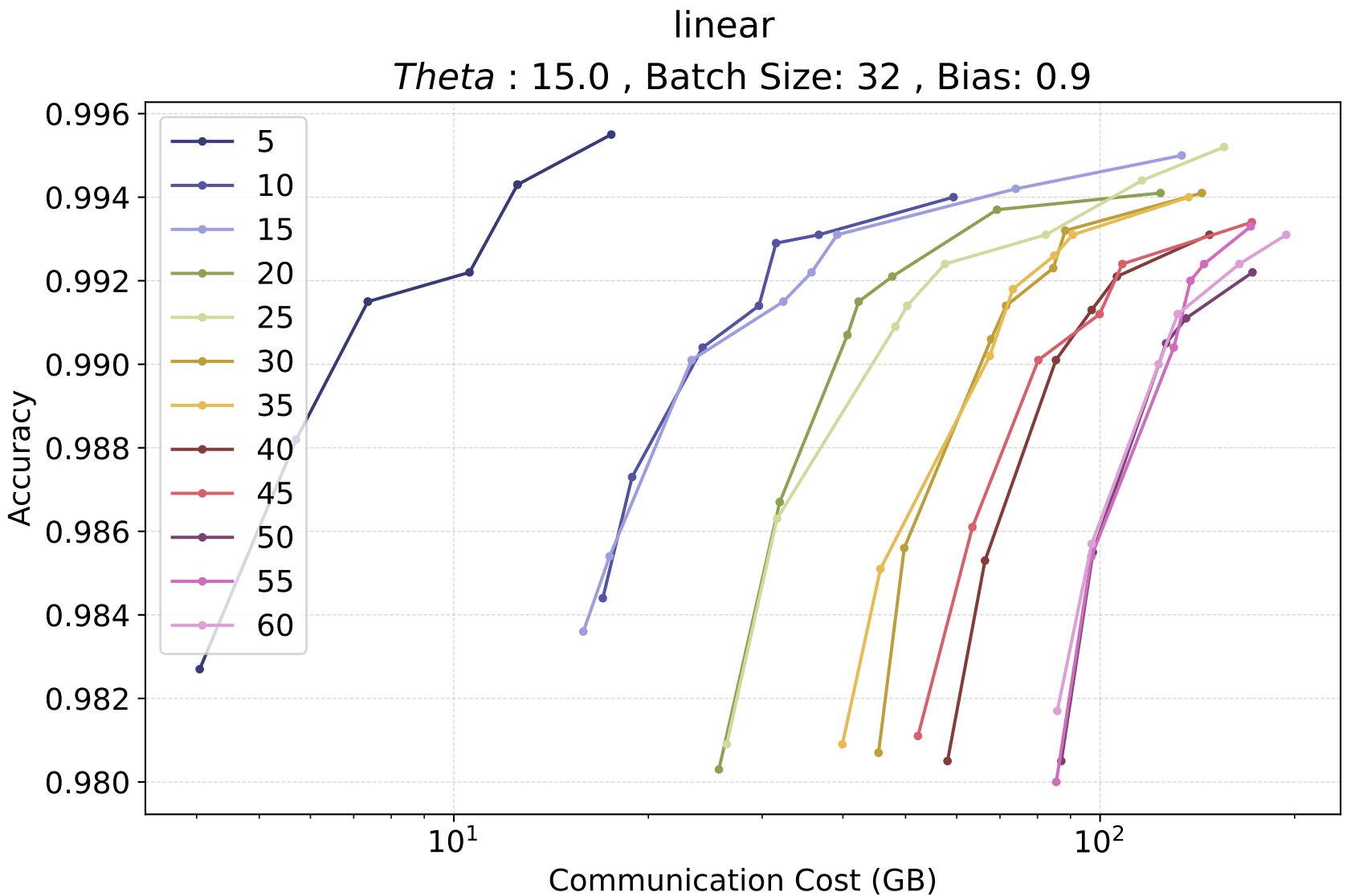
60
10^1
10^2
Communication Cost (GB)


linear
Theta : 15.0 , Batch Size: 32 , Bias: 0.9
Accuracy
0.996
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
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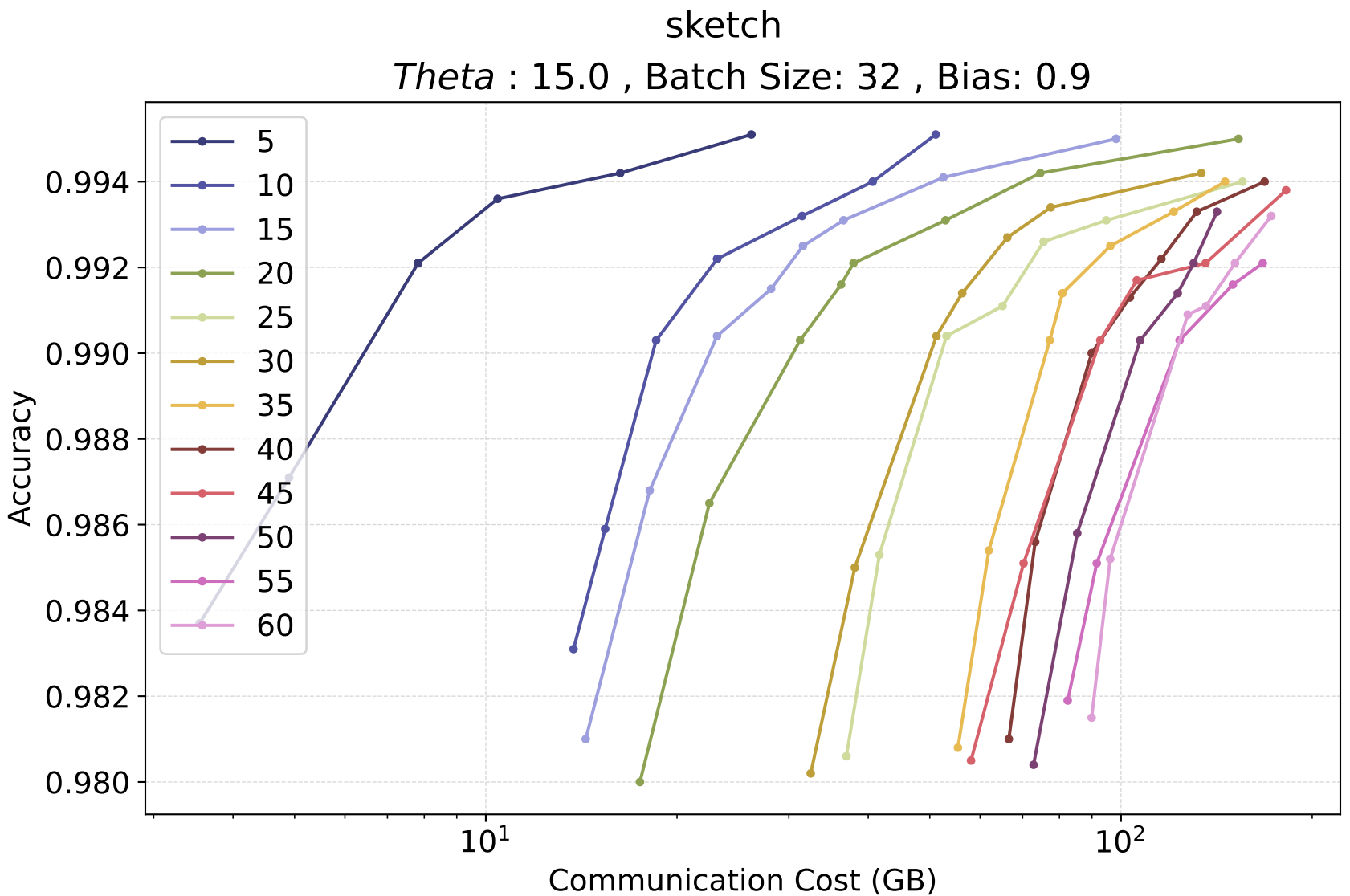
60
10^1
10^2
Communication Cost (GB)


sketch
Theta : 15.0 , Batch Size: 32 , Bias: 0.9
Accuracy
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^1
10^2
Communication Cost (GB)
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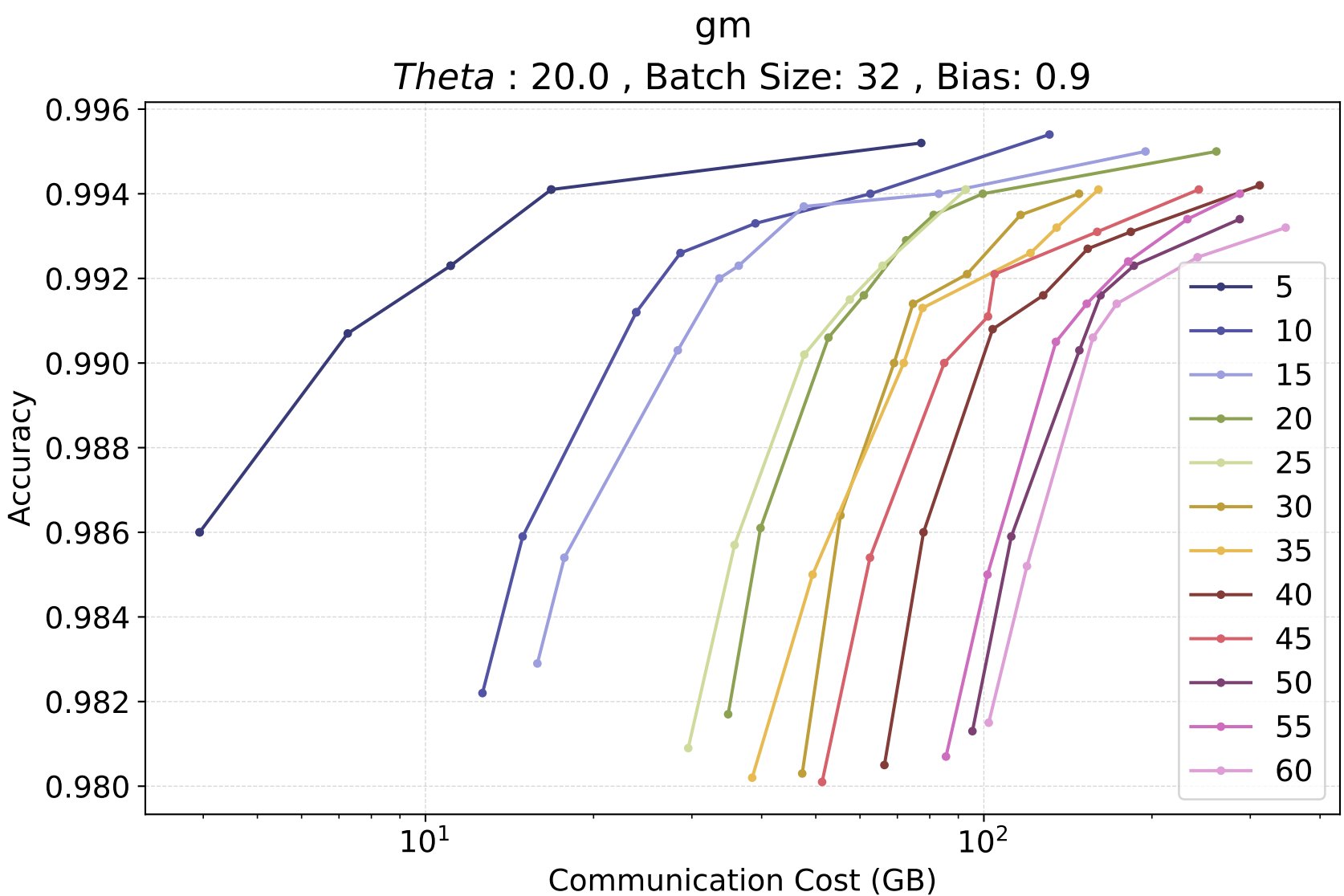
gm
Theta : 20.0 , Batch Size: 32 , Bias: 0.9
Accuracy
0.996
0.994
0.992
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10^1
10^2
Communication Cost (GB)
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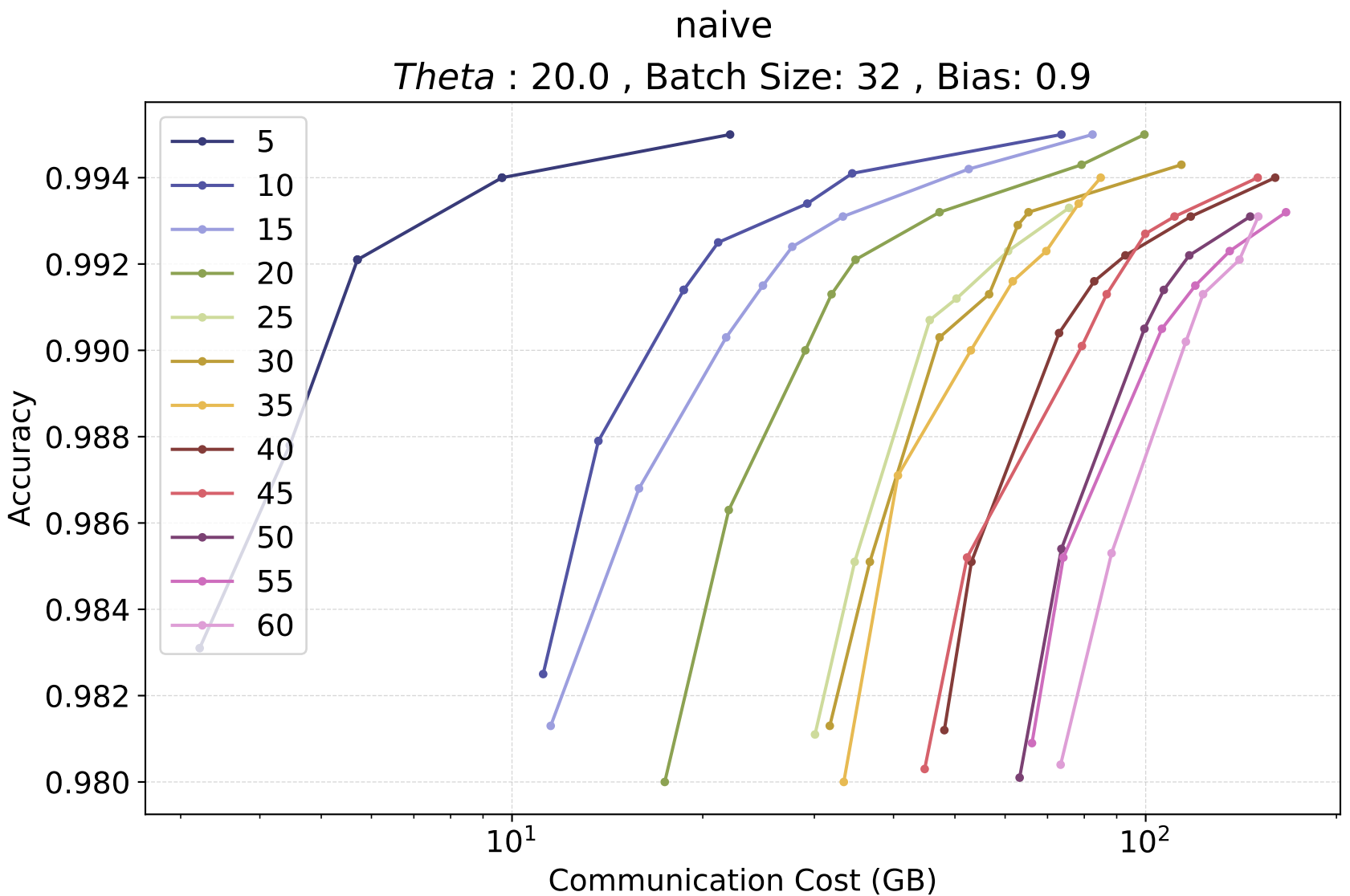
naive
Theta : 20.0 , Batch Size: 32 , Bias: 0.9
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0.994
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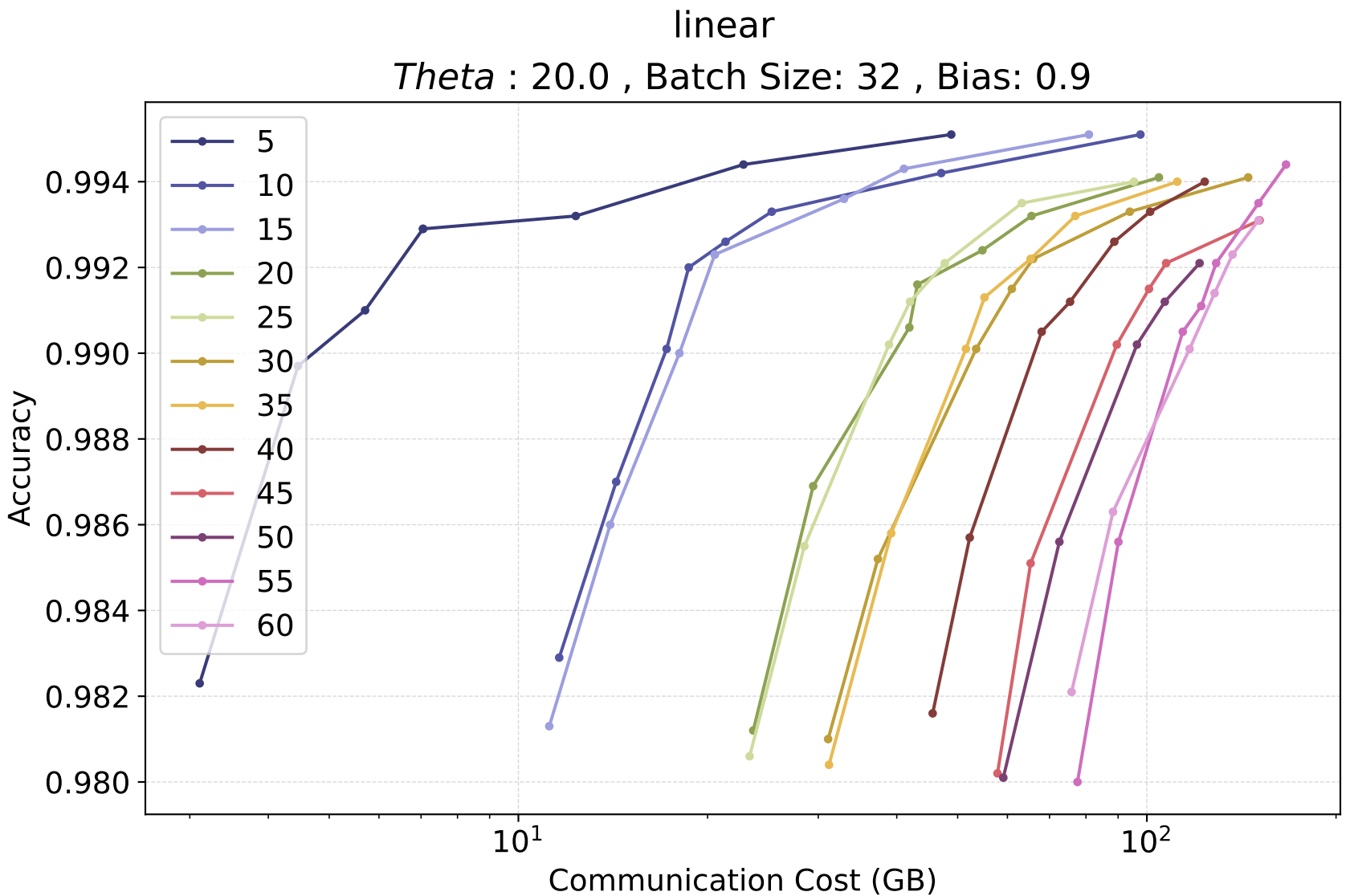
Accuracy
10^1
10^2
Communication Cost (GB)


linear
Theta : 20.0 , Batch Size: 32 , Bias: 0.9
Accuracy
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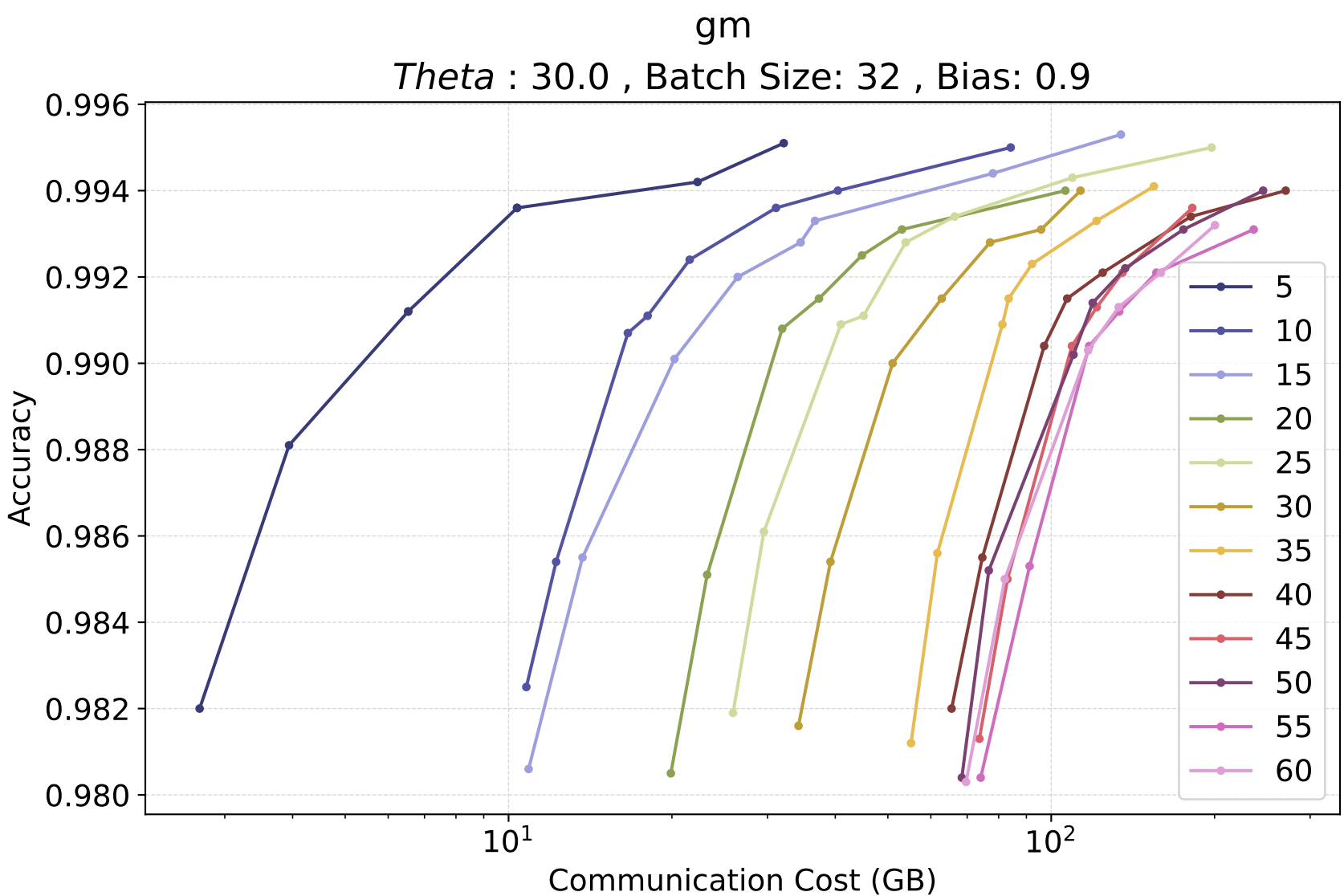
10^1
10^2
Communication Cost (GB)


gm
Theta : 30.0 , Batch Size: 32 , Bias: 0.9
Accuracy
0.996
0.994
0.992
0.990
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10^1
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Communication Cost (GB)
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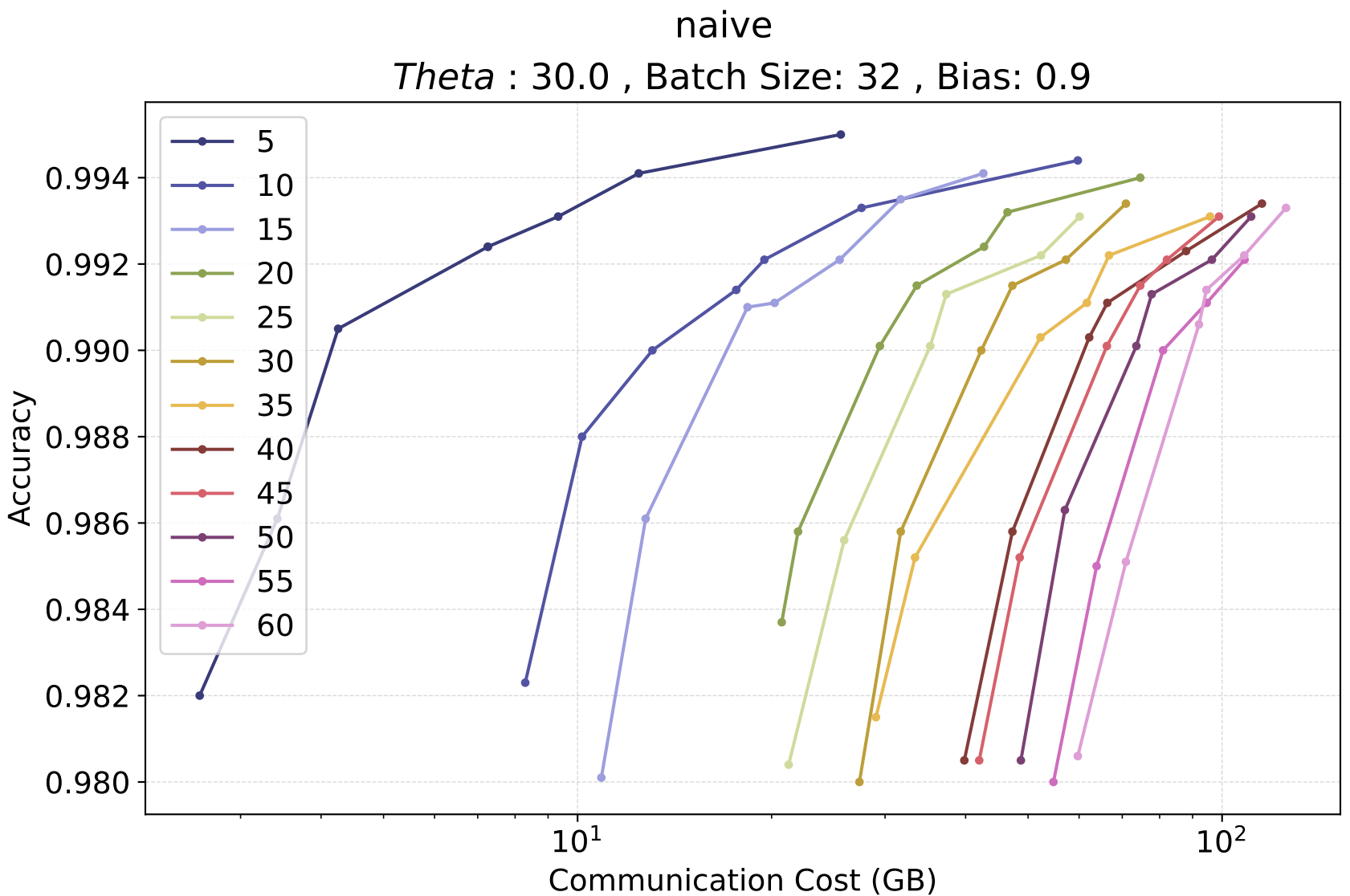
naive
Theta : 30.0 , Batch Size: 32 , Bias: 0.9
Accuracy
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Communication Cost (GB)
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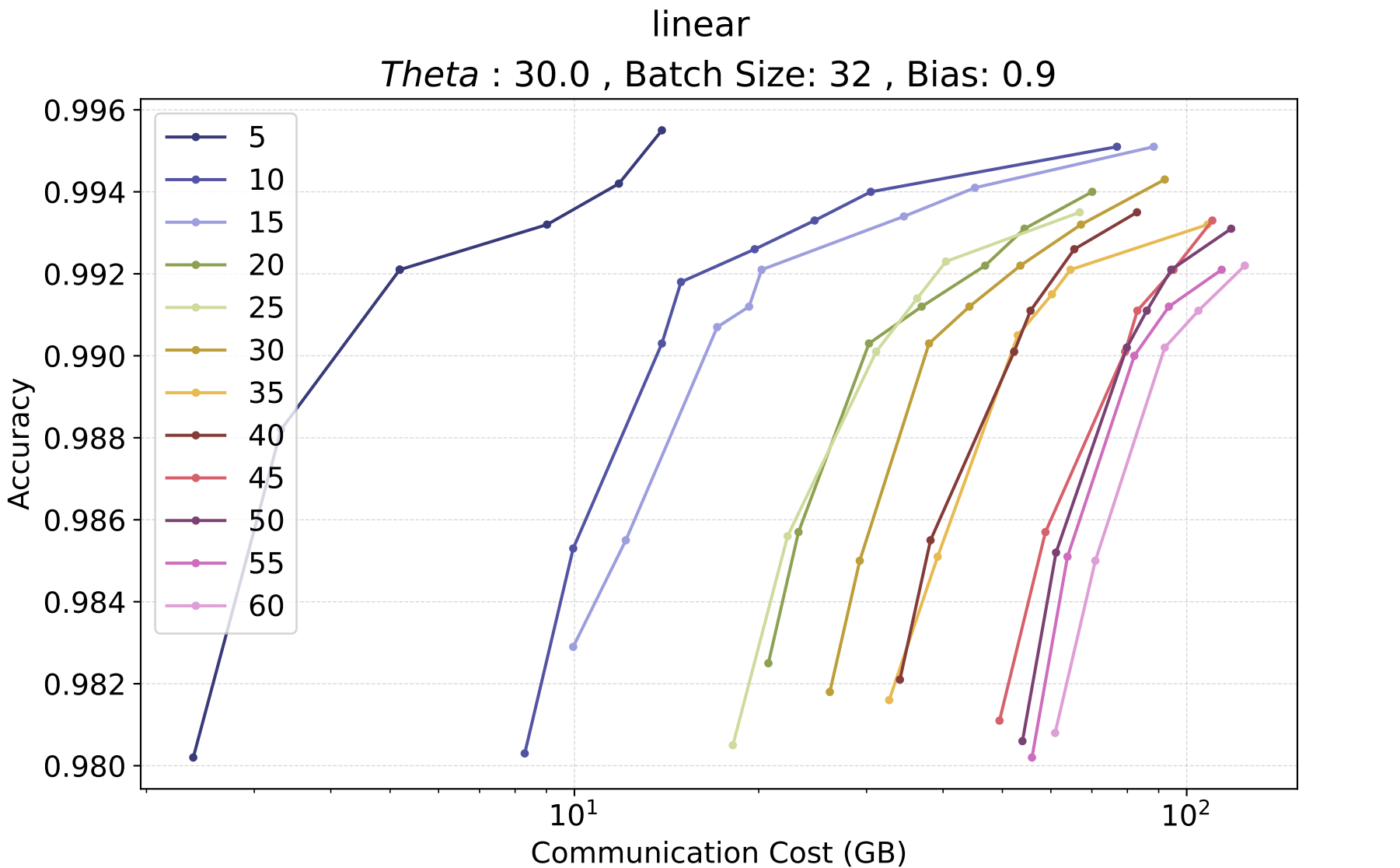
linear
Theta : 30.0 , Batch Size: 32 , Bias: 0.9
Accuracy
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10^1
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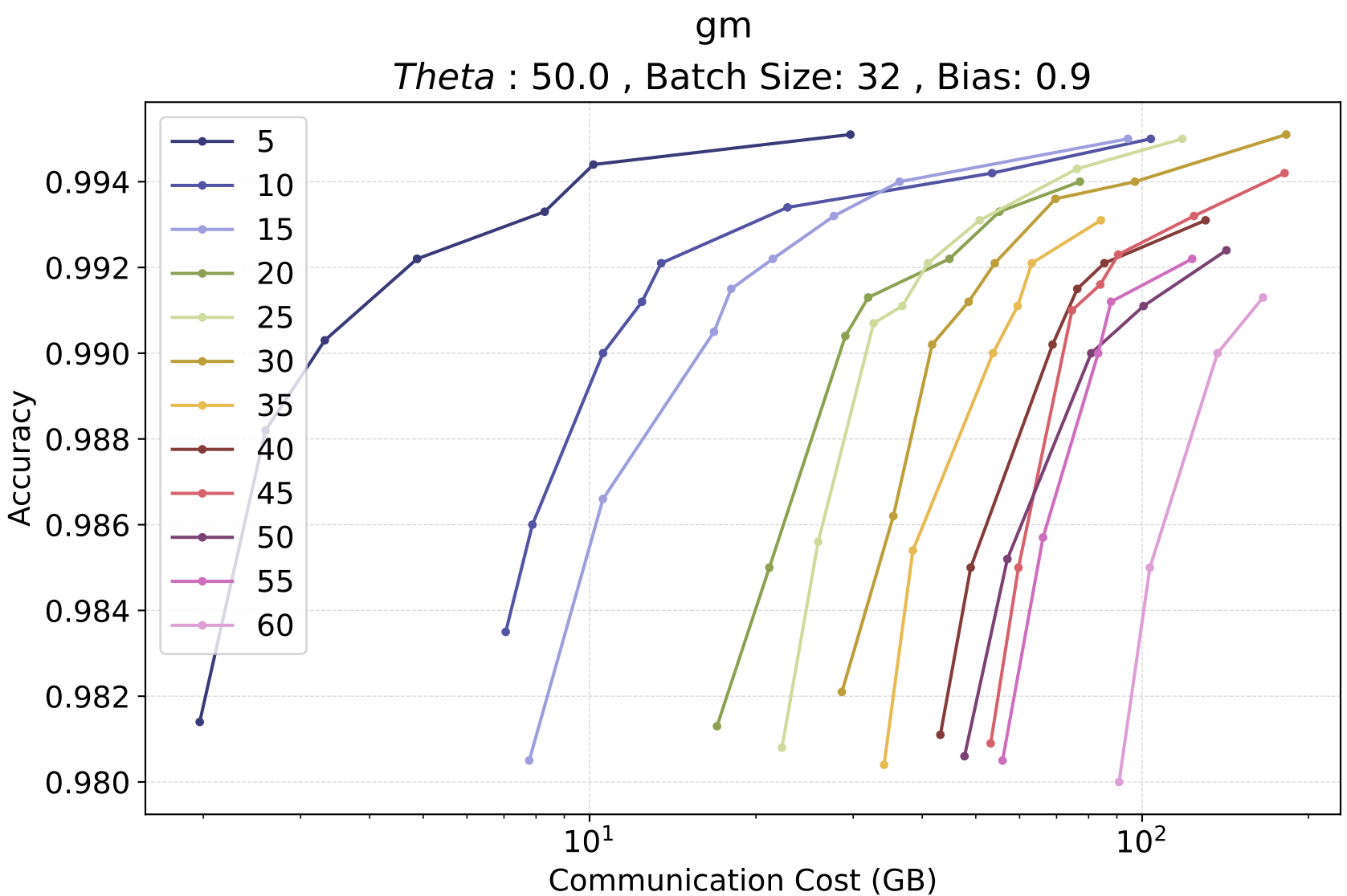
Communication Cost (GB)


gm
Theta : 50.0 , Batch Size: 32 , Bias: 0.9
Accuracy
0.994
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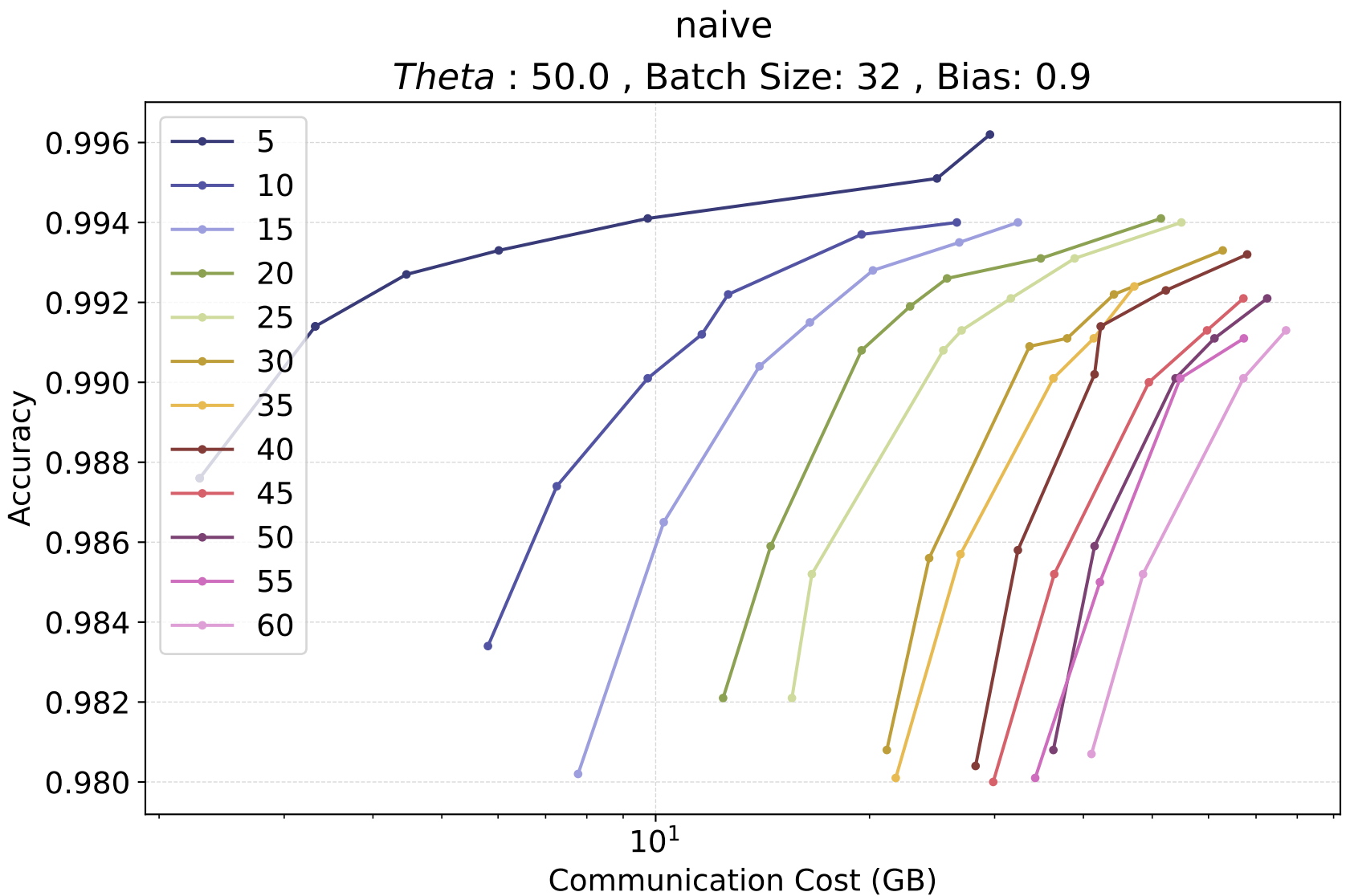
10^1
10^2
Communication Cost (GB)


naive
Theta : 50.0 , Batch Size: 32 , Bias: 0.9
Accuracy
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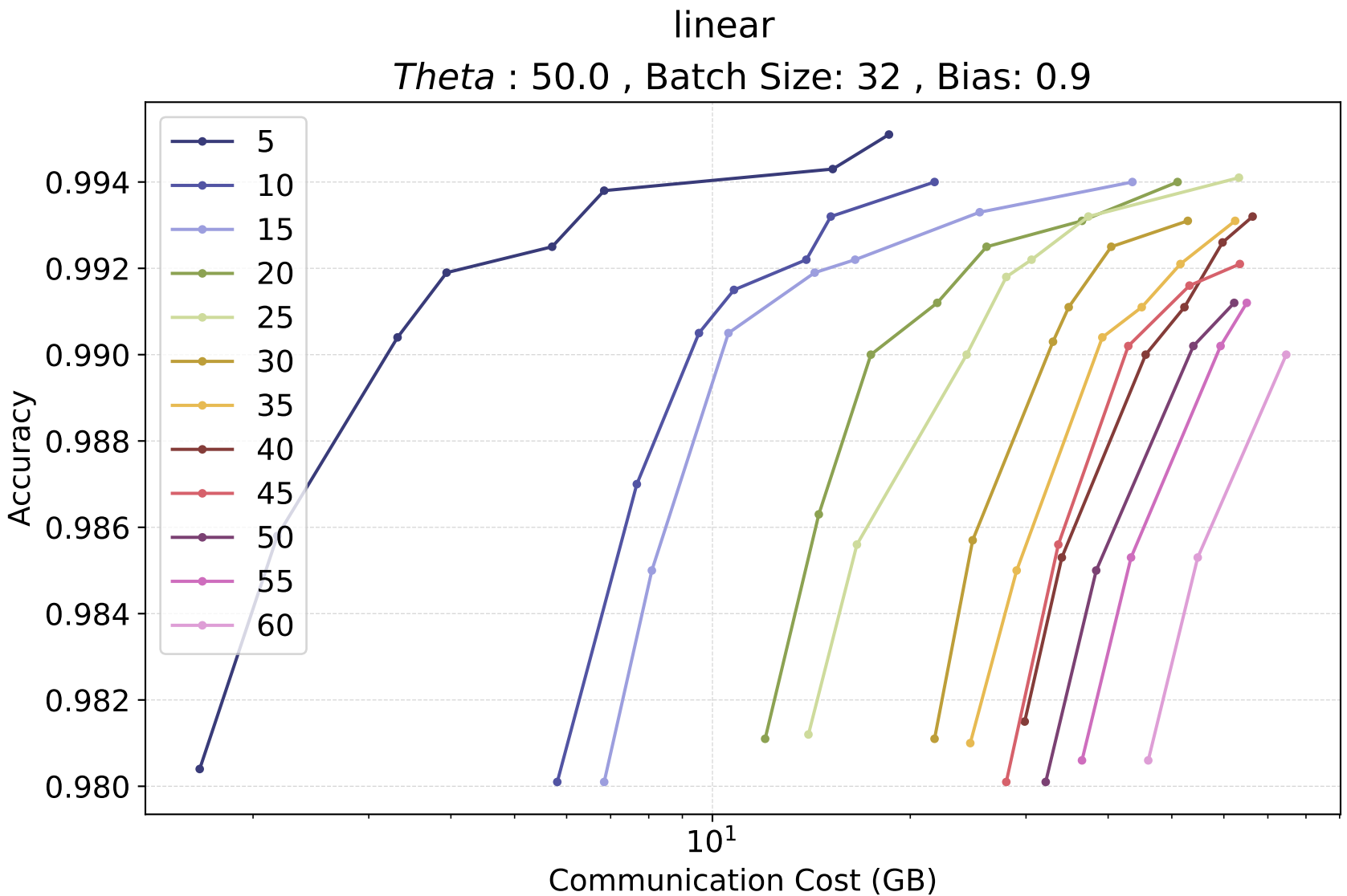
10^1
Communication Cost (GB)


linear
Theta : 50.0 , Batch Size: 32 , Bias: 0.9
Accuracy
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Communication Cost (GB)
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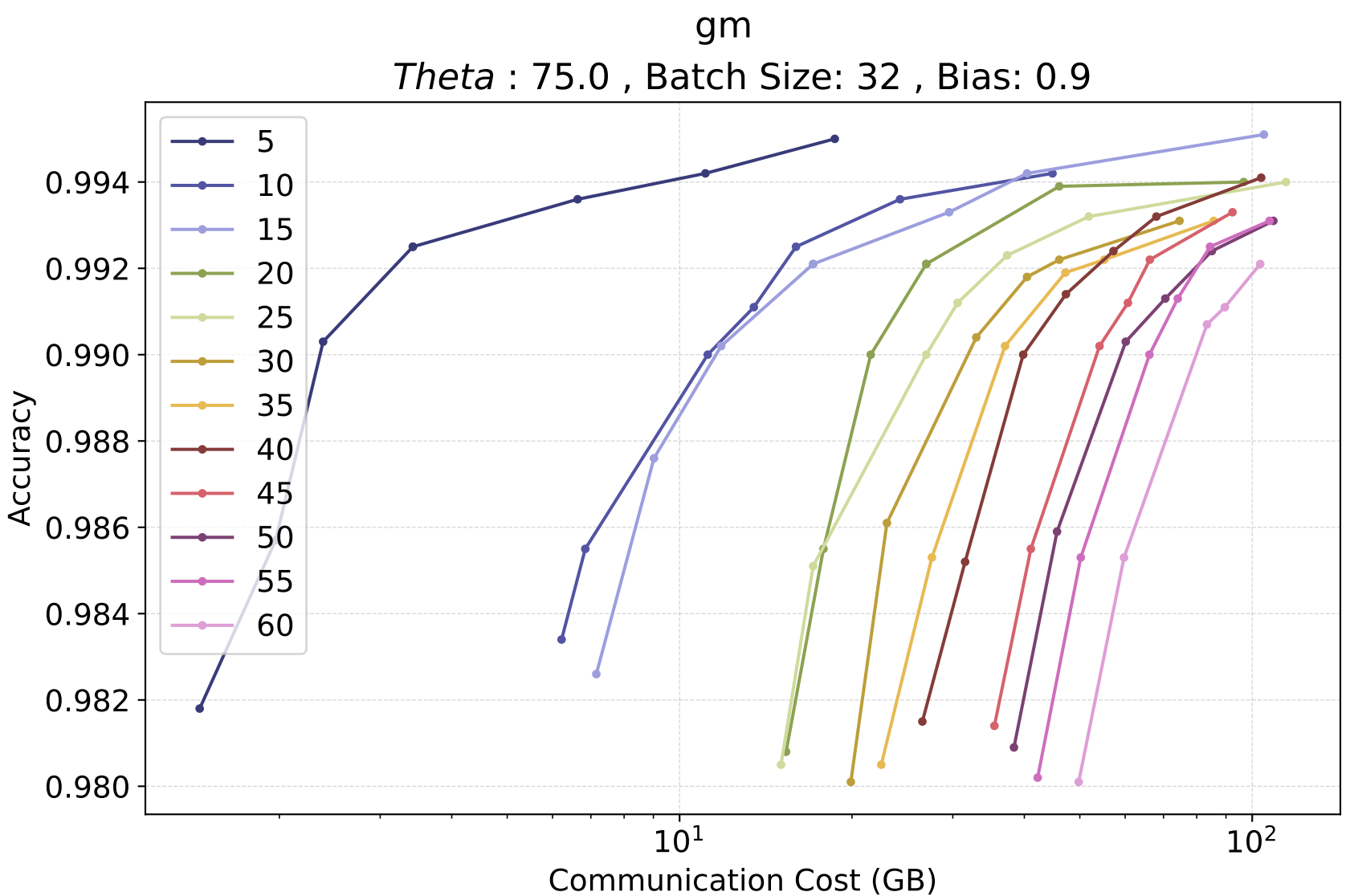
gm
Theta : 75.0 , Batch Size: 32 , Bias: 0.9
Accuracy
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Communication Cost (GB)
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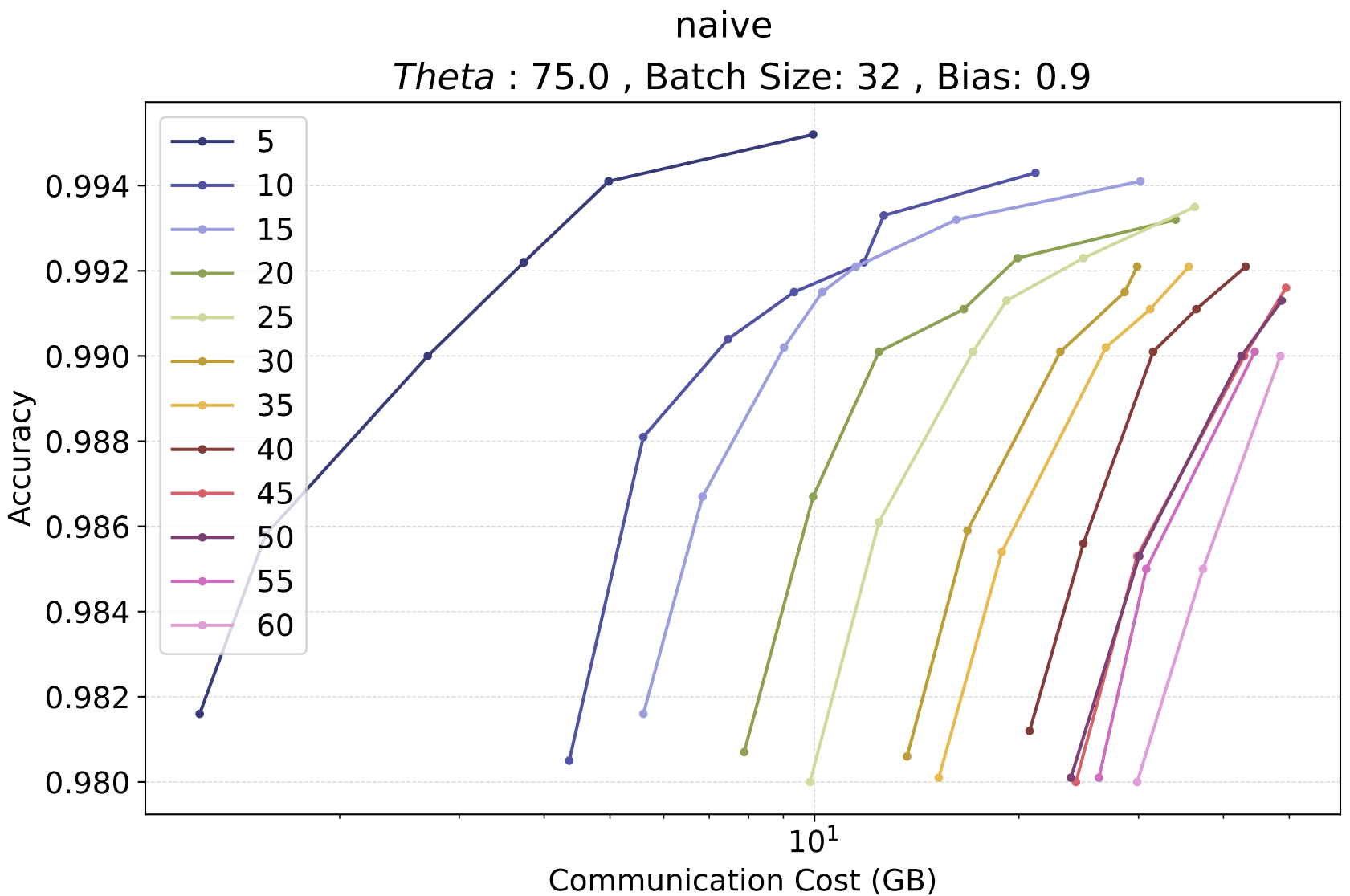
naive
Theta : 75.0 , Batch Size: 32 , Bias: 0.9
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Accuracy
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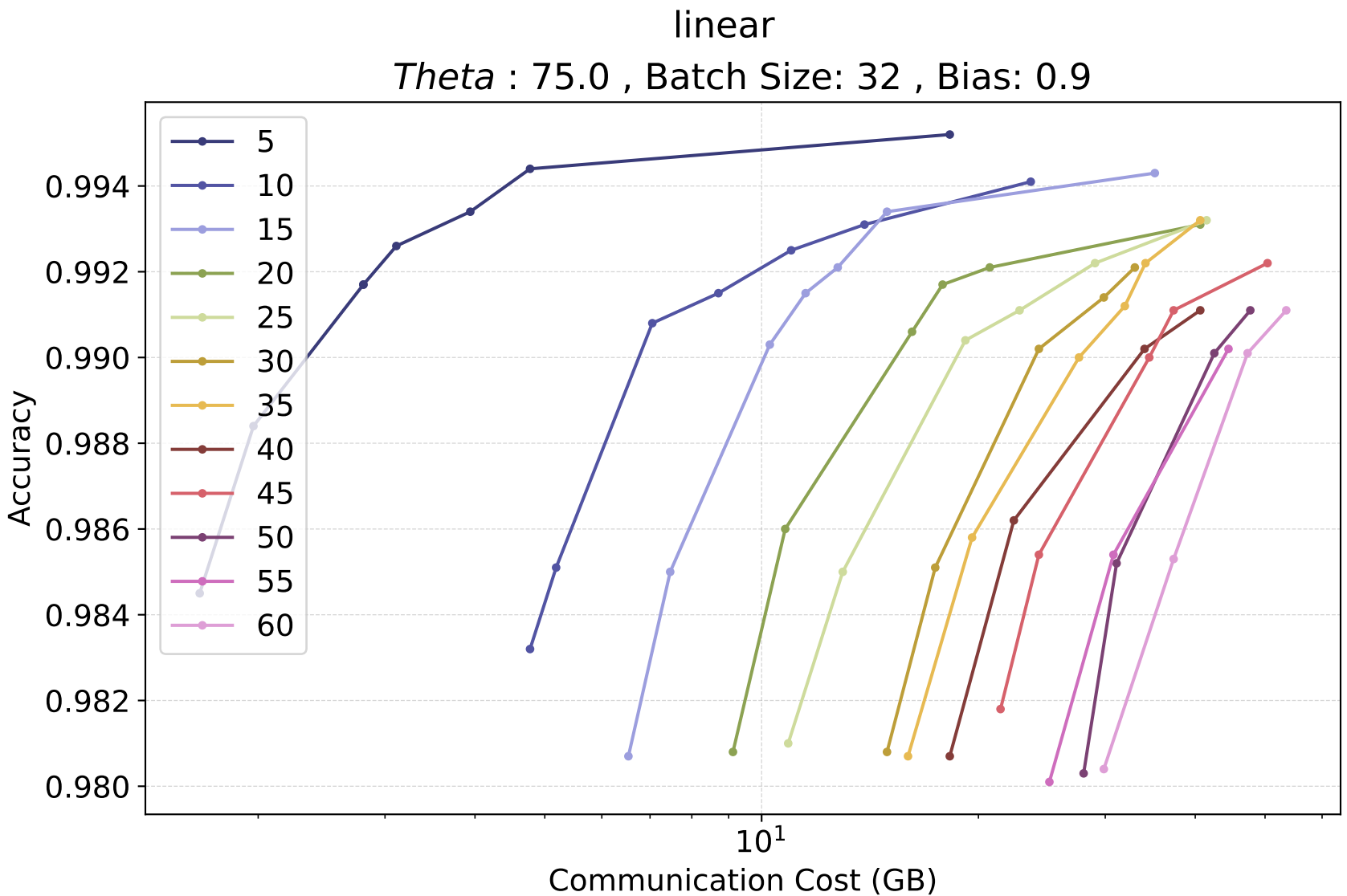
Communication Cost (GB)


linear
Theta : 75.0 , Batch Size: 32 , Bias: 0.9
Accuracy
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Communication Cost (GB)
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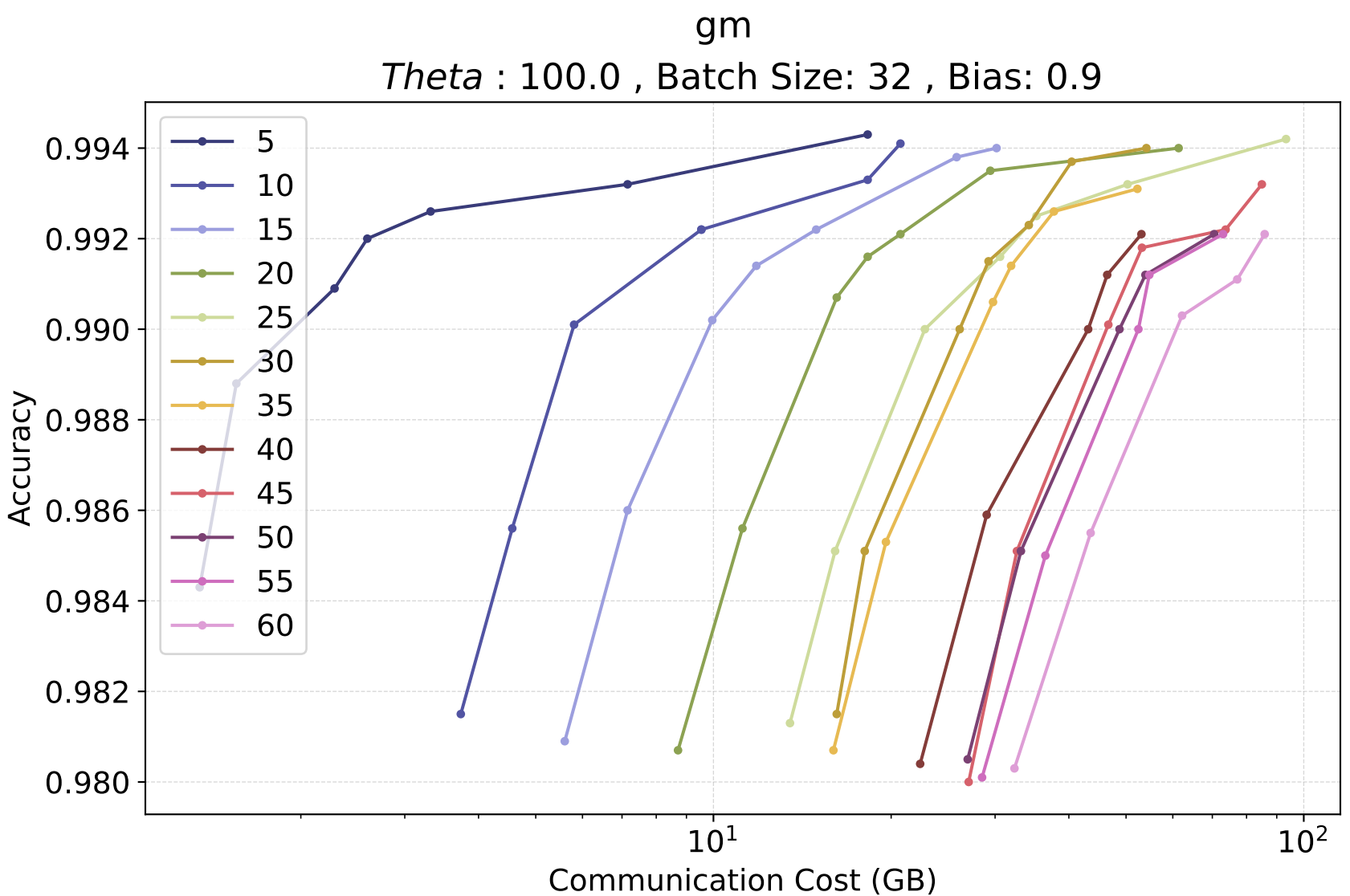
gm
Theta : 100.0 , Batch Size: 32 , Bias: 0.9
Accuracy
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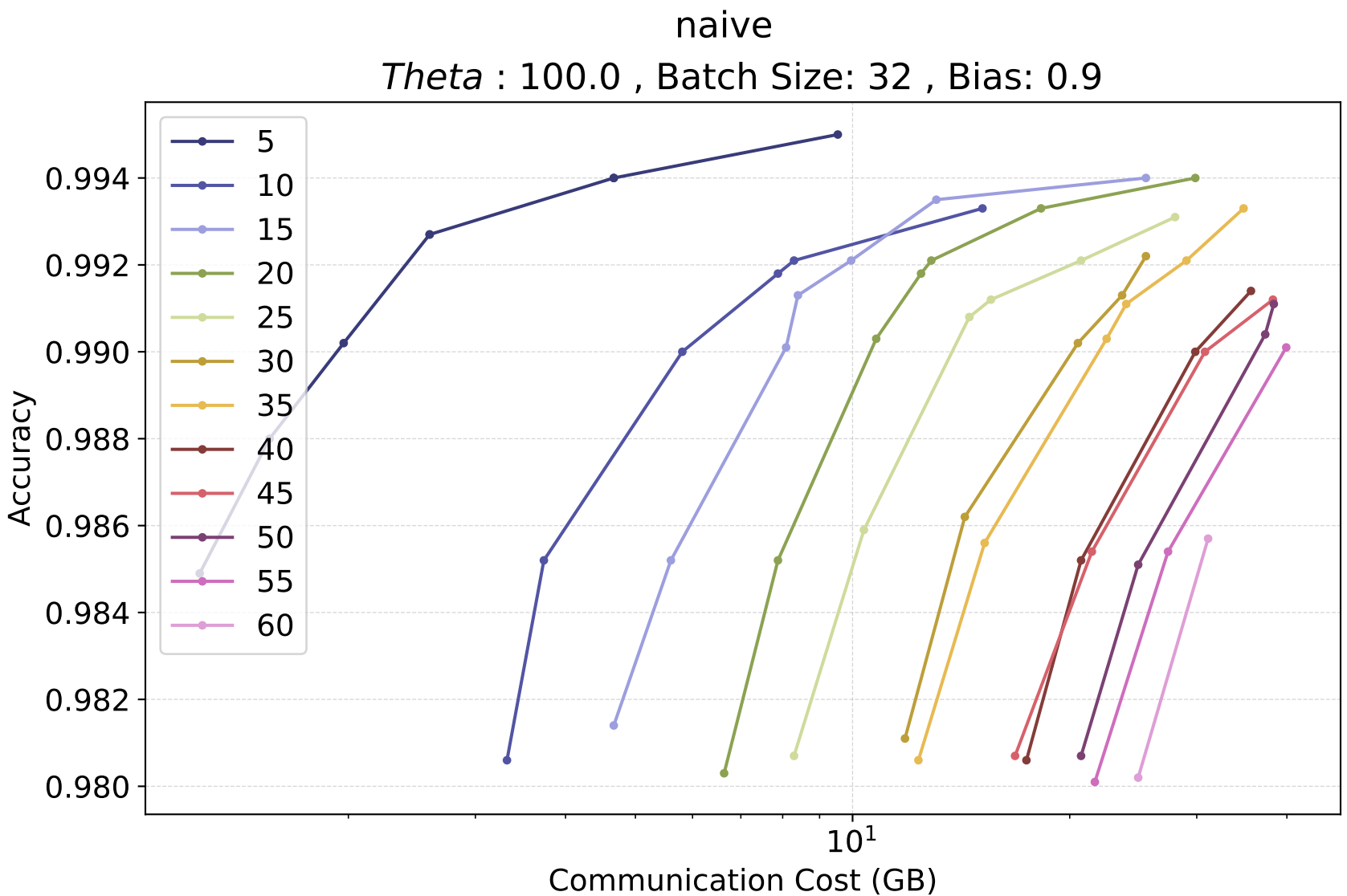
Communication Cost (GB)


naive
Theta : 100.0 , Batch Size: 32 , Bias: 0.9
Accuracy
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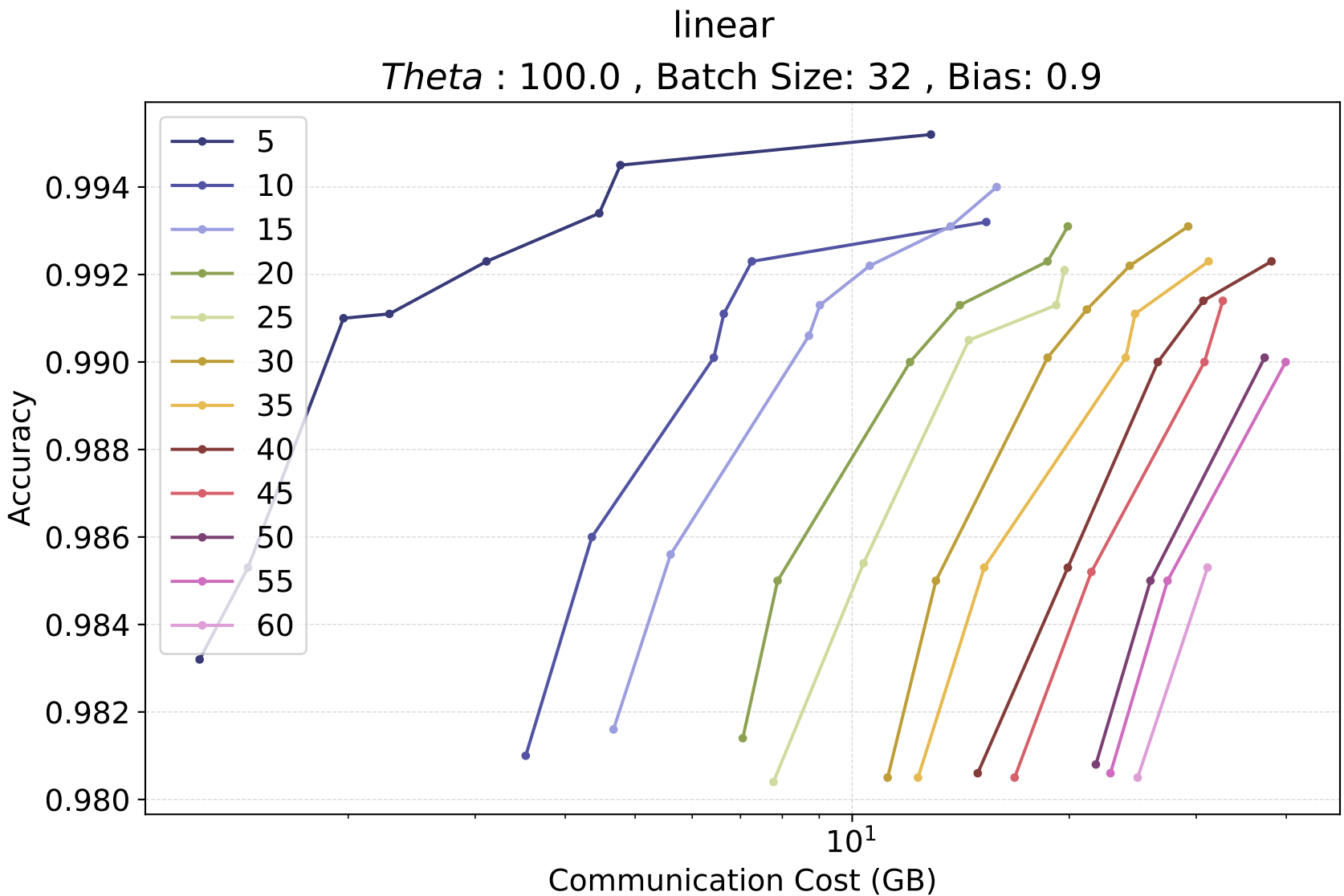
Communication Cost (GB)


linear
Theta : 100.0 , Batch Size: 32 , Bias: 0.9
Accuracy
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10^1
Communication Cost (GB)
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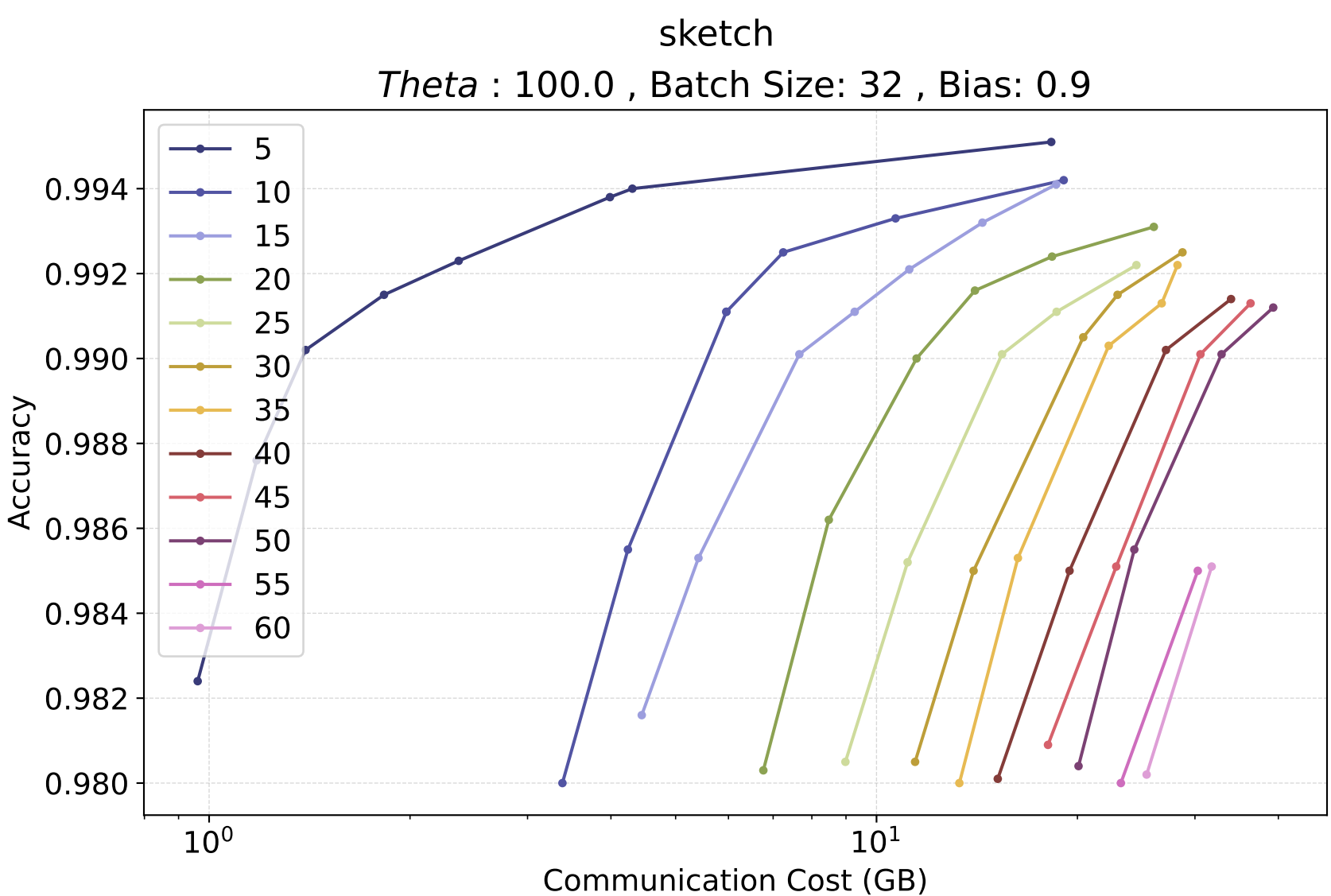
sketch
Theta : 100.0 , Batch Size: 32 , Bias: 0.9
Accuracy
0.994
0.992
0.990
0.988
0.986
0.984
0.982
0.980
10^0
10^1
Communication Cost (GB)
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