

# XPS-Q8 LabVIEW Library

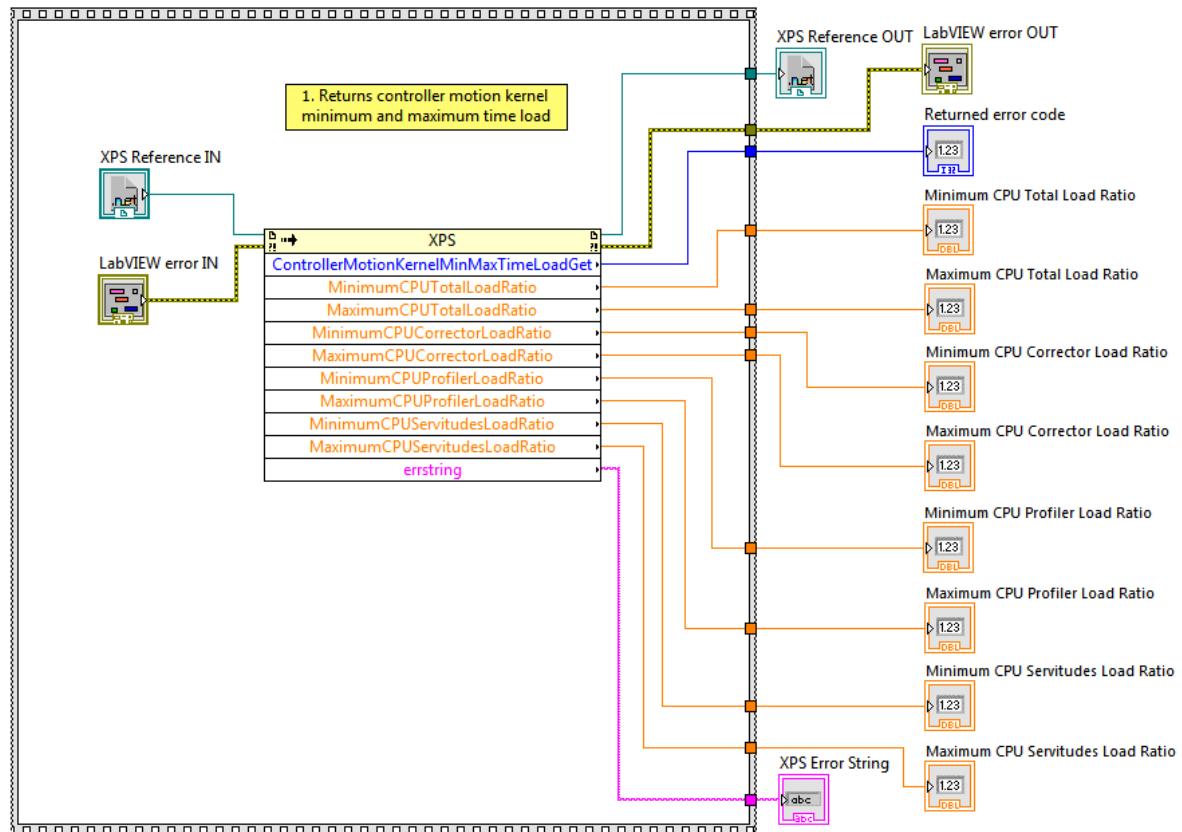
## 1. Controller Motion Kernel Min Max Time Load Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns controller motion kernel minimum and maximum time load

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality

 **Returned Error Code** Returns function error code

 **Minimum CPU Total Load Ratio** Minimum controller motion kernel total CPU time load

 **Maximum CPU Total Load Ratio** Maximum controller motion kernel total CPU time load

 **Minimum CPU Corrector Load Ratio** Minimum controller motion kernel corrector CPU time load

 **Maximum CPU Corrector Load Ratio** Maximum controller motion kernel corrector CPU time load

 **Minimum CPU Profiler Load Ratio** Minimum controller motion kernel profiler CPU time load

 **Maximum CPU Profiler Load Ratio** Maximum controller motion kernel profiler CPU time load

 **Minimum CPU Servitudes Load Ratio** Minimum controller motion kernel servitudes CPU time load

 **Maximum CPU Servitudes Load Ratio** Maximum controller motion kernel servitudes CPU time load

 **XPS Error String** return error string from VI

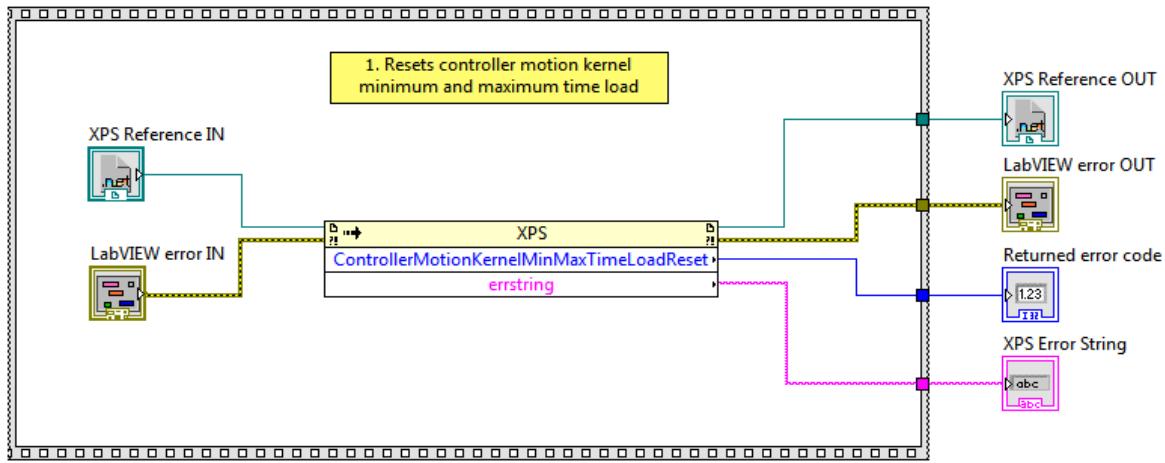
## 2. Controller Motion Kernel Min Max Time Load Reset VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Resets controller motion kernel minimum and maximum time load.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

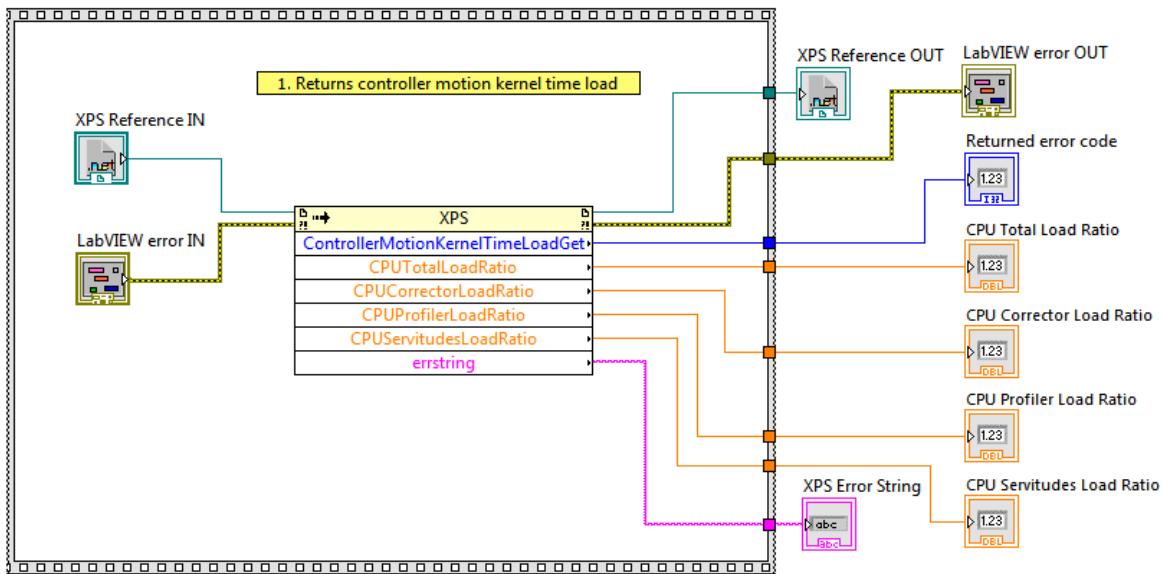
### 3. Controller Motion Kernel Time Load Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns controller motion kernel time load.

#### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**CPU Total Load Ratio** Controller motion kernel total CPU time load

**CPU Corrector Load Ratio** Controller motion kernel corrector CPU time load

**CPU Profiler Load Ratio** Controller motion kernel profiler CPU time load

**CPU Servitudes Load Ratio** Controller motion kernel servitudes CPU time load

**XPS Error String** return error string from VI

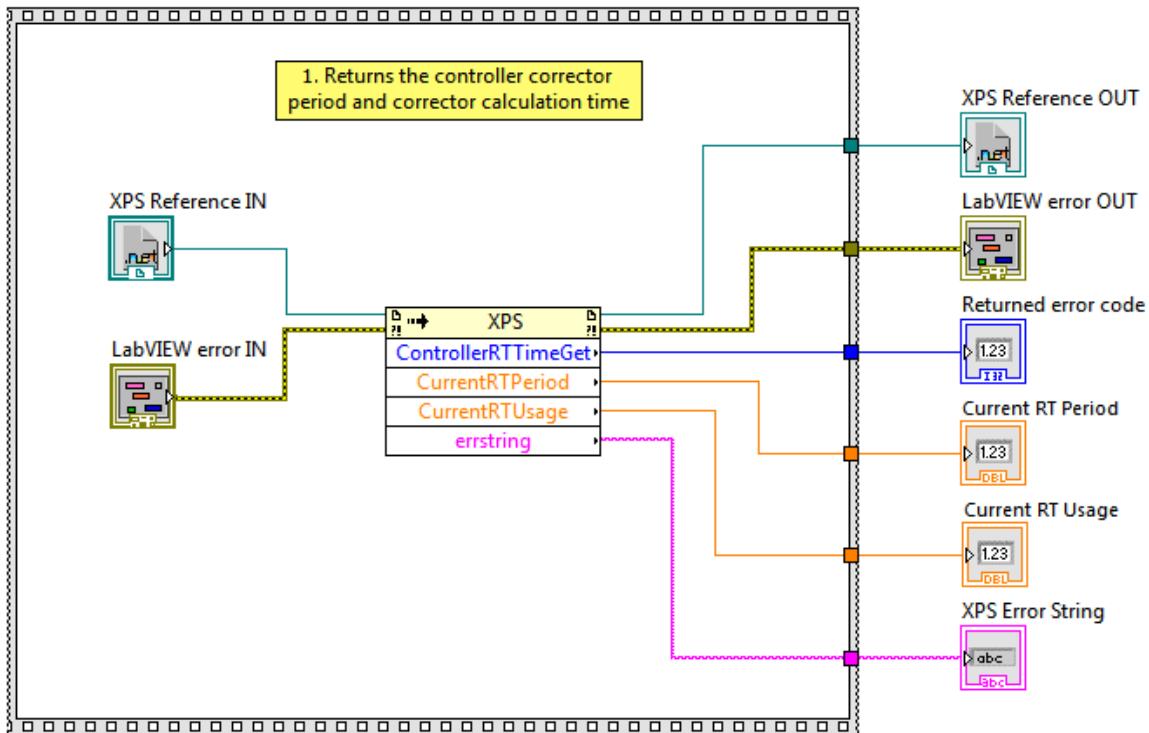
## 4. Controller RT Time Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the controller corrector period and corrector calculation time.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**CPU RT Period** Controller corrector period in seconds

**CPU RT Usage** Controller corrector calculation time in seconds

**XPS Error String** return error string from VI

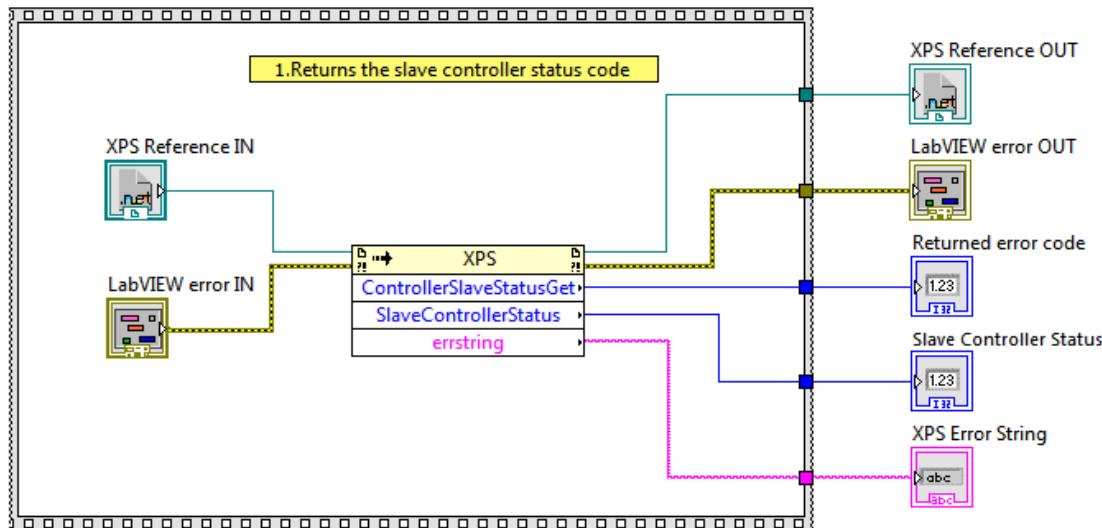
## 5. Controller Slave Status Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the slave controller status code

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Slave Controller Status** Slave status of the controller

**XPS Error String** return error string from VI

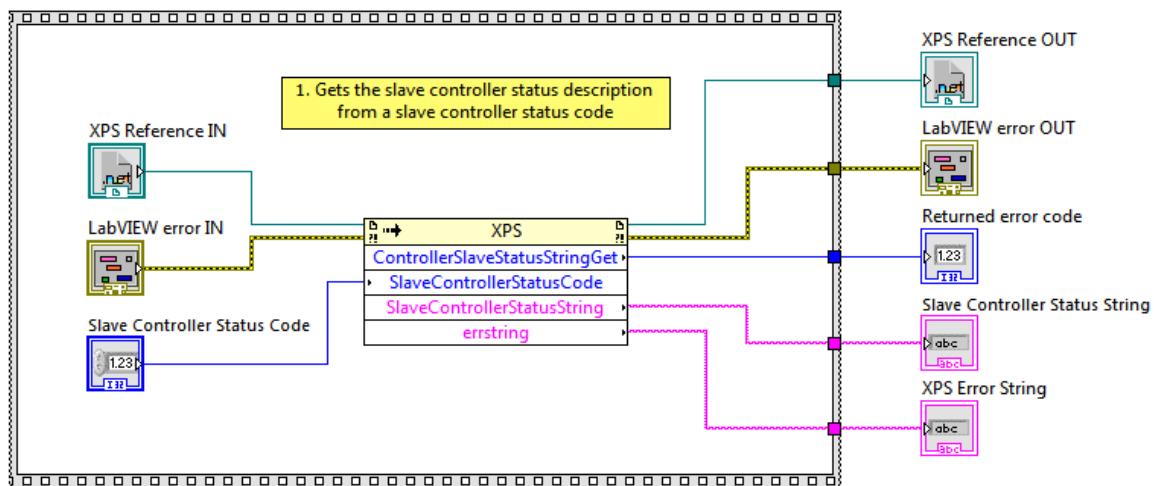
## 6. Controller Slave Status String Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the slave controller status description from a slave controller status code.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input



provides standard error in functionality.

**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**Slave Controller Status String** Slave controller status description

**XPS Error String** return error string from VI

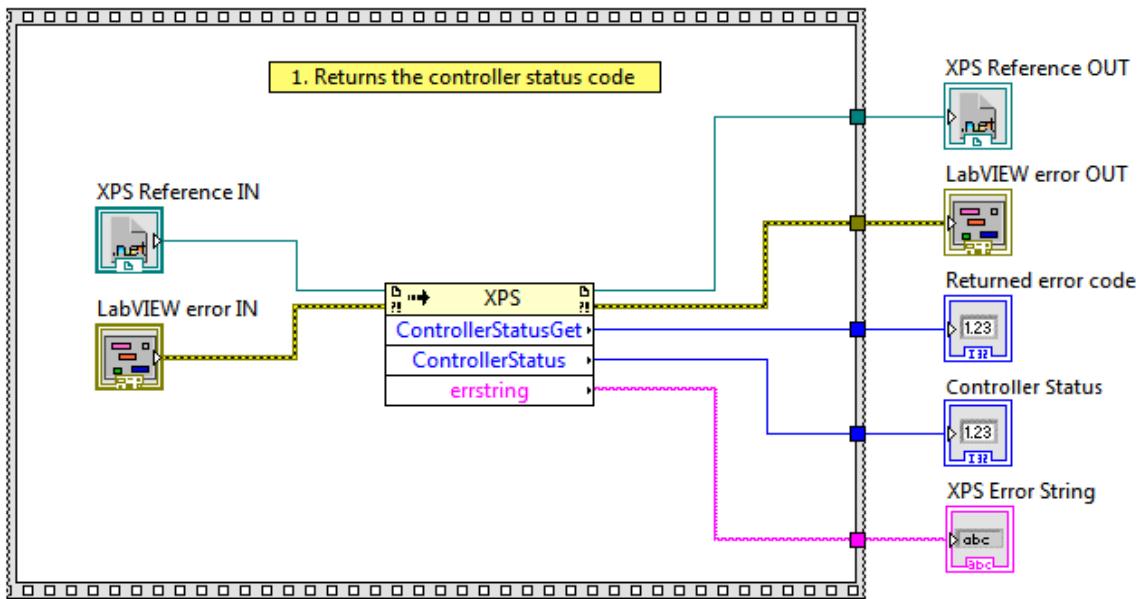
## 7. Controller Status Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the controller status code.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Controller Status** status of the controller

**XPS Error String** return error string from VI

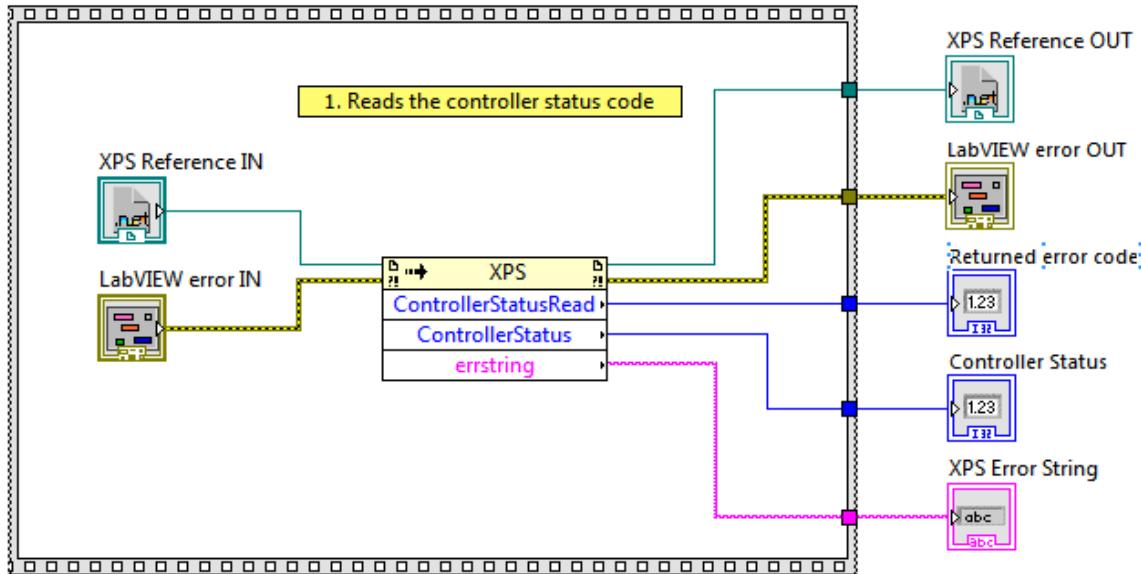
## 8. Controller Status Read VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Reads the controller status code.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Controller Status** status of the controller

**XPS Error String** return error string from VI

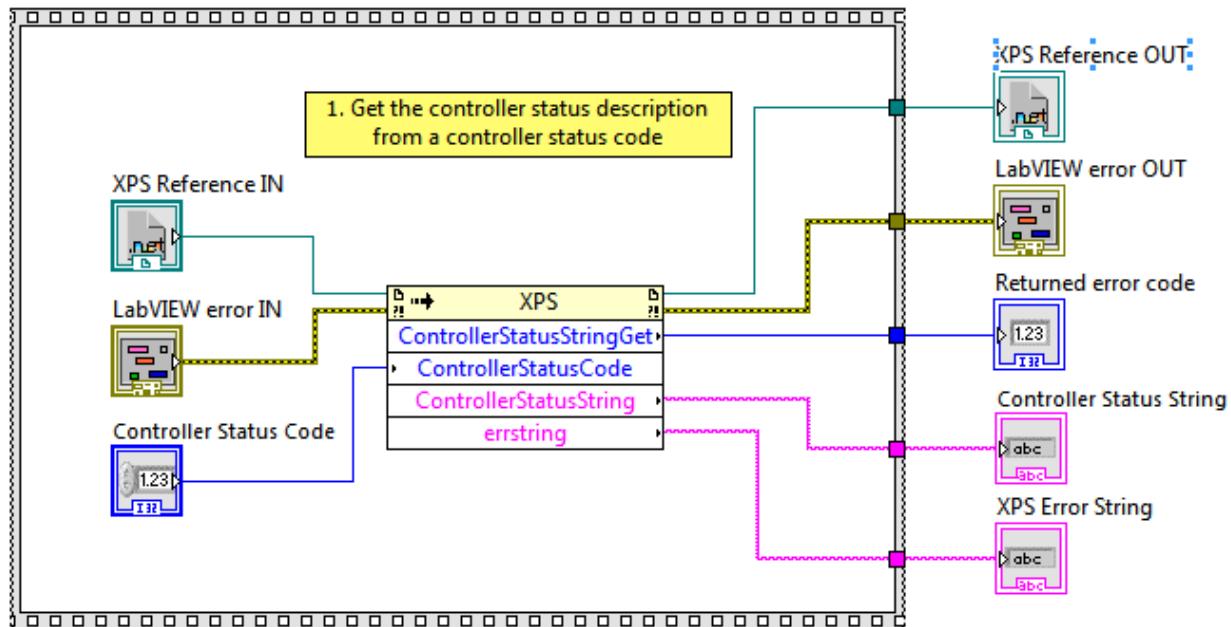
## 9. Controller Status String Get VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Get the controller status description from a controller status code.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Controller Status Code** controller status code

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Controller Status String** controller status description

**XPS Error String** return error string from VI

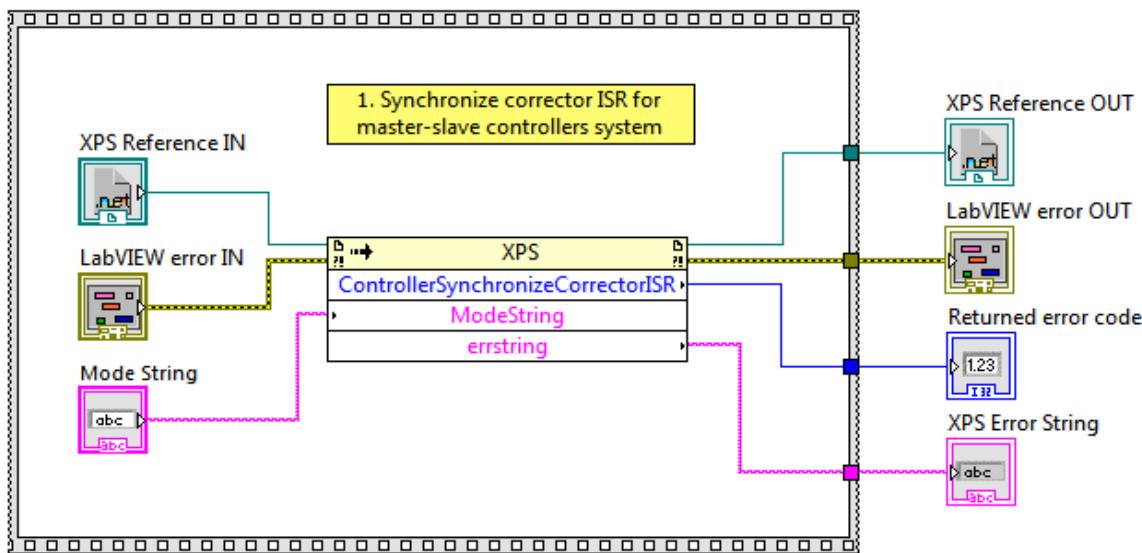
## 10. Controller Synchronize Corrector ISR VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Synchronize corrector ISR for master-slave controllers system.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Mode String** Synchronization mode

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

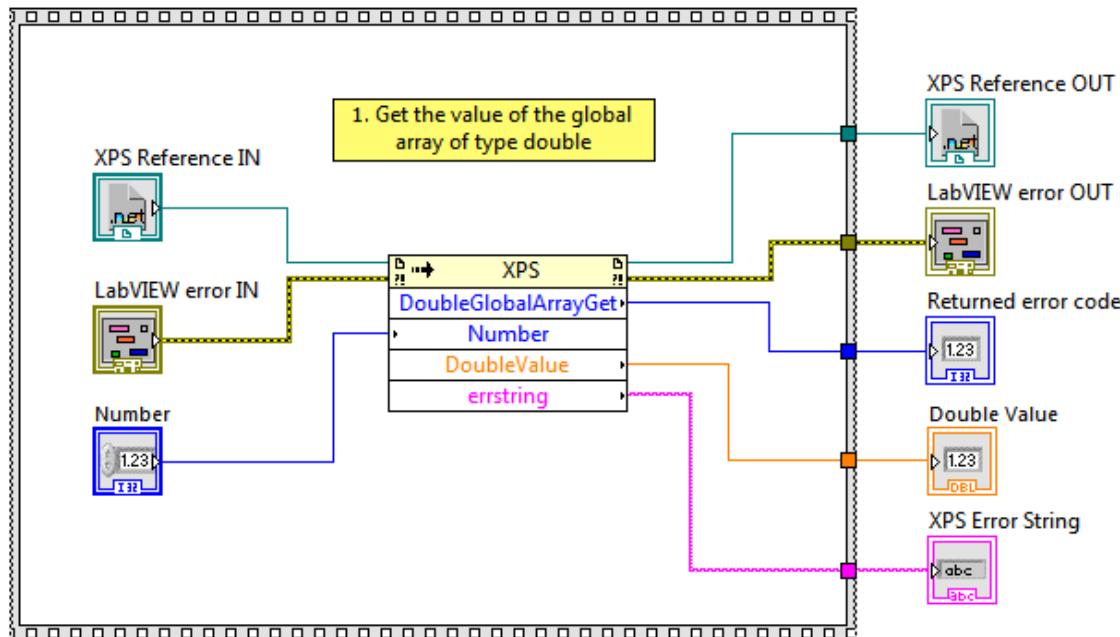
## 11. Double Global Array Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the value of the global array of type “double”.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Number** Index in the global array

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code



**Double Value** Variable value

**XPS Error String** return error string from VI

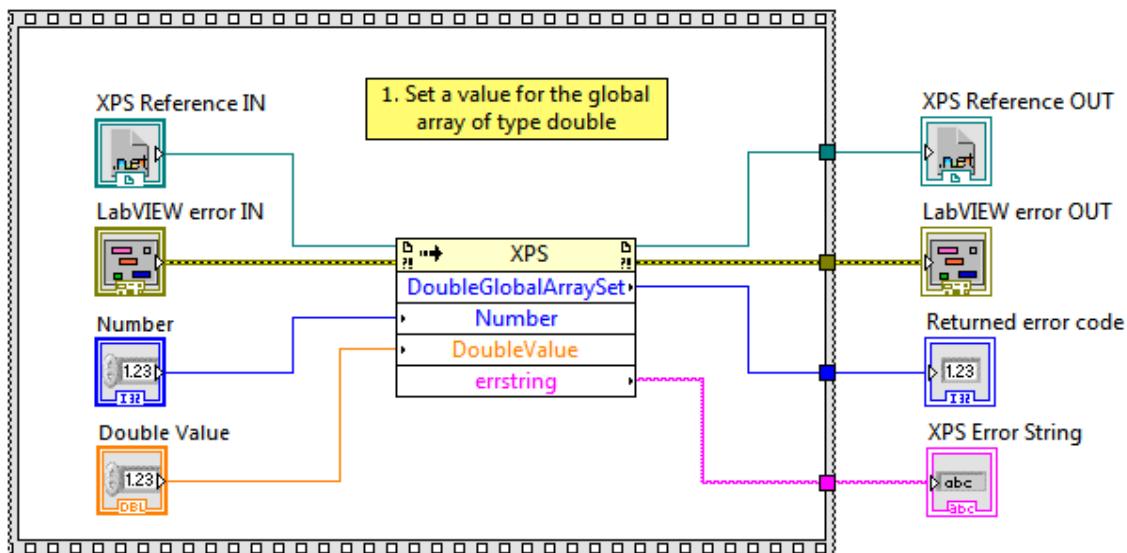
## 12. Double Global Array Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set a value for the global array of type “double”.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Number** Index in the global array



**Double Value** Variable value

**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

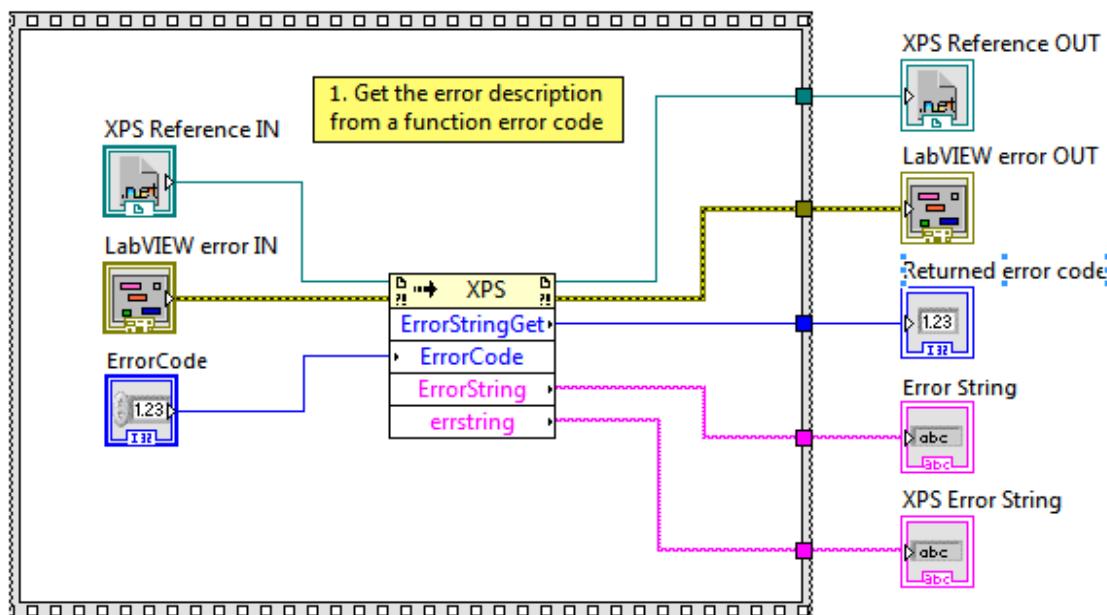
## 13. Error String Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the error description from a function error code.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Error Code** error code

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out

functionality.

**Returned Error Code** Returns function error code

**Error String** error string

**XPS Error String** return error string from VI

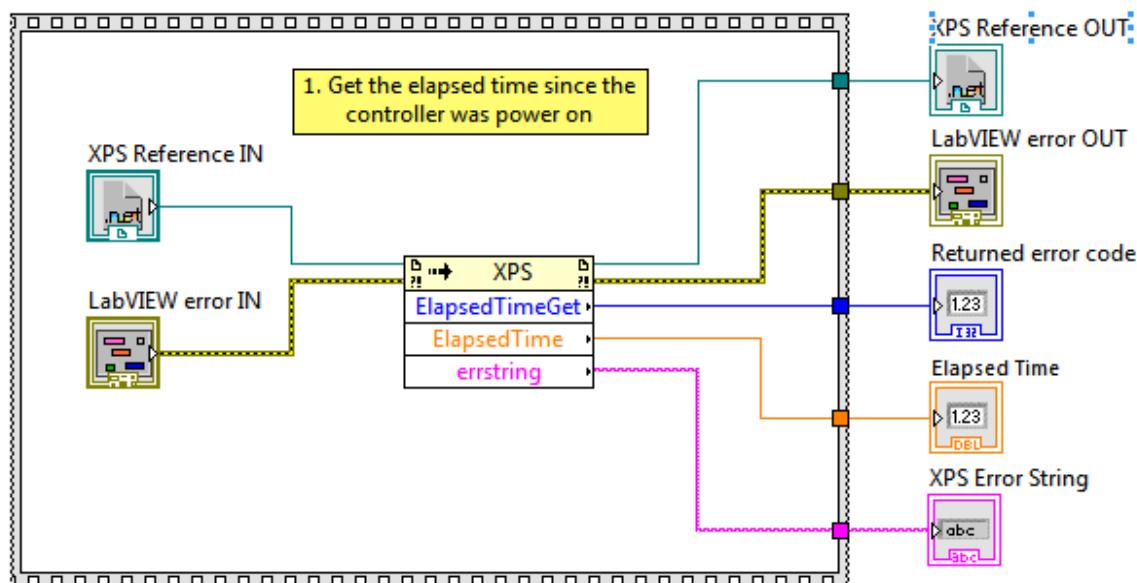
## 14. Elapsed Time Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the elapsed time since the controller was power on.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **Elapsed Time** Elapsed time in seconds

 **XPS Error String** return error string from VI

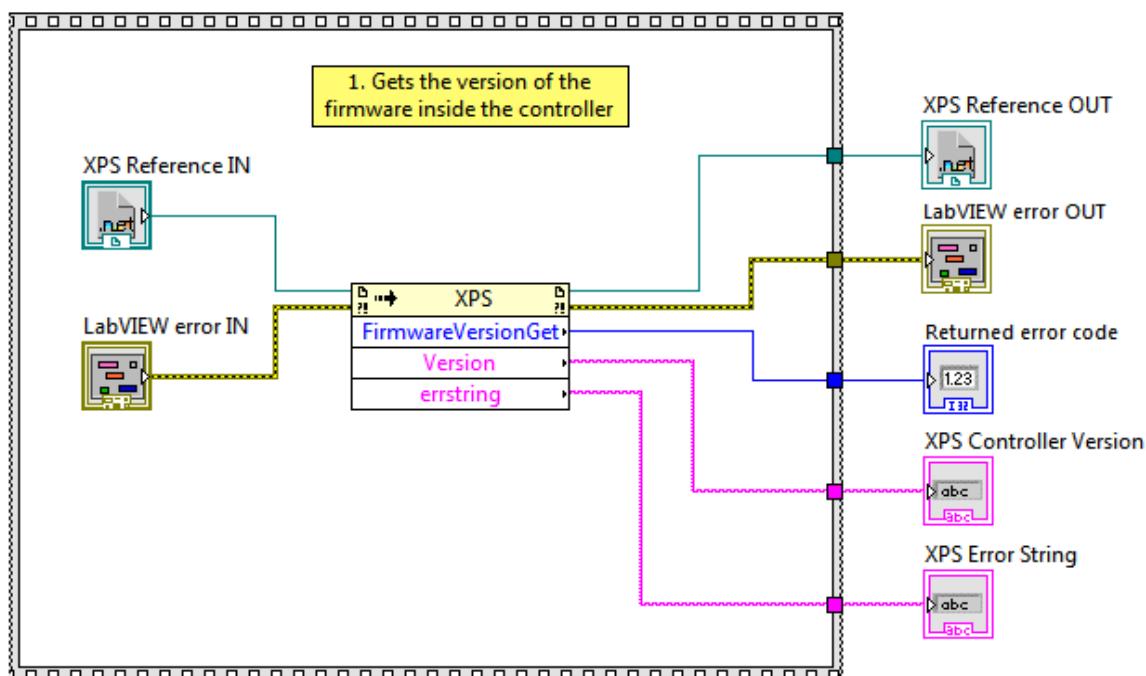
## 15. Firmware Version Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the version of the firmware inside the controller.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Controller Version** XPS controller version

 **XPS Error String** return error string from VI

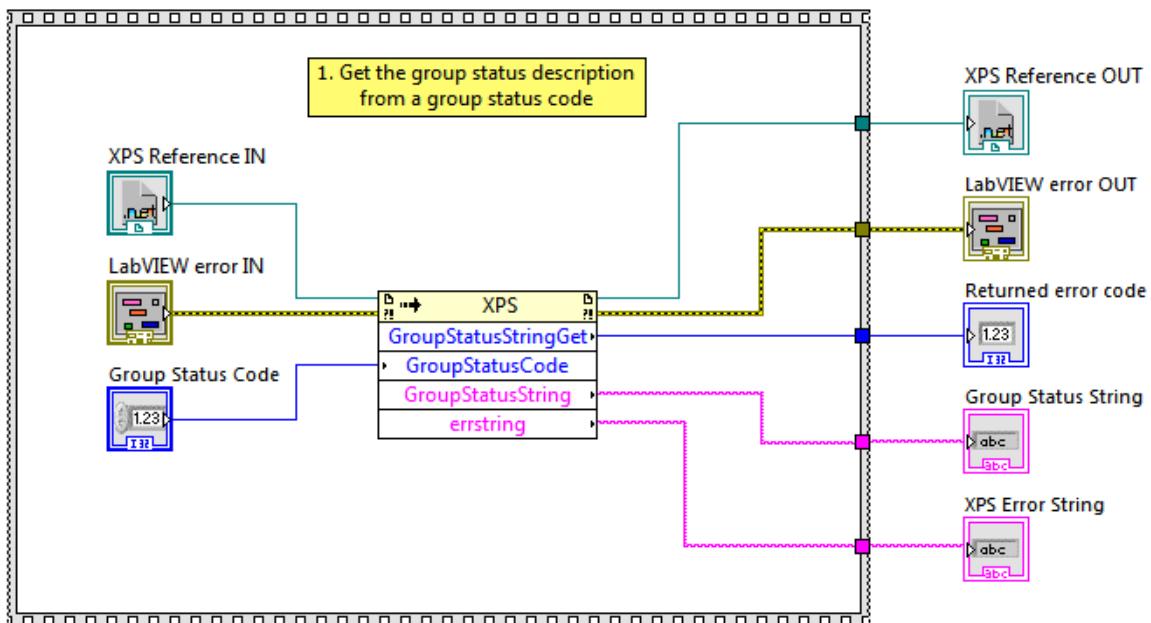
## 16. Group Status String Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the group status description from a group status code.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Status Code** group status code

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Group Status String** group status description

**XPS Error String** return error string from VI

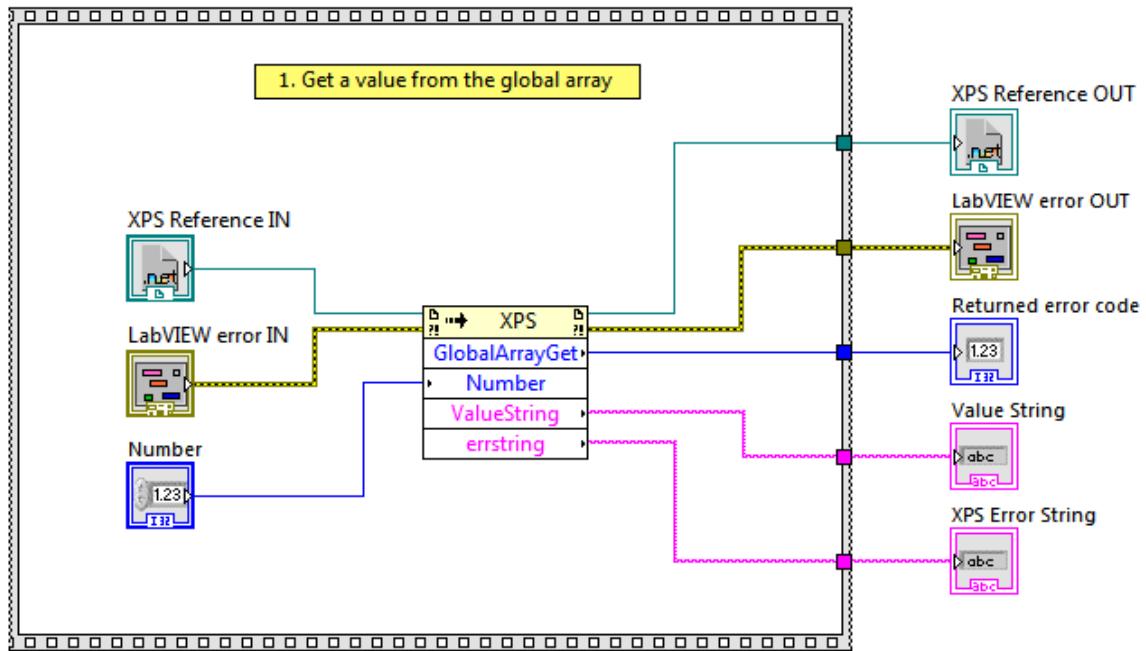
## 17. Global Array Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get a value from the global array.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Number** Index in the global array



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Value String** variable value



**XPS Error String** return error string from VI

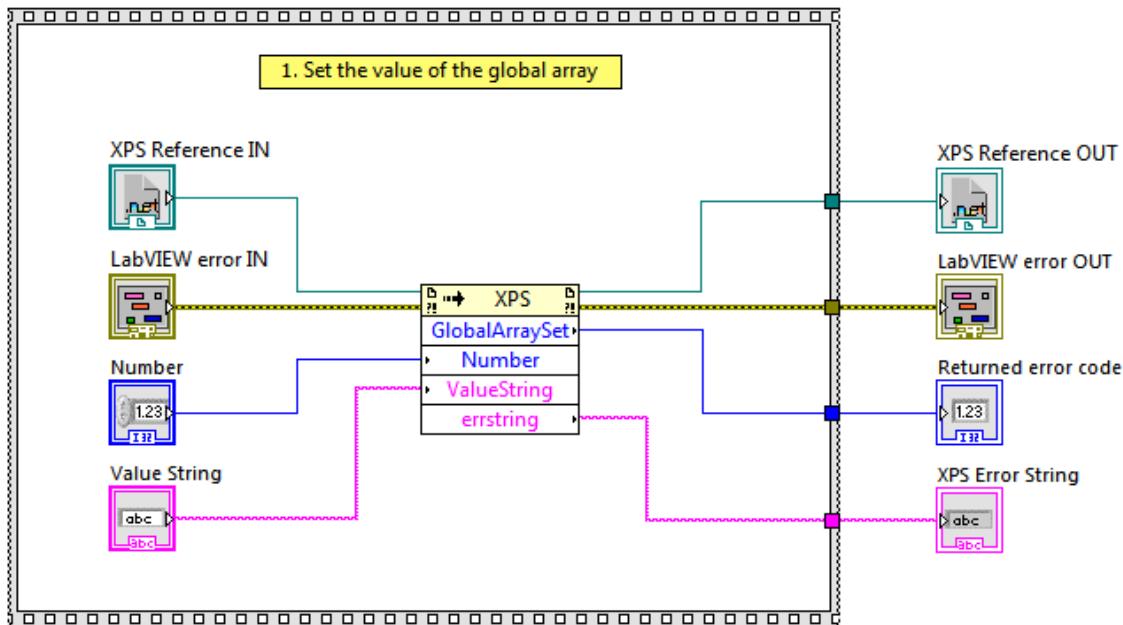
## 18. Global Array Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set the value of the global array.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Number** Index in the global array



**Value String** variable value



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

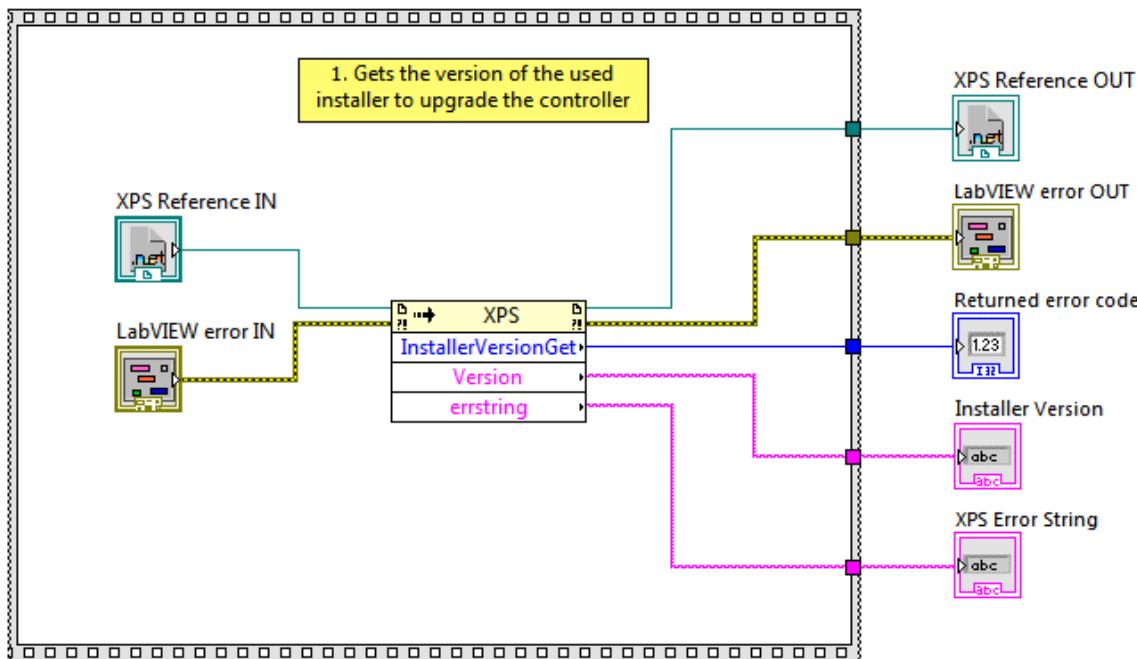
## 19. Installer Version Get VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Gets the version of the firmware inside the controller.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**Returned Error Code** Returns function error code  
 **Installer Version** Installer version

**XPS Error String** return error string from VI

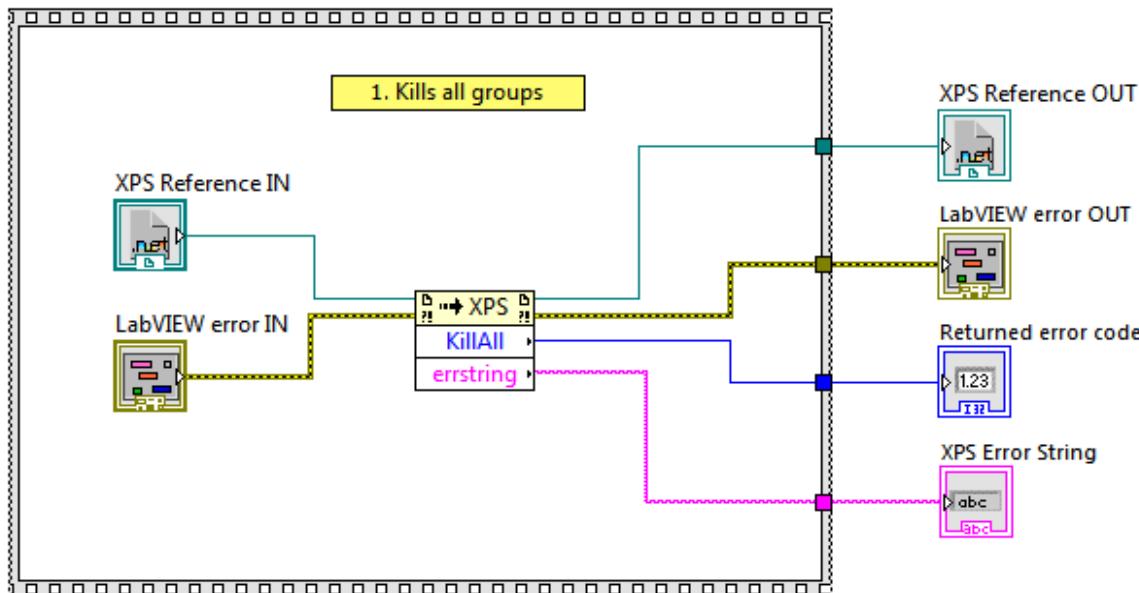
## 20. Kill All VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Kills all groups.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

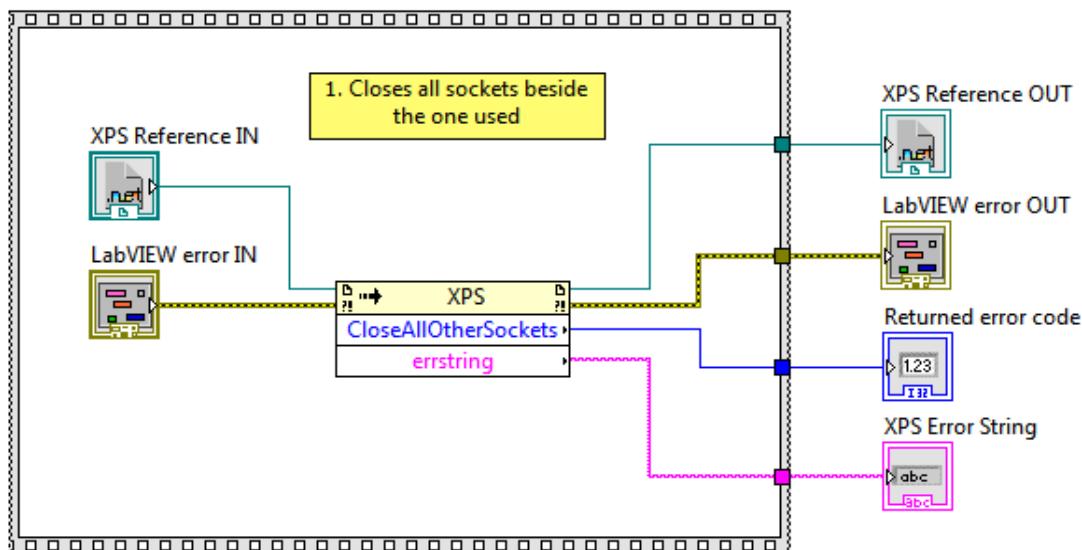
## 21. Close All Other Sockets VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Closes all sockets beside the one used.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

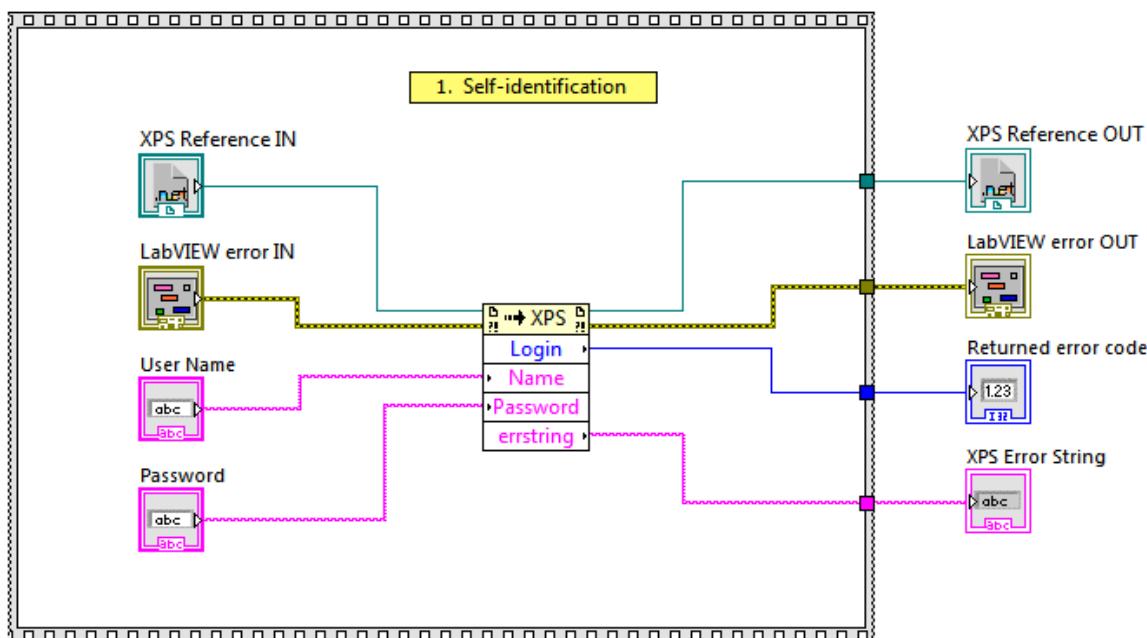
## 22. Login VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Self-identification.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**User Name** User Name

**Password** Password



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

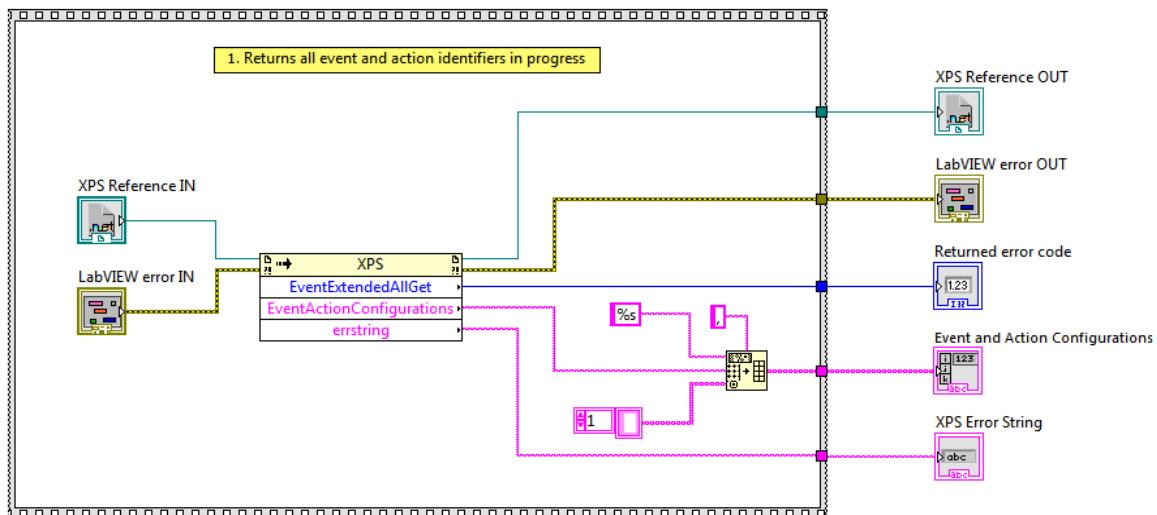
## 23. Event Extended All Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Return all “event and action” identifiers in progress.

### Screenshot



**XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

 **Event and Action Configuration** “Event and action” identifier from “ExtendedEventStart”

 **XPS Error String** return error string from VI

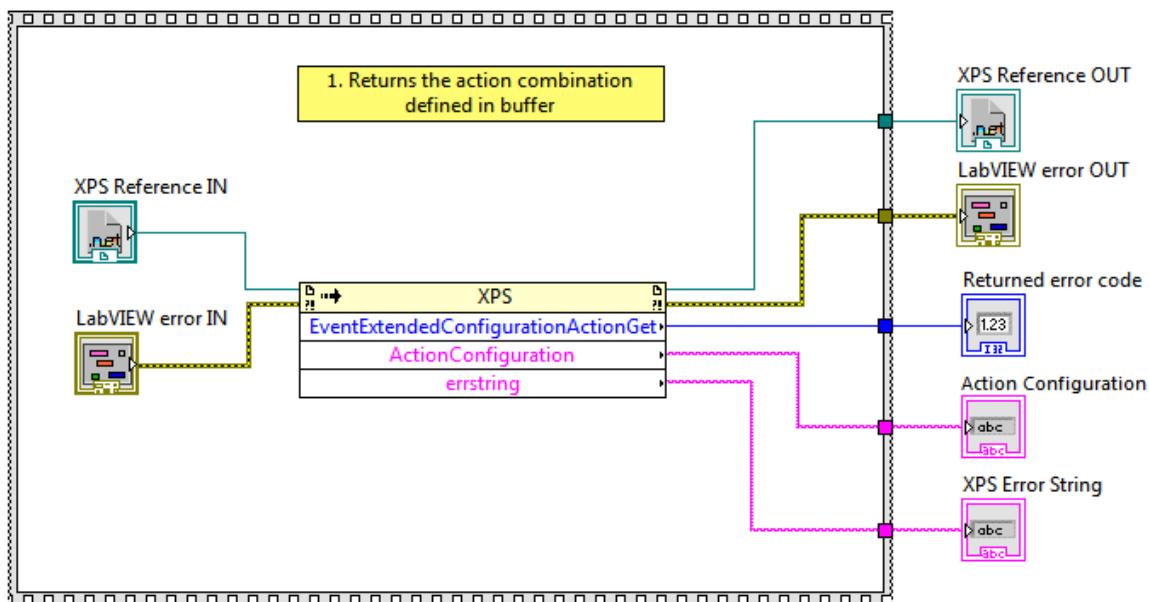
## 24. Event Extended Configuration Action Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the action combination defined in buffer.

### Screenshot



**XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[132] Returned Error Code** Returns function error code

**[abc] Action Configuration** Action combination configured in buffer

**[abc] XPS Error String** return error string from VI

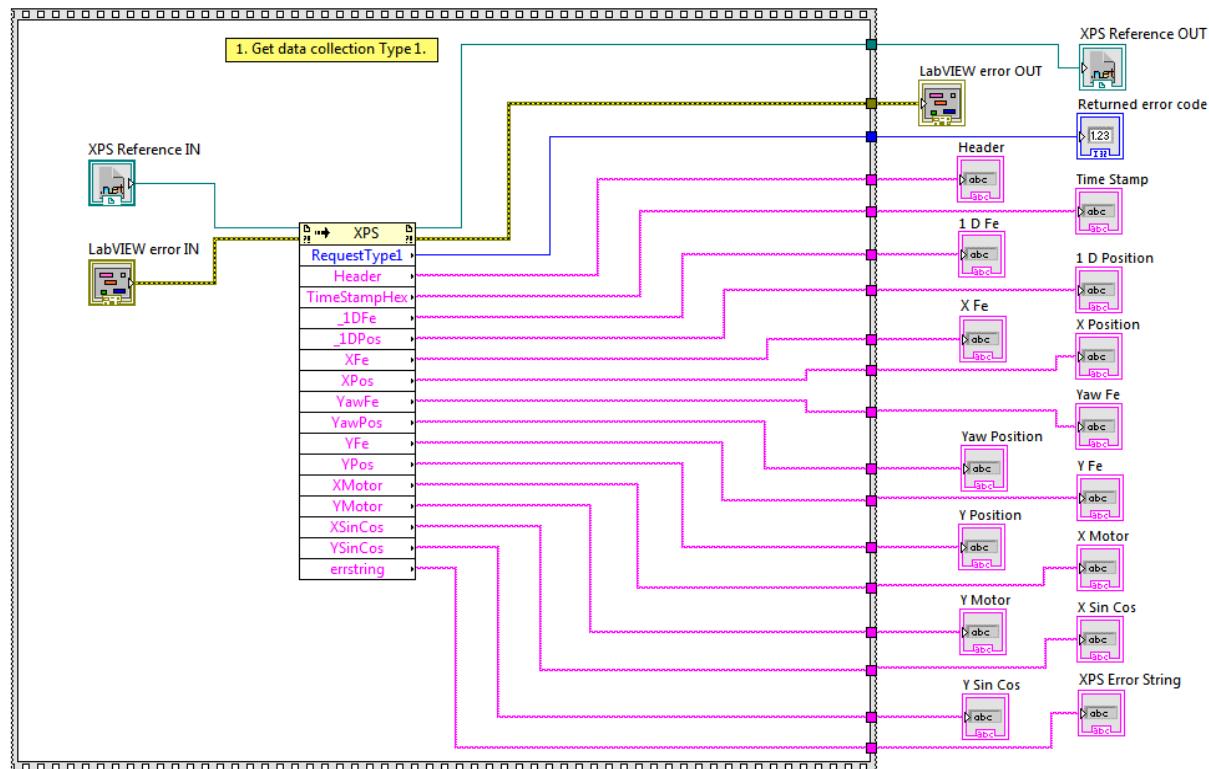
## 25. Request Type 1 VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get data collection Type 1.

### Screenshot



**XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **Header** Header

 **Time Stamp** Time Stamp

 **1 D Fe** 1 D Fe

 **1 D Position** 1 D Position

 **X Fe** X Fe

 **X Position** X Position

 **Yaw Fe** Yaw Fe

 **Yaw Position** Yaw Position

 **Y Fe** Y Fe

 **Y Position** Y position

 **X Motor** X motor

 **Y Motor** Y motor

 **X Sin Cos** X Sin Cos

 **Y Sin Cos** Y Sin Cos

 **XPS Error String** return error string from VI

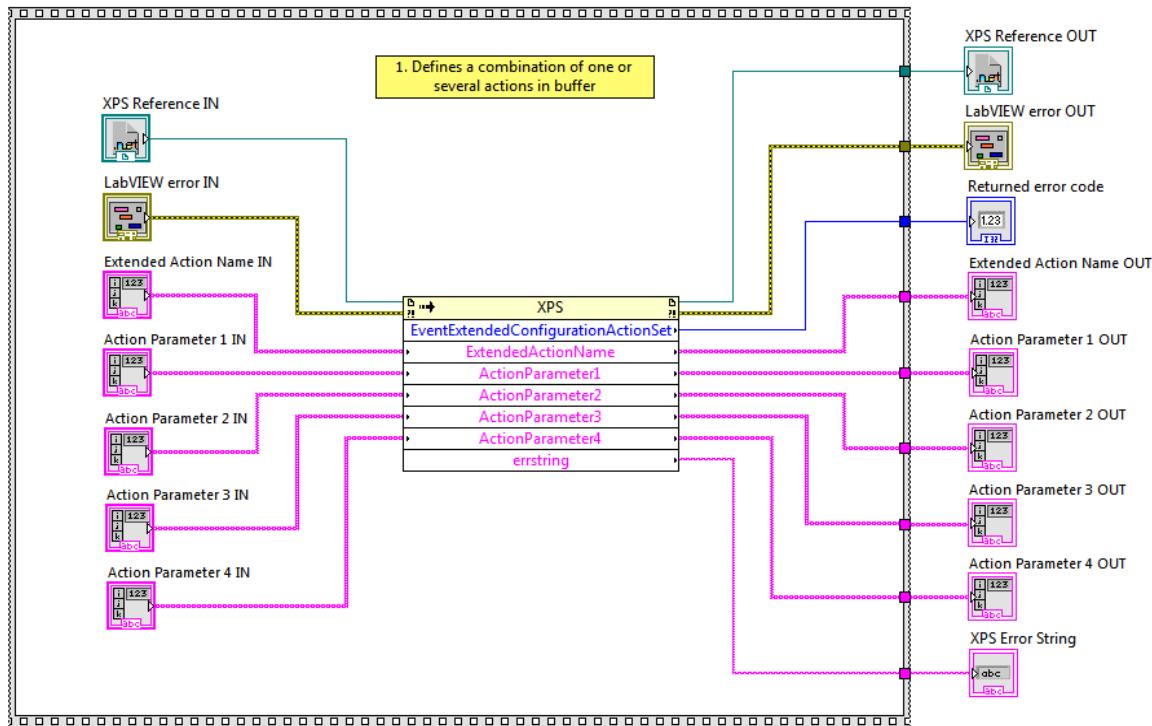
## 26. Event Extended Configuration Action Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Defines a combination of one or several actions in buffer.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Extended Action Name IN** Event full name

**Action Parameter 1 IN** Optional action's parameter 1

**Action Parameter 2 IN** Optional action's parameter 2

**Action Parameter 3 IN** Optional action's parameter 3

**Action Parameter 4 IN** Optional action's parameter 4

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Extended Action Name IN** Event full name

**Action Parameter 1 OUT** Optional action's parameter 1

**Action Parameter 2 OUT** Optional action's parameter 2

**Action Parameter 3 OUT** Optional action's parameter 3

 **Action Parameter 4 OUT** Optional action's parameter 4

 **XPS Error String** return error string from VI

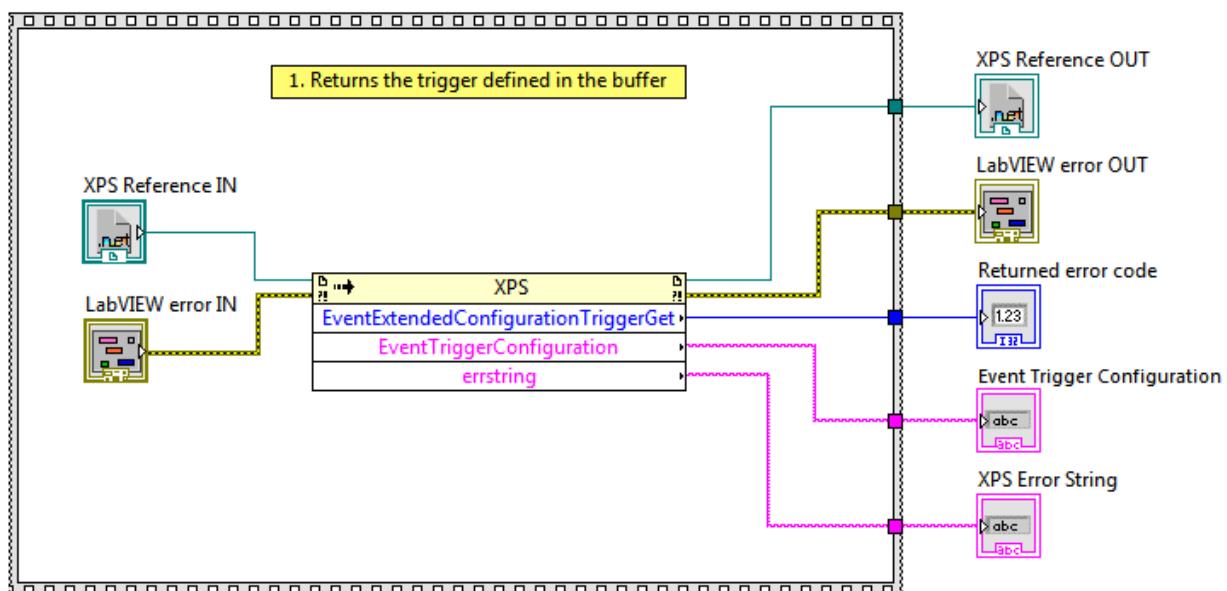
## 27. Event Extended Configuration Trigger Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the trigger defined in the buffer.

### Screenshot



**XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code



**Event Trigger Configuration** Event combination configured in buffer

**XPS Error String** return error string from VI

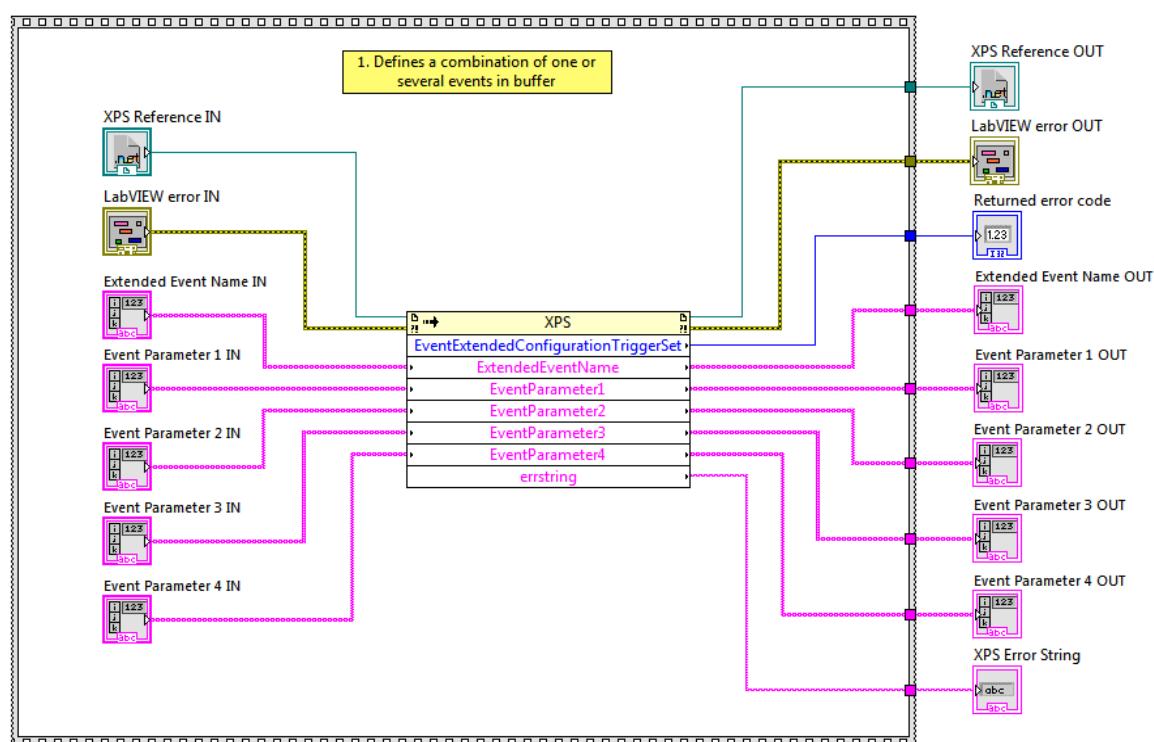
## 28. EventExtendedConfigurationTriggerSetVI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Defines a combination of one or several events in buffer.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

- Extended Action Name IN** Event full name
- Action Parameter 1 IN** Optional action's parameter 1
- Action Parameter 2 IN** Optional action's parameter 2
- Action Parameter 3 IN** Optional action's parameter 3
- Action Parameter 4 IN** Optional action's parameter 4
- XPS Reference OUT** returns XPS reference
- LabVIEW error OUT** contains error information. This output provides standard error out functionality.
- Returned Error Code** Returns function error code
- Extended Action Name IN** Event full name
- Action Parameter 1 OUT** Optional action's parameter 1
- Action Parameter 2 OUT** Optional action's parameter 2
- Action Parameter 3 OUT** Optional action's parameter 3
- 
- 
- Action Parameter 4 OUT** Optional action's parameter 4
- XPS Error String** return error string from VI

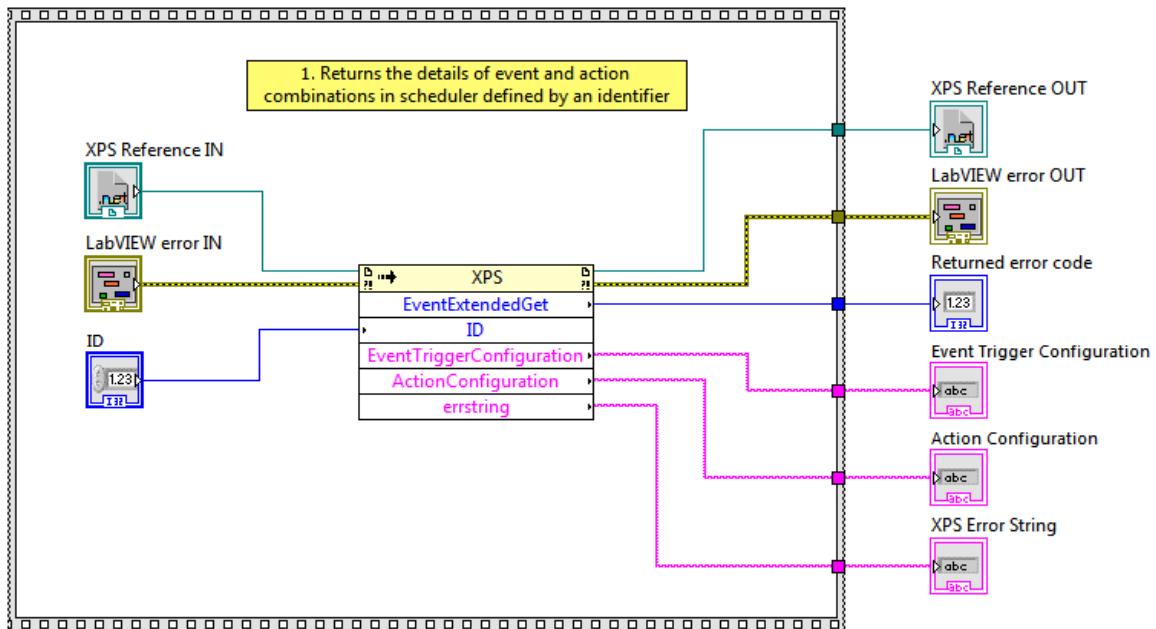
## 29. Event Extended Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the details of “event and action” combinations in scheduler defined by an identifier.

### Screenshot



**[D]** **XPS Reference IN** is the XPS reference

**[E]** **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[I32]** **ID** “Event and action” identifier from “ExtendedEventStart”

**[D]** **XPS Reference OUT** returns XPS reference

**[E]** **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[I32]** **Returned Error Code** Returns function error code

**[abc]** **Event Trigger Configuration** Event combination defined in scheduler

**[abc]** **Action Configuration** Action combination defined in scheduler

**[abc]** **XPS Error String** return error string from VI

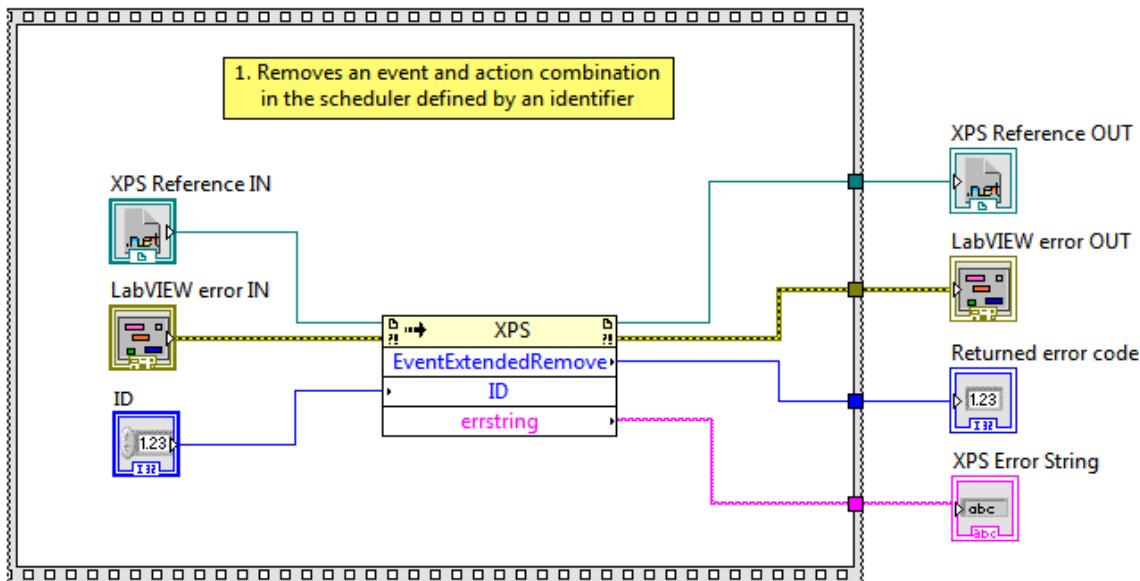
## 30. Event Extended Remove VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Removes an “event and action” combinations in the scheduler defined by an identifier.

## Screenshot



**[D]** **XPS Reference IN** is the XPS reference

**[E]** **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[I32]** **ID** “Event and action” identifier

**[D]** **XPS Reference OUT** returns XPS reference

**[E]** **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[I32]** **Returned Error Code** Returns function error code

**[abc]** **XPS Error String** return error string from VI

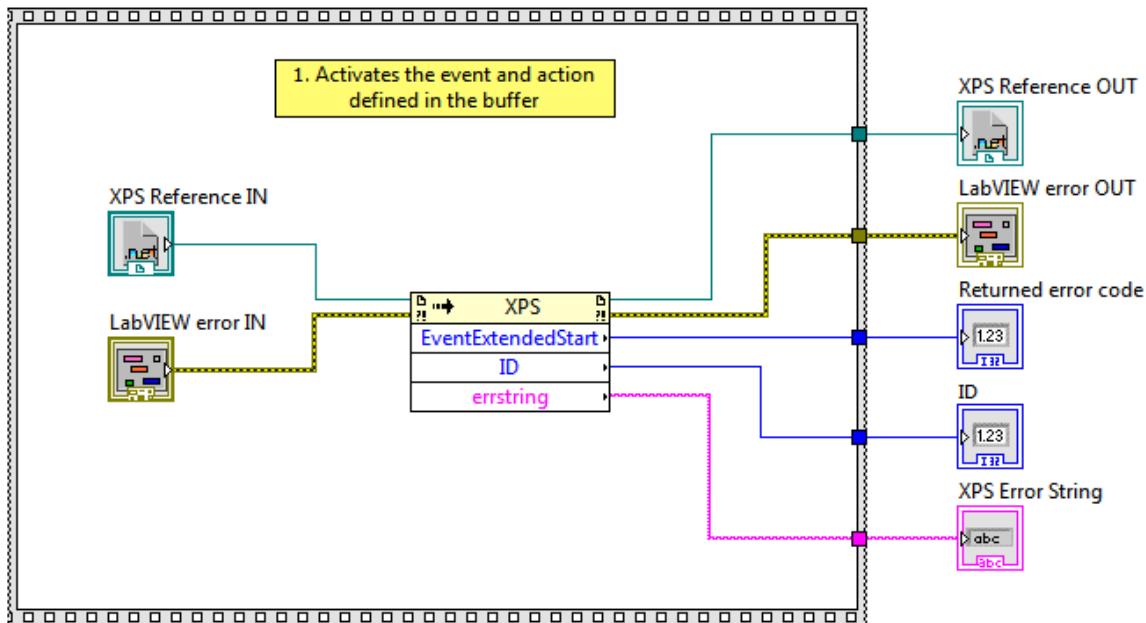
## 31. Event Extended Start VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Activates the “event and action” defined in the buffer.

## Screenshot



**[XPS]** **XPS Reference IN** is the XPS reference

**[LVI]** **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[XPS]** **XPS Reference OUT** returns XPS reference

**[LVI]** **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[I32]** **Returned Error Code** Returns function error code

**[I32]** **ID** “Event and action” identifier

**[abc]** **XPS Error String** return error string from VI

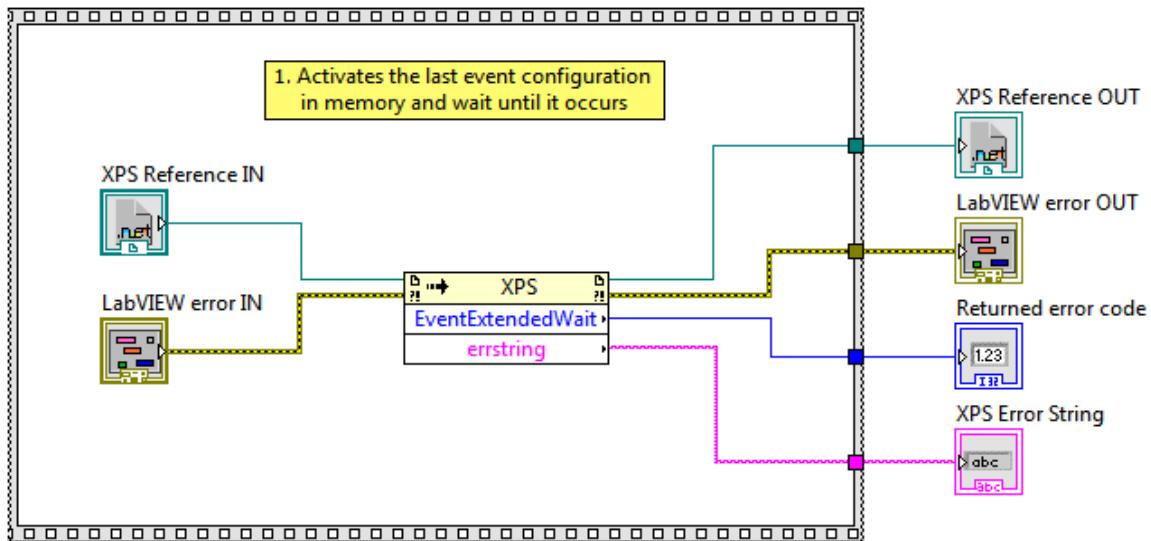
## 32. Event Extended Wait VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Activates the last “event” configuration in memory and wait until it occurs.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

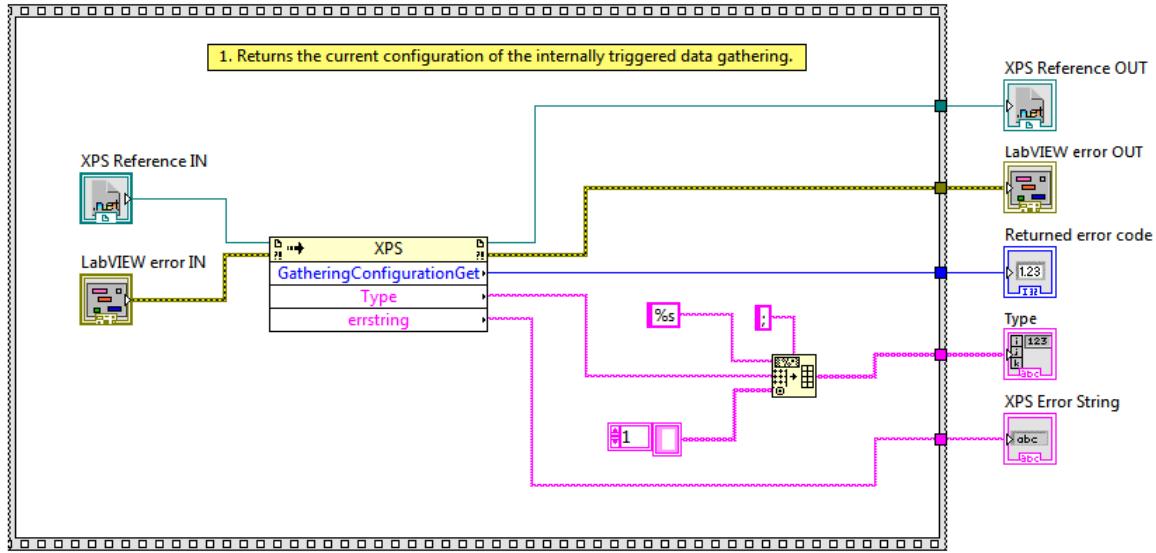
## 33. Gathering Configuration Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the current configuration of the internally triggered data gathering.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**1.23** **Returned Error Code** Returns function error code

**123** **Type** List of configured gathering types

**abc** **XPS Error String** return error string from VI

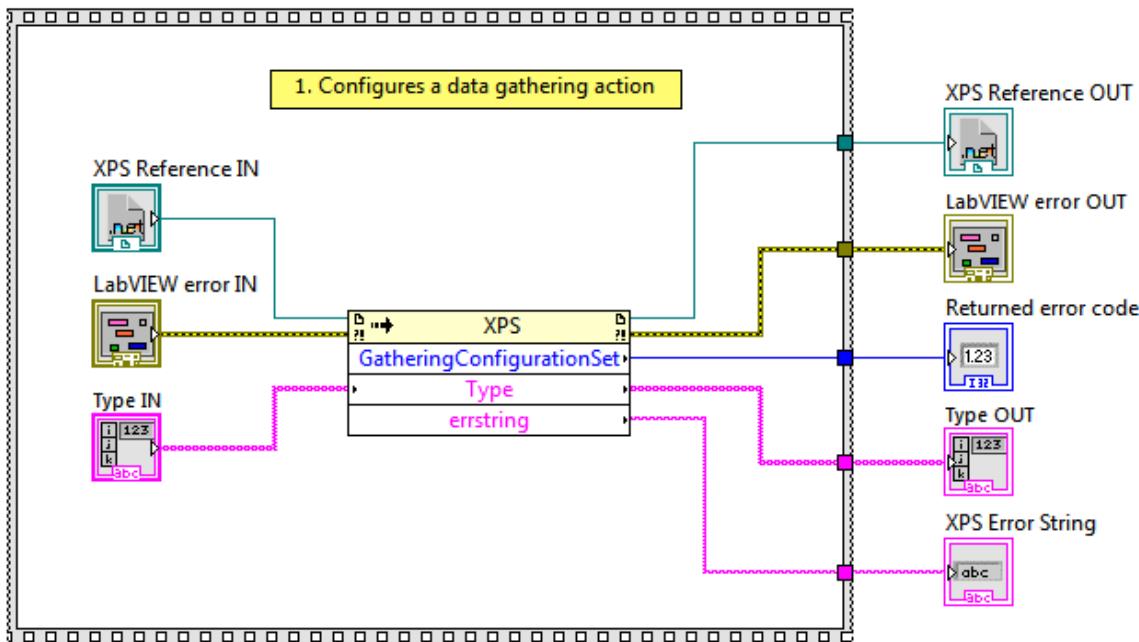
## 34. Gathering Configuration Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Configures a data gathering action.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Type IN** List of configured gathering types

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Type OUT** List of configured gathering types

**XPS Error String** return error string from VI

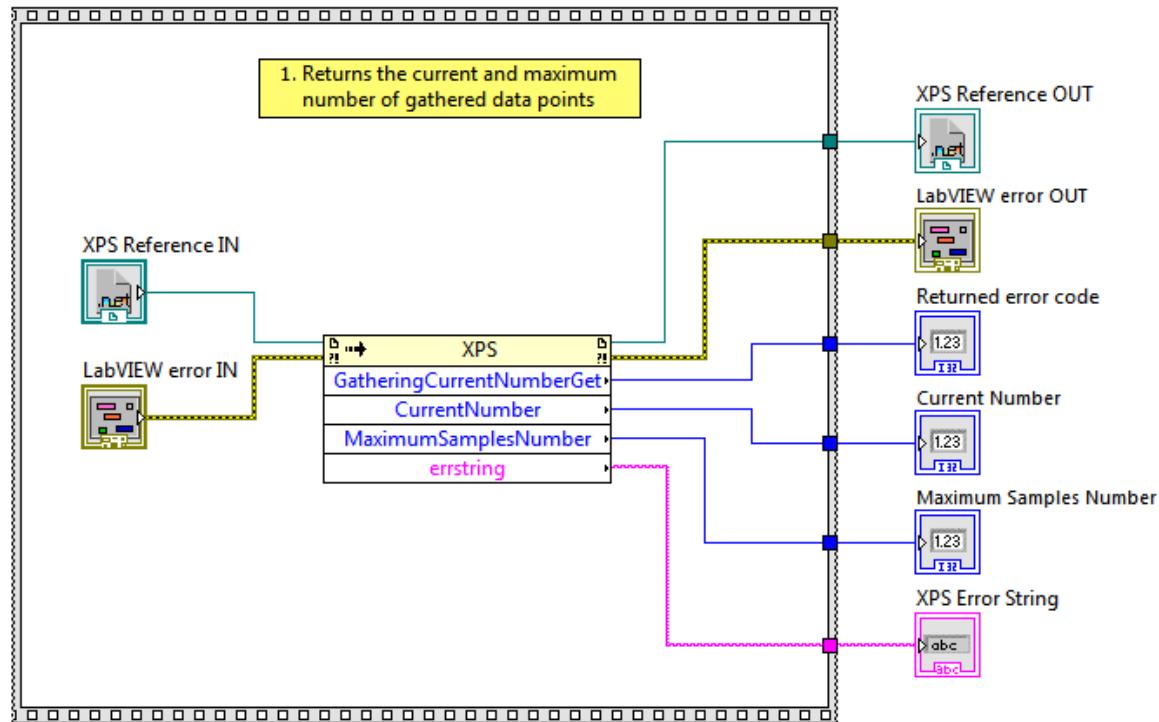
## 35. Gathering Current Number Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the current and maximum number of gathered data points.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Current Number** Current number during acquisition

**Maximum Samples Number** Maximum number of samples

**XPS Error String** return error string from VI

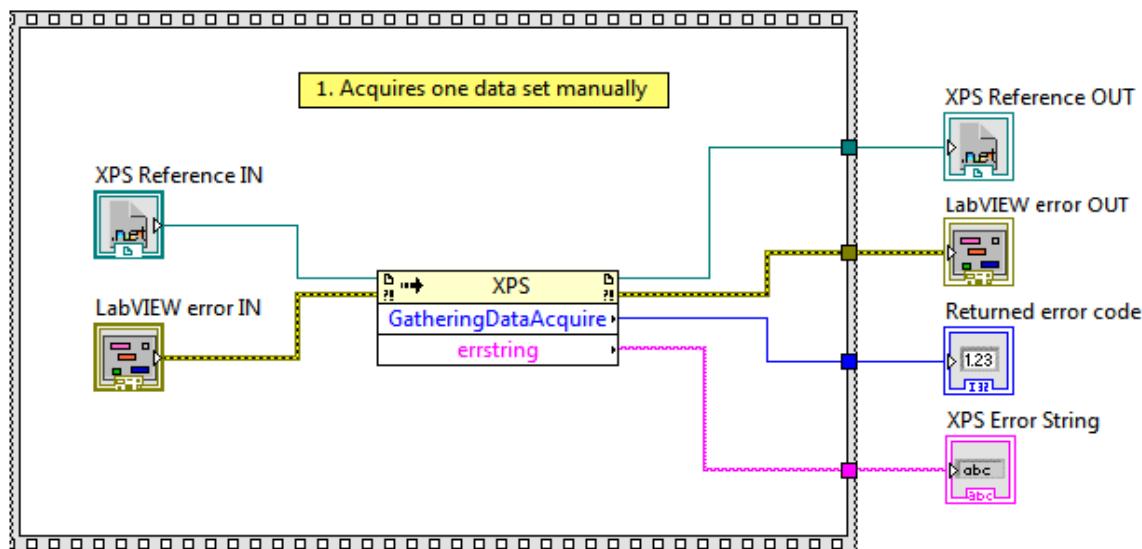
## 36. Gathering Data Acquire VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Acquires one data set manually.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

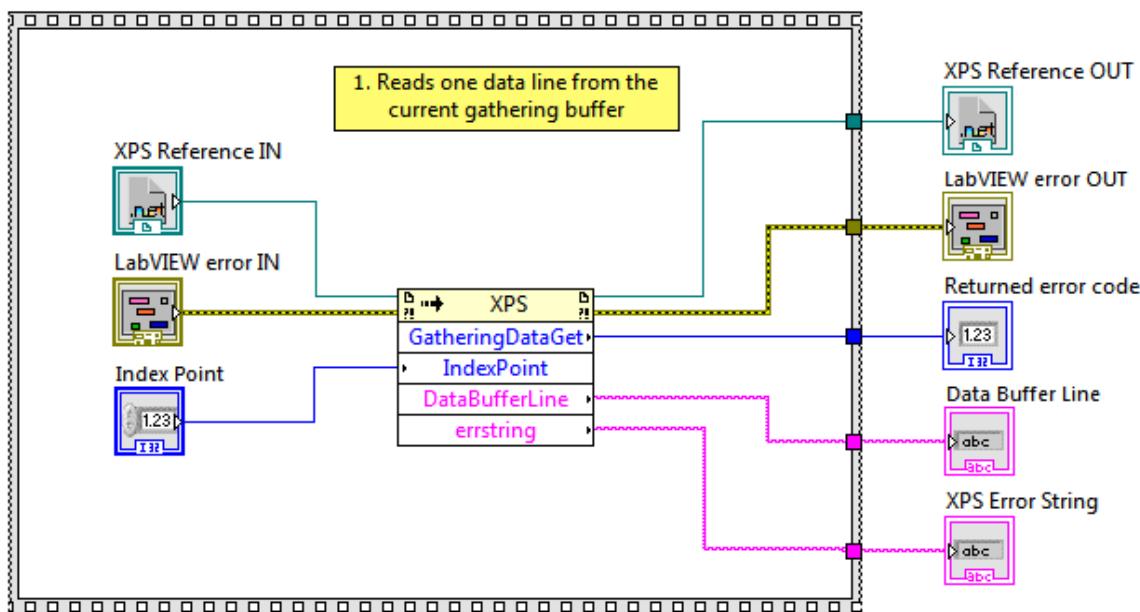
## 37. Gathering Data Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Reads one data line from the current gathering buffer.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Index Point** Index of an acquired data from the current gathering buffer

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Data Buffer Line** contains values from the current buffer at the selected index

**XPS Error String** return error string from VI

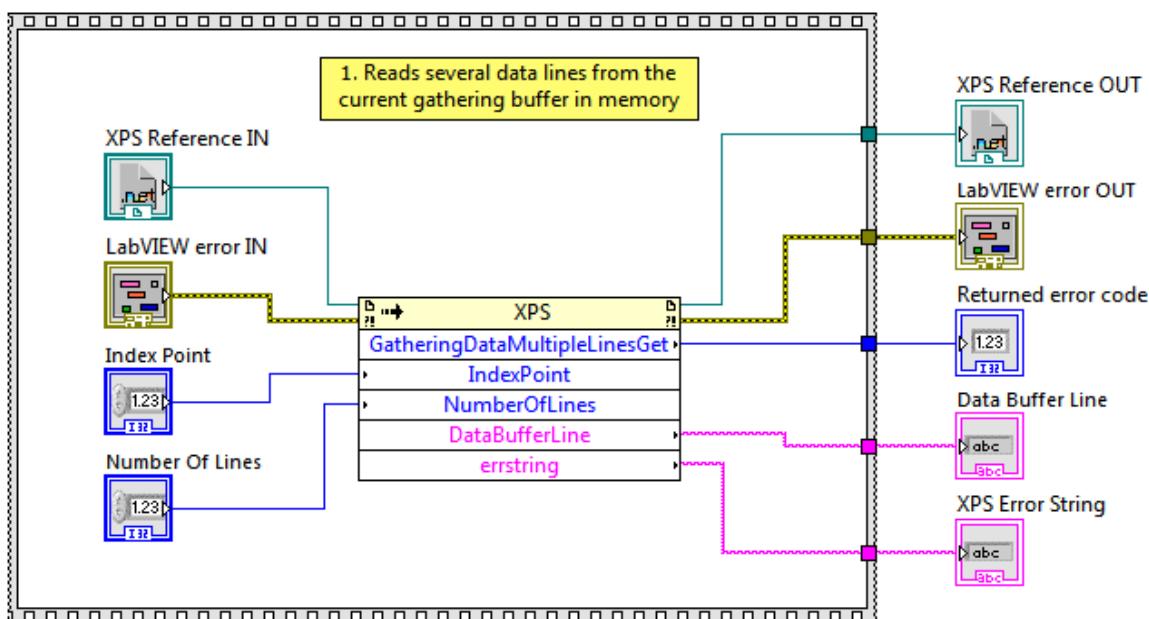
## 38. Gathering Data Multiple Lines Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Reads several data lines from the current gathering buffer in memory.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Index Point** Index of an acquired data from the current gathering buffer



**Number of Lines** Number of lines to get



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**Data Buffer Line** contains values from the current buffer at the selected index

**XPS Error String** return error string from VI

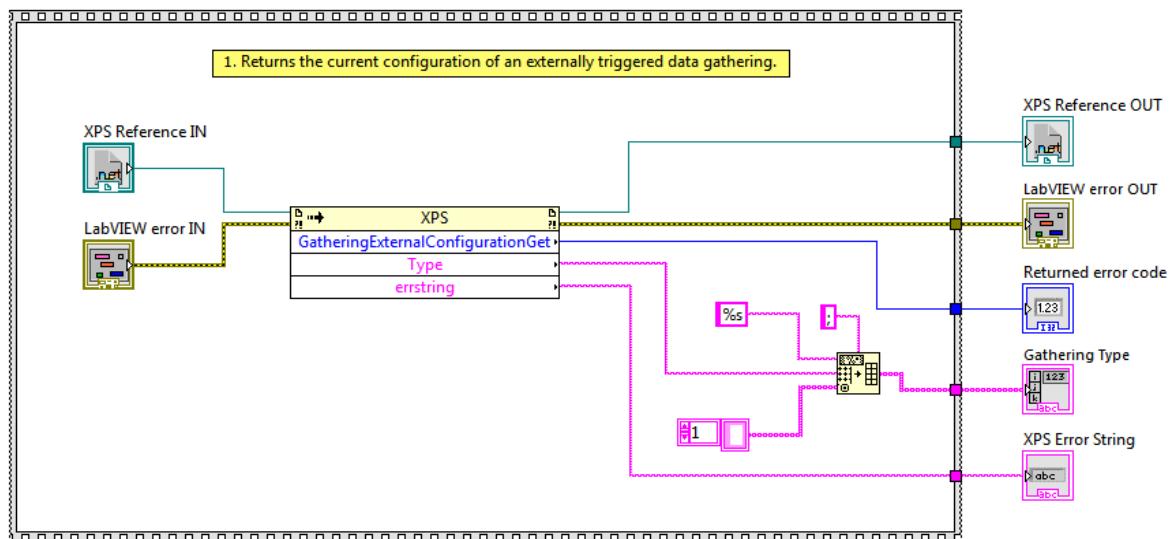
## 39. Gathering External Configuration Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the current configuration of an externally triggered data gathering.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**Gathering Type** List of configured gathering types

**XPS Error String** return error string from VI

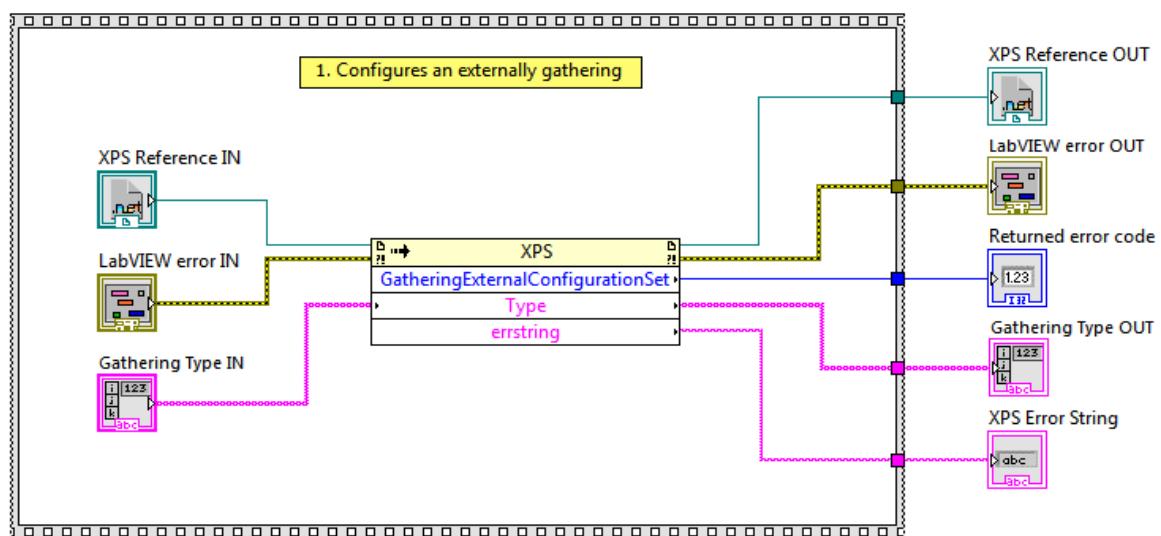
## 40. Gathering External Configuration Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Configures an externally gathering.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Gathering Type IN** List of configured gathering types

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **Gathering Type OUT** List of configured gathering types

 **XPS Error String** return error string from VI

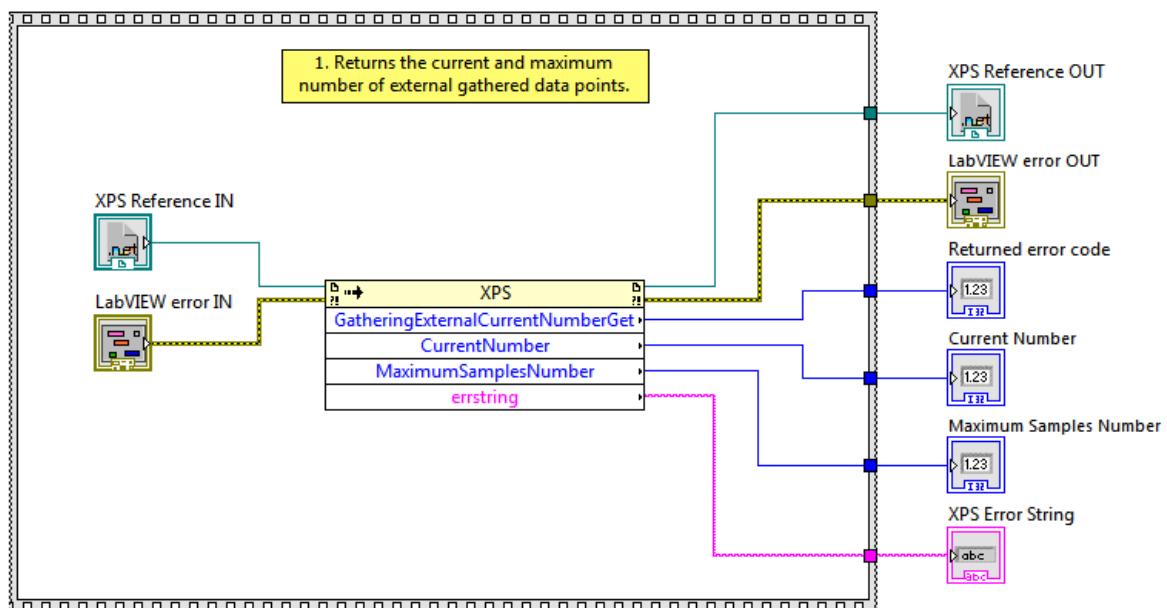
## 41. Gathering External Current Number Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the current and maximum number of external gathered data points.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out

functionality.



**Returned Error Code** Returns function error code



**Current Number** Current number during acquisition



**Maximum Samples Number** Maximum number of samples



**XPS Error String** return error string from VI

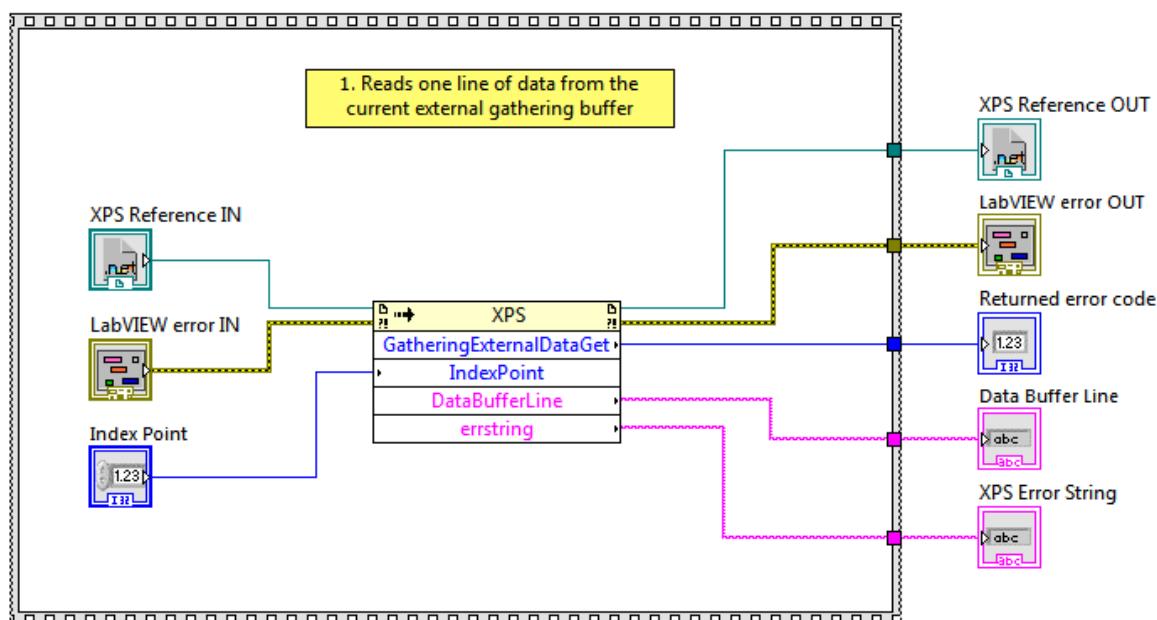
## 42. Gathering External Data Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Reads one line of data from the current external gathering buffer.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Index Point** Index of an acquired data from the current gathering buffer

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Data Buffer Line** contains values from the current buffer at the selected index

**XPS Error String** return error string from VI

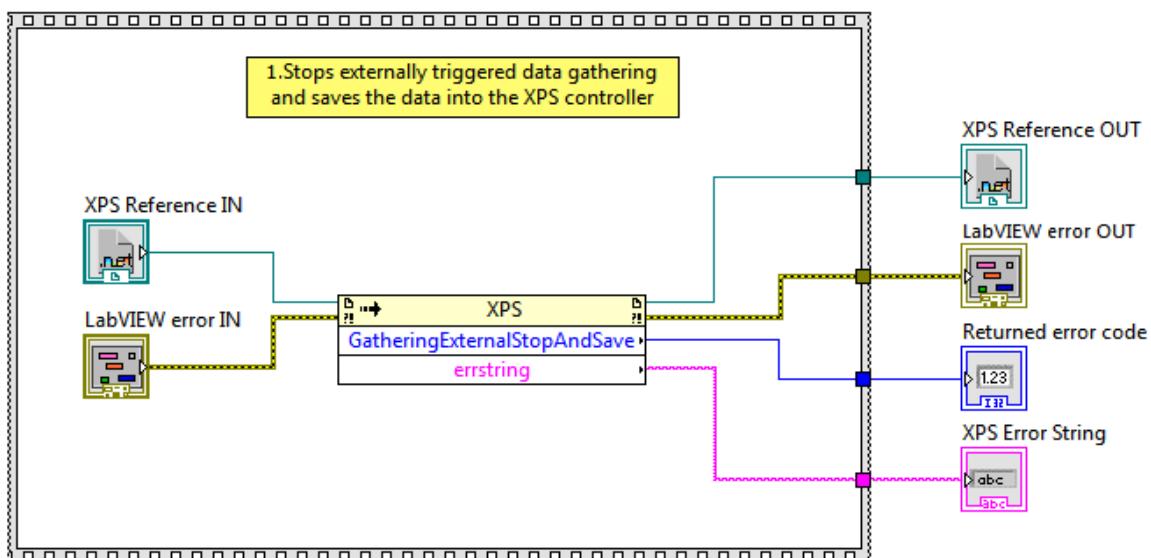
## 43. Gathering External Stop And Save VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Stops externally triggered data gathering and saves the data into the XPS controller.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

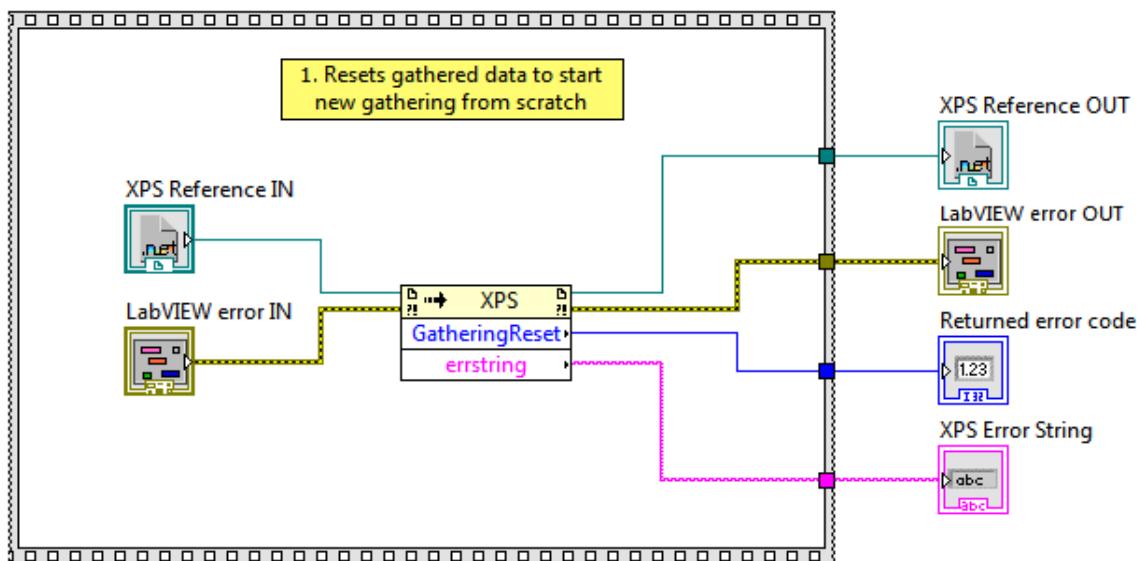
## 44. Gathering Reset VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Resets gathered data to start new gathering from scratch.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

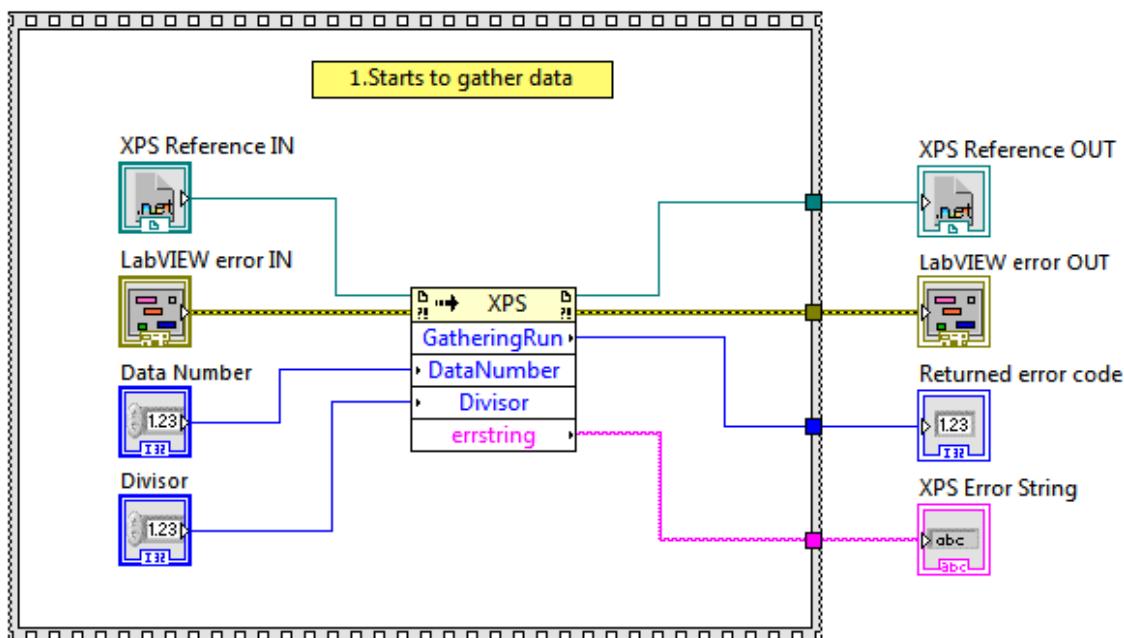
## 45. Gathering Run VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Start to gather data.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

- [132] Data Number** The number of data line to gather
- [132] Divisor** The divisor of the servo frequency
- [D] XPS Reference OUT** returns XPS reference
- [F68] LabVIEW error OUT** contains error information. This output provides standard error out functionality.
- [132] Returned Error Code** Returns function error code
- [abc] XPS Error String** return error string from VI

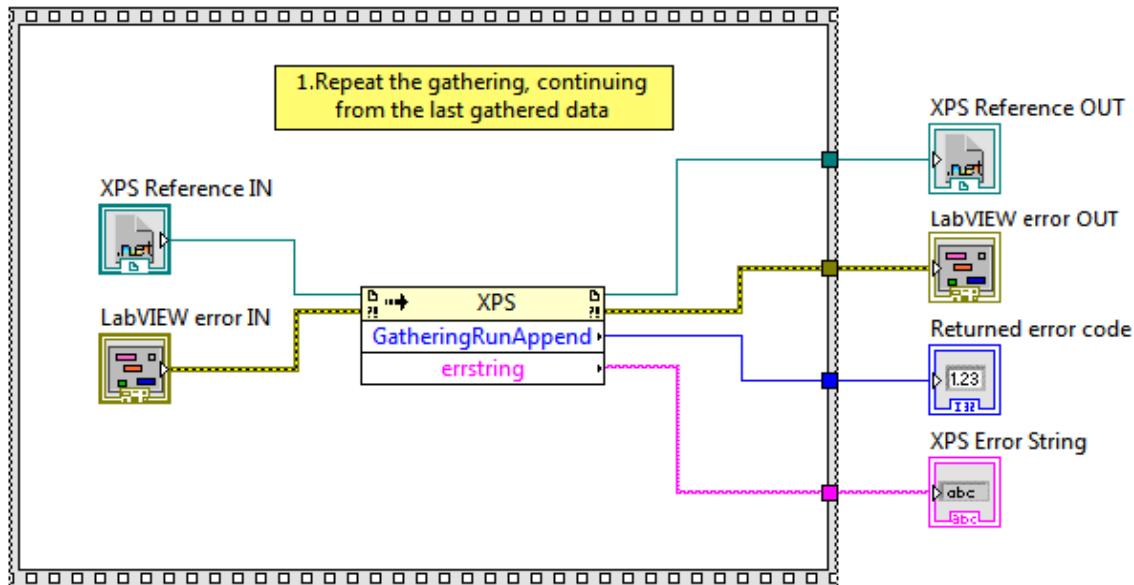
## 46. Gathering Run Append VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Repeat the gathering, continuing from the last gathered data.

### Screenshot



- [D] XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

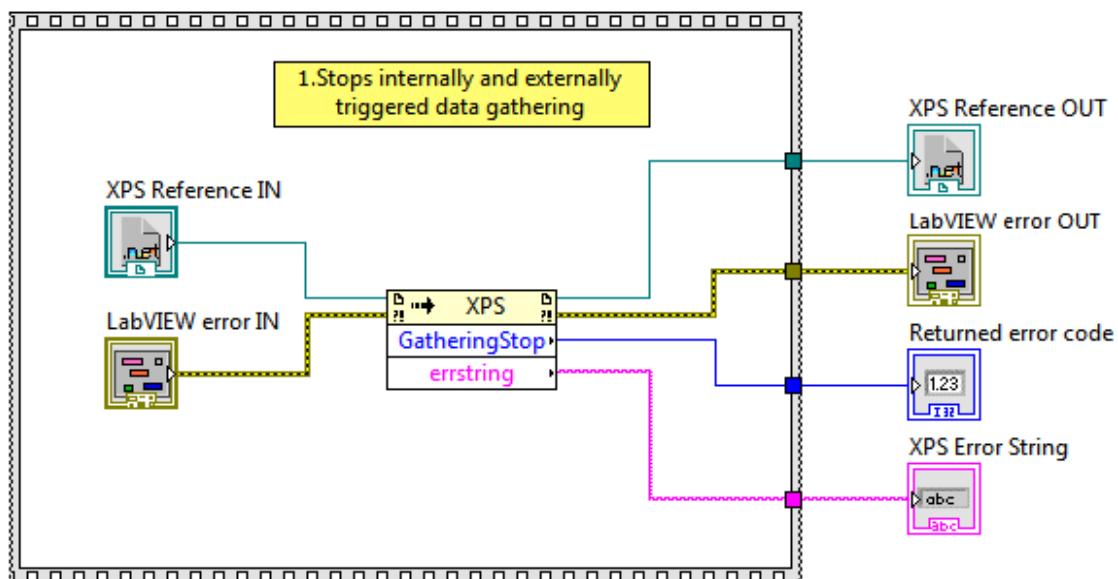
## 47. GatheringStop VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Stops internally and externally triggered data gathering.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input

provides standard error in functionality.

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

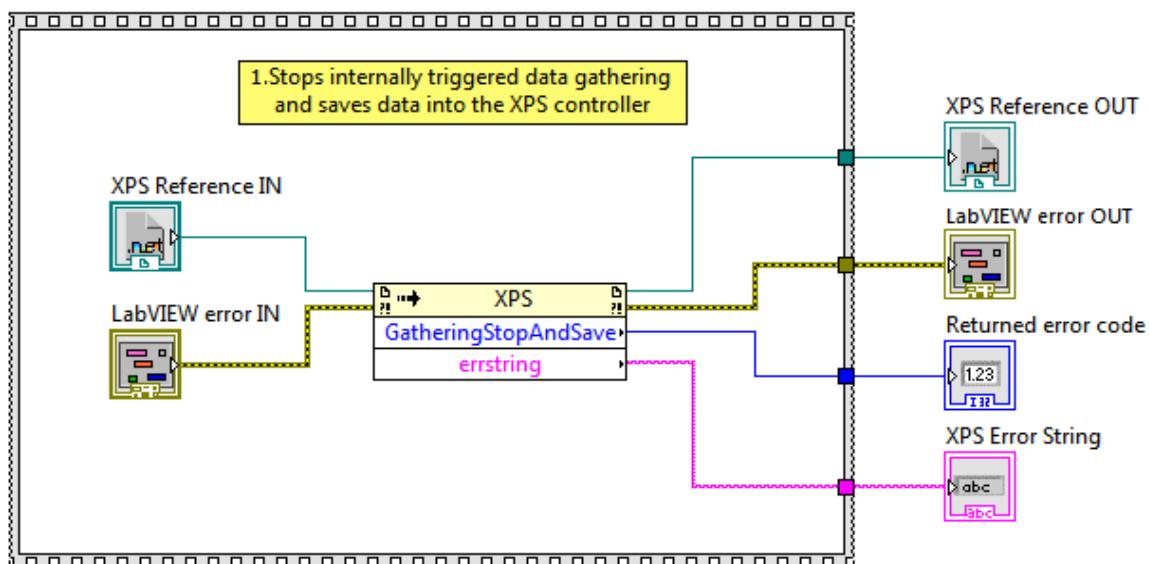
## 48. Gathering Stop And Save VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Stops internally triggered data gathering and saves data into the XPS controller.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

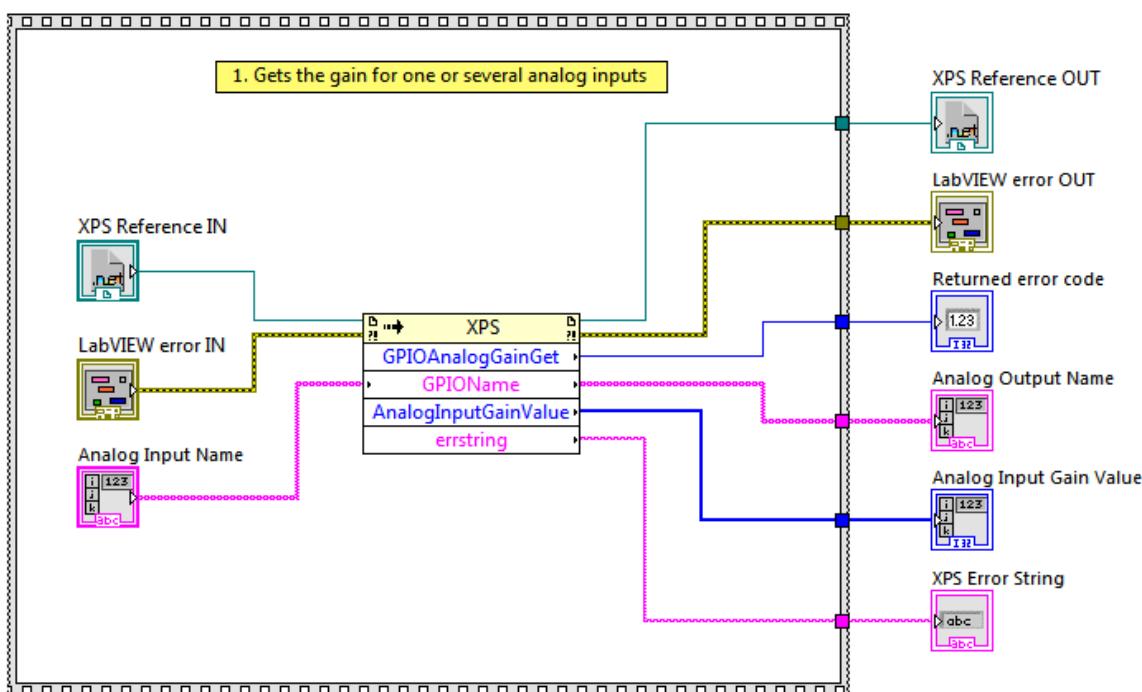
## 49. GPIO Analog Gain Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the gain for one or several analog inputs (ADC).

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input

provides standard error in functionality.

**Analog Input Name** List of Analog input names

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Analog Output Name** List of Analog output names

**Analog Input Gain Value** Value of analog input gain

**XPS Error String** return error string from VI

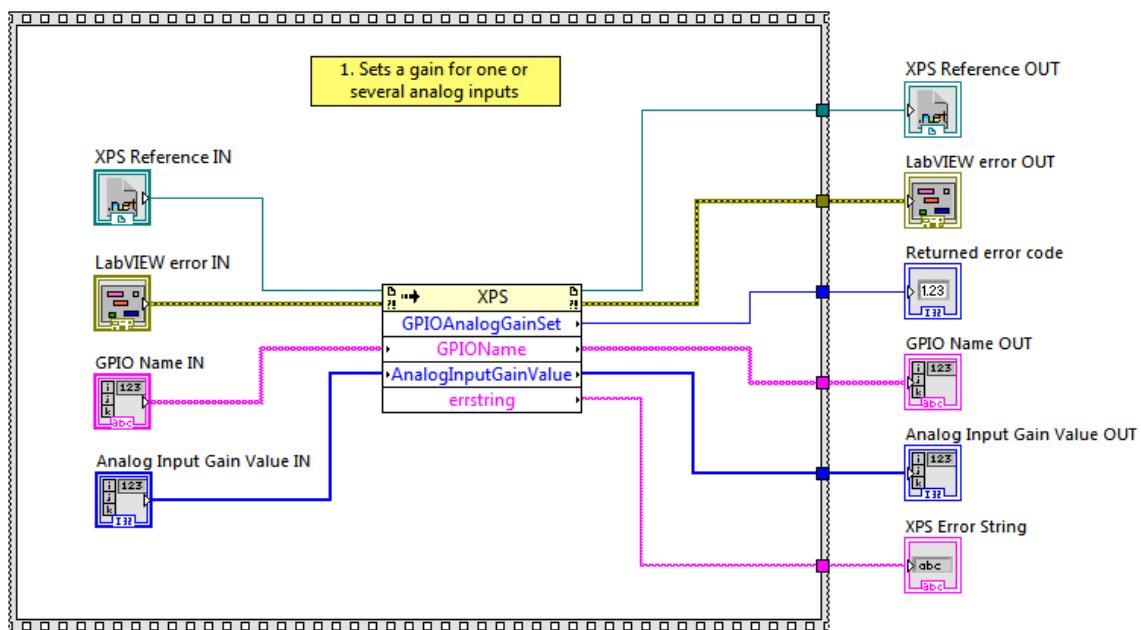
## 50. GPIO Analog Gain Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets a gain for one or several analog inputs (ADC).

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **GPIO Name IN** List of Analog input names

 **Analog Input Gain Value IN** Value of analog input gain

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **GPIO Name OUT** List of Analog output names

 **Analog Input Gain Value OUT** Value of analog input gain

 **XPS Error String** return error string from VI

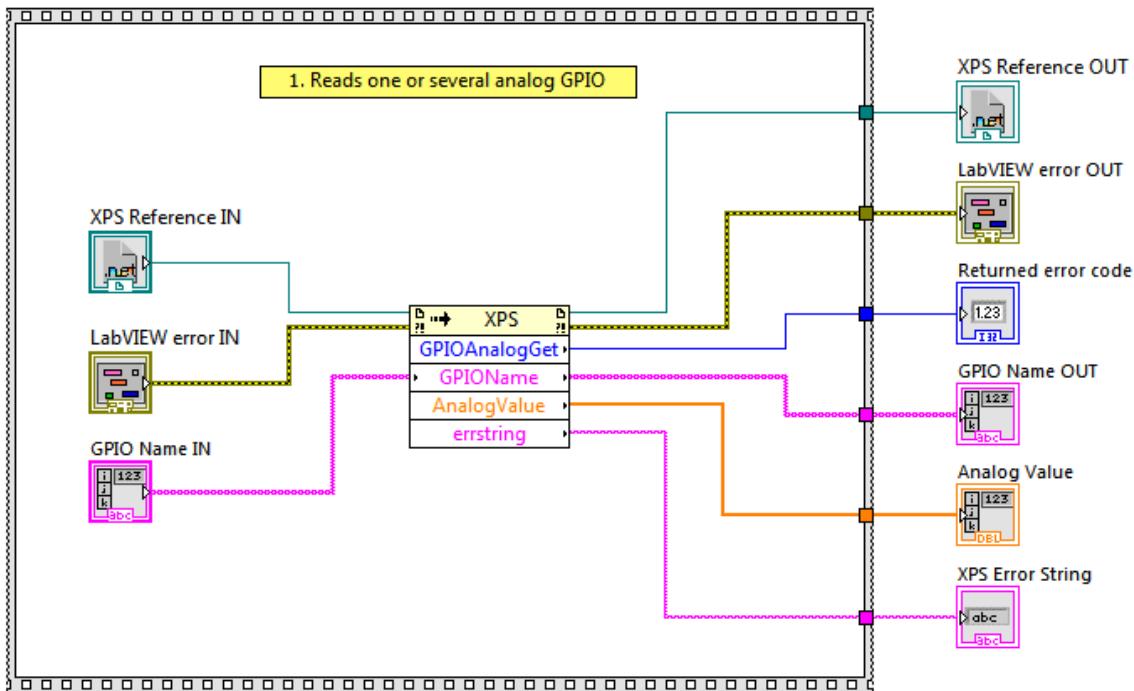
## 51. GPIO Analog Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Reads one or several analog GPIO (DAC or ADC)

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**GPIO Name IN** List of Analog input names

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**GPIO Name OUT** List of Analog output names

**Analog Value** Value of analog GPIO

**XPS Error String** return error string from VI

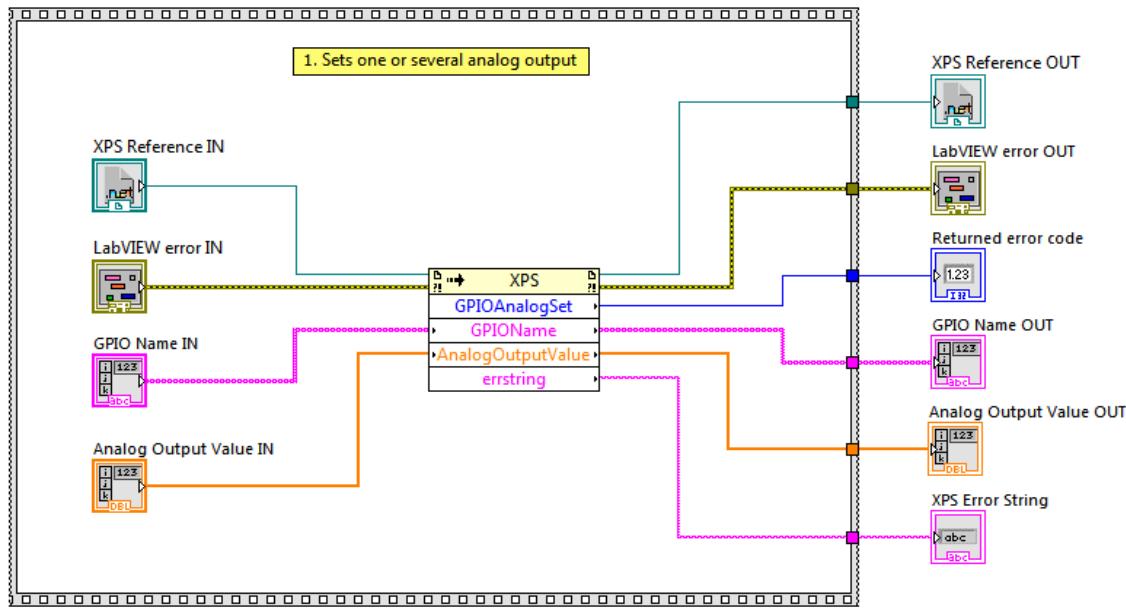
## 52. GPIO Analog Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets one or several analog output (DAC).

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**GPIO Name IN** List of Analog input names

**Analog Output Value IN** Value of analog GPIO

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**GPIO Name OUT** List of Analog output names

**Analog Output Value OUT** Value of analog GPIO

**XPS Error String** return error string from VI

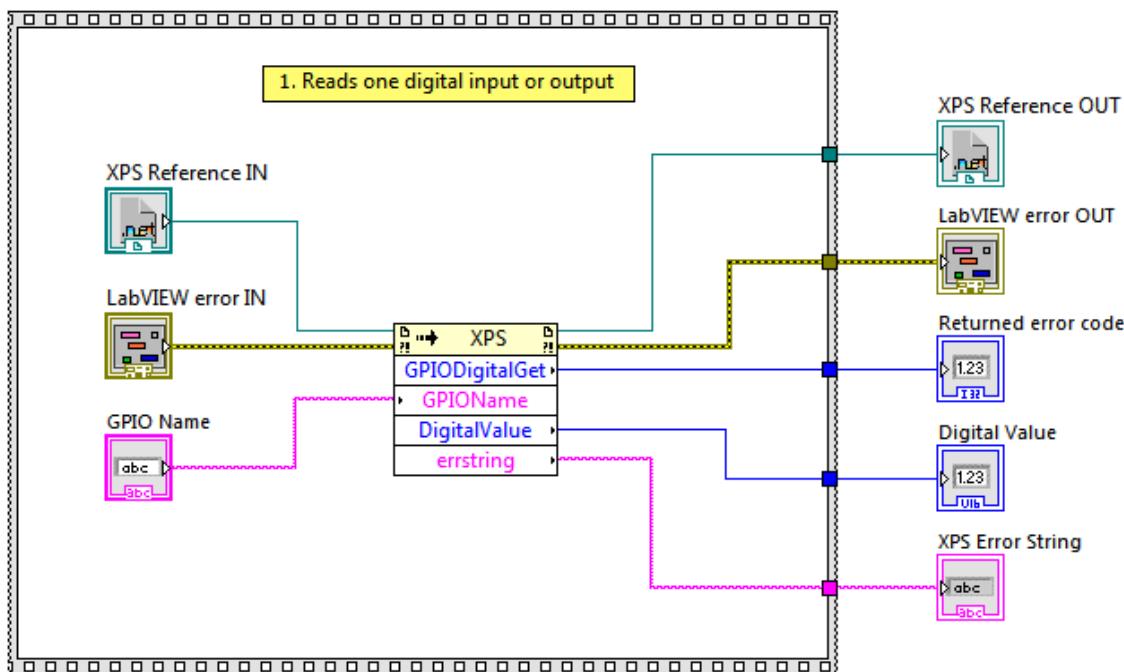
## 53. GPIO Digital Get VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Reads one digital input or output.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**GPIO Name** Analog GPIO name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Digital Value** Digital value (DI or DO)

**XPS Error String** return error string from VI

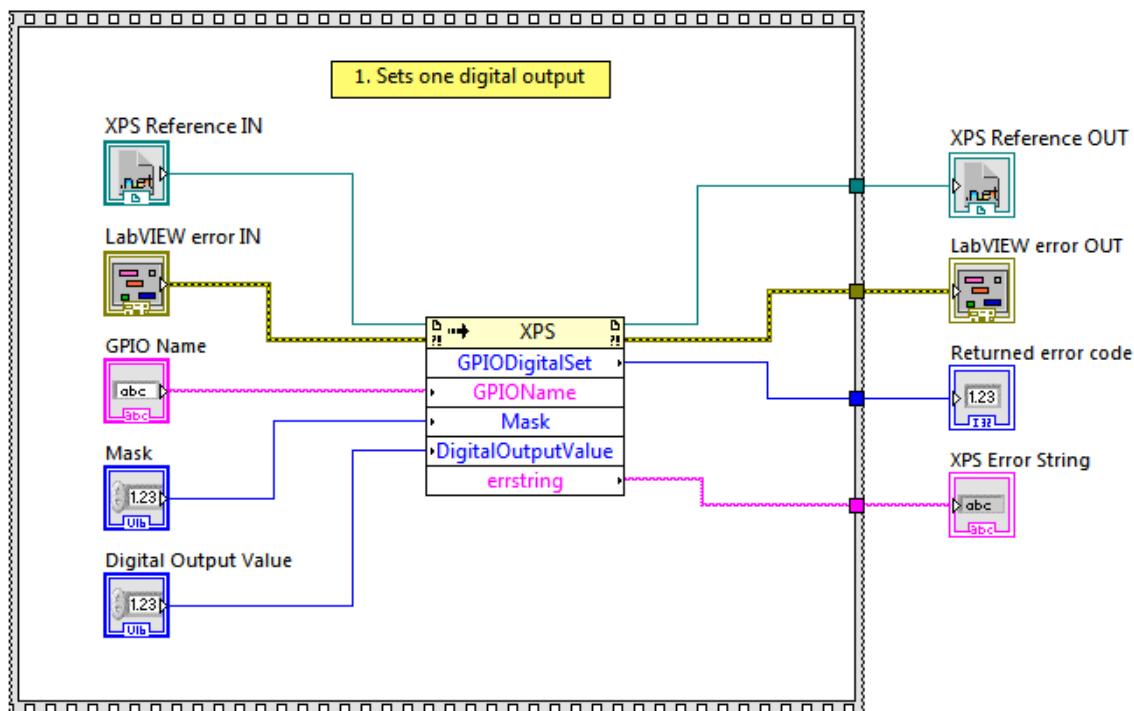
## 54. GPIO Digital Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets one digital output.

### Screenshot



**XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input  provides standard error in functionality.



**GPIO Name** Digital output name



**Mask** Mask



**Digital Output Value** Digital output value



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

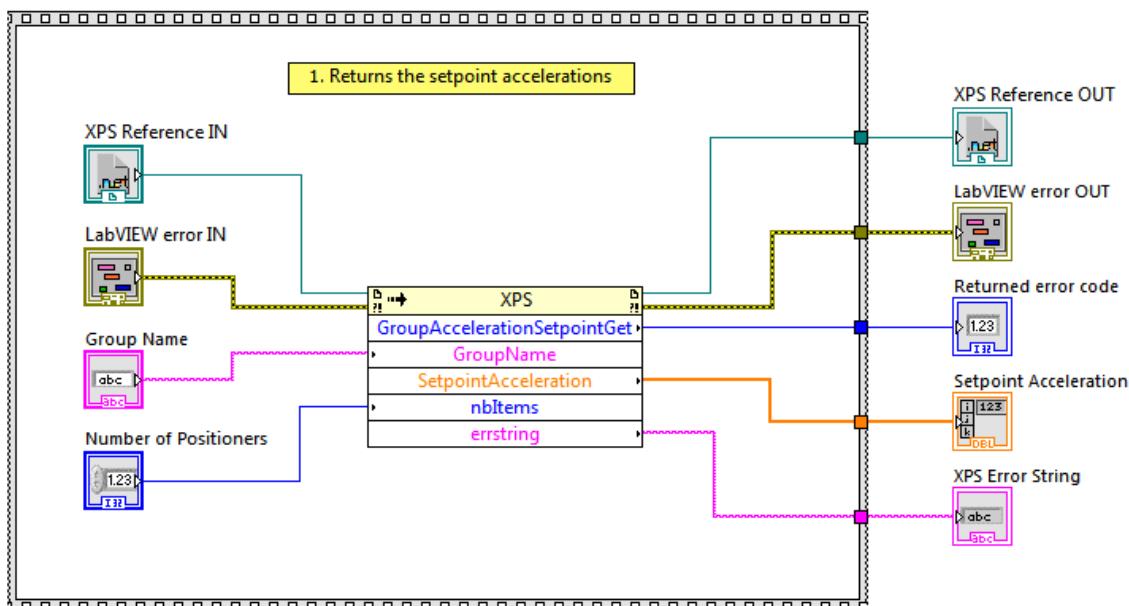
## 55. Group Acceleration Setpoint Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the setpoint acceleration for one or all positioners of the selected group.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input



provides standard error in functionality.

**GPIO Name** Digital output name

**Number of Positioners** Number of positioners

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Set Point Acceleration** Set point acceleration

 **XPS Error String** return error string from VI

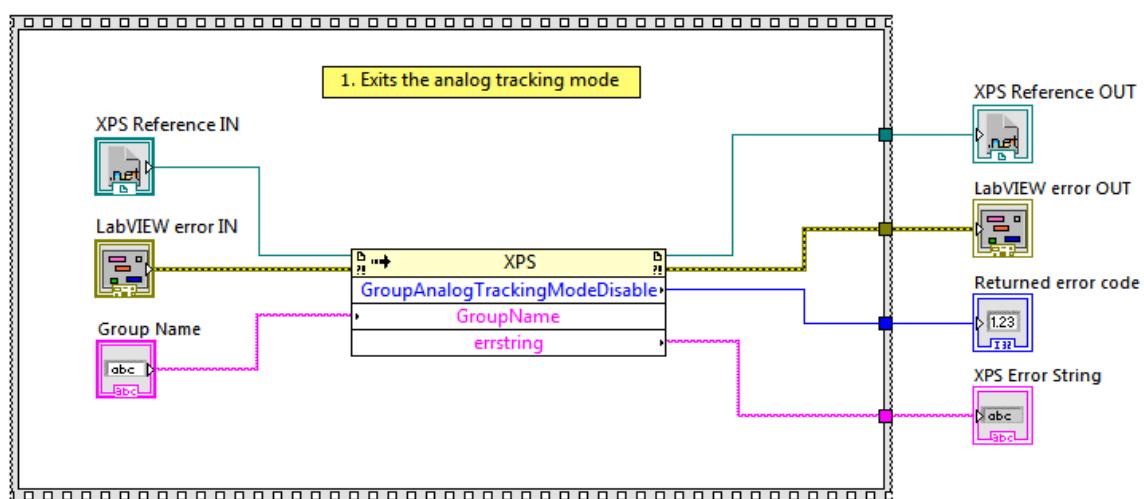
## 56. Group Analog Tracking Mode Disable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Exits the analog tracking mode.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** Single Axis group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

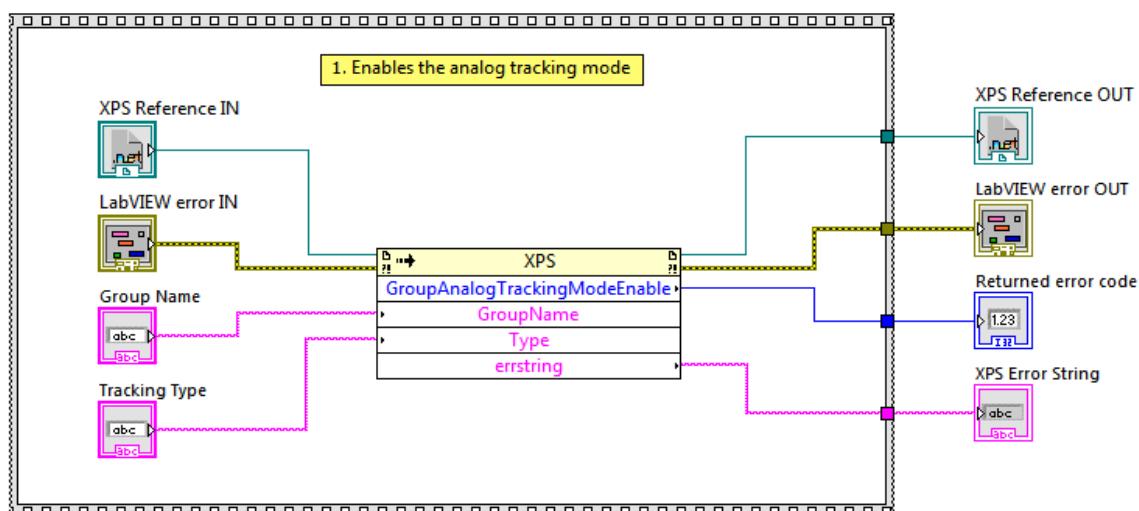
## 57. Group Analog Tracking Mode Enable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Enables the analog tracking mode

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** Single Axis group name

**Tracking Type** Tracking type (“Position” or “Velocity”)

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

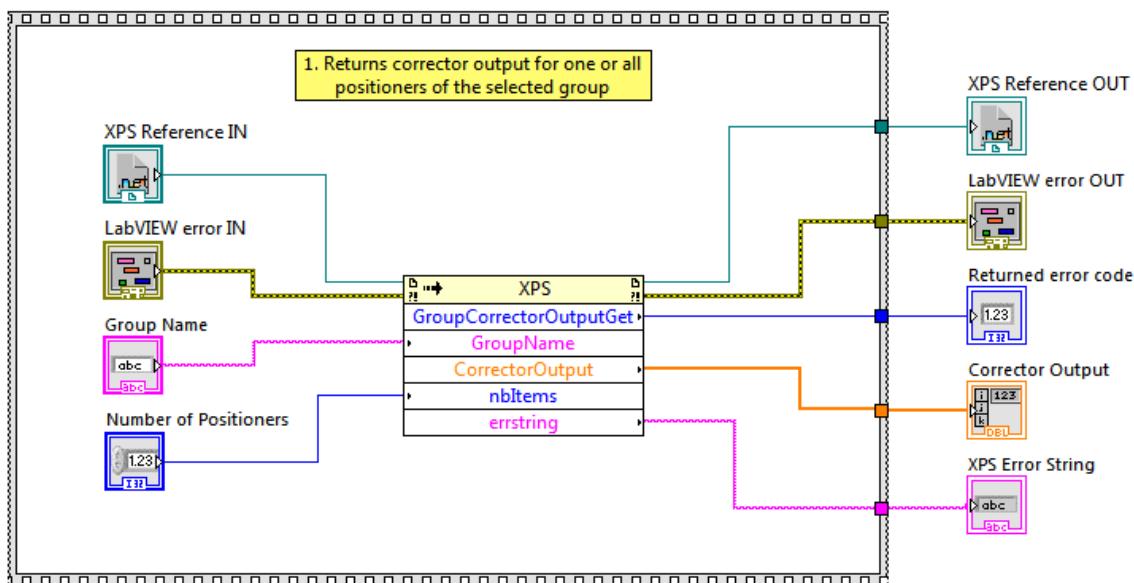
## 58. Group Corrector Output Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns corrector output for one or all positioners of the selected group.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** Group name

**Number of Positioners** Number of positioners

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Corrector Output** Corrector output

**XPS Error String** return error string from VI

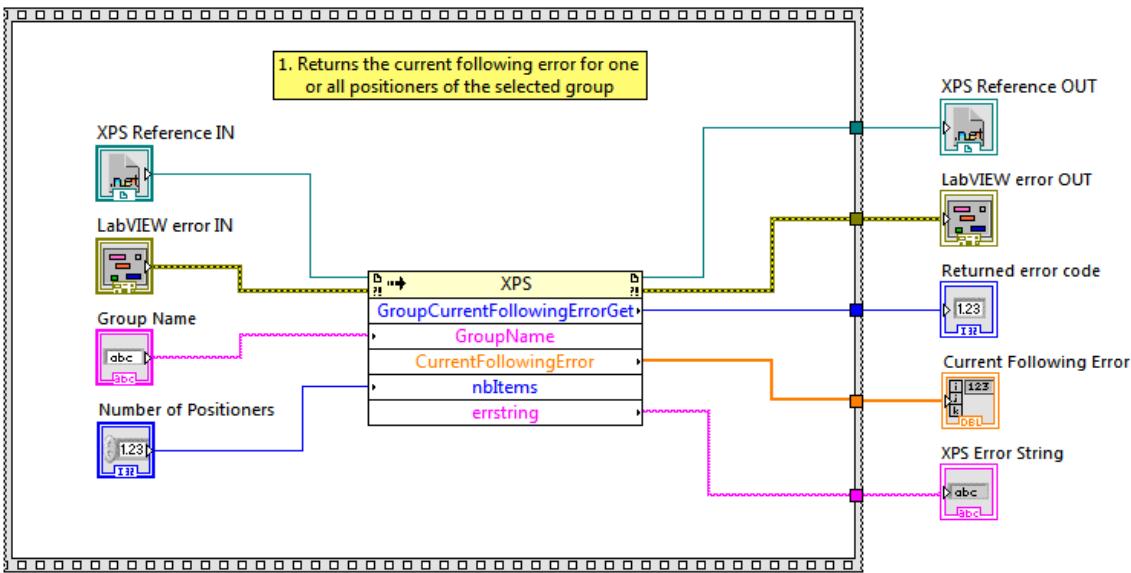
## 59. Group Current Following Error Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the current following error for one or all positioners of the selected group.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input



**Group Name** Group name



**Number of Positioners** Number of positioners



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Current Following Error** Current following error



**XPS Error String** return error string from VI

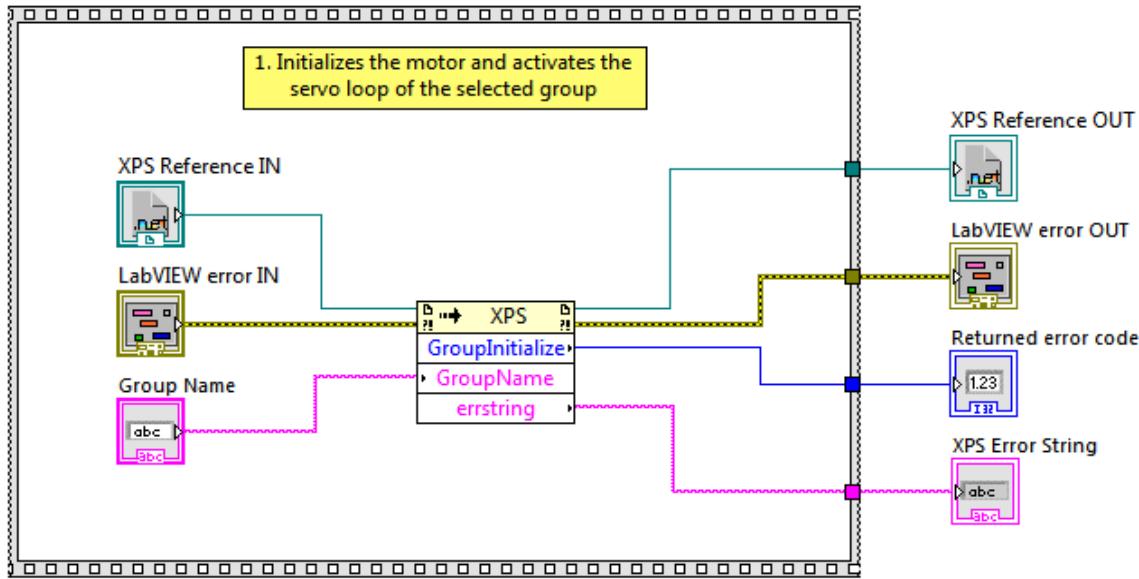
## 60. Group Initialize VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Initializes the motor and activates the servo loop of the selected group.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** Single Axis group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

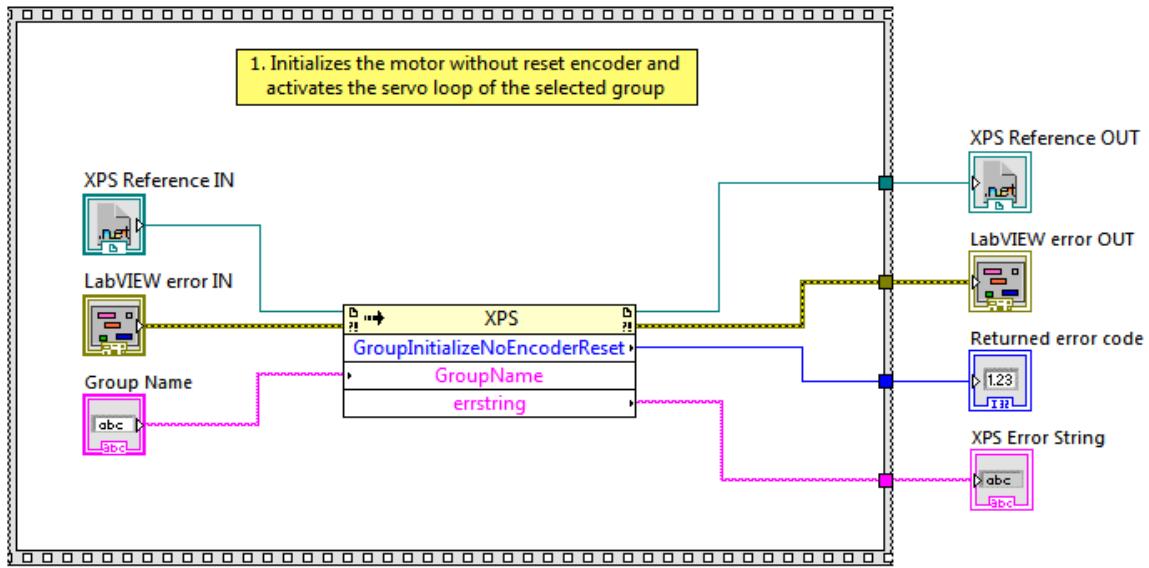
## 61. Group Initialize No Encoder Reset VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Initializes the motor without reset encoder and activates the servo loop of the selected group.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** Single Axis group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

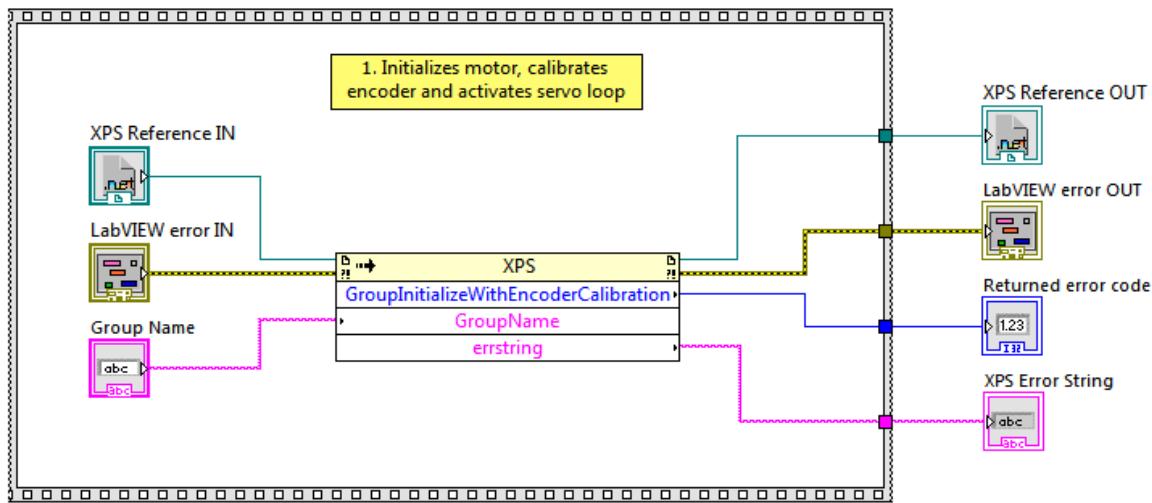
## 62. Group Initialize With Encoder Calibration VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Initializes motor, calibrates encoder and activates servo loop.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** Single Axis group name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

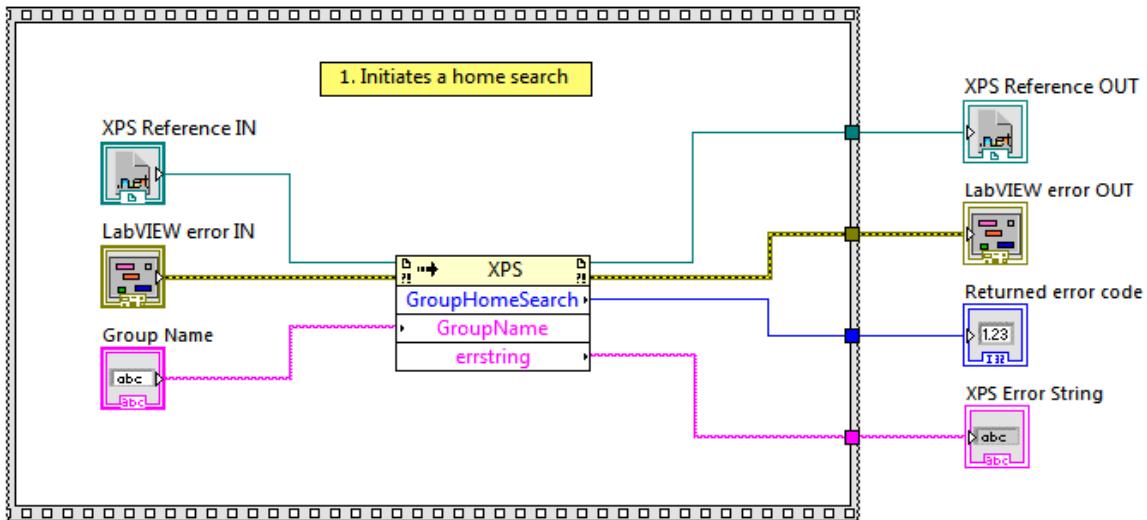
## 63. Group Home Search VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Initiates a home search.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** Single Axis group name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

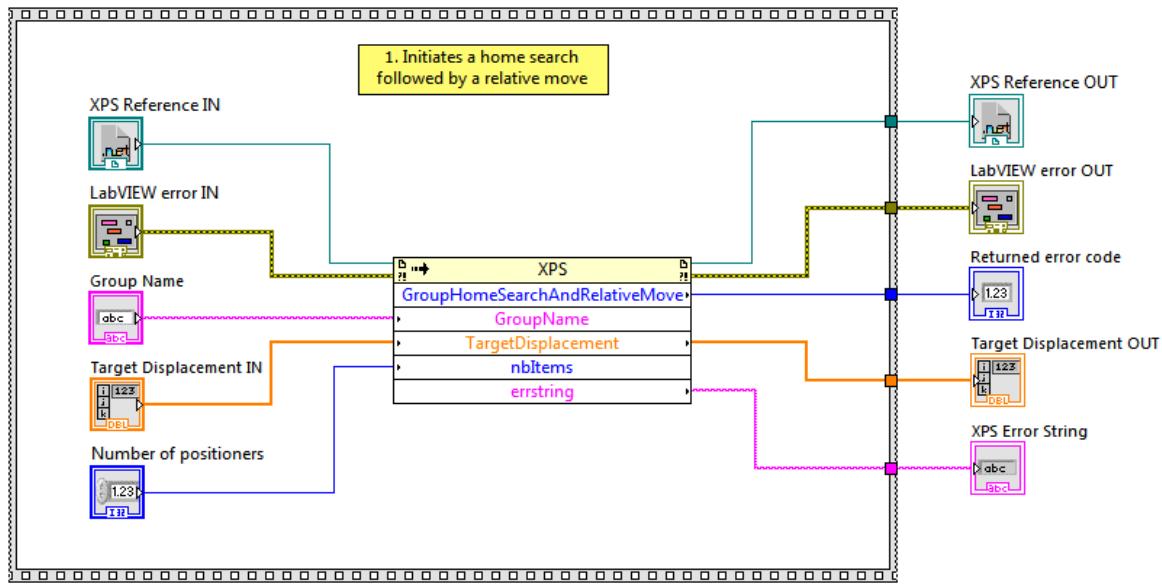
## 64. Group Home Search And Relative Move VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Initiates a home search followed by a relative move.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** Single Axis group name



**Target Displacement IN** Relative displacement



**Number of Positioners** Number of positioners



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Target Displace OUT** Relative displacement

**XPS Error String** return error string from VI

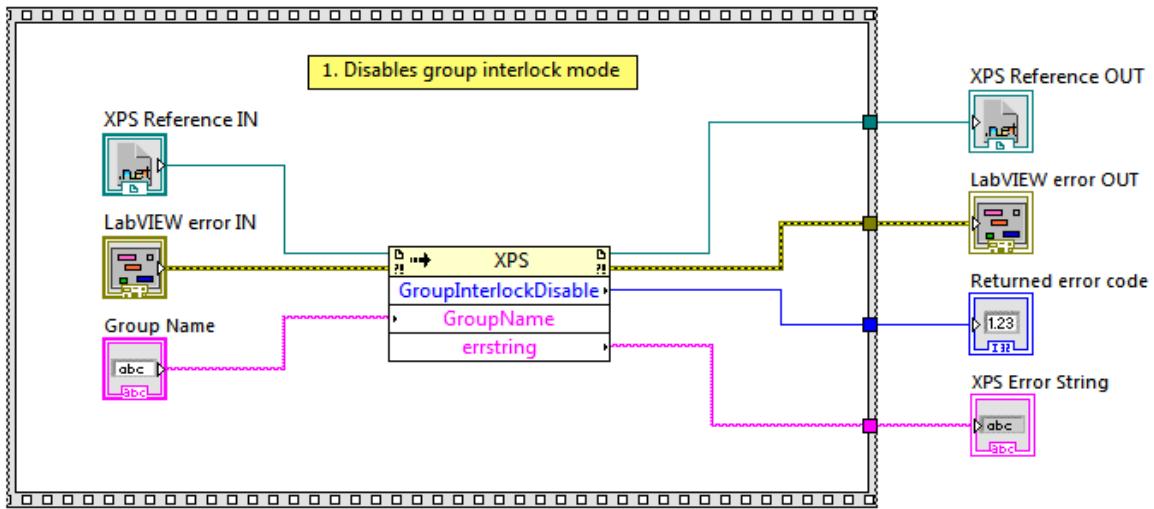
## 65. Group Interlock Disable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Disables group interlock mode.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** Single Axis group name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

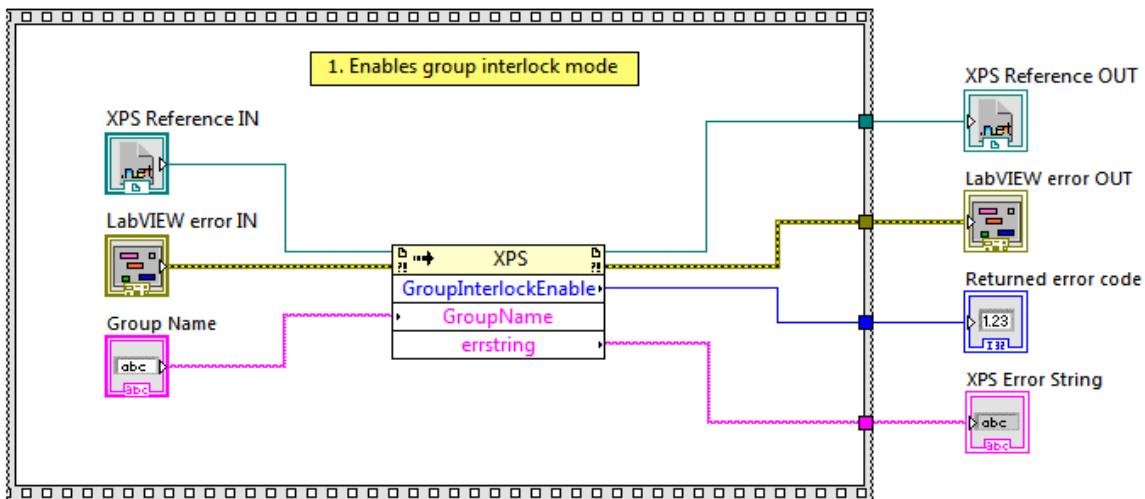
## 66. Group Interlock Enable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Enables group interlock mode.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** Single Axis group name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

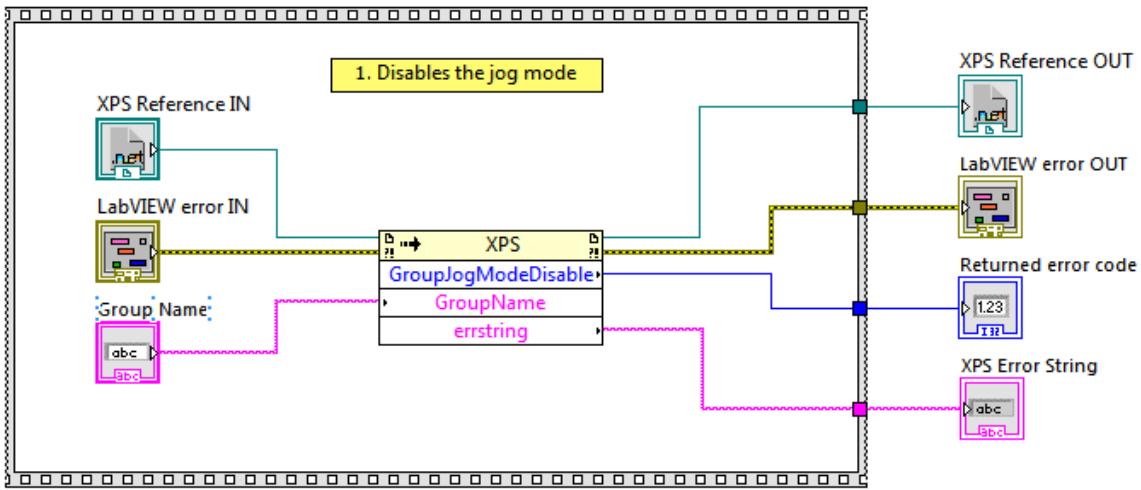
## 67. Group Jog Mode Disable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Disables the jog mode.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** Single Axis group name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

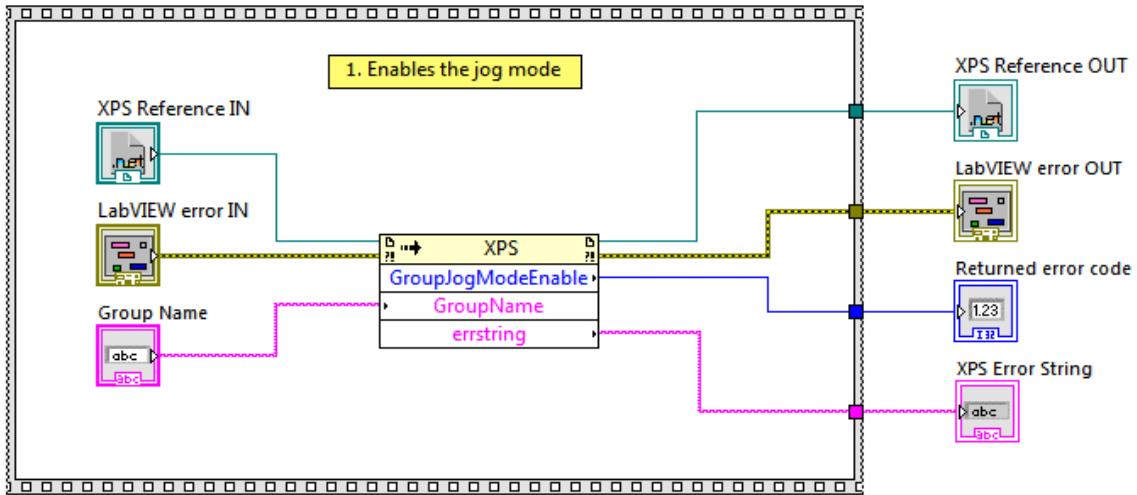
## 68. Group Jog Mode Enable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Enables the jog mode.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** Single Axis group name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

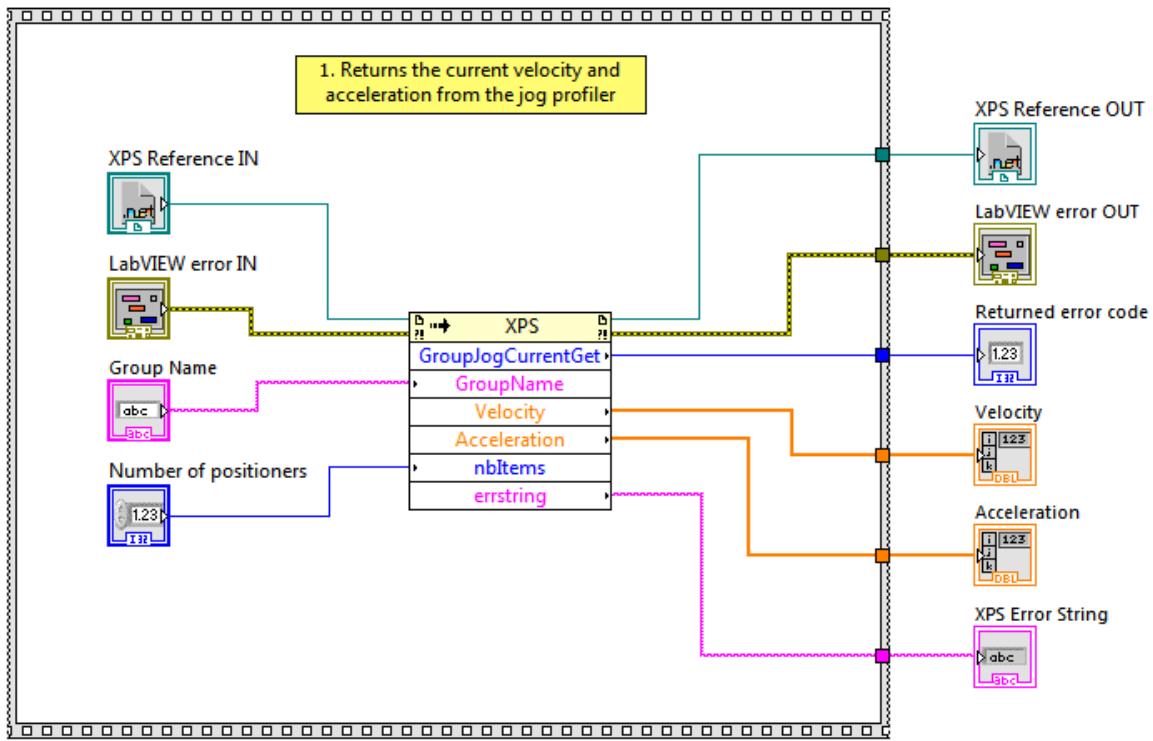
## 69. Group Jog Current Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the current velocity and acceleration from the jog profiler.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** group name



**Number of Positioners** Number of positioners



**XPS Reference OUT** returns XPS reference



**Returned Error Code** Returns function error code



**Velocity** Current velocity array



**Acceleration** Current acceleration array



**XPS Error String** return error string from VI

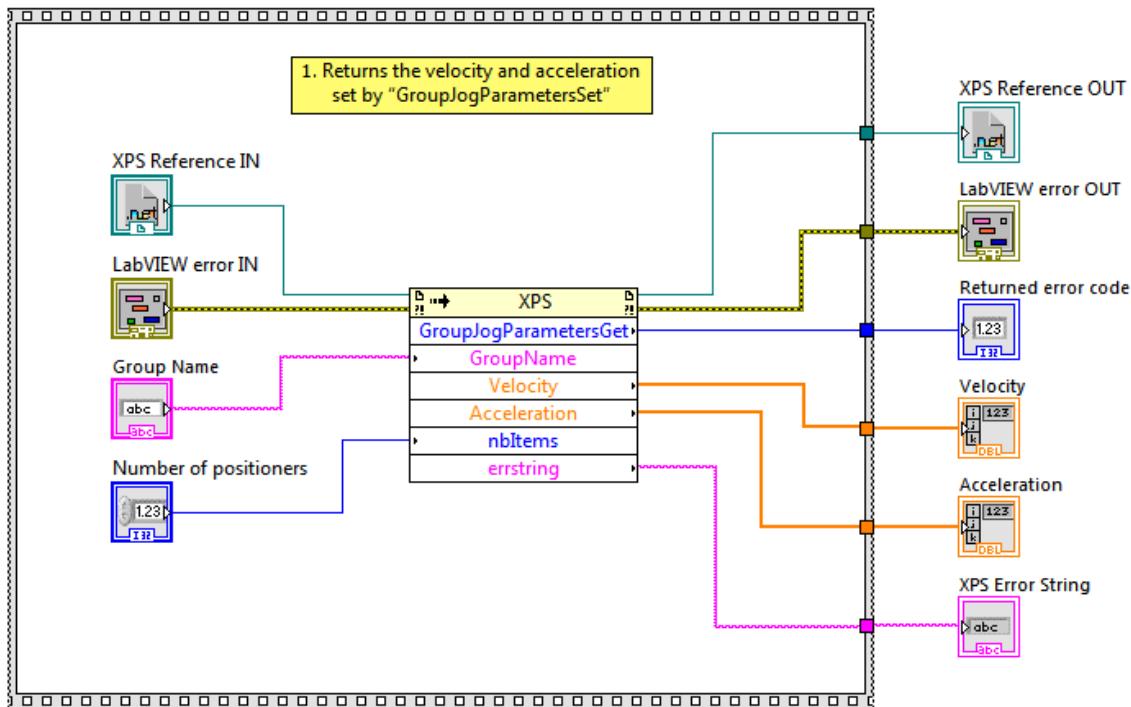
## 70. Group Jog Parameters Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the velocity and acceleration set by “GroupJogParametersSet”.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group name

**Number of Positioners** Number of positioners

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**I32 Returned Error Code** Returns function error code

**DBL Velocity** Current velocity array

**DBL Acceleration** Current acceleration array

 **XPS Error String** return error string from VI

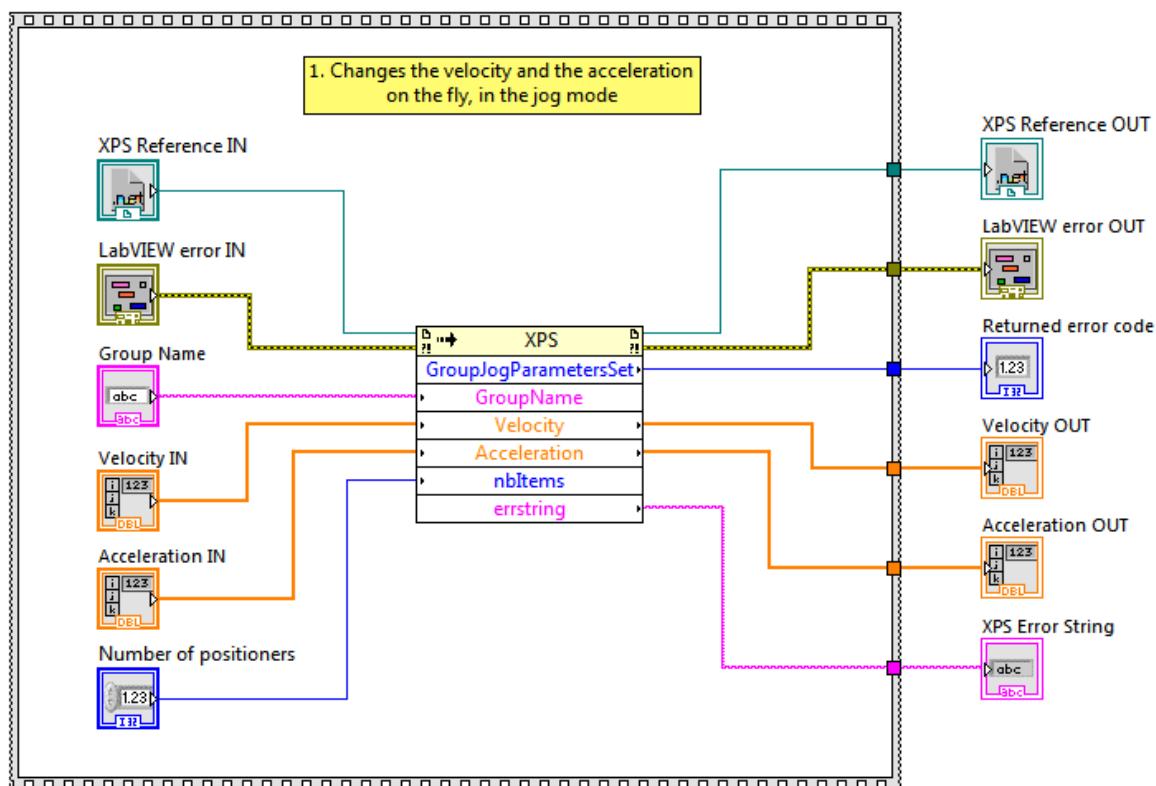
## 71. Group Jog Parameters Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Changes the velocity and the acceleration on the fly, in the jog mode.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Group Name** group name

 Velocity

 Acceleration

 nbItems

 errstring

**Velocity IN** User jog velocity

**Acceleration IN** User jog Acceleration

**Number of Positioners** Number of positioners

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Velocity OUT** User jog velocity

**Acceleration OUT** User jog acceleration

**XPS Error String** return error string from VI

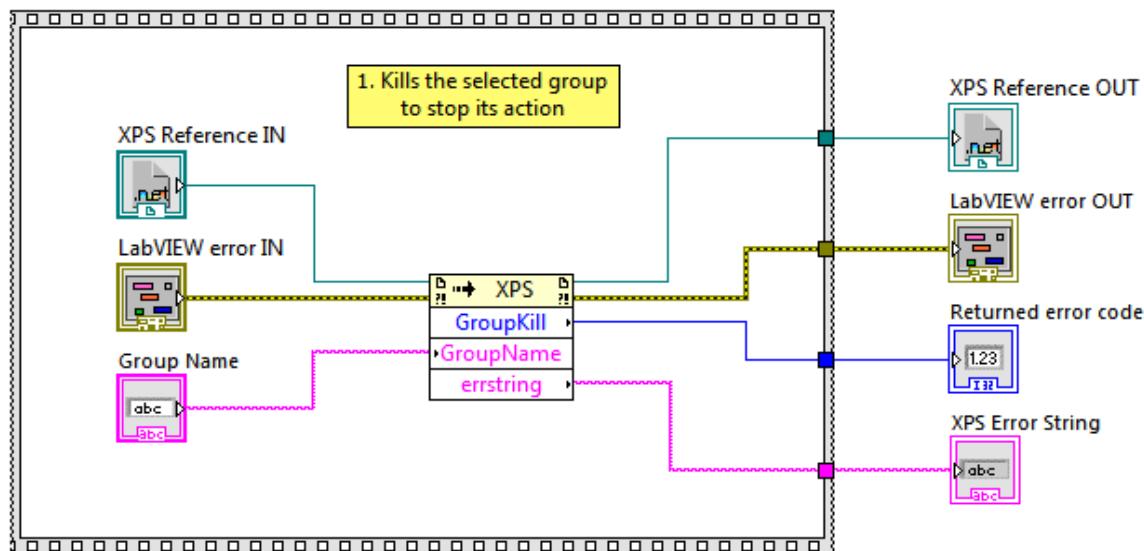
## 72. Group Kill VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Kills the selected group to go to “NOTINIT” status.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** Single Axis group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

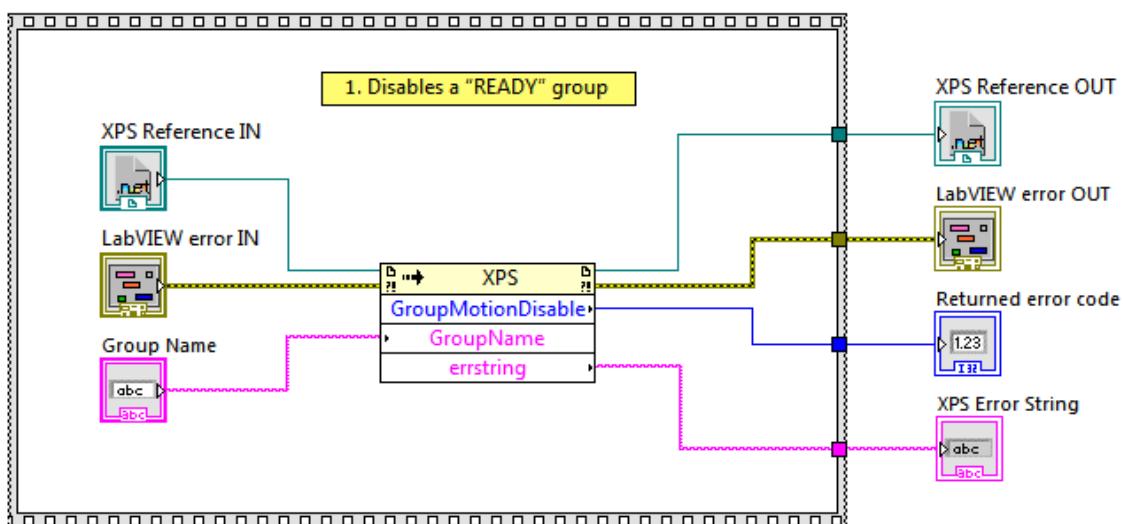
## 73. Group Motion Disable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Disables a “READY” group.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** Single Axis group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

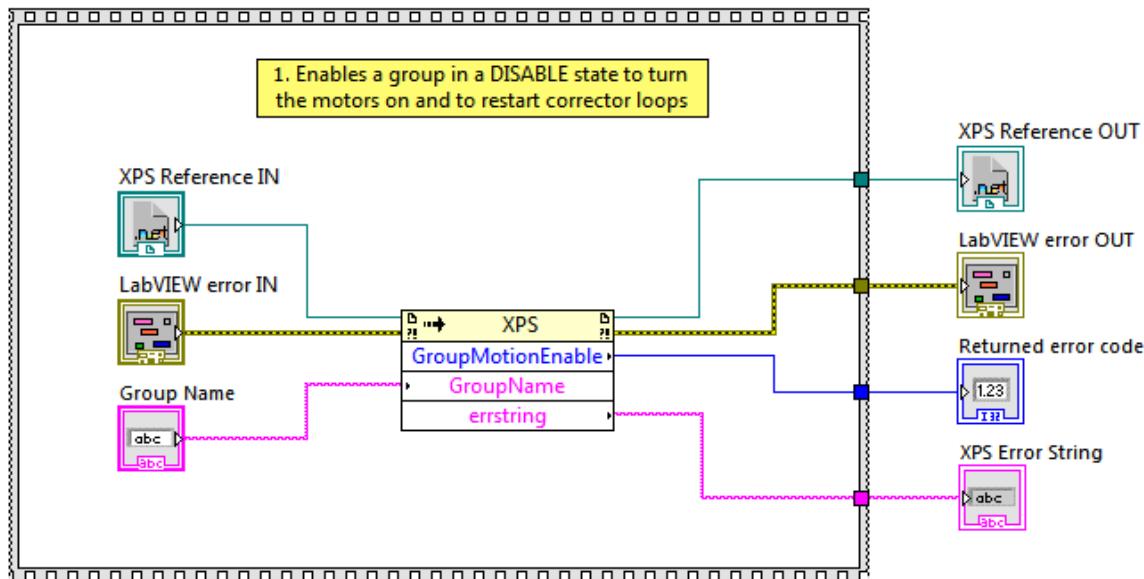
## 74. Group Motion Enable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Enables a group in a DISABLE state to turn the motors on and to restart corrector loops.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** Single Axis group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

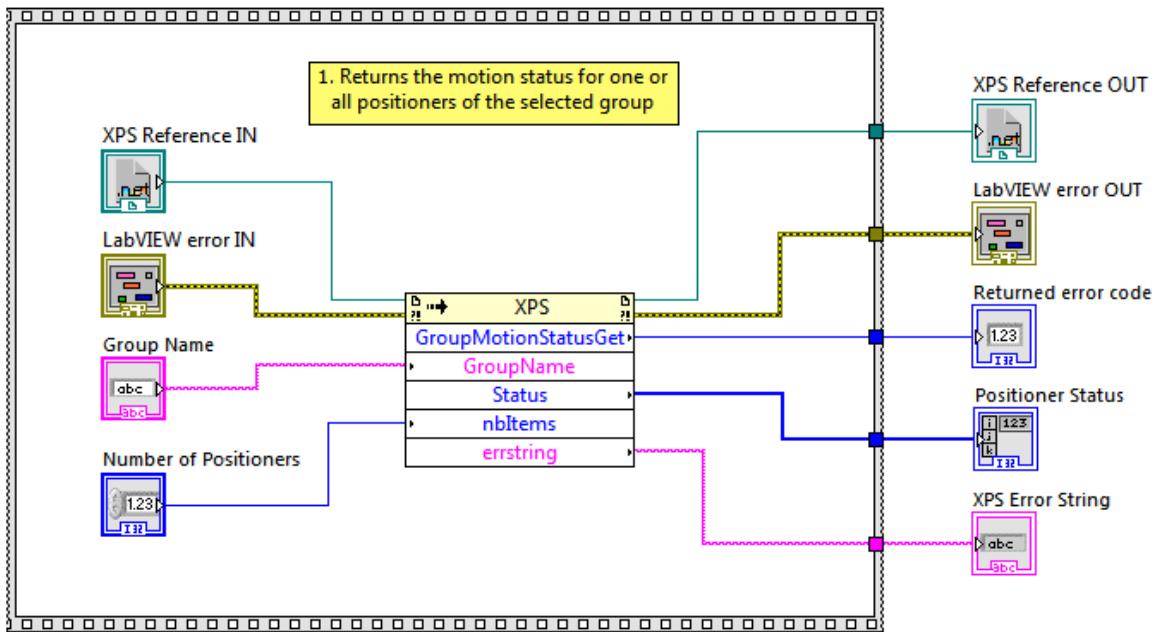
## 75. Group Motion Status Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the motion status for one or all positioners of the selected group.

**Screenshot**



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** group name



**Number of Positioners** Number of positioners



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Positioner status** Positioner status

**XPS Error String** return error string from VI

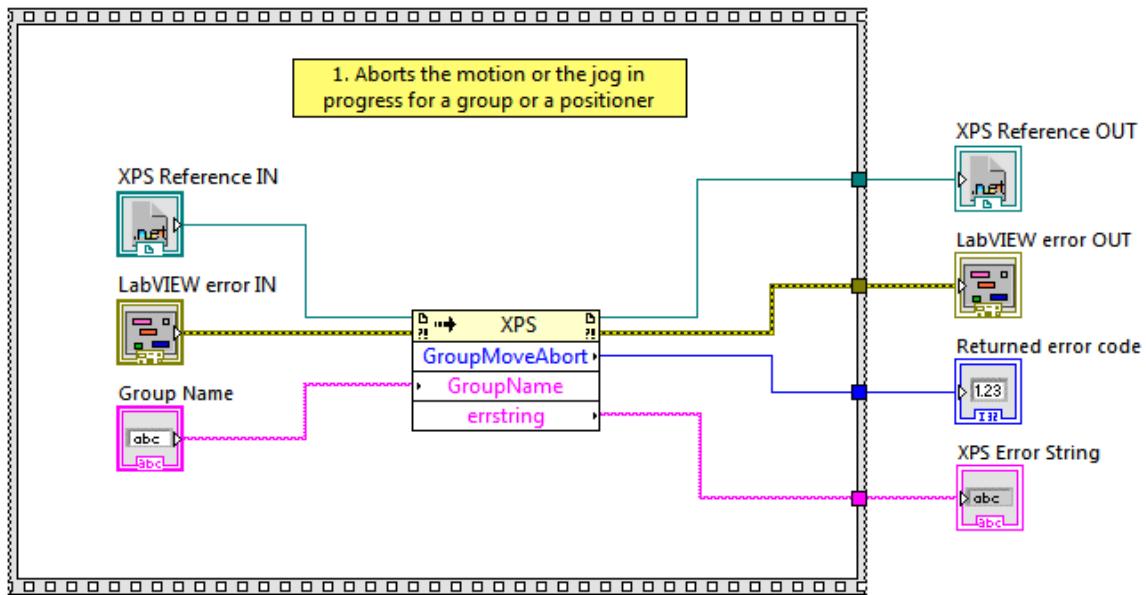
## 76. Group Move Abort VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Aborts the motion or the jog in progress for a group or a positioner.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** Single Axis group name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

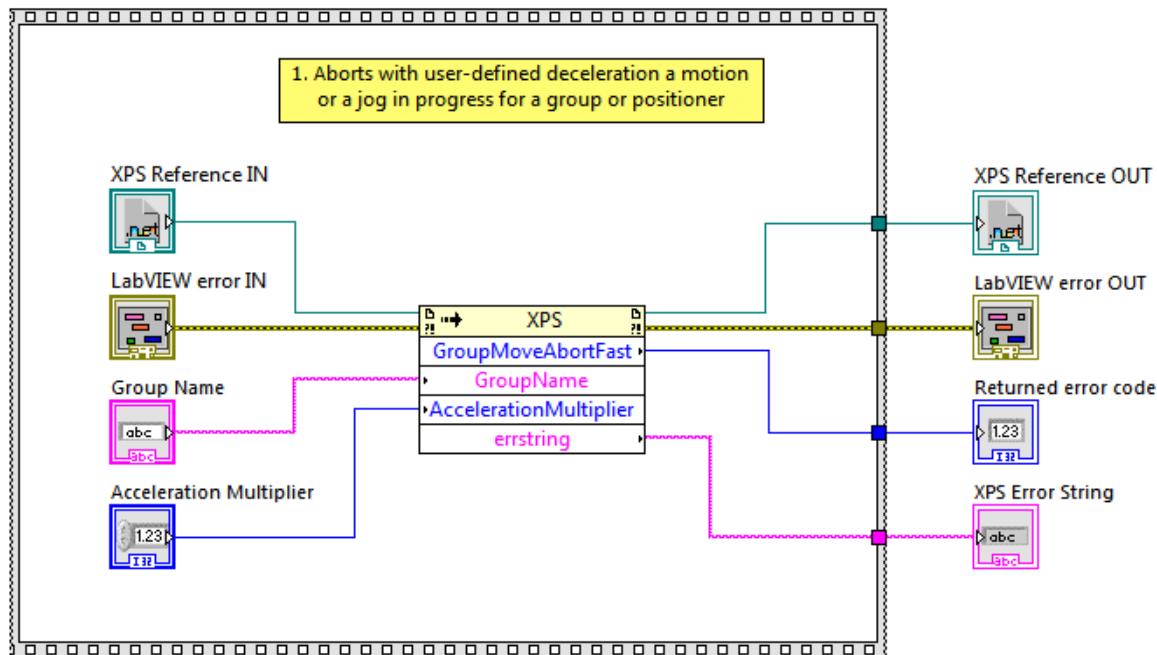
## 77. Group Move Abort Fast VI

**Owning Palette:** Interpolation & Extrapolation VI

## Requires: Full Development System

Aborts with user-defined deceleration a motion or a jog in progress for a group or positioner.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group name

**Acceleration Multiplier** Braking acceleration multiplier

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

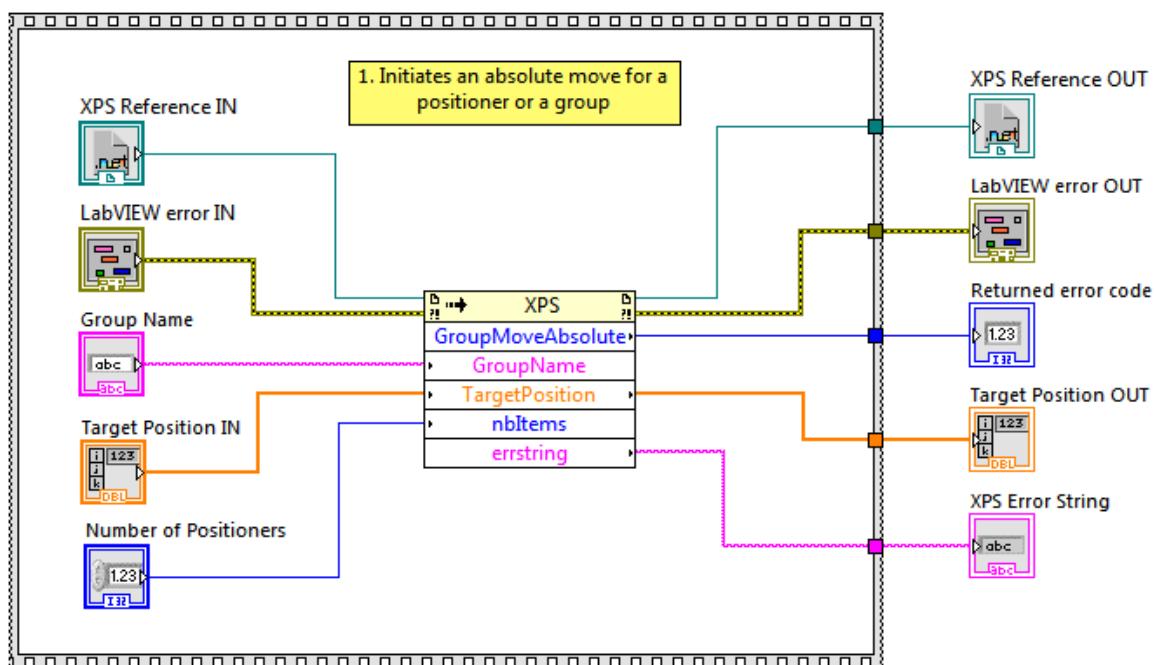
## 78. Group Move Absolute VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Initiates an absolute move for a positioner or a group.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** group name



**Target Position IN** Target position IN



**Number of Positioners** Number of positioners



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Target Position OUT** Target position OUT

**XPS Error String** return error string from VI

**I32**

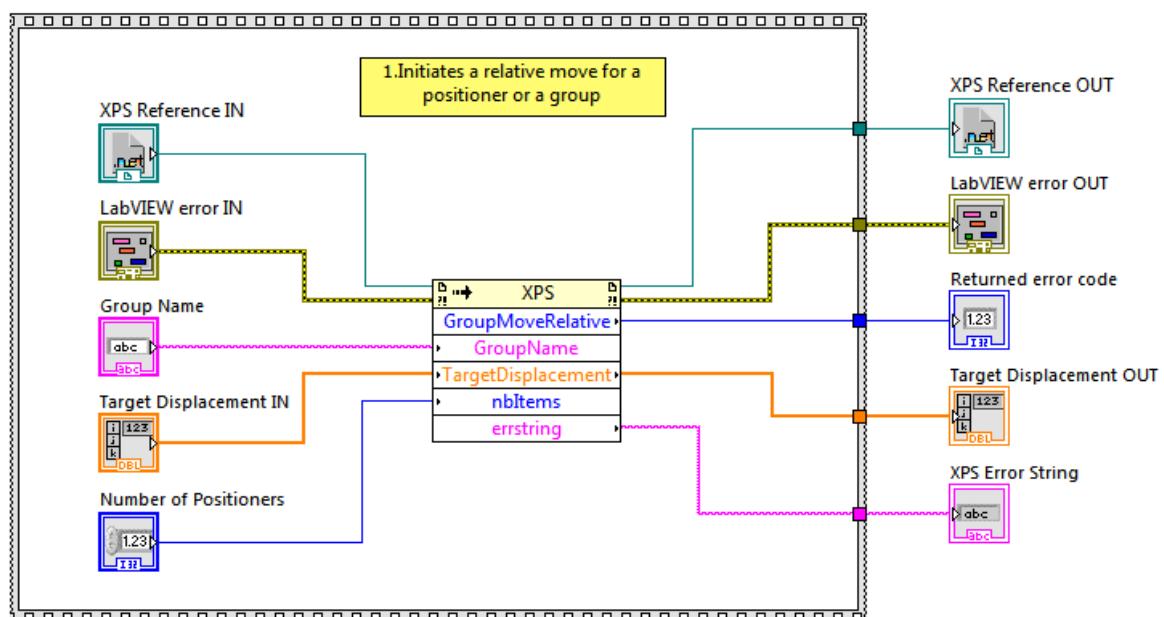
## 79. Group Move Relative VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Initiates a relative move for a positioner or a group.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**abc**

**DBL**

**I32**

**DL**

**Group Name** group name

**Target Displacement IN** Relative displacement array

**Number of Positioners** Number of positioners in the selected group

**XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.



 **Returned Error Code** Returns function error code

**Target Displacement OUT** Relative displacement array

 **XPS Error String** return error string from VI

## 80. Group Position Corrected Profiler Get VI

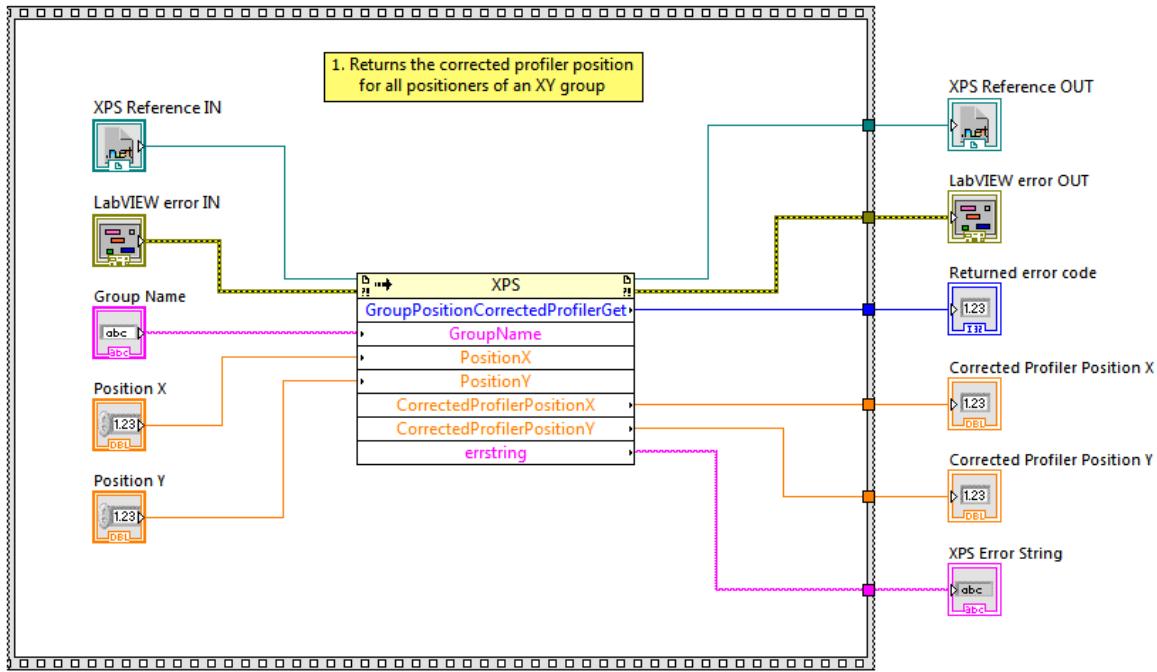
**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the corrected profiler position for all positioners of an XY group.

**Screenshot**





**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group name

**Position X** Theoretical position X

**Position Y** Theoretical position Y

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code



**Corrected Position X** Corrected theoretical position X



**Corrected Position Y** Corrected theoretical position Y

**XPS Error String** return error string from VI

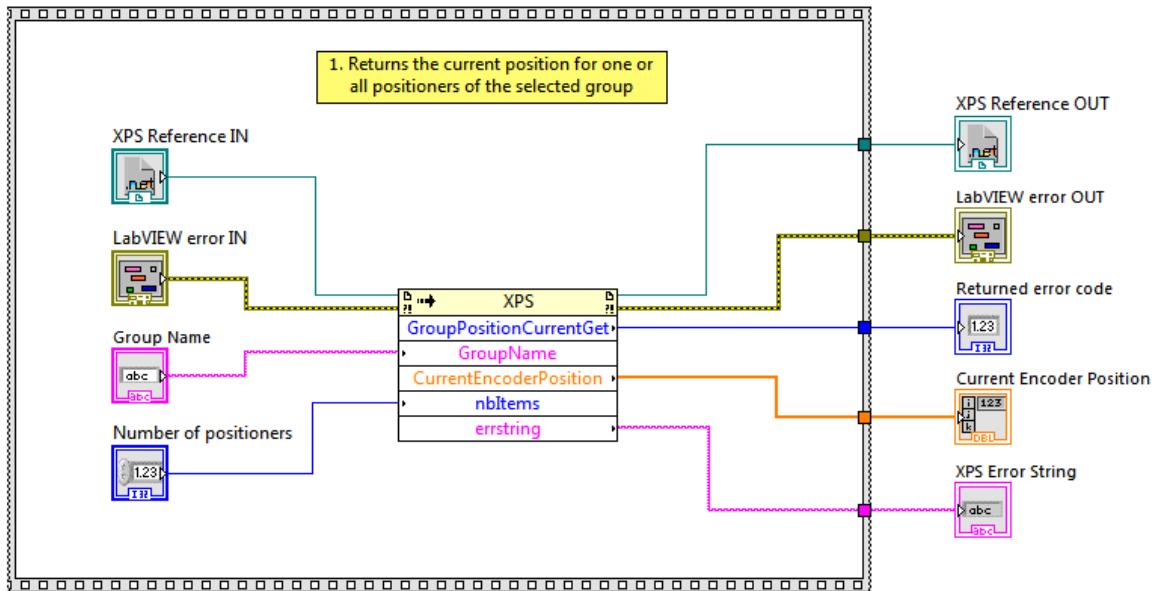
## 81. Group Position Current Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the current position for one or all positioners of the selected group.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group name

**Number of Positioners** Number of positioners in the selected group

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Current Encoder Position** Current encoder position

**XPS Error String** return error string from VI

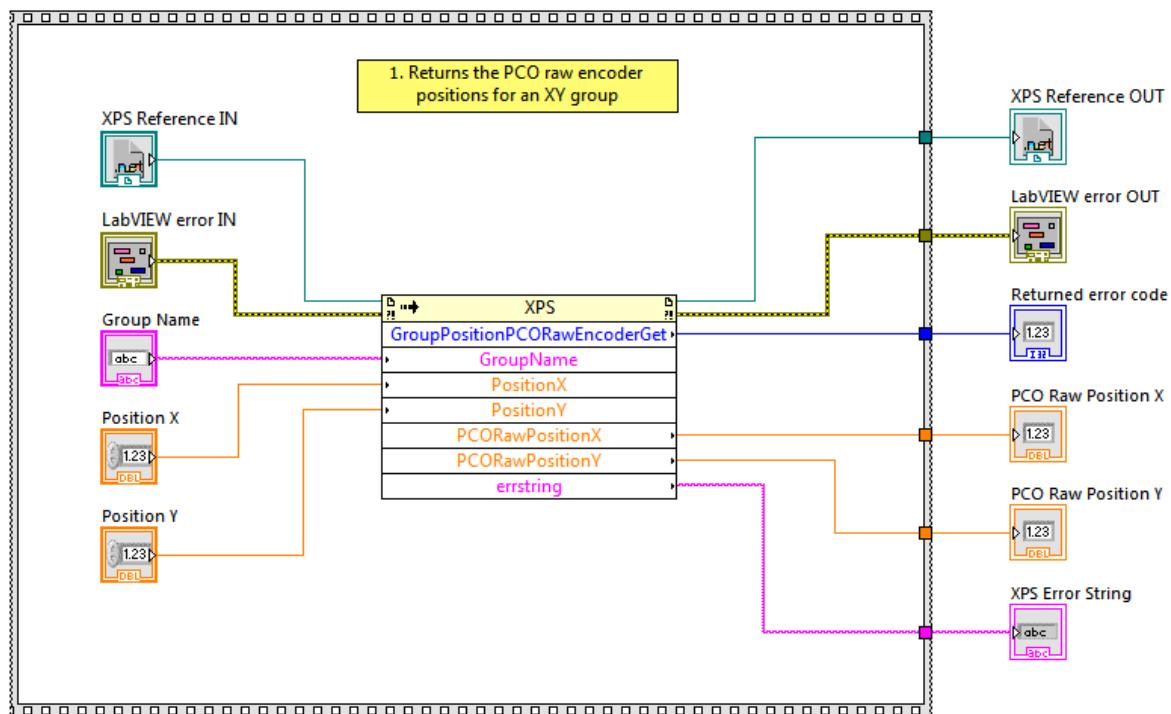
## 82. Group Position PCO Raw Encoder Get VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Returns the PCO raw encoder positions for an XY group.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input



**Group Name** provides standard error in functionality.



**Group Name** group name



**Position X** User corrected position X



**Position Y** User corrected position Y



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out



functionality.



**Returned Error Code** Returns function error code

**PCO Raw Position X** PCO Raw position X

**DBL**

**I32**

**PCO Raw Position Y** PCO Raw position Y

**XPS Error String** return error string from VI

**abc**

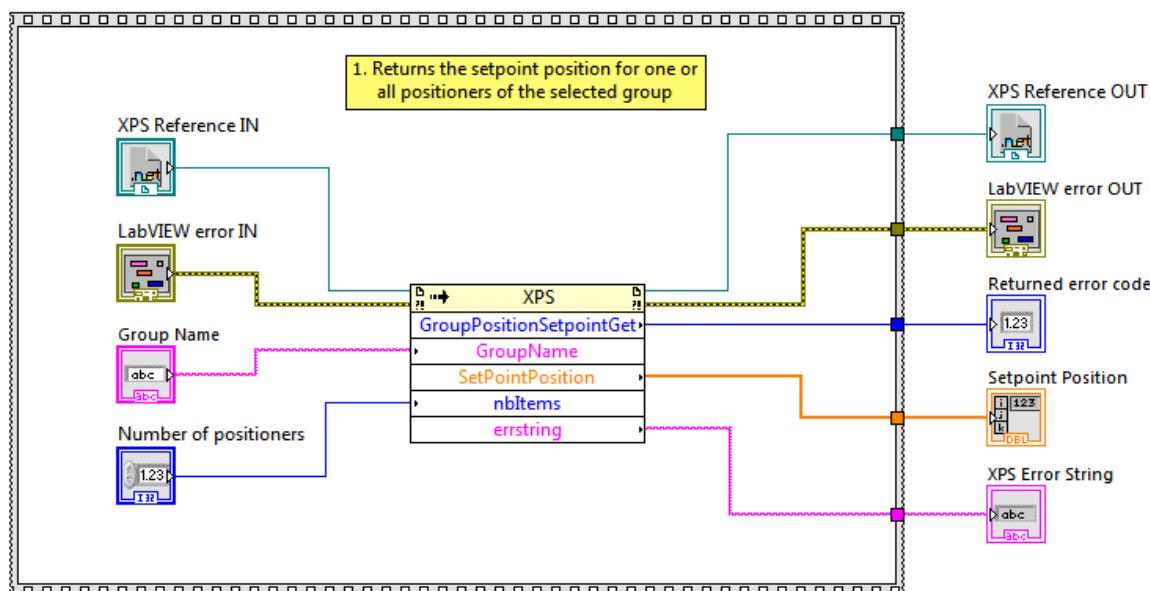
## 83. Group Position Set point Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the setpoint position for one or all positioners of the selected group.

### Screenshot



**net**

**net**

**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**I32**

**net**

**Group Name** group name

 **Number of Positioners** Number of positioners in the selected group



 **XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



 **Returned Error Code** Returns function error code

 **Setpoint Position** Setpoint position

 **XPS Error String** return error string from VI

## 84. Group Position Target Get VI

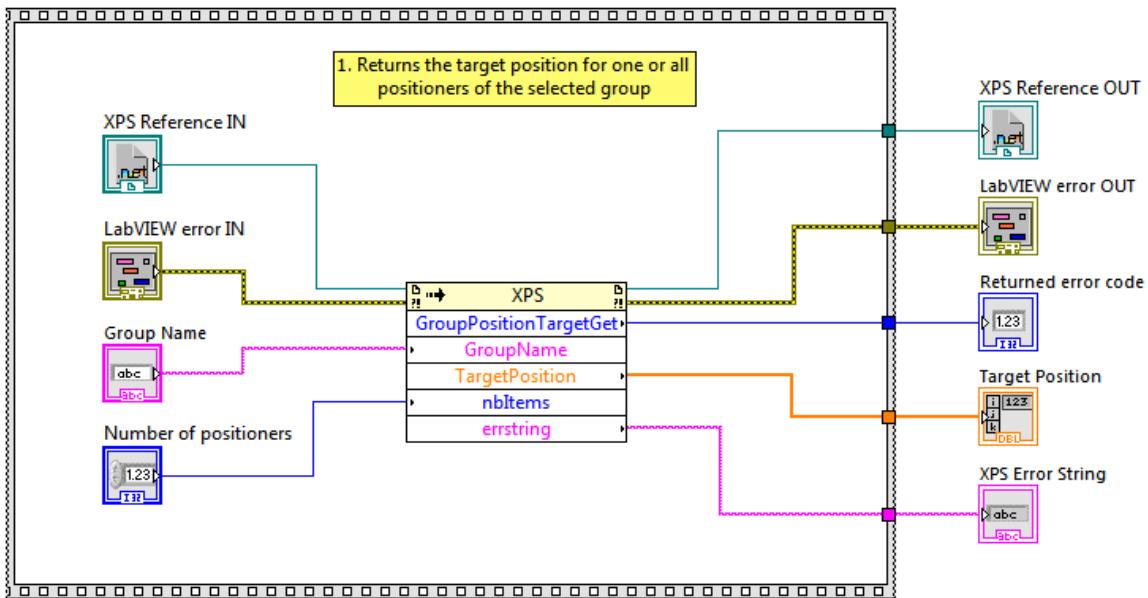
**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the target position for one or all positioners of the selected group.

### Screenshot





**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group name

**Number of Positioners** Number of positioners in the selected group

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Target Position** Target position

**XPS Error String** return error string from VI

abc

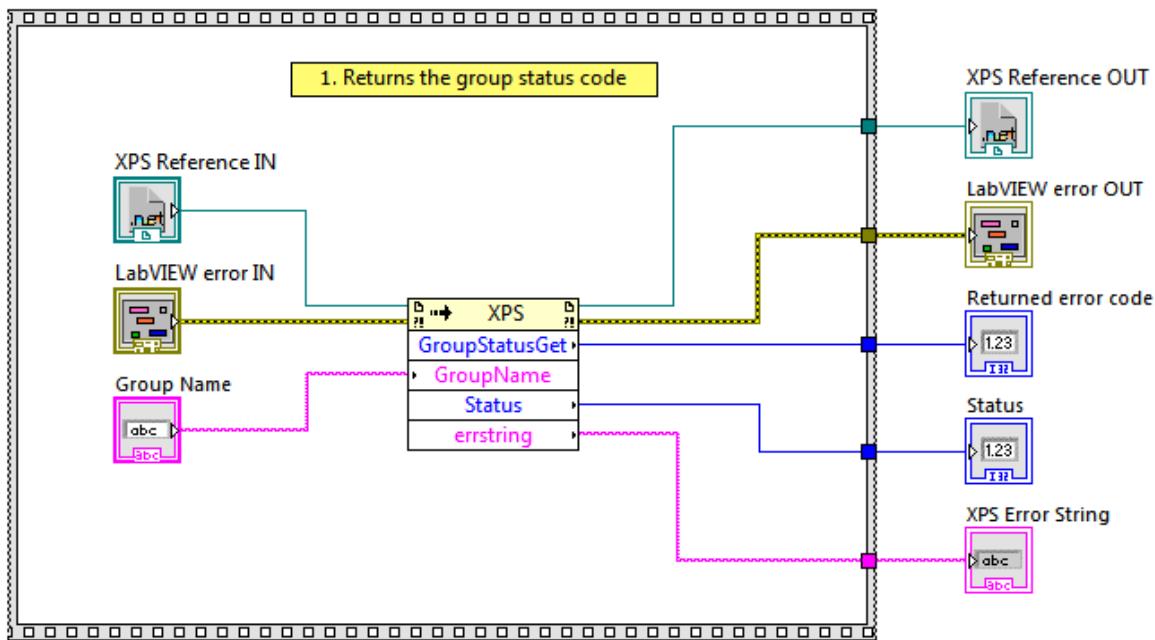
## 85. Group Status Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the group status code.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Status** Status of the group

**XPS Error String** return error string from VI

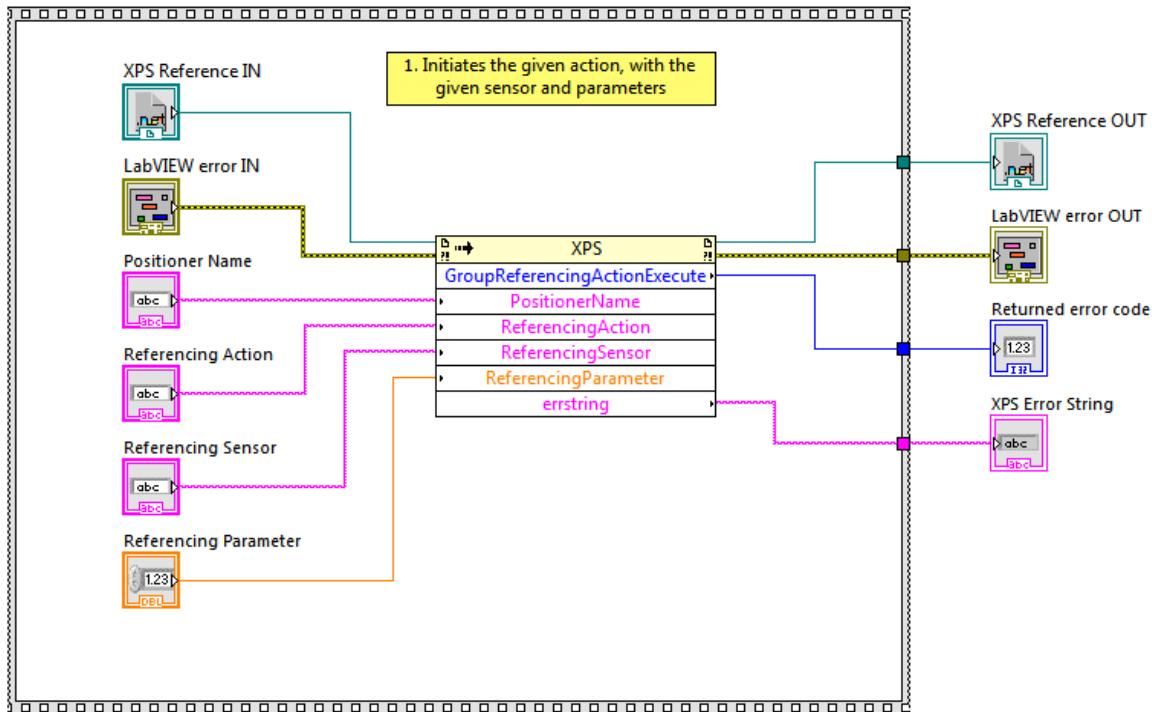
## 86. Group Referencing Action Execute VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Initiates the given action, with the given sensor and parameters.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** Positioner name

**Referencing Action** Referencing action

**Referencing Sensor** Referencing sensor

**Referencing Parameter** Referencing parameter

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

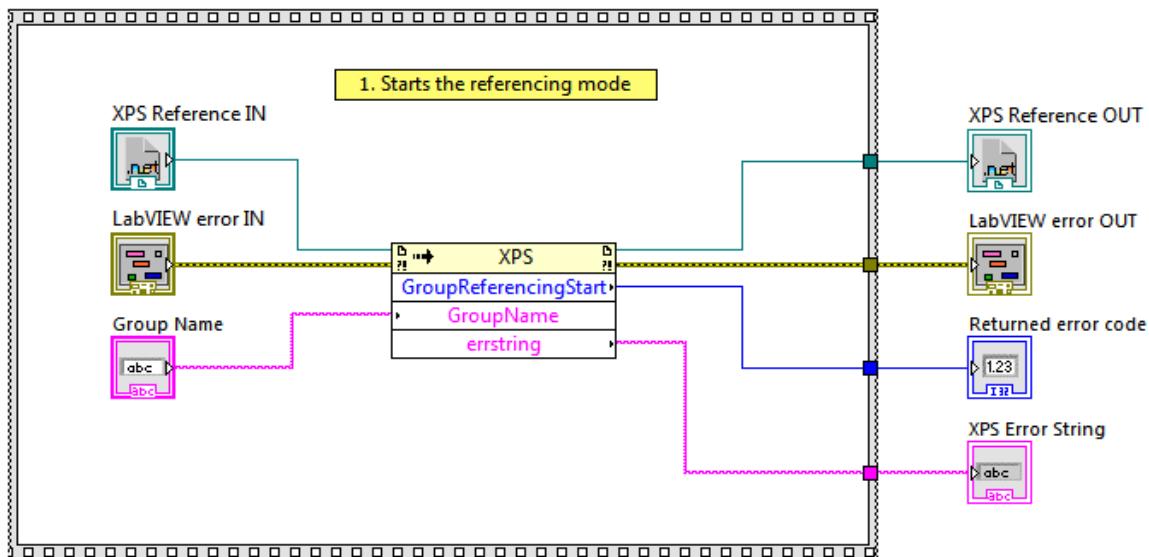
## 87. Group Referencing Start VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Starts the referencing mode.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** Single Axis group name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

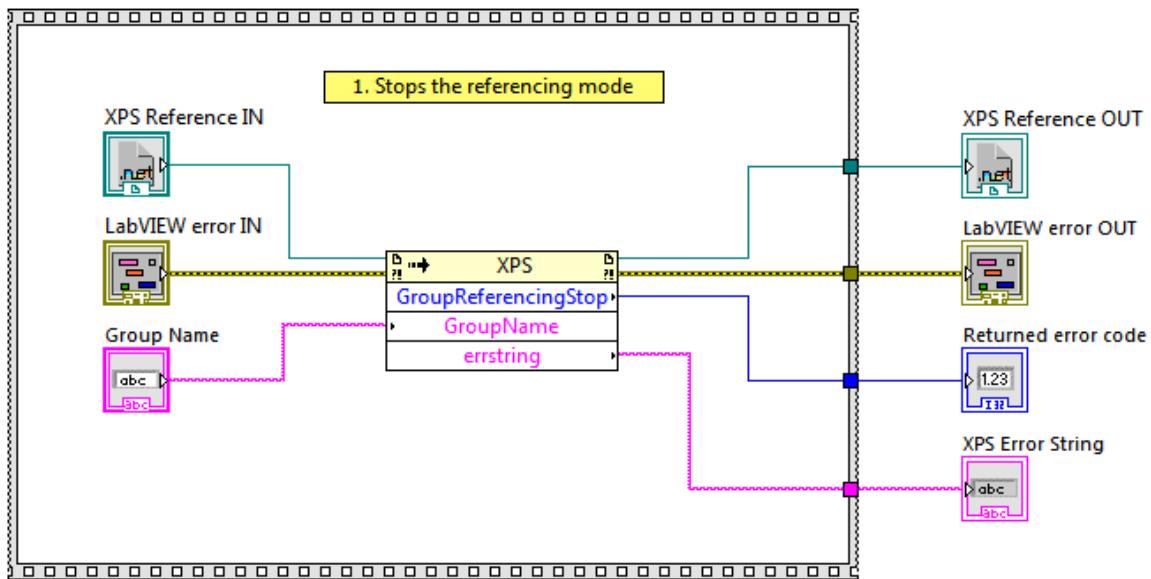
## 88. Group Referencing Stop VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Stops the referencing mode.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** Single Axis group name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

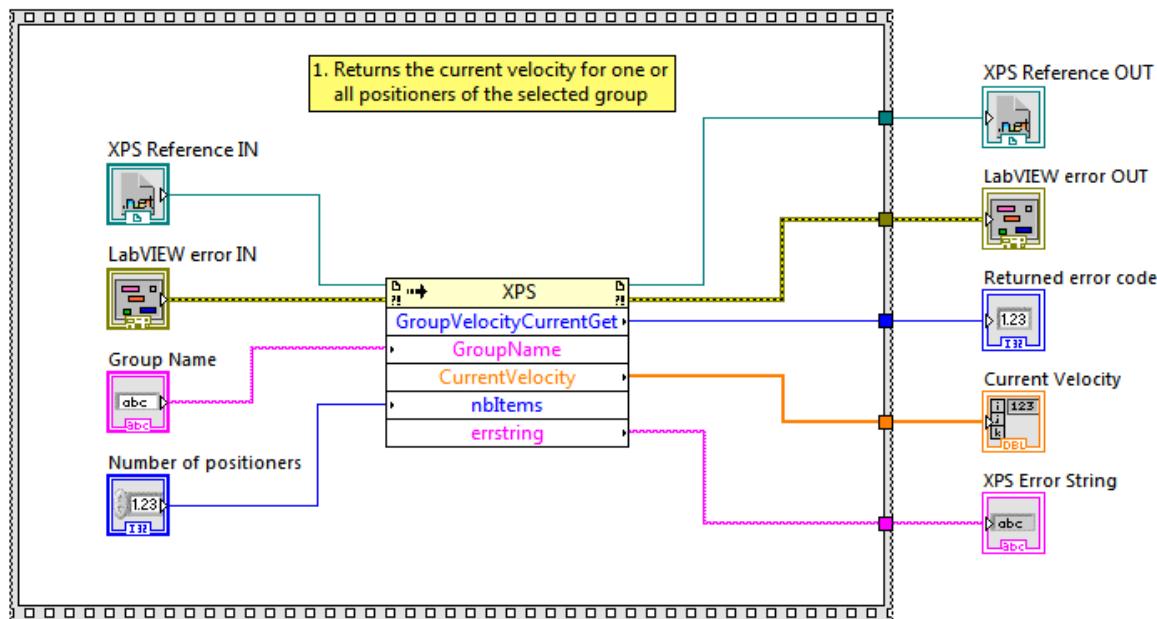
## 89. Group Velocity Current Get VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Returns the current velocity for one or all positioners of the selected group.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group name

**Number of Positioners** Number of positioners in the selected group

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Current Velocity** Current velocity array

**XPS Error String** return error string from VI

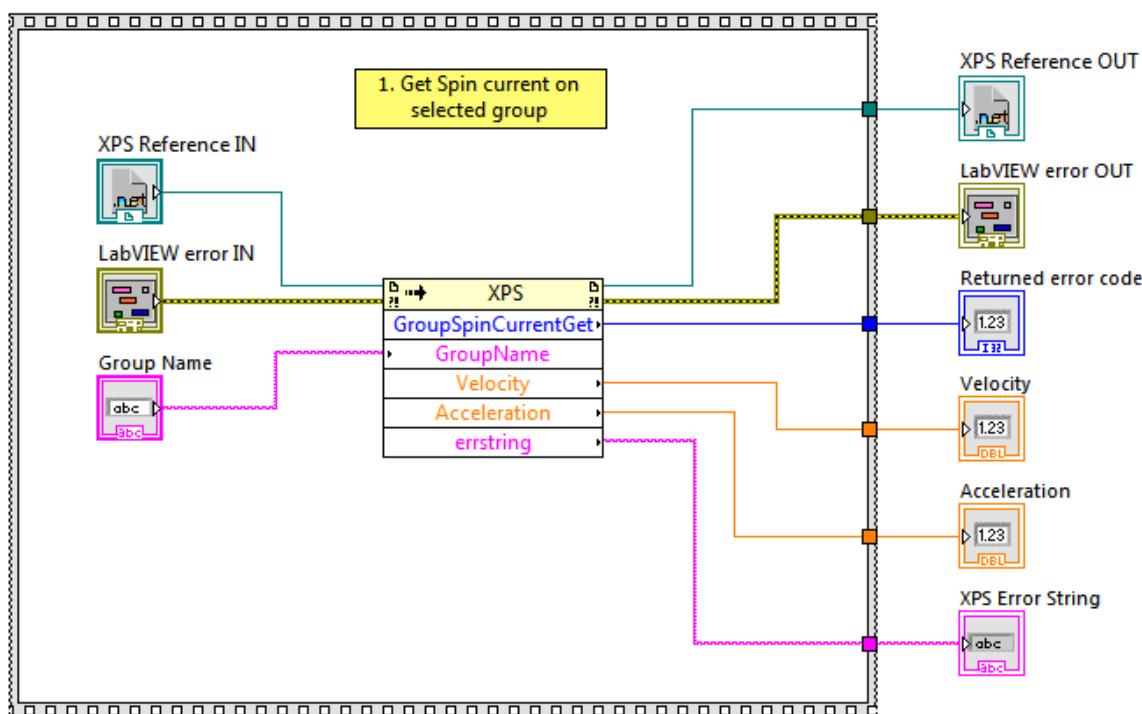
## 90. Group Spin Current Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the spin mode parameters.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** group name



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out



Velocity



Acceleration



XPS Error String

functionality.

**Returned Error Code** Returns function error code

**Velocity** Velocity (units/s)

**Acceleration** Acceleration (units/s<sup>2</sup>)

**XPS Error String** return error string from VI

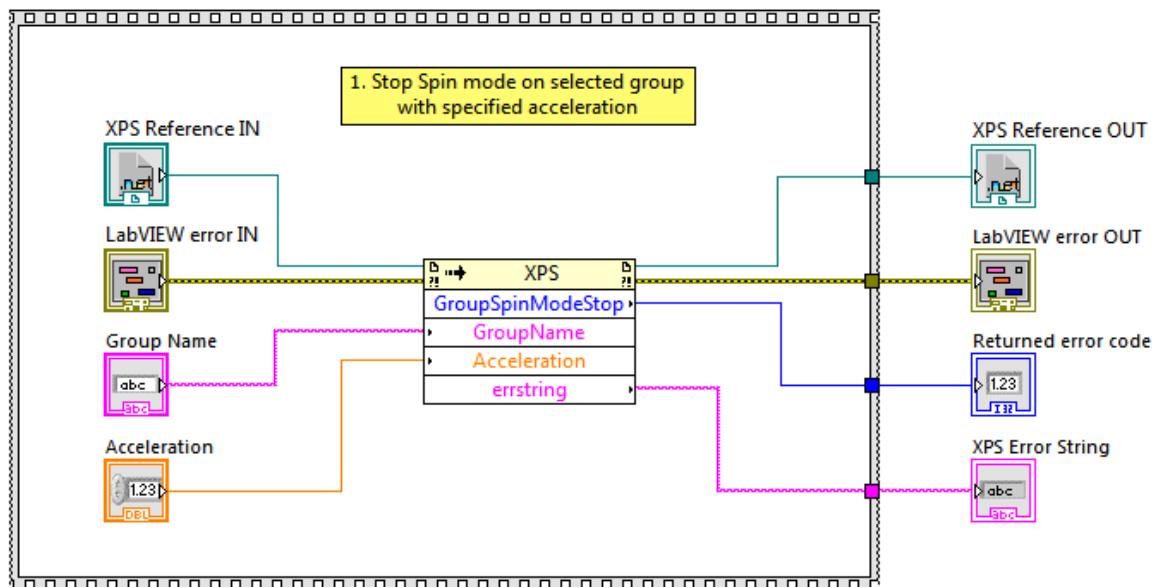
## 91. Group Spine Mode Stop VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Stops the motion of the spindle group.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** Group name

**Acceleration** Acceleration

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI



## 92. Group Spin Parameters Get VI



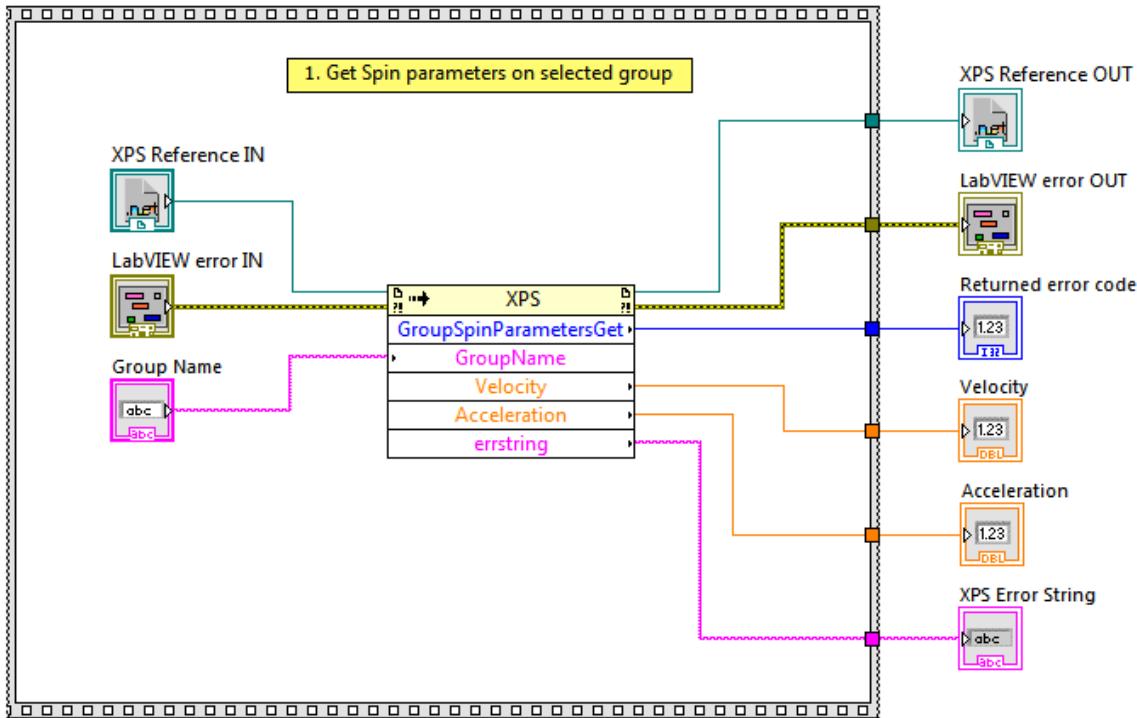
**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the spin profiler parameters.

### Screenshot





**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Velocity** Velocity (units/s)

**Acceleration** Acceleration (units/s<sup>2</sup>)

**XPS Error String** return error string from VI



## 93. Group Spin Parameters Set VI

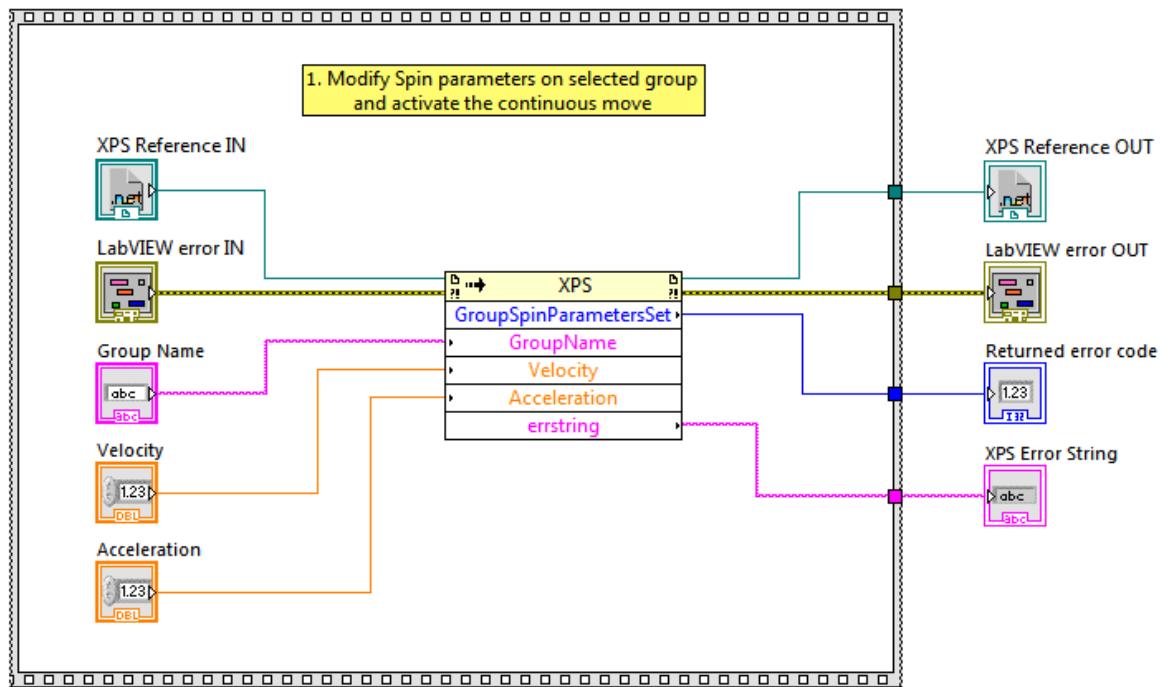
**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System



Sets the spin profiler parameters.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** Group name

**Velocity** Velocity (units/s)

**Acceleration** Acceleration (units/s<sup>2</sup>)

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

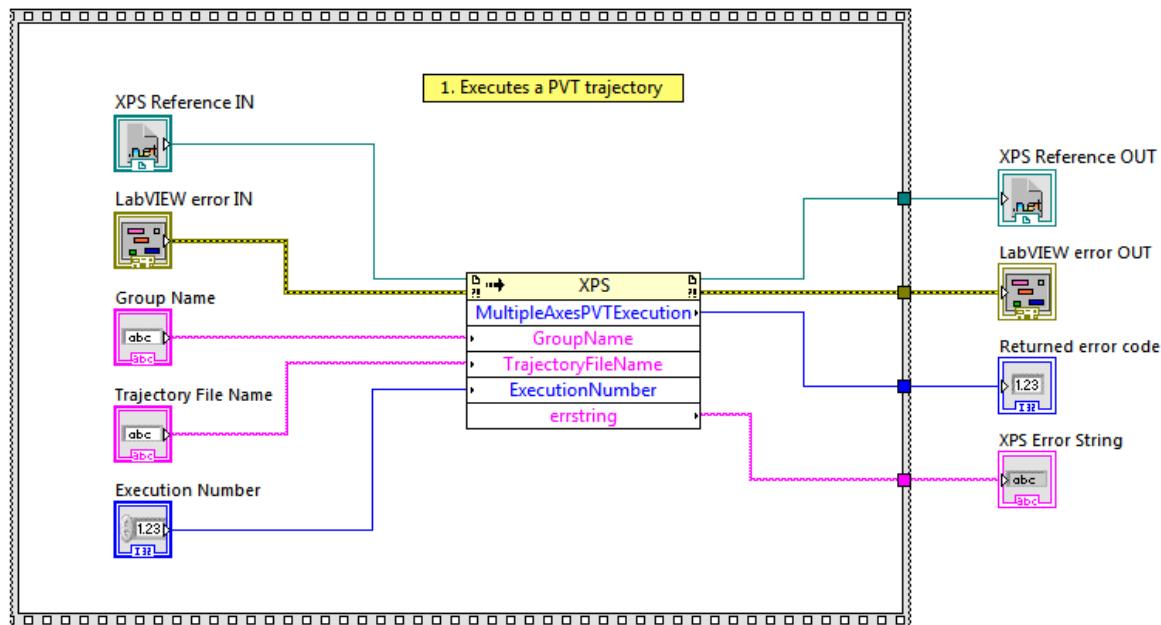
## 94. Multiple Axes PVT Execution VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Executes a PVT trajectory

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group name

**Trajectory File Name** Trajectory file name

**Execution Number** Number of trajectory executions

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

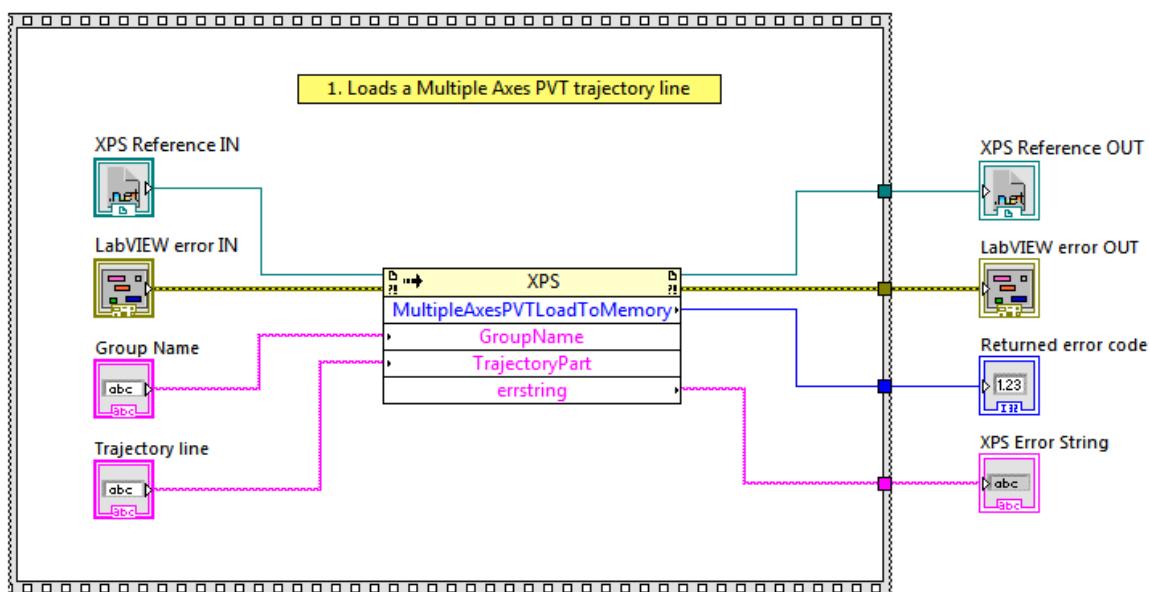
## 95. Multiple Axes PVT Load To Memory VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Loads a Multiple Axes PVT trajectory line.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** group name



**Trajectory line** Trajectory line



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

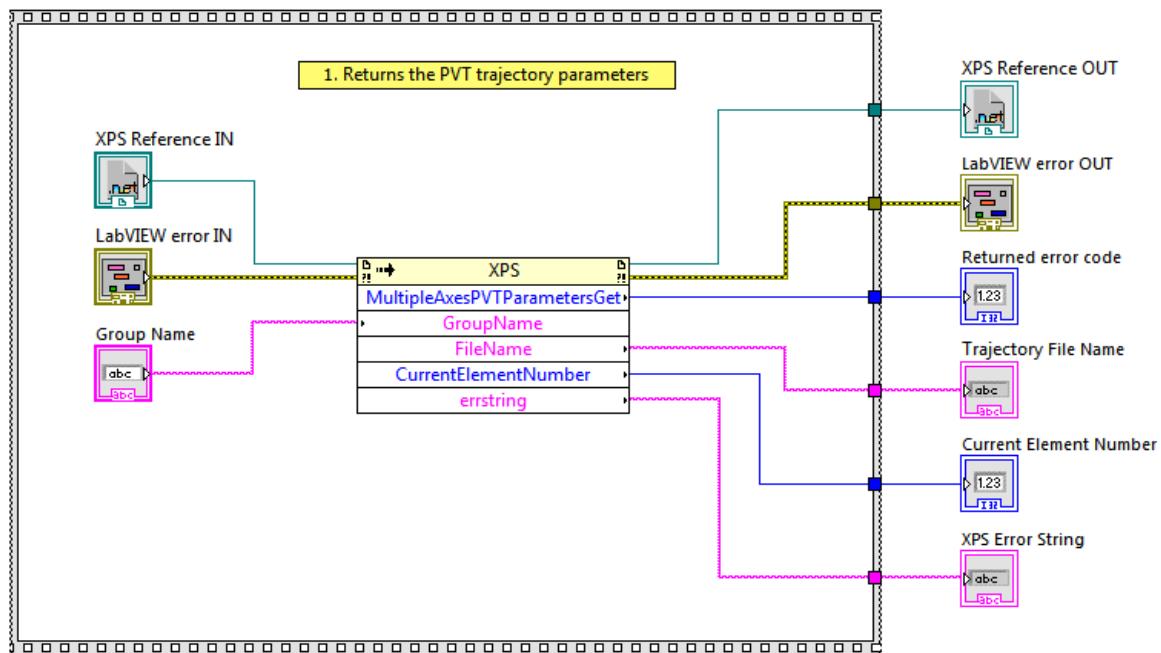
## 96. Multiple Axes PVT Parameters Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the PVT trajectory parameters.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** group name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Trajectory File Name** Executing trajectory file name

**Current Element Number** Current executing element number

**XPS Error String** return error string from VI

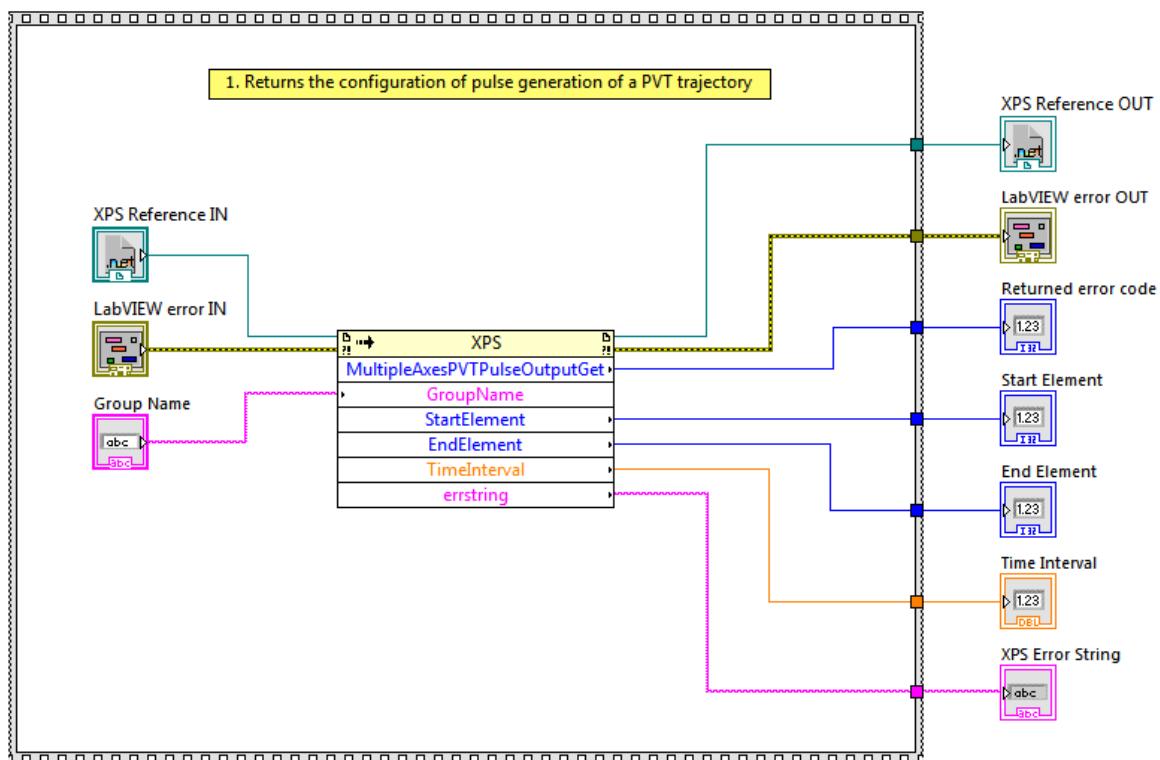
## 97. Multiple Axes PVT Pulse Output Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the configuration of pulse generation of a PVT trajectory.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Start Element** Start element number

**End Element** End element number

**Time Interval** Time interval in seconds

**XPS Error String** return error string from VI



## 98. Multiple Axes PVT Pulse Output Set VI



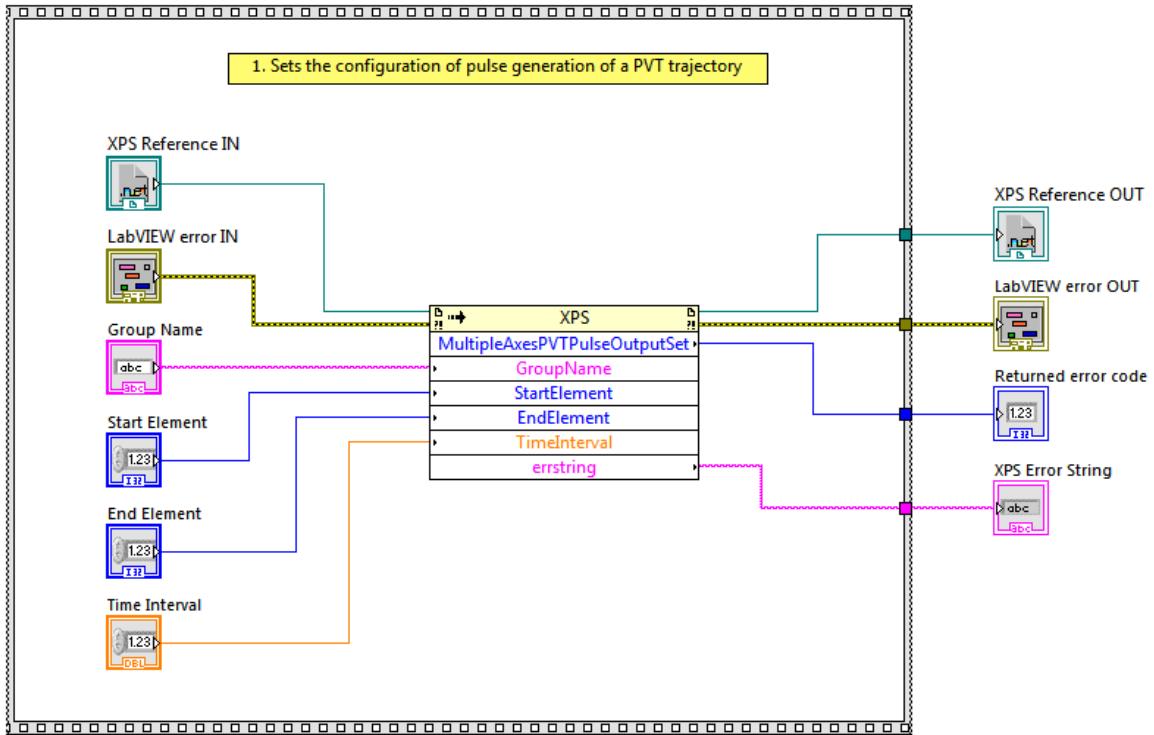
**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the configuration of pulse generation of a PVT trajectory.

**Screenshot**





**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** Multiple axes group name

**Start Element** Start Element number

**End Element** End Element number

**Time Interval** Time interval in seconds

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

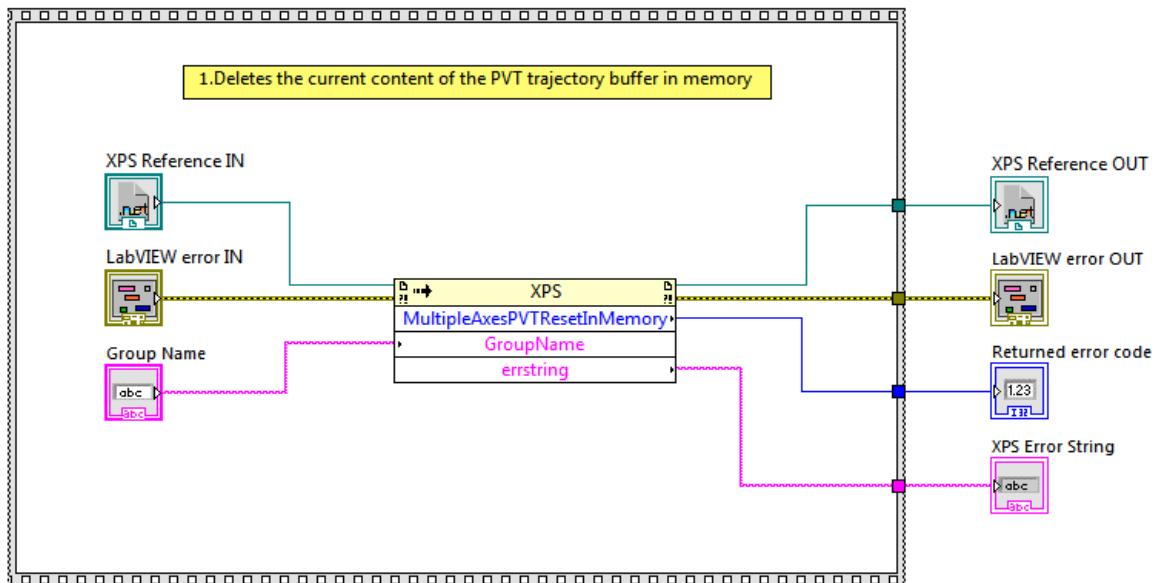
## 99. Multiple Axes PVT Reset In Memory VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Deletes the current content of the PVT trajectory buffer in memory.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** Single Axis group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

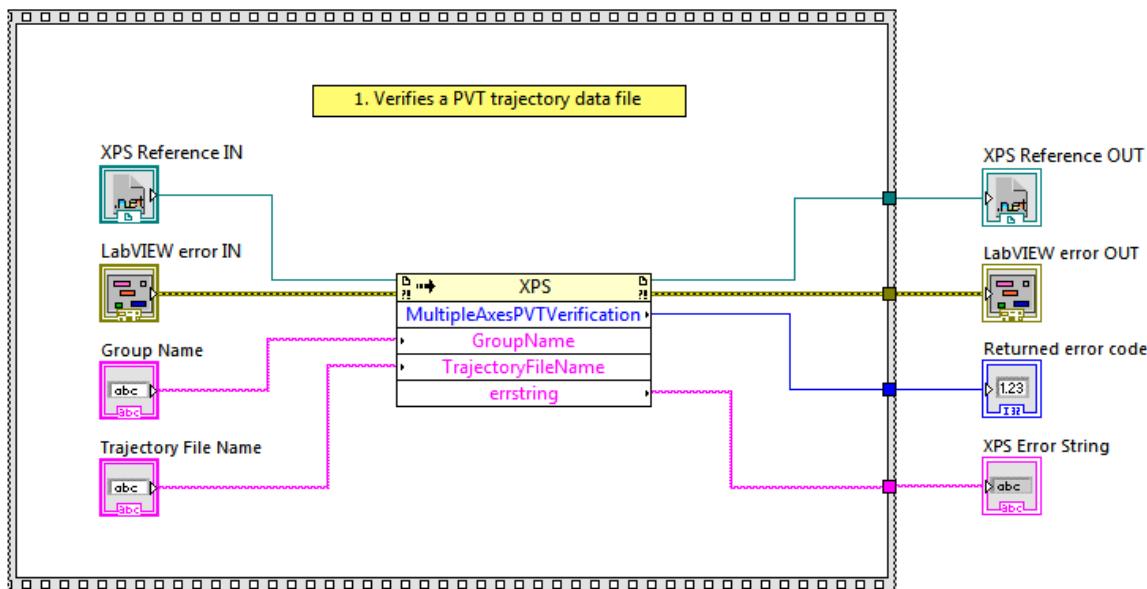
## 100. Multiple Axes PVT Verification VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Verifies a PVT trajectory data file.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** Multiple Axes group name



**Trajectory File Name** Trajectory file name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

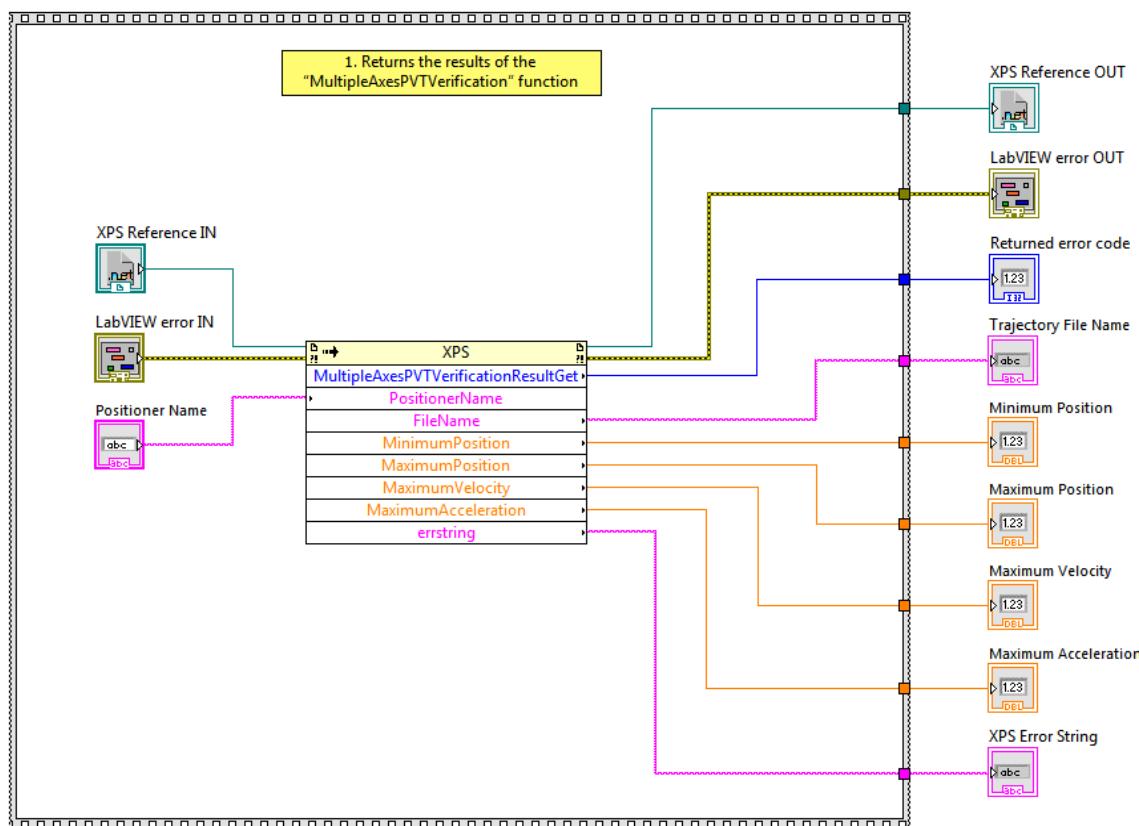
## 101. Multiple Axes PVT Verification Result Get VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Returns the results of the “MultipleAxesPVTVerification” function.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** Multiple Axes positioner name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**Trajectory File Name** Examined trajectory file name (maximum size = 250)

**Minimum Position** Acceleration position (units)

**Maximum Position** Maximum position (units)

**Maximum Velocity** Maximum trajectory velocity (units/seconds)

**Maximum Acceleration** Maximum trajectory acceleration (units/seconds<sup>2</sup>)

**XPS Error String** return error string from VI

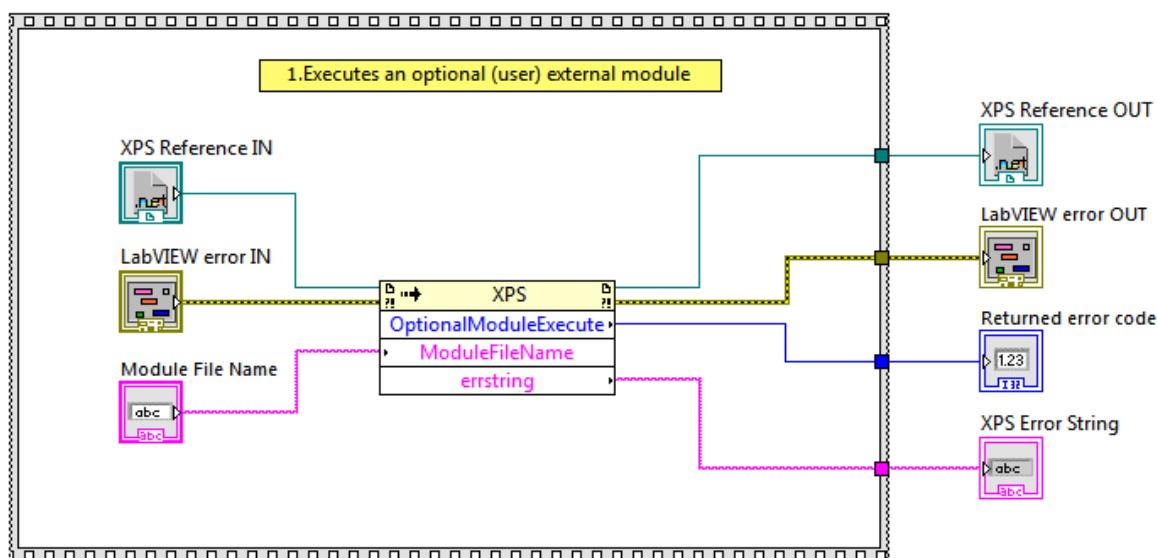
## 102. Optional Module Execute VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Executes an optional (user) external module.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Module File Name** Module file name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

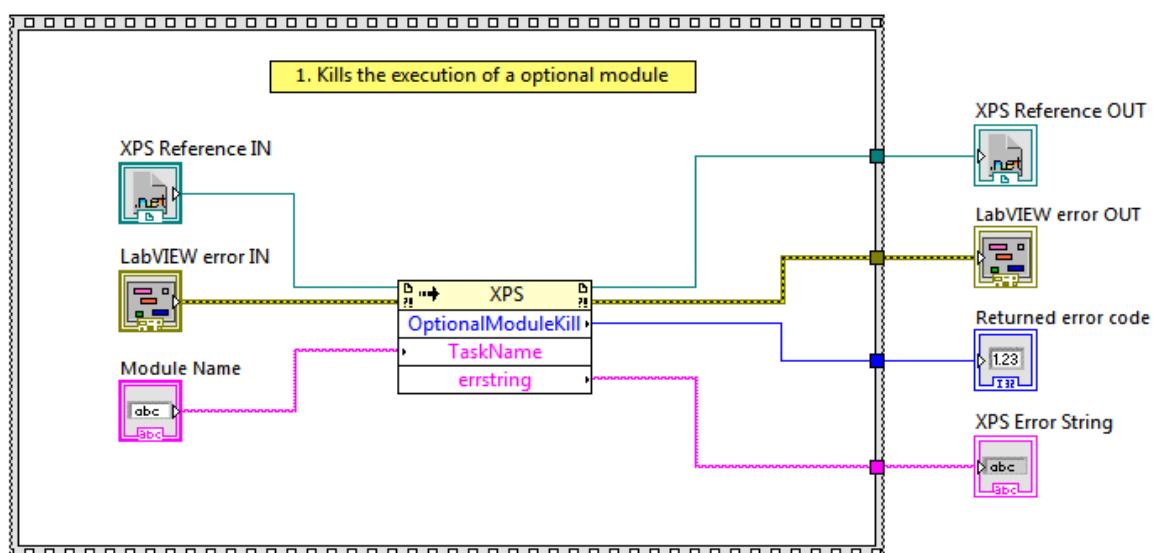
## 103. Optional Module Kill VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Kills the execution of an optional module.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input



provides standard error in functionality.

**Module File Name** Module file name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

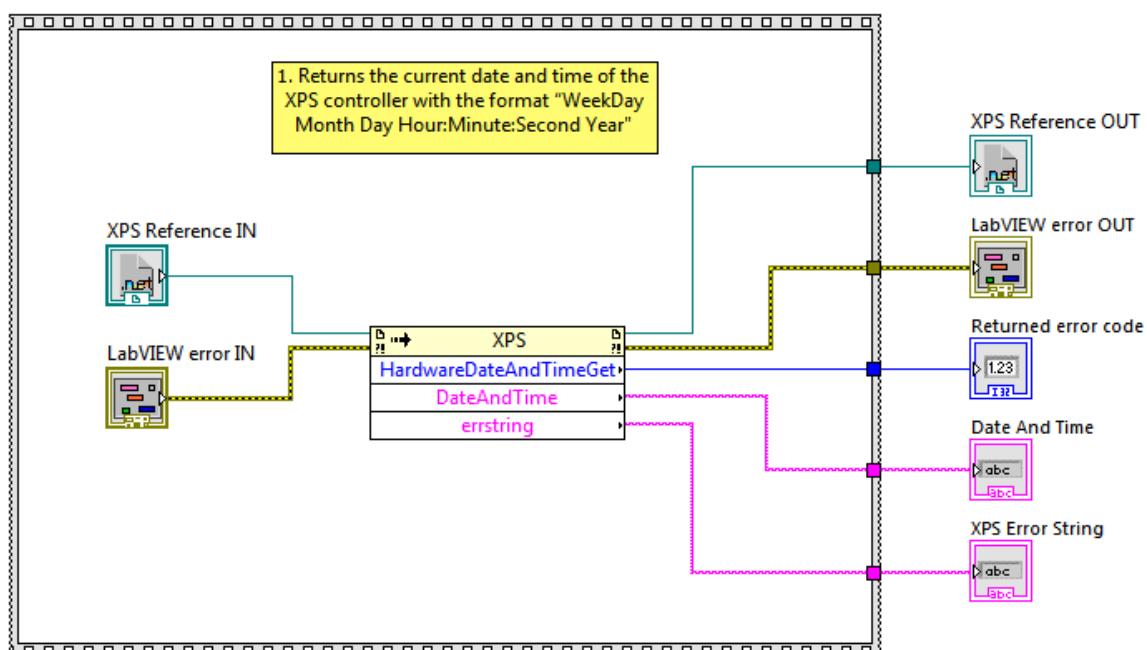
## 104. Hardware Date And Time Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the current date and time.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Date And Time** controller date and time

**XPS Error String** return error string from VI

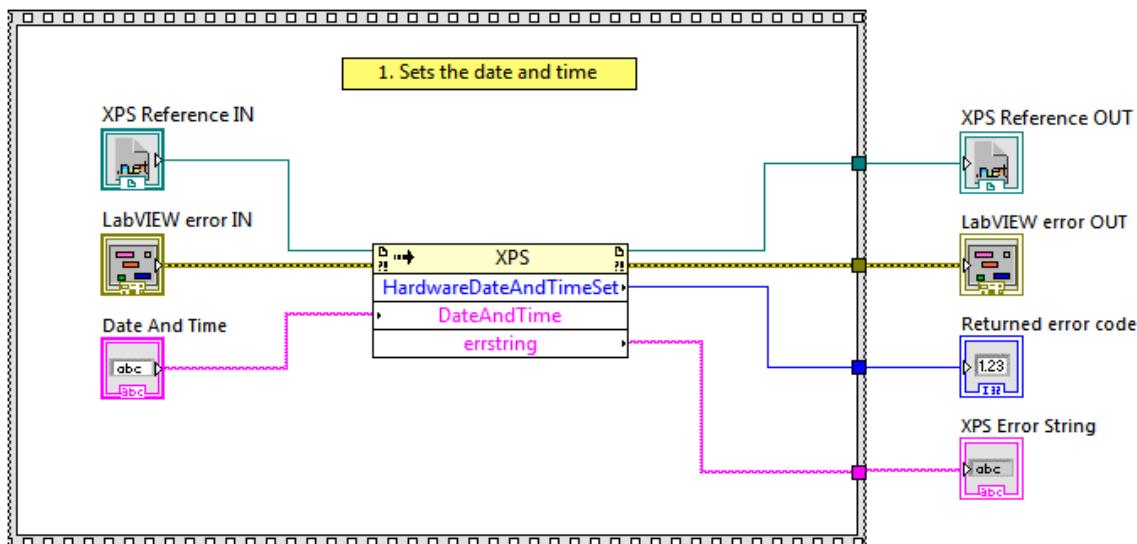
## 105. Hardware Date And Time Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the date and time.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Date And Time** Controller date and time

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

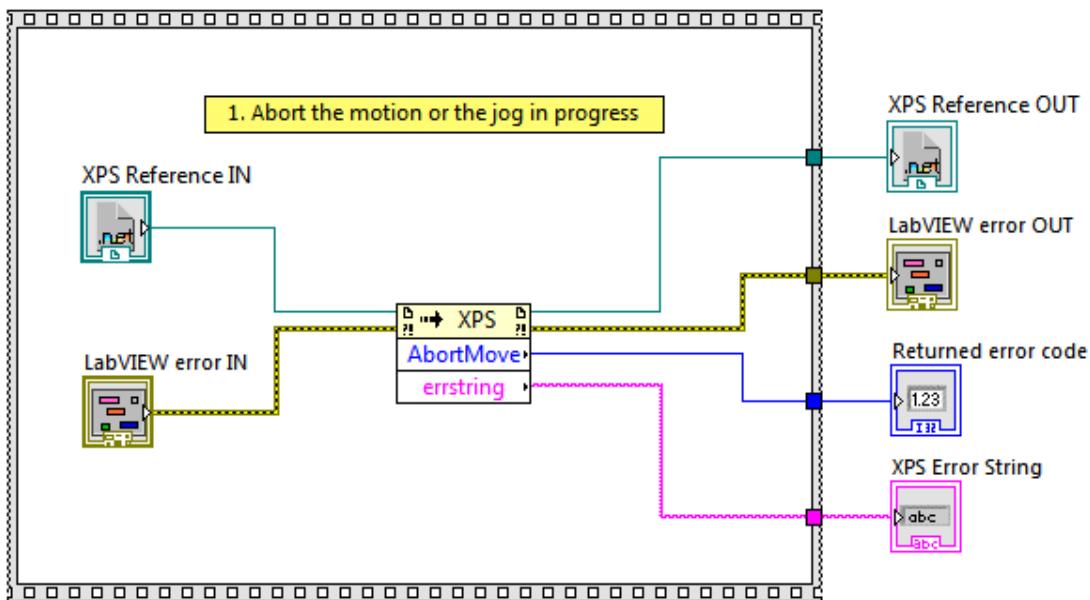
## 106. Abort Move VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Abort the motion or the jog in progress for the XY group.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

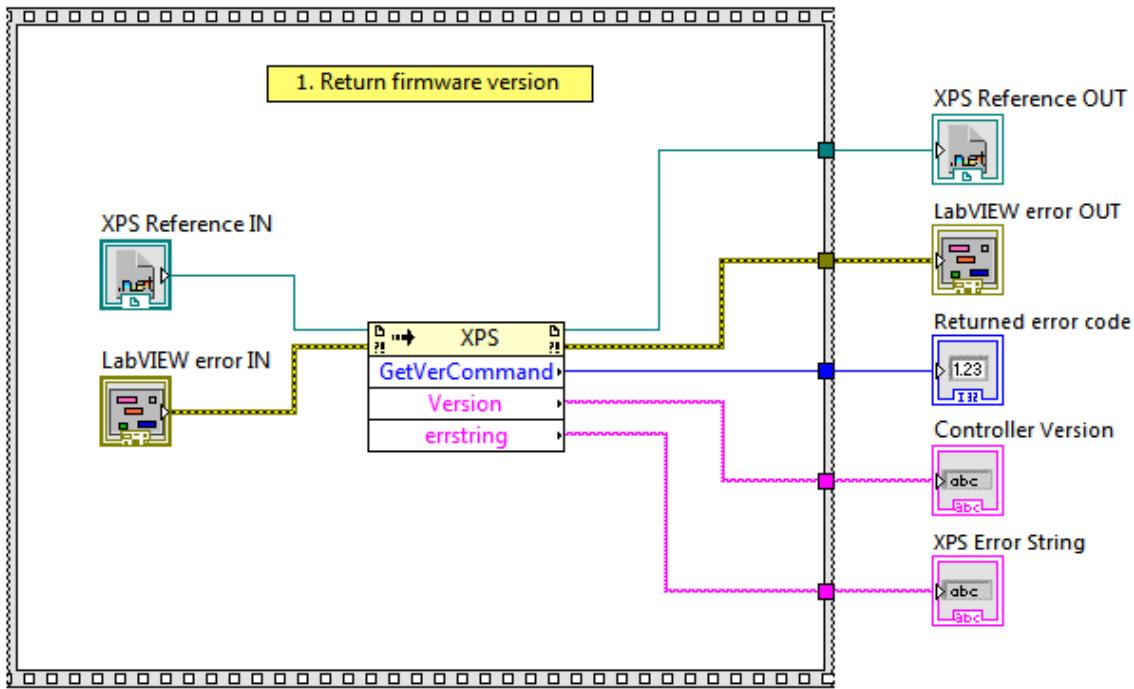
## 107. Get Version Command VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns firmware version.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Controller Version** Controller version

**XPS Error String** return error string from VI

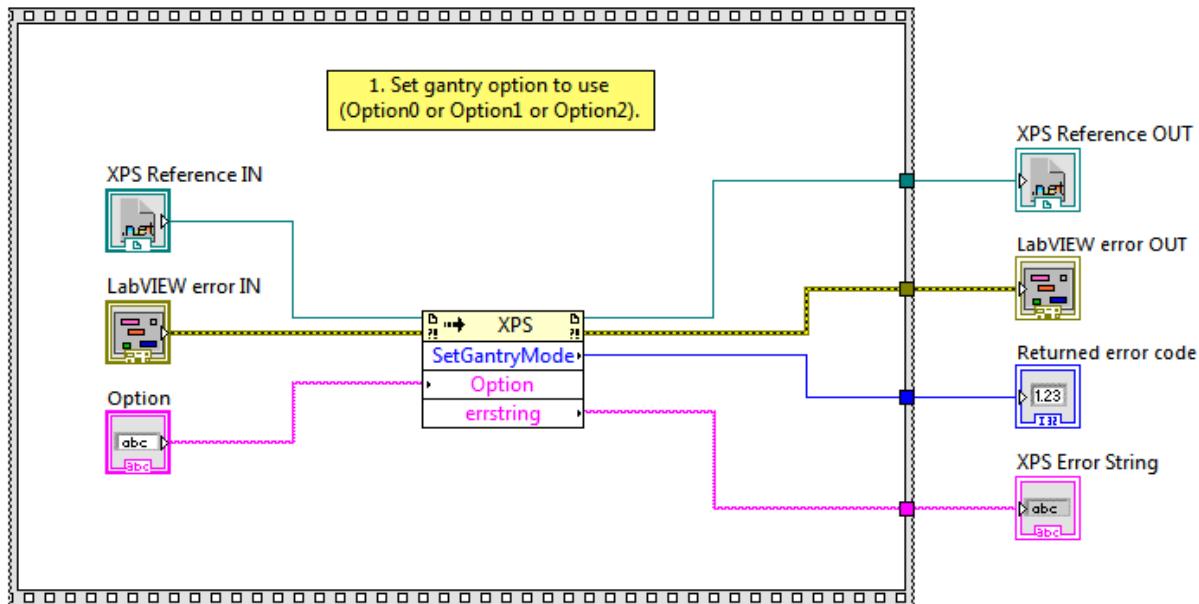
## 108. Set Gantry Mode VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set gantry option to use (Option0 or Option1 or Option2).

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Option** Option selection ("Option0", "Option1" or "Option2")



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

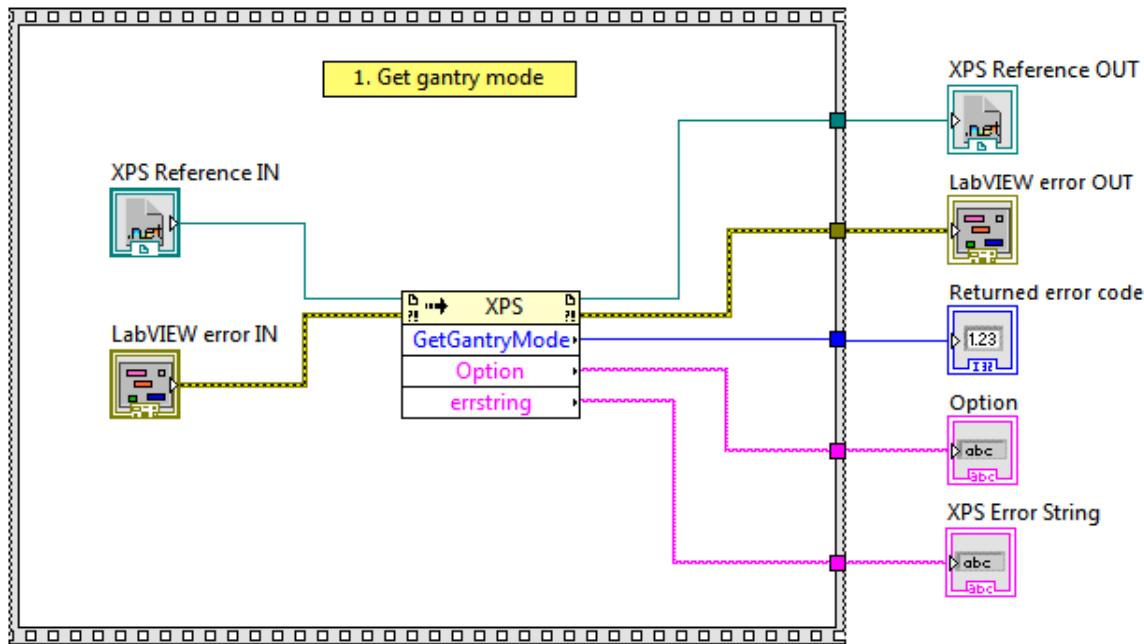
## 109. Get Gantry Mode VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get current gantry option (Option0 or Option1 or Option2).

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Option** Option selection ("Option0", "Option1" or "Option2")

**XPS Error String** return error string from VI

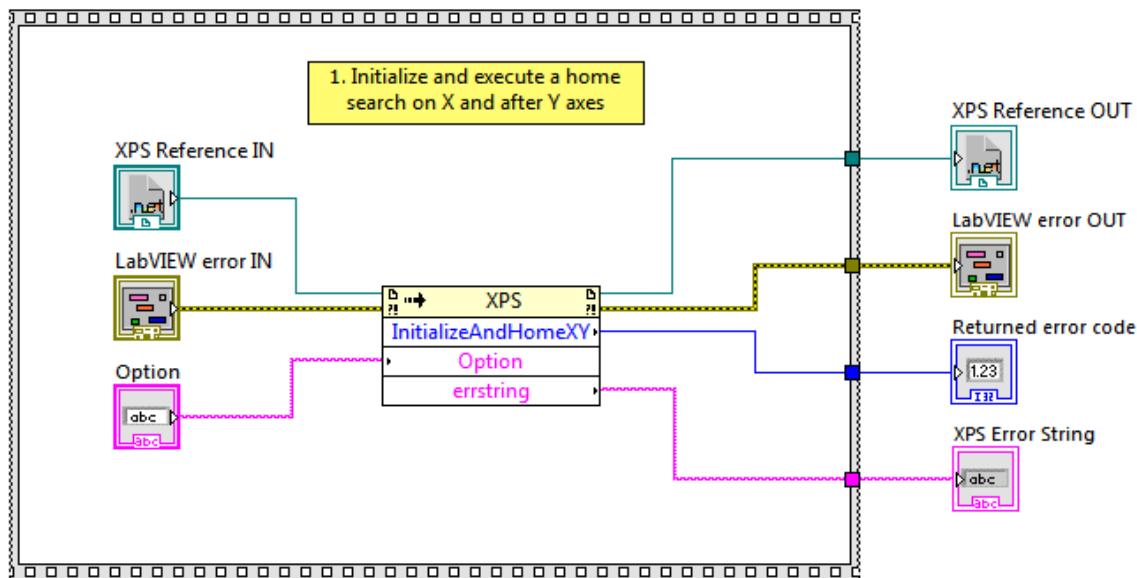
## 110. Initialize And Home XY VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Initialize and execute a home search on X and after Y axes.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Option** Option selection (“Option0”, “Option1” or “Option2”)

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

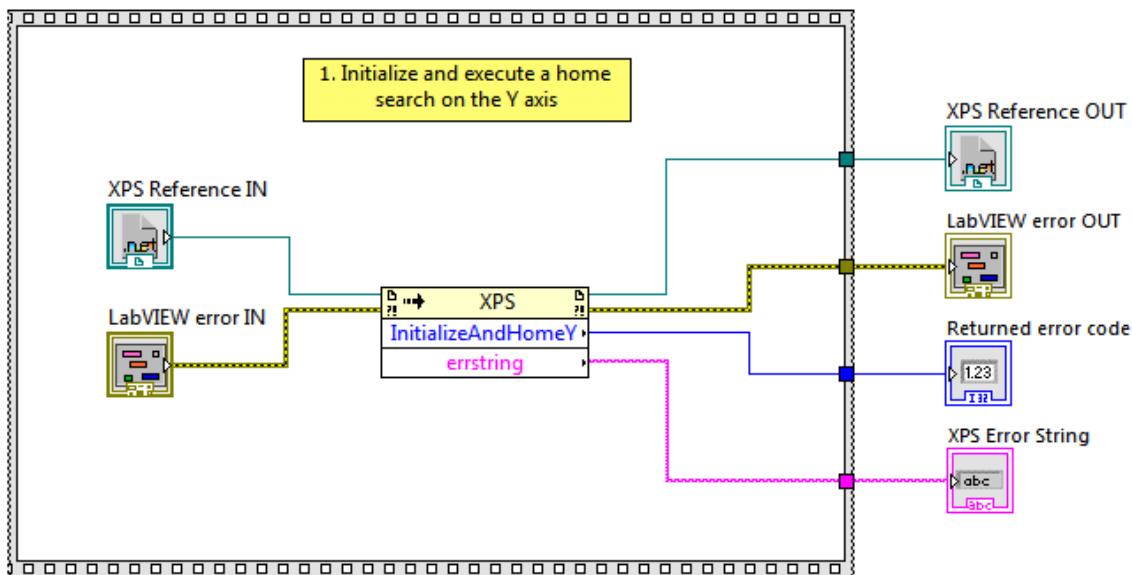
## 111. Initialize And Home Y VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Initialize and execute a home search on the Y axis.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

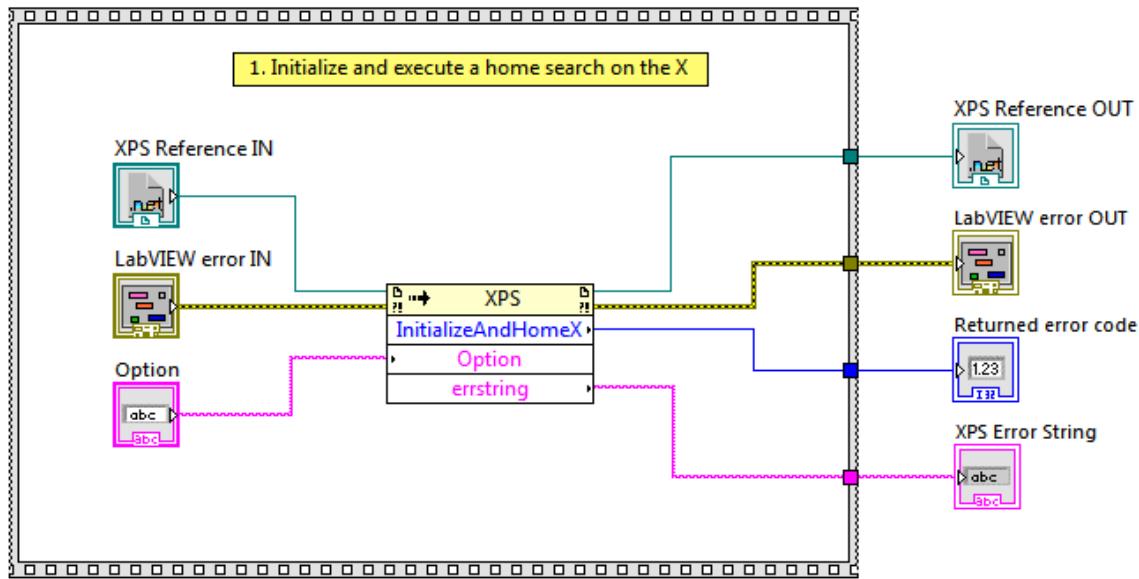
## 112. Initialize And Home X VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Initialize and execute a home search on the X axis.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Option** Option selection ("Option0", "Option1" or "Option2")



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI



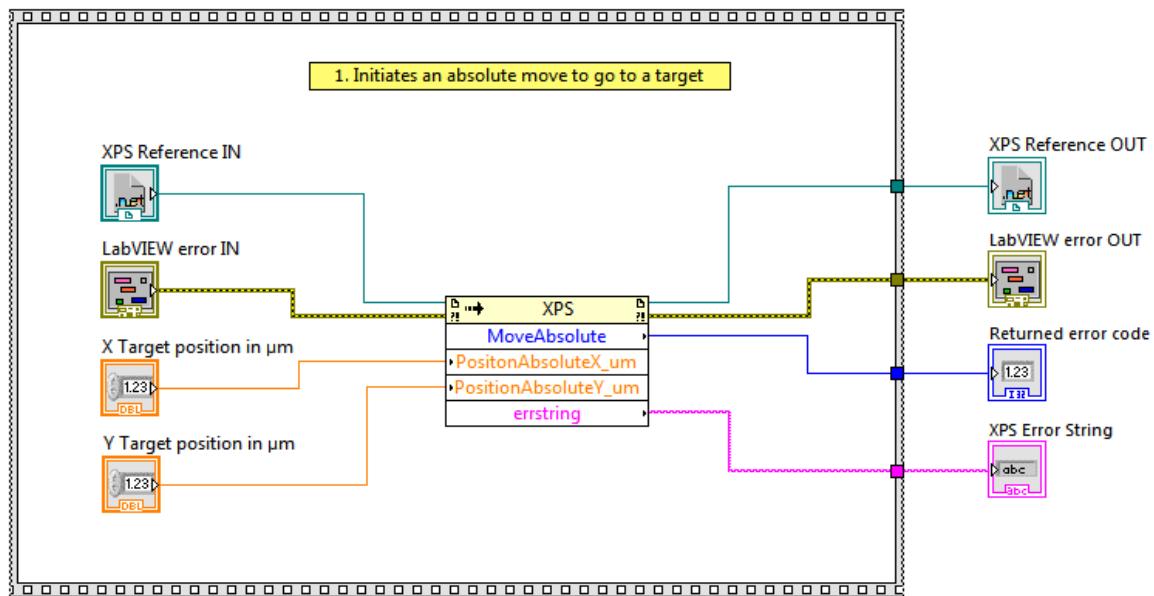
## 113. Move Absolute VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Initiates an absolute move to go to a target position for a XY group.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**X Target position in μm** X Target position in μm

**Y Target position in μm** Y Target position in μm

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

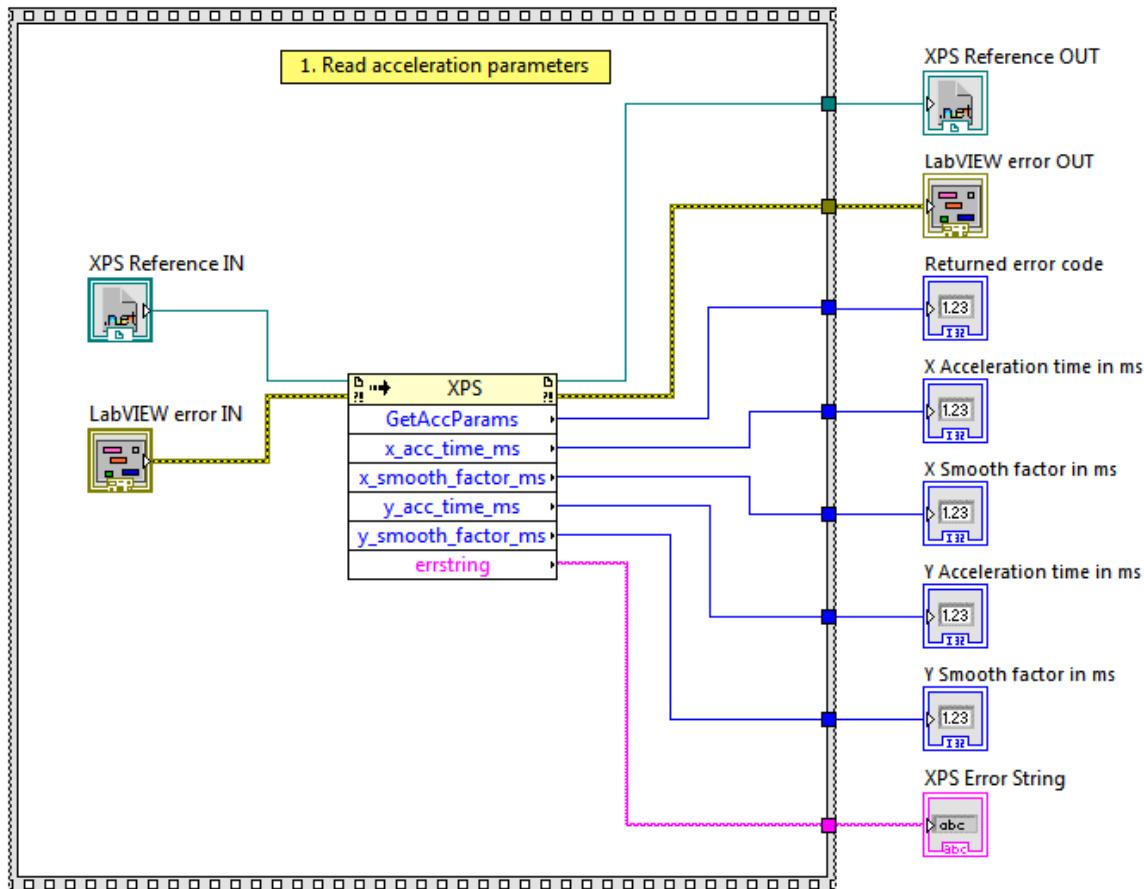
## 114. Get Acceleration Params VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get acceleration parameters for X and Y axes.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**X Target position in  $\mu\text{m}$**  X Target position in  $\mu\text{m}$



**Y Target position in  $\mu\text{m}$**  Y Target position in  $\mu\text{m}$



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**X Acceleration time in msec** X acceleration time in msec

**X Smooth factor in msec** X smooth factor in msec (jerk time)

**Y Acceleration time in msec** Y acceleration time in msec

**Y Smooth factor in msec** Y smooth factor in msec (jerk time)

**XPS Error String** return error string from VI

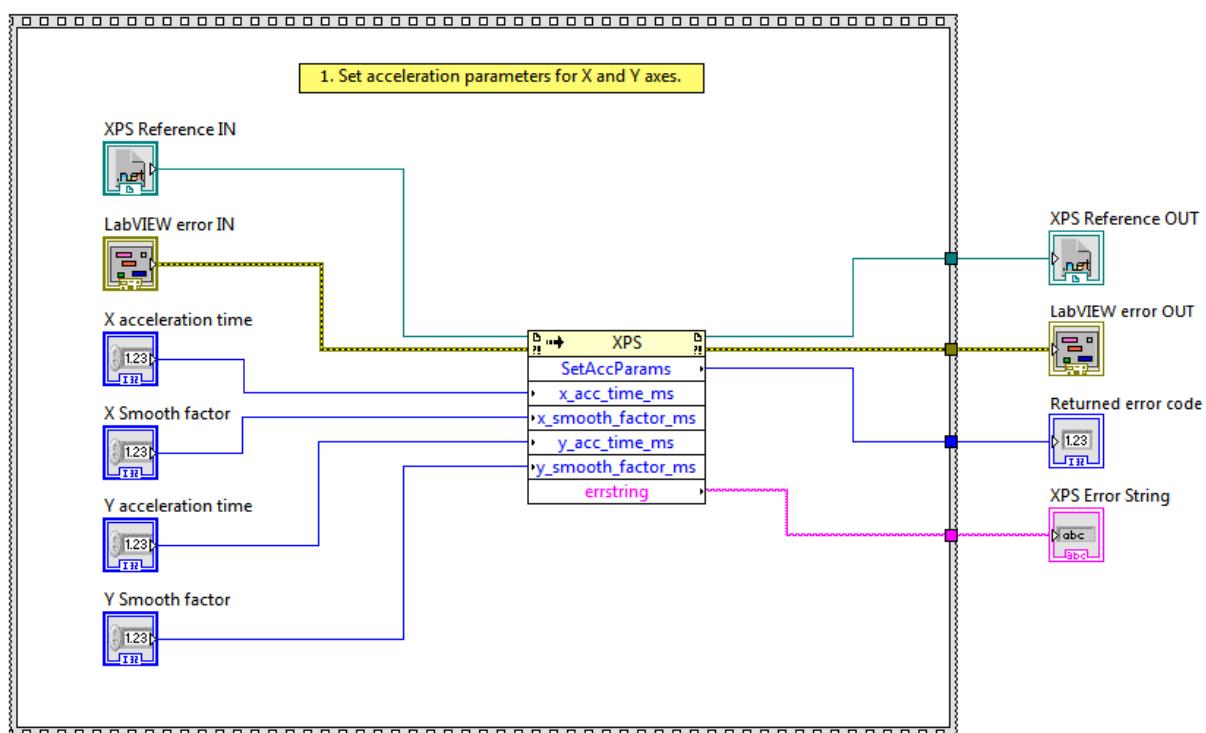
## 115. Set Acceleration Params VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets acceleration parameters for X and Y axes.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**X Acceleration time** X acceleration time in msec

**X Smooth factor** X Smooth factor in msec (jerk time)

**Y Acceleration time** Y acceleration time in msec

**Y Smooth factor** Y smooth factor in msec (jerk time)

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

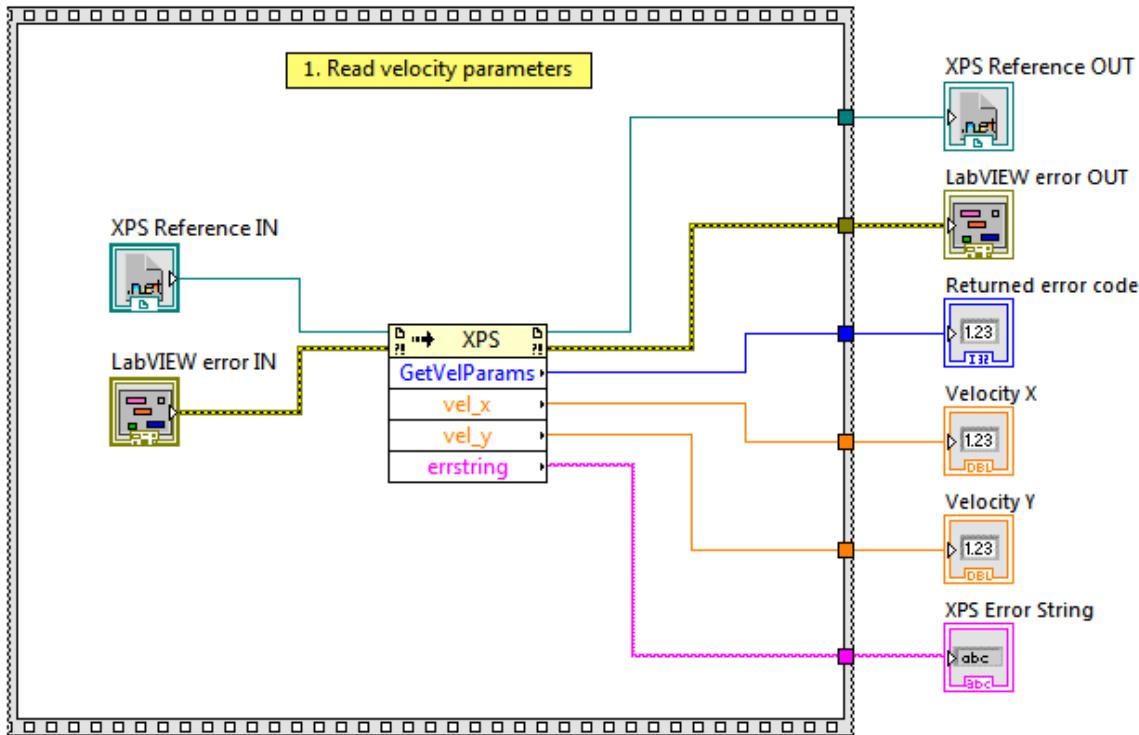
## 116. Get Velocity Params VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get current velocity for X and Y axes.

**Screenshot**



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Velocity X** X velocity in  $\mu\text{m}/\text{s}$



**Velocity Y** Y velocity in  $\mu\text{m}/\text{s}$

**XPS Error String** return error string from VI



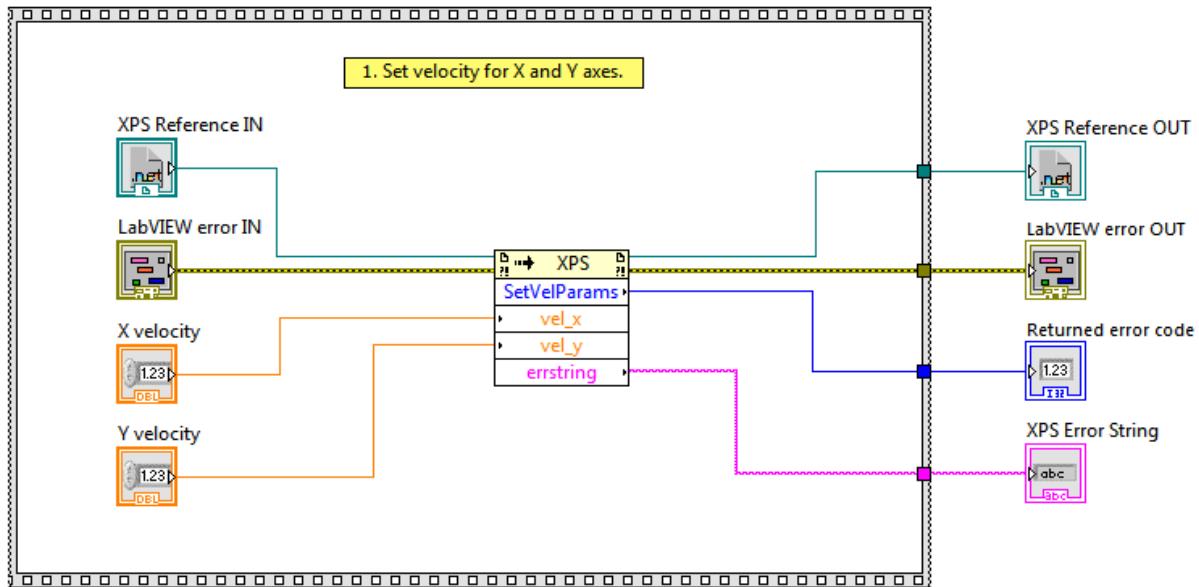
## 117. Set Velocity Params VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get current velocity for X and Y axes.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**X Velocity** X velocity in  $\mu\text{m}/\text{s}$

**Y Velocity** Y velocity in  $\mu\text{m}/\text{s}$

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**1.32 XPS Error String** return error string from VI

**DBL**

**abc**

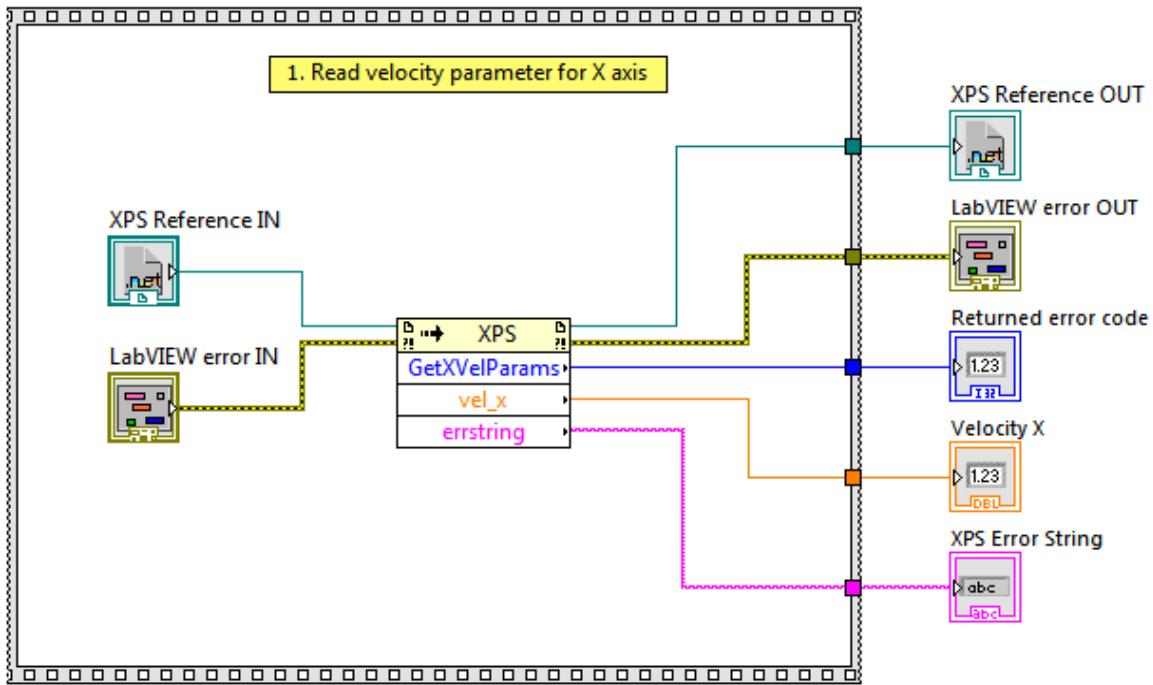
## 118. Get X Velocity Params VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get velocity for X axis.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Velocity X** X velocity in  $\mu\text{m}/\text{s}$

**XPS Error String** return error string from VI

abc

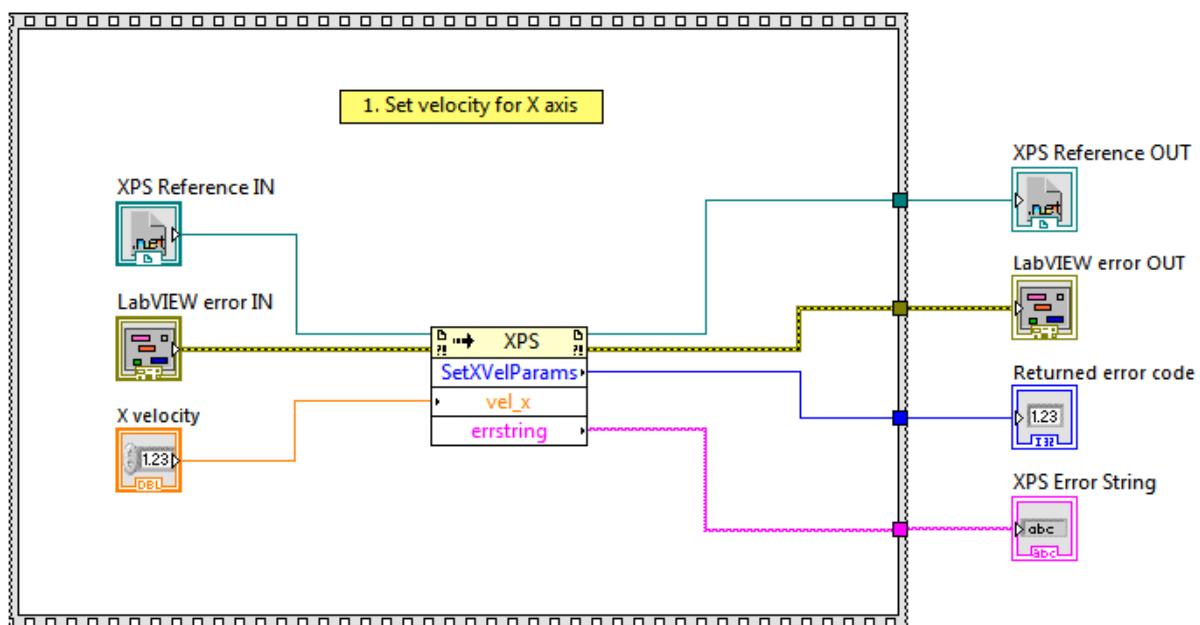
## 119. Set X Velocity Params VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set velocity for X axis.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**X Velocity** X velocity in  $\mu\text{m/s}$

**XPS Reference OUT** returns XPS reference

**NET** **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**132** **XPS Error String** return error string from VI



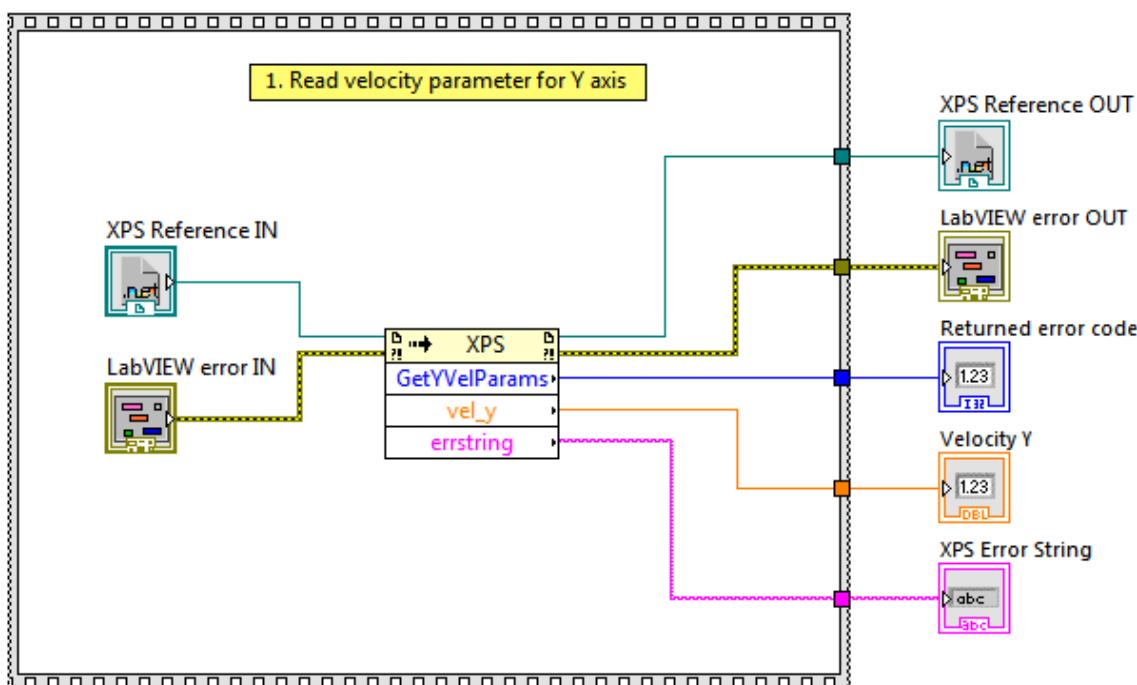
## 120. Get Y Velocity Params VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get velocity for Y axis.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code



**Velocity Y** Y velocity in  $\mu\text{m/s}$

**XPS Error String** return error string from VI

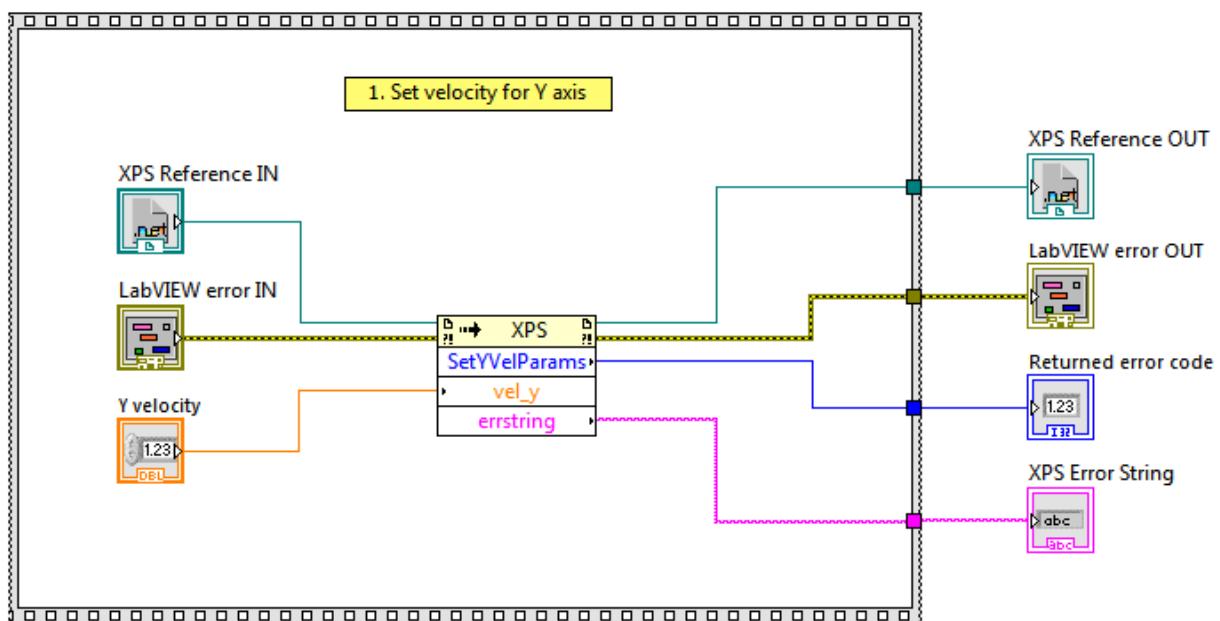
## 121. Set Y Velocity Params VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set velocity for Y axis.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Y Velocity** Y velocity in  $\mu\text{m/s}$

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

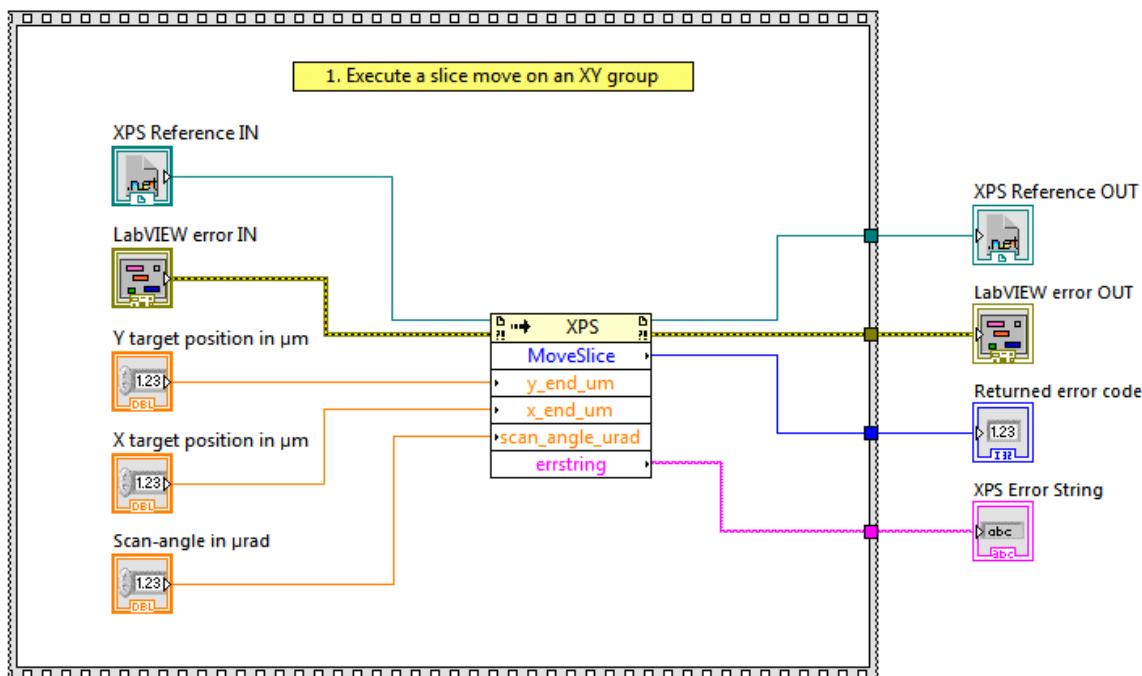
## 122. Move Slice VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Execute a slice move on an XY group.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Y target position in μm** Y target position in μm



**X target position in  $\mu\text{m}$**  X target position in  $\mu\text{m}$

**Scan-angle in  $\mu\text{rad}$**  scan-angle in  $\mu\text{rad}$

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

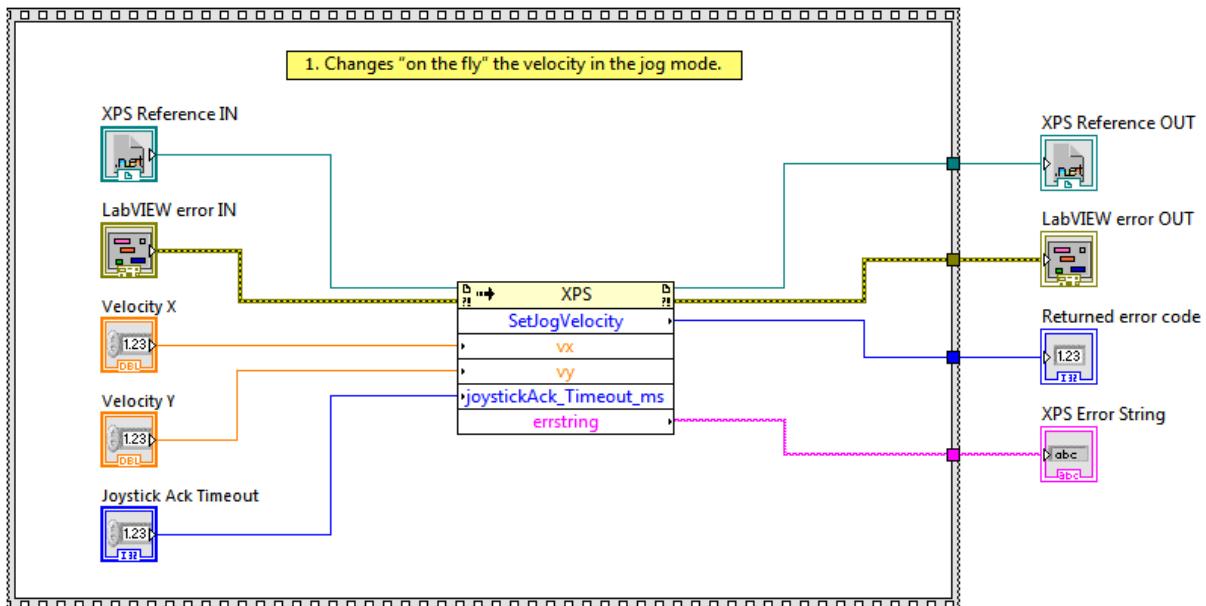
## 123. Set Jog Velocity VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Changes “on the fly” the velocity in the jog mode.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Velocity X** User jog velocity for X in  $\mu\text{m}/\text{s}$

**Velocity Y** User jog velocity for Y in  $\mu\text{m}/\text{s}$

**Joystick Ack Timeout** User jog velocity acknowledge timeout in ms

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

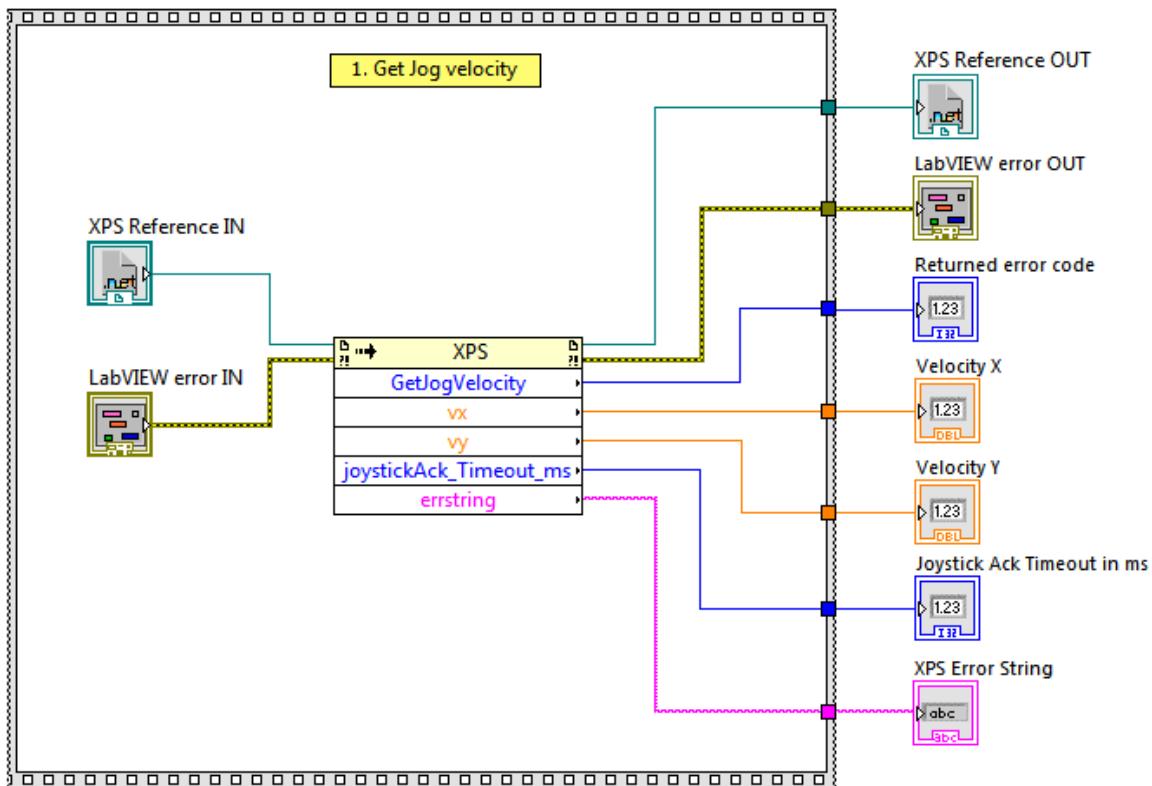
## 124. Get Jog Velocity VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the velocity setting by “SetJogVelocity”.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Velocity X** User jog velocity for X in  $\mu\text{m/s}$

**Velocity Y**

User jog velocity for Y in  $\mu\text{m/s}$

**Joystick Ack Timeout** Joystick ack timeout in ms

**XPS Error String** return error string from VI

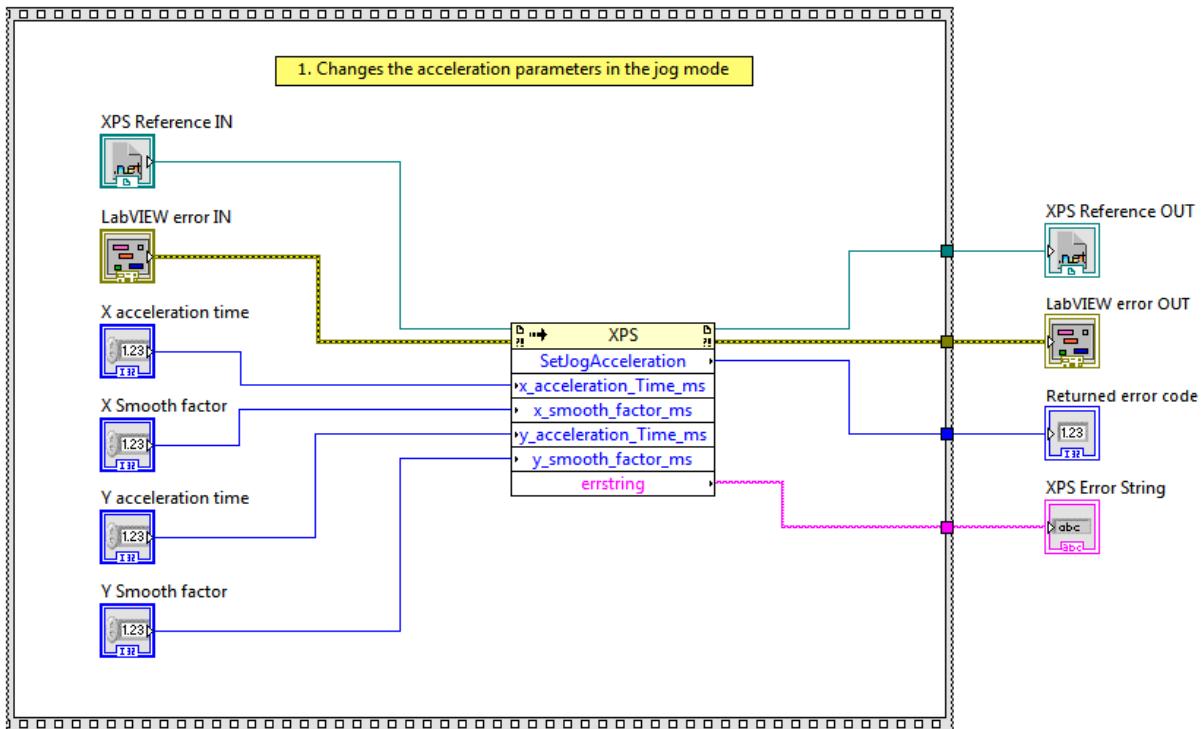
## 125. Set Jog Acceleration VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Changes the acceleration parameters in the jog mode.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**X Acceleration Time** User jog Acceleration time for X in ms



**X Smooth factor** User jog Smooth factor for X in ms



**Y acceleration time** User jog Acceleration time for Y in ms



**Y Smooth factor** User jog Smooth factor for Y in ms



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**Current Following Error** Current following error

**XPS Error String** return error string from VI

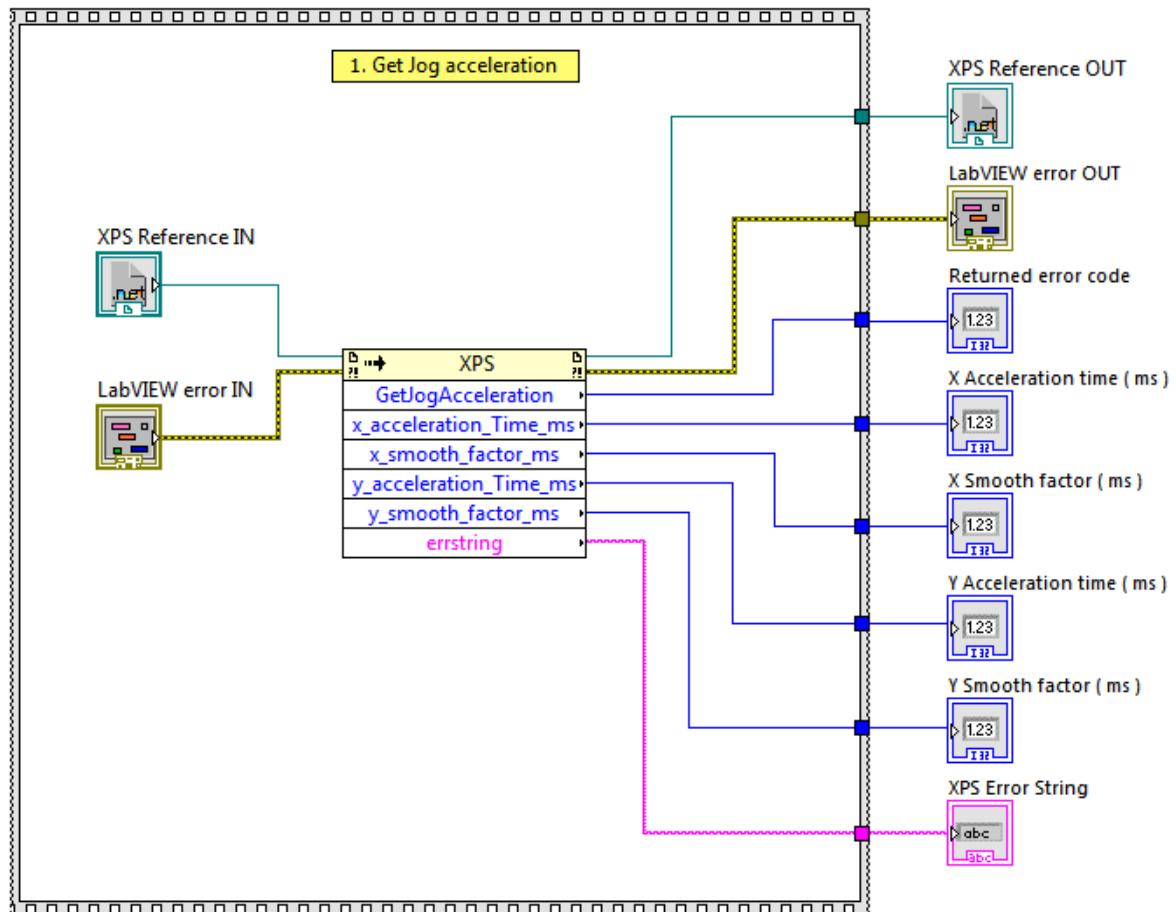
## 126. Get Jog Acceleration VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the acceleration setting by “SetJogAcceleration”.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**X Acceleration time** User jog Acceleration time for X in ms

**X Smooth factor in ms** User jog Smooth factor for X in ms

**Y Acceleration time in ms** User jog Acceleration time for Y in ms

**Y Smooth factor in ms** User jog smooth factor for Y in ms

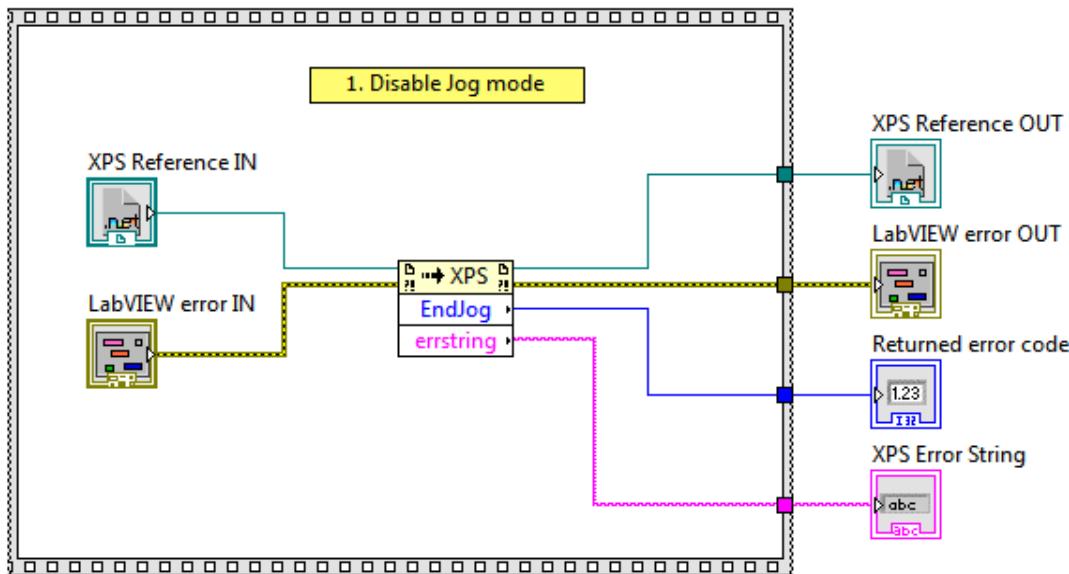
**XPS Error String** return error string from VI

## 127. End Jog VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Disables the jog mode in the XY group.



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

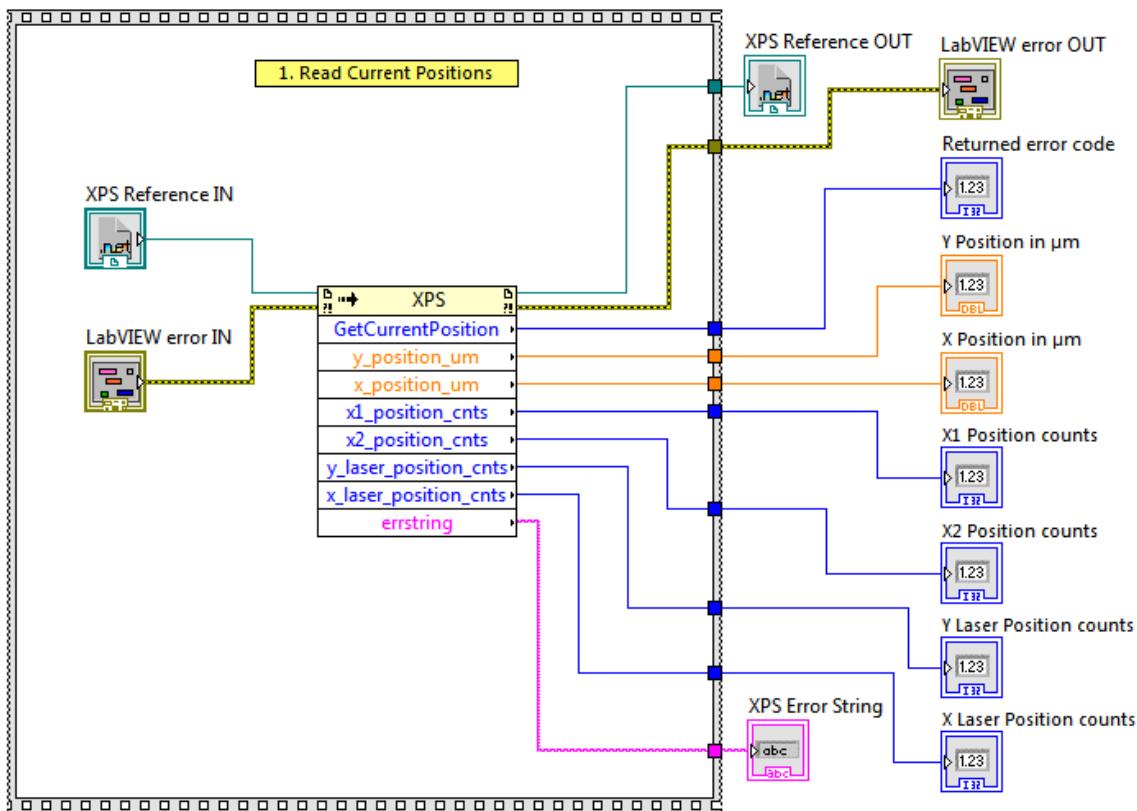
## 128. Get Current Position VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get current positions

**Screenshot**



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Y Position in μm** Y position in μm



**X Position in μm** X position in μm



**X1 Position Counts** X1 position counts



**X2 Position in Counts** X1 position counts



**Y Laser Position Counts** Y1 laser position counts



**X Laser Position Counts** X laser position counts



**XPS Error String** return error string from VI

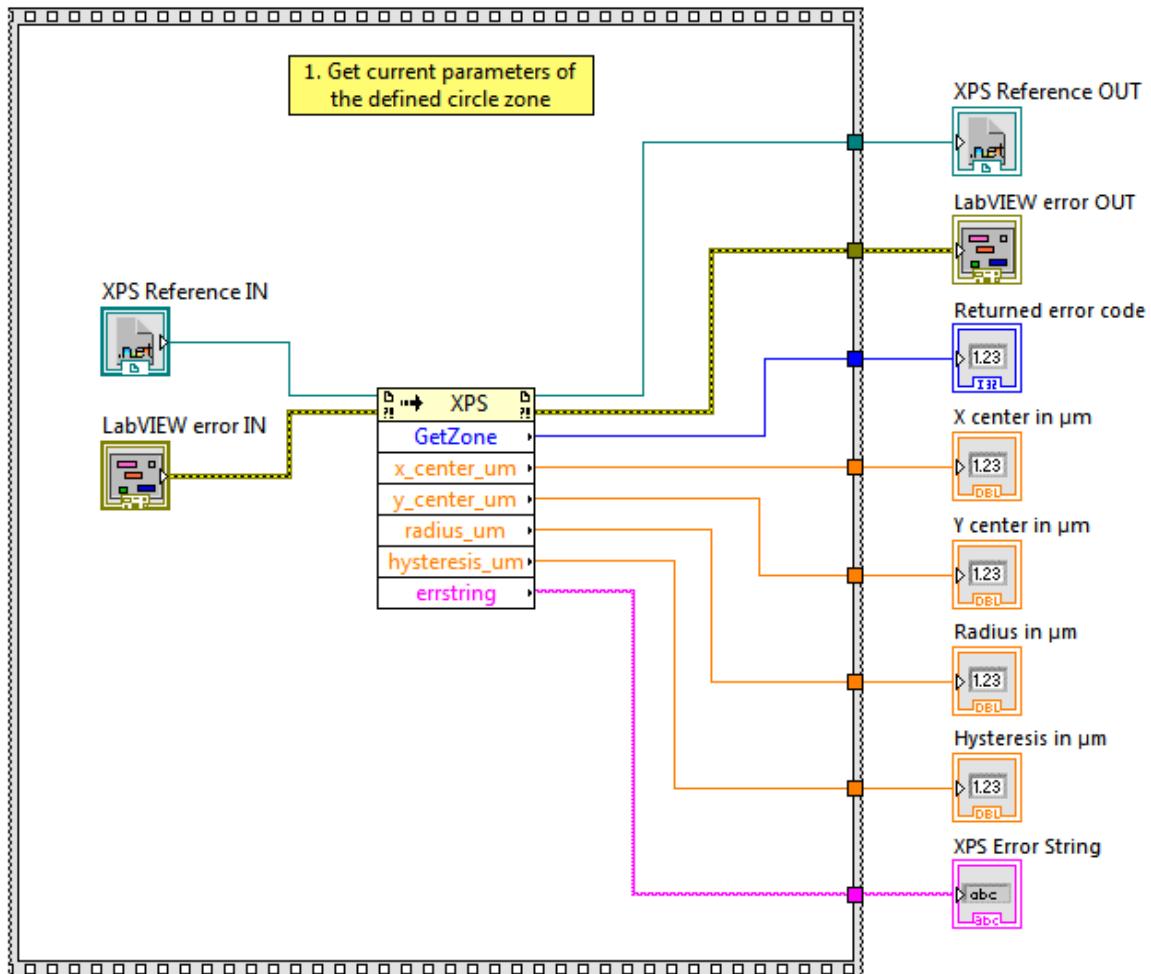
## 129. Get Zone VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get current parameters of the defined circle zone

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**X center in  $\mu\text{m}$**  X center in  $\mu\text{m}$

**Y center in  $\mu\text{m}$**  Y center in  $\mu\text{m}$

**Radius in  $\mu\text{m}$**  Radius in  $\mu\text{m}$

**Hysteresis in  $\mu\text{m}$**  Hysteresis in  $\mu\text{m}$

**XPS Error String** return error string from VI

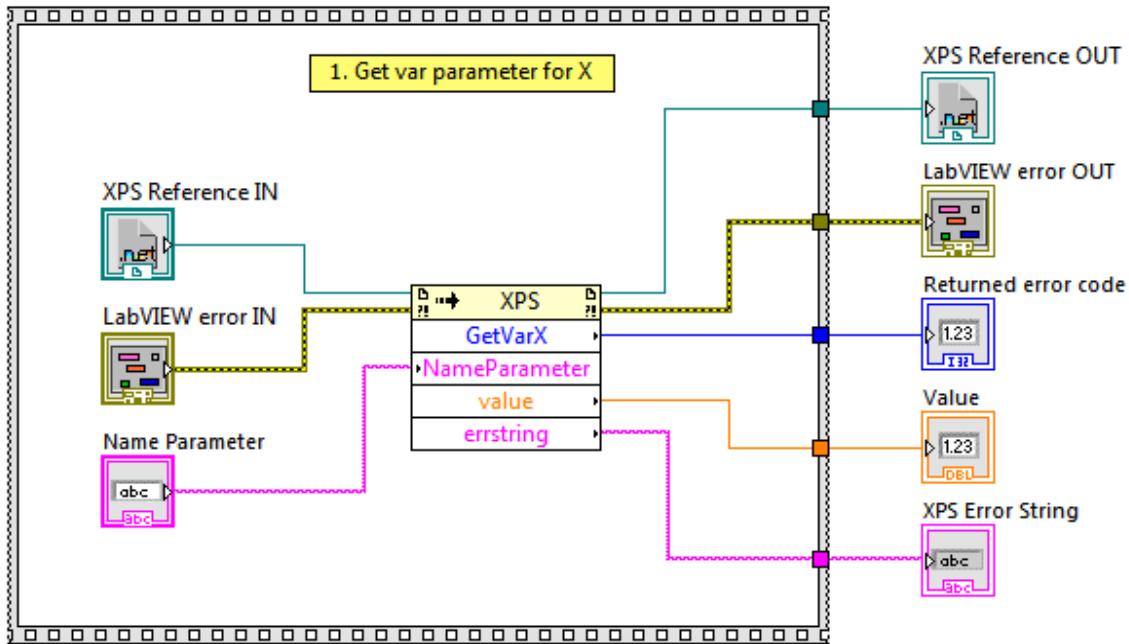
## 130. Get Var X VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the configured value of the parameter name from stages.ini for X positioner.

**Screenshot**



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Name Parameter** Stages.ini parameter name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Value** Configured value

**XPS Error String** return error string from VI

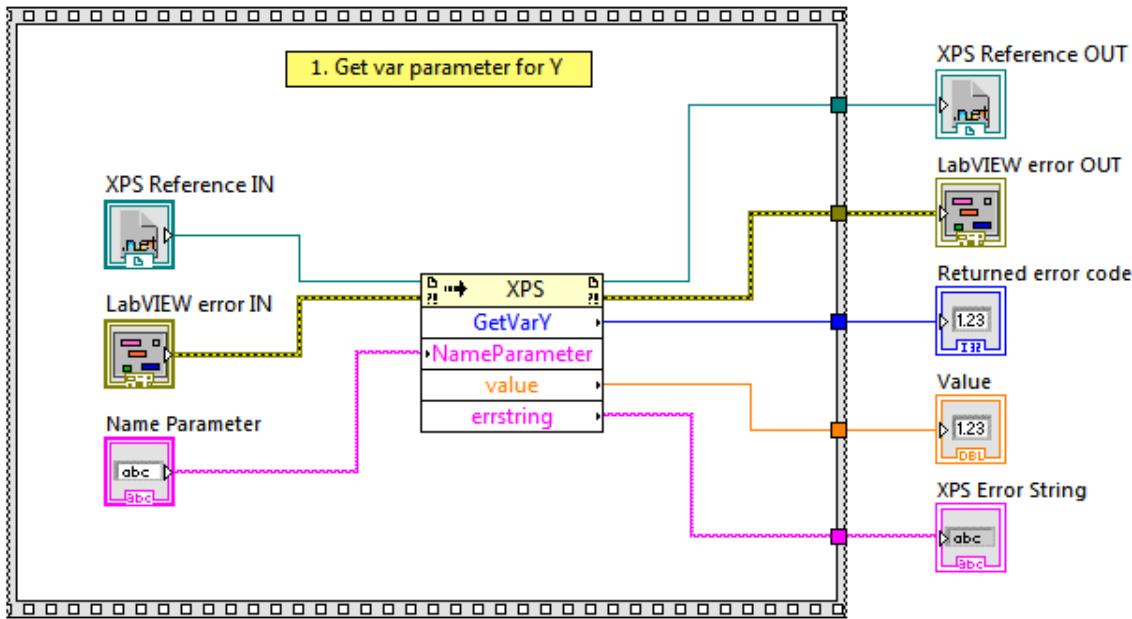
## 131. Get Var Y VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the configured value of the parameter name from stages.ini for Y positioner.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Name Parameter** Stages.ini parameter name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Value** Configured value



**XPS Error String** return error string from VI

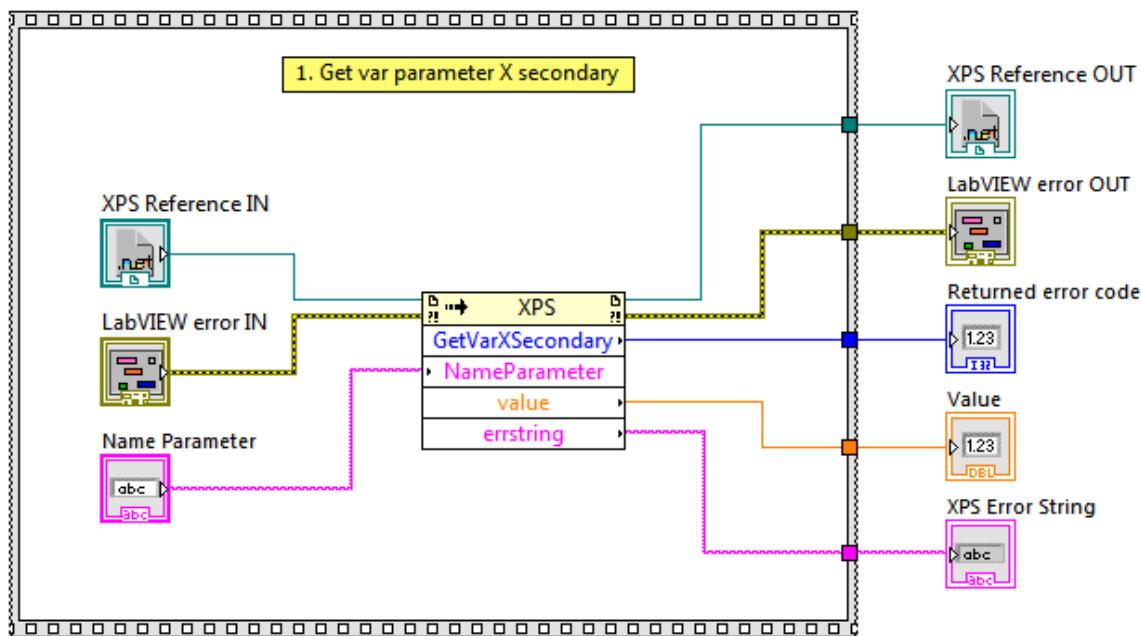
## 132. Get Var X Secondary VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Get the configured value of the parameter name from stages.ini for X secondary positioner.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Name Parameter** Stages.ini parameter name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Value** Configured value

**XPS Error String** return error string from VI

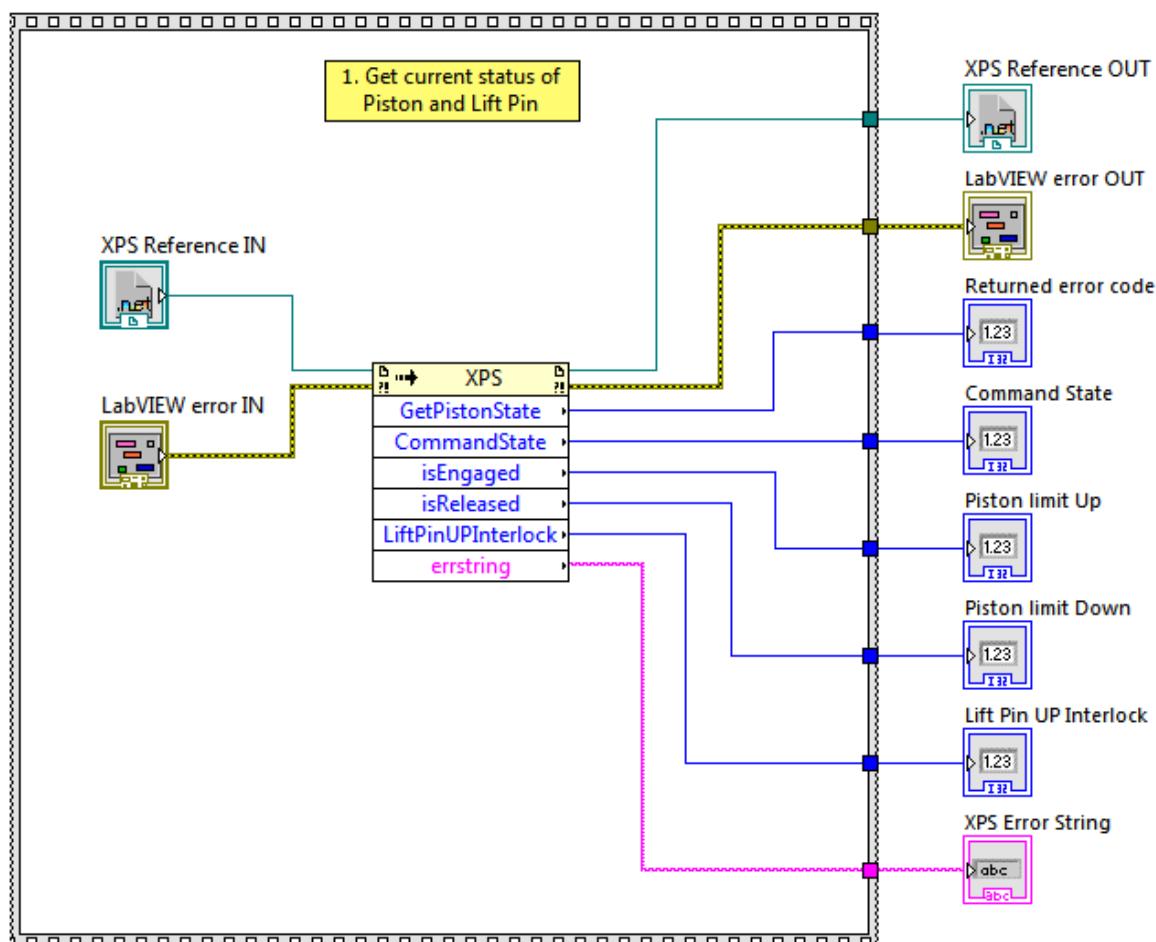
## 133. Get Piston State VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the configured value of the parameter name from stages.ini for X secondary positioner.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Command Status** status of the Piston command (0=Unlock / 1=Lock)

**Piston Limit Up** Status of the Piston limit UP (0 = Not activated / 1 = Activated)

**Piston Limit Down** Status of the Piston limit DOWN (0 = Not activated / 1 = Activated)

**Lift Pin UP Interlock** Status of the Lift Pin UP (0 = Not activated / 1 = Activated)



**XPS Error String** return error string from VI



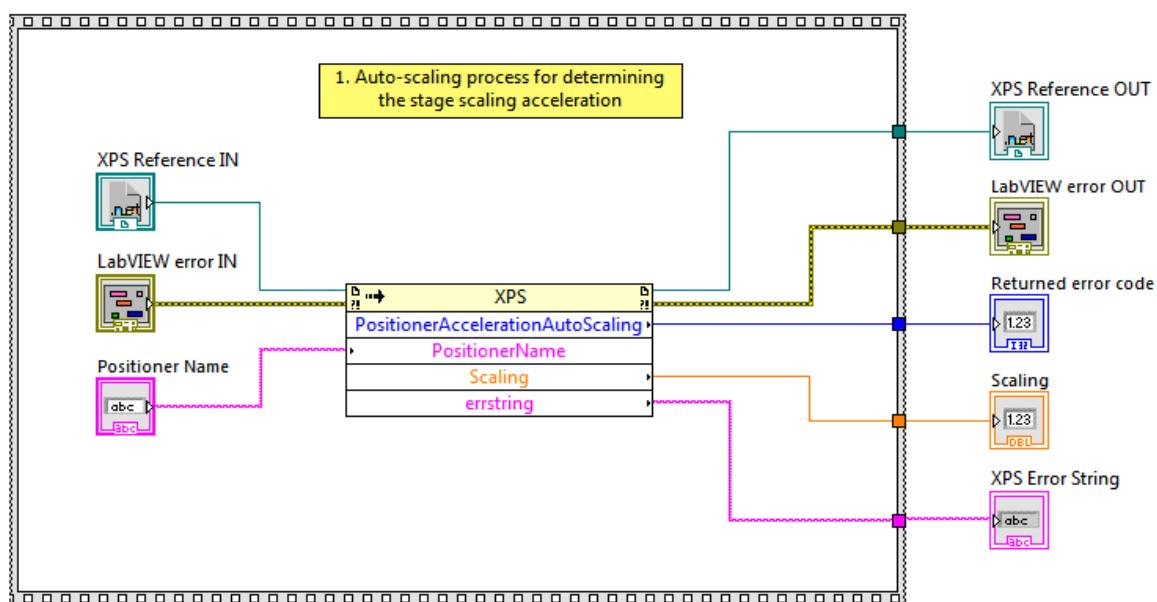
## 134. Positioner Acceleration Auto Scaling VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Auto-scaling process for determining the stage scaling acceleration.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** Name of a positioner

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code



**Scaling** Calculated scaling acceleration value

**XPS Error String** return error string from VI



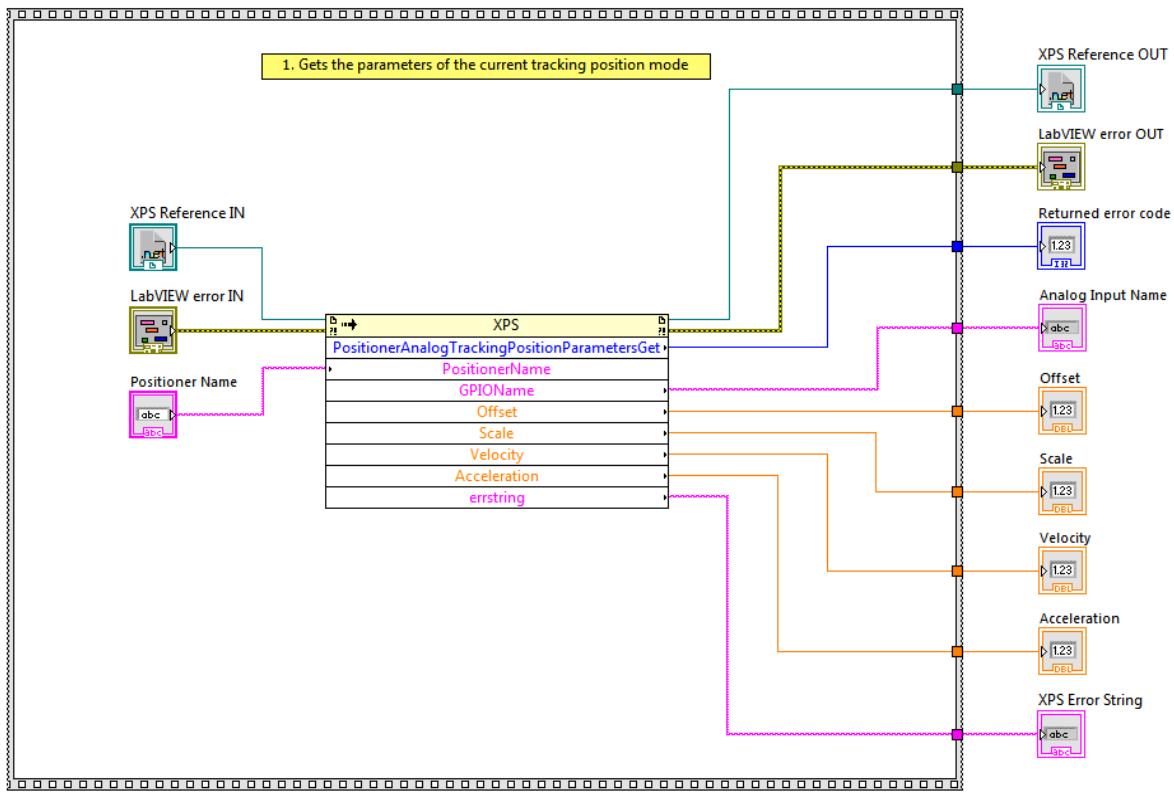
## 135. Positioner Analog Tracking Position Parameters Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the parameters of the current tracking position mode.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** Multiple Axes positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Analog Input Name** Analog input name (ADC)

**Offset** Offset (volts)

**Scale** Scale (Units/Volts)

**Velocity** Velocity (Units/s)

**Acceleration**

**Acceleration** Acceleration (Units/s<sup>2</sup>)

**XPS Error String** return error string from VI

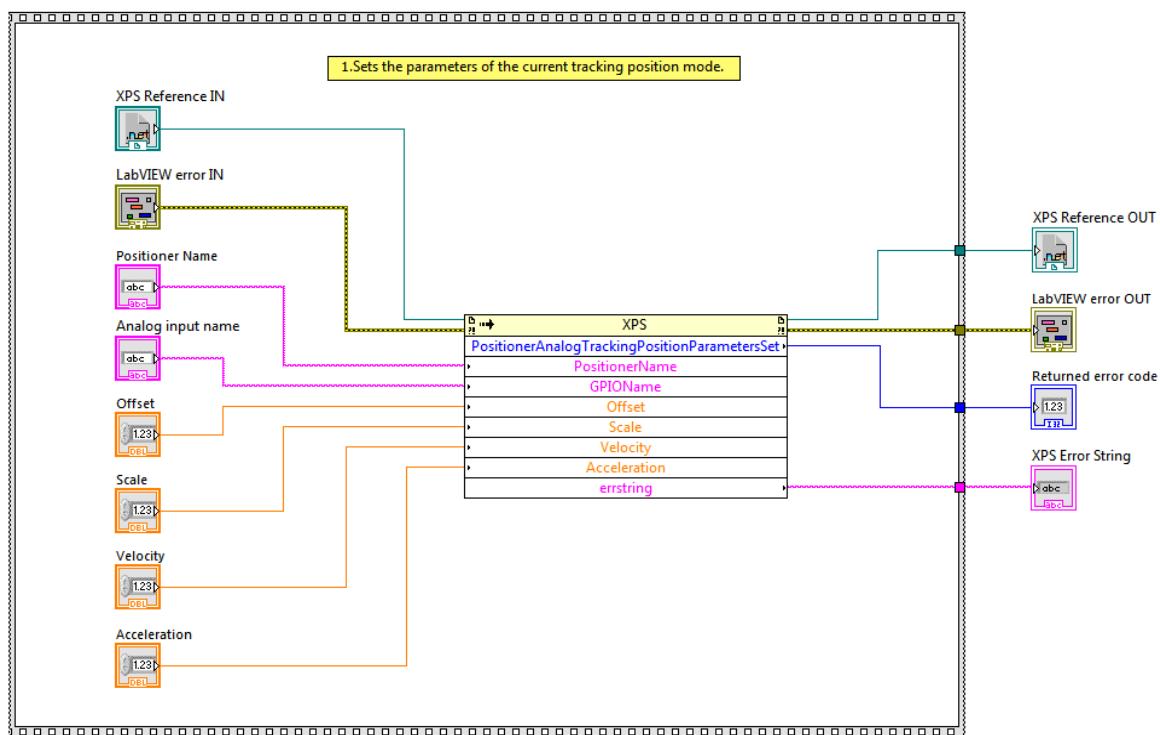
## 136. Positioner Analog Tracking Position Parameters Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the parameters of the current tracking position mode.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Analog Input Name** Analog input name (ADC)



**Offset** Offset (volts)

**Scale** Scale (Units/Volts)

**Velocity** Velocity (Units/s)

**Acceleration** Acceleration (Units/s<sup>2</sup>)

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

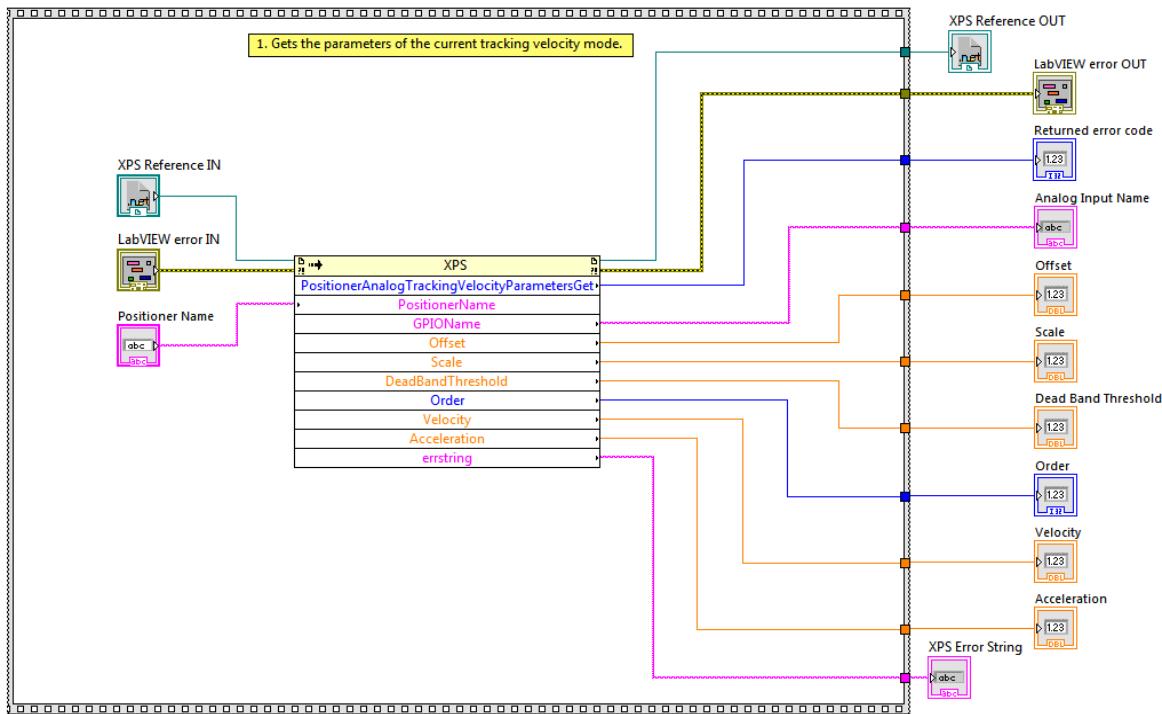
## 137. Positioner Analog Tracking Velocity Parameters Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the parameters of the current tracking velocity mode.

**Screenshot**



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**GPIO Name** Analog input name (ADC)



**Offset** Offset (volts)



**Scale** Scale (Units/Volts)



**Dead Band Threshold** Dead band threshold (Volts)



**Order** order



**Velocity** Velocity (Units/s)

**Acceleration** Acceleration (Units/s)



**XPS Error String** return error string from VI

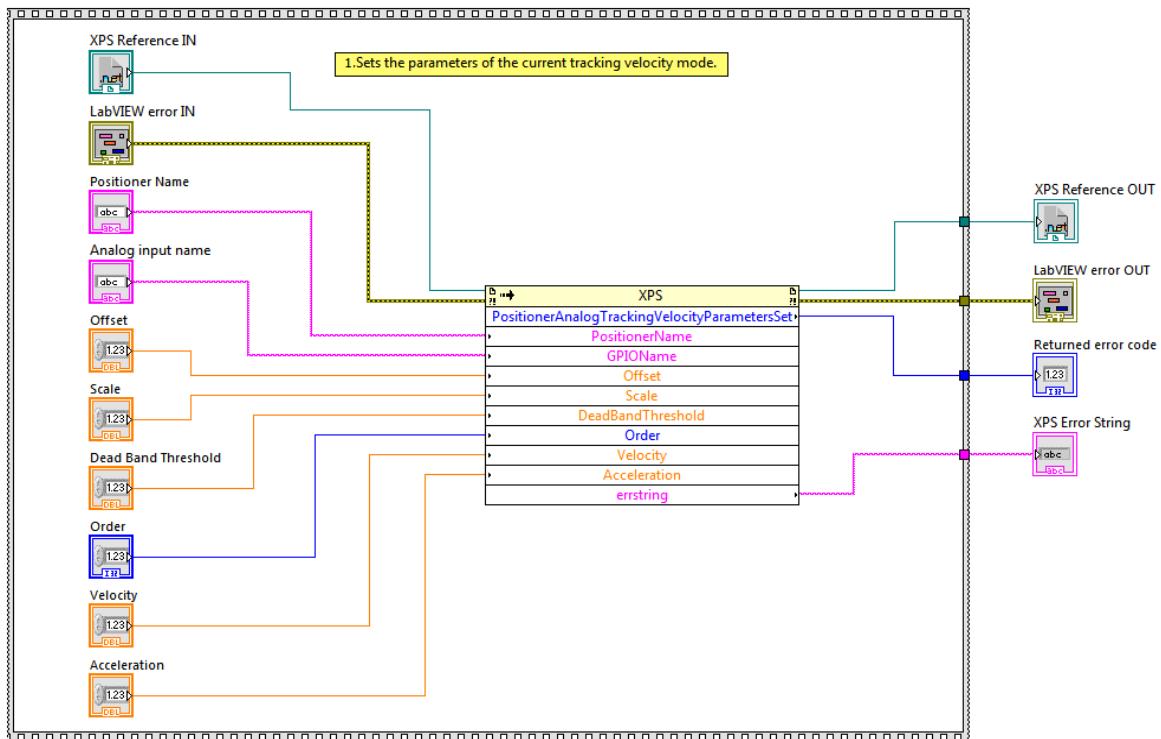
## 138. Positioner Analog Tracking Velocity Parameters Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the parameters of the current tracking velocity mode.

### Screenshot





**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name



**Closed Loop Status Position servo loop status** (true=closed and  
false=opened)

**Proportional gain** PID servo loop proportional gain

**Integral gain** PID servo loop integral gain

**Integral gain 2** PID servo loop integral gain 2

**Derivative gain** PID servo loop derivative gain

**Integral saturation value** PID integral saturation value (0 to 1)

**Integration time** PID integration time (seconds)

**Derivative Filter Cut Off Frequency** PID derivative filter cut off frequency (Hz)

**Proportional gain multiplier** Variable PID proportional gain multiplier

**Integral gain multiplier** Variable PID integral gain multiplier

**Derivative gain multiplier** Variable PID derivative gain multiplier

**Form coefficient** Variable PID form coefficient

**Feed Forward Acceleration** Acceleration feedforward gain (units)

**Feed Forward Jerk** Jerk feed forward gain



**Setpoint Position Delay** Set point position delay

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI



- **XPS Reference IN** XPS Reference IN

- LabVIEW error IN LabVIEW error IN
  - Positioner Name Positioner name
  - GPIO Name Analog input name (ADC)
  - Offset Offset (volts)
  - Scale Scale (Units/Volts)
  - Dead Band Threshold Dead band threshold (Volts)
  - Order Order
  - Velocity Velocity (Units/s)
  - Acceleration Acceleration (Units/s<sup>2</sup>)
- 
- XPS Reference OUT XPS Reference OUT
  - LabVIEW error OUT LabVIEW error OUT
  - Returned Error Code Returned Error Code
  - XPS Error String XPS Error String

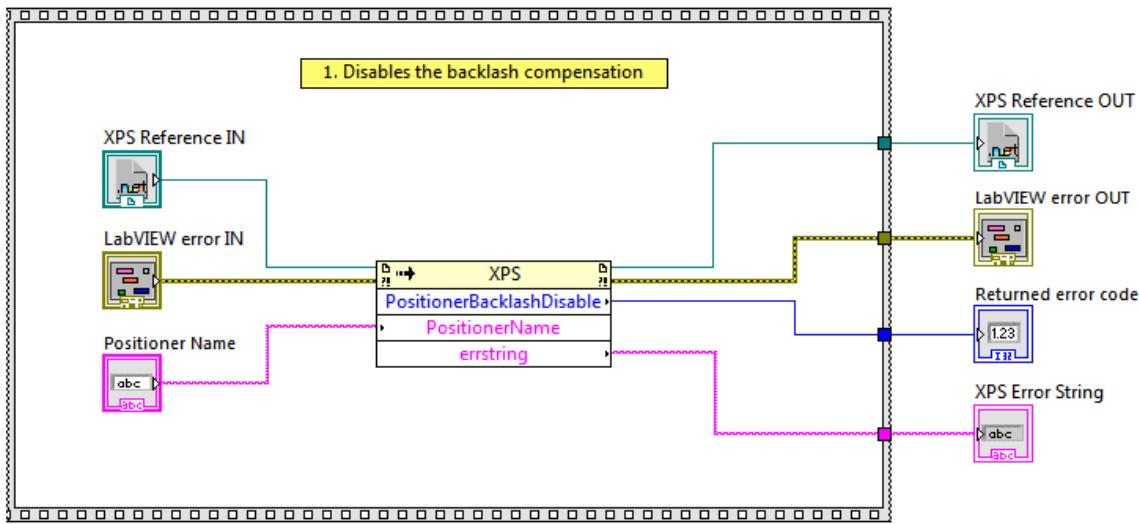
## 139. Positioner Backlash Disable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Disables the backlash compensation.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** Positioner name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

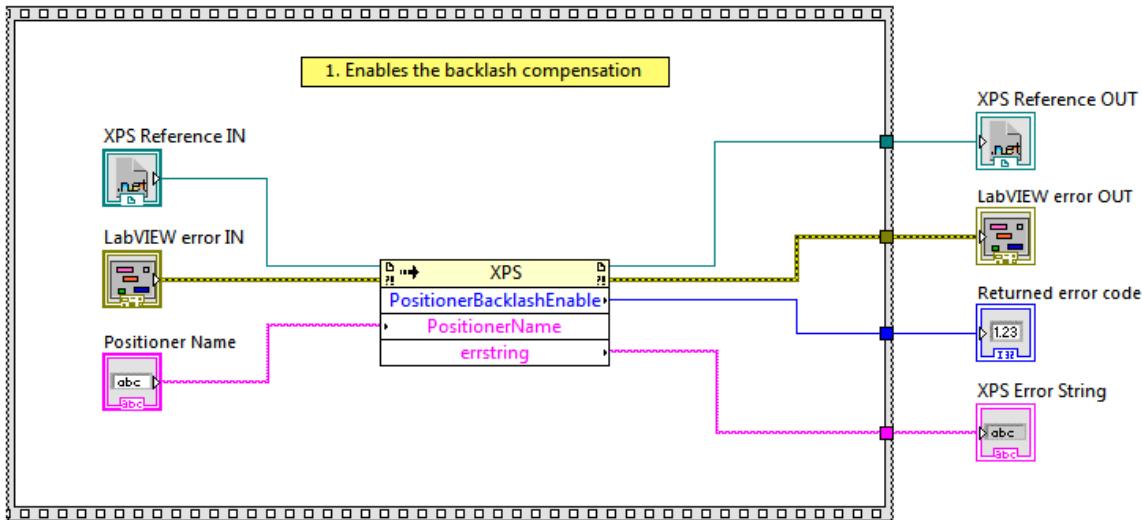
## 140. Positioner Backlash Enable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Enables the backlash compensation.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** Positioner name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

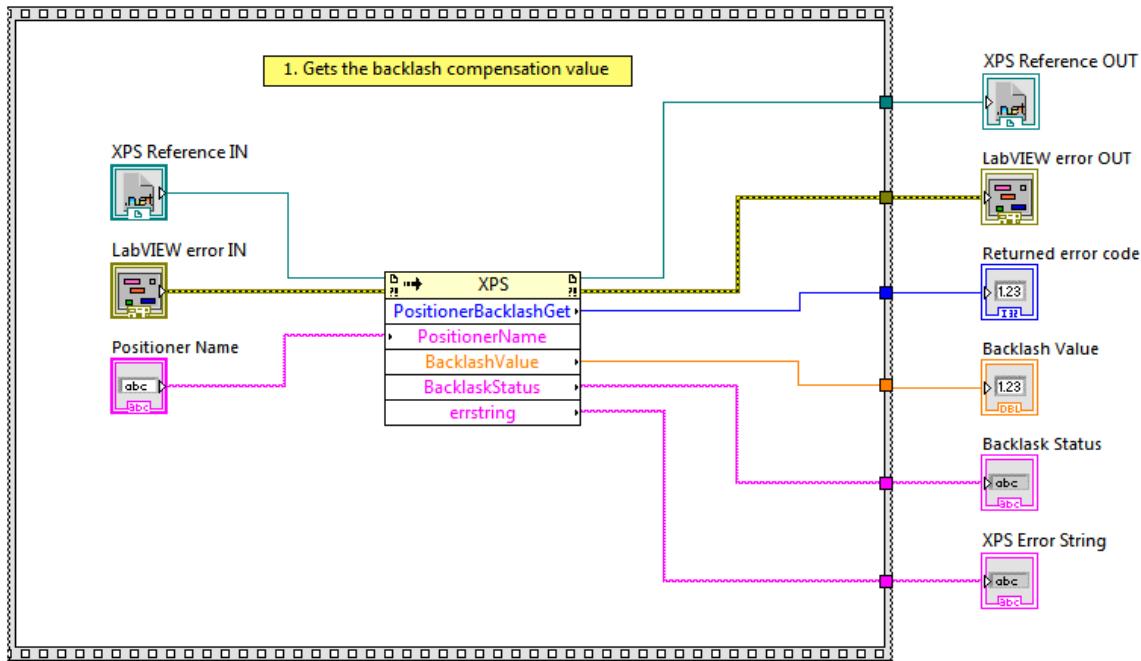
## 141. Positioner Backlash Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the backlash compensation value.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Backlash Value** backlash value

**Backlash Status** Backlash status (Enable or Disable)

**XPS Error String** return error string from VI

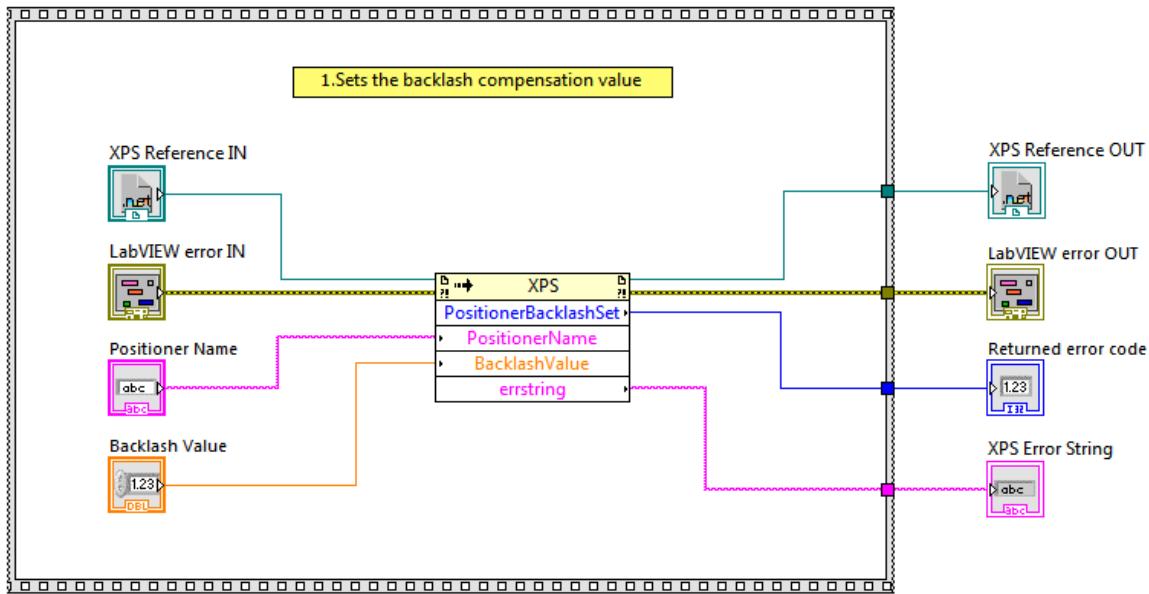
## 142. Positioner Backlash Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the backlash compensation value.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** Positioner name

**Backlash Value** Backlash compensation value (units)

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

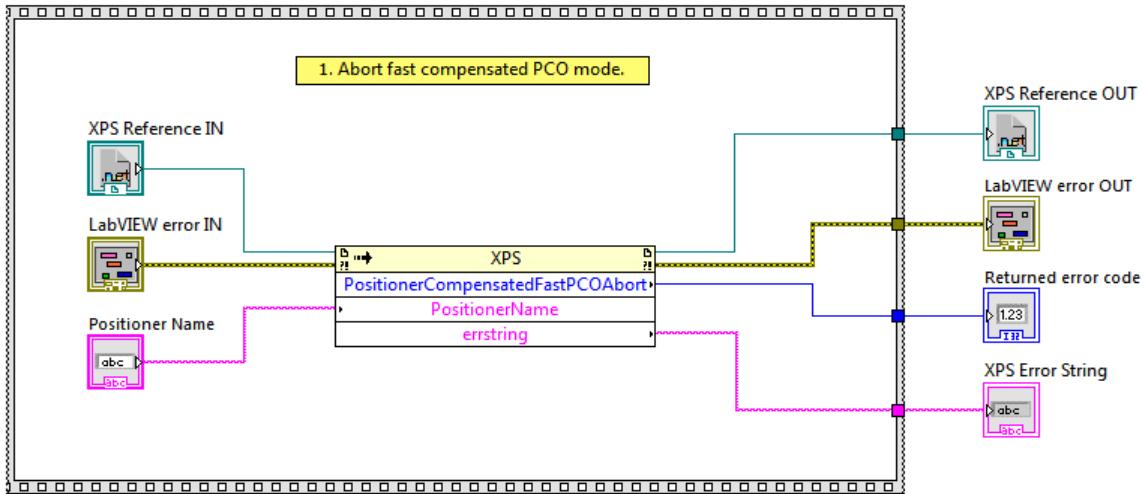
## 143. Positioner Compensated Fast PCO Abort VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Abort fast compensated PCO mode.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** Positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

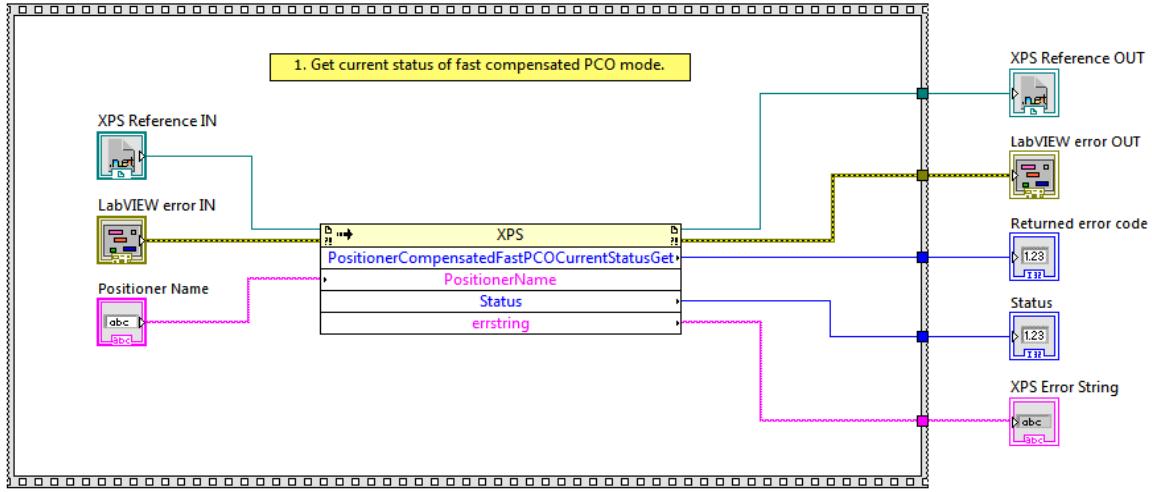
## 144. Positioner Compensated Fast PCO Current Status Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get current status of fast compensated PCO mode.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** Name of a positioner



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Status** Mode status



**XPS Error String** return error string from VI

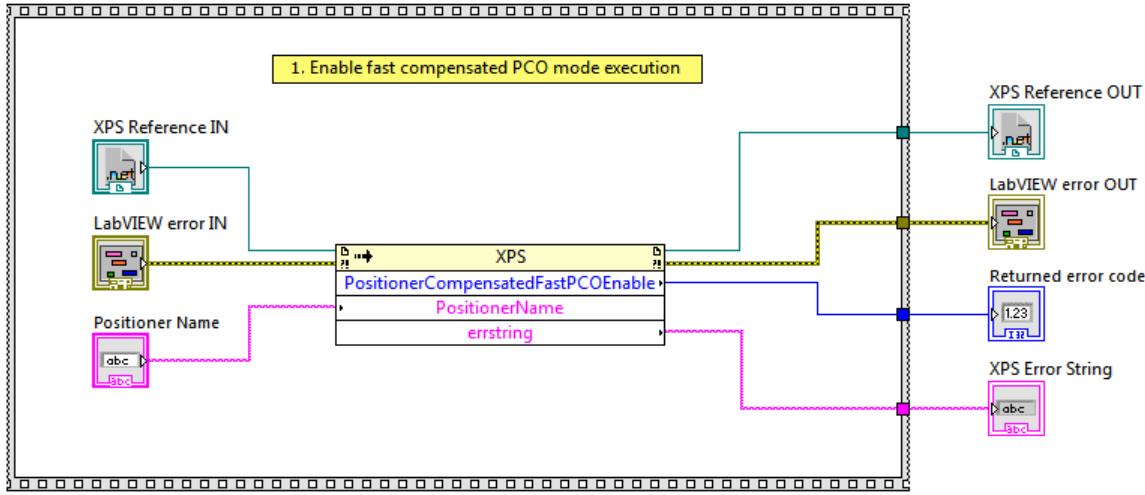
## 145. Positioner Compensated Fast PCO Enable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Enable fast compensated PCO mode execution.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

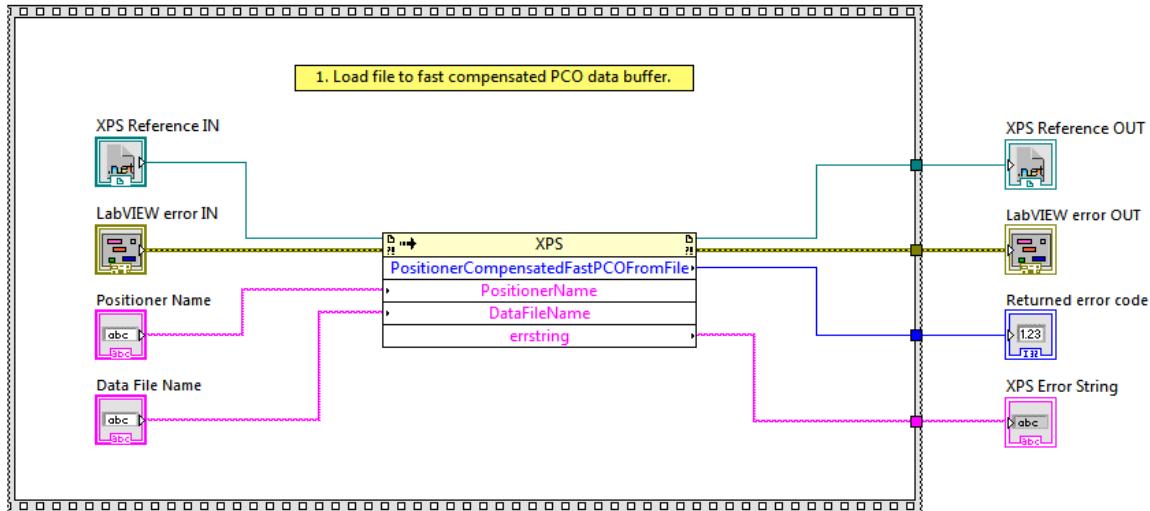
## 146. Positioner Compensated Fast PCO From File VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Load file to fast compensated PCO data buffer.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name



**Data File Name** Data file name



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

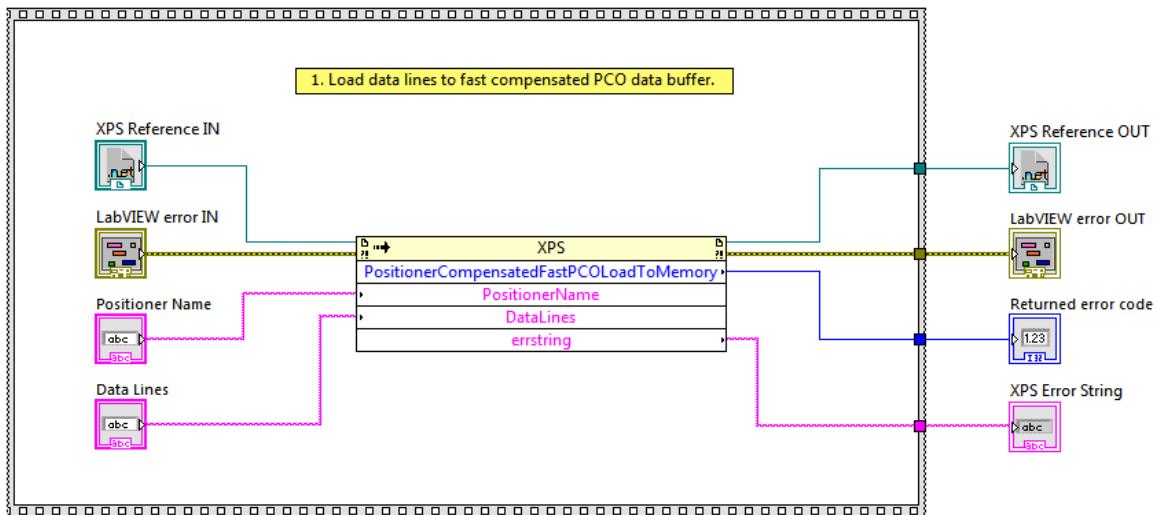
## 147. Positioner Compensated Fast PCO Load To Memory VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Load data lines to fast compensated PCO data buffer.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** Positioner name



**Data Lines** Some data lines



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI



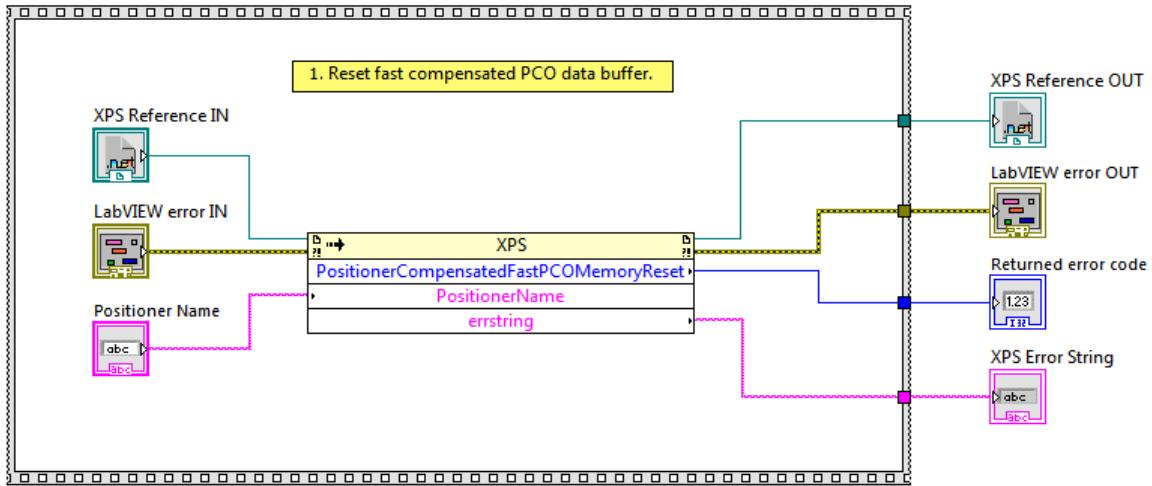
## 148. Positioner Compensated Fast PCO Memory Reset VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Reset fast compensated PCO data buffer.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** Positioner name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

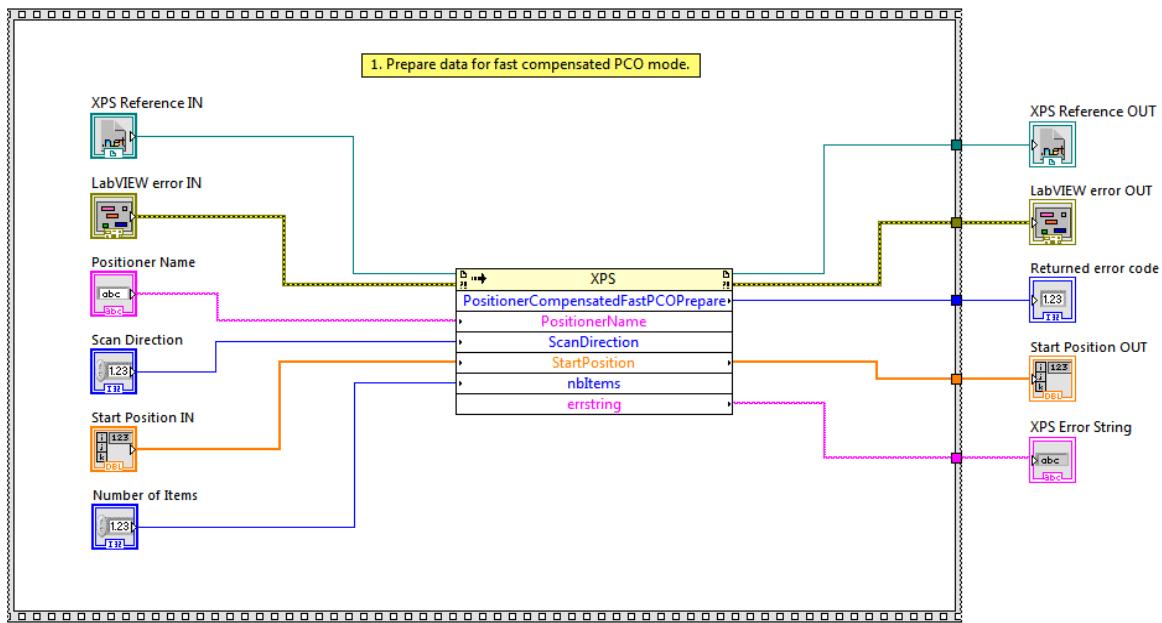
## 149. Positioner Compensated Fast PCO Prepare VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Prepare data for fast compensated PCO mode.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** Positioner name

**Scan Direction** Scan direction (1 or -1)

**Start Position IN** start position (units)

**Scan Direction** Scan direction (1 or -1)

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Start Position OUT** Start position out

**XPS Error String** return error string from VI

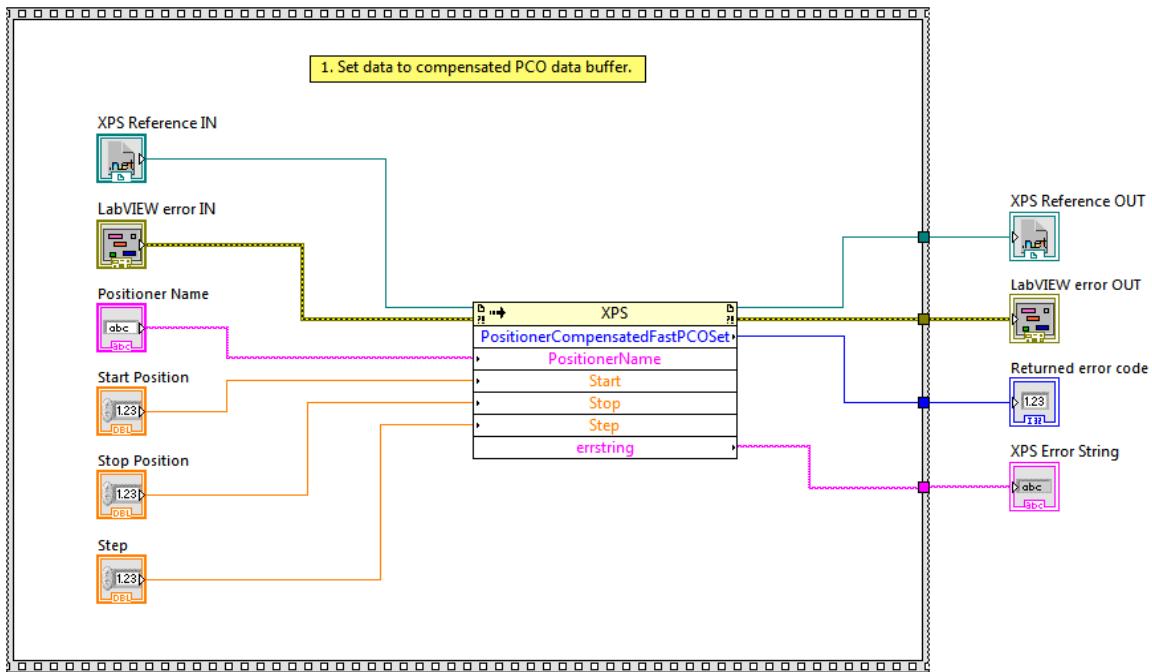
## 150. Positioner Compensated Fast PCO Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set date to compensated PCO data buffer.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Start Position** start position

**Stop Position** stop position

**Step** Distance between two consecutive pulses (units)

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI



## 151. Positioner Compensation Frequency Notchs Get VI



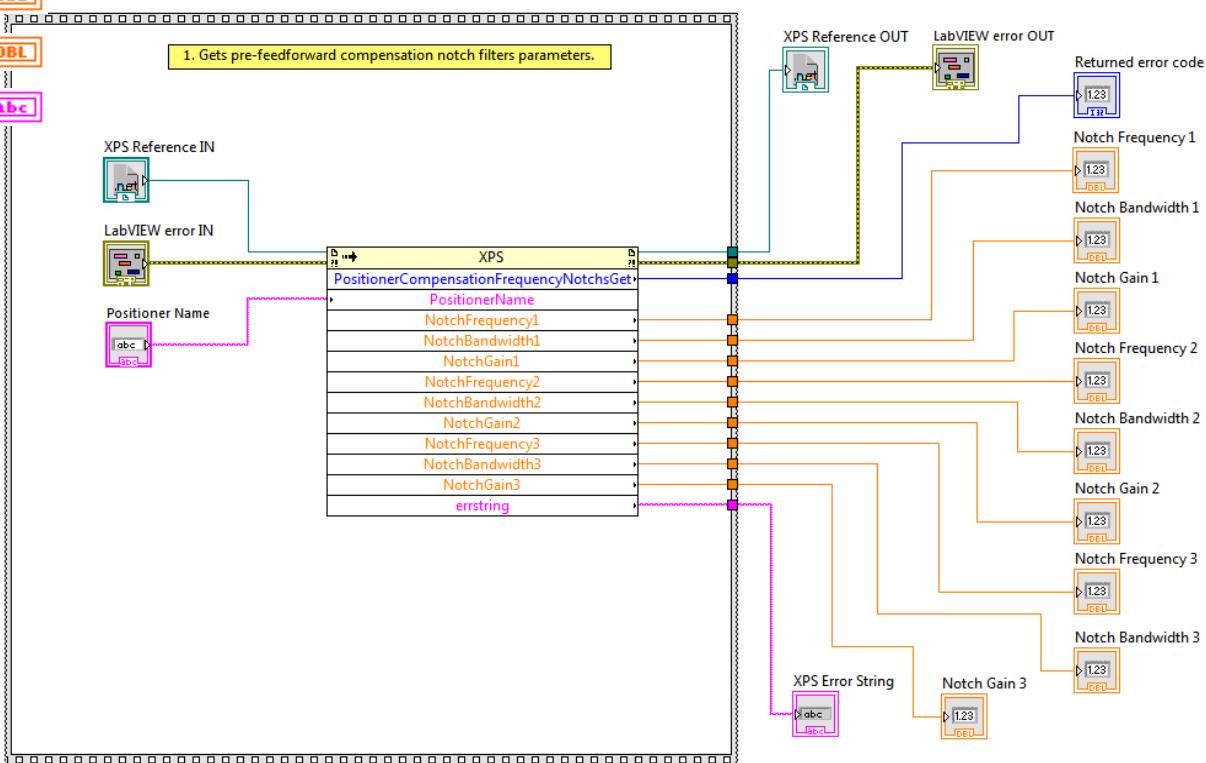
**Owning Palette:** Interpolation & Extrapolation VI



**Requires:** Full Development System



Gets pre-feedforward compensation notch filters parameters.



### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Notch Frequency 1** Notch frequency for filter 1 (Hz)

**Notch Bandwidth 1** Notch bandwidth for filter 1 (Hz)

**Notch Gain 1** Notch gain for filter 1

**Notch Frequency 2** Notch frequency for filter 2 (Hz)

**Notch Bandwidth 2** Notch bandwidth for filter 2 (Hz)

**Notch Gain 2** Notch gain for filter 2

**Notch Frequency 3** Notch frequency for filter 3 (Hz)

**Notch Bandwidth 3** Notch bandwidth for filter 3 (Hz)

**Notch Gain 3** Notch gain for filter 3

**XPS Error String** return error string from VI

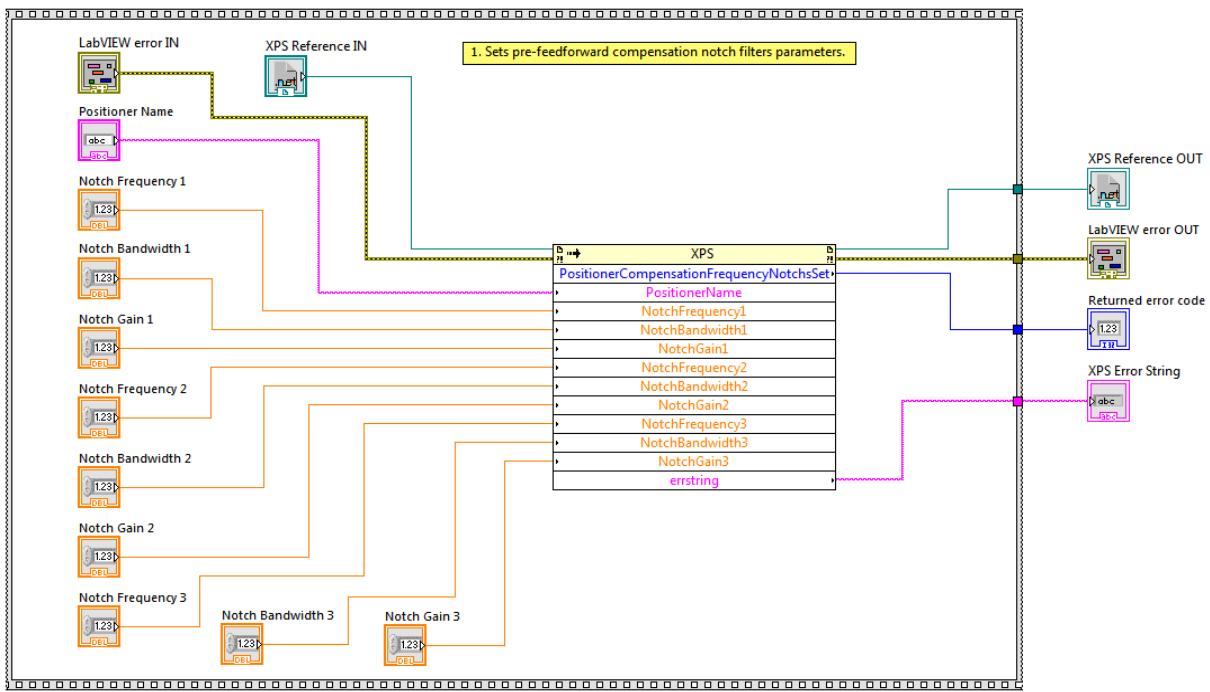
## 152. Positioner Compensation Frequency Notches Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets pre-feedforward compensation notch filters parameters.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner name** positioner name

**Notch Frequency 1** Notch frequency for filter 1 (Hz)

**Notch Bandwidth 1** Notch bandwidth for filter 1 (Hz)

**Notch Gain 1** Notch gain for filter 1

**Notch Frequency 2** Notch frequency for filter 2 (Hz)

**Notch Bandwidth 2** Notch bandwidth for filter 2 (Hz)

**Notch Gain 2** Notch gain for filter 2

**Notch Frequency 3** Notch frequency for filter 3 (Hz)

**Notch Bandwidth 3** Notch bandwidth for filter 3 (Hz)

**Notch Gain 3** Notch gain for filter 3

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out

functionality.



**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

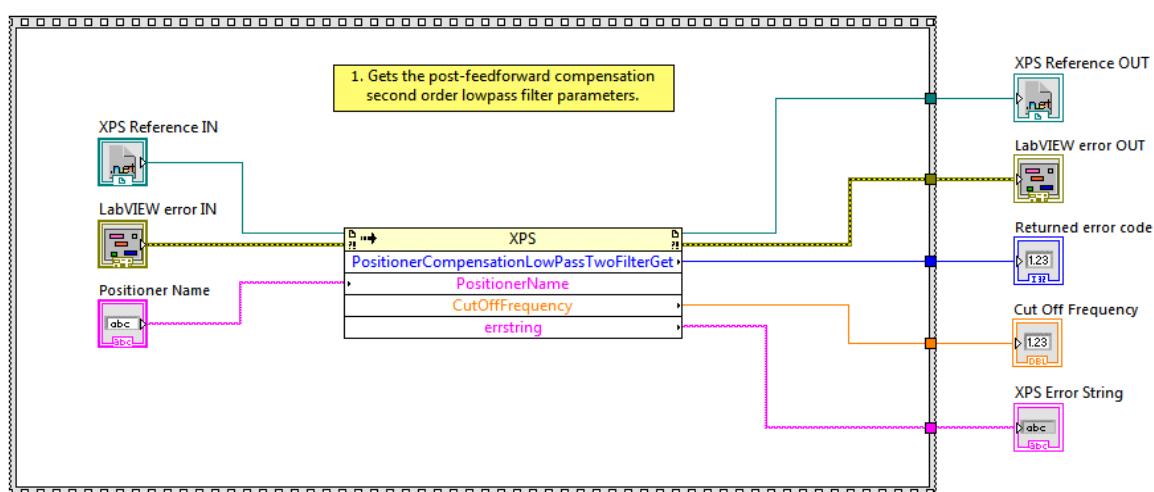
## 153. Positioner Compensation Low Pass Two Filter Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the post-feedforward compensation second order low-pass filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**Cut Off Frequency** Second order filter cut-off frequency (Hertz)

**XPS Error String** return error string from VI

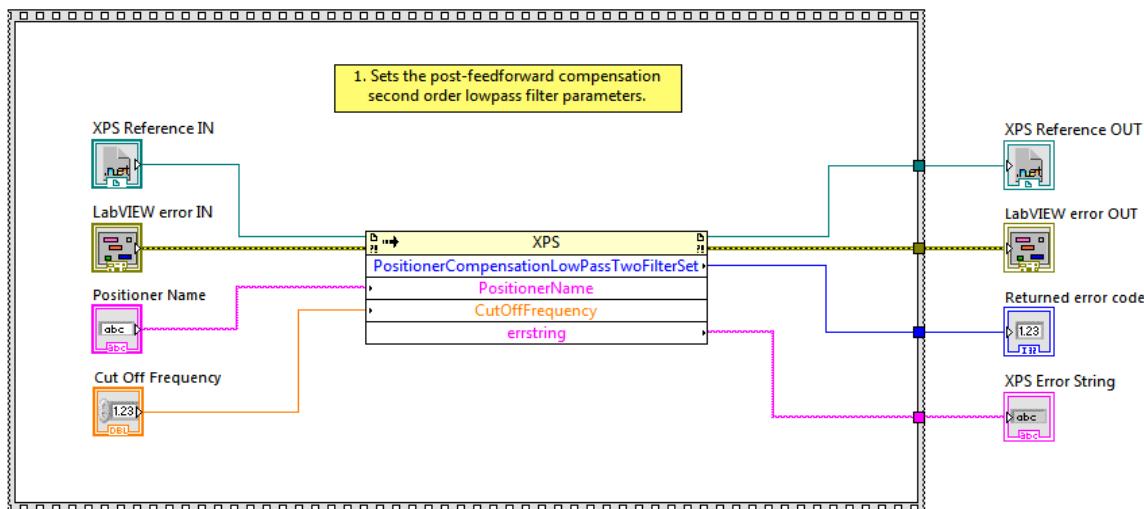
## 154. Positioner Compensation Low Pass Two Filter Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the post-feedforward compensation second order low-pass filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group name

**Cut Off Frequency** Second order filter cut-off frequency (Hertz)

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

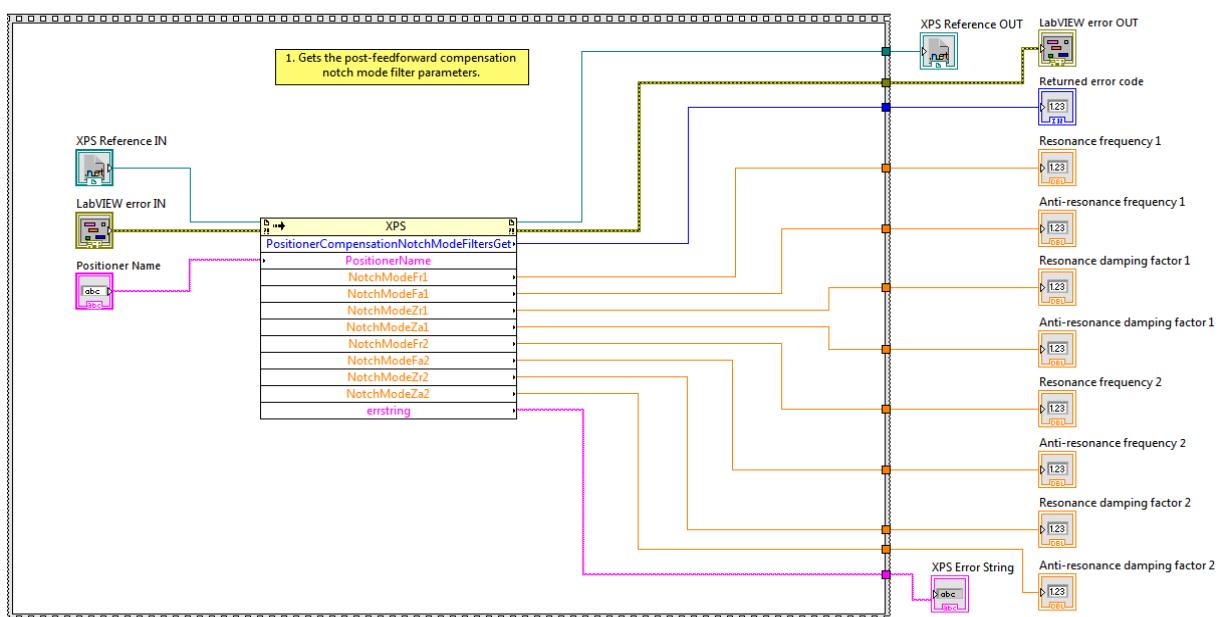
## 155. Positioner Compensation Notch Mode Filters Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the post-feedforward compensation notch mode filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**Resonance frequency 1** Resonance frequency (Hz) for notch mode filter 1

**Anti-resonance frequency 1** Anti-resonance frequency (Hz) for notch mode filter 1

**Resonance damping factor 1** Resonance damping factor for notch mode filter 1

**Anti-resonance damping factor 1** Anti-resonance damping factor for notch mode filter 1

**Resonance frequency 2** Resonance frequency (Hz) for notch mode filter 2

**Anti-resonance frequency 2** Anti-resonance frequency (Hz) for notch mode filter 2

**Resonance damping factor 2** Resonance damping factor for notch mode filter 2

**Anti-resonance damping factor 2** Anti-resonance damping factor for notch mode filter 2

**XPS Error String** return error string from VI

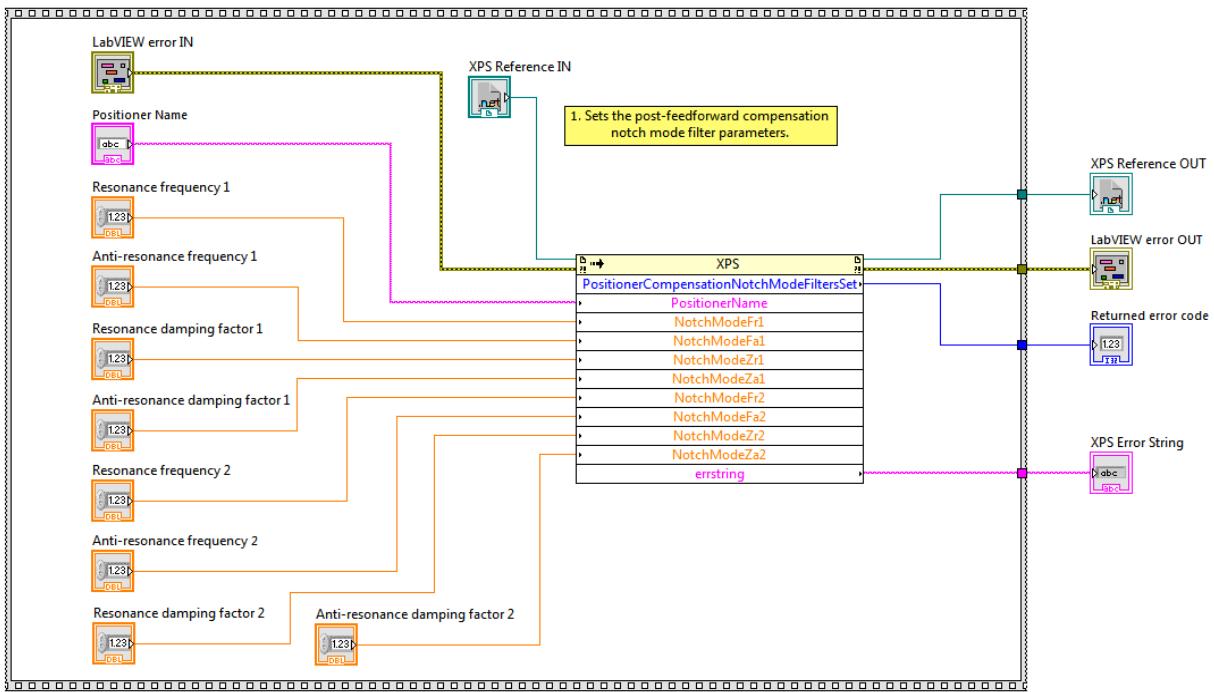
## **156. Positioner Compensation Notch Mode Filters Set VI**

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the post-feedforward compensation notch mode filter parameters.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Resonance frequency 1** Resonance frequency (Hz) for notch mode filter 1

**Anti-resonance frequency 1** Anti-resonance frequency (Hz) for notch mode filter 1

**Resonance damping factor 1** Resonance damping factor for notch mode filter 1

**Anti-resonance damping factor 1** Anti-resonance damping factor for notch mode filter 1

**Resonance frequency 2** Resonance frequency (Hz) for notch mode filter 2

**Anti-resonance frequency 2** Anti-resonance frequency (Hz) for notch mode filter 2

**Resonance damping factor 2** Resonance damping factor for notch mode filter 2

**Anti-resonance damping factor 2** Anti-resonance damping factor for notch mode filter 2

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

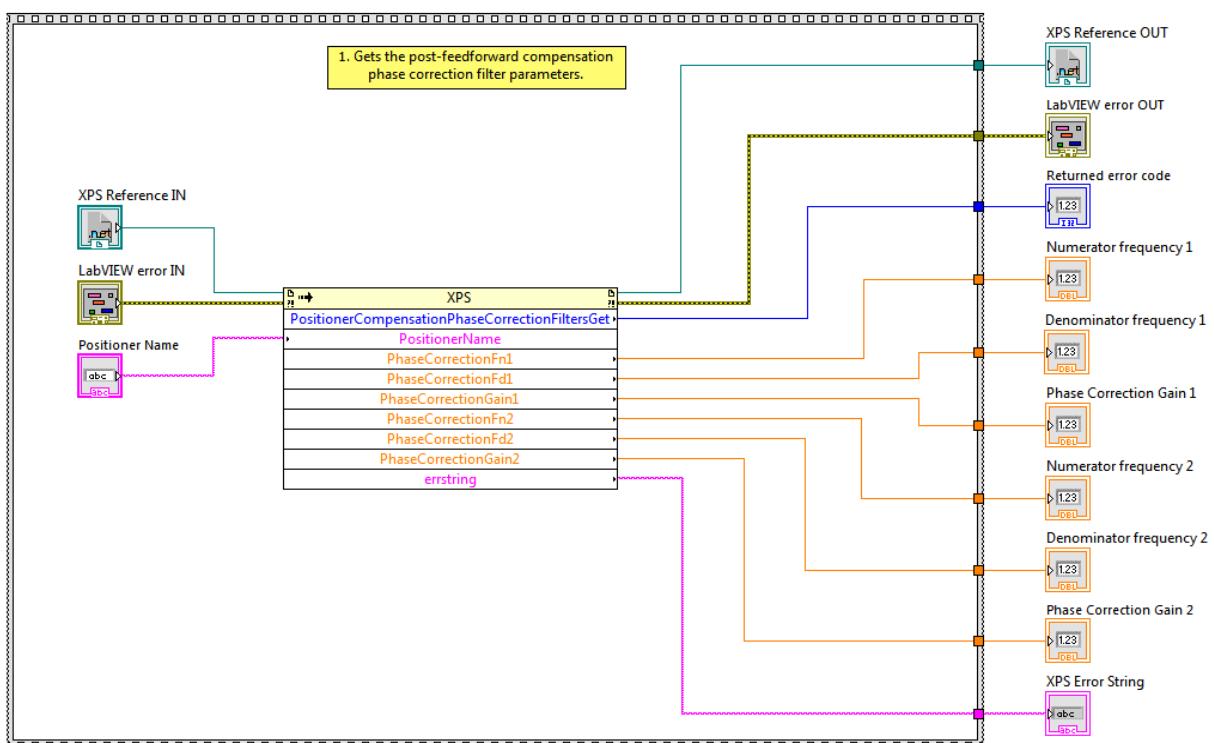
## 157. Positioner Compensation Phase Correction Filters Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the post-feedforward compensation phase correction filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Numerator frequency 1** Numerator frequency (Hz) for phase correction filter 1

**Denominator frequency 1** Denominator frequency (Hz) for phase correction filter 1

**Phase Correction Gain 1** Gain for phase correction filter 1

**Numerator frequency 2** Numerator frequency (Hz) for phase correction filter 2

**Denominator frequency 2** Denominator frequency (Hz) for phase correction filter 2

**Phase Correction Gain 2** Gain for phase correction filter 2

**XPS Error String** return error string from VI

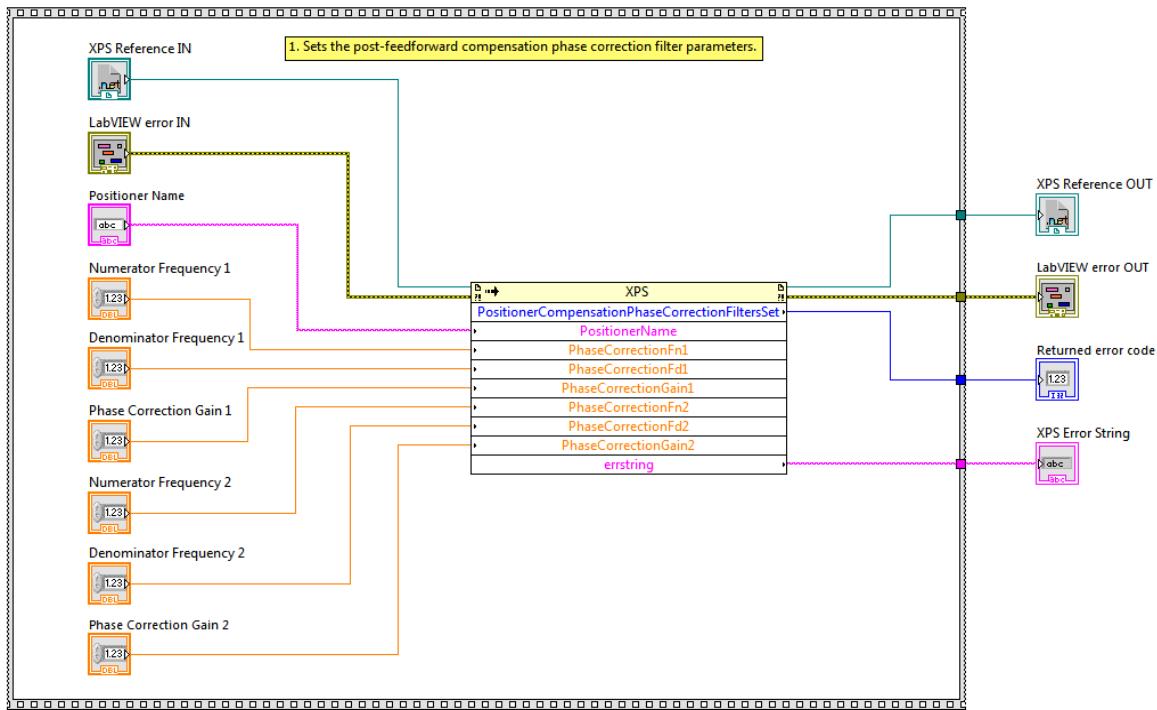
## 158. Positioner Compensation Phase Correction Filters Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the post-feedforward compensation phase correction filter parameters.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Numerator frequency 1** Numerator frequency (Herz) for phase correction filter 1

**Denominator frequency 1** Denominator frequency (Herz) for phase correction filter 1

**Phase Correction Gain 1** Gain for phase correction filter 1

**Numerator frequency 2** Numerator frequency (Herz) for phase correction filter 2

**Denominator frequency 2** Denominator frequency (Herz) for phase correction filter 2

**Phase Correction Gain 2** Gain for phase correction filter 2

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

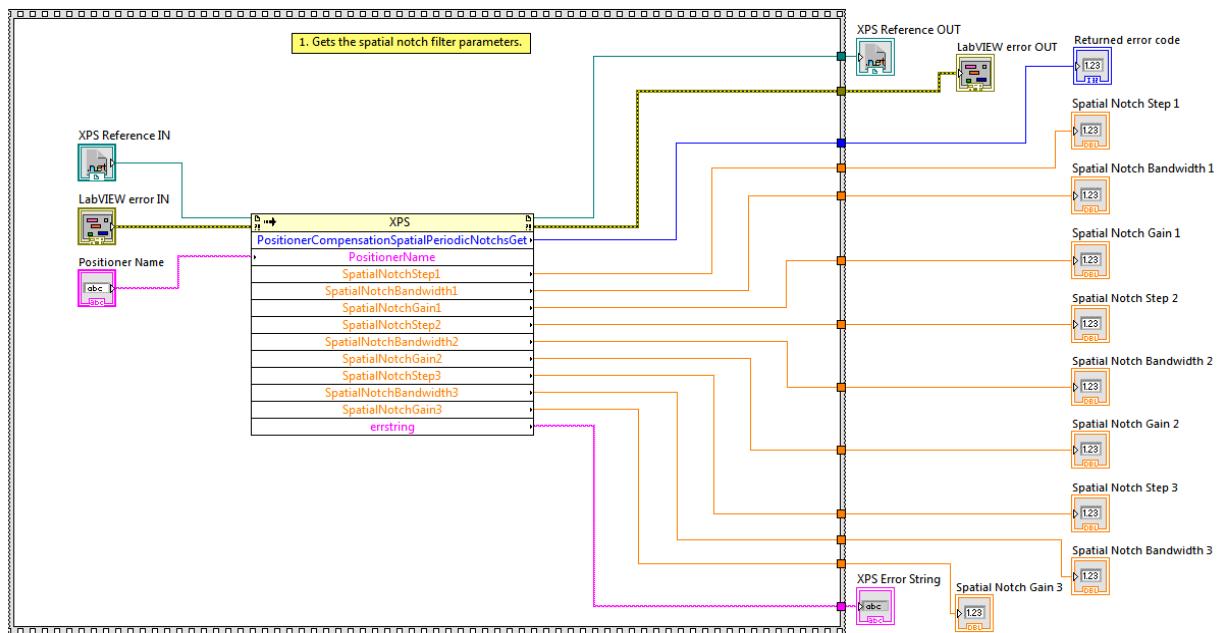
## 159. Positioner Compensation Spatial Periodic Notchs Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets spatial periodic filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Spatial periodic step 1** Spatial periodic step for filter 1 (units)

- DBL** **Spatial periodic bandwidth 1** Spatial periodic bandwidth for filter 1 (Hz)
- DBL** **Spatial periodic gain 1** Spatial periodic gain for filter 1
- DBL** **Spatial periodic step 2** Spatial periodic step for filter 2 (units)
- DBL** **Spatial periodic bandwidth 2** Spatial periodic bandwidth for filter 2 (Hz)
- DBL** **Spatial periodic gain 2** Spatial periodic gain for filter 2
- DBL** **Spatial periodic step 3** Spatial periodic step for filter 3 (units)
- DBL** **Spatial periodic bandwidth 3** Spatial periodic bandwidth for filter 3 (Hz)
- DBL** **Spatial periodic gain 3** Spatial periodic gain for filter 3
- abc** **XPS Error String** return error string from VI

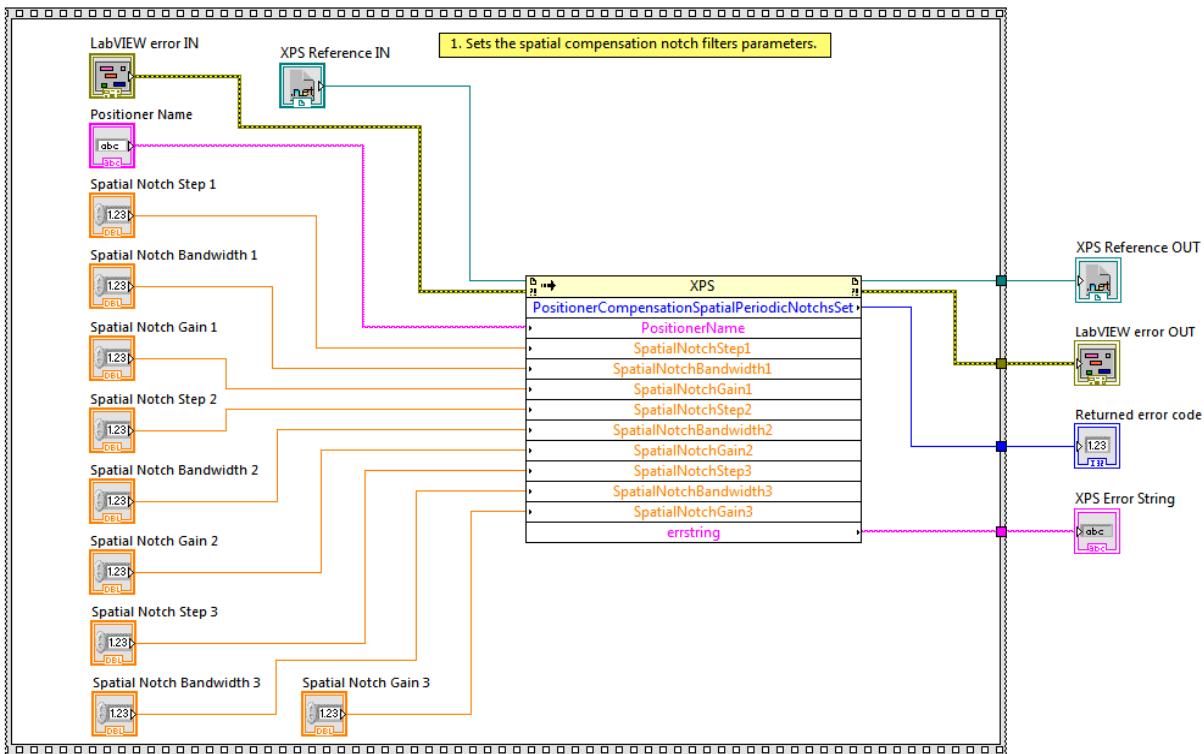
## 160. Positioner Compensation Spatial Periodic Notchs Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the spatial compensation notch filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name<sup>271</sup>

**Spatial periodic step 1** Spatial periodic step for filter 1 (units)

**Spatial periodic bandwidth 1** Spatial periodic bandwidth for filter 1 (Hz)

**Spatial periodic gain 1** Spatial periodic gain for filter 1

**Spatial periodic step 2** Spatial periodic step for filter 2 (units)

**Spatial periodic bandwidth 2** Spatial periodic bandwidth for filter 2 (Hz)

**Spatial periodic gain 2** Spatial periodic gain for filter 2

**Spatial periodic step 3** Spatial periodic step for filter 3 (units)

**Spatial periodic bandwidth 3** Spatial periodic bandwidth for filter 3 (Hz)

**Spatial periodic gain 3** Spatial periodic gain for filter 3

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out

functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

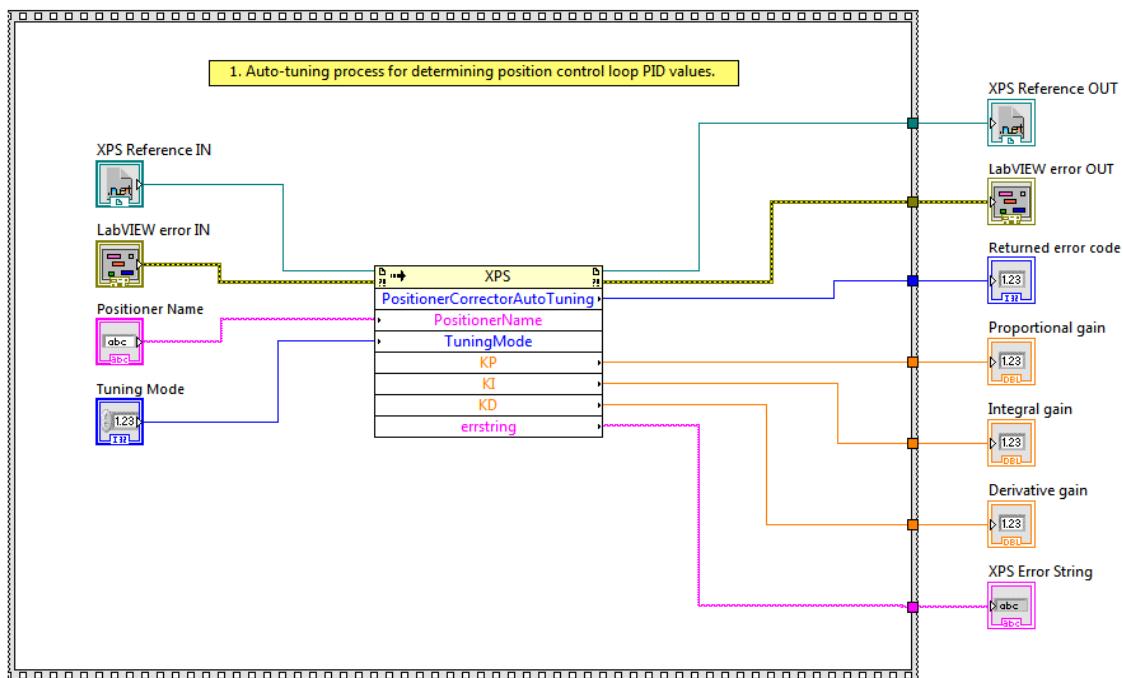
## 161. Positioner Corrector Auto Tuning VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Auto-tuning process for determining position control loop PID values.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Tunning Mode** control mode (0 = short settle, or 1 = robust)

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **Proportional Gain** proportional gain

 **Integral Gain Y** integral gain

 **Derivative Gain** derivative gain

 **XPS Error String** return error string from VI

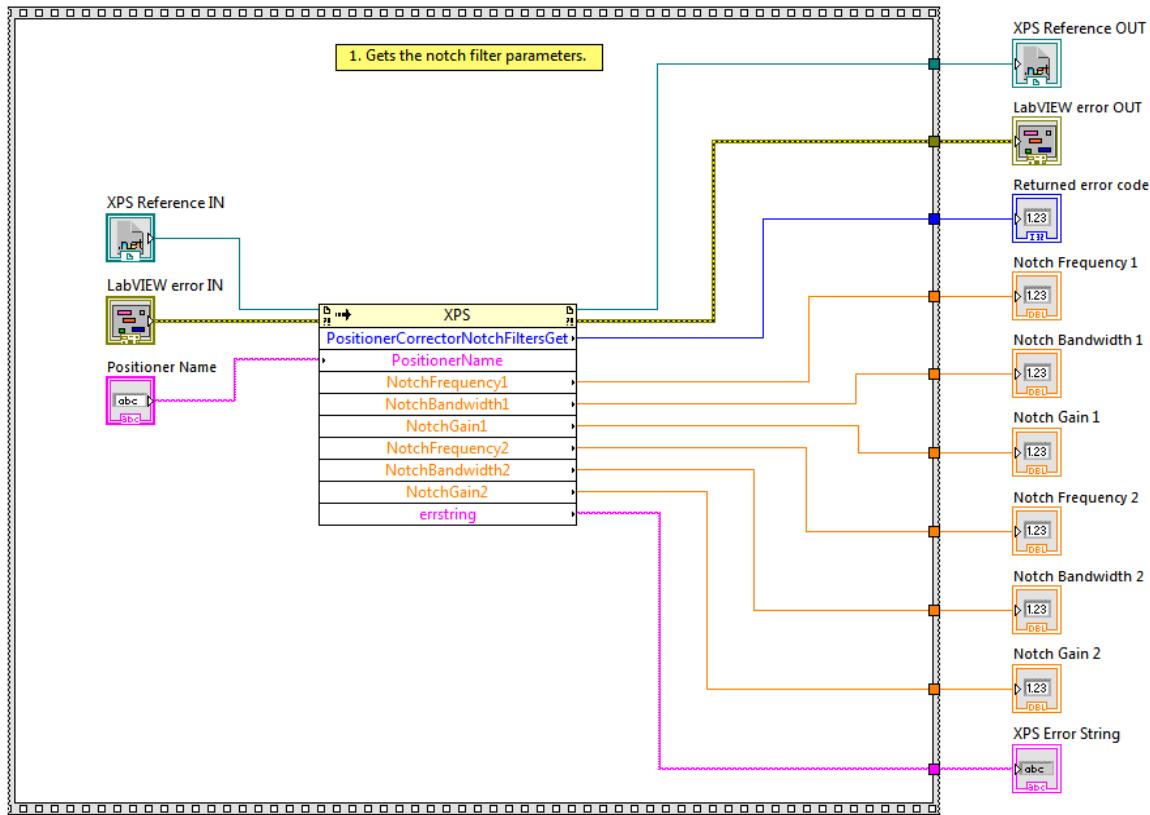
## 162. Positioner Corrector Notch Filters Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the notch filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Notch frequency 1** Numerator frequency (Hz) for phase correction filter 1

**Notch Bandwidth 2** Bandwidth (Hz) for notch filter 2

**Notch Gain 1** Gain for notch filter 1

**Notch frequency 2** Frequency (Hz) for notch filter 2

**[DBL]** Notch Bandwidth 2 Bandwidth (Hz) for notch filter 2

**[DBL]** Phase Gain 2 Gain for phase correction filter 2

**[abc]** XPS Error String return error string from VI

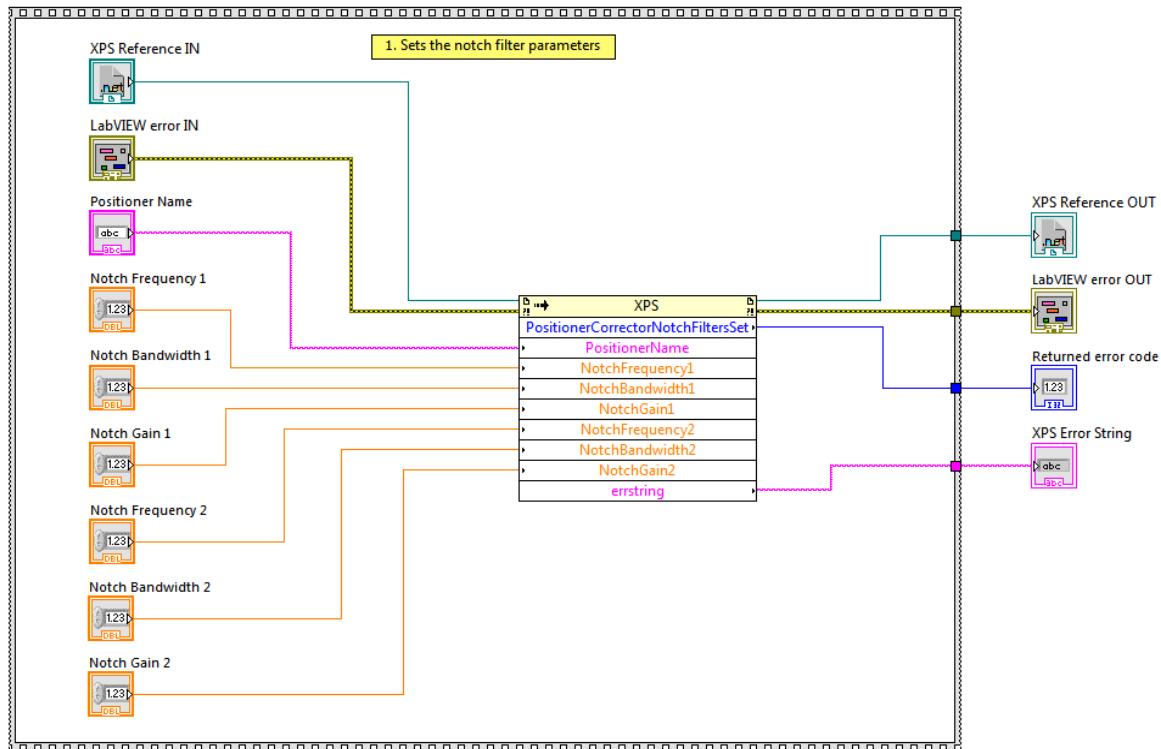
## 163. Positioner Corrector Notch Filters Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the notch filter parameters.

### Screenshot



**[DBL]**

**[DBL]**



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Notch Frequency1** Frequency (Herz) for notch filter 1



**Notch Bandwidth 1** Band width (Herz) for notch filter 1

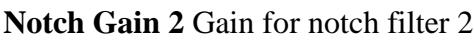
**Notch Gain 1** Gain for notch filter 1



**Notch Frequency 2** Frequency (Herz) for notch filter 2



**Notch Bandwidth 2** Band width (Herz) for notch filter 2



**Notch Gain 2** Gain for notch filter 2

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

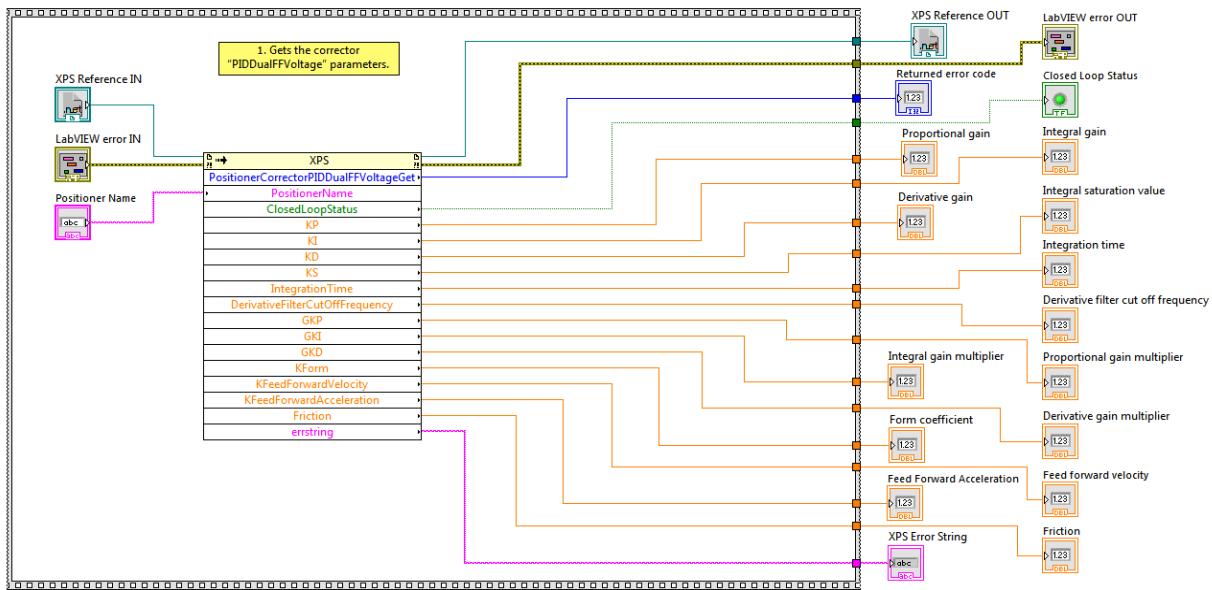
## 164. Positioner Corrector PID Dual FF Voltage Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the corrector “PIDDualFFVoltage” parameters.

**Screenshot**



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**Closed Loop Status** Position servo loop status (true=closed and false=opened)

**Proportional gain** PID servo loop proportional gain

**Integral gain** PID servo loop integral gain

**Derivative gain** PID servo loop derivative gain

**Integral saturation value** PID integral saturation value (0 to 1)

**Integration Time** PID integration time (seconds)

**Derivative Filter Cut Off Frequency** PID derivative filter cut off frequency (Hz)

**Proportional gain multiplier** Variable PID proportional gain multiplier

**Integral gain multiplier** Variable PID integral gain multiplier

**Derivative gain multiplier** Variable PID derivative gain multiplier

**Form coefficient** Variable PID form coefficient

**Feed Forward Velocity** Velocity feed forward gain (units)

**Feed Forward Acceleration** Acceleration feed forward gain

**Friction** Friction compensation

**XPS Error String** return error string from VI

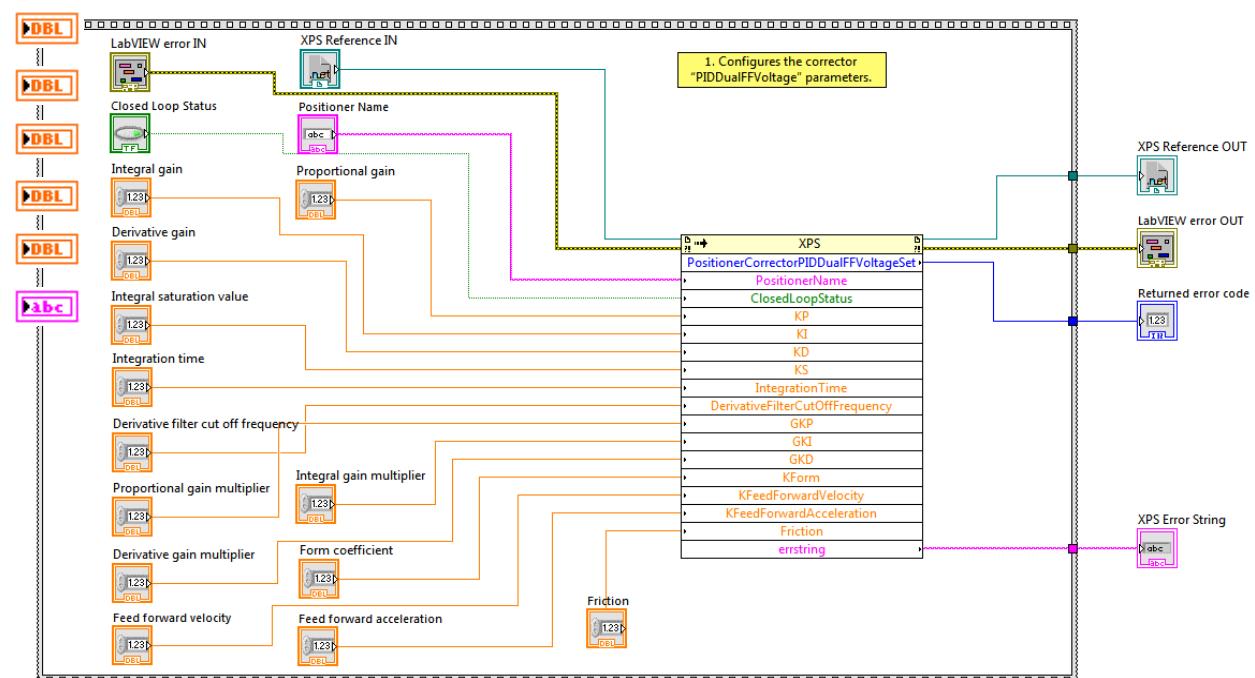
## 165. Positioner Corrector PID Dual FF Voltage Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Configures the corrector “PIDDualFFVoltage” parameters.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input



provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Closed Loop Status** Position servo loop status (true=closed and false=opened)

**Proportional gain** PID servo loop proportional gain

**Integral gain** PID servo loop integral gain

**Derivative gain** PID servo loop derivative gain

**Integral saturation value** PID integral saturation value (0 to 1)

**Integration Time** PID integration time (seconds)

**Derivative Filter Cut Off Frequency** PID derivative filter cut off frequency (Hz)

**Proportional gain multiplier** Variable PID proportional gain multiplier

**Integral gain multiplier** Variable PID integral gain multiplier

**Derivative gain multiplier** Variable PID derivative gain multiplier

**Form coefficient** Variable PID form coefficient

**Feed Forward Velocity** Velocity feed forward gain in units

**Feed Forward Acceleration** Acceleration feed forward gain in units

**Friction** Friction compensation

**XPS Error String** return error string from VI

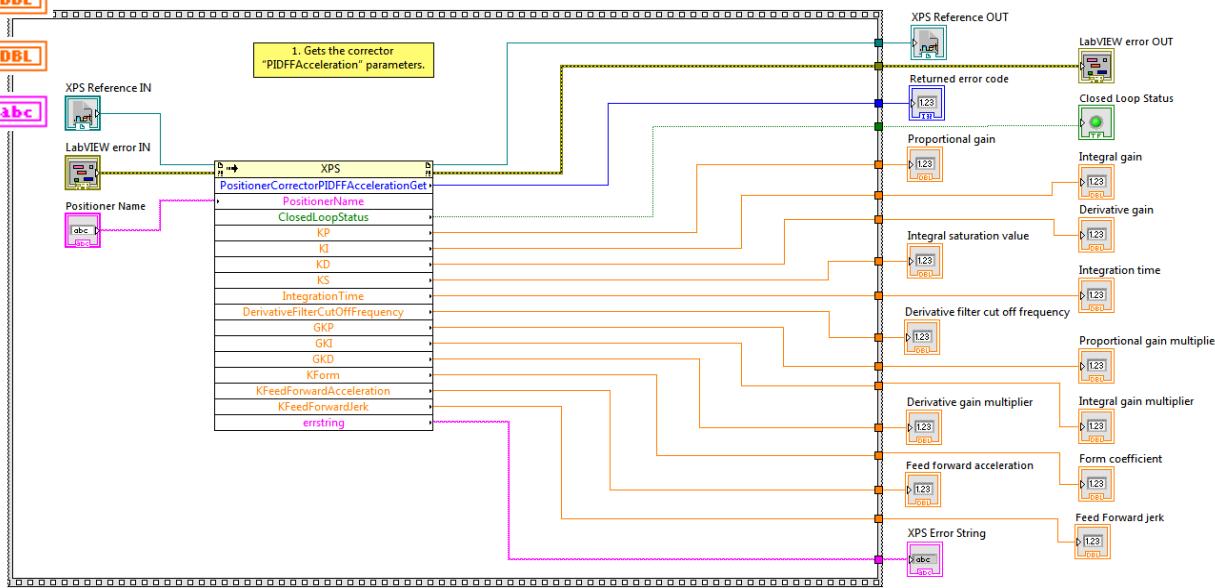
## 166. Positioner Corrector PID FF Acceleration Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the corrector “PIDFFAcceleration” parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Closed Loop Status** Position servo loop status (true=closed and false=opened)

**Proportional gain** PID servo loop proportional gain

**Integral gain** PID servo loop integral gain

**Derivative gain** PID servo loop derivative gain

**Integral saturation value** PID integral saturation value (0 to 1)

**Integration Time** PID integration time (seconds)

**Derivative Filter Cut Off Frequency** PID derivative filter cut off frequency (Hz)

**Proportional gain multiplier** Variable PID proportional gain multiplier

**Integral gain multiplier** Variable PID integral gain multiplier

**Derivative gain multiplier** Variable PID derivative gain multiplier

**Form coefficient** Variable PID form coefficient

**Feed Forward Gain Acceleration** Acceleration feed forward gain (units)

**Jerk Feed Forward Gain** Jerk feed forward gain

**XPS Error String** return error string from VI

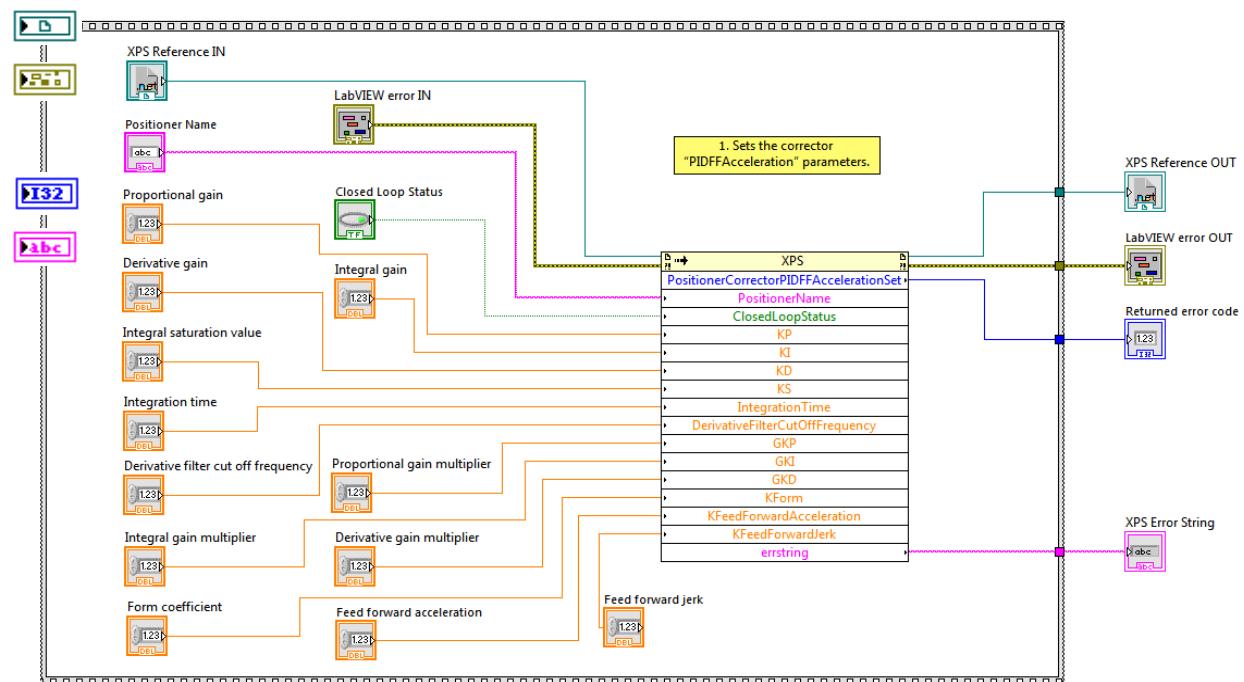
## 167. Positioner Corrector PID FF Acceleration Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the corrector “PIDFFAcceleration” parameters.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Closed Loop Status** Position servo loop status (true=closed and false=opened)

**Proportional gain** PID servo loop proportional gain

**Integral gain** PID servo loop integral gain

**Derivative gain** PID servo loop derivative gain

**Integral saturation value** PID integral saturation value (0 to 1)

**Integration Time** PID integration time (seconds)

**Derivative Filter Cut Off Frequency** PID derivative filter cut off frequency (Hz)

**Proportional gain multiplier** Variable PID proportional gain multiplier

**Integral gain multiplier** Variable PID integral gain multiplier

**Derivative gain multiplier** Variable PID derivative gain multiplier

**Form coefficient** Variable PID form coefficient

**Feed Forward Gain Acceleration** Acceleration feed forward gain (units)

**Jerk Feed Forward Gain** Jerk feed forward gain

**XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

## 168. Positioner Corrector SR1 Acceleration Get VI

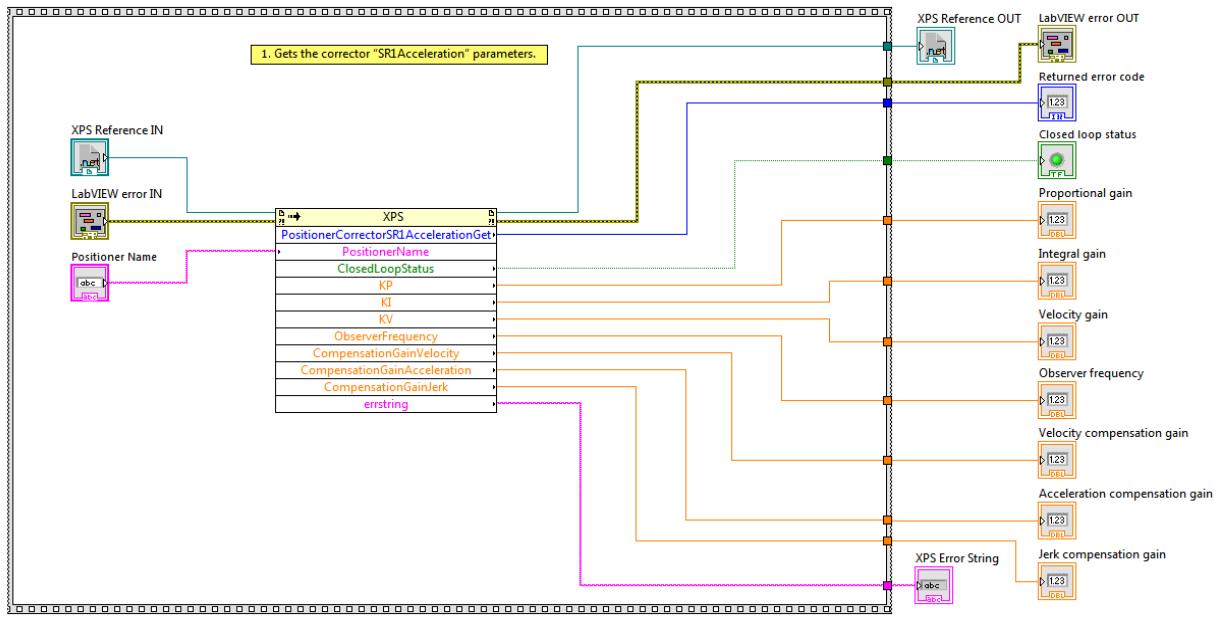
**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the corrector “SR1Acceleration” parameters.

### Screenshot





**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code



**Closed Loop Status** Position servo loop status (true=closed and false=opened)



**Proportional gain** SR1 corrector proportional gain (sec-2)



**Integral gain** SR1 corrector integral gain (sec-3)



**Velocity gain** SR1 corrector velocity gain (sec-1)



**Observer Frequency** SR1 observer frequency (Hz)



**Compensation Gain Velocity** Velocity compensation gain (sec)



**Compensation Gain Acceleration** Acceleration compensation gain (sec<sup>2</sup>)



**Compensation Gain Jerk** Jerk compensation gain (sec<sup>3</sup>)

**XPS Error String** return error string from VI

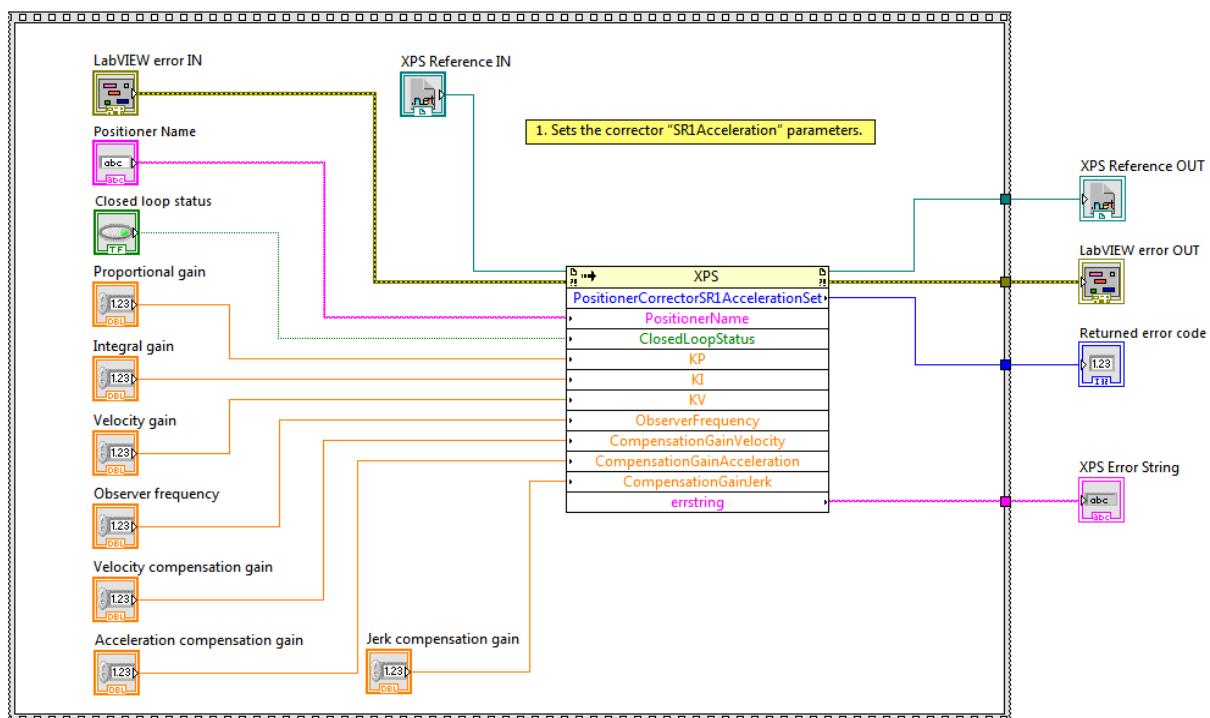
## 169. Positioner Corrector SR1 Acceleration Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the corrector “SR1Acceleration” parameters.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Closed Loop Status** Position servo loop status (true=closed and false=opened)



**Proportional gain** SR1 corrector proportional gain (sec-2)



**Integral gain** SR1 corrector integral gain (sec-3)



**Velocity gain SR1** corrector velocity gain (sec-1)

**Observer Frequency SR1** observer frequency (Hz)

**Compensation Gain Velocity** Velocity compensation gain (sec)

**Compensation Gain Acceleration** Acceleration compensation gain (sec<sup>2</sup>)

**Compensation Gain Jerk** Jerk compensation gain (sec<sup>3</sup>)

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

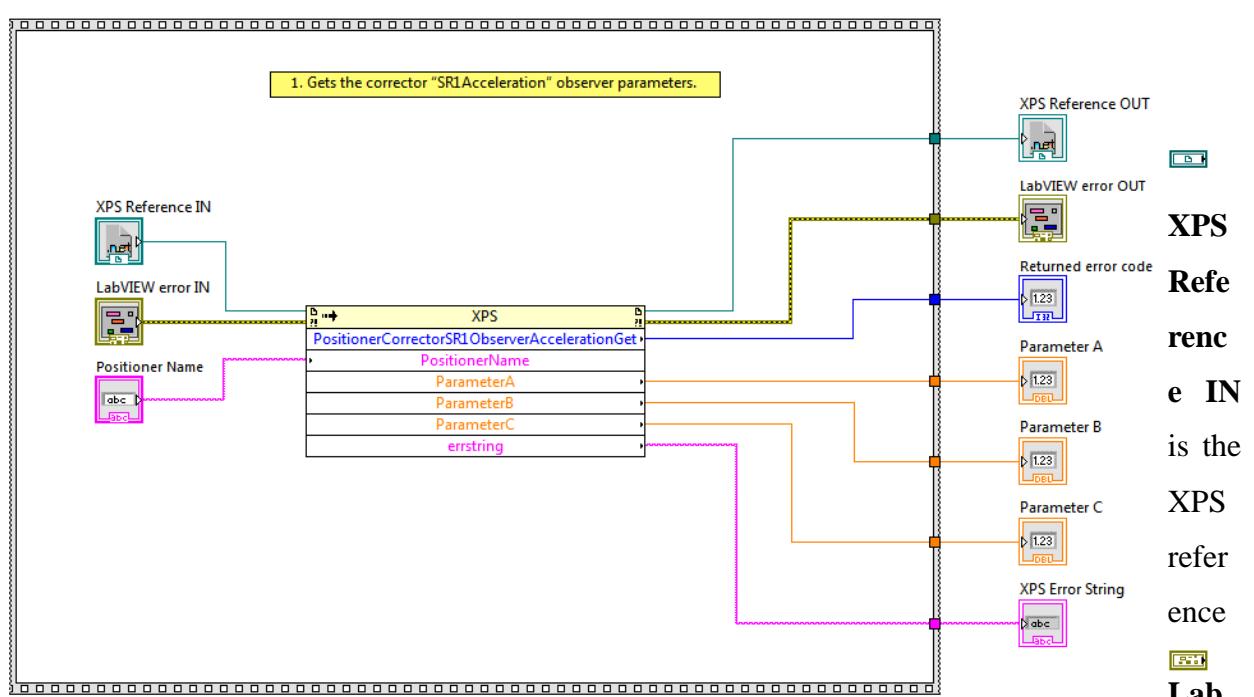
## 170. Positioner Corrector SR1 Observer Acceleration Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the corrector “SR1Acceleration” observer parameters.

### Screenshot



**VIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Parameter A** SR1 observer parameter A

**Parameter B** SR1 observer parameter B

**Parameter C** SR1 observer parameter C

**XPS Error String** return error string from VI

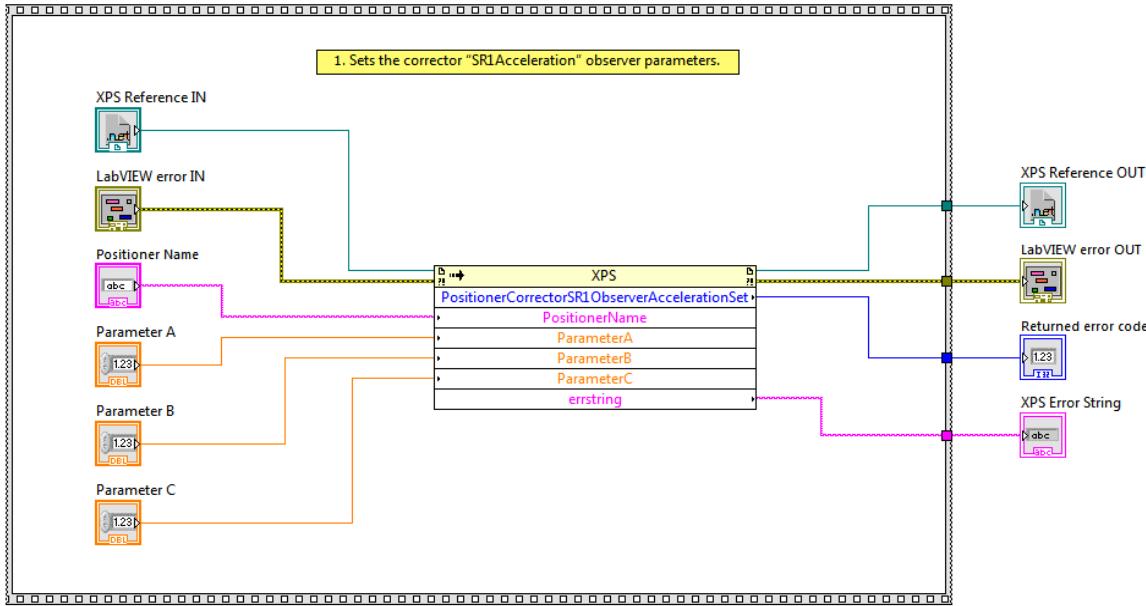
## 171. Positioner Corrector SR1 Observer Acceleration Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the corrector “SR1Acceleration” observer parameters.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Parameter A SR1** observer parameter A



**Parameter B SR1** observer parameter B



**Parameter C SR1** observer parameter C

**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

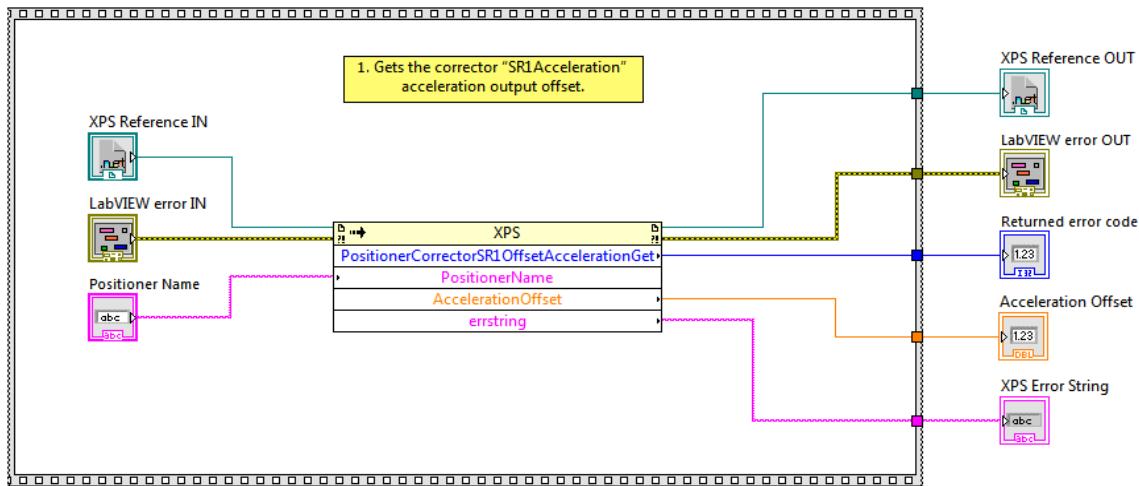
## 172. Positioner Corrector SR1 Offset Acceleration Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the corrector “SR1Acceleration” acceleration output offset.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**Acceleration Offset** SR1 corrector acceleration output offset



**XPS Error String** return error string from VI

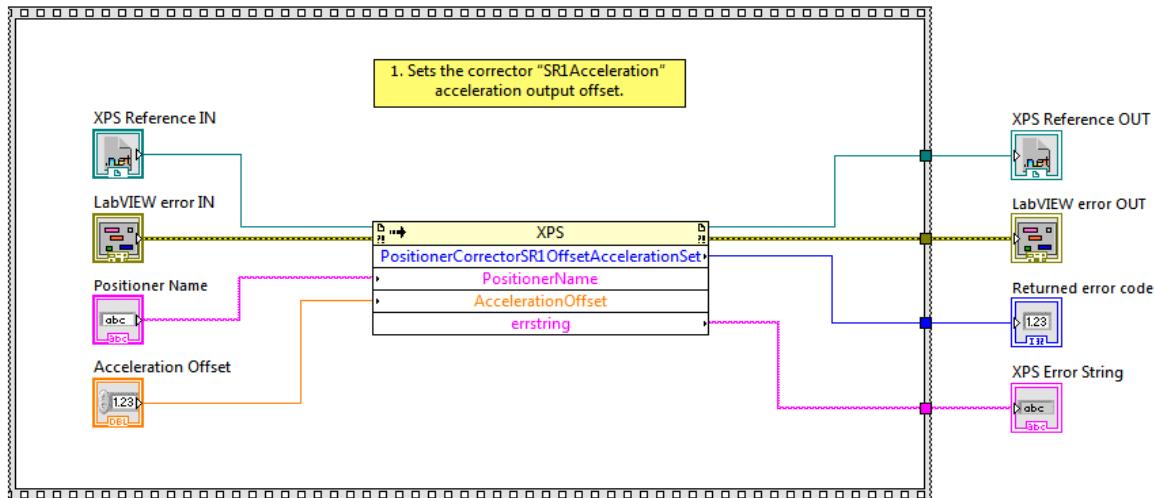
## 173. Positioner Corrector SR1 Offset Acceleration Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the corrector “SR1Acceleration” acceleration output offset.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Acceleration Offset** SR1 corrector acceleration output offset



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

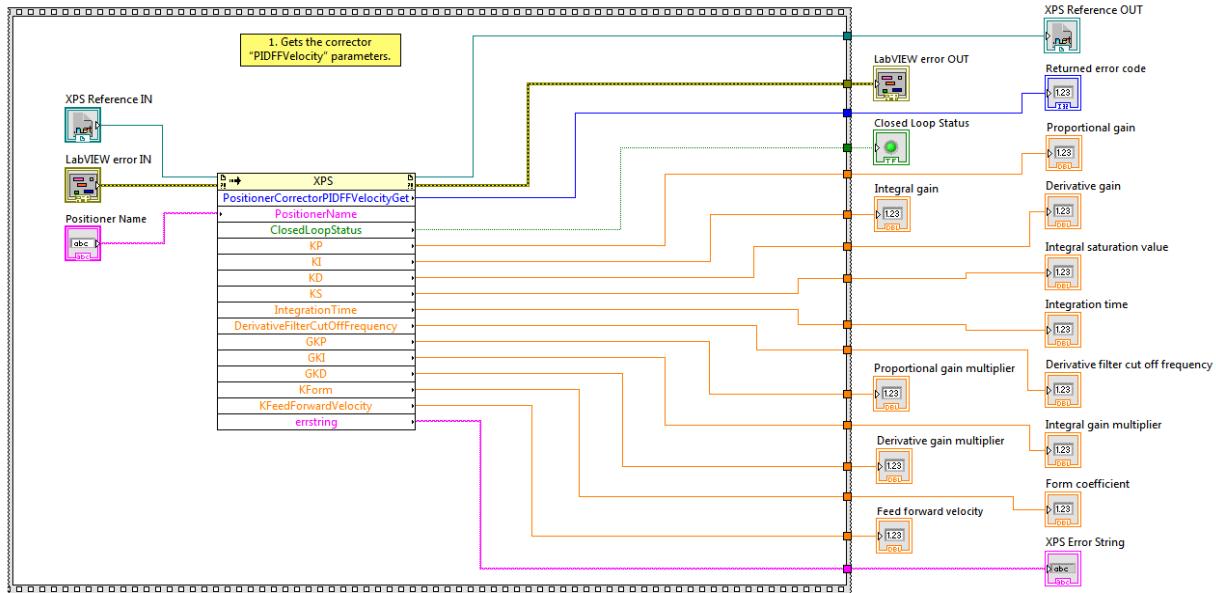
## 174. Positioner Corrector PID FF Velocity Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the corrector “PIDFFVelocity” parameters

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Closed Loop Status** Position servo loop status (true=closed and false=opened)



**Proportional gain** PID servo loop proportional gain



**Integral gain** PID servo loop integral gain



**Derivative gain** PID servo loop derivative gain



**Integral saturation value** PID integral saturation value (0 to 1)

 **Integration Time** PID integration time (seconds)





 **Derivative Filter Cut Off Frequency** PID derivative filter cut off frequency (Hz)

 **Proportional gain multiplier** Variable PID proportional gain multiplier

 **Integral gain multiplier** Variable PID integral gain multiplier

 **Derivative gain multiplier** Variable PID derivative gain multiplier

 **Form coefficient** Variable PID form coefficient

**Feed Forward Gain Velocity** Velocity feed forward gain (units)

**XPS Error String** return error string from VI

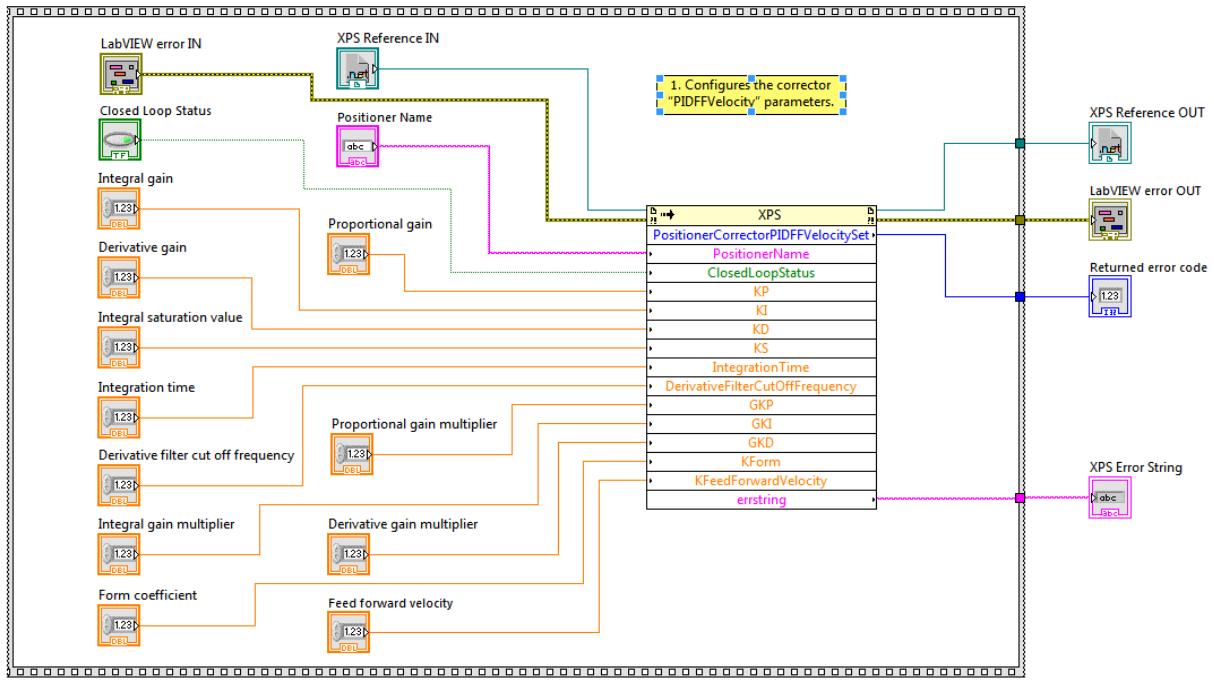
## 175. Positioner Corrector PID FF Velocity Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Configures the corrector “PIDFFVelocity” parameters.

**Screenshot**



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Closed Loop Status** Position servo loop status (true=closed and false=opened)



**Proportional gain** PID servo loop proportional gain



**Integral gain** PID servo loop integral gain



**Derivative gain** PID servo loop derivative gain



**Integral saturation value** PID integral saturation value (0 to 1)



**Integration Time** PID integration time (seconds)



**Derivative Filter Cut Off Frequency** PID derivative filter cut off frequency (Hz)



**Proportional gain multiplier** Variable PID proportional gain multiplier



**Integral gain multiplier** Variable PID integral gain multiplier



**Derivative gain multiplier** Variable PID derivative gain multiplier



**Form coefficient** Variable PID form coefficient



**Feed Forward Gain Velocity** Velocity feed forward gain (units)



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[I32] Returned Error Code** Returns function error code

**[abc] XPS Error String** return error string from VI

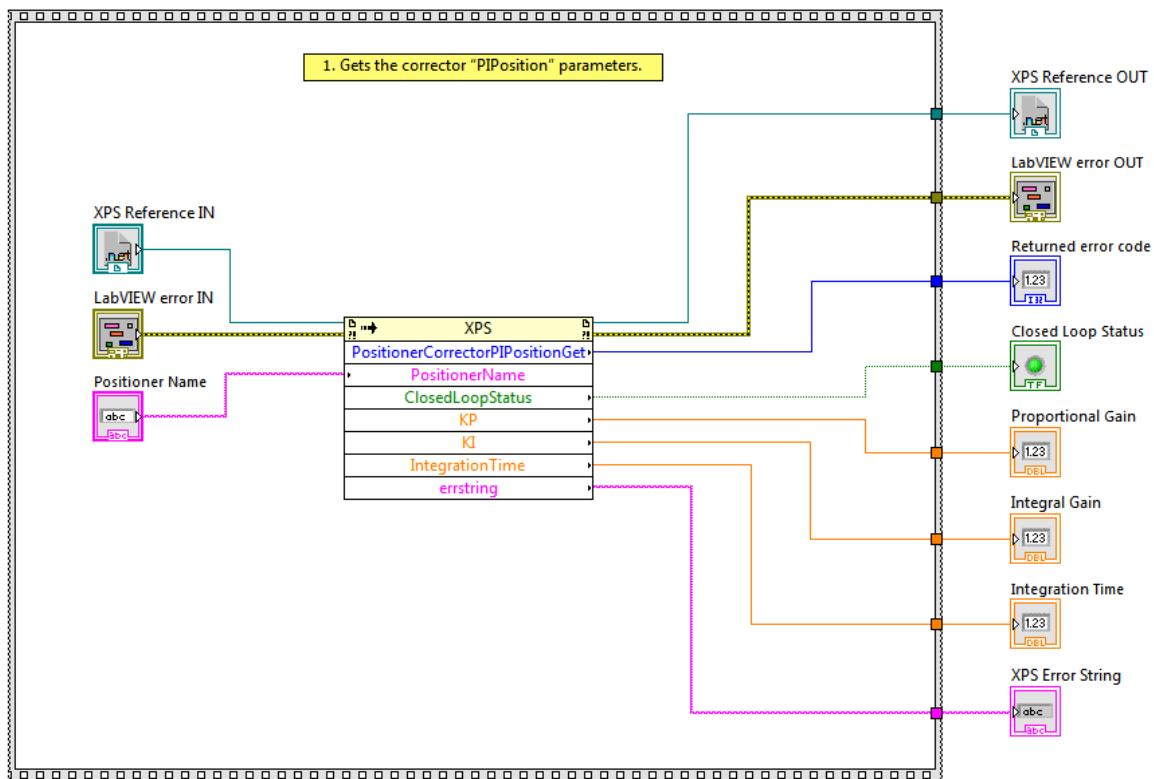
## 176. Positioner Corrector PI Position Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the corrector “PIPosition” parameters.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input

provides standard error in functionality.

 **Positioner Name** positioner name

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **Closed Loop Status** Position servo loop status (true=closed and false=opened)





**Proportional gain** PID servo loop proportional gain

**Integral gain** PID servo loop integral gain

 **Integration Time** PID integration time (seconds)

 **XPS Error String** return error string from VI

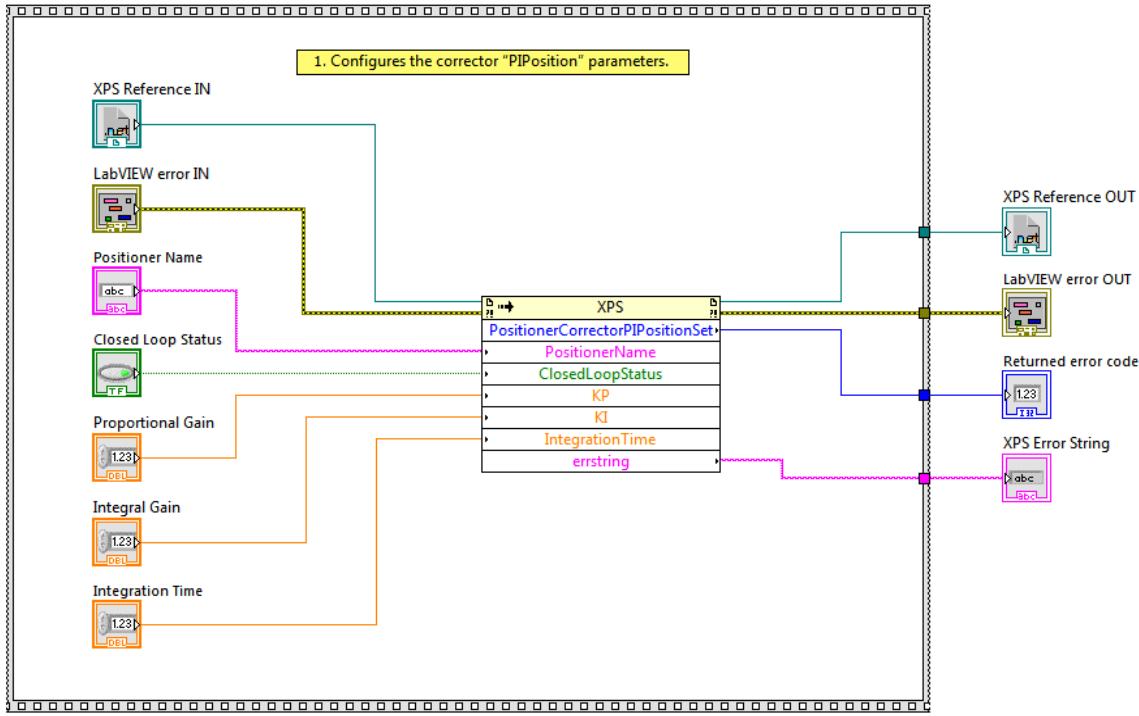
## 177. Positioner Corrector PI Position Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Configures the corrector “PIPosition” parameters.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Closed Loop Status** Position servo loop status (true=closed and false=opened)



**Proportional Gain** PID servo loop proportional gain



**Integral Gain** PID servo loop integral gain



**Integration Time** PID integration time in seconds



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

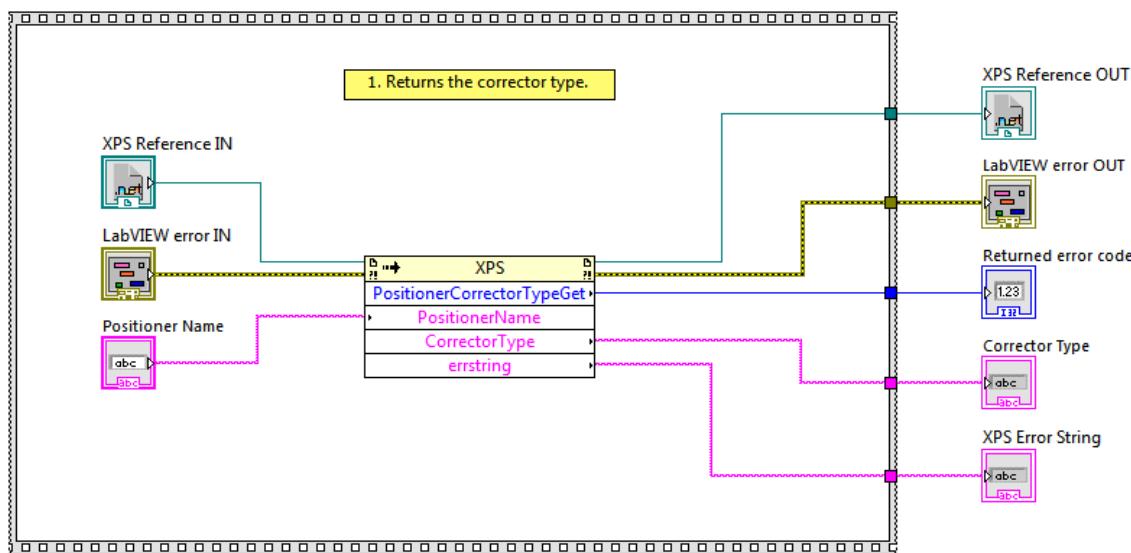
## 178. Positioner Corrector Type Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the corrector type.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Corrector Type** corrector type value

**XPS Error String** return error string from VI

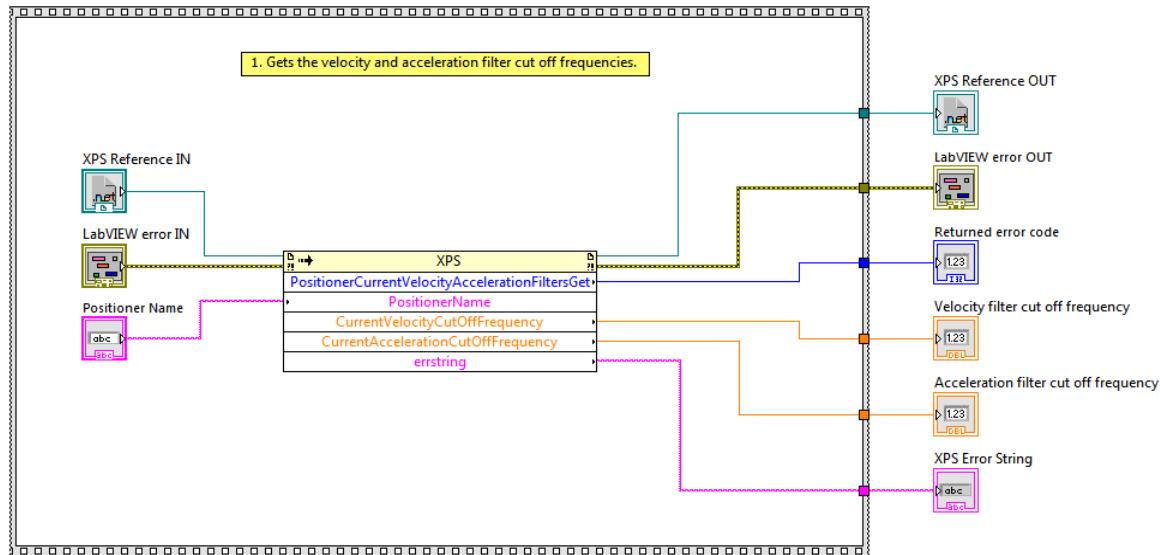
### 179. Positioner Current Velocity Acceleration Filters Get VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Gets the velocity and acceleration filter cut off frequencies.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Velocity Cut Off Frequency** Velocity filter cut off frequency (Hz)



**Acceleration Cut Off Frequency** Acceleration filter cut off frequency (Hz)



**XPS Error String** return error string from VI

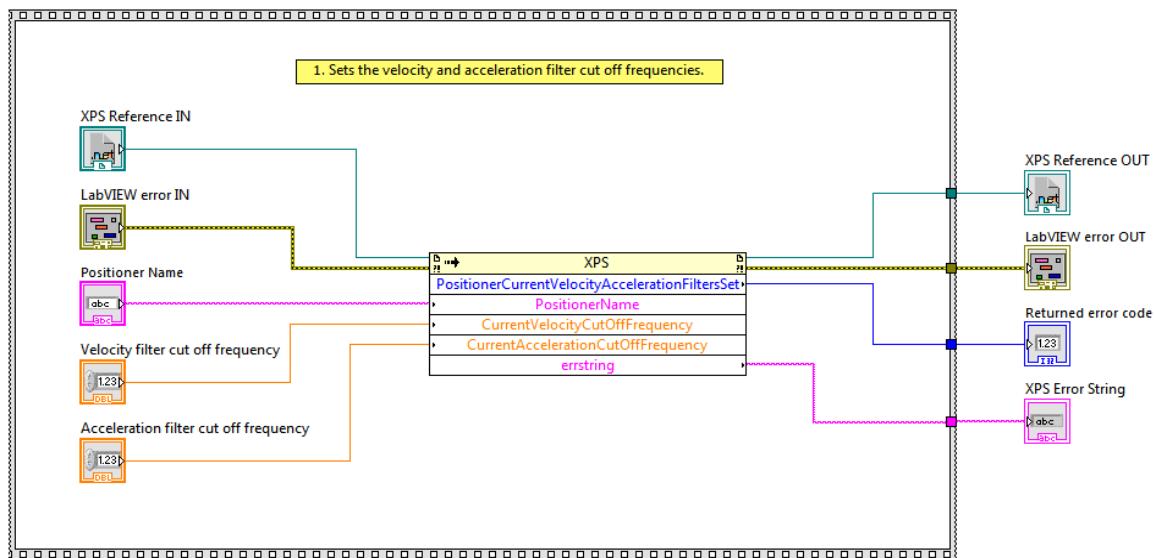
## 180. Positioner Current Velocity Acceleration Filters Set VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Sets the velocity and acceleration filter cut off frequencies.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Velocity Filter Cut Off Frequency** Velocity filter cut off frequency

**Acceleration Filter Cut Off Frequency** Acceleration filter cut off frequency

**XPS Reference OUT** returns XPS reference

**XPS Error String** return error string from VI

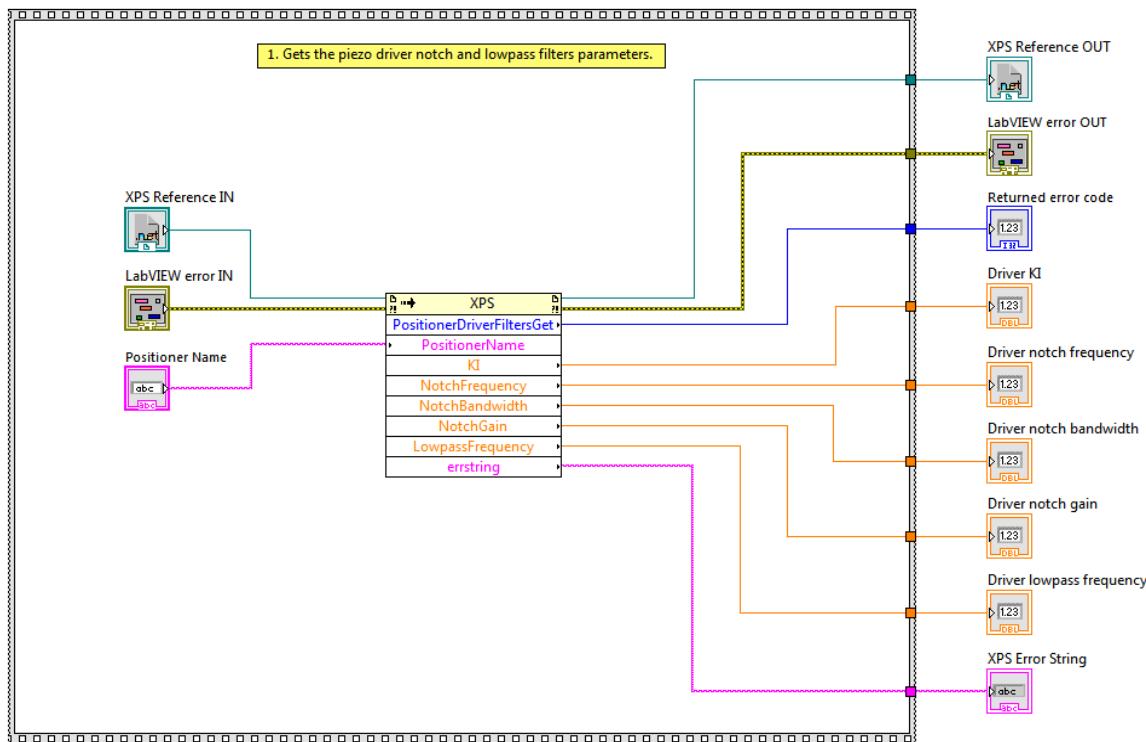
## 181. Positioner Driver Filters Get VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Gets the piezo driver notch and lowpass filters parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Driver KI** Driver KI



**Driver Notch Frequency** Driver notch frequency (Hz)



**Driver Notch Bandwidth** Driver notch bandwidth (Hz)

**Driver Notch Gain** Driver notch gain

**Driver Low-pass Frequency** Driver low-pass frequency (Hz)

**XPS Error String** return error string from VI

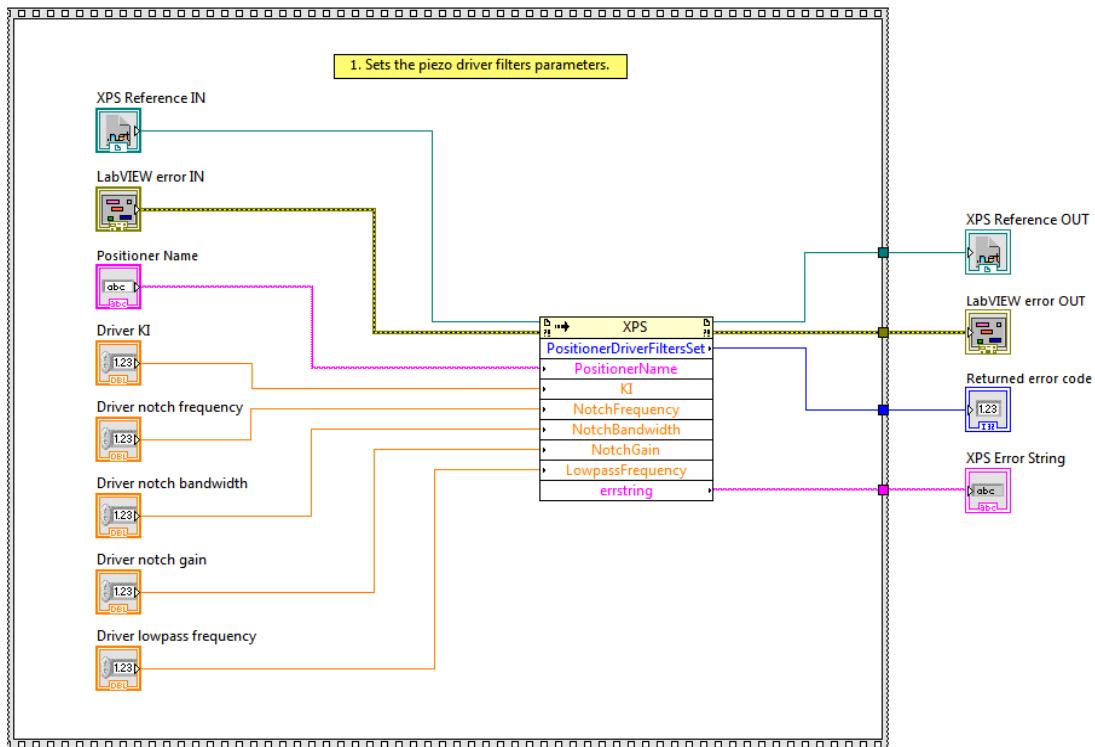
## 182. Positioner Driver Filters Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the piezo driver notch and lowpass filters parameters.

### Screenshot



**XPS Reference IN** is the XPS reference



abc



1.23



1.23



1.23



1.23



1.23

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Driver KI** Driver KI

**Driver Notch Frequency** Driver notch frequency (Hz)

**Driver Notch Bandwidth** Driver notch bandwidth (Hz)

**Driver Notch Gain** Driver notch gain

**Driver Low-pass Frequency** Driver low-pass frequency (Hz)

**XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

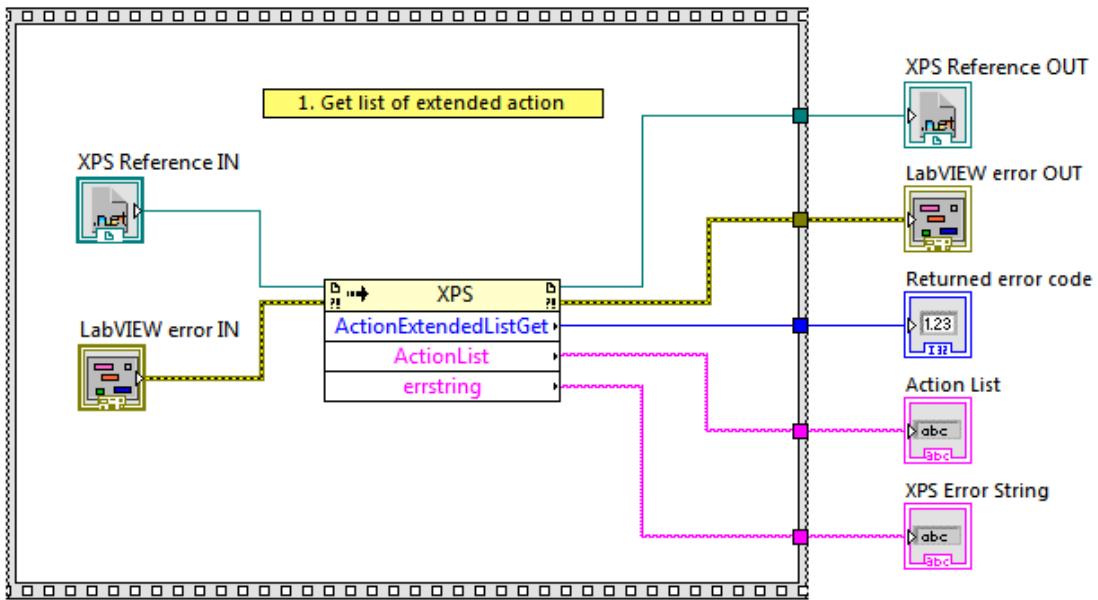
## 183. Action Extended List Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get list of extended action.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Action List** action list

**XPS Error String** return error string from VI

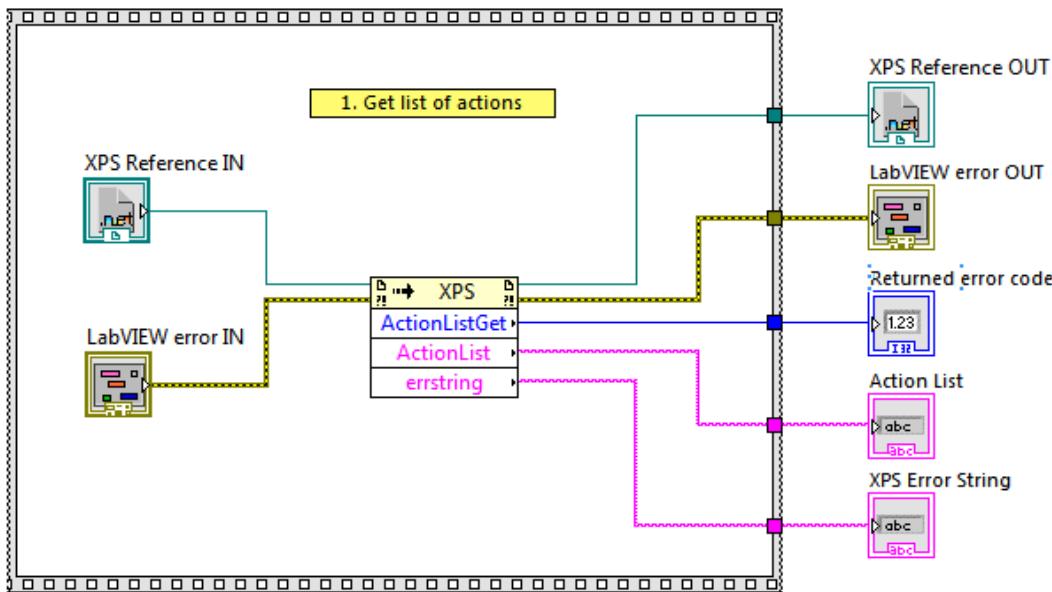
## 184. Action List Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get list of action.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Action List** action list



**XPS Error String** return error string from VI

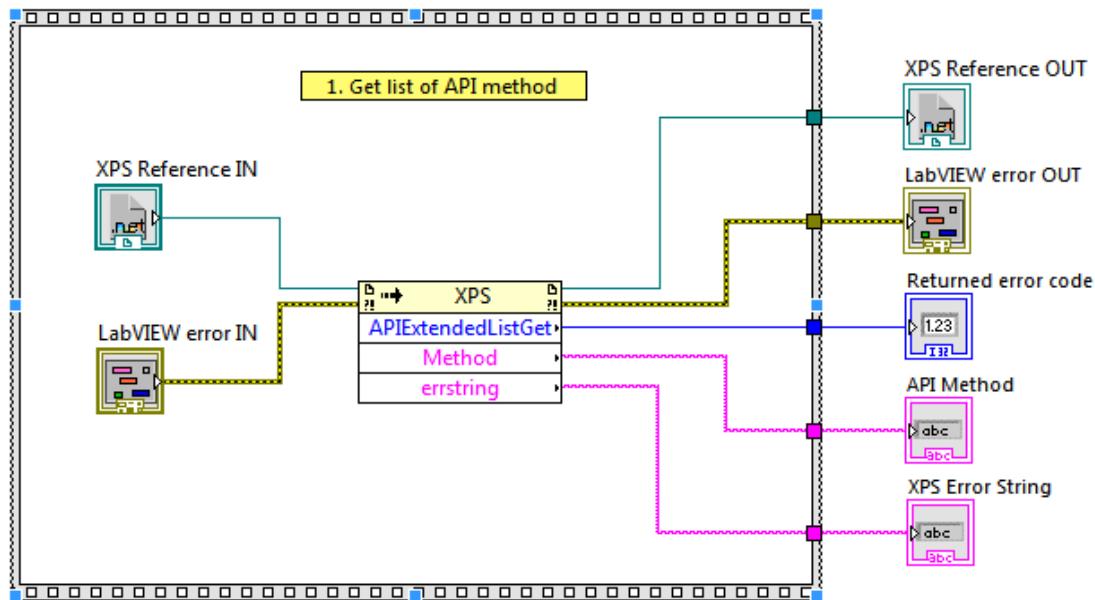
## 185. API Extended List Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get list of API method.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**API Method** API method

**XPS Error String** return error string from VI

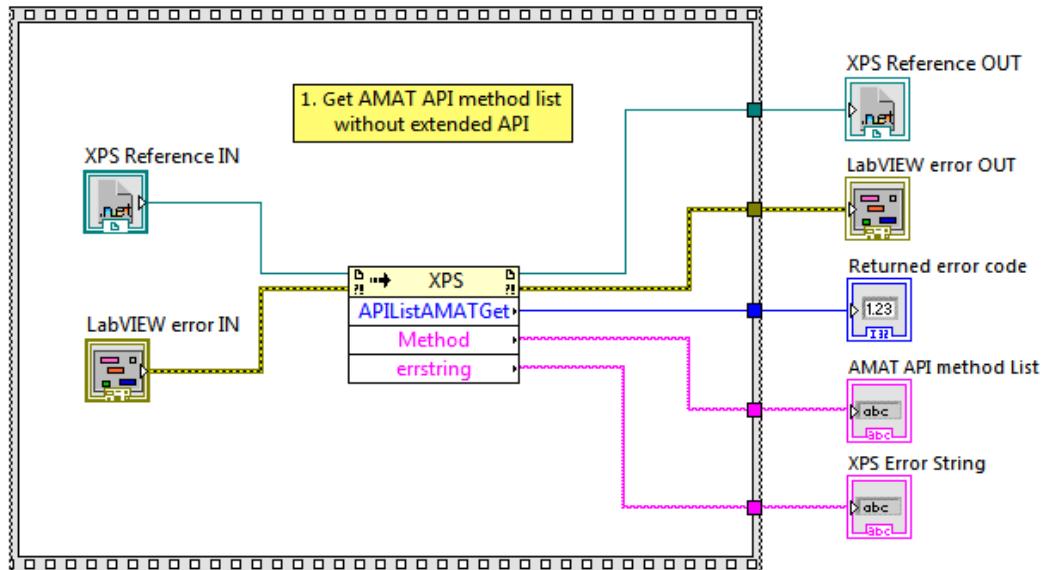
## 186. API List AMAT Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get AMAT API method list without extended API.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**AMAT API Method List** AMAT API method list

**XPS Error String** return error string from VI

## 187. API List Get VI



**Owning Palette:** Interpolation & Extrapolation VI



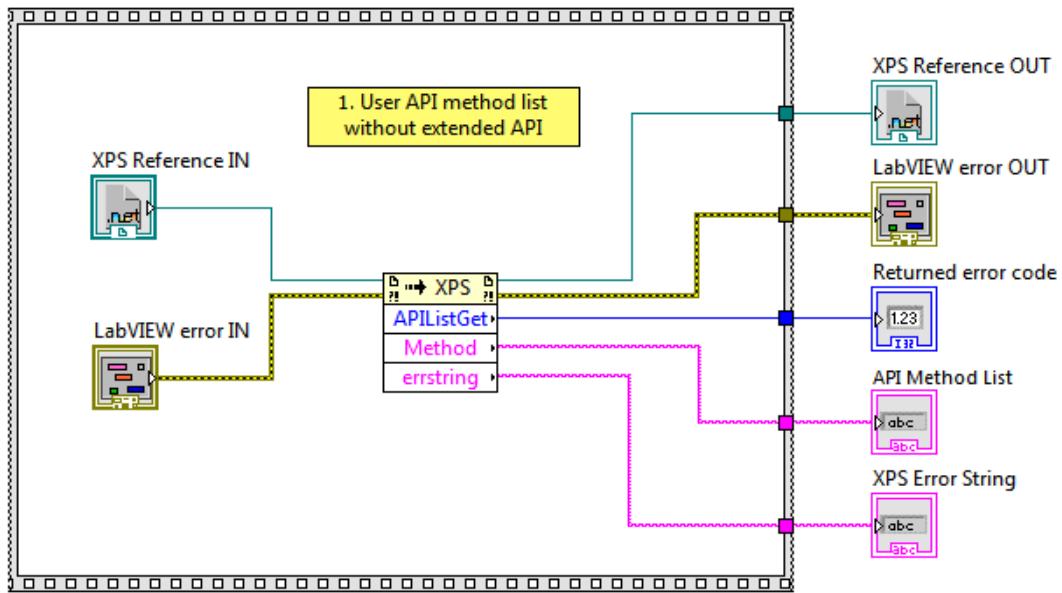
**Requires:** Full Development System

Get user API method list without extended API.



**Screenshot**





**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**API Method List** User API method list

**XPS Error String** return error string from VI

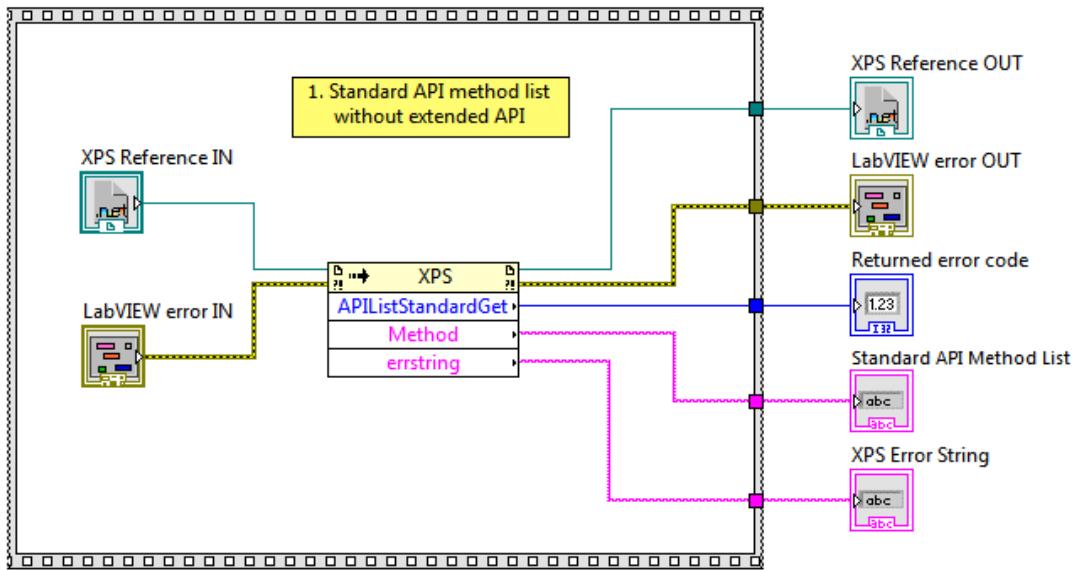
## 188. API List Standard Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get standard API method list without extended API.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Standard API Method List** Standard API method list

**XPS Error String** return error string from VI

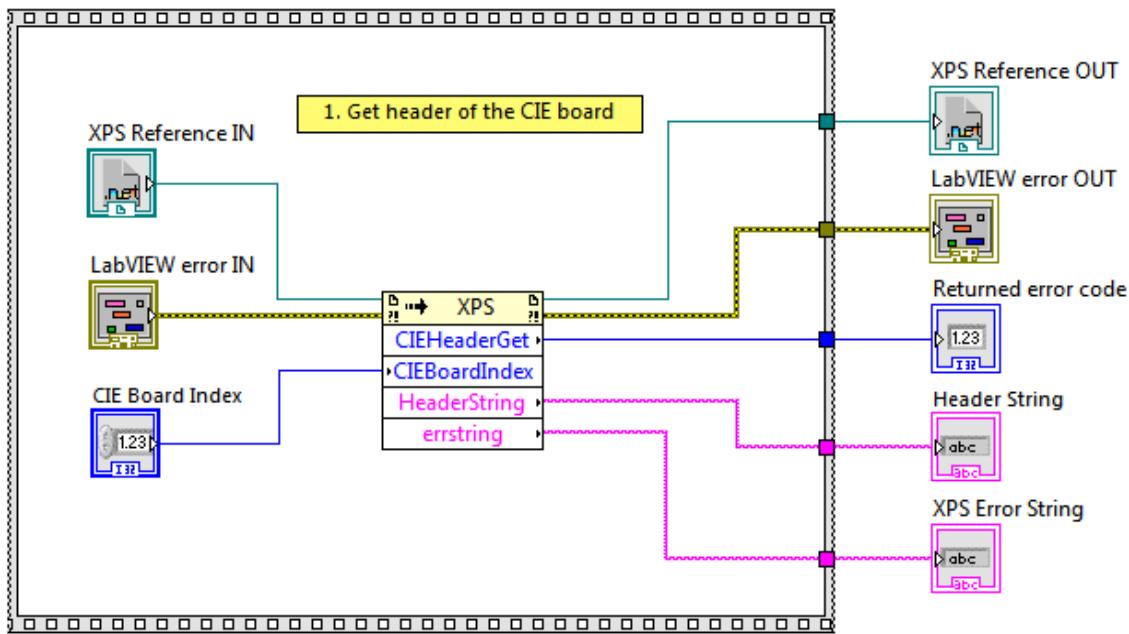
## 189. CIE Header Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get header of the CIE board.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**CIE Board Index** CIE board index

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Header String** Header string

**XPS Error String** return error string from VI

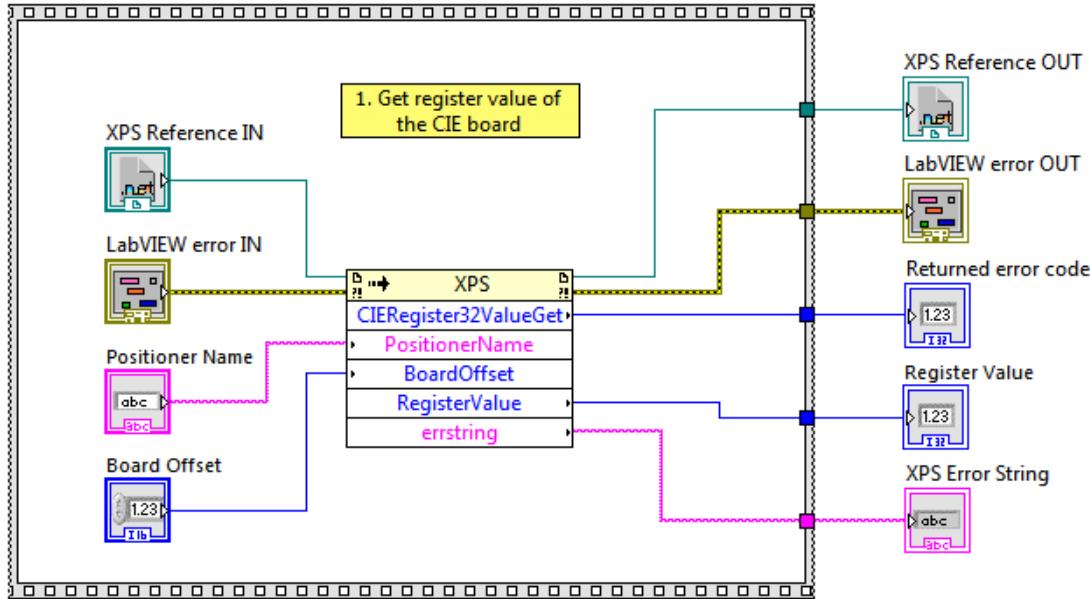
## 190. CIE Register 32 Value Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get register value of the CIE board.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner name** positioner name

**Board Offset** board offset

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Register Value** Register value

**XPS Error String** return error string from VI

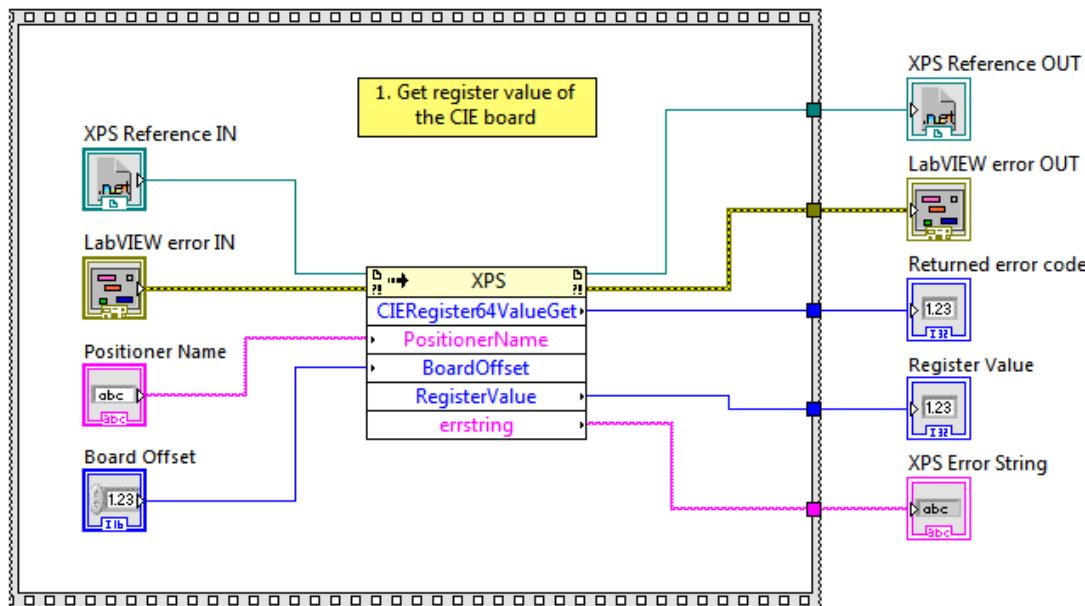
## 191. CIE Register 64 Value Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get register value of the CIE board.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner name** positioner name

**Board Offset** board offset

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Register Value** Register value

**XPS Error String** return error string from VI

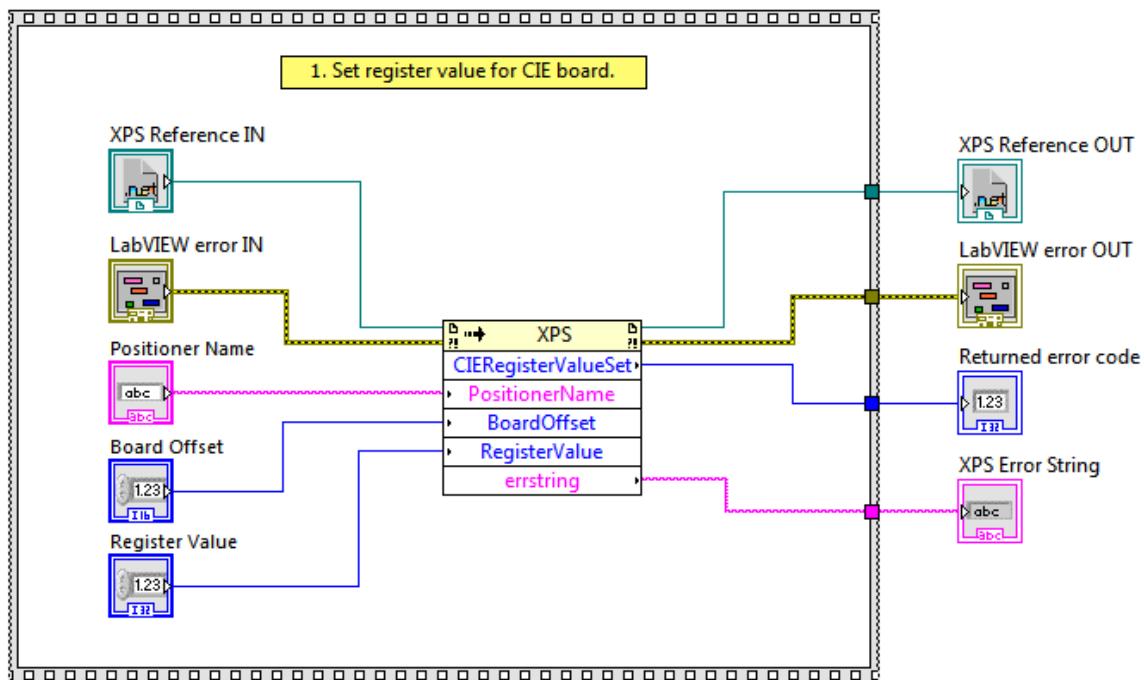
## 192. CIE Register Value Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set register value for CIE board.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Board Offset** board offset

**Register Value** Register value

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out

functionality.



**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

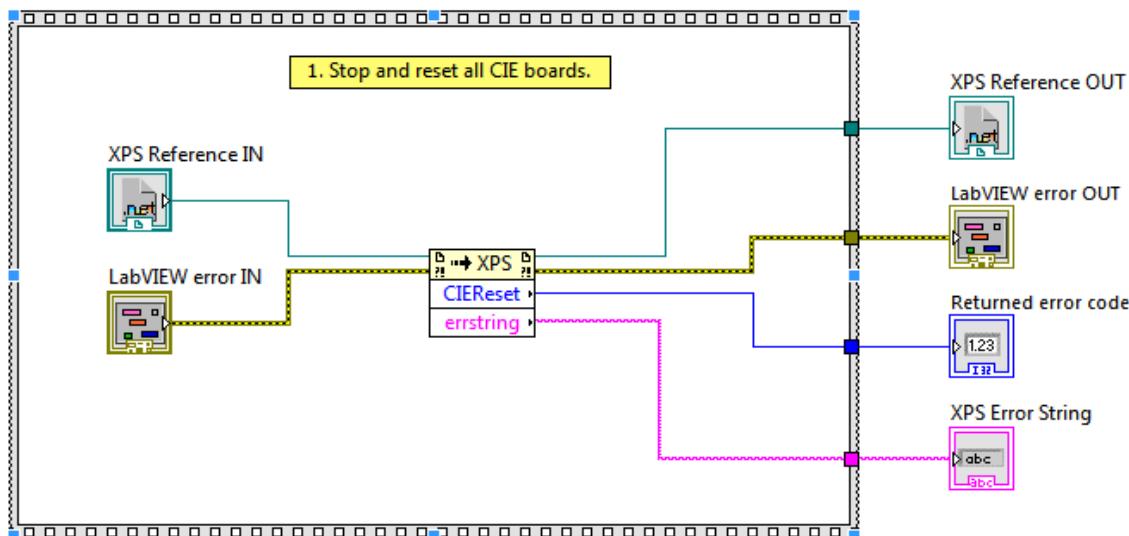
## 193. CIE Reset VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Stop and reset all CIE boards.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out



functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

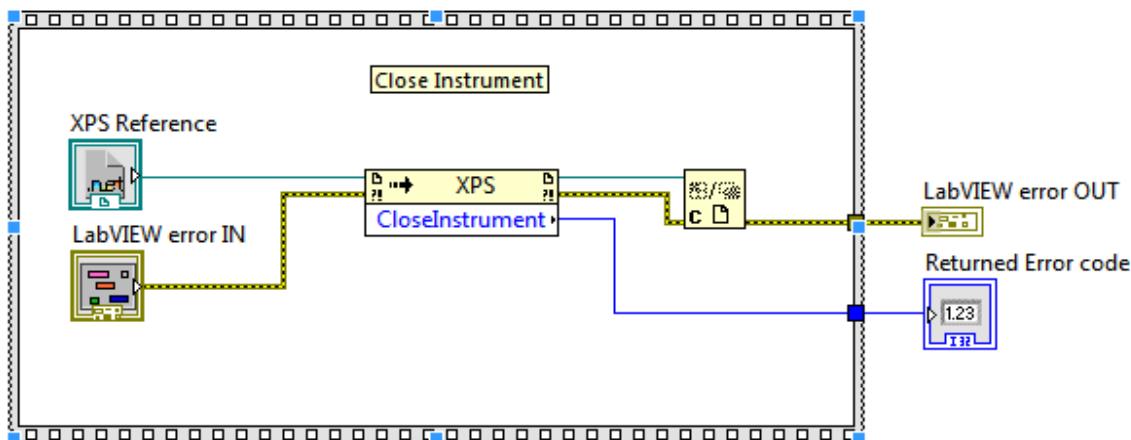
## 194. Close VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Close the instrument.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

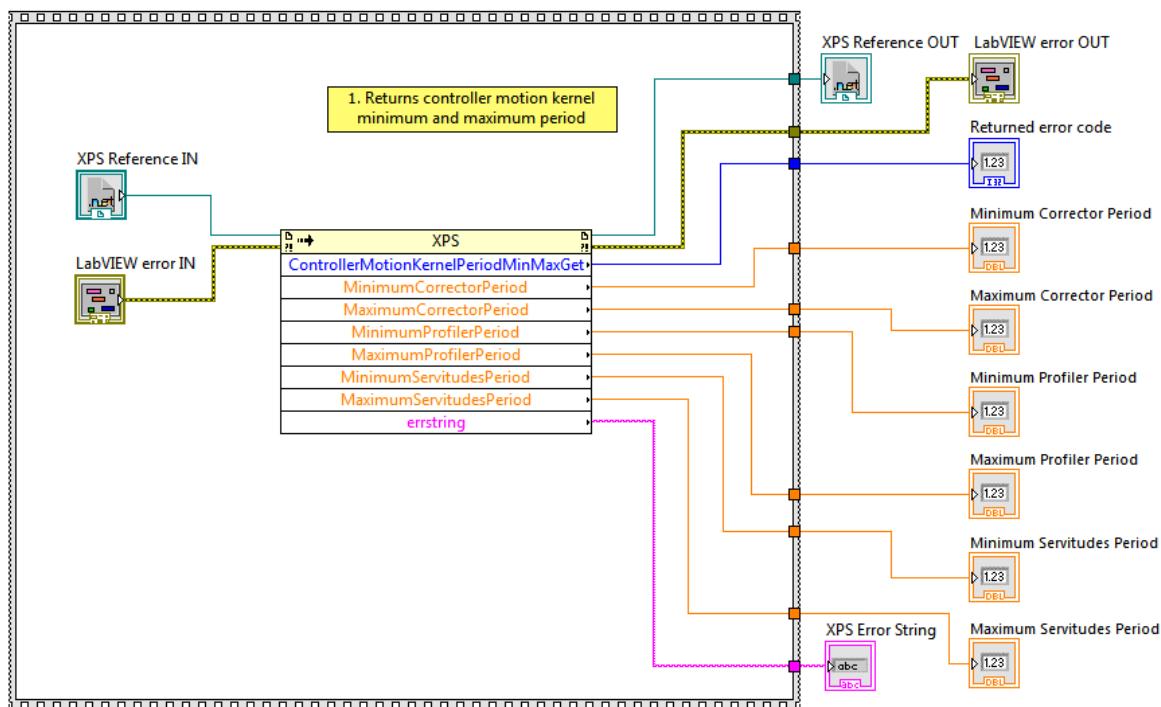
## 195. Controller Motion Kernel Period Min Max Get VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Return controller motion kernel minimum and maximum period.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Minimum Corrector Period** Minimum controller motion kernel corrector period



**Maximum Corrector Period** Maximum controller motion kernel corrector period



**Minimum Profiler Period** Minimum controller motion kernel profiler period



**Maximum Profiler Period** Maximum controller motion kernel profiler period



**Minimum Servitudes Period** Minimum controller motion kernel servitudes period



**Maximum Servitudes Period** Maximum controller motion kernel servitudes period

**Maximum Profiler Period** Maximum controller motion kernel profiler period

**Minimum Servitudes Period** Minimum controller motion kernel servitudes period

**Maximum Servitudes Period** Maximum controller motion kernel servitudes period

**XPS Error String** return error string from VI

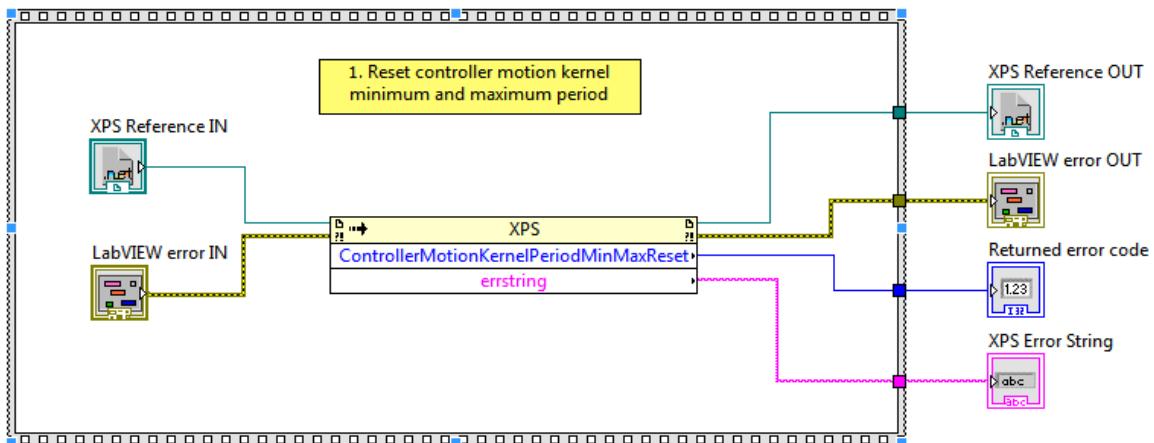
## 196. Controller Motion Kernel Period Min Max Reset VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Reset controller motion kernel minimum and maximum period.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

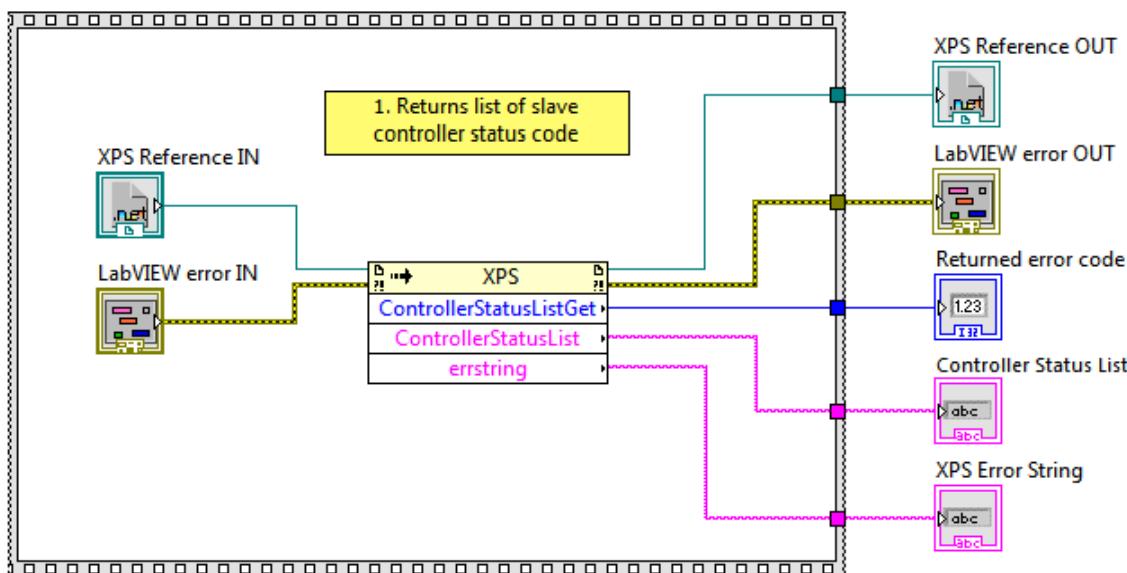
## 197. Controller Status List Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns list of slave controller status code.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Controller Status List** Controller status list

**XPS Error String** return error string from VI

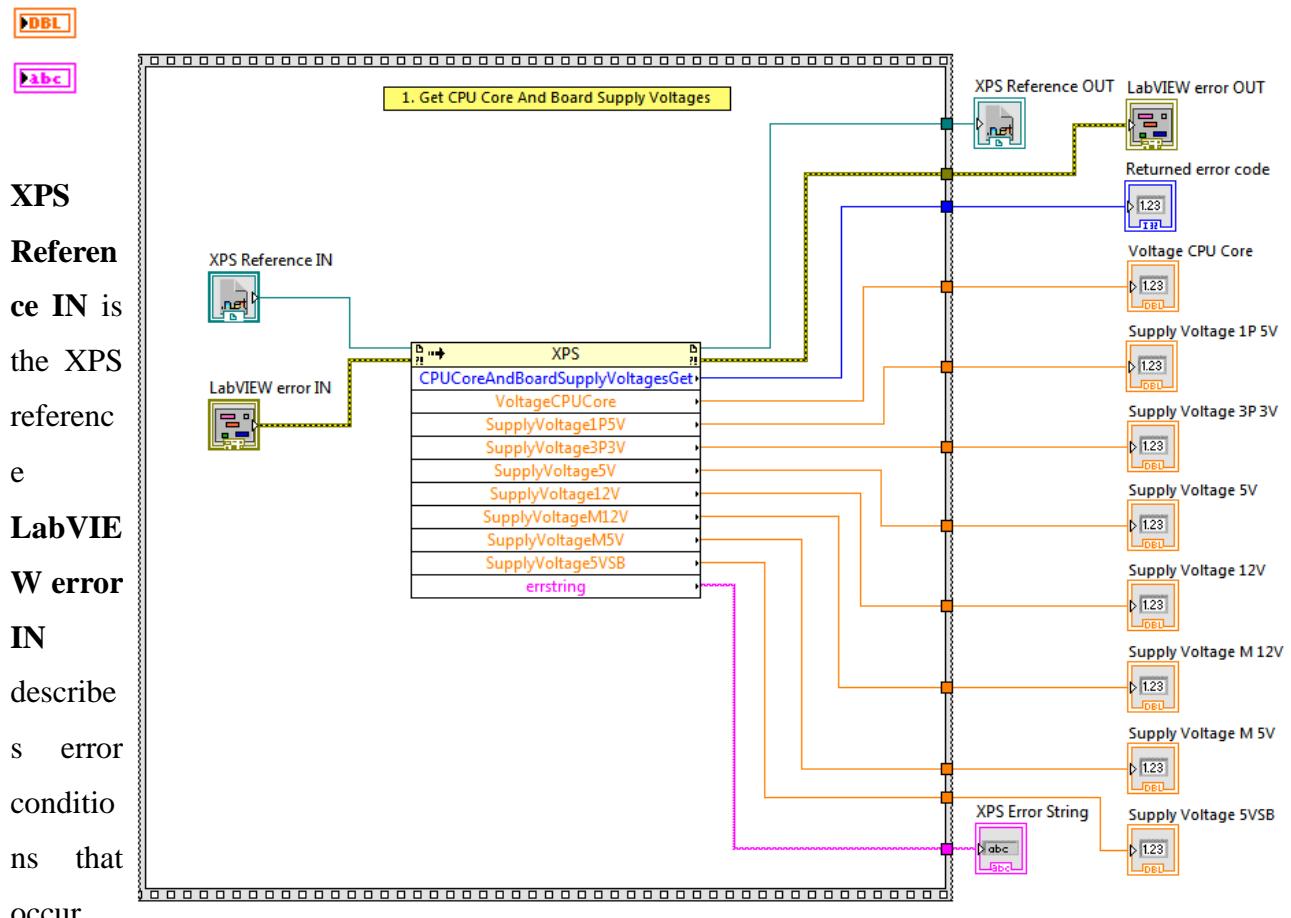
## 198. CPU Core And Board Supply Voltages Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get CPU core and board supply voltages.

### Screenshot



before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**Voltage CPU Core** Voltage CPU Core



**Supply Voltage 1P 5V** Supply Voltage 1P 5V  
**Supply Voltage 3P 3V** Supply Voltage 3P 3V  
**Supply Voltage 5V** Supply Voltage 5V  
**Supply Voltage 12V** Supply Voltage 12V  
**Supply Voltage M 12V** Supply Voltage M 12V  
**Supply Voltage M 5V** Supply Voltage M 5V  
**Supply Voltage 5VSB** Supply Voltage 5VSB  
**XPS Error String** return error string from VI

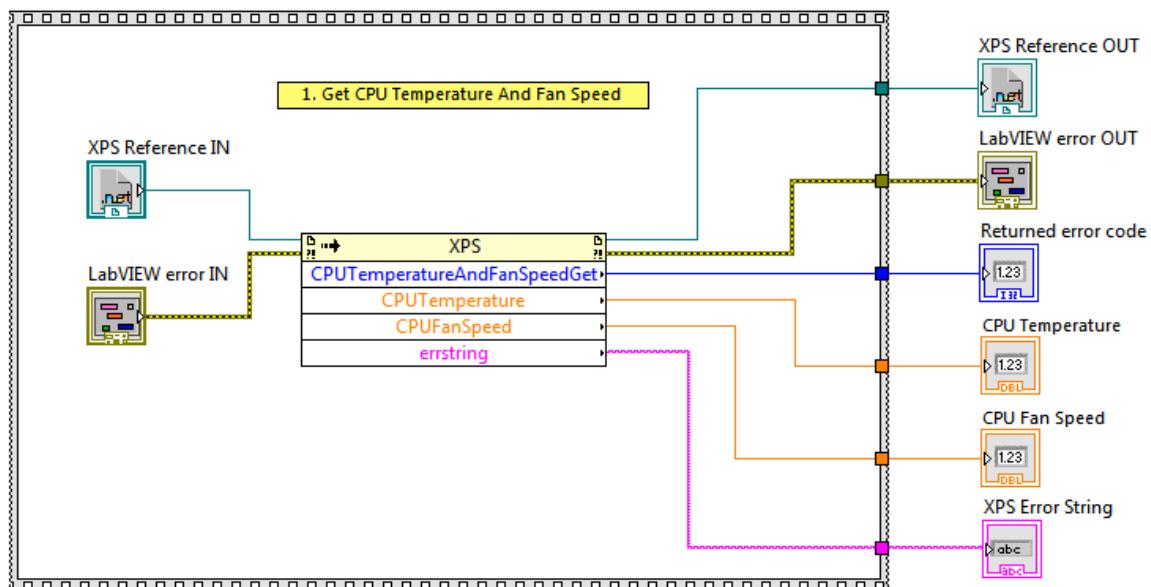
## 199. CPU Temperature And Fan Speed Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get CPU temperature and fan speed.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**CPU Temperature** CPU temperature

**CPU Fan Speed** CPU fan speed

**XPS Error String** return error string from VI

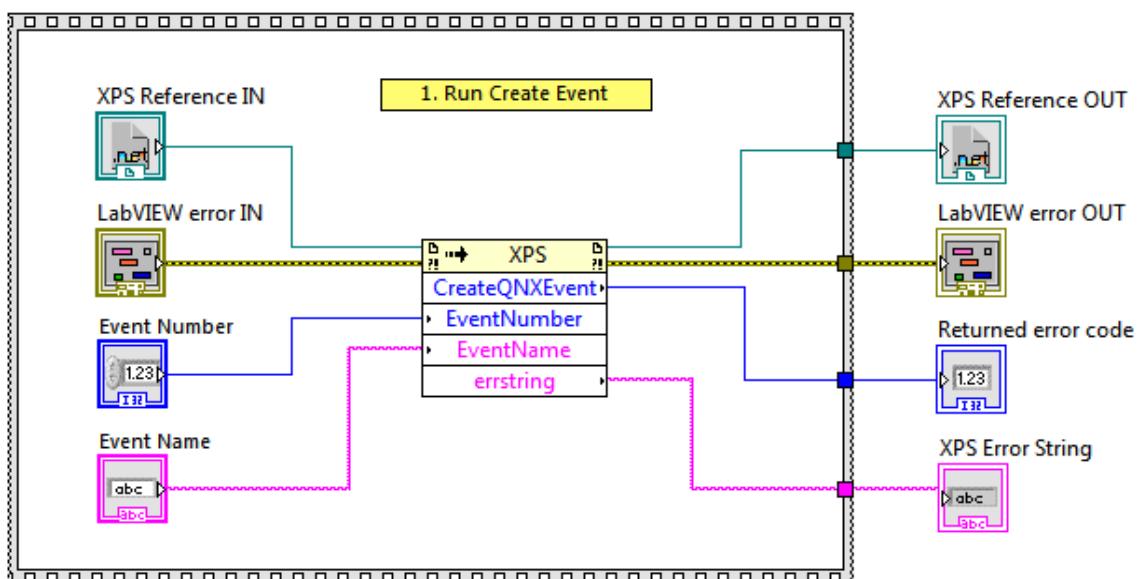
## 200. Create QNX Event VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Run create event

### Screenshot





**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Event Number** Event number



**Event Name** Event name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

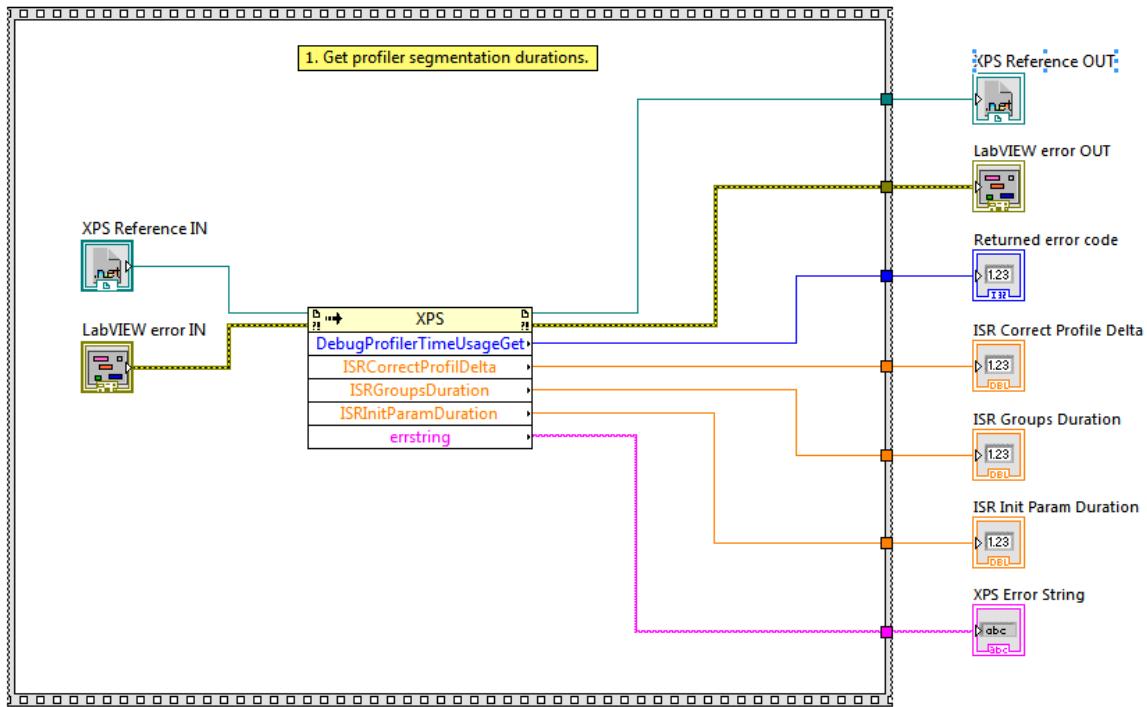
## 201. Debug Profiler Time Usage Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get profiler segmentation durations.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** Single Axis group name



**Target Displacement IN** Relative displacement



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code



**Returned Error Code** Returned Error Code



**ISR Correct Profile Delta** ISR correct profile delta



**ISR Groups Duration** ISR groups duration



**ISR Init Param Duration** ISR init param duration



**XPS Error String** return error string from VI

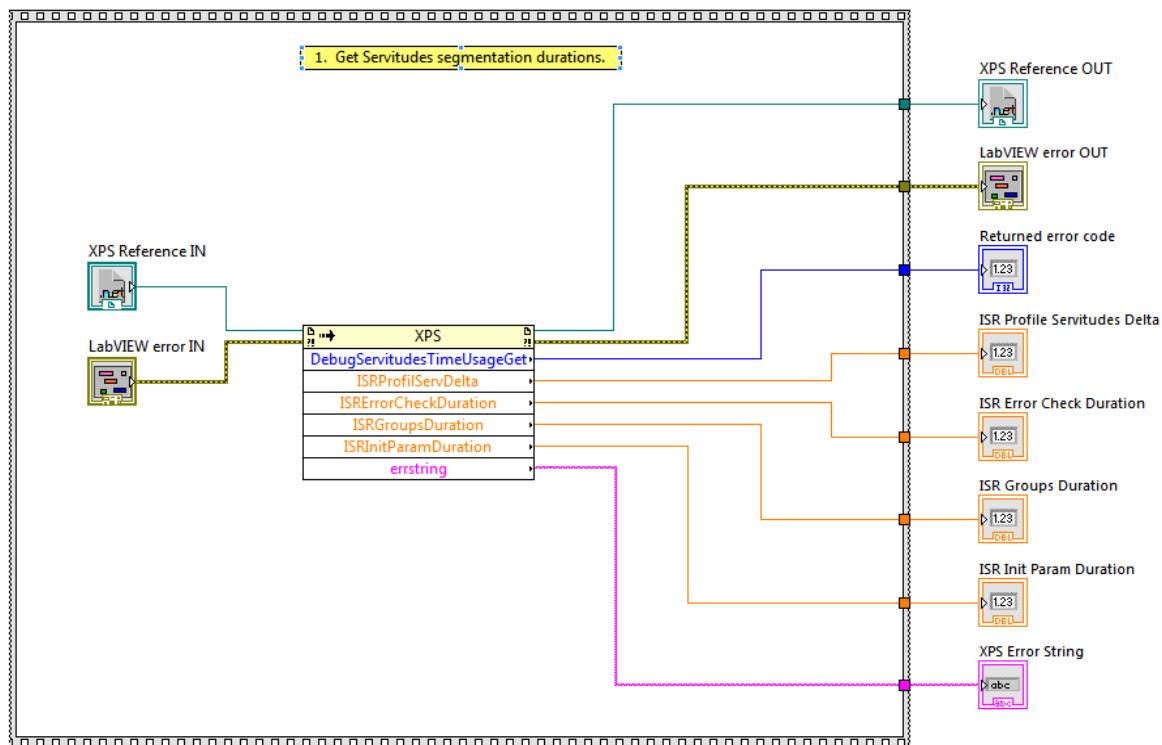
## 202. Debug Servitudes Time Usage Get VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Get servitudes segmentation durations.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**ISR Profile Servitudes Delta** ISR profile servitudes delta

**ISR Error Check Duration** ISR error check duration

**ISR Groups Duration** ISR groups duration

**ISR Init Param Duration**

**XPS Error String**

**ISR Init Param Duration** ISR init param duration

**XPS Error String** return error string from VI

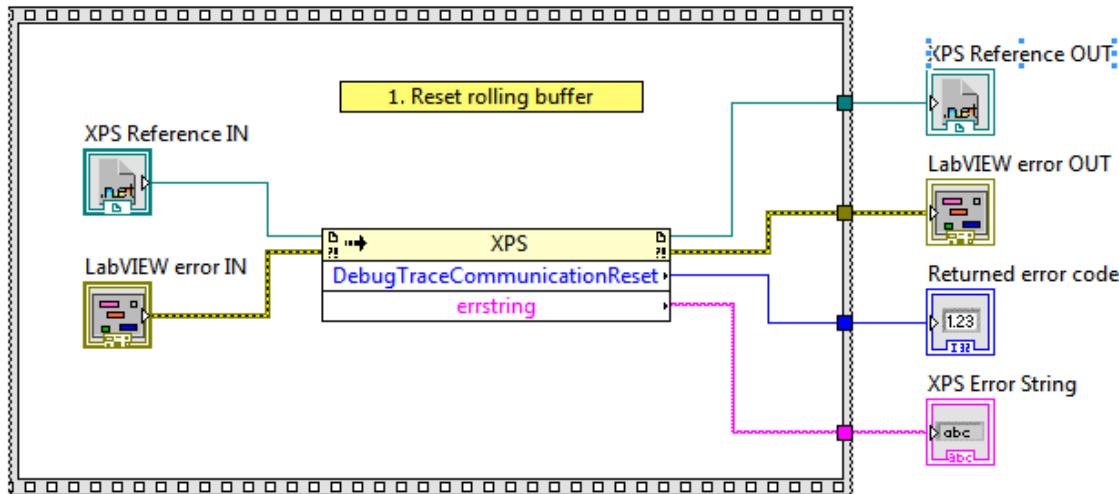
## 203. Debug Trace Communication Reset VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Reset rolling buffer.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

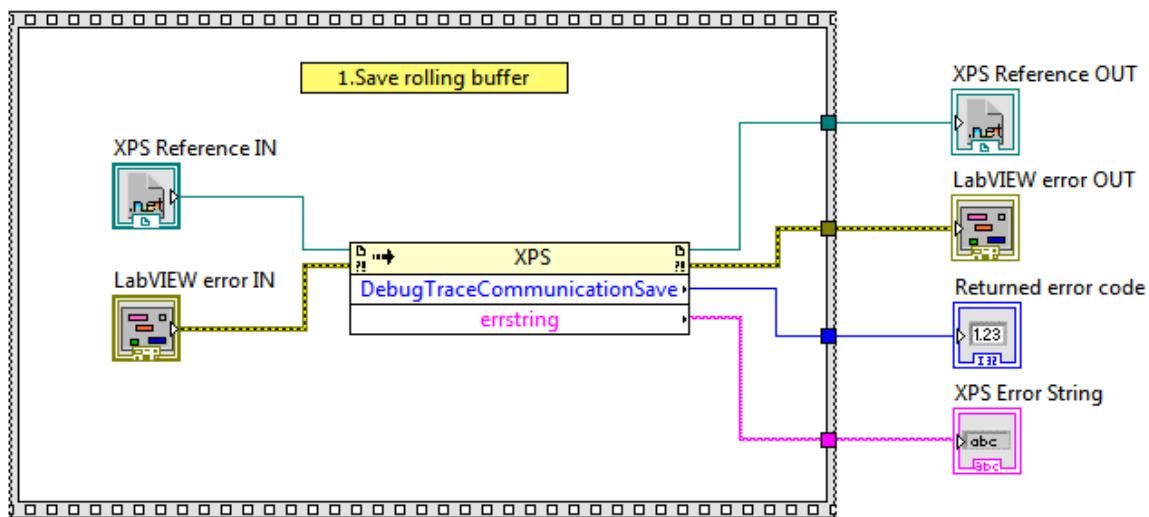
## 204. Debug Trace Communication Save VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Save rolling buffer.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

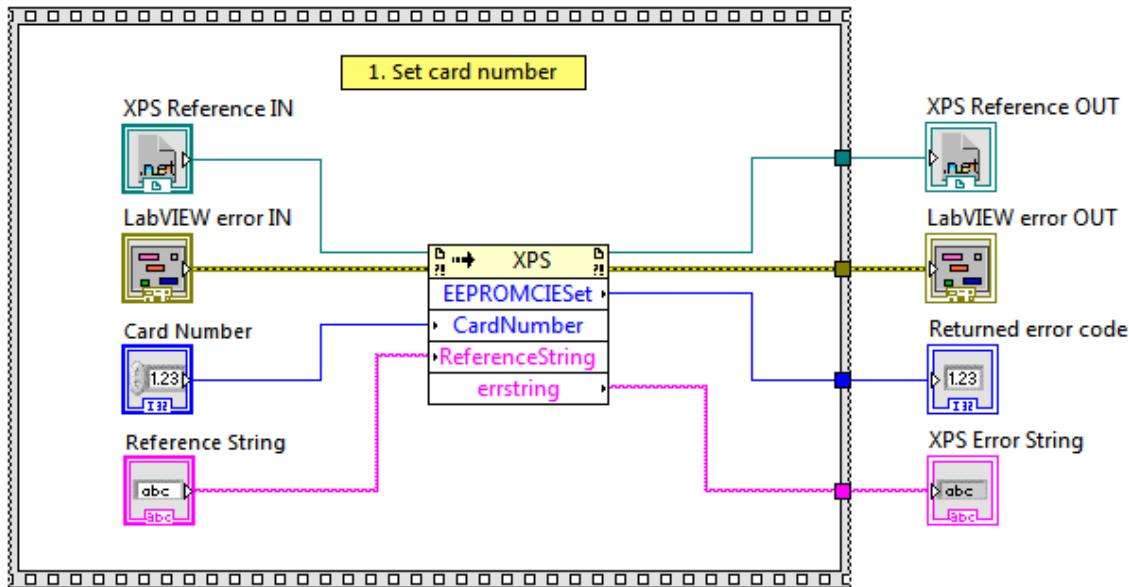
## 205. EEPROM CIE Set VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Set card number.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Card Number** Card number

**Reference String** reference string

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

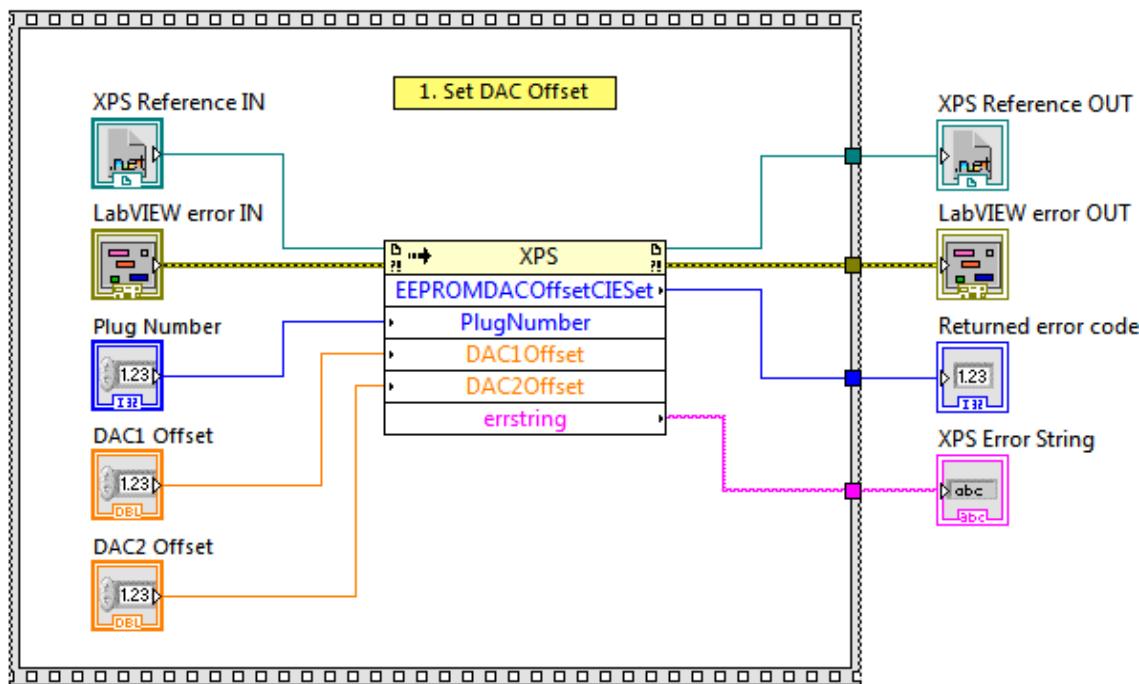
## 206. EEPROM DAC Offset CIE Set VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Set DAC offset.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Plug Number** plug number

**DAC1 Offset** DAC1 offset

**DAC2 Offset** DAC2 offset

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

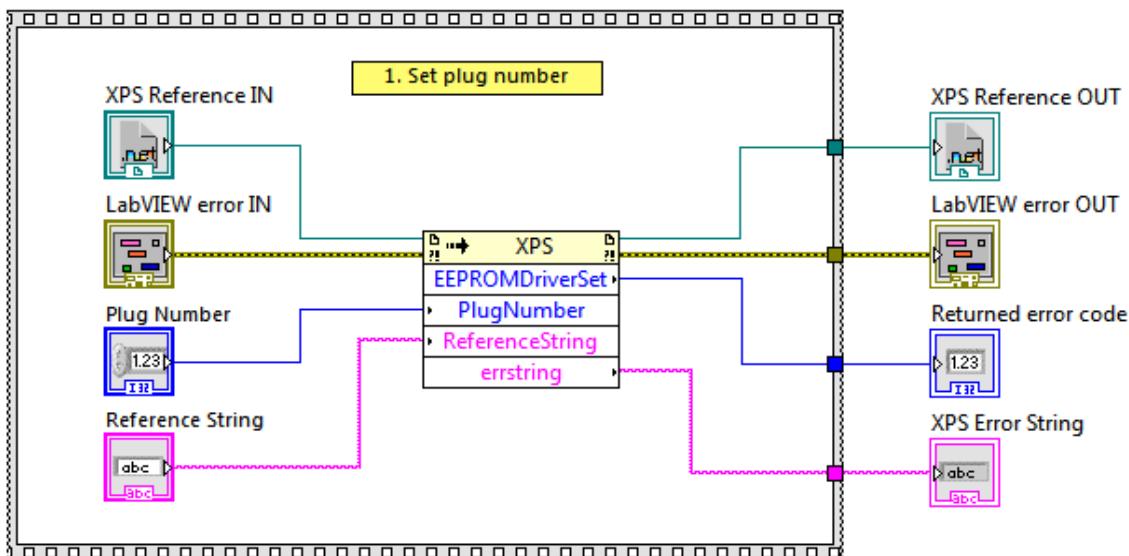
## 207. EEPROM Driver Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set plug number.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Plug Number** plug number



**Reference String** reference string



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

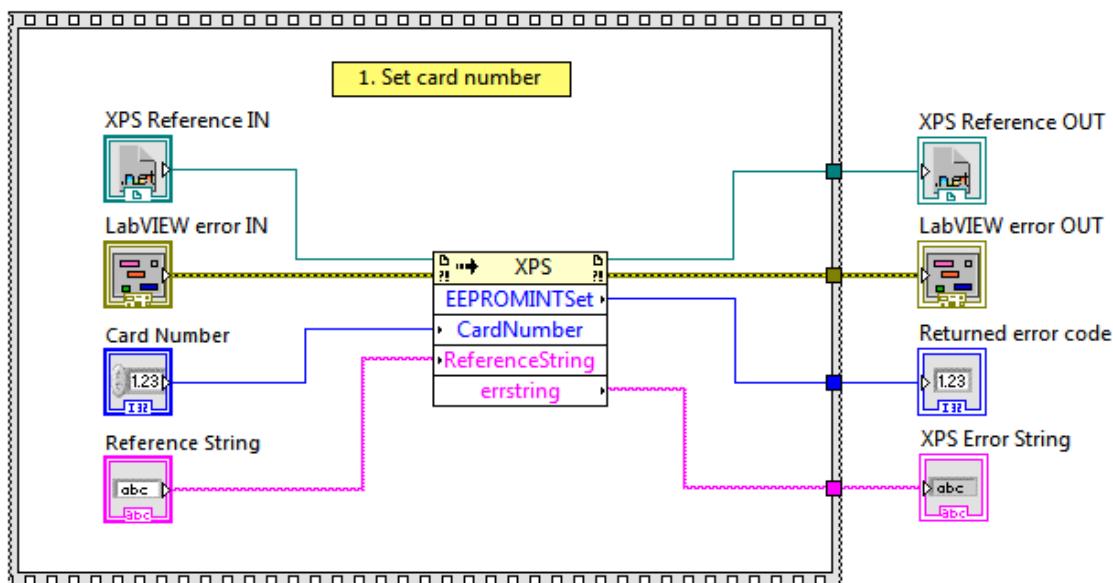
## 208. EEPROM INT Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set card number.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Card Number** Card number



**Reference String** reference string



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out



functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

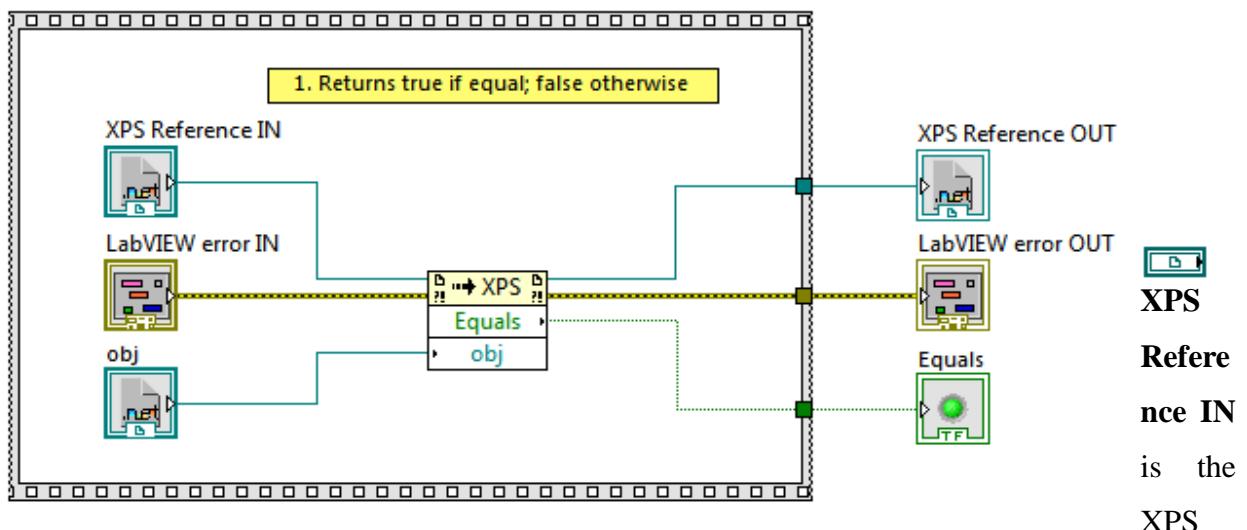
## 209. Equals VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns true if equal; false otherwise.

### Screenshot



reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Obj** object

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Equals** True if equal; false otherwise

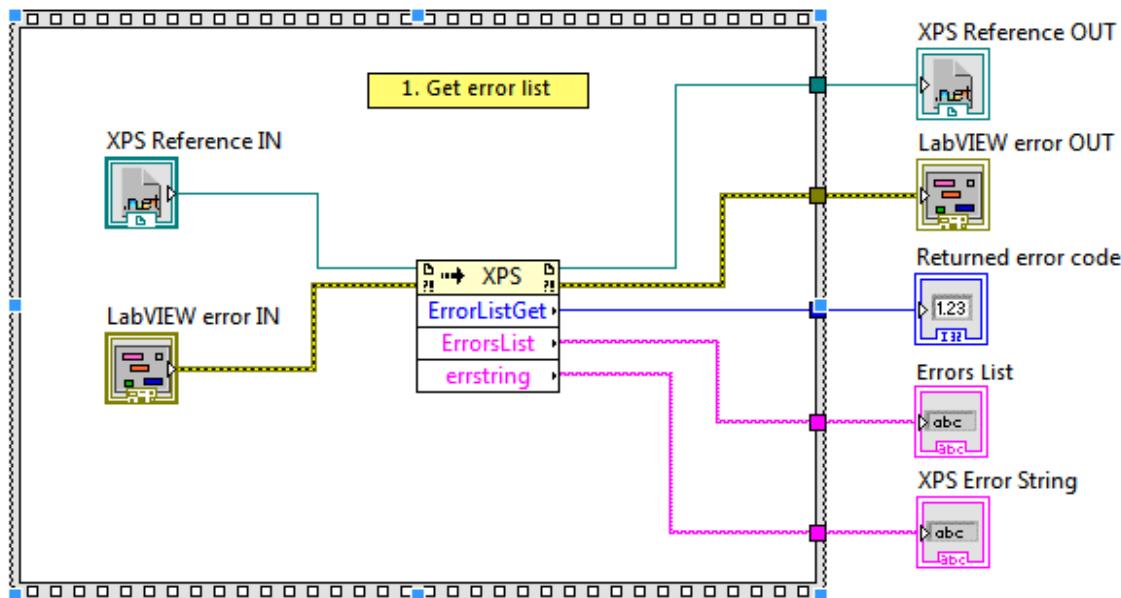
## 210. Error List Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get error list.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Error List** Error list



**XPS Error String** return error string from VI

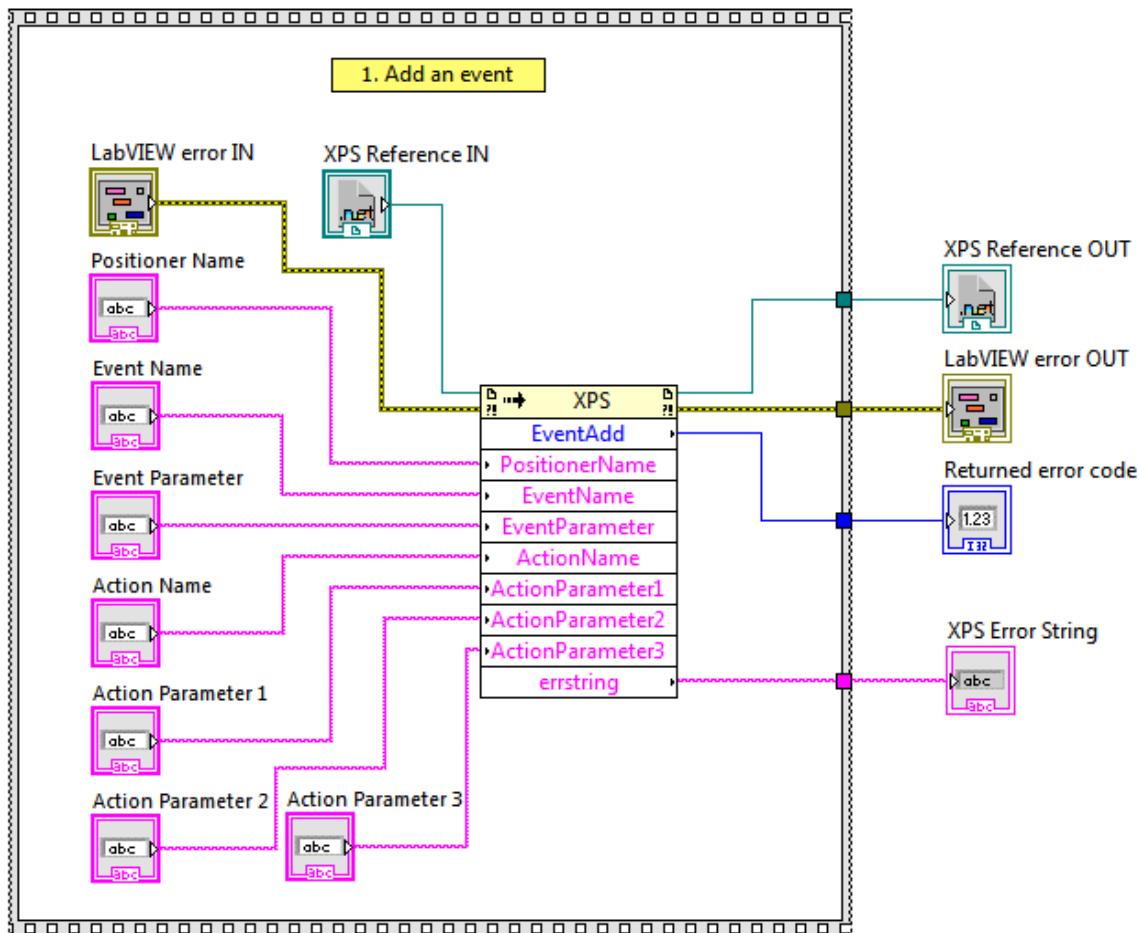
## 211. Event Add VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Add an event.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

-  **Event Name** event name
-  **Event Parameter** event parameter
-  **Action Name** action name
-  **Action Parameter 1** action parameter 1
-  **Action Parameter 2** action parameter 2
-  **Action Parameter 3** action parameter 3
-  **XPS Reference OUT** returns XPS reference
-  **LabVIEW error OUT** contains error information. This output provides standard error out functionality.
-  **Returned Error Code** Returns function error code
-  **XPS Error String** return error string from VI

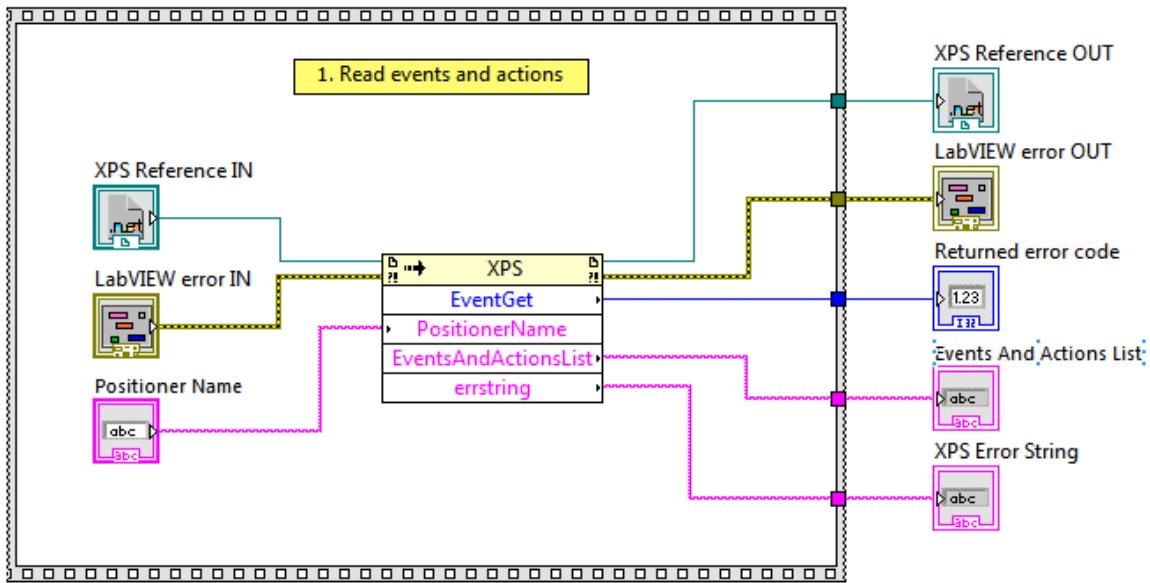
## 212. Event Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Read events and actions.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Events And Action List** Events and actions list



**XPS Error String** return error string from VI

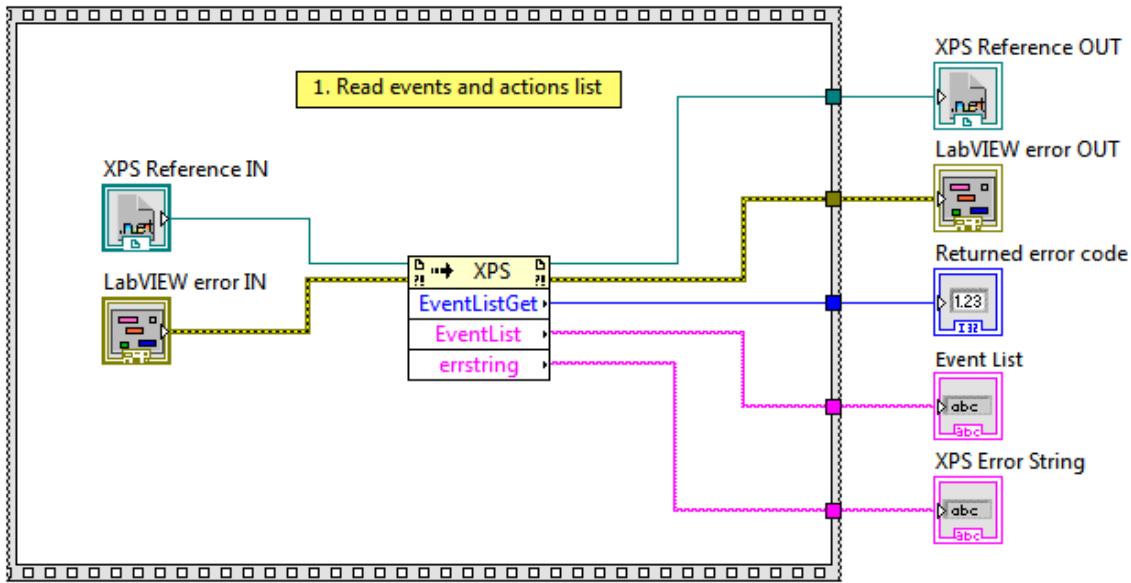
## 213. Event List Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Read events and actions list.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Event List** Event list



**XPS Error String** return error string from VI

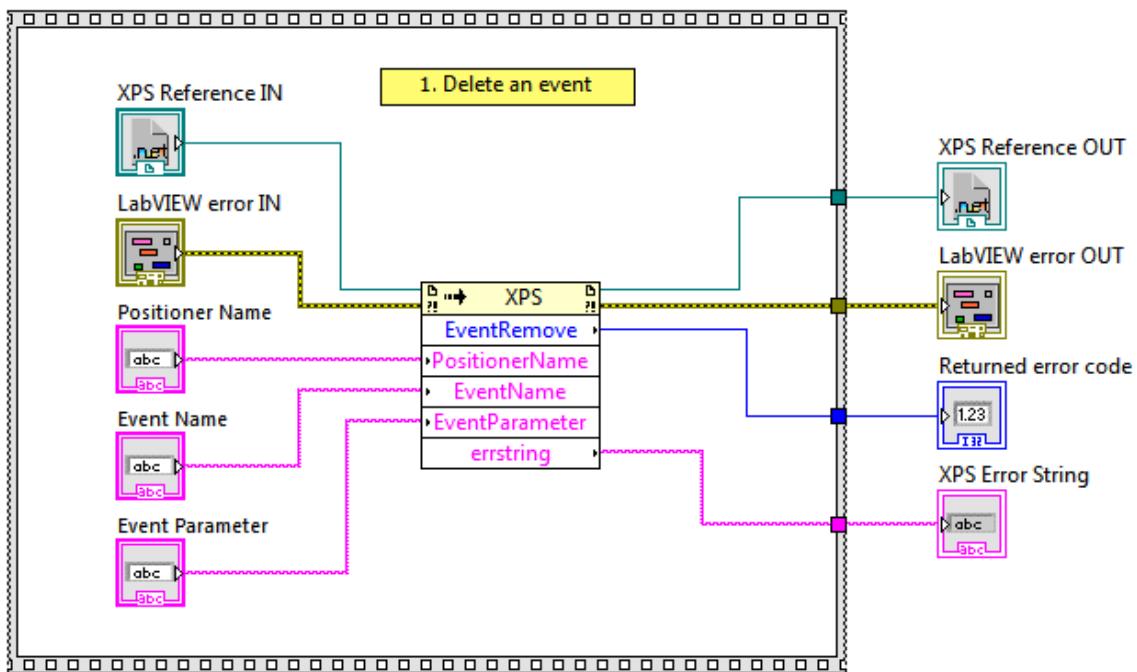
## 214. Event Remove VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Delete an event.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positione name

**Event Name** Event name

**Event Parameter** Event parameter

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Response** Response read from ZYGO box

**XPS Error String** return error string from VI

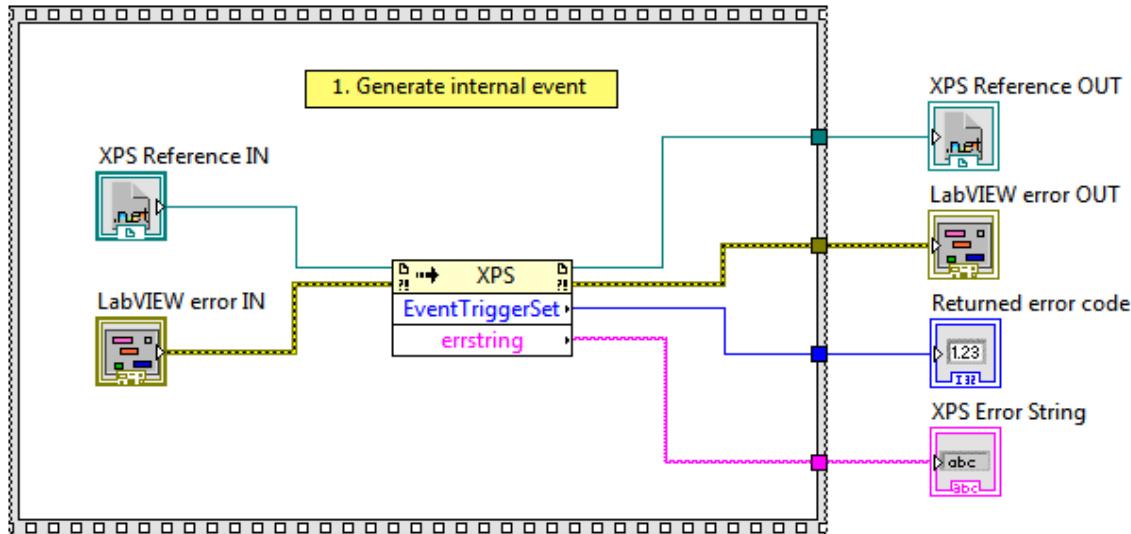
## 215. Event Trigger Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Generate internal event.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

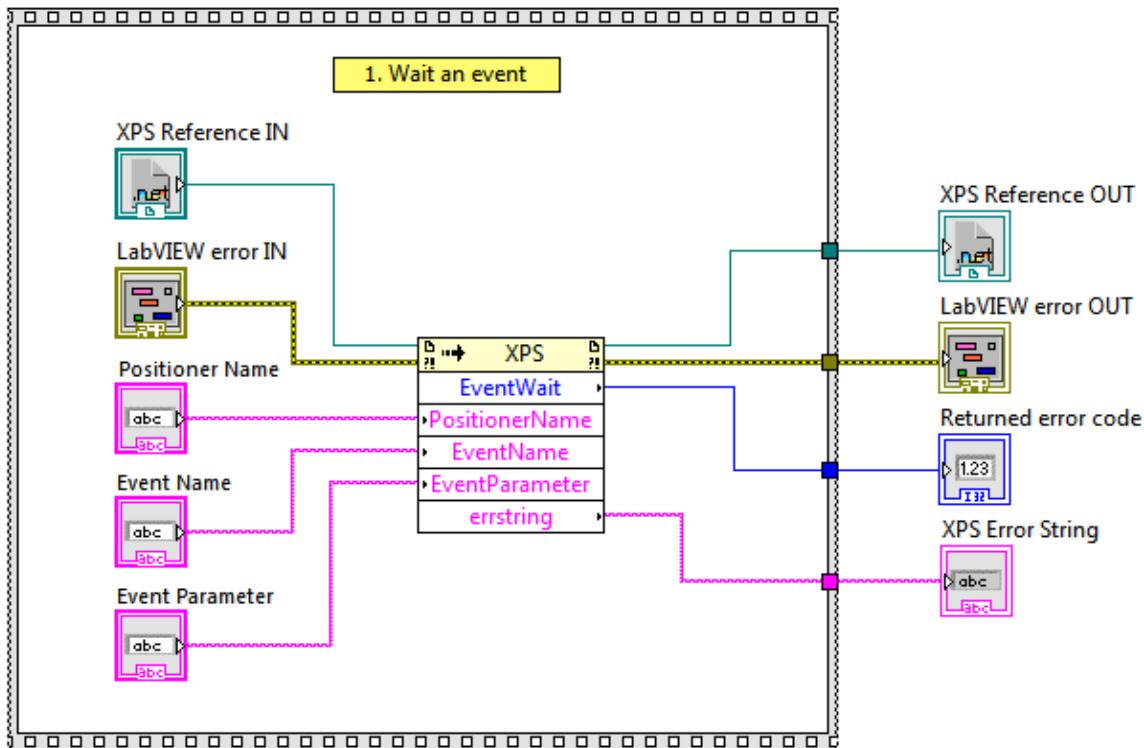
## 216. Event Wait VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Wait an event.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Event Name** event name

**Event Parameter** event parameter

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

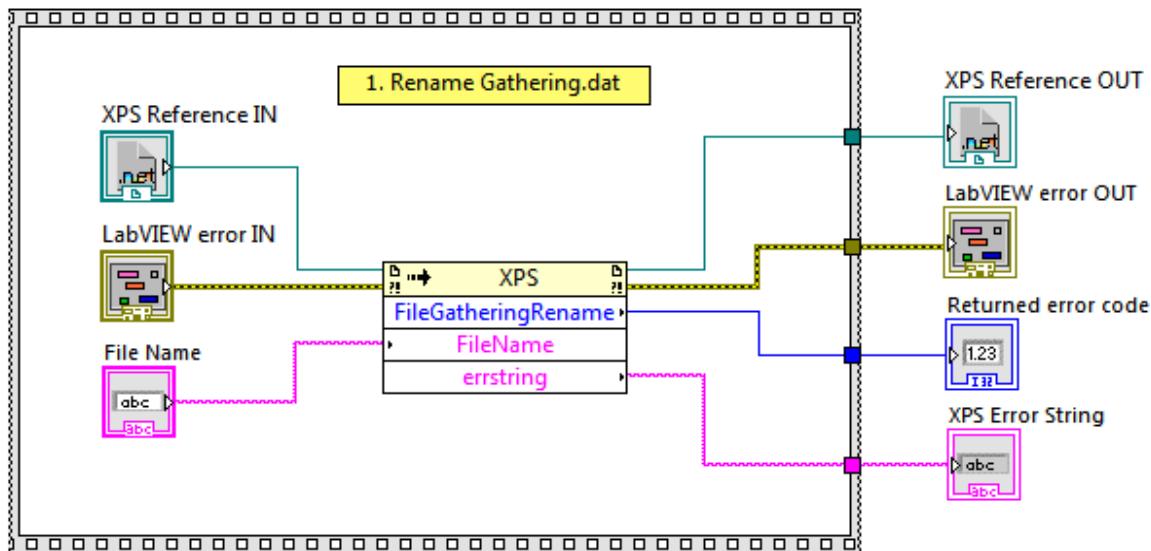
## 217. File Gathering Rename VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Rename Gathering.dat

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**File Name** File name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

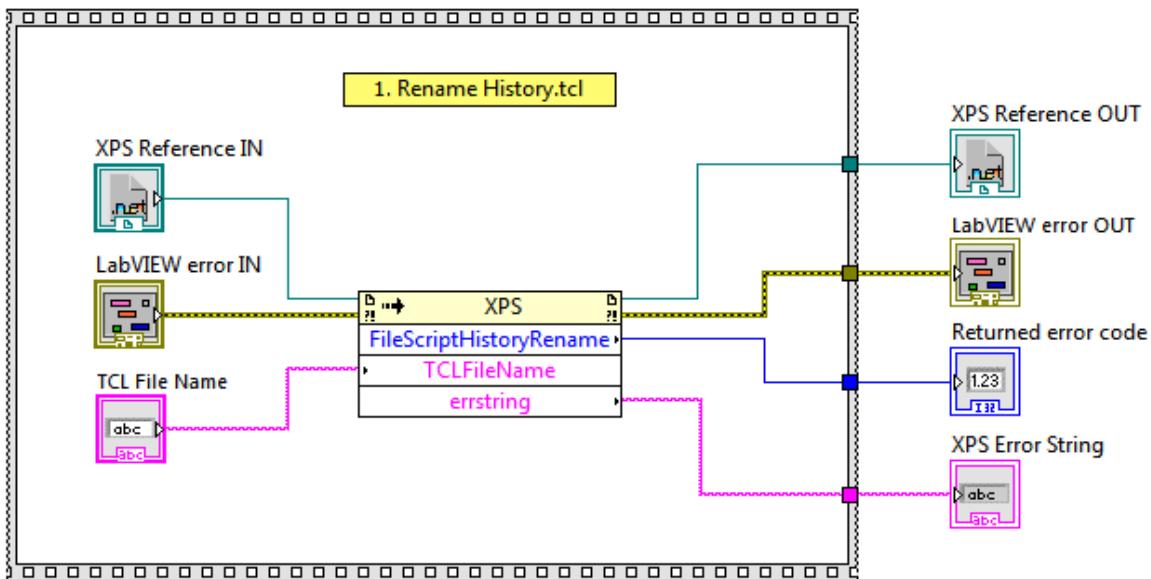
## 218. File Script History Rename VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Rename History.tcl

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**TCL File Name** TCL file name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

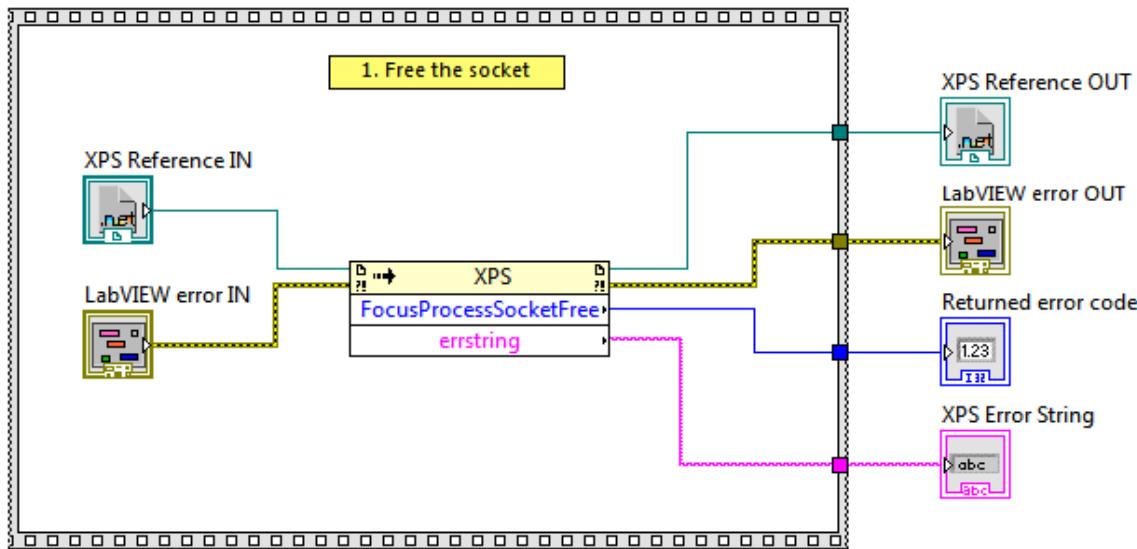
## 219. Focus Process Socket Free VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Free the socket.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

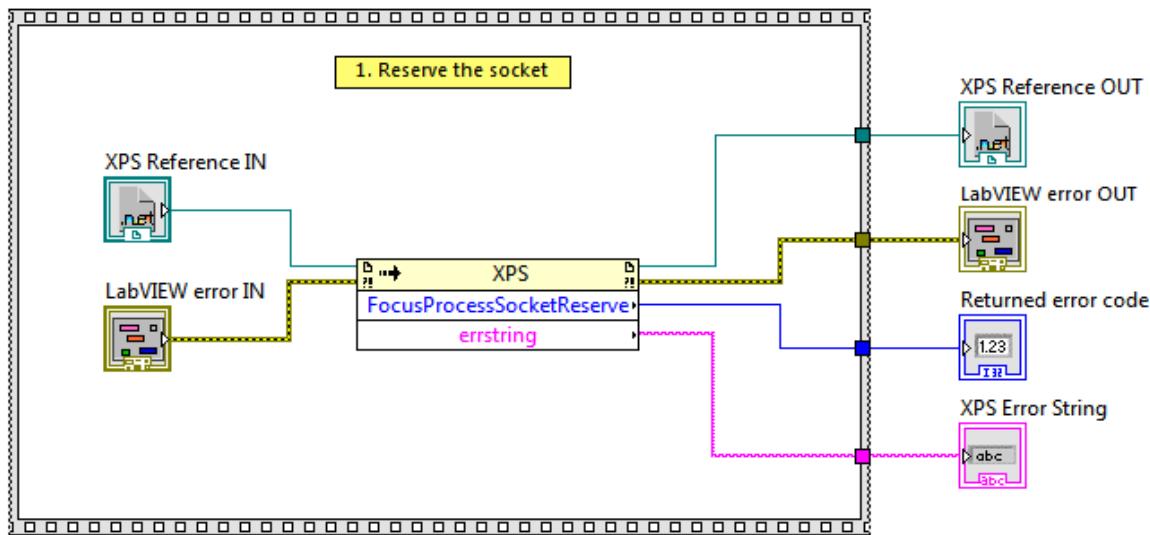
## 220. Focus Process Socket Reserve VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Reserve the socket.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI



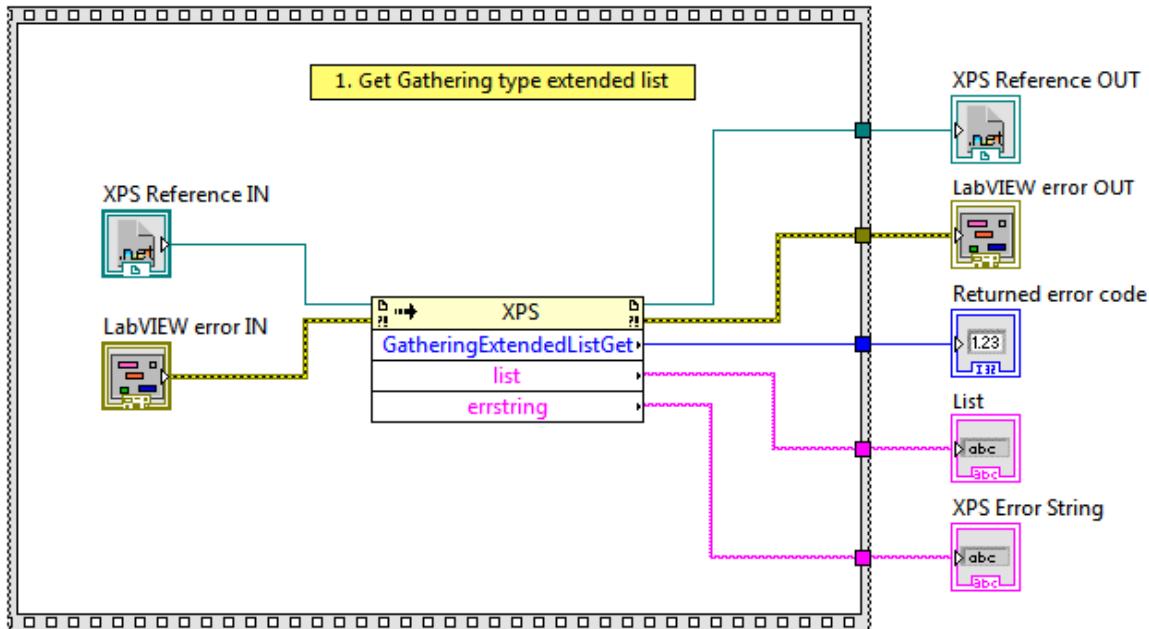
## 221. Gathering Extended List Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get gathering type extended list.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**List** Gathering type extended list

**XPS Error String** return error string from VI

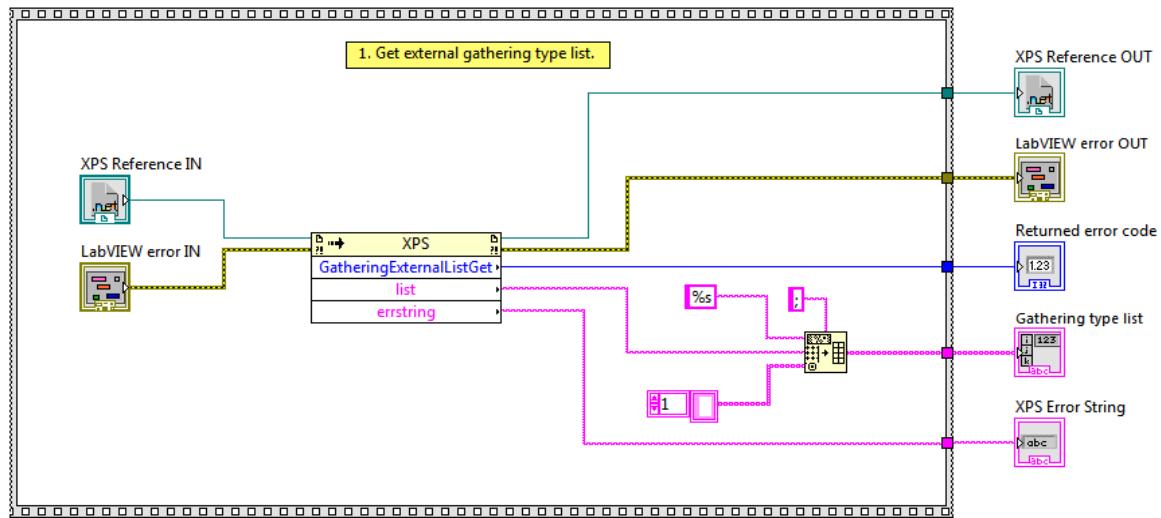
## 222. Gathering External List Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get external gathering type list.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Gathering Type list** Gathering type list



**XPS Error String** return error string from VI

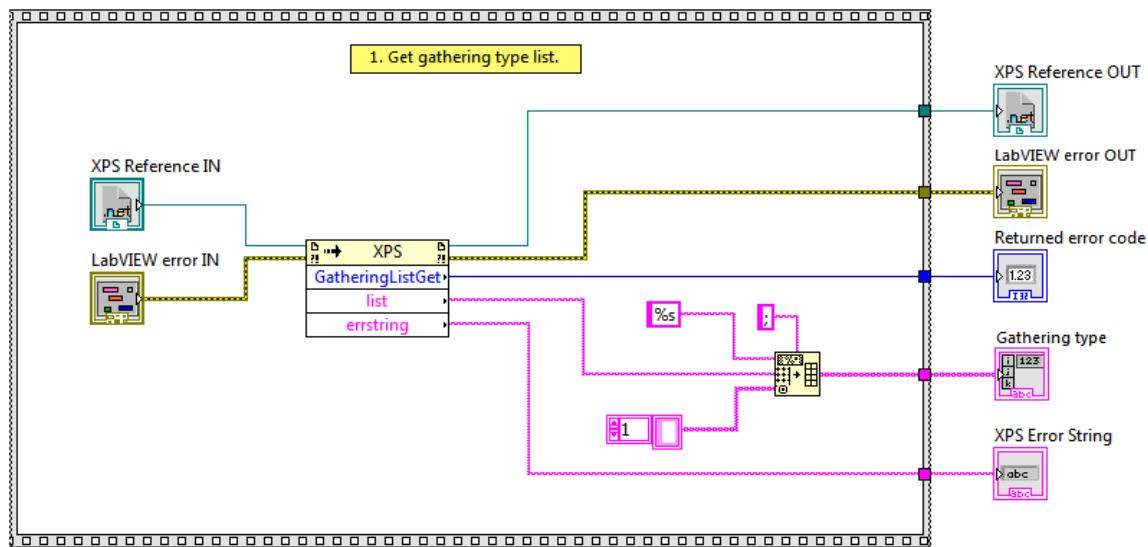
## 223. Gathering List Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get gathering type list.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Gathering Type** Gathering type list



**XPS Error String** return error string from VI

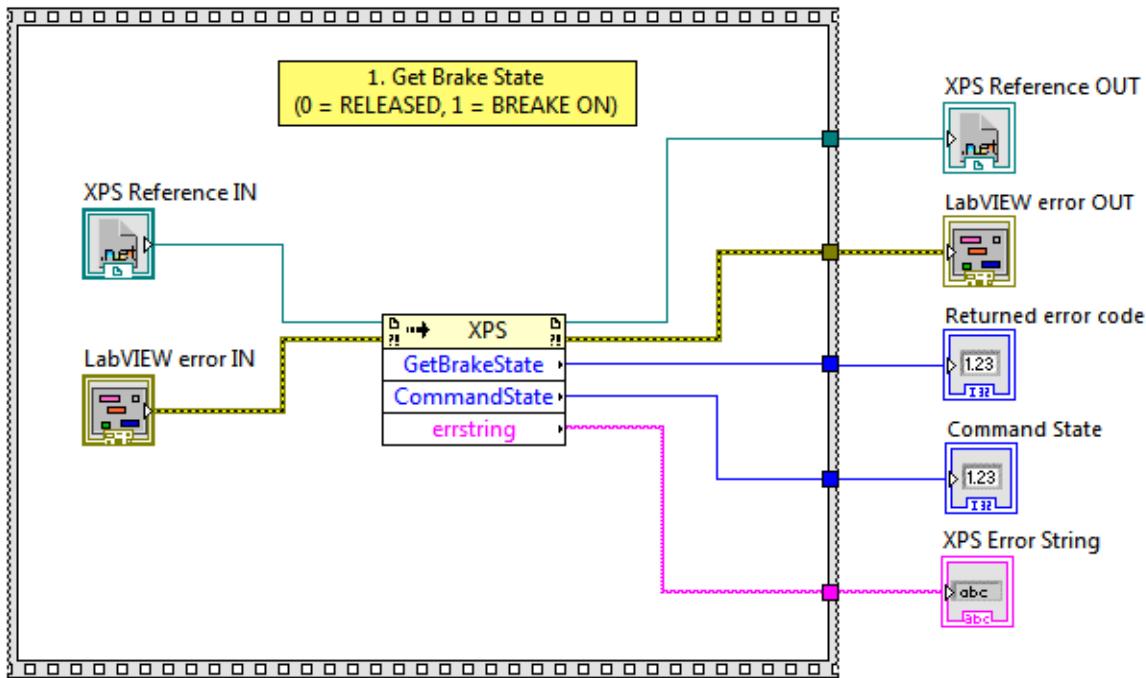
## 224. Get Brake State VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get break state ( 0 = RELEASE, 1 = BREAK ON )

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**Returned Error Code** Returns function error code  
**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Command State** Command state

**XPS Error String** return error string from VI

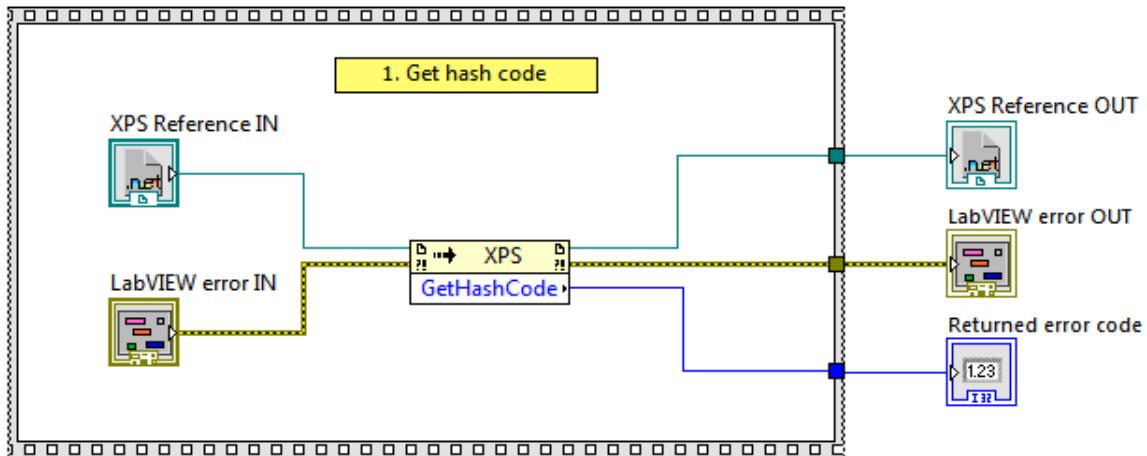
## 225. Get Hash Code VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get hash code.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

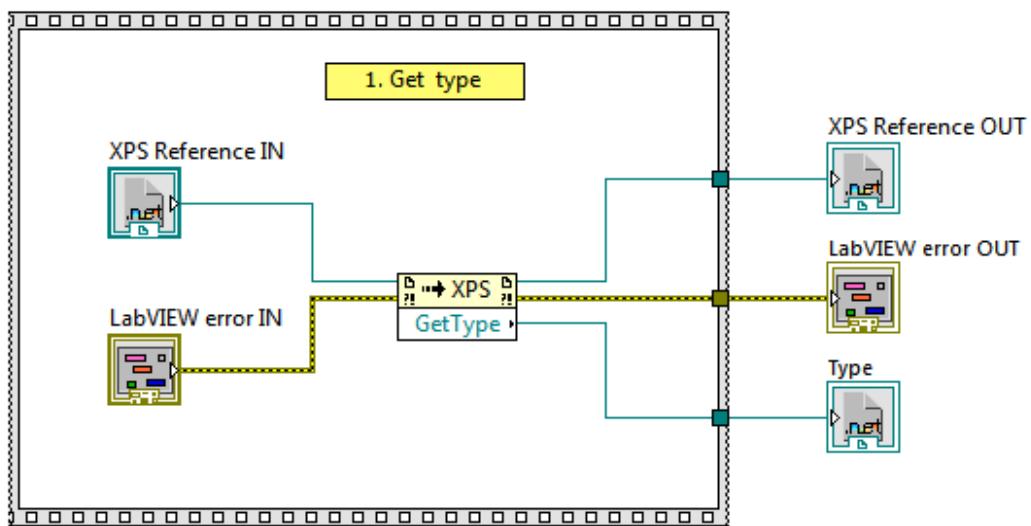
## 226. Get Type VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get type

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Type** type



XPS Reference IN XPS Reference IN

LabVIEW error IN LabVIEW error IN

XPS Reference OUT XPS Reference OUT

LabVIEW error OUT LabVIEW error OUT

Type Type

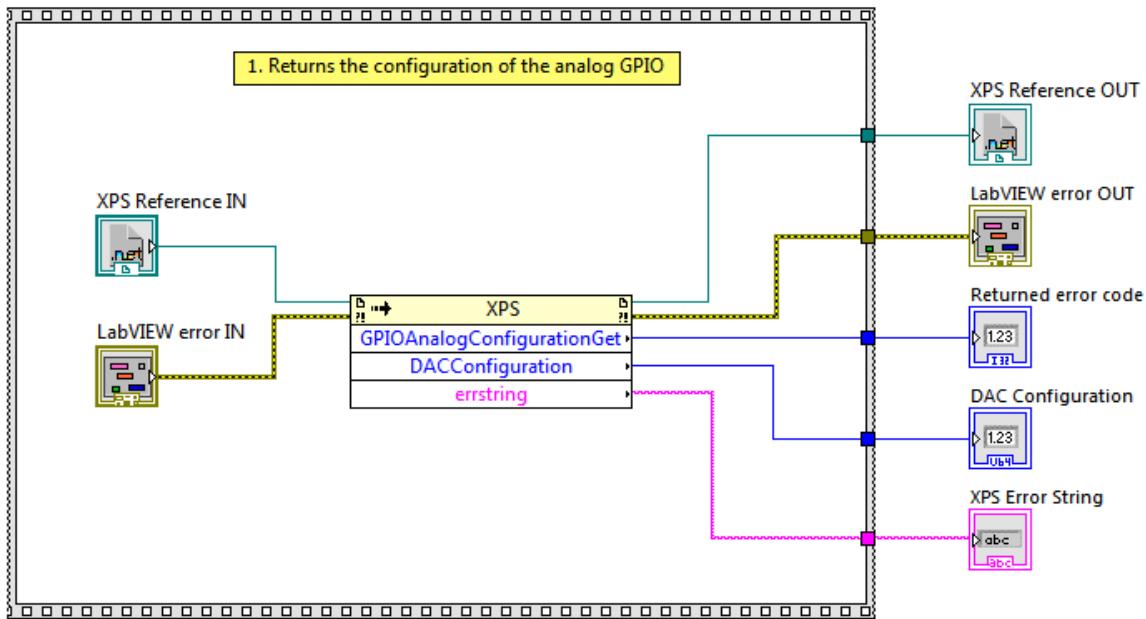
## 227. GPIO Analog Configuration Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the configuration of the analog GPIO.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**DAC Configuration** DAC configuration



**XPS Error String** return error string from VI

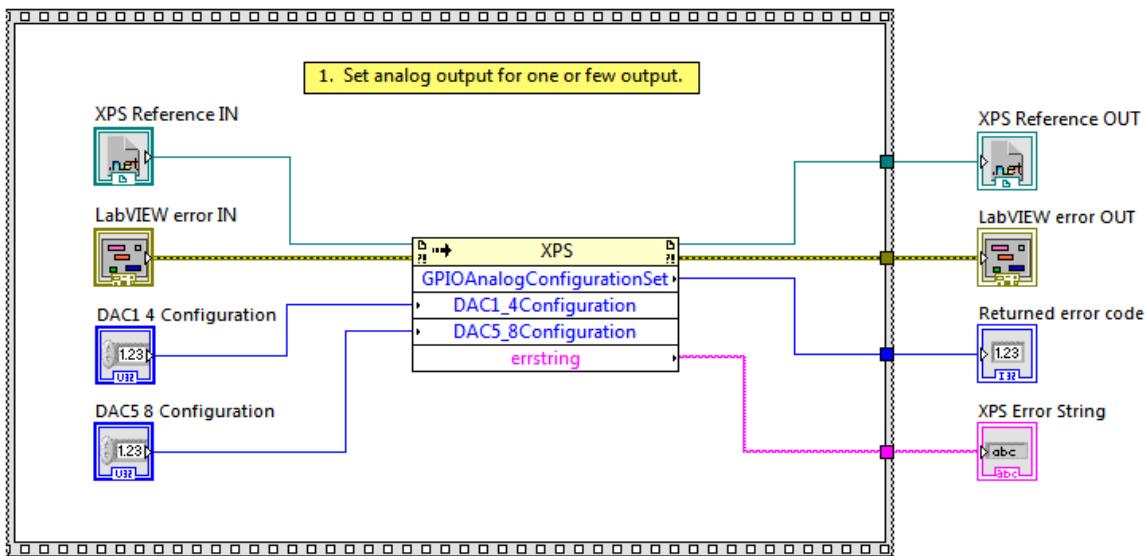
## 228. GPIO Analog Configuration Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set analog output for one or few output.

## Screenshot



**[D]** **XPS Reference IN** is the XPS reference

**[E]** **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[I32]** **DAC 4 Configuration** DAC 4 configuration

**[I32]** **DAC 8 Configuration** DAC 8 configuration

**[D]** **XPS Reference OUT** returns XPS reference

**[E]** **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[I32]** **Returned Error Code** Returns function error code

**[abc]** **XPS Error String** return error string from VI

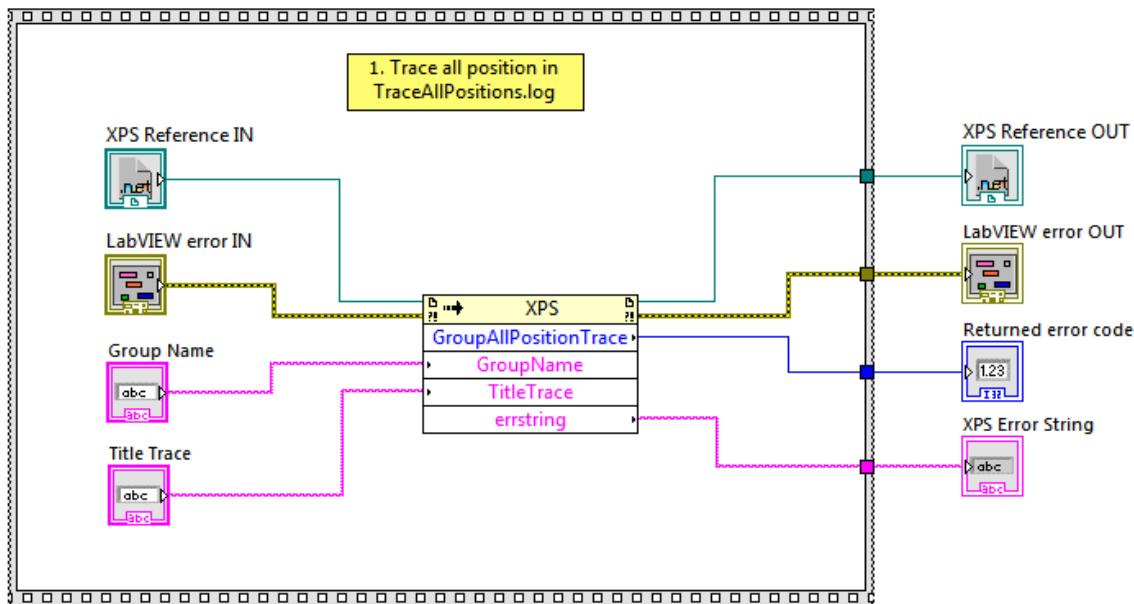
## 229. Group All Position Trace VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Trace all position in TraceAllPositions.log

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group name

**Title Trace** Title trace

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

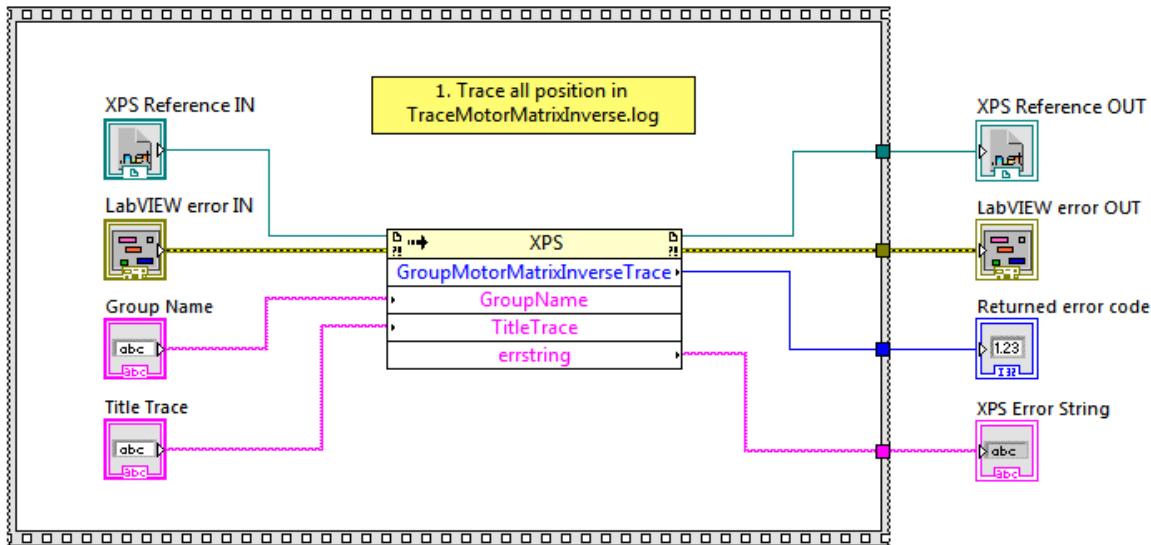
## 230. Group Motor Matrix Inverse Trace VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Trace all position in TraceMotorMatrixInverse.log

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** group name



**Title Trace** Title trace



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

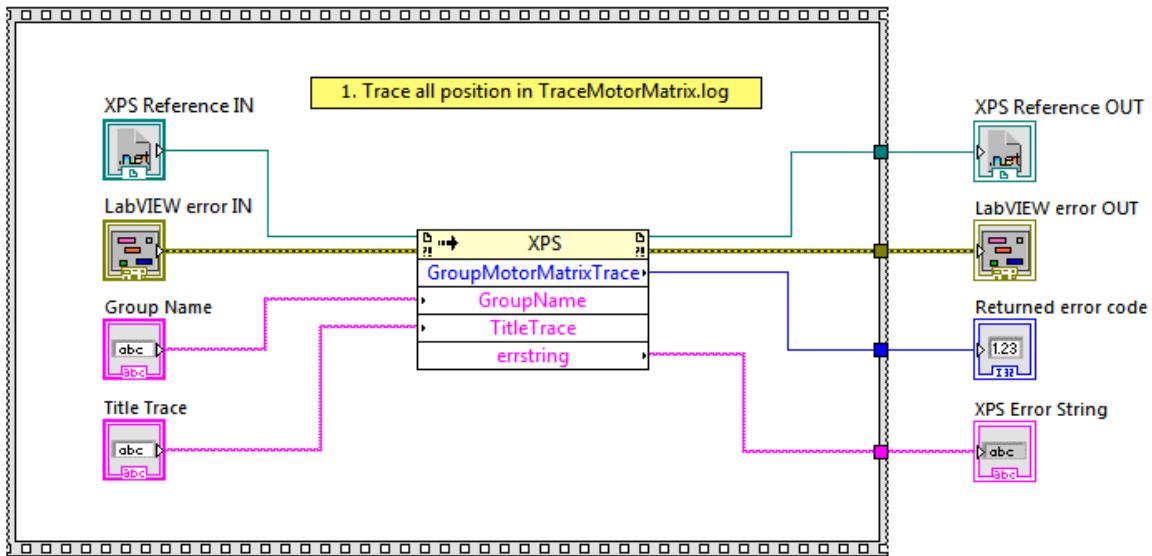
## 231. Group Motor Matrix Trace VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Trace all position in TraceMotorMatrix.log

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** group name



**Title Trace** Title trace



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

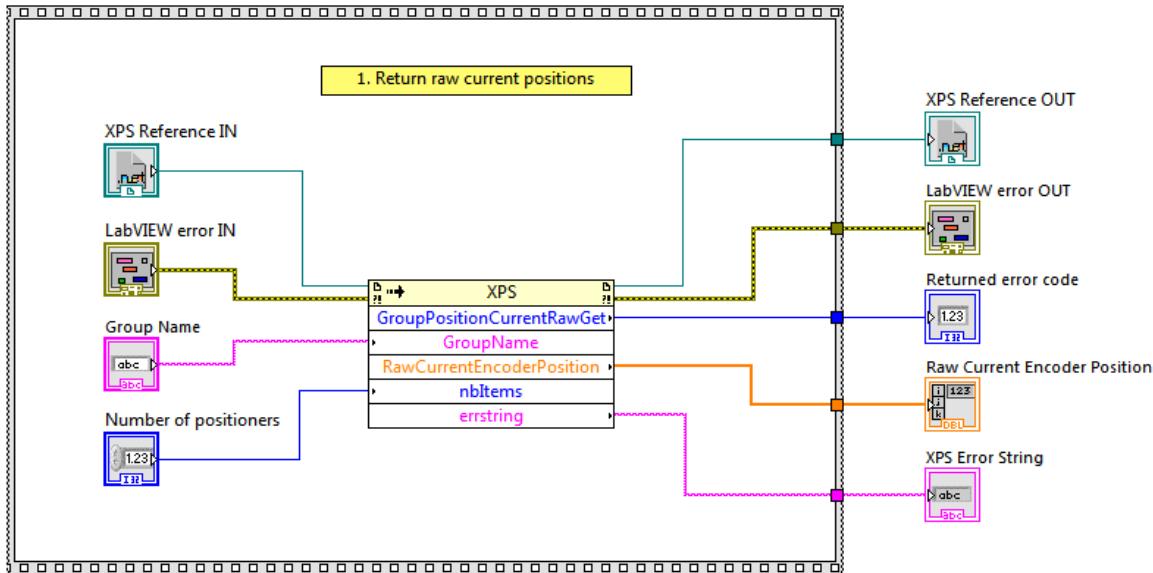
## 232. Group Position Current Raw Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Return current raw position.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group name



**Number of positioners** Number of positioners

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

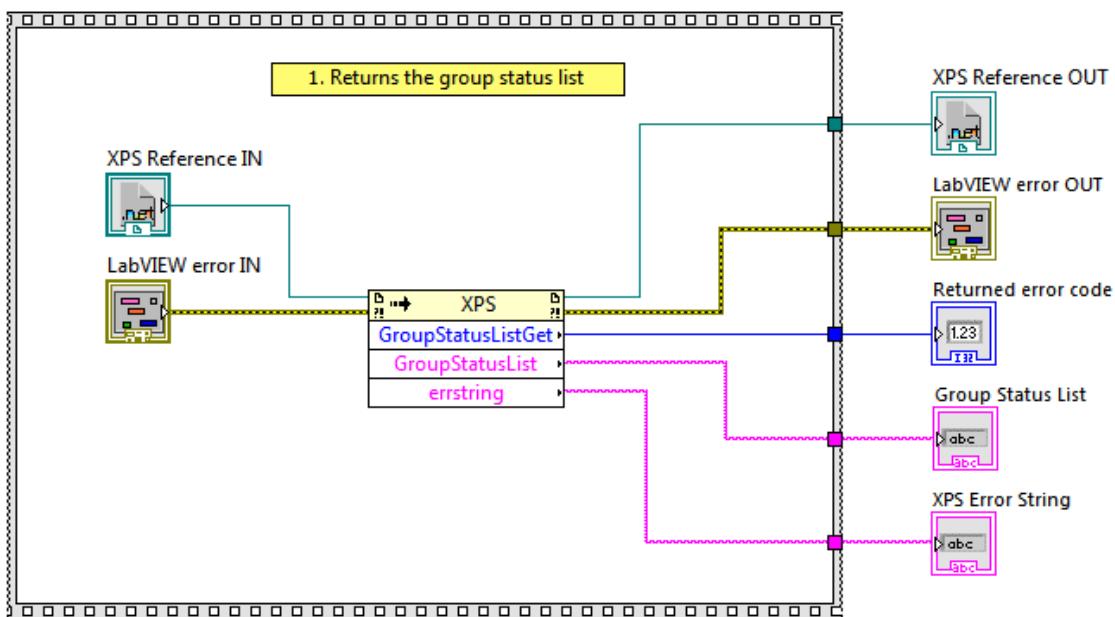
## 233. Group Status List Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the group status list.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code



**Group Status List** Group status list

**XPS Error String** return error string from VI

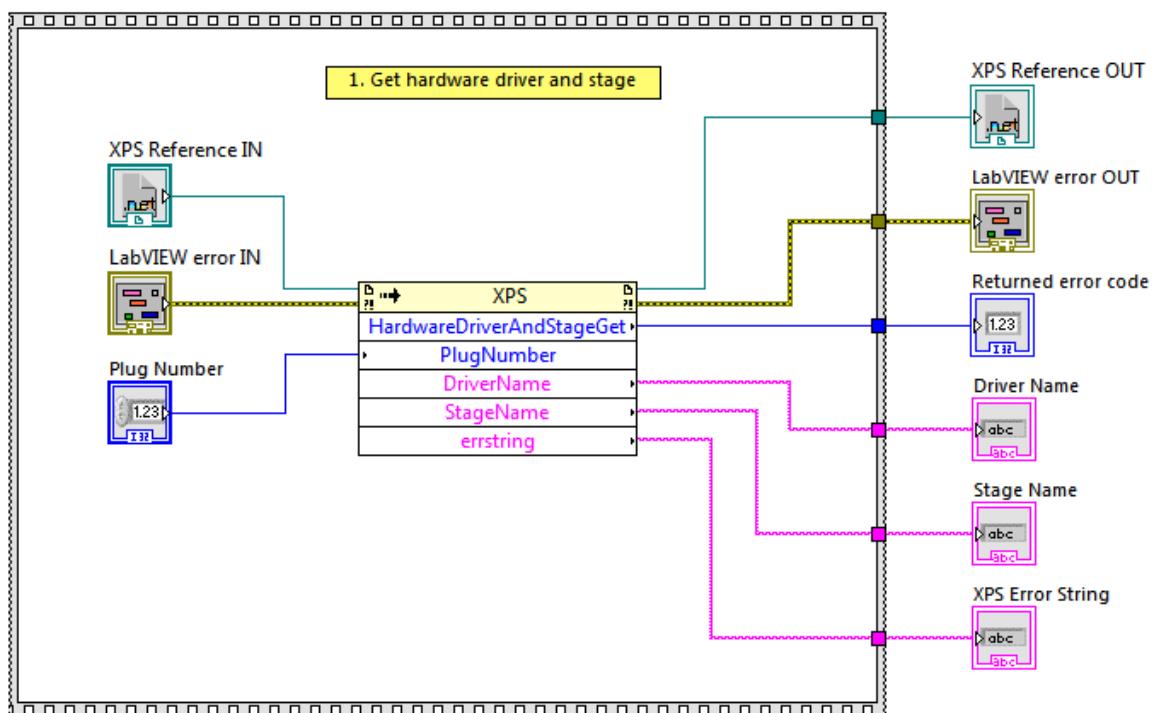
## 234. Hardware Driver And Stage Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get hardware driver and stage.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Start Element Number** start element number

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

1.23

**Returned Error Code** Returns function error code

 **Driver Name** driver name

 **Stage Name** Stage name

 **XPS Error String** return error string from VI

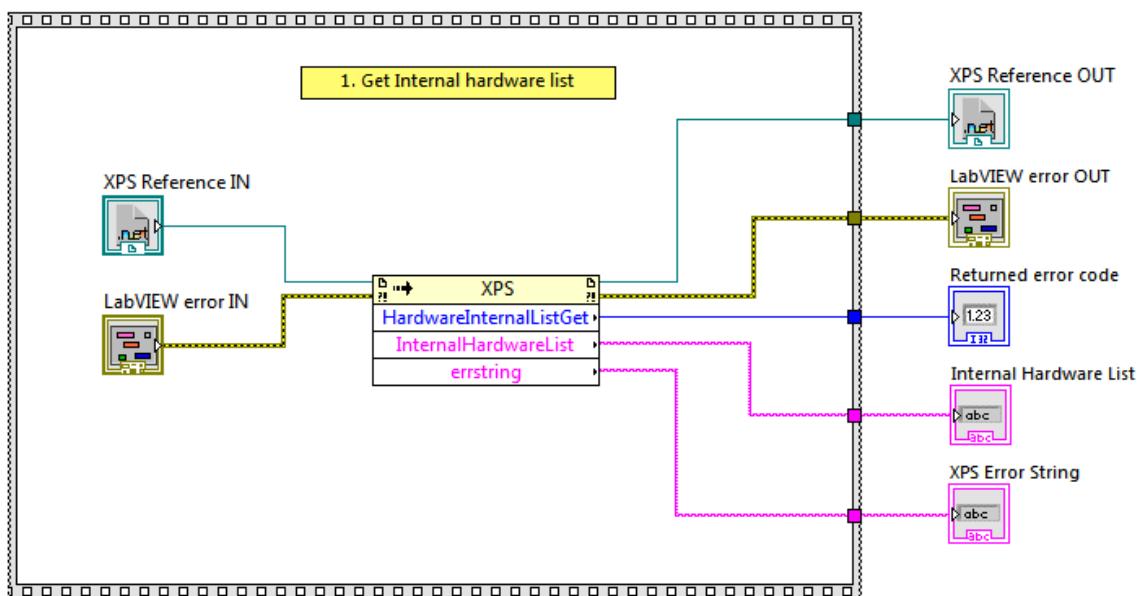
## 235. Hardware Internal List Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get internal hardware list.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input



provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Internal Hardware List** Internal hardware list

**XPS Error String** return error string from VI

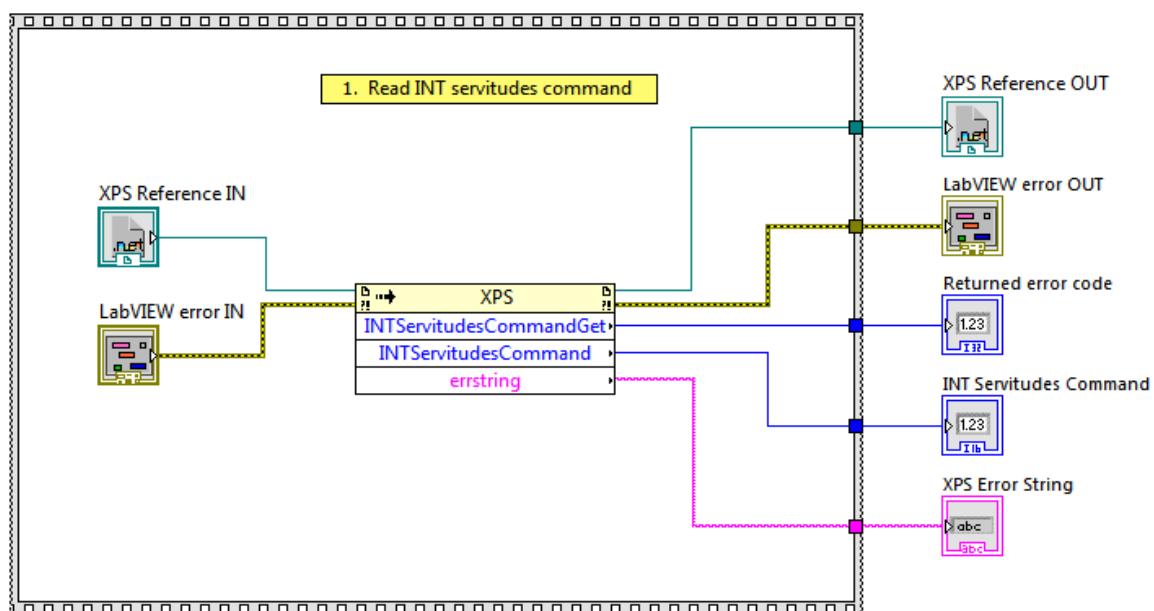
## 236. INT Servitudes Command Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Read INT servitudes command.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input



provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**INT Servitudes Command** INT servitudes command

**XPS Error String** return error string from VI

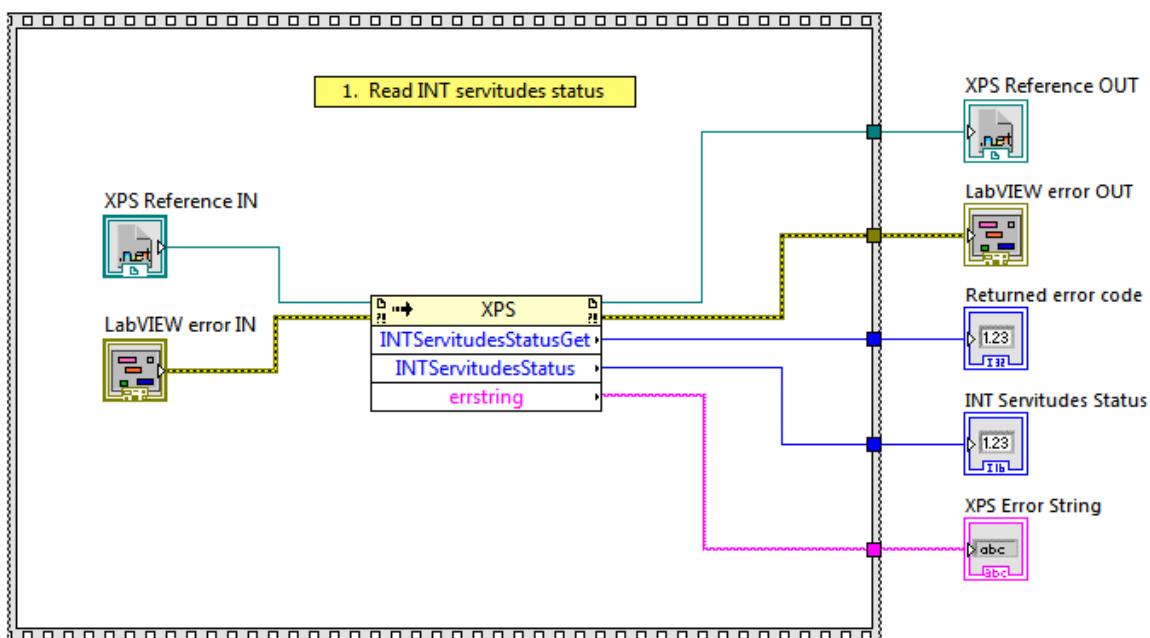
## 237. INT Servitudes Status Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Read INT servitudes status.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**INT Servitudes Status** INT servitudes status

**XPS Error String** return error string from VI

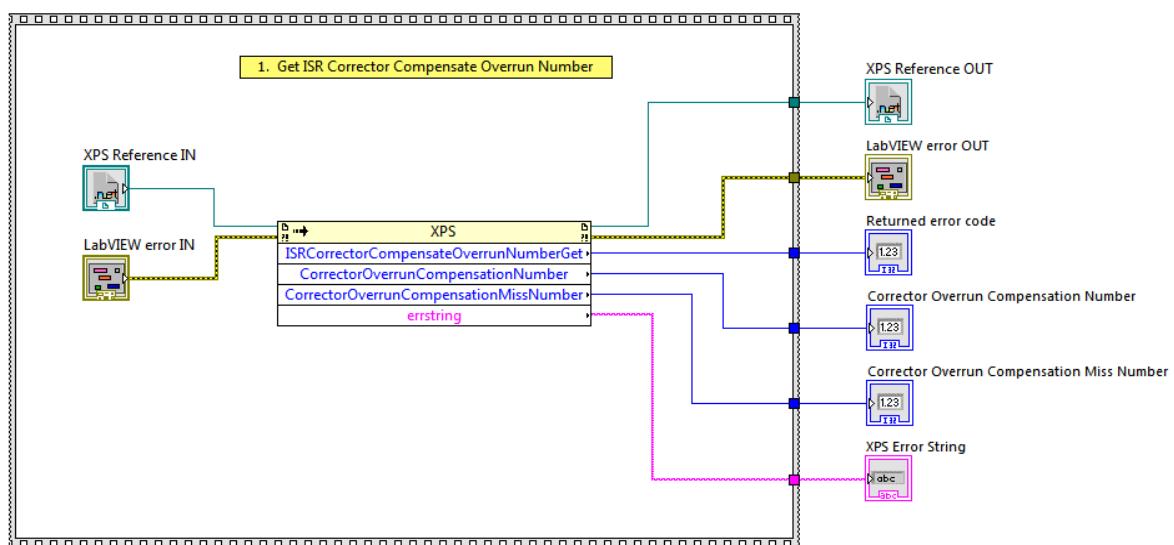
## 238. ISR Corrector Compensate Overrun Number Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get ISR corrector compensate overrun number.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Corrector Overrun Compensation Number** Corrector overrun compensation number

**Corrector Overrun Compensation Miss Number** Corrector overrun compensation miss number

**XPS Error String** return error string from VI

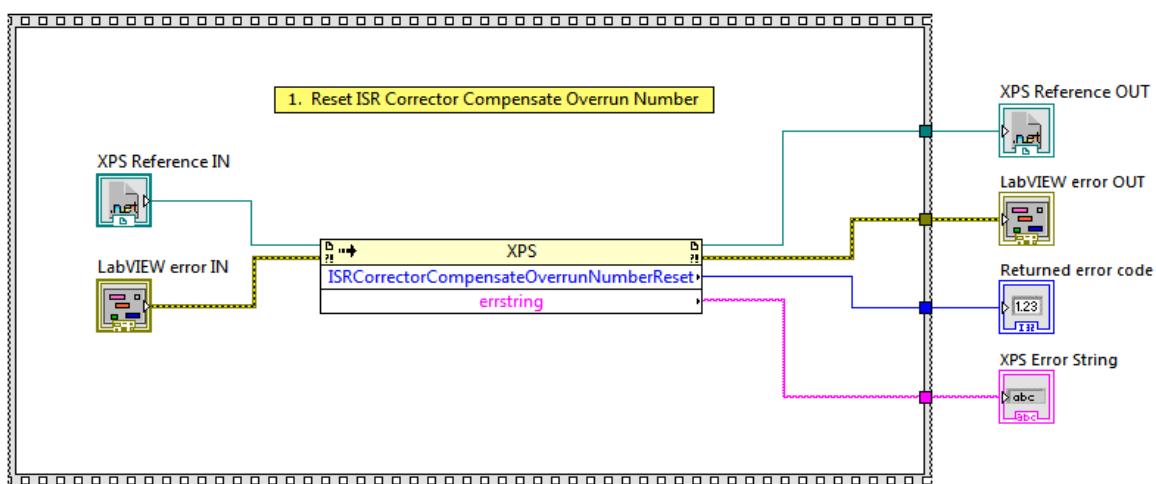
## 239. ISR Corrector Compensate Overrun Number Reset VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Reset ISR corrector compensate overrun number.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

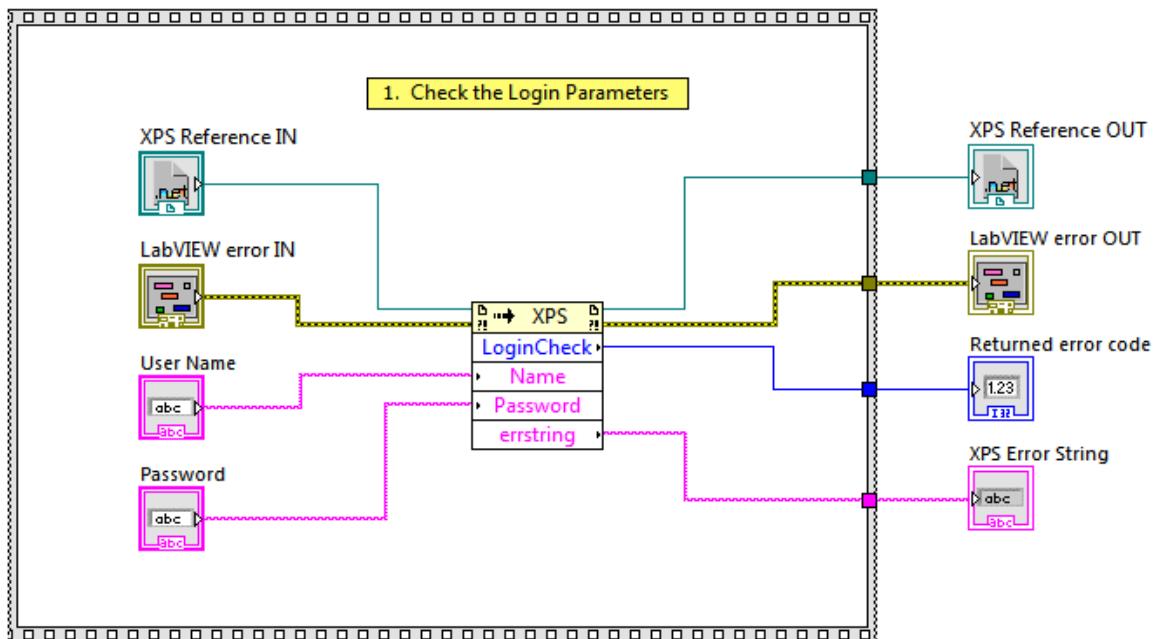
## 240. Login Check VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Check the login parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**User Name** User Name



**Password** Password

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

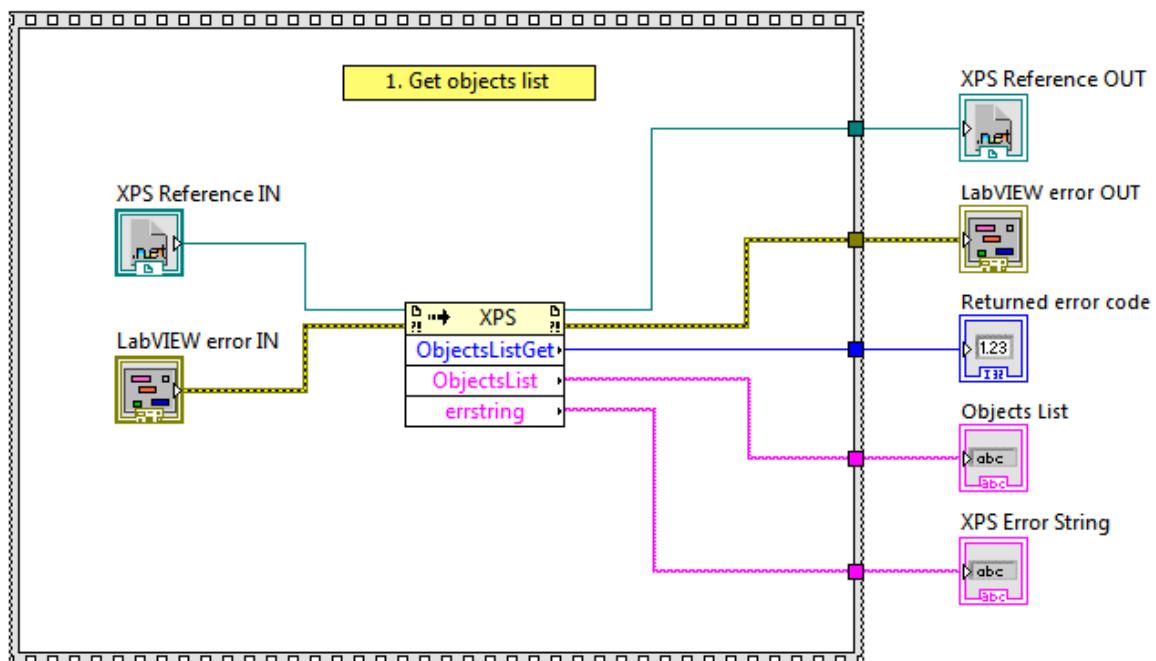
## 241. Objects List Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get objects list.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Objects List** Objects list

**XPS Error String** return error string from VI

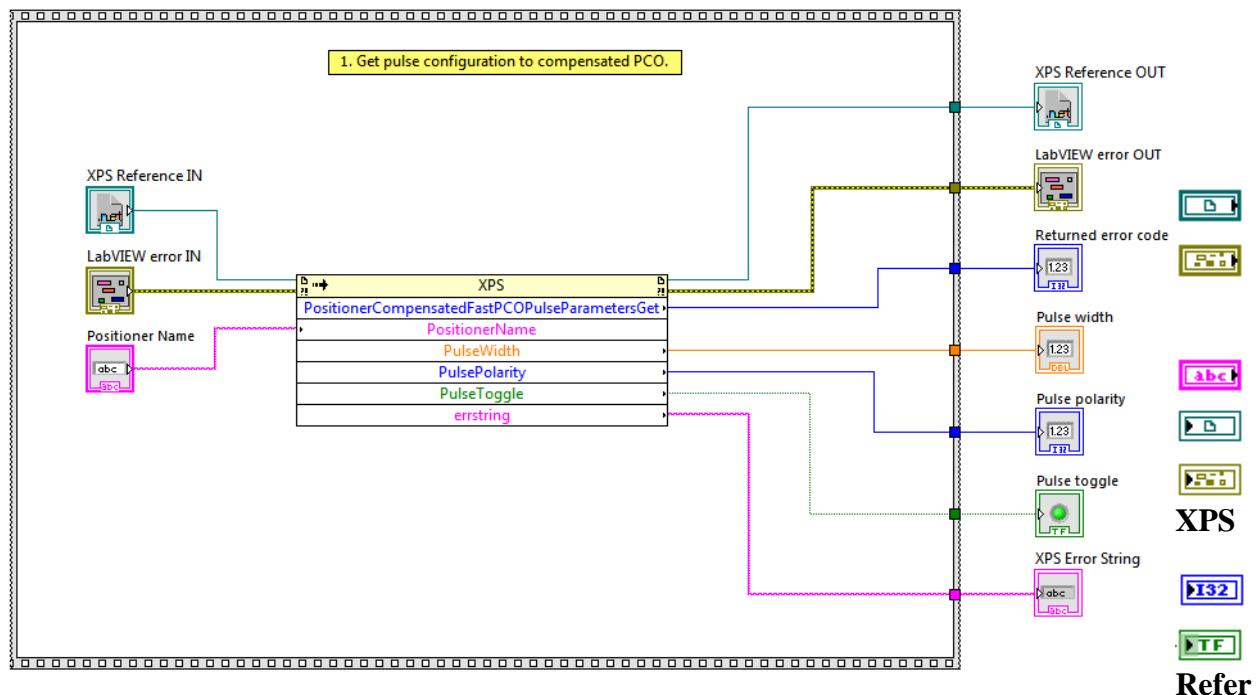
## 242. Positioner Compensated Fast PCO Pulse Parameters Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get pulse configuration to compensated PCO.

### Screenshot



ence IN is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Filter Control Status** filter control status



**KD gain** KD gain

**Derivative Filter Cut Off Frequency** PID derivative filter cut off frequency (Hz)

**XPS Error String** return error string from VI

- XPS Reference IN XPS Reference IN
  - LabVIEW error IN LabVIEW error IN
  - Positioner Name Positioner name
- 
- XPS Reference OUT XPS Reference OUT
  - LabVIEW error OUT LabVIEW error OUT
  - Returned Error Code Returned Error Code
  - Pulse width Pulse width
  - Pulse polarity Pulse polarity
  - Pulse toggle Pulse toggle
  - XPS Error String XPS Error String

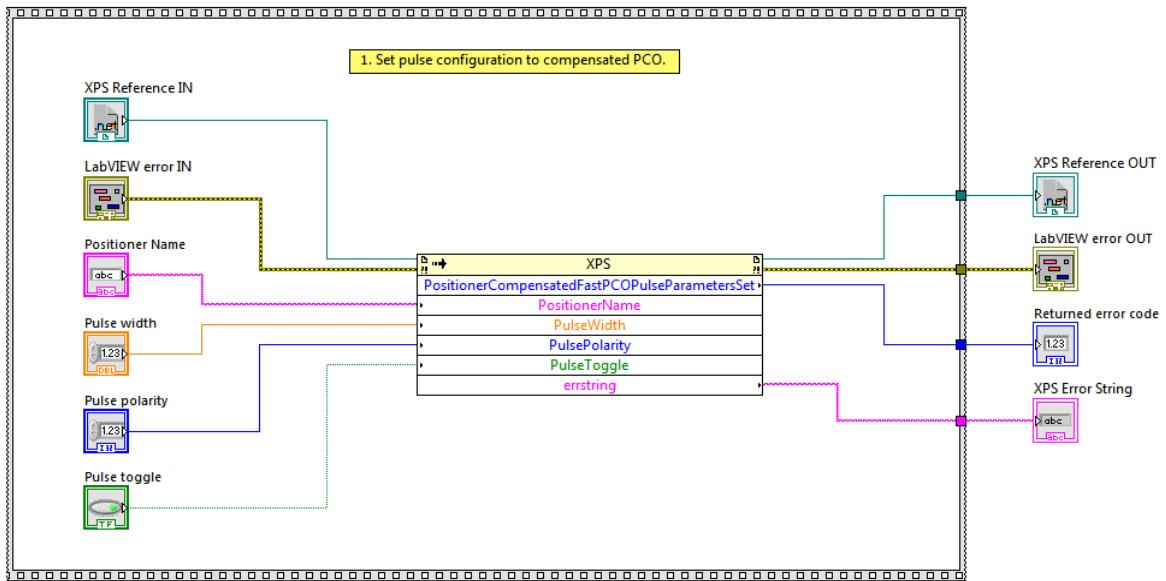
## 243. Positioner Compensated Fast PCO Pulse Parameters Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set pulse configuration to compensated PCO.

**Screenshot**



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Pulse width** Pulse width



**Pulse polarity** Pulse polarity



**Pulse toggle** Pulse toggle

**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

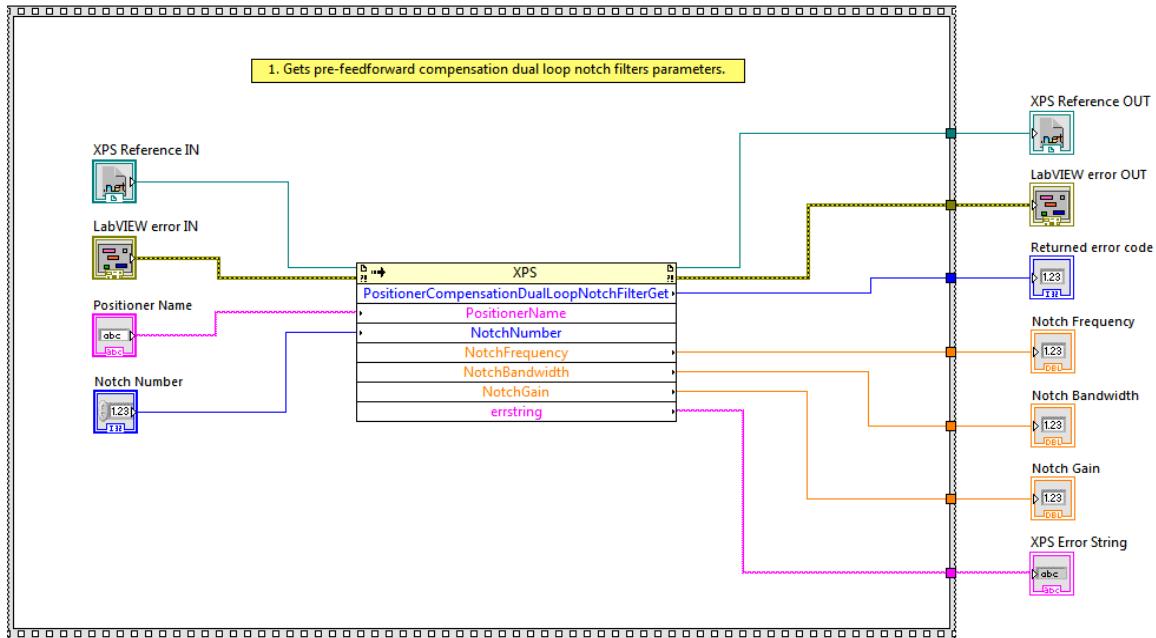
## 244. Positioner Compensation Dual Loop Notch Filter Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get compensation dual loop notch filter parameters.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Notch Number** notch number

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Notch Frequency** notch frequency

**Notch Bandwidth** notch bandwidth

**Notch Gain** notch gain

**XPS Error String** return error string from VI

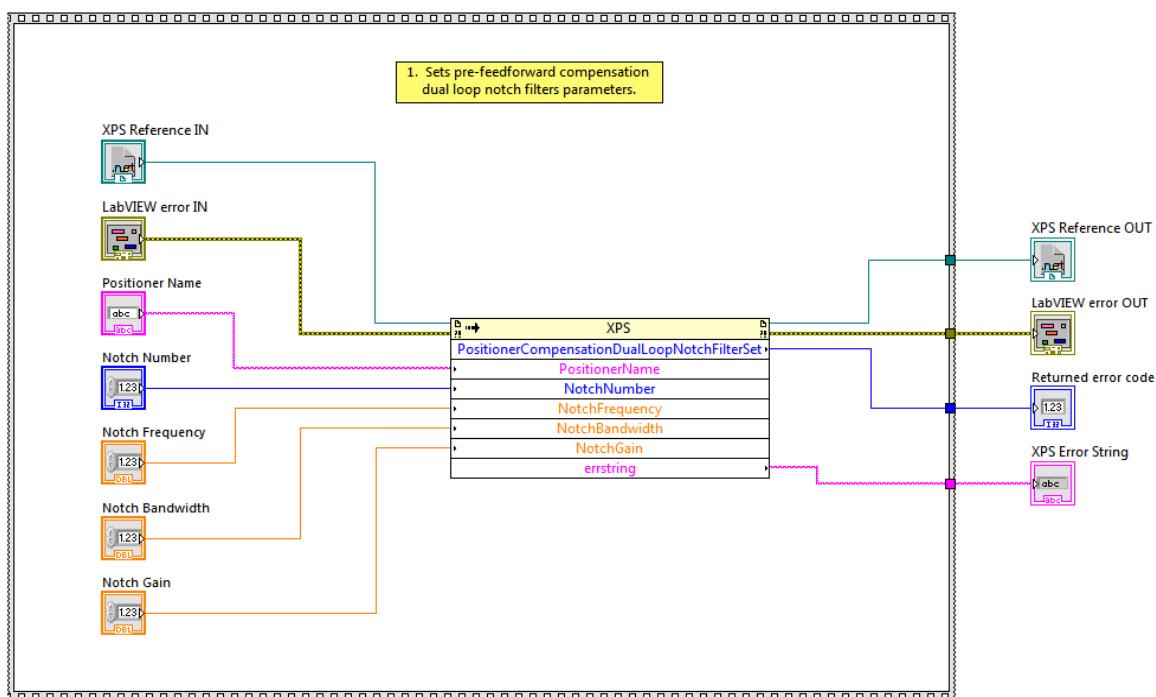
## 245. Positioner Compensation Dual Loop Notch Filter Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set compensation dual loop notch filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Notch Number** Notch number



**Notch Frequency** Notch frequency



**Notch Bandwidth** Notch bandwidth



**Notch Gain** Notch gain



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**abc** **XPS Error String** return error string from VI

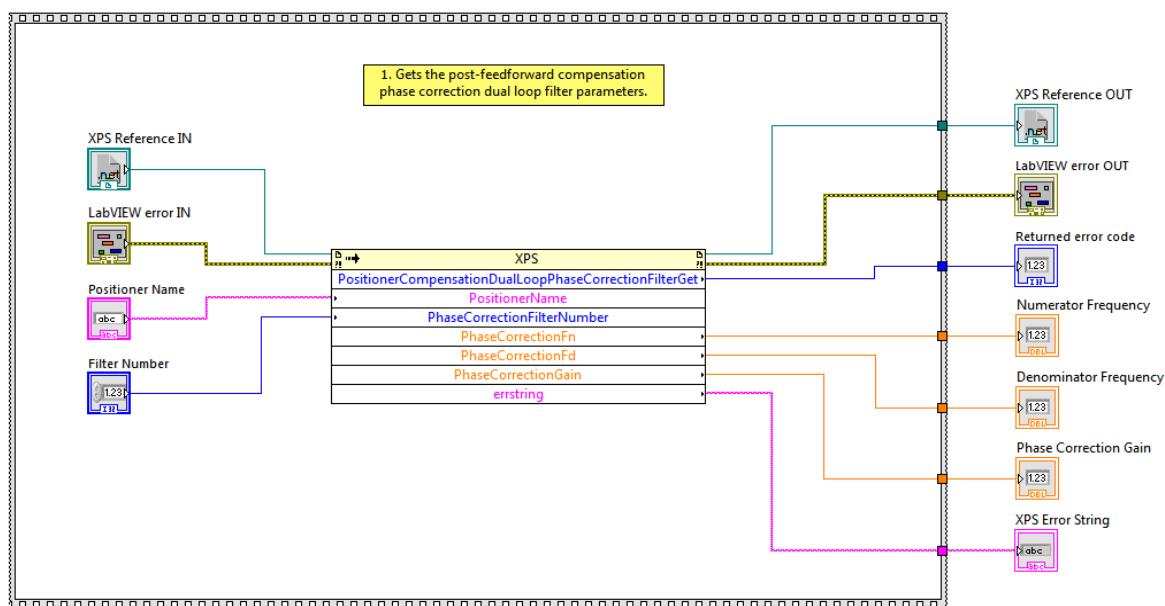
## 246. Positioner Compensation Dual Loop Phase Correction Filters Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get compensation phase correction dual loop filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Filter Number** filter number

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**DBL** **Numerator Frequency** Phase correction numerator frequency

**DBL** **Denominator Frequency** Phase correction denominator frequency

**DBL** **Phase Correction Gain** Phase correction gain

**abc** **XPS Error String** return error string from VI

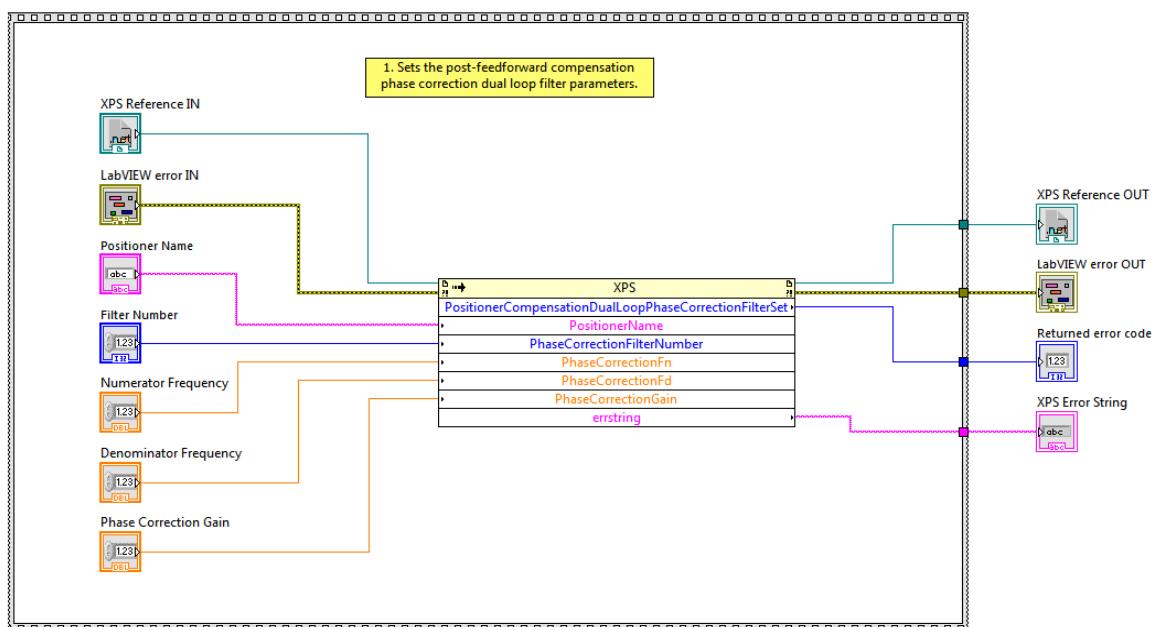
## 247. Positioner Compensation Dual Loop Phase Correction Filters Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set compensation phase correction dual loop filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Filter Number** Filter number

**Numerator Frequency** Phase correction numerator frequency



**Denominator Frequency** Phase correction denominator frequency



**Phase Correction Gain** Phase correction gain



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

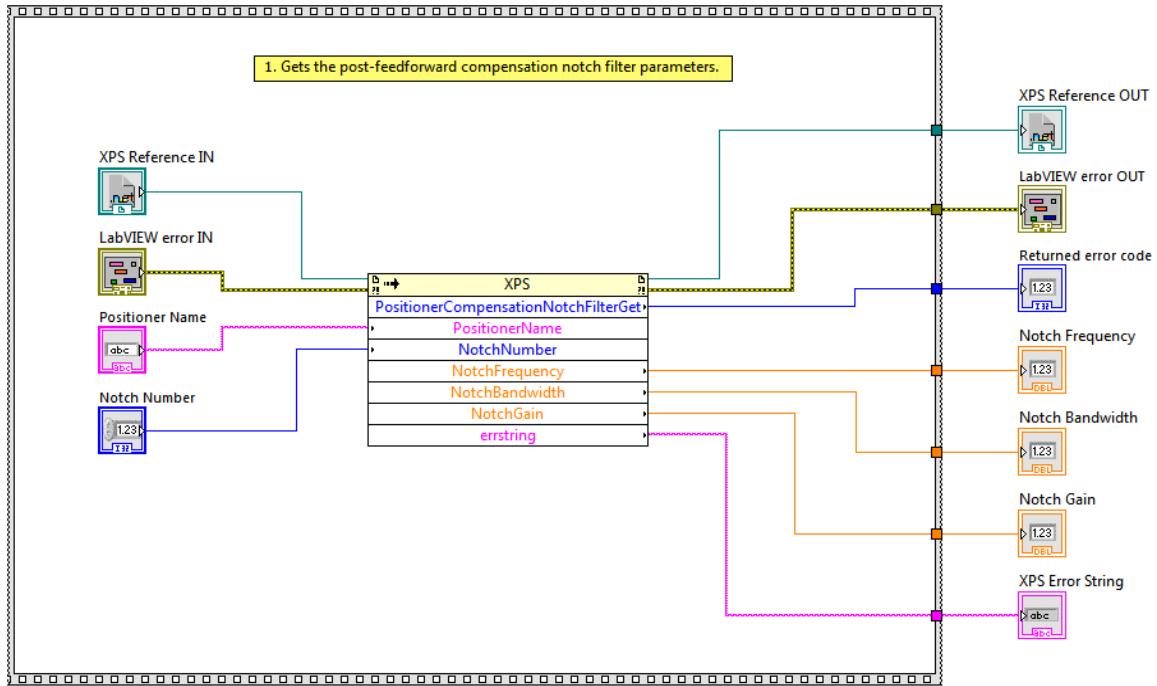
**XPS Error String** return error string from VI

## 248. Positioner Compensation Notch Filter Get VI

Get compensation notch filter parameters.

### Screenshot





**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Notch Number** notch number

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Notch Frequency** notch frequency

**Notch Bandwidth** notch bandwidth

**Notch Gain** notch gain

**XPS Error String** return error string from VI

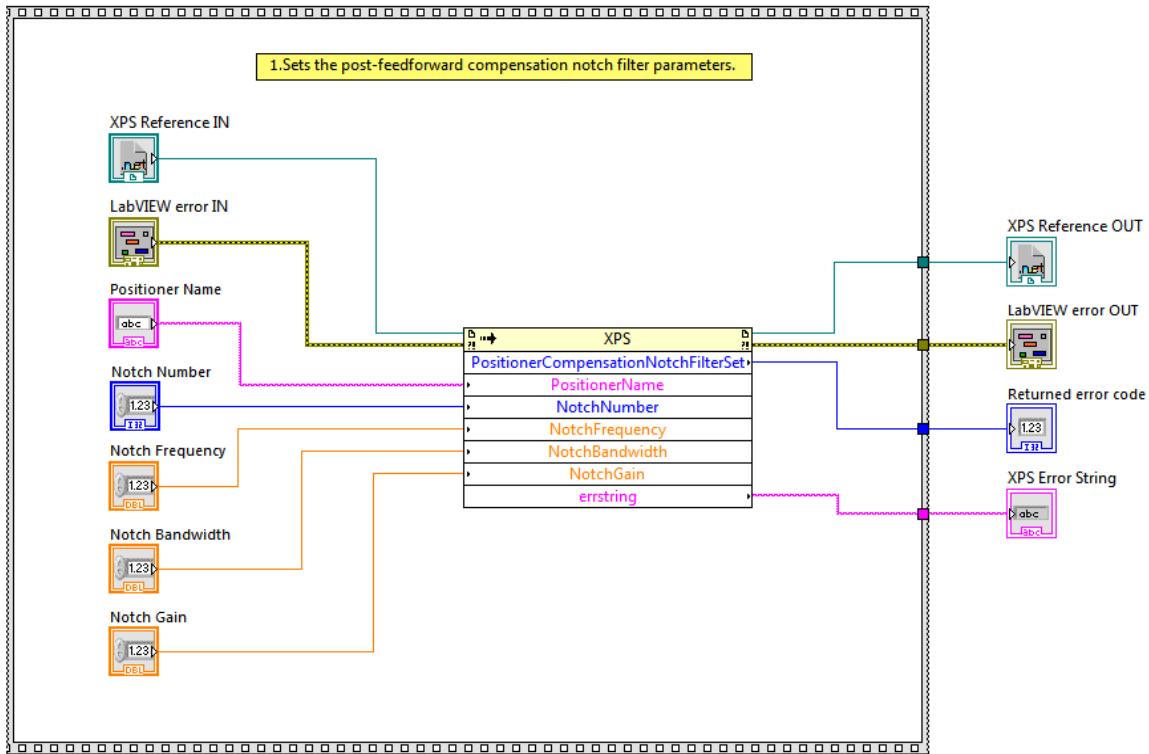
## 249. Positioner Compensation Notch Filter Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set compensation notch filter parameters.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Notch Number** Notch frequency number



**Notch Frequency** Notch frequency



**Notch Bandwidth** Notch bandwidth



**Notch Gain** Notch gain



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

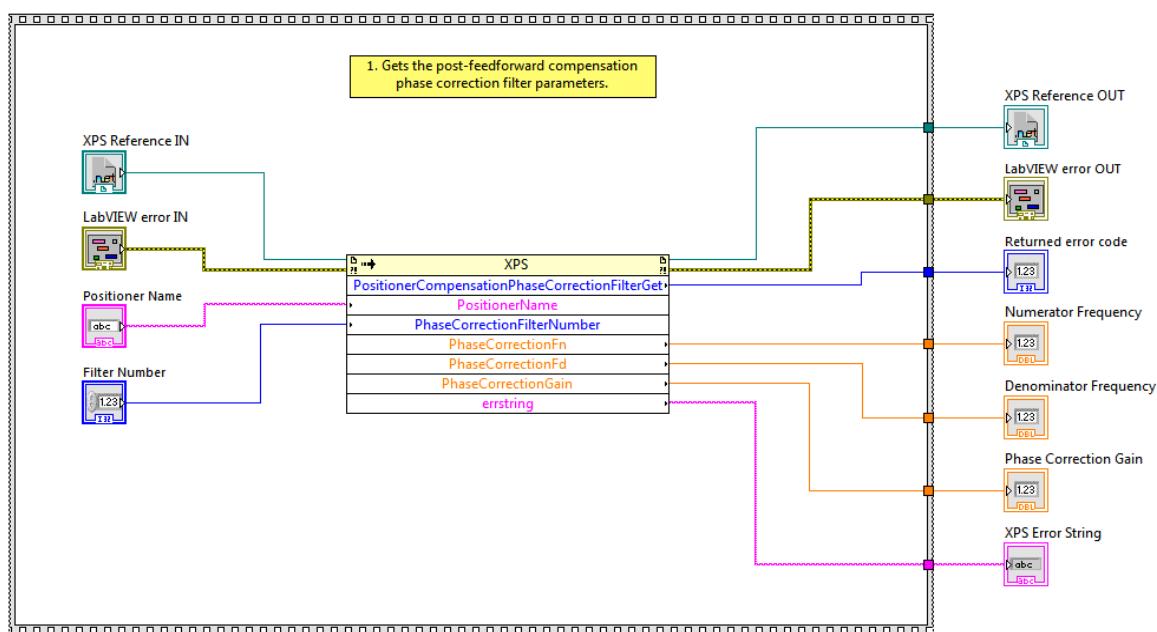
## 250. Positioner Compensation Phase Correction Filter Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get compensation phase correction parameters.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Filter Number** filter number



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Numerator Frequency** Phase correction numerator frequency



**Denominator Frequency** Phase correction denominator frequency

**Phase Correction Gain** Phase correction gain

**XPS Error String** return error string from VI

## 251. Positioner Compensation Phase Correction Filter Set VI

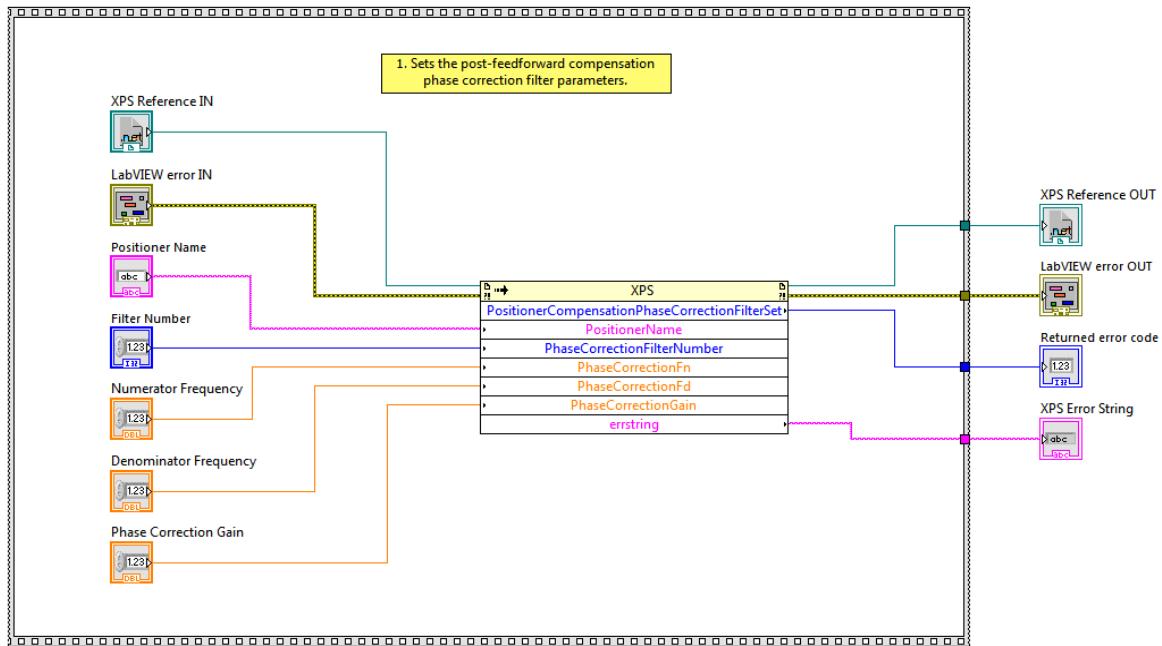
**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set compensation phase correction parameters.

**Screenshot**





**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Filter Number** Filter number

**Numerator Frequency** Phase correction numerator frequency

**Denominator Frequency** Phase correction denominator frequency

**Phase Correction Gain** Phase correction gain

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

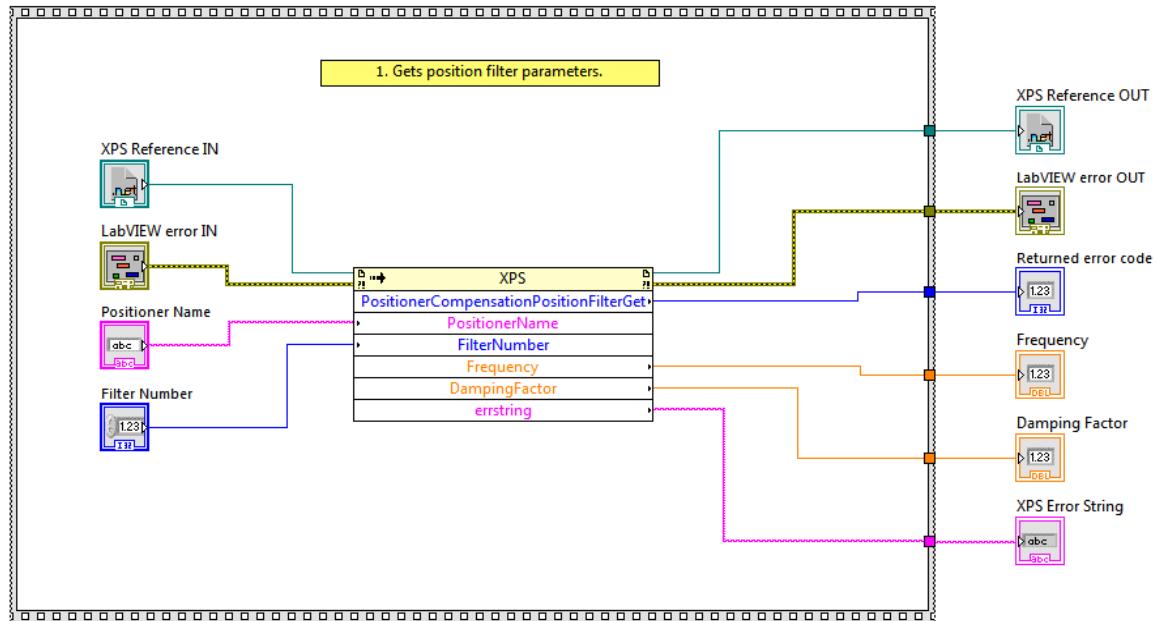
## 252. Positioner Compensation Position Filter Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get position filter parameters.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Filter Number** filter number

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Frequency** frequency

**Damping Factor** damping factor

**XPS Error String** return error string from VI

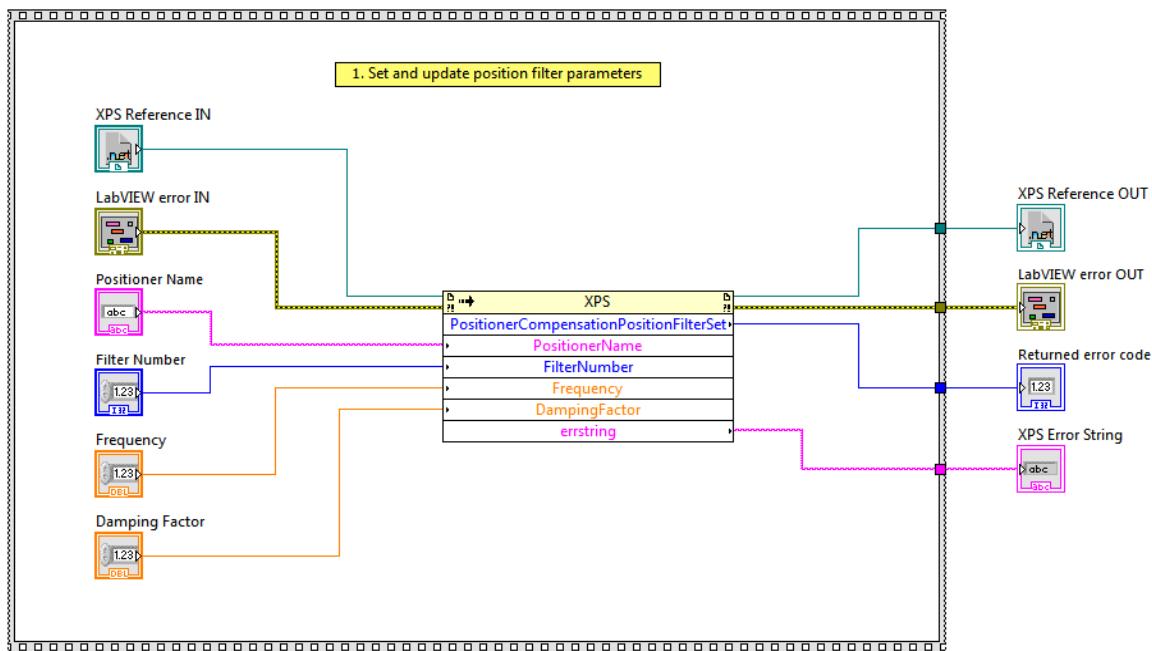
## 253. Positioner Compensation Position Filter Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set and update position filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Filter Number** Filter number



**Frequency** frequency



**Damping Factor** damping factor



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

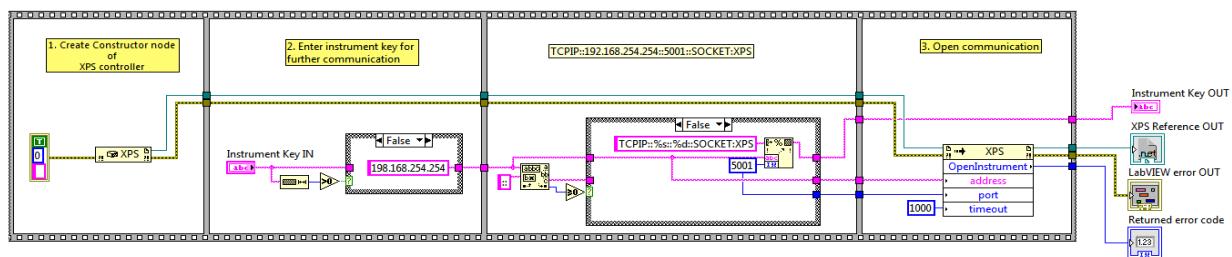
## 254. Open VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Open communication.

### Screenshot



**Title Trace** Title trace

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Instrument Key OUT** Instrument key OUT

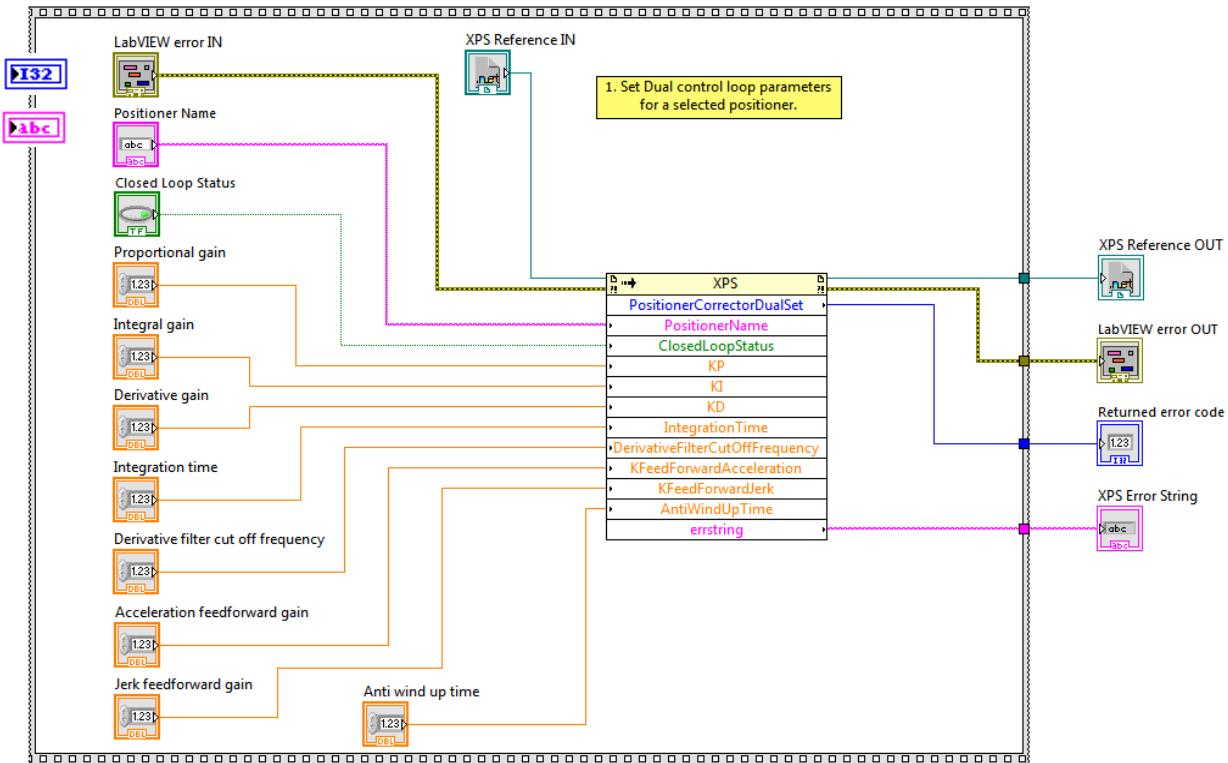
## 255. Positioner Corrector Dual Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set dual control loop parameters for a selected positioner.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name



**Closed Loop Status** Position servo loop status (true=closed and false=opened)

**Proportional gain** PID servo loop proportional gain

**Integral gain** PID servo loop integral gain

**Derivative gain** PID servo loop derivative gain

**Integration time** PID integration time (seconds)

**Derivative Filter Cut Off Frequency** PID derivative filter cut off frequency (Hz)

**Acceleration feedforward gain** Acceleration feed forward gain



**Jerk feedforward gain** Jerk feed forward gain

**Anti wind up time** Anti wind up time

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

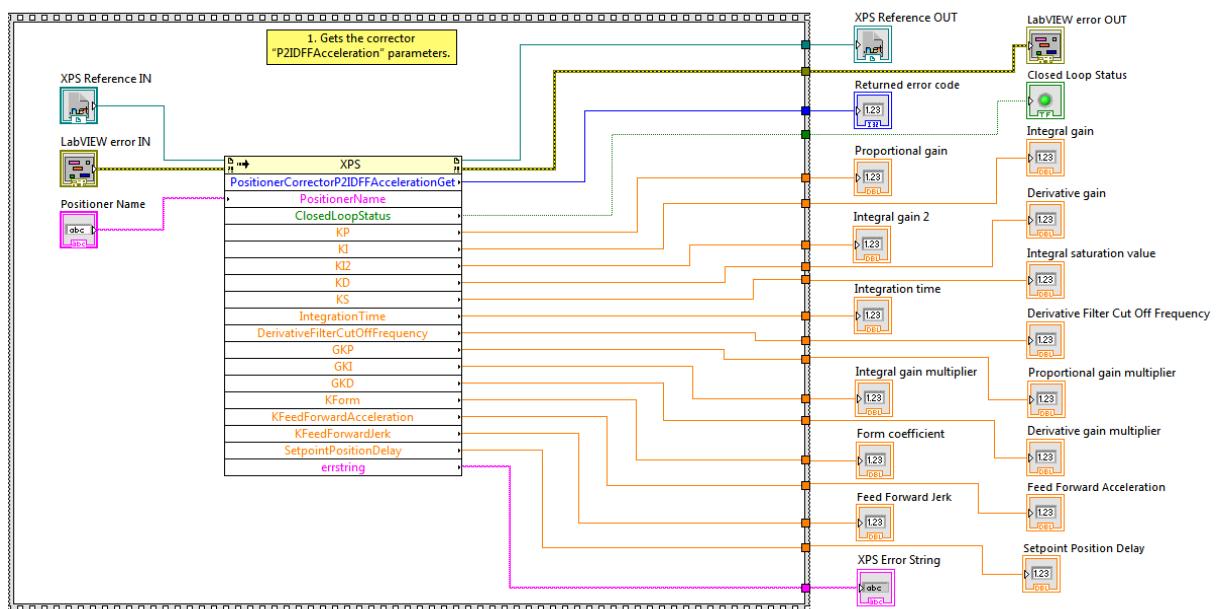
## 256. Positioner Corrector P2 ID FF Acceleration Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the corrector “P2IDFFAcceleration” parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input



provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **Closed Loop Status** Position servo loop status (true=closed and false=opened)

 **Proportional gain** PID servo loop proportional gain

 **Integral gain** PID servo loop integral gain

 **Integral gain 2** PID servo loop integral gain 2

 **Derivative gain** PID servo loop derivative gain

 **Integral saturation value** PID integral saturation value (0 to 1)

 **Integration Time** PID integration time (seconds)

 **Derivative Filter Cut Off Frequency** PID derivative filter cut off frequency (Hz)

 **Proportional gain multiplier** Variable PID proportional gain multiplier



 **Integral gain multiplier** Variable PID integral gain multiplier

 **Derivative gain multiplier** Variable PID derivative gain multiplier

 **Form coefficient** Variable PID form coefficient

 **Feed Forward Acceleration** Acceleration feed forward gain (units)

 **Feed Forward Jerk** Jerk feed forward gain

 **Setpoint Position Delay** Setpoint position delay

 **XPS Error String** return error string from VI

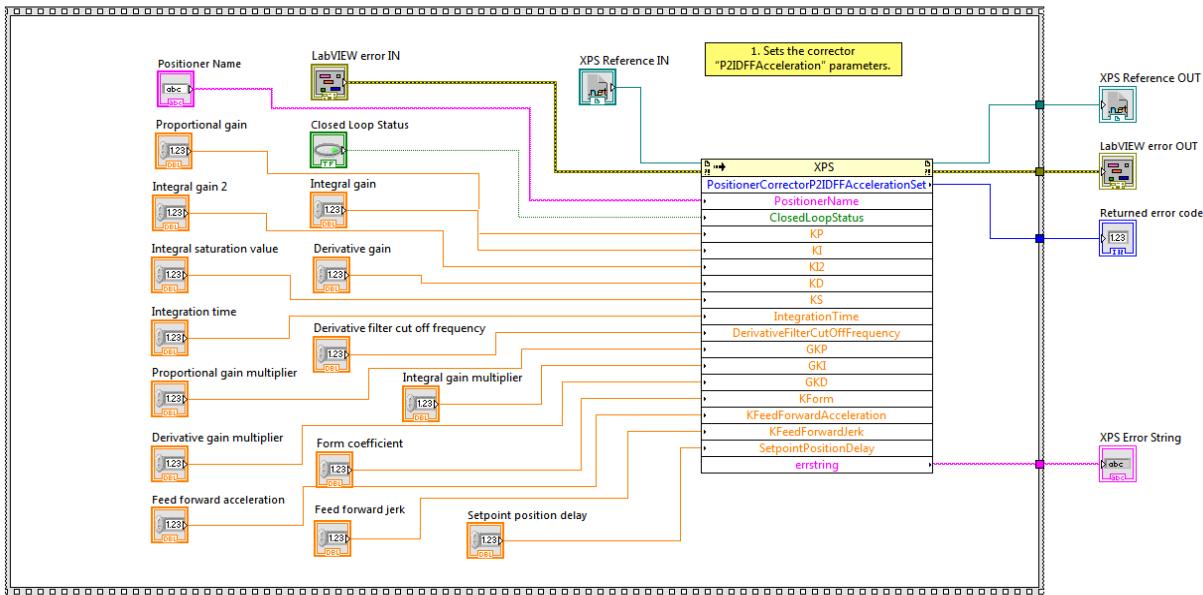
## 257. Positioner Corrector P2 ID FF Acceleration Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the corrector “P2IDFFAcceleration” parameters.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**TF**

**DBL**

**Closed Loop Status** Position servo loop status (true=closed and false=opened)

**Proportional gain** PID servo loop proportional gain

**Integral gain** PID servo loop integral gain

**Integral gain 2** PID servo loop integral gain 2

**DBL**

**DBL**

**Derivative gain** PID servo loop derivative gain

**Integral saturation value** PID integral saturation value (0 to 1)

**Integration time** PID integration time (seconds)

**Derivative Filter Cut Off Frequency** PID derivative filter cut off frequency (Hz)

**Proportional gain multiplier** Variable PID proportional gain multiplier

**Integral gain multiplier** Variable PID integral gain multiplier

**Derivative gain multiplier** Variable PID derivative gain multiplier

**Form coefficient** Variable PID form coefficient

**DBL**

**DBL**

**Feed Forward Acceleration** Acceleration feedforward gain (units)

**Feed Forward Jerk** Jerk feed forward gain



**Setpoint Position Delay** Set point position delay

**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

XPS Reference IN XPS Reference IN

LabVIEW error IN LabVIEW error IN

Positioner Name Positioner name

Closed Loop Status Position servo loop status (true=closed and false=opened)

Proportional gain PID servo loop proportional gain

Integral gain PID servo loop integral gain

Integral gain 2 PID servo loop integral gain 2

Derivative gain PID servo loop derivative gain

Integral saturation value PID integral saturation value (0 to 1)

Integration time PID integration time (seconds)

Derivative Filter Cut Off Frequency PID derivative filter cut off frequency (Hz)

Proportional gain multiplier Variable PID proportional gain multiplier

Integral gain multiplier Variable PID integral gain multiplier

Derivative gain multiplier Variable PID derivative gain multiplier

Form coefficient Variable PID form coefficient

Feed Forward Acceleration Acceleration feedforward gain (units)

Feed Forward Jerk Jerk feed forward gain

Setpoint Position Delay Set point position delay

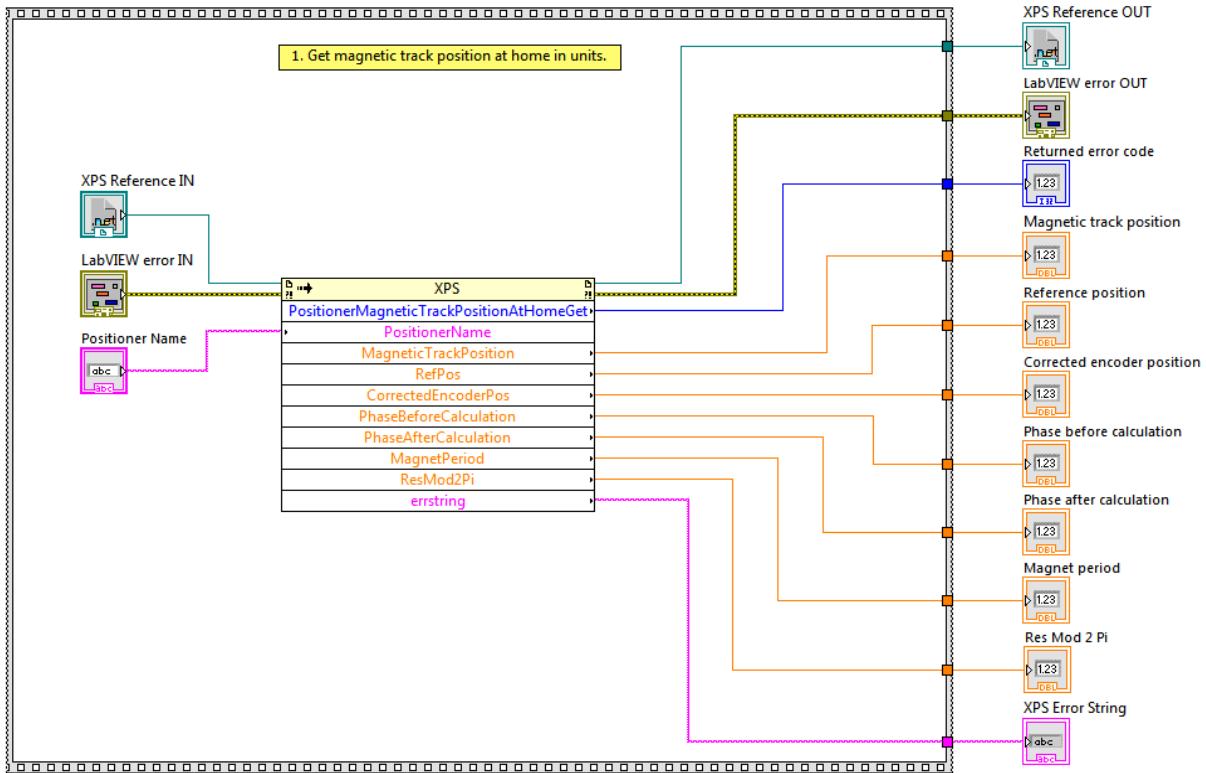
## 258. Positioner Magnetic Track Position At Home Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get magnetic track position at home in units.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Magnetic track position** Magnetic track position

DBL

DBL

**Reference position** Reference position

DBL

**Corrected encoder position** Corrected encoder position

DBL

**Phase before calculation** Phase before calculation

DBL

**Phase after calculation** Phase after calculation

**Magnet period** Magnet period

DBL

**Res Mod 2 Pi** Res Mod 2 Pi

abc

**XPS Error String** return error string from VI

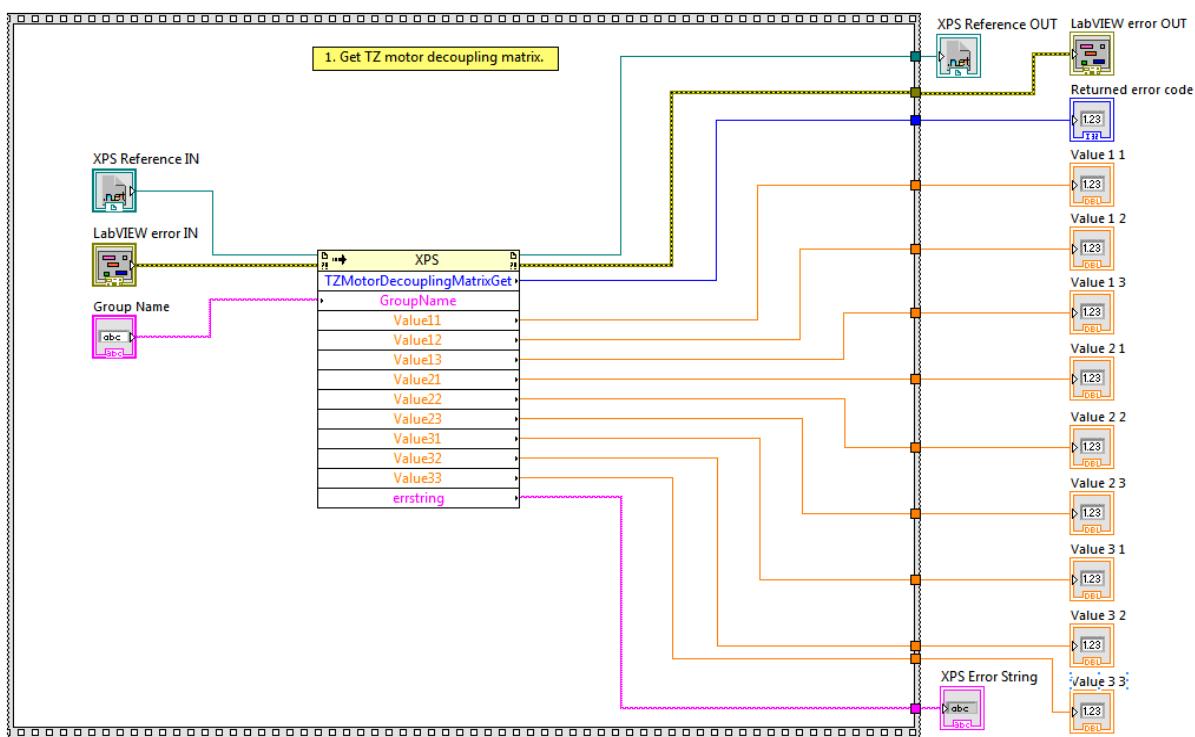
## 259. TZ Motor Decoupling Matrix Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get TZ motor decoupling matrix.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

 **Value 1 1** Value 1 1





**Value 1 2** Value 1 2



**Value 1 3** Value 1 3



**Value 2 1** Value 2 1



**Value 2 2** Value 2 2



**Value 2 3** Value 2 3



**Value 3 1** Value 3 1



**Value 3 2** Value 3 2



**Value 3 3** Value 3 3

**XPS Error String** return error string from VI

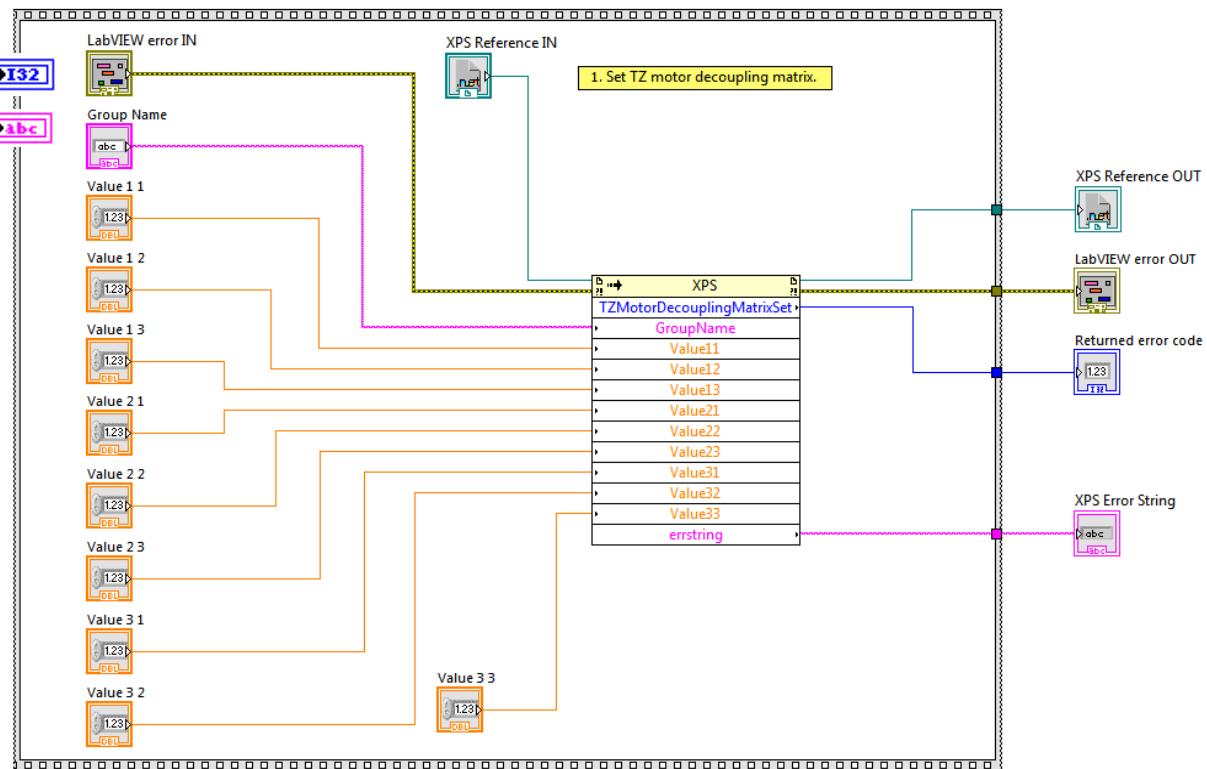
## 260. TZ Motor Decoupling Matrix Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set TZ motor decoupling matrix.

**Screenshot**



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** group name



**Closed Loop Status** Position servo loop status (true=closed and false=opened)



**Value 1 1** Value 1 1



**Value 1 2** Value 1 2



**Value 1 3** Value 1 3



**Value 2 1** Value 2 1



**Value 2 2** Value 2 2



**Value 2 3** Value 2 3



**Value 3 1** Value 3 1



**Value 3 2** Value 3 2



**Value 3 3** Value 3 3



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

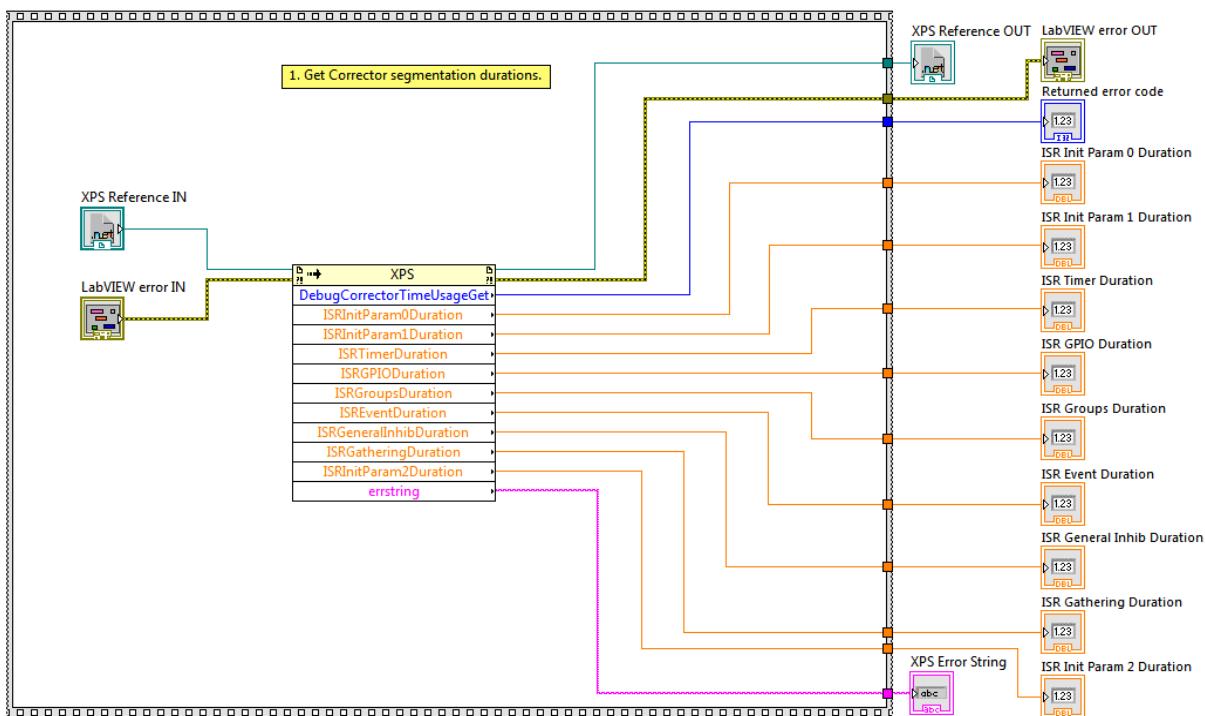
## 261. Debug Corrector Time Usage Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get corrector segmentation durations.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

 **ISR Init Param 0 Duration** ISR init parameter 0 duration





 **ISR Init Param 1 Duration** ISR init parameter 1 duration



 **ISR Timer Duration** ISR timer duration



 **ISR GPIO Duration** ISR GPIO duration



 **ISR Groups Duration** ISR groups duration



 **ISR Event Duration** ISR event duration



 **ISR General Inhib Duration** ISR general inhib duration



 **ISR Gathering Duration** ISR gathering duration



**ISR Init Param 2 Duration** ISR init parameter 2 duration

**XPS Error String** return error string from VI

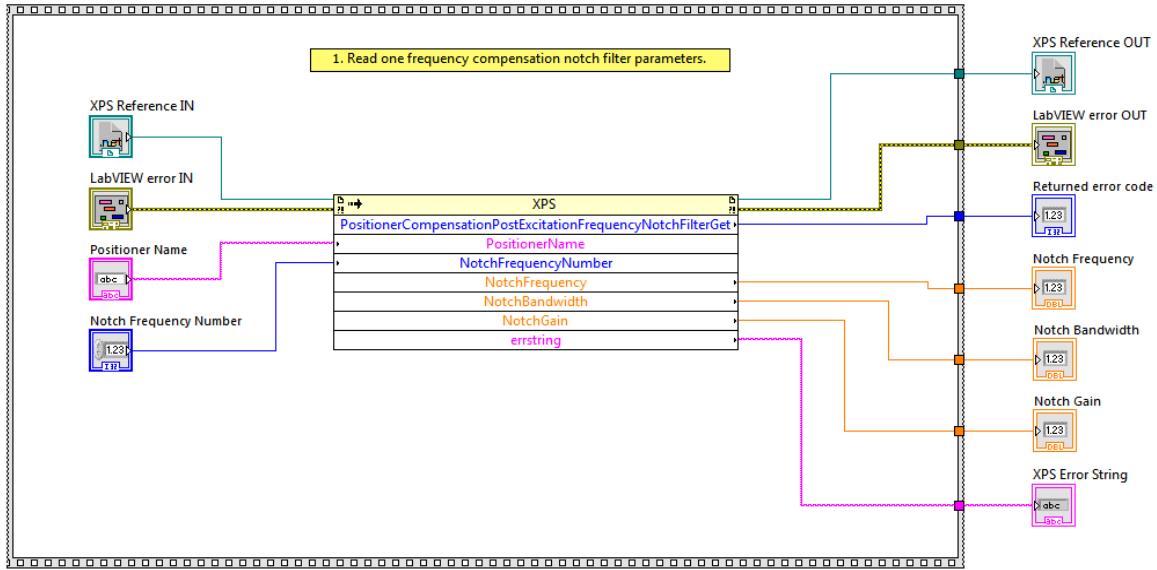
## 262. Positioner Compensation Post Excitation Frequency Notch Filter Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Read one frequency compensation notch filter parameters.

**Screenshot**



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Notch Frequency Number** notch frequency number



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Notch Frequency** notch frequency



**Notch Bandwidth** notch bandwidth



**Notch Gain** notch gain

**XPS Error String** return error string from VI

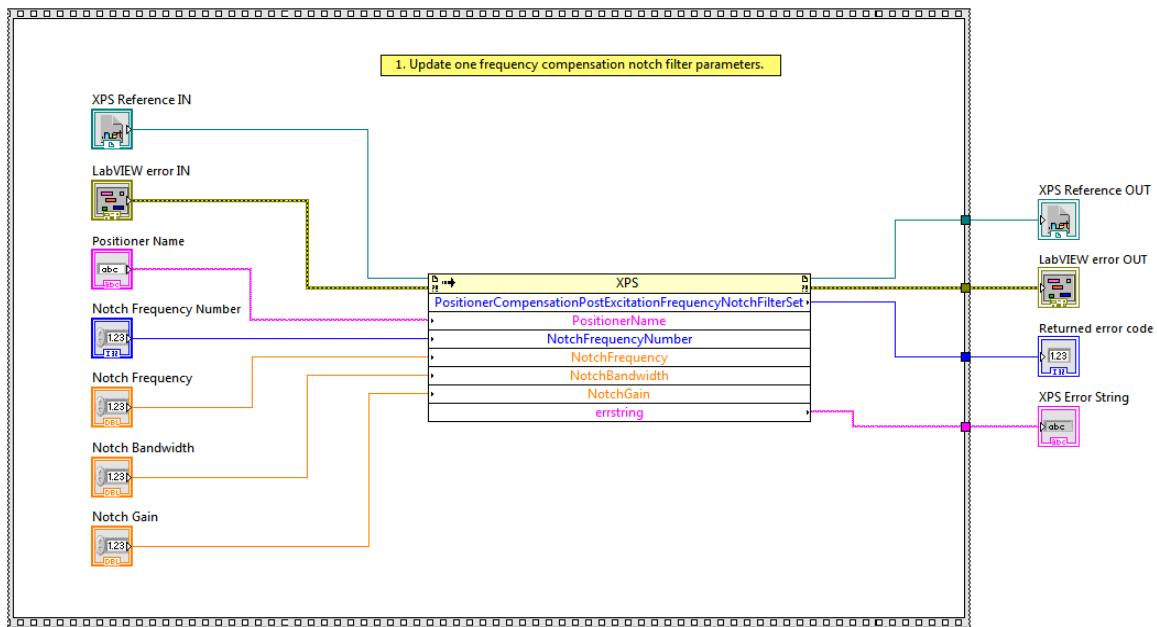
## 263. Positioner Compensation Post Excitation Frequency Notch Filter Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Update one frequency compensation notch filter parameters.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Notch Frequency Number** Notch frequency number



**Notch Frequency** Notch frequency



**Notch Bandwidth** Notch bandwidth



**Notch Gain** Notch gain



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

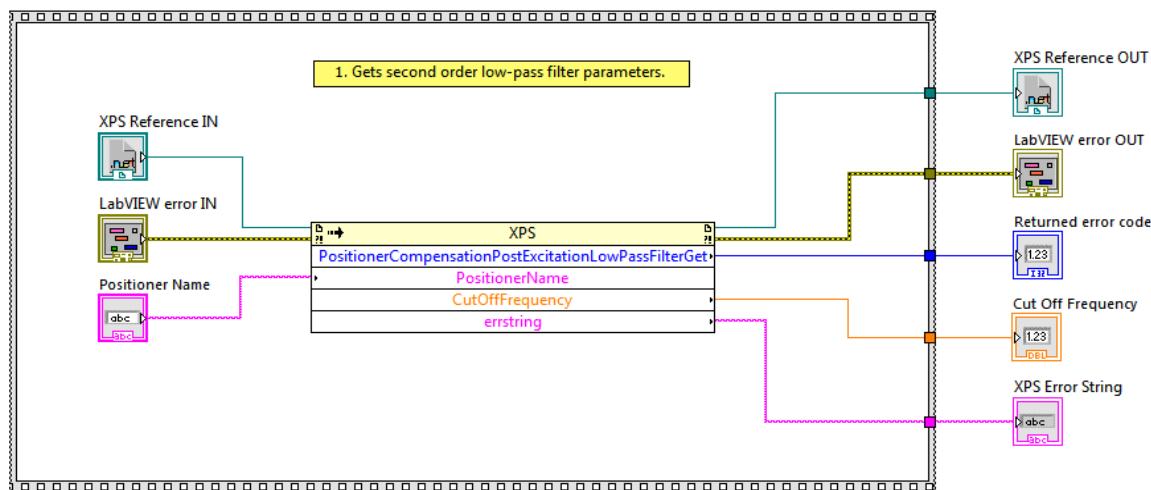
## 264. Positioner Compensation Post Excitation Low Pass Filter Get VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Get second order low-pass filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Cut Off Frequency** cut-off frequency (Hz)



**XPS Error String** return error string from VI

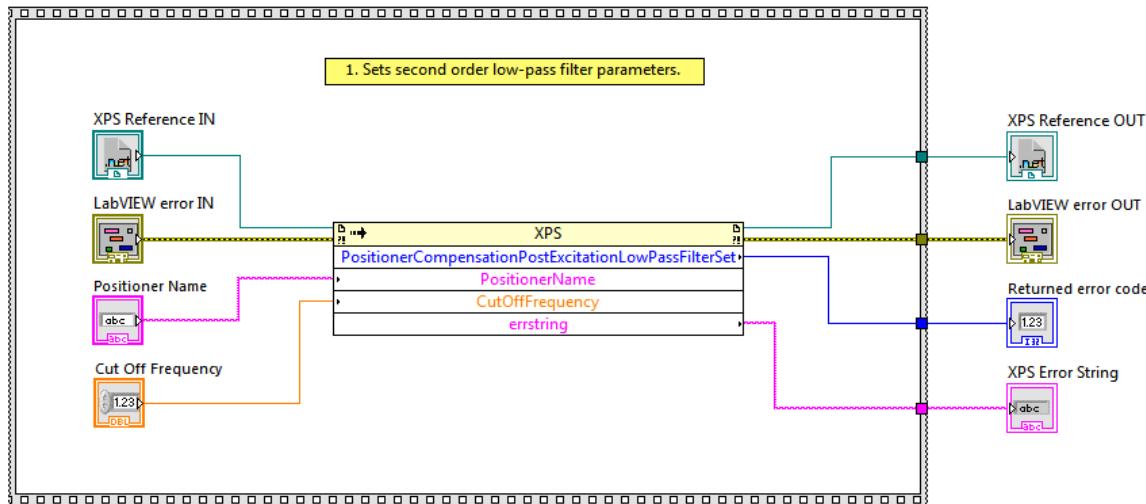
## 265. Positioner Compensation Post Excitation Low Pass Filter Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set second order low-pass filter parameters.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Cut Off Frequency** Cut off frequency

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

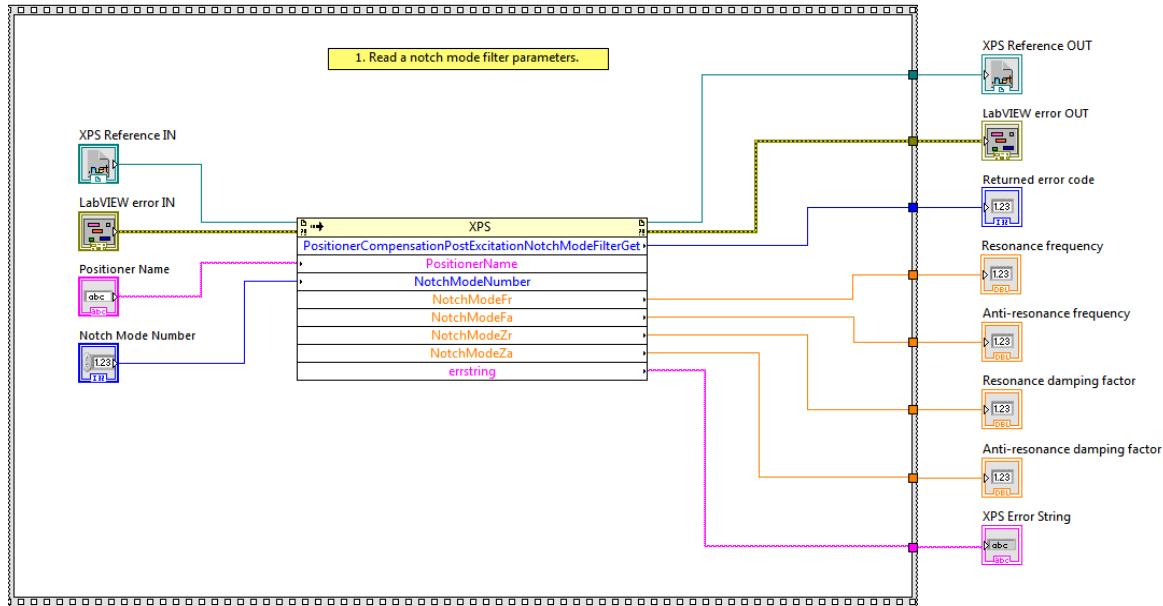
## 266. Positioner Compensation Post Excitation Notch Mode Filter Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Read notch mode filter parameters.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name



**Notch Mode Number** Notch Mode Number



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Resonance frequency** Resonance frequency (Herz) for notch mode filter



**Anti-resonance frequency** Anti-resonance frequency (Herz) for notch mode filter



**Resonance damping factor** Resonance damping factor for notch mode filter



**Anti-resonance damping factor** Anti-resonance damping factor for notch mode filter

**XPS Error String** return error string from VI

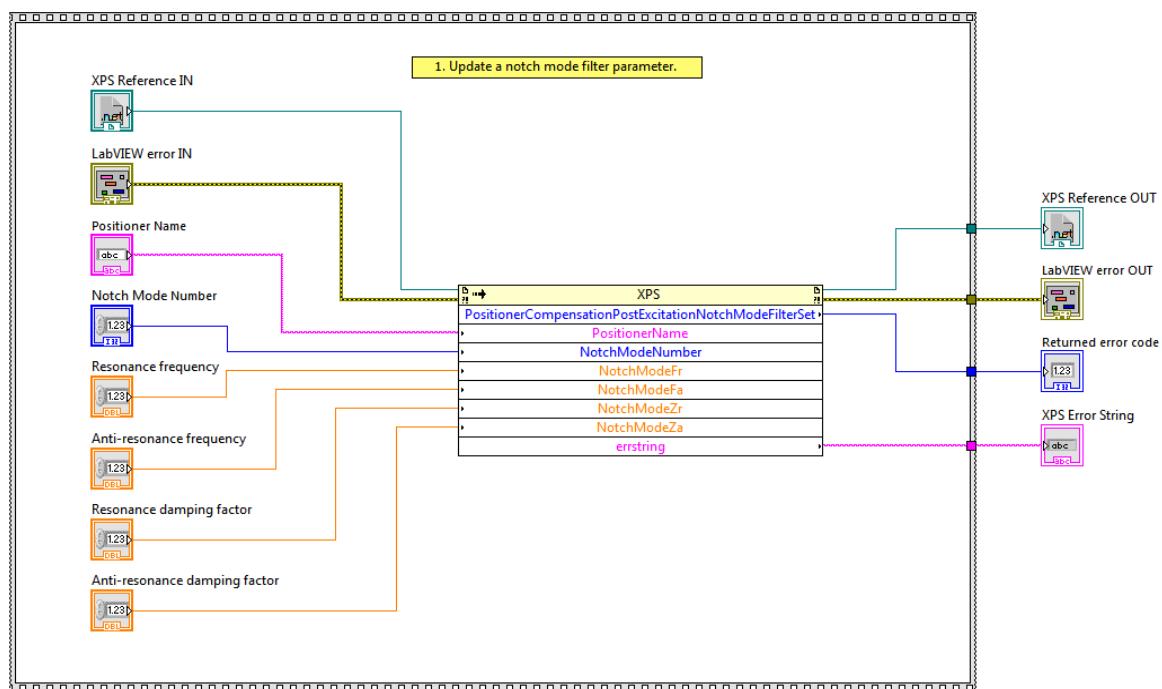
## 267. Positioner Compensation Post Excitation Notch Mode Filter Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Update notch mode filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Notch Mode Number** Notch mode number



**Resonance frequency** Resonance frequency (Hz) for notch mode filter



**Anti-resonance frequency** Anti-resonance frequency (Hz) for notch mode filter



**Resonance damping factor** Resonance damping factor for notch mode filte



**Anti-resonance damping factor** Anti-resonance damping factor for notch mode filter

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

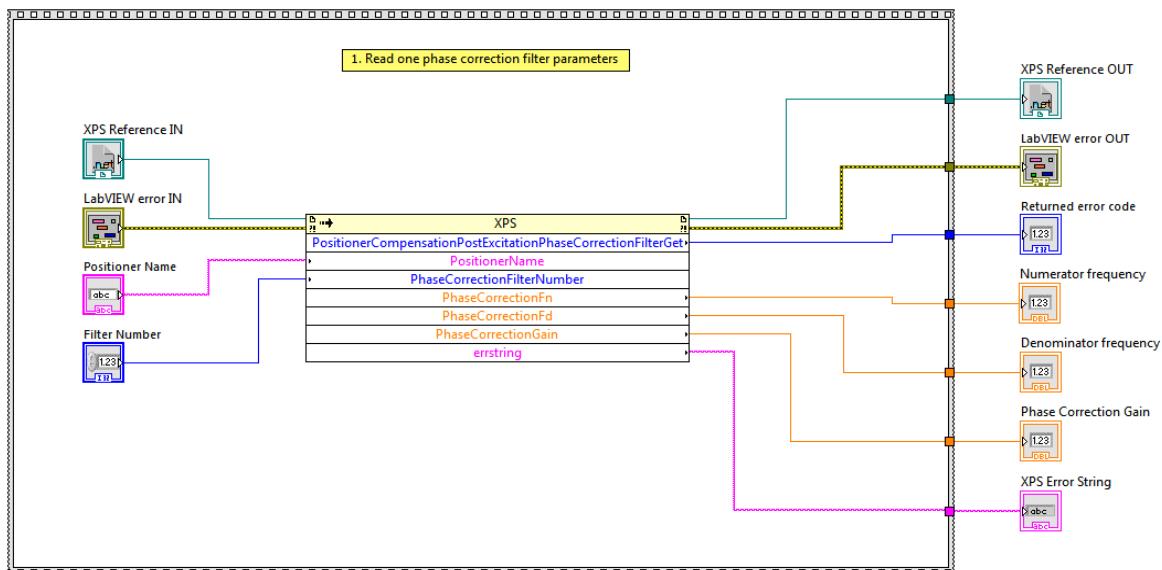
## 268. Positioner Compensation Post Excitation Phase Correction Filter Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Read one phase correction filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name

**Filter Number** filter number

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Numerator Frequency** Phase correction numerator frequency



**Denominator Frequency** Phase correction denominator frequency



**Phase Correction Gain** Phase correction gain

**XPS Error String** return error string from VI

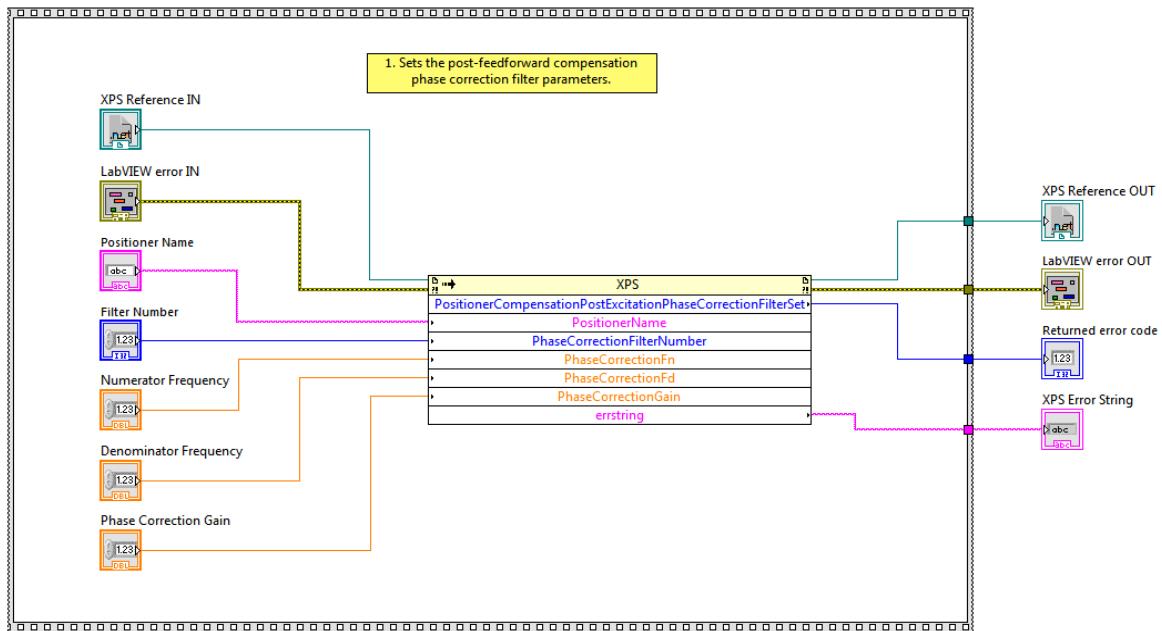
## 269. Positioner Compensation Post Excitation Phase Correction Filter Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set the post feed forward compensation phase correction filter parameters.

**Screenshot**



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Notch Frequency Number** Notch frequency number



**Notch Frequency** Notch frequency



**Notch Bandwidth** Notch bandwidth



**Notch Gain** Notch gain



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

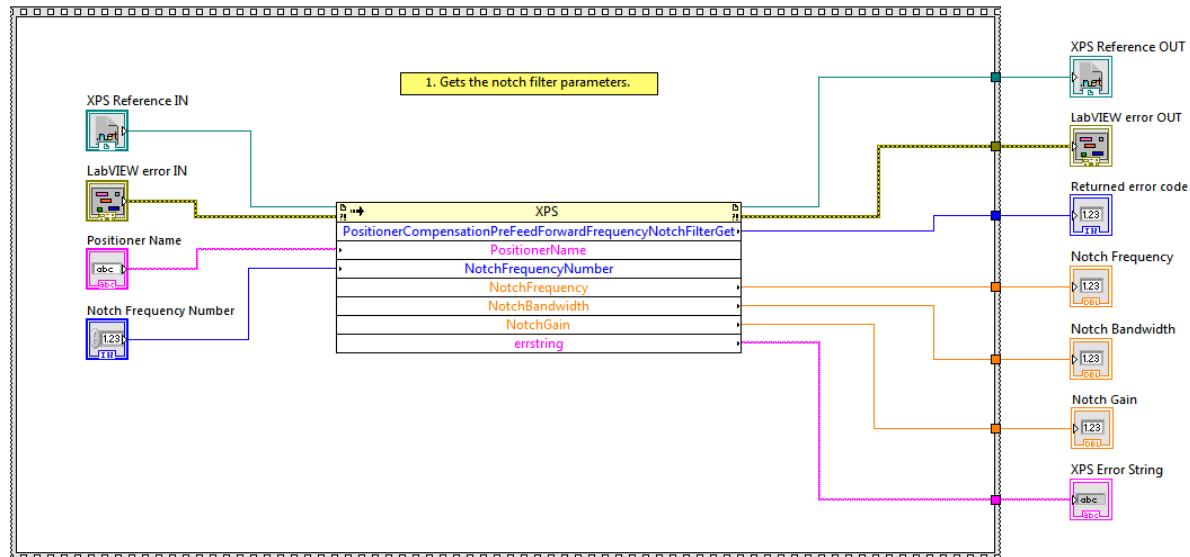
## 270. Positioner Compensation Pre Feed Forward Frequency Notch Filter Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the notch filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input



provides standard error in functionality.

**Positioner Name** positioner name

**Notch Frequency Number** notch frequency number

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.





**Returned Error Code** Returns function error code



**Notch Frequency** notch frequency



**Notch Bandwidth** notch bandwidth

**Notch Gain** notch gain

**XPS Error String** return error string from VI

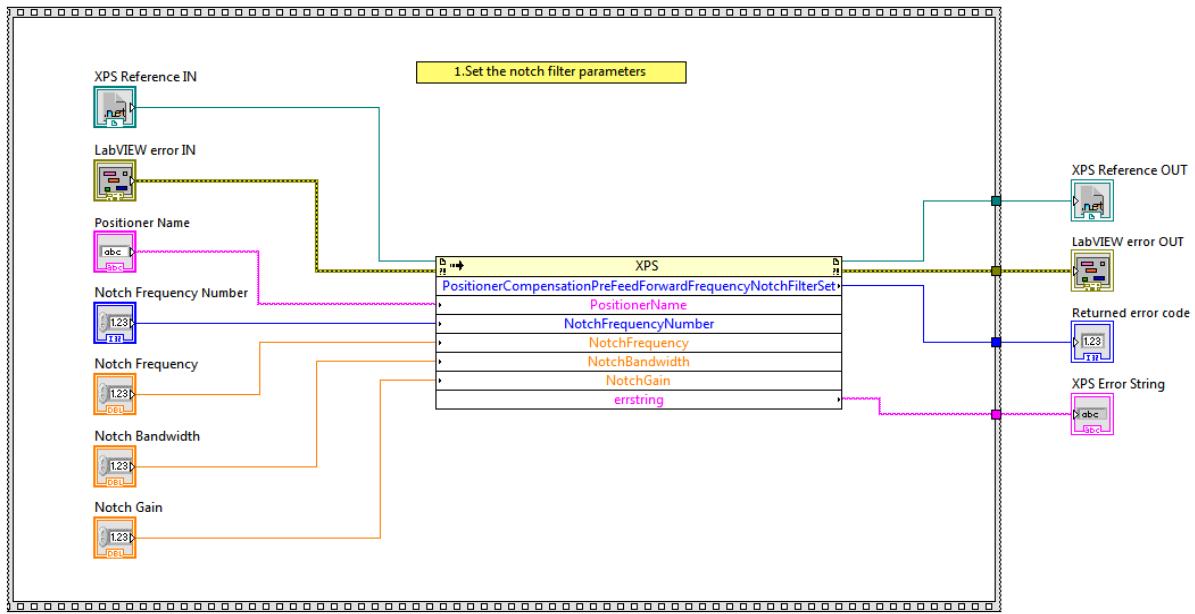
## 271.Positioner Compensation Pre Feed Forward Frequency Notch Filter Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set the notch filter parameters.

**Screenshot**



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Notch Frequency Number** Notch frequency number



**Notch Frequency** Notch frequency



**Notch Bandwidth** Notch bandwidth



**Notch Gain** Notch gain



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

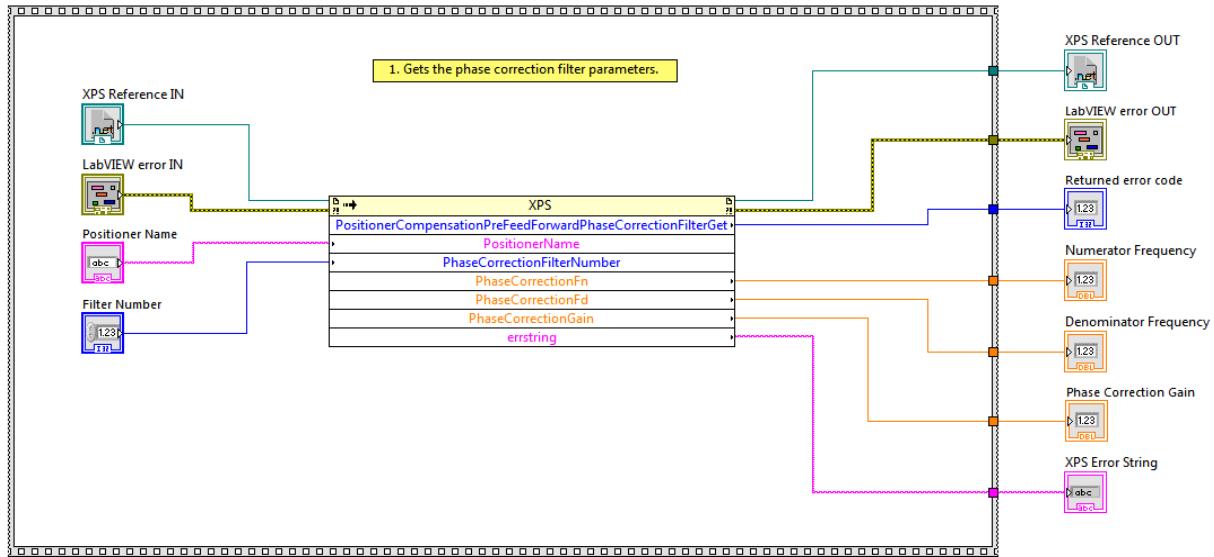
## 272. Positioner Compensation Pre Feed Forward Phase Correction Filter Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the phase correction filter parameters.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Filter Number** filter number



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Numerator Frequency** Phase correction numerator frequency



**Denominator Frequency** Phase correction denominator frequency



**Phase Correction Gain** Phase correction gain

**XPS Error String** return error string from VI

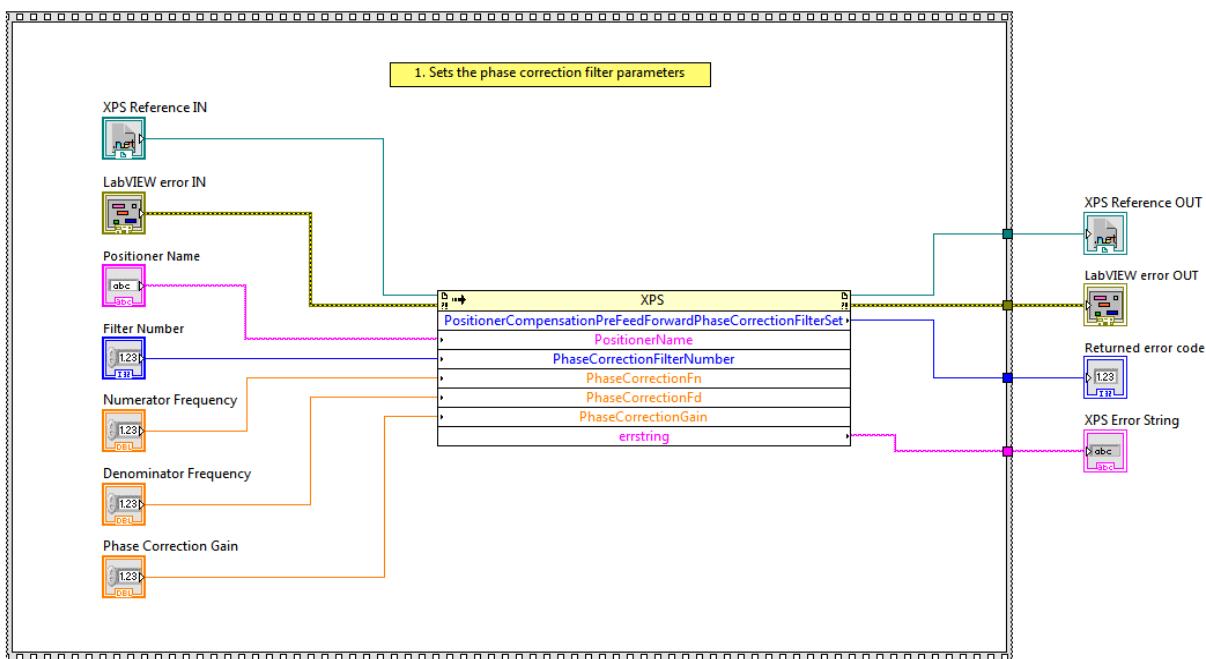
## 273. Positioner Compensation Pre Feed Forward Phase Correction Filter Set VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Set the phase correction filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Filter Number** Filter number

**Numerator frequency** Phase correction numerator frequency

**Denominator frequency** Phase correction denominator frequency

**Phase Correction Gain** Phase correction gain

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out



functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

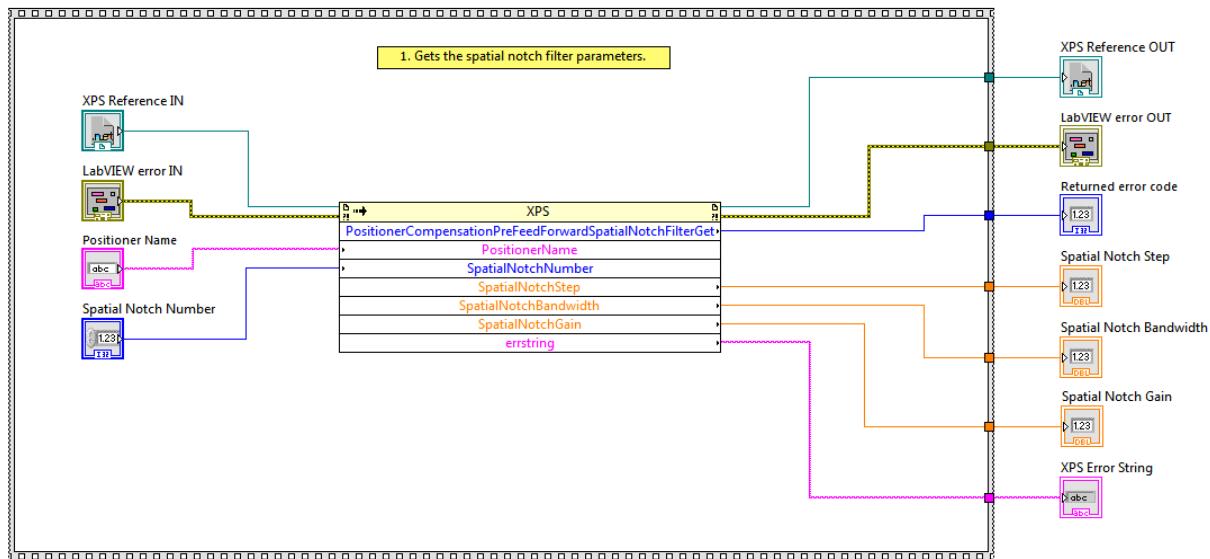
## 274. Positioner Compensation Pre Feed Forward Spatial Notch Filter Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the spatial notch filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Spatial Notch Number** Spatial notch number



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Spatial Notch Step** Spatial notch step

**Spatial Notch Bandwidth** Spatial notch bandwidth

**Spatial Notch Gain** Spatial notch gain

**XPS Error String** return error string from VI

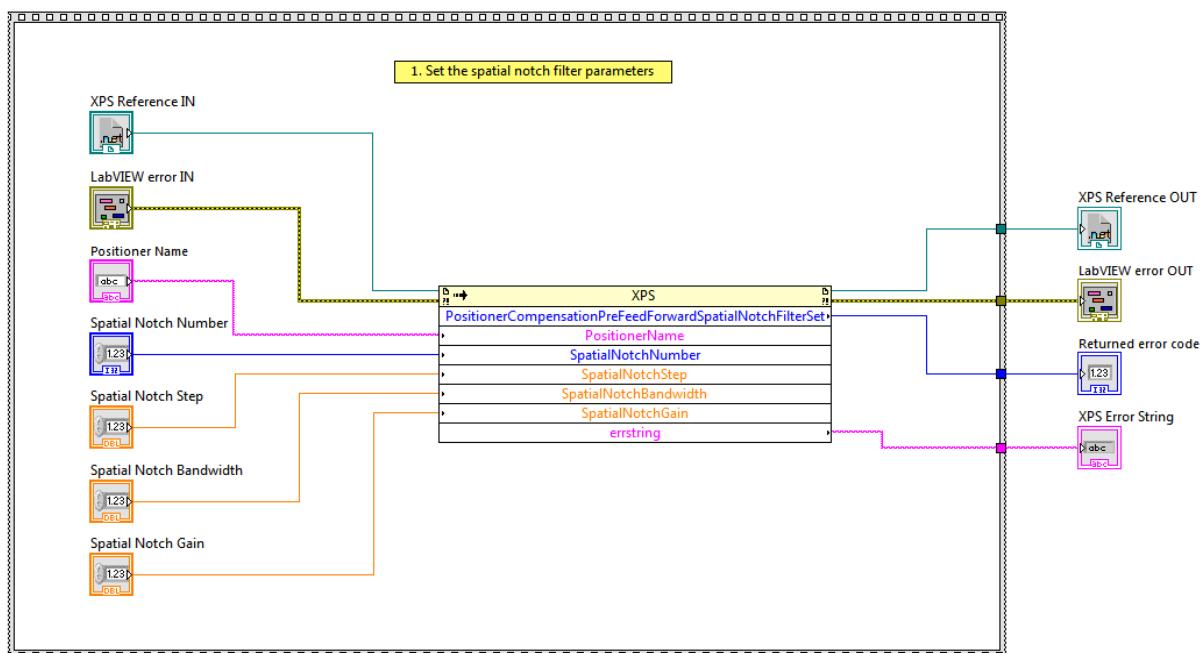
## 275. Positioner Compensation Pre Feed Forward Spatial Notch Filter Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set the spatial notch filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Spatial Notch Number** Spatial notch number

**Spatial Notch Step** Spatial notch step

**Spatial Notch Bandwidth** Spatial notch bandwidth

**Spatial Notch Gain** Spatial notch gain

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

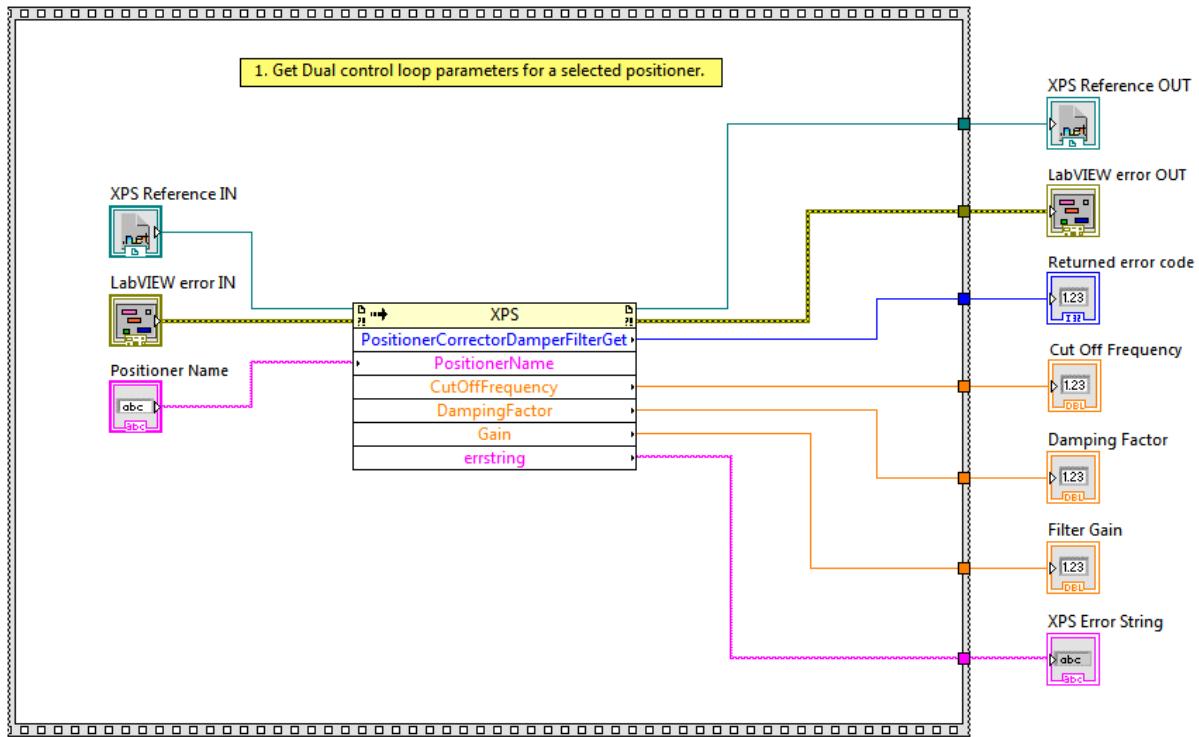
## 276. Positioner Corrector Damper Filter Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get dual control loop parameters for a selected positioner.

**Screenshot**



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Cut Off Frequency** cut off frequency



**Damping Factor** damping factor



**Filter Gain** filter gain

**XPS Error String** return error string from VI

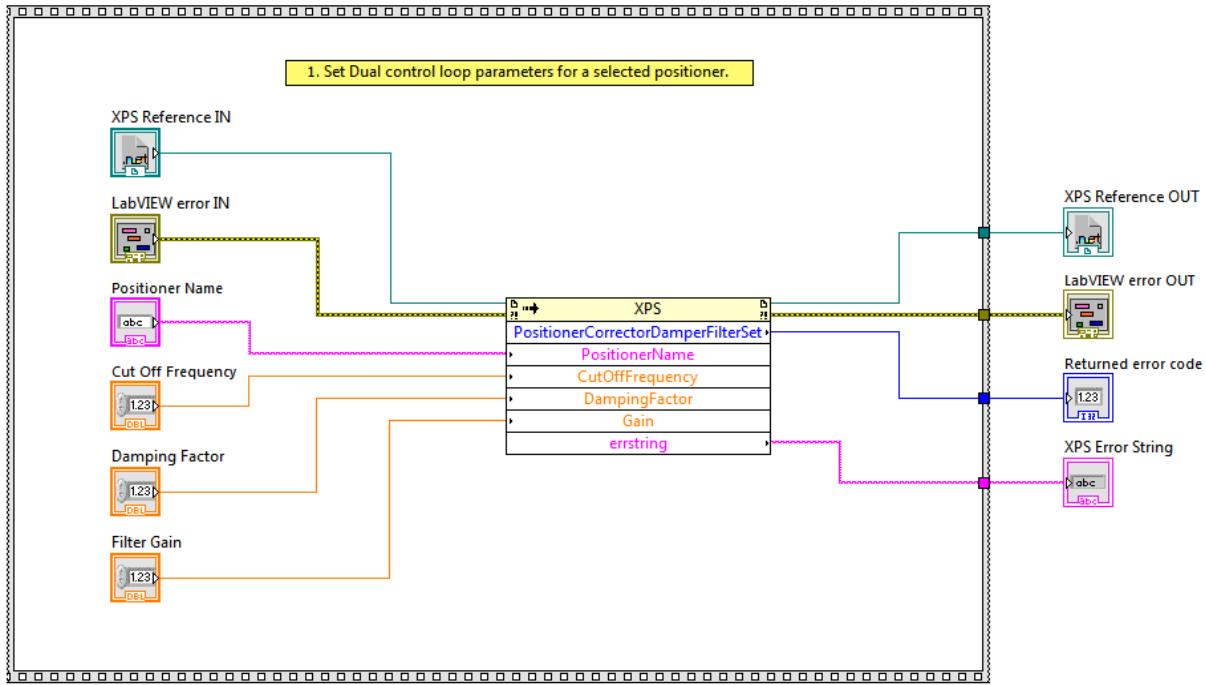
## 277. Positioner Corrector Damper Filter Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set dual control loop parameters for a selected positioner.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Cut Off Frequency** cut off frequency



**Damping Factor** damping factor



**Filter Gain** filter gain



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

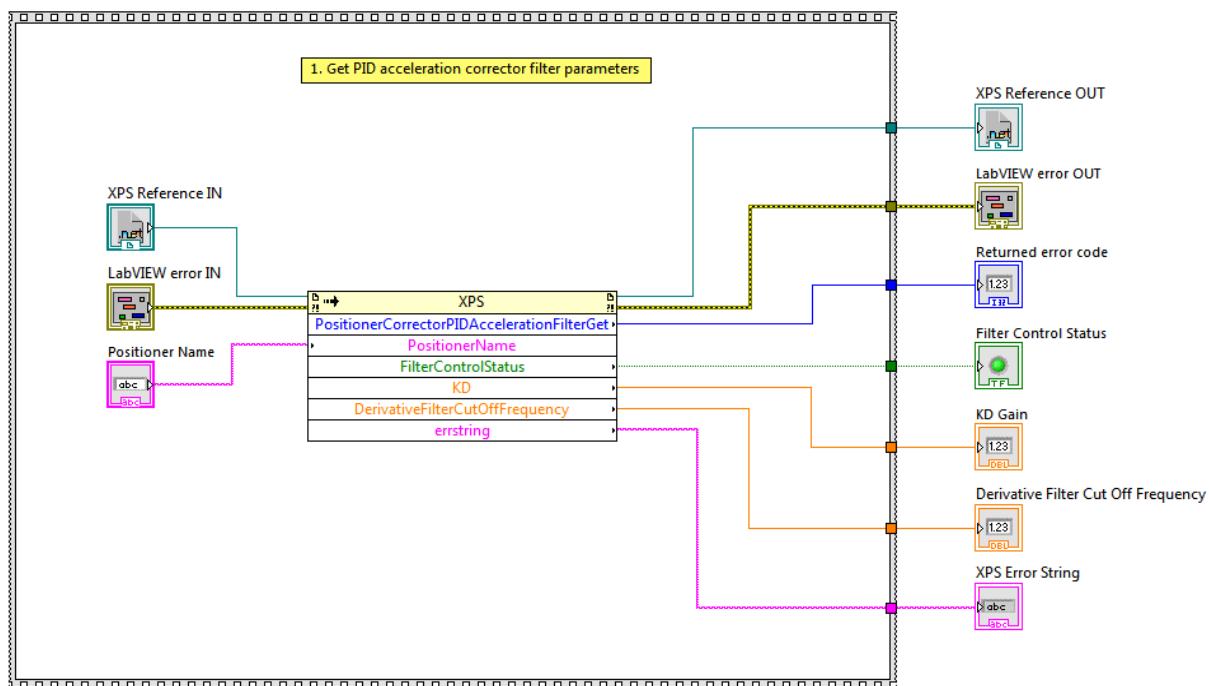
## 278. Positioner Corrector PID Acceleration Filter Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get PID acceleration filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**Filter Control Status** filter control status



**KD gain** KD gain



**Derivative Filter Cut Off Frequency** PID derivative filter cut off frequency (Hz)



**XPS Error String** return error string from VI

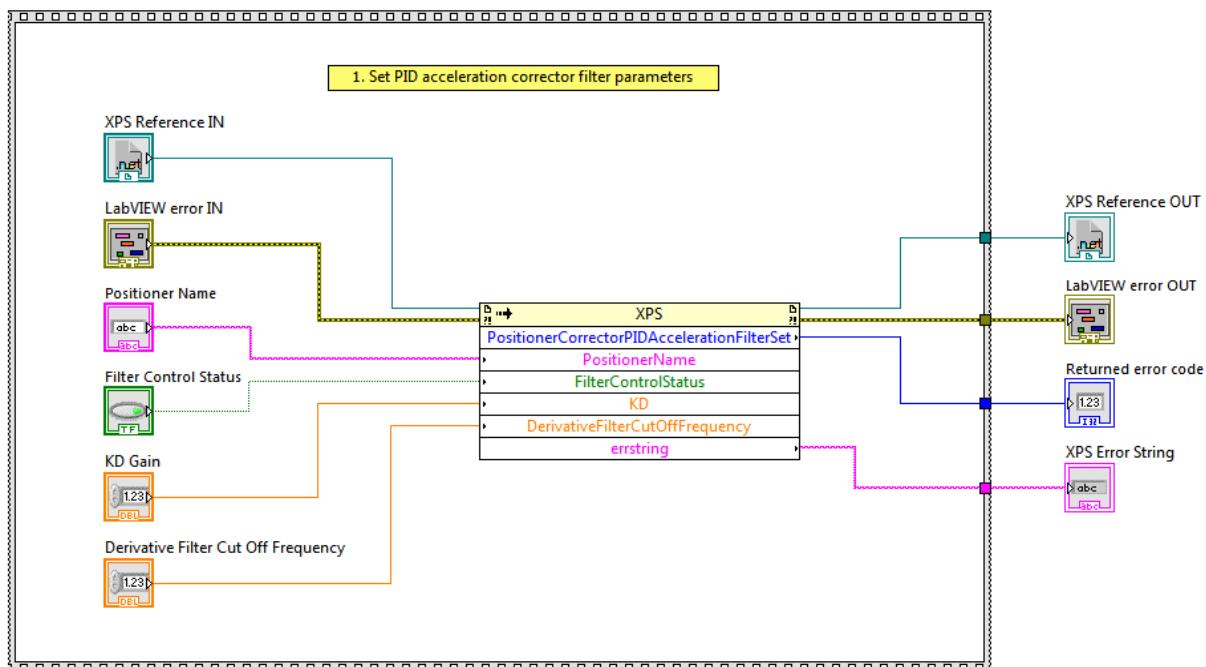
## 279. Positioner Corrector PID Acceleration Filter Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set PID acceleration filter parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Positioner Name** positioner name

 **Filter Control Status** Filter Control status

 **KD gain** KD gain

**Derivative Filter Cut Off Frequency** PID derivative filter cut off frequency (Hz)

**XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

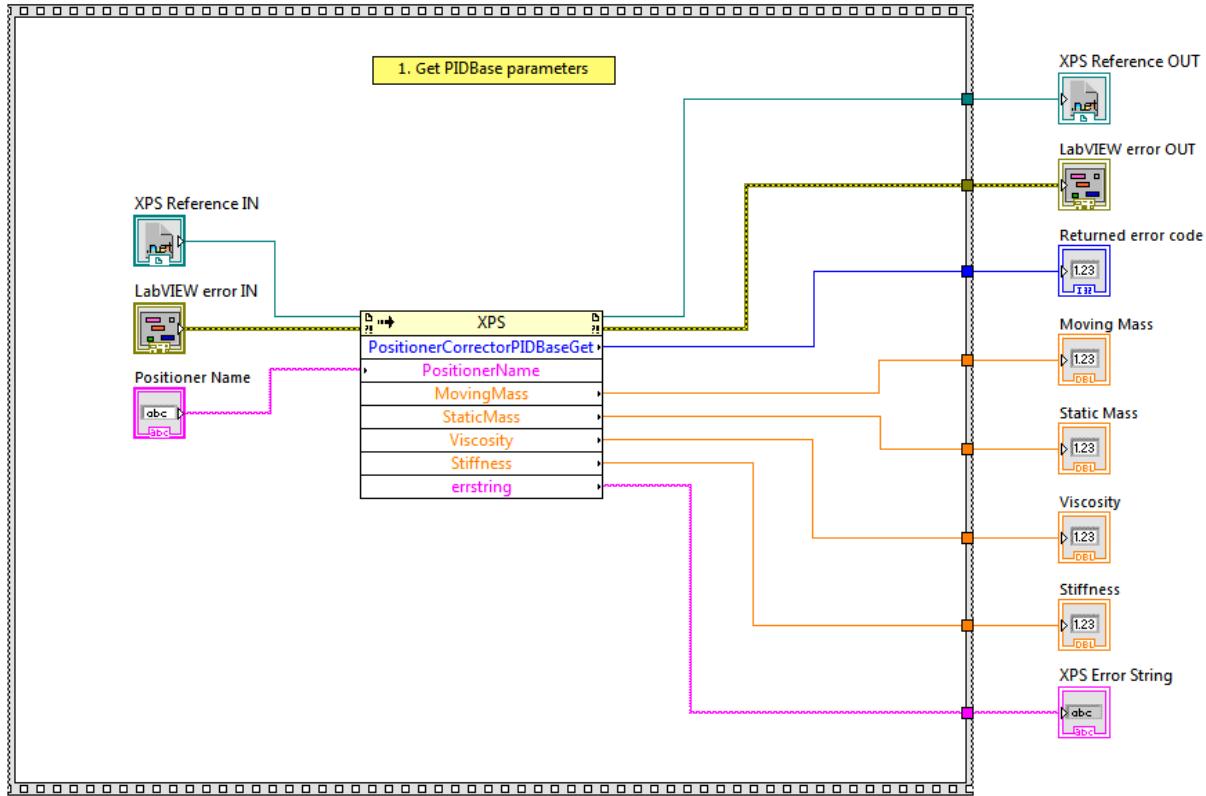
## 280. Positioner Corrector PID Base Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get PIDBase parameters.

**Screenshot**



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Moving Mass** moving mass



**Static Mass** static mass



**Viscosity** viscosity



**Stiffness** stiffness

**XPS Error String** return error string from VI

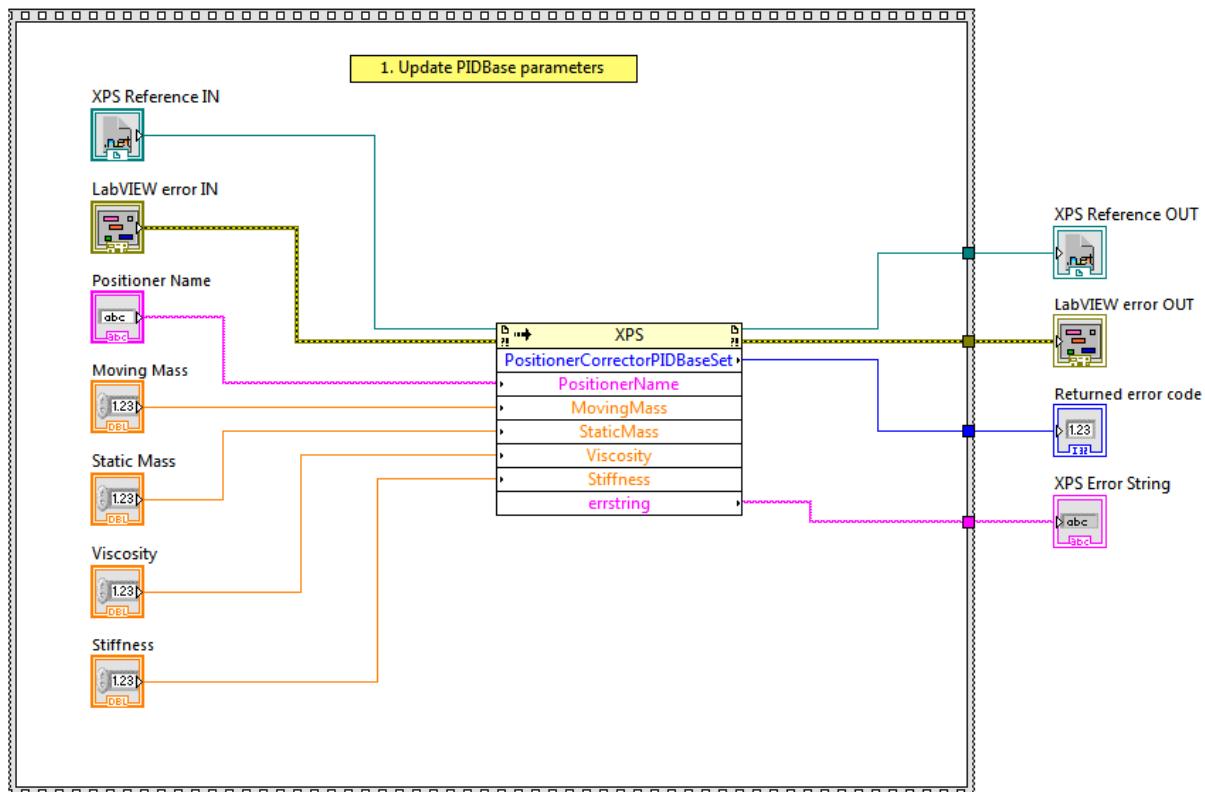
## 281. Positioner Corrector PID Base Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Update PIDBase parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Moving Mass** moving mass



**Static Mass** static mass



**Viscosity** viscosity



**Stiffness** stiffness

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

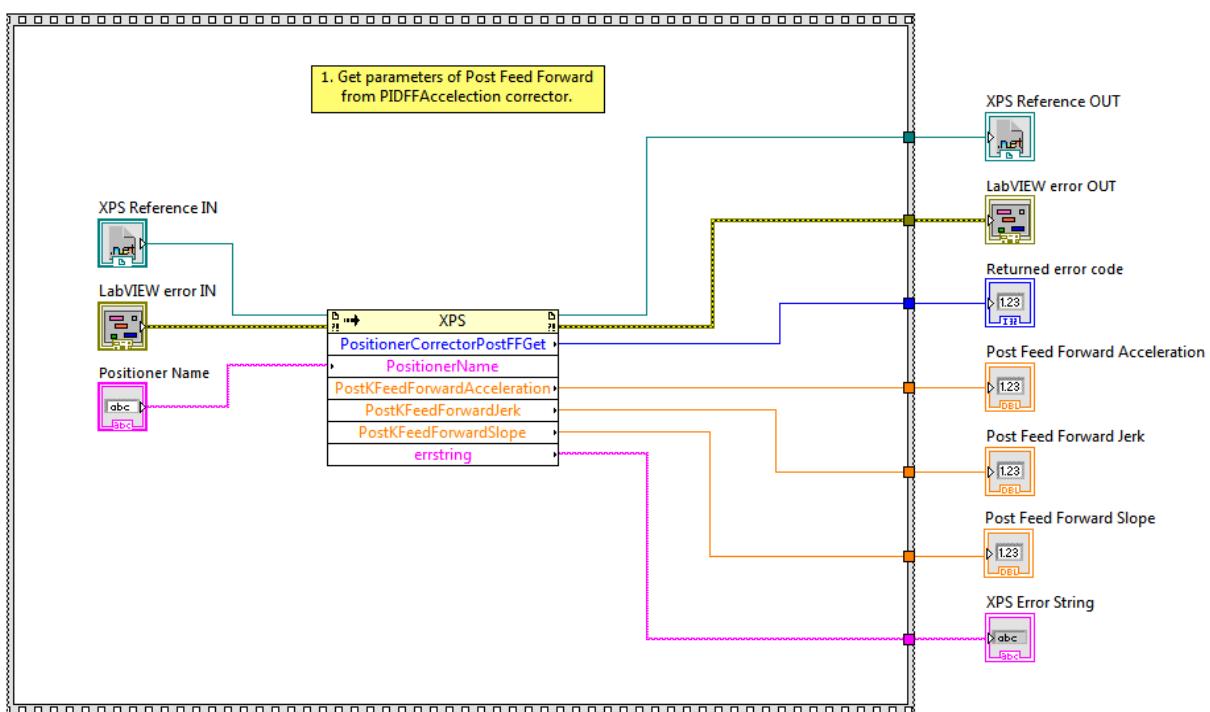
## 282. Positioner Corrector Post FF Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get parameters of Post Feed Forward from PIDFFAcceleration corrector.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Post Feed Forward Acceleration** Post feed forward acceleration

**Post Feed Forward Jerk** Post feed forward jerk

 **Post Feed Forward Slope** Post feed forward slope

 **XPS Error String** return error string from VI



## 283. Positioner Corrector Post FF Set VI

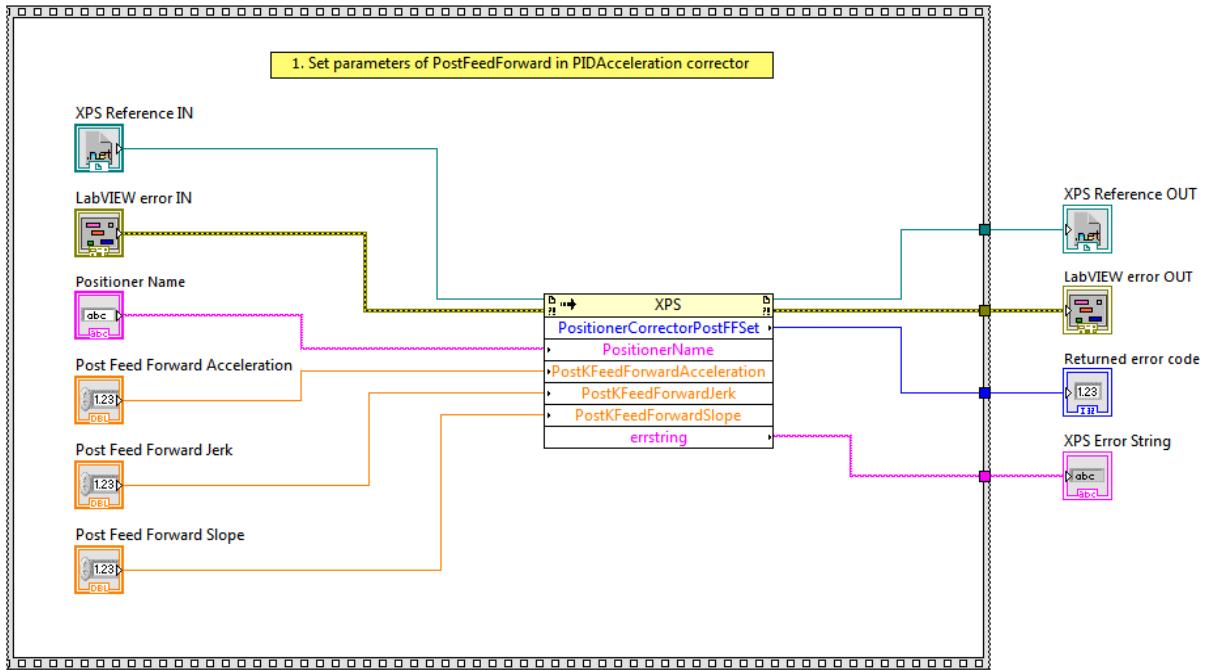
**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set parameters of Post Feed Forward from PIDFFAccelection corrector.

**Screenshot**





**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Post Feed Forward Acceleration** Post feed forward acceleration

**Post Feed Forward Jerk** Post feed forward jerk

**Post Feed Forward Slope** Post feed forward slope

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

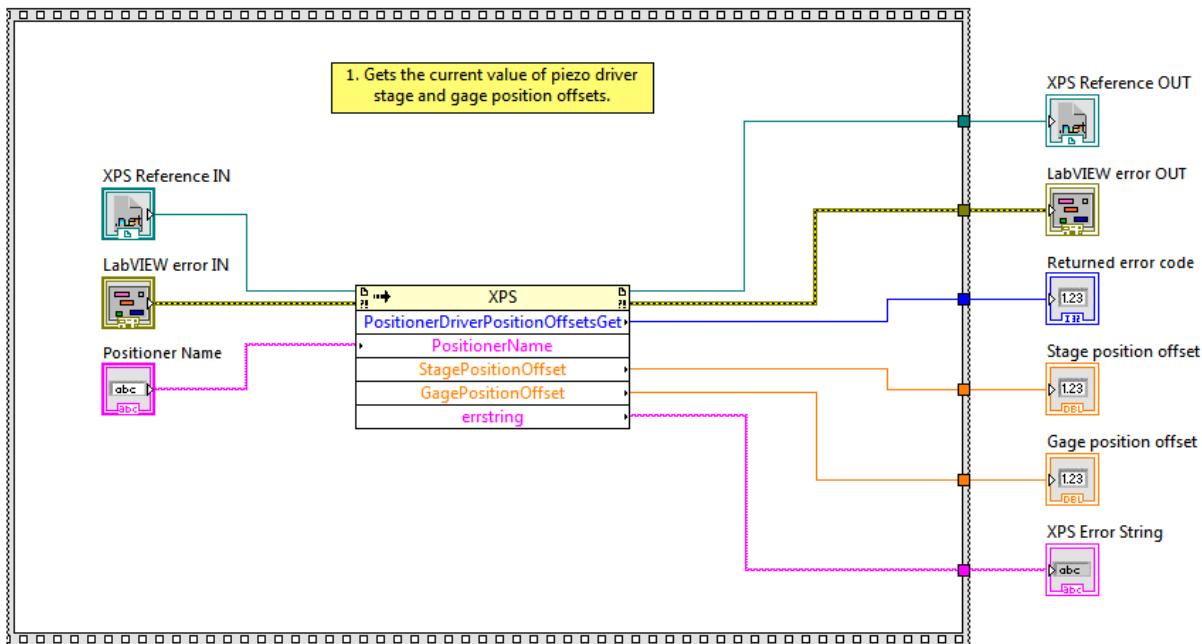
## 284. Positioner Driver Position Offsets Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the current value of piezo driver Stage and Gage position offsets.

## Screenshot



**[ ] XPS Reference IN** is the XPS reference

**[ ] LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[abc] Positioner Name** positioner name

**[ ] XPS Reference OUT** returns XPS reference

**[ ] LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[I32]**

**[DBL]**

**[DBL] Returned Error Code** Returns function error code

**[DBL] Stage Position Offset** Stage position offset

**[DBL] Gage Position Offset** Gage position offset

**XPS Error String** return error string from VI

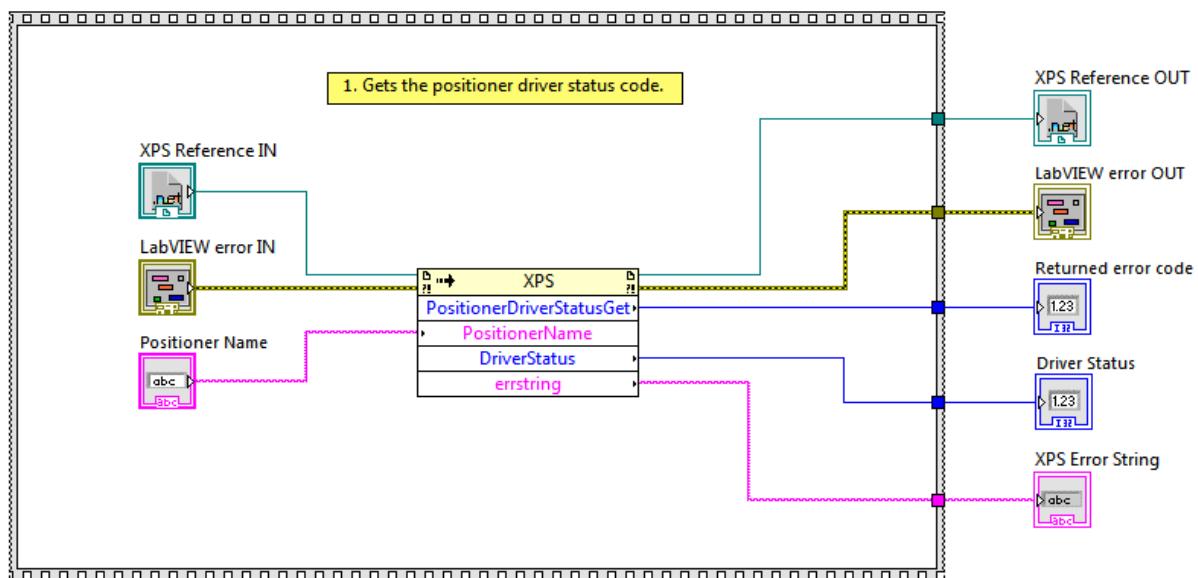
## 285. Positioner Driver Status Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the positioner driver status code.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Driver Status** Driver status

**XPS Error String** return error string from VI

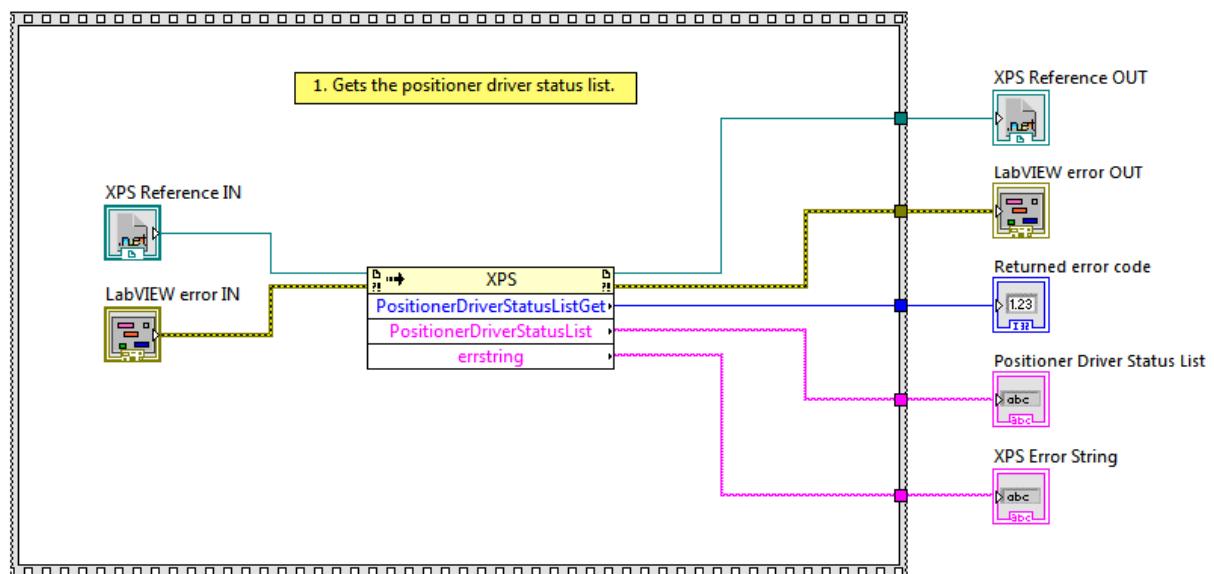
## 286. Positioner Driver Status List Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the positioner driver status list.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Positioner Driver Status List** Positioner driver status list

**XPS Error String** return error string from VI

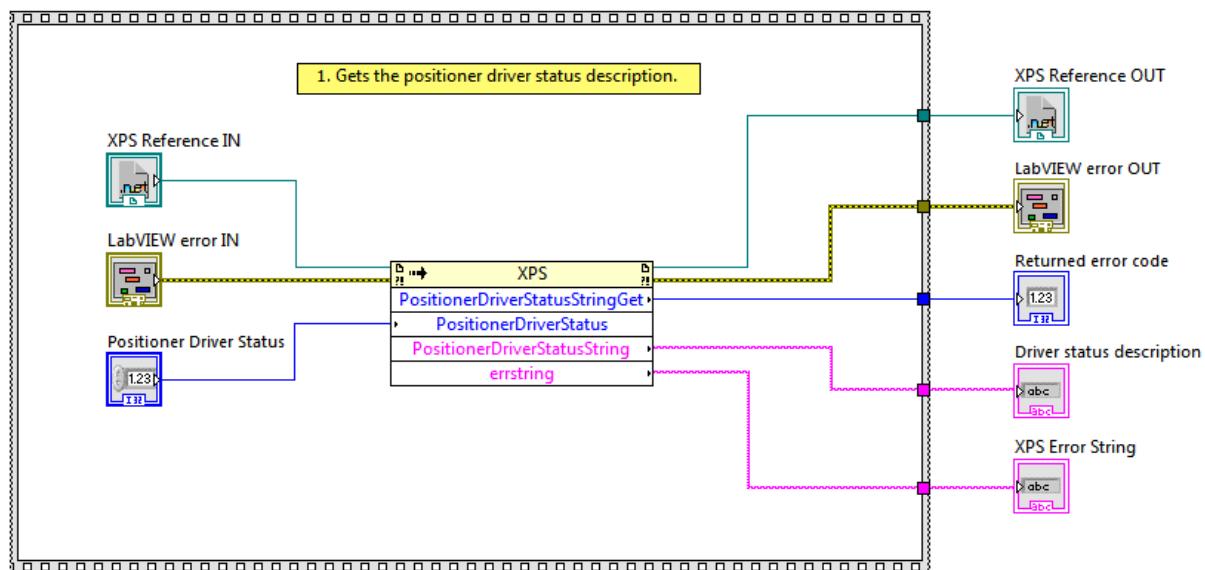
## 287. Positioner Driver Status String Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the positioner driver status description.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Driver Status** Positioner driver status

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Driver Status Description** Positioner driver status description

**XPS Error String** return error string from VI

**132**

**DBL**

## 288. Positioner Encoder Amplitude Values Get VI

**DBL**

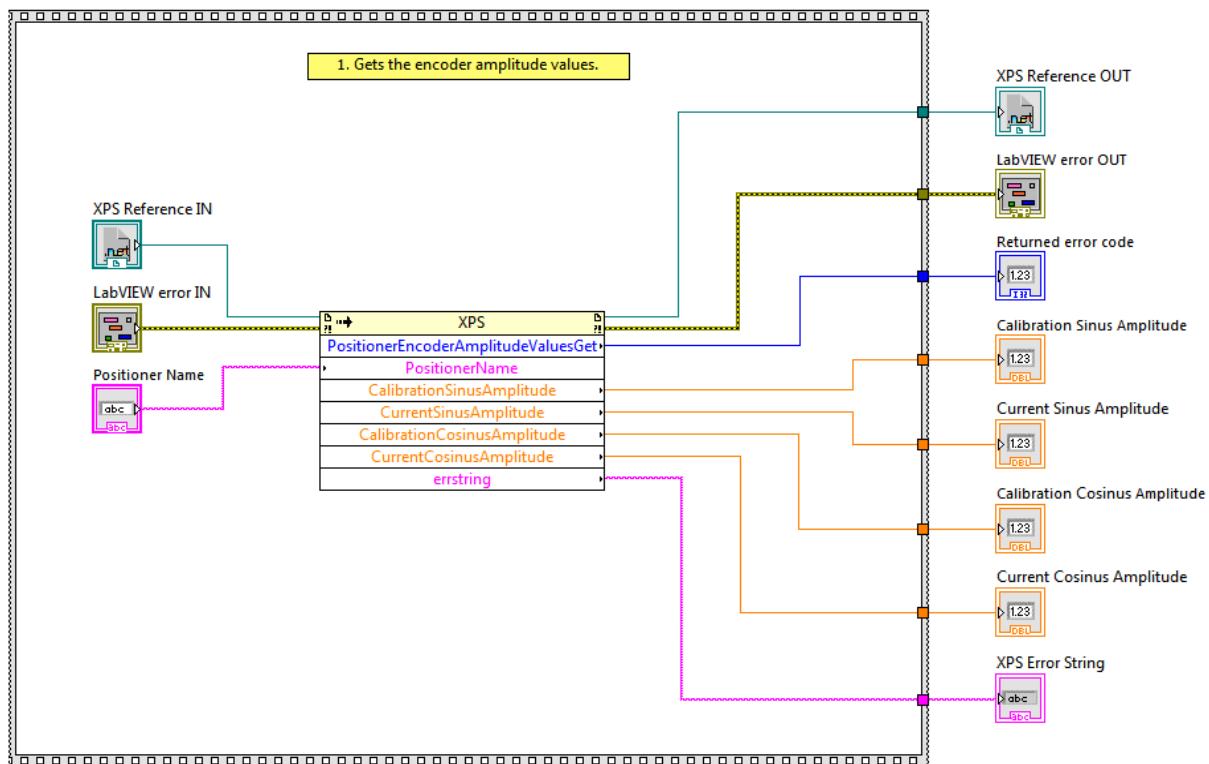
**DBL**

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Get the encoder amplitude values.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Calibration Sinus Amplitude** Calibration sinus amplitude

**Current Sinus Amplitude** Current sinus amplitude

**Calibration Cosinus Amplitude** Calibration cosinus amplitude

**Current Cosinus Amplitude** Current cosinus amplitude

**XPS Error String** return error string from VI

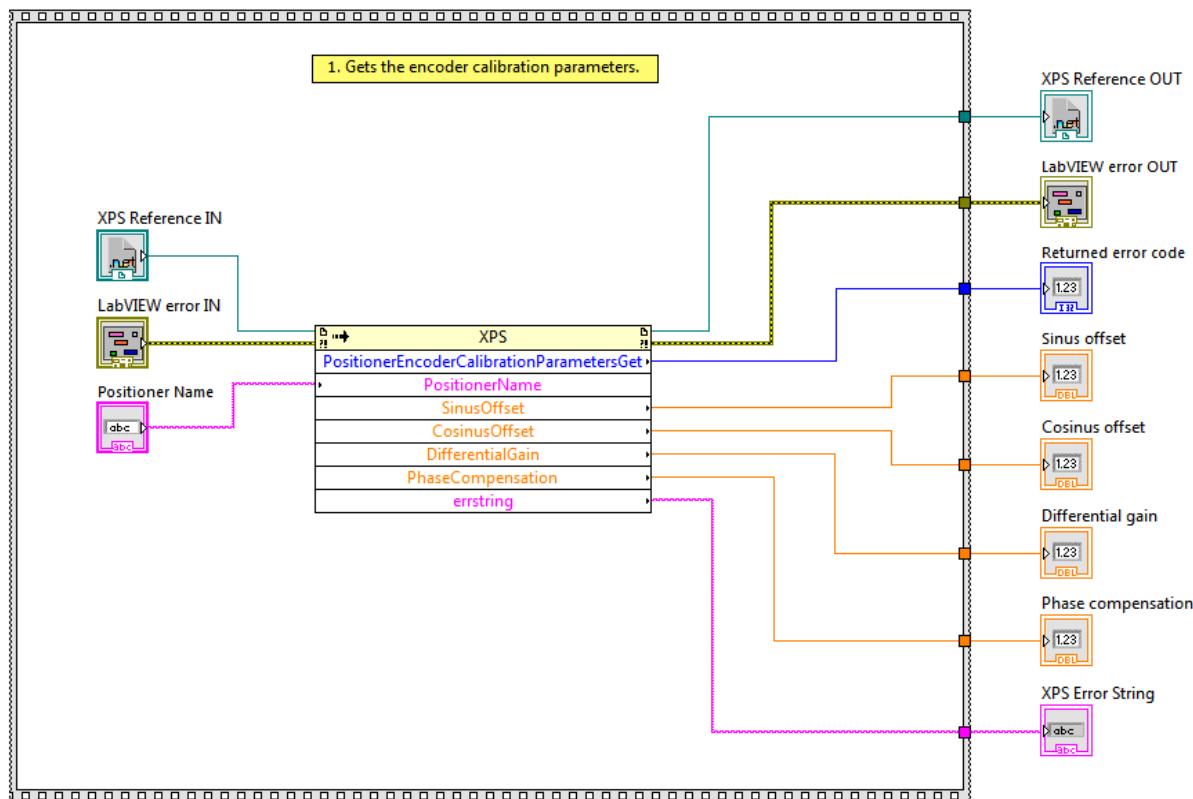
## 289. Positioner Encoder Calibration Parameters Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the encoder calibration parameters.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input



provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Sinus Offset** Sinus offset

**Cosinus Offset** Cosinus offset

**Differential Gain** Differential gain

**Phase Compensation** Phase compensation

**XPS Error String** return error string from VI

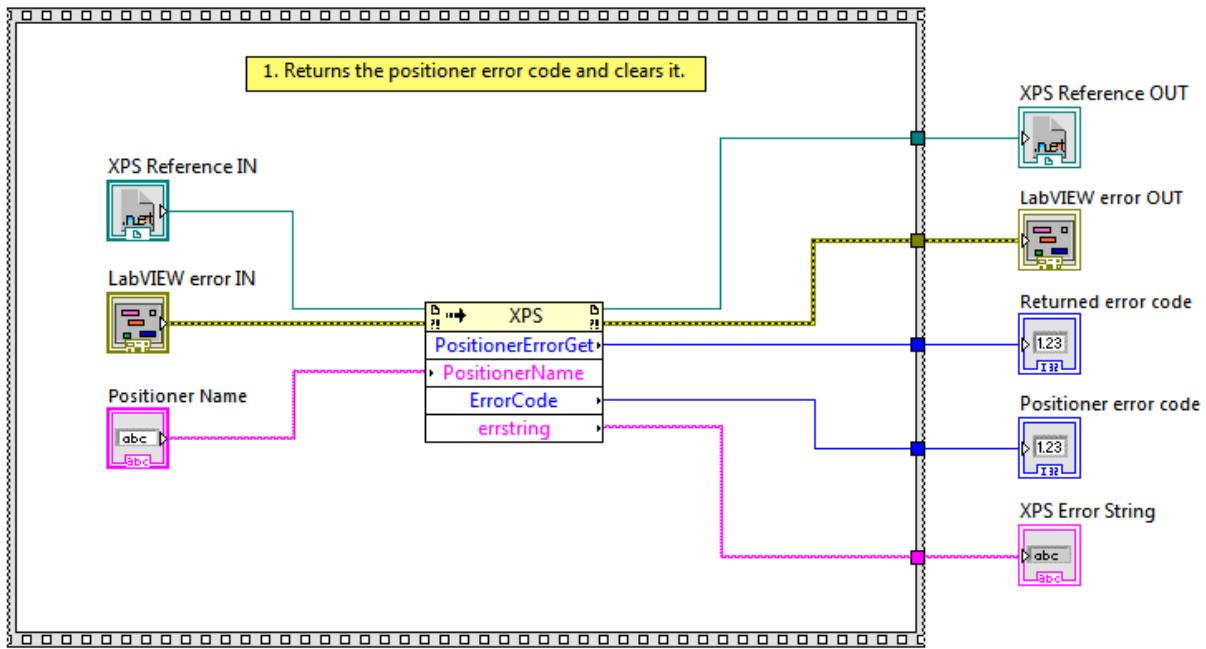
## 290. Positioner Error Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the positioner error code and clears it.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Positioner Error Code** Positioner error code

**XPS Error String** return error string from VI

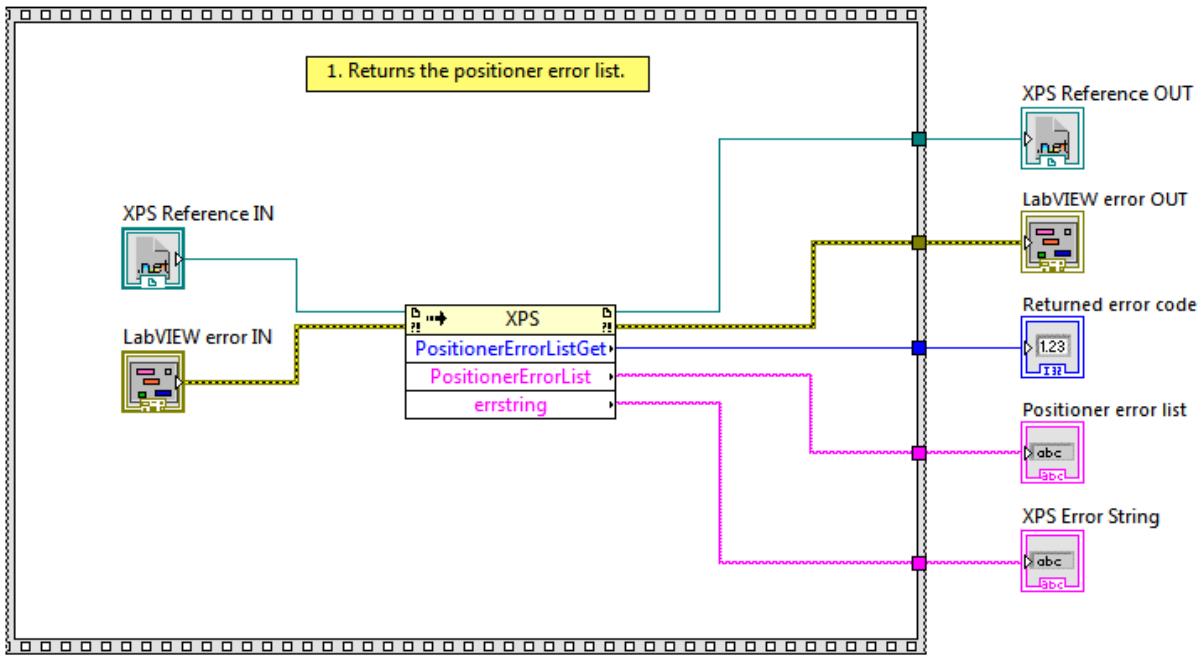
## 291. Positioner Error List Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the positioner error list.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code



**Positioner Error List** Positioner error list



**XPS Error String** return error string from VI

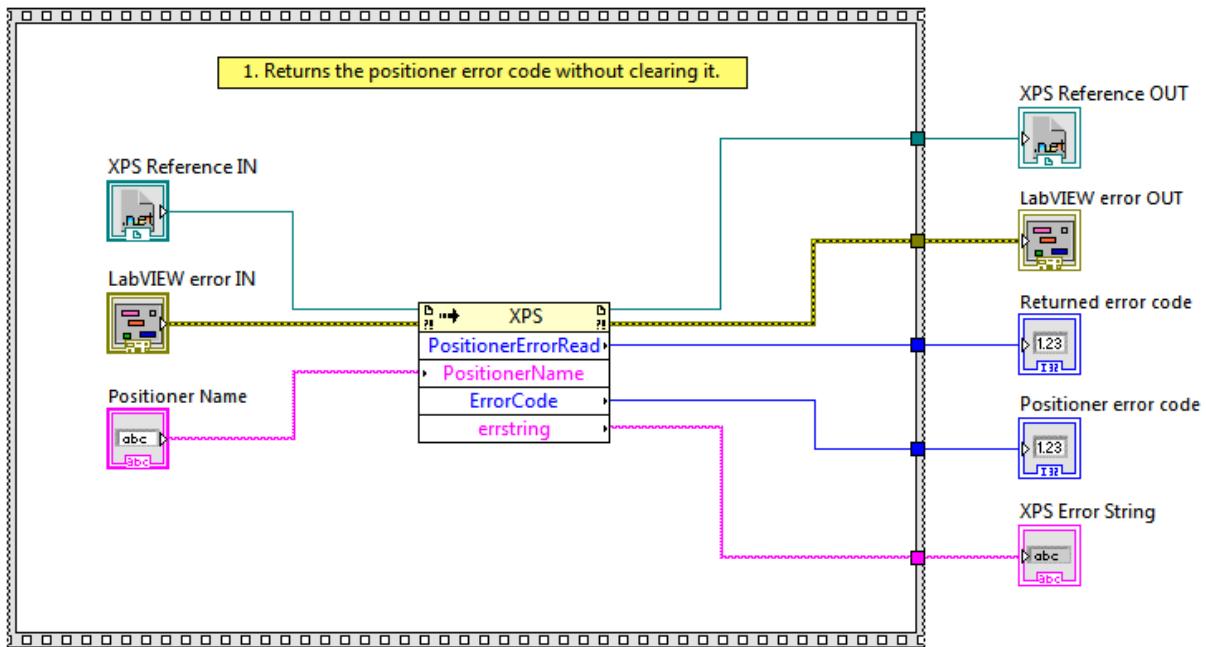
## 292. Positioner Error Read VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the positioner error code without clearing it.

## Screenshot



**[d]** XPS Reference IN is the XPS reference

**[e]** LabVIEW error IN describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[abc]** Positioner Name positioner name

**[d]** XPS Reference OUT returns XPS reference

**[e]** LabVIEW error OUT contains error information. This output provides standard error out functionality.

**[132]** Returned Error Code Returns function error code

**[132]** Positioner Error Code Positioner error code

**[abc]** XPS Error String return error string from VI

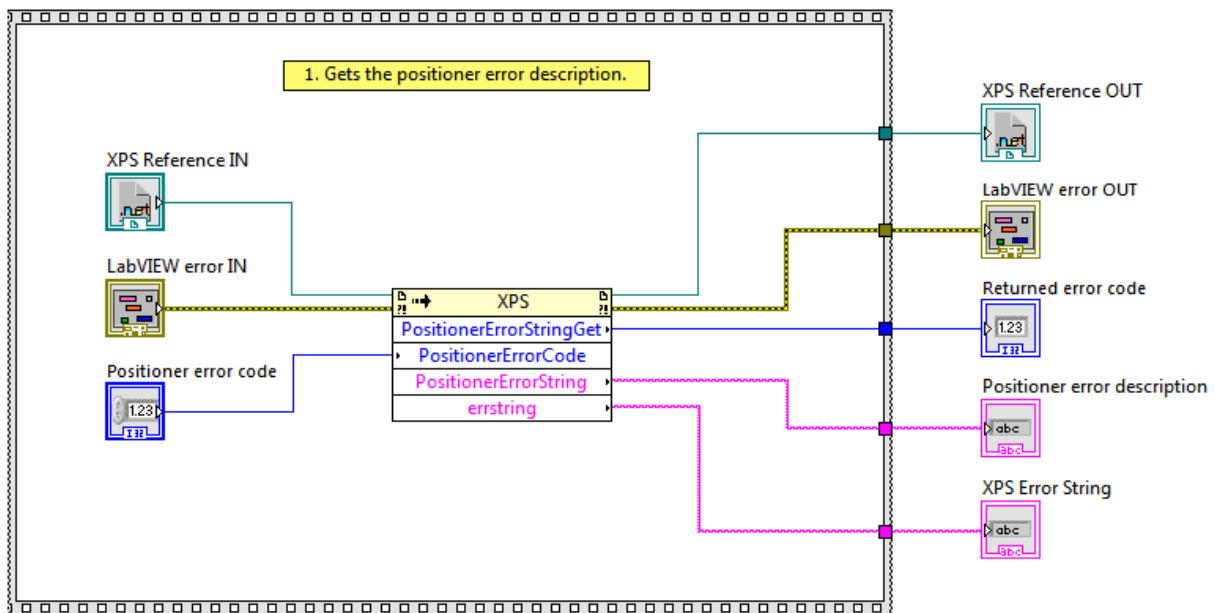
## 293. Positioner Error String Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the positioner error description.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Error Code** Positioner error code

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Positioner Error Description** Positioner error description

**XPS Error String** return error string from VI

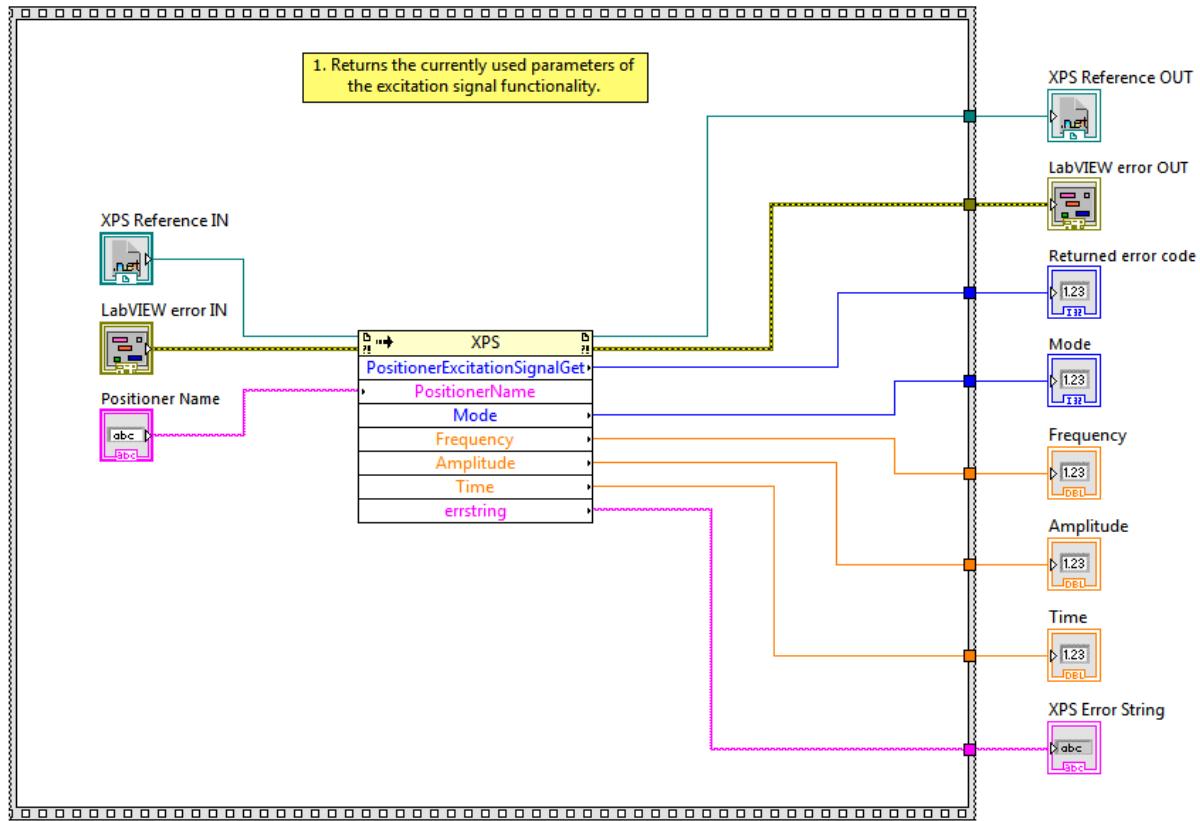
## 294. Positioner Excitation Signal Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the currently used parameters of the excitation signal functionality.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Mode** mode

**Frequency** frequency

**Amplitude** amplitude

 Time time

 XPS Error String return error string from VI

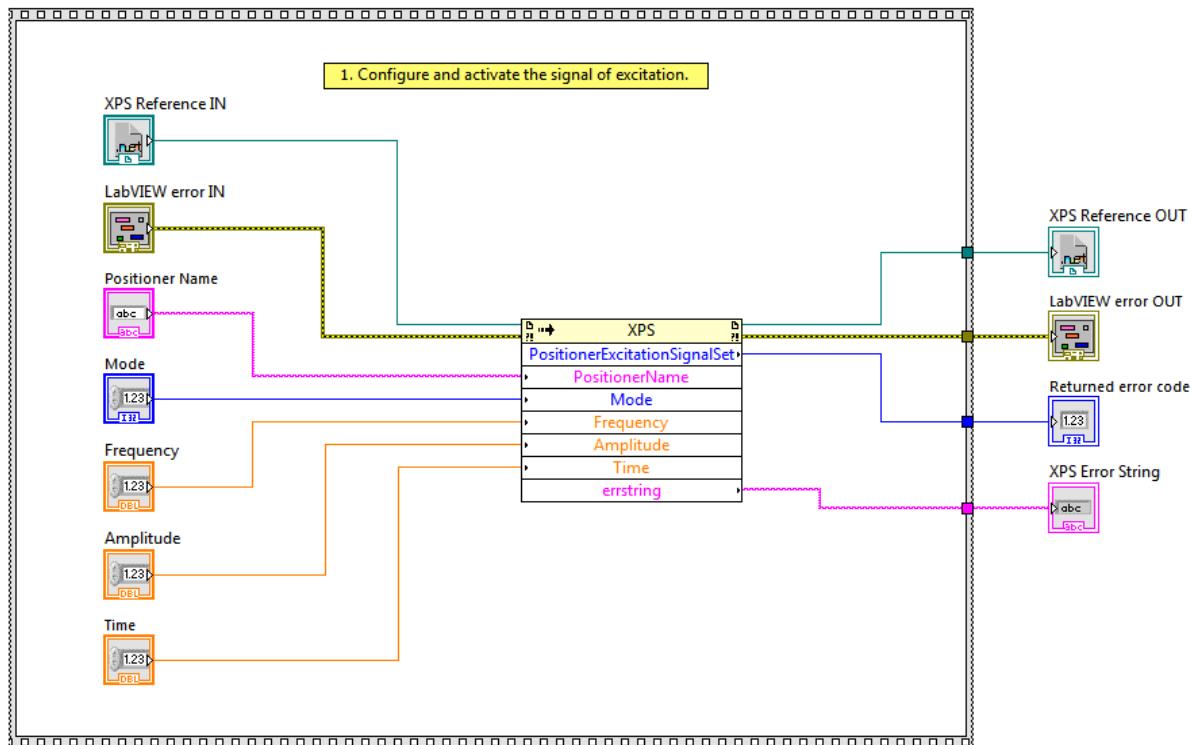
## 295. Positioner Excitation Signal Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Configure and activate the signal of excitation.

### Screenshot



 XPS Reference IN is the XPS reference

 LabVIEW error IN describes error conditions that occur before this node runs. This input provides standard error in functionality.

 Positioner Name positioner name

**[I32] Mode mode**

**[DBL] Frequency** Phase correction numerator frequency

**[DBL] Amplitude** Amplitude

**[DBL] Time** Time

**[D] XPS Reference OUT** returns XPS reference

**[F+I] LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[I32] Returned Error Code** Returns function error code

**[abc] XPS Error String** return error string from VI

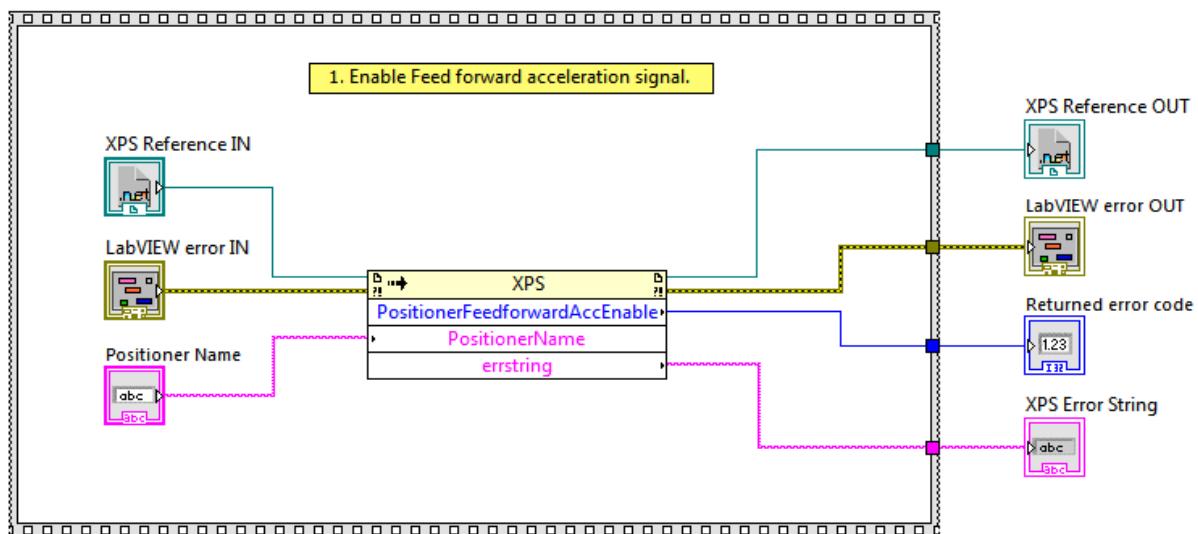
## 296. Positioner Feed forward Acc Enable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Enable feed forward acceleration signal.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Positioner Name** positioner Name

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

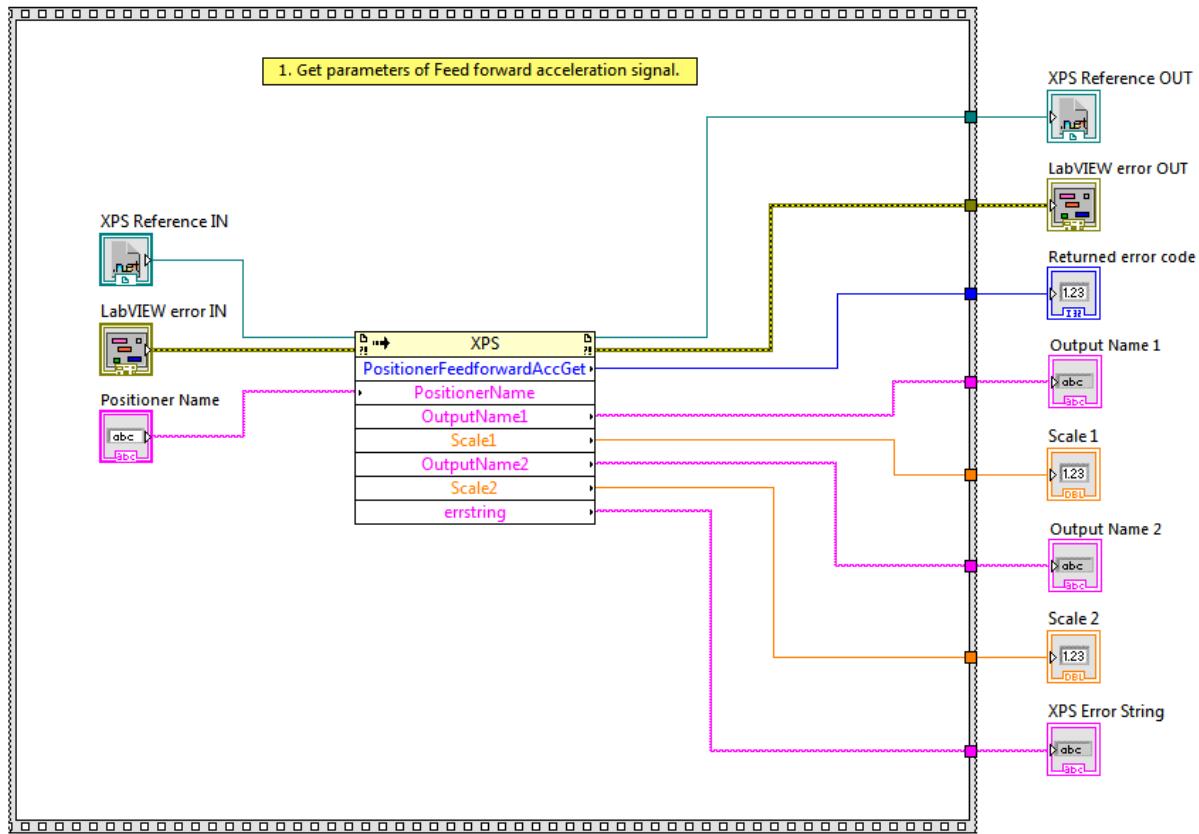
## 297. Positioner Feed forward Acc Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get parameters of feed forward acceleration signal.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Output Name 1** output name 1

**Scale 1** Scale 1

**Output Name 2** output name 2

**Scale 2** Scale 2

**XPS Error String** return error string from VI

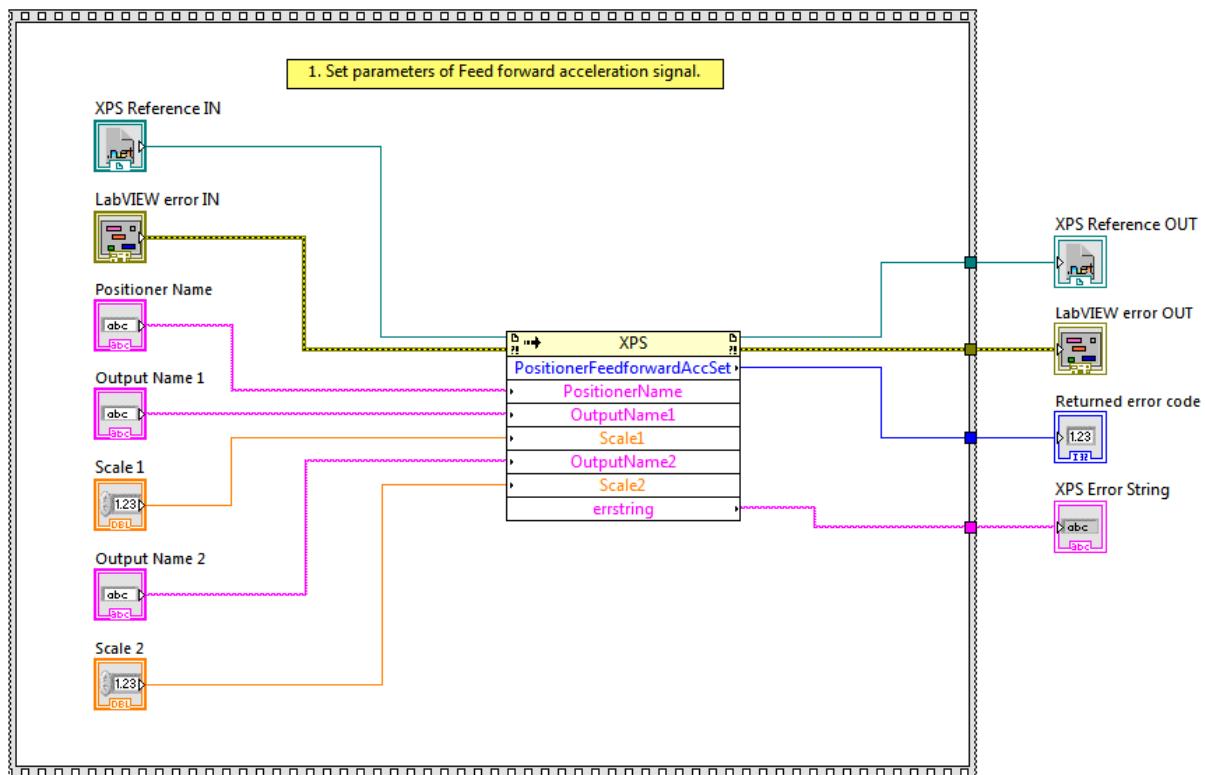
## 298. Positioner Feed forward Acc Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set parameters of feed forward acceleration signal.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** Positioner name

**Output Name 1** Output name 1

**Scale 1 Scale 1**

**Output Name 1** Output name 1

**Scale 2 Scale 2**

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

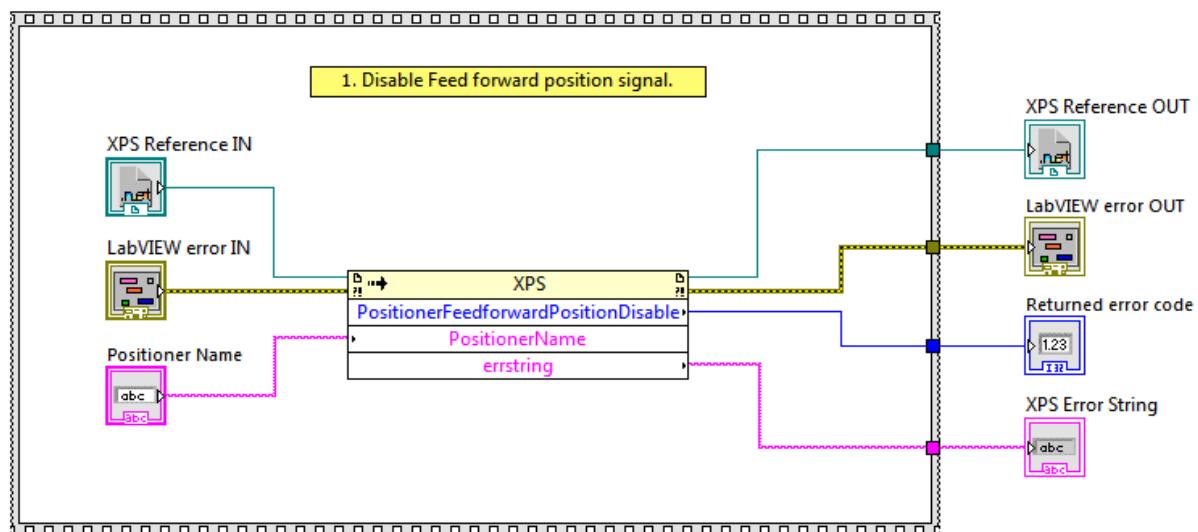
## 299. Positioner Feed forward Position Disable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Disable feed forward position signal.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input

provides standard error in functionality.

 **Positioner Name** positioner Name

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

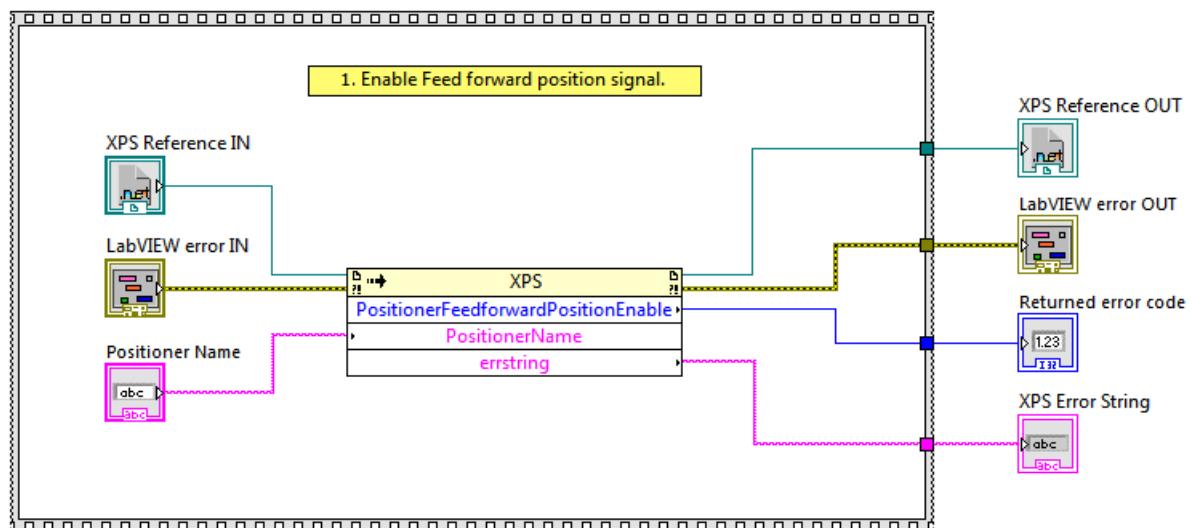
## 300. Positioner Feed forward Position Enable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Enable feed forward position signal.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner Name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

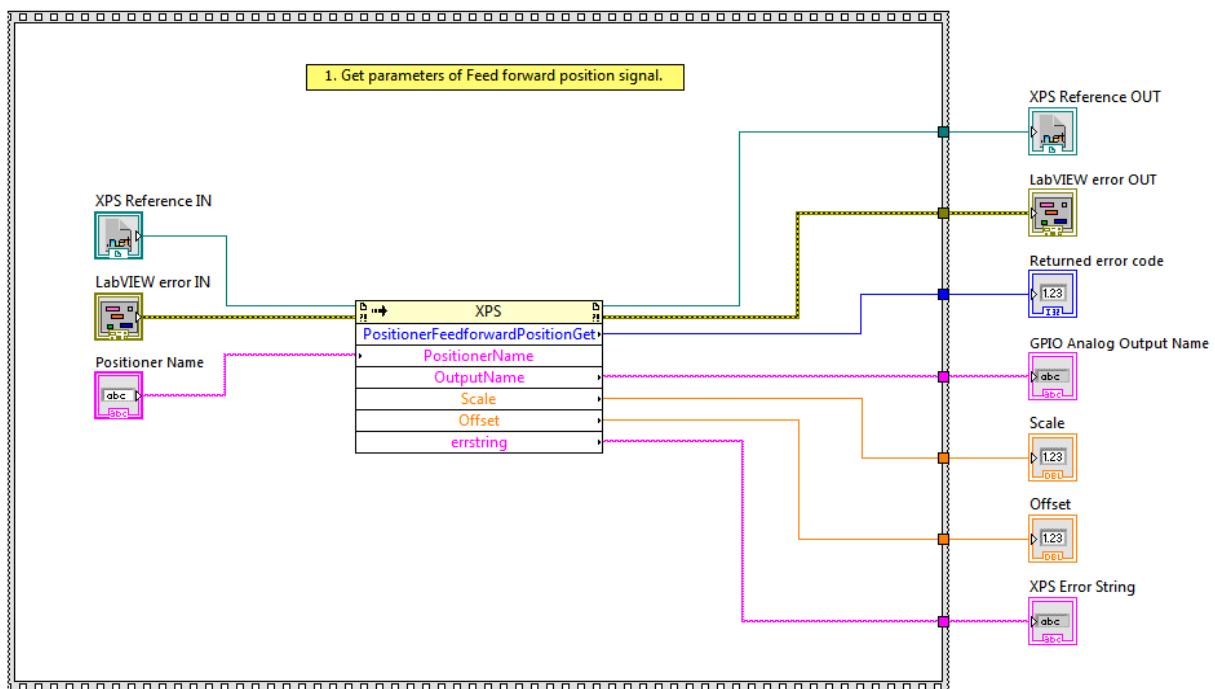
## 301. Positioner Feed forward Position Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get parameters of feed forward position signal.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** Multiple Axes positioner name

**XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **I32 Returned Error Code** Returns function error code

 **GPIO Analog Output Name** GPIO Analog Output Name

 **Scale** Scale

 **Offset** Offset

 **XPS Error String** return error string from VI

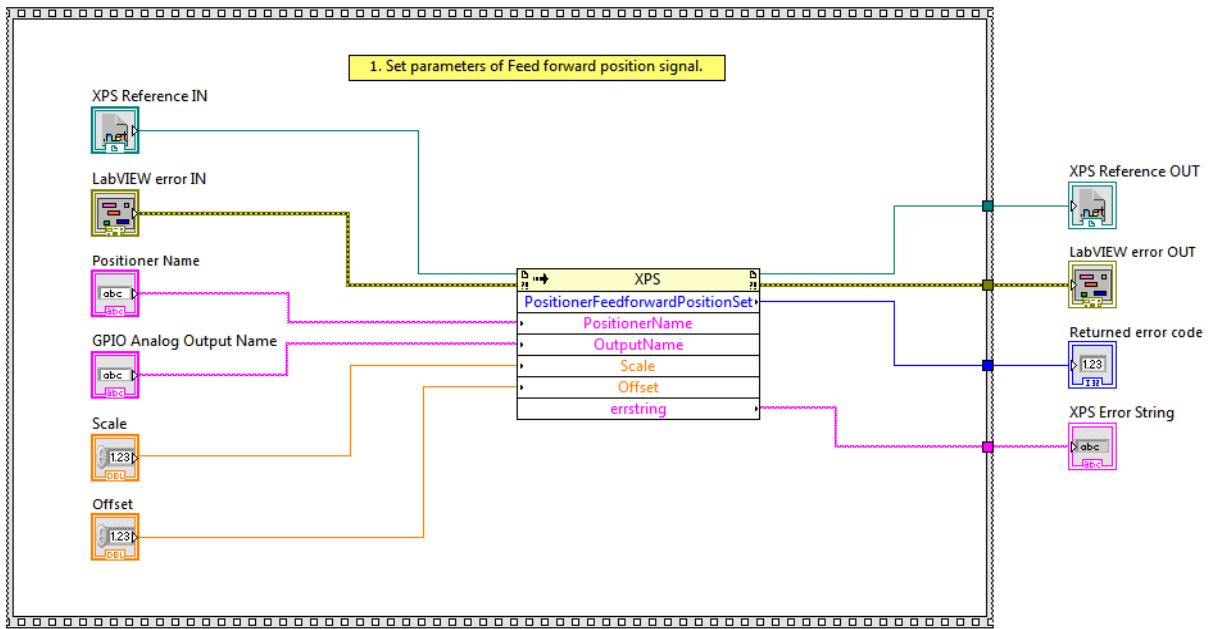
## 302. Positioner Feed forward Position Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set parameters of feed forward position signal.

**Screenshot**



**[D]** **XPS Reference IN** is the XPS reference

**[E]** **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[abc]** **Positioner Name** positioner name

**[abc]** **GPIO Analog Output Name** GPIO analog output name

**[DBL]** **Scale** Scale (Units/Volts)

**[DBL]** **Offset** Offset (volts)

**[D]** **XPS Reference OUT** returns XPS reference

**[E]** **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[I32]** **Returned Error Code** Returns function error code

**[abc]** **XPS Error String** return error string from VI

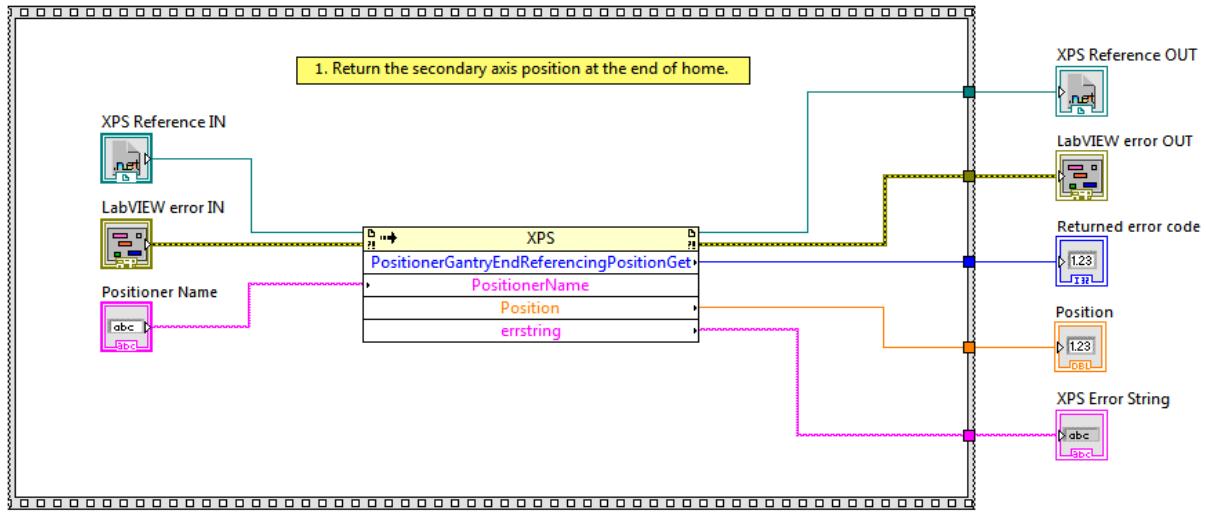
### 303. Positioner Gantry End Referencing Position Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Return the secondary axis position at the end of home.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Position** position

**XPS Error String** return error string from VI

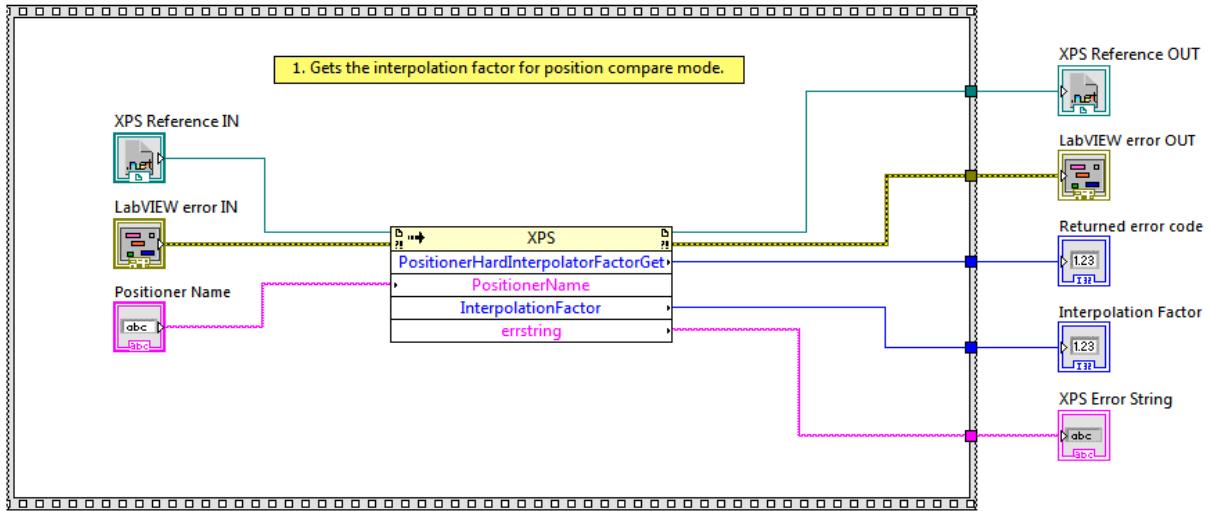
## 304. Positioner Hard Interpolator Factor Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the interpolation factor for position compare mode.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Interpolation Factor** Interpolation factor

**XPS Error String** return error string from VI

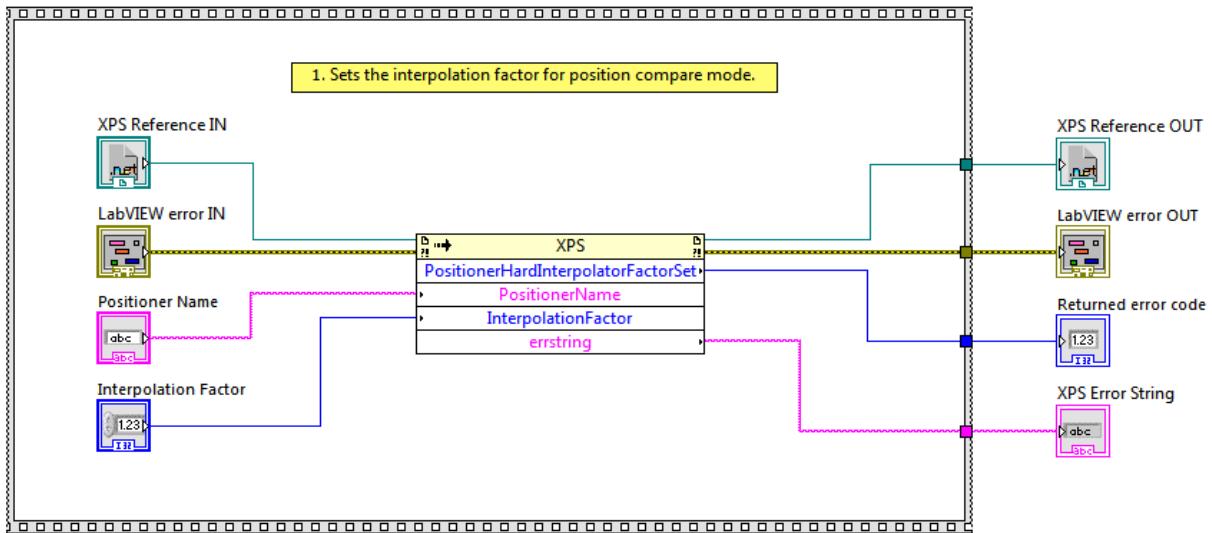
## 305. Positioner Hard Interpolator Factor Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the interpolation factor for position compare mode.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name

**Interpolation Factor** Interpolation factor

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

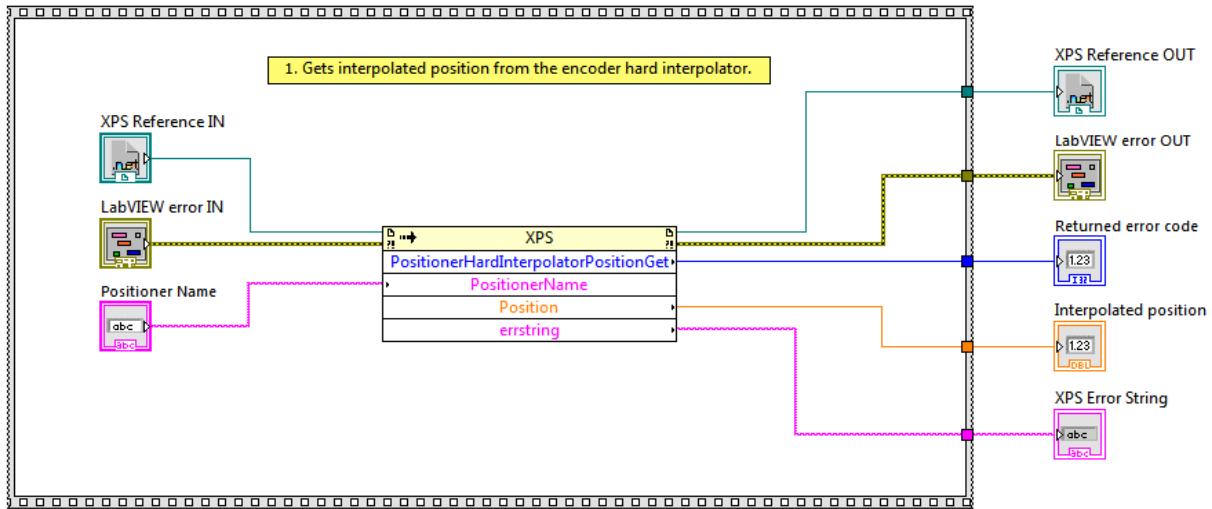
## 306. Positioner Hard Interpolator Position Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gest interpolated position from the encoder hard interpolator.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Start element number** Start element number

**End element number** End element number

**Interpolated Position** Interpolated position

**XPS Error String** return error string from VI

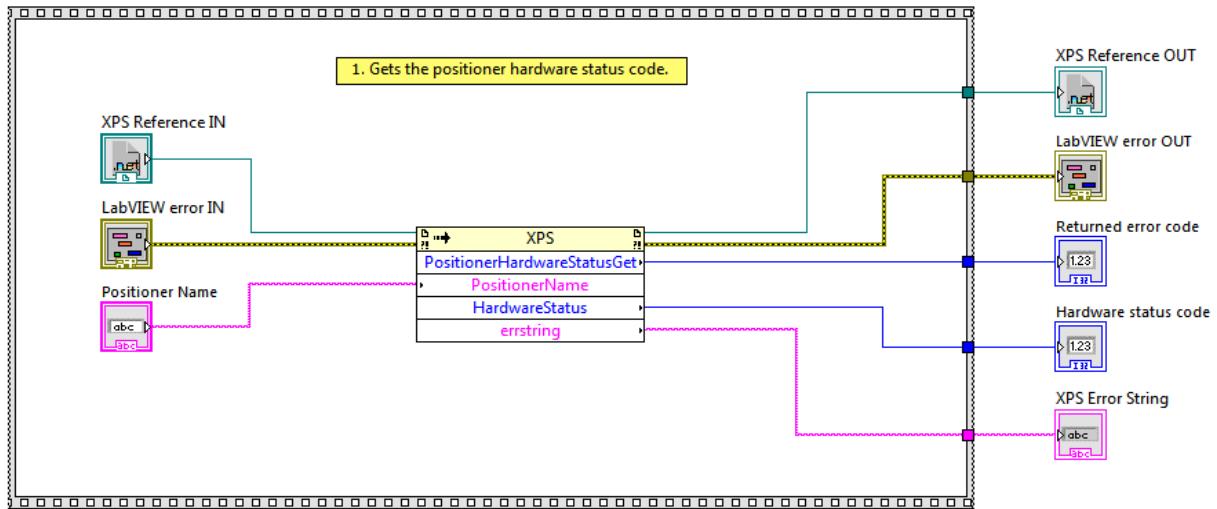
## 307. Positioner Hardware Status Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the positioner hardware status code.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

132

**Returned Error Code** Returns function error code

132 **Hardware Status Code** Hardware status code

**XPS Error String** return error string from VI

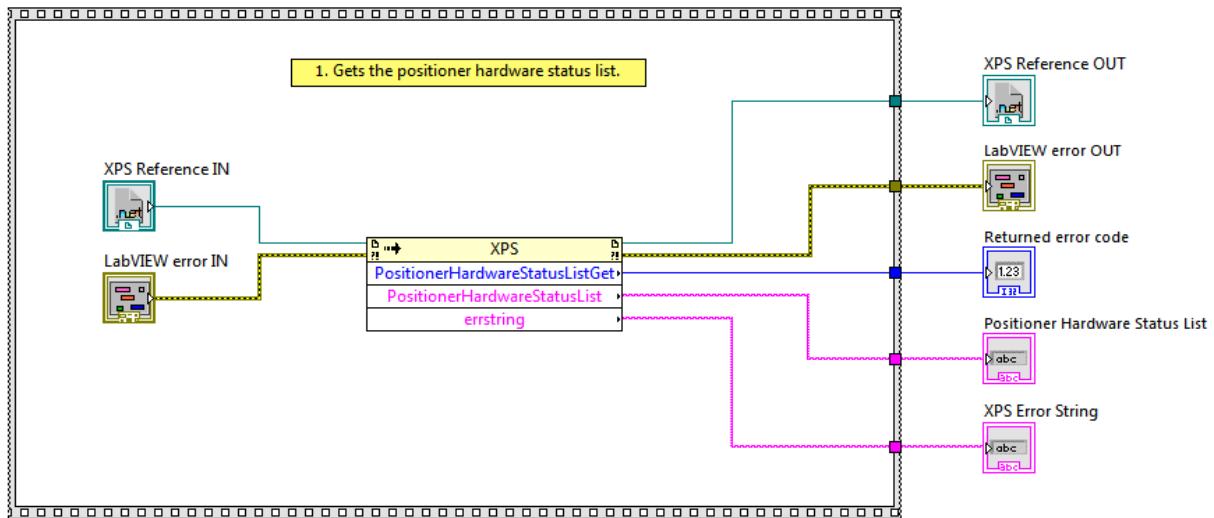
## 308. Positioner Hardware Status List Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the positioner hardware status list.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Positioner Hardware Status List** positioner hardware status list

**XPS Error String** return error string from VI

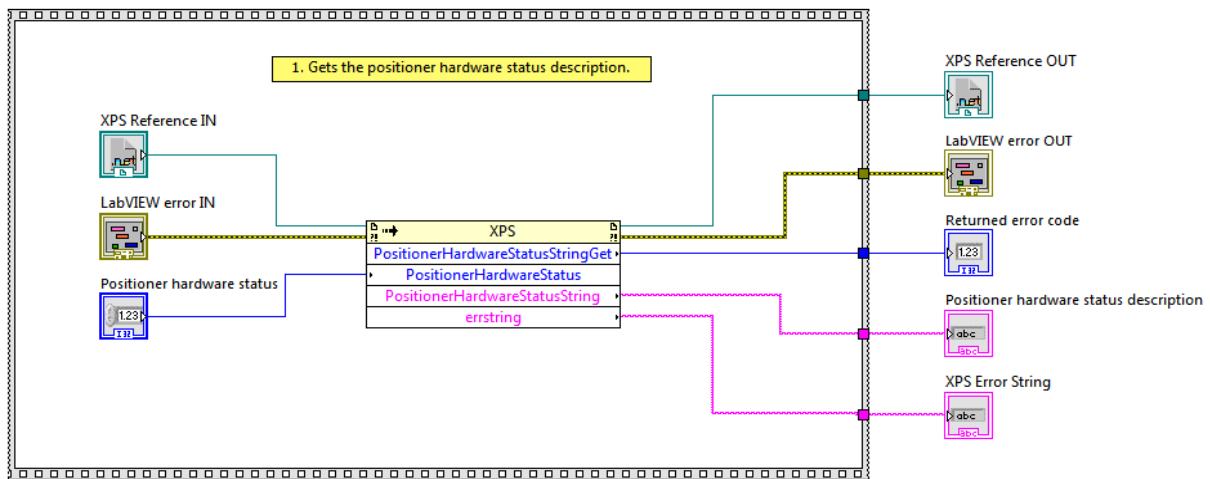
## 309. Positioner Hardware Status String Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the positioner hardware status description.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Hardware Status** positioner hardware status



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Positioner Hardware Status Description** positioner hardware status description



**XPS Error String** return error string from VI

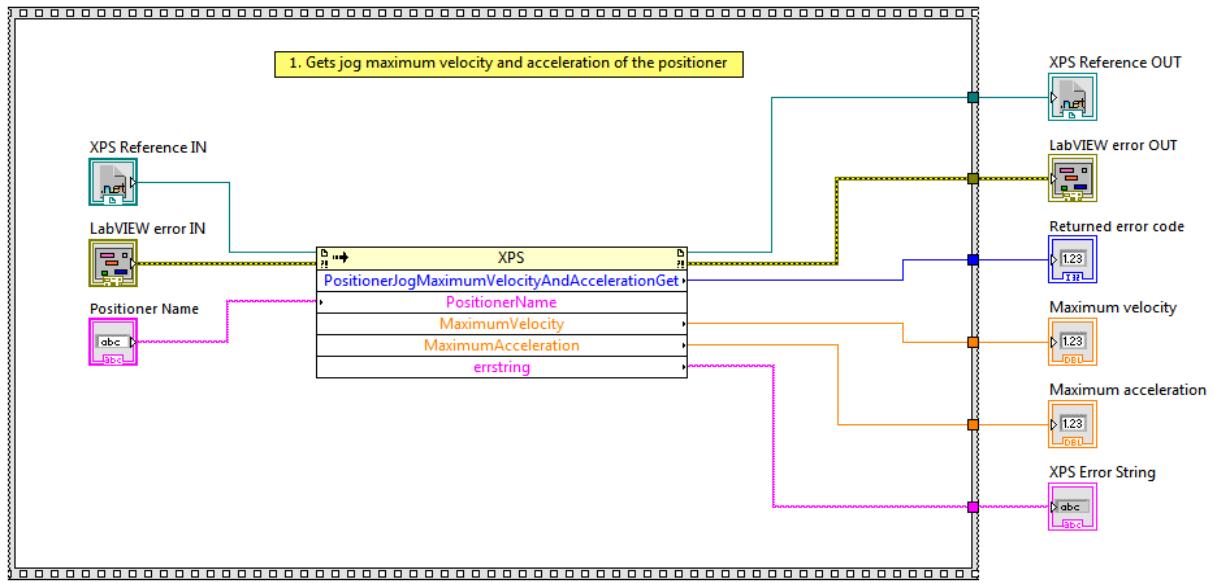
## 310. Positioner Jog Maximum Velocity And Acceleration Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get jog maximum velocity and acceleration of the positioner.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Maximum Velocity** Maximum velocity

**Maximum Acceleration** Maximum acceleration

**XPS Error String** return error string from VI

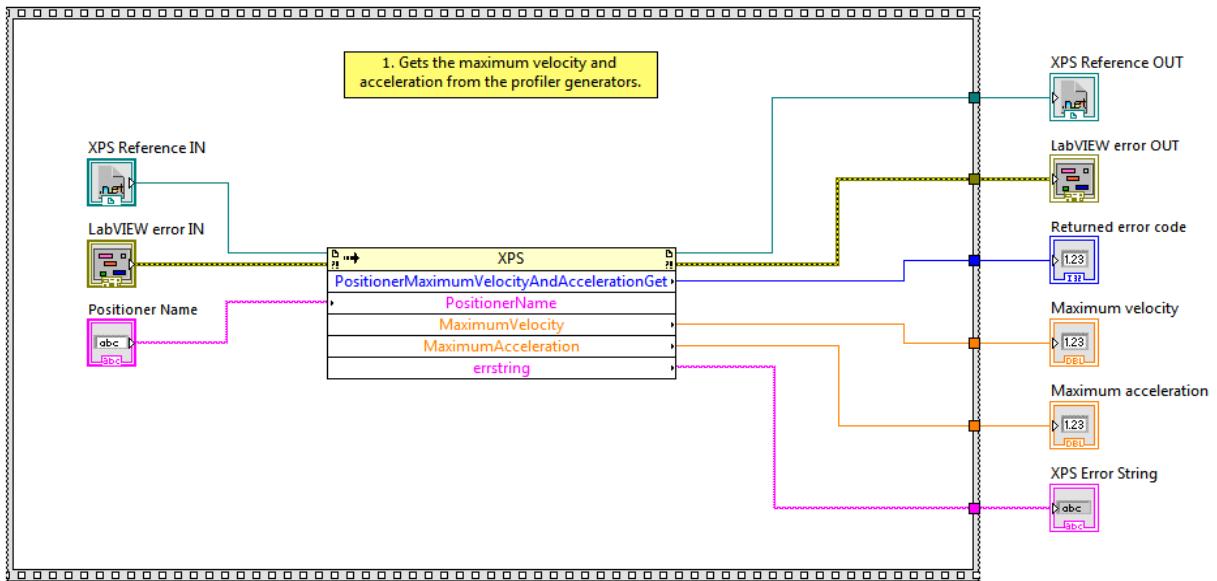
## 311. Positioner Maximum Velocity And Acceleration Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get maximum velocity and acceleration of the positioner.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Maximum Velocity** Maximum velocity

**Maximum Acceleration** Maximum acceleration

**XPS Error String** return error string from VI

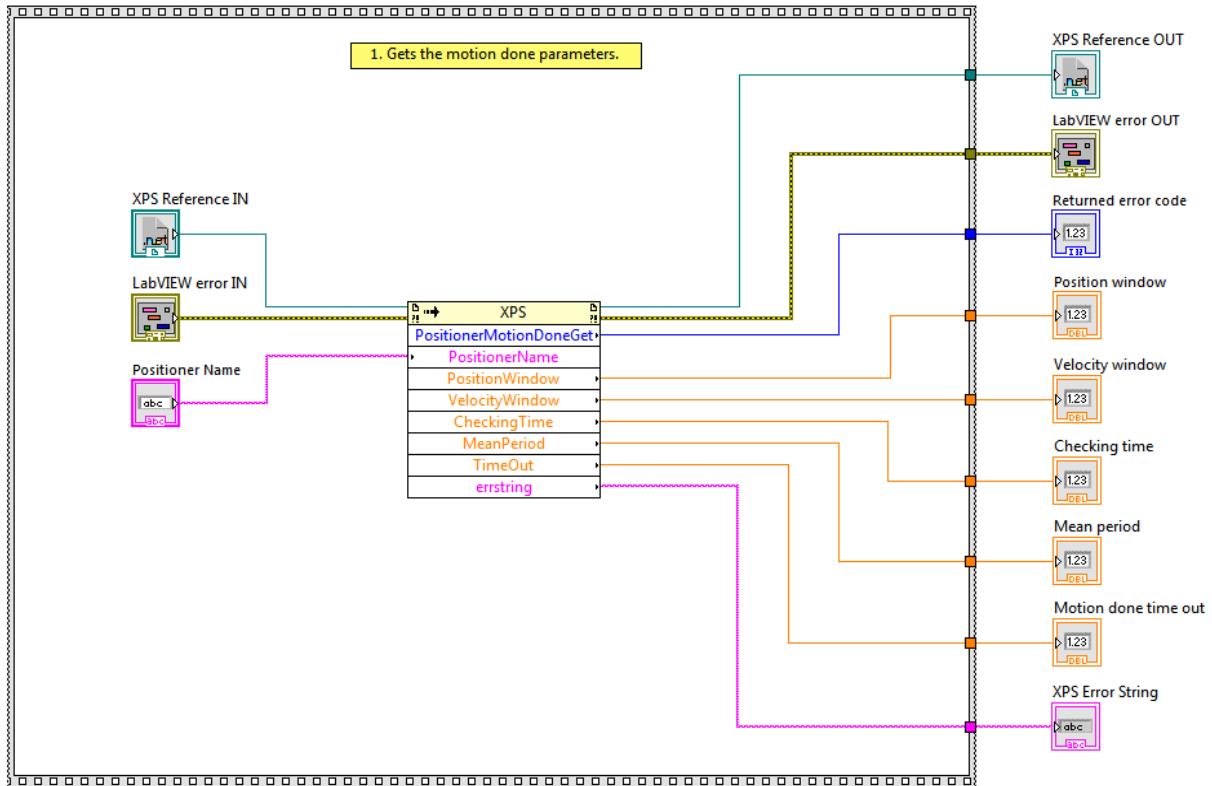
## 312. Positioner Motion Done Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get motion done parameters.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Position Window** Position window

**Velocity Window** Velocity window

**Checking Time** Checking time

**Mean Period** Mean period

**Motion Done Time Out** Motion done time out

 **XPS Error String** return error string from VI

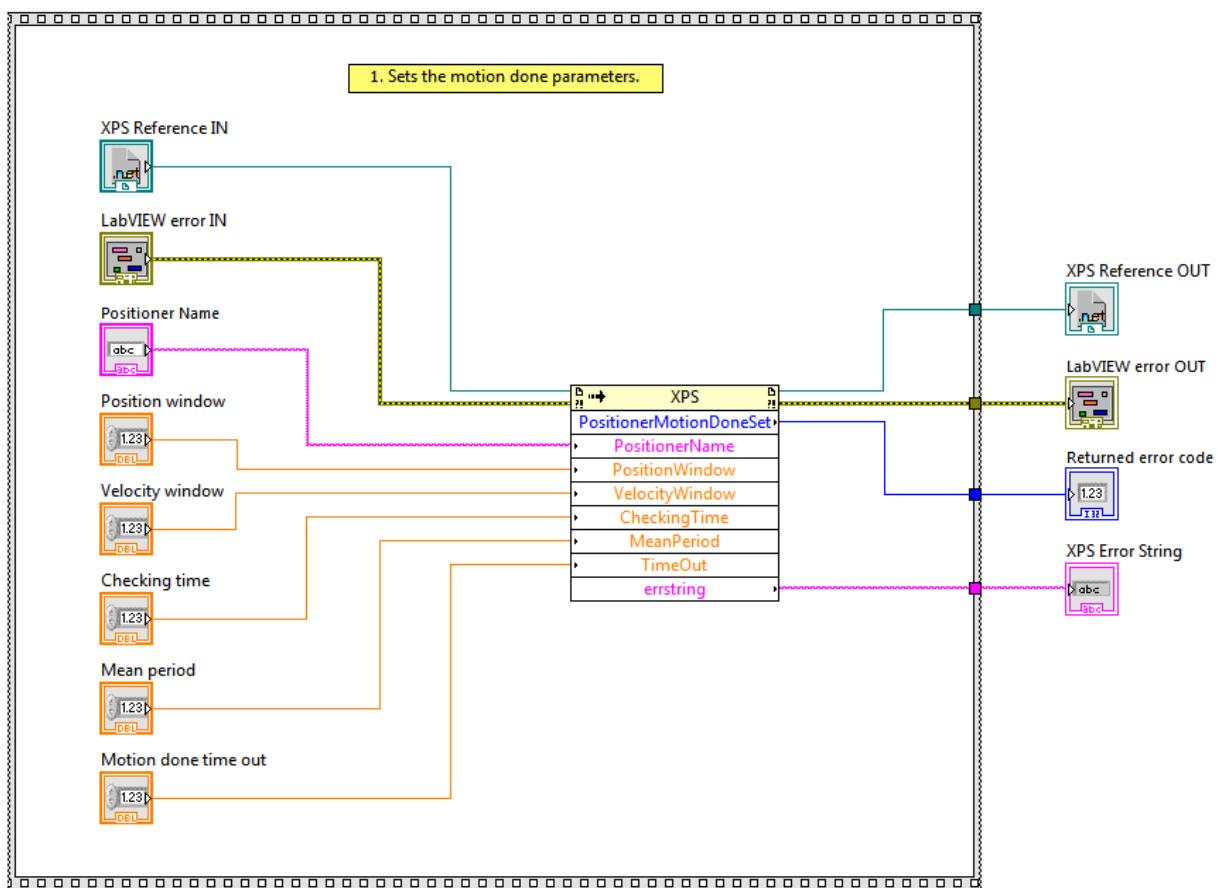
## 313. Positioner Motion Done Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set motion done parameters.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Positioner Name** positioner name

-  **Position Window** Position window
-  **Velocity Window** Velocity window
-  **Checking Time** Checking time
-  **Mean Period** Mean period
-  **Motion Done Time Out** Motion done time out
-  **XPS Reference OUT** returns XPS reference
-  **LabVIEW error OUT** contains error information. This output provides standard error out functionality.
-  **Returned Error Code** Returns function error code
-  **XPS Error String** return error string from VI

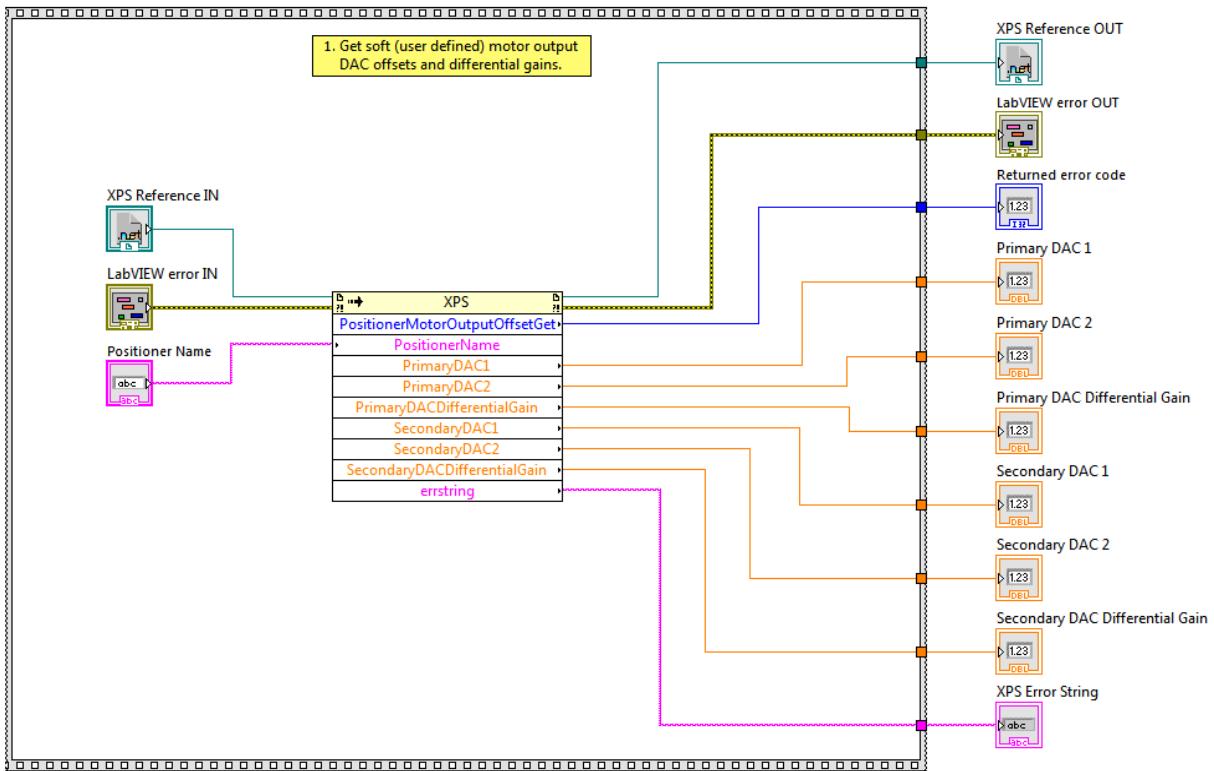
## 314. Positioner Motor Output Offset Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get soft (user defined) motor output DAC offsets and differential gains.

**Screenshot**



**[net] XPS Reference IN** is the XPS reference

**[err] LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[abc] Positioner Name** positioner name

**[net] XPS Reference OUT** returns XPS reference

**[err] LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[I32] Returned Error Code** Returns function error code

**[DBL] Primary DAC 1** Primary DAC 1

**[DBL] Primary DAC 2** Primary DAC 2

**[DBL] Primary DAC Differential Gain** Primary DAC differential gain

**[DBL] Secondary DAC 1** Secondary DAC 1

**[DBL] Secondary DAC 2** Secondary DAC 2

**[DBL] Secondary DAC Differential Gain** Secondary DAC differential gain

**[abc] XPS Error String** return error string from VI

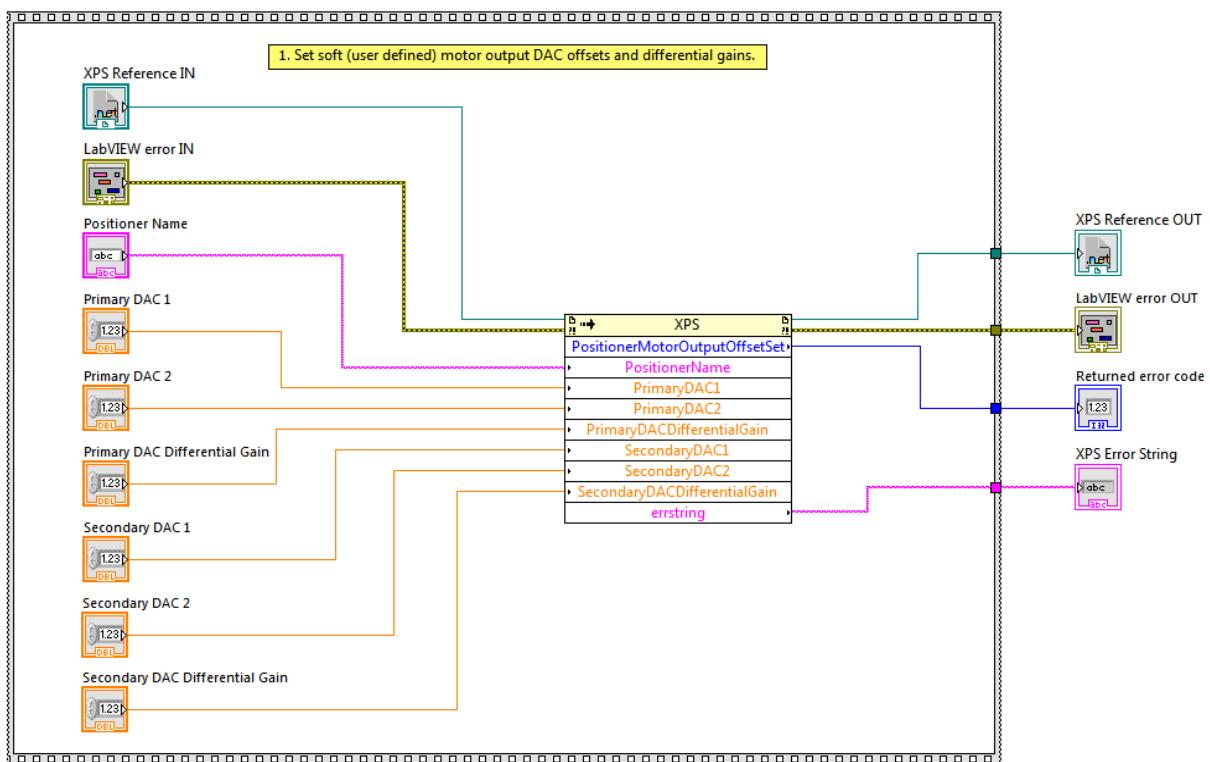
## 315. Positioner Motor Output Offset Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set soft (user defined) motor output DAC offsets and differential gains.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Primary DAC 1** Primary DAC 1

**Primary DAC 2** Primary DAC 2

- DBL** Primary DAC Differential Gain Primary DAC differential gain
- DBL** Secondary DAC 1 Secondary DAC 1
- DBL** Secondary DAC 2 Secondary DAC 2
- DBL** Secondary DAC Differential Gain Secondary DAC differential gain
- D** XPS Reference OUT returns XPS reference
- ED** LabVIEW error OUT contains error information. This output provides standard error out functionality.
- I32** Returned Error Code Returns function error code
- abc** XPS Error String return error string from VI

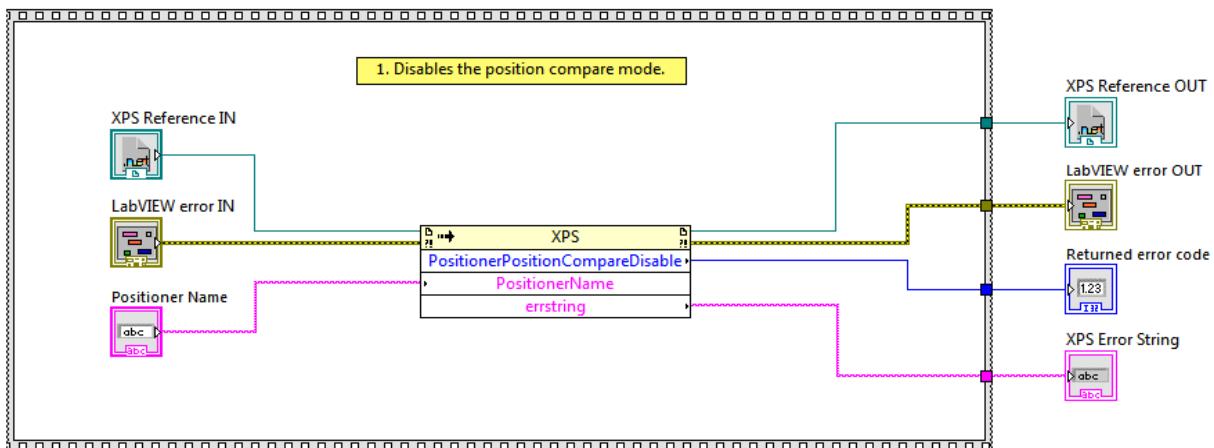
## 316. Positioner Position Compare Disable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Disables the position compare mode.

### Screenshot



**D** XPS Reference IN is the XPS reference

**ED** LabVIEW error IN describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Positioner Name** positioner Name

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

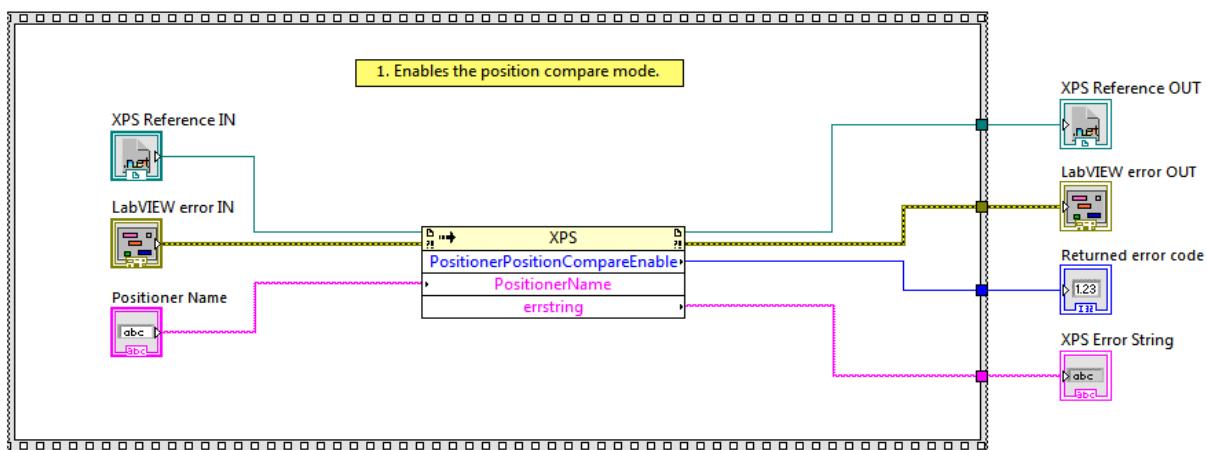
## 317. Positioner Position Compare Enable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Enables the position compare mode.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Positioner Name** positioner Name

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

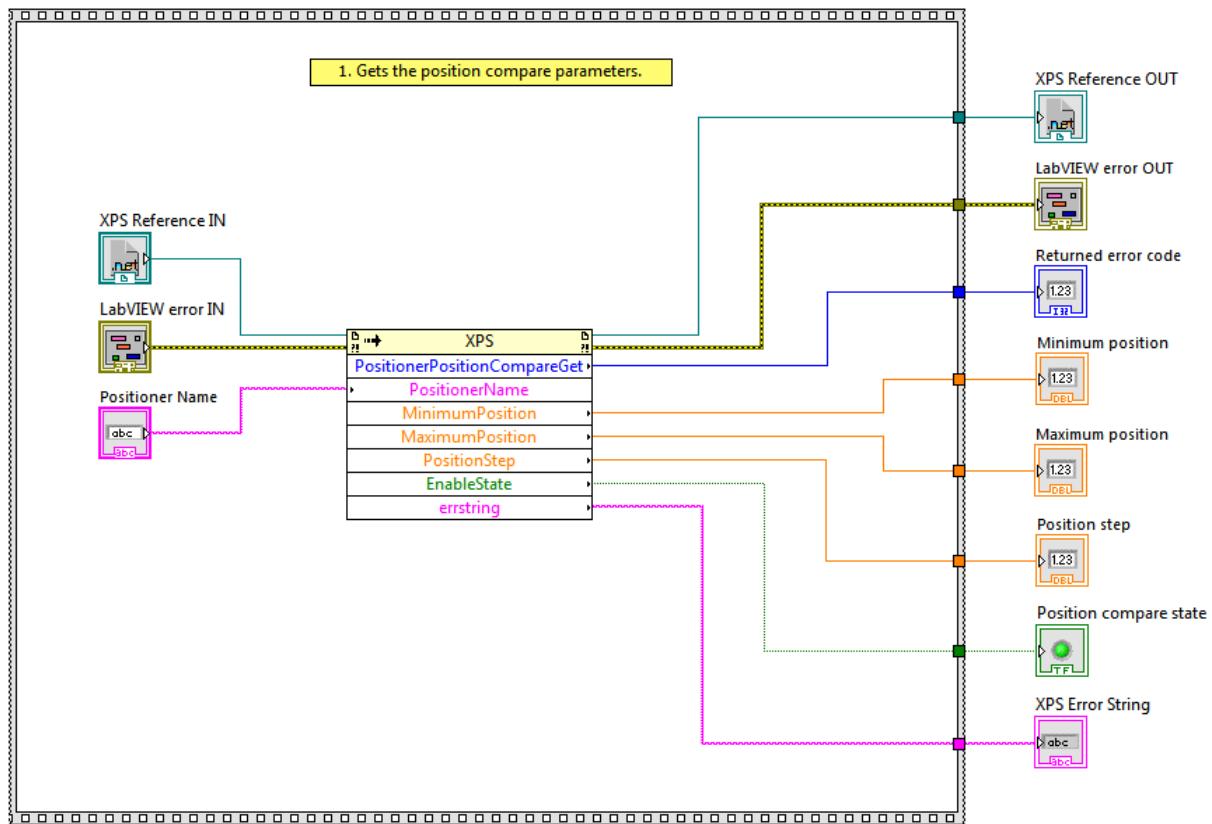
## 318. Positioner Position Compare Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the position compare parameters.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Positioner Name** positioner name

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **Minimum position** Minimum position

 **Maximum position** Maximum position

 **Position step** Position step

 **Position compare state** Position compare state

 **XPS Error String** return error string from VI

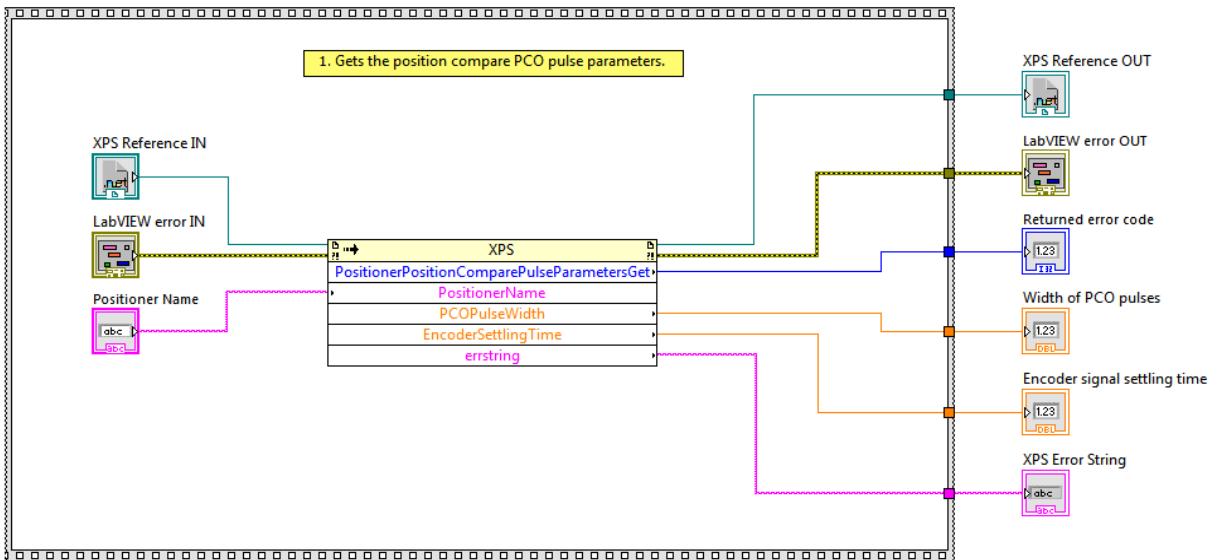
## 319. Positioner Position Compare Pulse Parameters Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the position compare PCO pulse parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Width of PCO pulses** Width of PCO pulses

**Encoder signal settling time** Encoder signal settling time

**XPS Error String** return error string from VI

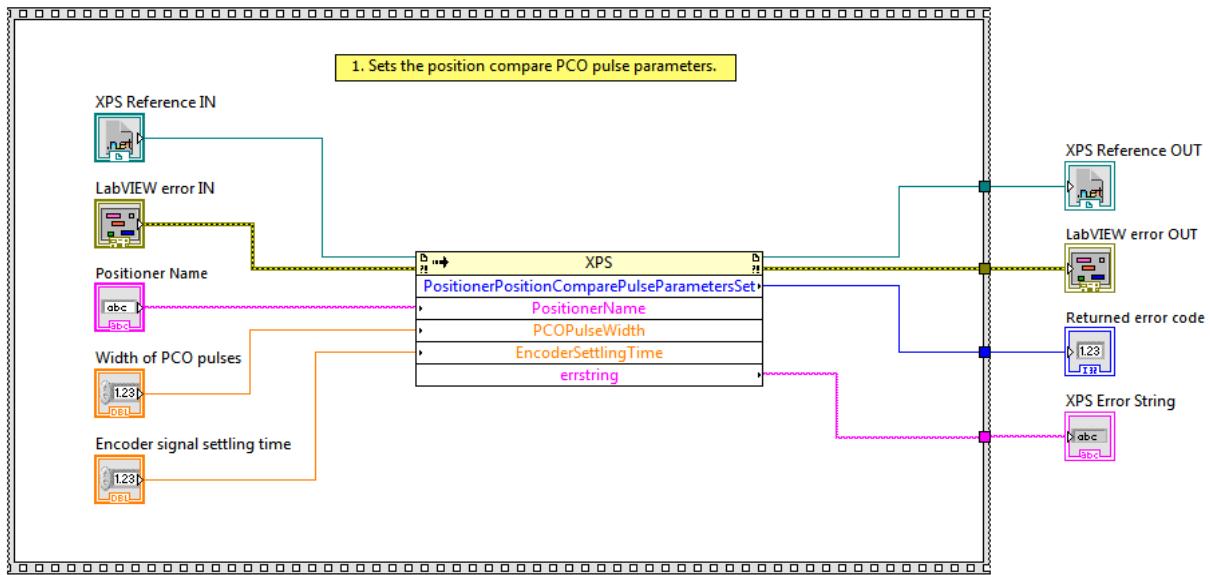
## 320. Positioner Position Compare Pulse Parameters Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set the position compare PCO pulse parameters.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Width of PCO pulses** Width of PCO pulses

**Encoder signal settling time** Encoder signal settling time

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

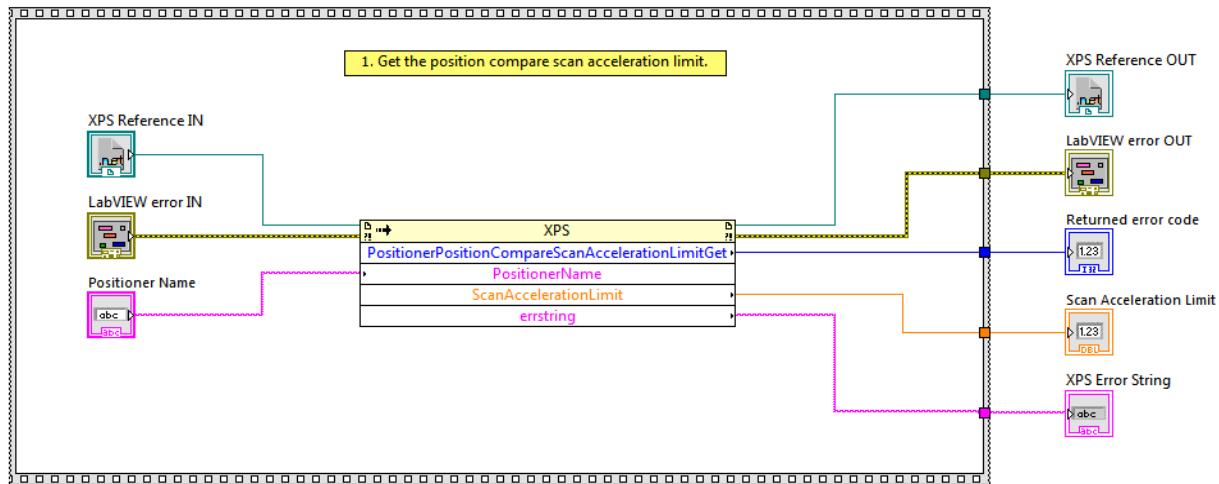
## 321. Positioner Position Compare Scan Acceleration Limit Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the position compare scan acceleration limit.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** Positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Scan Acceleration Limit** Scan acceleration limit

**XPS Error String** return error string from VI

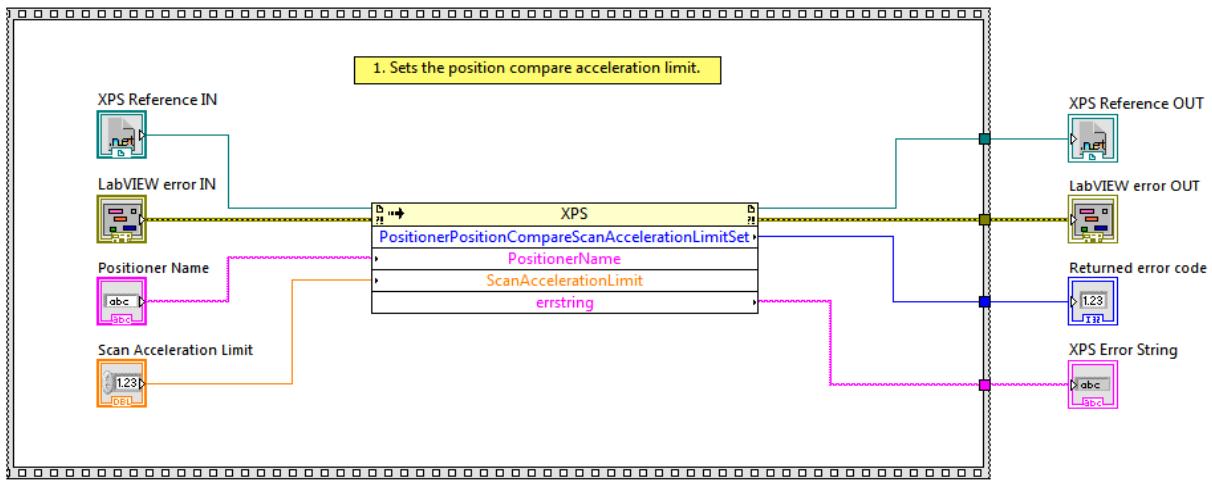
## 322. Positioner Position Compare Scan Acceleration Limit Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set the position compare scan acceleration limit.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Scan Acceleration Limit** Scan acceleration limit

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

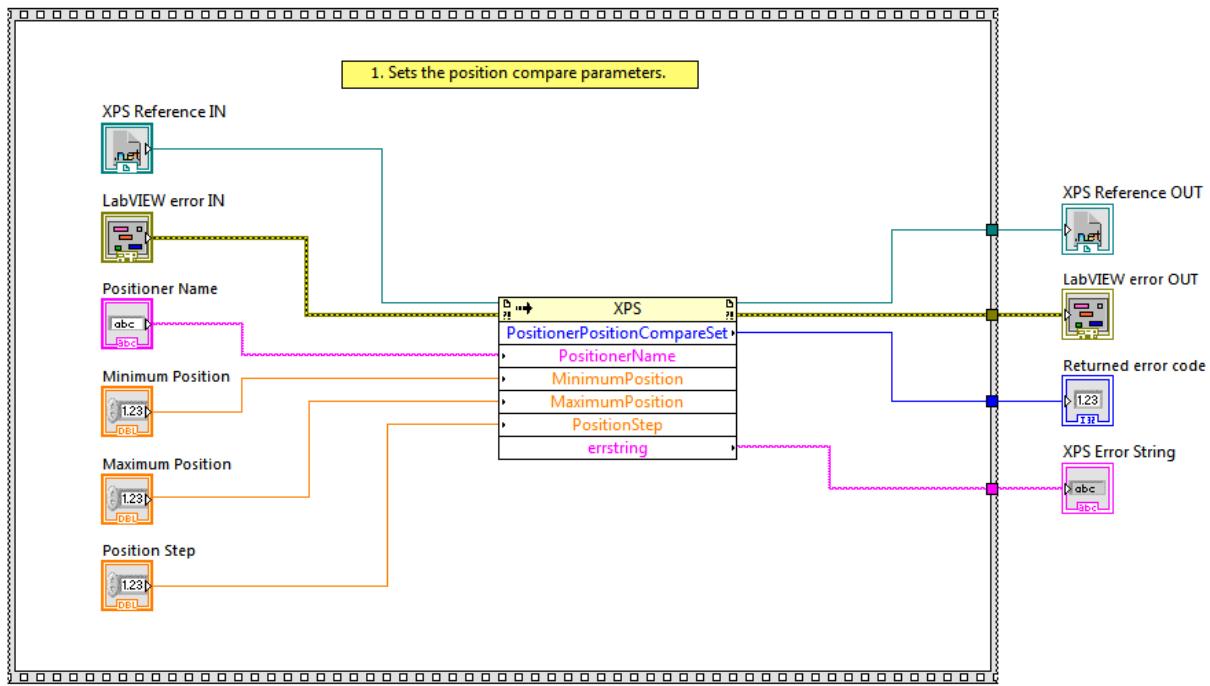
## 323. Positioner Position Compare Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set the position compare parameters.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Minimum Position** Minimum position

**Maximum Position** Maximum position

**Position Step** Position step

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

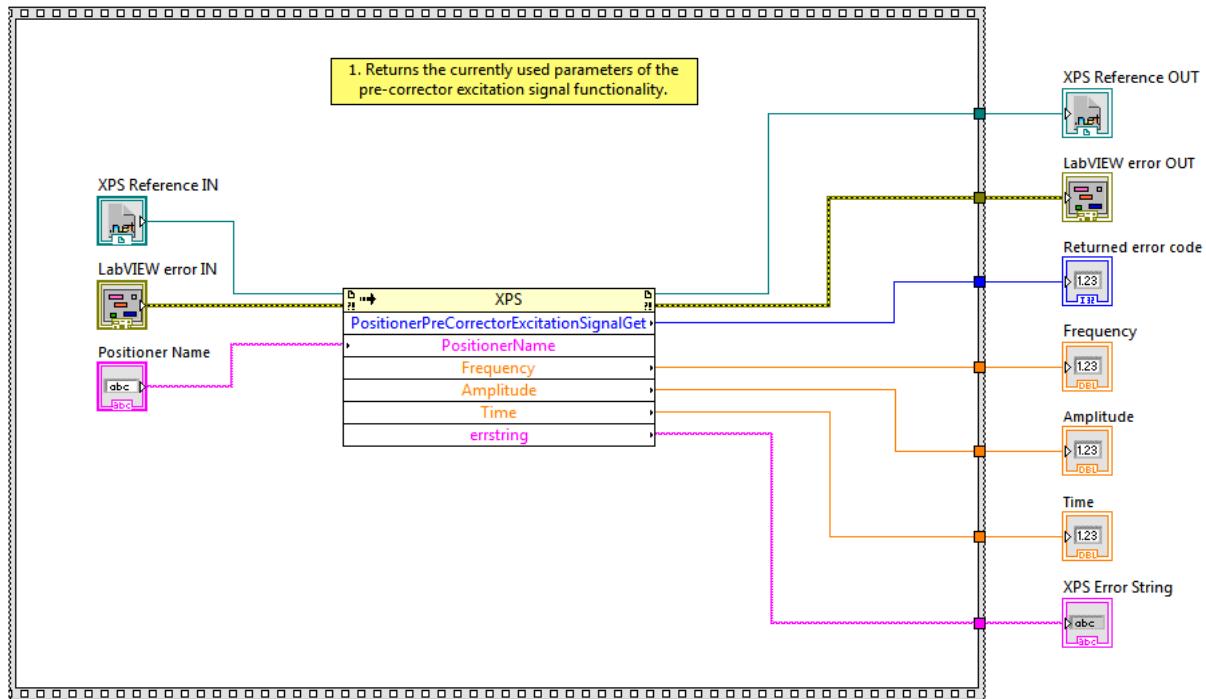
## 324. Positioner Pre Corrector Excitation Signal Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the currently used parameters of the pre-corrector excitation signal functionality.

## Screenshot



**[D]** **XPS Reference IN** is the XPS reference

**[E]** **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[abc]** **Positioner Name** positioner name

**[D]** **XPS Reference OUT** returns XPS reference

**[E]** **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[I32]** **Returned Error Code** Returns function error code

**[DBL]** **Frequency** frequency

**[DBL]** **Amplitude** amplitude

**[DBL]** **Time** time

**[abc]** **XPS Error String** return error string from VI

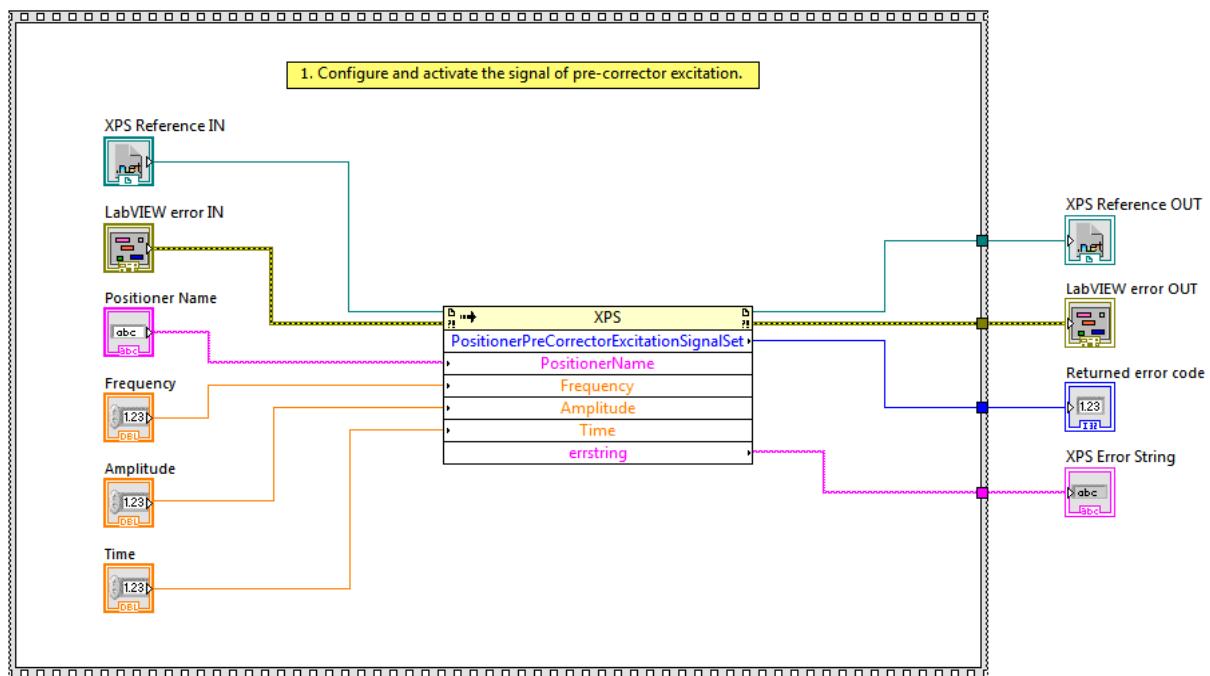
## 325. Positioner PreCorrector Excitation Signal Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Configure and activate the signal of pre-corrector excitation.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Mode** mode



**Frequency** Phase correction numerator frequency



**Amplitude** Amplitude



**Time** Time



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

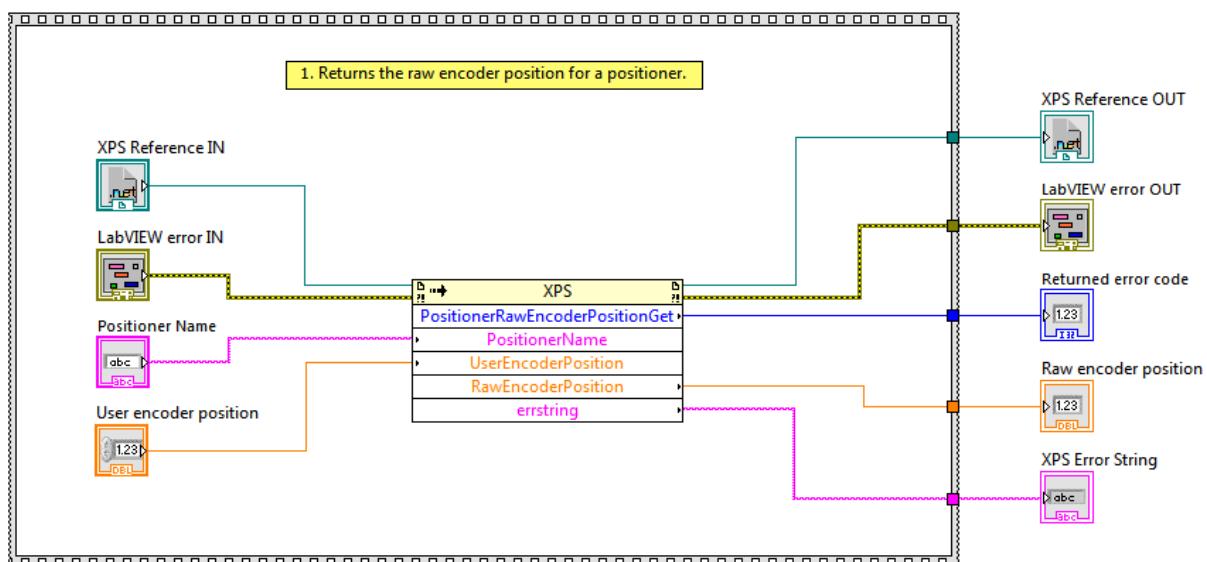
## 326. Positioner Raw Encoder Position Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the raw encoder position for a positioner.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**User Encoder Position** User encoder position



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Raw Encoder Position** Raw encoder position

**XPS Error String** return error string from VI

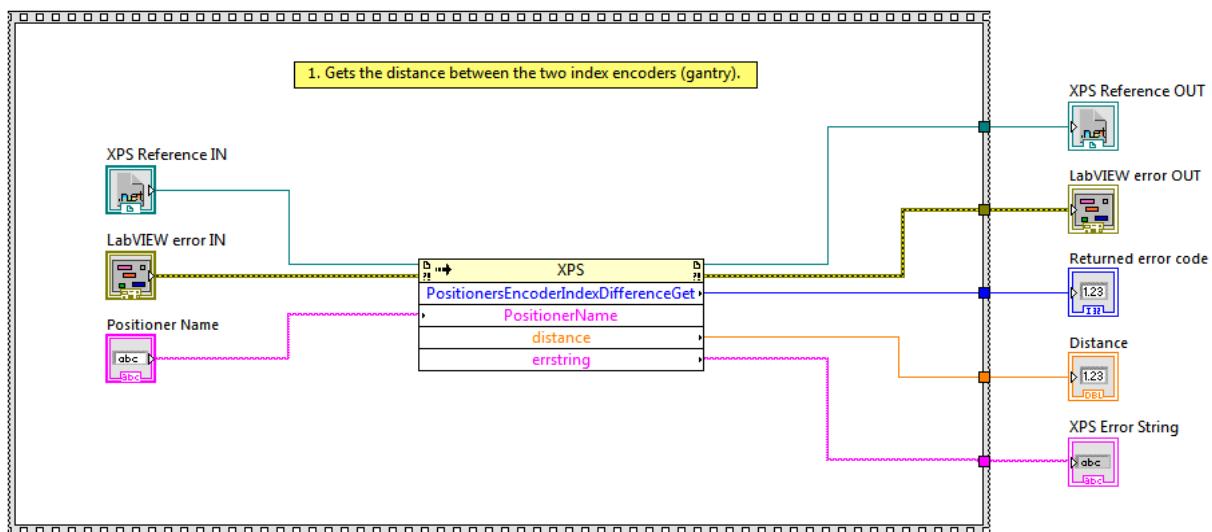
## 327. Positioners Encoder Index Difference Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the distance between the two index encoders (gantry).

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Start element number** Start element number



**End element number** End element number



**Distance** Distance



**XPS Error String** return error string from VI

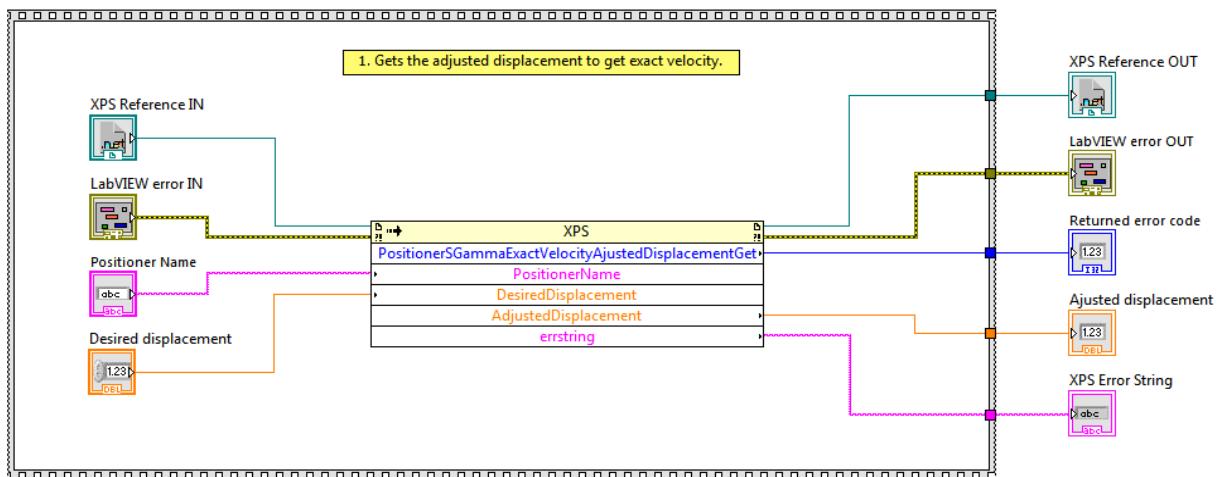
## 328. Positioner Sgamma Exact Velocity Ajusted Displacement Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the adjusted displacement to get exact velocity.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Positioner Name** positioner name

- Desired Displacement** Desired displacement
- XPS Reference OUT** returns XPS reference
- LabVIEW error OUT** contains error information. This output provides standard error out functionality.
- Returned Error Code** Returns function error code
- Adjusted Displacement** Adjusted displacement
- XPS Error String** return error string from VI

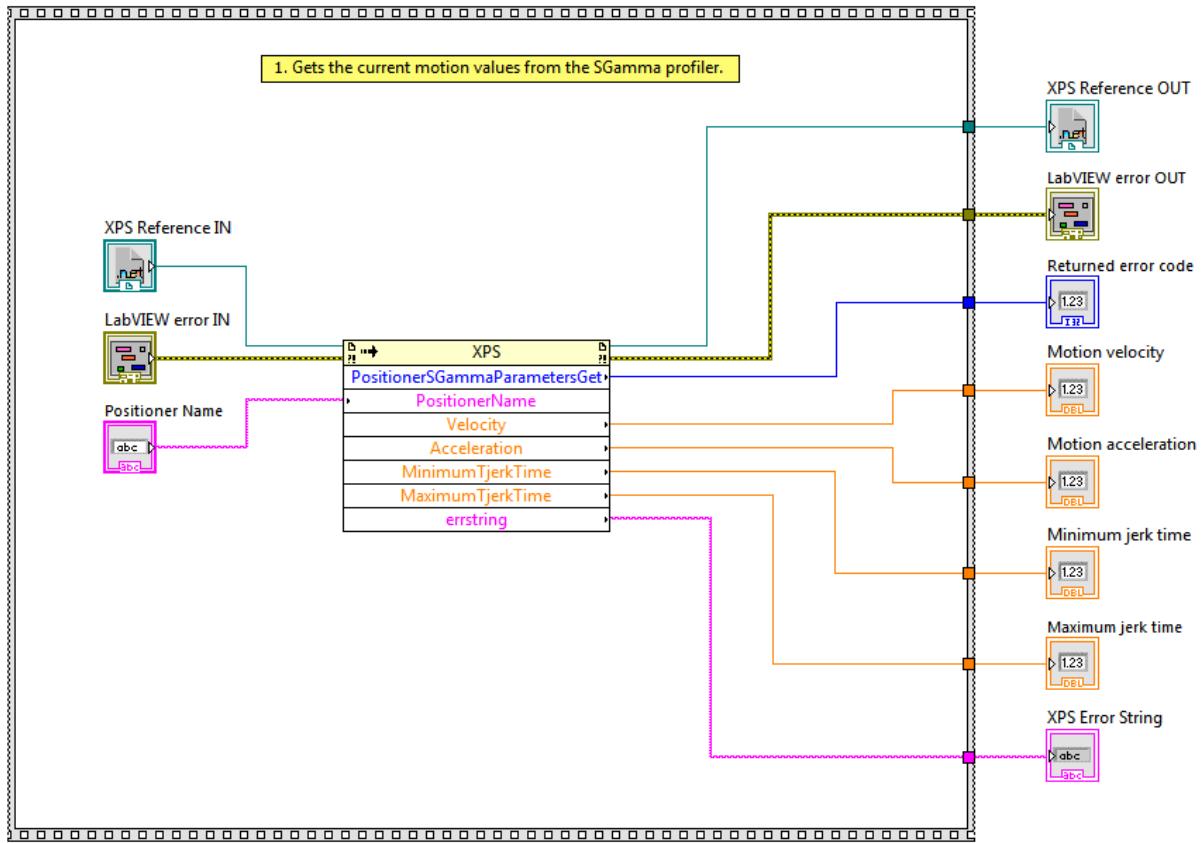
## 329. Positioner Sgamma Parameters Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the current motion values from the SGamma profiler.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Motion Velocity** Motion velocity

**Motion Acceleration** Motion acceleration

**Minimum Jerk Time** Minimum jerk time

**Maximum Jerk Time** Maximum jerk time

**XPS Error String** return error string from VI

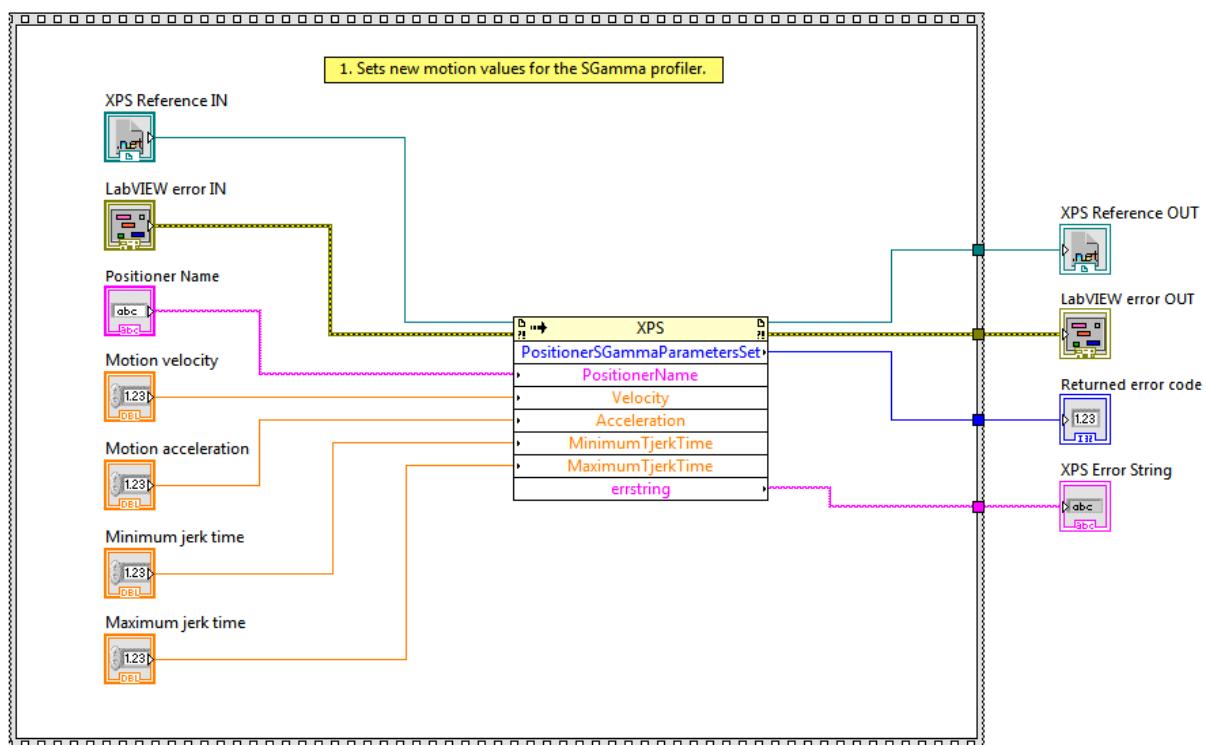
## 330. Positioner Sgamma Parameters Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set the current motion values for the SGamma profiler.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**Motion Velocity** Motion velocity

**Motion Acceleration** Motion acceleration

**Minimum Jerk Time** Minimum jerk time

**Maximum Jerk Time** Maximum jerk time

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

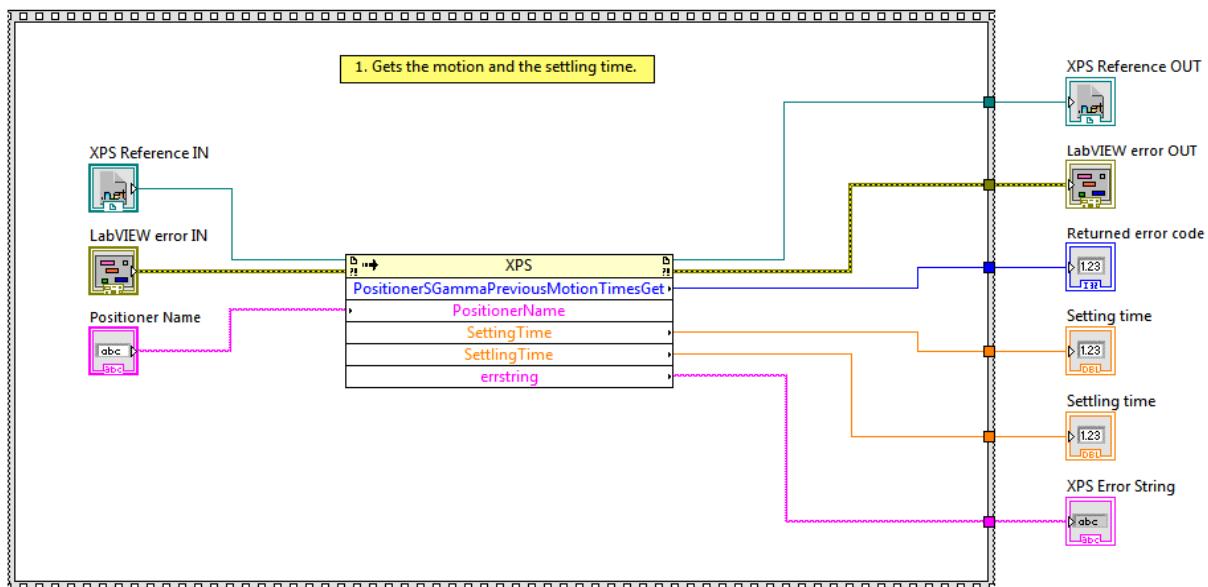
## 331. Positioner Sgamma Previous Motion Times Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the motion and the settling time.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Setting time** Setting time

**Settling time** Settling time

**XPS Error String** return error string from VI

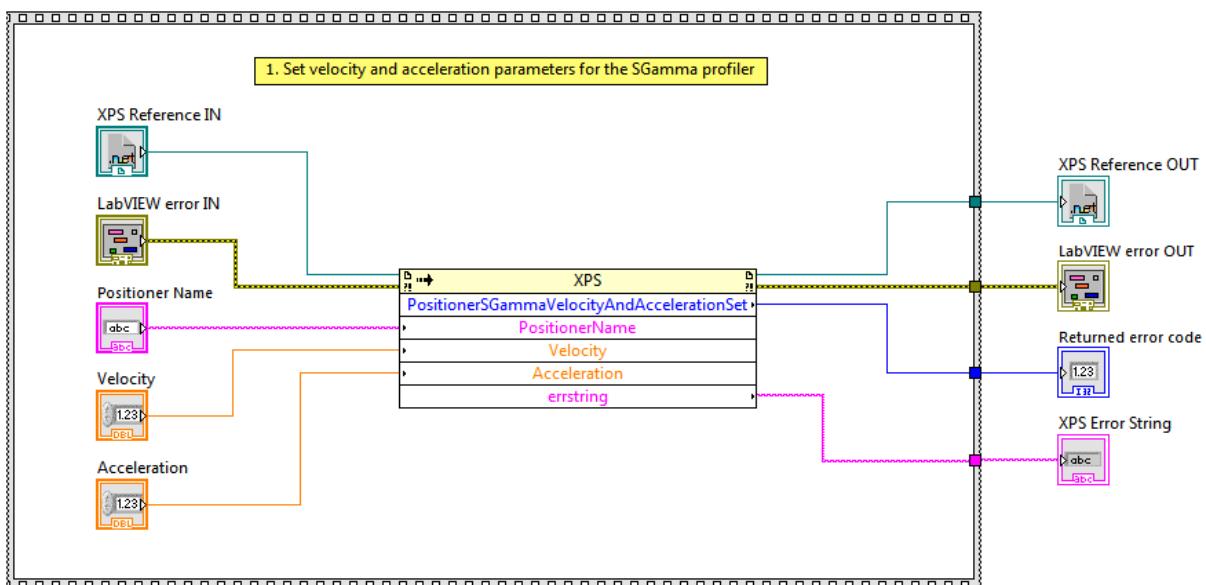
## 332. Positioner Sgamma Velocity And Acceleration Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set velocity and acceleration parameters for the SGamma profiler.

### Screenshot



**XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Positioner Name** positioner name

 **Velocity** velocity

 **Acceleration** acceleration

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

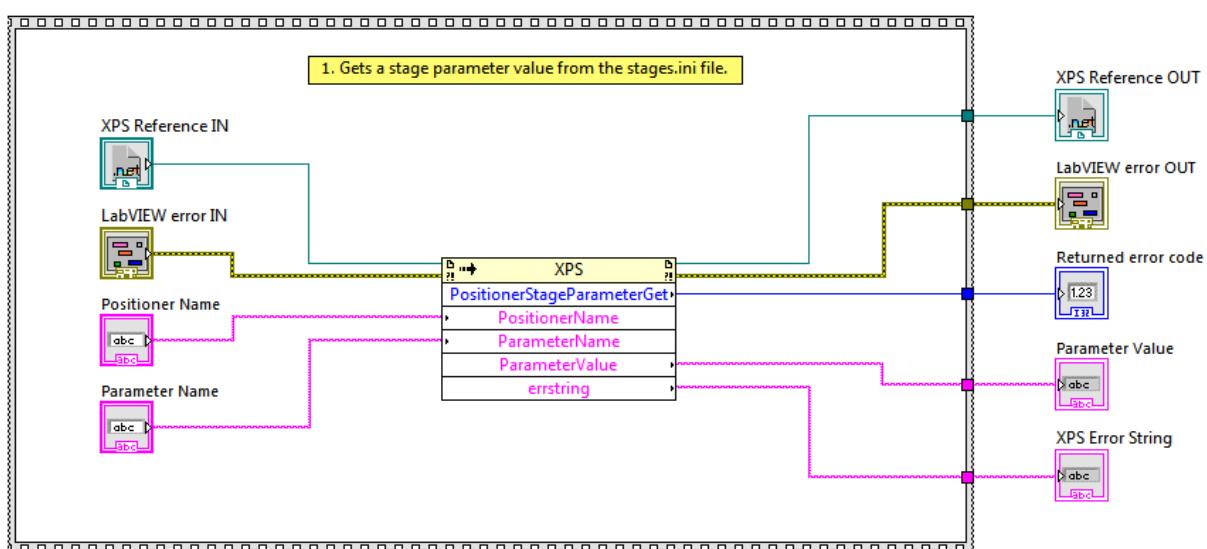
### 333. Positioner Stage Parameter Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets a stage parameter value from the stages.ini file.

#### Screenshot



- [XPS]** **XPS Reference IN** is the XPS reference
- [LabVIEW error]** **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.
- [abc]** **Positioner Name** Positioner name
- [abc]** **Parameter Name** Parameter name
- [XPS]** **XPS Reference OUT** returns XPS reference
- [LabVIEW error]** **LabVIEW error OUT** contains error information. This output provides standard error out functionality.
- [abc]** **Returned Error Code** Returns function error code
- [abc]** **Parameter Value** Parameter value
- [abc]** **XPS Error String** return error string from VI

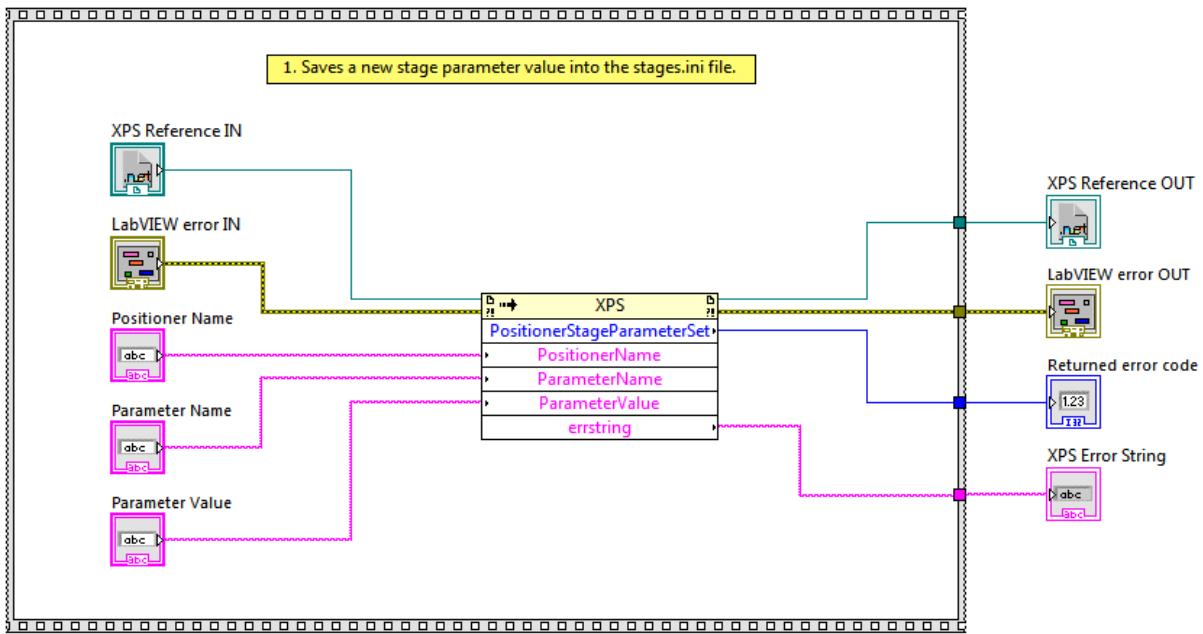
## 334. Positioner Stage Parameter Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Saves a new stage parameter value into the stages.ini file.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Positioner Name** positioner name



**Parameter Name** parameter name



**Parameter Value** Parameter value



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

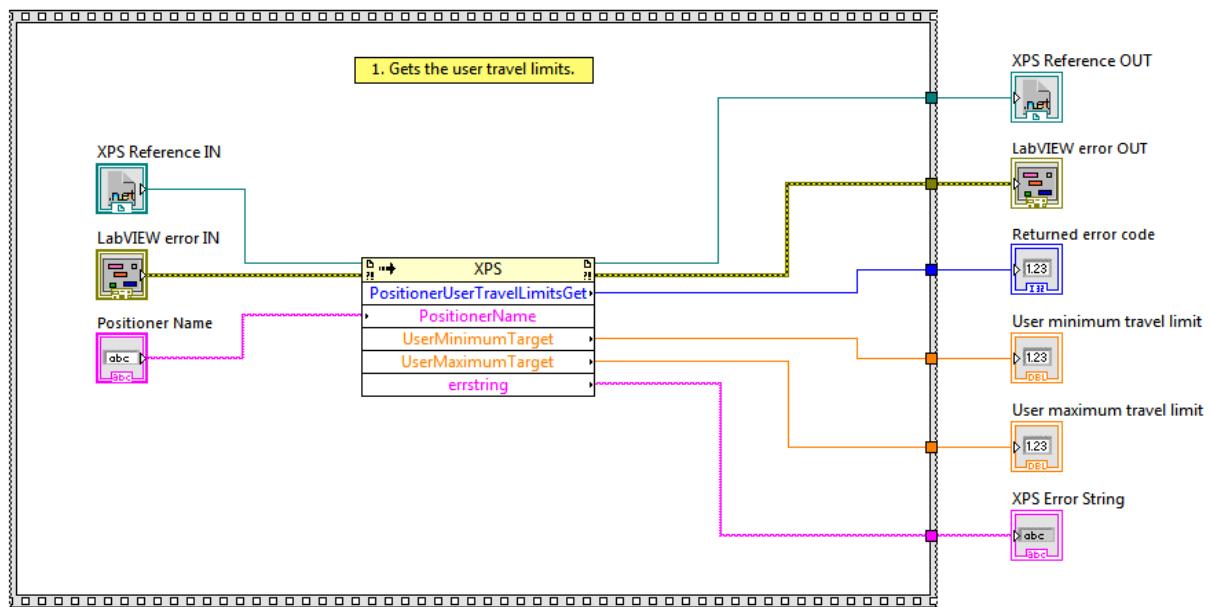
### 335. Positioner User Travel Limits Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get user travel limits.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**User minimum travel limit** User minimum travel limit

**User maximum travel limit** User maximum travel limit

**XPS Error String** return error string from VI

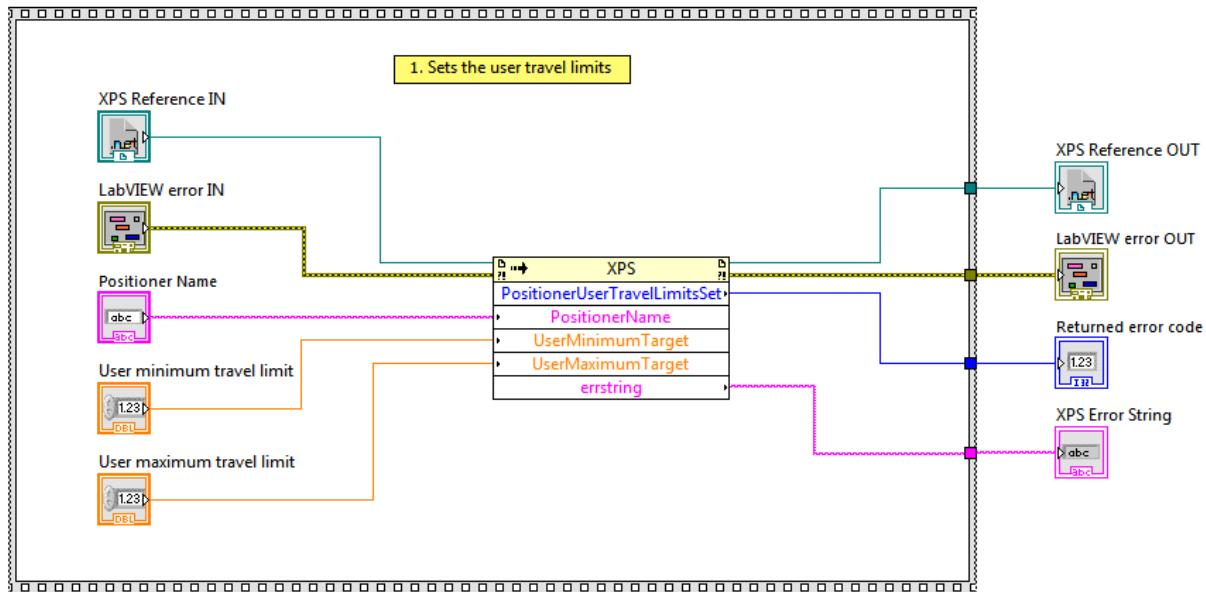
## 336. Positioner User Travel Limits Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set user travel limits.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** positioner name

**User minimum travel limit** User minimum travel limit

**User maximum travel limit** User maximum travel limit

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

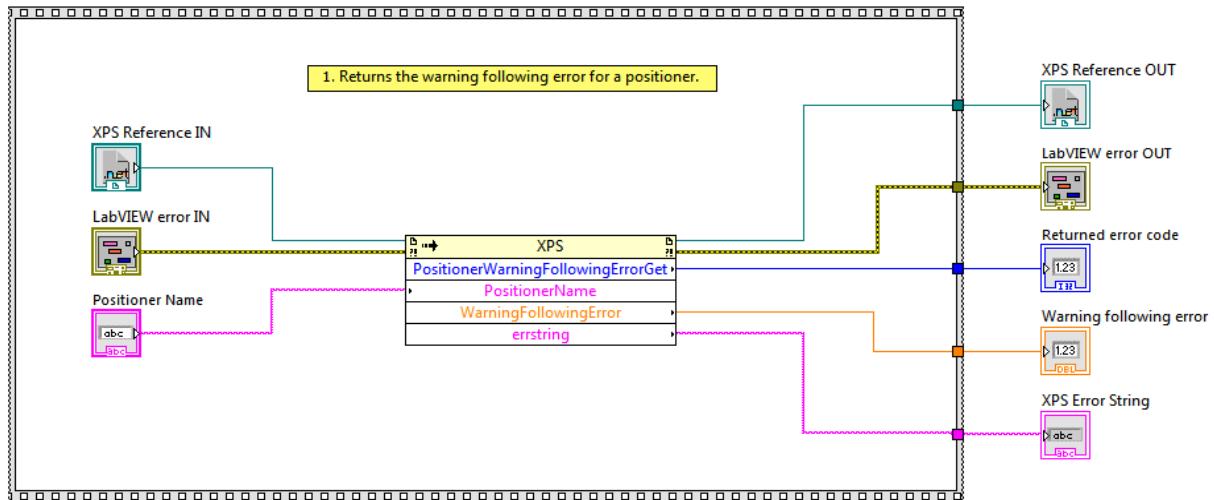
## 337. Positioner Warning Following Error Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the warning following error for a positioner.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Warning following error** Warning following error

**XPS Error String** return error string from VI

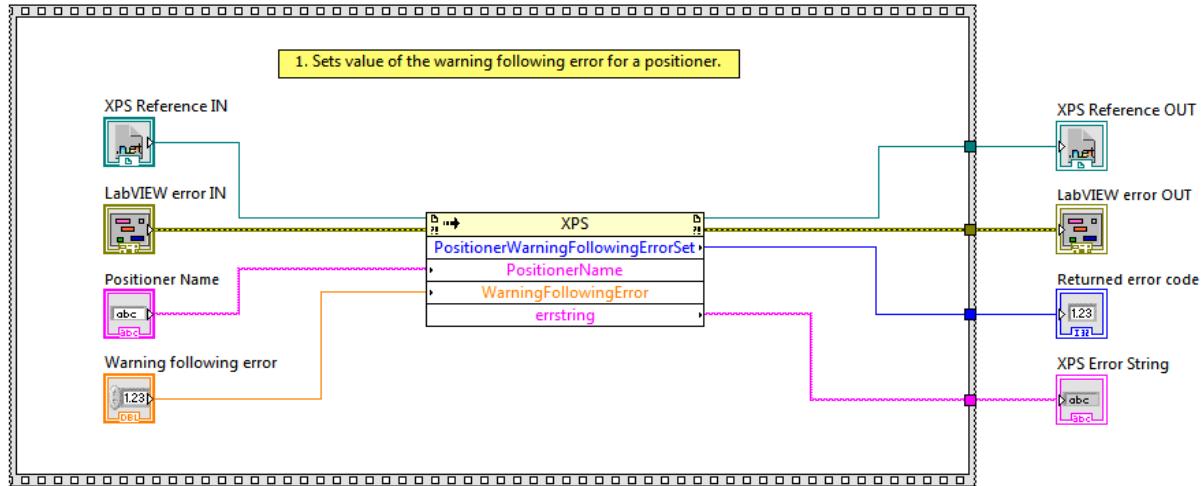
## 338. Positioner Warning Following Error Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets warning following error for a positioner.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** Positioner name  
 **Warning following error** Warning following error

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code  
 **XPS Error String** return error string from VI

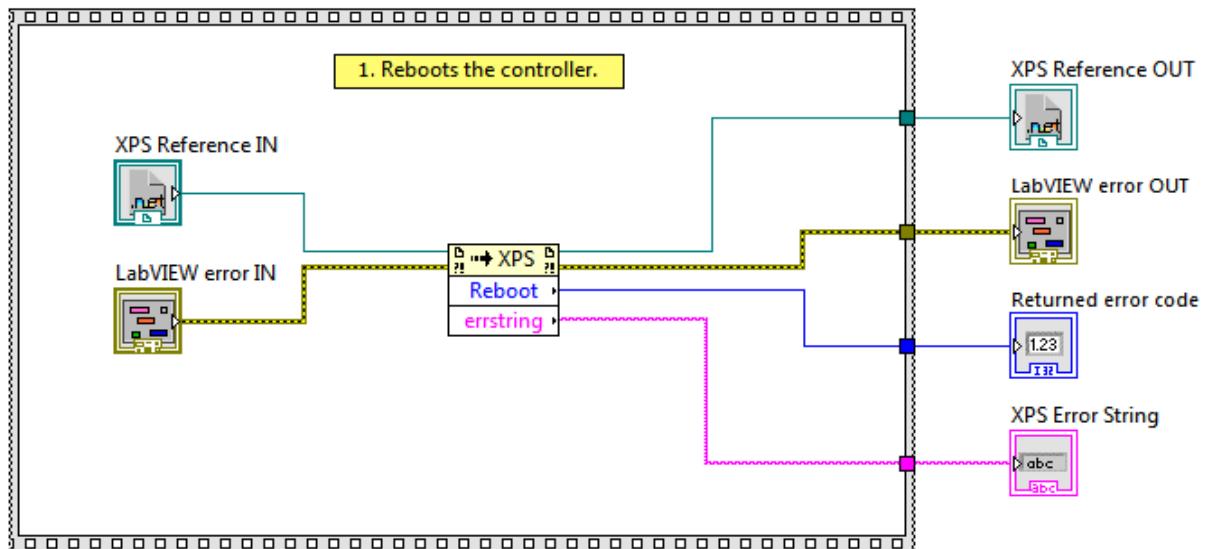
## 339. Reboot VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Reboots the controller.

## Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

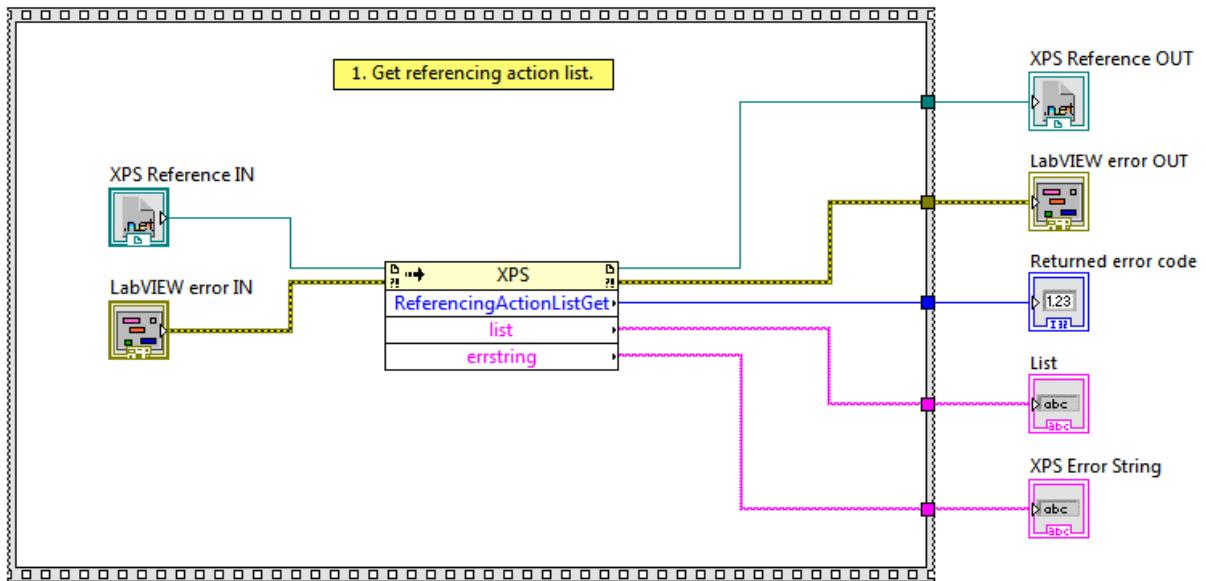
## 340. Referencing Action List Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get referencing action list.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**List** Referencing action list

**XPS Error String** return error string from VI

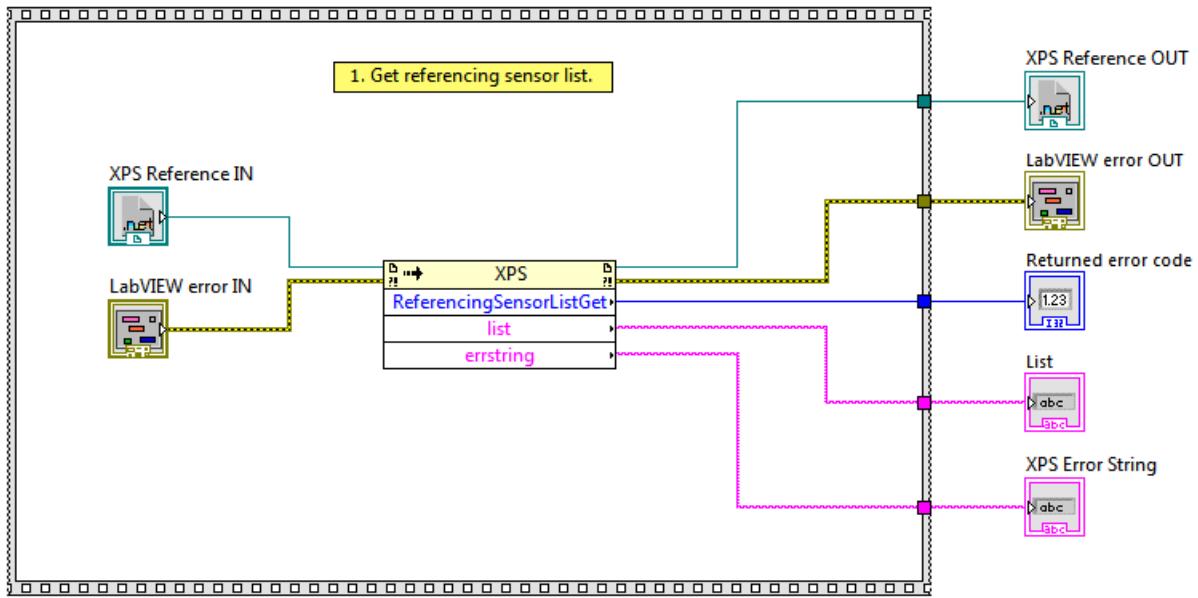
## 341. Referencing Sensor List Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get referencing sensor list.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**List** Referencing sensor list

**XPS Error String** return error string from VI

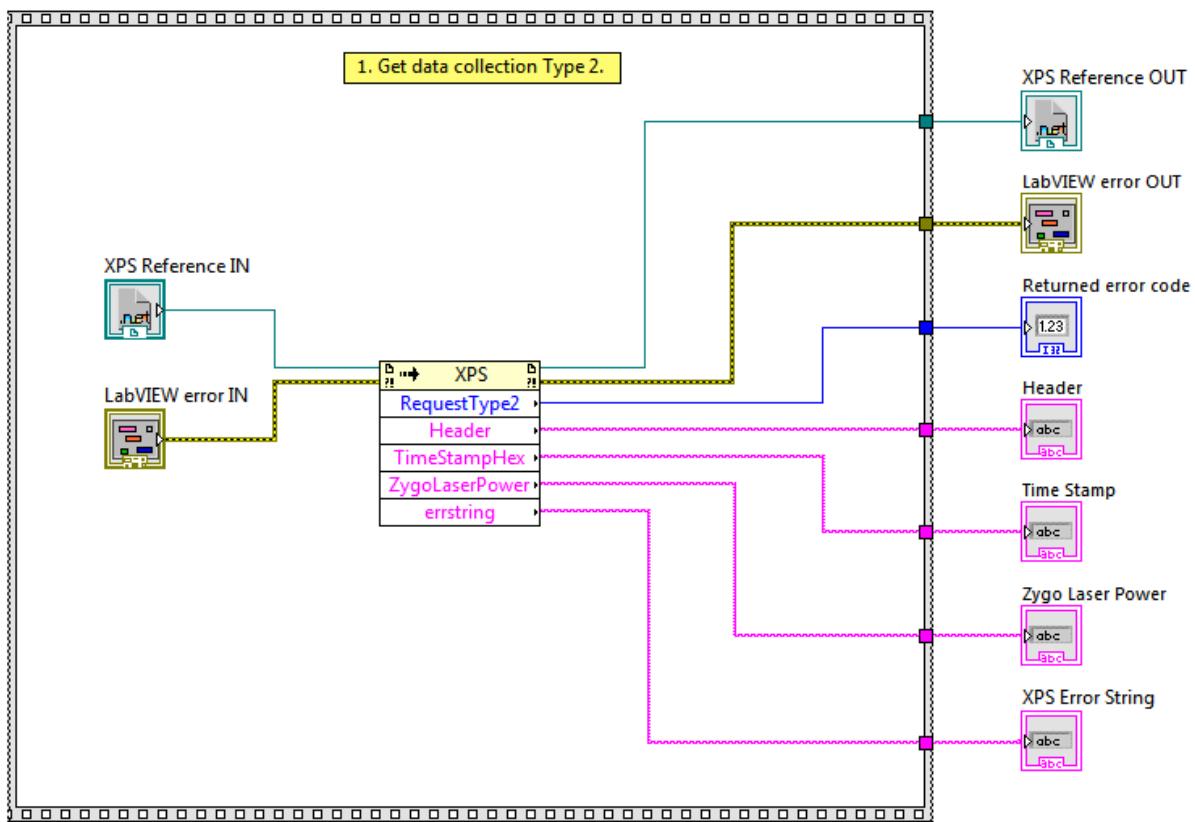
## 342. Request Type 2 VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get data collection Type 2.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Header** Header



**Time Stamp** Time Stamp



**Zygo Laser Power** Zygo Laser Power



**XPS Error String** return error string from VI

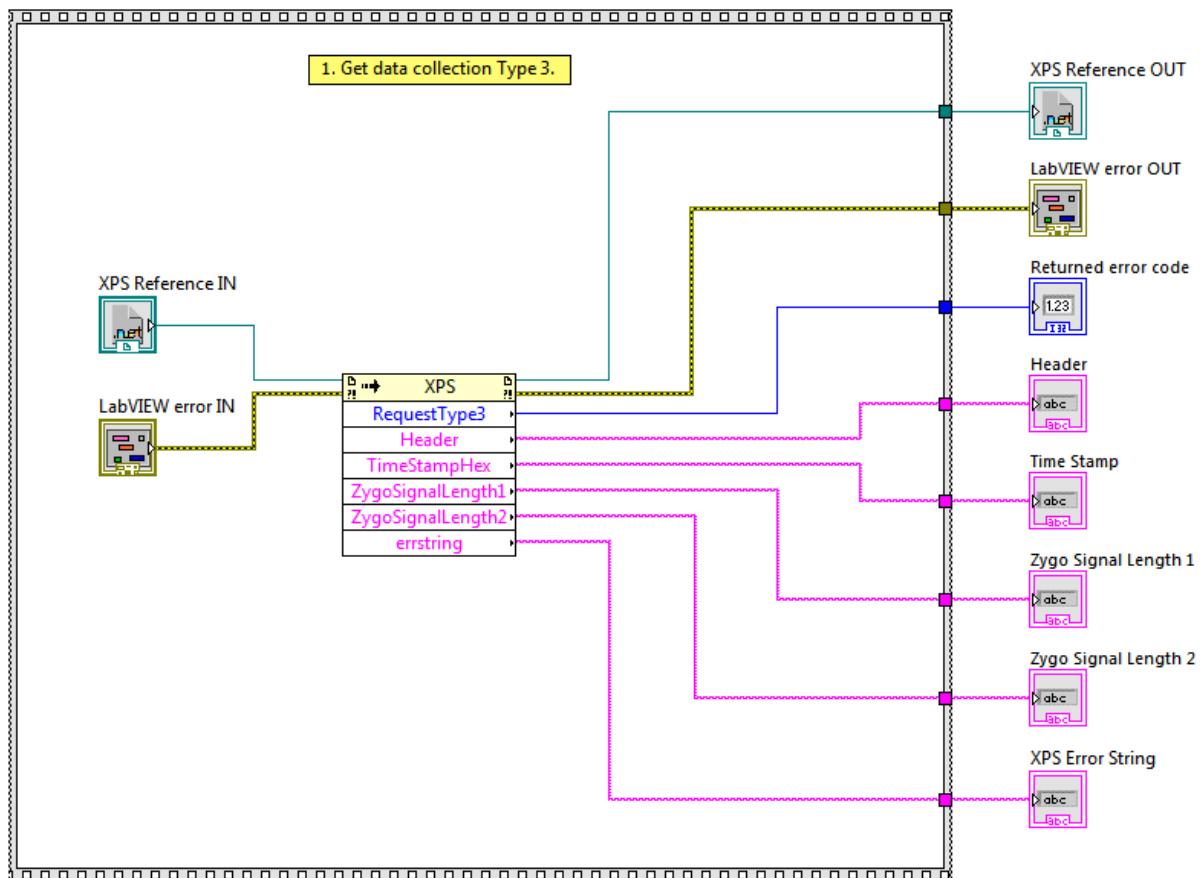
### 343. Request Type 3 VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Get referencing sensor list.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **Header** Header

 **Time Stamp** Time Stamp

 **Zygo Signal Length 1** Zygo Signal Length 1

 **Zygo Signal Length 2** Zygo Signal Length 2

 **XPS Error String** return error string from VI

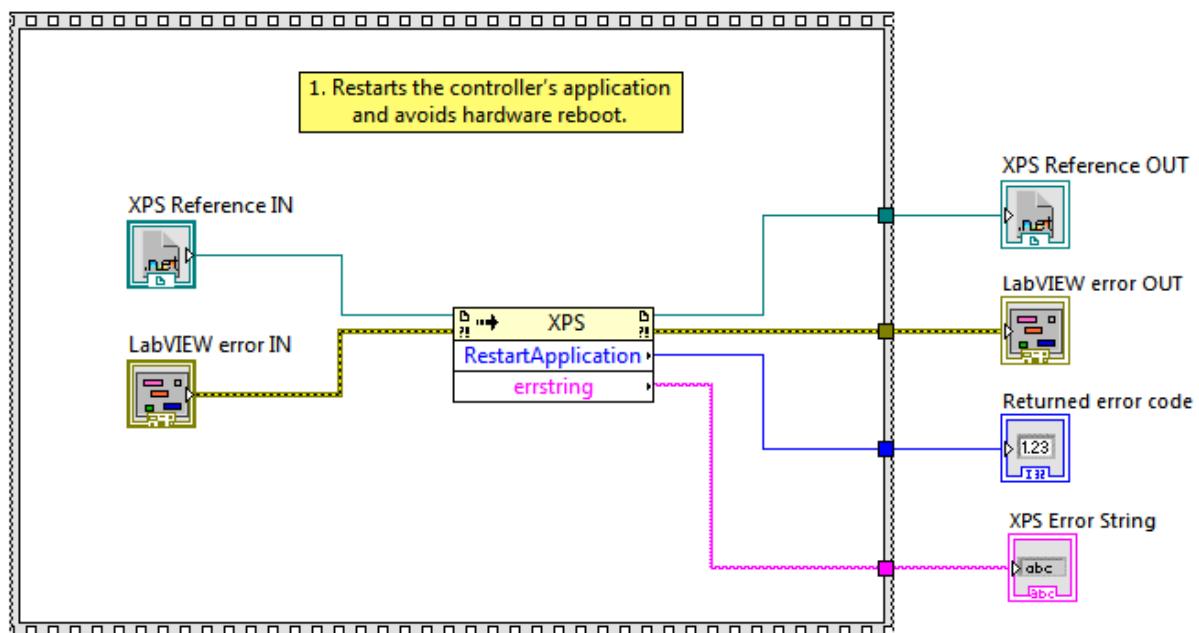
## 344. Restart Application VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Restarts the controller's application and avoids hardware reboot.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input

provides standard error in functionality.

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

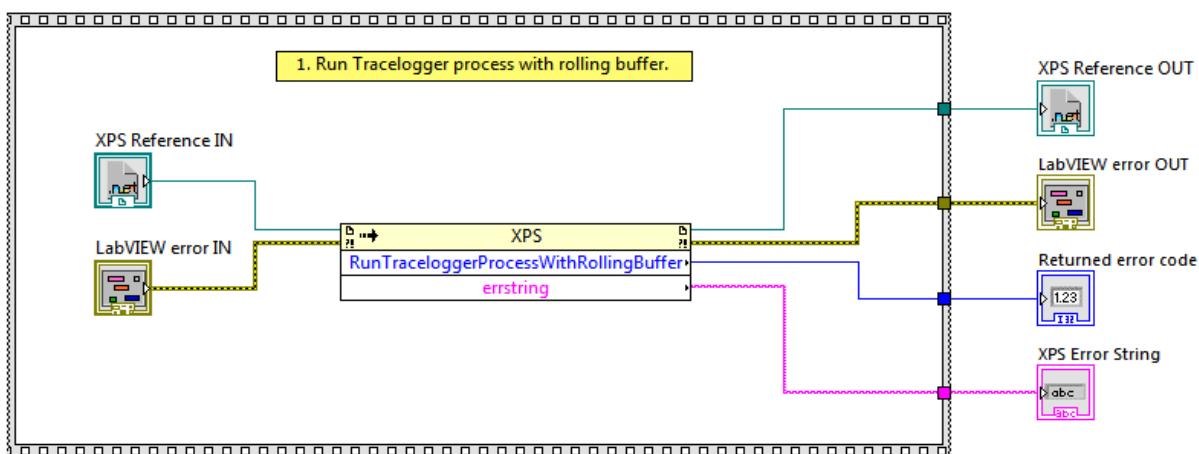
## 345. Run Trace logger Process With Rolling Buffer VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Run Trace logger process with rolling buffer.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

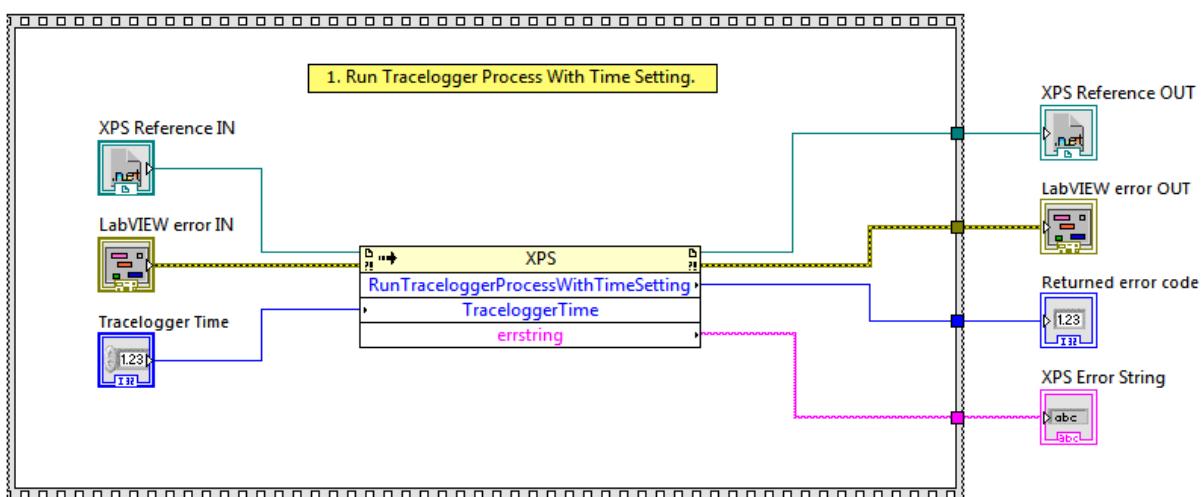
## 346. Run Trace logger Process With Time Setting VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Run Trace logger process with time setting.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Trace logger Time** Trace logger time

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

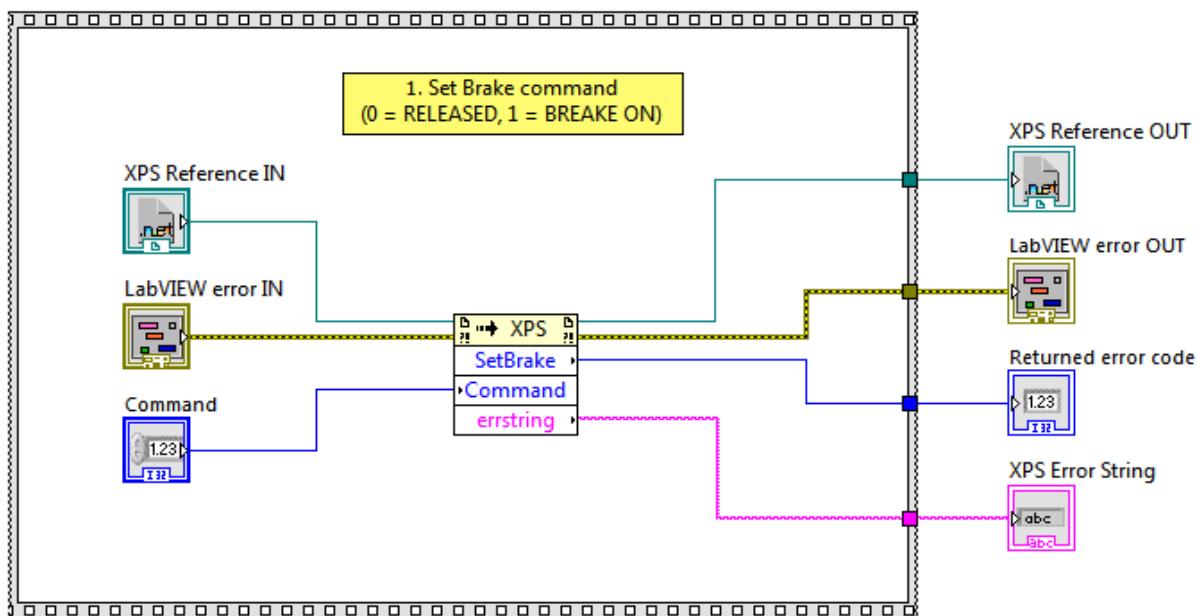
## 347. Set Brake VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set Brake command ( 0 = RELEASED, 1 = BREAK ON )

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Command** Command

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

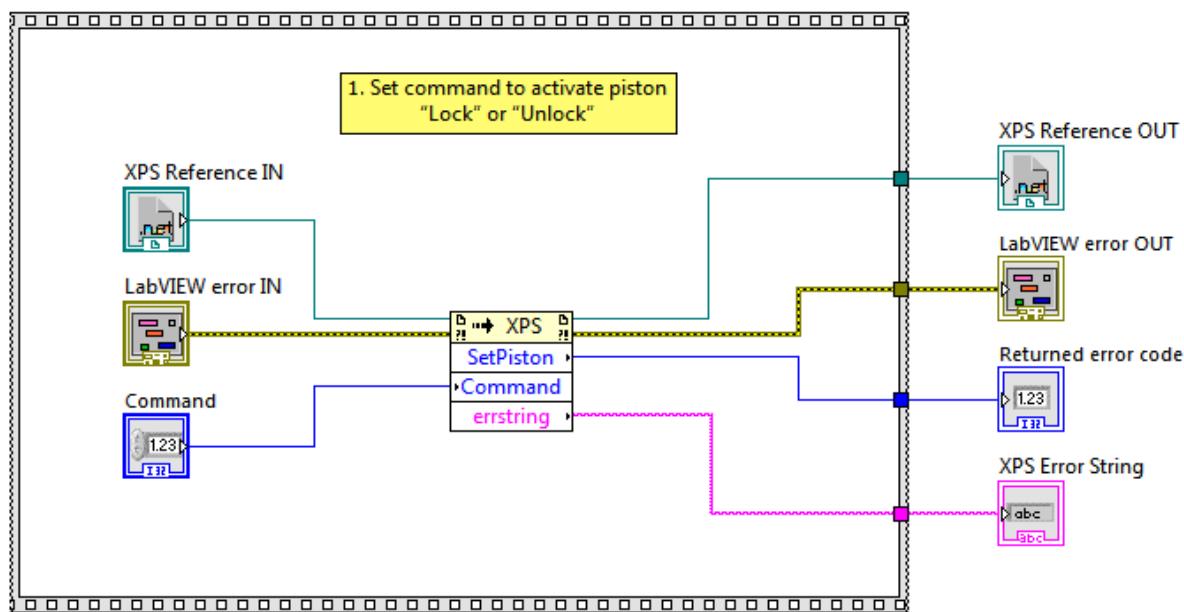
## 348. Set Piston VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set command to activate piston “Lock” or “Unlock”.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Command** Command

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

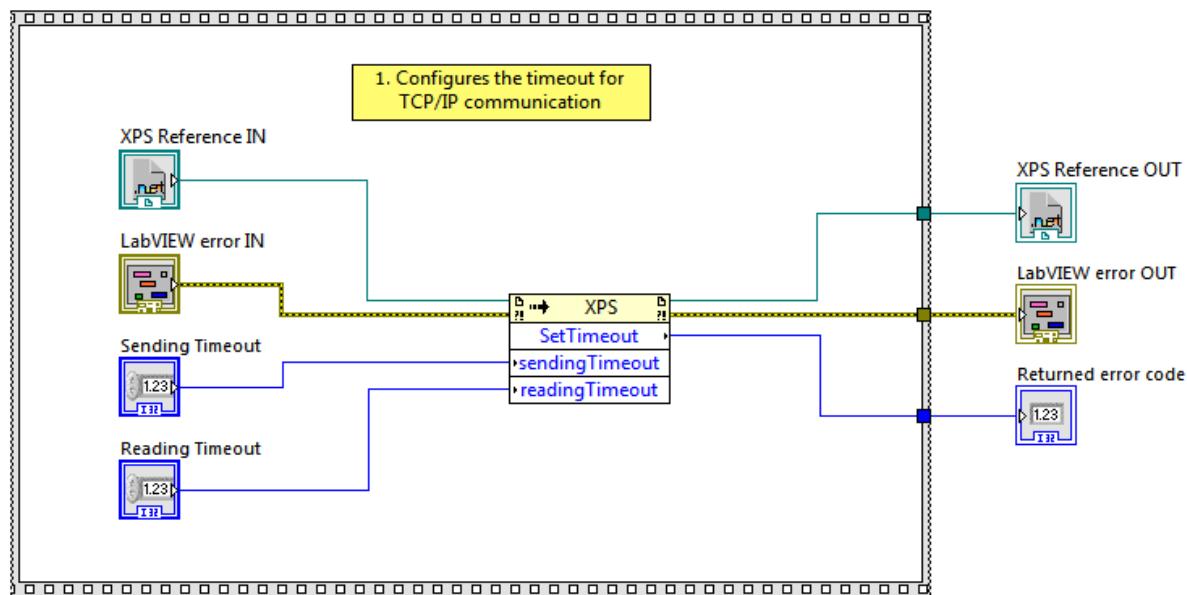
## 349. Set Timeout VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Configure the timeout for TCP/IP communication.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Sending Timeout** Sending timeout



**Reading Timeout** Reading timeout



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

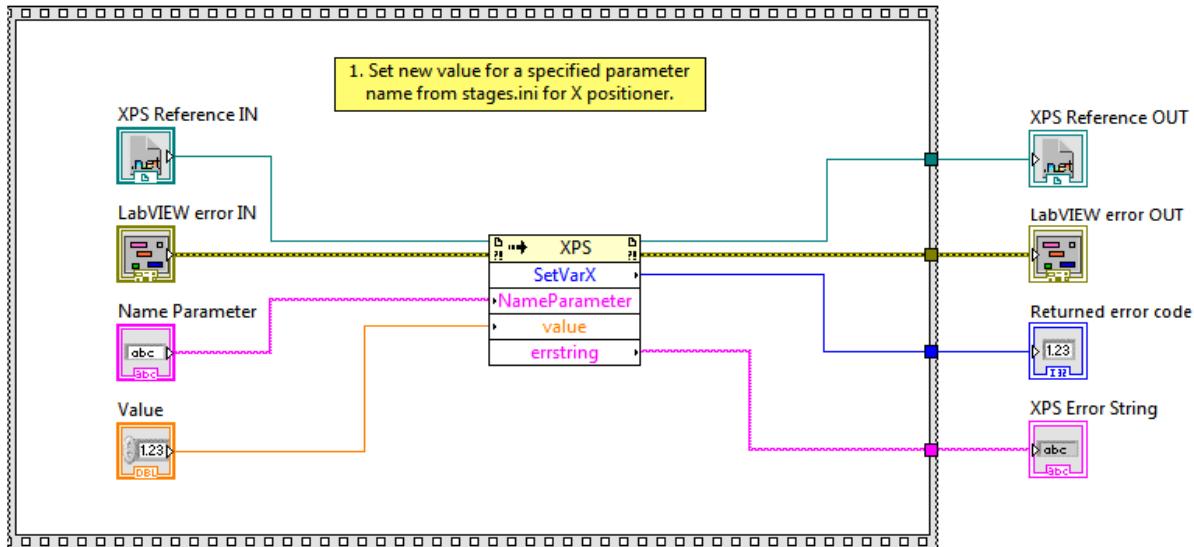
## 350. Set Var X VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set new value for a specified parameter name from stages.ini for X positioner.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Name Parameter** Stages.ini name parameter

**Value** value

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

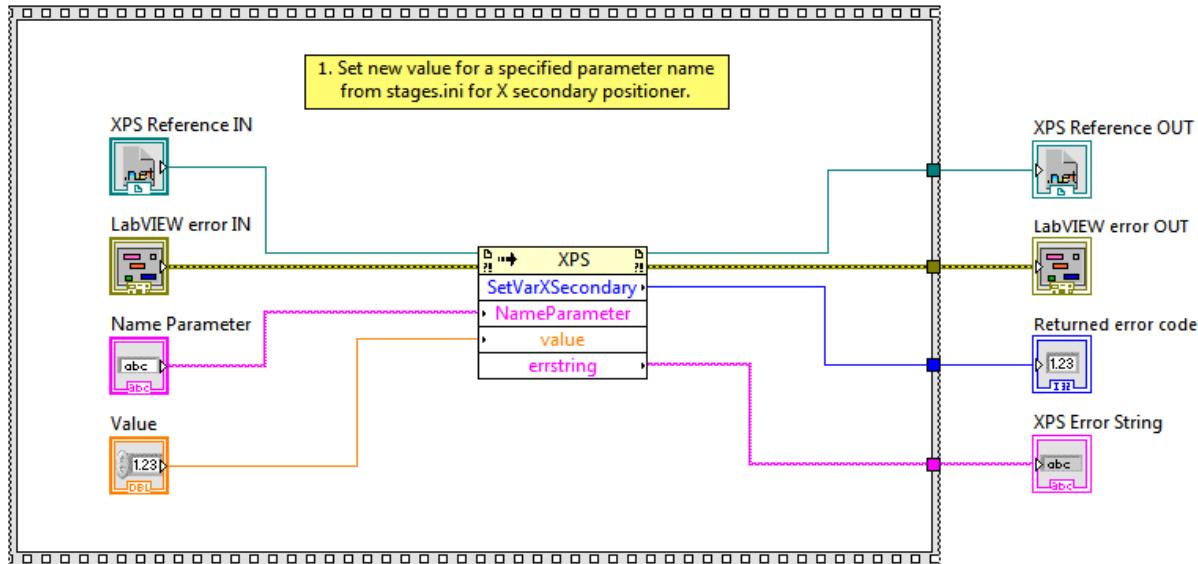
## 351. Set Var X Secondary VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set new value for a specified parameter name from stages.ini for X secondary positioner.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Name Parameter** Stages.ini name parameter

**Value** value

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

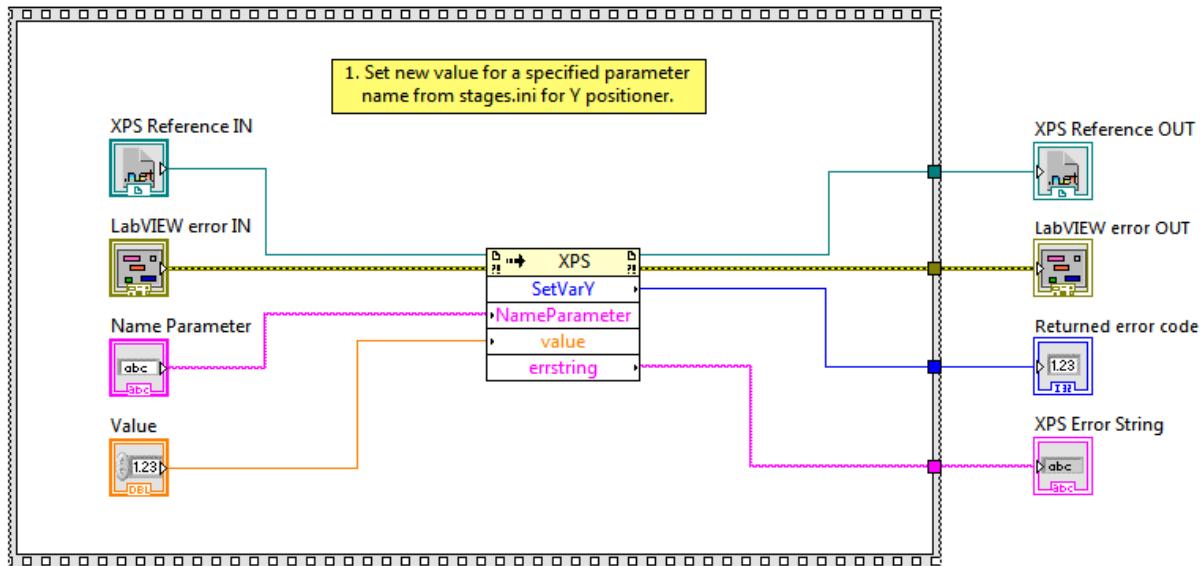
## 352. Set Var Y VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set new value for a specified parameter name from stages.ini for Y positioner.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Name Parameter** Stages.ini name parameter

**Value** value

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

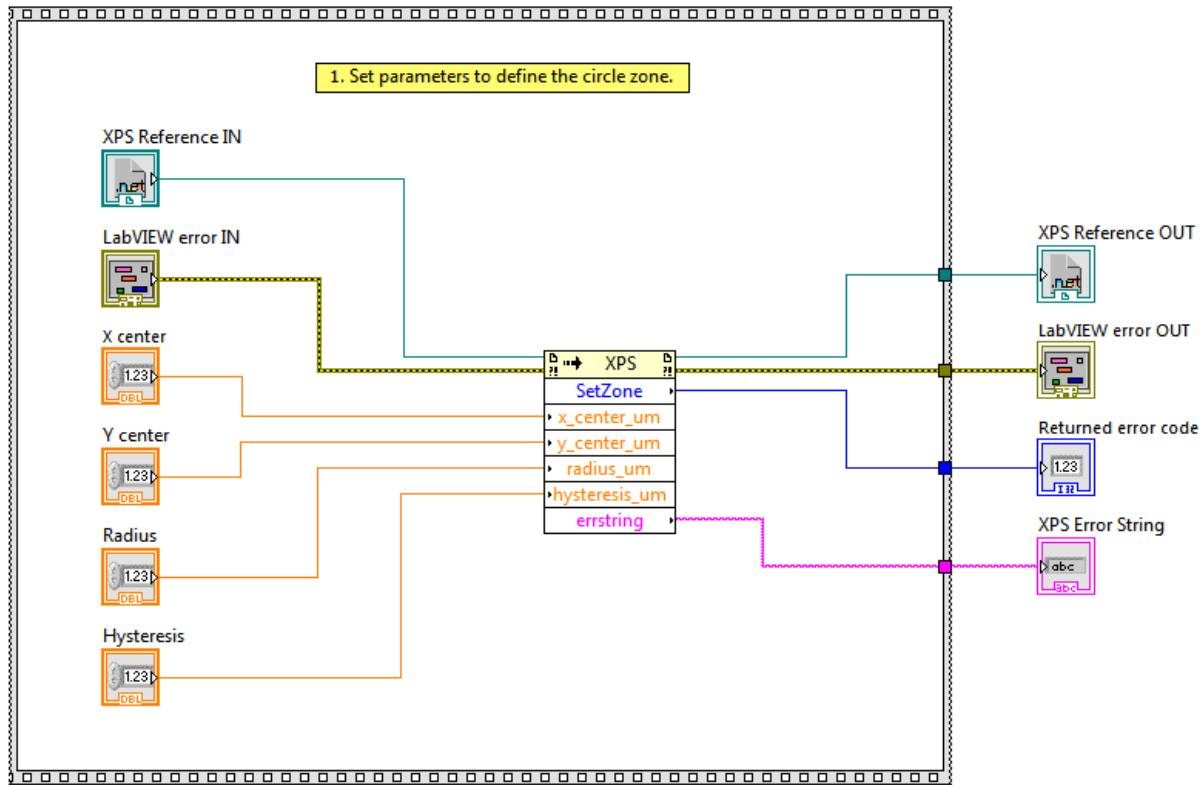
## 353. Set Zone VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set parameters to define the circle zone.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**X center** X center

**Y center** Y center

**Radius** Radius

**Hysteresis** Hysteresis

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

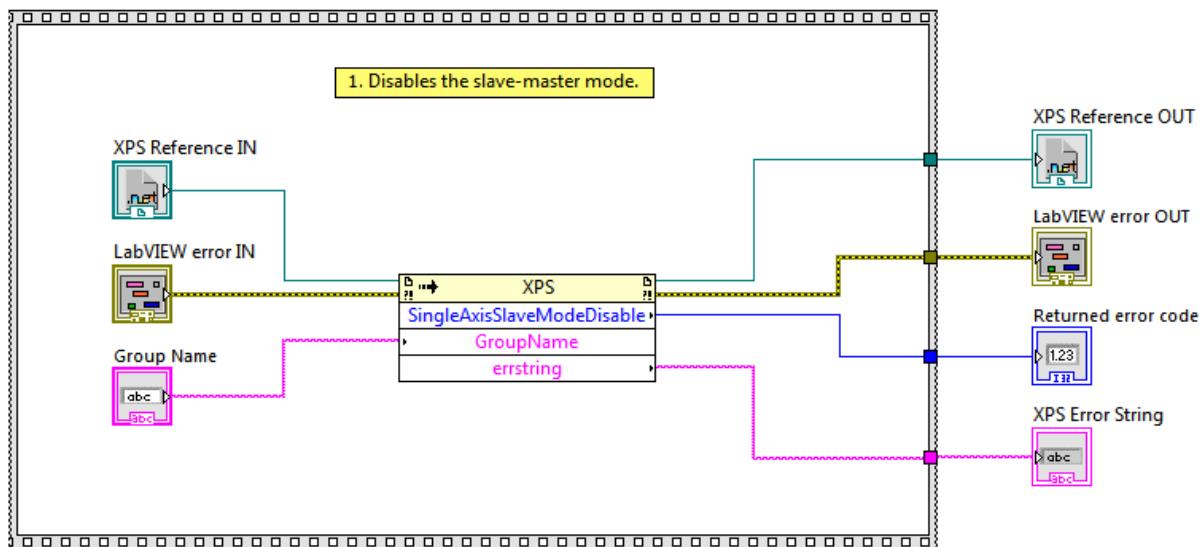
## 354. Single Axis Slave Mode Disable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Disables the slave-master mode.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group Name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

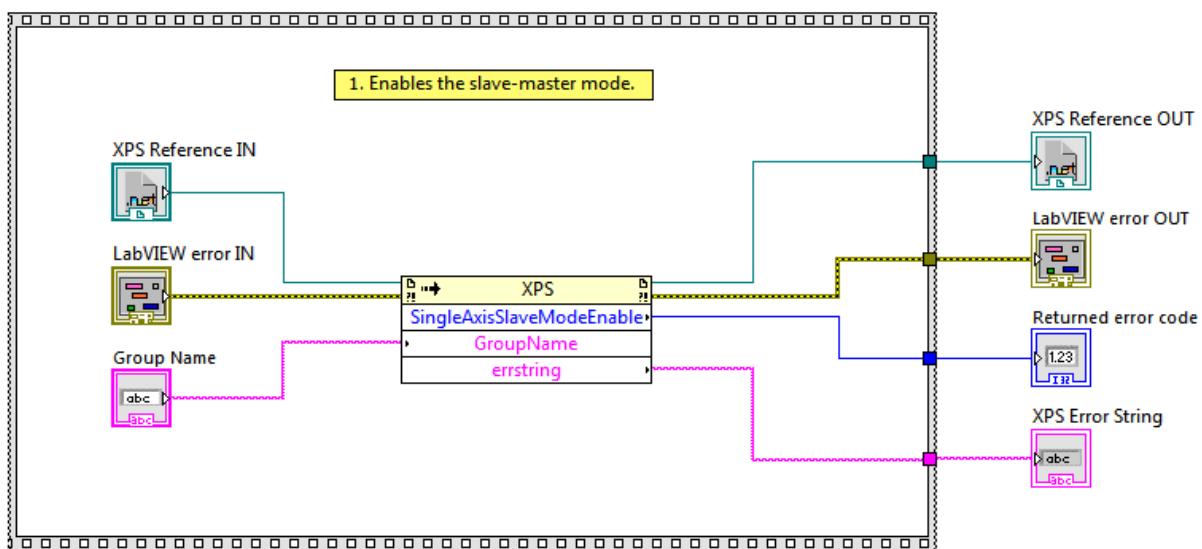
## 355. Single Axis Slave Mode Enable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Enables the slave-master mode.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group Name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

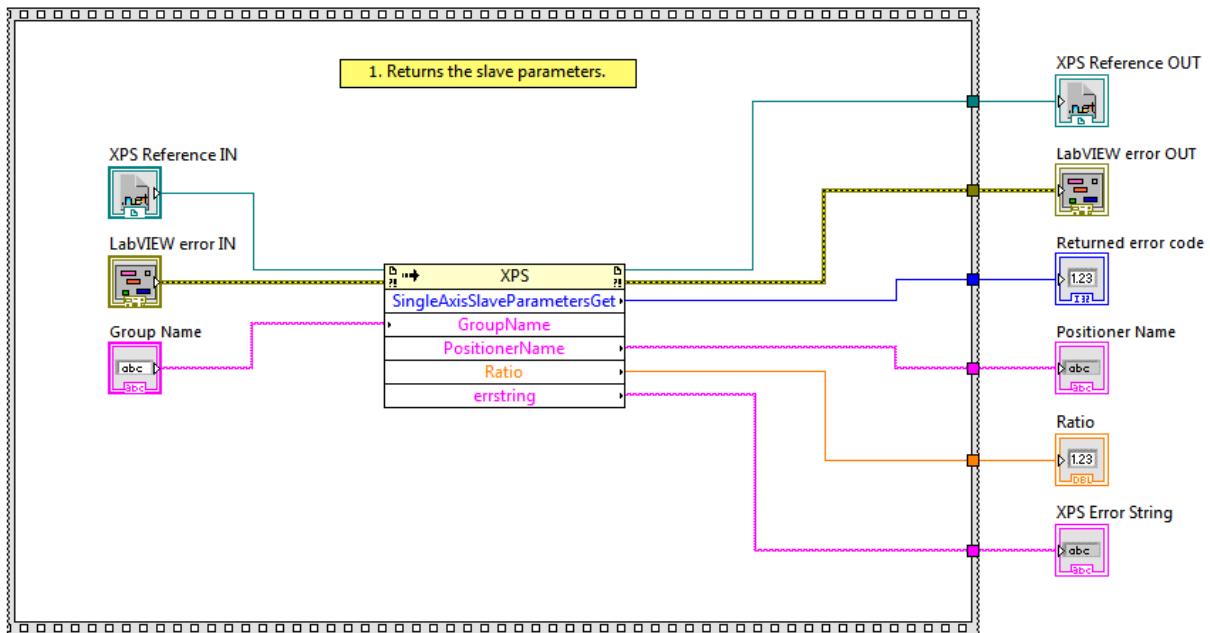
## 356. Single Axis Slave Parameters Get VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Return the slave parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Positioner Name** positioner name

**Ratio** Ratio

**XPS Error String** return error string from VI

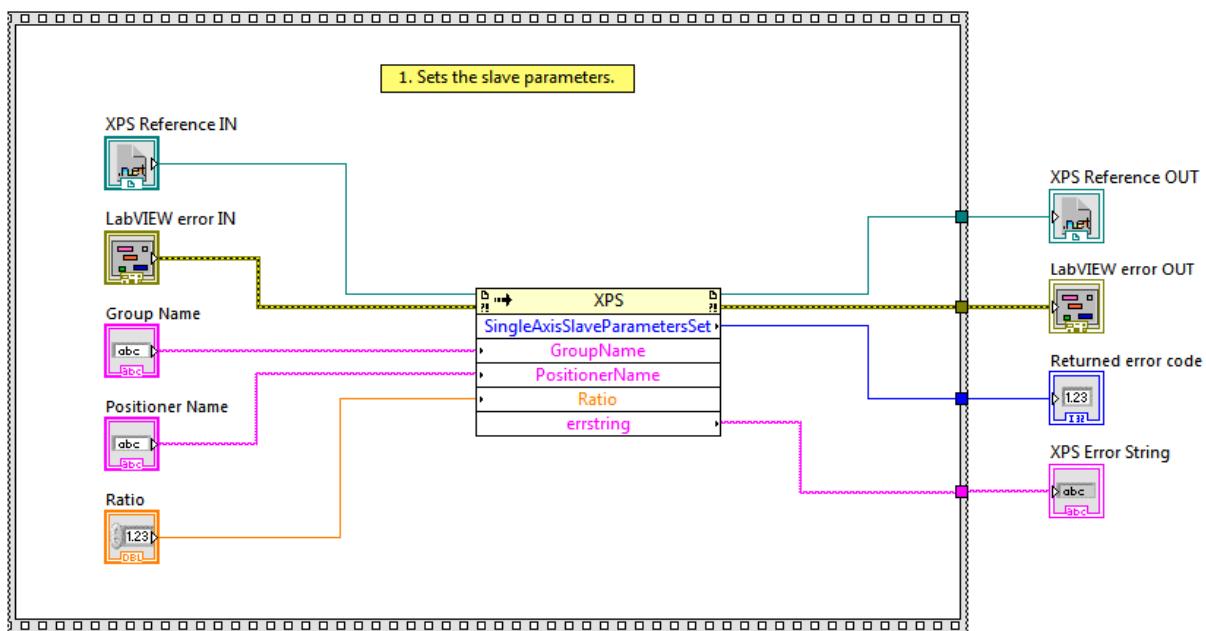
## 357. Single Axis Slave Parameters Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set the slave parameters.

### Screenshot



**[D] XPS Reference IN** is the XPS reference

**[E+I] LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[abc] Group Name** group name

**[abc] Positioner Name** positioner name

**[DBL] Ratio** ratio

**[D] XPS Reference OUT** returns XPS reference

**[E+I] LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

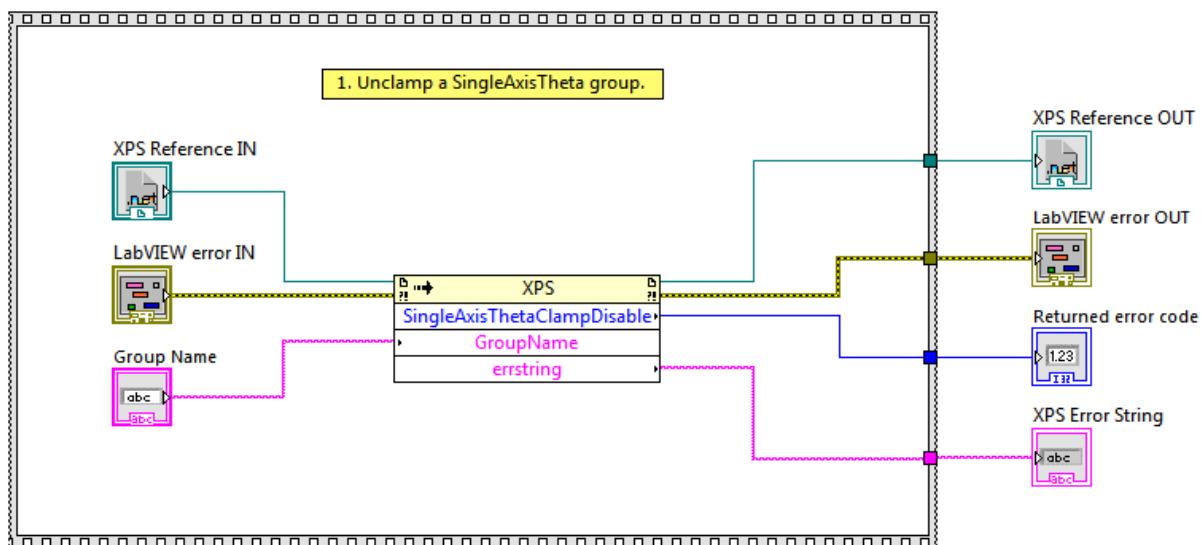
## 358. Single Axis Theta Clamp Disable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Unclamp a SingleAxisTheta group.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Group Name** group Name

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

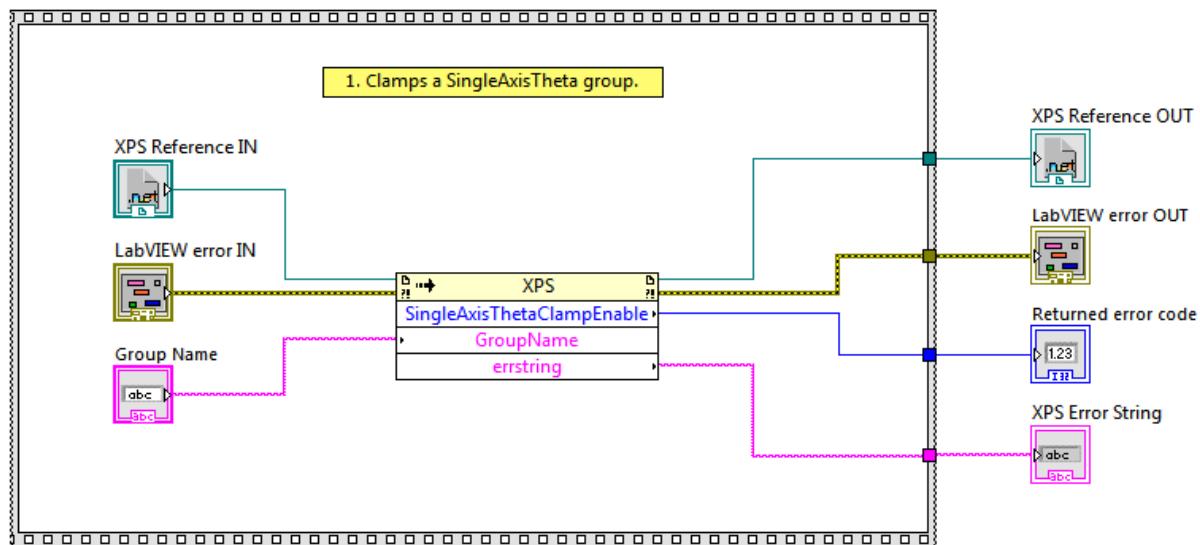
## 359. Single Axis Theta Clamp Enable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Clamp a SingleAxisTheta group.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group Name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

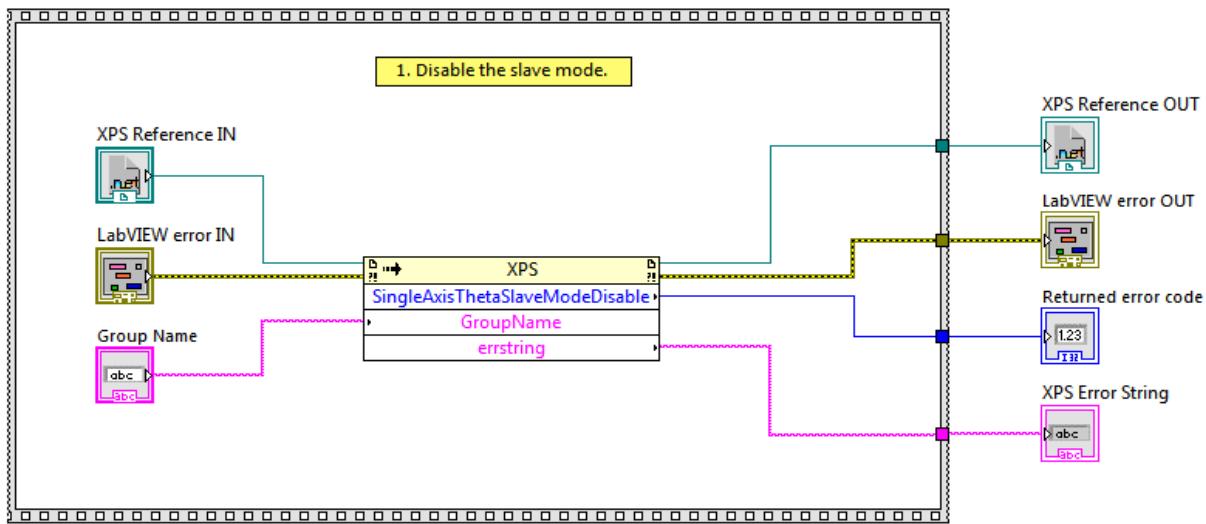
## 360. Single Axis Theta Slave Mode Disable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Disable the slave mode.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group Name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

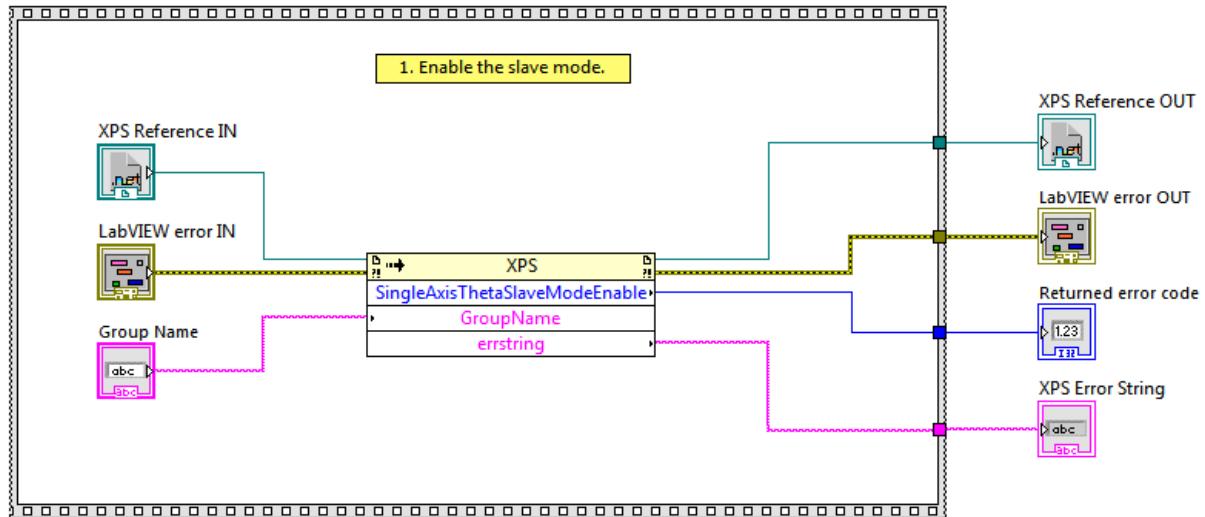
## 361. Single Axis Theta Slave Mode Enable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Enable the slave mode.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**GroupName** group Name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

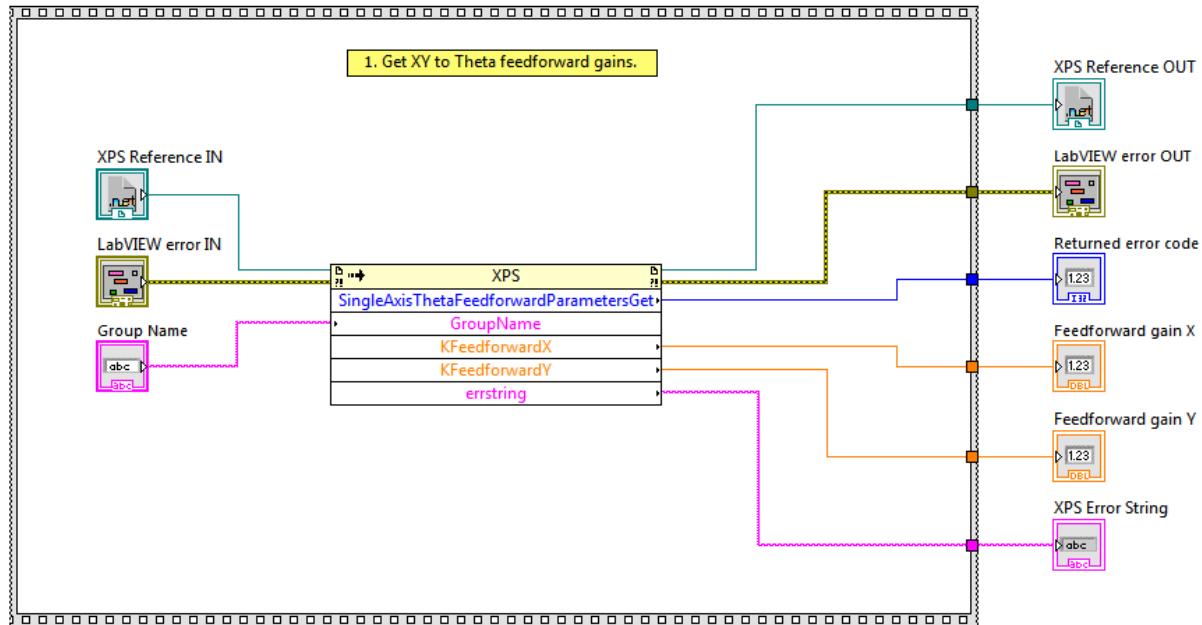
## 362. Single Axis Theta Feed forward Parameters Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get XY to theta feed forward gain.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Feedforward Gain X** Feed forward gain X

**Feedforward Gain Y** Feed forward gain Y

**XPS Error String** return error string from VI

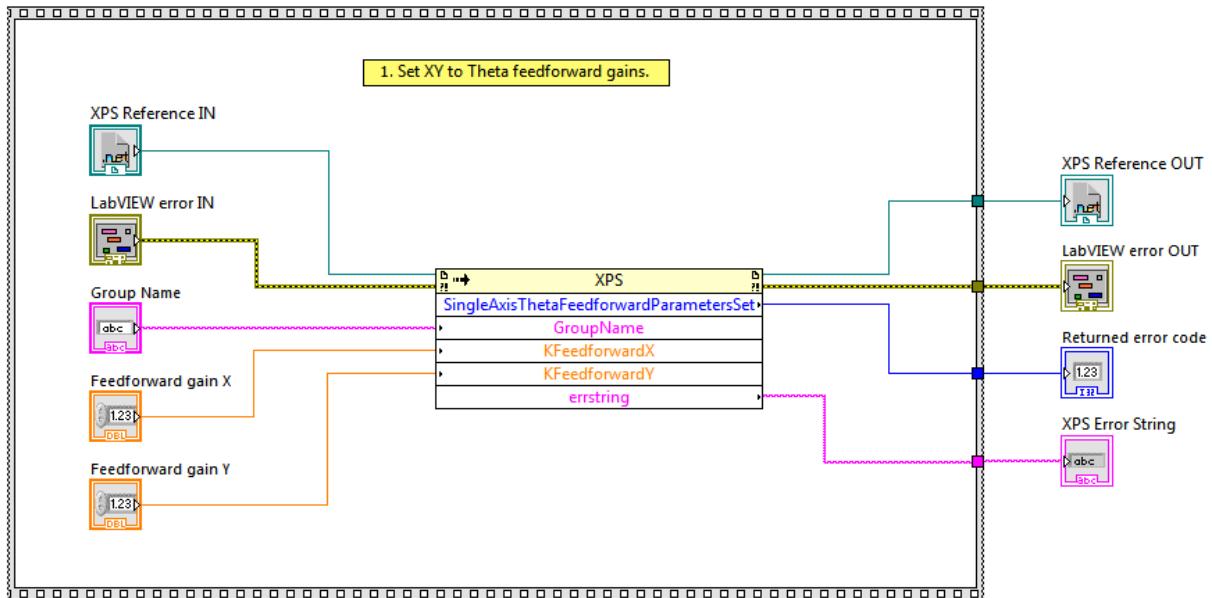
## 363. Single Axis Theta Feed forward Parameters Set VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Set XY to theta feed forward gain.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Group Name** group name



**Feedforward gain X** Feed forward gain X



**Feedforward gain Y** Feed forward gain Y



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

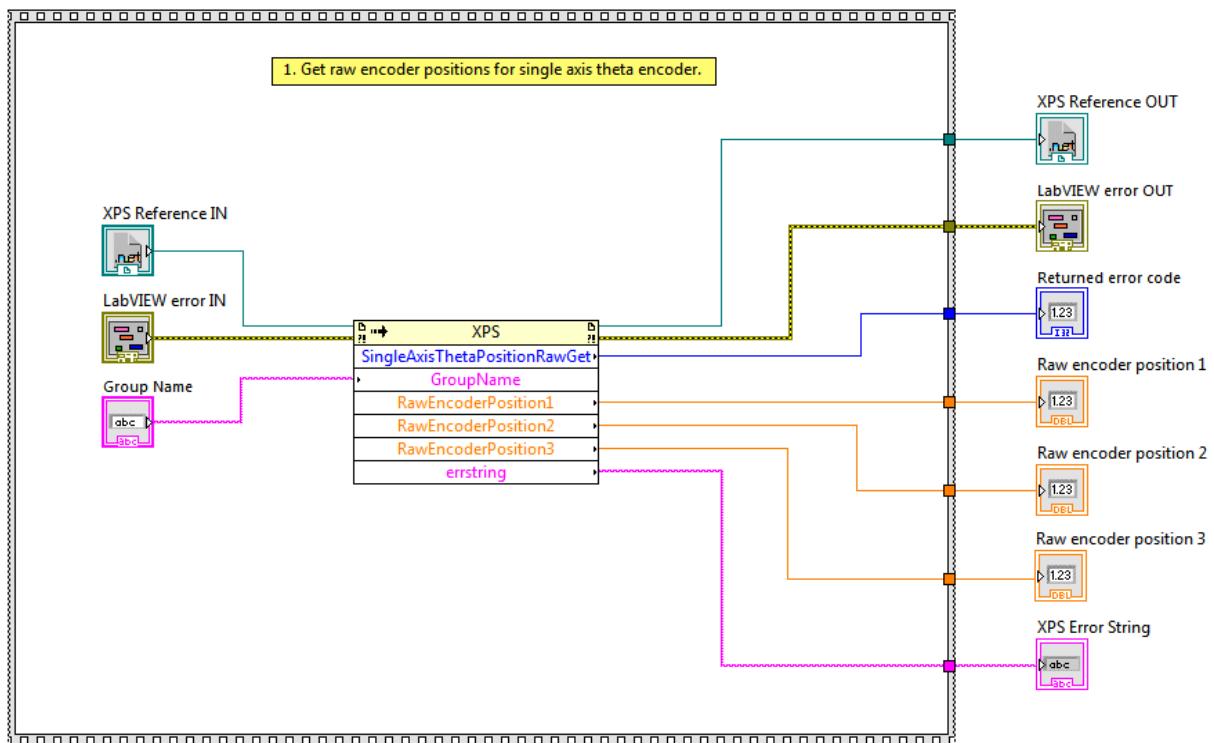
## 364. Single Axis Theta Position Raw Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get raw encoder positions for single axis theta encoder.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Raw Encoder Position 1** Raw encoder position 1

 **Raw Encoder Position 2** Raw encoder position 2

 **Raw Encoder Position 3** Raw encoder position 3

 **XPS Error String** return error string from VI

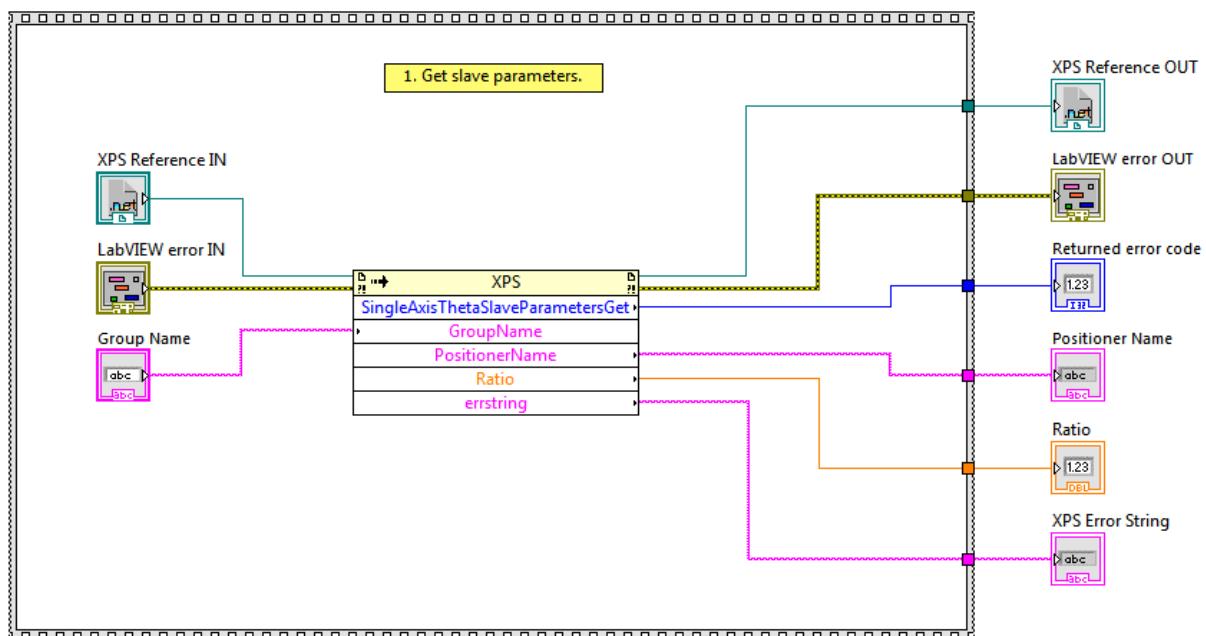
## 365. Single Axis Theta Slave Parameters Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get slave parameters.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Group name** group name

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **Positioner Name** positioner name

 **Ratio** Ratio

 **XPS Error String** return error string from VI

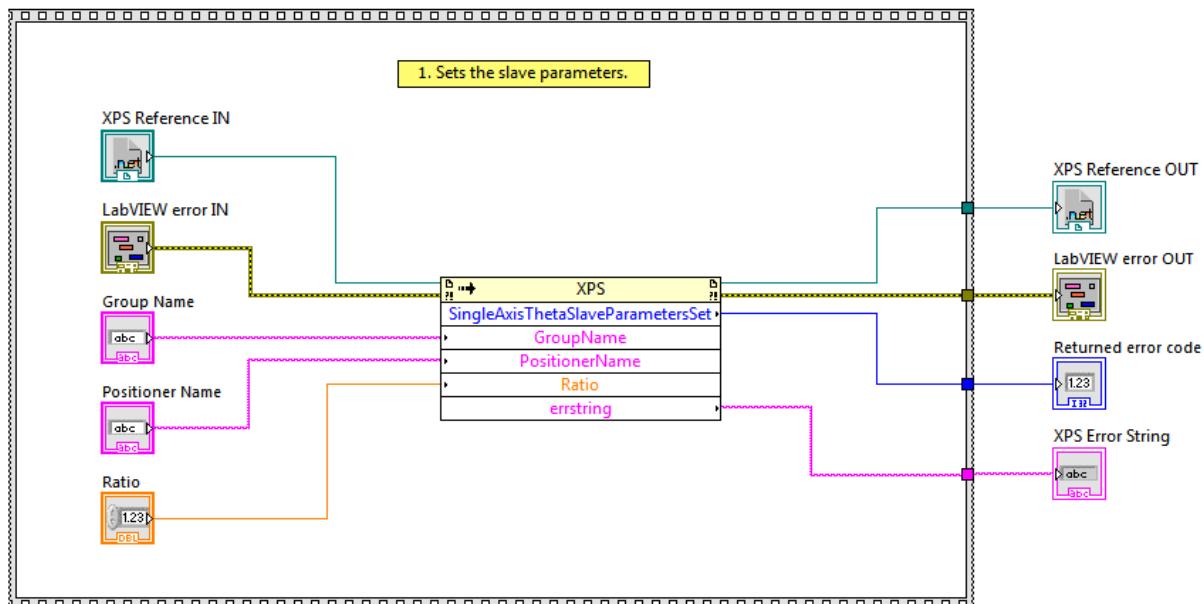
## 366. Single Axis Theta Slave Parameters Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set slave parameters.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group Name** group name

**Positioner Name** positioner name

**Ratio** ratio

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

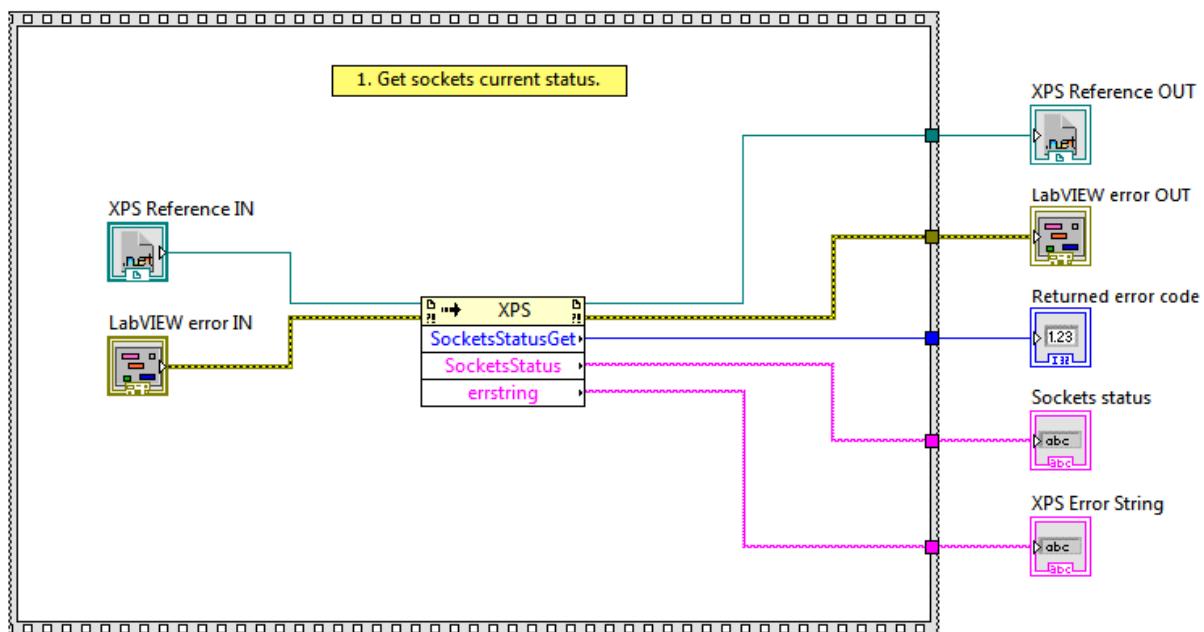
## 367. Sockets Status Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get sockets current status.

### Screenshot



- XPS Reference IN** is the XPS reference
- LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.
- XPS Reference OUT** returns XPS reference
- LabVIEW error OUT** contains error information. This output provides standard error out functionality.
- Returned Error Code** Returns function error code
- Socket Status** Socket status
- XPS Error String** return error string from VI

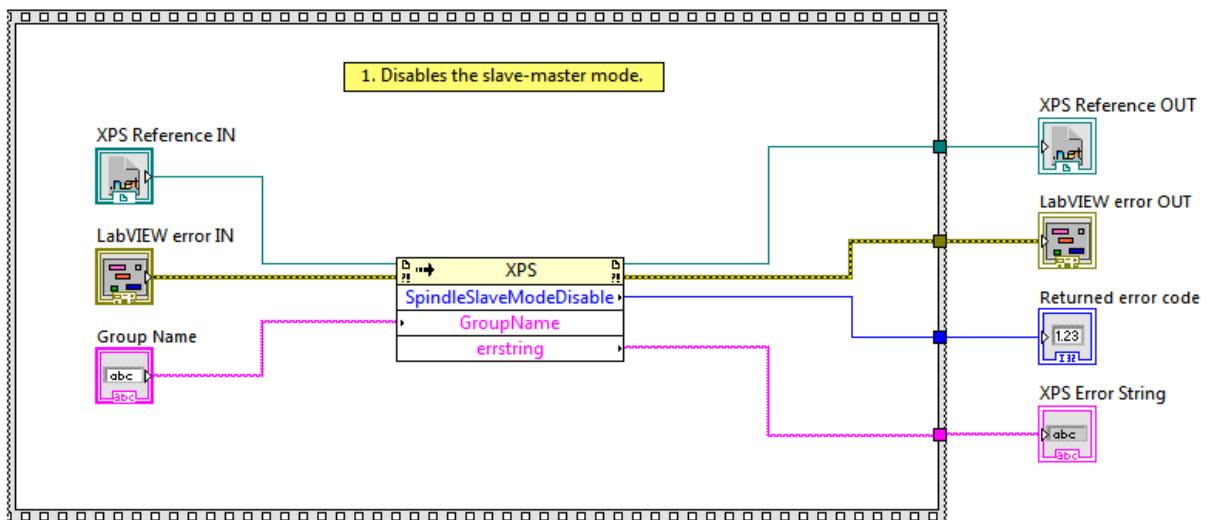
## 368. Spindle Slave Mode Disable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Disables the slave-master mode.

### Screenshot



- XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Group name** group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

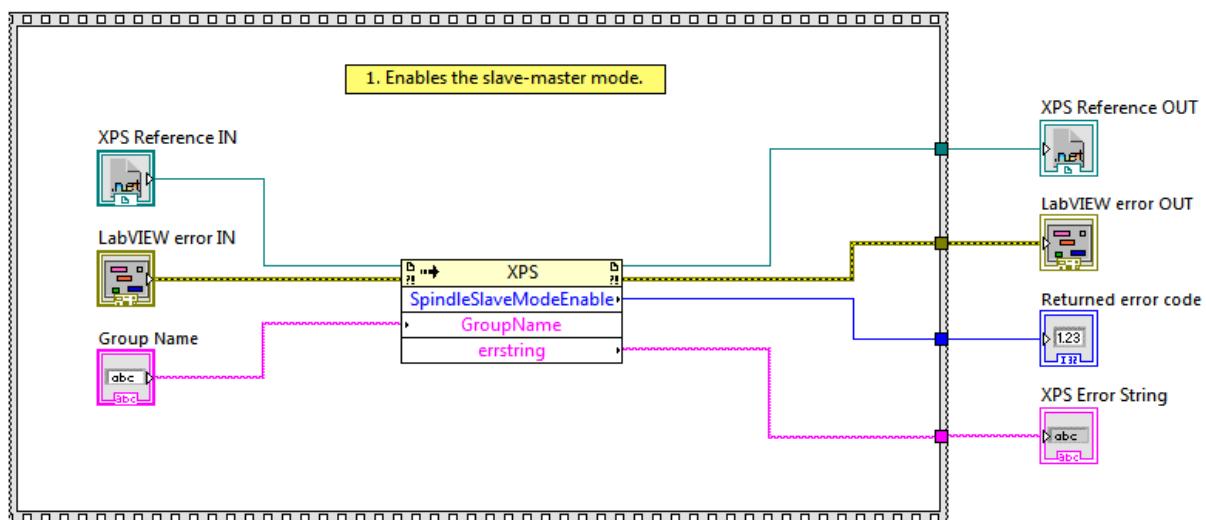
## 369. Spindle Slave Mode Enable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Enables the slave-master mode.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Group name** group name

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

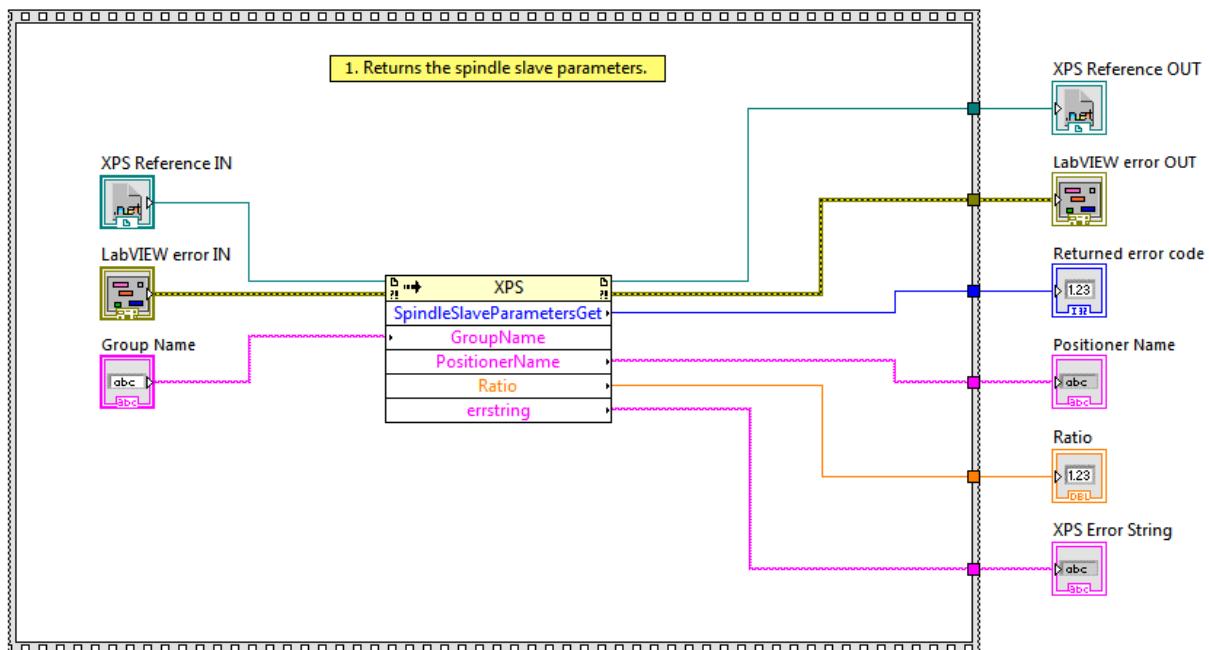
## 370. Spindle Slave Parameters Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Return the spindle slave parameters.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input

provides standard error in functionality.

**Group name** group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Positioner Name** Positioner name

**Ratio** Ratio

**XPS Error String** return error string from VI

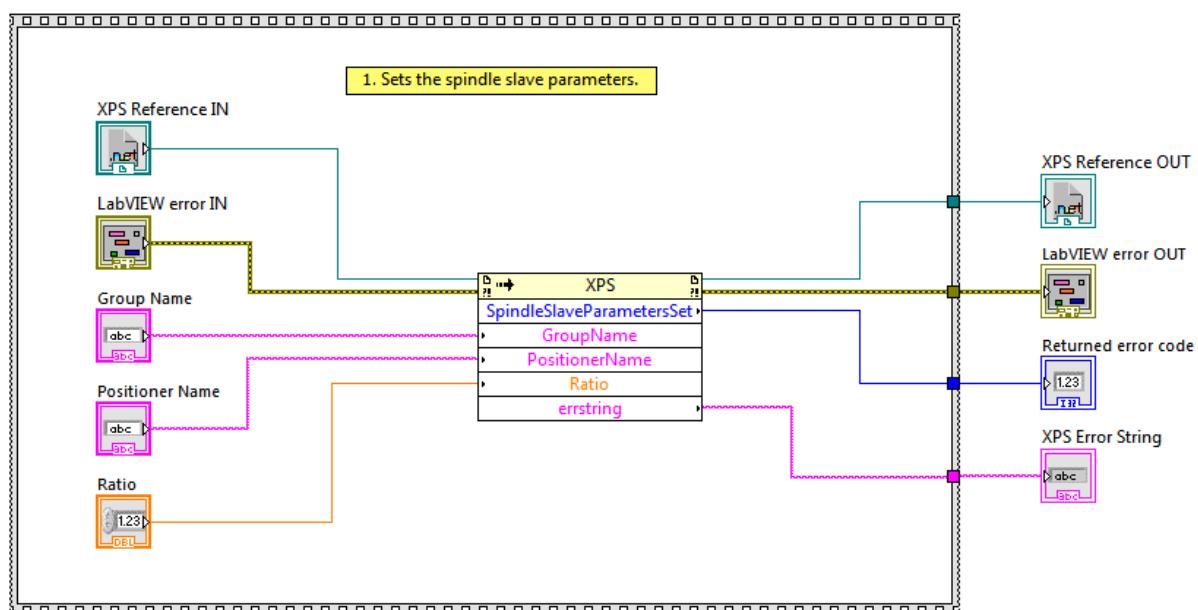
## 371. Spindle Slave Parameters Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set the spindle slave parameters.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Group Name** group name

 **Positioner Name** positioner name

 **Ratio** ratio

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

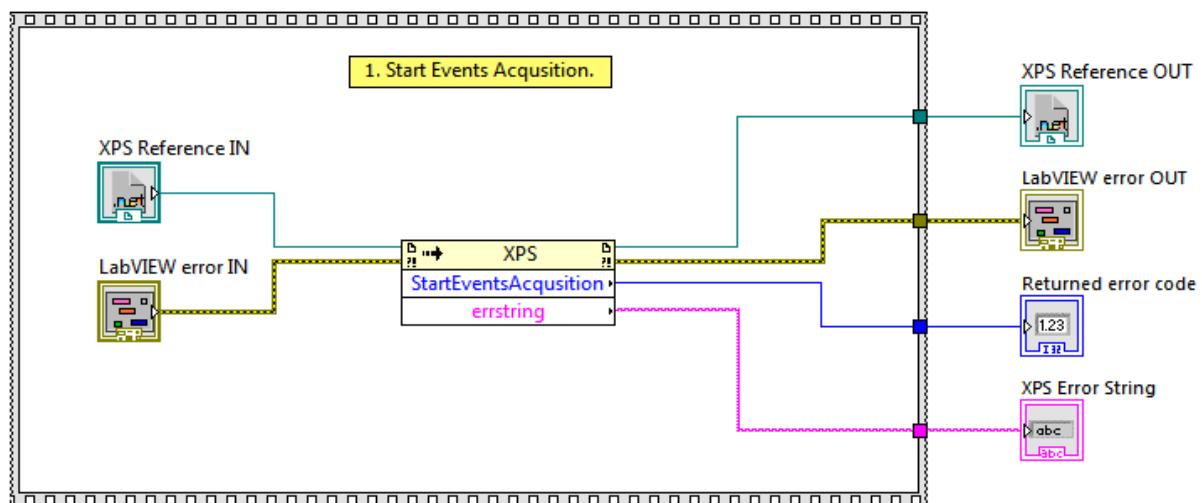
## 372. Start Events Acquisition VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Start events acquisition.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

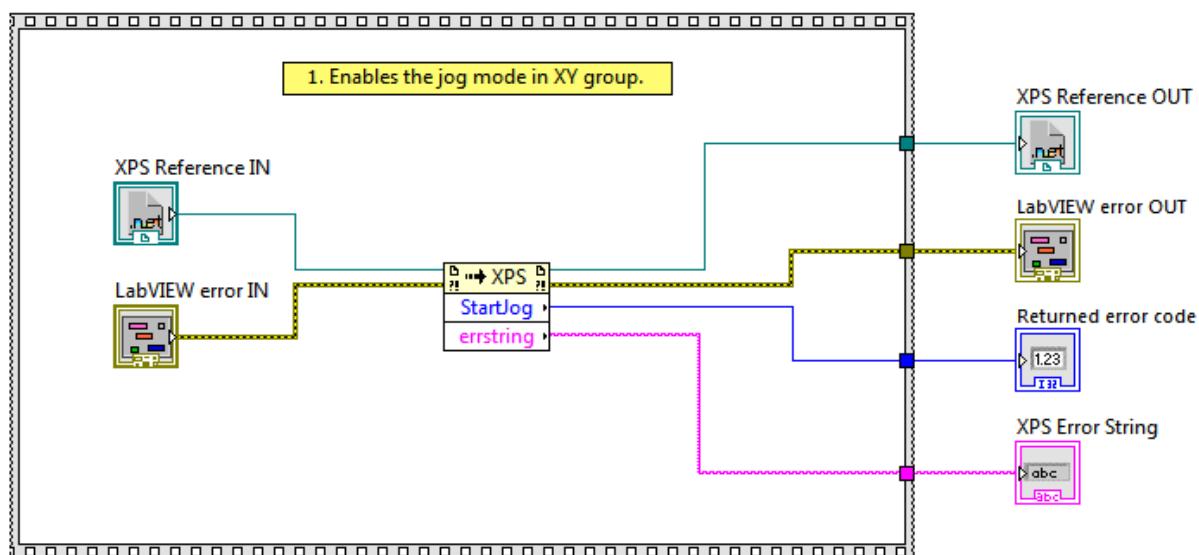
## 373. Start Jog VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Enables the jog mode in XY group.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

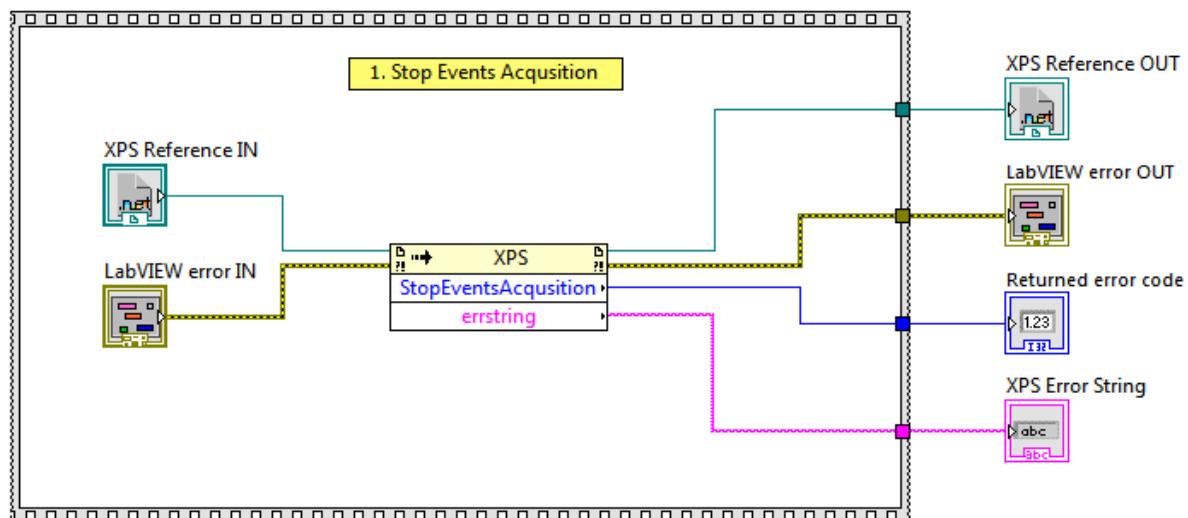
## 374. Stop Events Acquisition VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Stop events acquisition.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

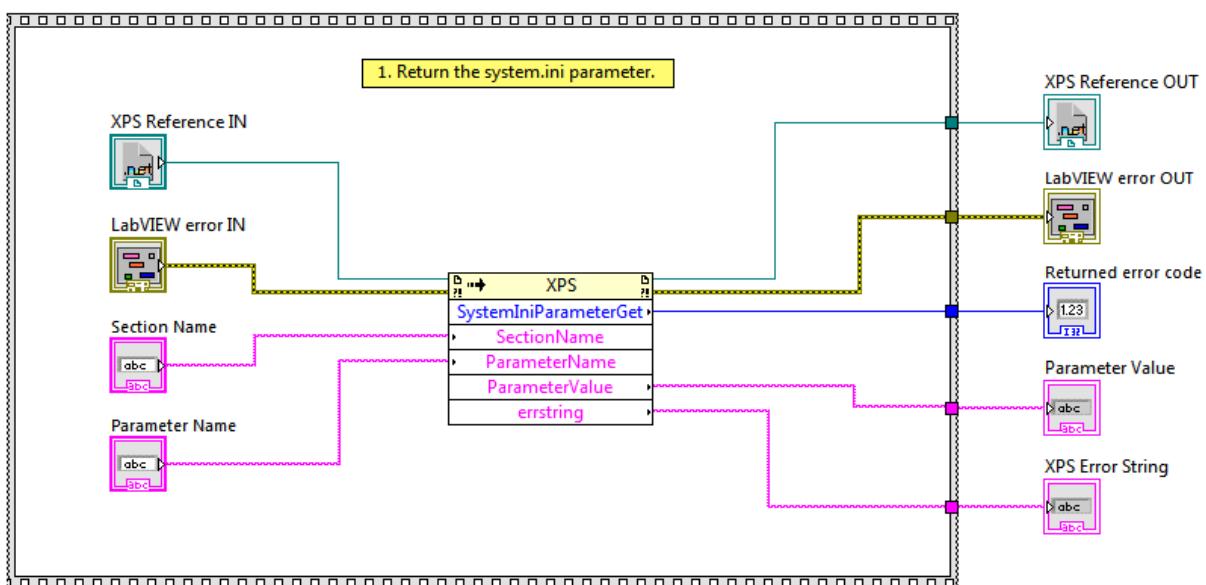
## 375. System.ini Parameter Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Return the system.ini parameter.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Section Name** Section name

 **Parameter Name** Parameter name

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **Parameter Value** Parameter value

 **XPS Error String** return error string from VI

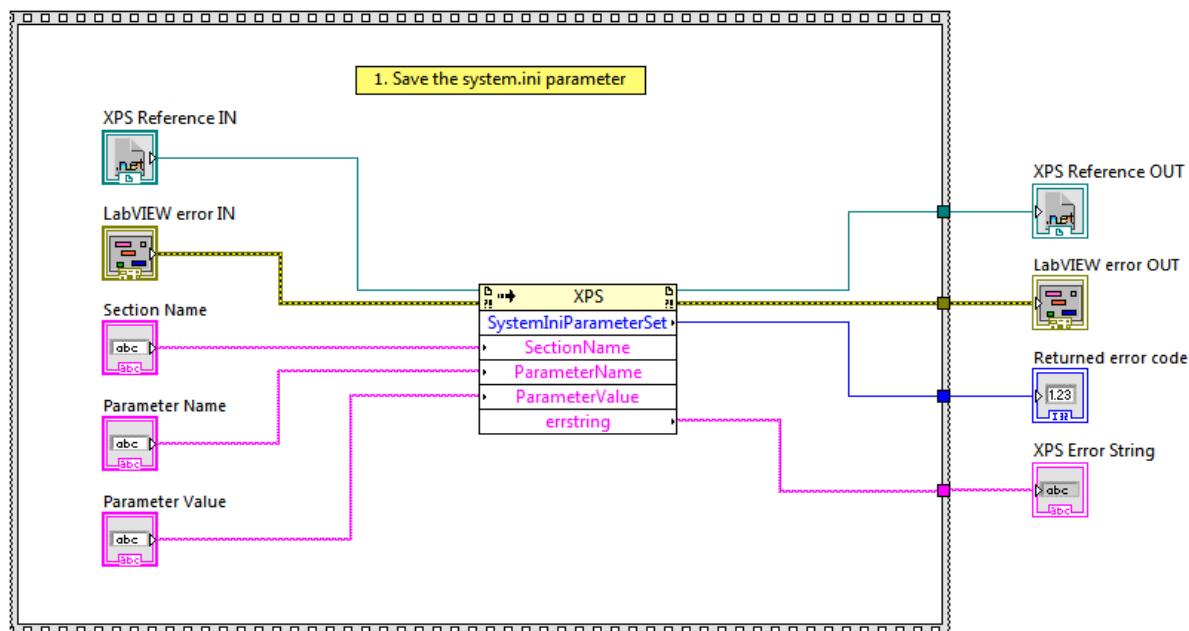
## 376. System.ini Parameter Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Save the system.ini parameter.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Section Name** section name

 **Parameter Name** parameter name

 **Parameter Value** Parameter value

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

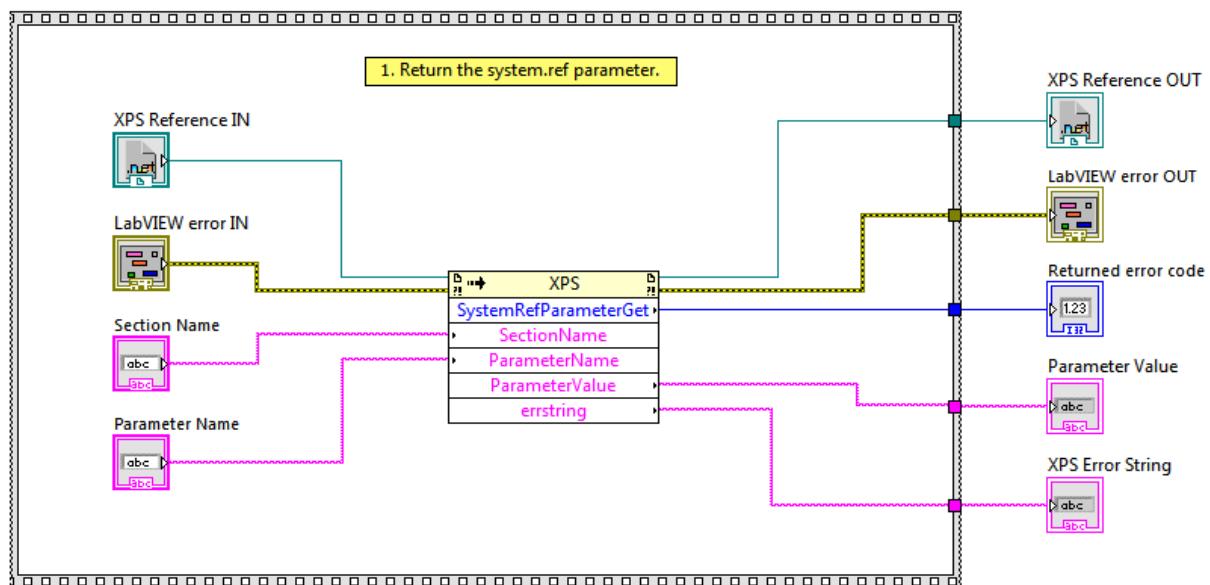
## 377. System.ref Parameter Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Return the system.ref parameter.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Section Name** Section name

 **Parameter Name** Parameter name

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **Parameter Value** Parameter value

 **XPS Error String** return error string from VI

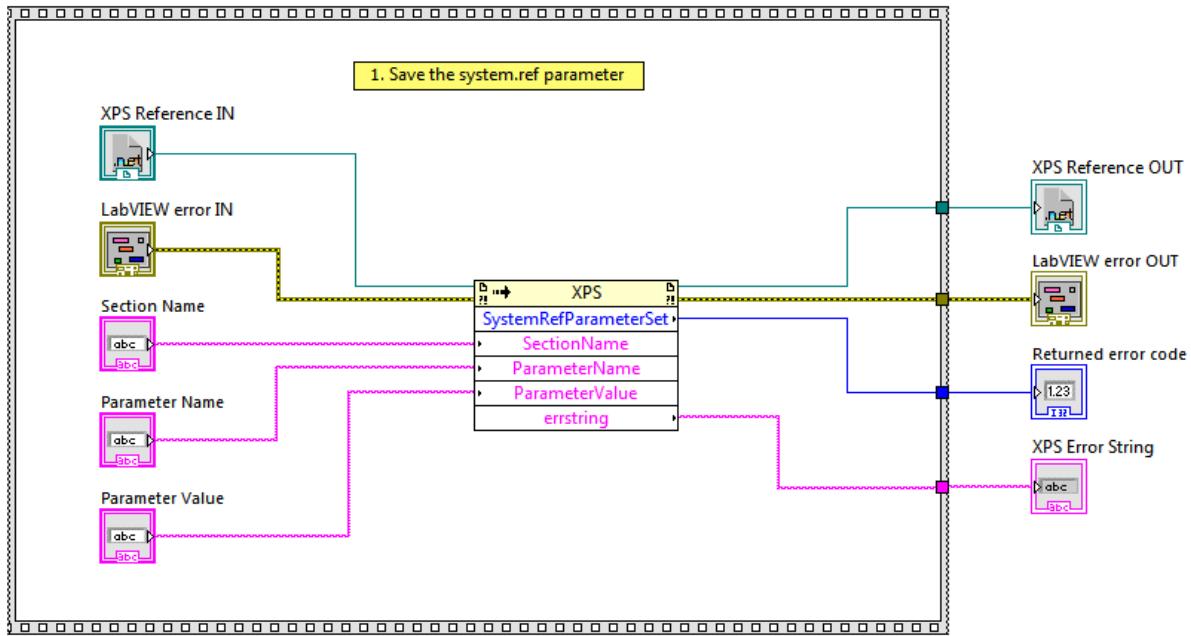
## 378. System.ref Parameter Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Save the system.ref parameter.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Section Name** section name

**Parameter Name** parameter name

**Parameter Value** Parameter value

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

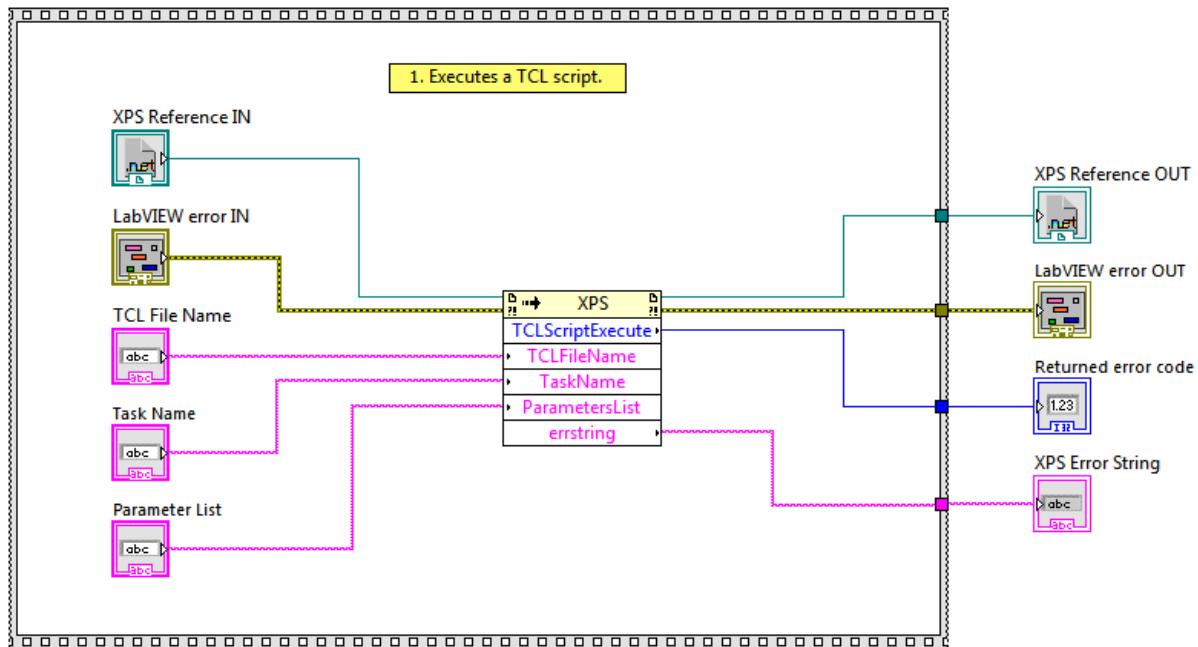
## 379. TCL Script Execute VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Executes a TCL script.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**TCL File Name** TCL file name

**Task Name** Task name

**Parameter List** Parameter list

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

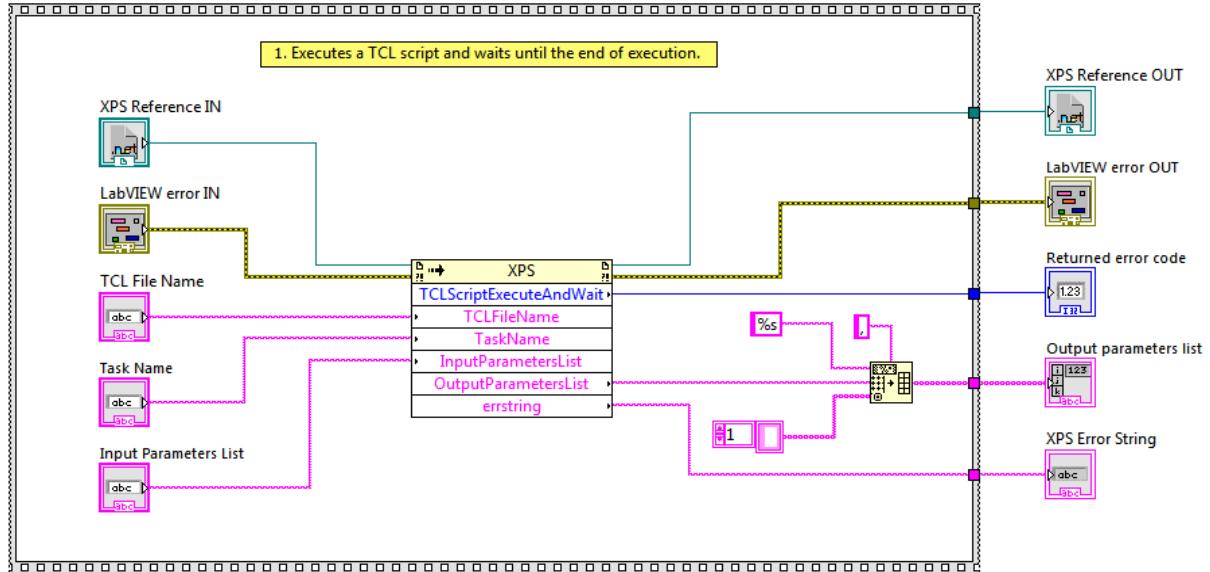
## 380. TCL Script Execute And Wait VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Executes a TCL script and waits until the end of execution.

## Screenshot



**[abc] XPS Reference IN** is the XPS reference

**[abc] LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[abc] TCL File Name** TCL file name

**[abc] Task Name** Task name

**[abc] Input Parameter List** Input parameter list

**[abc] XPS Reference OUT** returns XPS reference

**[abc] LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[abc] Returned Error Code** Returns function error code

**[abc] Output Parameter List** output parameter list

**[abc] XPS Error String** return error string from VI

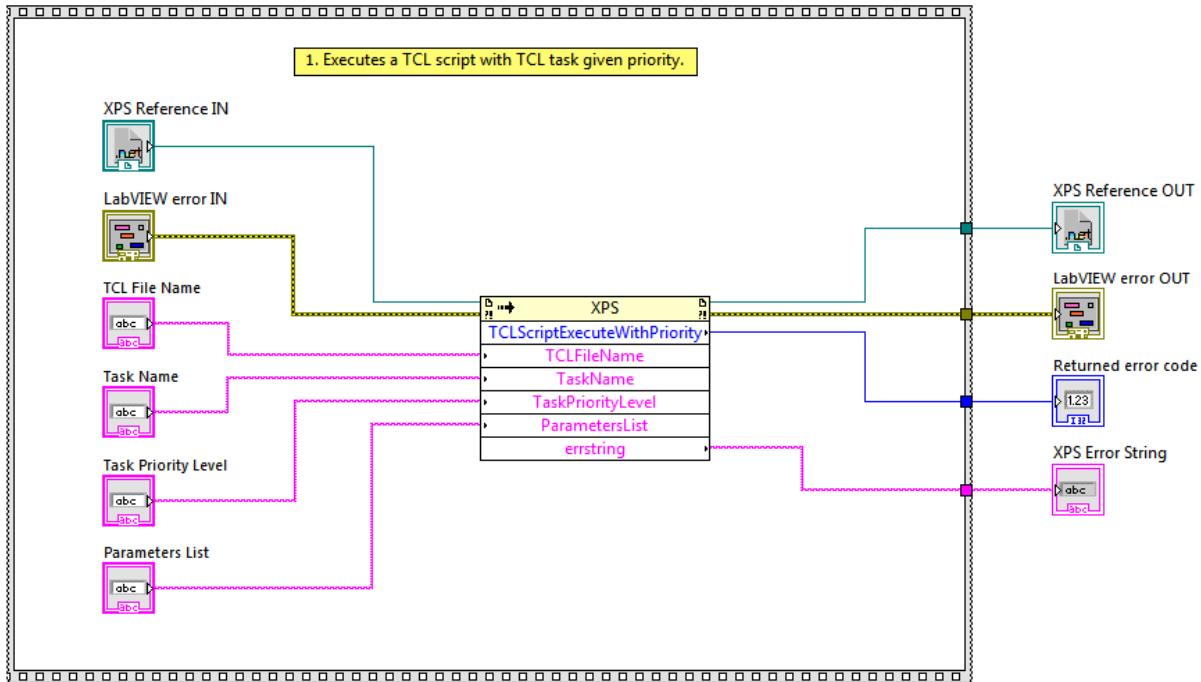
## 381. TCL Script Execute With Priority VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Executes a TCL script with TCL task given priority.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**TCL File Name** TCL file name

**Task Name** task name

**Task Priority Level** task priority level

**Parameter List** Parameter list

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

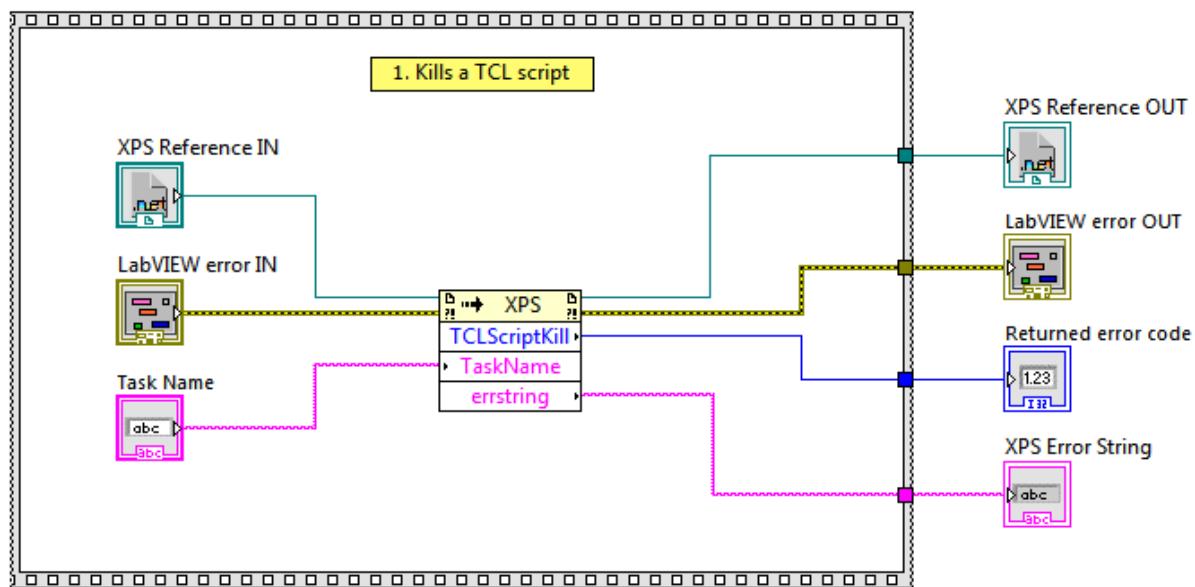
## 382. TCL Script Kill VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Kills a TCL script.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Task name** Task name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

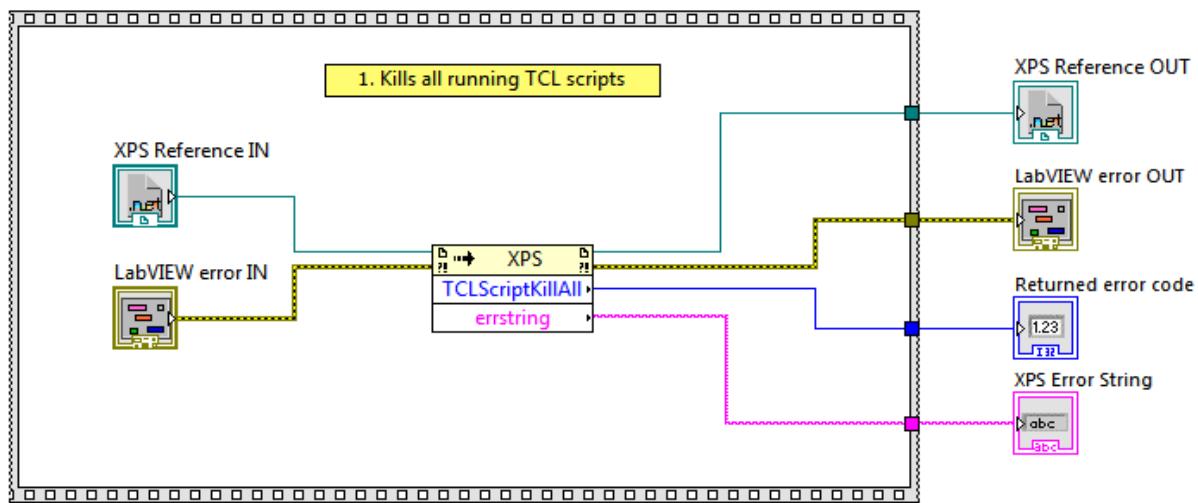
## 383. TCL Script Kill All VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Kills a TCL script.

### Screenshot



**[D] XPS Reference IN** is the XPS reference

**[E] LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[D] XPS Reference OUT** returns XPS reference

**[E] LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[D] Returned Error Code** Returns function error code

**[E] XPS Error String** return error string from VI

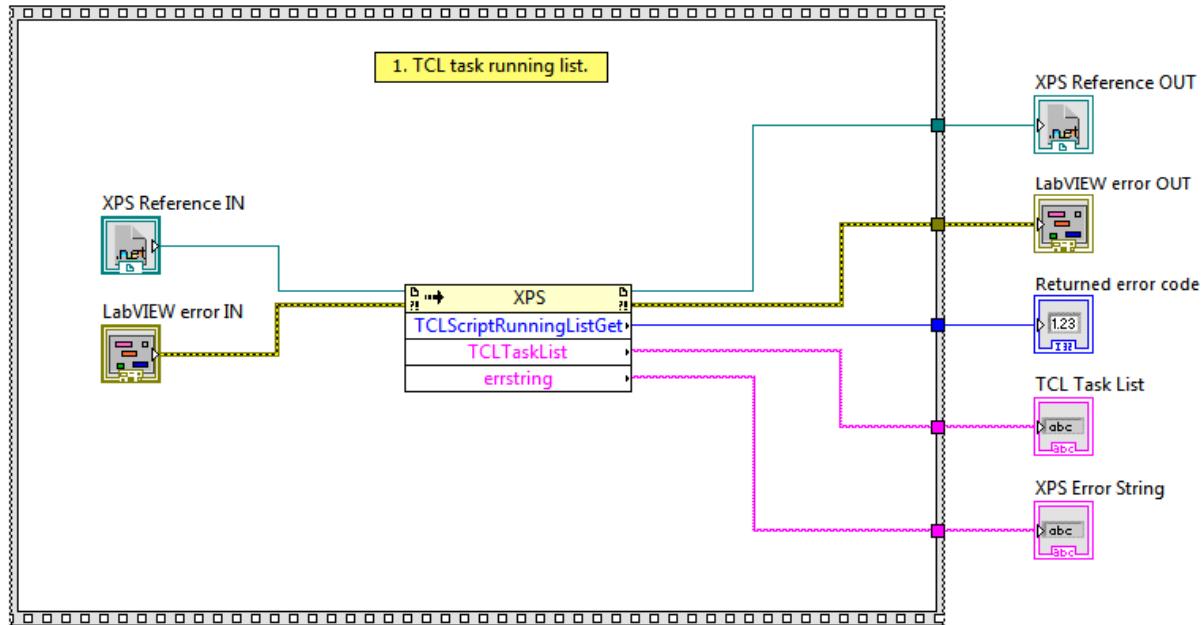
## 384. TCL Script Running List Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get TCL task running list.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**TCL Task List Status** TCL task list

**XPS Error String** return error string from VI

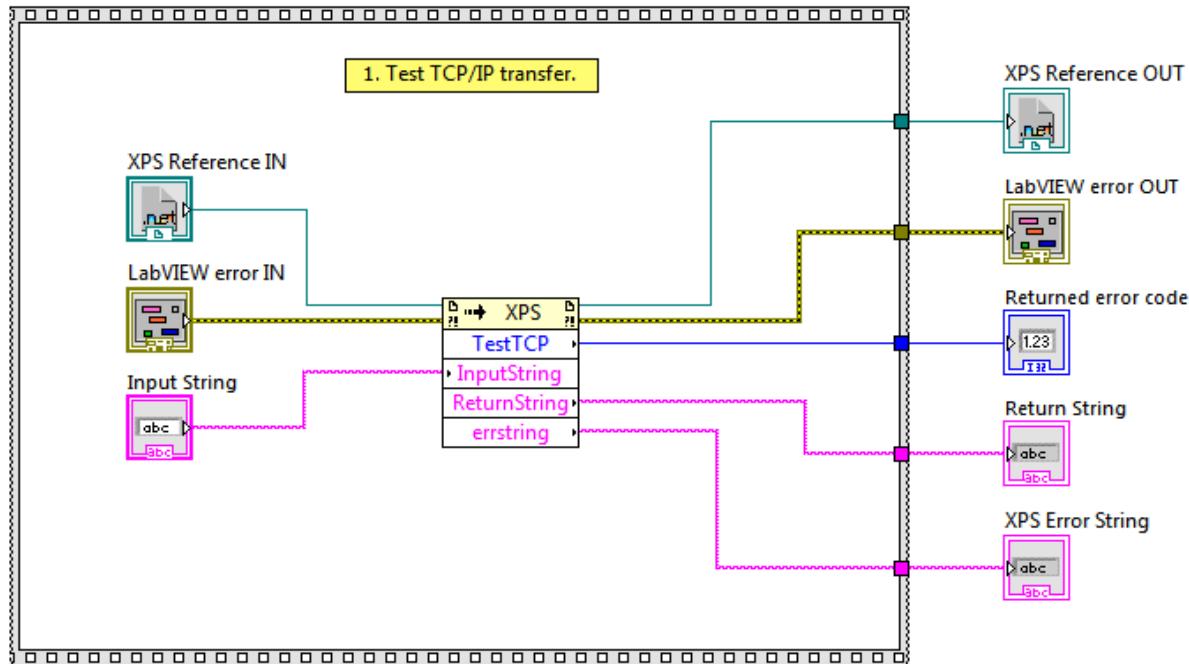
## 385. Test TCP VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Test TCP/IP transfer.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Input String** Input string

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Return String** return string

**XPS Error String** return error string from VI

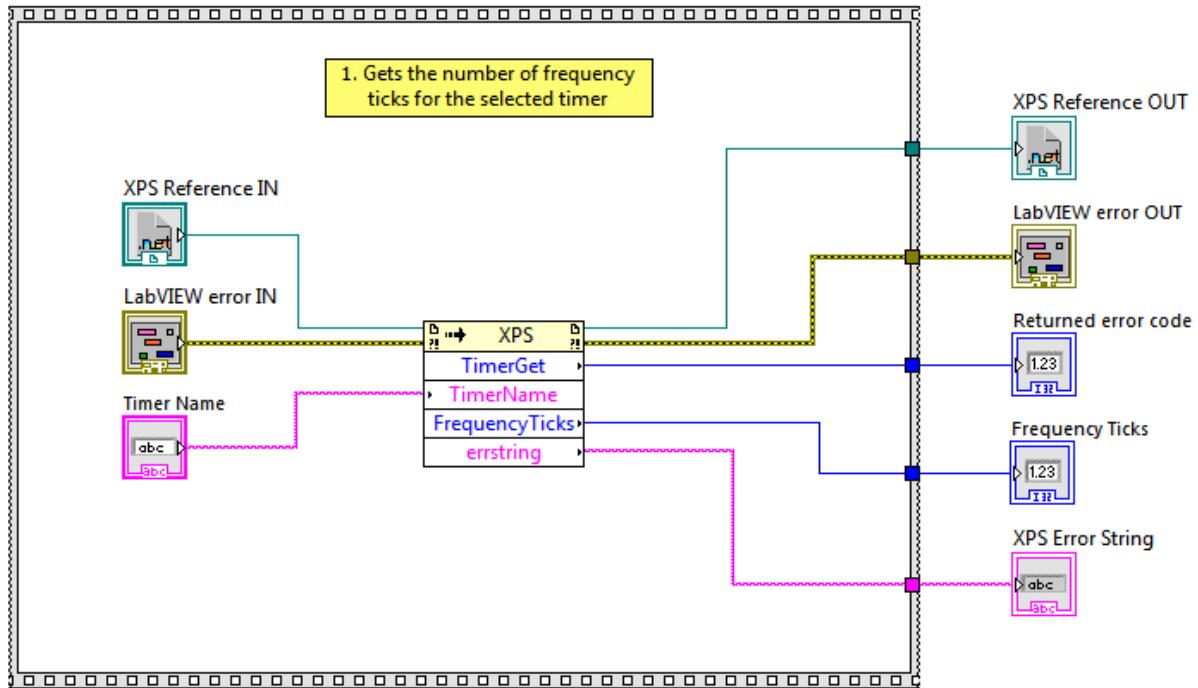
## 386. Timer Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets the number of frequency ticks for the selected timer.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

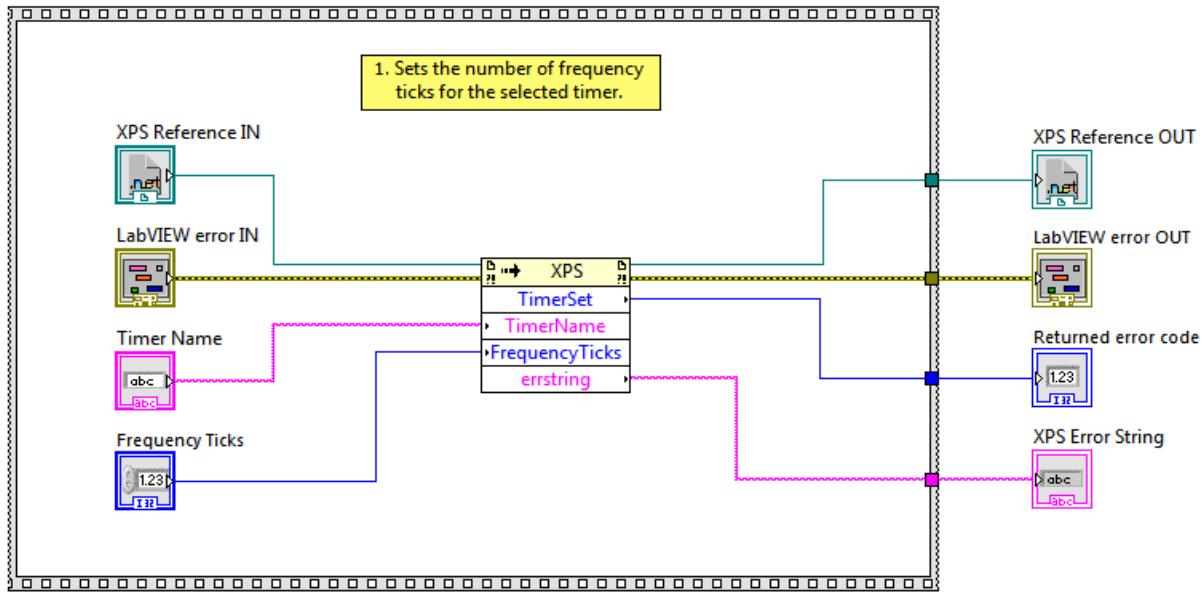
### 387. Timer Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the number of frequency ticks for the selected timer.

### Screenshot



**[XPS Reference IN]** is the XPS reference

**[LabVIEW error IN]** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[Timer Name]** timer name

**[Frequency Ticks]** number of frequency ticks

**[XPS Reference OUT]** returns XPS reference

**[LabVIEW error OUT]** contains error information. This output provides standard error out functionality.

**[Returned Error Code]** Returns function error code

**[XPS Error String]** return error string from VI

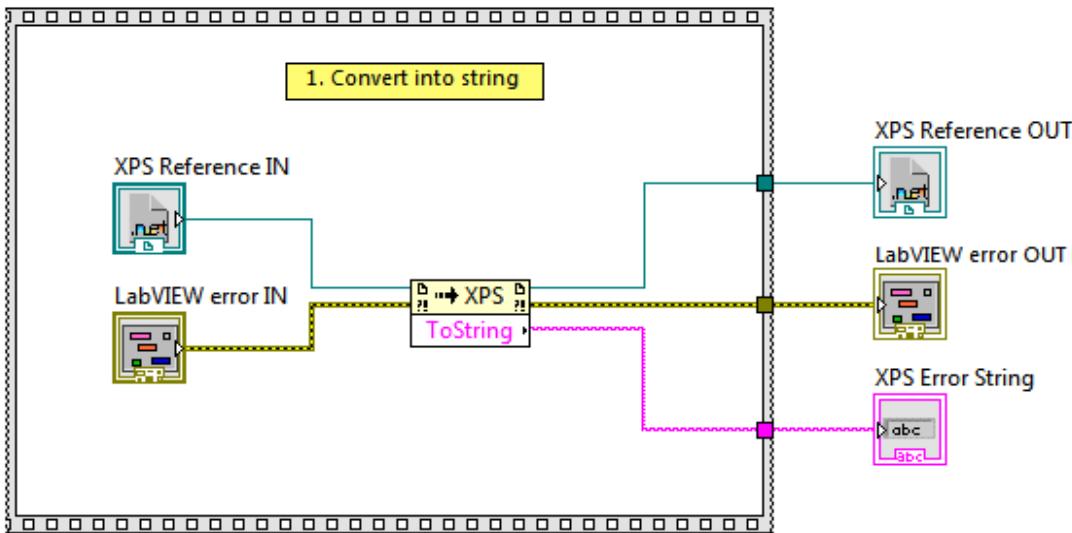
## 388. To String VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Convert into string.

### Screenshot



- XPS Reference IN** is the XPS reference
- LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.
- XPS Reference OUT** returns XPS reference
- LabVIEW error OUT** contains error information. This output provides standard error out functionality.
- Returned Error Code** Returns function error code
- XPS Error String** return error string from VI

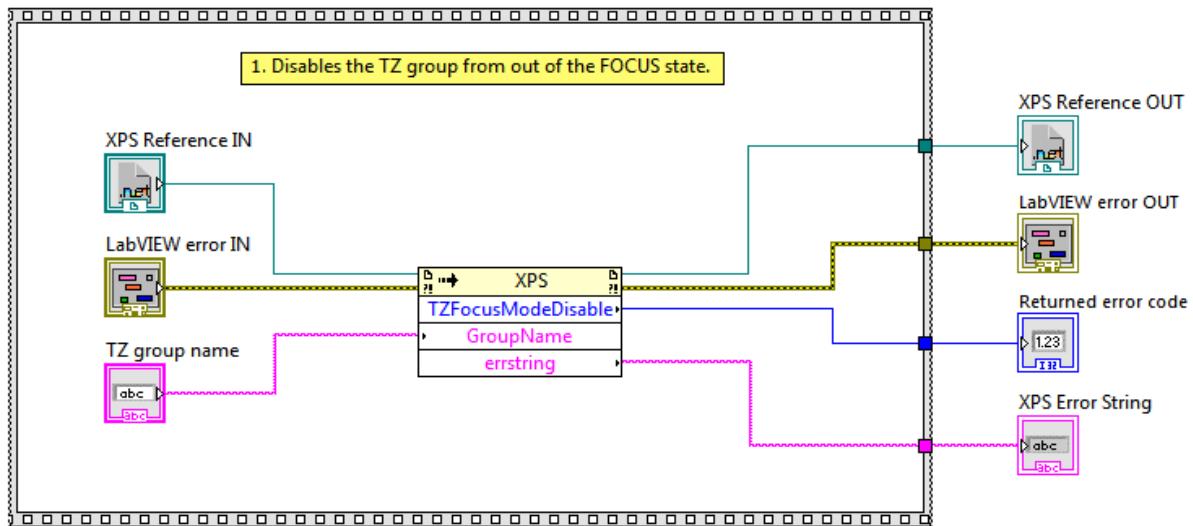
### 389. TZ Focus Mode Disable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Disables the TZ group from out of the FOCUS state.

#### Screenshot



**[a]** **XPS Reference IN** is the XPS reference

**[b]** **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[c]** **TZ group name** TZ group name

**[d]** **XPS Reference OUT** returns XPS reference

**[e]** **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[f]** **Returned Error Code** Returns function error code

**[g]** **XPS Error String** return error string from VI

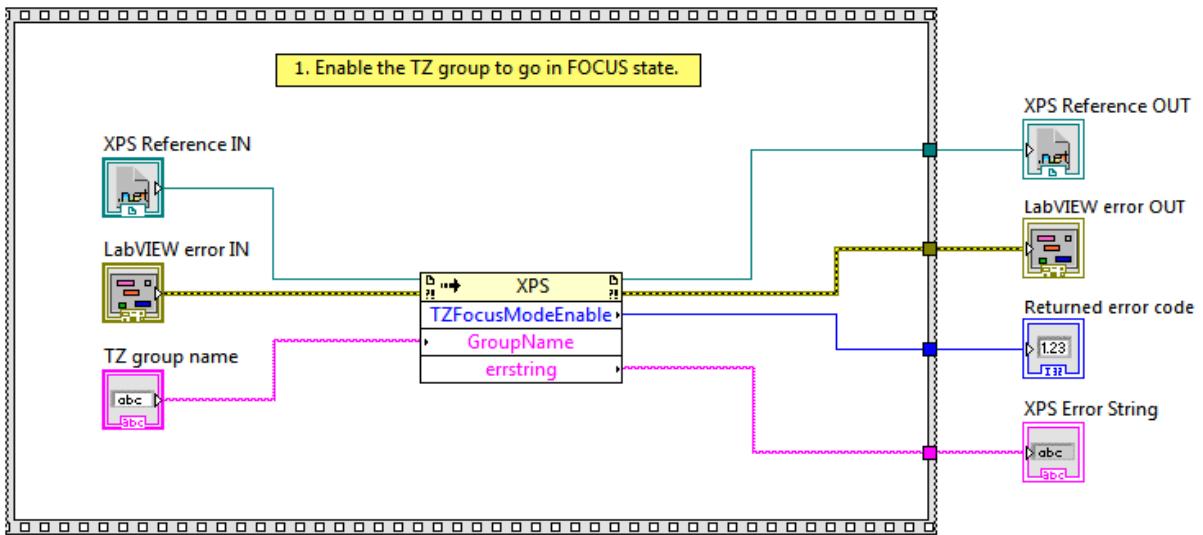
## 390. TZ Focus Mode Enable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Enable the TZ group to go in FOCUS state.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**TZ group name** TZ group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

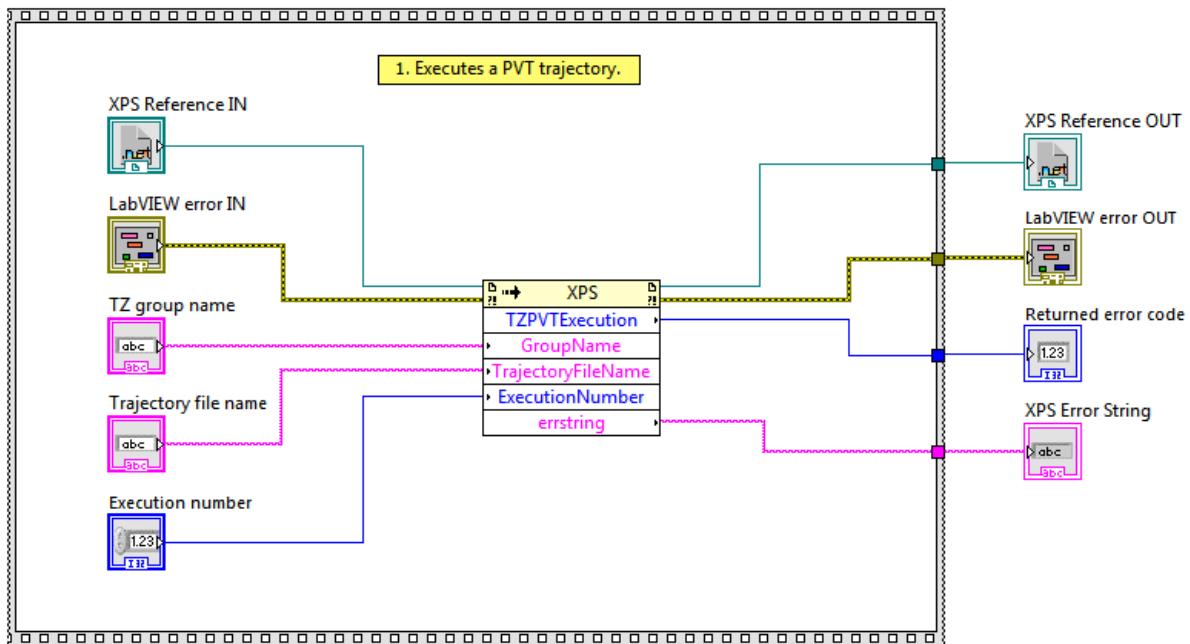
## 391. TZ PVT Execution VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Executes a PVT trajectory.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**TZ Group Name** TZ group name

**Trajectory File Name** Examined trajectory file name (maximum size = 250)

**Execution Number** execution number

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

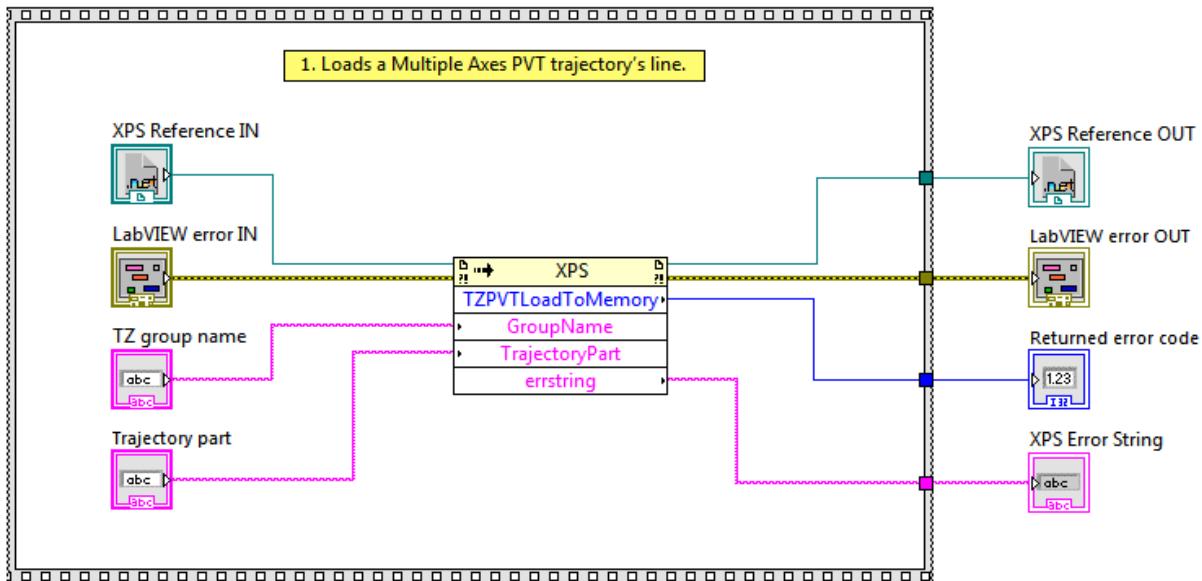
## 392. TZ PVT Load To Memory VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Loads a multiple axes PVT trajectory's line.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**TZ Group Name** TZ group name

**Trajectory Part** Trajectory part

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

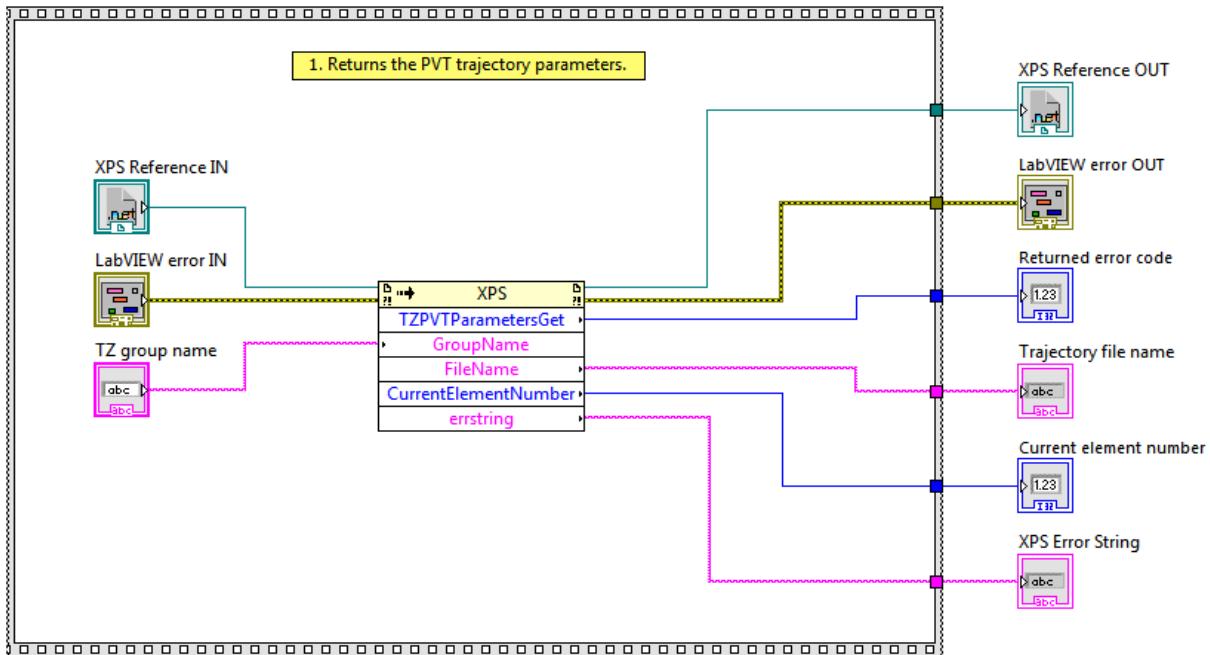
## 393. TZ PVT Parameters Get VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Returns the PVT trajectory parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**TZ Group name** TZ group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Trajectory File Name** trajectory file name

**Current element number** current element number

**XPS Error String** return error string from VI

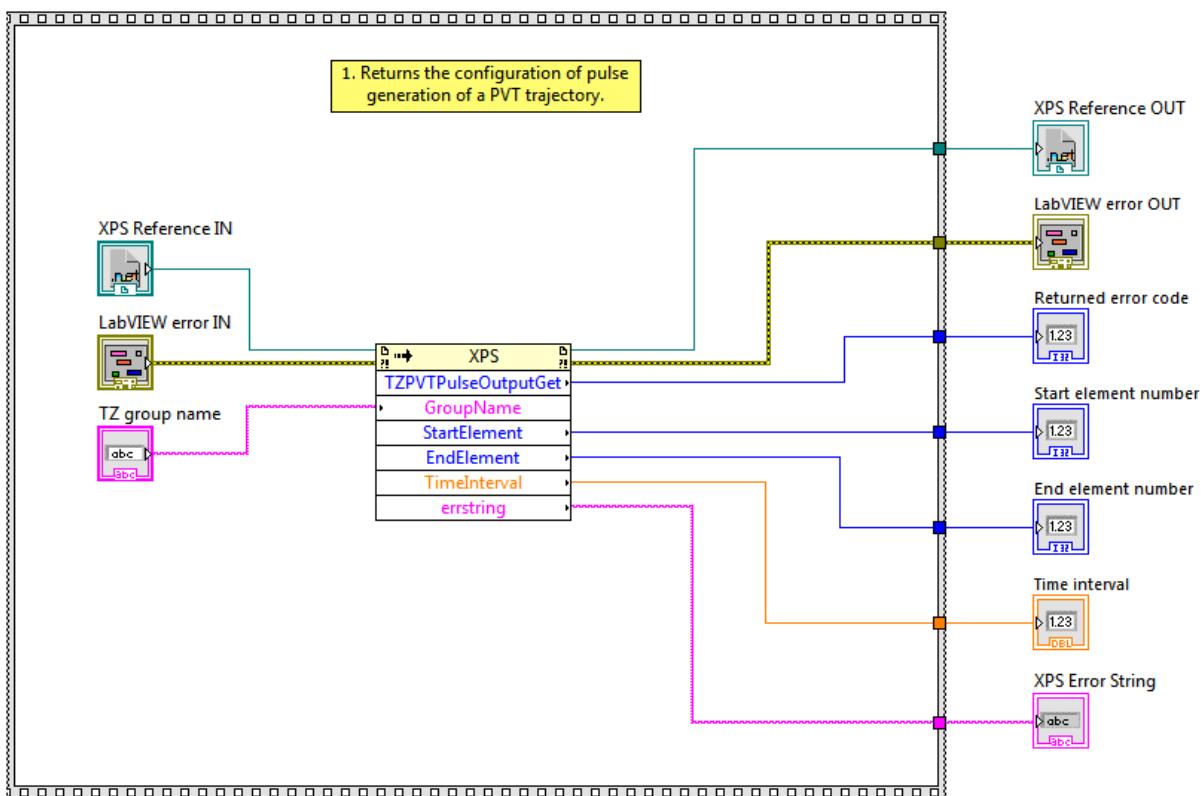
## 394. TZ PVT Pulse Output Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the PVT trajectory parameters.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**TZ Group name** TZ group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Start element number** Start element number

**I32** **End element number** End element number

**DBL** **Time interval** Time interval (seconds)

**abc** **XPS Error String** return error string from VI

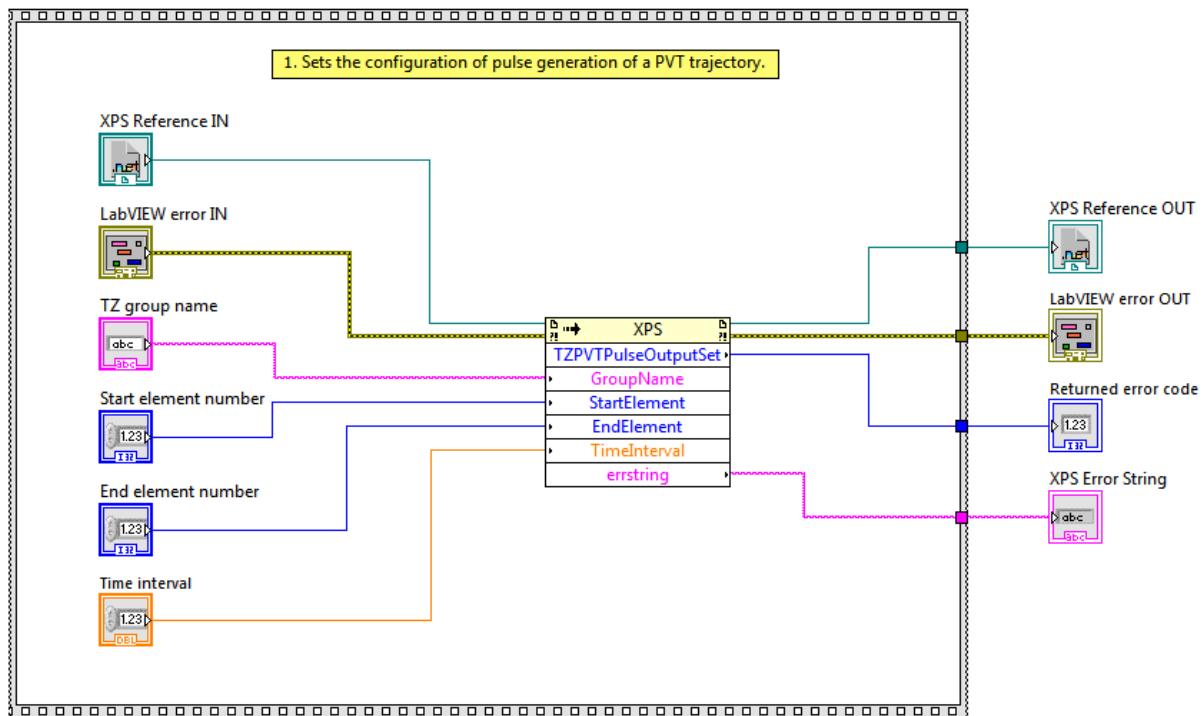
## 395. TZ PVT Pulse Output Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set the configuration of pulse generation of a PVT trajectory.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input

provides standard error in functionality.



**TZ Group Name** XY group name



**Start Element Number** start element number

**End Element Number** end element number

provides standard error in functionality.



**Time Interval** time interval (seconds)



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

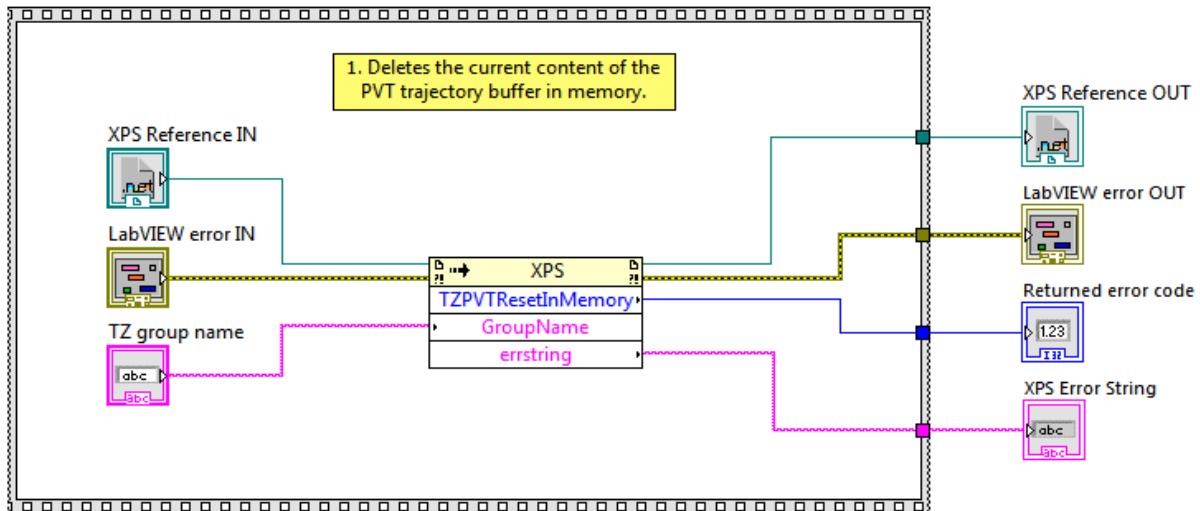
## 396. TZ PVT Reset In Memory VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Delete the current content of the PVT trajectory buffer in memory.

**Screenshot**



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**TZ group name** TZ group name

**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

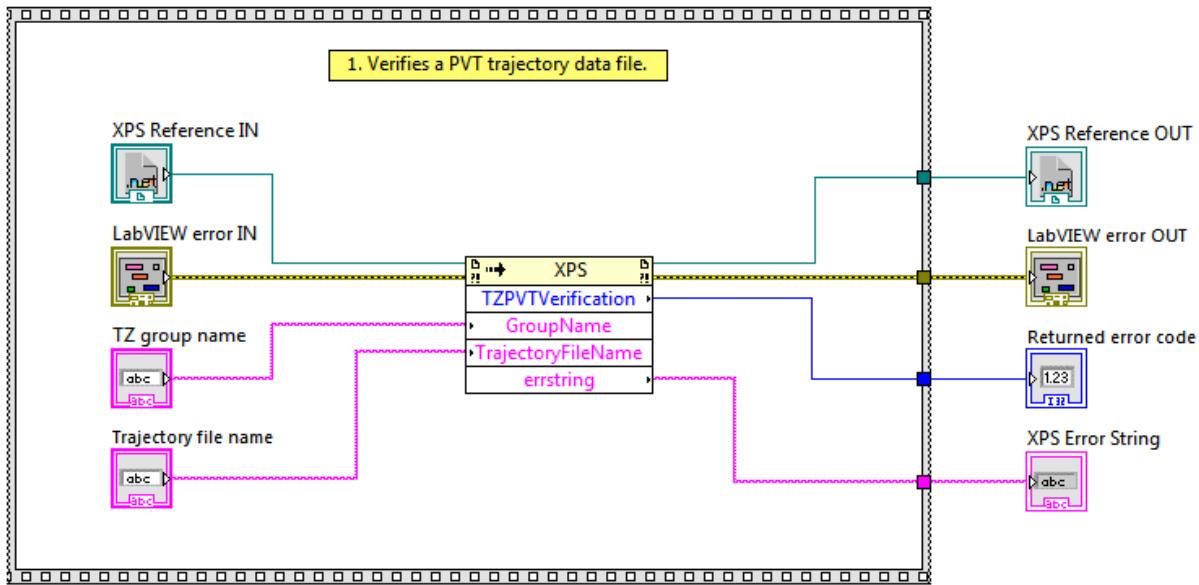
## 397. TZ PVT VerificationVI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Verifies a PVT trajectory data file.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**TZ Group Name** TZ group name

**Trajectory File Name** Trajectory file name



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

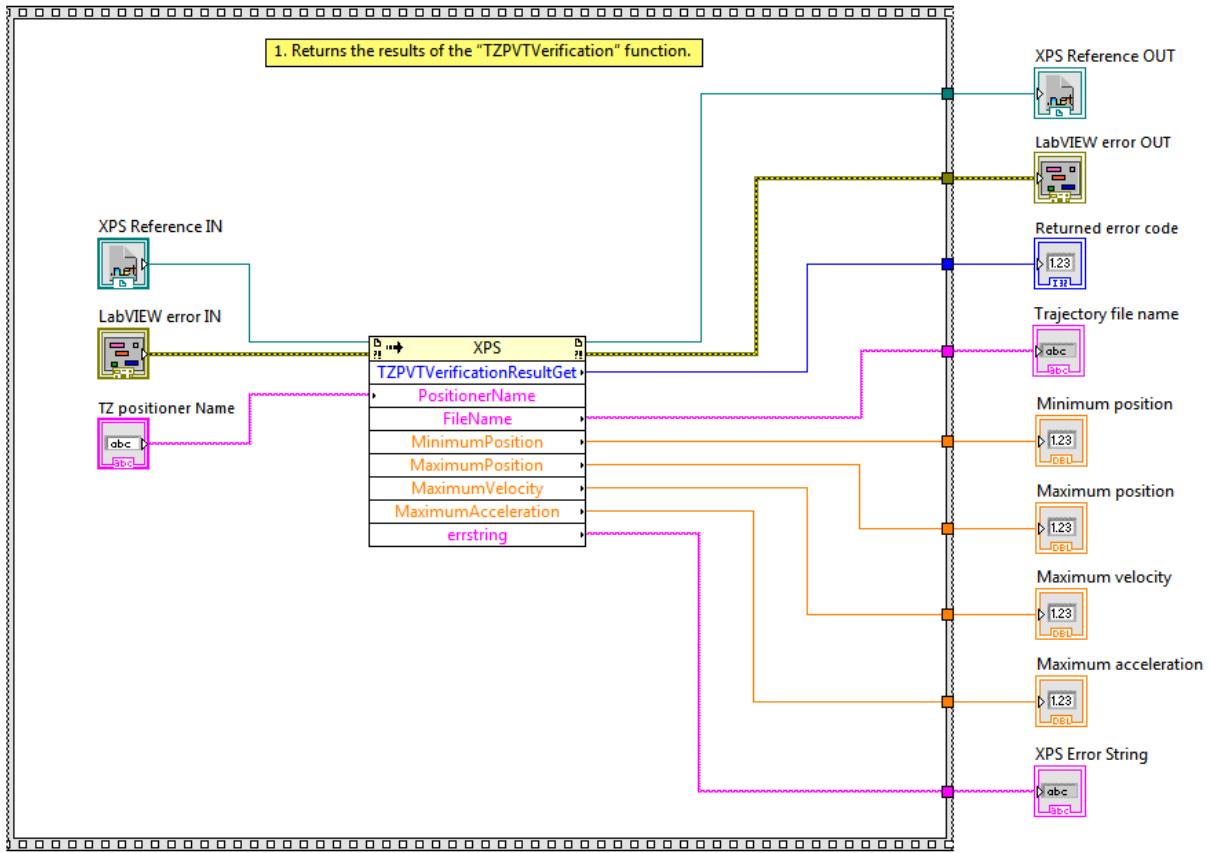
## 398. TZ PVT Verification Result Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the results of the “TZPVTVerification” function.

### Screenshot



**[net]** **XPS Reference IN** is the XPS reference

**[err]** **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[abc]** **TZ Positioner Name** TZ positioner name

**[D]** **XPS Reference OUT** returns XPS reference

**[err]** **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[I32]** **Returned Error Code** Returns function error code



**Trajectory File Name** Examined trajectory file name (maximum size = 250)



**Minimum Position** Minimum position (units)



**Maximum Position** Maximum position (units)

**Maximum Velocity** Maximum trajectory velocity (units/seconds)



**Maximum Acceleration** Maximum trajectory acceleration (units/seconds<sup>2</sup>)

**XPS Error String** return error string from VI

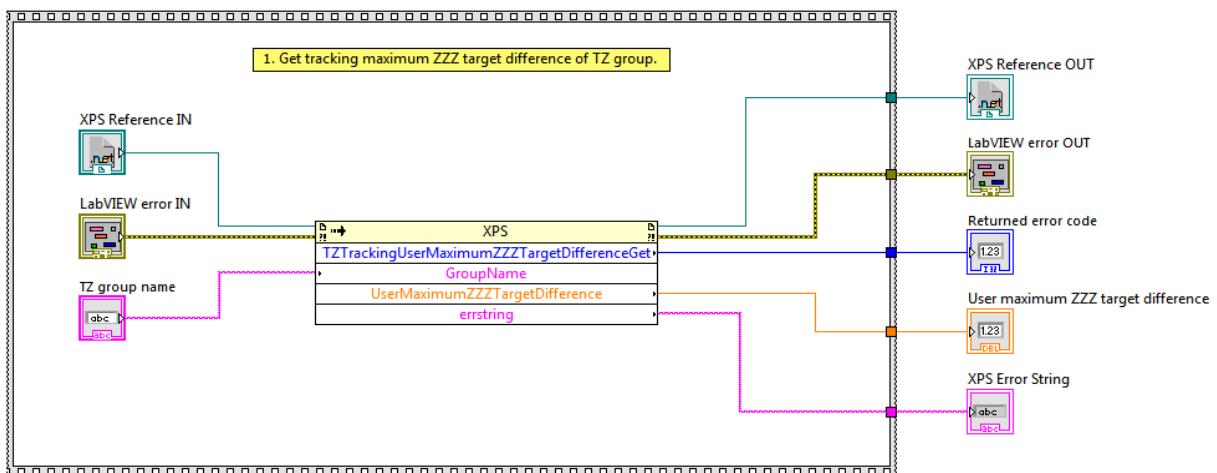
## 399. TZ Tracking User Maximum ZZZ Target Difference Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Gets tracking maximum ZZZ target difference of TZ group.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**TZ Group name** TZ group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **User maximum ZZZ target difference** User maximum ZZZ target difference

 **XPS Error String** return error string from VI

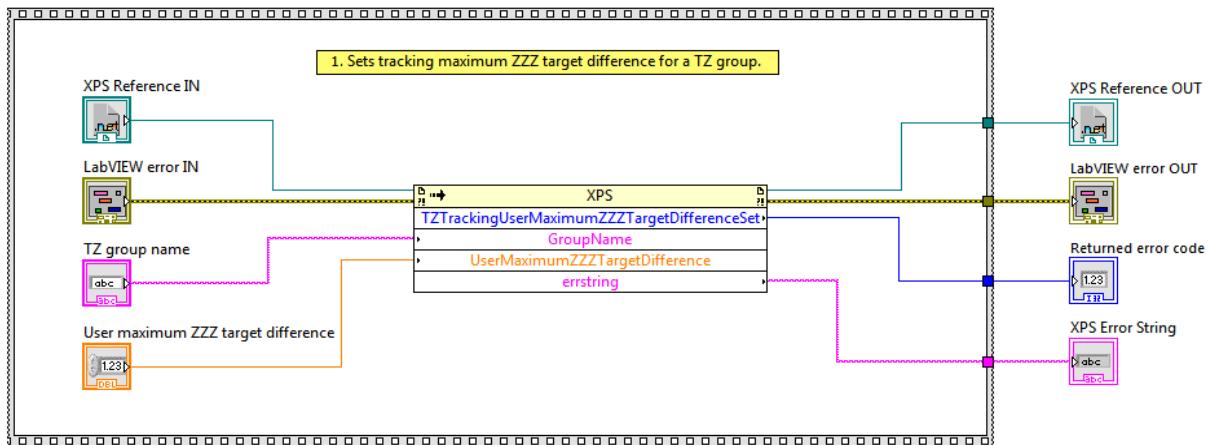
## 400. TZ Tracking User Maximum ZZZ Target Difference Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets tracking maximum ZZZ target difference for a TZ group.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **TZ Group Name** TZ group name

 **User maximum ZZZ target difference** User maximum ZZZ target difference point

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out

functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

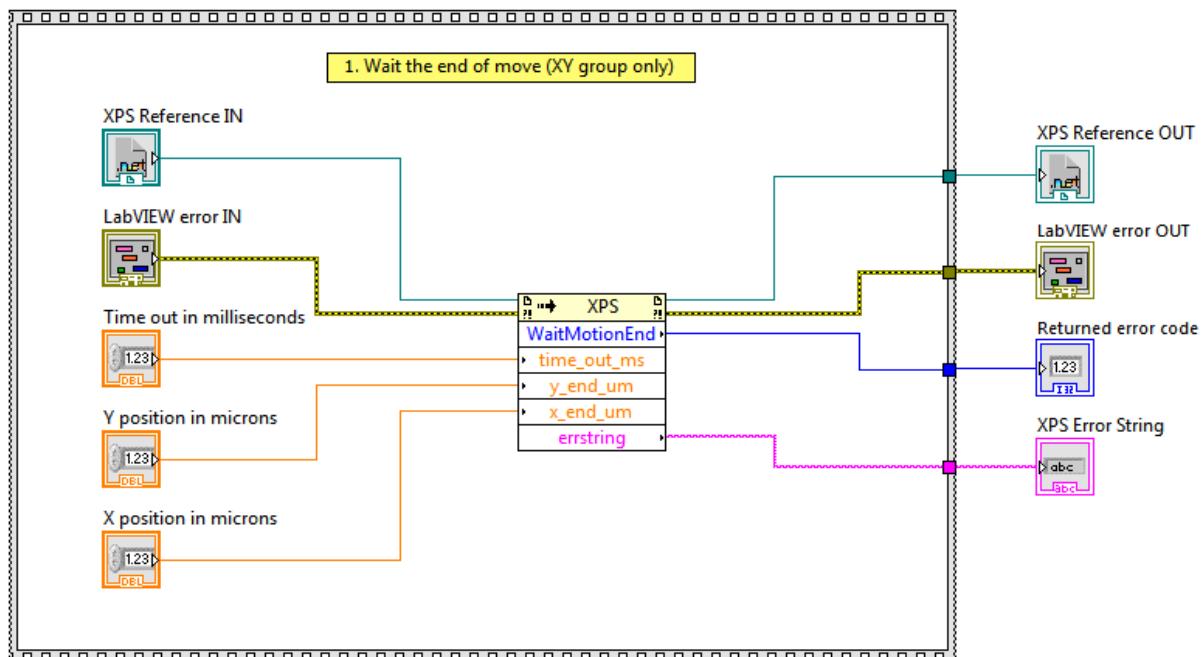
## 401. Wait Motion End VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Wait the end of move (XY group only)

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Time out in milliseconds** Time out in milliseconds

**Y position in microns** Y position in microns

**X position in microns** X position in microns

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

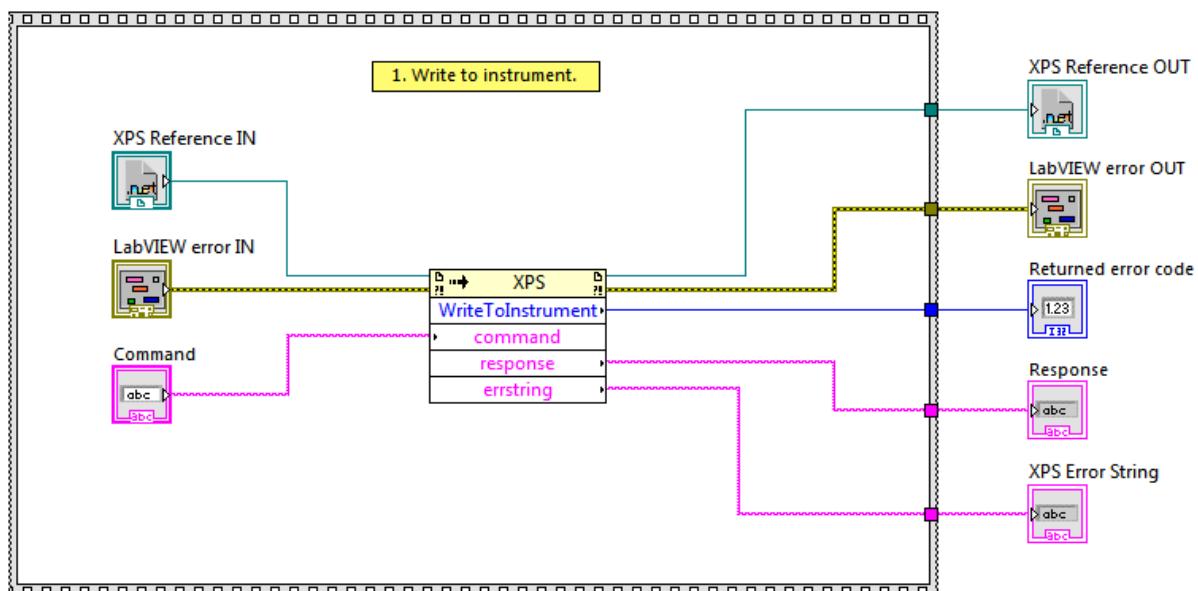
## 402. Write To Instrument VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Write to instrument.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Command** Command

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **Response** Response

**XPS Error String** return error string from VI

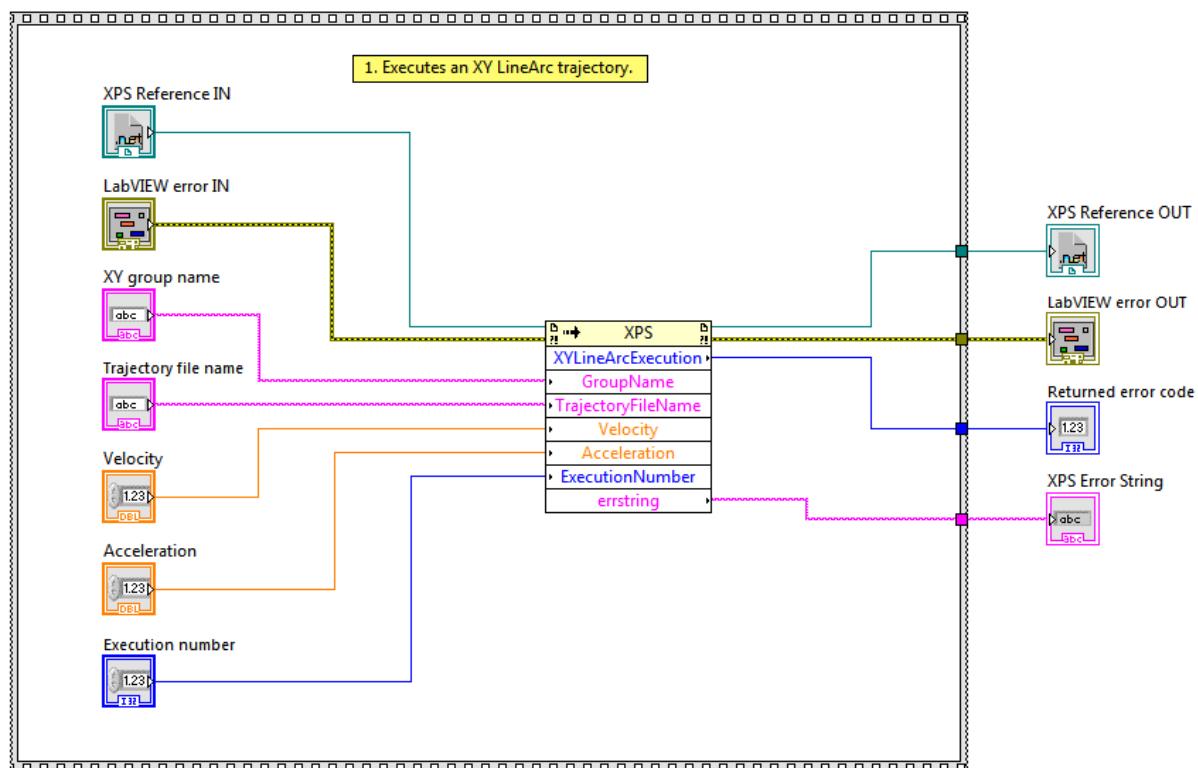
## 403. XY Line Arc Execution VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Executes an XY line-arc trajectory.

### Screenshot







**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XY Group Name** TZ group name

**Trajectory File Name** Trajectory file name

 **Velocity** velocity

 **Acceleration** acceleration

 **Execution Number** execution number

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

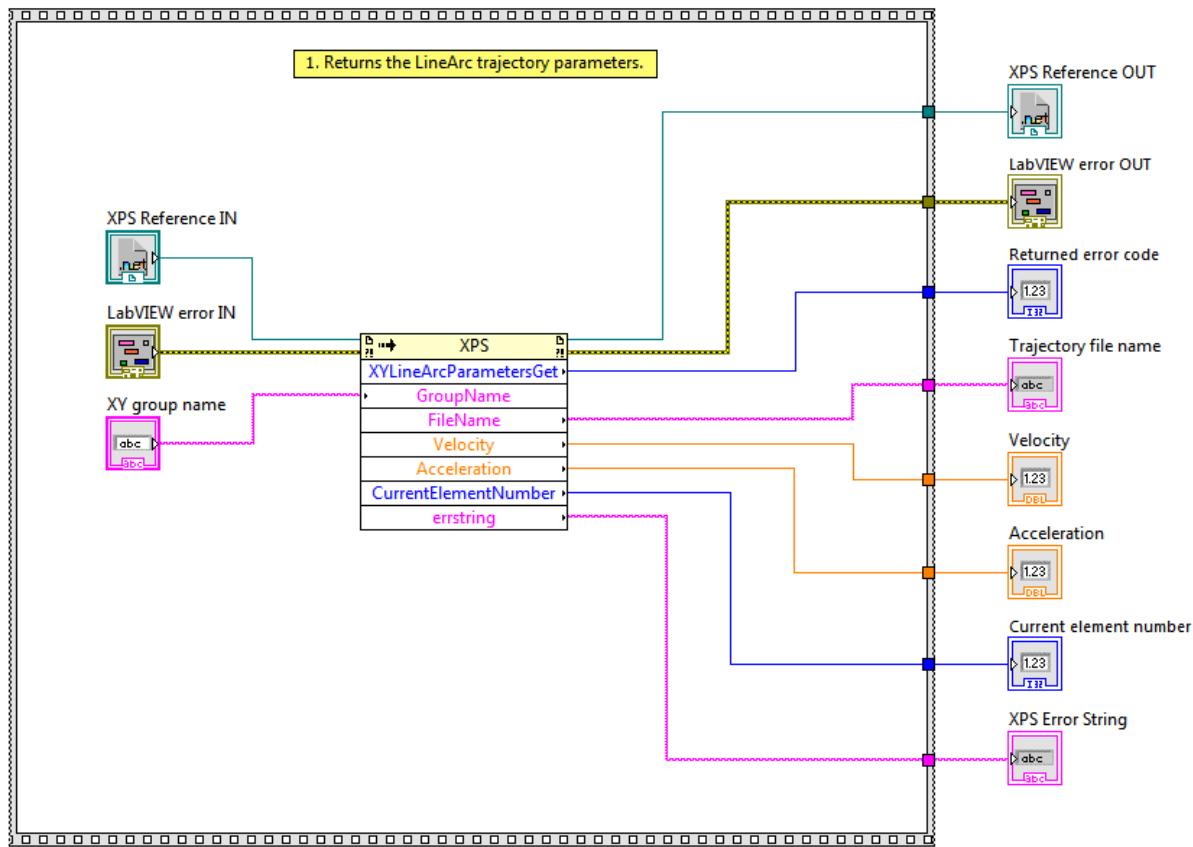
## 404. XY Line Arc Parameters Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Return an XY line-arc trajectory parameters.

**Screenshot**



**[ ] XPS Reference IN** is the XPS reference

**[ ] LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[abc] XY Group Name** XY group name

**[ ] XPS Reference OUT** returns XPS reference

**[ ] LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[I32] Returned Error Code** Returns function error code

**[abc] Trajectory file name** Trajectory file name

**[DBL] Velocity** velocity

**[DBL] Acceleration** Current acceleration array

**[I32] Current Element Number** current element number

**[abc] XPS Error String** return error string from VI

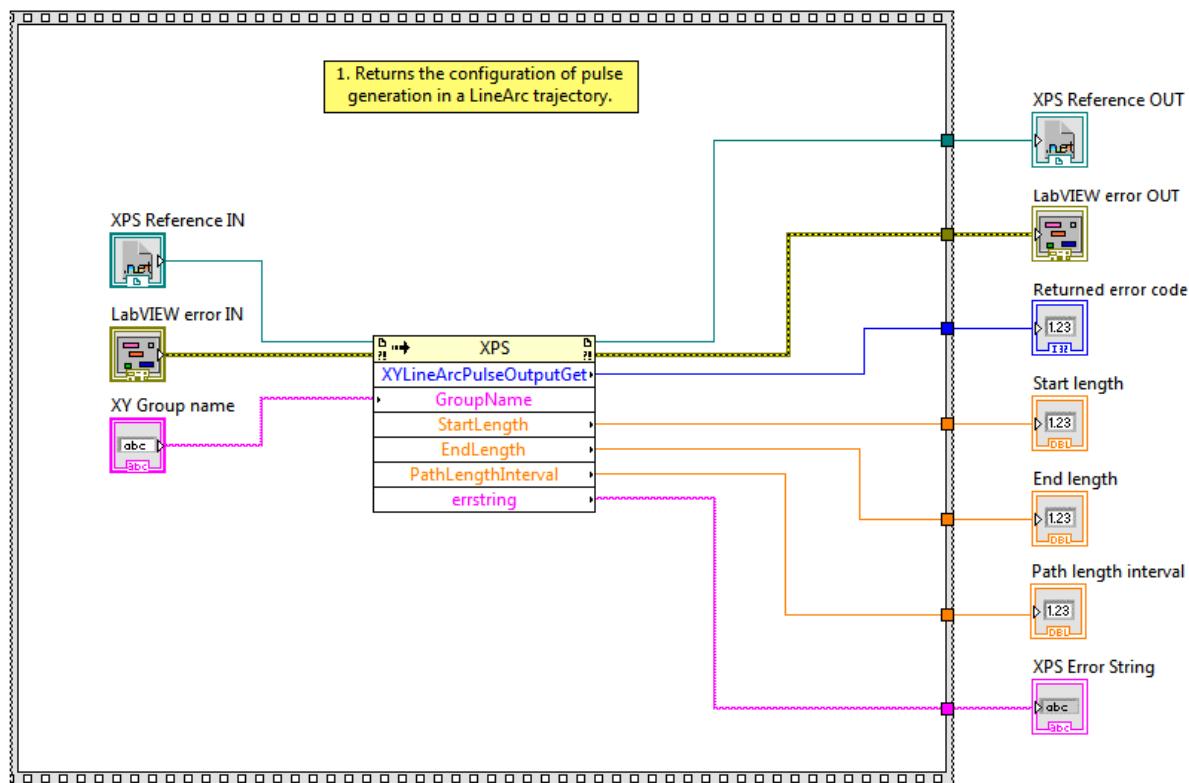
## 405. XY Line Arc Pulse Output Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Return the configuration of pulse generation in a line-arc trajectory.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XY Group Name** XY group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Start Length** Start length

**End Length** End length

**Path Length Interval** Path length interval in seconds

**XPS Error String** return error string from VI

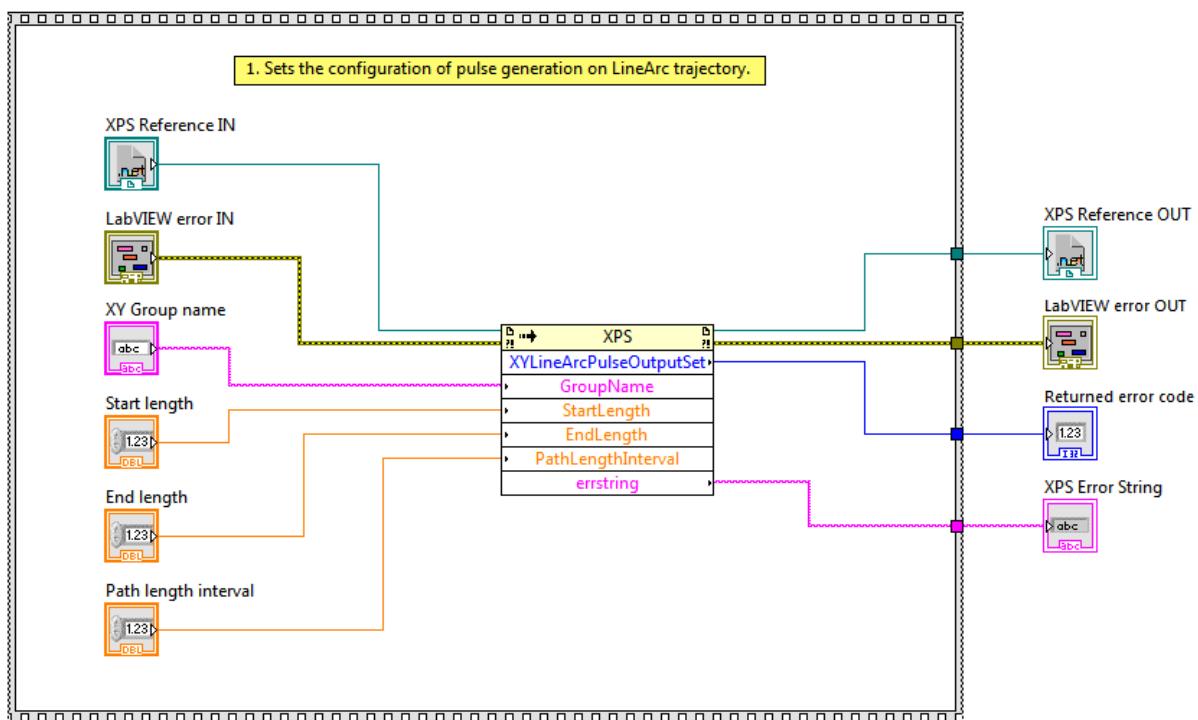
## 406. XY Line Arc Pulse Output Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the configuration of pulse generation on line-arc trajectory.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XY Group name** XY group name

**Start Length** Start length

**End length** End length

**Path Length Interval** Path length interval (seconds)

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

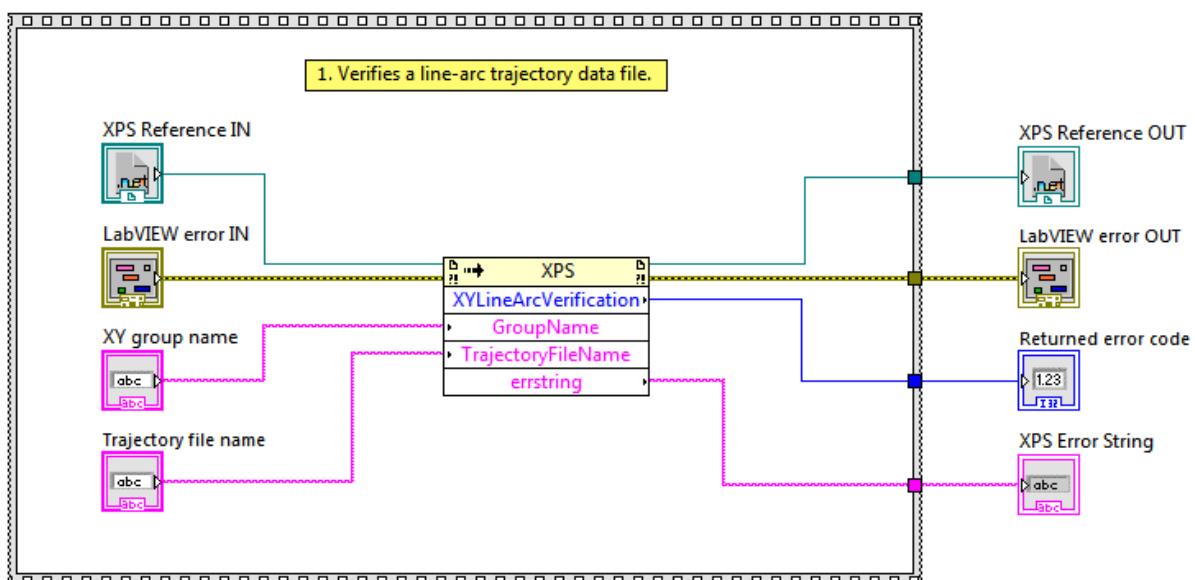
## 407. XY Line Arc Verification VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Verifies a line-arc trajectory data file.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XY Group Name** XY group name

 **Trajectory File Name** Trajectory file name



**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

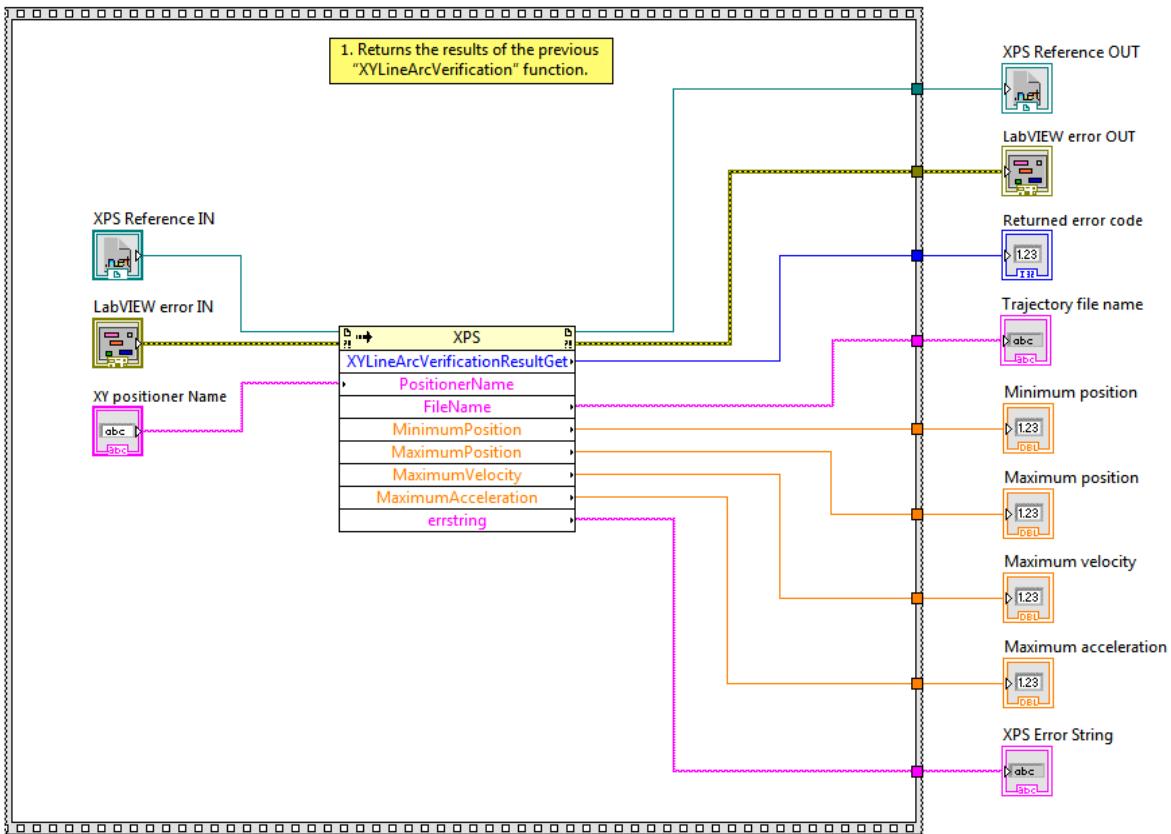
## 408. XY Line Arc Verification Result Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the result of the “XYLineArcVerification” function.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner Name** Multiple Axes positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Trajectory File Name** Examined trajectory file name (maximum size = 250)

**Minimum Position** Acceleration position (units)

**Maximum Position** Maximum position (units)

**Maximum Velocity** Maximum trajectory velocity (units/seconds)

**Maximum Acceleration**

**Maximum Acceleration** Maximum trajectory acceleration (units/seconds<sup>2</sup>)

**XPS Error String** return error string from VI

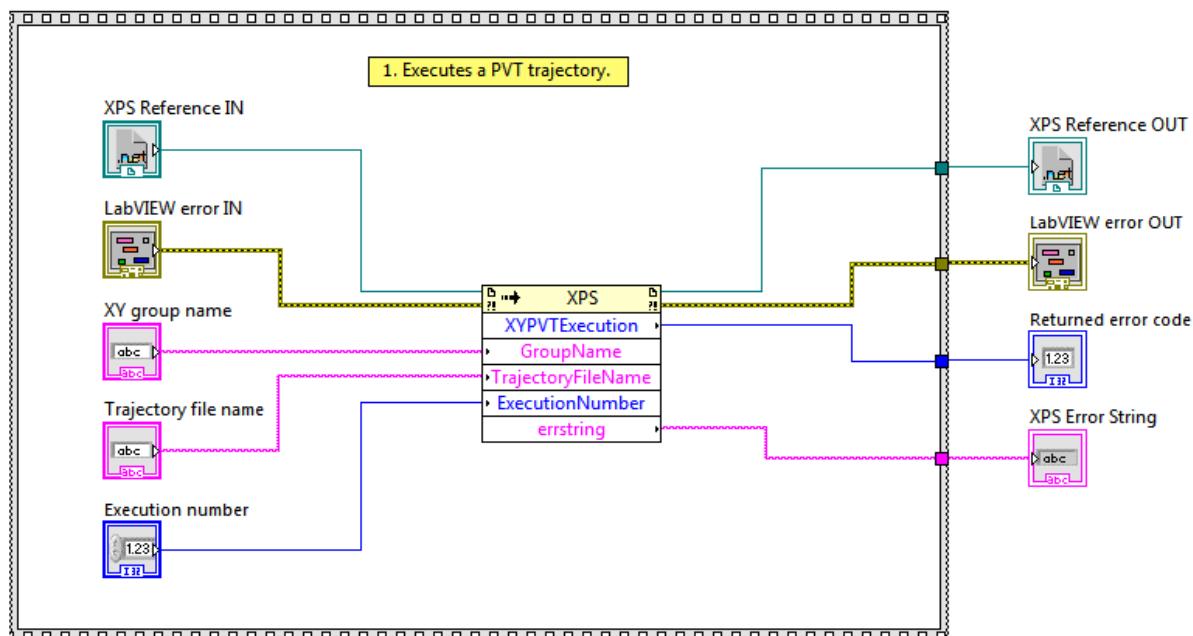
## 409. XY PVT Execution VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Executes a PVT trajectory.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XY Group Name** XY group name

**Trajectory File Name** Examined trajectory file name (maximum size = 250)

**Execution Number** execution number

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

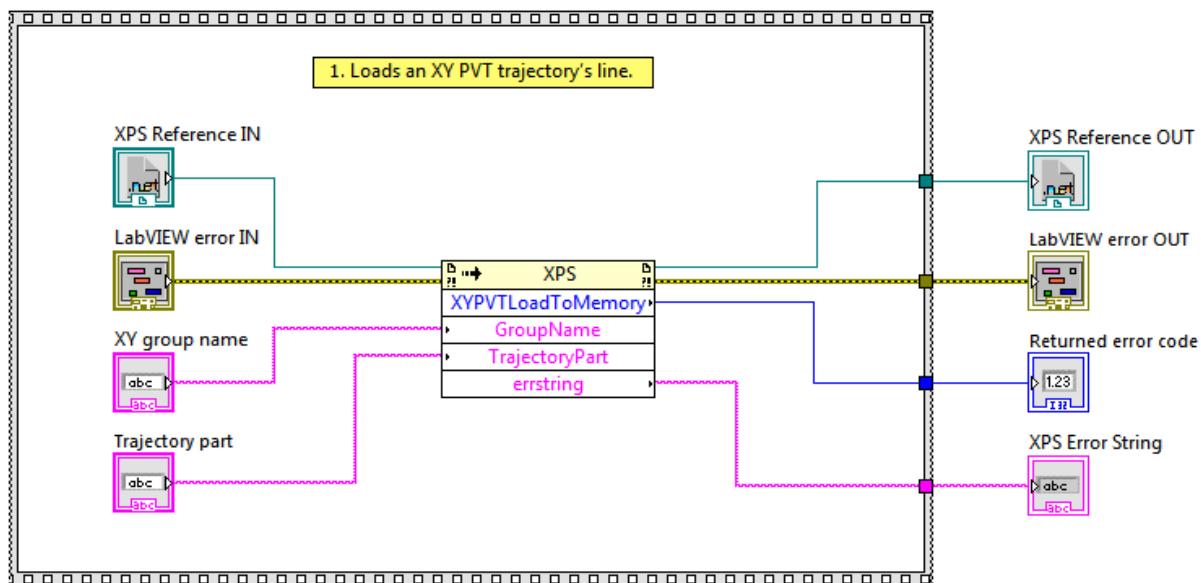
## 410. XY PVT Load To Memory VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Loads a XY PVT trajectory's line.

### Screenshot



**XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XY Group Name** XY group name





**Trajectory Part** Trajectory part

**XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

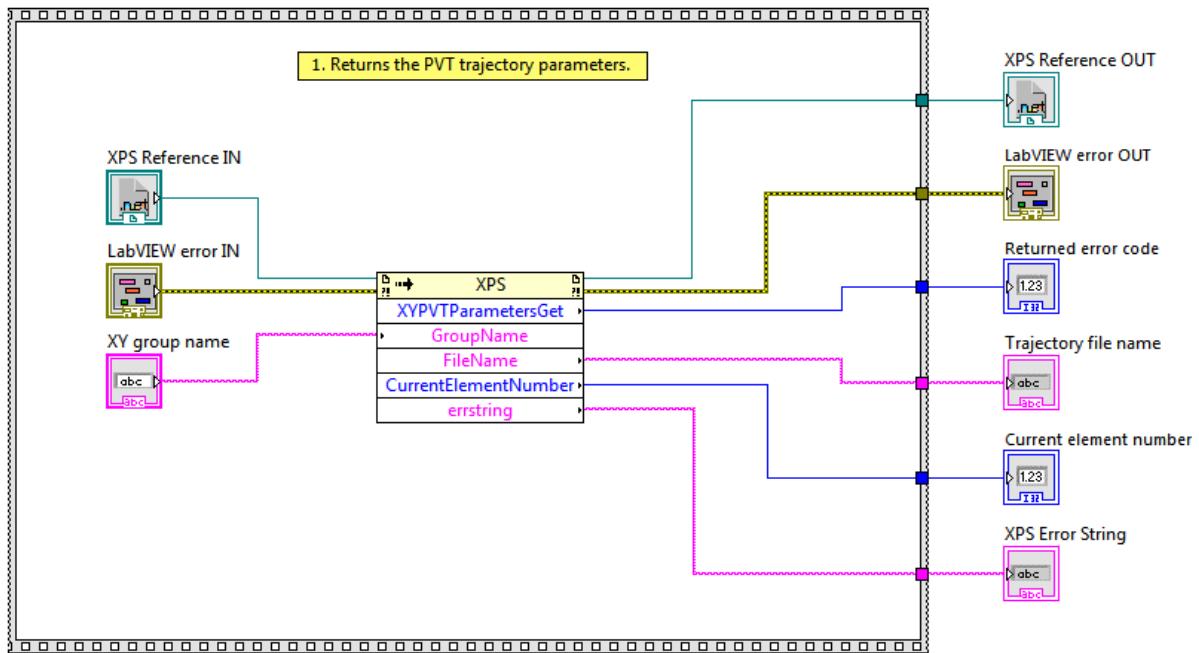
## 411. XY PVT Parameters Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the PVT trajectory parameters.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XY Group Name** XY group name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Trajectory File Name** trajectory file name

**Current Element Number** Current element number

**XPS Error String** return error string from VI

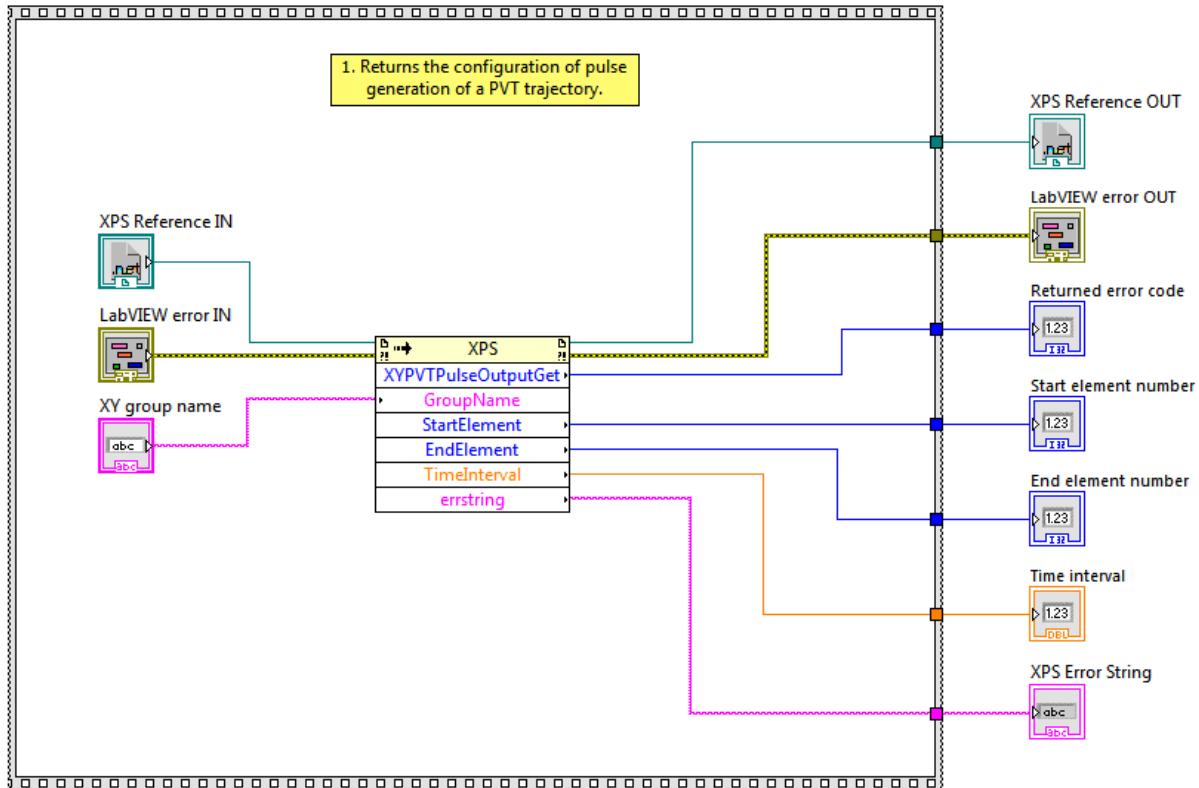
## 412. XY PVT Pulse Output Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the configuration of pulse generation of a PVT trajectory.

## Screenshot



**[XPS]** **XPS Reference IN** is the XPS reference

**[LabVIEW error]** **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[LabVIEW error]** **XY Group name** XY group name

**[XPS]** **XPS Reference OUT** returns XPS reference

**[LabVIEW error]** **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[LabVIEW error]** **Returned Error Code** Returns function error code

**[LabVIEW error]** **Start element number** Start element number

**[LabVIEW error]** **End element number** End element number

**[LabVIEW error]** **Time interval** Time interval (seconds)

 **XPS Error String** return error string from VI

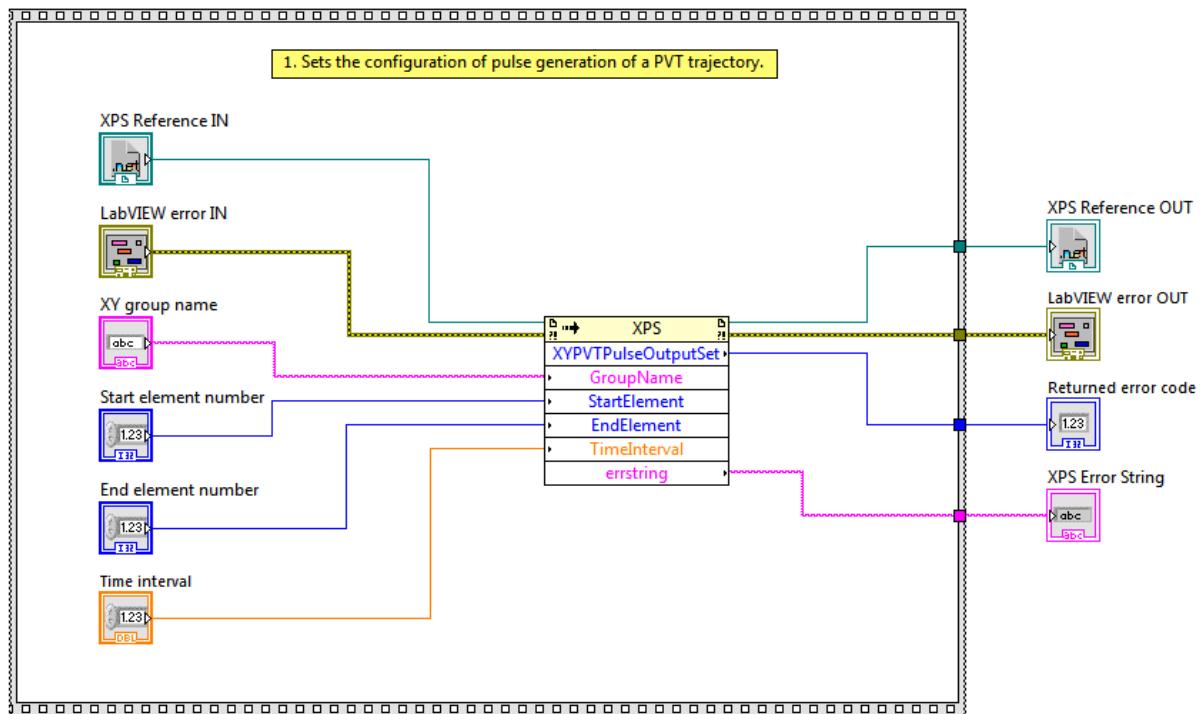
## 413. XY PVT Pulse Output Set VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Sets the configuration of pulse generation of a PVT trajectory.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XY Group Name** XY group name

 **Start Element Number** start element number

 **End Element Number** end element number

provides standard error in functionality.

 **Time Interval** time interval (seconds)

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

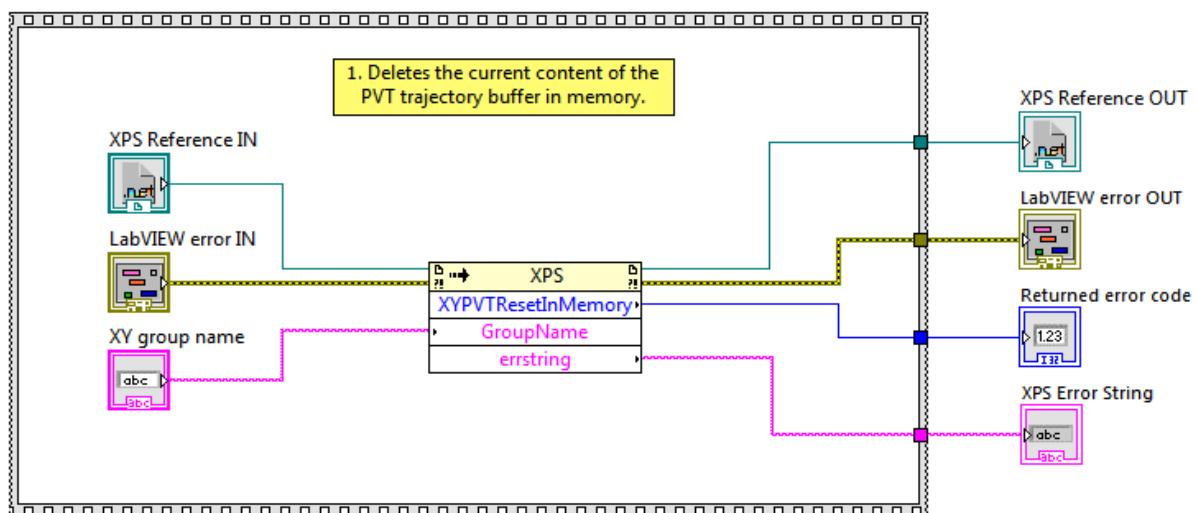
## 414. XY PVT Reset In Memory VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Deletes the current content of the PVT trajectory buffer in memory.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XY group name** XY group name

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

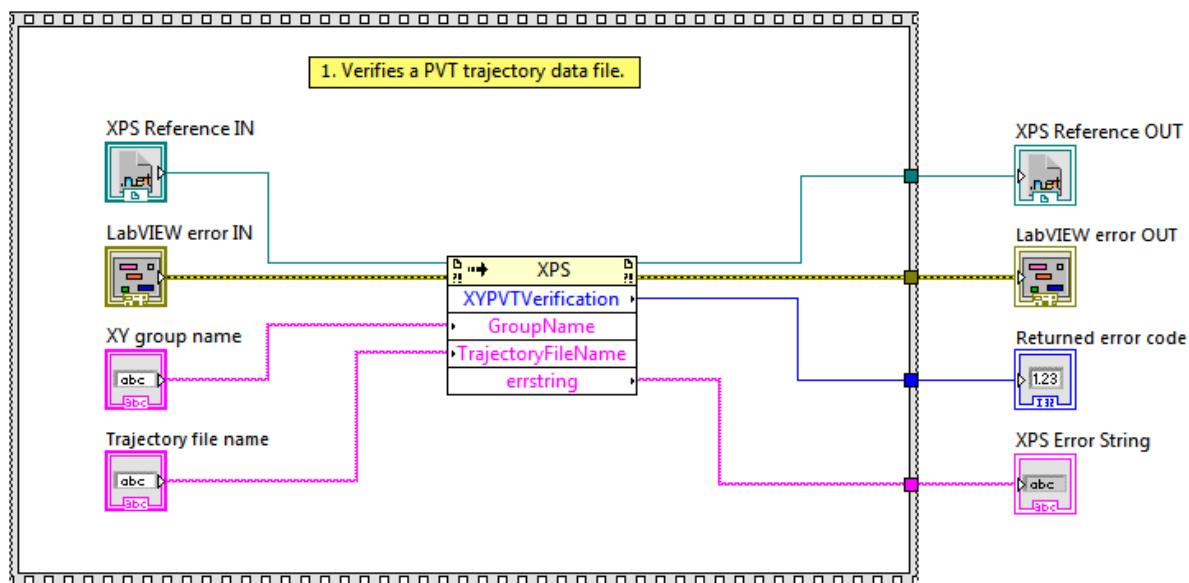
## 415. XY PVT Verification VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Verifies a PVT trajectory data file.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XY Group Name** XY group name

 **Trajectory File Name** Trajectory file name

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.



 **Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

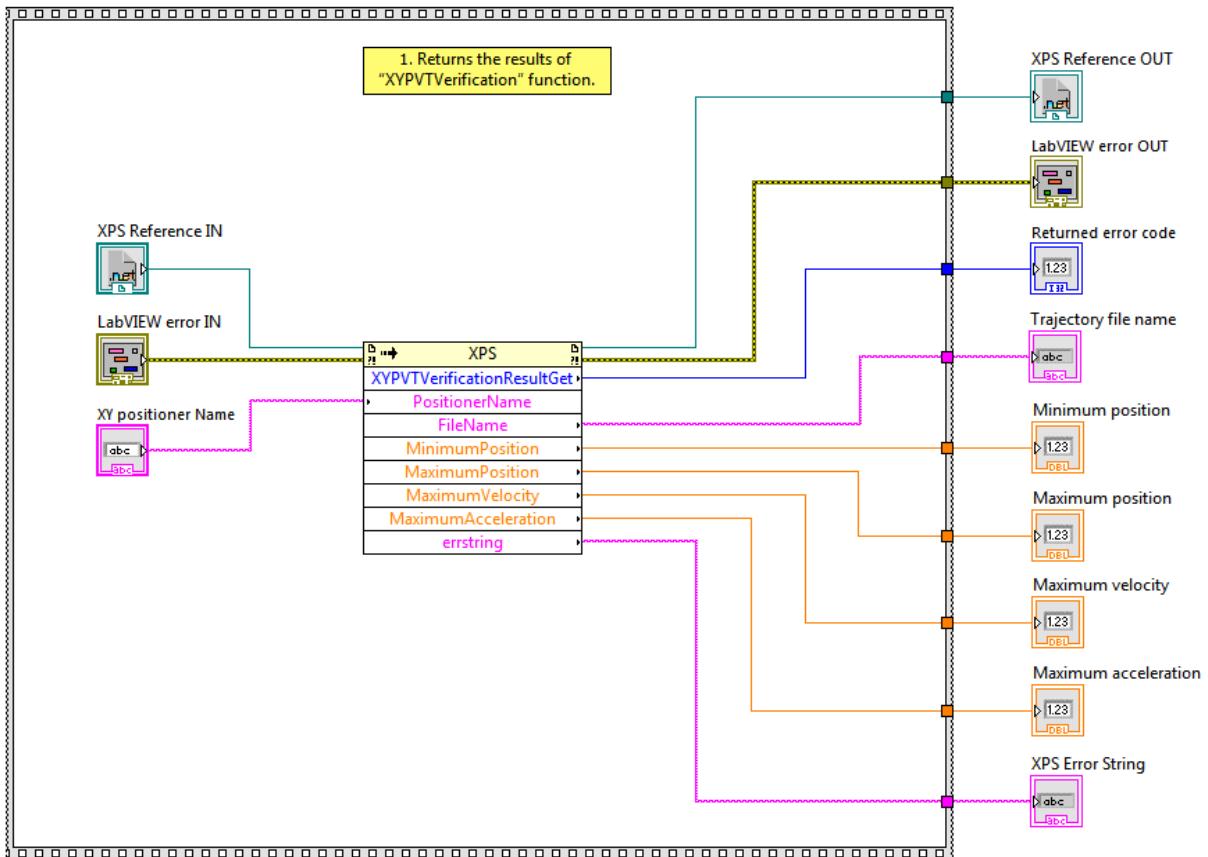
## 416. XY PVT Verification Result Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the result of “XYPVTVerification” function.

**Screenshot**



**[ ] XPS Reference IN** is the XPS reference

**[ ] LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[abc] XY Positioner Name** XY positioner name

**[ ] XPS Reference OUT** returns XPS reference

**[ ] LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[ ] Returned Error Code** Returns function error code

**[abc] Trajectory File Name** Examined trajectory file name (maximum size = 250)

**[DBL] Minimum Position** Acceleration position (units)

**[DBL] Maximum Position** Maximum position (units)

**[DBL] Maximum Velocity** Maximum trajectory velocity (units/seconds)

**[DBL] Maximum Acceleration** Maximum trajectory acceleration (units/seconds<sup>2</sup>)

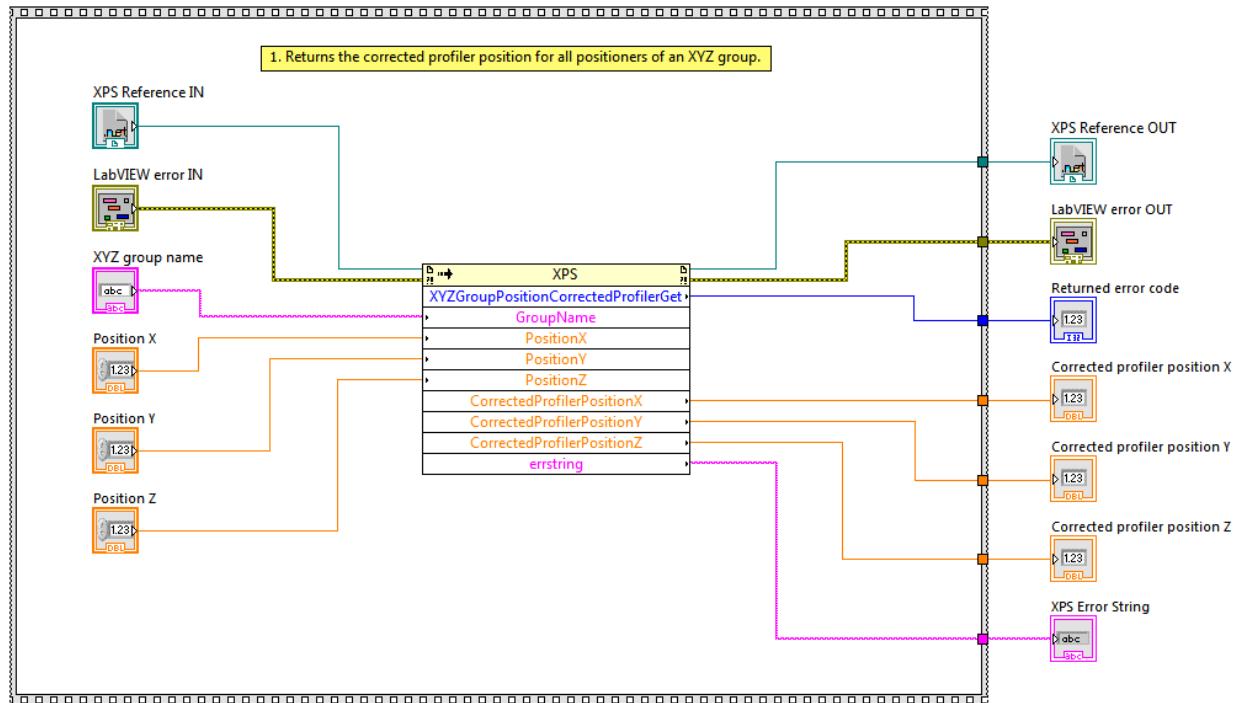
 **XPS Error String** return error string from VI

## 417. XYZ Group Position Corrected Profiler Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the corrected profiler position for all positioners of an XYZ group



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XYZ Group Name** XYZ group name

-  **Position X** position x
-  **Position Y** position y
-  **Position Z** position z
-  **XPS Reference OUT** returns XPS reference
-  **LabVIEW error OUT** contains error information. This output provides standard error out functionality.
-  **Returned Error Code** Returns function error code
-  **Corrected Profiler Position X** Corrected profiler position X
-  **Corrected Profiler Position Y** Corrected profiler position Y
-  **Corrected Profiler Position Z** Corrected profiler position Z
-  **XPS Error String** return error string from VI

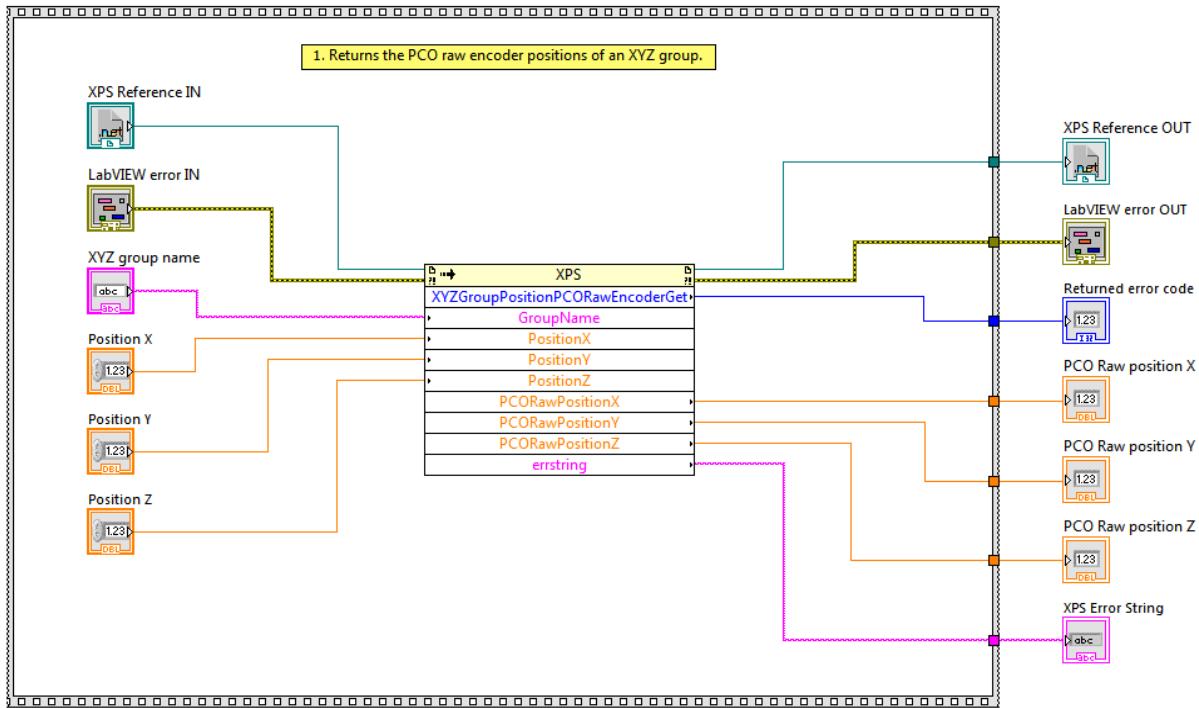
## 418. XYZ Group Position PCO Raw Encoder Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Return the PCO raw encoder positions of an XYZ group.

**Screenshot**



**[D]** **XPS Reference IN** is the XPS reference

**[E]** **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[abc]** **XYZ Group Name** XYZ group name

**[DBL]** **Position X** position X

**[DBL]** **Position Y** position Y

**[DBL]** **Position Y** position Y

**[D]** **XPS Reference OUT** returns XPS reference

**[E]** **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[I32]** **Returned Error Code** Returns function error code

**[DBL]** **PCO Raw Position X** PCO raw position X

**[DBL]** **PCO Raw Position Y** PCO raw position Y

**[DBL]**

**[abc]** **PCO Raw Position Y** PCO raw position Y

**XPS Error String** return error string from VI

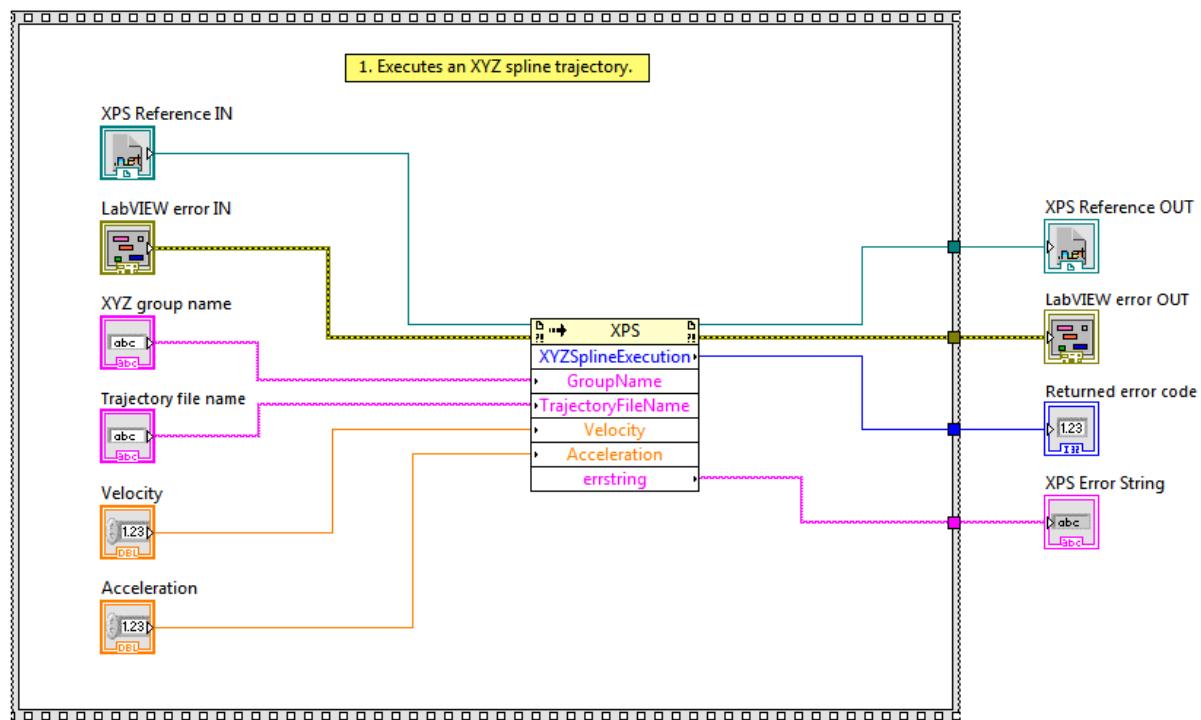
## 419. XYZ Spline Execution VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Executes an XYZ spline trajectory.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XYZ Group Name** XYZ group name

**Trajectory File Name** Examined trajectory file name (maximum size = 250)

**Velocity** velocity

**Acceleration** acceleration

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out

functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

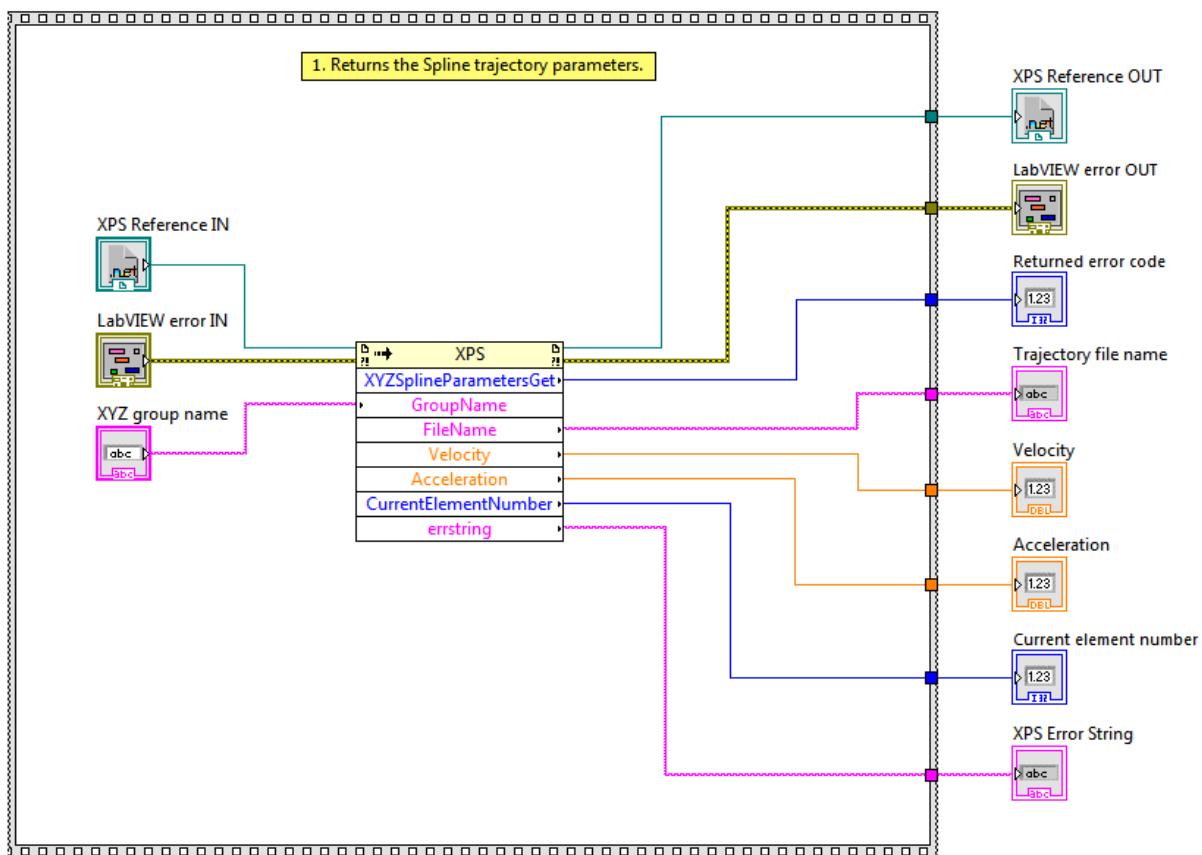
## 420. XYZ Spline Parameters Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the spline trajectory parameters.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XYZ group Name** XYZ group name

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code



**Trajectory file name** Examined trajectory file name (maximum size = 250)



**Velocity** velocity

 **Acceleration** acceleration

 **Current Element Number** Current element number

 **XPS Error String return error string from VI**

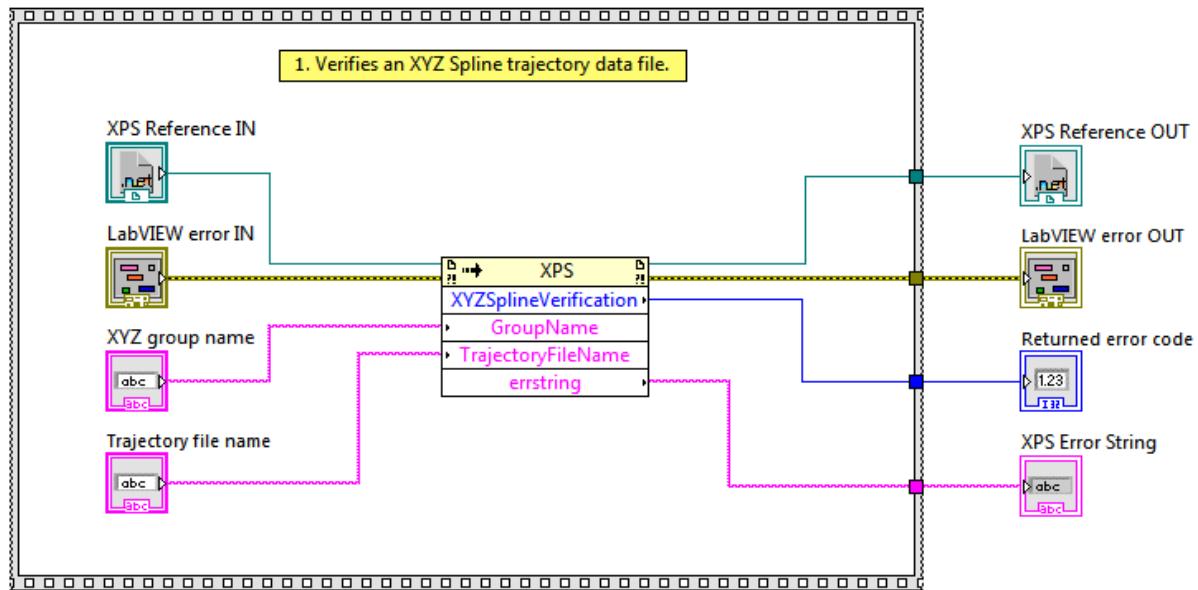
## 421. XYZ Spline Verification VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Verifies an XYZ spline trajectory data file.

**Screenshot**



- **XPS Reference IN** is the XPS reference
- **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.
- **XYZ Group Name** XYZ group name
- **Trajectory File Name** Trajectory file name
- **XPS Reference OUT** returns XPS reference
- **LabVIEW error OUT** contains error information. This output provides standard error out functionality.
- **Returned Error Code** Returns function error code
- **XPS Error String** return error string from VI

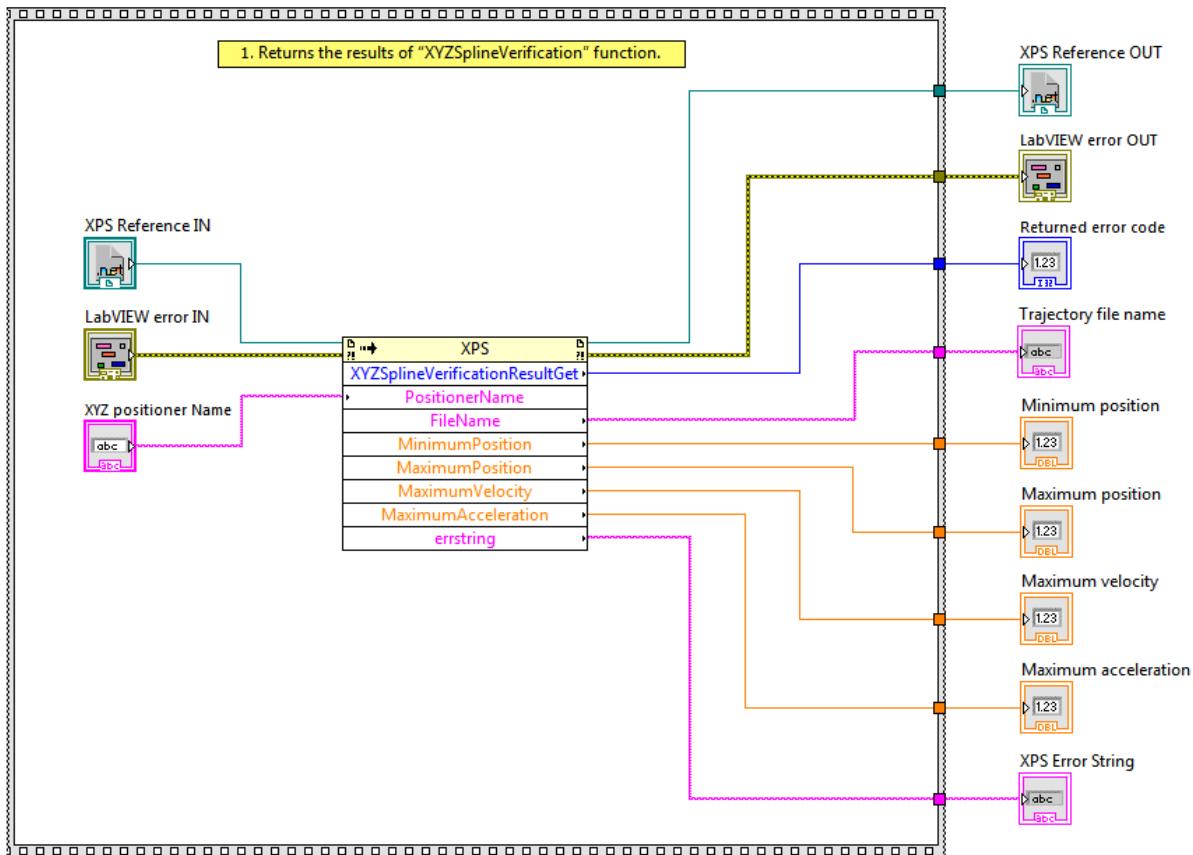
## 422. XYZ Spline Verification Result Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the results of “XYZSplineVerification” function.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Trajectory file name** Examined trajectory file name (maximum size = 250)

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Numerator frequency 1** Numerator frequency (Hz) for phase correction filter 1

**Minimum position** Minimum position (units)

**Maximum position** Maximum position (units)

**Maximum velocity** Maximum trajectory velocity (units/seconds)

**Maximum acceleration** Maximum trajectory acceleration (units/seconds<sup>2</sup>)

 **XPS Error String** return error string from VI

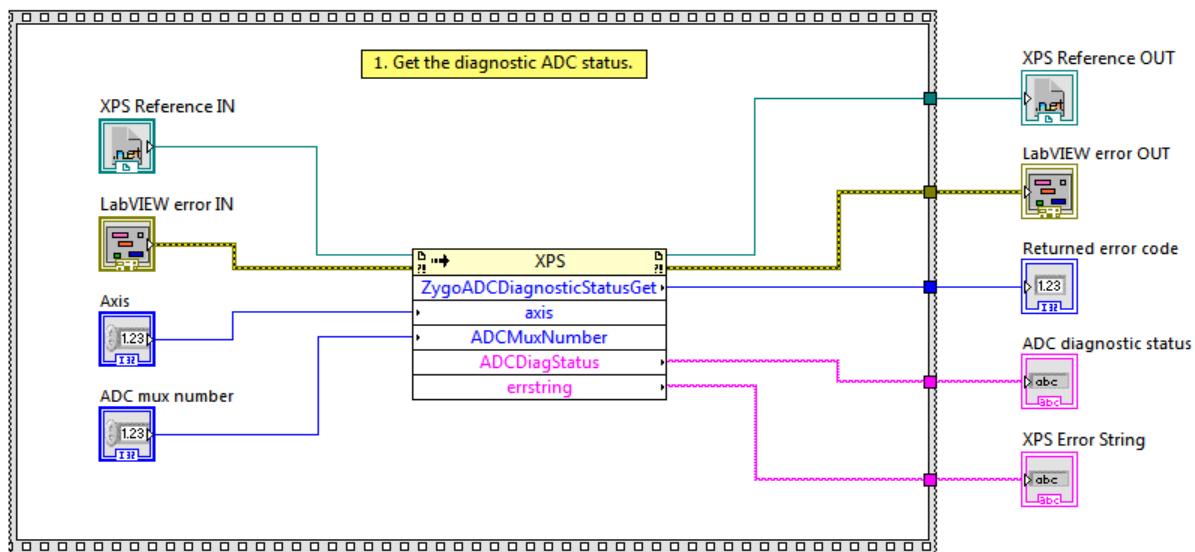
## 423. Zyg ADC Diagnostic Status Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the diagnostic ADC status.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **I32**

 **Axis**

 **ADC Mux Number** ADC mux number

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **abc**

 **abc**

**ADC Diagnostic Status** ADC diagnostic

**XPS Error String** return error string from VI

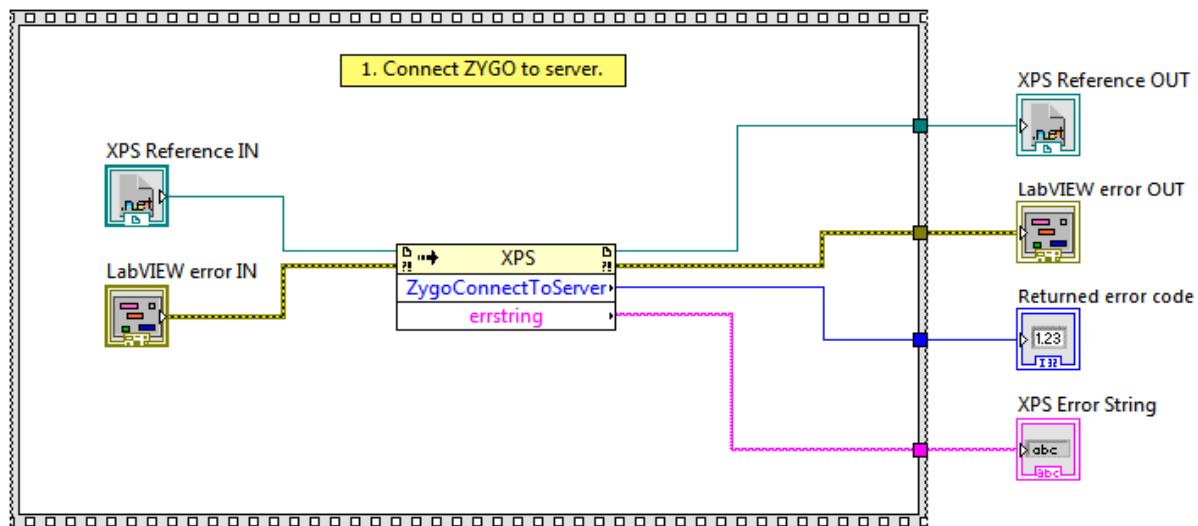
## 424. Zygō Connect To Server VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Connect ZYGO to server.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

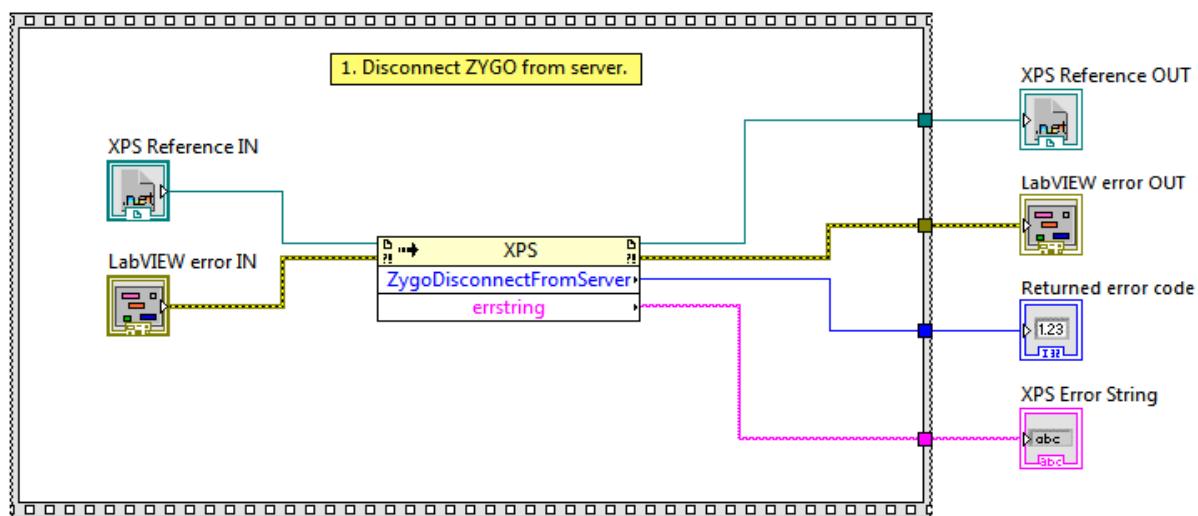
## 425. Zygō Disconnect From Server VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Disconnect ZYGO from server.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**XPS Error String** return error string from VI

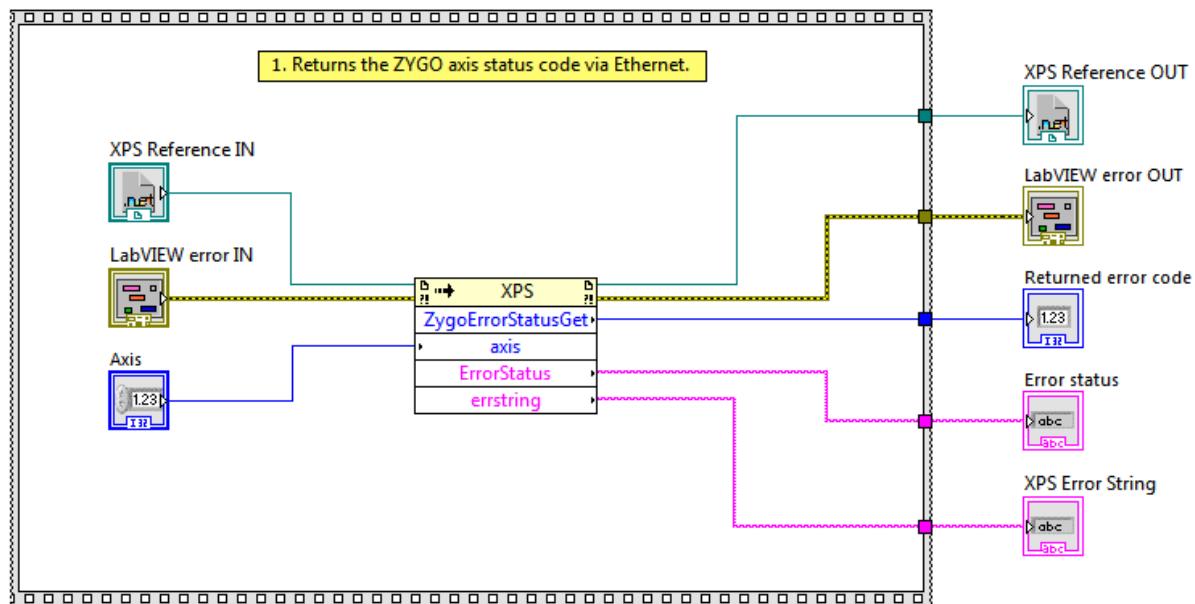
## 426. Zygō Error Status Get VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Return the ZYGO axis status code via Ethernet.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Axis axis**



**XPS Reference OUT** returns XPS reference



**LabVIEW error OUT** contains error information. This output provides standard error out functionality.



**Returned Error Code** Returns function error code



**Error Status** error status



**XPS Error String** return error string from VI

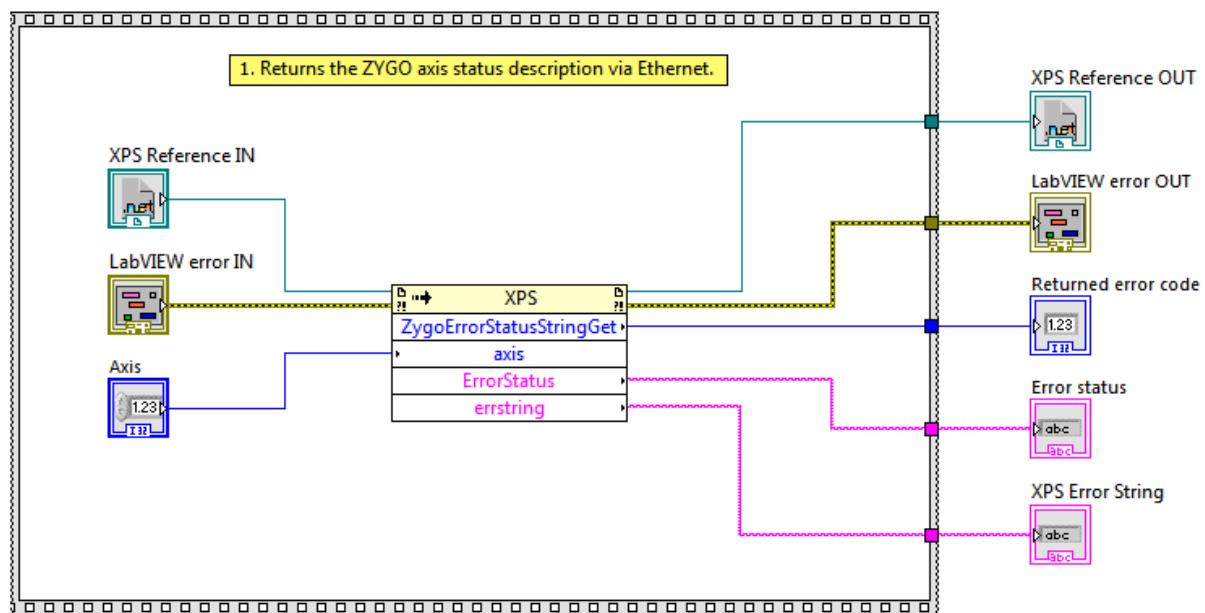
## 427. Zygō Error Status String Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the ZYGO axis status description VIa Ethernet.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Axis** axis

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Error Status** error status

 **XPS Error String** return error string from VI

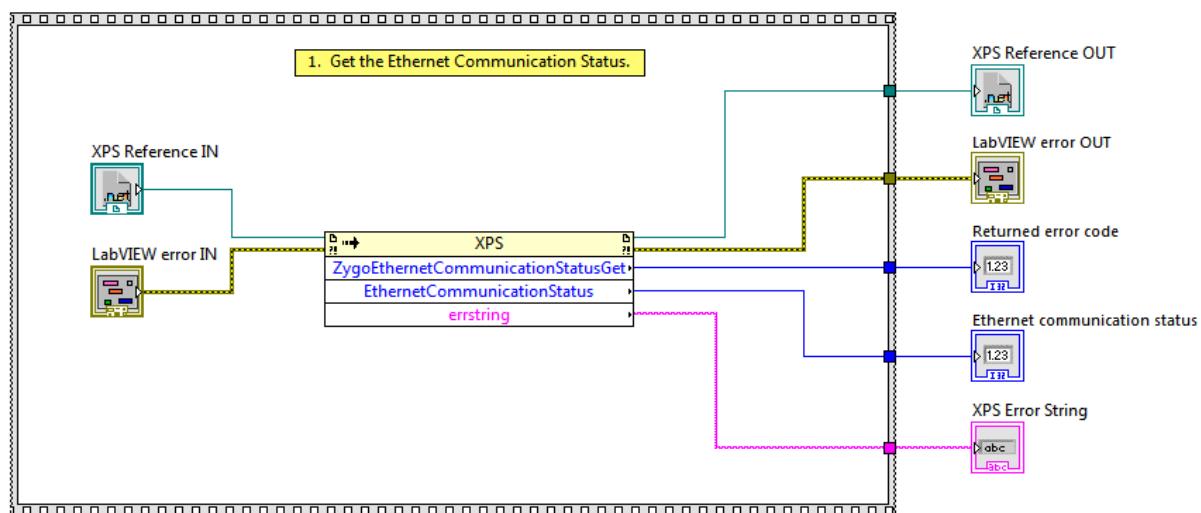
## 428. Zyro Ethernet Communication Status Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the Ethernet communication status.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **Ethernet communication status** Ethernet communication status

 **XPS Error String** return error string from VI

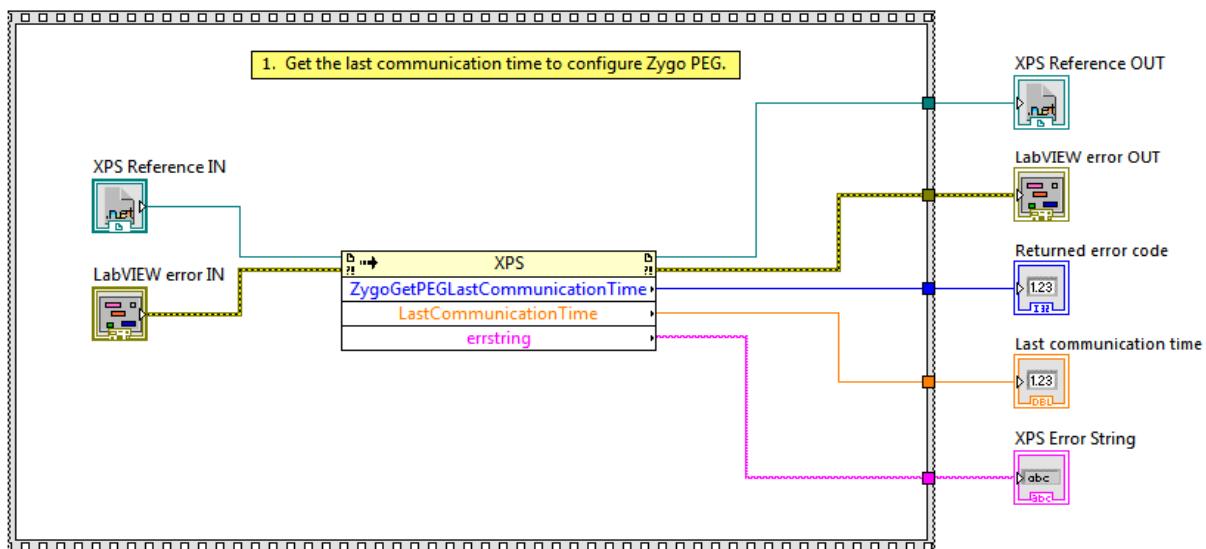
## 429. Zygō Get PEG Last Communication Time VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the last communication time to configure Zygō PEG.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Last Communication Time** Last communication time

**XPS Error String** return error string from VI

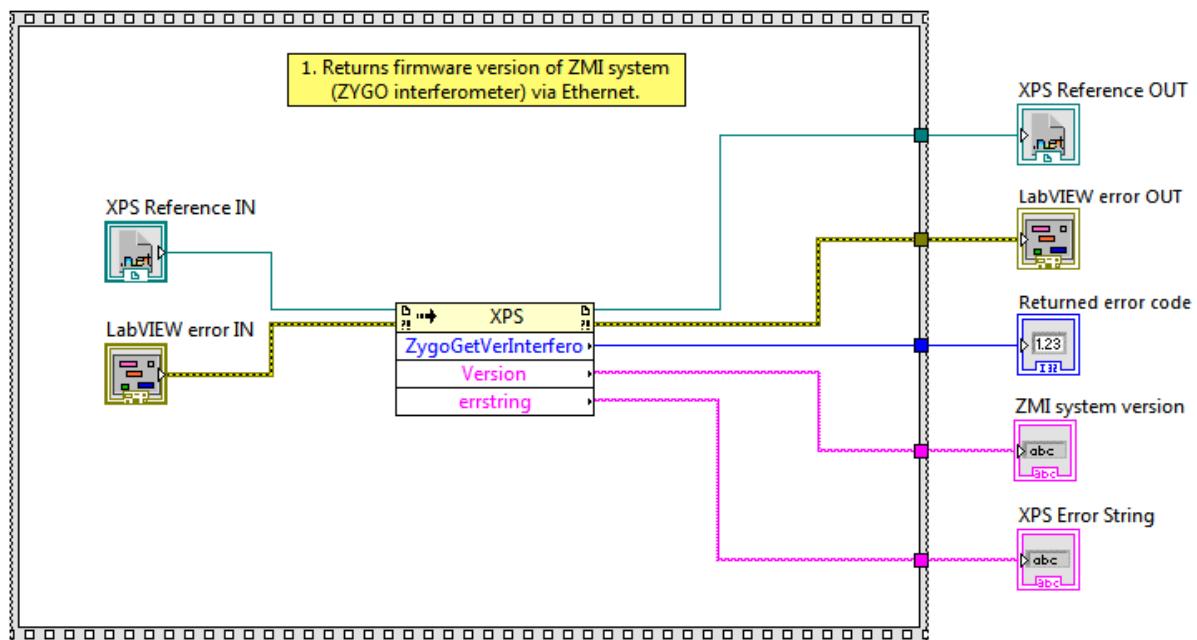
## 430. Zyg Get Ver Interfero VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns firmware version of ZMI system (ZYGO interferometer) VIA Ethernet.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**ZMI System Version** ZMI system version

**XPS Error String** return error string from VI

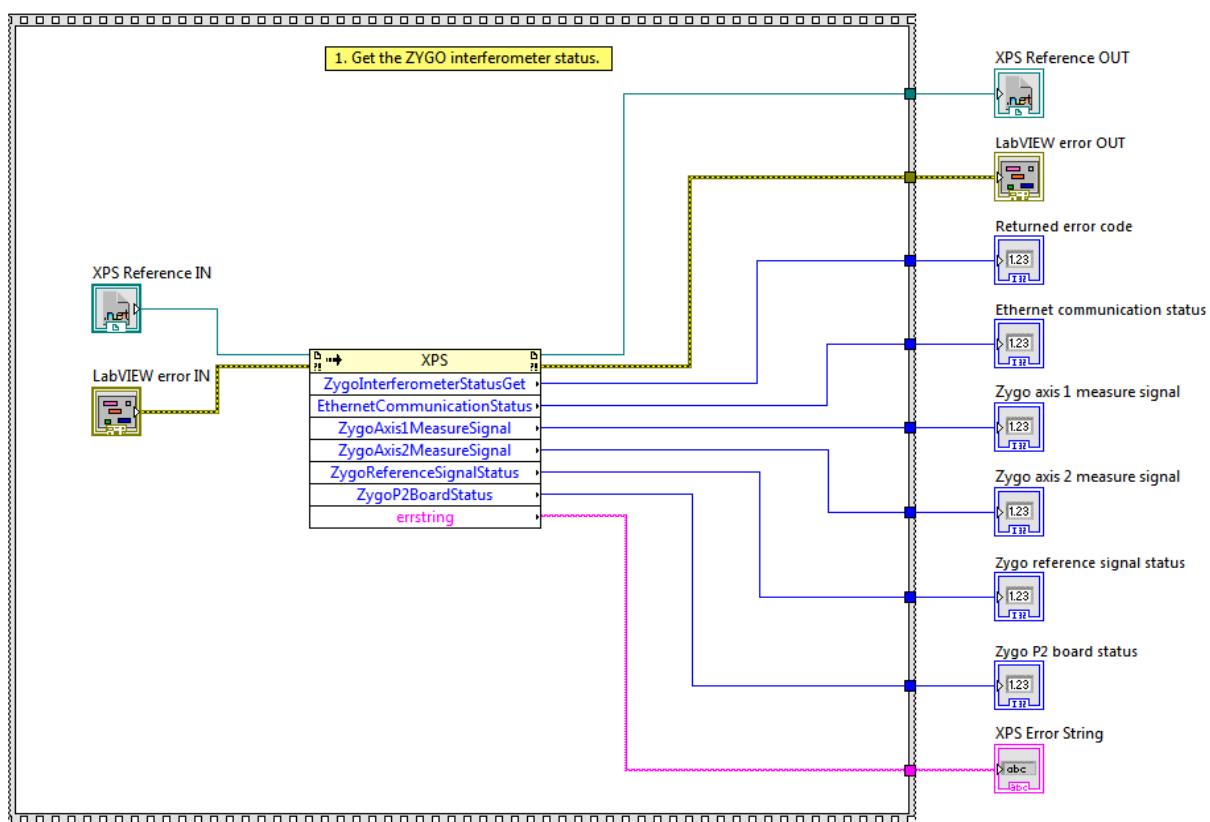
## 431. Zygō Interferometer Status Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get the ZYGO interferometer status.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**[I32] Ethernet Communication status** Ethernet communication status

**[I32]**

**[I32]**

**Zygo Axis 1 Measure signal** Zygo axis 1 measure signal

**Zygo Axis 2 Measure signal** Zygo axis 2 measure signal

**[I32] Zygo reference signal status** Zygo reference signal status

**[I32] Zygo P2 board status** Zygo p2 board status

**[abc] XPS Error String** return error string from VI

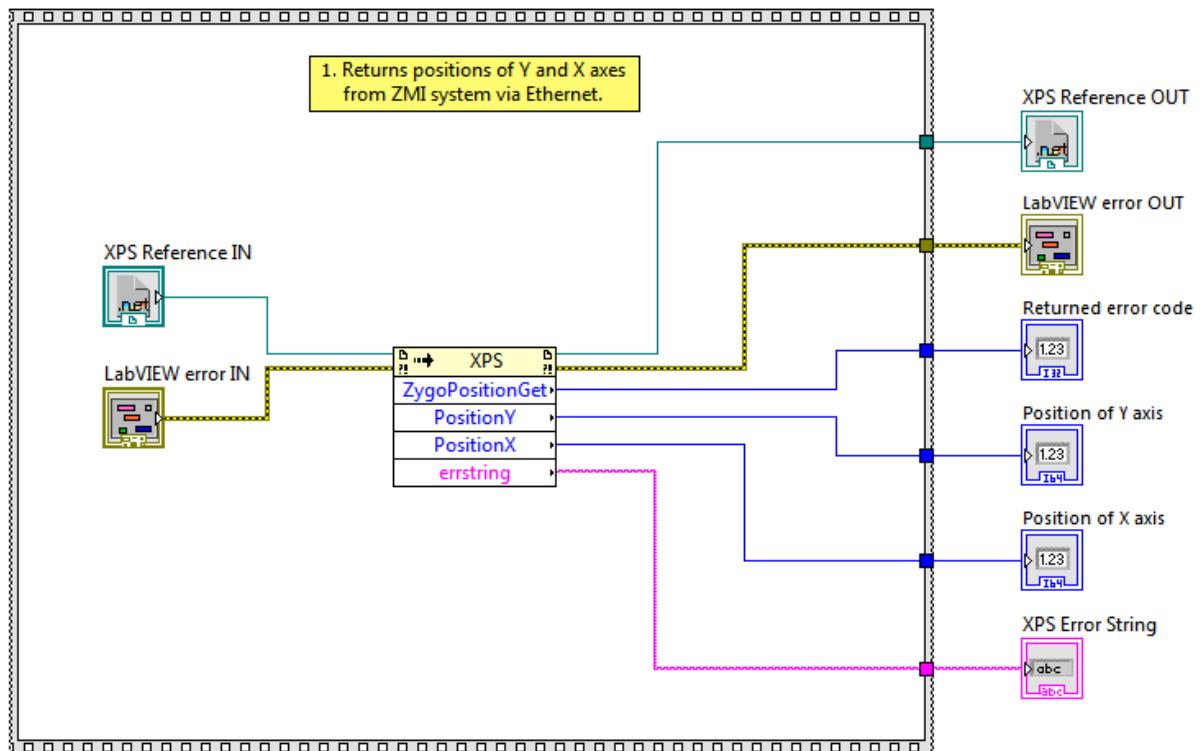
## 432. Zygo Position Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns position of Y and X axes from ZMI system via Ethernet.

### Screenshot



-  **XPS Reference IN** is the XPS reference
-  **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.
-  **XPS Reference OUT** returns XPS reference
-  **LabVIEW error OUT** contains error information. This output provides standard error out functionality.
-  **Returned Error Code** Returns function error code
-  **Position of X axis** Position of X axis
-  **Position of Y axis** Position of Y axis
-  **XPS Error String** return error string from VI

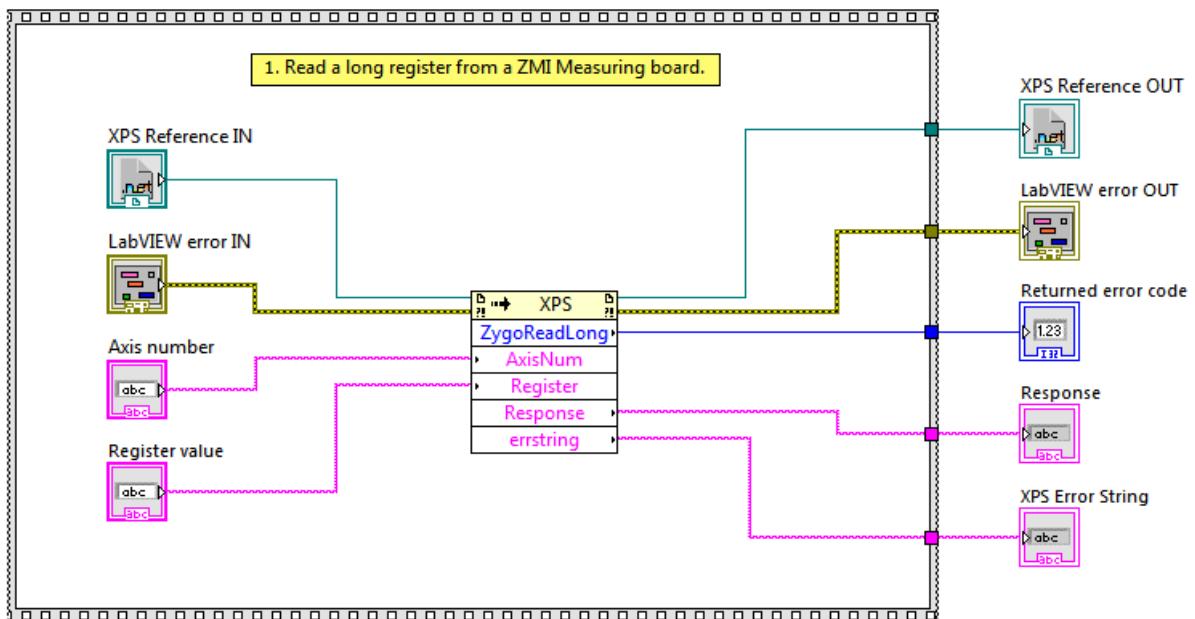
## 433. Zygo Read Long VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Read a long register from a ZMI measuring board.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Axis Number** ZMI axis number

**Register Value** Register value in hexadecimal

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Response** Response read from ZYGO box

**XPS Error String** return error string from VI

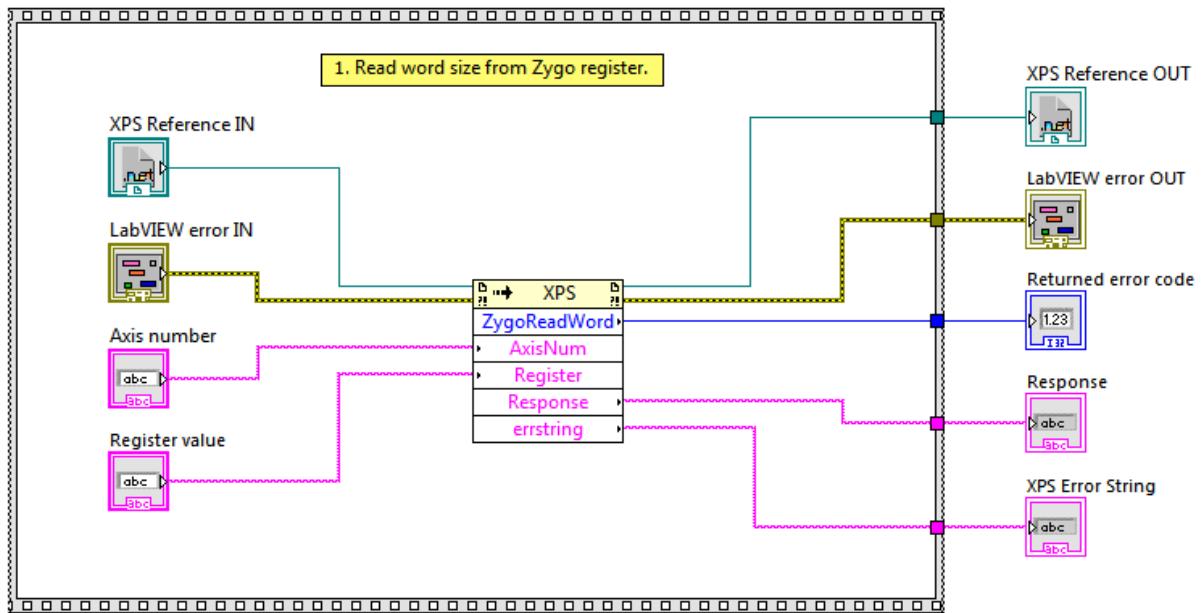
## 434. ZygoreadWord VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Read word size from ZygoreadWord VI.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Axis Number** ZMI axis number

**Register Value** Register value in hexadecimal

**Data** Data value in hexadecimal

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Response** Response read from ZYGO box

**XPS Error String** return error string from VI

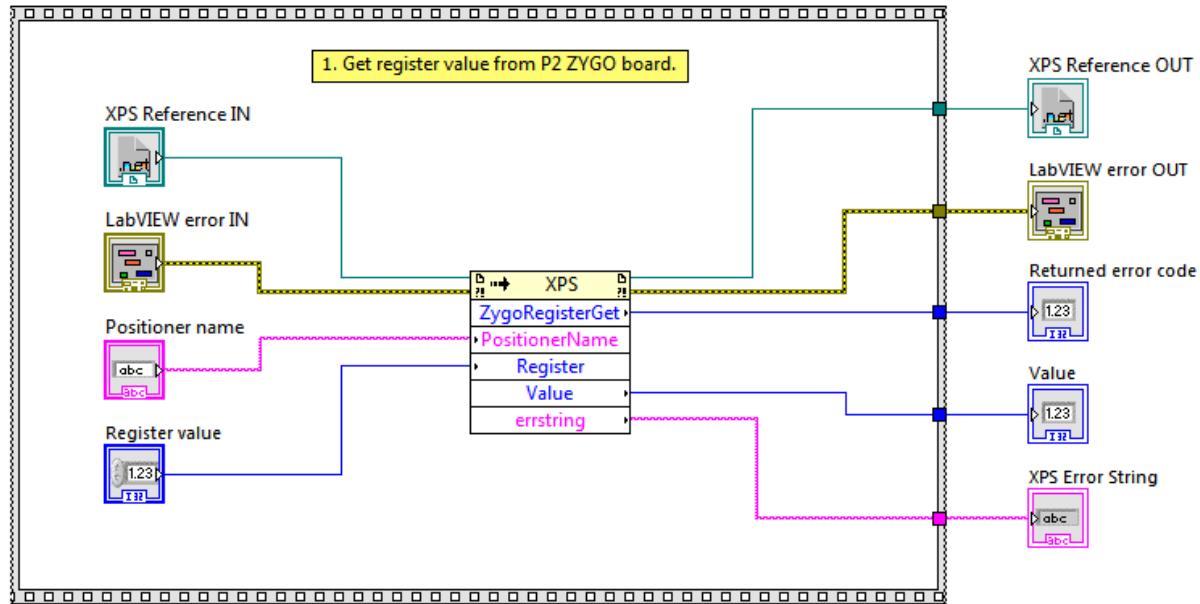
## 435. Zygo Register Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get register value from P2 ZYGO board.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

abc\bcd

123

**Positioner Name** positioner name

Register Value Register value

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

123 **Returned Error Code** Returns function error code

123 **Value** Value

\abc\bcd **XPS Error String** return error string from VI

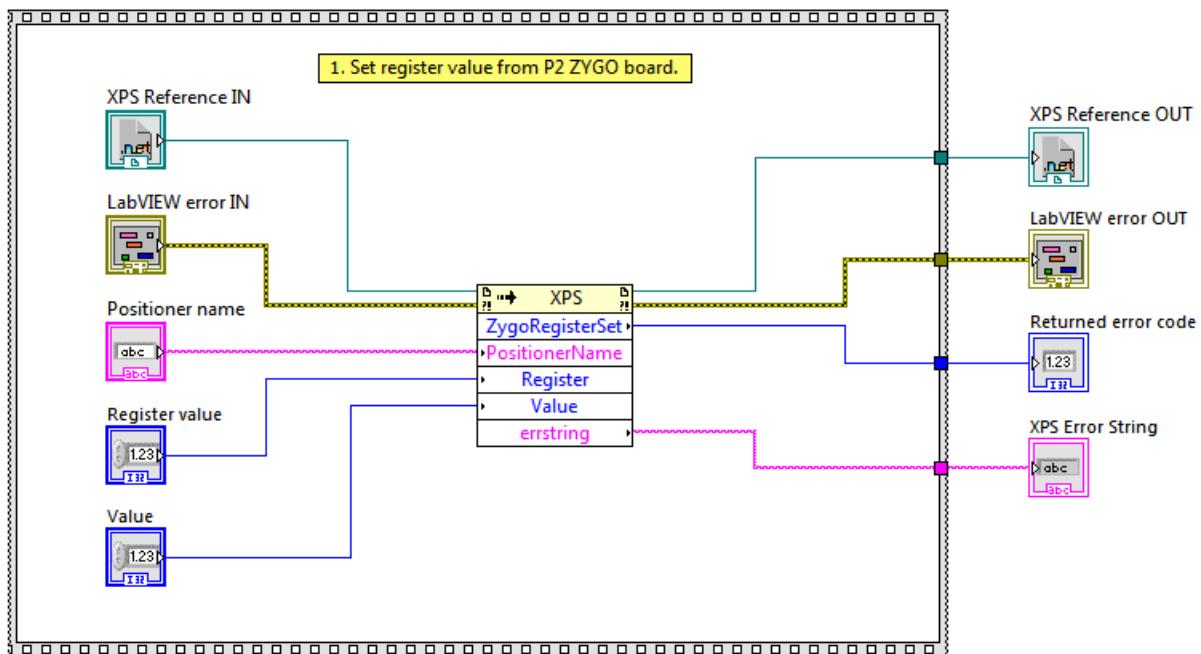
## 436. Zygo Register Set VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Set register value from P2 ZYGO board.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Start PEG region** Start PEG region

**End PEG region** End PEG region

**Increment value 1** Increment value 1

**Number of PEG events 1** Number of PEG events 1

**Increment value 2** Increment value 2

**Register Value** register value

**Value** value

**XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

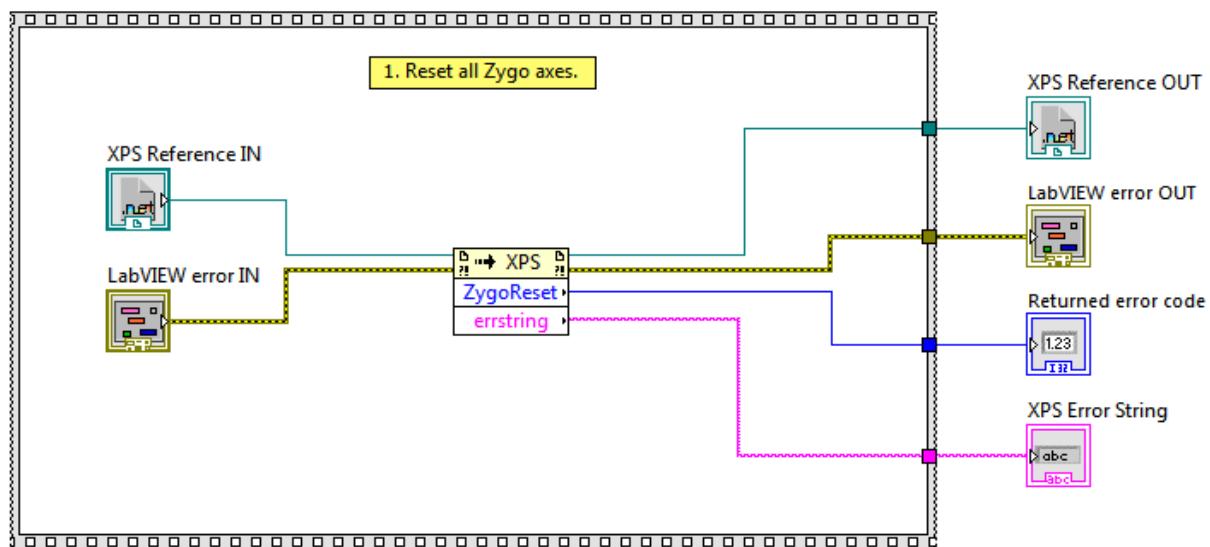
## 437. Zygoreset VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Reset all ZYGO axes.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

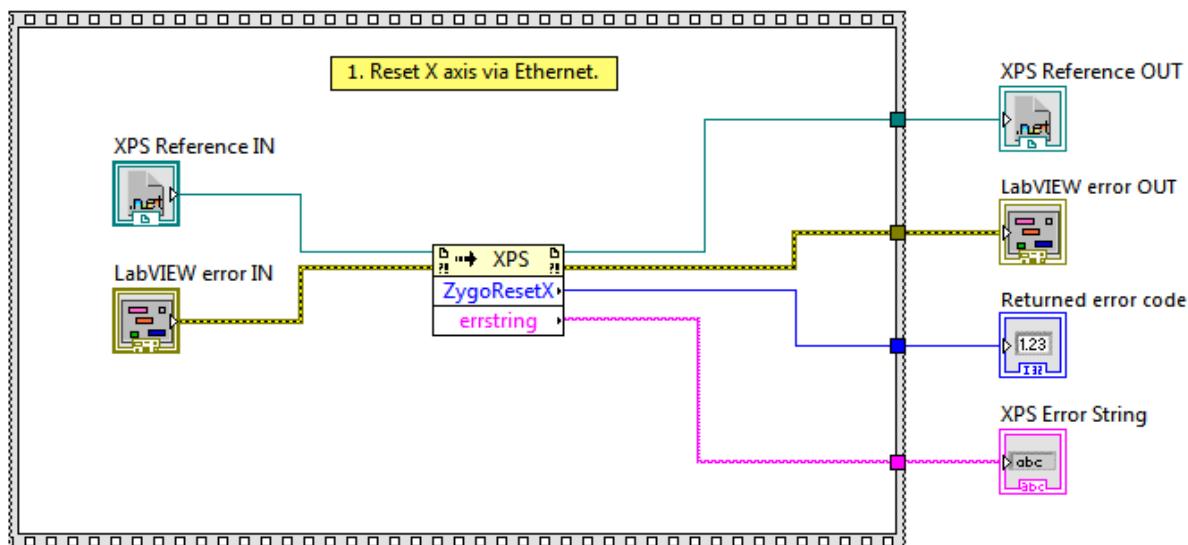
## 438. Zygō Reset X VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Reset X axis VIA Ethernet.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

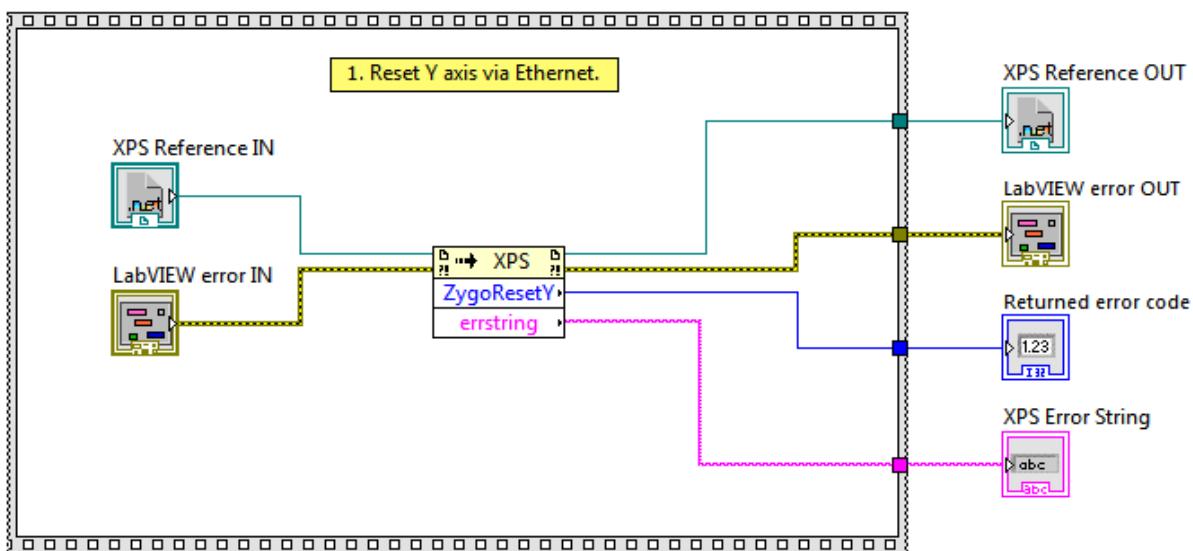
## 439. Zygō Reset Y VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Reset Y axis VIA Ethernet.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

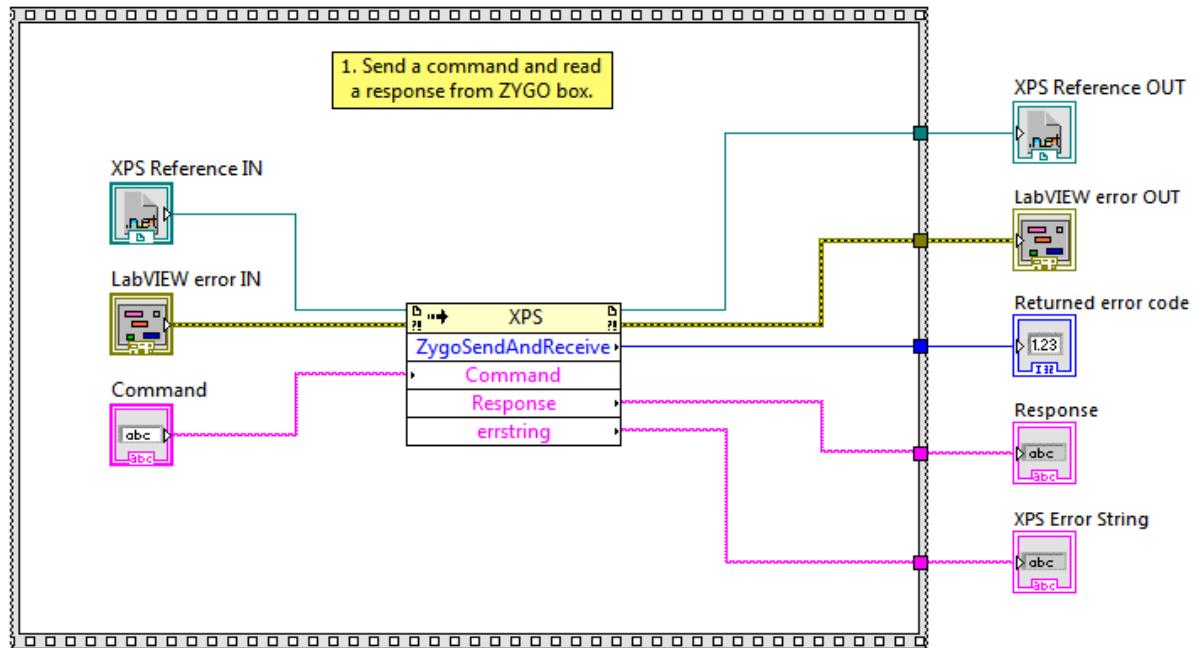
## 440. Zygō Send And Receive VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Send a command and read a response from ZYGO box.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Command** Command

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Response** Response

**XPS Error String** return error string from VI

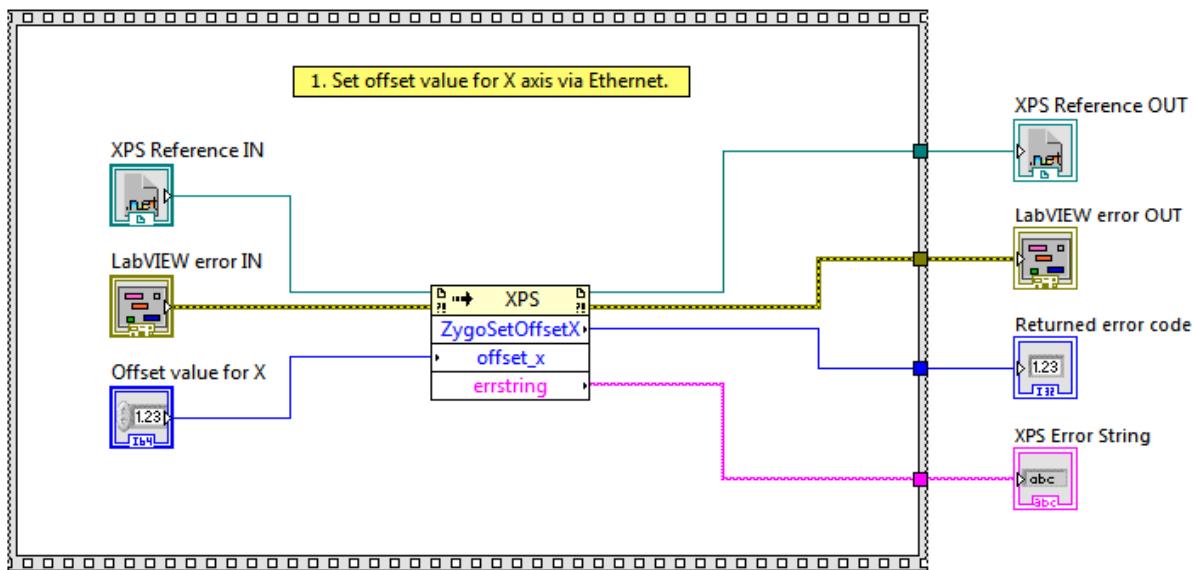
## 441. Zyg Set Offset X VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Set offset value for X axis VIA Ethernet.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Offset value for X** Offset value for X

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

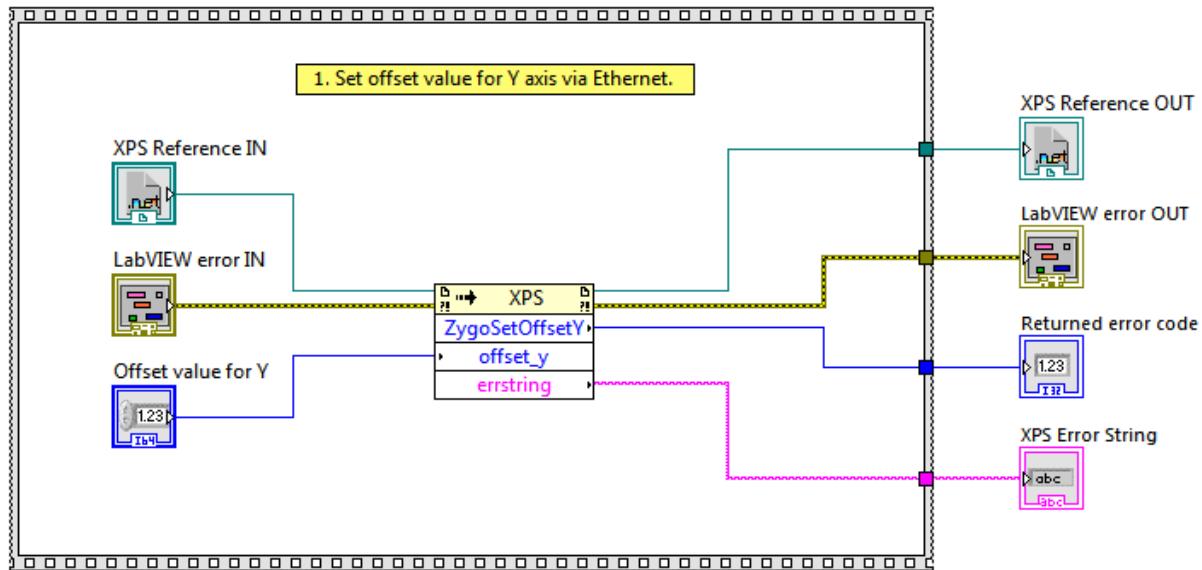
## 442. Zygo Set Offset Y VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set offset value for Y axis VIA Ethernet.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Offset value for Y** Offset value for Y

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

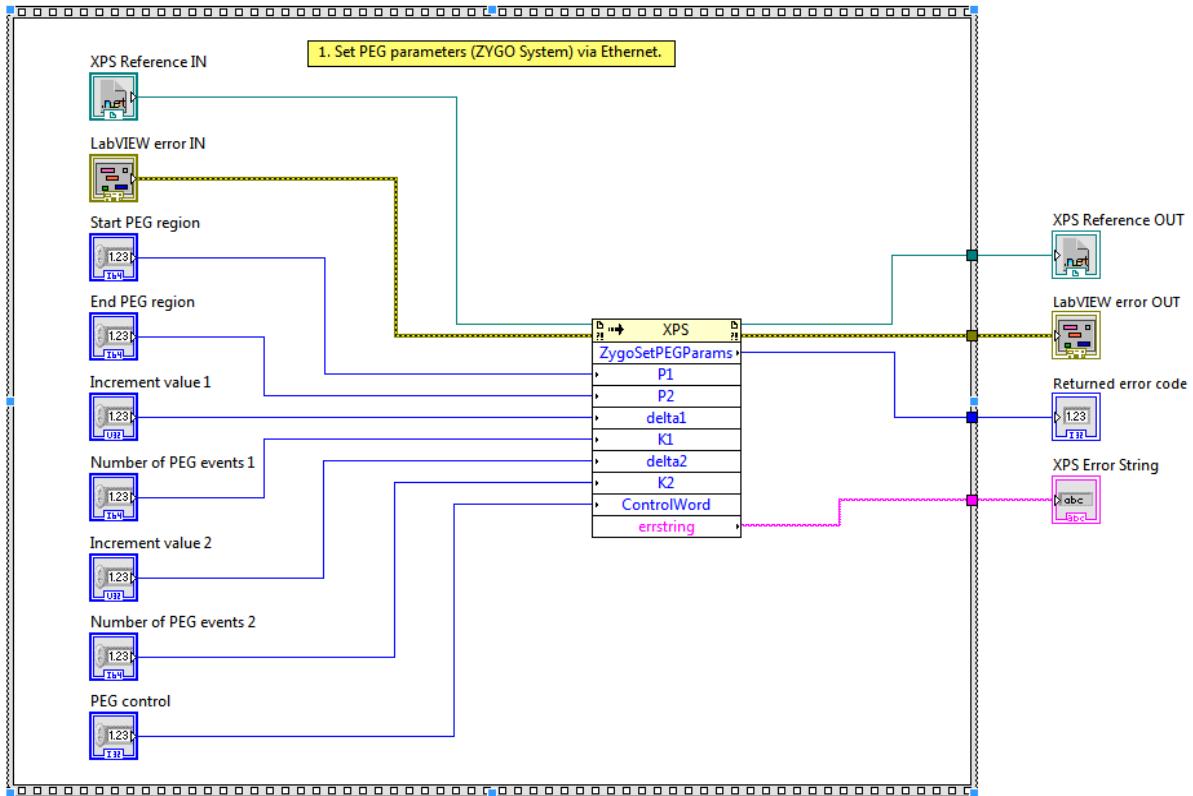
## 443. Zygote Set PEG Params VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Set PEG parameters (Zygo System) Via Ethernet.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Start PEG region** Start PEG region

**End PEG region** End PEG region

**Increment value 1** Increment value 1

**Number of PEG events 1** Number of PEG events 1

**Increment value 2** Increment value 2

**Number of PEG events 2** Number of PEG events 2

**PEG control** PEG control

**XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **XPS Error String** return error string from VI

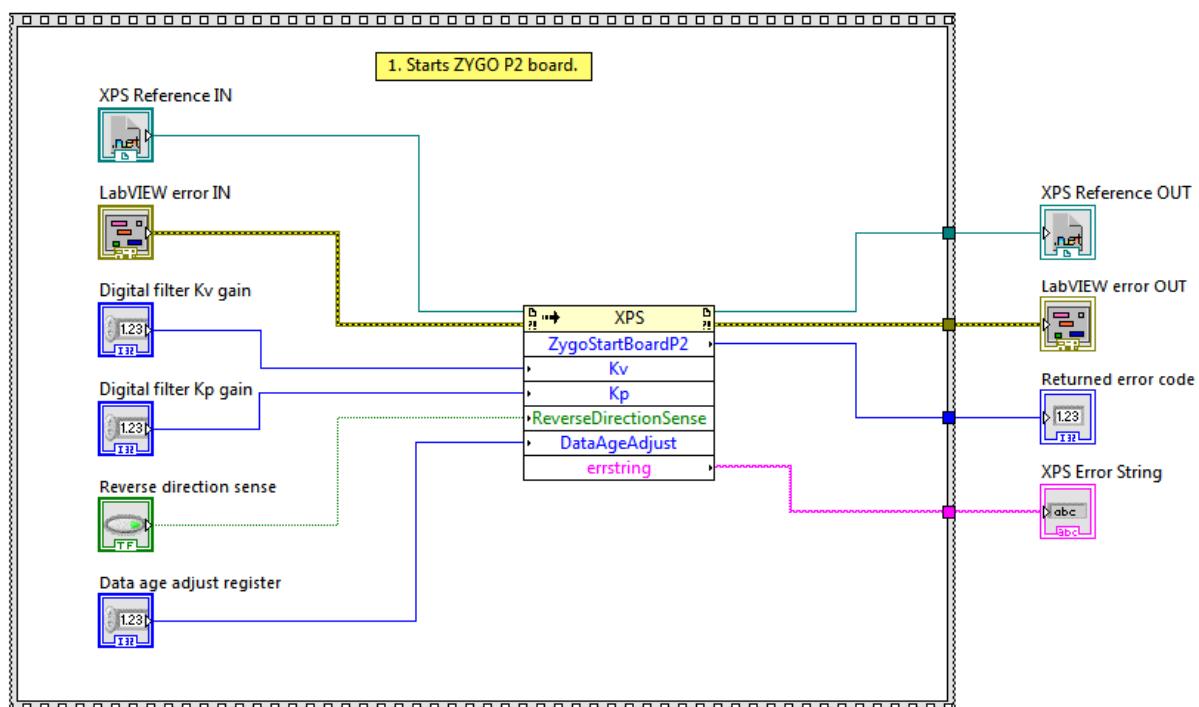
## 444. Zygostart Board P2 VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Starts ZYGO P2 board.

### Screenshot



**XPS Reference IN** is the XPS reference



**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.



**Digital filter Kv gain** Digital filter Kv gain

**Digital filter Kp gain** Digital filter Kp gain

**Reverse direction sense** Reverse direction sense

**Data age adjust register** Data age adjust register

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

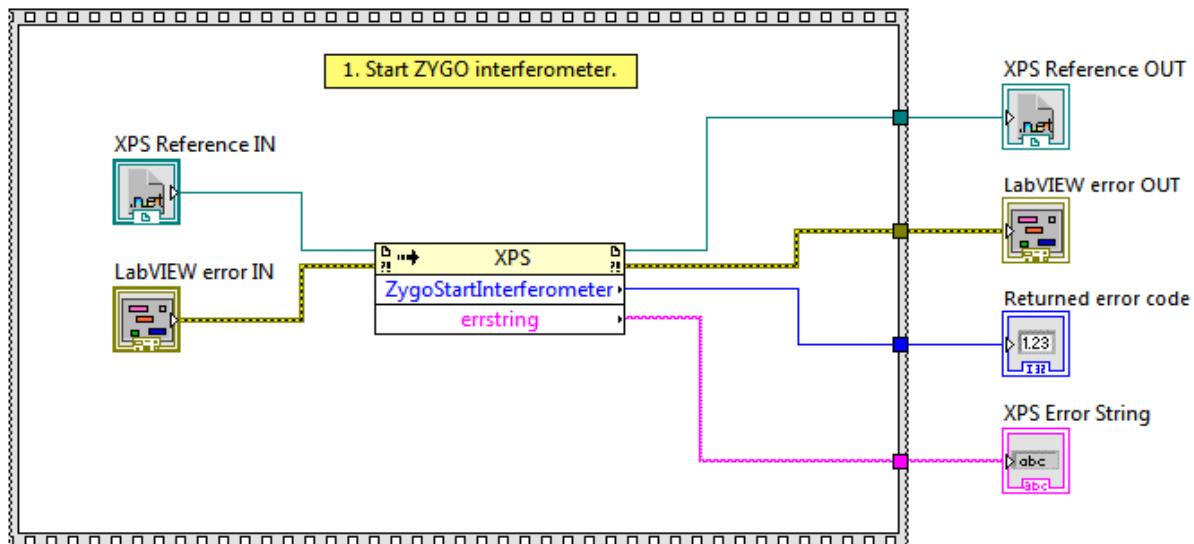
## 445. Zygostart Interferometer VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Start ZYGO interferometer.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

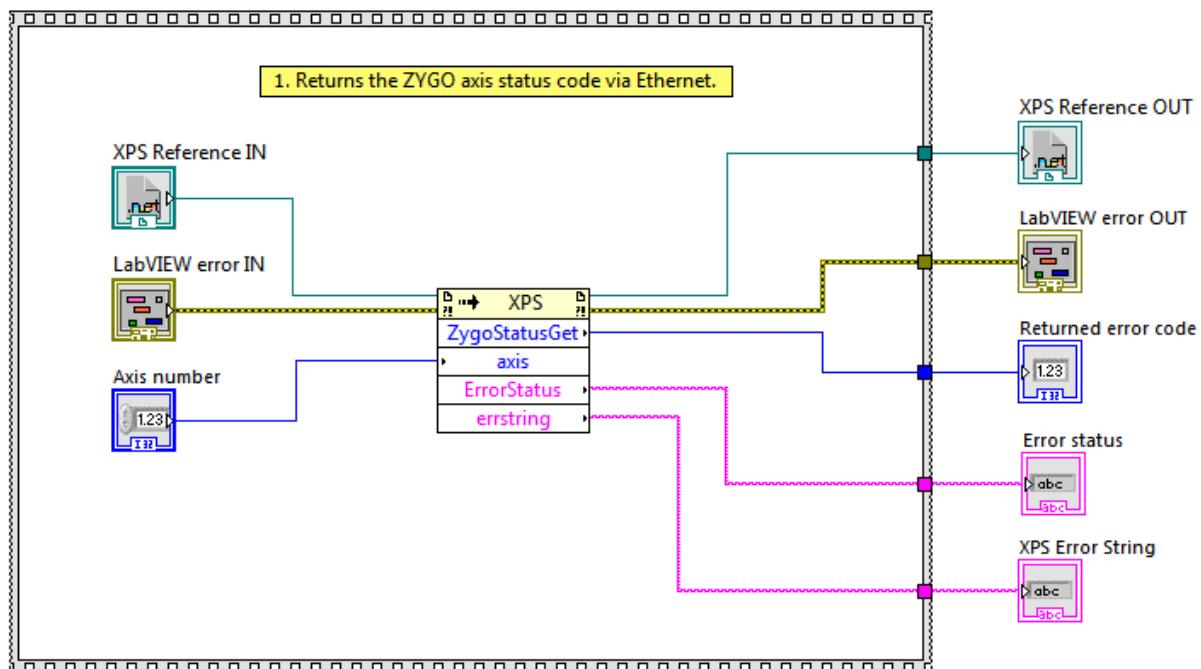
## 446. Zygostatus Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the ZYGO axis status code via Ethernet.

### Screenshot



**XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

 **Axis number** ZMI axis number

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.



 **Returned Error Code** Returns function error code

**Error Status** ZMI axis status

 **XPS Error String** return error string from VI

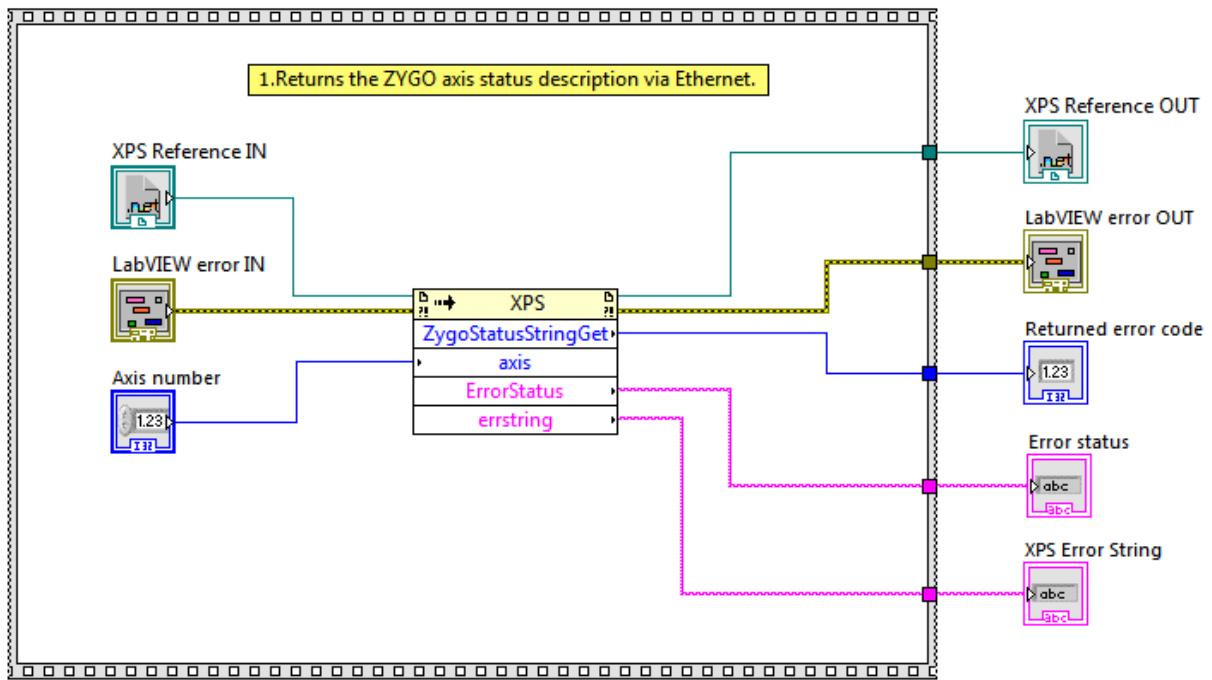
## 447. Zygo Status String Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Returns the ZYGO axis status description VIA Ethernet.

**Screenshot**



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Axis number** ZMI axis number

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Error Status** ZMI axis status

**XPS Error String** return error string from VI

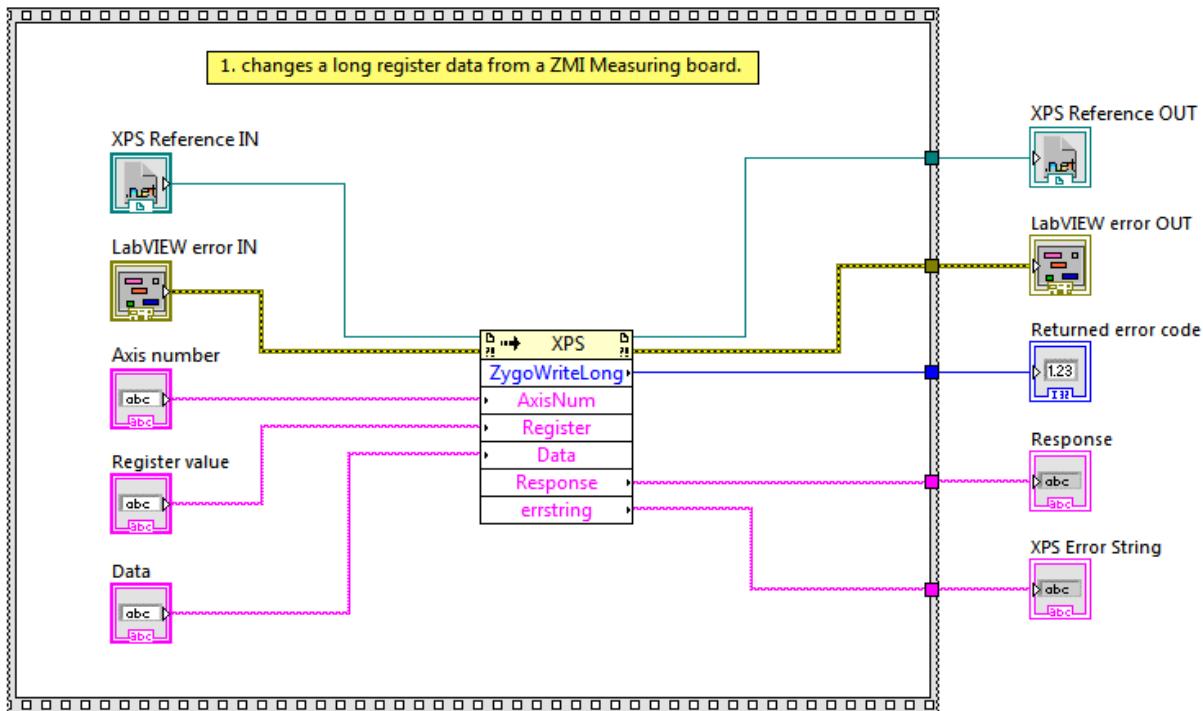
## 448. Zyg Write Long VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Changes a long register data from a ZMI measuring board.

## Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Axis Number** ZMI axis number

**Register Value** Register value in hexadecimal

**Data** Data value in hexadecimal

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Response** Response read from ZYGO box

**XPS Error String** return error string from VI

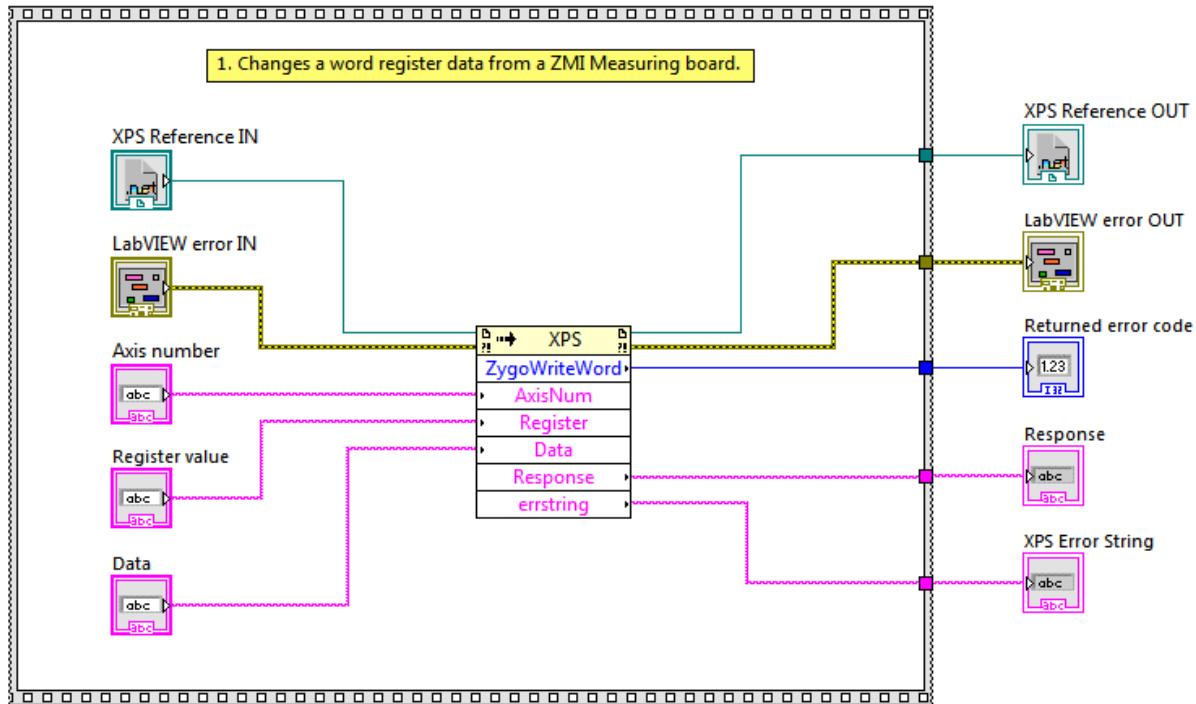
## 449. Zygo Write Word VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Changes a word register data from a ZMI measuring board.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Axis Number** ZMI axis number

**Register Value** Register value in hexadecimal

**Data** Data value in hexadecimal

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

 **Response** Response read from ZYGO box

 **XPS Error String** return error string from VI

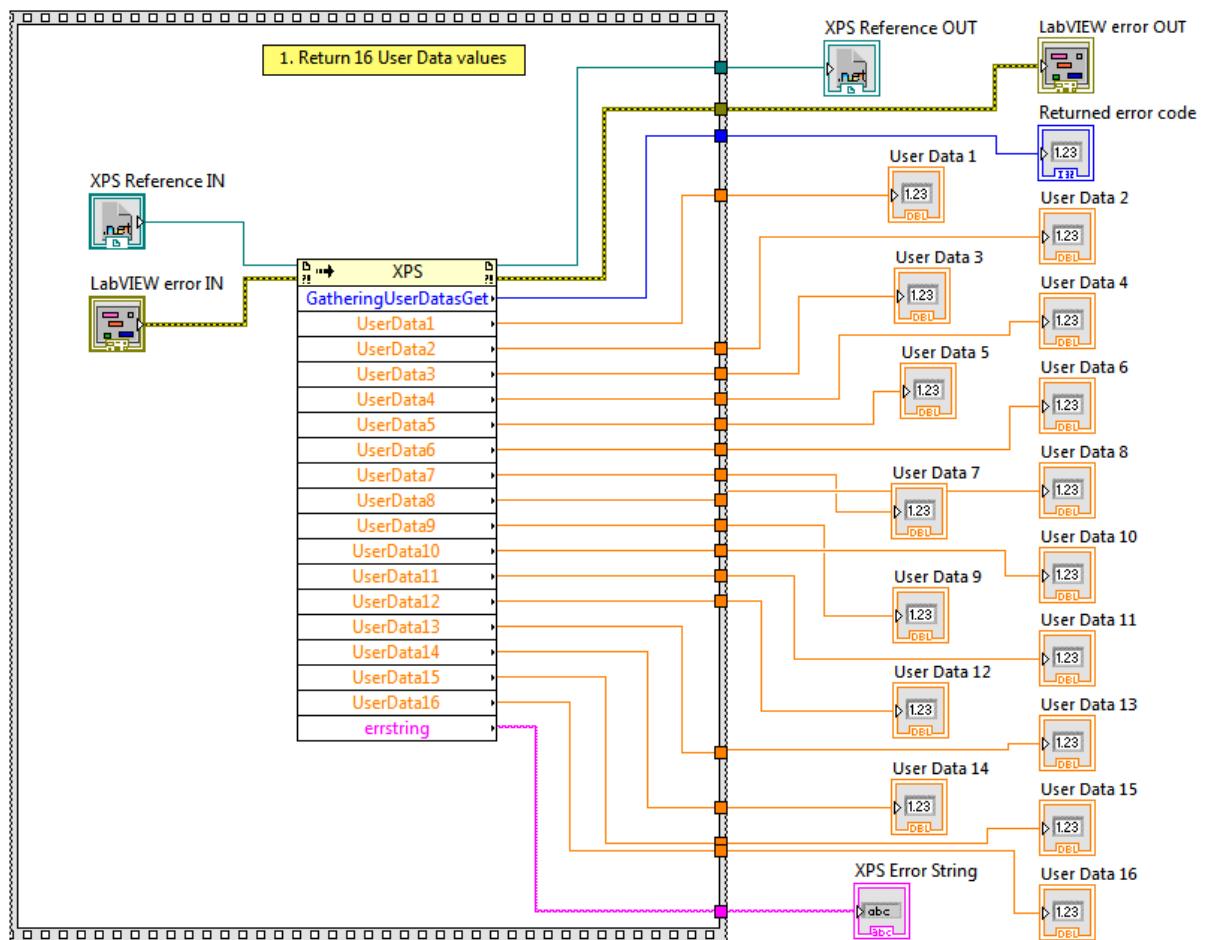
## 450. Gathering User Data Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Return user data values.

### Screenshot



 **XPS Reference IN** is the XPS reference

 **LabVIEW error IN** describes error conditions that occur before this node runs. This input

provides standard error in functionality.

 **Positioner Name** positioner name

 **XPS Reference OUT** returns XPS reference

 **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

 **Returned Error Code** Returns function error code

 **User Data 1** User data 1

 **User Data 2** User data 2

 **User Data 3** User data 3

 **User Data 4** User data 4

 **User Data 5** User data 5

 **User Data 6** User data 6

 **User Data 7** User data 7

 **User Data 8** User data 8

 **User Data 9** User data 9

 **User Data 10** User data 10

 **User Data 11** User data 11

 **User Data 12** User data 12

 **User Data 13** User data 13

 **User Data 14** User data 14

 **User Data 15** User data 15

 **User Data 16** User data 16

 **XPS Error String** return error string from VI

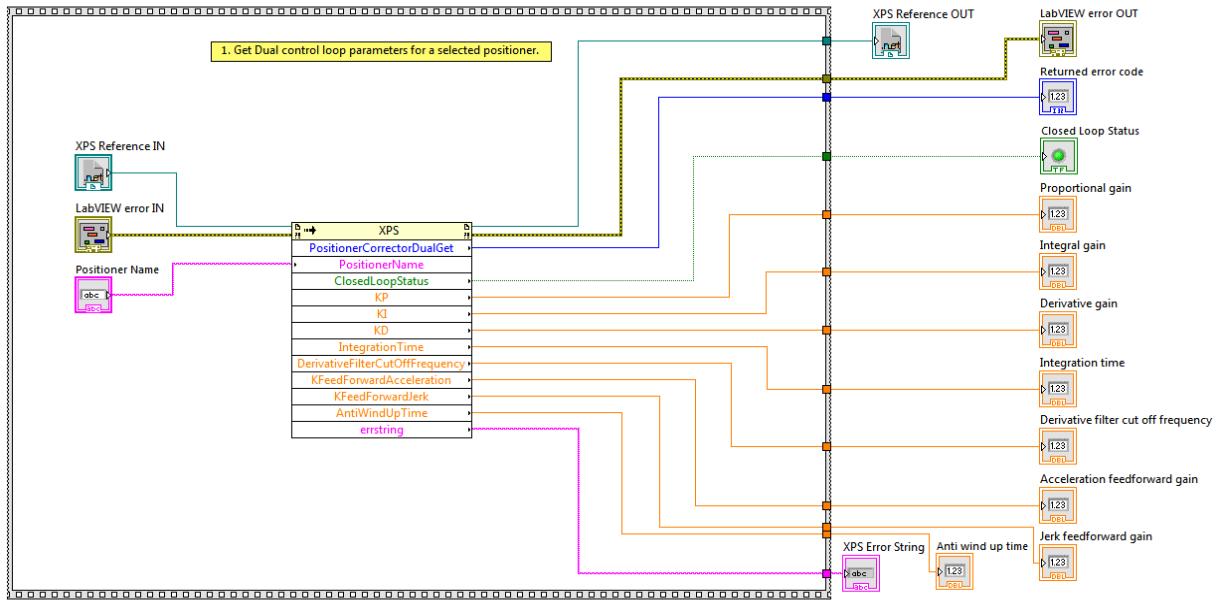
## 451. Positioner Corrector Dual Get VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Get dual control loop parameters for a selected positioner.

### Screenshot



**[IN]** **XPS Reference IN** is the XPS reference

**[IN]** **LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**[IN]** **Positioner Name** positioner name

**[OUT]** **XPS Reference OUT** returns XPS reference

**[OUT]** **LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**[OUT]** **Returned Error Code** Returns function error code

**[OUT]** **Closed Loop Status** Position servo loop status (true=closed and false=opened)

**[OUT]** **Proportional gain** PID servo loop proportional gain

**[OUT]** **Integral gain** PID servo loop integral gain

**[OUT]** **Derivative gain** PID servo loop derivative gain

**[OUT]** **Integration Time** PID integration time (seconds)

**[OUT]** **Derivative Filter Cut Off Frequency** PID derivative filter cut off frequency (Hz)

**[OUT]** **Acceleration feedforward gain** Acceleration feed forward gain

**[OUT]** **Jerk feedforward gain** Jerk feed forward gain

**[OUT]** **Anti wind up time** Anti wind up time

**[OUT]** **XPS Error String** return error string from VI

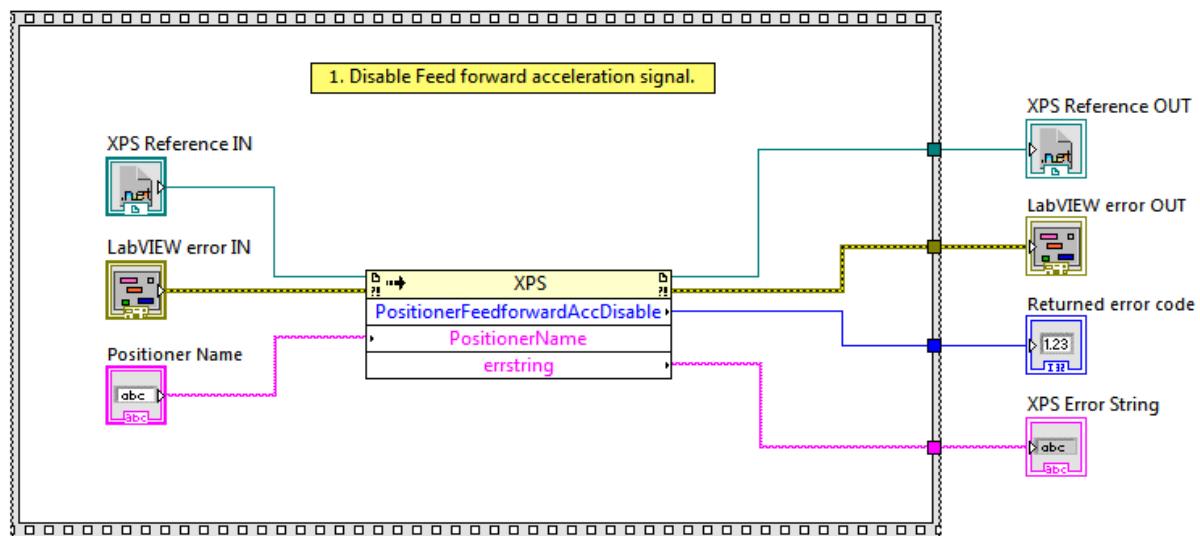
## 452. Positioner Feed forward Acceleration Disable VI

**Owning Palette:** Interpolation & Extrapolation VI

**Requires:** Full Development System

Disable feed forward acceleration signal.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**Positioner name** positioner name

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**XPS Error String** return error string from VI

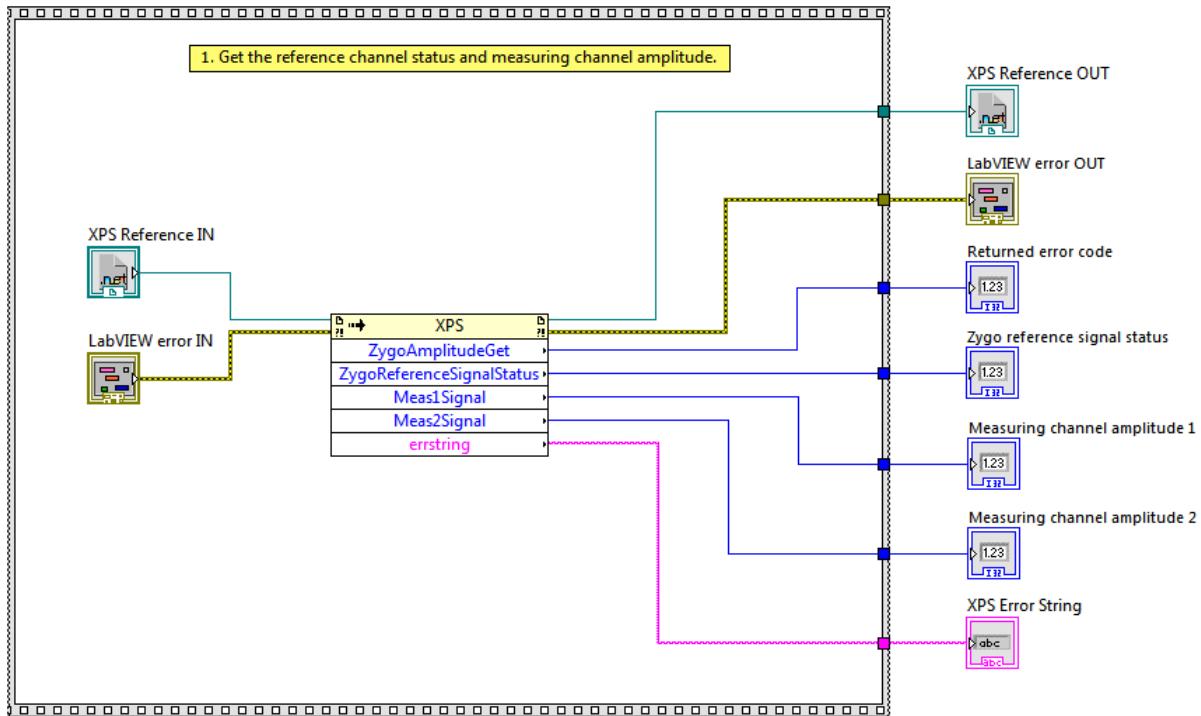
## 453. Zygo Amplitude Get VI

## Owning Palette: Interpolation & Extrapolation VI

Requires: Full Development System

Get the diagnostic ADC status.

### Screenshot



**XPS Reference IN** is the XPS reference

**LabVIEW error IN** describes error conditions that occur before this node runs. This input provides standard error in functionality.

**XPS Reference OUT** returns XPS reference

**LabVIEW error OUT** contains error information. This output provides standard error out functionality.

**Returned Error Code** Returns function error code

**Zygo reference signal status** Zygo reference signal status

**Measuring Channel Amplitude 1** Measuring channel amplitude 1

**Measuring Channel Amplitude 2** Measuring channel amplitude 2

**XPS Error String** return error string from VI