Use Case for IEC/IEEE 60802
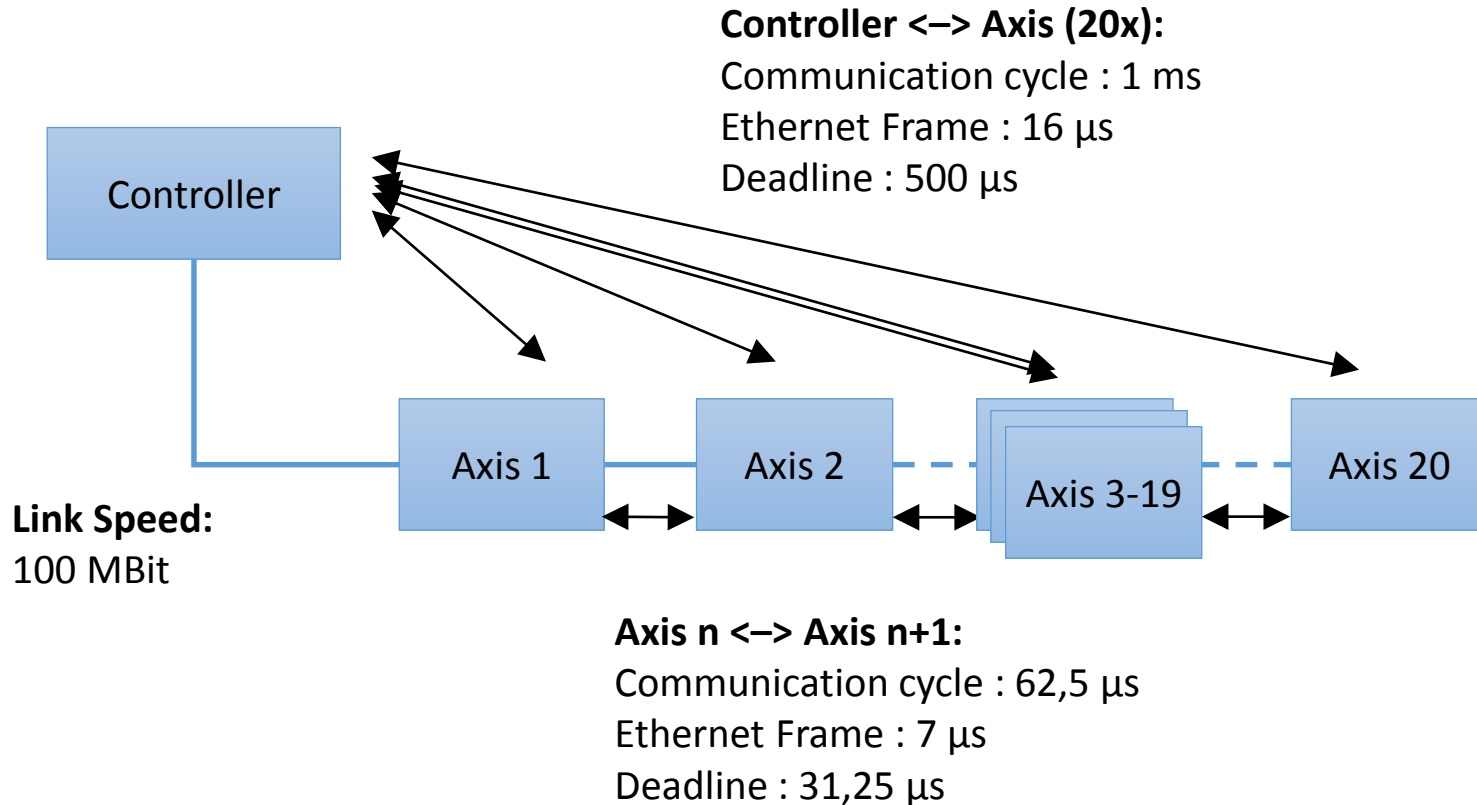
Isochronous drive synchronization

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IEEE 802.1 Plenary, July 2018

Isochronous drive synchronization

Controller <–> Axis (20x):
Communication cycle : 1 ms
Ethernet Frame : 16 µs
Deadline : 500 µs

Controller

Link Speed:
100 MBit

Axis 1

Axis 2

Axis 3-19

Axis 20

Axis n <–> Axis n+1:
Communication cycle : 62,5 µs
Ethernet Frame : 7 µs
Deadline : 31,25 µs

Note: The use case shows a simplified case where all drives are connected in a line and every drive needs direct data exchange to its direct neighbor.
Some applications might be more complex where the physical topology does not match the logical order of drives.