



Example 1: Single start of a closed cam

Task:

- Closed cam (forwards and backwards) with standstill area at the beginning and at the end.
- Digital input starts run through curve once.
- Connection to virtual master.

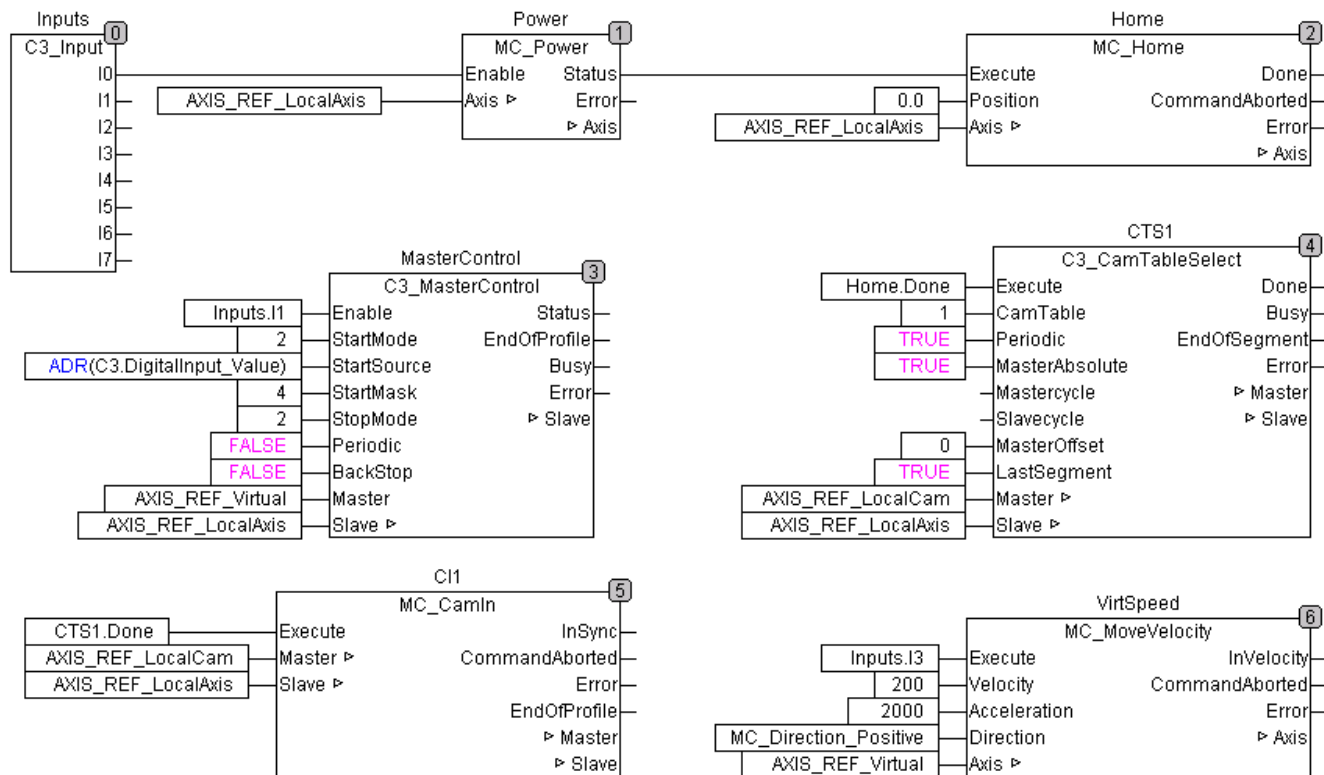
Corresponding files:

CamExample01.C3P (Compax3 project on the Compax3 CD:\Examples\Example1)
 CamExample01.pro (CoDeSys project on the Compax3 CD:\Examples\Example1)

Control interface:

Input	Function
I0	Energize axis, homing, curve generator, starting and coupling axis
I1	Enable master detection
I2	Starting detection in single mode
I3	Start of the virtual master
I4	Free
I5	Free
I6	Free
I7	Free

Solution:



- The curve is activated after the homing run (Home.Done to CTS1).
- After that the axis is synchronized via CS1.Done at CI1. Now the master detection can be started.
- Input I1 enables the master acquisition, which will wait for the external event (Input I2)
 In order to do this, the C3_MasterControl module: is assigned to following value: ADR(C3.DigitalInput_Value).
 In order to select the 3rd bit from this value the input StartMask receives the value 4.
- The master acquisition runs in Single Mode and the curve generator (C3_CamTableSelect) in the Periodic, this means that the switch

between the curve generator and detection is always closed, see in the [signal image](#). With the external event (input I2) a curve cycle is run through.

Signal image:

