CoBo Data Rate

In a CoBo: 72 x 512 x 4 x 4 ≈ 600 kSample (≈ 7 Mbit if 12 bits/Sample)

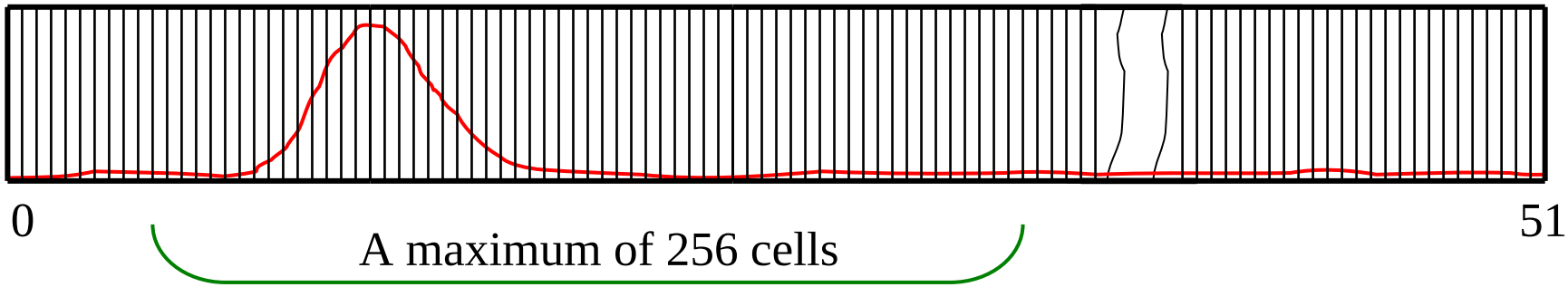
ACTAR or 2pTPC : 10% of fired channels: ≈ 60 kSample
MSU AT-TPC : 25% of fired channels: ≈ 150 kSample
sent in (max) 1 ms, so data rate is: 60 Msample/s for ACTAR and 2pTPC
and: 150 Msample/s for AT-TPC

If using an Ethernet link with a rate of 500Mbit/s
Maximum Usable payload is 500/16 ≈ 31 MSample/s

Conclusion: a minimum of factor 2 for ACTAR
and 5 for AT-TPC
must be found by zero suppress, threshold or other data treatment to achieve the required throughput for a dead time below 1 ms

In terms of SCA depth

ACTAR or 2pTPC AGET - SCA Memory



AT-TPC AGET-SCA Memory