

## VFCADC Tango Cpp Class

### **Contents :**

- [Description](#)
- [Properties](#)
- [Commands](#)
  - [State](#)
  - [Status](#)
  - [Reset](#)
  - [SetGain](#)
  - [SetPolarity](#)
  - [SetOffset](#)
  - [InitVFCADC](#)
- [Attributes](#)
  - [Value](#)
  - [Gain](#)
  - [Offset](#)
  - [Polarity](#)
  - [Counts](#)
  - [FlagVFCADCInit](#)
- [States](#)

### **VFCADC Class Identification :**

Contact : at desy.de - maria-teresa.nunez-pardo-de-vera  
Class Family : InputOutput  
Platform : Unix Like  
Bus : VME  
Manufacturer : none  
Manufacturer ref. :

### **VFCADC Class Inheritance :**

- [Tango::DeviceImpl](#)
  - VFCADC

### **VFCADC Class Description :**

Server for a VFC ADC. The Server describes a channel.

## VFCADC Properties :

### There is no class properties

Device Properties			
Name	Description	Type	Default Value
Base	VME base address. Default value 0x011000 (in decimal 69632)	int	69632
Channel	Channel number. Each module has 8 channels.	int	0
SimulationMode	0 real mode, 1 simulation mode	int	none
VmeCard	selects the VME card, can be 0 or 1, def.: 0	int	0

VFCADC Class Commands				
Name	Input type	Output type	Level	Description
<a href="#">State</a>	DEV_VOID	DEV_STATE	OPERATOR	This command gets the device state (stored in its <i>device_state</i> data member) and returns it to the caller.
<a href="#">Status</a>	DEV_VOID	CONST_DEV_STRING	OPERATOR	This command gets the device status (stored in its <i>device_status</i> data member) and returns it to the caller.
<a href="#">Reset</a>	DEV_VOID	DEV_LONG	OPERATOR	Reset a channel, clear contents.
<a href="#">SetGain</a>	DEV_VOID	DEV_LONG	OPERATOR	Set gain in ADC to Gain value.
<a href="#">SetPolarity</a>	DEV_VOID	DEV_LONG	OPERATOR	Set polarity in ADC to Polarity value.
<a href="#">SetOffset</a>	DEV_VOID	DEV_LONG	OPERATOR	Set offset in ADC to Offset value.
<a href="#">InitVFCADC</a>	DEV_VOID	DEV_LONG	OPERATOR	Init VFCADC. Set FlagVFCADCInit

### Command State :

This command gets the device state (stored in its *device\_state* data member) and returns it to the caller.

State Definition		
Input Argument	Tango::DEV_VOID	none.
Output Argument	Tango::DEV_STATE	State Code
DisplayLevel	OPERATOR	..
Inherited	true	..

Abstract	true	..
Polling Period	Not polled	..
Command allowed for	All states	..

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### **Command Status :**

This command gets the device status (stored in its *device\_status* data member) and returns it to the caller.

<b>Status Definition</b>		
Input Argument	Tango::DEV_VOID	none.
Output Argument	Tango::CONST_DEV_STRING	Status description
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	true	..
Polling Period	Not polled	..
Command allowed for	All states	..

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### **Command Reset :**

Reset a channel, clear contents.

<b>Reset Definition</b>		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_LONG	completion status
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

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### **Command SetGain :**

Set gain in ADC to Gain value.

<b>SetGain Definition</b>		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_LONG	completion status
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

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### **Command SetPolarity :**

Set polarity in ADC to Polarity value.

<b>SetPolarity Definition</b>		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_LONG	completion status
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

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### **Command SetOffset :**

Set offset in ADC to Offset value.

SetOffset Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_LONG	completion status
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

### **Command InitVFCADC :**

Init VFCADC. Set FlagVFCADCInit

InitVFCADC Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_LONG	completion status
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

VFCADC Class Attributes							
Name	Inherited	Abstract	Attr. type	R/W type	Data type	Level	Description
<a href="#">Value</a>	false	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	ADC value
<a href="#">Gain</a>	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	
<a href="#">Offset</a>	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	
<a href="#">Polarity</a>	false	false	Scalar	READ_WRITE	Tango::DEV_LONG	OPERATOR	

Counts	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	
FlagVFCADCIInit	false	false	Scalar	READ	Tango::DEV_BOOLEAN	EXPERT	

**There is no dynamic attribute defined.**

**Attribute Value :**

ADC value

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

Attribute Properties	
label	
unit	
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	Not set

**Attribute Gain :**

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	true
Write hardware at init.	true
Read allowed for	All states
Write allowed for	All states

Attribute Properties	
label	
unit	
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	Not set

**Attribute Offset :**

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	true
Write hardware at init.	true

Attribute Properties	
label	
unit	
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set

Read allowed for	All states
Write allowed for	All states

min_warning	
delta_time	
delta_val	

Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	Not set

**Attribute Polarity :**

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_LONG
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	true
Write hardware at init.	true
Read allowed for	All states
Write allowed for	All states

Attribute Properties	
label	
unit	
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	Not set

**Attribute Counts :**



Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states
Write allowed for	All states

Attribute Properties	
label	
unit	
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	false

**Attribute FlagVFCADClnt :**

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_BOOLEAN
Display Level	EXPERT
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set

Attribute Properties	
label	
unit	
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
	Not

Read allowed for	All states
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max_warning
min_warning
delta_time
delta_val

Archive Absolute Change	set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	Not set

VFCADC Class States	
Name	Description
ON	ADC is ready
FAULT	Problems in ADC