



CODESYS MOTION CNC ROBOTICS

CODESYS Feature Briefing, October 2024
Georg Seidel, Head of Application Technology

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Halting of superimposed movements

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Drive support

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Cam extensions

4

Forecast

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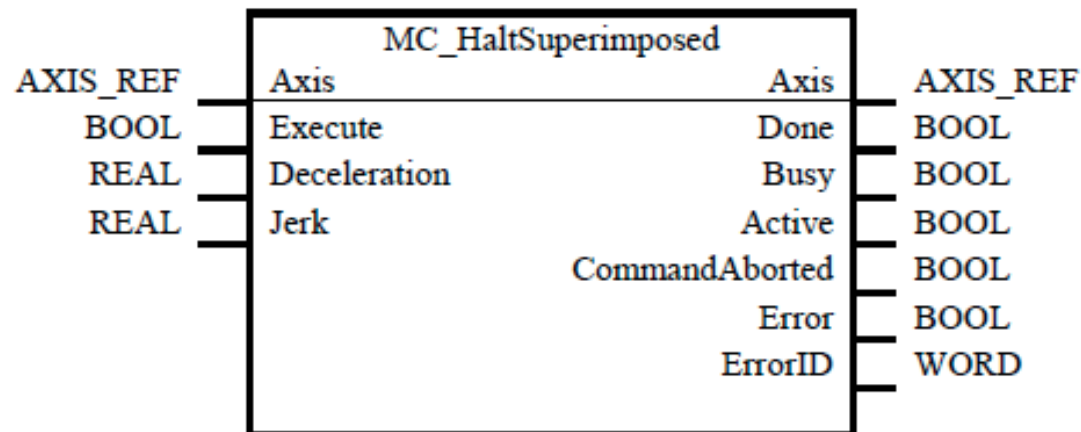
Cam extensions

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3.9. MC_HaltSuperimposed

| | | | |
|--|----------------|---------------------|---|
| FB-Name | | MC_HaltSuperimposed | |
| This Function Block commands a halt to all superimposed motions of the axis. The underlying motion is not interrupted. | | | |
| VAR_IN_OUT | | | |
| B | Axis | AXIS_REF | Reference to the axis |
| VAR_INPUT | | | |
| B | Execute | BOOL | Start the action at rising edge |
| E | Deceleration | REAL | Value of the deceleration [u/s ²] |
| E | Jerk | REAL | Value of the Jerk [u/s ³] |
| VAR_OUTPUT | | | |
| B | Done | BOOL | Superimposed motion halted |
| E | Busy | BOOL | The FB is not finished and new output values are to be expected |
| E | CommandAborted | BOOL | 'Command' is aborted by another command |
| B | Error | BOOL | Signals that an error has occurred within the Function Block |
| E | ErrorID | WORD | Error identification |
| - | | | |



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- **New driver for Mitsubishi Melservo series**
- **Discontinuation of Sercos driver**



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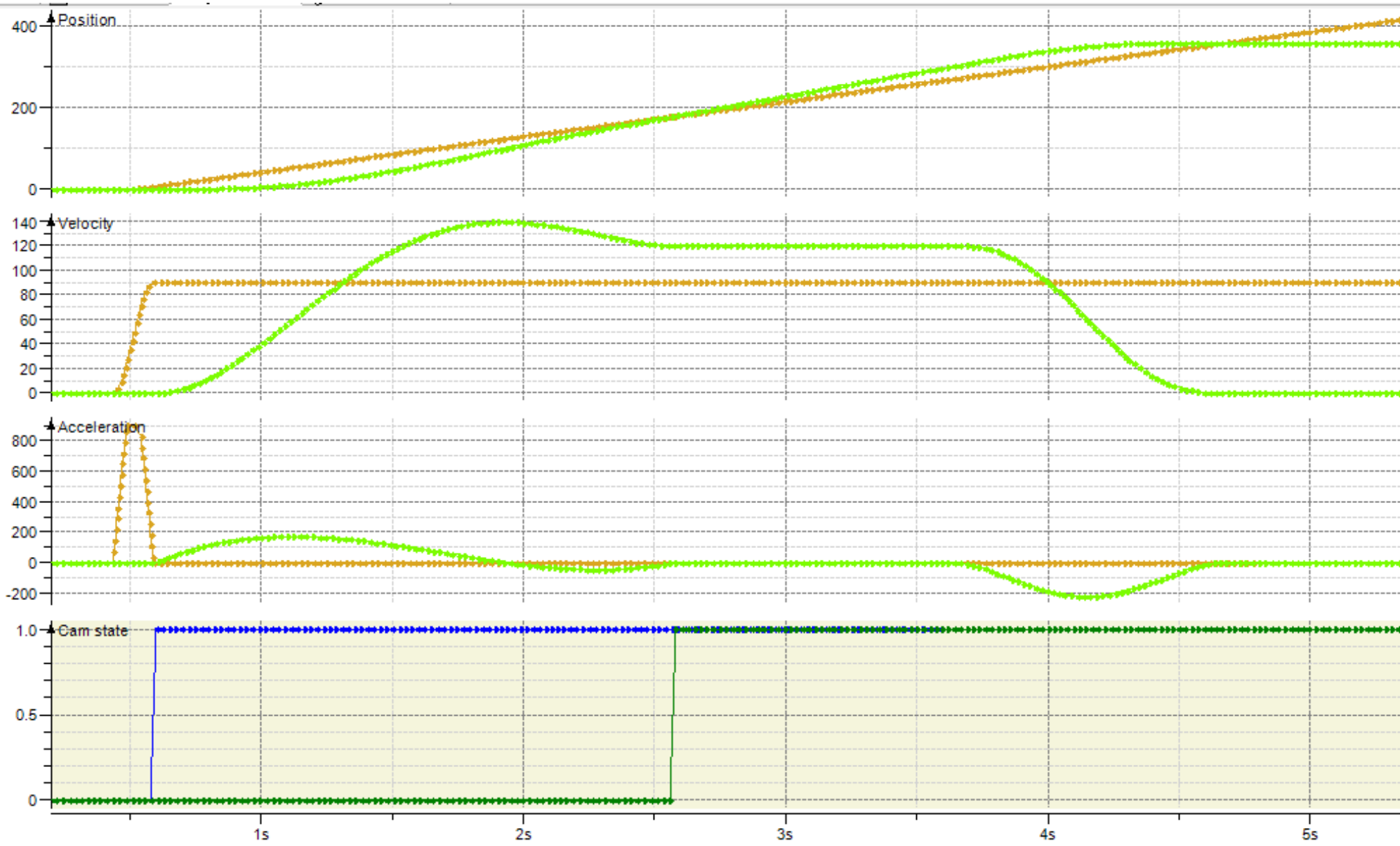
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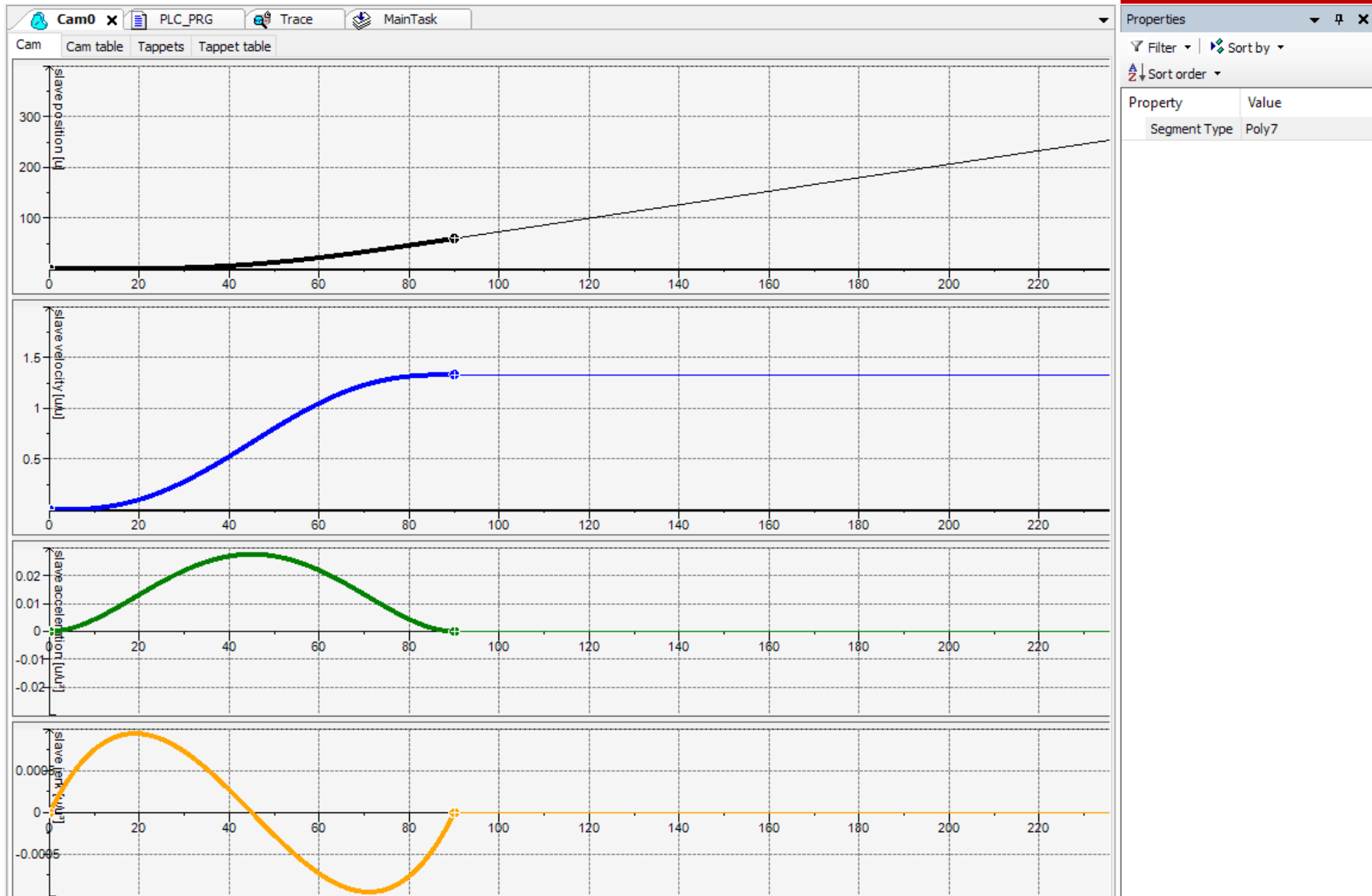
Forecast

Distance-based ramping-in

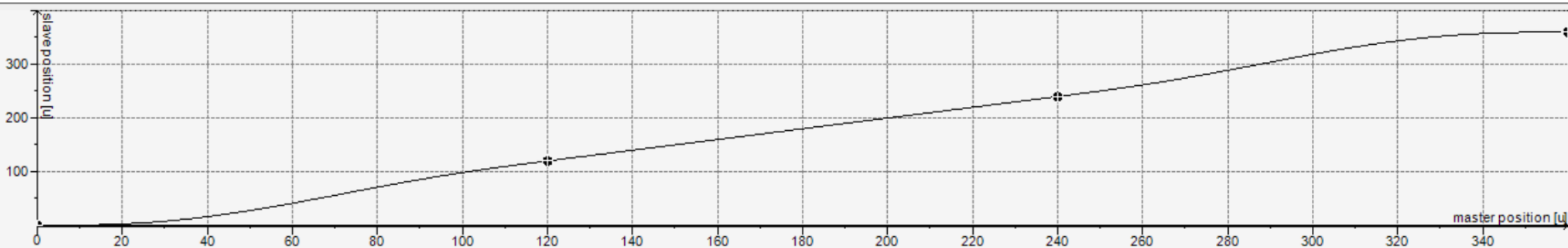


[Configuration](#)
[Add Variable](#)

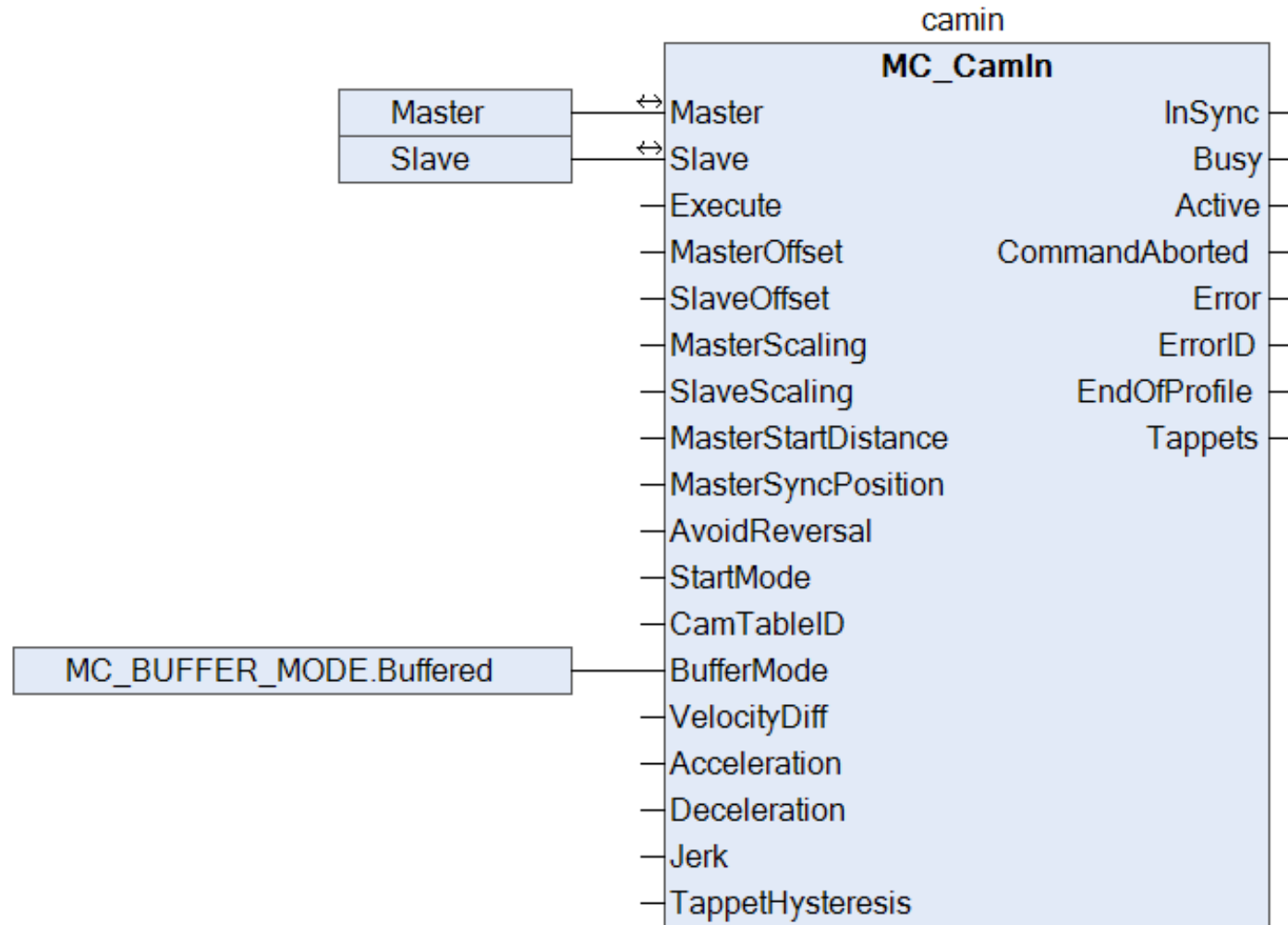
- Diagram 1
 - Slave.fSetPosition
 - Master.fSetPosition
- Diagram 3
 - Slave.fSetVelocity
 - Master.fSetVelocity
- Diagram 5
 - Slave.fSetAcceleration
 - Master.fSetAcceleration
- Diagram 7
 - PLC_PRG.cam.InSync
 - PLC_PRG.cam.Execute



```
camBuilder.Init();  
  
camBuilder.Append(  
    SMCB.Poly5(  
        SMCB.BoundImplicit(),  
        SMCB.Bound(120, 120, 1)));  
camBuilder.Append(  
    SMCB.Poly5(  
        SMCB.BoundImplicit(),  
        SMCB.Bound(240, 240, 1)));  
camBuilder.Append(  
    SMCB.Poly5(  
        SMCB.BoundImplicit(),  
        SMCB.Bound(360, 360)));
```



Switching cams using buffer modes



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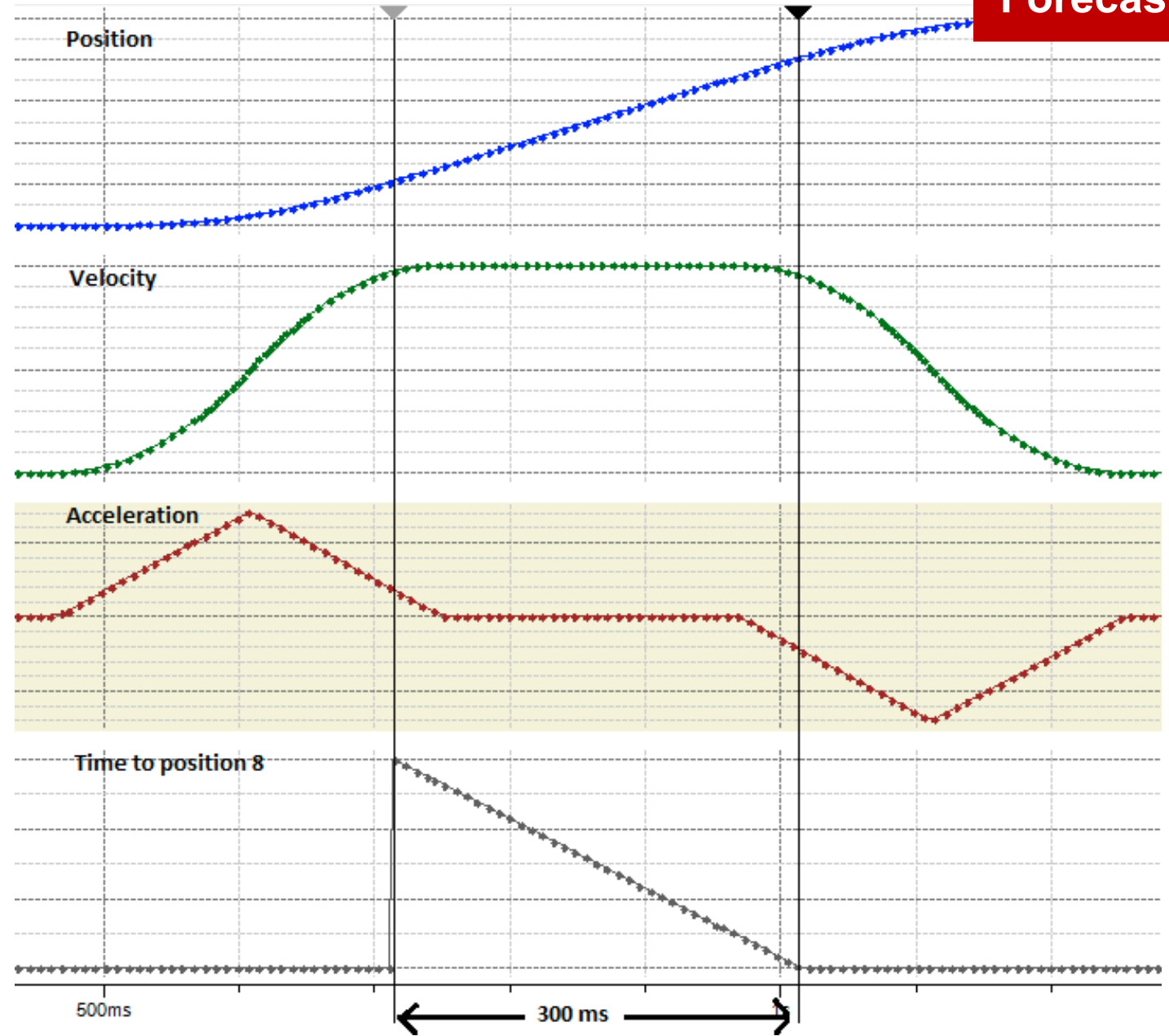
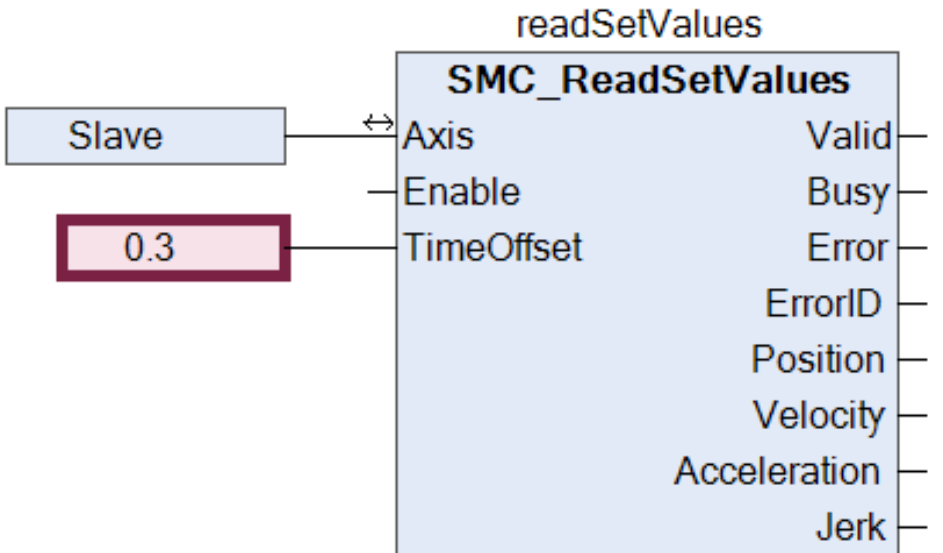
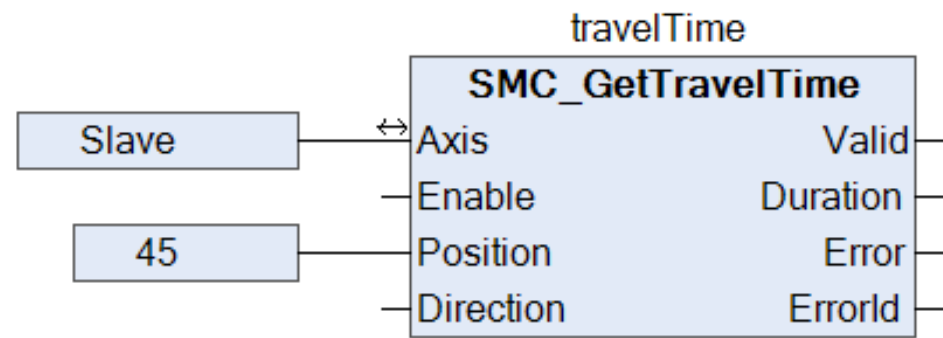
Drive support

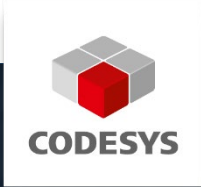
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