

# PROFIdrive Multi-Vendor Demo (MVD) Planned System Architecture

PackExpo – 2005



# PROFIdrive Multi-Vendor Demo (MVD)

## Goal:

- The interoperability shall be demonstrated in a demo model by products of several manufacturers who support the PROFIdrive profile.
- Provide evidence that PROFIdrive is an established technology in the market and is supported by many manufacturers
- The MVD shall be used often to demonstrate PROFIdrive and could serve as a reference installation for the certification also.

- 2 Modules:
  - same application
  - different vendors
  - same bus interface
  
- Application:

A gear motor drives the absolute encoder over a belt. A disk on the encoder shaft has a marking for a limit switch. The signal of the limit switch is the trigger for stroboscope lights. The signal of the limit switch is also used for the IO.

The encoder signal is transferred via the bus to the control and is used as reference of the succeeding servo drives (synchronization control)

The disks of the succeeding drives are flashed with another 2 lights (with different color) controlled by IO.

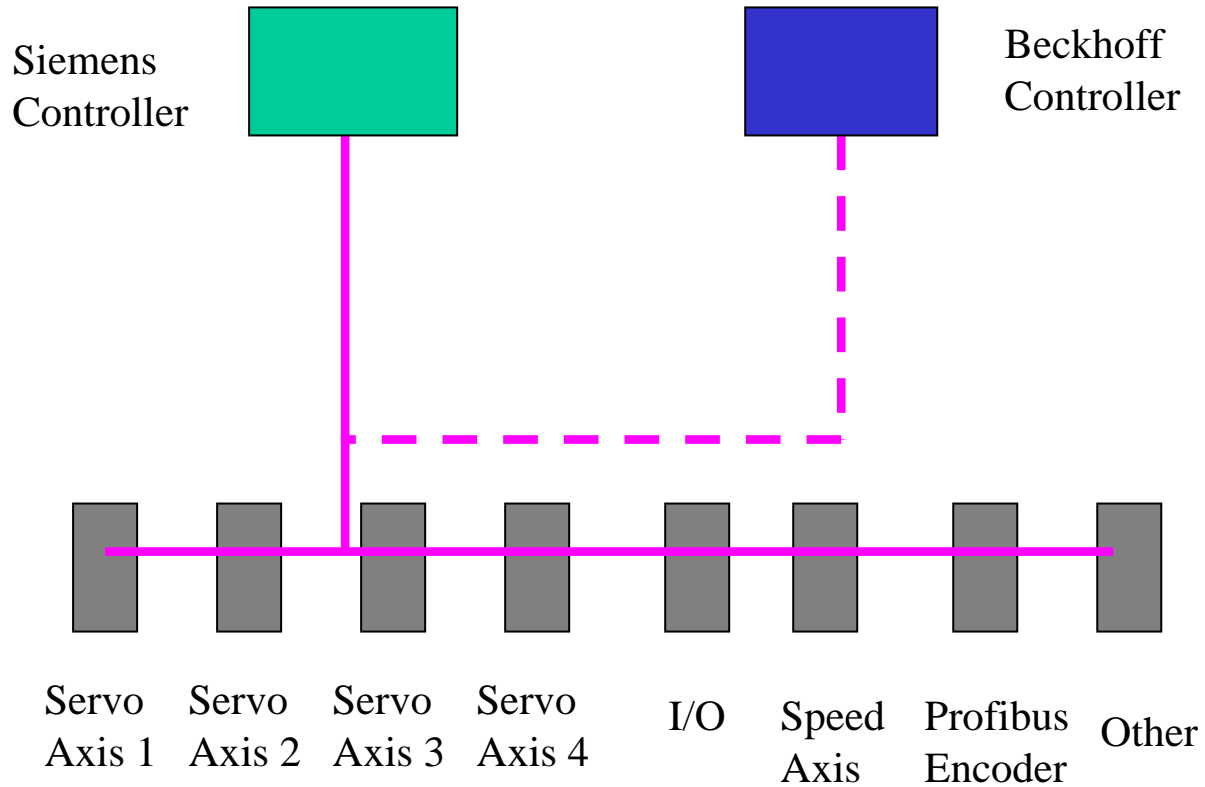


# Basic message: Interoperability

- The two controls independently of each other operate the same application.
  - Both are equipped with servo axes, IOs and other components of different manufacturers.
- Interoperability – how to achieve:
  - With only changes to the hardware configuration!
  - Without changing the application programs (code)!

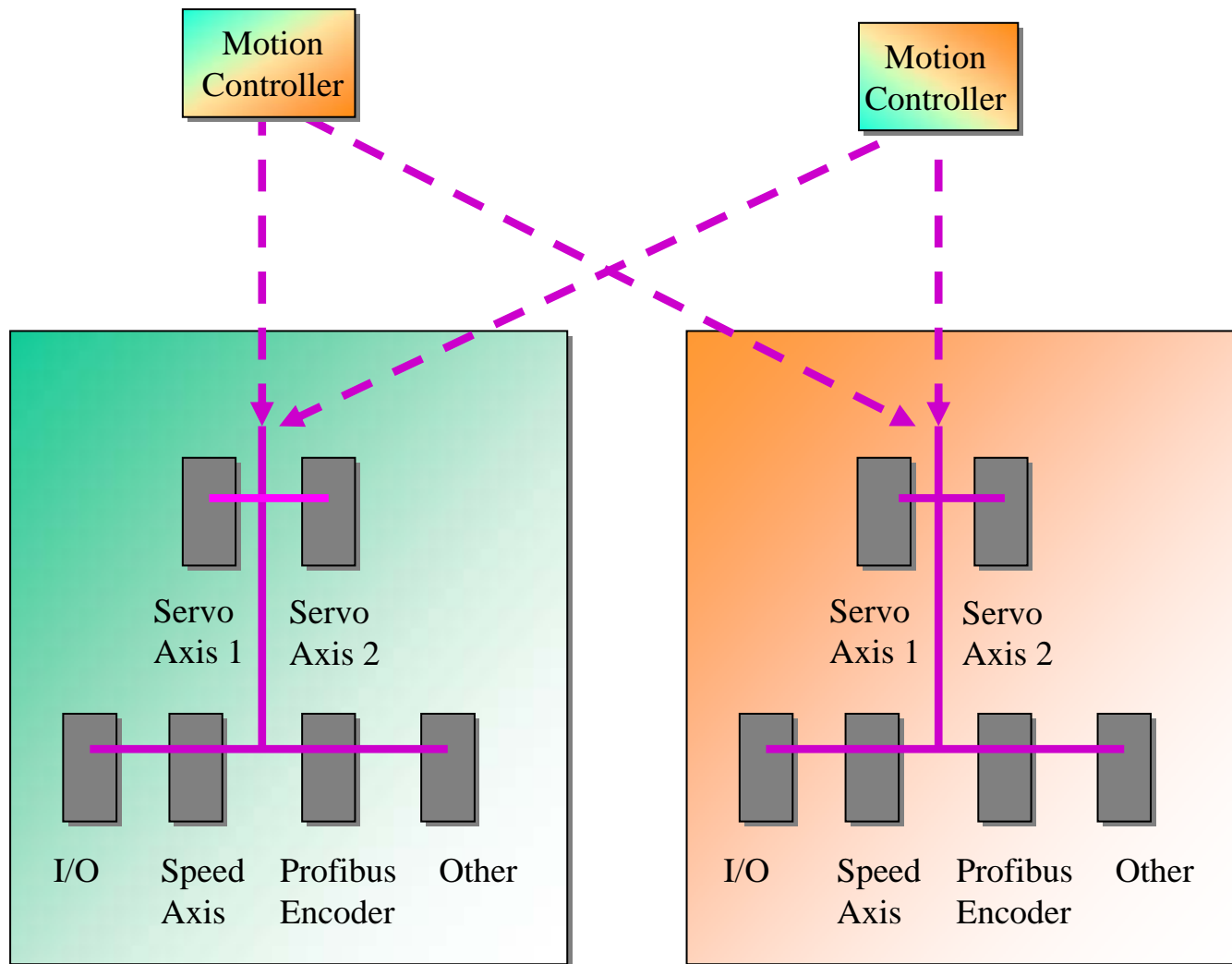
# MVD Interoperability Overview

## Basic Controller Swap

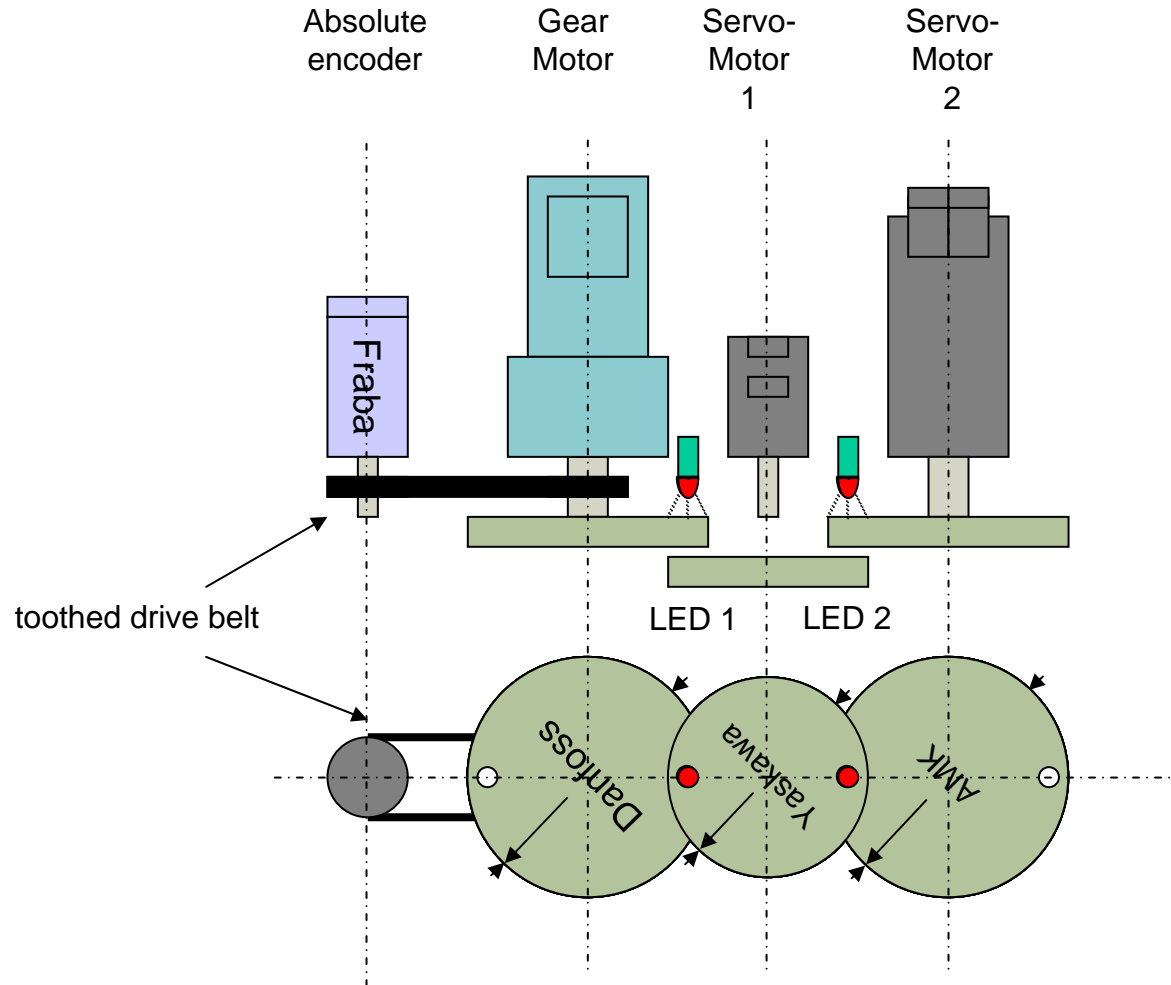


# MVD Interoperability Overview

## Interoperability of the PROFIBUS components



# MVD Interoperability Overview Application



# Controller Details Hardware & Software



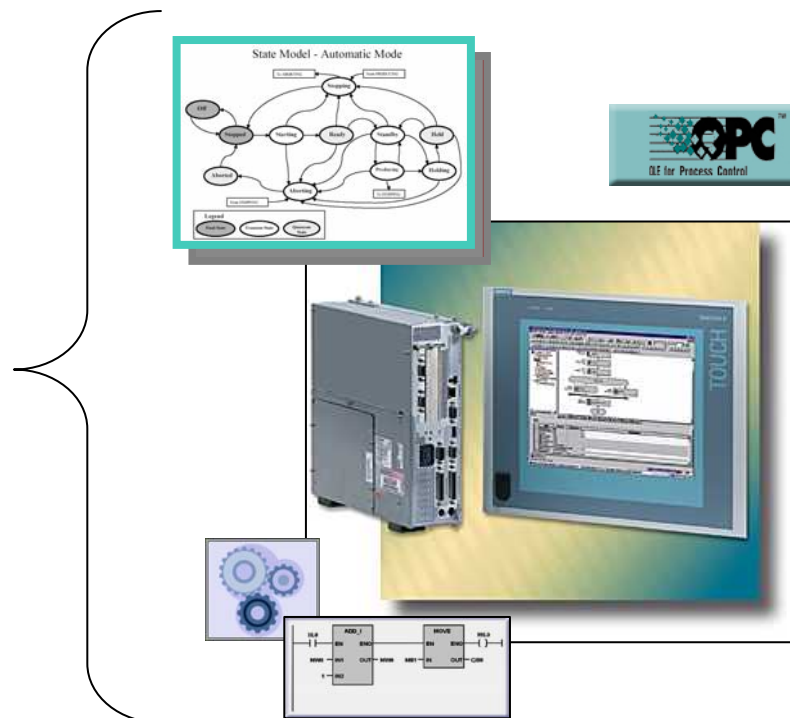
## Motion Controller

### Motion Controller Hardware:

- PC-Based Motion Controller
- TFT Display with Integrated Touch Screen
- Ethernet & PROFIBUS communications ports

### Motion Controller Software:

- Motion and "PLC" Logic
- HMI
- Running OMAC Packaging State Model (PSM)
- PackTags V2.0
- OPC-compliant



# “Line” Details - current MVD configuration

## Centralized HMI using OPC

