Vdsp71 for Hqps Vibration
User's Guide

HqpsVdspVib Class

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Implemented in C++ - CVS repository: ESRF

Introduction:

This class is part of the HQPS2 project. It manages a Vdsp71 board used to measure the HQPS2 Rotabloc vibrations

Class Identification:

- **Contact :** at esrf.fr - taurel
- **Class Family :** Hqps (ESRF Specific)
- **Platform :** Unix Like
- **Bus :** VME

Class Inheritance:

- Tango::Device_4Impl
  - HqpsVdspVib

Properties:

There is no Class properties.
There is no Device Properties.

States:

States	
Names	**Descriptions**
ON	The VDSP board is ON and running
FAULT	The VDSP board is in FAULT
MOVING	The Vdsp board is actually loading the DSP code

Attributes:

Scalar Attributes			
Attribute name	**Data Type**	**R/W Type**	**Expert**
SamplingPeriod: Sampling period to get vibration data for all the board channels	DEV_SHORT	READ_WRITE	No
FFTAverage: Number of points used to compute FFT. This attribute is fr all the channels used in the board	DEV_SHORT	READ_WRITE	No

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

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
- Tango::MOVING

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
- Tango::MOVING

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
- Tango::MOVING

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