

Table of contents

- C8214 SMO: Incorrect configuration

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An error occurred when executing the command to exit the configuration mode (C8200).

The parameterization mode was not reached.



An incorrect configuration might have caused the error to be triggered, see description in detailed diagnostics. To find out, please call the *“Diagnostic trace”* in ctrlX DRIVE Engineering as follows:

- In the function tree select the drive for which an error has been diagnosed.
- Open the context menu of the axis: *Diagnostics → Diagnostic trace*.
⇒ The *“Diagnostic trace”* is opened.
- Filter for "detailed diagnostics".

Cause

Scaling:

The **data reference** for position, velocity and acceleration data is not equally parameterized

Remedy

Make sure that the **data reference** is the same

- "SMO position scaling: Type" (0x3022:01 / P-0-3222.0.1 / --)
- "SMO velocity scaling: Type" (0x3024:01 / P-0-3223.0.1 / --)
- "SMO acceleration scaling: Type" (0x3026:01 / P-0-3224.0.1 / --)

The **scaling type** for velocity and acceleration data is not equally parameterized

Make sure that the **scaling type** is the same

- "SMO velocity scaling: Type" (0x3024:01 / P-0-3223.0.1 / --)
- "SMO acceleration scaling: Type" (0x3026:01 / P-0-3224.0.1 / --)

Cause	Remedy
The scaling unit for position, velocity and acceleration data is not equally parameterized (mixed inch/metric)	Make sure that the scaling unit is the same ■ "SMO position scaling: Type" (0x3022:01 / P-0-3222.0.1 / --) ■ "SMO velocity scaling: Type" (0x3024:01 / P-0-3223.0.1 / --) ■ "SMO acceleration scaling: Type" (0x3026:01 / P-0-3224.0.1 / --)
Scaling: The selection "Data reference at the motor shaft" - with load encoder – is not allowed	Select an allowed data reference
Scaling: The rotation position resolution is not correct	The rotation position resolution has to be entered as the value $360 \times 10^{\text{Exp}}$ (Exp="0..7")
Signal control of outputs: The source IDN is not allowed - or - The source bit is not allowed	Check the "discrete outputs": Use ident number from "SMO signal control, discrete outputs: Possible source IDNs" (0x305A:03 / P-0-3335.0.3 / --) or Use bit from "SMO signal control, discrete outputs: Possible source bits" (0x305A:04 / P-0-3335.0.4 / --) Check the signal sources for the "safety bus status word": Use ident number from "SMO safety bus, signal control: Possible source IDNs" (0x3054:03 / P-0-3336.0.3 / P-0-2521) or Use bit from "SMO safety bus, signal control: Possible source bits" (0x3054:04 / P-0-3336.0.4 / P-0-2522)

Cause	Remedy
IO mapper inputs: The maximum possible number of instances of an IO mapper block type has been exceeded	One connection type is used too often. Check the I/O mapper block types and their individually possible maximum number of instances: ■ "SMO IO mapper 1: Type" (0x3030:01 / P-0-3330.0.1 / --) ■ "SMO IO mapper 2: Type" (0x3031:01 / P-0-3330.1.1 / --) ■ ... ■ "SMO IO mapper 16: Type" (0x303F:01 / P-0-3330.15.1 / --)
IO mapper inputs: A target signal (target IDN / target bit) is used multiple times	Make sure a target IDN / a target bit is only used once. Target IDNs: ■ "SMO IO mapper 1: IDN target" (0x3030:04 / P-0-3330.0.4 / --) ■ "SMO IO mapper 2: IDN target" (0x3031:04 / P-0-3330.1.4 / --) ■ ... ■ "SMO IO mapper 16: IDN target" (0x303F:04 / P-0-3330.15.4 / --) Target bits: ■ "SMO IO mapper 1: Bit target" (0x3030:05 / P-0-3330.0.5 / --) ■ "SMO IO mapper 2: Bit target" (0x3031:05 / P-0-3330.1.5 / --) ■ ... ■ "SMO IO mapper 16: Bit target" (0x303F:05 / P-0-3330.15.5 / --)

Cause	Remedy
IO mapper inputs: The target IDN is not allowed	Check the I/O mapper block types and their individually possible target IDNs: ■ "SMO IO mapper 1: Type" (0x3030:01 / P-0-3330.0.1 / --) ■ "SMO IO mapper 2: Type" (0x3031:01 / P-0-3330.1.1 / --) ■ ... ■ "SMO IO mapper 16: Type" (0x303F:01 / P-0-3330.15.1 / --)
IO mapper inputs: The target bits are not allowed	Check the I/O mapper block types and their individually possible target bits: ■ "SMO IO mapper 1: Type" (0x3030:01 / P-0-3330.0.1 / --) ■ "SMO IO mapper 2: Type" (0x3031:01 / P-0-3330.1.1 / --) ■ ... ■ "SMO IO mapper 16: Type" (0x303F:01 / P-0-3330.15.1 / --)
IO mapper inputs: Input signals not in order	I/O mapper block "Binary-to-bit decoder": Check the list of source IDNs for gaps: ■ "SMO IO mapper 1: IDN source" (0x3030:02 / P-0-3330.0.2 / --) ■ "SMO IO mapper 2: IDN source" (0x3031:02 / P-0-3330.1.2 / --) ■ ... ■ "SMO IO mapper 16: IDN source" (0x303F:02 / P-0-3330.15.2 / --)

Cause	Remedy
IO mapper inputs: Only safety bus allowed	"Binary-to-bit decoder": Check the source IDN for "SMO safety bus function: Control word" (0x3052:02 / P-0-3340 / --): ■ "SMO IO mapper 1: IDN source" (0x3030:02 / P-0-3330.0.2 / --) ■ "SMO IO mapper 2: IDN source" (0x3031:02 / P-0-3330.1.2 / --) ■ ... ■ "SMO IO mapper 16: IDN source" (0x303F:02 / P-0-3330.15.2 / --)
IO mapper inputs: The IO mapper block type is not allowed	Check the IO mapper block types. Only values from "0" to "7" are allowed. ■ "SMO IO mapper 1: Type" (0x3030:01 / P-0-3330.0.1 / --) ■ "SMO IO mapper 2: Type" (0x3031:01 / P-0-3330.1.1 / --) ■ ... ■ "SMO IO mapper 16: Type" (0x303F:01 / P-0-3330.15.1 / --)
IO mapper inputs: The source IDN is not allowed	Use an IDN from the list of possible source IDNs: ■ "SMO IO mapper 1: IDN source" (0x3030:02 / P-0-3330.0.2 / --) ■ "SMO IO mapper 2: IDN source" (0x3031:02 / P-0-3330.1.2 / --) ■ ... ■ "SMO IO mapper 16: IDN source" (0x303F:02 / P-0-3330.15.2 / --)

Cause	Remedy
IO mapper inputs: The list of source IDNs is incomplete <i>If the auxiliary function "Safe homing procedure" is used:</i> "SMO Safe homing procedure: Tolerance window" (0x31B0:04 / P-0-3253.0.4 / P-0-2796) has been parameterized with "0"	Make sure that the required inputs of the IO mapper block type have been entered: ■ "SMO IO mapper 1: IDN source" (0x3030:02 / P-0-3330.0.2 / --) ■ "SMO IO mapper 2: IDN source" (0x3031:02 / P-0-3330.1.2 / --) ■ ... ■ "SMO IO mapper 16: IDN source" (0x303F:02 / P-0-3330.15.2 / --) Assign a value unequal zero to "SMO Safe homing procedure: Tolerance window" (0x31B0:04 / P-0-3253.0.4 / P-0-2796)

Also see I/O mapper block types

► Attributes

Detailed diagnostics

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00110212

00110213

00110214

00110215

00110216

001C000F

001C0017

001C001A

001C002C

001C002D

001C0030

001C0034

001C0038

001C003C

001C0040

001C0047

001C0050

001C0051

001D0007

001D0008

001D0022

0040047F

004606D1

004606D2

00480001

0048325B

0048325C

00490000

00490001

0053008C

00530728

00530729

0053073D

0053073E

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