



**Title:** MCAPI.INI settings – Converting from a DCX-AT300 to a DCX-PCI300  
**Products(s):** DCX-AT300, DCX-PCI300  
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## Summary

The DCX-PCI300 motion controller and associated software (MCAPI ver. 3.01 or higher) are designed to be compatible with DCX-AT300 motion control systems. When converting to the PCI bus controller, a minor edit of the file MCAPI.INI will allow the DCX-PCI300 controller to use the motion parameters that were originally defined for the DCX-AT300.

## More Information

For Windows based applications, all motion parameters (PID, velocity, acceleration, deceleration, limit settings, profile type, etc.) should be saved into the MCAPI.INI file. This would typically be accomplished by selecting Save All Axis Settings from the File menu of PMC's Servo Tuning program.

In the mcapi.ini file the settings for each axis are preceded by the section title [Axis**b**:**a**]. The variable *b* = board number, variable *a* = axis number. The first key following the section title is *Identity*. The value for this key is a 16-bit integer, which is coded to indicate both the controller type (eight most significant bits) and the module type (eight least most significant bits). The hex value for the DCX-AT300 = 6, the hex value for the DCX-PCI300 = 7. To convert mcapi.ini settings from a DCX-AT300 to a DCX-PCI300 change the *Identity* value for each axis so that the eight most significant bit equal 7 instead of 6.

## Example

The *Identity* key & value for a DCX-MC300 operating on a DCX-AT300 as axis #1 is:

Identity=1538            when converted to a hex value 1538d = 602h

To change the *Identity* key value for a DCX-PCI300 with a DCX-MC300 as axis #1:

702d = 1794d

Identity=1794