Icv712 device server
User's Guide

Dac712 Class

Revision: - Author: vedder
Implemented in C++ - CVS repository: ESRF

Introduction:

This class will allow to manage an icv712 board.

Class Inheritance:

- Tango::Device_4Impl
  - Dac712

Class Description:

Properties:

Device Properties		
Property name	**Property type**	**Description**
Pathname	Tango::DEV_STRING	pathname of the descriptor.

Device Properties Default Values:

Property Name	Default Values
Pathname	No default value

There is no Class properties.

States:

States	
Names	**Descriptions**
ON	The device is ON and working. All commands are allowed.
FAULT	There is a problem accessing the card or the device driver. The state remains in this state until a successfull access has been made. All commands are allowed, but if the state remains in fault, their effect is unpredictable.

Commands:

More Details on commands....

Device Commands for Operator Level		
Command name	**Argument In**	**Argument Out**
Init	DEV_VOID	DEV_VOID
State	DEV_VOID	DEV_STATE
Status	DEV_VOID	CONST_DEV_STRING
WriteChannel	DEVVAR_SHORTARRAY	DEV_VOID
ReadChannel	DEV_SHORT	DEV_DOUBLE
Store	DEV_VOID	DEV_VOID
Restore	DEV_VOID	DEV_VOID
StopConversion	DEV_VOID	DEV_VOID
Reset	DEV_VOID	DEV_VOID

1 - Init

- **Description:** This commands re-initialise a device keeping the same network connection.
  After an Init command executed on a device, it is not necessary for client to re-connect to the device.
  This command first calls the device *delete_device()* method and then execute its *init_device()* method.
  For C++ device server, all the memory allocated in the *nit_device()* method must be freed in the *delete_device()* method.
  The language device desctructor automatically calls the *delete_device()* method.

- **Argin:**
  DEV_VOID : none.

- **Argout:**
  DEV_VOID : none.

- **Command allowed for:**
- Tango::ON
- Tango::FAULT

2 - State

- **Description:** This command gets the device state (stored in its *device_state* data member) and returns it to the caller.

- **Argin:**
  DEV_VOID : none.

- **Argout:**
  DEV_STATE : State Code

- **Command allowed for:**
- ○ Tango::ON
- ○ Tango::FAULT

3 - Status

- **Description:** This command gets the device status (stored in its *device_status* data member) and returns it to the caller.

- **Argin:**
  DEV_VOID : none.

- **Argout:**
  CONST_DEV_STRING : Status description

- **Command allowed for:**
- ○ Tango::ON
- ○ Tango::FAULT

4 - WriteChannel

- **Description:** Sets the output value of one channel.

- **Argin:**
  DEVVAR_SHORTARRAY : channel + value to write

- **Argout:**
  DEV_VOID :

- **Command allowed for:**
- ○ Tango::ON
- ○ Tango::FAULT

5 - ReadChannel

- **Description:** Reads the output value of one channel. The output value is read from the register.

- **Argin:**
  DEV_SHORT : channel to read

- **Argout:**
  DEV_DOUBLE : Output value read from the card.

- **Command allowed for:**

- ○ Tango::ON
- ○ Tango::FAULT

6 - Store

- **Description:** Puts the card into continuous scanning mode. The card stores the level of each output into internal EEPROM memory from where they are fetched when the system is powered up or with the Restore command. Note that EEPROMs allow their contents to be changed about 10000 times.

- **Argin:**
  DEV_VOID :

- **Argout:**
  DEV_VOID :

- **Command allowed for:**
- ○ Tango::ON
- ○ Tango::FAULT

7 - Restore

- **Description:** Starts the refreshing of the output channels. The card restores the level of each output from the internal EEPROM memory.

- **Argin:**
  DEV_VOID :

- **Argout:**
  DEV_VOID :

- **Command allowed for:**
- ○ Tango::ON
- ○ Tango::FAULT

8 - StopConversion

- **Description:** Stops the refreshing of the output channels. The output channels will conserve their value and the writechannel command won't have anymore effect. The Restore command will restart the refreshing of the channels again, having first load the values from the EEPROM to memory.

- **Argin:**
  DEV_VOID :

- **Argout:**
  DEV_VOID :

- **Command allowed for:**
- ○ Tango::ON
- ○ Tango::FAULT

9 - Reset

- **Description:** reset the board.

- **Argin:**
  DEV_VOID :

- **Argout:**
  DEV_VOID :

- **Command allowed for:**
- ○ Tango::ON
- ○ Tango::FAULT