



Co-funded by the
Erasmus+ Programme
of the European Union

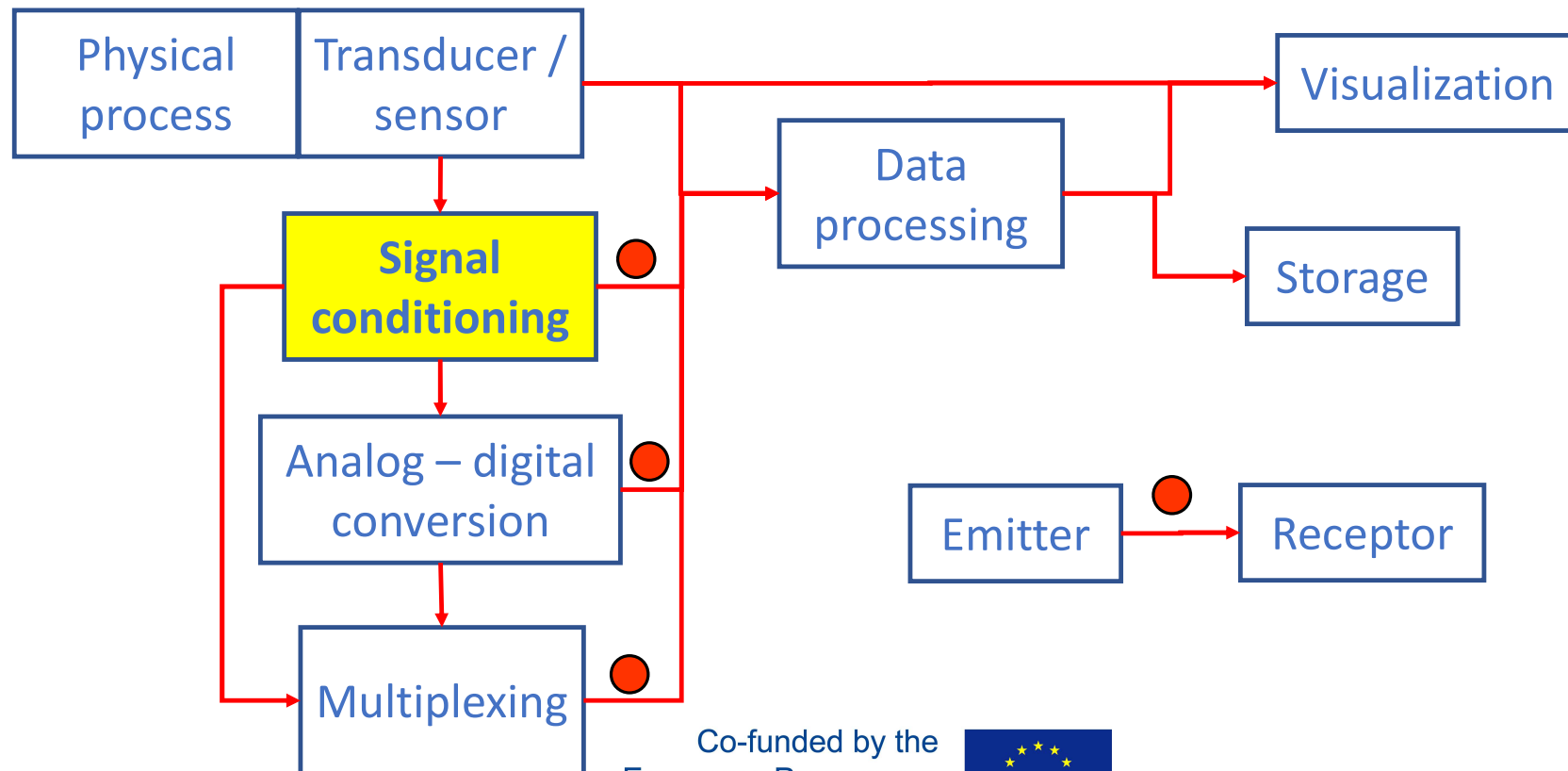


Cyber-Physical Industrial Systems

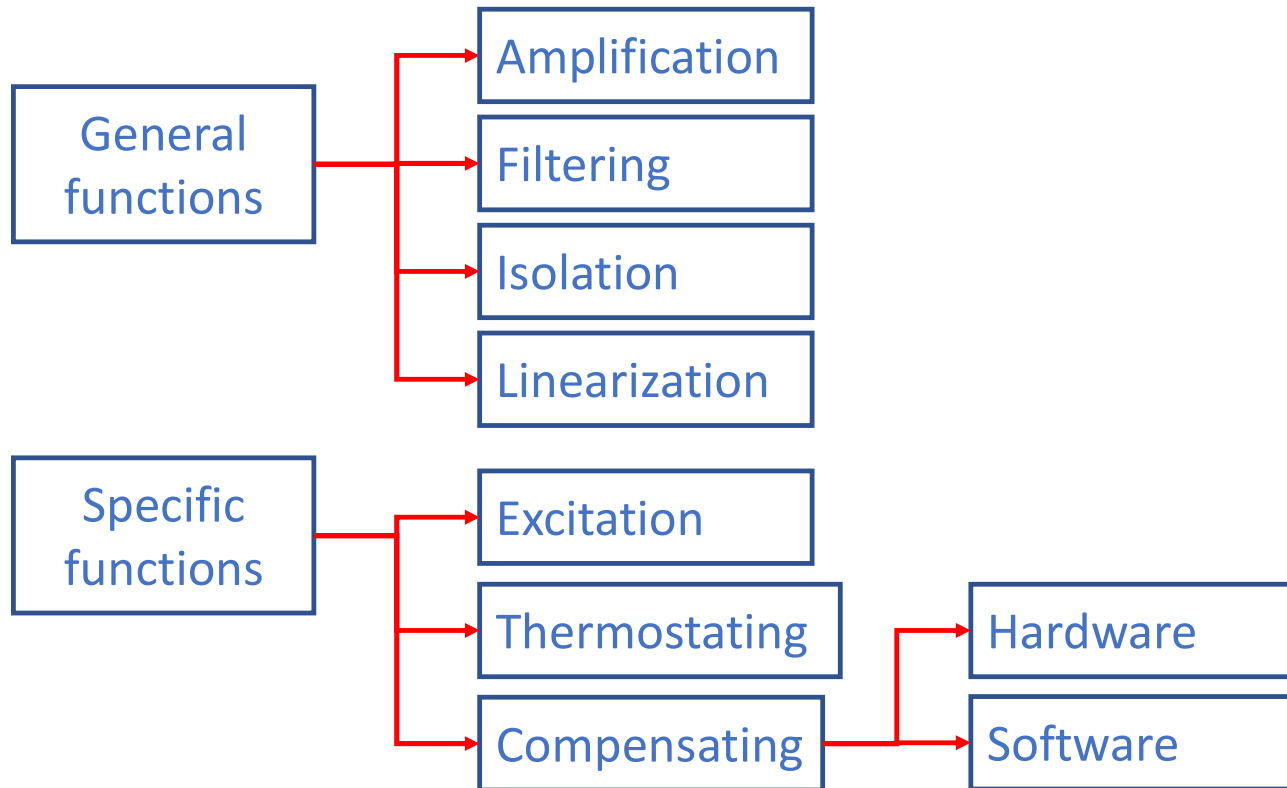
Module 2 Session 1
Signal conditioning basics
Lecture



CPS general model



Signal conditioning functions



Co-funded by the
Erasmus+ Programme
of the European Union



Signal conditioner types

SCXI chassis

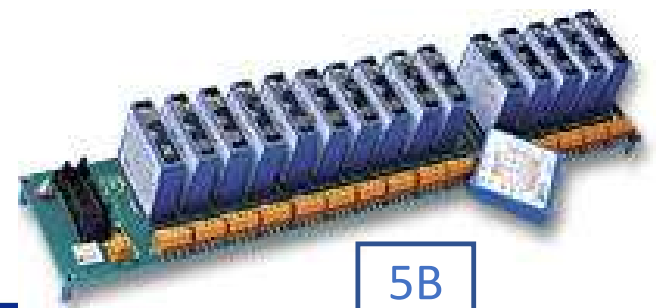


Terminal blocks

Modules



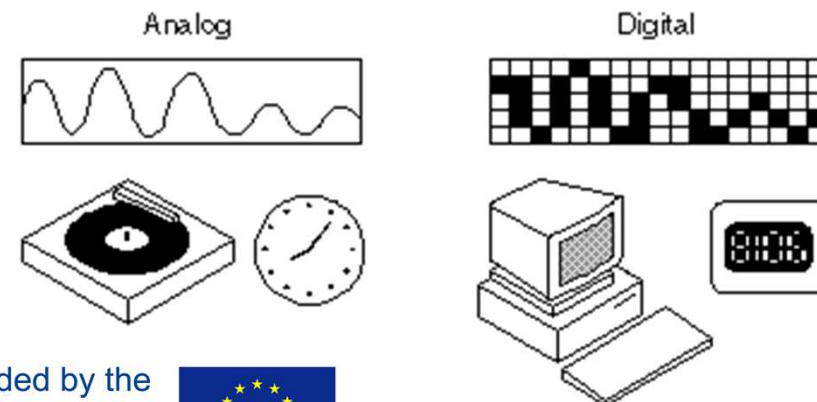
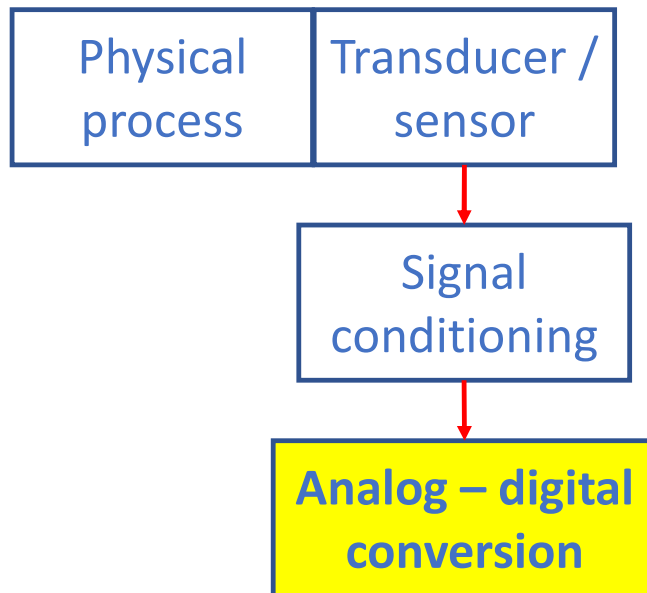
SCXI



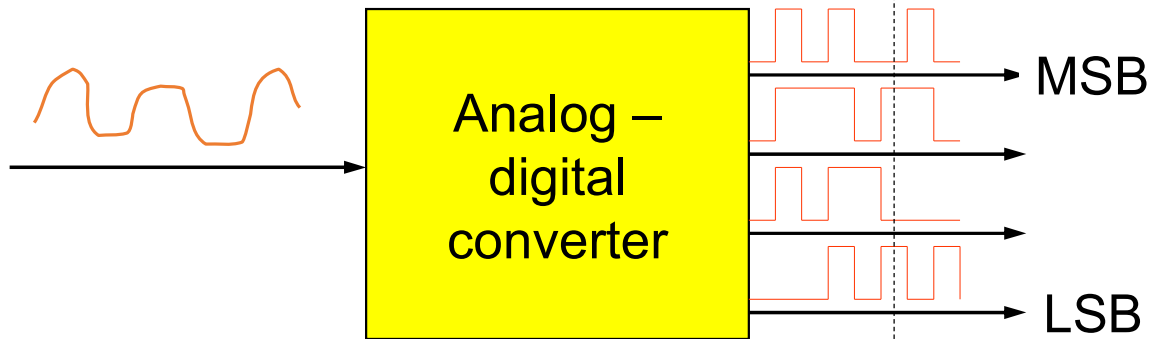
5B



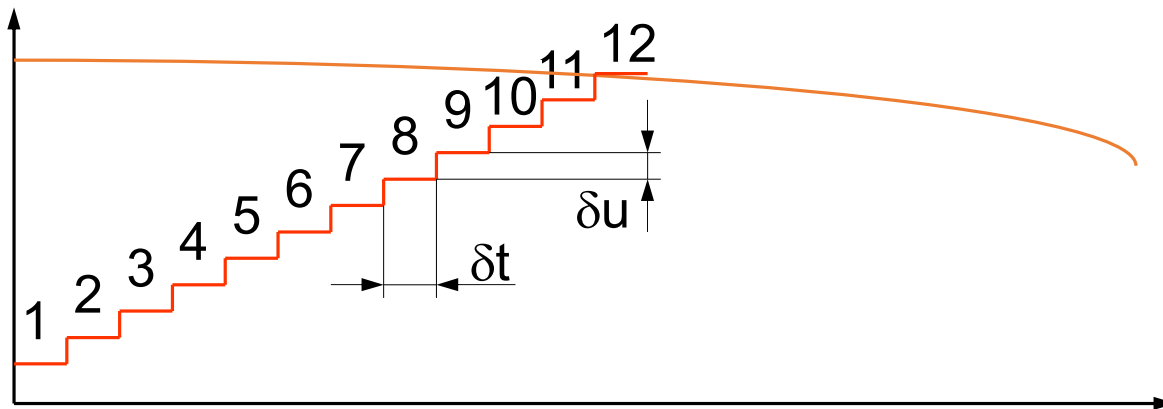
Analog to digital converters



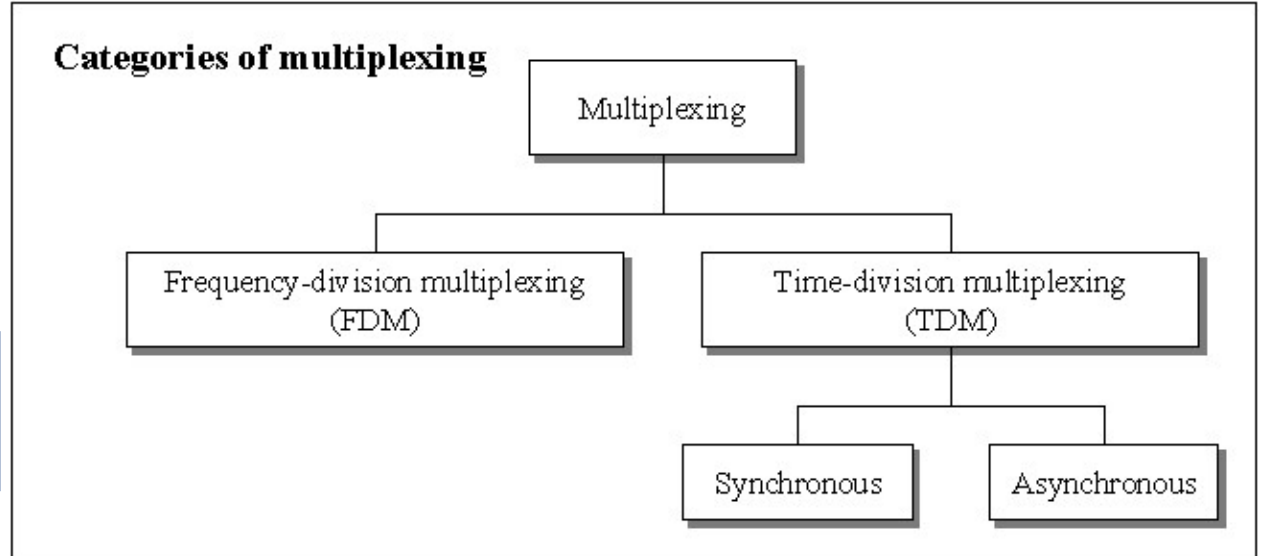
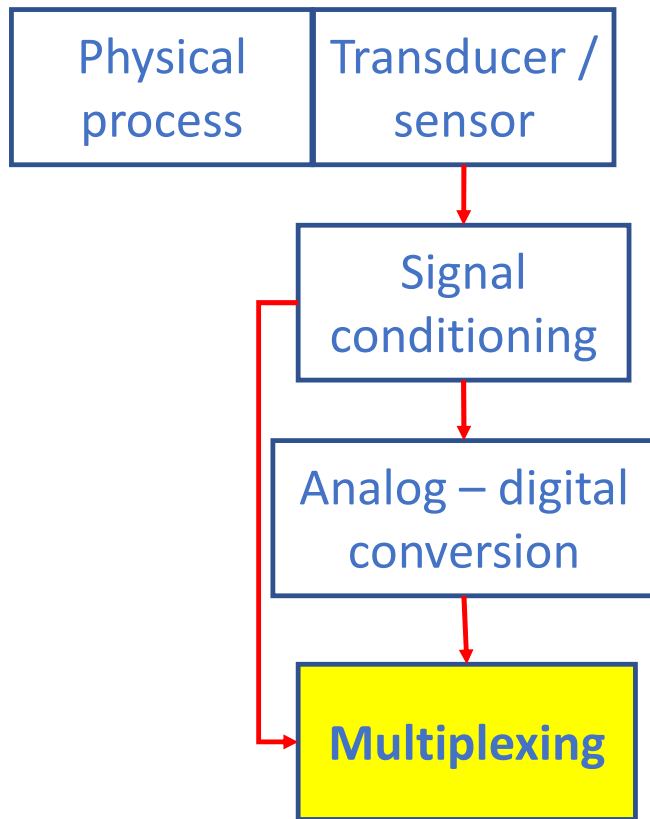
Analog to digital converters



0101 = 5

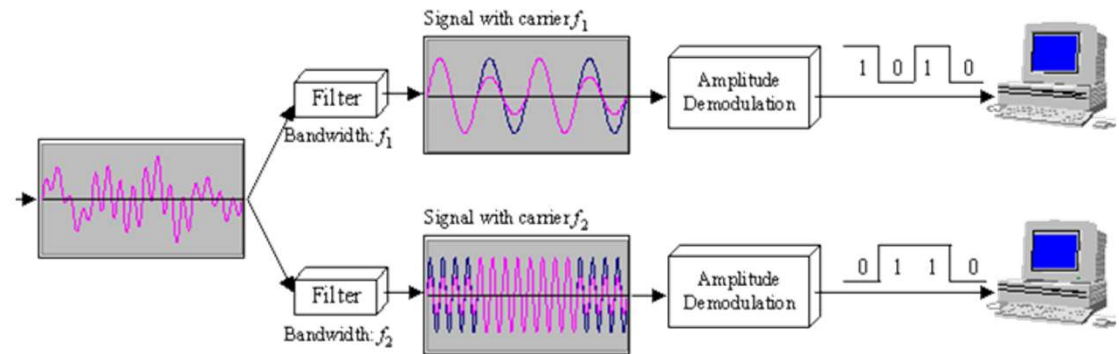


Multiplexing categories

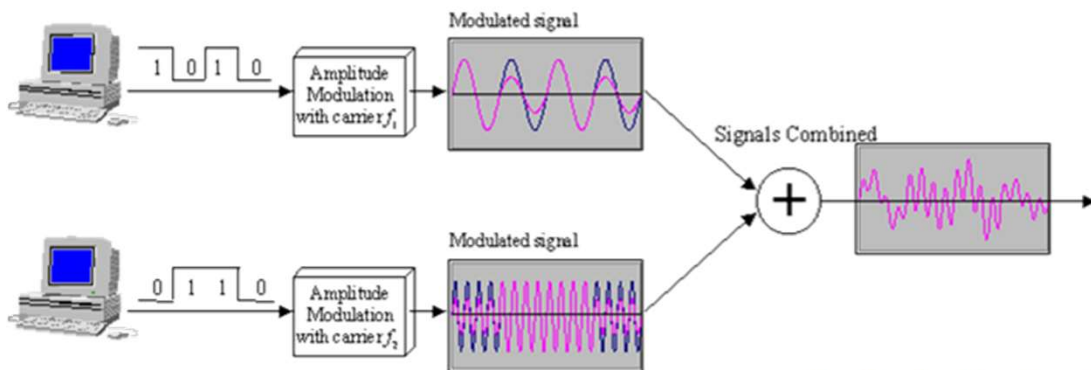


Multiplexing categories

FDM demultiplexing process

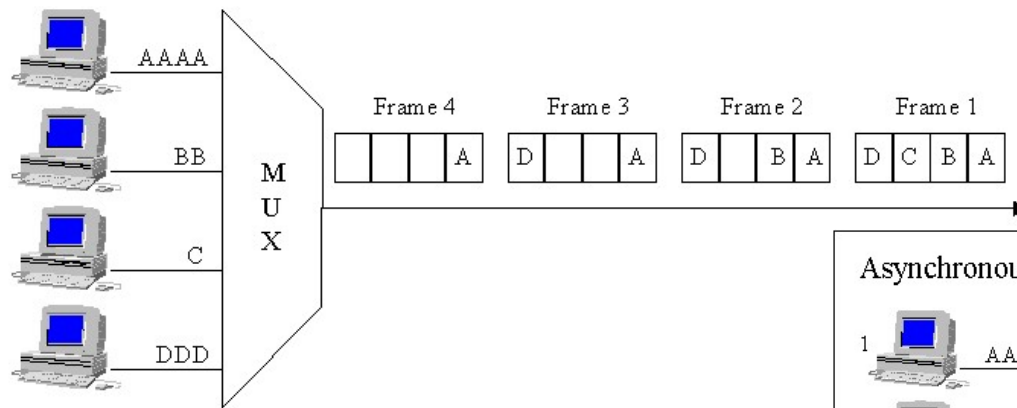


FDM multiplexing process

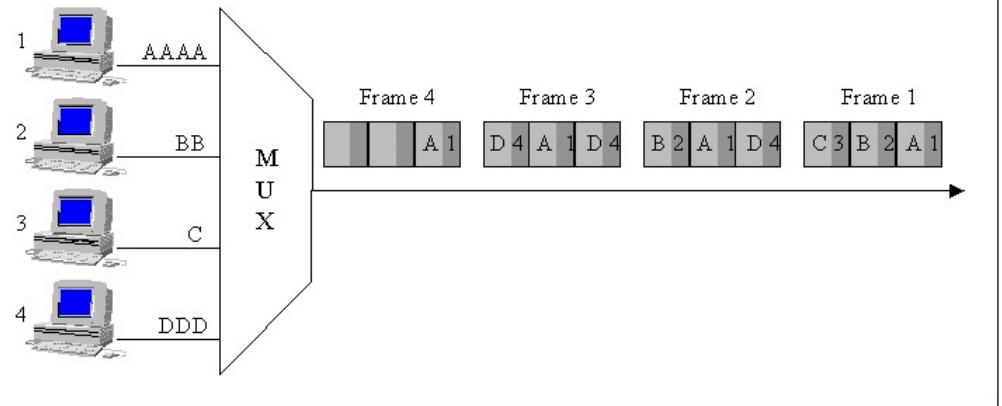


Multiplexing categories

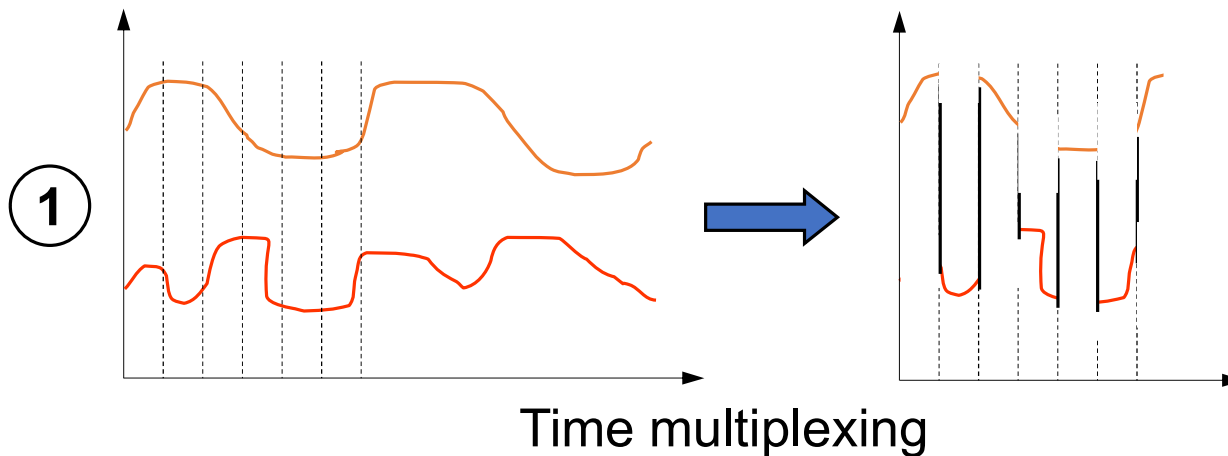
Synchronous TDM: multiplexing process



Asynchronous TDM: multiplexing process



Multiplexing categories



② Frequency multiplexing