

Introduction

AMC DZEANTU-020B080 drives are configurable to support multiple sub-nodes (DZSANTU-020B080) when used on the 4 Axis mounting card MC4XDZP01. The EtherCAT®¹ XML Device Description File stored in the drive's EEPROM must be changed in order to recognize additional nodes. The XML Description File is published by AMC and describes the servo drive to the EtherCAT network.

This example walks through setup for a 4-axis configuration using TwinCAT®.

Note: DZEANTU-020B080 ships configured as a 1-Axis drive. To recognize additional sub-nodes, the DZEANTU-020B080 XML Device Description File must be updated.

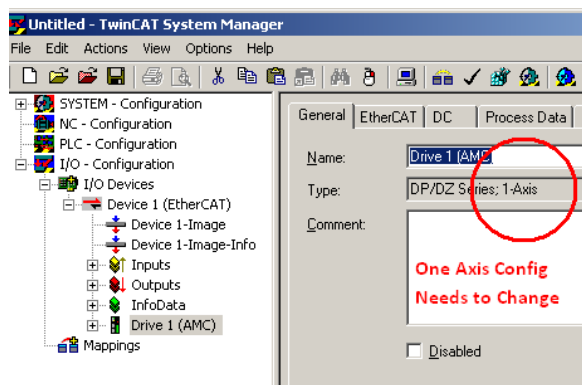
XML Device Description File

The XML Device Description File identifies the servo drive to the EtherCAT network and contains the default PDO configuration. To add additional sub-nodes, additional PDO information is required. This is pre-defined in the XML Device Description File provided by AMC

1. Download the XML Device Description File for the DZE:
<https://dpk3n3gg92jw.cloudfront.net/domains/amc/pdf/AMCEtherCATXML.zip>
2. Place the file in the default folder:
C:\TwinCAT\Io\EtherCAT
3. Close TwinCAT® and re-launch it. This updates the device description cache in TwinCAT®.

Check the Configuration

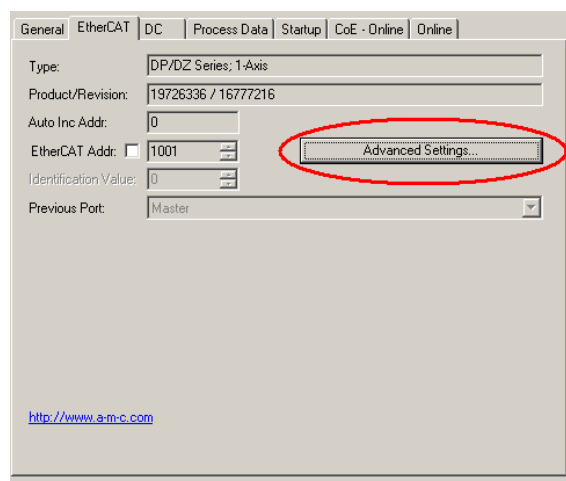
DZEANTU-020B080 drives are pre-loaded with a 1-Axis drive configuration and show up when detected on the EtherCAT network. Click on the AMC drive Box and look at the General tab.



1-Axis Configuration

Write to EEPROM in TwinCAT

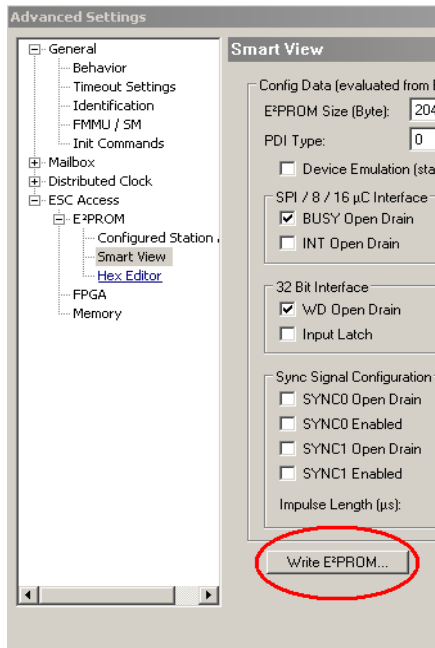
1. Start by clicking the EtherCAT tab with the drive selected in the view on the left.
2. Go to the Advanced Settings page.



EtherCAT Advanced Settings

3. In the advanced settings page open the Smart View under E²PROM on the left
4. Select Write E²PROM

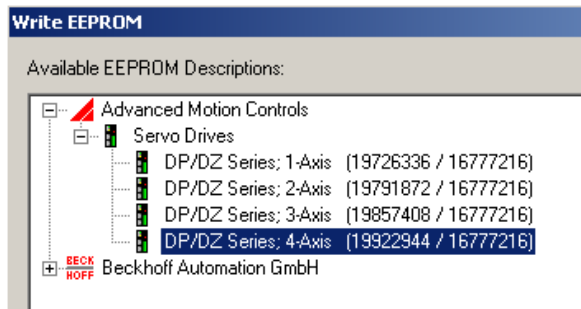
¹ EtherCAT and TwinCAT are registered trademarks of Beckhoff Automation GmbH.



SmartView Editor

- Select the 4-Axis option

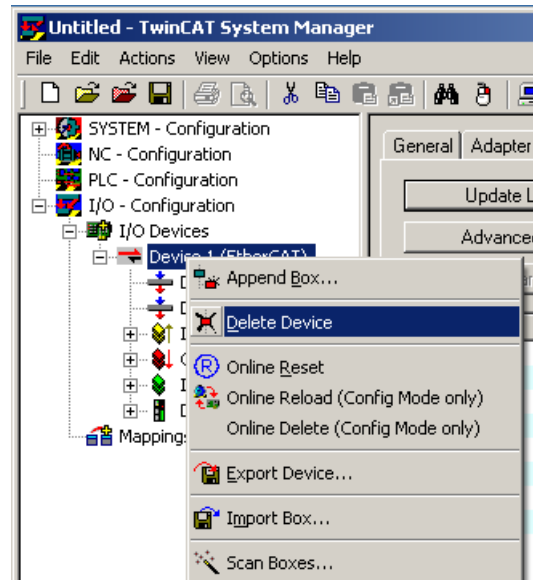
Note: This example covers a 4-axis configuration, but other configurations are possible. Choose the axis configuration that matches your configuration.



AMC Drive Selection

Remove the One Axis Device

Now that the EPROM has the correct configuration, the original one axis device must be removed from the I/O devices section of TwinCAT®

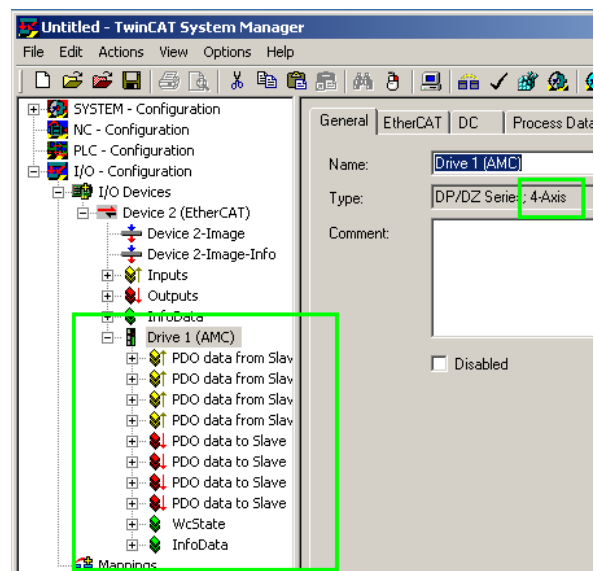


Removing 1-Axis Drive

Check the Configuration Again

Detect the device again and look at the general tab and PDO information to ensure the 4-Axis drive is present.

Note: There are 4 sets of PDO data in this example. For a 3-axis setup there would be 3 sets of PDO data and so on.



4-Axis Drive Configuration